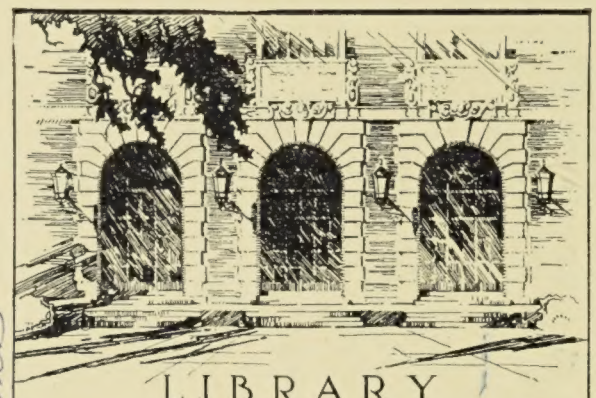


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ILLUSTRATIONS.

Various Diseases of the Skin (Dr. S. Mackenzie), Four Figures ... 5, 6, 7
A Case of Elephantiasis Telangiectodes and Molluscum Fibrosum (Dr. W. Calwell) 13
A Case of Gastroschisis (Dr. W. Brown) 14
"The Leicester" Vaporiser and Odorator 24
New Vaginal Insufflator (Dr. A. Duke) 24
Splint for Foot-Drop (Mr. B. Roth) 24
An Improvement of the Stethoscope (Dr. J. Murray) 25
Operation for Deafness and Tinnitus due to Immobilisation of the Ossicles and for Otorrhœa (Dr. S. Sexton) 70
New Aural Injector and Evacuator with a Flexible Eustachian Catheter (Dr. J. Ward Cousins), Two Figures 71
Two New Tests for Colour Blindness (Dr. F. W. Edridge-Green) ... 73
The Operative Treatment of Cicatricial Ectropion (Dr. C. B. Taylor) ... 74
A Guarded Capillary Trocar for Suprapubic Puncture of the Bladder (Mr. A. G. R. Foulerton) 83
The Surgical Aspect of Hepatic Abscess (Mr. R. J. Godlee), Seven Figures 123, 172, 173, 175
A Method of Administering Etherised Nitrous Oxide as a General Anæsthetic in Minor Surgery (Dr. J. F. W. Silk), Two Figures 126
Intrauterine Ointment Introducer 138
Dr. L. Borthen's New Refraction Ophthalmoscope 139
Osmosis Experiments with Living and Dead Membranes (Dr. E. W. Reid) 166
Bronchitis Air Kettle, Two Figures 190
Appliance for Treatment of Prolapsus Recti (Dr. G. E. J. Greene) ... 190
Pocket Galvanometer 191
Zymotic Mortality in London (Charts) 211
The Antiseptic After-Treatment of Vaccination (Mr. J. Bark) 233
A Case of Cerebral Abscess Localised and Opened (Mr. G. E. Williamson) 235
Chloride of Ammonium Spray 249
History and Uses of the Protected Surgical Lamp (Mr. N. Stevenson) Three Figures 290, 291
Stanley's Medical Spirometer 306
The Viaduct Ambulance Litter 306
Improved Cycle Saddle 306
Portrait of Sir William Gull 319
The Treatment of Incompletely Descended Testicle (Mr. W. Watson Cheyne) 351
An Obscure Outbreak of Dengue (Staff-Surgeon C. C. Godding), Three Diagrams 352, 353
Influenza and Pneumonia (Dr. J. Haddon), Three Diagrams 355
New Nursing Stove 368
The Newlands Table 368
Modified Binaural Stethoscope (Dr. F. C. Barker) 368
Sclerema and Œdema Neonatorum (Dr. J. W. Ballantyne), Two Figures 405
On the Successful Treatment of Cases of Congenital Displacement of the Hip-Joint by Complete Recumbency with Extension for Two Years (Mr. W. Adams), Two Figures 407
On the Treatment of Dupuytren's Contraction of the Palmar Fascia (Mr. J. Macready), Five Figures 412, 413, 414
On Subcuticular Suture (Mr. Kendal Franks), Two Figures 415
A New Vaccinator (Mr. J. Bark)... 433
The Etiology and Prevention of Phthisis (Dr. A. Ransome), Three Full Page Maps and Four Diagrams ... 466, 467, 524, 526, 527, 586, 587
Case of Carcinoma of the Thyroid (Mr. J. K. Robinson) 479
The Royal Medical and Chirurgical Society's New House 503
A Series of 100 Cataract Extractions (Mr. H. R. Swanzy), Two Figures ... 534
Prolapse of Part of the Wall of the Stomach into the Duodenum from a Horse (Mr. Spencer) 543
Palpebral Plate 553
The House in which the First Ovariotomy was performed 568
Case of Cæsarean Section (Dr. Murdoch Cameron), Three Figures ... 584
On the Histology of a Case of So-called "Duct Cancer" (Mr. A. E. Barker), Five Figures 591, 592
Fibrosarcoma of Left Clavicle at Sternal End (Mr. G. Barling)... ... 598
Zeiss's Microphotographic Apparatus 620
The Mandrake (Mr. W. W. Westcott), Two Figures 620
Guy's Hospital Residential College for Students, Two Figures... ... 622
Acromegaly (Dr. H. Waldo), Two Figures... 662
New Expansion Trocar (Mr. R. C. G. Durdin) 675
Index Repositor for Clinical Thermometers 675
A Contribution to the Study of Sulphonal (Dr. J. Gordon), Two Figures and Chart 711, 712, 713

PAGE
Case of Gunshot Wound (Suicidal) (Brigade-Surgeon J. M. D. O'Farrell)... 721
A New Chloride of Silver Battery 727
A case of Localisation of a Limited Lesion of the Spinal Cord (Dr. W. Macewen), Three Figures 776, 777
Some Cerebral Lesions (Dr. G. Newton Pitt), Six Figures ... 820, 831
Aortic Aneurysm presenting in the Dorsal Region (Surgeon-Major W. R. Browne), Three Figures 837, 838
Strangulated Inguinal Hernia, Herniotomy, Rupture of the Bowel, Enterectomy and Radical Cure (Surgeon-Major W. R. Browne)... ... 839
New Reflecting Adjustable Invalid Bed Table with arrangement for Lighting 845
Antiseptic Douche Apparatus 845
The Pathogenic Microbe of Distemper in Dogs and its Use for Protective Inoculation (Mr. Everett Millais), Three Figures ... 857, 858
Remarks on Fatty Tumours (Mr. J. B. Sutton), Eleven Figures 877, 878, 879, 880
Four Years' Experience of Cases of Stricture of the Urethra treated by Electrolysis, with a Record of Fifty Cases (Mr. W. Bruce Clarke), Three Figures 883
The Radical Cure of Hernia (Mr. E. S. Bishop), Three Figures... 885, 886
Case of Intracranial Suppuration (Professor Ogston) 892
A New Catheter 905
A Flushing Uterine Curette 905
The "Elephant" Man, Two Figures 916
The Contagious Nature of Leprosy, Three Figures 917, 918
Case of Pelvic Abscess treated by Abdominal Section (Mr. A. W. M. Robson), Two Figures... ... ... 945, 946
Unique Case of Extrauterine Pregnancy (Dr. C. M. Mac Quibban), Three Figures 948
On the Parallelism between the three Thermic Mechanisms and Hughlings Jackson's Three Levels (Dr. W. Hale White) 949
Toothplate passed *per anum* (Mr. A. Ledlie) 952
An Easy Method of Feeding *per rectum* (Mr. Y. M. Jones-Humphreys) ... 952
Lead Poisoning from Drinking Water in Sheffield 975
Biliary or Hypertrophic Cirrhosis (Mr. J. Michell Clarke) 1001
An Intratympanic Syringe, Douche, and Aspirator; a Vulcanite Ear Shoot (Mr. W. R. H. Stewart), Two Figures 1077, 1078
Universal Speculum Lightholder (Dr. T. More Madden) 1078
On Bilaterally Associated Movements and on the Functional Relations of the Corpus Callosum to the Motor Cortex (Dr. F. W. Mott) ... 1125
The Destruction of Micro-organisms during the process of Inflammation (Dr. M. A. Ruffer), Five Figures 1178, 1179, 1180, 1181, 1182
Intubation of the Larynx (Dr. W. Hailes, jun.), Two Figures ... 1186, 1187
An Improved form of Relaxation Suture Plate 1202
Forceps for the removal of Enlarged Follicles from the Pharynx ... 1202
The Morphology and Development of the Blood (Mr. A. Edington), Eleven Figures 1234, 1235, 1236
Causation of Reduced Arterial Tension (Dr. A. Haig), Five Figures 1241, 1242
The Croonian Lectures on Cerebral Localisation (Dr. D. Ferrier), Twenty-five Figures 1289, 1293, 1294, 1349, 1350, 1351, 1352, 1354, 1413, 1416, 1417, 1474, 1475, 1476, 1477, 1478
A Case of Gastrostomy (Mr. A. W. M. Robson), Two Figures ... 1295, 1296
Report on the Second Hyderabad Commission on Chloroform (Drs. McKendrick, Coats, and Newman), Diagrams 1347
Vegetative Aortic Valvulitis which proved fatal in Embolism, Aneurysm, and Rupture of the left Profunda Femoris Artery (Sir Dyce Duckworth) 1356
Psilosis (Linguæ et Mucosæ Intestini) (Dr. G. Thin), Eight Figures and Chromolithograph 1359, 1360
Note on Mesenteric and Omental Cysts (Sir Spencer Wells), Two Figures 1362
A case of Malformation in a Newborn Child (Surgeon-Major H. D. Cook) 1366
Foreign Body passed *per anum* (Mr. J. Berwick) 1367
Plastic Operation for Deformity of Cheek (Surgeon J. Kernan) ... 1369
Safety Bottles (Dr. A. H. Hassall) 1376
A New Form of Eyelid Retractor 1376
Removal of a very large Tumour from the Neck, probably a Diseased Accessory Thyroid Gland (Mr. A. E. J. Barker), Three Figures 1423, 1424, 1425
Case of Sarcoma of the Tonsil (Dr. G. H. Mackenzie) 1427
Circulating Filter 1432
Further Remarks on the Self-retaining Palate Hook, including its Use in Post-nasal Catheterism (Mr. E. C. Baber) 1481
The Radical Cure of Hernia (Mr. E. Kingscote), Four Figures 1482, 1483
A Case of Raynaud's Disease (Dr. W. Calwell) 1484
A New Chair Support for Spinal Curvature (Dr. C. Steele) 1489
A Primitive Surgical Instrument 1500

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Biology

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INDEX TO VOLUME I FOR 1890.

A.

Abattoir, the Liverpool, 373, 1218, 1260
Abdomen, topographical anatomy of the, 300; change of size of in the lying-in period, 604; the present position of the surgery of the, 896, 955, 967, 1042, 1105, 1167, 1219, 1332; penetrating wound of the with protrusion of the bowel, 1367
Abercrombie, Dr. J., appointed honorary consulting physician to Charing Cross Hospital, 1436
Abdominal section, pancreatic cyst successfully treated by, 426; pelvic abscess treated by, 944; for hydatid cyst of the liver, 1074; in Java, 1148
Aberdeen, the epidemic of influenza in, 96; the Gifford lectures at, 255; health of, 455; the teaching of chemistry in, 684; health of for February, 758; beverages at, 972; puerperal fever and erysipelas at, 1027; effect of the influenza epidemic on the death-rate of, 1091; rectorial election at, 1386; anatomy for practitioners at, *ib.*; the medical staff corps of, 1407
Abortion, the Causes and Treatment of, Dr. R. R. Rentoul, *rev.*, 247; the law of conspiracy in, 318; cardiac insufficiency in its relation to, 596; the prevention of, 672
Abraham, Dr. P. S., leprosy, 182; the National Leprosy Fund, 1278
Abscess in the left temporo-sphenoidal lobe, 15, 225; extra-pleural simulating empyema, 17; hepatic, surgical aspects of, 61, 120, 172, 268, 328, 889; of the cerebellum, following otitis media, 231; cerebral, localised and opened, 235; hepatic secondary to severe pelvic peritonitis, 289; pyæmia of sternum, 299; of frontal sinus, trephining for, 426; psoas, case of, 481; pelvic, treatment of, 606, 944; laparotomy in, 669; of the cerebellum, trephining for, 709; subdiaphragmatic, relation of to the thoracic viscera, 1002; abdominal, caused by a pin, 1074; cerebral, 1135
Abscesses, old, iodoform emulsion in, 922; multiple of liver, 1070, 1198; subdural, two cases of resulting from disease of the antrum and middle ear, 1301
Abuse of medical charities, 335; of medical charity, a new form of, 1111
Academy, Royal, medical portraits at, 1026
Academy, Royal, of Medicine in Ireland, Section of Anatomy and Physiology; the American periglyph, 299; single unilateral sigmoid kidney, 300; Meckel's diverticulum, *ib.*; topographical anatomy of the abdomen, *ib.*; abnormal right subclavian artery, *ib.*; topographical anatomy of the brain, *ib.*; nerve supply of the extensor brevis digitorum manus in man, and valvulæ conniventes in man, *ib.*; exhibit, 901; the lantern as an aid to anatomical demonstrations, *ib.*; collective investigation reports, *ib.*; the parieto-occipital and calcarine fissures of the brain, their development and relation to the calcar avis, 901

——— Section of Medicine, extrapleural abscess simulating empyemy, 17; case of empyema treated by the radical method, *ib.*; exhibition, 363; the practice of clinical medicine in Europe, 1507; angina pectoris in the heart-palsy of acute specific infective disease, *ib.*; intestinal obstruction, *ib.*; the influenza epidemic in Dublin, 670; dengue fever at Kells, co. Meath, *ib.*; massage, 1073; acute confusional insanity, 1486; medicated soaps, *ib.*; old fallacies under new names, *ib.*

——— Section of Obstetrics, exhibitions, 299, 548; complete prolapse of the cervical zone of the uterus preceding labour at full term, 299; congenital absence of vagina, *ib.*; a Cæsarean section, 548; specimens, 1486; speculum illuminator, *ib.*; papers, *ib.*

——— Section of Pathology, case of injury to the liver, 242; the pathology of empyema, *ib.*; micro-organisms, 243; corneal tumours, 670; rectal neoplasm, *ib.*; columnar-celled epithelioma of the lower jaw, *ib.*; cases, 961; specimens, *ib.*; diphtheritic micro-organisms, 1198; multiple abscess of the liver, *ib.*; round-celled sarcoma of the testes, *ib.*;

——— Section of State Medicine, the medical selection of lives for assurance, 483; the Infectious Diseases (Notification) Act, 1889, 1137; the state medicine qualification, *ib.*; the boarding-out system for the insane, *ib.*

Academy, Royal, of Medicine in Ireland, Section of Surgery, compound luxations of the ankle, 78; Battey's operation, *ib.*; the high operation for encysted calculus, 363; a series of, 100; cataract extractions, 670; surgery of the brain, 1485; cholecystotomy, 1486
Accidents and Injuries, the Immediate and General Treatment of, Sir W. Moore, *rev.*, 188; tramway, 195
Accountant, a defaulting, 95
Accounts, hospital, 698
Acetic acid in epithelioma, 1275
Acland, Dr., symmetrical trophic affection of nails, 667
Acne, etiology and treatment of, 383
Acromegaly, etc., 19; case of, 301, 662
Act, Food and Drugs, prosecution of chemists under, 797
—— Indecent Advertisements, conviction under, 312; difficulty of convicting under, 507
—— Infectious Diseases (Notification), adopted by Port of London, 90, 215; adopted by Dublin Corporation, 94; and the medical men resident in the Chippenham Union, 152; list of authorities adopting, 212, 919; Hints as to the Working of the, Dr. J. S. Cameron, *rev.*, 367; entry of sick rooms under powers of, 990; in Dublin, 1137; duties of medical officers of health under, 1406
—— Lunacy Acts Amendment, the protective clauses of, 369
—— New Lunacy, 1889, Dr. T. O. Wood, *rev.*, 790; urgency orders under the, 934; the certification and reception orders of lunatics under the, 1035; fees for certificates under, 1085, 1282; suicide and the, *ib.*; the working of the, 1219, 1278, 1319, 1331, 1401
—— new Medical for South Australia, 510
—— Pharmacy (Ireland) 1875, 1268
—— Public Health, sec. 126 of, 90
—— Sale of Horseflesh Regulation conviction under, 160, 197
Actinomycosis hominis, 43, 571; of the brain trephining in, 709; tuberculosis with aspergillus niger simulating, 1194
Action for disappointment, 521
Acts, Adulteration, administration of the, 918
——— the Contagious Diseases in India, 209
——— the Factory amendment of the, 1147
——— Vaccination fines and imprisonment for non compliance with, 795
Acworth, Mr., poor-law progress and reform in the metropolis, 28; the work of the Metropolitan Asylums Board, 104
Adam, Mr. J., scarlet fever and puerperæ, 780; cholepulmonary fistula, 836
Adams, Mr. J. E., obituary notice of, 271
——— Mr. W., on the successful treatment of cases of congenital displacement of the hip-joint by complete recumbency with extension for two years, 406; treatment of Dupuytren's finger contraction, 722
Addison's disease. *See* Disease
Address on endemic disease in British Guiana, etc., by Surgeon-General R. Grieve, 468; on the surgical aspect of impacted labour by Mr. L. Tait, 657; on disease of the heart in children by Dr. J. M. Bruce, 937
——— change of, 1223
Adenoma, calcifying of the skin, 895; of rectum, 962; malignant of the cervix uteri, 1136
Adenomata of the thyroid gland, extirpation of, 93
Adipocere conversion, remarkable example of, 1322
Adulteration, inadequate fines for, 562; "particulars" of, 616; by farmers, 754; punishment for in Russia, 1173; impunity in, 1464
Advertisements, indecent, 27
Advertising, unprofessional, 461; in newspapers, 694; through hospitals, 934
Æsthesiometer, new, for leprosy, 1165
Affections, Syphilitic, of the Nervous System, their Diagnosis and Treatment, Dr. T. McC. Anderson *rev.*, 1140
Africa, Central, white men in, 310; fashions and customs of, 1384; gleanings from the diary of a physician in, 1388
Agenda du Chimiste, MM. G. Salet, Ch. Girard, and A. Pabst, *rev.*, 1076
Agius, Dr. P., obituary notice of, 1048
Agoraphobia, 429
Agreement, an illegal, 1223
Agreements, lax, 157
Ague after influenza treated with belladonna, 601
Ainsworth, Dr. R. F., obituary notice of, 634
Air, aseptic, admission of into the pleura, 1245; superheated, treatment of phthisis by the inhalation of, 1249; intussusception successfully treated by injection of, 1300
Air passages, foreign body in the, 219
Aitken, Sir W., The Animal Alkaloids, *rev.*, 305
Albumen, vesical, 160; in urine, trichloracetic acid as a test for, 681; in urine, tests for, 1509
Albuminuria and high tension pulse, the connecting link between, 65; peripatetic, a digest of, cases of, 362, 419; functional, 1121; and morphine mania, 1275; without dropsy, 1299
Albuminurie in physiologischer und klinischer Behandlung, Professor H. Senator, *rev.*, 432
Albumoses, pathogenic, 1080; poisonous and defensive, 1261
Alcohol, recent signatures to medical declarations on, 255; use of in hospitals, 498, 1219; and the budget, 968; in workhouses, 1219; and childhood, 1468, 1471; the average consumption of, 1470
Alderson, Dr., treatment of placenta prævia, 1070
Alexia, subcortical, case of, 1027
Alkalies, the influence of on assimilation, 1033
Alkaloids, the Animal, Sir W. Aitken, *rev.*, 305
Allen, Mr. F. J., ptomaine or ptomine? 1279
——— Messrs. W. H., "the London Medical Recorder," 279
Allingham, Mr. H. W., case of ankylosis of temporo-maxillary joint excision of the condyle and neck of the jaw, 129; case of elephantiasis, 481; on the treatment of fistula in phthisis, 546, 832; an obscure case of acute abdominal obstruction in a boy aged 10, laparotomy, removal of the suppurating appendix vermiformis, recovery, 782
Allinson, Mr. H. C., imperforate hymen with retained menses, 780
"Alma Mater" completes seventh year of issue, 500
Altham, Dr. J., the influenza epidemic, 148; case of compound comminuted fracture of patella with avulsion of ligamentum patellæ, removal of the entire bone, recovery with freely movable and useful joint, 1190
Althaus, Dr. J., elected honorary member of Medical Society of New York, 56; transverse lesions of the spinal cord, 629
Althorp, Mr. C. F. M., death of a child during the administration of chloroform, 1425
Ambulance. *See* Association, St. John Ambulance
——— organisation, 733; street for London, 912, 1321
Amenorrhœa from shock, 1014
America. *See* United States
Amsterdam, lady doctors at, 948
Anæmia, pernicious, administration of arsenic in, 130, 328; malignant or pernicious in which a condition of chronic osteomyelitis was found after death, 232; pernicious case of, 784
Anæsthetic, hypnotism as an, 801, 849, 912; bromide of ethyl as an, 864
Anæsthetics, experiments on at Hyderabad, 347, 359; the question of in operations for adenoid growths in the naso-pharynx, 835
Analysis of milk, standard for, 89; Quantitative, a Handbook of Messrs. J. Mills and B. North, *rev.*, 1430
Anatomy, Human, Systematic and Topographical, a Textbook of, Professor A. Macalister. *rev.*, 135;

341139

Applied, Surgical, Medical, and Operative, Dr. J. M'Lachlan, *rev.*, 245; Practical, a Manual of, Dr. H. J. Cunningham and H. St. J. Brooks, *rev.*, 366; for practitioners, 1386; of the Central Nervous Organs in Health and Disease, Dr. H. Obersteiner, *rev.*, 1487
Anderson, Mr. A. R., ruptured popliteal aneurysm, 17; suprapubic lithotomy, 18; ovarian cyst, 673
——— Dr. H. S., obituary notice of, 814
——— Dr. T. M'C., ulceration of the stomach with special reference to the statistics of thirty-five consecutive cases, 1057; on Syphilitic Affections of the Nervous System, their Diagnosis and Treatment, *rev.*, 1140
Andrassy, Count, the last illness of, 627
Andrew, Dr. J., hæmorrhagic varicella, 132
Andrews, Dr. E., and Andrews, Dr. E. W., Rectal and Anal Surgery, etc., *rev.*, 303
Anemonine, 1275
Aneurysm, ruptured popliteal, 17; traumatic of back following a fracture, dislocation of the spine, etc., 131; popliteal, ligature of femoral artery in, 232; of popliteal artery and sarcoma, 422; abdominal, case of, 542; carotid, 666, 724; popliteal, 673; aortic, presenting in the dorsal region, 837; thoracic, unusual form of, 962; aortic, electropuncture in, 1276
Aneurysms, four sacculated arising from a dilated aortic arch, 894
Angina pectoris in the heart palsy of acute specific infective diseases, 363; after influenza, 1426
Anilides, two cases of poisoning by, 288
Aniline violet, superficial keratitis caused by, 836
Animals, marine, sea water and the nutrition of, 198, 387, 399; domestic, influenza in, 322; domestic, diphtheria in, 1081, 1259, 1411; living, experiments on, 1099, 1319, 1455; flesh of inoculated with anthrax or malignant pustule as food, 1287; born blind, variations in results of operations on, 1520
Ankle, compound luxations of the, 78; excision of, 671
Ankle-joint, amputation at, 243
Ankylosis of temporo-maxillary joint, 129
Annandale, Dr. C., Blackie's Modern Cyclopædia of Universal Information, *rev.*, 905
——— Professor T., retention tubes for constriction of the œsophagus, 426
Annual, the Medical and Practitioners' Index, *rev.*, 553
Antal, Professor Géza v., obituary notice of, 110
Anthrax, case of, 18; malignant, cure of, 499; flesh of animals inoculated with as food, 1287
Anthropology, criminal, 1204
Anthropometry in Ireland, 1499
Antipyrin as a hypnotic for children, 13; to mask the taste of, 872; increased sale of during the influenza epidemic, 930
Antiseptic, report upon sodium silicofluoride as an, 355
Antiseptics for midwives, 505, 851
Antwerp, exportation of horses to, 518
Anus, suburethralis, 252; imperforate, 664
Aortitis, unusual form of, 962
Aphasia, influenza and, 1190
Aphemia due to syphilis, 300
Apothecaries' Company *v.* Welch, 753
Apothecaries' Society of London, pass lists, 56, 276, 816, 993, 1334; prosecutions by, 144; and irregular practice, 509, 926; and its members, 1166; the licentiateship of, 1223; the Papers Set for the Several Examinations for the Qualification of the L.S.A.Lond., *rev.*, 1431
Appeal, a medical, 820, 876, 934, 1055; an, six years in bed, 1119, 1231, 1287; an, 1119, 1175, 1231, 1524
Appointments, hospital, 1209; Poor-law, 1227
Archæologists, medical, 1407
Archiv der Pharmacie, the editorship of, 56
Argentine Republic, beri-beri in, 872
Aristol in epithelioma, 1104; in diseases of the skin, 1207
Armagh, alleged case of leprosy in the workhouse of, 799
Armitage, Mr. J., a case of icterus gravis in a child, 293
Armstrong, Mr. H. E., infectious hospitals and the question of payment, 1015
Army, British, promotions and appointments in the medical staff of, 50, 106, 156, 210, 270, 331, 389, 452, 510, 575, 633, 695, 752, 812, 868, 926, 985, 1044, 1107, 1169, 1222, 1281, 1334, 1403, 1463, 1513; suggestions on army medical organisation, 51; medical officers' titles, 51, 105, 209, 331, 510, 695, 752, 812, 1044, 1222, 1613; varicocele as a disqualification, 105; promotions and appointments in the medical reserve of, 106, 331, 389, 633, 695, 986, 1222, 1463; the recent army medical warrant, 144, 388; army medical examination, 156; changes of station, 156, 389, 633, 926, 1169, 1463; medical valour, 156; *Hart's Army List*, *ib.*; retirement age of surgeons-general, 209; the order of the Medjidieh, *ib.*; sympathy between the Indian and British medical services, *ib.*; the profession and the Medical Staff, 270; varicose veins, *ib.*; the rank controversy, 270, 984; the cockade, 279, 388, 695, 927; the Army Medical School, Netley, 331; military equality, 331; medical department in the *Army List*, *ib.*; medical case books, *ib.*; what is a brigade-sugeon, 388; the report of Lord Camperdown's Committee, 494, 1462; result of examinations for medical staff of, 509; action on Lord Camperdown's Committee, 509; good advice, *ib.*; Army Service Corps, 510; medical command, *ib.*; action of the colleges, *ib.*; non-effective list, *ib.*; Mr. Stanhope and the medical department of, 554, 566, 612, 631, 676, 751, 968, 1044; army medical reform, 632; the old control, *ib.*; an anomaly, *ib.*; the Barracks Bill, 695; a *Manual* for medical officers, *ib.*; rejected, 696; Netley, *ib.*; military justice, *ib.*; soldiers' rations, 681, 847; scheme for the reorganisation of the medical staff of, 752; supply of candidates, *ib.*; rank retirement, *ib.*; promotion by selection, *ib.*; the evidence taken by Lord Camperdown's Committee, 800, 1106; the medical service in modern war, 811; redress of grievances, *ib.*; the military advisers, 812; the future of soldiers' dietary, 847; the refusal, 926; military instincts, 926, 1044, 1281; barrack improvement, 927; the grievances of the medical department of, 984; military opinion of medical officers, *ib.*; increase of foreign service, 985; military recognition, *ib.*; Manual for Army Medical Services, Surgeon-Major W. E. Riordan, *rev.*, 1017; the new regulations of the, 1020; compound titles, 1044; short home service, *ib.*; how discipline is affected, *ib.*; why medical officers desire army rank, 1106; the doctor's position, *ib.*; the hitch in Burmah, *ib.*; non-combatants, *ib.*; medical staff defence, 1107; medical officers and dress, *ib.*; army rank, 1168; the contemned position, *ib.*; a sham position, *ib.*; why I retired from the army medical department, 1169, 1513; the colleges and the army medical service, 1203; doctors or officers, 1221; hospitals in the field, 1222; rank at the station mess table, *ib.*; the Camperdown and Morley Committees, *ib.*; the work of the Camperdown Committee, 1280; Major-General Sir R. Buller's evidence, *ib.*; an army medical grievance, 1333; pupils at the Royal School for Daughters of Officers, 1334; junkerism, *ib.*; a royal medical corps, *ib.*; the colleges and the, 1382; doctors or officers, 1402, 1403; organisation of the schools, 1403; Mr. Stanhope's responsibilities, *ib.*; the new regulations on the position and functions of principal medical officers with armies in the field, 1434; annual dinner of medical department of, 1437, 1514; the Royal Colleges and the army medical officers, 1462; military instincts *v.* medical efficiency, 1463; Sir George Harman's evidence, 1514; expressions of opinions, *ib.*; rewards and promotions, *ib.*; history of the Soudan campaign, *ib.*
Army, Egyptian, notes on the medical organisation of, 446
——— French, practice of hypnotism forbidden to medical officers of, 368; health of the, 627; phthisis in the, 746
——— Indian, the surgeon-generalship in Bengal, 50; pay grievances of the medical staff of, 50, 210; promotion and appointments in the medical staff of, 51, 106, 156, 210, 271, 332, 389, 453, 510, 575, 633, 753, 812, 868, 926, 985, 1044, 1107, 1169, 1222, 1281, 1334, 1403, 1463, 1513; sympathy between the Indian and British medical services, 209; brigade-surgeons in, 388; result of examination for medical staff of, 509; the extra year abroad, *ib.*; administrative tenure, 632; pay in, 868; pay in, 926; Indian tours, 985; the medical service of and the Netley schools, *ib.*; compulsory promotion in, 1168; the wants of the service in, *ib.*; the medical service of, 1333; the Indian Government and military law, 1514
——— Spanish, health of the, 1479
Artery, abnormal, right subclavian, 300; popliteal, aneurysm of, 422; gluteal, embolism of, 423; radial, unusual distribution of, 642; profunda femoris, rupture of, 1355
Arthritis, chronic rheumatic, treatment of, 902
Ascites, hepatic, 19
Ashby, Dr. H., some points in the pathology of the paralysis which occurs during the first two years of life, 281; brain from a case of congenital syphilis, 427; perforation of the bowel, *ib.*; the kidneys in diphtherial uræmia, 962
Ashdown, Dr. H. H., certain substances found in the urine which reduce the oxide of copper upon boiling in the presence of an alkali, 169
Ashmead, Mr. G., obituary notice of, 51
Asia, cholera in, 336; Russian lady doctors in, 992
Asphyxia from pressing down the tongue, 1508
Assistant, the modern, 1389, 1456, 1510
Assistants, unqualified the law as to, 330; practice by, 388; unqualified legal practitioners in the practice of, 574; unqualified and certificates of death, 638
Association, the after-care appeal for funds for, 453
——— American Medical, annual meeting of, 1381
——— Belfast Medical Students, *conversazione* of, 501
——— British, meeting of at Leeds, 1228; programme of meeting of, 1407
Association, British Medical, books wanted for library of, 40, 315, 807; list of authors and others who have presented books to library of, 100, 315, 685, 806, 1146, 1162; the annual meeting of in Birmingham, 101; fifty-eighth annual meeting, 447, 625, 808, 861, 1038, 1164, 1272, 1387, 1397; financial statement for the year ending December 31st, 1889, 921; gift of portrait of Dr. Rogers to, 1024; presentation of medical portraits to library of, 1024; annual museum, 1039, 1165, 1274, 1399; the home and colonial Branches of the, 1377; the membership of, *ib.*; vacancy in science scholarship of, 1494
——— council of, proceedings of, 206, 1037; report of committee of on proxy voting, 1038
——— Inebriates Legislation Committee, report of, 1034
——— Parliamentary Bills Committee, meeting of *re* government of the College of Surgeons, 740
——— Scientific Grants Committee, report on osmosis experiments with living and dead membranes, 165; report on the coagulation of egg and serum albumen, vitellin and serum globulin, by heat, 167; report on certain substances found in the urine which reduce the oxide of copper upon boiling in the presence of an alkali, 169; report on bilaterally associated movements and on the functional relations of the corpus callosum to the motor cortex, 1124; notice as to grants by, 1202, 1268, 1329, 1376; report on the morphology and development of the blood, 1233; report on the excretion of balsams in the urine, 1365; report on associated eye movements produced by unilateral and bilateral cortical faradisation of the monkey's brain, 1419
——— Aberdeen, Banff, and Kincardine Branch, strangulated hernia, 135, accidental injury, *ib.*; the telephone as a bullet-finder, *ib.*; minutes and nomination, 570, 920; new members, 570, 920, 1037; cases, 606, 1016; the Aberdeen Dispensary, 606; atropine poisoning, *ib.*; communications, 901; microcorneæ, 1016; bacilli of grouse disease, *ib.*
——— Bath and Bristol Branch, new members, 264, 570, 920, 1396; communications, 264, 570; card cases, 920; papers, 920; the New Lunacy Act, 1396; epidemic influenza, *ib.*
——— Birmingham and Midland Counties Branch, dermoid cysts of the ovaries, 80; œsophagotomy, *ib.*; spinal injury, *ib.*; cerebellar lesion, *ib.*; exophthalmic goître, *ib.*; syphilitic headache, *ib.*; malignant disease of bladder, *ib.*; typhlitis and perityphlitis, *ib.*; new members, 101, 321, 745; Dr. Rentoul's proposals 101; cerebellar lesion, 321; fracture dislocation of vertebræ, *ib.*; myoma, *ib.*; papers, 321, 725, 963; amputation of the hip-joint for sarcoma of femur, 725; punctured fracture of skull, *ib.*; nephrotomy or nephrectomy, *ib.*; transposition of viscera, 962; tobacco amblyopia in a woman, *ib.* case, 963; specimens, *ib.*; herpes zoster brachialis *ib.*; cerebral abscess, 1135; tumour of brain, *ib.*; hydatid cyst of brain, *ib.*
——— Bombay Branch, demonstrations, 243; perineal fistula, *ib.*
——— Border Counties Branch, winter meeting, 102; communications, 102, 1036; proposed public medical service, 107; the late Dr. Anderson of Selkirk, 1036; dinner, 1037
——— British Guiana Branch, annual meeting, 504; minutes, *ib.*; president's address, *ib.*; election of auditors, *ib.*; vote of thanks, *ib.*; quarterly meeting, 1163; financial report, *ib.*; yellow fever, *ib.*; typhoid fever in Georgetown, *ib.*
Cambridge and Huntingdon Branch, combined meeting with the East Anglian Branch and the Norwich Medico-Chirurgical Society, 1504; next annual meeting, 1506; election of officers, *ib.*
——— Colombo, Ceylon Branch, election of secretary, 624; proposed resignation of presidents, *ib.*; new members, 624, 625; election of officers, 624; rules of procedure, 625; paper, *ib.*
——— Dorset and West Hants Branch, spring meeting, 1330; officers and council, *ib.*; representative on the council of the Association, *ib.*; representative on the Parliamentary Bills Committee, *ib.*; new members, *ib.*; next meeting, *ib.*; medical officers of health to county councils, *ib.*; case, *ib.*; paper, *ib.*; votes of thanks, *ib.*; excursion and dinner, *ib.*
——— Dublin Branch, annual meeting, 320; report of Council, *ib.*; the question of hospital abuse, *ib.*; installation of new president, 321; president's address, *ib.*; Irish diplomas and English hospital appointments, *ib.*; officers and council, *ib.*; annual dinner, *ib.*; the secretaryship of, 1386
——— East Anglian Branch, proposed public medical service, 53; com-

meeting with Cambridge and Huntingdon Branch and the Norwich Medico-Chirurgical Society, 1504; new members, 1505; report of council, *ib.*; election of officers, *ib.*; new president, *ib.*; invitation to Cambridge, *ib.*

Association, British Medical, East Anglian Branch, Essex District, meeting, 1103; luncheon, *ib.*; next meeting, *ib.*; honorary secretary, *ib.*; communications, *ib.*; cases, *ib.*

——— East York and North Lincoln Branch, annual meeting, 1453; officers and council, *ib.*; president's address, *ib.*; cases and papers, *ib.*; lunch, *ib.*

——— Glasgow and West of Scotland Branch, annual meeting, 504; election of officers, *ib.*; cases, etc., *ib.*; dinner, *ib.*

——— Gloucestershire Branch, influenza, 625; proposed public medical service, 625, 635; abuse of out-patient department, 980; diet in acute disease, *ib.*; surgical physiology of the abdomen and pelvis, *ib.*; annual meeting and dinner, *ib.*; annual meeting, 1330; officers and council, *ib.*; paper, *ib.*; dinner, *ib.*

——— Jamaica Branch, notices of motion, 264; papers, *ib.*; proposed medical benevolent fund, etc., 1272; communications, *ib.*

——— Malta and Mediterranean Branch, meeting of, 207; new members, *ib.*; treatment of cholera, *ib.*; triplets, *ib.*; electricity in facial paralysis, *ib.*

——— Melbourne and Victoria Branch, annual meeting, 861; president's address, *ib.*; election of officers, *ib.*; report of council, *ib.*

——— Metropolitan Counties Branch, annual dinner, 1392; annual meeting, 1450; report of council, 1451; vote of thanks to Mr. Noble Smith, *ib.*; election of officers, *ib.*; notice of motion, *ib.*; treasurer's report, *ib.*; vote of thanks to retiring president, *ib.*; president's address, *ib.*; letter from Charity Organisation Society, *ib.*; dinner, *ib.*

——— Metropolitan Counties Branch, East London and South Essex District, cases, 101; votes of thanks, 102, 807; demonstration of nervous cases, 504; paper, 807; annual meeting, 1451; officers and committee, *ib.*; vote of thanks to president, *ib.*; dinner, *ib.*

——— Metropolitan Counties Branch, North London District, communications, 504, 1163; cases, 504; votes of thanks, 504, 1163

——— Metropolitan Counties Branch, South London District, cases, 447; pseudo-peritonitis and epilepsy in hysteria, *ib.*; vote of thanks, *ib.*; annual meeting, 1330; officers and committee, *ib.*; votes of thanks, *ib.*; dinner, *ib.*

——— Metropolitan Counties Branch, Western District, transposition of viscera, 19; exophthalmic goître, *ib.*; hepatic ascites, *ib.*; Raynaud's disease, *ib.*; myxœdema and sporadic cretinism, *ib.*; acromegaly, etc., *ib.*; vote of thanks, 20; paper, 1164

——— Midland Branch, annual meeting, 1453; officers and council, *ib.*; president's address, *ib.*; communications, *ib.*; exhibits, *ib.*; luncheon and dinner, *ib.*; new members, *ib.*

——— Midland Branch, Leicestershire District, papers, 980; dinner, 981

——— North of England Branch, spring meeting, 1163; specimens, *ib.*; paper, *ib.*; dinner, *ib.*

——— North of Ireland Branch, suprapubic lithotomy, 1074; peculiar affection of the nails, *ib.*; optic neuritis, *ib.*; plastic bronchitis, *ib.*; abdominal sections, *ib.*; œdematous fœtus, 1075

——— Northern Counties of Scotland Branch, annual meeting, 1507; president's address, *ib.*; new members, *ib.*; officers and council, *ib.*; next meeting, *ib.*; dinner, *ib.*

——— Oxford and District Branch, new members, 1037; communications, *ib.*

——— Perthshire Branch, election of president, 264; medical officers of health, *ib.*; annual dinner, *ib.*; papers, 264, 1396; proposed public medical service, 276; distribution of cancer, 447; separation of funis, *ib.*; business, 1396

——— Shropshire and Mid-Wales Branch, cancer of breast, 1016; bacillus of tubercle in sputum, *ib.*; keratitis after influenza, *ib.*; safety pin in urethra, etc., *ib.*; double vagina, *ib.*; specimens, *ib.*; cases, *ib.*; new members, 1037

——— Southern Branch, Isle of Wight District, abuse of out-patient departments, 920; communications, *ib.*; dinner, *ib.*; adjourned annual meeting, 1271; election of officers, *ib.*; next meeting, *ib.*

——— Southern Branch, South East Hants District, malignant adenoma of the cervix uteri, 1136; cases, *ib.*; specimens, *ib.*; right lumbar colotomy for chronic intestinal obstruction, *ib.*; treatment of placenta prævia, *ib.*; new aural snare, 1137; election of president, *ib.*

Association, British Medical, South-Eastern Branch, report of council, 1506; financial report, *ib*; officers and council, *ib.*; representative of Branch on Council of Association, 1507; honorary secretary, *ib.*; representative on Parliamentary Bills Committee, *ib.*; next annual meeting, *ib.*; resolutions, *ib.*; votes of thanks, *ib.*; dinner, *ib.*

——— South-Eastern Branch, East Kent District, spring meeting, 745; communications, *ib.*; annual meeting, 1271; election of honorary secretary, *ib*; future meetings, *ib.*; chairman for next meeting, *ib.*; cases, etc., *ib.*; tea, *ib.*; visit to cathedral, *ib.*

——— South-Eastern Branch, East Surrey District, spring meeting, 691; communications, *ib.*; dinner, 691, 1164; heart-disease, 1164; myxœdema, *ib.*; muscular atrophy, *ib.*; nitrous oxide as an anæsthetic, *ib.*

——— South-Eastern Branch, East Sussex District, conjoint meeting with West Sussex District, 861; Nurses' Co-operation Association, *ib*; communications, *ib.*; next meeting, 861, 1272; election of honorary secretary, 1271; communications, *ib.*

——— South-Eastern Branch, West Kent District, meetings, 745, 1330; next meeting, *ib.*; representative for Kent on the Council of the Association, *ib.*; election of honorary secretary of district, *ib.*; papers, *ib.*; dinner, 745, 1330; next meeting, 1330; communications, *ib.*

——— South-Eastern Branch, West Surrey District, meeting, 861; next meeting, *ib.*; papers, *ib*; dinner, *ib.*

——— South-Eastern West Sussex District, conjoint meeting with East Sussex District, 861

——— South Indian and Madras Branch, aortic aneurysm, 79; the Burmah campaign, *ib.*; purpura hæmorrhagica, *ib.*; orbital tumours, 725; congenital cataract, *ib.*; enterectomy, *ib.*; varix of the femoral lymphatics, *ib.*; hydatid of the liver, *ib.*; living specimens, 1198; beri-beri, *ib.*; cases, 1199; sarcoma of leg, *ib.*; pathological specimens, *ib.*; paraplegia from syphilitic disease of cord, 1371; cases, *ib.*; specimens, *ib.*; plastic operation, *ib*; the effect of chill in producing malarial fever, *ib.*; annual meeting, 1396; statement of accounts, *ib.*; reduction of subscription, *ib.*; remission of postage, *ib.*

——— South Midland Branch, annual meeting, 1452; report of council, *ib.*; election of officers, *ib.*; autumnal meeting, *ib.*; new members, *ib.*; disposal of surplus funds, *ib.*; medical charities, *ib.*; president's address, 1453; tariff of fees, *ib.*; papers, etc., *ib.*; votes of thanks, *ib.*

——— South Wales and monmouthshire Branch, new members, 1037; papers, etc., *ib.*; donations to Epsom College, *ib.*; dinner, *ib.*

——— South-Western Branch, extraordinary meeting of, 691; annual meeting, 1451; general meeting, *ib.*; vote of thanks to retiring president, *ib.*; president's address, *ib.*; report of Branch Council, 1452; next annual meeting *ib.*; officers and council, *ib.*; papers, *ib.*; drive, *ib.*; annual dinner, *ib*; excursion, *ib.*

——— Staffordshire Branch, popliteal aneurysm, 673; epithelioma of tongue, *ib.*; pseudo-hypertrophic paralysis, *ib.*; neurological instruments, *ib.*; suprapubic lithotomy, *ib.*; pyrosis, *ib.*; retention of urine, *ib.*; new members, 691; new member, 1506; fracture of patella, *ib.*; traumatic aneurysm of the left brachial artery, *ib.*; glass vaginal tube and female catheter, *ib.*; mediastinal sarcoma, *ib*; malignant tumour of thyroid, *ib.*; complications of labour in 2,000 consecutive pregnancies, *ib.*; insanitary cesspools in rural districts and their remedy, *ib.*

——— Stirling, Kinross, and Clackmannanshire Branch, Dr. Rentoul's scheme, 624, 634; exhibition of instruments, 624; annual meeting, 1507; report of council and financial statement, 1508; officers and council, *ib.*; cases, *ib.*; health conditions in school life, *ib.*; exhibition of instruments, *ib.*; annual dinner, *ib.*

——— Sydney and New South Wales Branch, 86th meeting, 101; new members, 101, 1272; communications, *ib.*; notices of motion, *ib.*; papers, etc, 264; medical ethics, 265; annual meeting, 1272; president's address, *ib.*; balance sheet, *ib.*; officers and council, *ib.*; annual meeting, 1507; new members, *ib.*; president's address, *ib.*; vote of thanks, *ib.*; balance sheet, *ib.*; officers and council, *ib.*

——— West Somerset Branch spring meeting, 980; representative of Branch on Council of Association, *ib.*; new members, *ib*; the influenza epidemic, *ib.*

Association, British Medical, Yorkshire Branch, communications, 570; cases, *ib.*; dinner, *ib.*

Association, British Medical Temperance, new members, 458; annual meeting of, 1339

——— British Nurses, meeting of, 503

——— of Certifying Factory Surgeons, annual meeting of, 444

——— Edinburgh Sanitary Protection, meeting of, 564

——— of Fellows of the Royal College of Surgeons, meeting of committee of, 484; account of origin and progress of, 566; list of officers of, 1339; general meeting of, 1447

——— Fifeshire Medical, annual meeting of, 1211

——— French Medical, annual meeting of, 981

——— Glasgow, University Assistants', memorial of, 799

——— Holiday Colonies of Munich, statistics of, 1173

——— Home Hospitals, report of, 910; and a street ambulance for London, 912; the ambulance service of, 1051

——— Irish Medical, and appointments to the Prisons Board, 736; Dr. A. H. Jacobaud, 915; the proposed changes in the constitution of, 1153; special meeting of, 1326

——— Irish Medical Schools' and Graduates' annual meeting, 690; summer provincial meeting of, 1328

——— Manchester Medico-Ethical, list of officers, etc., 337

——— of Medical Men of the Department of the Seine, 57th annual meeting of, 1228

——— Medical Officers of Schools, discussion on epidemic of influenza, 150, 924

——— Metropolitan and National Nursing, annual meeting of, 1148

——— Metropolitan Provident Medical, annual meeting of, 1516

——— Midland Volunteer Medical Officers', annual meeting, 1044

——— Medico-Psychological, pass lists, 56, 111; quarterly meeting of, 699; new members, 760, 1283; offers bronze medal for dissertation on insanity, 930; the examination of the, 1087

——— Poor-law Medical Officers', list of officers and Council, 112; resolution *re* fees for lunacy certificates, 1114, 1518

——— of Public Sanitary Inspectors, annual dinner, 391

——— St. John Ambulance, Lord Wolseley on the work of, 57; station at St. Paul's Cathedral, 244; and the Duchess of Albany, 276; at Ceylon, 335; at Oxford, 1338

——— Sanitary Assurance, annual report, 518

——— Scottish, for the Medical Education of Women, course of medicine of, 145; first general meeting of, 203; the by-laws of, etc., 446; progress of, 1091

——— Workhouse Infirmary Nursing, the work of, 1214; annual gathering of, 1284

——— Yorkshire, of Medical Officers, list of officers, etc., 216

Associations, medical, 330: medical and contracts not to practise, 388

Assurance, the medical selection of lives for, 483

Asylum, Broadmoor Criminal Lunatic, annual report of, 813

——— Chenango County, burning of, 1173

——— Cork District Lunatic, overcrowding of, 929; the difficulties of, 1386

——— Dorchester County Lunatic, annual report, 54

——— Dundrum Lunatic, disorder in, 1052

——— Earlswood, forty-third anniversary festival of, 699

——— Glasgow Royal Lunatic, Gartnavel, annual report, 214

——— Longue Pointe Lunatic, fire in, 1115

——— new pauper lunatic, laying of foundation stone of, 1464

——— Nottingham Borough Lunatic, new wing to, 276

——— Western Counties Idiot, annual meeting of subscribers, 1463

Asylums, clinical students at, 29, 453, 490, 615; county lunatic, out-patients a, 39, 252; lunatic, consulting physicians at, 756; Egyptian, English management of, 851; removal of pauper lunatics to, 1223

Atheroma, multiple, of skin, 863

Athetosis after injury, 667

Athletics, Greek, 702

Atkin, Mr. C., aural complications in influenza, 787

Atkinson, Dr. F. P., the epidemic of influenza, 103; the medical profession and the prevention of disease, 702; diphtheria in domestic animals, 1411

——— Dr. G. A., the therapeutical value of exalgine, 1366

——— Mr. G. P., the forceps a death trap, 163

Atlas of Illustrations of Pathology, *rev.*, 432

Atlas, necrosis of, 249

Atresia vaginæ, Porro's operation for, 1467

Atrophy, progressive idiopathic muscular in a young child, 16; universal lateral facial, 499
Atropine, morphine as an antidote to, 1440
——— drops, toxic effects of, 128
——— poisoning by absorption from the conjunctiva, 421; case of, 607
Atticus, external, of the tympanic cavity, pathology and therapeutics of the, 1040
Auchinleck, Dr. H., elected physician to Mercer's Hospital, 314
Augusta, the late Dowager Empress, 87, 142; proposed memorial to, 497
Aulde, Dr. J., A Treatise on Materia Medica, Pharmacology and Therapeutics, *rev.*, 187
Aural. *See* Ear
Austen, Mr. H., the University of London and degrees for medical students, 629
Aust-Lawrence, Dr. A. E., hæmorrhages occurring during pregnancy, 1065; the treatment of metrorrhagia, 1484
Australia, insanity among the aborigines of, 375; M. Pasteur and the rabbit pest in, 615, 692; Cæsarean section in, 1150; leprosy in, 1405
Austria, black pox in, 111; proposed admission of women to medical faculties of, 760, 1173; the first lady doctor in, 969; insanity in, 1115; hospital statistics in, 1154
Austria-Hungary, obituary in 1889, 36
Autographism, 922
Autopsies, Manuel d', Dr. T. Harris, *rev.*, 23
Axel Key's Schulhygienische Untersuchungen in Deutscher Bearbeitung herausgegeben, Dr. L. Burgerstein, *rev.*, 1137

B

Baber, Mr. E. C., epistaxis, 902; further remarks on the self-retaining palate hook, including its use in post-nasal catheterism, 1481
Baby farmers, sentence on, 816
——— farming at home and abroad, 565
Bacilli, inoculation of, 102; of grouse disease, 1016
Bacillus, the cholera, 90; of mumps, 505; of typhoid fever, new method of isolating, 505; Eberth's typhoid, 570; of rhinoscleroma, 747; of tubercle in sputum, 1016; "pseudo"-typhoid, 1040
Bacteria, chemistry of, 1095; of the soil, 1441
Bacteriology, of influenza, 194, 249; books on, 279; and epizoötics, 1266
Baginsky, Dr. A., Lehrbuch der Kinderkrankheiten für Aerzte und Studirende, *rev.*, 790
Bailey, Mr. R. C., the London University and degrees for London medical students, 1105
Balding, Mr., and the coroner for Cambridgeshire, 574
Balfour, Dr. G. W., elected member of Enlarged Court of the University of St. Andrews, 855
——— Surgeon-General T. G., nominated member of Metropolitan Asylums Board, 731
Ball, Dr. C. B., rectal neoplasms, 670
—— Dr. J. B., hæmatoma of nasal septum, 178; case of rhinolith, 478
—— Dr. W. M., treatment of obesity, 1410
Ballance, Mr., congenital hemihypertrophy of the head and of certain toes, 667; operations for septic thrombosis of the lateral sinus consecutive on aural disease, 783
Ballantyne, Dr. J. W., scleroma and œdema neonatorum, 403
Balsam of Peru in tuberculosis, 92, 863
Balsams in the urine, report on the excretion of the, 1365
Baltic Provinces, leprosy in the, 1304
Bandage, Esmarch's, as an aid to cocaine anæsthesia in minor surgery, 1509
Bantock, Dr. G. G., fibroid tumours of the uterus, 15; elected honorary member of the Société Belge de Gynécologie et d'Obstétrique, 56; dermoid cysts of both ovaries, 242
Barber-surgeon, redivivus, the, 1524
Barbour, Dr. H. F., Manual of Gynæcology, *rev.*, 1018
Bark, Mr. J., the antiseptic after-treatment of vaccination, 233; and new vaccinator, 433
Barker, Mr. A. E. J., acute intestinal strangulation due to a band with active tubercular peritonitis, laparotomy, recovery, 124; on the histology of a case of so-called "duct cancer," 590; macroglossia, 785; a study of fifty consecutive cases of operation for the radical cure of non-strangulated herniæ, 840; the present position of abdominal surgery, 958; removal of a very large tumour from the neck, probably a diseased accessory thyroid gland, recovery, 1422
——— Dr. F. C., modified binaural stethoscope, 368
——— Mr. W. J. T., local outbreaks of influenza, 202
Barling, Mr. H. G., syphilitic chancre of lips, 428; fibrosarcoma of left clavicle at sternal end, excision, death from suppuration spreading down the anterior mediastinum, 598
Barmaids, "betterment" for, 730, 816
Barnard, Dr., presentation to, 1338
Barnes, Mr. E. C., notes on 290 cases of influenza, 599
——— Dr. E. G., the influenza epidemic, 148
——— Dr. F., elected honorary corresponding member of the Imperial Society of Medicine of Constantinople, 56
Barnes, Dr. R., elected honorary member of the the Imperial Society of Medicine of Constantinople, 56; the relations of the graduates and convocation of the University of London to the proposed reform of the University, 267, 324, 384, 420, 507; influence of the influenza wave on puerperal and menstruating women, 356; the relations of the female sexual organs to mental diseases, 1401
Baronets, medical, 309
Barrett, Mr. A. E., first pregnancy late in life, 234; prolonged somnolence after influenza, 1067; treatment of perspiring feet, 1231
——— Mr. G. W. S., on the antiseptic after-treatment of vaccination, 478, 1068, 1288
Barrs, Dr. A. G., the tuberculous nature of the so-called pleuritic effusion, 1059; enlarged liver, with increase of white blood corpuscles, 1250
Barton, Mr. J. K., Battey's operation, 79; epidemic influenza in a newborn infant, 477; gastric ulcer, symptoms of perforation, peritonitis, abscess bursting into bowel, 1013
Barwell, Mr. R., treatment of lateral curvature of the spine, 605
Bastian, Dr. H. C., on the symptomatology of total transverse lesions of the spinal cord, with special reference to the condition of the various reflexes, 480
Bateman, Dr. A. G., the Medical Defence Union and the members of the General Medical Council, 270; the Indecent Advertisements Act, 507
Bates, Dr. H. L., the epidemic of influenza, 96
——— Mr. J. P., presentation to, 216
Bath, a Short Manual of the Mineral Waters of, Mr. A. E. Fox, *rev.*, 23; and her Thermal Waters, Mr. S. Craddock, *rev.*, *ib.*
Baths and washhouses, 157; cold, in measles, 1275; German, for rheumatism, 1286
Batten, Dr. G. B., the treatment of influenza, 1411
——— Dr. R. D., "peripatetic albuminuria," 419
Battery, new chloride of silver, 727
Battey's operation, case of, 79
Battle, Mr. W. H., tubercular ulceration of the bladder in which recovery followed scraping of the disease through a suprapubic incision, 1011; cerebral symptoms accompanying disease of the middle ear, 1132
Baumgarten, Dr. P., Lehrbuch der pathologischen Mykologie, *rev.*, 486
Beach, Dr. F., provision for feeble minded and exceptional children, 1511
Beale, Dr. C., a case of acute obstruction of the larynx after convalescence from broncho-pneumonia, 953
Beatty, Dr. W., intestinal obstruction, 363
Becker, Professor O., obituary notice of, 454
Bed table, new reflecting adjustable, invalid, 845
Beddoes, Mr. G., Habit and Health, *rev.*, 1493
Beef-tea ices, 1432
Beer, pure, 815
Beevor, Dr. C. E., case of ossifying scalenus (?), 481; athetosis after injury, 667
Beiträge zur pathologischen Anatomie und zur allgemeinen Pathologie, Dr. E. Ziegler, *rev.*, 486
Belcher, Mr. H. E., hypertrophied mamma in a boy, 364
Belfast, the sanitary condition of, 145; the university extension scheme in, 201, 314; high death-rate in, 315; post-graduate courses for, 501; the influenza in, *ib.*; the abuse of medical charities in, 1092; Hospital Saturday in, 1268
Belgium, obituary in, in 1889, 36; action for malpraxis in, 112; epileptics in, 578; criminal lunatics in, 638; notice as to coffins by Government of, 691
Bell, Dr. James, re-elected president of the Institute of Chemistry, 578
—— Mr. John, the Hong Kong Medical Society's Transactions, 934
—— Dr. J. H., the Bradford Infirmary, 52
—— Mr. T., clinical teaching in Dublin, 154, 327
Belladonna, a possible substitute for, 92; pilocarpine in, poisoning by, 420; ague after influenza treated by, 601
——— —— liniment, poisoning by, 720
Benham, Mr. F., excision of villous growth from the rectum, 426
Benington, Dr., insanity cured by a pessary, 15, 242; dilatation instead of support of the perineum, 1119
Bennett, Dr. F. W., vital force, 135
——— Mr. W. H., Clinical Lecture on Varicose Veins of the Lower Extremities, *rev.*, 189; a case of hernia of the cæcum entirely wanting in a peritoneal sac, in which strangulation at the internal abdominal ring coexisted with an intussusception through the ileo-cæcal valve, 238
Ben Nevis Observatory, new instruments at, 441
Benson, Mr. A. H., corneal tumours, 670; corneal tumour (? fibroma), in a man aged 72, 1072
——— Mr. J., anthrax, 18
Benzoate of mercury in syphilis, 1087
Bequest, the Campbell, 145; the Berridge, 518
Bequests, 215, 276, 518, 579, 638, 699, 803, 872, 910, 1064, 1283, 1338; to hospitals, 919
Berdoe, Mr. E., ague after influenza treated by belladonna, 601; Browning's Message to his Time, *rev.*, 1371; experiments on animals, 1455
Beri-beri in the Argentine Republic, 872; remarks on, 1198; in Brazil, 1440
Berkhamsted, the sanitary condition of, 1112
Berlin, hospital reform in, 275; the influenza epidemic in, 315; phthisis in, 457; opening of new university Poliklinik at, 1283; benefit societies in, 1467; laying of foundation stone of children's hospital, 1494; insanity in, 1520; new hospital at, 1521
Bernard, Claude, proposed statue to, 1051
——— Dr. W., visiting physicians to lunatic asylums in Ireland, 203; case of injury to the liver, 242
Bernheim, Dr. H., Suggestive Therapeutics, *rev.*, 366
Berry, Mr. G. A., spontaneous purulent hyalitis 9 months after successful cataract extraction, 668; note on the metre angle in latent and manifest muscular deviations, *ib.*; on the immediate effect of tenotomy on the concomitancy of a squint, 669; removal of large foreign body from orbit without injury to sight, 1429; note on vaccinia of the eyelids, 1483
——— Mr. J., specimens illustrating disease of the thyroid gland, 180; fibro-chondroma of tongue, 1195
Bertheraud, Dr., death of, 1520
Berthold, Professor E., Die ersten zehn Jahre der Myringoplastik, *rev.*, 138
Bertillon, Dr. J., influenza in France, 1015
Berwick, Mr. J., foreign body passed per anum, 1367
Besser, Dr. V., obituary notice of, 1170
Bewley, Dr. H. T., the pathology of empyema, 242
Bexhill-on-Sea, the climate of, 220, 279
Beyrout, an Anglo-Syrian dispensary at, 1497
Bickerton, Mr. T. H., a criticism of the Board of Trade's tests for colour blindness, 535
Bidwell, Mr., necrosis of atlas, 299; pyæmic abscess of sternum, *ib.*; sebaceous cyst of umbilicus, 667; tubercle of thyroid, *ib.*; treatment of erysipelas, 1015
Bill to amend the Pharmacy Act Ireland (1875), 1501
—— the Barrack, 1220
—— Dublin Hospitals, 442, 501
—— Children's Life Assurance, second reading of, 1458
—— Education of Blind and Deaf-mute Children, introduced into the House of Lords, 1442
—— Factory and Workshop Act Amendment, provisions of, 1517
—— Infant Life Protection, text of, 569; opposition to, 614; select committee on, 1436
—— Infectious Diseases (Prevention), provisions of, 806; and the dairy trade, 912, 972; read a third time, 1436
—— Lunacy Consolidation, 561
—— Midwives Registration, 1152, 1471
Billings, Dr. J. S., The National Medical Dictionary, *rev.*, 903
Billingsgate, the insanitary condition of, 616
Bills, the Housing of the Working Classes, 1495
Biology, the study of in Great Britain, 376; of Daily Life, the, Mr. J. H. N. Nevill, *rev.*, 1201, 1470
Birds, tuberculosis in, with observations on the relation of the disease to leprosy, 785
Birmingham, the epidemic of influenza in, 96, 146, 267; the Hospital Sunday Fund in, 111; conference of medical men, etc., at, *re* hospital reform, 155; correspondence from, 266, 692, 1166 1510; the Children's Hospital, 266; balls at hospitals, *ib.*; the Skin and Lock Hospital, 267; medical appointments to post office districts of, 579; proposed children's sanatorium for, 613, 692; the hospital question in, 615; death of a bonesetter's patient, 1166; Hospital Saturday at, *ib.*
Birmingham, Professor, single unilateral sigmoid kidney, 300; Meckel's diverticulum, *ib.*; the lantern as an aid to anatomical demonstrations, 901
Birnie, Deputy Surgeon-General T. K., obituary notice of, 111
Birt, Mr. G., a case of Raynaud's disease 200 years ago, 1343
Birthday honours, 33, 1206
Bishop, Mr. E. S., radical cure of hernia, 884; Lectures to Nurses on Antiseptics in Surgery, *rev.*, 1304
Bismuth salts and the odour of garlic, 499
Black, Dr. D. C., the Laurie case, the medical evidence, 115; corrosive sublimate in gonorrhœa, 752
——— Dr. R., myeloid sarcoma of femur, 903
——— Mr. W. G., the meteorological aspects of the influenza epidemic, 1055
Blackman, Dr. J. G., laryngeal stenosis from fixed adduction of the vocal cords following cancer of the œsophagus, 837; malignant adenoma of the cervix uteri, 1136; pilocarpin in dryness of the tongue, 1366
Black-pox in Austria, 111
Bladder, unusual growth in the, 16; sloughing of the wall of, 242; villous disease of, 426; diffuse papilloma of, 544; 964 cases of operation for cal-

culus in, 603; tubercular ulceration of cured by scraping, 1011; sloughing of the, 1087; wounded by decapitating hook, 1408
Blanc, M. E., *post-partum* hæmorrhage, 384
Blenkarne, Mr. W. L'H., scarlet fever and puerperæ, 719
Blind, proposed legislation for, 192
"Blocking" Bills in Parliament, 969
Blood, preservation of, 102; the history of the discovery of the circulation of the, 399; the Mechanism of the Circulation of the, etc., Dr. H. Davies, *rev.*, 551; report on the morphology and development of the, 1233
——— poisoning, an unusual variety of, 419
Bloomfield, Mr. J. E., influenza and rheumatic fever, 889
Blumer, Dr., popliteal aneurysm, 673; epithelioma of tongue, *ib.*
Blunder, a complex, 819
Board, Local Government, Annual Report of the Medical Officer of the, *rev.*, 1093; administrative relations of, 1096; infectious diseases and, 1519
——— Metropolitan Asylums, the work of, 88, 104; the medical superintendents of the hospitals of, 493; meeting of, 516, 638; the ambulance service of, 910; review of year's work of, 1114
——— school for London, and children in want of food, 91
Boarder or patient? 1333
Bodington, Mrs. A., Studies in Evolution and Biology, *rev.*, 1076, 1524
Body, ownership of the after death, 1045; foreign passed per anum, 1367
Bokenham, Mr. T. J., two cases of poisoning by anilides (exalgine and antifebrin), 288; report on the value of sodium silico-fluoride as an antiseptic, 355
Bombay, leper home at, 335; medical education in, 389; influenza epidemic at, 578; laying of foundation stone of leper asylum at, 759
Bond, Mr. C. J., cholecystomy, 135
Bone, frontal, instrumental indentation of, 242; decalcified, the implantation of, 370
——— drilling in the neighbourhood of inflamed joints and elsewhere, 416, 508
——— inflammations of typhoid origin, 1033
Bones, ancient Egyptian, with osteoarthritis and senile symmetrical atrophy of skulls, 423; metacarpal dorsal dislocation of, 951; from a case of scurvy, 1192
Book, kissing the, 1494
Booth, Dr. J. M., the Aberdeen Dispensary, 606
Borax, dangers of as a preservative, 578; in epilepsy, 901
Borborygmus, treatment of, 461
Boric acid and glycerine as an application in smallpox, 1104
Borthen, Dr. L., new refraction ophthalmoscope, 138
Bostock, Surgeon-Major, health of, 111
Botkin, Professor S., death of, 28; obituary notice of, 110; memorial to, 330
Bottles, safety, 1375
Bourneville, Dr., Recherches Cliniques et Thérapeutiques sur l'Épilepsie, l'Hystérie, et l'Idiotie, *rev.*, 1302
Boutflower, Mr. A., memorial to, 1336
Bowel, perforation of the, 427; strangulation of through a hole in the mesentery, 890
Bowen, Dr. E., obituary notice of, 757
Bower, Dr. D., the working of the new Lunacy Act, 1331
——— Mr. W. G., presentation to, 807
Bowlby, Mr. A. A., Injuries and Diseases of Nerves and their Surgical Treatment, *rev.*, 430; diffuse papilloma of bladder, 544; three cases of coccygeal tumours, 663; melanotic epithelioma, 894; on the condition of the reflexes in cases of injury to the spinal cord with special reference to the indications for operative interference, 1132
Boxall, Mr. F., dysmenorrhœa, 875
——— Dr. R., fever in childbed, 1427
Boy, hypertrophied mamma in a, 364; aged 10, obscure case of acute abdominal obstruction in a, laparotomy, removal of suppurating appendix vermiformis, recovery, 782; precocious maturity in a, 1510
Bradford, slaughter houses at, 208, 269, 326, 386, 458
Brain, A Demonstration of Centres of Ideation in the, Mr. B. Hollander, *rev.*, 86; topographical anatomy of the, 300; syphilis of, 426, 427; foreign body in the, 542, 558; disease of in hereditary syphilis, 607; Dr. G. N. Pitt on some lesions of, 643, 771, 827; trephining in actinomycosis of, 709; tumour of the, 1135; hydatid cyst of the, 1135; cystic degeneration of the, 1173; multiple tubercular tumours of in a child, 1244; the Croonian lectures on localisations of the, 1289, 1349, 1413, 1473; monkey's, associated eye movements produced by unilateral and bilateral faradisation of the, 1419; surgery of the, 1485
Brakenridge, Dr., the influenza epidemic, 669
Bramann, Professor F., appointed to chair of surgery at Halle, 731
Bramwell, Dr. J. P., obituary notice of, 1282
Brand, Dr. A. T., management of horses, 995
Braithwaite, Mr. H., obituary notice of, 517
Bratton, Mr. J. A., the influenza epidemic, 148
Bray, Dr. H. A., award of gold medal of Royal Humane Society to, 1339
Brazil, obituary in in 1889, 36; microbiology in, 42; yellow fever in, 699; notification in, 855; public health in, 1407; beri-beri in, 1440
Bread, the examination of, 1231
Breast, disease of the in the male, 244; cystic disease of the, 549; cancer of the treated by electricity, 960; cancer of, 1016; duct carcinoma of, 1070; calcifying sarcoma of, 1192; cystic disease of complicated with cancer, 1193; tumour of, 1196
Bremner, Mr. R. A., the University of London and degrees for medical students, 692
Brieger, Dr., appointed extraordinary professor in the University of Berlin, 1466
Bridges, Mr. A. C., American degrees and general culture, 280
Brighton, the influenza epidemic in, 146; diseased meat at, 312; muzzling order revoked in, 368
Bright's disease. *See* Disease
Bristol, the epidemic of influenza in, 96
Bristowe, Mr. H. C., outbreak of influenza in King Edward's school for girls, 418
——— Dr. J. S., pseudo-peritonitis and epilepsy in hysteria, 401
British not English, 521, 582, 641
British Columbia, rejection of British diplomas in, 1263, 1287; practice in, 1472
British Guiana, endemic disease, etc., in, 468
British Isles, lepra hospitals in in the Middle Ages, 630
Brockwell Park, contributions to purchase of, 397
Bromide of ethyl as an anæsthetic, 864
Bromides, gold and camphor in epilepsy, 448
Brompton cemetery, 198
Bronchiectasis, case of, 673
Bronchitis, Chronic, and its Treatment, Dr. W. Murrell, *rev.*, 304; crouposa, bronchial casts from, 663; plastic, 1073
Bronchocele, three cases of, 1014
Bronner, Dr. A., othæmatoma, 20; massage of the membrana tympani in catarrh of the middle ear, 428; massage of the membrana tympani and ossicula in the treatment of chronic catarrh of the middle ear, 1189
Brooks, Dr. H. St. J., the American periglyph, 299; topographical anatomy of the abdomen, 300; nerve supply of the extensor brevis digitorum manus in man and valvulæ connidentes in man, *ib.*; A Manual of Practical Anatomy, *rev.*, 366
Brooksbank, Mr., death of, 1104
Brown, Mr. G., suggestive therapeutics, 573
——— Dr. John, Clinical and Chemical Observations on Plumbism, *rev.*, 138; unsuspected lead poisoning in children, 177; scarlet fever and the puerperal condition, 234; the action of potable waters on lead, 420; observations on the factors determining the plumbo solvent action of moorland waters, 1197
——— Dr. W., a case of gastroschisis, 14
——— Mr. W. H., influenza, 961
Browne, Surgeon-Major, enterectomy, 725; aortic aneurysm presenting in the dorsal region, 837; strangulated inguinal hernia, herniotomy, rupture of the bowel, enterectomy and radical cure, recovery, 839
——— Mr. G. B, two rare cases of sacculated vesical calculi in the male successfully removed by suprapubic lithotomy, 239; a correction, 399; some practical points in the treatment of retention of urine, 592; spontaneous fracture and reunion of vesical calculi, 893
——— Mr. H. W. L., spinal injury, 80
——— Mr. L., elongation of the uvula as a case of laryngismus, 357
——— Dr. W. H., vinegar in urticaria, 1175
——— Surgeon-Major W. R., aortic aneurysm, 79; sarcoma of leg, 1199
Browning history, 1524
Browning's Message to his Time, Mr. E. Berdoe, *rev.*, 1371
Bruce, Dr. J. M., disease of the heart in children, 937
——— Dr. W., the etiology of influenza, 328
Bruhl, Dr. L., Diphtheria und Croup in Königreich Preussen, etc., *rev.*, 189
Brunton, Dr. T. L., the *Pioneer of India* on, 142; and the pariah dog, 207; experiments on anæsthetics at Hyderabad, 347, 359
Bryden, Mr. R. J, abscess of the cerebellum, trephining, death, 709
Brydone-Jack, Dr. M. D., practice in British Columbia, 1472
Buckland, Mr. F. O., Health Springs of Germany and Austria, *rev.*, 1488
Buda-Pesth, proposed Pasteur Institute at, 457, 816; inoculations, etc., at Pasteur Institute at, 1338
Budget, the, alcohol and, 968
Buenos Ayres, the medical faculty of, 1173
Bullet finder, the telephone as a, 135
Burgerstein, Dr. L., Axel Key's Schulhygienische Untersuchungen in deutscher Bearbeitung herausgegeben, *rev.*, 1137
Burghard, Mr. F. F., phlebitis after influenza, 1010
Burial, neglect of, 89; in churches, 318
Burmah, hospitals and dispensaries in, 457; climate, etc., of, 1054
Burn, duodenal ulcer after a, 128
Burns, the pathology of duodenitis after, 76; transplantation of skin in, 862
Burt, Surgeon T., gallant conduct of, 680
Bury, Dr. J. S., brain disease in hereditary syphilis, 607
Bush, Dr. R. H., obituary notice of, 517
Butler, Dr. H. M., a eulogy of hospitals and medical schools, 743
Butlin, Mr. H. T., two cases of glandular tumour of tongue, 545
Butt, Mr. C. K., an ingenious imposition, 330
Butter, Normandy, adulteration of, 1518
Buzzard, Dr. F., illustrations of some less known forms of peripheral neuritis, especially alcoholic monoplegia and diabetic neuritis, 1419
Byers, Dr., abdominal sections, 1073; œdematous fœtus, *ib.*
Bynol, 1202

C.

Cachexia strumipriva, a possible means of arresting the progress of, 287
Cactus grandiflorus in some forms of heart disease, 70
Cadge, Mr. W., presented with freedom of city of Norwich, 732
Cadogan-Masterman, Dr. G., covering the Medical Aid Society, 208
Cæcum, a case of hernia of the entirely wanting in peritoneal sac, 238
Cæsarean section, case of, 548, 583, 589, 1325, 1482; in Australia, 1150
Caffeine, actions of, 735, 746
Cagney, Dr. J., the mechanism of suspension in locomotor ataxy, 131, 238
Caillard, Mr. E. M., The Invisible Powers of Nature, *rev*, 83
Caithness, epidemic influenza in, 578
Calculi, sacculated vesical in the male, two rare cases of removed by suprapubic lithotomy, 238; vesical spontaneous fracture of, 893; vesical, spontaneous fracture and reunion of, *ib.*; encysted vesical, three lithotrities and three suprapubic lithotomies for, 1249
Calculus, impacted in the ureter removed by operation, 240; encysted, the high operation for, 363; vesical, 428; in the bladder, 964 cases of operation for, 603; urethral, attached to an old lithotomy scar, 661; salivary, 668; renal, spontaneous fracture of a, 1195; intestinal, from abuse of Vichy water, 1439
Calcutta, leper legislation at, 1262
Calf pepsin, glycerite of, 216
Callaway, the late Bishop, 796; obituary notice of, 868
Calleja, Dr. C., Principles of Universal Physiology, *rev.*, 485
Calwell, Dr. W., a case of elephantiasis telangiectodes and molluscum fibrosum, 12; peculiar affection of the nails, 1073; optic neuritis, *ib.*; a case of Raynaud's disease, 1484
Cam, Mr. T., obituary notice of, 516
Camera, photographic rhombohedral, 368; Kodak photographic, 1197
Cameron, Mr. A. H. T., ergotin in erysipelas, 836
——— Sir C. A., the Public Health Medical Society, 1279
——— Mr. H. J., testimonial to, 35
——— Dr. J. S., the compulsory notification of infectious disease, 183; sanitary experts and the charge of obstructing justice, 269; presentation to, 318; Hints as to the Working of the Infectious Disease (Notification) Act, *rev.*, 367
——— Dr. M., remarks on Cæsarean section, 583
Camp, the boys', 1051
Campaign, the Burmah, 79
Campbell bequest, the, 145
Canalis, Professor, goes to Russia to study the epidemic of influenza, 55
Canary Islands, Madeira or? 59, 115; correspondence from, 1277
Cancer, of the uterus, 298; of sigmoid flexure, 299; collective investigation on, 387, 925; the morphology of, 415; of omentum, 422; Mr. J. Hutchinson on, 427; of the liver, 667; of œsophagus eroding trachea, 785; of the breast treated by electricity, 960; and its Complications, Mr. C. E. Jennings, *rev.*, 964; of breast, 1016; chimney sweep's, 1086; primary, of omentum, 1136; cystic disease of breast complicated by, 1193; uterine, complete extirpation of, 1439
——— Formation, the General Theory of, Dr. H. Snow, *rev.*, 305

Candidate, a dejected, 1343
Cane, Mr. F. E., defective hearing in seamen, 629
Cape of Good Hope, lepers at, 112
——— Town, influenza at, 518, 600
Capes, Mr. R , antiseptic after-treatment of vaccination, 1176
Capsule, splenic, fibroid thickening of the, 420
Carageorgiades, Dr. J. C., uncomplicated angina pectoralis after influenza, 1426
Carbolic acid, injections of, 102
Carbonic acid, treatment of phthisis by, 564, 1144
Carcasses, diseased in the Edinburgh slaughter-houses, 564
Carcinoma, primary, of the pancreas, 296; of the thyroid, 479; of the mammary glands of a cat, 543; melanotic of labium, 894
Cardarelli, Dr. A., appointed professor of pathology, etc., in the University of Naples, 56
Carden, Dr. G. A., the influenza epidemic, 147
Cardiac. *See* Heart
Cardiff, the influenza epidemic in, 146
Cardinal Manning and the London Hospital, 1464
Cardiolith, a, 76
Carline, Dr. W. A., the epidemic of influenza, 147
Carpenter, Dr. A., expert evidence, 592
——— Dr. R. H. S., death of, 1261; obituary notice of, 1336
Carr, Dr. J. W., the reform of the University of London, 325
Carriages, Prize Essay on the Suspension of, Mr. W. Philipson, *rev.*, 675
Carteighe, Mr. M., re-elected president of the Pharmaceutical Society, 1380
Carter, Dr. A. H., pyrosis. 673
——— Rev. A. R., a medical appeal, 820, 876, 931, 1055
——— Mr. G., Landry's paralysis, 1127
Cartilages, articular, necrosis and separation of, 544
Case, a hard, 157
Casebook, medical. 461
Castor oil, palatable, 1432
Casts, bronchial, from bronchitis crouposa, 663
Cat, carcinoma of the mammary glands of a, 543
Catalepsy, influenza and, 837
Catalogue, a Descriptive of the Pathological Museum of the London Hospital, *rev.*, 1431
Cataract, glaucoma after extraction of, 297; a series of 100 extractions of, 531, 670; congenital, 725; immature senile, artificial maturation of by trituration, 1072, 1428; artificial maturation of by Förster's method, 1428
Catarrh of the middle ear, massage of the membrana tympani in, 428
Cathcart, Mr. C. W., pancreatic cyst successfully treated by abdominal section, 426
Catheter, a new, 905, 964, 1019; a simple female, 1489
Catheters, selection and use of for enlarged prostate, 1128
Cattle, tuberculous, 1520
Caudwell, Mr. H., glycerine as a dressing in necrosis, 478
Cauty, Mr. H. E., pediculi capitis, 1055
Cavanagh, Mr. J. W., obituary notice of, 757
Cavity, basic tubercular, case of, 241; peritoneal, extravasation of fæces into, 476, 661
Cellulitis of the anterior abdominal wall occurring after a premature birth without evidence of coexisting pelvic disturbance, 1068
Cemetery, crematorium, proposed, 1322
Censures, ignorant, 913
Centenarian, a, 638
Centenarians, two, 519
Centenary, the Howard, 216
"Centralblatt für Nervenheilkunde," enlargement of, 947
Cerealine flakes, 905
Cerebellar. *See* Cerebellum
Cerebellum, cysts of the, 60; lesion of the, 80; abscess of the following otitis media, 231; trephining in abscess of the, 709
Cerebral. *See* Brain
Certificate in sanitary science and medical registration, 115; of cases of death, 209
Certificates, of stillbirth, 509, 753; false, 582; of death, unqualified assistants and, 638; of death for insurance companies, 867; official, 1045; of identity, 1470
Ceylon, St. John Ambulance Association in, 335
Chair support, new, for spinal curvature, 1489
Chancre, syphilitic, of lip, 428
Chancres, urethral, 959
Chaplin, Mr., on the muzzling order, 199
Charbon, action of pyocyanic acid on the development of, 265; intestinal, the first case of in France, 922
Charge, an unfounded, 509
Charges, particulars of, 452; cumulative, 641; to masters and servants, 1223; to widow of medical man, 1512; to chemists, *ib.*
Charities' Register and Digest, *rev.*, 305
Charities, medical, reform of out-patient department of, 636; medical, the press and, 807; metropolitan medical, the inquiry into, 914, 1048; the abuse of, 973
Charity and insanitation, 392
Charnley, Dr., keratitis after influenza, 1016
Chart, Ormsby's surgical operation, 219
Charteris, Dr. M., rheumatism, its treatment past and present with special reference to certain experimental researches on salicylic acids and their salts, 359
Charts and notepapers, bedside, 25
Chavasse, Dr. T. F., successful removal of the entire upper extremity for osteochondroma, 131
Cheadle, Dr., transposition of viscera, 19; hepatic ascites, *ib.*; Raynaud's disease, *ib.*; myxœdema and sporadic cretinism, *ib.*; exophthalmic goître, *ib.*
Cheek, plastic operation for deformity of, 1368
Cheese, adulterated, 853, 986
Cheltenham, the influenza epidemic in, 147
Chemist, and M.B., combination of, 209; a too candid, 1166
Chemistry, books on, 279; and Metallurgy, Dental, Dr. C. Mitchell, *rev.*, 790; preliminary instruction in, 934
Chemist's counter, the, tippling at, 1085
Chemists, prosecution of under Sale of Food and Drugs Act, 797; prescribing, 866; charges to, 1512
Cherries, tinned, poisoning by, 833
Chessnire, Mr. A. E., hospitals and the working classes, 275
Chest, sinus of, 482; change of size in the, in the lying-in period, 604
Chesterfield, the sanitary authorities of, and the lead question, 628
Chew, Dr. R. G. S., The Student's Handbook of Water Analysis, *rev.*, 82
Cheyne, Mr. W. W., abscess in the left temporo-sphenoidal lobe, 15, 225; operation for partially descended testicle, 241, 351; ruptured jejunum, laparotomy, 781; central necrosis of radius without suppuration, 785; receives Astley-Cooper prize, 1495
Cheyne-Stokes respiration, case of, 427, 819; in granular kidney, 545
Chiapini, Dr. P. J., obituary notice of, 111
Chiene, Professor, on the value of a health society to a community, 93
Chilblains, treatment of, 934
Child, young, progressive idiopathic muscular atrophy in a, 16; case of icterus gravis in a, 293; young, successful nephrectomy in a, 1149; multiple tubercular tumours in the brain of a, 1244; young, dislocation of the hip-joint in a, 1246; five days old, successful case of inguinal colotomy for absence of rectum in a, 1297; newborn, case of malformation in a, 1366; death of a during the administration of chloroform, 1425; tubercular, laparotomy in a, 1429
Childbed, fever in, 1427
Childhood, the paralysis of, 285; urticaria of, 1250; alcohol and, 1468, 1471
Children, antipyrin as a hypnotic for, 13; mitral stenosis in, 15; feeble, the care of, 39; stone in, 80; in want of food and the School Board for London, 91; weak-minded and backward, Earlswood schools for, 144; unsuspected lead poisoning in, 177; feeble, the classification of in schools, 254; school, meals for, 276; hemiplegia accompanied by loss of speech in, 284; The Surgical Treatment of the Common Deformities of, Mr. W. Pye, *rev.*, 486; the paralyses of, 760; a Practical Treatise on Disease in, Dr. E. Smith. *rev.*, 790; prolapse of the urethral mucous membrane in, 854; lithotrity in, 901; disease of the heart in, 937; school, casualties in, 1087; feebleminded and exceptional, provision for, 1511
Chill, the effect of in producing malarial fever, 1371
Chimney-sweep's cancer, 1086
China, Western, medicine in, 1111
Chloralamide, elixir of, 24; acute universal desquamative dermatitis following the administration of, 546; uses of, 626
Chloralimide, 1151
Chloremia and its treatment, 1239
Chloride of ammonium spray, 248
Chlorine solutions, 115, 219, 461
Chlorodyne, death from, 872
Chloroform, prepared from acetone, 24; death under, 29, 433, 817, 1051; in midwifery, 59; *v.* ether, 293, 981; the Glasgow Committtee on and the Hyderabad report, 386, 1345; taken by the mouth, poisoning by, 1089; the pulse during anæsthesia from, 1425; death of a child during the administration of, *ib.*
Chlorosis, etiology and treatment of, 383; remarks on, 1086
Choanæ, a curious case of occlusion of the, 178
Cholecystotomy, case of, 135
Cholelithiasis, salicylate of sodium in, 803
Cholera in Mesopotamia, 201, 254; in Persia, 254, 948, 1284; precautions against the advent of, 308; in Asia, 335; the march of, 375; the Russian Government and, 623, 699; in Turkey, 681, 1321; the threatened visitation of, 690, 979, 1033; the prevention, etc., of, 919; on board the *Fulford*, 981; in Turkish Arabia, 1031; in the Euphrates Valley, 1269; in Spain, 1438; and the River Lee, 1490; in Spain, France and Italy, 1501
"Cholera cry," the, 448
Christy, Mr. R., Proverbs, Maxims, and Phrases, *rev.*, 26
——— Mr. T., a hint to tea drinkers, 934
Chrysarobin, treatment of ringworm by, 1090
Chubb, Dr. W. L., convalescent homes, 1055
Church, Dr. W. S., St. Bartholomew's Hospital Reports, *rev.*, 553
Churches, burial in, 318
Churchouse, Mr. W. F., case of idiopathic tetanus following Russian influenza, 719
Churton, Dr. F., notes on an epidemic of pneumonia, 134
Chyluria, traumatic, 420
Circular, a, 49, 1280
Circulation, on the symptoms connected with the in diphtheria, 960
Circumcision for phimosis after syphilis, 1286
Cirrhosis, biliary or hypertrophic, 1000; post-scarlatinal of kidney (small white) in a girl aged 12, 1193
Clark, Sir A., re-elected president of the Royal College of Physicians, 795; elected corresponding member of the Berlin für Innere Medizin, 1024
——— Dr. F. E., chlorine solutions, 219
——— Dr. F. C. G., Papers on Surgery, Pathology, and Allied Subjects, *rev.*, 1138
Clarke, Dr. J. M., osteitis deformans, 724; biliary or hypertrophic cirrhosis, 1000
——— Mr. W. B., operative statistics, 15; electrolysis in urethral structure, 47, 881, 942; plastic operation, 667; calcifying sarcoma of breast, 1192; spontaneous fracture of a renal calculus, 1195; urethral structure four years after electrolysis, encysted vesical calculi, three operations by lithotrity and three by suprapubic lithotomy, one of which was performed through the perineum, 1249
Clavicle, left, fibrosarcoma of, 598
Clay, Mr. A., melon seed bodies from sheath of tendon, 607
Clayton, Mr. R., death of, 201; obituary notice of, 273
Cleaver, Dr., water-closet system, 18
Cleland, Professor, on university reform, 1325
Clemow, Mr. F. G., the epidemic in Russia, 46; influenza, 723
Clerks, city, free medical relief for, 756
Clevenger, Dr. S. V., Spinal Concussion Surgically Considered, etc., *rev.*, 1077
Clift, Mr. W., MS. volume relating to John Hunter's household, etc., 738, 865
Cloetta, Dr. A., death of, 578
Club, Aberdeen University, 1386
—— Cambridge Natural Science, *conversazione* of, 438
—— Edinburgh Pathological, meeting of, 1385
—— Glasgow University, memorial *re* reform of university, 1045
—— foot, osteotomy in, 481
—— patients, duties of partners as to, 1280; and colliery contracts, 1458
—— practice, 1402
—— system, abuse of the, 757
—— White Lion Private Medical, 1223
——— are they public institutions? 55; appointments, 271; and practitioners, 867
Coagulation of egg and serum albumen, vitellin, and serum globulin by heat, 167
Coal, poisoning by fumes of smoke of, 178
Coates, Mr. W., two cases of defective mental development, 607
Coats, Dr. J., remarks on the report of Second Hyderabad Commission on Chloroform, 1345
Cobbe, Miss F , experiments on animals, 1455
Cocaine, preparations of, 84; and morphine, 1367
Coccygodynia, 301
Cockade, the, 279, 388
Cockey, Mr. E., infrequent pulse with epileptiform attacks, 1068
Cocoa essence, 84
Code of Medical Ethics, translated into Italian, 1203
—— the new educational, 849
Cod-liver oil, action of, 854
Coffee, the abuse of, 309; and cold water, 820; unroasted, in hepatic affections and diabetes, 1104
Colahan, Dr. N., death of, 442
Cold in the head, remedy for, 934
Coley, Dr. F. C., albuminuria without dropsy, 1299
College, Cavendish, Cambridge, scholarship, etc., 456
——— Eton, outbreak of diphtheritic tonsillitis at, 474
——— Firth, Sheffield, proposed extension of, 337
——— Grant Medical, Calcutta, lady students at, 979; Lord Reay lectureship at, 987

College, Guy's, opening of, 744
——— King and Queen's of Physicians in Ireland, the licentiates of, 105; pass lists, 336, 457, 1111, 1172; the licentiateship of, 1045
——— of Medicine, Newcastle-on-Tyne, the history of, 1454
——— Meharry Medical for Negroes, "commencement" at, 1173
——— Owens, Manchester, extension of, 628; the chair of pathology at, 796; opening of medical session at, 1104; post-graduate courses at, 1104, 1224
——— Queen Margaret, Glasgow, medical education at, 1091, 1385
——— Queen's, Birmingham, improvements and alterations in, 1510
——— Royal Medical Benevolent, donations, etc., to, 771; annual festival of, 795, 811, 975, 982, 1175; proposed £50,000 fund for, 1380; teaching at, 1520
——— Royal of Physicians, Edinburgh, annual dinner, 34; pass lists, 56; reports from the laboratory of, 313, 373; the directorship of the laboratory of the, 441; proposed formation of society of Fellows living in London, 451; Reports from the Laboratory of the, Drs. J. B. Tuke and G. S. Woodhead, *rev.*, 552; and the report of the Camperdown Committee, 1462
——— Royal of Physicians of London and the medical curriculum, 28; lectures at the, 253; comitia of Fellows of the, 263, 568, 801, 979, 1102, 1461; the Membership of, 279; report of the Fever Hospitals Committee of, 316; pass lists, 336, 1046; fire-extinguishing apparatus at, 397; examination for the licentiateship of, 1343; and the report of the Camperdown Committee, 1461
——— Royal of Surgeons of Edinburgh, pass lists, 1110, 1281
——— Royal of Surgeons of England, pass lists, 111, 396, 638, 1110, 1172, 1224, 1405; lectures at the, 253, 1224; examination for Membership of, 399; and its Members, 440; reform of the, 488, 503, 561; meeting of council of, 618, 737, 927, 1102, 1461; the government of, 740; gift of manuscripts to, 910; examination for the Fellowship of, 933, 1118; the coming elections at, 1322. 1383, 1402, 1457; retrospect of elections at, 1393; the voting papers, 1437; and the report of the Camperdown Committee, 1462; the fellowship of, 1499
——— Royal of Surgeons in Ireland, *conversazione* at, 145; pass lists, 276, 991, 1172; demonstration by students of, 736; the presidency of, 737, 799, 855; Barker anatomical prize, 927; circular of *re* grievances of Army Medical Department, 984; the president of, 1092; list of examiners at, 1153; annual meeting of, 1212, 1269, 1326; the council of, 1268; distribution of prizes, etc., at, *ib.*; election of president and council of, 1326; the fellowship of, 1499
——— Royal Veterinary, extension of the, 1407
——— St. Mungo's, Glasgow, first annual meeting of, 1028; appointments, etc., at, 1091
——— of State Medicine, etc., election of Associates of, 1170
——— Trinity, Dublin, honorary degrees at, 1499
——— University, Dundee, representatives of on University Court, 1152
——— University of London, list of officers, etc., 579
——— University, North Wales, appointment of governors of, 28
——— University of South Wales and Monmouthshire, proposed formation of a faculty of medicine at, 374; donation to, 518
——— Yorkshire, Leeds, proposed new buildings for medical department of, 438; donation by Duke of Devonshire to, 565; and the Leeds Infirmary, 623
Colleges, the, and the Army Medical Service, 1203
——— King and Queen's of Physicians and Royal of Surgeons in Ireland, pass lists, 1111
——— Royal of Physicians and Surgeons of Edinburgh, the golf club of, 855
——— Royal of Physicians and Surgeons of Edinburgh and Faculty of Physicians and Surgeons of Glasgow, Conjoint Examining Board of, pass lists, 991, 1110
——— Royal of Physicians of London and Surgeons of England, Conjoint Examining Board of, pass lists, 56, 160, 215, 276, 871, 927; the new laboratories of, 143, 311; and the University of London, 1086; synopsis for examination in chemistry and physics, 1172
Colles's law, 848
Collins, Mr. E. T., glaucoma after extraction of cataract, 297
——— Mr. F. H., An Epitome of the Synthetic Philosophy, *rev.*, 22
——— Dr. F. H., treatment of chronic rheumatic arthritis, 902
——— Dr. M. C., ascending spinal paralysis, 364
——— Mr. W. J., cancer of œsophagus eroding trachea, 785
Collinson, Mr. T. A., the provident dispensary system and the select committee on hospitals, 1226
Colman, Dr., compression myelitis with and without secondary degenerations, 422; unconscious automatic actions occurring at the close of epileptic fits, 961; Raynaud's disease in a girl 10 years of age, 1013
Colon, epithelioma of, 244; chronic lateral invagination of following a malignant growth, 543; multiple tubercular stricture of the, 1192
Colotomy, inguinal, 666; right lumbar for chronic intestinal obstruction, 1136; inguinal for absence of rectum in a child five days old, 1297
Colour blindness, note on tests for, 69, 234; two new tests for, 73; the Detection of from a Practical Point of View, Dr. F. W. Edridge Green, *rev.*, 82; a criticism of the Board of Trade's tests for, 535; tests for, 572; scientific committee on, 681; an undetected case of, 888; committee appointed by Royal Society on, 968
——— vision of railway servants, 29; defective and the public safety, 193
Coma, diabetic, treated by the injection of saline fluid into the veins, 545
Commission, hospital, for London, 681
——— Hyderabad Chloroform, remarks on 1345, 1380
——— Royal on Vaccination, meeting of, 372, 493, 560, 613, 680, 910; the Stanley Expedition and, 1084
——— Scottish universities, session of, 93; meetings of, 313
Commissioners in Lunacy, new rules of the, 846
Committee, the Leprosy, meetings of, 851
——— Lord Camperdown's. *See* Army, British
——— Select, on Hospitals, 852, 869, 929, 1022, 1035, 1088; report of proceedings of, 1100, 1160, 1215, 1394, 1448, 1501; proposed extension of inquiry, 1160; and the provident dispensary system, 1226; and hospitals for venereal diseases, etc., 1457
——— on the Sweating System, the report of, 1082
Competition, unkindly, 575; for appointment, 867
Concussion, Spinal, Surgically Considered as a Cause of Spinal Injury, etc., Dr. S. V. Clevenger, *rev.*, 1077
Confidence professional, 1055
Congress, Balneological, papers to be read at, 519
——— gastronomic, date and place of meeting of, 684
——— of German Surgical Society, date and place of meeting of, 458; papers at, 914
——— Hungarian, medical subjects of discussion at, 1407
——— of Internal Medicine date and place of meeting of, 458; official programme of, 502; opening of, 911; discussion at, 977, 1032, 1159, 1213, 1327
——— International of Hygiene, meeting in furtherance of objects of, 440, 1262; aims, etc., of, 1327; Prince of Wales accepts presidentship of, 1494
——— International Medical, Scotch delegates to, 617; obstetrics and gynæcology at, 618; Irish delegates to, 684; programme of sections at, 689, 743, 805, 872, 951, 1051; travelling arrangements to, 689, 743, 1521; visitors to, 905; lodgings at, 1084; exhibition at, 1116, 1283; the French Medical Press Association and, 1173; steamer from Leith to Hamburg, 1228; the French Government and, 1262; notes concerning, 1372; French representatives at, 1436, 1495; resolutions *re* proceedings at, 1446; proposed banquet to visitors at, 1466; wives of foreign practitioners at, *ib.*
——— International Medical of Australasia, Transactions of the, *rev.*, 1019
——— International Medico-Legal, arrangements for, 1173
——— International Temperance, date and place of meeting of, 579; subjects for discussion at, 760
——— Italian Surgical holds meeting at Florence, 979
——— Russian Naturalists and Physicians attendance at, 518
——— Sanitary Institute, arrangements for, 1467
——— of Scientific Societies, date and place of meeting of, 457
——— Tenth International Medical, list of sections, etc., 382; France and, 519
——— Viticultural, date and place of meeting of, 699
Congresses, medico-psychological, 1283
Conjunctiva, atropine poisoning by absorption from, 421
Connor, Dr. L. R., death of, 201
Constantinople, dengue at, 1091
Consulate, refusal to, 1168
Consultants, duties of, 388; and prescriptions, 1280
Consultations with homœopath, 271
Consumption, alleged prevalence of at San Remo, 1026, 1104, 1167, 1279, 1332
Contagion, water and dust as vehicles of, 43; the telephone and, 903
Contracts, not to practise, medical associations and, 388; unstamped, validity of, 867; not to practise, 1280
Convicts, the higher education of, 852
Convulsive seizures, Dr. J. Hughlings Jackson on, 703, 765, 821
Convulsions, tetanoid, in an infant, 1429
Cook, Mr. A., a case of Thomsen's disease, 73
——— Surgeon-Major H. D., a case of malformation in a newborn child, 1366
Cookery, sick room, 145
Cooper, Mr. H., the Rose and Cooper Defence Fund, 1231
Cope, Dr., elected medical officer of South City Dispensary, Dublin, 378; presentation to, 684
Copper, poisoning by, 1265; in tinned peas, 1279
Coracoid process, fracture of the, 178
Cord, the spinal, in alcoholic paralysis, 127; symptomatology of total transverse lesions of, 480, 629; a case of localisation of a limited lesion of the, 775, 793, 866; on the condition of the reflexes in cases of injury to, 1132; paraplegia from syphilitic disease of, 1371; in influenza, 1439, 1523
Cords, true vocal, the limits of, 497; the vocal laryngeal stenosis caused by fixed adduction of, 837
Cordwent, Dr. G., the laws of diphtheria, 1457
Cork, the epidemic of influenza in, 97, 378
Corlidge, Dr. A., jun., the Mortality of Acute Lobar Pneumonia, *rev.*, 609
Cornbill, Mr. J., life assurance and medical examination, 642
Cornwall, the climate of, 1024
Coroners and their duties, 754
Coroners' courts, 638
Corpus callosum, functional relations of the to the motor cortex, 1124
Correction, a, 399
Corrections, two, 1410
Corrosive sublimate, in gonorrhœa, 752; poisoning by uterine injections of, 1040
Cortex, the relation of the to vision, 1147
Cory, Dr. R., appointed teacher of vaccination at Cambridge University, 332
Coryza, treatment of, 219
Cosgrave, Dr. E. M'D., medical casebook, 461; the Infectious Disease (Notification) Act, 1889, 1137
Cossham, Mr. H., the will of, 1201
——— Dr. W. R., strangulated obturated hernia, 719
Cotman, Dr., puerperal nephritis, 667
Cottage nurses, 461
Cotter, Dr., epithelioma of penis, 1074
Coughing, fracture of a rib from, 953
County Council of London, and the housing of the poor, 438; the sanitary work of, 1083
Course, post-graduate. *See* Lectures
Courtney, Dr. E. M., appointed inspector of lunatic asylums in Ireland, 565
Cousins, Dr. J. W., new aural injector and evacuator, with a flexible Eustachian catheter, 71; right lumbar colotomy for chronic intestinal obstruction, 1136; new aural snare, 1137
Cow, the, diphtheria and, 573
Cowper's glands, inflammation of in measles, 43; inflammation of in dengue, 129
Cow-pox and other eruptive diseases of the cow, 1093
Cows, tuberculous, sale of milk from, 929
Cracow, Gynæcological Society founded at, 518
Craddock, Mr. S., Bath and her Thermal Waters, *rev.*, 23
Craven, Mrs. Dacre, A Guide to District Nurses, *rev.*, 904
Crawford, Dr. G., obituary notice of, 210
——— Mr. J. P., obituary notice of, 814
Credé, Professor, celebrates 70th birthday, 56
Cremation in Germany, 458; progress of, 494, 911; in Paris, 638; programme of meeting of delegates at Berlin, 1051
Creolin, poisoning by, 92: capsules, 1432
Cretinism, sporadic, myxœdema and, 19
Crime and insanity, 746
Criminals, executed, the right of anatomical experiments on, 1233
Crimmin, Surgeon, presentation of Victoria Cross to, 33; complimentary dinner to, 142
Cripps, Mr. H., Diseases of the Rectum and Anus, *rev.*, 367; a case of fæcal extravasation into the peritoneal cavity, thorough washing of the peritoneum recovery, 476; the surgical treatment of general paralysis, 1364
Crisp, Mr. J. E., venesection in puerperal eclampsia, 889
Croft, Mr., aneurysm of popliteal artery and sarcoma, 422; ruptured small intestine, 665
Croly, Mr., compound luxations of the ankle, 78
Crookshank, Dr. E. M., History and Pathology of Vaccination, *rev.*, 788, 842
——— Dr. H., made a pasha, 370
Croom, Dr. T. H., the technique of laparotomy, 17
Cross, Dr. J., phlebitis following influenza, 952
Crowe, Dr. G. W., the influenza epidemic, 149
Crozier, Mr. R., seaside convalescent home, 1 19
Crustacea, phosphorescence of, 863

Cuba, medical congress in, 112; Pasteurism in, 718; abdominal surgery in, 745
Cullingworth, Dr. C. J., A Manual of Nursing, Medical and Surgical, *rev.*, 304; four cases of hysterectomy, 900
Cummins, Dr. W. E. A., stricture of œsophagus treated by gastrostomy, 243; empyema, 673
——— Dr. W. J., fever, 243, 673
Cuneus, left, hemianopsia with softening of the, 1194
Cunningham, Dr. C. J., A Manual of Practical Anatomy, *rev.*, 366
——— Professor D. J., the parieto-occipito and calcarine fissures of the brain, their development and relation to the calcar avis, 901
Curette, a new flushing uterine, 905, 964
Curgenven, Mr. J. B., eucalyptus in scarlatina, 723
Curriculum, the five years', 1382
Cyanide of zinc and mercury, observations on, 1, 441
Cyanides, double, of zinc and mercury, strangulated hernia treated with, 1247
Cyanosis from monobromacetanilide, 357
Cyclopædia of the Diseases of Children, Mr. J. M. Keating, *rev.*, 246; Blackie's of Universal Information, Dr. C. Annandale, *rev.*, 905
Cycloplegia, temporary, after head injury, 292
Cyprus, influenza in, 698; leprosy in, 859
Cyst of the inferior turbinated body, 17; ruptured ovarian, 242; of broad ligament, 300; dermoid, 364; pancreatic, successfully treated by abdominal section, 426; sebaceous, of umbilicus, 667; hydatid of the liver causing serious displacement of viscera, 895; pancreatic, two cases of, 902; of the transverse mesocolon, 993; hydatid of liver, abdominal section for, 1074; hydatid, of brain, 1135; hydatid in the pelvis, retention of urine from, 1248
Cystitis, saccharin in, 91; the treatment of, 340, 400
Cystoscope, the, 17
Cysts of the cerebellum, 60; dermoid, of the ovaries, 80, 242; of the thyroid gland, extirpation of, 93; double sessile parovarian, 300; unilocular, 483; dermoid, teeth in, 549; mesenteric and omental, 1361

D.

Dabbs, Dr. G. H. R., cocaine and morphine, 1367
Dakin, Dr., ectopia viscerum, 1427
Dalby, Sir W. B., Menière's vertigo and the semicircular canals, 888
Dale, Dr. W., the reform of the University of London, 326
Dalton, Dr. N., an unusual variety of blood poisoning, 419; the etiology of rheumatic fever and an explanation of its relation to other diseases, 472; chronic lateral invagination of the colon following a malignant growth, 543
Davidson, Dr. J. M., appointed ophthalmic surgeon to Sick Childrens' Hospital, Aberdeen, 1464
Davies, Dr. A., bronchocele, 1014
——— Dr. A. T., sarcoma of lung, 299; sarcoma of kidney, *ib.*
——— Dr. H., The Mechanism of the Circulation of the Blood through Organically Diseased Hearts, *rev.*, 551
——— Dr. J., presentation to, 1228
——— Dr. N. E., treatment of obesity, 1410
——— Brigade-Surgeon R. W., death of, 309; obituary notice of, 517
——— Mr. T. L. K., rash in influenza, 357
Davies-Colley, Mr. N., penetrating wound of abdomen with hernial protrusion of the bowel, 1367
Davidson, Dr. J. McK., the telephone as a bullet finder, 135; micro-corneæ, 1016
Davis, Mr. A. E., a new catheter, 905, 1019
——— Mr. H., on the question of anæsthetics in operations for adenoid growths of the naso-pharynx, 835
——— Mr. J. R. A., The Flowering Plant as illustrating the First Principles of Botany, *rev.*, 674
Davos Platz, the "J. E. M." Guide to, Mr. J. E. Muddock, *rev.*, 1488
Davy, Mr. R., osteotomy in club-foot, 481
Deaf, the, no longer dumb, 1266
—— and dumb, legislation for, 192, 614
—— mutes, the education of, 249
Deafness, operation for, 69; labyrinthine, treated by pilocarpine, 1125, 1300; in tabes dorsalis, 1467
Deakin, Surgeon-Major C. W. S., obituary notice of, 51
Dean, Mr. C. W., Fehling's solution, 1342
Deas, Dr. P. M., the influenza epidemic, 147, 203
Death, of Dr. A. P. Dobrosslawin, 7; of Professor S. Botkin, 28; under chloroform, 29, 433, 817, 1051; of Dr. H. Raverty, 35; of Dr. A. J. Struthers, 42; of Dr. J. Morton, 94; of Dr. J. I. Donovan, *ib.*; of Dr. A. F. v. Troltsch, 160; by electricity, judicial and accidental, 195; of Dr. L. R. Connor, 201; of Mr. R. Clayton, *ib.*; of Dr. L. H. Sayre, 215; of Mr. T. McGrath, *ib.*; of Mr. B. V. Sortain, 251; of Mr. D. H. Gabb, 276; of Professor E. v. Wahl, 318; of M. D. Mollière, 336; of Dr. H. Frey, *ib.*; of Nurse Porter, 376; of Dr. N. Calahan, 442; of Mr. Alderman Stone, 493; of Dr. G. W. Hatchell, 501; of Dr. Paquet, 571; of Dr. A. Cloetta, 578; of Dr. T. Kane, 618; of Dr. A. Sacchi, 685; of Mr. C. S. Pollock, 699; of Dr. A. Smith, 737; of Dr. John Nicolls, *ib.*; of Dr. A. B. Kearney, 799; from visceral affections after ovariotomy, 854; of Dr. A. Gibbon, 855; from chlorodyne, 872; of Dr. Küchenmeister, 909; of Dr. Lightburne, 915; of the "elephant man," 916; of Mr. J. S. Morgan, 930; of Professor Loewig, *ib.*; of Surgeon A. C. Thompson, 931; of Dr. A. Parchini-Bonfanti, 991; of Dr. J. Martin, 1028; of Dr. C. E. Leet, 1092; of Dr. A. Young, *ib.*; of Mr. Brooksbank, 1104; of Dr. M. Michaux, 1115; of Dr. W. K. Sullivan, 1154; of Professor M. v. Huss, 1173; of Dr. P. Zimmermann, 1227; of Dr. R. H. S. Carpenter, 1261; of Dr. R. C. R. Jordan, 1262; of Dr. Schneider, 1407; of Dr. J. de la L. Hernandez, *ib.*; of Dr. Bertheraud, 1520
Death-rate, high, in London, 142; of infants at the breast, 1115
Deaths, table of, 16; from surgical shock, 440; uncertified, 638
De Bartolomé, Dr. M. M., the late, 1331, 1381; obituary notice of, 1335; the funeral of, 1454; and the Sheffield Medical School, *ib.*
Debove, Dr., appointed to chair of pathology in the French Faculty of Medicine, 698
Debt, old bad, 157
Deformities of the extremities treated by means of the screw clamp, 1006
Dégraissage, 1040
De Granchamps, Dr., gains prize for essay on hypnotism, 578
Degrees, foreign non-registrable, use of, 157; American and general culture, 219, 280, 339, 876; for provincial and London students, 279; for London medical students, 559, 1147, 1262, 1321, 1383, 1433, 1492, 1511; the trade in, 798, 1151, 1166; for London medical schools, 798; honorary, 972
Delépine, Dr., a cardiolith, 76; *sable intestinal*, 295; hemianopsia with softening of the left cuneus, 1194
Demarquay, Mr. J. H., Essay on Medical Pneumatology, *rev.*, 188
Dengue, and influenza, 60, 202, 357; inflammations of Cowper's glands in, 129; an account of an obscure outbreak of, 352; at Kells, co. Meath, 670; an epidemic of, 802; at Nice, 850; at Constantinople, 1091; in the Fiji Islands, 1485
Dentists and surgeons, 105; the General Medical Council and, 1439
Depilatory, a, 875
Dermatitis, acute universal desquamation following the administration of chloralamide, 546
Dermatologie et Syphilographie, Annales de, *rev.*, 367
Desquamation in the third week of enteric fever, 132
D'Evelyn, Mr. A., chlorine solutions, 115
Dexiocardia, congenital, without visceral displacement, 1441
De Zouche, Dr. I., Ether as an Anæsthetic, *rev.*, 248
Diabetes, its Cause and Permanent Cure, from the Standpoint of Experience and Scientific Investigation, Drs. Schnee and Tafel, *rev.*, 189; benefited by phosphorous, 293; new theory of, 322; mellitus, with convulsions for 17 hours, 1011; mellitus, gastric digestion in, 1033; after influenza, 1067; unroasted coffee in, 1104
Diagnosis of infectious disease, errors in, 1153
Diamonds and doctors, 1120
Diary for 1890 of the Sanitary Record and the London Medical Recorder, *rev.*, 248; of a physician in Central Africa, gleanings from, 1388
Dickenson, Miss F. M., appointed house-surgeon to Belgrave Hospital for Children, 337
Dickinson, Dr. W. H., diabetic coma treated by the injection of saline fluid into the veins, 545
Dictionary, medical, 339; a New English, Mr. J. A. H. Murray, *rev.*, 488; the National Medical, Dr. J. S. Billings, *rev.*, 903; a German-English of Medical Terms, Messrs. F. Treves and H. Lang, *rev.*, 963
Dill, Dr. G., variations of bodily temperature, 1136
Diphtheria, treatment of, 59; and measles, 75; und Croup in Königreich Preussen in den Jahren 1875-1882, Drs. L. Bruhl and E. Jahr, *rev.*, 189; at West Kensington, 336; six cases of, 429; the etiology of, 445; and the cow, 573; its Antiseptic Treatment, Dr. J. Renou, *rev.*, 726; in Tredegar, 733; specifics for, 935; on the symptoms connected with the circulation in, 960; infectious sore throat and, 971; of birds and human diphtheria, 1040; sporadic, following influenza, 1074; in domestic animals, 1081, 1259, 1411; pseudo, of scarlet fever, 1165; the laws of, 1323, 1457; in Paddington, 1495; oxygen inhalations in, 1508
Diploma mills, 733
Diplomas, Irish, and English hospitals, 1344
Disclaimer, a, 48, 1332
Disease, weather and, 20; infectious, notification of, 182, 183, 273; the new, 685; the medical profession and prevention of, 702; another new, 850; infections in board schools, 989; tubercular with multiple abscesses of the liver, 1070; infectious, errors in diagnosis of, 1153; infectious, the spread of, 1267
——— Addison's, of long duration, 1196
——— Bright's, chronic, 1159; the relation of chronic endarteritis to, 1491
——— Graves's, case of, 18, 548
——— midwives', 735
——— Morvan's, chief features of, 735
——— Paget's, of nipple, with psorospermiæ, 664, 668, 677
——— Raynaud's, case of, 19, 1484; remarks on, 89; in a girl 10 years of age, 1013; case of, 200 years ago, 1343
——— Thomsen's, a case of, 73, 429; cases of, 241
Diseases of Women and Abdominal Surgery, Mr. L. Tait, *rev.*, 186; Pathological Anatomy of, Dr. N. Moore, *rev.*, 245; Tropical, the Geographical Distribution of, Dr. R. W. Felkin, *rev.*, 365; infections in Italy, 873; new, and new remedies, 910; infections, management of, 1170; infections, incubation periods of, 1263; a census of, 1343; mental, relation of female sexual organs to, 1401; Specific, the Natural History of, Dr. E. Willoughby, *rev.*, 1488; infectious, and the Local Government Board, 1519
Disinfectants, the use and abuse of, 376
Disinfection of railway carriages in Italy, 458
Dislocations irreducible by other means, operative treatment of, 962
Dispensaries, advertising, 574; provident, speculation in, 694
Dispensary, provident disadvantages of, 53; private or public hospital, 452; the sixpenny, 1458
——— Aberdeen General, annual meeting, 635
——— Ballynacollig, and Dr. Tanner, 200
——— Hastings, special meeting of governors, 343
——— Murragh, medical officership of, 516
Dissolution. *See* Putrefaction
Distemper in dogs, the pathogenic microbe in, 856; human vaccine, a prophylactic in, 927, 983, 1042, 1167
Dittel, Professor, jubilee of, 1509
Diuretin, 1077
Diverticula, urethral, 361
Diverticulum of bladder, cystoscopic view of, 667
Dixon, Dr. W. H., obituary notice of, 577
Dobrosslawin, Dr. A. P., death of, 7; education of sons of, 139
Dobson, Mr. N. C., the discussion at the medical Society, 1167
Doctor the, the Westminster magistrate and, 392
Doctors, and proverbs, 26; two family, 48; army and civil practitioners, 59, 163, 400, 461, 581, 642; the Evil that has been Said of, Dr. T. C. Minor, *rev.*, 192; Workhouse, 1023, 1192; diamonds and, 1120; in France, 1339
Dogs, registration of at Manchester, 458; lost, rabies and, 760; the pathogenic microbe of distemper in, 856; human vaccine a prophylactic for distemper in, 923, 983, 1042, 1167; influenza in, 1040
Donations, 56, 215, 579, 628, 1338, 1407, 1515
Donelan, Mr. J., supernumerary tonsils, 1129
Donovan, Dr. J. T., death of, 94
——— Dr. W., American degrees and culture, 339
Doorplates, 1223
Doran, Mr. A., apoplexy of the ovary, cystic dilatation without rupture, 605; the present position of abdominal surgery, 958; myoma of the uterus becoming sarcomatous, 1069
Douche apparatus, an antiseptic, 845
Douglas, Dr. K. M., fatty hernia, 426
Downie, Mr. J. W., epithelioma primarily affecting the tonsil, 1008
D. P. H., the, 702
Dr., the title of, 574
Drake-Brockman, Surgeon-Major E. F., purpura hæmorrhagica, 79; orbital tumours, 725; congenital cataract, *ib.*
Drawings, old, 962
Dreschfeld, Dr., epithelioma of colon, 244; Thomsen's disease, 429; lepra hospitals in the British Isles during the Middle Ages, 630; unusual form of aortitis and thoracic aneurysm, 962
Dressing, a new, 570
Drills, dentists', 339
Drink Question, the, its Social and Medical Aspects, Dr. Kate Mitchell, *rev.*, 83
Dropsy, albuminuria without, 1299
Drug, dangerous, conviction for selling, 867
Druggists and the licensing question, 1050
Drugs, the administration of by electricity, 164; effect on of intestinal absorption, 1213; and protection, 1407
Drunk or dying, 561
Drunkenness, medical view of, 728
Drysdale, Dr. C. R., the contagiousness of leprosy, 27

Dublin, Viceregal visits to the hospitals of, 35, 111; the Christmas season in, 35, 94; typhoid fever in, 35; dispensary medical officers in, 94; health of, *ib.*; the epidemic of influenza in, 96, 670; clinical teaching in, 104, 154, 268, 327, 400; the hospitals of, 214; the Royal barracks at, 501; vaccinations at, 617; students' demonstration at, 736; the defalcations in the hospitals of, 973
Duckworth, Sir D., A Treatise on Gout, *rev.*, 184; appointed honorary physician to the Prince of Wales, 372; two cases of thrombosis of the cerebral arteries and veins, 423; case of vegetative aortic valvulitis which proved fatal by embolism, aneurysm and rupture of the left profunda femoris artery, 1355
Duct, persistent thyroid, specimens of, 1069
——— cancer, on the history of, 590
——— carcinoma of breast, 1070
Dudfield, Dr. R., table of deaths, 16
Duggan, Mr. C. W., the coagulation of egg and serum albumen, vitellin and serum globulin by heat, 167
Duke, Dr. A., new vaginal insufflator, 24; a flushing uterine curette, 905; dilatation instead of support of the perineum, 1119, 1287
Duncan, Dr. J. M., Clinical Lectures on the Diseases of Women, *rev.*, 81
——— Dr. W., should pregnancy be terminated prematurely in a case of phthisis? 132
Dundee, epidemic disease in, 1325
Dunedin, influenza in, 680
Dunlop, Mr. J. C., deafness treated by pilocarpin, 1300
Duodenitis after burns, the pathology of, 76
Duodenum, perforating ulcer of, 893; a case of rupture of the, 1131
Dupuytren's contraction of the palmar fascia, treatment of the, 411; of the finger, treatment of, 722
Durdin, Mr. R. C. G., new expansion trocar, 675
Dust, as a vehicle of contagion, 43; sweeping without, 279; atmospheric, presence and significance of, 313
Dwellings of the poor, *See* Housing
——— insanitary, the improvement of, 32
Dyes, poisonous, 1497
Dying, drunk or, 561
Dynamometer, the, as an instrument of diagnosis, 541
Dysmenorrhœa, treatment of, 819, 875, 934

E

Eades, Mr. S. O., dilatation instead of support of the perineum, 1119
Eagle, Dr. H. F. C., support instead of dilatation of the perineum, 1343
Eales, Mr. H., appointed Middlemore lecturer, 968
Ear, new injector and evacuator for, 71; disease of in acute specific fevers, 78; right traumatic injury to labyrinth of treated by injections of pilocarpine, 234; middle, inflammation of the mastoid process associated with disease of, 707; operations for septic thrombosis of the lateral sinus consecutive to disease of, 783; middle, cerebral symptoms accompanying disease of the, 1132; middle, massage of the membrana tympani and the ossicula in the treatment of chronic catarrh of the, 1189
Earlswood schools for backward and weak-minded children, 144
Earth temperatures, 114
East, Mr. G., the Danalier Fund, 1231
Eastbourne, health of, 27; meteorological observations at, 115
Eccles, Dr. A. S., paroxysmal heart hurry associated with floating kidney, 1250
Eclampsia, puerperal, five cases of especially illustrating the temperature and urine in this disease, 133; puerperal, venesection in, 889, 1300
Economy, domestic, the teaching of, 1385
Ectopia viscerum, 1427
Ectropion, cicatricial, the operative treatment of, 74
Eczema and its Treatment, a Practical Treatise on, Dr. M. J. Rae, *rev.*, 23
Edinburgh, influenza epidemic at, 34, 96, 199, 313; unusual mortality from chest disease in, 199; high mortality in, 376, 1211; diseased carcasses in the slaughterhouses of, 564; termination of winter session at, 617; the sale of unsound meat at, 617, 1498; health statistics of, 683; examinations at, 854; recent appointments at, 855; post-graduate courses at, 1090, 1267, 1385; hospital changes in, 1211; lady students and hospital training at, 1266; clinical and practical teaching at, 1385; clinical teaching for lady students at, 1498
Edington, Mr. A., report on the morphology and development of the blood, 1233
Edis, Dr. A. W., on the diagnosis and treatment of metrorrhagia, 1298, 1302
Edridge-Green, Dr. F. W., two new tests for colour blindness, 73; the Detection of Colour Blindness from a Practical Point of View, *rev.*, 82; awarded gold medal at University of Durham, 106
Education, the sacrifice of to examination, 85; medical, the practical element in, 219; of deaf mutes, 249; the physiological basis of, 500; medical in the United States, 850; higher of convicts, 852; medical, 1410; modern, Prince Bismarck and Mr. Gladstone on the effects of, 1471
Edwards, Miss B. A., De l'Hemiplegie dans Quelques Affections Nerveuses, *rev.*, 433
——— Mr. J. F. H., exophthalmic goître, 80
Effusion, the so-called pleuritic, the tuberculous nature of, 1059; the treatment of pleurisy with, 1061
Egypt, correspondence from, 44, 323, 692, 748, 1166; drainage of Cairo, 44, 748, 1166; hospitals in Upper Egypt, necessity of European supervision of, *ib.*; proposed antirabic institution, 45; the season in, *ib.*; as a Health Resort, Mr. F. Sandwith, *rev.*, 189; the school of medicine, 323, 748; the drainage of Cairo, *ib.*; the weather, *ib.*; the Pyramid Hotel, *ib.*; the influenza, 692; new appointments at Kasr-el-Aini Hospital, *ib.*; nursing sisters, 748; enteric fever and sanitation, *ib.*; a model village, 1166; hospital administration in, 1266
Ekaterinburg, foundation of association for promotion of medical science at, 991
Elborne, Mr. W., A Laboratory Course of Pharmacy and Materia Medica, *rev.*, 1373
Elder, Dr., the present position of abdominal surgery, 957
Electric currents in the skin, 846
Electricity, the administration of certain drugs by, 164; death by, 195; in the treatment of tumours of the uterus, 570; in Facial Blemishes, Dr. P. S. Hayes, *rev.*, 609; in Gynæcology, *rev.*, 727; in the treatment of uterine fibroids, 852; cancer of the breast treated by, 960; and Magnetism, Elementary Manual of, Professor Jamieson, *rev.*, 1141, 1304; in histology, 1284; in General Practice, Dr. W. B. Tomson, *rev.*, 1303
Electrode, new, 1073
Electrolysis in urethral stricture, 47, 881, 942, 1043, 1364, 1442; uterine and urethral, 483; for warts, 571
Electropuncture in aortid aneurysm, 1276
Elephantiasis, case of, 481
——— telangiectodes, case of, 12
"Elephant Man," death of the, 916
Elixir of chloralamide, 24
Elkins, Mr. F. A., report on an epidemic of influenza at Morningside, 228
Ellis, Mr. A. D., the trade in degrees, 1166
——— Surgeon-Major P. M., introduction of influenza into India, 1269
——— Mr. T. S., The Human Foot, its Form and Structure, Function and Clothing, *rev.*, 1251
Embolism of gluteal artery, 423
Emin Pasha, 1158
Eminson, Dr. R., obituary notice of, 1466
Emperor, German, contributes £5,000 to Langenbeck Institution, 930
Empress Frederick, the, and the Children's Hospital at Berlin, 1494
Emphysema, tubercular, 183; and tuberculosis, 1503
Empyema, extra-pleural abscess simulation, 17; treated by the radical method, *ib.*; the pathology of, 242; case of, 673; treatment of, 977
Emulsions, phosphorised cod-liver, 84
Encephalocele, operation for, 384
Enchondroma of rib, resection of rib, etc., 1368
Endarteritis, chronic, the relation of to Bright's disease, 1491
Endocarditis, aneurysm, and amyloid degeneration, 1069; corporeal, its frequency, diagnosis and treatment, 221
Englott, Dr. G. F., *See* Inglott
Ensor, Dr. E. F., a difficult case of turning rendered easy by placing patient in the genupectoral position, 888
Enterectomy, case of, 725
Enteritis, Koch's bacillus and, 922
Epilepsy, rubidium-ammonium bromide in, 43; in hysteria, 401; gold and camphor bromides in, 448; borax in, 901; the clinical study of, 1400
Epileptic fits, unconscious automatic actions occurring in, 961
Epileptics, treatment of in Belgium, 578
Epiphysitis, syphilitic, 300
Epispadias, complete, two cases of, 242
Epistaxis, 902
Epitheliomia of colon, 244; of lower eyelid, 296; on site of specific ulcer, 606; of uterus, *ib.*; of tongue, 673; melanotic, 894; of the tonsil, 901; primarily affecting the tonsil, 1008, 1130, 1286; of penis, 1074; aristol in, 1104; of the rectum, excision, etc., 1134; acetic acid in, 1275; renal, 1508
Epizoötics, bacteriology and, 1266
Epulis, myeloid, 668
Ergotin, rapid cure of erysipelas by, 602, 836
Erysipelas, rapid cure of by ergotine, 602, 836; notification of, 682, 750; the microbe of, 746; the mechanical treatment of, 992; treatment of, 1015; at Aberdeen, 1027; the vasomotor nerves in, 1165
Esbach, Dr. G. H., obituary notice of, 577
Esmarch, Dr. E. v., obtains licence as *Privatdocent*, 816
Esays, prize, 690, 816, 992, 1096, 1116, 1338
Essex, county medical officer of health for, 1438
Ether as an Anæsthetic, Dr. J. de Zouche, *rev.*, 248; chloroform, *v.* 293, 981
Ether inhalers in the tropics, 163
Ethychloral urethane, 322
Eucalyptus in scarlatina, 723
——— disinfectant fluid, 25, 139
——— rostrata in the treatment of sea sickness, 419
Euphrates valley, cholera in the, 1269
Evans, Dr. C. J., the influenza epidemic, 148
——— Mr. F. R. A., charge of manslaughter against, 49
Evatt, Surgeon-Major G. J. H., the certificate in sanitary science and medical registration, 115
Eve, Mr. F., ancient Egyptian bones with osteo-arthritis and senile symmetrical atrophy of skulls, 423
Eversbed, Dr. A., the Rose and Cooper defence fund, 1268, 1411
——— Mr. R., the influence of the influenza wave on menstruating women, 477
Evidence, scientific, at inquests, 34, 105; expert, 491, 572
Evolution and Biology, Studies in, Mrs. A. Bodington, *rev.*, 1076, 1524
Ewart, Dr. J., elected alderman, 991; migrating œdema, 1196
——— and Sons, Messrs., geysers, 1411
Ewens, Mr. J., glycosuria, 75
Exalgine, the analgesic action of, 344; remarks on, 555, 582, 1432; in influenza, 573; poisonous effects of, 1009, 1130, 1246; the therapeutical value of, 1366
Examination, the sacrifice of education to, 85; competitive, the evils of, 562; for D.P.H., 1406
Examinations, holidays after, 496
Exchanges, 50
Exeter, the influenza epidemic in, 147; the health of, 336
Exhibition, Royal Military, opening of, 1115
Exophthalmos, pulsating, 724
Exostosis of tibia, 298
Expectorant, a new, 91, 747
Expedition, dredging, 1092
Expenses, division of, 105
Experts, sanitary and the charge of obstructing justice, 208, 269, 326, 386, 458
Exploration, a welcome, 219
Extra Pharmacopœia, the, Messrs. W. Martindale and W. W. Westcott, *rev.*, 904
Eye, defects of, headaches and, 92; the golfer's, 1264; hypnotic suggestion in disease of, 1276; the value of an, 1402; associated movements of produced by unilateral and bilateral cortical faradisation of the monkey's brain, 1419; mental disorder following operations on the, 1509
Eyelid, lower, epithelioma of, 276
——— retractor, new form of, 1376
Eyelids, note on vaccinia of the, 1483
Eyesight, the volunteers', 1324
Eyre, Surgeon-Major, M.S., beri-beri, 1193

F.

Fabrics, inflammable, 875
Faculty of Physicians and Surgeons of Glasgow, pass lists, 56, 1335
Fæcal. *See* Fæces
Fæces, extravasation of into the peritoneal cavity, 476, 661
Fairbank, Dr. F. R., retention of urine from a hydatid cyst in the pelvis, 1248
Fairland, Surgeon-Major E., dilatation instead of support of the perineum, 1119
Faith Cures, their History and Mystery, Mr. A. J. L. Gliddon, *rev.*, 726
Fallacies, old, revived under new names, 1486
Falmouth as a health resort, 761
Families, large, 1120
Farmers, adulteration by, 754
Farquharson, Dr. R., a disclaimer, 48
Farrar, Dr. J., Stanley's spirometer, 727
Fascia, palmar, treatment of Dupuytren's contraction of the, 411
Fasting man. *See* Succi
Faulkner, Surgeon, perineal fistula, 243
Favete linguis, 1108
Fawcett, Dr. R. M., obituary notice of, 1048
Fayrer, Sir J., made LL.D. of St. Andrews University, 564
Fee for examining a lunatic, 209
Feeding per rectum, an easy method of, 952, 1055
——— cup, an improved, 1489
Fees, for the attendance on families of medical men, 48; for death certificates, 54, 209; for evidence given before magistrates, 105; for reporting cases under the Notification of Diseases Act, 109; to medical witnesses, 157, 330, 1458; for parochial midwifery cases, 212; for inquests and medical officers of Poor-law infirmaries, 312; consultants, 330; for pauper lunatic certificates, 334, 1518; to medical witnesses in France, 448, 458; medical and surgical in Germany, 461; a question of, 574; to ex-assistant, 633; the scale of, 637; for substitutes, 925; to medical officers of health, 1050; for certificates under New Lunacy Act 1085; big, 1228; for official teacher of vaccination, 1410

Feet, tender, in psoriasis, 547; perspiring, treatment of, 1231, 1286, 1410
Fehling's solution, 1342
Felkin, Dr. R. W., The Geographical Distribution of Tropical Diseases, *rev.*, 365
"Fellow student, an old," 33, 330
Female, gonorrhœa in the, 734
Femme, La, pendant la Période Menstruelle, Dr. S. Icard, *rev.*, 905
Femur, excision of the head of the, 241; sarcoma of, amputation of hip-joint for, 725; myeloid sarcoma of, 903; accidental refracture of during manipulation, 925
Fenton, Dr., myxomatous tumour removed from the pelvis, 960
Fenwick, Mr. E. H., unusual bladder growth, 16; two cases of complete epispadias, 242; case of recurrent granular urethritis, 481; cystoscopic view of bladder diverticulum, 667; spontaneous fracture of vesical calculi, 893
——— Dr. S., Clinical Lectures on some Obscure Diseases of the Abdomen, *rev.*, 485
——— Mr. W. S., the University of Strassburg, 379, 443
Ferguson, the late Surgeon-General J., 270
Ferrier, Dr., appointed hon. member of the Imperial Leopold Charles Academy of Science in Halle, 638; the Croonian Lectures on cerebral lesions, 1289, 1349, 1413
Fever, remarks on, 673; outbreak of in Lismore Union, 855, 973; in childbed, 1427
——— dengue. *See* Dengue
——— enteric, at the London board schools, 31; in Dublin, 35; at Linlithgow Bridge, 56; desquamation in the third week of, 132; at Portsmouth dockyard, 194; speculations concerning, 197; statistics of in Paris, 265; water analysis in an epidemic of, 626; at Johannesburg, 699; at Naples, polluted oysters the supposed cause of, 1055; in India, 1196; the prevalence of at Melbourne, 1210; in Milan, 1466
——— hay, a new remedy for, 1085; local treatment in, 1250
——— intermittent, massage in, 44
——— malarial, the effect of chill in producing, 1371
——— Malta, remarks on, 482
——— puerperal, notification of, 682, 750; remarks on, 841; at Aberdeen, 1027
——— pleuropneumonic, report on, 1093
——— rheumatic, the etiology of, and an explanation of its relation to other diseases, 472; influenza and, 889
——— scarlet, at Sheldwick, 56; and puerperæ, 75, 234, 292, 601, 602, 719, 780, 1068; eucalyptus in, 723; pseudo-diphtheria of, 1165; epidemic, and the closing of schools, 1321
——— typhus, in Sheffield, 902; how it arises, 972; at Magherafelt, 1442
——— yellow, the pathology of, 93; in Brazil, 699; in the United States, 1520; at Malaga, *ib.*
Fevers, acute specific, aural complications in, 78; surgical sequelæ of, 482; how they arise and spread, 1323
Fibrochondroma of tongue, 1195
Fibroid of uterus, removal of, 606
Fibroma, removal of during pregnancy, 1085
Fibrosarcoma of left clavicle, 598
Fibula, sarcoma of, 427
Field, Mr. G. P., on labyrinthine deafness treated by pilocarpin, 1125
Filaria sanguinis hominis, report on, 1103
Filter, circulating, 1432
Fincham, Dr. G. T., obituary notice of, 1336
Fines, inadequate for adulteration, 562; for insanitary dwellings, 930
Finlay, Dr., rheumatic pericarditis with delirium, 1012
Finlayson, Dr. J., account of a MS. volume by William Clift relating to John Hunter's household and estate, and to Sir Everard Home's publications, 738; Plea for a Reform of University Teaching in Scotland, *rev.*, 906; diabetes mellitus, convulsions for 17 hours, death, 1011; Account of the Life and Works of Maister Peter Lowe, *rev.*, 1205
Fires, economical, bed room for invalids, 522; in hospitals, 697
Firth, Dr. C., case of strangulated right obturator hernia, 887
Fish, parasites of, 794; bloodless, 870; poisoning by, 1051; and leprosy, 1118
Fisher, Mr. F. B., the surgical treatment of impacted labour, 924
Fistula, perineal, 243; on the treatment of in phthisis, 546, 832; horse-shoe, operation for, 667; chole-pulmonary, 836; gastro-colic, case of, 1064
Fistulæ, biliary, with escape of biliary calculi, 425
Flemming, Mr. C. E. S., the discussion at the Medical Society, 1332
Flood, Mr. A. W., incubation of rötheln, 542
Florence, Italian Surgical Congress at, 979
Flugge, Dr. C., Micro-organisms, with Special Reference to the Etiology of the Infectious Diseases, *rev.*, 844
Fluid pressure, intracranial, surgical treatment of, 8
Fœtation, included, case of, 1380
Fœtus, with duplicity of right lower extremity, 128; malformation of generative organs in, 296; papyraceus in twin pregnancy, 499; retention of in fibroid disease, 500; œdematous, 1074
Food, in Health and Disease, Dr. J. B. Yeo, *rev.*, 302; the price and the age of marriage, 683; flesh of animals inoculated with anthrax or malignant pustule as, 1287
——— preparations, 84
Foot, sarcoma of, 298; the Human, its Form and Structure, Function and Clothing, Mr. T. S. Ellis, *rev.*, 1251
Foot, Dr. A. W., the medical selection of lives for assurance, 483
Football accidents, 111, 397
Foot-drop, splint for, 24
Forbes, Mr. J. G., obituary notice of, 757
Forceps, the, a death trap, 104, 163; for removal of enlarged follicles from the pharynx, 1202
Ford, Mr. A., sewer ventilation, 1114
Foster, Dr. M., elected a member of the Italian Reale Accademia dei Lincei, 560
Foulerton, Mr. A. G. R., a guarded capillary trocar for suprapubic puncture of the bladder, 83, 219; muzzling or registration? 1411
Fowler, Dr. W., papilloma of uvula, 298; hydatid of liver, 667
Fox, Mr. A. E., A Short Manual of the Bath Mineral Waters, *rev.*, 23
——— Dr. J. H., tender feet in psoriasis, 547; glycosuria, *ib.*
——— Dr. T. C., necrosis of pharynx, 667; bones from a case of scurvy, 1192
Foxwell, Dr., syphilitic headache, 80; sinus of chest, 482; chronic phthisis with unusual dislocation of heart, 724; tumour of brain, 1135
Fractures, the varying effects of violence in producing, 894
Frage des Ueberganges gutartiger Kehlkopfgeschwülste in bösartige speciell nach intralaryngealen Operationen, Dr. F. Semon, *rev.*, 1139
France, obituary in in 1889, 35; proposed new school of naval medicine in, 111; English practitioners in, 310, 340, 495, 615; the practice of medicine in, 395; fees for to medical witnesses in, 448, 458; and the International Medical Congress at Berlin, 519; medical sanitation in, 627; the first case of intestinal charbon in, 922; prophylaxis of phthisis on the railways of, 992; influenza in, 1015; medical candidates for municipal elections in, 1115; medical providence in, *ib.*; proposed increase of facilities for study and research in colleges, etc., in, 1264; gratuitous medical relief in, 1284; doctors in, 1339; the medical profession in, 1340; vital statistics in, 1439; new medical society in, 1466; cholera in, 1501
Franklin, Mr. G. C., two cases of nephrotomy, 550
Franks, Mr. K., on subcuticular suture, 414; appointed surgeon to the viceregal court of Ireland, 565; massage, 1073
Fraser, Dr. T. R., the analgesic action of exalgine, 344; exalgine in influenza, 573
Frazer, Professor, topographical anatomy of the brain, 300
Freeman, Mr. R., Royal Medical Benevolent College, Epsom, 1175
Freitas, Dr. V. U de, the case of, 1185, 1263
Frere, Mr. A. H., treatment of influenza, 764
Frey, Dr. H., death of, 336
Fürbringer, Professor, bone inflammations of typhoid origin, 1033; die innere Krankheiten der Harn- und Geschlechtsorgane, *rev.*, 1431
Fulford, cholera on board the, 981
Fund, Bradford Joint Hospital, report of, 394
——— British Medical Benevolent, annual general meeting of subscribers to, 155; meeting of, 1328
——— Cotton Districts Convalescent, report of, 336
——— the Danaher, subscriptions to, 1231
——— Falls memorial, 992
——— Hospital Saturday, report of, 309; meeting of delegates of, 442; first meeting of as a company, 516; and the penny-a-week collection, 576; first general meeting of, 1464
——— Hospital Sunday, at Norwich, 56; at Dublin, 684; metropolitan subscriptions to, 1405
——— Lady Dufferin's, annual meeting of, 389
——— Leeds Workpeople's Hospital, annual report of, 394
——— Lewis memorial, 927
——— Luke Armstrong memorial, balance sheet of, 801
——— the Moon, 642, 820
——— National leprosy, 141, 150, 1147, 1278
——— National pension for nurses, new year's gift to, 142; annual general meeting of, 614
——— Princess Christian, for Nurses, 1495
——— Rose and Cooper Defence, 1231, 1268, 1411
——— Royal Medical Benevolent of Ireland, annual meeting of Belfast Branch of, 442
Fund, Wilkes' Indemnity, 462, 582, 764, 820
Funds, Manchester and Salford Hospital collections in aid of, 394
Furber, Mr. E. P., intussusception successfully treated by injection of air, 1300
Furner, Dr. W., pe ityphlitis, 18
Fyfe, Mr. P., adulterated cheese, 986

G.

Gabb, Mr. D. H., death of, 276
Gagged by the Prison Commissioners, 1384
Gairdner, Professor T. W. on, influenza, 317
Galactorrhœa, hysterical, 399
Gall stone, impacted, crushing of in cystic duct, 135
Gallagher, Dr., appointed coroner for North Mayo, 378
Galton, Sir D., receives decoration of Legion of Honour, 258
Galvanism, Introduction to the Treatment of Disease by, Mr. S. Keith, *rev.*, 875
Galvanometers, pocket, 191
Gamaleia, M., choleraic vaccination, 505
Ganges, the sacred, as a common sewer, 311, 457
Gangrene, rapid spontaneous, 477; leprotic, sequel to two cases of amputation for, *ib.*
——— symmetrical. *See* Disease, Raynaud's
Gans, Dr., gastric digestion in diabetes mellitus, 1033
Gant, Mr. F. J., The Student's Surgery, *rev.*, 247; The Lord of Humanity, *rev.*, 963
Garden, Dr. R. J., amputation at the hip joint, with the skewer method of securing the vessels, 12; appointed medical examiner in surgery and midwifery at Aberdeen University, 1498
"Garden, the Physick," at Chelsea, 1497
Gardenier, Mr. A., Man Wonderful, Mannikin, *rev.*, 1304
Gardiner, Mr. P., complete transverse laceration of the womb, 720
Garlic, bismuth salts and the odour of, 499
Garrett, Dr. J. H., scarlet fever and the puerperal condition, 292
Garrod, Sir A. B., appointed physician extraordinary to the Queen, 372
Garry, Mr. W. A., rigid os, 820
Gas, coal, poisoning by, 18; inflammable eructation of from stomach, 470
Gaskin, Mr C., transposition of viscera, 962
Gasquet, Mr. J. R., the influenza epidemic, 47; the new lunacy Acts, 1136
Gastric juice, is it a germicide? 252; antiseptic powers of, 1095
Gastro-enterostomy, with Senn's approximation plates, 294, 1300; with excision of a portion of the stomach, 1090; remarks on, 1167
Gastroschisis, a case of, 14
Gastrostomy, stricture of the œsophagus treated by, 243; case of, 1103, 1295
Gasworks, contamination by, 684
Gautier, Dr. V., obituary notice of, 517
Gauze tissue, protective, note on a new form of, 1367
Gem, Mr. W., clinical teaching in Dublin, 400
Gemmell, Mr. W., ouabain in whooping-cough, 950
Germ flour and bread, 84
German Empire, representatives of learned professions in House of Deputies of, 1115
Germany, obituary in in 1889, 36; medical practitioners in, 330; the question of titles in, 337; cremation in, 458; surgical and medical fees in, 461; proposed regulation of sale of poisons in, 578; the lady doctor's question in, 992; transport of the sick in, 1115; medical men in, 1304; the medical profession in, 1340; vaccination in, 1384; honours to medical men in, 1407; vital statistics in, 1439; insanity in, 1467
Germicide, is the gastric juice a? 252
Geschichte des medicinischen Unterrichts, etc., Dr. T. Puschmann, *rev.*, 484
Gestation, ectopic, 15, 242; extrauterine, two cases of, 620; prolonged, 761; ectopic, mistakes concerning, 924; ectopic, spurious pregnancy simulating, 1427
Geyser baths, dangers of, 1149, 1218, 1411
Gibb, Dr. G., accidental injury, 135
Gibbon, Dr. A., death of, 855
Gibraltar, lepers in, 1407
Gibson, Dr. J., presentation to, 930
——— Dr. T. B., appointed assistant to the Professor of Pathology at the Aberdeen University, 93
Gift, the Guinness, 378
Gill, Mr. J. W., transient recurrent attacks of lateral hemianopsia, 233
Gilroy, Dr. J., a forgotten medical worthy, 1243
Gilruth, Dr. G. R., treatment of cystitis, 400
Gipps, Surgeon, Malta fever, 482
Girard, M. Ch., Agenda du Chimiste, *rev.*, 1076
Girl, the Welsh fasting, 935; 10 years of age, gastric ulcer in a, 1013; aged 12, post scarlatinal cirrhosis of kidney in, 1193; a warbling, 1410

Gladstone, Mr., and the medical profession, 731: opening of Guy's College by, 745; on the effects of modern education, 1471
Glanders, etiology of, 1331
Glands, strumous, treatment of, 243; sexual compensatory hypertrophy of, 863
Glasgow, correspondence from, 46, 1453; clinical instruction in fever at, 45, 617, 1498; the sale of unsound meat, *ib.*; University Students' Union bazaar, *ib.*; the epidemic of influenza in, 96, 204; mortality in in 1889, 392; proposed cancer hospital for, 442; the weather and death-rate in, 565; and the Universities Commission, 736; medical education of women in, 1152; poor children's fresh air fortnight at, 1267 1453; teaching of domestic economy at, 1385
Glaucoma after extraction of cataract, 297; primary at the age of 22, 668
Gliddon, Mr. A. J. L., Faith Cures: their History and Mystery, *rev.*, 726
Glycerine as a dressing in necrosis, 478
Glycerite of calf pepsin, 216
Glycosuria, 75, 547
Goat vaccine, 1331
Godding, Staff-Surgeon C. C., an account of an obscure outbreak of dengue, 352
Godlee, Mr. R. J., the surgical aspect of hepatic abscess, 61, 120, 172, 328
Goître, exophthalmic, 19, 80; ligature of nutrient arteries in, 1276; parenchymatous injections of iodoform in, 1509
Goldmann, Dr. E. E., Ueber das reiskörperchenhaltige Hygrom der Sehnenscheiden, *rev.*, 1201
Golf Club, the Royal Colleges, 855
Gonococcus in simple urethritis, 322
Gonorrhœa in the female, 734; corrosive sublimate in, 752; acute, treatment of, 1210
Gooch, Mr. J. W., report on an outbreak of diphtheritic tonsillitis at Eton College in September, 1889, 474
Goodall, Dr. E., hypnotism, 549; suggestive therapy in insanity, 951
Goodchild, Mr. J. A., English and foreign health resorts, 208
Goodhart, Dr. J. F., the Yearbook of Treatment for 1890, 279; albuminuria, 362; functional albuminuria, 1121; the vagaries of renal disease, 1183
Goodridge, Dr. H. F. A., select committee on medical charity organisation, 929; case of gastro-colic fistula, 1064
Goodsall, Mr., operation for horseshoe fistula, 667
Goodwyn, Mr. H., unusual distribution of the radial artery, 642
Gordon, Mr. G. A. S., imperforate rectum, operation, cure, 177
——— Dr. J., antipyrin as a hypnotic for children, 13; a contribution to the study of sulphonal, 710
Gormley, Surgeon-Major J. A., the surgical aspects of hepatic abscess, 889
Gottstein, Dr., honorary title of "professor" conferred on 1051
Gout, a Treatise on, Sir D. Duckworth, *rev.*, 184; a contribution to the chemistry of, 1369
Grant, Dr. O., typhus fever, 182
——— Dr. W. F., case of congenital syphilis with arrested development, 642
Grashey, Professor, succeeds to chair of psychiatry at Berlin, 816
Grates, 934, 1054
Gratton, Mr. N., 27 cases of deformities of the extremities treated by means of the screw clamp, 1006
Graves, Mr. W. R., anæmia and pernicious anæmia, 328
Graves's disease. *See* Disease
Great Britain, biological study in, 376
Green, Dr. C., obituary notice of, 454
——— Mr. G. L., colour blindness, 234
Greene, Dr. G. E. J., fracture of coracoid process, 178; appliance for the treatment of prolapsus recti, 190; the treatment of influenza, 1120
Greenwood, Principal, proposed memorial to services of, 317
Greswell, Dr. D. A., appointed chief health officer for Victoria, 143
——— Mr. G., The Diseases and Disorders of the Ox, *rev.*, 1019
Grieve, Surgeon-General R., on endemic disease in British Guiana, and on certain racial susceptibilities, 468
Griffith, Dr. A. H., the artificial vitreous body, 293
Griffiths, Mr. C. T., Rheumatic Diseases (So-called), *rev.*, 137; presentation to, 1115
——— Dr. J., necrosis and separation of articular cartilages, 544; carcinama of the testicle, 1194; necrosis of a portion of the fifth lumbar vertebra, 1195
——— Dr. T. D., the present position of abdominal surgery, 898
Grigg, Dr. W. C., heredity as to triplets, 541
Grimshaw, Dr., the State medicine qualification, 1137
Grossmann, Dr., Die Heilquellen der Taunus, *rev.*, 23
——— Dr. K., note on tests for colour blindness, 69
Grouse disease, bacilli of, 1016
"Growing pains," 816
Guarana, fluid extract of, 1141
Guardians of the poor, 1052
Guatemala, influenza in, 1065
Gubb, Mr. A. S., poisonous effects of exalgine, 1130
Guinness buildings, the, 732
——— gift, the, 378
——— trust, the, 513
Gula, Professor, obituary notice of, 273
Gull, Sir W., obituary notice of, 256; the late, 294, 438; the funeral of, 319, 336; portrait of, 395; the will of, 744
Gulland, Mr., the Kochs-Wolz microscope lamp, 426
Gumma of the heart, 667
Gunn, Mr. R. M., toxic effects of atropine drops, 128
Gunshot wound, suicidal case of, 721
Guyon, M. F., on retention of urine, 626
Gwynne, Dr., Graves's disease, 548
Gynæcology, modern, 908; a manual of, Drs. D. B. Hart and H. F. Barbour, *rev.*, 1018; aims and present position of, 1073, 1197
Gynécologie Opératoire, Leçons de, MM. Vulliet and Lutaud, *rev.*, 904

H.

Habit and Health, Mr. G. Beddoes, *rev.*, 1493
Hadden, Dr. W. B., cysts of the cerebellum, 60
Haddon, Dr. J., poisoning by coal fumes and smoke, 178; influenza and pneumonia, 354
Hæmatoma of nasal septum, 178
Hæmaturia, cyclic of four years' duration in a woman aged 63, 178
Hæmoglobinuria, epidemic, 571
Hæmophilia occurring in malaria, 1301
Hæmorrhage, *post-partum* 384; pancreatic, 564; case of accidental concealed, 780; uterine, after the menopause not depending on malignant growths, 1072; uterine, hydrastinin in, 1086; retinal in hydracetin poisoning, 1276
Hæmorrhages occurring during pregnancy, 1065
Hahn, Dr. E., receives title of professor, 816
Haig, Dr. A., the connecting link between high tension pulse and albuminuria, 65; salicin compared with salicylate of soda as to effect on the excretion of uric acid and value in acute rheumatism, with some deductions as to the causation of the disease, 954; causation of reduced arterial tension by mercury, 1241
Hailes, Dr. W., jun., intubation of the larynx, 1186
Hailstones, microbes in, 1467
Hair, change in the colour of the, 934; fair, is it becoming extinct, 1145
Halifax, new infirmary for, 813
Hall, Dr. Ben, presentation to, 992
——— Dr. F. de H., unusually loud systolic murmur, 667
Halliburton, Dr. W. D., elected profesor of physiology at King's College, London, 680
Hamilton, Surgeon C. W., a new remedy for seasickness, 1067
Hammond, Mr. W., sulphonal *post-partum*, 179
Handbill, advertising by, 1223
Handfield-Jones, Dr. M., cardiac insufficiency in its relation to abortion, 596; uterine hæmorrhage after the menopause not depending on malignant growths, 1072
Handford, Dr. H., the epidemic of influenza, 147, 339; tubercular emphysema, 183; myositis, *ib.*; stricture of rectum, puncture of intestine, 673; bronchiectasis, *ib.*; post-scarlatinal cirrhosis of the kidneys (small white) in a girl aged 12, 1193; disseminated polypi of the large intestine becoming malignant, 1195
Hands, chapped, treatment of, 934
Hanwell, ophthalmia at, 89
Harbour, a cold, 582
Hare, Mr. A. W., abscess of the cerebellum following otitis media, trephining, death, 230; flat foot, 1074
Harelip and cleft palate, 1196
Harley, Dr. G., human vaccine a prophylactic in canine distemper, 923
Harries, Dr. A., the administration of certain drugs by electricity, 164
Harris, Dr. A. W., presentation to, 992
——— Mr. J. H., scarlet fever and puerperæ, 719
——— Dr. R. P., results of the Porro-Cæsarean operation in all countries from its introduction to the close of 1888, 68, 508
——— Dr. T., Manuel d'Autopsies, *rev.*, 23; intrathoracic suppuration without rise of temperature, 429
——— Dr. D. V., the treatment of pleurisy with effusion, 1061
——— Mr. W. J., early pregnancy, 179
Harrison, Dr. J. B., obituary notice of, 110
Harrison, Mr. R., Toronto university library restoration, 811; on the selection and use of catheters and other instruments for enlarged prostate, 1128
Hart, Dr. D. B., Manual of Gynæcology, *rev.*, 1018
——— Mr. Ernest, receives decoration of Legion of Honour, 253
Hartley, Mr. R. N., abdominal hysterectomy, 672
Harvey, Mr. F. G., Menière's vertigo and the semicircular canals, 1010; massage of the membrana tympani, 1411
——— Mr. J. S., presentation to, 930
Haslam, Mr. W. F., two cases of severe head injury, trephining, recovery, 358; vesical calculus, 428; congenital dislocation of hip, 724; punctured fracture of skull, 725
Hassall, Dr. A. H., English and foreign health resorts, 153; the alleged increase of consumption at San Remo, 1104, 1332; safety bottles, 1375
Hastings, the medical officership of health of, 1150
Hatchell, Dr. G. W., death of, 501
Hatherly, Mr. H. R., dermoid cyst, 364
Hats, heads and, 679
Haughton, Dr. E., dangers of geyser baths, 1218
Haultain, Dr., sloughing of the bladder wall, 242
Haward, Mr. W., division of labour in nursing, 990
Hawkins-Ambler, Mr., acute diffuse suppurative peritonitis, laparotomy, recovery, 896
Haycraft, Dr. J. B., the coagulation of egg and serum albumen, vitellin, and serum globulin by heat, 167
Hayem, Professor G., Du Sang et de ses Altérations Anatomiques, *rev.*, 21
Hayes, Dr. P. S., Electricity in Facial Blemishes, *rev.*, 609
——— Dr. R. A., case of empyema treated by the radical method, 17
Hay fever. *See* Fever
Haynes, Dr. S., dysmenorrhœa, 875
Hazell's Annual for 1890, Mr. E. D. Price, *rev.*, 83
Head, temporary cycloplegia after injury to, 292; two cases of severe injury to, 358; congenital hemi-hypertrophy of the, 667
Headache, syphilitic, 80
Headaches and ocular defects, 92
Heads and hats, 679
Health resort, Falmouth as a, 761
——— resorts, English and foreign, 104, 127, 153, 208, 329, 387
——— Springs of Germany and Austria, Mr. F. O. Buckland, *rev.*, 1488
Hearing, defective, in seamen, 629
Heart, cactus grandiflorus in some forms of disease of, 70; the human, electrical phenomena of, 91; case of disease of, with nervous symptoms, 242; case of severe valvular disease of, 481; a new disease of, 570; paroxysmal hurry of the, 605; gumma of the, 667; unusual dislocation of the, 724; disease of the, in children, 937; the rapid, 1070; acute overstrain of the, and its treatment, 1159; the papillary muscles of the, 1207; the innervation of the, 1213
——— hurry, paroxysmal, associated with floating kidney, 1250
——— palsy of acute specific infective diseases, angina pectoris in, 363
Heat, moist, as a sterilising agent, 1166
Hebert, Dr. P. Z., the respiratory complications of influenza, 419; new electrode, 1072; dilatation instead of support of the perineum, 1119
Hegar, Professor, honours to, 57
Heilquellen der Taunus, Dr. Grossman, *rev.*, 23
Hellier, Dr., pyrexia in the puerperal state, 679; the pulse during chloroform anæsthesia, 1425
Helme, Dr. T. A., a successful case of inguinal colotomy for absence of rectum in a child five days old, 1297
Helmet, the Tuson, 163
Hemianopsia, lateral, transient recurrent attacks of, 233; with softening of the left cuneus, 1194
Hemiplegia, accompanied by loss of speech in children, 284; right, due to syphilis, 300; old, accompanied by severe headache, trephining for, 424; infantilis spastica, 571
Hemiplégie, De l', dans quelques Affections Nerveuses, Miss B. A. Edwards, *rev.*, 433
Henoch, Professor, proposed memorial to, 638; Lectures on Children's Diseases, *rev.*, 790
Hentsch, Dr. J. P., the inquiry in regard to metropolitan hospital charities, 1048
Henby, Dr. G., the epidemic of influenza, 95
Hepatic. *See* Liver
Herbert, Mr. A., The Sacrifice of Education to Examination, *rev.*, 85
Herman, Dr. G. E., five cases of puerperal eclampsia especially illustrating the temperature and urine in this disease, 133; corporal endometritis, its frequency, diagnosis, and treatment, 221; two cases of extrauterine gestation, 602; the change in size in the chest and abdomen during the lying-in period, and the effect of the binder upon them, 604; amenorrhœa from shock, 1014
Hermann, Dr. F. L., Influenza, *rev.*, 1075

Hermann, Professor, presentation of gold snuffbox to by Emperor of Russia, 991
———— Professor L., celebrates silver jubilee as teacher, 638
Hernia, radical cure of, 19, 671, 884, 1482; strangulated, 135; umbilical, operation for at birth, 106; of the cæcum entirely wanting in a peritoneal sac, 238; retroperitoneal, 295; umbilical, radical treatment of, 428; Halstead's operation for, 495; strangulated obturator, 719; strangulated inguinal herniotomy for, 839; non-strangulated, a study of fifty consecutive cases of operation for the radical cure of, 840; strangulated right obturator, case of, 887; strangulated, treated with the double cyanides of zinc and mercury, 1247; congenital umbilical, 1496
Hernandez, Dr. J. de la L., death of, 1407
Heroism, medical, 142
Herpes zoster, brachialis, 963; in influenza, 1321
Herschell, Dr. G., peptones as food, 163; case of Thomsen's disease, 242
Heuston, Dr. F. T., clinical teaching in Dublin, 327
Hewlett, Deputy Surgeon-General T. G., proposed memorial to, 309
Hickling, Dr. W., gallant conduct of, 1263
Higgins, Dr. G. H., the graduation of hypodermic syringes, 115
Hill, Dr. A. B., sanitary experts and the charge of obstructing justice, 326
—— Mr. G. W., aural complications in acute specific fevers, 78
Hillingdon, opening of convalescent home for children at, 698
Hillis, Dr. J. D., anæsthetic and tubercular leprosy, 693
Hime, Dr. T. W., shall we eat tuberculous meat? 866
Hinshelwood, Dr. J., temporary cycloplegia after head injury, 292
Hip, excision of, 667; congenital dislocation of, 724
Hip-joint, amputation at the with the skewer method of securing the vessels, 12; amputation at the, 13; erasion of the, 241; on the successful treatment of congenital cases of by complete recumbency with extension for two years, 406; amputation of for sarcoma of femur, 725; dislocation of the in a young child, 1246
His, Dr., the innervation of the heart, 1213
Histology, electricity in, 1284; Practical, Outlines of, Professor Stirling, *rev.*, 1372
Hodder, Brigade-Surgeon F. W. L., a guarded capillary trocar, 163
Hodges, Mr. F. H., keratitis subepithelialis, 550
Hogg, Mr. J., an undetected case of colour blindness, 888
Holden, Dr. J. S., Mason testimonial, 18
———— Mr. L., case of osteotomy for the relief of malposition after fracture, 1196
Holiday, summer, 521, 581
Holidays after examinations, 496
Holland, chemists' shops in, 1051
Hollander, Mr. B., A Demonstration of Centres of Ideation in the Brain, *rev.*, 86
Hollis, Dr. W. A., Graves's disease, 18; on chloremia and its treatment, 1239
Holman, Dr. C., the Royal Medical Benevolent College, Epsom, 811, 982
Holmes, Mr. T., sickness and mortality of the police force, 983
Home, convalescent hospital gift of a, 30, 682; for medical men and their widows, 269; seaside convalescent, donation for, 565; convalescent for scarlet fever patients, 641
——— Dalrymple, statistics of 699
——— Glasgow Convalescent, report of, 395
——— Glasgow Training for Nurses, progress of, 565
——— Morley Convalescent, "parade" in aid of, 1131
——— Thompson Memorial, Lisburn, annual meeting, 516
Homœopaths, consultations with, 271, 574; attendance on, 509
Homes, convalescent, 936, 1055
Hong Kong, the Contagious Diseases Act, 578
Honours, birthday, 33, 1206
Hook, decapitating, bladder wounded by, 1408
Hopkins, Mr. H. C., presentation to, 872
Horrocks, Dr. P., the Moon fund, 820; puerperal fever, 841
Horse, prolapse of part of the wall of the stomach into the duodenum from a, 543
Horseflesh, fine for selling, 160, 197; as human food, 966, 1338
Horses, exportation of to Antwerp, 518; influenza in, 638, 747; management of, 995; books on, 1118
Horse-shoeing, 873
Horsley, Mr. R. E., cyst of the inferior turbinated body, 17
———— Mr. V., on the central motor innervation of the larynx, 175; on a possible means of arresting the progress of myxœdema cachexia strumipriva and allied diseases, 287
Hospital or sick asylum, 442; public or private dispensary, 452
Hospital accommodation and the notification of infectious disease, 273
———— expenses, 1437
———— reform in Ireland, 453
———— Addenbrooke's, the house-surgeoncy of, 758
———— Bethlem Royal, annual report of, 1463
———— Cancer, Brompton, annual meeting, 576
———— Charing Cross, annual report, 515; distribution of prizes at the medical school of, 1467
———— Cheyne, visit of Prince and Princess of of Wales to, 1494
———— City of Dublin, annual meeting of, 929
———— Children's, Birmingham, receives donation for foundation of special cot, 990
———— Children's, Great Ormond Street, legacy to, 309
———— Clinical for Women, Manchester, report of, 394
———— for Consumption, Belfast, annual meeting, etc., 255
———— for Consumption, Manchester, annual meeting, 453
———— for Consumption, Ventnor, annual meeting, 516
———— Cork Intercepting, subscription to, 200
———— Cork Mercy, statistics of, 1226
———— Dental of Ireland, bazaar in aid of funds for, 378, 813
———— Devon and Exeter, and the Hospital Saturday Fund, 33
———— Ear, Glasgow, award of prizes at, 699; annual report of, 1226
———— Ear and Throat, Birmingham, donation to building fund of, 14
———— for Epilepsy and Paralysis, annual meeting, 737
———— Evelina, annual dinner, 1226
———— expenditure, 1142
———— Eye, Ear, and Throat, Ulster, annual meeting, 395
———— Fever, rules for a, 212
———— Fever, Edinburgh, discontinuance of supply of beer to nurses of, 617
———— Fever, London, annual meeting, 453
———— French, London, donation to, 1283; proposed fête for, 1464
———— General, Birmingham, annual report, 814
———— German, Dalston, representation of the medical staff on the board of management of, 380, 562
———— Great Northern Central, reform of abuses at, 1102
———— Grimsby and district, reorganisation of, 698
———— Guest, Dudley, opening of isolation wards of, 378
———— Guy's, presentation of medals to nurses at, 107; residential college for students at, 621; changes in staff of, 1206; recognition of dental school of, 1466; distribution of prizes at, 1521
———— Johns Hopkins, Reports of, *rev.*, 675
———— Kasr-el-Aini, report of, 1208
———— Kendray, Barnsley, opening of, 628, 636
———— London, sanitary arrangements of the, 756; laying of foundation stone of new building at, 1206; appointments to medical staff of, 1262; Cardinal Manning and, 1464
———— Longmore, for Incurables, Edinburgh, the funds of, 1339
———— Meath, annual meeting, 973; distribution of prizes at, 1092
———— Mercer's, appointments to medical staff of, 1442
———— Mexborough, Montagu Cottage, opening of, 291
———— Metropolitan, Shoreditch, festival dinner in aid of funds of, 1111
———— Monkwearmouth and Southwick, opening of new ward, etc., at, 378
———— National Childrens', Dublin, annual meeting, 314
———— Orthopædic, Dublin, ball in aid of, 314
———— Portsmouth Infectious, enlargement of, 274
———— Queen's, Birmingham, annual report, 990
———— Royal Belfast, special meeting of subscribers, etc., 515
———— Royal Eye, Manchester, 335
———— Royal London Ophthalmic, donation to, 453; bequest to, 855
———— Royal Southern, Manchester, bequest to, 759
———— Royal Victoria, Bournemouth, opening of, 142; description of, 214.
———— St. Anna's, Vienna, donation to, 1466
———— St. Bartholomew's, Reports, Dr. W. S. Church and Mr. W. J. Walsham, *rev.*, 553
———— St. George's, 400 cases of amputation performed at, 1370
———— St. John's for Diseases of the Skin, receives grant from Hospital Saturday Fund, 142
Hospital, St. John's, Limerick, presentment to, 1466
———— St. Mary's, Manchester, annual meeting, 628
———— St. Michael's, Kingston, ball in aid of, 1051
———— St. Thomas's, the matronship of, 518; the treasurership of, 560, 613
———— Salford Infectious, enlargement of, 270
———— Samaritan, Belfast, annual meeting of, 378
———— Samaritan Free, bazaar in aid of, 1115
———— Seamen's, Greenwich, annual report, 515; opening of new branch of, 1495
———— Sick Children's, Aberdeen, annual meeting of, 634; appointments at, 1091
———— for Sick Children, Belfast, annual meeting of, 315
———— for Sick Children, Edinburgh, and the medical education of women, 145
———— for Sick Children, Glasgow, report of, 394
———— for Sick Children, Great Ormond Street, laying foundation-stone of new wing of, 732
———— Sir Patrick Dun's, annual report of, 813
———— for Skin Diseases, Glasgow, annual report, 870
———— Temperance, London, bequests to, 699
———— Ulster, Belfast, changes in the staff at, 973
———— Ulster for Women and Children, Belfast, annual meeting, 395
———— University College, festival dinner in aid of funds of, 516
———— Victoria Dental, Manchester, annual meeting of governors of, 394
———— West Ham, opening of, 970
———— West Kent, Maidstone, new ward for, 698
———— Westminster, explosion at, 816
———— Women's, Birmingham, annual report, 813
———— for Women, New, bazaar in aid of, 1050
———— and Dispensary, French, annual dinner, 453
Hospitals, suburban infectious, 16; reform of outpatient departments of, 106, 155, 213, 1220; fever, students at the, 253, 387, 750, 811; and the working classes, 275, 335; representation of the medical staff on the boards of, 375, 380, 635; right to perform operations in, 496; use of alcohol in, 498; special, touting for, 574; the provident system at, 613; English, reports on, 627; lepra, in the British Isles in the Middle Ages, 630; national and a civil medical service, 635; sewer gas in, 681; fires in, 697; London, royal visits to, 698; a eulogy on, 743; advertising through, 934; infectious, the question of payment in, 1015; English, Irish, and Scotch qualifications in, 1028; the provident principle at, 1111, 1218; stimulants in, 1219; railway companies and, 1280; for infectious diseases, 1282; misapprehension as to, 1464
———— Committee. *See* Committee
House of Lords, the medical profession and the, 935
Houses, insanitary, 29; redraining, 54
Housing of the poor, the, 48, 311, 329, 438, 795, 970, 1406
Houston, Brigade-Surgeon M,, obituary notice of, 1048
Hove, health of, 1338
Howard centenary, the, 216
Hughes, Mr. A. D., a case of suprapubic lithotomy, 180
———— Mr. A., Nerves of the Human Body, *rev.*, 904
Humby, Dr. E., obituary notice of, 928
Humerus, severe compound comminuted fracture of, healed by continuous irrigation, 74
Humphreys, Dr. F. R., dilatations instead of support of the perineum, 1287
Humphry, Dr. G. M., Old Age, *rev.*, 302; senile hypertrophy and senile atrophy of the skull, 1248
———— Mr. L., A Manual of Nursing, Medical and Surgical, *rev.*, 304
Hungary, sale of poisons in, 1407
Hunt, Dr. J. W., the epidemic of influenza, 95
——— Mr. L., traumatic chyluria, 421
Hunter, Mr. John, MS. volume relating to the household of, 738, 865; portrait of by Sir J. Reynolds, 1338
———— Dr. J. B., national hospitals and a civil medical service, 635
———— Dr. Walter, the prevention of abortion, 672
———— Dr. William, the pathology of duodenitis after burns, 76; case of pernicious anæmia, 784
Huss, Professor M. V., death of, 1173
Hutchinson, Dr. C. F., English and foreign health resorts, 329
———— Mr. J., the New Sydenham Society, 103; some facts illustrating the early stages of leprosy, 341, 529; cancer, 427; Archives of Surgery, *rev.*, 432, 1373; notes on leprosy in various countries, 651; an appeal, six years in bed, 1119

1231, 1287; the Danaher fund, 1231; on the administration of hospital relief, 1379, 1391; and the Berlin Congress, 1494
———— Mr. J., jun., Paget's disease of nipple with psorospermiæ, 664, 668; myeloid epulis, 668; salivary calculus, *ib.*; lymphatic nævus of tongue, 785; calcifying adenoma of skin, 895
Hutton, Dr. H. R., epidemic influenza, 430
Huxley, Professor, presentation of Linnean medal to, 1320
Hyalitis, spontaneous purulent, 9 months after successful cataract extraction, 668
Hydarthrosis, case of, 481
Hydatid of the orbit, 179
Hydatids of liver, 20, 667, 725; of the pelvis, 427
Hyderabad, experiments on anæsthetics at, 347, 359; and the Glasgow Chloroform Committee, 386
Hydracetin poisoning, retinal hæmorrhage in, 1276
Hydramnion, case of, 199
Hydramnios, two cases of, 301; case of, 601
Hydrastinin in uterine hæmorrhage, 1086
Hydrastis Canadensis, preparations of, 626
Hydrencephalocele, large, case of, 279
Hydroctyle, Asiatica, 875
Hydrocyanic acid, toxic action of, 505
Hydrophobia, search remedies in, 30; accidental (?) death from, 160; after two years' duration, 626; death from, 1141
Hydrops tubæ profluens, 1089, 1441
Hydroxylamin in skin diseases, 1207
Hygiene and Public Health, Dr. L. C. Parkes, *rev.*, 187; of the Nursery, Dr. L. Starr, *rev.*, 790; personal and domestic, the teaching of, 1157, 1191; in Odessa, 1283
Hymen, imperforate, with retained menses, 780, 935
Hyperemesis. *See* Vomiting
Hyperplasia, a case of, 1196
Hypiodous acid, the salts of, 952
Hypnal, 970
Hypnotic, for children, antipyrin as a, 13
Hypnotism, remarks on, 549; as an anæsthetic, 801, 849, 912; and suggestions, 912, 924, 983; as an entertainment, 969; the Paris Municipal Council and, 981; use of forbidden in the French navy, 1050; forbidden in Belgium, 1173; the fields of vision in, *ib.*; restriction of practice of, 1264; the study of, 1342
Hypospadias, hereditary, 1173
Hysterectomy, abdominal, 672; four cases of, 900, 1134
Hysteria, pseudo-peritonitis and epilepsy in, 401; cases of, 1040

I.

Icard, Dr. S., La Femme pendant la Période Menstruelle, *rev.*, 905
Ichthyol capsules, 790
Icterus gravis in a child, case of, 293
Identification, personal, 1021
Idiosyncrasy in relation to the use of tannin, 1087
Iliffe, Mr. W., medical officers of health and county councils, 452
Illingworth, Dr. C. J., treatment of influenza, 129, 953; antiseptic after-treatment of vaccination, 1010, 1176, 1288, 1411; thermogenesis and the motor levels, 1287; support instead of dilatation of the perineum, 1343
Imbeciles, State aid for, 372
Immermann, Professor, the treatment of empyema, 977
Imposition, an ingenious, 330, 452
Ince, Mr. J., the Latin Grammar of Pharmacy, *rev.*, 305
Income tax, extraordinary overcharge in, 935; sickness pay and, 1231; deductions in, 1470
Incubation period of infectious diseases, 1263
Index Medicus, a new, 337
Index repositor for clinical thermometers, 675
India, the Contagious Diseases Acts in, 209; leper legislation in, 335; first aid in, 397; civil and military employ in, 457; influenza in, 797, 851, 1269; lepers in, 979; medical aid for women in, 987; the Zenana mission in, 1047; enteric fever in, 1196
Inebriates, habitual, 29
Inebriety, nostrums for, 579; treatment of in England, 699
Infancy, and childhood, the surgery of, 77, 181; strophanthus in diseases of, 321; urticaria of, 1250
Infant, large spleen from an, 296; newborn, epidemic influenza in, 477; tetanoid convulsions in a, 1429
Infection, local tuberculous, 1467
Infirmaries, Poor-law, clinical instruction in, 440
Infirmary, Belfast Union, opening of to students, 977
———— Birmingham Workhouse, cost of, 990
———— Carlow Union, increase of admissions at, 636
———— Chester, General, and the working classes, 335
Infirmary, County Galway, the surgeoncy of, 35, 378, 1028, 1499
———— County Wexford, donation to, 396
———— Derbyshire, the sanitary condition of, 911; proposed rebuilding of, 1265
———— Dewsbury, presentation to staff of, 336
———— Drogheda, result of inquiry at, 870
———— Glasgow Eye, annual report, 394
———— Glasgow Western, convalescent home for, 1268
———— Greenock, annual report, 453
———— Ingham, South Shields, closing of, 681
———— Leeds, and the Yorkshire College, 623
———— Newcastle, working men and, 636
———— North Staffordshire, alteration in constitution of medical staff of, 1262
———— Paisley, annual meeting, 576
———— Royal, Aberdeen, annual report of, 377; meeting of board of directors of, 1047
———— Royal Edinburgh, annual report, 214
———— Royal Glasgow, annual report, 314
———— Royal Manchester, post-graduate lectures at, 792
———— Sunderland, opening of new wing to, 111
———— Victoria, Glasgow, opening of, 444; appointments to staff of, 500
———— Warrington, proposed extension of, 816
———— and Dispensary, Bradford, out-patients at, 30, 52, 107
Inflammation, venesection in, 1055; the destruction of micro-organisms during the process of, 1177
Influenza, the epidemic of, 31, 34, 35, 40, 46, 95, 103, 146, 154, 202, 244, 313, 314, 315, 339, 383, 399, 425, 430, 441, 457, 505, 607, 669, 672, 723, 961; dengue and, 60, 202, 357; treatment of, 129, 163, 764, 864, 953, 1120, 1411; the bacteriology of, 194, 249; report on an epidemic of, at Morningside, 228; mortality of in London, 252, 310, 372; the etiology of, 266, 328, 356, 369, 384, 449, 461, 559; Lord Palmerston on, 280; the Nervous Substratum of, Dr. J. W. Springthorpe, *rev.*, 303; its Prevention, Symptoms and Treatment, Dr. J. E. Viney, *rev.*, *ib.*; its History, Symptoms and Treatment, *rev.*, *ib.*; monads in, 312; Professor Gairdner on, 317; Professor Weichselbaum on the pathology of, 322; in domestic animals, *ib.*; and pneumonia, 354; influence of the wave of, on puerperal and menstruating women, 356, 477; two attacks of, 357, 781; rash in, *ib.*; is it contagious? 372; in Persia, 373; in Portugal, 373, 760; at Cork, 378; sudden death from, *ib.*; in Madrid, 397; epidemic of in prison, 417; an outbreak of in King Edward's schools for girls, 418; the respiratory complications of, 419; effect of the epidemic of, on the sick rate, 445; the microbe of, 448; dispensation from fasting during, 457; an outbreak of, on board the industrial training ship *Mount Edgcumbe*, 477; rapid spontaneous gangrene during, *ib.*; in a newborn infant, *ib.*; fresh outbreaks of, 494; in Belfast, 501; at Cape Town, 518; œdema of the larynx, a sequence to, 541; the cost of the epidemic of, 560, 797; exalgine in, 572; in Caithness, 578; at Bombay, *ib.*; notes on, 290; cases of, 599; at the Cape, 600; ague after treated with belladonna, *ib.*; in large provincial towns, 637; investigation into in Germany, 638; in horses, 638, 747; in Dublin, 670; in New Zealand, 680, 759; in Cyprus, 698; in Kent, *ib.*; idiopathic tetanus following, 719; ocular complications in, 732; aural complications of, 787; on board ship, 797; in India, 797 851, 1269; death-rates of, 814; in Melton Mowbray, 834; and catalepsy, 837; the meteorological aspect of, 859, 1055; complications of, 862; and rheumatic fever, 889; the influence of on pre-existing conditions, 922; Medical Officers of Schools Association and, 924; phlebitis following, 952, 1010; Professor Revilliod on the complications of, 981; at Tientsin, 991; electricity in, 1010; in France, 1015; in Barstead Down Schools, *ib.*; keratitis after, 1016; in New Zealand, 1024; the spread of, 1026; in dogs, 1040; in Mandalay, 1050; in Guatemala, 1046; prolonged somnolence after, 1067; diabetes after, *ib.*; sporadic diphtheria following, 1074; Drs. Ch. Kusnezow and F. L. Hermann, *rev.*, 1075; effect of in the death-rate of Aberdeen, 1091; the history of, 1118; and surgical operations, 1165; and aphasia, 1190; rash in, 1275; coincidence of in England and America, 1288; herpes zoster in, 1321; insanity cured by, 1362; in Victoria, 1405; amongst horses in Milan, 1407; uncomplicated angina pectoralis in, 1426; the spinal cord in, 1439, 1523; in Styria, 1520
Ingle, Dr. R. N., nonconformist nurses, 1055
Inglott, Dr. G. F., wound of the right lung followed by immediate recovery, 75; fœtus, with duplicity of right lower extremity arm presentation, 128; a case of large hydrencephalocele, 279; influenza, double attacks, 781; influenza and catalepsy, 837
Inhalers, 248
Inheritance, responsibility and, 818
Injections, antiseptic, in obstetric practice, 198; saline in diabetic coma, 545
Injector and evacuator, new aural, with a flexible Eustachian catheter, 71
Injury accidental, 135
Inoculation, antirabic, 1207; antirabic at Palermo, 1270
Inquests, scientific evidence at, 34, 105; coroner's, 436; medical witness at, 594, 986, 1224; coroners', the uses and abuses of, 694
Insane, the boarding-out system for, 1137; after-care of the, 1380, 1521
Insanitation, charity and, 392
Insanity cured by a pessary, 15, 242; confusional, 250; among the Australian aborigines, 375; is it increasing, 502; proposed hospital for the study of, 621; the clinical study of, 693; crime and, 746; in Italy, 941; suggestive therapy in, 951; in Austria, 1115; cured by influenza, 1362; in Germany, 1467; the study of in America, 1467; acute confusional, 1486
Insomnia and its Therapeutics, Dr. A. W. Macfarlane, *rev.*, 552
Inspection, perfunctory sanitary, dangers of, 30
Inspectors, sanitary, for East London, 143; sanitary, the status of, 577
Institut Pasteur, English patients for, 130; statistics of for December 1889, 396; statistics of the, 1104; Annales de l', *rev.* 1141
Institute, Birmingham Medical, annual report, 692; annual meeting, 796
———— Midland, appoints members of committee on the question of hospital abuse, 731
———— the Midwives', objects of, 563
———— Sanitary, lectures at the, 277; the congress of, 578, 1261; the examinations of, 991; meeting of council of, 1228
Institution, Glasgow Ophthalmic, annual report, 635
———— Liverpool Medical, list of officers, etc., 160; reform of the out-patient department in medical charities, 686; resolution of *re* officers of medical charities, 991
———— Metropolitan Convalescent, jubilee of, 1339
———— Ophthalmic, 330
———— Pure Oral, festival of, 1228
———— Royal, new members of, 1338
Instruction, clinical in mental disease, 490
Instrument, a primitive surgical, 1500
Instruments, how to render aseptic, 1330
Insufflator, new vaginal, 24; the J. R. P., 191
Insurance, provident, against infectious diseases 309; infant life, 816, 1380
Intelligence, literary, 860, 930, 1339
Intemperance, report on, 581
Intestinal. *See* Intestine
Intestine, obstruction of, 9, 19, 1429; small, ruptured, 665; two cases of acute obstruction of, with enormous secretion of peritoneal fluid, 883; large, disseminated polypi of the becoming malignant, 1195; small, volvulus of the, *ib.*
Intoxication, saturnine, 265; Chronique par la Morphine et ses Diverses Formes, Dr. L. R. Regnier, *rev.*, 1488
Intruder, an, 49
Intubation of the larynx, 1186, 1188
Intussusception successfully treated by injection of air, 1300
Iodate of calcium, 279
Iodine, tincture of, 43
Iodism, rare form of, 1089
Iodoform, substitutes for, 1441; parenchymatous injections of in gôitre, 1509
———— emulsion in cold abscesses, 922
Iodol, properties of, 699
Iredale, Mr. J., scarlet fever and puerperæ, 719
Ireland, influenza epidemic in, 35, 149, 204, 314; lunatic asylum appointments in, 95, 200; visiting physicians to lunatic asylums in, 208; hospital reform in, 453; vaccination in, 737; expenditure on asylums in, 1338; anthropometry in, 1499
Iron, albuminated, 191
Irrigation, continuous, severe compound comminuted fracture of humerus treated by, 74
Isolation of doubtful cases, 970
Italy, obituary in in 1889, 36; disinfection of railway carriages in, 458; crusade against quackery in, 458, 1226, 1467; public health in, 481; infectious diseases in, 873; honours to medical men in, 930, 1025, 1338; insanity in, 941; small-pox in, 1228; the sale of patent medicines in, 1228; practice of dentistry in, 1338; public health administration in, 1479; cholera in, 1501; new journal started in, 1520

J.

Jackson, Mr. A., the influenza epidemic, 148
———— Dr. J. H., on rigidity with exaggerated tendon reactions and cerebellar influx, 541; on convulsive seizures, 703, 765, 821; the parallelism between the three thermic mechanisms and the three levels of, 949
———— Dr. T., on mumps, 661
———— Mr. T. V., suprapubic lithotomy, 673; am-

putation of the hip-joint for sarcoma of femur, 725
Jacob, Dr. A. H., and the Irish Medical Association, 915
——— Dr. E. H., functional disturbances of speech, 428
Jacobson, Mr. W. H. A., the symptoms and conditions which justify nephrolithotomy, etc., 117; surgical sequelæ of fevers, 482
Jahr, Dr. E., Diphtheria and Croup in Königreich Preussen, etc., *rev.*, 189
Jalland, Dr., enlargement of right lobe of thyroid, removal, recovery, 479
James, Mr. J. B., the modern assistant, 1456
——— Dr. W. D., hydramnios, 301
Jamieson, Professor, Elementary Manual of Electricity and Magnetism, *rev.*, 1141, 1304
Japan, influence of climate of in causing rheumatism, 518; leprosy in, 698; the Sanitarium of the East, 976; medical practitioners in, 1520
Java, abdominal section in, 1148
Jaw, excision of neck of for ankylosis, 129
Jecks, Dr. C. W., obituary notice of, 1225
Jejunum, intussusception of in an adult due to a polypus, 76; ruptured laparotomy for, 781
Jelly, concentrated Iceland moss, 191
Jenner, Sir W., retirement of, 850
Jennings, Mr. C. E., collective investigation on cancer, 387, 925; Cancer and its Complications, *rev.*, 964
Jessett, Mr. F. B., cancer of the uterus, 298; portable operating table, 1073; remarks on pylorectomy, 1105; pylorectomy and gastroenterostomy, 1220; intestinal obstruction, 1429
Johannesburg, typhoid fever at, 699
Johnson, Dr. G., the history of the discovery of the circulation of the blood, 399
——— Mr. R., specimens of persistent thyroid duct, 1069
Johnston, Mr. G. A., clinical teaching in Dublin, 154; poisonous effects of exalgine, 1009
Jones, Dr. A. O., cactus grandiflorus in some forms of heart disease, 70
——— Mr. E. Ll, two cases of poisoning by anilides (exalgine and antifebrin), 288; note on some properties of sodium silicofluoride, 1425
——— Dr. H. M., epithelioma of the uterus, 606; a long-retained pessary, *ib.*
——— Dr. J., appointed deputy coroner for Brecknockshire, 1115
——— Mr. J. A., dislocation of the hip-joint in a young child, 1246
——— Dr. W. M., poisoning by coal gas, 18
Jones-Humphreys, Mr Y. M., an easy method of feeding *per rectum*, 952
Jonson, Mr. G. C., obituary notice of, 1047
Jordan, Dr. R. C. R., death of, 1262; obituary notice of, 1335
Joslen, Mr. H., a case of abdominal aneurysm, 542
Joubert, Dr., tumours of the pelvis simulating ovarian tumours 1429
Joule, Memorial, the, 309
JOURNAL, THE BRITISH MEDICAL, the circulation, etc., of, 194, 1378
Journals, new medical, 337, 396, 458; Spanish medical, 639
Jubilee, a chemical, 639
Jurymast, value of the, 1009, 1191
Justice, obstructing of, 208, 269, 326, 386, 458

K

Kahler, Prof., the health of, 1355
Kane, Sir R., obituary notice of, 454
——— Dr. T., death of, 618
Kanzler, Dr., decoration of, 1338
Kazan, medical aid to the poor in, 905; establishment of "central medical office" at, 1283
Kealy, Dr., treatment of placenta prævia, 1136
Kearney, Dr. A. B., death of, 799
Keating, Mr. J. M., Cyclopædia of the Diseases of Children, etc., *rev.*, 246
Keetley, Mr. C. B., on some cases of nephrolithotomy and a case of partial nephrectomy for injury, 134; amputation at the ankle-joint, 243; hip excision, 667
Keith, Dr. A. D., the forceps, a death trap, 163
——— Mr. S., the present position of abdominal surgery, 899
Keller, Dr. O., trephining in a case of actinomycosis of the brain, 709; obituary notice of, 929
Kelynack, Mr. T. N., atropine poisoning by absorption from the conjunctiva, 421
Kennedy, Dr. C., rickets simulating pseudo-hypertrophic muscular paralysis, 17
Kensington, the health of, 337
Kent, influenza in, 698
Keratitis, subepithelialis, 550; superficialis punctata, 747; superficial, caused by aniline violet, 837; after influenza, 1016
Kernan, Surgeon J., plastic operation for deformity of cheek, 1368
Kettle, bronchitis air, 190; bronchitis and croup, 727
Kidd, Dr. F., complete prolapse of the cervical zone of the uterus preceding labour at full term, 299
Kidd, Dr. P., on a peculiar obstructive form of laryngeal tuberculosis which simulates bilateral abductor paralysis, 715; subacute indurative pneumonia, 722; appointed assistant physician to London Hospital, 1465
Kidderminster, influenza at, 613
Kidney, repair after rupture of the, 295; sarcoma of, 299; single unilateral sigmoid, 300; granular, Cheyne-Stokes breathing in, 545; the vagaries of disease of, 1183; floating, paroxysmal heart hurry associated with, 1250
Kidneys, diseased, 427; the in diphtherial uræmia, 962; post-scarlatinal cirrhosis of the, in a girl aged 12, 1193; contracted granular in young persons, 1193.
Kieff, correspondence from, 1041; faculty of medicine at, *ib.*; the Surgery of the, Mr. J. K. Thornton, *rev.*, 1303
King, Mr. E. G., double vagina, 1016
——— Mr. F. T., injection and aspiration with hypodermic syringe, for diagnostic purposes, 72
——— Dr. H. D., long interval between pregnancies, 521
——— Dr. J. C., charges against, 1386
Kingsbury, Mr. E., diphtheria and measles, 75
——— Dr. G. C., rapid cure of erysipelas by ergotine, 602
Kingscote, Mr. E., the radical cure of hernia, 1482
Kirchner, Professor, appointed head of clinical diseases of the ear at Würzburg University, 578
Kirk, Sir J., elected member of Athenæum Club, 760
——— Dr. R., vomiting in the latter months of pregnancy, 903
Kirkcaldy, bequest for public park and library for, 638
Kirker, Surgeon G., the action of potable waters on lead, 71
Kirkpatrick, Deputy Surgeon-General J, obituary notice of, 159
Kirkwood, Dr. R., candidate for County Council of Ayrshire, 145
Klebs, Dr. E., Die allgemeine Pathologie, *rev.*, 185
Klinische Vorträge, new series of, 656
Knaggs, Mr. L., hydatid cyst of the liver causing serious displacement of viscera, operation, death, 895; acute diffuse suppurative peritonitis, laparotomy, recovery, 896; nephrolithotomy, 1250
Knee-joint, successful removal of internal semilunar cartilage from, 242; loose body from, 544; loose bodies in the, 607
Knott, Dr. J. F., the practice of clinical medicine in Europe A.D. 1507, 363
——— Fleet-Surgeon T. K., a case of malignant or pernicious anæmia in which a condition of chronic general osteomyelitis was found after death, 232
Koch, Dr. W., appointed to chair of surgery at Dorpat, 904
——— Mr. W. V. M., hæmophilia occurring in malaria, 1301
Kocher, Professor, elected honorary member of Medical Society of London, 930
Koch's bacillus and enteritis, 922
Kola nut, the, 969, 1275; preparations of, 1141
Korosi, Herr J., Kritik der Vaccinations-Statistik, *rev.*, 431
Krankheiten, die innere, der Harn und Geschlechtsorgane, Prof. Fürbringer, *rev.*, 1431
Krause, Dr. H., on the central motor innervation of the larynx, 123, 270
Küchenmeister, Dr. death of, 909; the late, 1229
Kusnezow, Dr. Ch., Influenza, *rev.*, 1075

L.

Labium, melanotic sarcoma of, 894
Laboratories, new, of the London colleges, 143
Laboratory, bacteriological in France, 698; new bacteriological in Dublin, 1326
——— Course of Pharmacy and Materia Medica, Mr. W. Elborne, *rev.*, 1373
Labour, impacted, the surgical aspect of, 657, 674, 750, 864, 924, 983; the management of, 1273, 1332, 1401
Laburnum poisoning, 1407
Lady doctor at Amsterdam, 948
——— question in Germany, 992
Lady doctors, Russian, in Asia, 992
Laffan, Dr. T., the practical element in medical education, 219; army doctors and civil practitioners, 461
Lagrange, Dr. F., Physiology of Bodily Exercise, *rev.*, 136
Laird-Cox, Mr. W., presentation to, 692
Lamb, Mr. A. D., Specific Unbelief, *rev.*, 963
Lamp, protected surgical electric, history and uses of, 290; the Kochs-Wolz microscope, 426
Landolt, Dr., palpebral plate, 553
Lane, Mr. H., Rheumatic Diseases (so-called), *rev*, 137
——— Mr. J. E., urethral chancres, 959; adhesion of the soft palate to the pharynx, the result of syphilis, 1195
——— Dr. J. W., the surgical treatment of impacted labour, 750
Lane, Mr. W. A., the treatment of suppurative inflammation of the mastoid process associated with disease of the middle ear, 707; case of strangulation of the bowel through a hole in the mesentery, 890; two cases of subdural abscess resulting from disease of the antrum and middle ear, 1301; the treatment of pyæmia consequent upon disease of the middle ear and unassociated with thrombosis of the lateral sinus, 1480
Lang, Mr. H., A German-English Dictionary of Medical Terms, *rev.*, 963
Langholm, large bequest to found hospital at, 683
"La Nona," 685, 748, 981
Lantern, the, as an aid to anatomical demonstrations, 901
Laparotomy, the technique of, 17; case of, 124, 1508; followed by fæcal fistula and tetanus, 606; in pelvic abscess, 669; for ruptured jejunum, 781; for intestinal obstruction, 886; for acute diffuse suppurative peritonitis, 896; case of, 1103; for intestinal obstruction, 1296; in a tubercular child, 1429
Larvæ passed per anum, 875
Laryngismus in young children, the causes of, etc., 286, 357; hysterical, 725; remarks on, 729
Laryngitis, tuberculous, transmitted, 448
Larynx, respiratory cerebral centre and its relation to, 44; on the central motor innervation of, 123, 175, 270; œdema of the, a sequel to influenza, 541; case of acute obstruction of, after convalescence from bronchopneumonia, 953; intubation of the, 1186, 1188; fracture of the, 1210
Lattey, Dr. W., filling capillary tubes with vaccine lymph, 995
Laurie case, the medical evidence at, 115
——— Mr. C. R., the influenza epidemic, 339
Laveran, Dr., receives prize for researches on the hæmatozoa in malaria, 1338
Law, and equity of attacks on medical practitioners, 307; metropolitan sanitary, consolidation of, 310; a cruel school, 935
Lawford, Mr. J. B., optic nerve atrophy in smokers, 1072
Lawrence-Hamilton, Mr. J., sea water and the nutrition of marine animals, 387; the dissolution of bodies in oceanic depths, 694
Leach, Mr. A., the antiseptic after-treatment of vaccination, 890
Lead, the action of potable waters on, 71, 420; in public water supplies, 139, 439, 1095
——— poisoning, case of, 18; at Sheffield, 32, 45, 207, 506, 974, 1383; the prevention of, 88; unsuspected in children, 177; chronic case of, 481; in Yorkshire, 974, 1029, 1097, 1155
——— tremor, case of, 483
League, Catholic Total Abstinence, formation of medical section of, 699
Leber, Professor, appointed professor of ophthalmology at Heidelberg, 1115
Lectures, on the surgical aspects of hepatic abscess by Mr. R. J. Godlee, 61, 120, 172; post-graduate in London, 112, 151; Clinical, on Varicose Veins of the Lower Extremities, Mr. W. H. Bennett, *rev.*, 189; the Goulstonian, on Secondary Degenerations of the Spinal Cord, Dr. H. H. Tooth, *rev*, 305; the Erasmus Wilson, on the relation of morphology and pathology, 350, 415; Hunterian, on the Morbid Anatomy, Pathology, and Treatment of Hernia, Mr. C. B. Lockwood, *rev.*, 431; the Milroy, on the etiology and prevention of phthisis, by Dr. A. Ransome, 463, 523, 585, 647; Clinical, on Some Obscure Diseases of the Abdomen, Dr. S. Fenwick, *rev.*, 485; the Goulstonian, on some cerebral lesions, by Dr. G. N. Pitt, 643, 771, 827; the Lumleian, on convulsive seizures, by Dr. J. Hughlings Jackson, 703, 765, 821; on Children's Diseases, Dr. E. Henoch, *rev.*, 790; advanced, on pathology at Cambridge, 971; the Croonian, on cerebral localisation, by Dr. D. Ferrier, 1289, 1349; 1413, 1473; on Nervous Diseases, Dr. A. L. Ranney, *rev.*, 1487
Ledlie, Mr. A., tooth plate passed *per anum*, 952
Lee River, the pollution of, 1465; cholera and 1490
Lee, Mr. A. B., the Microtomist Vade-Mecum, *rev.*, 1141
——— Dr. P. G., sporadic diphtheria following influenza, 1074
Leech, Dr., pancreatic cyst, 902
Leeds, proposed sanatorium at, 453
Lees, Dr. D. B., the influenza epidemic, 47
Leeson *v.* the General Medical Council, 49
Leet, Dr. C. E., death of, 1092
——— Mr. C. H., the leprosy case and medical inspection of emigrants at Liverpool, 1278
Leeward Islands, the medical service of, 115, 1466
lepers in, 681
Leg, sarcoma of, 1199
Legislation, sanitary, the prospects of, 371
Lehrbuch, der allgemeinen und speciellen Pathologischen Anatomie, Dr. E. Zeegler, *rev*, 247; der pathologischen Mykologie, Dr. P. Baumgarten, *rev.*, 486; der Kinderkrankheiten für Aerzte und Studirende, Dr. A. Baginsky, *rev.*, 790

Leicester, return of vaccination in, 930
Lenval prize, the, 337
Lepers at the Cape, 112, 1047; American and English steamboats, 195; in the Leeward Islands, 681; in Natal, 694; at Gibraltar, 1407
Leprosy, the inoculation of, 90, 1262; in Zululand, 103; an analysis of, 118; cases of, 182; the contagiousness of, 279, 909, 917; the propagation of, 291; some facts illustrating the early stages of, 341, 529; in New Caledonia, 518; family history of and marriage, 521; and its Prevention as Illustrated by Norwegian Experience, Dr. R. Rose, *rev.*, 553; the etiology of, 555; notes on in various countries, 651; anæsthetic and tubercular, 693; in Japan, 698; relation of tuberculosis to, 785; in Armagh Workhouse, alleged case of, 799; in New Caledonia, 816; the treatment of, 853; in Cyprus, 859; fish and, 1118; new æsthesiometer for, 1165; in the Baltic Provinces, 1304; and the Atlantic passenger traffic, 1381, 1400; in Australasia, 1045
——— case, the, and medical inspection of emigrants at Liverpool, 1278
——— Committee. *See* Committee
Le Quesne, Surgeon, Victoria Cross presented to, 452
Letts, Dr., receives Keith prize of Royal Society, 1442
Leubuscher, Dr. S., effect of drugs on intestinal absorption, 1213
Leucocytosis, inflammatory, 1384
Levels, Hughlings Jackson's, and the three thermic mechanisms parallelism between, 949, 1041, 1105; the motor thermogenesis and, 1287
Lewers, Dr. A. H. N., removal of uterine appendages, 426; a Practical Textbook of the Diseases of Women, *rev.*, 1019
Lewin, Professor G., celebrates 70th birthday, 987
Lewis, Dr. C. J., Fehling's solution, 1342
Leyden, Professor E., celebrates 25th anniversary as clinical teacher, 816
Libel suit against an army surgeon, 49
Library of British Medical Association, books wanted for, 40, 315, 807, 1162; list of authors and others who have presented books to, 100, 315, 685, 806, 1146, 1162; of the Surgeon-General's Office, U.S. Army, Index Catalogue of, *rev.*, 188; medical sale of a, 458; of the British Medical Association, presentation of medical portraits to, 1024
Licensing question, the, druggists and, 1050
Lichen planus, 18
Liebreich, Professor, celebrates 25th anniversary of graduation as M.D., 1115
Life assurance, without medical examination, 434; and medical examination, 642
Ligature, abdominal, history of a, 1429
Lightburne, Dr., death of, 915
Lightholder, universal speculum, 1078
Linacre, T., proposed memorial to, 731
Lincoln, tuberculous mutton at, 32; the influenza epidemic in, 147
Linlithgow Bridge, typhoid fever at, 56
Lip, syphilitic chancre of, 428
Liquor, iodi decolorations, 191; ouabaïn, 1078
Lisbon, new neurological journal at, 578; medical practitioners, etc., in, 872
Lismore, outbreak of fever at, 855, 973
Lister, Mr. C. S., obituary notice of, 928
——— Sir J., on two cases of long standing dislocation of both shoulders treated by operaton, with further observations on the cyanide of zinc and mercury, 1; proposed statue of, 734
Listerine, 1019
Lithotomy, suprapubic, 18, 180, 239, 673, 1073, 1191, 1249
Lithotrity in children, 961
Litter, the Viaduct ambulance, 306
Little, Dr. J. F., large spleen from an infant, 296; microscopical specimens of enlarged spleen from a child, 786
Litzmann, the late Professor, 579
Liver, hydatids of, 20, 667, 725; the surgical aspects of abscess of, 61, 120, 172, 268, 328, 889; case of injury to the, 243; abscess of secondary to severe pelvic peritonitis, 289; syphilis of, 426; cancer of the, 667; hydatid cyst of the causing serious displacement of viscera, 895; multiple abscesses of, 1070, 1198; hydatid cyst of, abdominal section for, 1074; unroasted coffee in affections of the, 1104; enlarged, with increase of white blood corpuscles, 1250; regeneration of the after resection, 1276
Liverpool, correspondence from, 45, 267, 323, 1218, 1400, 1510; hydrophobia and Pasteurism, 45; scarlatina in the police courts, *ib.*; hospital appointments, *ib.*; the epidemic of influenza, 96, 147, 204; annual meeting of the Medical Institution, 267; Dr. Taylor's report on the abattoir, *ib.*; endowment fund of the Stanley Hospital, *ib.*; the abattoir at, 373, 1218, 1260; sanitary condition of the police offices of, 732; the medical examination of prisoners, 1218; the leprosy case and medical inspection of emigrants at, 1278; a Swedish leper in, 1400
Lloyd, Mr. J., double sessile (imbedded) parovarian cysts, 300; carotid aneurysm, 724; tubercular testes, *ib.*
Loan, parochial medical orders on, 334
Lobe, temporo-sphenoidal, abscesses in the, 15, 225
Local government reform, 495
Localisation of a limited lesion of the spinal cord, 775, 866
Lochée, Dr. A., obituary notice of, 1108
Locke, Mr. F. S., the diuretic action of mercury, 1511
Lockie, Dr., a case of pernicious anæmia, administration of arsenic, transfusion, recovery, 130
Lockwood, Mr. C. B., excision of the head of the femur and erasion of the hip-joint with immediate and permanent closure of the wound, 241; retro-peritoneal hernia, 295; Hunterian Lectures on the Morbid Anatomy, Pathology, and Treatment of Hernia, *rev.*, 431; mammary tumour, 1196; ill-united Pott's fracture, *ib.*; two cases of operation for the relief of strangulated hernia treated with the double cyanides of zinc and mercury, 1247
Locomotor ataxy, the mechanism of suspension in, 131, 238, 746; muscular atrophy in, 760; treatment of, 1208; suspension in, 1357; deafness in, 1467
Loewig, Professor C. J., death of, 930
London, poor-law progress and reform in, 28; local self-government in, 88; the muzzling order in, 111; post-graduate course in, 112, 151, 969; death-rate in, 142, 196, 274, 333, 391, 455; night medical service for, 142; East, sanitary inspectors for, 143; sanitation in, 196; zymotic mortality in, 211; influenza mortality in, 252, 310, 372, 455; proposed new asylum for, 310, 749; rabies in, 519; the water supply of, 614, 1284; a hospital commission for, 681; North, proposed convalescent home for, 690; a street ambulance for, 912, 1321; zymotic mortality in, 1049; open spaces for, 1322
London, Dr., decoration of, 1338
Longevity, temperance and, 1262
Longhurst, Dr. A. E. S., convalescent homes, 936
Lord High Commissioner, the, and the medical profession, 1266
—— of Humanity, the, Mr. F. J. Gant, *rev.*, 963
—— Lieutenant of Ireland. *See* Zetland
Lowe, Dr., retention of urine, 673
——— Maister Peter, Account of the Life and Works of, Dr. J. Finlayson, *rev*, 1205
Lowndes, Mr. F. W., the Lords' Committee and hospitals for venereal diseases, 1457
Lozenges, papain and cocaine, 191
Lucas-Championnière, M., Le Massage et la Mobilisation dans le Traitément des Fractures, *rev.*, 1075
Lucius-quelle water in the gastric affections of phthisis, 1277
Ludwig, Professor, celebrates twenty-fifth anniversary of installation as Professor at Leipzig University, 396
Luff, Dr. A. P., danger of flushing the peritoneum with sublimate, 508; four cases of tin poisoning caused by tinned cherries, 833
Lunacy, the alleged increase of, 376
Lunatics, criminal, before trial, 574; criminal in Belgium, 638; treatment of in America, 854; pauper, relieving officers and, 867; pauper, removal of to asylums, 1223; pauper, temporary custody of, 1227; organised outbreak of, 1264; pauper, certificates for, 1337
Lung, right, wound of the followed by immediate recovery, 75; sarcoma of, 299; surgical treatment of tuberculosis of, 1363; respiratory movements of, 1368; right, rupture of, 1369
Lungs, Pathological Condition of hitherto Undescribed in America, Dr. F. P. Porcher, *rev.*, 367
Lupus (?) of gums and lips, 667
Lush, Dr. W. V., the influenza epidemic, 149, 399
Lutaud, M., Leçons de Gynécologie Opératoire, *rev.*, 904
Lycett, Dr., aims and present position of gynæcology, 1073
Lyddon, Mr. R., a successful case of laparotomy for intestinal obstruction, 886
Lynch and Co., Messrs., a new catheter, 964; a flushing uterine curette, *ib.*
Lyons, the water supply of, 992

M.

Macalister, Professor A., A Textbook of Human Anatomy, Systematic and Topographical, *rev*, 135; appointed member of the Museums and Lecture-rooms Syndicate at Cambridge, 215
MacAlister, Dr. D., the three thermal mechanisms and the motor levels, 1041
McAldowie, Dr., neurological instruments, 673
Macan, Dr., a Cæsarean section, 548
McArdle, Mr., the high operation for encysted calculus, 363
McCulloch, Mr. A., a case of idiopathic inflammation of the tongue, 1067
Macdonald, Dr. A. D., the forceps and death trap, 163; the epidemic of influenza, 339; exalgine, 582
——— Dr. J., hymeneal obstruction, retention of menses, 420
McDowell, Dr. E., the house of, 568
Macewen, Dr. W., a case of localisation of a limited lesion of the spinal cord, 775; presentation of graduation robes and hood to, 1027
McFarland, Brigade-Surgeon, re-elected president of the North of Ireland Branch of the British Temperance Association, 1268
Macfarlane, Dr. A. W., Insomnia and its Therapeutics, *rev.*, 552
McGill, Mr. A. F., radical treatment of umbilical hernia, 428
McGillivray, Mr. A., new form of eyelid retractor, 1376
McGowan, Dr. W., pilocarpin in poisoning by belladonna, 420; case of Cæsarean section for osteomalacic pelvis, 589
McGrath, Mr. T., death of, 215
Macgregor, Dr. A., demonstrations in clinical medicine by, 228
McHardy, Mr. M., the artificial maturation of immature senile cataract by trituration, 1072, 1428
Mackay, Dr. J. J., charge against, 915
McKendrick, Dr. J. G., A Textbook of Physiology, *rev.*, 364; remarks on the report of the second Hyderabad commission on chloroform, 1345
Mackenzie, Dr. D. J., the support of the perineum, 889; an easy method of feeding per rectum, 1055
——— Dr. G. H., intubation of the larynx, 1088; case of sarcoma of the tonsil, 1426
——— Dr. H., tubercular disease with multiple abscess of the liver, 1070
——— Dr. S., remarks on various diseases of the skin, 4; case of chronic lead poisoning, 481; a case of hyperplasia, 1196; Addison's disease of long duration, *ib.*
Mackey, Dr. E., lichen planus, 18; demonstrations of skin disease, 427; skin disease, 1136
Mackinnon, Surgeon-Major H. W. A., the Burmah campaign, 79
McLachlan, Dr. J., Applied Anatomy, Surgical, Medical, and Operative, *rev.*, 245
Maclagan, Dr. T. J., the epidemic of influenza, 103
Maclaren, Dr. R., amputation at the hip-joint, 13
McLean, Dr. C. J., a dangerous practice, 875; ectopic pregnancy in the left Fallopian tube, rupture (?) 1130
Maclean, Surgeon-General W. C., an appeal, 1175
MacLintock, Dr. J., sanitary experts and the charge of obstructing justice, 269
MacMunn, Mr. J., the radical cure of urethral stricture by electrolysis, 1043; anachronism of involuntary muscles, 1486
Macnamara, Mr. N. C., malarial neuritis and neuro-retinitis, 540; the University of London and degrees for London medical students, 810; rheumatic neuritis and neuro-retinitis, 1007; Lord Camperdown's Committee, 1106
McNaught, Dr. J., a case of dilatation of the stomach, accompanied by the eructation of inflammable gas, 470
Macnaughton, Dr., and the Prison Commissioners, 1384
Macpherson, Inspector-General J., death of, 732; obituary notice of, 758
MacQuibban, Dr. C. M., unique case of extra-uterine pregnancy, 947
Macready, Mr. J., on the treatment of Dupuytren's contraction of the palmar fascia, 411
Macroglossia, 785
M'Weeny, Dr., micro-organisms, 243; columnar-celled epithelioma of the lower jaw, 670; diphtheritic micro-organisms, 1198; round-celled sarcoma of the testis, *ib.*
Madden, Dr. T. M., congenital absence of vagina, 299; universal speculum lightholder, 1078, 1486; honorary degree of M.D. conferred on by Texas Medical College, 1127; dilatation instead of support of the perineum, 1287; old fallacies revived under new names, 1486
Madeira, or the Canary Islands (?) 59, 115; small-pox at, 442
Madras, annual report of the Sanitary Commissioner for, 210
——— Famine, Diseases of the, Brigade-Surgeon A. Porter, *rev.*, 23
Madrid, influenza in, 397; death-rate of, 816
Magherafelt, outbreak of typhus fever at, 1442
Magistrate, the Westminster and the doctor, 392
Magistrates, medical, 13, 56, 64, 111, 816, 867, 872, 1465
Magnetism and Electricity, Elementary Manual of Professor Jamieson, *rev.*, 1141, 1304
Maguire, Dr. R., osteitis deformans, 1196
Mair, Dr. S., decoration of, 21
Maitland, Surgeon-Major J., varix of the femoral lymphatics, 725
Malabar, the, the sad story of, 1265
Malaga, yellow fever at, 1520
Malaria, spontaneous, rupture of the of the spleen in, 498; hæmophilia occurring in, 1301
Malasma in phthisis, 550
Malins, Dr., the present position of abdominal surgery, 957
Malpraxis, action for in Belgium, 11
Malt extract, standard, 1489
Malta fever. *See* Fever

Mamma, case of excision of, 179; hypertrophied in a boy, 364
Man, nerve supply of the extensor brevis digitorum and valvulæ connidentes in, 300; rumination in, 1276; Wonderful Manikin, Mr. A. Gardenier, *rev.*, 1304
Manchester, a coroner's court for, 57; correspondence from, 102, 152, 267, 628, 1104; resignation of office by Principal Greenwood, 102; Royal Infirmary and St. Mary's Hospital, *ib.*; cremation society, *ib.*; Owens College medical school, *ib.*; the influenza epidemic at, 147, 628; Salford hospital for infectious diseases, 152; seeking the measles, *ib.*; Manchester Medical Society, *ib.*; the abuse of the provident dispensaries of, 213; Children's Hospital, Pendlebury, 267; Burnley Hospital, *ib.*; Aberdeen University Club, *ib.*; National Association of Sanitary Inspectors, *ib.*; St. Mary's Hospital and the Royal Infirmary, *ib.*; registration of dogs at, 458; Local Government Board inquiry, 628; Hospital Sunday, *ib*; cremation at, 1104
Mandalay, influenza at, 1050
Mandrake, the, 620
Mann, Dr. J. D., Cheyne-Stokes respiration, 427
Manning, Dr. H., Toogood *v.* Wilkes, 462, 582, 764, 820, 934
Manœuvres, Easter, 852, 915
Manslaughter, charge of against a medical man, 49
Mantle, Dr. A., the causes of laryngismus in young children, with special reference to its production by elongation of the uvula, 286
March, Dr. H. C., the sphygmograph, 607
Marcy, Dr. H. O., subcuticular suture, 751
Marks for physical efficiency, 793
Marriage, leprous family history and, 521; age of and the price of food, 683
Marriott, Dr. C. H., cholecystotomy and crushing of impacted gall stone in cystic duct, 135
Marsh, Mr. F., cerebellar lesion, 80; tumour of brain, 1135; enchondroma of rib, resection of portion of rib and pleura, respiratory movements of lung, 1368
Marshall, Mr. J. G., the ecbolic action of pennyroyal, 542
——— Dr. L. W., stone in children, 80; the value of the jury mast, 1191
——— Mr. W. G., retirement of, 760
Martin *v.* Stubbs, 931
——— Dr. J., presentation to, 314; death of, 1028
——— Dr. J. B., the climate of Ventnor, 163
Martindale, Mr. W., The Extra Pharmacopœia, *rev.*, 904
Mason, Mr. J., proposed testimonial to, 48
Massage in intermittent fever, 44; of the membrana tympani in catarrh of the middle ear, 428; remarks on, 1073; et la Mobilisation dans le Traitement des Fractures, M. Lucas-Championnière, *rev.*, 1075; of the membrana tympani and ossicula in chronic catarrh of the middle ear, 1189, 1411
Masser, Mr. E. C., fracture of a rib from coughing in a patient with chronic Bright's disease, 953
Masters, the liability of, 1512
Mastitis, puerperal, 1051
Mastoid process, the treatment of suppurative inflammation of, 707
Masturbation, treatment of, 116
Materia Medica, Pharmacology, and Therapeutics, A Treatise on, Drs. J. V. Shoemaker and J. Aulde, *rev.*, 187
Matterson, Dr. W., obituary notice of, 1048
Maude, Mr. A., influenza, two attacks, 357; nævus and maternal impression, 953
Maxwell, Dr. T., Terminologia Medica Polyglotta, *rev.*, 1372
May, Mr. B., œsophagotomy, 80
—— Mr. H., the isolation of infectious disease, 109
M.B. and chemist combination of, 209
M.B.s and the title of Dr., 933
Meals for school children, 276
Measles, notification of, 31; inflammation of Cooper's glands in, 43; diphtheria and, 75; incubation of, 234; epidemic of at Morley near Leeds, 508; epidemic of in the Staffordshire potteries, 636; cold baths in, 1275
Measures, liquid and solid, 1410
Meat, unsound, imprisonment for selling, 56; tuberculous, 212; tinned, poisoning by, 276; diseased at Brighton, 312; condemned, action to recover the price of, 455; tuberculous, shall we eat, 728, 865; bloodless, 870
——— Inspection, A Practical Guide to, Professor T. Walley, *rev.*, 1076
——— poisoning, case of, 494
——— trade, the, and tuberculosis, 1079
Mechanisms, the three thermic and the motor levels, 949, 1041, 1105
Meckel's ganglion, excision of, 162; diverticulum, 300
Medical attendants and medical relations, 1512
——— Council, General, the powers of, 26; Partridge *v.*, 49, 1107; Leeson *v.*, *ib.*; the members of and the Medical Defence Union, 207, 270; the business of the, 496; meeting of, 1136; president's address, 1252; the examination for D.P.H. Glasgow, 1253, 1256, 1257, 1313, 1374; yearly tables, 1253; extension of medical curriculum, *ib.*; withdrawal of qualifications, *ib.*; death certificates, the "Medical Register," *ib.*; diplomas in sanitary science, 1253, 1316; communication from the Royal College of Physicians, London, 1254; registration of diplomas of foreign and colonial practitioners, 1255; the case of fraudulent entry on the "Register," *ib.*; petition from Mr. J. F. Leeson, 1256; the case of James McCully, *ib*; Midwives Registration Bill, 1257; inspection of examinations for higher registrable qualifications, *ib.*; removal from "Students' Register," *ib.*; finance report, *ib.*; education committee report, 1257, 1305 to 1312, 1313, 1315; report of executive committee, 1314; dental business, 1314, 1316; new edition of recommendations, 1316; clinical instruction in infectious diseases, *ib.*; system of marking, *ib.*; the fifth year of medical education, 1317; the extension of the curriculum, 1375; and the dentists, 1438
Medical Defence Union. *See* Union
——— men, midwives in their relation to, 682; in Italy, honours to 930, 1025
——— officer of health, for the North Riding, 1337; salary of, 1519
——— officer, poor-law, vacancy of, 274
——— officers and friendly societies, 387, 633
——— officers of health and other practitioners, 49, 54, 1114; duties and powers of under the Notification Act, 54; the office of and partnerships, 271; county, 311, 334, 374, 386, 618, 851, 934, 1150, 1208, 1267, 1438; and county councils, 452; tenure of office of, 1406
——— officers, poor-law, attendance of on boards of guardians, 55; poor law and dispensary, 105; absence of from home, 212; of poor-law infirmaries and fees for inquests, 312; nomination of substitute for, 815; district medical, duties of, 930; and superannuation allowances, *ib.*; substitutes for, 1337; as county councillors, *ib.*
——— practitioner. *See* Practitioner
——— referees of insurance companies, 209
——— service. *See* Service
——— tariffs, 1280
——— titles, the unqualified assumption of, 1511
——— witnesses. *See* Witnesses
Medicine, clinical, the practice of in Europe in 1507, 363; Equine, a Textbook of the Practice of, Mr. W. Robertson, *rev.*, 487; penny a week, 635, 757; Western, in China, 1111; Forensic, Toxicology and Hygiene, the Essentials of, Mr. C. E. A. Semple, *rev.*, 1201; domestic in the olden time, 1383; the higher, 1493
Medicines, patent, injurious, liability for the sale of, 254; English, boycotting of in Portugal, 373; proprietary, poisonous drugs in, 734, 753; patent, the sale of in Italy, 1228
Melbourne, correspondence from, 449, 572; the Australasian Association for the Advancement of Science, 449; typhoid fever and the Royal Commission on Sanitation, 450, 572; the medical school, *ib.*; the alleged discovery of typhoid bacilli in the water supply of, 732; the sanitary condition of, 987; the prevalence of enteric fever at, 1210
Meldola, Mr. R., the influenza epidemic, 154
Melton Mowbray, the influenza epidemic in, 834
Melon seed bodies from sheath of tendon, 607
Menopause, uterine, hæmorrhage after, 1072
Menses, retention of, 420
Menstruation, precocious, 836
Mental. *See* Mind
Menthol in the hyperemesis of pregnancy, 1382
——— wool, 487
Mercury, causation of reduced arterial tension by, 1241, 1357; the diuretic action of, 1511
Meredith, Mr. W. A., the present position of abdominal surgery, 896
Mesmer, Dr. F. A., unveiling of monument to, 1261
Mesentery, strangulation of the bowel through hole in the, 890
Mesocolon, transverse, cyst of the, 992
Mesopotamia, cholera in, 201, 254
Metcalfe, Mr. G. H., four cases of tin poisoning caused by tinned cherries, 833
Methylacetanilide. *See* Exalgine
Metre angle in latent and manifest muscular deviations, note on the, 668
Metritis, chronic, treatment of, 863
Metrology, the Science of, Hon. E. Noel, *rev.*, 1139
Metropolis. *See* London
Metrorrhagia, the diagnosis and treatment of, 1298, 1302; the treatment of, 1484
Michaux, Dr. M., death of, 1115
Microbe, derivation of, 399; of erysipelas, 746
Microbes, action of selenious acid on, 505; spore-bearing and spore-free, effect of heat and drying on, 1095; action of positive pole on, 1275; in hailstones, 1467
Microbicides, new, 1104
Microbiology, in Brazil, 42; a manual of, 266
Microcorneæ, 1016
Micro-organisms in tumours, 498; with Special Reference to the Etiology of the Infectious Diseases, Dr. C. Flugge, *rev.*, 844; the destruction of during the process of inflammation, 1177
Microscope, the third centenary of the invention of the, 836
Middlesex, rabies in, 336, 1051
Midwifery, chloroform in, 59
Midwife's disease. *See* Disease
Midwifery engagements, 48
Midwives, antiseptics for, 505, 851; in their relation to medical men, 682; remarks on, 1524
Mikulicz, Professor, appointed to the chair of Surgery at Halle, 661
Milan, small-pox at, 1102; influenza amongst horses at, 1407; typhoid fever in, 1466; opening of co-operative drug store at, 1514
Miles, Mr. A., skingrafting, 16
Militia, promotions and appointments in the medical staff of, 389, 459, 1169; the medical department of, 752; surgeons in the, 868; abolition of surgeons in the, 1222
Milk, standard for analysis of, 89; infected, danger of, 200; adulteration of, 251; sale of from tuberculous cows, 929
Milkseller, conviction of a, 866
Millais, Mr. E., the pathogenic microbe of distemper in dogs and its use for protective inoculation, 856
Millbank, offer to purchase, 699
Miller, Mr. A. G., trephining for abscess of frontal sinus, 426; intestinal obstruction successfully treated by laparotomy, *ib.*; laparotomy in a tubercular child, 1429
Milligan, Mr. W. B., abscess of the cerebellum following otitis media, trephining, death, 231
Mills, Mr. J., A Handbook of Quantitative Analysis, *rev*, 1430
——— Dr. W., A Textbook of Animal Physiology, *rev.*, 1074
Mind, two cases of defective development of, 607
Minor, Dr. T. C., The Evil that has been said of Doctors, *rev.*, 192
Mirror, dental mouth, 306
Misunderstanding, an unfortunate, 452
Mitchell, Dr. C. M., dental chemistry and metallurgy, 790
——— Dr. Kate, The Drink Question, its Social and Medical Aspects, *rev.*, 83
Mole, a large hairy, 84
Mollière, M. D., death of, 336
Mollities ossium, influence of operations on, 499; cured by öophorectomy, 1496
Molluscum, fibrosum, case of, 12; contagiosum, cause of, 681
Monads in influenza, 312
Money, Dr. A., nitrate of pilocarpine in nervous attacks, 103; case of heart disease with nervous symptoms, 242; instrumental indentation of frontal bone, 242
Monobromacetanilide, cyanosis from, 357
Monod, M. Ch., Traité des Maladies du Testicule, *rev.*, 432
Monomania in stealing, 1084
Monoplegia, hysterical, 1275
Monsters, acardiac, 199
Monteith, Mr. J., the dissolution of bodies in oceanic depths, 630
Moon, Dr. F., appeal for, 115, 219, 279, 400
Moorbath, the, and its substitutes, 1228
Moore, Dr. J. W., angina pectoris in the heart palsy of acute specific infective diseases, 363; the influenza epidemic in Dublin, 670
——— Dr. J. M., New Zealand for the Emigrant Invalid and Tourist, *rev.*, 1200
——— Dr. N., Pathological Anatomy of Diseases, *rev.*, 245; ulcerative endocarditis, aneurysm, and amyloid degeneration, 1069
——— Mr. T., coccygodynia, 301
——— Dr. W., appointed high sheriff for co. Antrim, 255
——— Sir W., The Immediate and General Treatment of Accidents and Injuries, *rev.*, 188, 397
Morgan, Mr. F. W. G., obituary notice of, 273
——— Mr. G. B., hydatids of liver, 20
——— Mr. J. S., death of, 930
Morphine, cocaine and, 1367; as an antidote to atropine, 1440
——— habit, 1470
Morphinomania, albuminuria and, 1275
Morphology and pathology, the relation of, 350, 415
Mortality, excessive infant, 34; on railways, 1115
Morton, Dr. J., death of, 94; obituary notice of, 272
——— Mr. J. N., Western Medical School, Glasgow, 48
——— Dr. T. G., Inflammation of the Vermiform Appendix, etc., *rev.*, 1019
Morvan's disease. *See* Disease
Moscow, gift for asylum for incurables at, 1336
Mosler, Professor, pemphigus, 1213
Mother-of-pearl workers, periostitis of, 910

Mott, Dr. F. W., report on bilateral associated movements and on the functional relations of the corpus callosum to the motor cortex, 1124; report on associated eye movements produced by unilateral and bilateral faradisation of the monkey's brain, 1419
Mouillot, Mr. F. A., a successful case of Cæsarean section, 1482
Mountford, Miss, presentation to, 1051
Movements, bilaterally associated, report on, 1124
Muddock, Mr. J. E., the "J. E. M." Guide to Davos Platz, *rev.*, 1488
Mumps, infectivity of, 219; bacillus of, 505; influenza and, 661
Mundie, Dr. G., treatment of diphtheria, 59
Murmur, unusually loud systolic, 667
Murray, Dr. H. M., four sacculated aneurysms arising from a dilated aortic arch, 894
——— Dr. J., improved stethoscope, 25
——— Mr. J. A. H., A New English Dictionary, *rev.*, 488
Murrell, Dr. W., Chronic Bronchitis and its Treatment, *rev.*, 304; the flavouring agents of the *Pharmacopœia*, 982
Muscæ volitantes, 301
Muscle, striped, structure and contraction of, 689
Muscles, involuntary, anachronism of, 1484
Mutton, tuberculous at Lincoln, 32
Muzzle, the value of the, 1382
Muzzling or registration? 1259, 1321, 1411
——— order, the, in London, 111; Mr. Chaplin on, 199; extension of to Hampshire, 448; proposed abrogation of, 1228
——— regulations, the new, 85
Myelitis, compression, with and without secondary degenerations, 422
Myers, Brigade-Surgeon, perforating ulcer of duodenum, 893
Myoma of the uterus becoming sarcomatous, 1069
Myomata, the uterus and, 497
Myositis, case of, 183
Myringoplastik, die ersten zehn Jahre der, Professor E. Berthold, *rev.*, 138
Myrtle, Dr. A. S., scarlet fever and puerperæ, 601; double ovariotomy in 1882 and nephrectomy in 1889, 782
——— Dr. J. A., incubation of measles, 234
Myxœdema, and sporadic cretinism, 19; a possible means of arresting the progress of, 287; cases of, 724; thyroid grafting in, 1467
Myxofibroma (?) of pelvis of uterus, 296

N.

Nævus, lymphatic, of tongue, 785; and maternal impression, 953
Nails, symmetrical trophic affection of, 667; peculiar affection of the, 1073; finger, impurities under, 1207
Nairne, Mr. J. S., the discussion at the Medical Society, 1219
Naismith, Surgeon-Major, presentation to, 1513
Name, what's in a, 1520
Napier of Magdala, the late Lord, 194
Napier, Dr. A. D. L., the ecbolic action of pennyroyal, 661; the surgical treatment of impacted labour, 750, 924
Naples, polluted oysters at, the supposed cause of typhoid, 1055
Naregamia, tincture of as an expectorant, 746, 1090
Nares, posterior, congenital occlusion of, 1277
Nasal. *See* Nose
Nash, Mr. T. Ll., the representation of Dublin University, 1278
Naso-pharynx, growths in the, 183; the question of anæsthetics in operations for adenoid growths in, 835
Natal, lepers in, 694
Nature, the Invisible Powers of, Mr. E. M. Caillard, *rev.*, 83
Navy, Royal, promotions and appointments in the medical staff of, 50, 106, 156, 210, 270, 331, 388, 452, 510, 575, 695, 752, 812, 868, 926, 985, 1044, 1107, 1169, 1222, 1281, 1334, 1403, 1463, 1513; examiners for admission to medical staff of, 309; the health of the, 381; result of examination for medical staff of, 509; Lord George Hamilton on the estimates for, 633; good service pensions, 752; sound teeth in, 868; revised regulations for admission of surgeons to, 1380
Neale, Dr. R., turning rendered easy by placing the patient in the genu-pectoral position, 1055
Neck, removal of a very large tumour from the, 1422
Necrosis of atlas, 299; glycerine as a dressing in, 478; central of radius without suppuration, 785
Neech, Dr. J. T., hysterical galactorrhœa, 399; diphtheria and the cow, 574
Needleworkers, phthisis and, 1052
Negroes trained as medical practitioners in Malta, 1338
Neoplasms, rectal, 670
Nephrectomy, partial, for injury, 134; for large sarcoma of the capsule of the left kidney, 665; nephrotomy or, 725; successful in a young child, 1149
Nephritis, puerperal, 667
Nephrolithotomy, the symptoms and conditions which justify, 117; some cases of, 134; case of, 1250
Nephrotomy, two cases of, 550; or nephrectomy, 725
Nerve, optic, atrophy of in smokers, 1072
——— supply of the extensor brevis digitorum manus in man and valvulæ conniventes in man, 300
——— tissue, Pal's method of staining, 244
Nerves, Injuries and Diseases of and their Surgical Treatment, Mr. A. A. Bowlby, *rev.*, 430; of the Human Body, Mr. A. W. Hughes, *rev.*, 904; the vasomotor in erysipelas, 1165
Netley, result of examinations at, 331
Neuritis, malarial and neuro-retinitis, 540; rheumatic and neuro-retinitic, 1007; optic, with hemiplegia, 1017; optic, 1073; peripheral, illustrations of some less known forms of, 1419
Neve, Mr. A., chloroform versus ether, 293
——— Dr. E. F., severe compound comminuted fracture of humerus treated by continuous irrigation, recovery, 74; the propagation of leprosy, 291
Nevill, Mr. J. H. N., The Biology of Daily Life, *rev.*, 1201
New Caledonia, leprosy in, 578, 816
Newcastle-on-Tyne, the influenza epidemic at, 147; correspondence from, 506, 809, 1454; annual report of the infirmary, 506; Clinical Society's banquet, *ib.*; death of Dr. D. Page, *ib.*; the health department of, 513; the late Dr. Rutherford, 809; the Pathological Society, *ib.*; the Clinical Society, *ib.*; removal of dermoid tumour, *ib.*
Newell, Dr. F. T. P., presentation to, 1515
Newman, Mr. A., obituary notice of, 1466
——— Dr. D., case of laryngeal suppurative perichondritis without any antecedent disease in the larynx, 717; remarks on the report of the second Hyderabad commission on chloroform, 1345
Newspapers, prescribing in, 163
New York, establishment of female Medical Society at, 578; the Pasteur Institute at, 1407; and the medical service of the Atlantic steamers, 1500
New South Wales, medical and surgical staff equipment for, 638
New Zealand, influenza in, 680, 759, 1024; for the Emigrant, Invalid, and Tourist, Dr. J. M. Moore, *rev.*, 1200
Nice, dengue fever at, 859
Nichols, Mr. F. B., the surgical aspect of hepatic abscess, 268
Nicolls, Dr. J., death of, 737
Nisbet, Mr. W. B., poisoning by belladonna liniment, 720
Nitrate of pilocarpine in nervous attacks, 103
Nitrous oxide, etherised, method of administering as an anæsthetic in minor surgery, 126
No cure, no pay, 925
Nodules, rheumatic, case of, 481
Noel, Hon. E., The Science of Metrology, *rev.*, 1139
Noman, Dr. D. van H., Casuistique et Diagnostic Photographique des Maladies de la Peau, *rev.*, 305
Nomenclature, anatomical, 1025
Norman, Dr. C., the boarding-out system for the insane, 1137; acute confusional insanity, 1486
North, Mr. B., a Handbook of Quantitative Analysis, *rev.*, 1430
Northampton, the influenza epidemic at, 148
Norton, Mr. A. T., epithelioma of the rectum, excision, restoration of function, 1134
——— Mr. H. H., tracheotomy under difficulties, 1130
Norway, medical districts, etc., in, 872
Nose, hæmatoma of septum of, 178; tumour of, 483
Nostrums for inebriety, 579
Notification, of measles, 31; of infectious disease, 182, 183, 1227; of infectious disease and hospital accommodation, 273; expenses and uses of, 374; of cases of puerperal fever and erysipelas, 682, 750; the uses of, 796; in Brazil, 855; in South America, 872
Nottingham, the influenza epidemic at, 147
Nugent, Dr. J., resigns inspectorship of lunatic asylums in Ireland, 565; knighted, 617
Nuisance injurious to health, the removal of, 439
Nunn, Mr. T. W., cystic disease of breast complicated with cancer, 1193
Nurses, in an infectious hospital, are they entitled to medical orders as paupers? 109, 274; cottage, 461; registration of, 732, 816; District, a Guide to, Mrs. Dacre Craven, *rev.*, 904; nonconformist, 1055; trained, for the sick poor, 1284; trained, convalescent home for, *ib.*; pauper, 1518
Nursing, Medical and Surgical, Manuals of, Mr. L. Humphry and Dr. C. J. Cullingworth, *rev.*, 304; of Sick Children, Handbook of, Miss C. J. Wood, *rev.*, 431; division of labour in, 990; in workhouse infirmaries, 1214
Nursing Record, Series of Manuals and Textbooks, Mr. E. S. Bishop, *rev.*, 1304
Nussbaum, Professor v., illness of, 139; health of 638; retirement of, 1494

O.

Obersteiner, Dr. H., the Anatomy of the Central Nervous Organs, etc., *rev.*, 1487
Obesity, treatment of, 1246, 1410
Obituary for 1889, 35; of Mr. G. Ashmead, 51; of Surgeon-Major C. W. S. Deakin, *ib.*; of Professor Geza v. Antal, 110; of Professor Botkin, *ib.*; of Dr. J. B. Harrison, *ib.*; of Mr. G. S. Stiles, *ib.*; of Dr. P. J. Chiapini, 111; of Deputy Surgeon-General T. K. Birnie, *ib.*; of Deputy Surgeon-General J. Kirkpatrick, 159; of Mr. J. Sharman, *ib.*; of Deputy Surgeon-General C. E. Smith, *ib.*; of Mr. G. Wyllie, 210; of Dr. G. Crawford, *ib.*; of Sir W. Gull, 256; of Mr. J. E. Adams, 271; of Dr. T. T. Pyle, 272; of Dr. J. Morton, *ib.*; of Mr. R. Clayton, 273; of Professor Gulia, *ib.*; of Mr. F. W. G. Morgan, 273; of Dr. L. H. Sayre, 332; of Professor K. Westphal, *ib.*; of Mr. B. V. Sortain, *ib.*; of Mr. A. Shaw, 393; of Professor E. v. Wahl, *ib.*; of Mr. E. H. Parson, 394; of Sir R. Kane, 454; of Dr. J. B. Wood, *ib.*; of Professor O. Becker, *ib.*; of Dr. C. Green, *ib.*; of Dr. R. Stanistreet, 455; of Dr. D. Page, 516; of Mr. T. Cane, *ib.*; of Dr. V. Gautier, 517; of Mr. H. Branthwaite, *ib.*; of Surgeon G. H. Symes, *ib.*; of Dr. R. H. Bush, *ib.*, of Brigade-Surgeon R. W. Davies, *ib.*; of Dr. W. H. Dixon, 577; of Dr. G. H. Esbach, *ib.*; of Dr. R. F. Ainsworth, 634; of Dr. M. C. Pamo, *ib.*; of Mr. C. Oswin, 697; of Mr. J. G. Forbes, 757; of Dr. E. Bowen, *ib.*; of Mr. J. W. Cavanagh, *ib.*; of Dr. J. Macpherson, 758; of Mr. J. H. Rutherford, *ib.*; of Dr. Aquilla Smith, 814; of Professor Trélat, *ib.*; of Dr. H. S. Anderson, *ib.*; of Mr. C. J. Pocock, *ib.*; of the Rt. Rev. H. Callaway, 868; of Dr. E. Humby, 928; of Mr. C. E. Lister, *ib.*; of Mr. W. H. Walker, *ib.*; of Mr. W. Pollard, *ib.*; of Dr. O. E. Keller, 929; of Professor M. Turchi, 986; of Mr. G. Tatham, *ib.*; of Mr. G. C. Jonson, 1047; of Dr. R. M. Fawcett, 1048; of Brigade-Surgeon M. Houston, *ib.*; of Dr. W. Matterson, *ib.*; of Dr. P. Agius, *ib.*; of Dr. A. Lochée, 1108; of Dr. A. J. Pollock, 1170; of Dr. A. Tafani, *ib.*; of Dr. V. Besser, *ib.*; of Dr. W. Pearce, 1225; of Dr. C. W. Jecks, *ib.*; of Dr. S. R. Percy, *ib.*; of Professor F. Scalzi, 1282; of Dr. J. P. Bramwell, *ib.*; of Dr. M. M. de Bartolomé, 1335; of Dr. R. C. R. Jordan, *ib.*; of Dr. R. H. S. Carpenter, 1336; of Dr. G. T. Fincham, *ib.*; of Mr. R. Eminson, 1466; of Mr. A. Newman, *ib.*; of Dr. W. H. Paine, 1517
Objectives, microscopic, 734
Obstetrics, a Textbook of, Dr. F. Winckel, *rev.*, 1429
Obstruction, intestinal, 363; hymeneal, retention of menses, 420; hymeneal, a bibliographical note, 508
O'Callaghan, Dr., the present position of abdominal surgery, 958
Oculist, an Indian, 88
Odessa, alcoholic poisoning at, 698; the directorship of the bacteriological laboratory, 1261; hygiene in, 1283
Œdema, neonatorum, 403; migratory, 1196
Œsophagotomy, 80, 1103
Œsophagus, stricture of, treated by gastrostomy, 243; retention tubes for constriction of, 426; congenital stricture of in a puppy, 521; cancer of eroding trachea, 785; stricture of, 1014
O'Farrell, Brigade-Surgeon J., M.D., case of suicidal gunshot wound, 721
Officers, sanitary, and local authorities, 1152
Oglesby, Mr. H. N., the prophylaxis of canine distemper, 984
O'Grady, Dr. W. F., scientific evidence at inquests, 105
Ogston, Professor, case of intracranial suppuration, trephining, and evacuation of pus, death, necropsy, 891
Ohm, G. S., proposed memorial to, 1326
Oil, carbolised in the treatment of scabes, 781
Ointment introducer, intrauterine, 138
Old Age, Dr. G. M. Humphry, *rev.*, 302
Oliver, Dr. J., cyclic hæmaturia of four years' duration in a woman, aged 63, 178; sudden extroversion of the vagina in a mulliparous female, 478; cellulitis of the anterior abdominal wall, occurring after a premature birth without evidence of co-existing pelvic disturbance, 1068
——— Dr. T., hemiplegia accompanied by loss of speech in children, 204
Ollier, Professor, elected honorary member of the German Surgical Society, 930
Omentum, cancer of, 422; primary cancer of, 1136
O'Neill, Dr. H., suprapubic lithotomy, 1073, 1191
Oophorectomy, mollities ossium cured by, 1496
Openshaw, Mr., malformed uterus, 299
Operation, plastic, 667
Operations, major on old people, 177; in hospitals, the right to perform, 496; influence of on mollitus ossium, 499

Ophthalmia, at Hanwell, 89; neonatorum, the prevention of, 438
Ophthalmoscope, new refractory, 133
Opium, cultivation of in Russia, 1050; the sale of, 1168
Oratory, after dinner, 1401
Orbit, hydatid of the, 179; removal of large foreign body from without injury to sight, 1429
Orchitis in small-pox, 1207
Orders, parochial medical, on loan, 334; confirmation of, 1519
Orexin, 1508
Organs, female sexual, relation of to mental diseases, 1401
Ormsby, Dr. J., treatment of perspiring feet, 1231; circumcision for phimosis after spyhuis, 1286
——— Mr. L. H., surgical operation chart, 219
Os, rigid, 820
Osburne, Dr. C. A. P., the character of the rash in influenza, 202
Osmosis, experiments with living and dead membranes, 165
Osteitis deformans, 724, 1196
Osteochondroma, successful removal of the entire upper extremity for, 131
Osteofibroma, removal of the facial bones for, 384
Osteomyelitis, chronic, in pernicious anæmia, 232; chronic of femur, 962
Osteotomy in club-foot, 481; for the relief of malformation after fracture, 1196
Oswin, Mr. C., obituary notice of, 697
Othaematoma, 20
Otitis media. *See* Ear, middle
Otorrhœa, operations for, 69
Ouabaïn as an anæsthetic, 746; in whooping-cough, 950
Out-patient, the cost of an, 756
Out-patients at county lunatic asylums, 39, 252; evening, 970
Ovaries, dermoid cysts of the, 80, 242
Ovariotomy, the father of, 568; double, in 1882 and nephrectomy in 1889, 782; death from visceral affections after, 854; per rectum, after labour, 1324
Ovary, apoplexy of the, cystic dilatation without rupture, 605
Owen, Mr. E., the surgery of infancy and childhood, 77, 181, 297; harelip and cleft palate, 1196
——— Sir R., the health of, 561, 614, 681, 850, 909
Ox, the Diseases and Disorders of the, *rev.*, 1019
Oxford, the influenza epidemic at, 148; St. John Ambulance Association at, 1338; summer meeting at, 1495
Oxygen inhalations in diphtheria, 1508
Oysters polluted, at Naples, the supposed cause of typhoid, 1055

P.

Pabst, M. A., Agenda du Chimiste, *rev*., 1076
Paddington, diphtheria in, 1495
Page, Dr. D., obituary notice of, 516
Paget, Mr. C. E., Salford Infectious Hospital, 270
——— Mr. S., duodenal ulcer after a burn, 128; villous disease of bladder, 426; case of imperforate rectum and imperforate anus, 664; lupus (?) of gums and lips, 617; cancer of breast, 1016
Paget's Disease. *See* Disease
Paine, Dr. W. H., obituary notice of, 1517
Paisley, the sanitary condition of, 377; opening of hospital for sick poor at, 1486
Palate, soft, adhesion of to pharynx and the result of syphilis, 1195; cleft, harelip and, 1196
——— hook, self-retaining, remarks on, 1481
Palermo, antirabic inoculation at, 1270
Palles, Chief Baron, appointed to the Senate of the Royal University, 94
Palm, Dr. T. A., admission of aseptic air into the pleura, 1245
Palmerston, Lord, on influenza, 280
Palpitation, recurrent, 724
Pal's method of staining nerve tissue, 244
Palsy, congenital and infantile cerebral, two cases of, 283
Pamo, Dr. M. G., obituary notice of, 634
Panbotano, 570
Pancreas, primary carcinoma of the, 296; successful removal of a cancerous tumour from, 561
Papilloma, of uvula, 298; diffuse, of bladder, 544; of the peritoneum, disappearance of, 1496
Paquet, Dr., death of, 571
Paradise for strong-minded women, 630
Paralyses, which occur during the first two years of life, the pathology of, 281; of childhood, 285, 760
Paralysis, general of the insane, surgical treatment of, 8, 11, 157, 749, 1364; pseudo-hypertrophic muscular, rickets simulating, 16; general, cerebral syphilis and, 88; Bell's, 179; ascending spinal, 364; alcoholic, the spinal cord in, 427; Erb's, two cases of, 481; general of the insane, 607; pseudo-hypertrophic, 673; general of the insane, the warnings of, 777, 784; Landry's, 1127; rheumatic, treatment of, 1165
Paramyoclonus multiplex, 426
Paraplegia, ataxic, 183; hereditary infantile spastic, 993; from syphilitic disease of cord, 1371
Parasites of fish, 794
Parchini-Bonfante, Dr. A., death of, 991
Paris, influenza epidemic in, 41, 97, 149, 204, 627, 746, 863, 1040, 1104, 1275, 1331; correspondence from, 43, 102, 265, 321, 383, 448, 504, 570, 626, 746, 862, 922, 981, 1039, 1103, 1165, 1275, 1330, 1508; general news from, 43, 102, 266, 322, 449, 505, 570, 627, 746, 863, 1040, 1104, 1275, 1331, 1508; the death-rate in, 196, 274, 333, 391, 455; night medical service in, 518; cremation in, 638; foreign students at, 760; referred students at faculties of, 816; foundlings in, 863; the municipal council of and hypnotism, 901; the sanitation of restaurant kitchens in, *ib.*; asylum for incurable vagrants in, *ib*; vote of 270,000 francs by municipal council of for sleeping place for destitute pregnant women, 1050; dearth of dissecting material in, 1089; whooping-cough in, 1295; adulteration in, 1521
Parke, Surgeon, decoration of, 142, 435, 1262; arrives at Alexandria, 48; at Cairo, 276, 336; query as to official recognition of services of, 388; movements of, 816; dinner to, 968, 1148, 1207, 1268, 1326, 1391; gold medal of British Medical Association awarded to, 1024; Stanley's eulogy of, 1088; doctors or officers, 1402; honours to, 1383; the army medical staff and, 1442
Parker, Dr. G., cases of myxœdema, 724
Parkes, Dr. L. C., Hygiene and Public Health, *rev.*, 187
Parliament, medicine and public hygiene in, 381; medical notes in, 456, 511, 576, 634, 696, 755, 812, 927, 987, 1046, 1108, 1169, 1226, 1281, 1335, 1403, 1458, 1516; bills in, relating to public health, 610; "blocking" bills in, 969
Parrott, Mr. P. G., Bell's paralysis, 179; excision of mamma, *ib.*
Parson, Mr. E. H., obituary notice of, 394
——— Dr. H. F., the epidemic of influenza, 102
Parsons, Dr. F. H., summer holiday, 521
——— Dr. J. I., cancer of the breast treated by electricity, 960
——— Mr., death of, 396
"Particulars" of adulteration, 616
Partner, new, introducing a, 1045; duty of as to club patients, 1280
Partnership and the office of medical officer of health, 271; accounts of, 926; the accounts of, 1045
Partridge *v.* the General Medical Council, 49, 1107
Passengers, grateful, 930
Pasteur Institute. *See* Institut
——— M., elected member of the Academy of Moral and Political Diseases, Paris, 145; and the rabbit pest in Australia, 615, 692; presentation to, 1209, 1260; the Chief Constable of Clitheroe *v.*, 1495
Pasteurism in Cuba, 718
Pastilles, antiseptic, 24; Soden mineral, 487; sulphonal, *ib.*
Patella, treatment of fracture of 841; case of compound comminuted fracture of, 1190
Pathologie, die allgemeine, Dr. E. Klebs, *rev.*, 185
Pathology and morphology, the relation of, 350, 415; Atlas of Illustrations of, *rev.*, 432
Patients, and practitioners, 157; statements by, 220; fever, improper treatment of, 441; lunatic, 755; the question of vested interests in, 1107, 1223
Patmore, Mr. T. D., the influenza epidemic, 203
Paul, Mr. F. T., gastro-enterostomy, 1167
Pauper, what is a? 55
Payment, the question of in infectious hospitals, 1015
Peachey, Mr. G. C., treatment of masturbation, 116
Pearce, Dr. W., obituary notice of, 1225
Pearson, Dr. C. Y., undescended testicle, 483; uterine and urethral electrolysis, *ib.*;
——— Mr. F. T., medical officers and friendly societies, 633
——— Dr. J., diphtheria, 429; peritonitis treated by incision, 902
Peas, tinned, copper in, 1279
Peau, Casuistique et Diagnostic Photographique des Maladies de la, Dr. D. Von H. Norman, *rev.*, 305
Pectoralis major, defective, 699
"Peculiar People," small-pox amongst the, 438
Pediculi capitis, treatment of, 1055
Peiper, Dr., the effects of extirpation of the cœliac plexus, 1327
Pelvis, hydatids of the, 427; contracted, 429; myxomatous tumours removed from, 960; retention of urine from a hydatid cyst in the, 1248; a floating spleen in the, 1440
Pembrey, Mr. M. S., elected to Radcliffe travelling studentship, 636
Pemphigus, acute, 129; Professor Mosler on, 1213
Penberthy, Mr. J., the prophylaxis of canine distemper, 1042
Penis, epithelioma of, 1074
Pennyroyal, the ecboric action of, 542, 661
Penrith, the influenza epidemic at, 148
People, the Peculiar, in America, 88
Pepsalia, 1489
Peptones as food, 163
Percival, Mr. T., scarlet fever and puerperæ, 780
Percy, Dr. S. R., obituary notice of, 1225
Pericarditis, rheumatic, with delirium, 1012
Perichondritis, laryngeal suppurative, case of, 717
Periglyph, the American, 299
Perineum, the support of the, 889; dilatation instead of support of the, 1009, 1119, 1232, 1287, 1343
Periostitis of mother of pearl workers, 910
Peritoneum, dangers of flushing with sublimate, 435, 508; drainage of the, 683; disappearance of papilloma of, 1496
Peritonitis, septic germs in, 496, 581; acute diffuse suppurative laparotomy for, 896; treated by incision, 902; septic, 907
Perityphlitis, 18
Persia, cholera in, 254, 948; high death-rate in, 276; influenza in, 373
Personality, double, 1143
Pessary, insanity cured by a, 15, 242; a long retained, 606; buckle, 1197
Petition in favour of Lord Dunraven's Bill for the College of Surgeons, 1100
"Pharmacopœia," new German, 334; Russian Army, 518; Swiss, revision of, 699; British, Companion to the latest Edition of the, Mr. P. Squire, *rev.*, 844; British, flavouring agents of the, 982; Italian, the revision of, 991; the British remarks on, 1270, 1390, 1446
Pharmacy, the Latin Grammar of, Mr. J. Ince, *rev.*, 305; in Portugal, 872
Pharynx, necrosis of, 667; adhesion of soft palate to, the result of syphilis, 1195
Philipson, Mr. W., Prize Essay on the Suspension of Carriages, *rev.*, 675
Phillips, Dr. L., the Medical Defence Union and members of the General Medical Council, 270
——— Dr. S., two cases of Erb's paralysis, 481; case of rheumatic nodules, *ib.*; case of hydarthrosis, *ib.*; on the symptoms connected with the circulation in diphtheria, 960
Philosophy, Synthetic, an Epitome of the, Mr. F. H Collins, *rev.*, 22
Phimosis after syphilis, circumcision for, 1286
Phlebitis following influenza, 952, 1010
Phosphorescence of crustacea, 863
Phosphorus in rickets, 215; in diabetes, 293
Photophobia cured by anæsthetising the auditory canal, 505
Phrenologies, the old and new, 86
Phthisis, pulmonary, salts of copper in, 102; pulmonary and laryngeal, *ib.*; should pregnancy be terminated prematurely in a case of? 132, 328; contagious character of, 265; in Berlin, 457; the etiology and prevention of, 463, 523, 585, 647; case of with psoas abscess, 481; on the treatment of fistula in, 546, 832; malasma in, 550; treatment of by carbonic acid, 564, 1144; the infectivity of, 682; chronic with unusual dislocation of the heart, 724; in the French army, 746; prophylaxis of on French railways, 992; and needleworkers, 1052; treatment of by the inhalation of superheated air, 1249; laryngeal, 1250; Luciusquelle water in the gastric affections of, 1277
Physical culture, 216
Physicians, consulting, at lunatic asylums, 756
Physiology of Bodily Exercise, Dr. F. Lagrange, *rev.*, 136; textbooks of, 279; a Textbook of, Dr. J. G. McKendrick, *rev.*, 364; Universal Principles of, Dr. C. Calleja, *rev.*, 485; Animal, a Textbook of, Dr. W. Mills, *rev.*, 1074
Pilkington, Mr. F. W., Cheyne-Stokes respiration, 819
Pilocarpin, traumatic injury to labyrinth of right ear treated by injections of, 234; in poisoning by belladonna, 420; labyrinthine deafness treated by, 1125, 1300; in dryness of the tongue, 1366
Pin, abdominal abscess caused by a, 1074
Pine products, Austrian, 1202
Pisani, Surgeon L. J., urethral calculus attached to an old lithotomy scar, 661
Pitt, Dr. G. N., on some cerebral lesions, 643, 771, 827; the diagnosis of pancreatic tumour, 1278
Placenta, the, in arrested pregnancy, 1148
Placenta prævia, previous rupture of the uterus, recovery, 494; treatment of, 1070, 1136
Plant, the Flowering, as illustrating the First Principles of Botany, Mr. J. R. A. Davis, *rev.*, 674
Plasmodia malariæ, 747
Plaster, porous india-rubber belladonna spread on kid, 25
Plate, palpebral, 553
Playgrounds, public, the closing of, 971
Pleura, admission of aseptic air into, 1245; surgical treatment of tuberculosis of, 1363
Pleurisy, tubercular origin of effusions in, 183; salicylate of sodium in, 808; with effusion, the treatment of, 1161; purulent, different forms of and their microbes, 1331
Pleuritic. *See* Pleurisy
Plexus, cœliac, effects of extirpation of, 1327
Plumbers, education and registration of, 216; registered for Devon and Cornwall, 931
Plumbing, sanitary, 577, 1173
Plumbism, Clinical and Chemical Observations on, Dr. John Brown, *rev.*, 138
Plymouth, small-pox at, 796, 913

Pneumatology, Medical, Essay on, Mr. J. N. Demarquay, 188
Pneumonia, notes on an epidemic of, 134; influenza and, 352; Acute Lobar, the Mortality of, Drs. C. W. Townsend and A. Corlidye, jun., *rev.*, 609; subacute indurative, 722
Pocket Book, the Professional, *rev.*, 487
Pocock, Mr. T. W., the will of, 276
Pogson, Dr. J. W. B., presentation to, 992
Point, a novel, 1512
Poisoning, by lead, 18; by coal gas, *ib.*; by creolin, 92; by coal fumes and smoke, 178; accidental, 215; by water gas, 253; by tinned meat, 276; by anilides, 288; by belladonna liniment, 720; by tinned cherries, 833; by uterine injections of corroside sublimate, 1040; by chloroform taken by the mouth, 1089; facilities for, 1149
Poisons, in preparatory preparations, 734, 753; *post-mortem* imbibition of, 796; sale of, 968; the sale and dispensing of, 1023; sale of to irresponsible persons, 1332
Poland, obituary in 1889, 36
Poland, Mr. J., treatment of fracture of the patella, 841
Policlinico Generale, meetings of medical staff of, 458
Police force, sickness and mortality of the, 982
Politics and public appointments, 915; of poverty, 965
Pollard, Mr. W., obituary notice of, 928
——— Mr. R., the influenza epidemic, 399
Pollock, Dr. A. J., obituary notice of, 1170
——— Mr. C. S., death of, 699
Polypus, intussusception of jejunum in an adult due to a, 76
Polypi, disseminated of the large intestine becoming malignant, 1195
Poole, Mr. T. D., a case of influenza and aphasia, 1190
Poor, the housing of the, 48, 311, 329, 438, 795, 970, 1406
Pope, Dr. F., the influenza epidemic, 147; malasma in phthisis, 550; Popow, Dr. L. W., appointed to chair of therapeutics in the Military Medical Academy of St. Petersburg, 1173
Population, the floating, 699; a stationary, 1226
Porcher, Dr. F. P., A Pathological Condition of the Lump, etc., *rev.*, 367
Porrigo, decalvans, treatment of, 862
Porro-Cæsarean operation, results of in all countries to the close of 1888, 68, 154, 508, 573
Porro's operation for atresia vaginæ, 1467
Porter, Brigade-Surgeon A., The Diseases of the Madras Famine, *rev.*, 23
——— Nurse, death of, 376
——— Mr. W. E., the management of impacted labour, 1279, 1401
Portsmouth, typhoid fever in the dockyard of, 194
Portugal, obituary in, in 1889, 36; influenza in, 373, 760; boycotting of English medicines in, *ib.*; pharmacy in, 872; sale of saccharin in, 930
Potteries, epidemic of measles in, 636
Pott's fracture, illunited, 1196
Poverty, politics of, 965
Powders, narcotic soothing, 1323
Power, Mr. D'A., repair after rupture of the spleen and kidney, 295; the varying effects of violence in producing fractures, 894
Practice, purchase of, 219; irregular, the Apothecaries' Society and, 509, 926; illegal, 633; irregular, 867; a dangerous, 875; in British Columbia, 1287, 1472; unqualified, 1333
Practitioner, an advertising, 754
Practitioners, civil, army doctors and, 59, 163, 400, 461, 581, 642; patients and, 157; medical, the law and equity of attacks on, 307; English, in France, 310, 340, 495, 615; medical, in Germany, 330; legal, on the practice of unqualified assistants, 574; clubs and, 867; surgical instrument makers as, 876
Pregnancies, long interval between, 521
Pregnancy, ruptured tubal, 15; vomiting in, 43, 903; first, late in married life, 112, 234, 358; twin, 129; should it be terminated prematurely in a case of phthisis? 132, 329; early, 179; ovarian, alleged case of, 197; the duration of, 440; twin, fœtus papyraceus in, 499; multiple, 601; extrauterine, unique case of, 947; extrauterine, 1041; extrauterine, early diagnosis of, 1043; ectopic in the broad ligament, 1044; hæmorrhages occurring during, 1065; removal of fibroma during, 1084; ectopic in the left Fallopian tube, 1130; arrested, the placenta in, 1148; menthol in the hyperemesis of, 1382; spurious, simulating ectopic gestation, 1427
Prescription, toxic, 761; consultants and, 1280
Presentation to Mr. H. J. Cameron, 35; to Surgeon-Major Vacy-Ash, 160; to Mr. J. P. Bates, 216; to Dr. J. Martin, 314; to Dr. J. S. Cameron, 318; to staff of Dewsbury Infirmary, 336; to Mr. J. Williams, 518; to Mr. Sweeting, 565; to Dr. B. Rice, 638; to Dr. G. P. Cope, 684; to Mr. W. Laird-Cox, 692; to Mr. W. R. Rice, 699; to Dr. W. J. Smyth, 725; to Dr. G. S. Woodhead, 736, 1090; to Mr. J. J. Weaver, 807; to Mr. G. Bower, *ib.*; to Mr. W. H. W. Stacey, 867; to Mr. H. C. Hopkins, 872; to Mr. P. M. Scatliff, *ib.*; to Mr. Jas. Gibson, 930; to Dr. J. S. Harvey, *ib.*; to Professor Hermann, 991; to Dr. J. W. B. Pogson, 992; to Mr. E. Skinner, *ib.*; to Dr. Ben Hall, *ib.*; to Mr. A. W. Harris, *ib.*; to Miss Mountford, 1051; to Mr. C. T. Griffiths, 1115; to Dr. J. W. Richardson, 1174; to M. Pasteur, 1209, 1260; to Dr. J. Davies, 1228; to Professor J. Wood, 1321; to Dr. T. J. Stafford, 1338; to Dr. Barnard, *ib.*; to Dr. W. Taylor, *ib.*; to Mr. J. J. Tweed, 1373; to Sergeant R. R. Sleman, 1407; to Dr. Pope, 1465; to Surgeon-Major Naismith, 1513; to Dr. F. T. P. Newell, 1515
Preservatives, boracic, 84
Press, the, and the medical charities, 907
Preston, Mr. G., an outbreak of influenza on board the industrial training ship *Mount Edgcumbe*, 477
Price, Mr. E. D., Hazell's Annual for 1890, *rev.*, 83
Prichard, Mr. A., pulsating exophthalmos, 724
Prince Albert Victor in India, 216
Prince Bismarck as a patient, 1437; on the effects of modern education, 1471
Prince of Wales accepts presidentship of College of State Medicine, 816
Pringle, Surgeon-Major R., enteric fever in India, 1196
Prison, epidemic of influenza in a, 417
Privilege, medical, 330
Prize, the Senval, 337; the Alvarenga, 579, 1228; the Riberi, 760; the Jacksonian, award of, 910; Prizes to medical students, 1052
Profession, the medical, and prevention of disease, 702; and the House of Lords, 934; the Lord High Commissioner and, 1266
Prolapsus recti, appliance for the treatment of, 190
Propaganda, a patriotic, 1264
Protection, drugs and, 1407
Prostitutes, regulations of in France, 746
Proverbs, Maxims and Phrases, Mr. R. Christy, *rev.*, 26
Providence, medical, in France, 1115
Prurigo, Hebra's, the pathology of, 1149
Prussia, instructions to midwives in, 518
Pseudo-eczema from contact with sulphate of copper, 383
Pseudo-peritonitis in hysteria, 401
Psilosis (linguæ et mucosæ intestini), 1357
Psoriasis, tender feet in, 547; successful inoculation of, 872
Psorospermia in relation to tumour formation, 1193
Psorospermiæ, Paget's disease of nipple with, 664
Ptomaine or ptomine? 1219
Public Health, England, health of principal towns of, 55, 109, 159, 212, 274, 334, 392, 456, 513, 577, 637, 697, 759, 815, 871, 929, 988, 1050, 1114, 1171, 1227, 1283, 1337, 1406, 1465, 1519; English urban mortality in the fourth quarter of 1889, 108; are nurses in a hospital for infectious disease entitled to medical orders as paupers? 109; the true death-rates of London districts during the last quarter of 1889, 158; zymotic mortality in London, 211; reports of medical officers of health, Rastrick, 217; Epping Rural, 230; St. Pancras, 382; Wellingborough Rural, *ib.*; Basford Rural, 514; Berkshire combination, *ib.*; Birkenhead, *ib.*; Bilston, *ib.*; Dublin, *ib.*; Islington, 515; Isle of Wight Rural, *ib.*; Stapleton, *ib.*; Sending Rural, *ib.*; West Sussex combination, *ib.*; Bexhill, 759; Hastings, *ib.*; Kidderminster, *ib.*; Towcester Rural, *ib.*; Keynsham R. S. D., 1214; Torquay, 1337; Cheltenham, 1338; Aston Manor, 1499; Harwich, 1519; of England and Wales during 1889, 333; English urban mortality in 1889, 390; the registrar-general's quarterly return, 391, 1112; true death-rates of London sanitary districts for 1889, 512; the sanitary staff of the London vestries, 513; bills in Parliament relating to, 610; English urban mortality in the first quarter of 1890, 988; the true death-rates of London districts during the first quarter of 1889, 1112
——— Ireland, health of principal towns of, 55, 109, 159, 213, 275, 334, 393, 456, 577, 697, 759, 815, 930, 990, 1050, 1171, 1227, 1283, 1465, 1519
——— Scotland, health of principal towns of, 55, 109, 159, 212, 274, 334, 393, 456, 513, 577, 637, 697, 759, 815, 871, 930, 990, 1050, 1171, 1227, 1283, 1337, 1465, 1519
Puerperal, scarlet fever and, 75, 234, 292, 601, 602, 719, 780, 1068
Pulse, high tension and albuminuria, the connecting link between, 65; infrequent with epileptiform attacks, 1068; the during chloroform anæsthesia, 1425
Pupil reaction, paradoxical case of, 216
Puppy, congenital stricture of œsophagus in a, 521
Purgatives, abuse of, 1324
Purpura hæmorrhagica, 79
Puschmann, Dr. T., Geschichte des medicinischen Unterrichts, etc., *rev.*, 484
Putrefaction in the depths of the sea, 310, 630, 694
Pyæmia, the treatment of consequent upon disease of the middle ear, and unassociated with thrombosis of the lateral sinus, 1480
Pye, Mr. Walter, successful removal of internal semilunar cartilage of knee-joint, 242; the Surgical Treatment of the Common Deformities of Children, *rev.*, 486
Pye-Smith, Dr., acute universal desquamative dermatitis following the administration of chloralamide, 546
Pyle, Dr. T. T., obituary notice of, 272
Pylorectomy, case of, 323; remarks on, 997, 1013, 1105; and gastro-enterostomy, 1220
Pyocyanic acid, action of in the development of charbon, 265
Pyrexia in the puerperal state, 672

Q.

Quackery, the open door of, 4; crusade against, in Italy, 458, 1226
Qualifications, medical, 196; Irish and Scotch, English hospitals and, 1028
Quiller, Mr. C. T., visits of courtesy, 925
Quinine, the price of, 276, 803; proposed substitute for, 639
——— chocolates, 191
——— water, aromatic, 964
Quinton, Dr. R. F., an epidemic of influenza in a prison, 417

R.

Rabagliati, Dr. A., radical cure of hernia, 19; intestinal obstruction, *ib.*
Rabbit, half vertebra in a, 664
——— pest in Australia, M. Pasteur and, 615, 692
Rabies, paralytic, the nervous system in, 265; in Middlesex, 336, 1051; dental origin of, 383; in London, 519; the transmission of, 626; lost dogs and, 760
Rabow, Dr., cold in the head, 934
Radius, central, necrosis of without suppuration, 785
Rae, Dr. M. J., a Practical Treatise on Eczema and its Treatment, *rev.*, 23
—— Staff-Surgeon W. M., the epidemic of influenza, 339
Railways, mortality on, 1115
Rainsford, Mr. H., temporary stammering coming on with tonsillitis, 1009
Rake, Dr. B., sequel to two cases of amputation for leprotic gangrene, 477
——— Mr. W. V., twin pregnancy, a healthy and a macerated fœtus, 129
Ranking, Dr. G. S. A., Talini-I-Zabán-I-Urdu, *rev.*, 305
Ranney, Dr. A. L., Lectures on Nervous Diseases, *rev.*, 1487
Ransford, Mr. T. D., a case of concealed accidental hæmorrhage, 780
Ransome, Dr. A., on the etiology and prevention of phthisis, 463, 523, 585, 647
Ranula glandulæ Nuhnii, 1276
Raori resin, 1275
Ratcliffe, Dr., hydatid cyst of brain, 1135
Raverty, Dr. H., sudden death of, 35
Raynaud's disease. *See* Disease
Recherches cliniques et thérapeutiques sur l'Epilepsie, l'Hystérie et l'Idiotie, Dr. Bourneville, *rev.*, 1302
"Recorder, the London Medical," 279
Rectum, imperforate, operation for, 177; and Anus, Diseases of the, Mr. H. Cripps, *rev.*, 367; imperforate, case of, 664; stricture of, puncture of intestine in, 673; adenoma of the, 962; epithelioma of, excision, etc., 1134
Redmond, Mr. J., multiple abscesses of the liver, 1198
Reeves, Surgeon F. C., hydatid of the liver, 725
——— Mr. H. A., removal of uterine fibroid, 606; fæcal extravasation into the peritoneal cavity, 661; case of Rokitansky's tumour, 669; the present position of abdominal surgery, 958
Referees, medical. *See* Medical
"Register, the Medical," 853; the Medical Students', 912
Registration, muzzling or? 1259, 1321, 1411
Regnier, Dr., gains prize for essay on hypnotism, 578; L'Intoxication Chronique par la Morphine, *rev.*, 1488
Reid, Mr. A. P., Stirpiculture or the Ascent of Man, *rev.*, 1431
——— Mr. E. W., osmosis experiments with living and dead membranes, 165
Rein, new safety driving, 25
Relieving officers and pauper lunatics, 867
Remedies, new, new diseases and, 910
Renton, Dr. T. C., note on a new form of protective gauze tissue, 1367
Renon, Dr. J., Diphtheria, its Antiseptic Treatment, *rev.*, 726
Renshaw, Mr. J., appointed honorary secretary of the Midland Branch of the British Dental Association, 1227
Rentoul, Dr. R. R., proposed public medical service, 52; out-patient hospital reform, 106, 394; the abuse of the Manchester provident dispensaries, 213; The Causes and Treatment of Abortion, *rev.*, 247; medical staffs on medical charity committees, 635; select committee on medical charity

organisation, 869; a new form of medical charity abuse, 1111; the Midwives Registration Bill, 1471
Respiration, forced, 495
Respirator, an improved sanitary and antiseptic, 1078
Responsibility, inebriate criminal, 111; and inheritance, 848
Restaurants, insanitary, 1323
Retinol in vaginitis, 1103
Revilliod, Professor, on nervous symptoms and complications of influenza, 981
Revington, Dr. G., the surgical treatment of general paralysis of the insane, 749
Reynolds, Dr. E. S., spinal cord in alcoholic paralysis, 427
Rheumatic Diseases (So-called), with Original Suggestions for more clearly defining them, Messrs. H. Lane and C. T. Griffiths, *rev.*, 137
Rheumatism, its treatment past and present, etc., 359; acute, value of salicin and salicylate of soda in, 954; German baths for, 1286
Rhinolith, case of, 478
Rhinoscleroma, the bacillus of, 747
Rhône, analysis of the waters of, 627
Rib, fracture of from coughing, 953
Rice, Dr. B., presentation to, 638
—— Dr. G., influenza in Banstead Down Schools, 1015
—— Mr. R., venesection in puerperal eclampsia, 1300
Richardson, Dr. J. W., presentation to, 1174
Rickets, simulating, pseudo-hypertrophic muscular paralysis, 16; the causation of, 90; phosphorus in, 215
Ricord, Dr. P., proposed monument to, 699
Ried, Professor, celebrates 80th birthday, 518
Rigidity with exaggerated tendon reaction and cerebellar reflux, 541
Rigor mortis, 498
Ringwood, Mr. J., inflammation of Cowper's glands in dengue, 129; dengue fever in Kells, co. Meath, 670
Ringworm, treatment of by chrysarobin, 1090
Riordan, Surgeon-Major W. E., Manual for Army Medical Services, *rev.*, 1017
Risk, Surgeon E. J. E., dengue and influenza, 60, 357; a case of traumatic injury to labyrinth of right ear successfully treated by injections of pilocarpin, 234
Riviera, the correspondence from, 44
Rivington, Mr., sarcoma of foot, 298; exostosis of tibia, *ib.*; stricture of œsophagus, 1014; the coming election at the College of Surgeons, 1457
Rizine, 1432
Roaring in horses cured by operation, 337
Robben Island, new leper hospital at, 872, 1047
Roberts, Mr. C., English and foreign health resorts, 127, 387; colour blindness, 572
——— Dr. D. C., abdominal section for hydatid cyst of the lower, 1074; ovarian tumour, *ib.*
——— Dr. S., the epidemic of influenza, 244; scleroderma, 548
——— Sir W., on the history of the uric acid in the urine, with reference to the formation of uric acid concretions and deposits, 721; a contribution to the chemistry of gout, 1369
Robertson, Mr. G. M., report on an epidemic of influenza at Morningside, 228
——— Dr. W., a curious case of occlusion of the choanæ, 178
——— Mr. W. A., Textbook of the Practice of Equine Medicine, *rev.*, 487
Robins, Mr. G. N., the fasting man, 764, 819, 876, 935, 996, 1056
Robinson, Surgeon-Major B. S., fibroid thickening of the splenic capsule, 420
——— Mr. H. B., epithelioma of eyelid (?) crateriform ulcer, 296; loose body from knee joint, 544; duct carcinoma of breast, 1070
Robson, Mr. A. W. M., laparotomy in pelvic abscess, 669; the present position of abdominal surgery, 898; operative treatment of dislocations irreducible by ordinary means, 962; gastro-enterostomy, 1167; a case of gastrostomy, 1295
——— Mr. T. A., unfounded charge against, 509
Roche, Dr. J., should pregnancy be terminated prematurely in cases of phthisis? 329; venesection in inflammation, 1055
Rötheln, incubation of, 542
Rogers, Surgeon-Major J. S., notes on the medical organisation of the Egyptian army, 446
Rolleston, Dr., desquamation in the third week of enteric fever, 132; multiple tubercular strictures of the colon, 1192; volvulus of the small intestine, 1125
Romberg, Dr., the innervation of the heart, 1213
Rome, correspondence from, 748
Ronaldson, Mr. T., tetanoid convulsions in an infant, 1429
Roose, Dr. R., Leprosy and its Prevention, etc., *rev.*, 553
Rose, Dr. G., atropine poisoning, 607
——— Dr. H. C., the Rose and Cooper Defence Fund, 1231; 1288, 1411
Rose, Mr. W., carotid aneurysm, 666; inguinal colotomy, *ib.*
Rosenthal, Professor M., death of, 111
Ross, Surgeon R., the effect of chill in producing malarial fever, 1317
Rostrevor, development of as a health resort, 973
Roth, Mr. B., splint for foot-drop, 24
Rotherham, the wage limit at, 335
Rothziegel, Dr. A., strophanthin, 1327
Routh, Dr. A., urethral diverticula, 361
Ruata, Dr. G., the alleged increase of consumption at San Remo, 1279; Italian vital statistics, 1457
Rubidium-ammonium bromide in epilepsy, 43
Ruffer, Dr. M. A., the destruction of micro-organisms during the process of inflammation, 1177
Rules, new, of the Commissioners in Lunacy, 846
Rumination in man, 1276
Russell, Mr. R. H., chronic intestinal obstruction following injury, laparotomy, 1296
——— Mr. W. M., eucalyptus rostrata in the treatment of sea-sickness, 419
Russia, obituary in in 1889, 36; the epidemic in, 46; public health in, 501; the government of and cholera, 623, 699; honours to medical men in, 992; cultivations of opium in, 1050; punishment for adulteration in, 1173; medical societies in, 1283
Rutherford, Professor, structure and contraction of striped muscle, 689
——— Mr. J. H., obituary notice of, 758
Ryan-Tenison, Dr. E. H., the climate of Bexhill-on-Sea, 220, 279; the sale of opium, 1168; the sale of poisons to irresponsible persons, 1332
Rydygier, Dr., decoration of, 578

S.

Sable intestinal, 295
Saccharin in cystitis, 91; tablets, 201; sale of in Portugal, 930; report on by Supreme Sanitary Council of Vienna, 991
Sacchi, Dr. A., death of, 685
Saddle, improved cycle, 306
Sadler, Dr. M. T., the etiology of influenza, 328
Sainsbury, Dr., cerebral symptoms accompanying disease of the middle ear, 1132
St. Bernard's Well, Edinburgh, 1385, 1498
St. Petersburg, trichinæ at, 1338
Salet, M. G., Agenda du Chimiste, *rev.*, 1076
Salford, laying of foundation stone of sanatorium for, 1338
Salicin, effect of on excretion of uric acid and value of air in acute rheumatism, 954
Salicylate of quinine, solution of, 1078
——— of sodium in cholelithiasis and pleurisy, 808; effect on excretion of uric acid and value of in acute rheumatism, 954
Salicylic acid, artificial, 59; and its impurities, 492
——— acids and their salts in rheumatism, 359
Salol as a diagnostic agent, 1400
Salts, chemical, developed in living organisms, 1147
——— of copper in pulmonary phthisis, 102
——— of hypiodous acid, 952
Salufer, preparations of, 84
Salzer, Dr. F., appointed professor of surgery at Utrecht, 1338
Sambucus niger, 265
Sanatorium for Consumptives at Görbersdorf, the management of, 930
Sandwith, Mr. F. M., Egypt as a Health Resort, *rev.*, 189
Sang (du) et de ses Altérations Anatomiques, Professor G. Hayem, *rev.*, 21
Sanitarium of the East, the, 976
——— Lowis, large donation to, 1173
Sanitary authorities, the obligations of, 1436
Sanitary Institutions, English, etc., Sir J. Simon, *rev.*, 550, 608
Sanitas oil, soluble, 964
San Remo, sanitation in, 44; home for invalid ladies at, *ib.*; English Club at, *ib.*; alleged prevalence of consumption at, 1026, 1104, 1167, 1279
Sansom, Dr. A. E., the reform of the University of London, 385; the rapid heart, 1070
——— Dr. S., on mitral stenosis in children, 15
Santha tea, 1489
Sarcoma, of foot, 298; of lung, 299; of kidney, *ib.*; and aneurysm of popliteal artery, 422; of fibula and tibia, 427; large, of the capsule of the left kidney, nephrectomy for, 665; of femur, amputation of hip-joint for, 725; myeloid, of femur, 903; calcifying, of breast, 1192; round-celled, of testis, 1198; of leg, 1199; of the tonsil, 1426
Sarell, Dr. R., decoration of, 910
Saundby, Dr. R., "Lectures on Bright's Disease," translated into German, 355; diabetes after influenza, 1067
Savage, Dr. G. H., the warnings of general paralysis of the insane, 777
Sawtell, Dr. T. H., English and foreign health resorts, 329
Sayre, Dr. L. H., death of, 215; obituary notice of, 332
Scabies, carbolised oil in the treatment of, 781
Scalenus, case of ossifying? 481
Scalzi, Professor F., obituary notice of, 1282
Scarlet fever. See Fever
Scatliff, Mr. P. M., presentation to, 872
Schnee, Dr. E., Diabetes, its Cause and Permanent Cure, etc., *rev.*, 189
Schneider, Dr., death of, 1407
Scholtz, Dr. W. C., the influenza epidemic at the Cape, 600
School, medical, entering in summer session, 702
——— New York Post Graduate Medical, progress of, 493
——— volunteer brigade, formation of, 518
——— Western Medical, Glasgow, a correction, 48
Schools, London Board, enteric fever at, 31; sanitary supervision of, 252; London Board, sanitary condition of, 374; King Edward's for girls, outbreak of influenza in, 418; medical, a eulogy on, 743; insanitary board, 872; civic and moral training in, 913; London Board, infectious disease in, 989; Banstead Down, influenza in, 1015; the closing of, epidemic scarlet fever and, 1321; vital statistics as to the population of, 1435; sanitary state of, 1518
Schott, Dr., acute overstrain of the heart and its treatment, 1159
Schrön, Professor, at Naples, 89
Schulek, Dr. W., elected Rector magnificus of Buda-Pesth University, 1520
Science, botanical, endowment of, 875
Scleremia neonatorum, 403, 439
Scleroderma, case of, 548
Scopola, 92
Scotland, the influenza epidemic in, 149; medical officers of health in, 618; Plea for a reform of the University Teaching in, Dr. J. Finlayson, *rev.*, 906
Scott, Dr. J. A., rectal neoplasms, 670
Scovell, Mr. A. C., medical instruction at fever and small-pox hospitals, 811
Screw clamp, deformities of the extremities treated by means of, 1006
Scrofula, lupus, and tuberculosis, relations of, 1094
Scurvy, bones from a case of, 1192
Sea, putrefaction in the depths of the, 310, 630, 694
—— salts, 487
—— sickness, eucalyptus rostrata in the treatment of, 419; a new remedy for, 1067
—— water and the nutrition of marine animals, 198, 387, 399
Seamen, defective hearing in, 629
Seaton, Dr. E., clinical instruction at the fever hospitals, 387
Selenious acid, action of on microbes, 505
Semon, Dr. F., on the central motor innervation of the larynx, 175; Die Frage des Ueberganges gutartiger Kehlkopfgeschwülste in bösartige speciell nach intralaryngealen Operationen, *rev.*, 1140
Semple, Mr. C. E. A., Essentials of Forensic Medicine, Toxicology, and Hygiene, *rev.*, 1201
Senator, Professor H., Die Albuminurie in physiologisches und klinischer Behandlung, *rev.*, 432; chronic Bright's disease, 1159
Septicæmia, vaccination and, 1227
Serjeant, Mr. W. H., new safety driving rein, 25
Servaes, Mr. F. C., case of multiple pregnancy, 601
Service, proposed public medical, 52, 276, 634; night medical for London, 142; civil medical, national hospitals and, 635; Poor-law medical, 1519
Sewage of small towns, 54
Sewer gas in hospitals, 681
—— ventilation, 989, 1114
Sexton, Dr. S., operation for deafness and tinnitus due to immobilisation of the ossicles and for otorrhœa, 69
Shadwell, Mr. St. C., suburban infectious hospitals, 16
Sharman, Mr. J., obituary notice of, 159
Sharp, Mr. A., case of hydatid of the orbit, 179
Shattock, Mr., malformation of generative organs in fœtus, 296
Shaw, the late Mr. A., 254; obituary notice of, 393
——— Dr. J. E., intracranial tumour, 301
Shawe, Dr. T. C., surgical treatment of general paralysis, 1364
Sheahan, Dr. D. A., Irish diplomas and English hospitals, 1344
Sheard, Mr. W. F., uterine disease discovered after death, 462
Sheen, Dr. A., the influenza epidemic, 146; two cases of trephining, 235; The Workhouse and its Medical Officer, *rev.*, 964; epithelioma primarily affecting the tonsil, 1130
Sheffield, lead poisoning at, 32, 45, 207, 506, 974; correspondence from, 45, 207, 506, 628, 809, 981, 1104, 1331, 1454; the muzzling order, 45; "Sequah," *ib.*; the influenza epidemic at, 148, 204; gifts to hospitals at, 506; nursing of paupers at, 628; deaths of medical men at, *ib.*; medical societies in, 787; the tuberculosis question, 809; portrait of Dr. Law, *ib.*; Fever Hospital, *ib.*;

Children's Hospital, *ib.*; death from pneumonia, *ib.*; typhus in, 902; prevention of cruelty to children, 982; ambulance corps at a military tournament, *ib.*; lead and the public water supply at, 1104; recovery of value of condemned meat, *ib.*; diminution of lead in the water supply of, 1331; the Society for the Prevention of Cruelty to Children, *ib.*; a pétroleuse, *ib.*
Sheldwick, scarlet fever at, 56
Shelly, Mr. C. E., Medical Officers of Schools' Association and influenza, 924
Sherrington, Mr. C. S., note on bilateral degeneration in the pyramidal tracts resulting from unilateral cortical lesion, 14
Sheward, Mr. R., meteorological observations at Eastbourne, 115
Shock, surgical, deaths from, 440
Shoemaker, Dr. J. V., A Treatise on Materia Medica, Pharmacology, and Therapeutics, *rev.*, 187
Shoulder-presentations, 13 in one patient, 1521
Shoulders, two cases of long standing dislocation of, 1
Shrewsbury, the influenza epidemic at, 148
Sibley, Dr. W., psorospermia in relation to tumour formation, 1193
—— Mr. W. K., the University of Strassburg, 99, 379, 443; hospital reform in Berlin, 275; the University of Berlin, 619, 804, 856
Sigmoid flexure, cancer of the, 299
Silcock, Mr. A. Q., acromegaly, etc., 19
Silk, Karswood rubber, 84
—— Dr. J. F. W., a method of admistering etherised nitrous oxide as a general anæsthetic in minor surgery, 126
Simon, Sir J., English Sanitary Institutions Reviewed in their Course of Development, and in some of their Political and Social Relations, *rev.*, 550, 608
Simpson, Mr. J. C., suggestion in hypnotism, 624; diagnosis of pancreatic tumour, 1043; the causation of reduced arterial tension by mercury, 1467
Sims, Dr. M., statue to, 731
Sinus, lateral, operation for septic thrombosis of consecutive to animal disease, 783; longitudinal, complete thrombosis of the, 1133
Sister Rose Gertrude starts for Molokai, 210
Skerritt, Dr. E. M., an ingenious imposition, 452
Skin, remarks on various diseases of the, 4; demonstrations of disease of, 427; electric currents in the, 846; transplantation of in burns, 862; multiple atheroma of, 863; calcifying adenoma of, 895; physiology of the, 1032; disease of the, 1136; hydroxylamin in diseases of, 1207; aristol in diseases of the, *ib.*
—— grafting, case of, 16
Skinner, Dr. G. L., proposed public medical service, 53
——— Mr. E., presentation to, 992
——— Dr. E. W., elected mayor of Winchelsea, 872
Skottowe, Dr. A. J. F., dengue fever in the Fiji Islands, 1485
Skull, punctured fracture of, 725; senile hypertrophy and senile atrophy of the, 1248
Sleep, Mr. F., foreign body in the air passages, 219
Sleman, Sergeant R. R., presentation to, 1407
Small-pox, among the "Peculiar People," 438; at Madeira. 442; at Plymouth, 796, 913; and vaccination, 872; at Milan, 1102; boric acid and glycerine as an application in, 1104; deaths from in the first quarter of 1889, 1115; orchitis in, 1206; in Italy, 1228; mortality from in Sweden, 1339
Smirnoff, Dr. S., Etude sur la Syphilis et son Traitement, *rev.*, 1432
Smith, Staff-Sergeant, admitted as surgeon on the medical staff, 200
—— Dr. Aquilla, death of, 737; obituary notice of, 814
—— Mr. Alder, Medical Officers of Schools Association and influenza, 924
—— Deputy Surgeon-General C. E., obituary notice of, 159
—— Dr. E., A Practical Treatise on Disease in Children, *rev.*, 790
—— Mr. F., congenital stricture of œsophagus in a puppy, 521
—— Dr. G., septicæmia and vaccination, 1227
—— Mr. J. G., two cases of acute intestinal obstruction associated with enormous secretion of peritoneal fluid, abdominal section and recovery in each, 833; the present position of abdominal surgery, 956
—— Dr. J. T., dorsal dislocation of metacarpal bones, 951
—— Mr. J. W., carcinoma of the thyroid, 479
—— Mr. N., bone-drilling in the neighbourhood of inflamed joints and elsewhere, 416, 508
—— Dr. Protheroe, the will of, 215
—— Dr. R. P., the surgical treatment of general paralysis, 11; the epidemic of influenza, 96; the clinical study of insanity, 693
Smith, Dr. R. T., ruptured ovarian cyst, 242; treatment of pelvic abscess, 606
—— Dr. S. W., hospitals and the working classes, 335
—— Dr. T. G., influenza, 425
—— Dr. W., extra-pleural abscess, simulating empyema, 17
—— Dr. W. G., medicated soaps, 1486
—— Mr. W. R., appointed medical officer to the London School Board, 614
—— Surgeon-Major W. R., volunteer medical staff dinner, 1281
Smoke, factory, the new attack upon, 1318
—— abatement, meeting at Mansion House, *re*, 1212
—— nuisance, the, 583, 911, 1263
Smoker, a centenarian inveterate, 993
Smokers, optic nerve atrophy in, 1072
Smyly, Dr. P. C., appointed physician to the Viceregal Court of Ireland, 565
Smyth, Dr. J. W., presentation to, 725
——— Dr. S., first pregnancy late in life, 358
Sneezing, paroxysmal, local treatment in, 1250
Snell, Mr. S., medical societies in Sheffield, 787; artificial ripening of cataract, Förster's operation, 1428
Snow, Dr. H., The General Theory of Cancer Formation, *rev.*, 305; the working of the New Lunacy Act, a warning, 1278; epithelioma primarily affecting the tonsil, 1287
Soaps, toilet, 615; medicated, 1486
Societies, friendly, and their medical officers, 387, 633; the Medical and original work, 563; medical in Sheffield, 787; medical aid, 1333
Society, Anatomical, of Great Britain and Ireland, reports to Collective Investigation Committee of, 851
——— of Apothecaries. *See* Apothecaries
——— Belfast, for Providing Nurses for the Sick Poor, annual meeting of, 1092
——— Charity Organisation, Glasgow, statistics of, 34
——— City of London Truss, annual report, 397
——— Clinical, of London, officers and council, 112; case of traumatic aneurysm of the back following a fracture-dislocation of the spine in the dorso-lumbar region and presumably connected with the lumbar arteries, 131; case of hæmorrhagic varicella, 132; desquamation in the third week of enteric fever, *ib.*; annual meeting of, 143; two rare cases of sacculated vesical calculi in the male successfully removed by suprapubic lithotomy, 239; calculus impacted in the ureter, removed by operation, 240; excision of the head of the femur and erasion of the hip-joint with immediate and permanent closure of the wound, 241; living specimens, 423, 665, 783, 895, 1133; two cases of thrombosis of the cerebral sinuses and veins, 423; trephining for old hemiplegia accompanied by severe headache, 424; biliary fistulæ with escape of biliary calculi, 425; the late Sir W. Gull, 438; two cases of glandular tumour of the tongue, 545; Cheyne-Stokes breathing in glandular kidney, *ib.*; diabetic coma treated by the injection of saline fluid into the veins, *ib.*; acute universal desquamative dermatitis following the administration of chloralamide, 546; abdominal nephrectomy for large sarcoma of the capsule of the left kidney or of the suprarenal capsule, recovery, 665; ruptured small intestine, *ib.*; enlargement of the spleen, 782; double ovariotomy in 1882 and nephrectomy in 1889, *ib.*; an obscure case of acute abdominal obstruction in a boy, aged 10, laparotomy, removal of the suppurating appendix vermiformis, recovery, *ib.*; hydatid cyst of the liver, causing serious displacement of viscera, operation, death, 895; acute diffuse suppurative peritonitis, laparotomy, recovery, 896; tubercular ulceration of the bladder in which recovery followed scraping of the disease through a suprapubic incision after failure of other methods of treatment, 1011; rheumatic pericarditis with delirium, 1012; gastric ulcer, symptoms of perforation, peritonitis, abscess bursting into bowel, 1013; Raynaud's disease in a girl 10 years of age, *ib.*; cerebral symptoms accompanying disease of the middle ear, operation on the ear, complete cessation of the symptoms, 1133; complete thrombosis of the longitudinal sinus, *ib.*; epithelioma of the rectum, excision, restoration of function, 1134; retention of urine from a hydatid cyst of the pelvis, 1248; a case of thyroid tumour, apparently malignant, which all but disappeared after tracheotomy, renewed growth in an undoubted sarcomatous form, 1249; urethral stricture four years after electrolysis, encysted vesical calculi, three operations by lithotrity and three by suprapubic lithotomy, one of which was performed through the perineum, *ib.*; cases illustrating the treatment of phthisis by hot air, *ib.*; report on incubation and infective periods, 1250
——— Clinical, of Manchester, abdominal abscess caused by a pin, 1074; abdominal section for hydatid cyst of the liver, *ib.*; ovarian tumour, *ib.*; flat foot, *ib.*
Society, Cremation, Hamburg, site for crematorium, etc, 1283
——— Cyprus, meeting of, 1339
——— Epidemiological of London, leprosy, 182; typhus fever, *ib.*; Malta fever, 482; eucalyptus in scarlet fever, 723; influenza in France, 1015; influenza in Banstead Down School, *ib.*; enteric fever in India, 1197; dengue fever in the Fiji Islands, 1485
——— French, for help of the wounded, general meeting, 1520
——— Gynæcological, British, fibrous tumour of the uterus, 15; ruptured tubal pregnancy, *ib.*; ectopic gestation, *ib.*; insanity cured by a pessary, 15, 242; ectopic gestation, 242; sloughing of bladder wall, *ib.*; exhibit, *ib.*; specimens, 242, 960, 1073, 1429; dermoid cyst of both ovaries, 242; ruptured ovarian cyst, *ib.*; president's address, 242, 298; financial report, *ib.*; cancer of the uterus, 298; epithelioma on site of specific ulcer, 606; removal of uterine fibroid, *ib.*; epithelioma of the uterus, *ib.*; a long retained pessary, *ib.*; laparotomy followed by fæcal fistula and tetanus, *ib.*; treatment of pelvic abscess, *ib.*; case of Rokitansky's tumour, 669; laparotomy in pelvic abscess, *ib.*; myxomatous tumour removed from the pelvis, 960; portable operating table, 1073; new electrode, *ib.*; the aims and present position of gynæcology, 1073, 1197; pessary, 1197; on the diagnosis and treatment of metrorrhagia, 1302; tumours of the pelvis simulating ovarian tumours, 1429; intestinal obstruction, *ib.*
——— Harveian, of London, list of officers, etc., 57, 216; aural complications in acute specific fevers, 78; albuminuria, 362; cases, etc, 482, 606; surgical sequelæ of fever, 482; warnings of general paralysis of the insane, 784; exhibit, *ib.*; urethral chancres, 959; on the symptoms connected with the circulation in diphtheria, 960; treatment of placenta prævia, 1071; uterine hæmorrhage after the menopause not depending on malignant growths, 1072; adhesion of the soft palate to the pharynx the result of syphilis, 1195; hare lip and cleft palate, 1196; migrating œdema, *ib.*; osteitis deformans, *ib.*; mammary tumour, *ib.*; cases of osteotomy for the relief of malposition after fracture, *ib.*; ill-united Pott's fracture, *ib.*; a case of hyperplasia, *ib.*; Addison's disease of long duration, *ib.*
——— a Health, value of to a community, 93
——— Humane, Glasgow, report of, 565
——— Hunterian, papilloma of uvula, 298; sarcoma of foot, *ib.*; exostosis of tibia, *ib.*; malformed uterus, 299; sarcoma of lung, *ib.*; sarcoma of kidney, *ib.*; necrosis of atlas, *ib.*; pyæmia abscess of sternum, *ib.*; cancer of sigmoid flexure, *ib.*; officers and council, 458; president's address, 547; tender feet in psoriasis, *ib.*,; glycosuria, *ib.*; gumma of the head, 667; cancer of the liver, *ib.*; puerperal nephritis, *ib.*; sebaceous cyst of umbilicus, *ib.*; tubercle of thyroid, *ib.*; hydatid of liver, *ib.*; myeloid epulis, 668; salivary calculus, *ib.*; Paget's disease of nipple, *ib.*; puerperal fever, 841; cases, 900; bronchocele, 1014; amenorrhœa from shock, *ib.*; stricture of œsophagus, *ib.*; treatment of erysipelas, 1015
——— Medical Aid, covering the, 208; remarks on the, 755
——— Medical, of Cardiff, hydatids of the pelvis, 427; borax in epilepsy, 901
——— Medical, Hong Kong, Transactions of the, *rev.*, 138; the Transactions of the, 934
——— Medical, of Leicester, specimens, 135, 550; cholecystotomy and crushing of impaired gall stone in cystic duct, 135; cholecystotomy, *ib.*; vital force, *ib.*; cases, 550; melasma in phthisis, 550; keratitis subepithelialis, *ib.*; two cases of nephrotomy, *ib.*
——— Medical, of London, on mitral stenosis in children, 15; on a case of abscess in the left temporo-sphenoidal lobe, *ib.*; surgery of infancy and childhood, 77, 181, 297; notes on an epidemic of pneumonia, 134; on some cases of nephrolithotomy and a case of partial nephrectomy for injury, *ib.*; case of basic tubercular cavity, 241; operation for partially descended testicle, *ib.*; cases of Thomsen's disease, *ib.*; two cases of complete epispadias, 242; successful removal of internal semilunar cartilage of knee-joint, *ib.*; case of heart disease with nervous symptoms, *ib.*; instrumental indentation of frontal bone, *ib.*; experiments on anæsthetics, 359; influenza, 425; case of phthisis and psoas abscess, 481; osteotomy in club-foot, *ib.*; case of ossifying scalenus (?), *ib.*; case of elephantiasis, *ib.*; two cases of Erb's paralysis, *ib.*; case of rheumatic nodules, *ib.*; case of hydrathrosis, *ib.*; case of severe valvular disease of heart, *ib.*; case of chronic lead poisoning, *ib.*; case of recurrent granular urethritis, *ib.*; annual meeting, 546; on the treatment of fistula in

phthisis, *ib.*; presidential address, 605; paroxysmal hurry of the heart, *ib.*; treatment of lateral curvature of the spine, *ib.*; annual dinner of, 616; carotid aneurysm, 666; inguinal colotomy, *ib.*; unusually loud systolic murmur, 667; operation for horseshoe fistula, *ib.*; athetosis after injury, *ib.*; hip excision, *ib.*; symmetrical trophic affection of nails, *ib.*; necrosis of pharynx, *ib.*; plastic operation, *ib.*; congenital hemihypertrophy of the knee and of certain toes, *ib.*; cystocopic view of a bladder diverticulum, *ib.*; lupus (?) of gums and lips, 667; abdominal surgery, *ib.*; subacute indurative pneumonia, 722; treatment of Dupuytren's finger contraction, *ib.*; list of officers of, 760; operations for septic thrombosis of the lateral sinus consecutive to aural disease, 783; case of pernicious anæmia, 784; the present position of abdominal surgery, 896, 955; pylorectomy, 1013; the annual oration, the rapid heart, 1070; reception, 1071

Society, Medical, of Manchester, list of officers, etc., 160; Thomsen's disease, 429; intrathoracic suppuration without rise of temperature, *ib.*; epidemic influenza, 430; loose bodies in the knee-joint, 607; two cases of defective mental development, *ib.*; the sphygmograph, *ib.*; brain disease in hereditary syphilis, *ib.*; lithotrity in children, 901; epithelioma of the tonsil, *ib.*; treatment of chronic rheumatic arthritis, 902; pancreatic cyst, *ib.*

——— Medical, Midland, specimens, 81, 300, 607, 961, 1016; papers, 81, 483, 607, 725, 961, 1017; cases, 81, 961; communications, 300; syphilitic epiphysitis, 300; right hemiplegia and aphemia due to syphilis, *ib.*; cyst of broad ligament, *ib.*; double sessile (embedded) parovarian cysts, *ib.*; sinus of chest, 482; lead tremor, 483; sphygmographic tracings, *ib.*; unilocular cysts, *ib.*; congenital infantile laryngeal stridor, 607; general paralysis of the insane, *ib.*; melon seed bodies from sheath of tendon, *ib.*; carotid aneurysm, 724; tubercular testes, *ib.*; congenital dislocation of hip, *ib.*; chronic phthisis with unusual dislocation of heart *ib.*; recurrent palpitation, *ib.*; hysterical laryngismus, 725; hemiplegia with optic neuritis, 1017.

——— Medical, Montgomery County (Pa.) elects a lady president, 578

——— Medical, Northumberland and Durham, cases, 20, 364; specimens, 20, 21, 364; weather and disease, 20; new members, 364; papers, *ib.*

——— Medical Officers of Health, table of deaths, 16; suburban infectious hospitals, *ib.*; the isolation of infectious disease, 109; notification of infectious disease, 182; public health in Italy, 481; influenza, 723; meeting of Yorkshire branch of, 931, 981; infectious hospitals and the question of payment, 1015; observations on the factors determining the plumbo-solvent action of moorland waters, 1197; Kodak photographic camera, *ib.*

——— Medical, Public Health, meeting of council of, 1228; annual meeting, dinner, 1279

——— Medical Sickness, Annuity, and Life Assurance, proposed extension to the colonies, 28; remarks on, 203; and the influenza epidemic, 445; report of the, 1101; monthly meeting of executive committee of, 1391

——— Medical, of Southampton, the surgical aspects of impacted labour, 674

——— Medical, Sunderland and North Durham, cases, 20, 824; specimens, 20, 607, 842; hydatids of liver, 20; papers, 20, 607, 842; new member, 607; influenza, *ib.*

——— Medical, of Ulster, meeting of, 501; hospital disabilities of Irish and Scotch diplomates, 737

——— Medical, of Warsaw, donation to, 1227

——— Medical and Surgical, Cork, specimens, 243; stricture of œsophagus treated by gastrostomy, *ib.*; fever, 243, 673; undescended testicle, 483; nasal tumour, *ib.*; uterine and urethral electrolysis, *ib.*; cases, 673; empyema, *ib.*; epithelioma of penis, 1074; deformities of the extremities treated by osteoclasy, *ib.*; sporadic diphtheria following influenza, *ib.*

——— Medico Chirurgical, Aberdeen, centenary of, 40; meeting of, 200, 1091

——— Medico-Chirurgical, Bradford, othæmatoma, 19; radical cure of hernia, *ib.*; intestinal obstruction, *ib.*; meeting of, 873, 931

——— Medico-Chirurgical, Brighton and Sussex, Graves's disease, 18; lichen planus, *ib.*; perityphlitis, *ib.*; demonstrations of skin disease, 427; cancer, *ib.*; cases, 723; specimens, 723, 902; locality of lesions, 724; epistaxis, etc., 902; myeloid sarcoma of femur, 903; skin disease, 1136; primary cancer of omentum, *ib.*; variations of bodily temperature, *ib.*; new Lunacy Acts, *ib.*

——— Medico-Chirurgical, Bristol, case of acromegaly, 301; intracranial tumour, *ib.*; specimens, 301, 724; cases of myxœdema, 724; pulsating exophthalmos, *ib.*; osteitis deformans, *ib.*

——— Medico-Chirurgical, Devon and Exeter, meeting of, 872, 992, 1228

——— Medico-Chirurgical, Edinburgh, rickets simulating pseudo-hypertrophic muscular paralysis, 16; skin-grafting, *ib.*; progressive idiopathic muscular atrophy in a young child, *ib.*; the cystoscope, 17; cyst of the inferior turbinated body, *ib.*; the technique of laparotomy, *ib.*; paramyoclonus multiplex, 426; pancreatic cyst successfully treated by abdominal section, *ib.*; trephining for abscess of the frontal sinus, *ib.*; retention tubes for constriction of the œsophagus, *ib.*; the Koch's-Wolz microscope lamp, *ib.*; syphilis of liver and brain, *ib.*; fatty hernia, *ib.*; intestinal obstruction successfully treated by laparotomy, *ib.*; the influenza epidemic, 659; removal of large foreign body from orbit without injury to sight, 1429; laparotomy in a tubercular child, *ib.*; specimens, *ib.*; exhibits, *ib.*; tetanoid convulsions in an infant, *ib.*; history of an abdominal ligature, *ib.*

Society, Medico Chirurgical, Leeds and West Riding, tubercular origin of pleuritic effusions, 183; the compulsory notification of infectious disease, *ib.*; pathological specimens, 184, 428, 549, 672, 962, 1250; functional disturbances of speech, 428; radical treatment of umbilical hernia, *ib.*; massage of the membrana tympani in catarrh of the middle ear, *ib.*; cases, 428, 786, 1250; exhibit, 428; cystic disease of the breast, 549; abdominal hysterectomy, 672; pyrexia in the puerperal state, *ib.*; influenza, 961; operative treatment of dislocations irreducible by ordinary means, 962; old drawings, *ib.*; nephrolithotomy, 1250; laryngeal phthisis, *ib.*; enlarged liver with increase of white blood corpuscles, *ib.*; list of officers, etc., 1284

——— Medico-Chirurgical, Norwich, combined meeting with the East Anglian and Cambridge and Huntingdon Branches, 1504

——— Medico-Chirurgical, Nottingham, ruptured popliteal aneurysm, 17; suprapubic lithotomy, 18; cases, 18, 673; specimens, 18, 672, 673; stone in children, 80; growths in the naso-pharynx, 183; tubercular emphysema, *ib.*; myositis, *ib.*; ataxic paraplegia, *ib.*; the abuse of medical charities, 335; dermoid cyst, 364; ascending spinal paralysis, *ib.*; hypertrophied mamma in a boy, *ib.*; prevention of abortion, 672; influenza, *ib.*; stricture of rectum, puncture of intestine, 673; bronchiectasis, *ib.*; ovarian cyst, *ib.*

——— Medico-Chirurgical, Sheffield, anthrax, 18; specimens, 18, 244, 301, 429, 671, 787, 902; lead poisoning, 18; poison by coal gas, *ib*; varicella gangrenosa, *ib.*; water-closet system, *ib.*; cases, 243, 301, 787, 902; epidemic influenza, 244; muscæ volitantes, 301; hydramnios, *ib.*; contracted pelvis, 429; diphtheria, *ib.*; scleroderma, 548; Graves's disease, *ib.*; hypnotism, 549; excision of ankle, 671; radical cure of hernia, *ib.*; aural complications of influenza, 787; medical societies in Sheffield, *ib.*; peritonitis treated by incision, 902; typhus in Sheffield, *ib.*

——— Medico-Chirurgical, West Kent, papers, 301; specimens, *ib.*; coccygodynia, *ib.*; treatment of fracture of the patella, 841

——— Medico-Chirurgical, West London, operative statistics, 15; unusual bladder growths, *ib.*; exhibits, *ib.*; treatment of strumous glands, 243; amputation at ankle-joint, *ib.*; specimens, 243, 423, 671, 961; removal of uterine appendages, 426; villous disease of bladder, *ib.*; excision of villous growths from the rectum, *ib.*; cases, 426, 671; cancer of the breast treated by electricity, 960; unconscious automatic actions occurring at the close of epileptic fits, 961; the urticaria of infancy and childhood, 1250; local treatment in hay fever and paroxysmal sneezing, *ib.*; paroxysmal heart hurry associated with floating kidney, *ib.*; specimens, *ib.*

——— Medico-Legal of New York, general meeting of, 1340

——— Microscopical, Scottish, meeting of, 200

——— National Health, lectures on first aid at, 518; scheme for the extension and systematic teaching of personal and domestic hygiene, 1157; the hygienic training of women, 1158

——— Natural History, Epsom College, report of, 1284

——— Neurological, of London, list of officers, etc., 337

——— New Sydenham, the publications of, 103, 519

——— Obstetrical of London, specimens, 132, 361, 900, 1134, 1427; should pregnancy be terminated prematurely in a case of phthisis? 132; five cases of puerperal eclampsia especially illustrating the temperature and urine in this disease, 133; urethral diverticula, 361; annual meeting, *ib.*; financial report, *ib.*; election of officers, *ib.*; the library of, 361, 615; examination for midwives, *ib.*; composition fee, 362; president's address, *ib.*; the retiring honorary secretary and honorary librarian, *ib.*; the retiring officers, *ib.*; list of officers, etc., 395; last meeting of, in Berners Street, 560; the change in size of the chest and abdomen during the lying-in period and the effect of the binder upon them, 604; apoplexy of the ovary, cystic dilatation without rupture, 605; first meeting at Hanover Square, 851; four cases of vaginal hysterectomy, 1134; ectopia viscerum, 1427; spurious pregnancy simulating ectopic gestation, *ib.*; fever in childbed, *ib.*

Society, Obstetrical and Gynæcological, Glasgow, vomiting in the later months of pregnancy, 903

——— Obstetrical and Gynæcological, for North of England, proposal for a, 57; officers, etc., of, 277; specimens, 1199; papers, *ib.*

——— Odontological, of Great Britain, list of officers, etc., 216; teeth in dermoid cyst, 594

——— Ophthalmological, French Congress of, 1165

——— Ophthalmological, of the United Kingdom, glaucoma after extraction of cataract, 297; card specimens, 298, 669, 1072, 1429; special meeting of, 613; case of primary glaucoma at the age of 22, 668; case of spontaneous purulent hyalitis nine months after successful cataract extraction, *ib.*; note on the metre angle in latent and muscular deviations, *ib.*; on the immediate effect of tenotomy on the concomitancy of a squint, 669; corneal tumours (fibroma), in a man, aged 72, 1072; optic nerve atrophy in smokers, *ib.*; the artificial maturation of immature senile cataract by trituration, 1072, 1428; artificial ripening of cataract, Förster's operation, 1428

——— Pathological, of London, list of officers, etc., 57; the pathology of duodenitis after burns, 76; intussusception of the jejunum in an adult, due to polypus, *ib.*; a cardiolith, *ib.*; rupture of spleen, 77; card specimens, 77, 297, 423, 545, 665, 786, 895, 1070, 1195; election of officers, 77; president's address, *ib.*; report, *ib.*; specimens illustrating disease of the thyroid gland, 180; thrombosis of portal vein with suppurative peritonitis, 181; the late Sir W. Gull, 294; *Sable intestinal*, 295; repair after rupture of the spleen and kidney, *ib.*; retroperitoneal hernia, *ib.*; myxofibroma of (?) pelvis or uterus, 296; malformation of generative organs in fœtus, *ib.*; large spleen from an infant, *ib.*; epitheloma of lower eyelid (?) crateriform ulcer, *ib.*; primary sarcoma of the pancreas, *ib.*; compression myelitis with and without secondary degenerations, 422; cancer of omentum, *ib.*; aneurysm of popliteal artery and sarcoma, *ib.*; embolism of gluteal artery, 423; ancient Egyptian bones with osteoarthritis and senile symmetrical atrophy of skulls, *ib.*; carcinoma (? duct cancer) of all the mammary glands of a cat, 543; prolapse of part of the wall of the stomach into the duodenum from a horse, *ib.*; case of chronic lateral invagination of the colon following on a malignant growth, *ib.*; diffuse papilloma of bladder, 544; loose body from knee-joint, *ib.*; necrosis and separation of articular cartilages, *ib.*; recent specimen, 545; bronchial casts from bronchitis crouposa, 663; three cases of coccygeal tumours, *ib.*; Paget's disease of nipple with psorospermiæ, 664; half vertebra in a rabbit, *ib.*; cases of imperforate rectum and imperforate anus, *ib.*; cancer of œsophagus eroding trachea, 785; central necrosis of radius without suppuration, *ib.*; lymphatic nævus of tongue, *ib.*; macroglossia, *ib.*; tuberculosis in birds, with observations on the relation of the disease to leprosy, *ib.*; fracture dislocation of spine, paraplegia, operation, death from pneumonia two months later, 786; microscopical specimen of enlarged spleen from a child, *ib.*; perforating ulcer of duodenum, 893; spontaneous fracture of vesical calculi, *ib.*; spontaneous fracture and reunion of vesical calculi, *ib.*; melanotic epithelioma, 894; melanotic carcinoma of labium, *ib.*; the varying effect of violence in producing fractures, *ib*; four sacculated aneurysms arising from a dilated aortic arch, *ib.*; calcifying adenoma of the skin, 895; specimens of persistent thyroid duct, 1069; myoma of the uterus becoming sarcomatus, *ib.*; ulcerative endocarditis, aneurysm, and amyloid degeneration, *ib.*; tubercular disease with multiple abscesses of the liver, 1070; duct carcinoma of breast, *ib.*; suggestions of council of, 1176; report of Morbid Growths Committee, 1192; multiple tubercular strictures of the colon, *ib.*; bones from a case of scurvy, *ib.*; calcifying sarcoma of breast, *ib.*; psorospermia in relation to tumour formation, 1193; cystic disease of breast complicated with cancer, *ib.*; post-scarlatinal cirrhosis of the kidneys (small white) in a girl, aged 12, *ib.*; contracted granular kidneys in young persons, *ib.*; tuberculosis with aspergillus niger simulating actinomycosis, 1194; carcinoma of the testicle, *ib.*; hemianopsia with softening of the left cuneus, *ib.*; disseminated polypi of the large intestine becoming malignant, 1195; spontaneous fracture of a renal calculus, *ib.*; necrosis of a portion of the fifth lumbar vertebra, *ib.*; volvulus of the small intestine, *ib.*; fibrochondroma of tongue *ib.*

——— Pathological, of Manchester, disease of the breast in the male, 244; Pal's method of staining nerve tissue, *ib.*; epithelioma of colon, *ib.*; brain from a case of congenital syphilis, 427; perforation of the bowel, *ib.*; Cheyne-Stokes respiration,

ib.; sarcoma of the tibia and fibula, *ib.*; diseased kidneys, *ib.*; spinal cord in alcoholic paralysis, *ib.*; specimens, 671; the kidneys in diphtherial uræmia, 962; osteomyelitis, *ib.*; adenoma of the rectum, *ib.*; unusual form of aortitis and thoracic aneurysm, *ib.*
Society, Pharmaceutical, of Great Britain, annual dinner, 1209; *conversazione*, 1228
——— Philosophical, Glasgow, meeting of, 565
——— Public Health, German, date and place of annual meeting, 685
——— Public Health Medical, meeting of Council of, 929; annual meeting of, 1393
——— for the Relief of Widows and Orphans of Medical Men, quarterly court of, 191, 1111; annual meeting of, 1328
——— Royal, appoints committee on colour blindness, 968; candidates for election, 1024; *conversazione* at, 1154; new members, 1370; ladies' night at, 1437
——— Royal, of Edinburgh, meeting of, 93, 199, 376, 441, 564, 1385, 1498; relations of the and army reserve, 1211
——— Royal Medical Benevolent of Ireland, annual meeting, 1328
——— Royal Medical and Chirurgical, successful removal of the entire upper extremity for osteochondroma, 131; the mechanism of suspension in locomotor ataxy, 131, 238, a case of hernia of the cæcum entirely wanting in a peritoneal sac, in which strangulation at the internal abdominal ring coexisted with an intussusception through the ileo-cæcal valve, 238; rheumatism, its treatment past and present, with special reference to recent experimental research on salicylic acids and their salts, 359; the new hall of, 438; on the symptomatology of total transverse lesions of the spinal cord with special reference to the condition of the various reflexes, 480; the new house of, 503, 1262; list of officers, 508; report of council, 543; change of by-laws, *ib.*; president's address, *ib.*; election of officers, *ib.*; analysis of 964 cases of operation for calculus in the bladder by lithotomy and lithotrity with remarks, 603; on the history of uric acid in the urine with reference to the formation of uric acid concretions and deposits, 721; a study of fifty consecutive cases of operation for the radical cure of non-strangulated herniæ, 840; salicin compared with salicylate of soda as to the effect on the excretion of uric acid and value in acute rheumatism with some deductions as to the cause of the disease, 954; on the condition of the reflexes in cases of injury to the spinal cord, with special reference to the indications for operative interference, 1132; senile hypertrophy and senile atrophy of the skull, 1248; on the cure of leprosy, *ib.*; a contribution to the chemistry of gout, 1369; on 400 cases of amputation performed at St. George's Hospital from October, 1874, to June, 1888, with especial reference to the diminished rate of mortality, 1370
——— Santa Claus, work of, 690
——— Scottish National for the Prevention of Cruelty to Children, the work of, 683
——— Seamen's Hospital, the new hospital of, 1467
——— for the Study of Inebriety, annual meeting, 775
——— Surgical Aid, North of England, annual meeting, 416
Sodium salt of cresotic acid, 1088
——— silicofluoride, report on as an antiseptic, 355; note on some properties of, 1425
Soil, bacteria of the, 1441
Sol. iodi, 1019
Solly, Mr., myxofibroma (?) of pelvis or uterus, 296; melanotic sarcoma of labium, 894
Solutions, hypodermic, 191
Somnolence, prolonged, after influenza, 1067
Sonsino, Dr. P., appointed teacher in the University of Pisa, 656
Sortain, Mr. B. V., death of, 251; obituary notice of, 332
Southam, Mr. F. A., lithotrity in children, 901
South America, notification in, 872
Southampton, Hospital Sunday collection at, 1338
South Australia, new Medical Act for, 510
South Shields, new wing for workhouse hospital at, 698
Spaces, open, 160
Spain, obituary in, in 1889, 36; cholera in, 1438, 1501; the question of physical exercise and school hygiene in, 1466
Spanton, Mr. W. D., epithelioma on site of specific ulcer, 606
Specific Unbelief, Mr. A. D. Lamb, *rev.*, 963
Speech, functional disturbances of, 428
Spencer, Dr. W., resigns deputy coronership for Retford district, 518
——— Mr. W. G., case of traumatic aneurysm of the back following a fracture-dislocation of the spine in the dorso-lumbar region and presumably connected with the lumbar arteries, 131; carcinoma (? duct cancer) of the mammary glands of a cat, 543; prolapse of part of the walls of the stomach into the duodenum from a horse, *ib.*; awarded Jacksonian prize, 910
Spender, Dr. J. K., the dynamometer as an instrument of diagnosis, 541
Sphygmograph, the, 607
Spicer, Dr. Scanes, local treatment in hay fever and paroxysmal sneezing, 1250
Spinal. *See* Spine
Spine, injury to the, 80; traumatic aneurysm of back following fracture-dislocation of, 131; treatment of lateral curvature of the, 605; fracture-dislocation of, 786; treatment of caries of, 1510
Spirometer, Stanley's medical, 306, 727
Spitalfields churchyard as an open space, 1024
Spleen, rupture of, 77; repair after rupture of the, 295; large, from an infant, 296; spontaneous rupture of, in malaria, 498; enlargement of the, 782; enlarged, from a child, microscopical specimens of, 786; a floating, in the pelvis, 1440
Splint for foot-drop, 24
Sprains, treatment of, 1355
Springthorpe, Dr. J. W., The Nervous Substratum of Influenza, *rev.*, 303
Sputum, bacillus of tubercle in, 1016
Squance, Dr., weather and disease, 20
Squint, the immediate effect of tenotomy on the concomitancy of, 669; the operation for, 922
Squire, Mr. A. J. B., a case of diabetes benefited by phosphorus, 293
——— Mr. P., Companion to the latest Edition of the "British Pharmacopœia," *rev.*, 844
——— Dr. W., the paralyses of childhood, 285; the etiological relations of pneumonia, 356
Stacey, Mr. W. H. W., presentation to, 867
Stadelmann, Dr. E., the influence of alkalies on assimilation, 1033
Stafford, Dr. T. J., presentation to, 1338
Stalkartt, Mr. C. E. J., precocious menstruation, 836
Stammering, temporary, coming on with tonsillitis, 1009
Stanhope, Mr., and the army medical department, 554, 566, 612, 631, 676, 751
Staniforth, Mr., varicella gangrenosa, 18
Stanistreet, Dr. R., obituary notice of, 455
Stanley expedition, the, and the Royal Commission on Vaccination, 1084
Stansfield, Mr. G. S., gastro-enterostomy with Senn's approximation plates, 294, 1300
Staphylococci, urethral, 1275
Starr, Dr. L., Hygiene of the Nursery, *rev.*, 790
State medicine qualification, the, 1137
Stawell, Mr. J. C., scarlet fever and puerperæ, 1068
Stealing, monomania in, 1084
Steamboats, English, American lepers and, 195
Steamers, ocean, supervision of, 1262; Atlantic, New York and the medical service of, 1500
Steele, Dr. C., the value of the jury mast, 1009; the coming election at the College of Surgeons, 1402; new chair support for spinal curvature, 1489
——— Dr. W. C., the epidemic of influenza, 96, 150
Steinthal, Mr. W. O., triplets, hydramnios, 601
Stenosis, mitral, in children, 15; laryngeal, from fixed adduction of the vocal cords, 837
Sternberg, Dr., tendon reflexes, 1327
Sternum, pyæmic abscess of the, 299
Stethoscope, an improvement of the, 25; modified binaural, 368
Stethoscopes, binaural, an improvement in, 1432
Steven, Dr. J. L., case of hepatic abscess secondary to severe pelvic peritonitis following upon salpingitis without definite symptoms during life, 289; a case of multiple tubercular tumours in the brain of a child aged 7½ months, with remarks, 1244
Stevenson, Mr. J. R., laparotomy followed by fæcal fistula and tetanus, 606
——— Mr. N., the history and uses of the protected surgical electric lamp, 290
Stewart, Dr. D., growths in the naso-pharynx, 183
——— Dr. T. G., paramyoclonus multiplex, 426; syphilis of liver and brain, *ib.*
——— Mr. W. R. H., intratympanic syringe, douche, and aspirator, a vulcanite ear-shoot, 1077
Stiles, Mr. G. S., obituary notice of, 111
Stillbirth, certificates of, 509, 753
Stimulants in workhouses, 1209, 1219, 1337
Stirling, Professor, Outlines of Practical Histology, *rev.*, 1372
Stirpiculture, or the Ascent of Man, Dr. A. P. Reid, *rev.*, 1431
Stockman, Dr. R. C., report on the excretion of balsams in the urine, 1365
Stocks, Mr., sarcoma of tibia and fibula, 427
Stokes, Sir W., remarks on pylorectomy, 987
Stoker, Mr. W. T., surgery of the brain, 1485
Stomach, dilatation of, accompanied by the eructation of inflammable gas, 470; prolapse of part of the wall of into the duodenum from a horse, 543; ulceration of the, 1057; gastro-enterostomy, with excision of a portion of the, 1090; resection of, for simple ulcer, 1339
Stomatitis, mercurial, a curious case of, 1275
Stone, in children, 80
——— Mr. Alderman, death of, 493
——— Miss E. C., registration of, 815
——— Fleet-Surgeon J. N., case of popliteal aneurysm, ligature of femoral artery, 232
——— Mr. T. M., John Hunter and William Clift, 865
Stove, new nursing, 368
Strand, the improvement scheme in, 144
Strange, Dr. W., sanitary experts and the charge of obstructing justice, 386
Strangulation, acute intestinal due to a band, etc., laparotomy, recovery, 124
Strassburg, establishment of meteorological station on tower of cathedral of, 56
Street's list of Newspapers published in Great Britain and Ireland, *rev.*, 307
Stridor, congenital infantile laryngeal, 607
Strophanthin, remarks on, 1327
Strophanthus in infantile diseases, 321; as an anæsthetic, 746; the action of, 1381
Struthers, Dr. A. J., death of, 42
Strychnine bonbons, 1322
Stubbs, Martin *v.*, 931
Students, clinical, at asylums, 29; at the fever hospitals, 253; London medical, degrees for, 559, 1147, 1262, 1321, 1383, 1433, 1492, 1511; missionary, 578; French medical, 746; German medical, 1051
Styria, influenza in, 1520
Substitute in an emergency, 330
Substitutes, duty of, a question of fees, 1402
Succi, Signor, the fast of, 764, 819, 876, 935, 996, 1056, 1444; a "hunger virtuoso," 930
Suckling, Dr., syphilitic epiphysitis, 300; right hemiplegia and aphæmia due to syphilis, *ib.*; agoraphobia, 429; lead tremor, 483; sphygmographic tracings, *ib.*; congenital infantile laryngeal strider, 607; general paralysis of the insane, *ib.*; hysterical laryngismus, 725; hemiplegia with optic neuritis, 1017
Suffolk, the influenza epidemic of, 148
Suggestion, hypnotism and, 912, 924, 983; in insanity, 951; hypnotic, in eye disease, 1276
Suicide and the New Lunacy Act, 1085
Sullivan, Dr. W. K., death of, 1154; the Council of Queen's College, Cork and, 1212
Sulphate of copper, pseudo-eczema from contact with, 383
Sulphonal, *post-partum*, 179; morbid symptoms of, 570; a contribution to the study of, 710
——— capsules, 790
Sulphones, certain, the relation between chemical constitution and physiological action of, 87
Sulphur vapour in whooping-cough, 1508
Supersession, 986
Supervision of ocean steamers, 1262
Supplanter, a, 925, 1045
Suppositories, glycerine, 84; tabloids and, 191
Suppuration, intrathoracic, without rise of temperature, 429; and septic disease, 611; intracranial trephining in a case of, 891
Surgeon, certifying factory, a director as a, 48; libelling a, 633
Surgeons, dentists and, 105; certifying factory, 493; army, *see* Doctors
Surgeries, advertising, 574
Surgery, of infancy and childhood, 77, 181, 297; the Student's, Mr. F. J. Gant, *rev.*, 247; Rectal and Anal, etc., Drs. E. and E. W. Andrews, *rev.*, 303; Archives of, Mr. J. Hutchinson, *rev.*, 432, 1373; abdominal in Cuba, 745; Ophthalmic, Original Contributions to, Dr. J. R. Wolfe, *rev.*, 845; abdominal, the present position of, 896, 955, 967, 1042, 1105, 1167, 1219, 1332; Pathological and Allied Subjects, Mr. F. C. G. Clark, *rev.*, 1158; cerebral, 1146
Surgical instrument makers as practitioners, 876
Suspension in locomotor ataxy, the machinery of, 131, 238, 746, 1357
Sutton, Mr. J. B., the relation of morphology and pathology, 350, 415; teeth in dermoid cysts, 549; half vertebra in a rabbit, 664; fatty tumours, 877
Suture, sub-cuticular, 414, 751
——— plate, an improved form of, 1202
Swain, Mr. J. S., vinegar in urticaria, 1056
Swan, Dr. S. A. C., dilatation instead of support of the perineum, 1119
Swanzy, Mr. H. R., clinical teaching in Dublin, 327; a series of 100 cataract extractions, 531, 671
Swayne, Dr. J. G., the surgical aspect of impacted labour, 983
Sweden, small-pox mortality in, 1339
Sweeping without dust, 279
Sweeten, Mr. B., a case of Thomsen's disease, 73
Sweeting, Mr., presentation to, 565
——— Mr. R. D. R., appointed medical inspector to Local Government Board, 438
Switzerland, correspondence from, 864, 1276, 1509; the medical faculties of, 864; medical service in, 1510

Sydenham, Mr. G. F., acute pemphigus, 129; influenza, rapid spontaneous gangrene, 477
Sykes, Mr. W., hymeneal obstruction, a bibliographical note, 507, 935; no cure, no pay, 925; Kodak photographic camera, 1197
Symes, Surgeon G. H., obituary notice of, 517
Sympson, Mr. E. M., two cases of congenital and infantile cerebral palsy, 283; treatment of perspiring feet, 1286
Syphilis, vaccination and, 29; cerebral and general paralysis, 88; right hemiplegia and aphemia due to, 300; of liver and brain, 426; congenital, brain from a case of, 427; Nervous, Dr. H. C. Wood, *rev.*, 433; alleged transmission of by vaccination, 561; hereditary, brain disease in, 607; congenital, with arrested development, 642; benzoate of mercury, 1087; adhesion of soft palate to pharynx, the result of, 1195; et son Traitement, Étude sur la, Dr. S. Smirnoff, *rev.*, 1432; as a neurosis, 1496
Syringe, hypodermic, infection and aspiration with for diagnostic purposes, 72; an intratympanic douche and aspirator, a vulcanite ear-shoot, 1077
Syringes, hypodermic, the graduation of, 115
System, nervous, the development of, 145

T.

Tabes. *See* Locomotor Ataxy.
Table, the "Newlands," 368; portable, operating, 1073
Tablets, insoluble compressed, 1115
Tabloids and suppositories, 191
Tafani, Dr. A., obituary notice of, 1170
Tafel, Dr. R. L., Diabetes, its Cause and Permanent Cure, etc., *rev.*, 189
Tait, Mr. L., ruptured tubal pregnancy, 15; ectopic gestation, 15, 242; dermoid cysts of the ovaries, 80; typhlitis and perityphlitis, *ib.*; the "Porro-Cæsarean" operation, 154, 573; Diseases of Women and Abdominal Surgery, *rev.*, 186; the surgical aspect of impacted labour, 657, 674, 864; nephrotomy or nephrectomy, 725; mistakes concerning ectopic gestation, 924; the present position of abdominal surgery, 955; ectopic pregnancy in the broad ligament, 1044; the discussion at the Medical Society, 1105, 1219; the management of impacted labour, 1332, 1456
Talim-I-Zabàn-I-Urdu, Dr. G. S. A. Ranking, *rev.*, 305
Tannin, idiosyncrasy in relation to the use of, 1087
Tatham, Mr. G., obituary notice of, 987
——— Mr. R. G., cancer of the liver, 667
Tayler, Dr. W. H., home for medical men and their widows, 269
Taylor, Dr. A. E., the influenza epidemic, 146
——— Dr. C. B., the operative treatment of cicatricial ectropion, 74; the flesh of animals inoculated with anthrax or malignant pustule as food, 1287
——— Dr. H. C., Madeira or Canary Islands? 59; Wanderings in Search of Health, *rev.*, 1199
——— Mr. H., cases illustrating the treatment of phthisis by the inhalation of superheated air, 1249
——— Mr. H. S., the late Professor von Wahl, 582
——— Mr. J. N., cyst of broad ligament, 300; unilocular cysts, 483; the present position of abdominal surgery, 899; early diagnosis of extra-uterine pregnancy, 1043
——— Surgeon-Major J. W., complimentary dinner to, 578
——— Dr. S., biliary fistulæ with escape of biliary calculi, 425; case of chronic lead poisoning, 481
——— Dr. W. (Cardiff), presentation to, 1338
——— Dr. W. (Edinburgh), history of an abdominal ligature, 1429
Tax, the carriage, 1333
Tea, dietetic, 905
Teacher, Dr. C. C., an improvement in binaural stethoscopes, 1432
Tea-drinkers, a hint for, 934
Teeth in dermoid cysts, 549; human, the carious process in, 914
Telephone, the, as a bullet-finder, 135; and contagion, 903
Temperance and longevity, 1262
Temperature of the earth, 114; bodily, variations of the, 1136
Tendon, melon seed bodies from sheath of, 607
——— reflexes, 1327
Tenotomy, the immediate effect of on the concomitancy of squint, 669
Terminologia Medica Polyglotta, Dr. T. Maxwell, *rev.*, 1372
Terrier, M., elected member of the French Academy of Medicine, 1228
Terrillon, M. O., Traité des Maladies du Testicule, *rev.*, 432
Testes, tubercular, 724
Testicle, partially descended, operation for, 241, 351; undescended, 483; carcinoma of the, 1194; round-celled sarcoma of the, 1198
Testicule, Traité des Maladies du, MM. Ch. Monod and O. Terrillon, *rev.*, 432
Tetanus, puerperal, 312; spontaneous cure of, 505; idiopathic following Russian influenza, 719; cure of, 922
Thames Valley, Bill for drainage of withdrawn, 457
Therapeutics, studies in, 87, 492, 557; Suggestive, Dr. H. Bernheim, *rev.*, 366; suggestive, 573
Thermogenesis and the motor levels, 1287
Thermometers, broken, 934
Thiersch, Professor, chosen president of Congress of German Surgeons, 991
Thin, Dr. G., psilosis (linguæ et mucosæ intestini), 1357
Thompson, Surgeon A. S., death of, 931
——— Surgeon C. M., paraplegia from syphilitic disease of cord, 1371
——— Surgeon F. W., influenza in a native regiment, 1269
——— Sir H., analysis of, 964; cases of operation for calculus in the bladder by lithotomy and lithotomy, with remarks, 603
——— Dr. J. H., the kidneys in diphtherial uræmia, 962
——— Mr. J. T., superficial keratitis caused by aniline violet, 836
——— Mr. T. W., appointed temporary inspector in Medical Department of Local Government Board, 493
——— Dr. W. H., abnormal right subclavian artery, 300
Thomsen's disease. *See* Disease
Thomson, Dr. J., progressive idiopathic muscular atrophy in a young child, 16
——— Mr. J., herpes zoster brachialis, 963
——— Dr. T., typhus in Sheffield, 902
——— Mr. T. P., scarlet fever and puerpera, 602
——— Mr. W., the discussion at the Medical Society, 1042, 1167
Thorburn, Mr. W., disease of the breast in the male, 244; spinal localisation, 866; epithelioma of the tonsil, 901
Thornton, Mr. B., the treatment of strumous glands, 243
——— Mr. J. K., abdominal nephrectomy for large sarcoma of the capsule of the left kidney, or of the suprarenal capsule, recovery, 665; the present position of abdominal surgery, 898, 958; the Surgery of the Kidneys, *rev.*, 1303
Throat, infectious sore, and diphtheria, 971; treatment of affections of the, 1039
Thrombosis of portal veins with suppurative peritonitis, 180; of cerebral arteries and veins, two cases of, 423; complete of the longitudinal sinus, 1133
Thursfield, Dr. W. N., scarlet fever and the puerperal condition, 75
Thyroid gland specimens illustrating disease of the, 180; removal of enlarged right lobe of, recovery, 479; carcinoma of, *ib.*; tubercle of, 667; grafting of in myxœdema, 1467
Tibbles, Mr. W., the epidemic of influenza in the sanitary district of Melton Mowbray, 834
Tibia, exostosis of, 298; sarcoma of, 427
Tic-douloureux, a case of, 1344
Tientsin, influenza in, 991
Tillmanns, Dr., the surgical treatment of tuberculosis of the pleura and lung, 1363
Tilt, Dr. E. J., the increase of consumption at health resorts, 1167
Timms, Dr. G., polluted oysters at Naples, the supposed cause of typhoid, 1055
Tinnitus, operation for, 69
Tippling at the chemist's counter, 1085
Tissues, nervous, new method of examining in the fresh state, 714
Tobacco amblyopia in a woman, 962
Tongue, two cases of glandular tumour of, 545; epithelioma of, 673; lymphatic nævus of, 785; a case of idiopathic inflammation of the, 1067; fibrochondroma of the, 1195; pilocarpin in dryness of the, 1366; asphyxia from pressing down the, 1508
Tonsil, epithelioma of the, 901; epithelioma primarily affecting, 1008, 1130, 1286; sarcoma of the, 1426; supernumerary, 1129
Tonsillitis, diphtheritic, outbreak of at Eton College, 474; temporary stammering coming on with, 1009
Tonsils, is removal dangerous? 1440
Toogood *v.* Wilkes, 400, 462, 925, 934
Tooth, Dr. H. H., The Goulstonian Lectures on Secondary Degeneration of the Spinal Cord, *rev.*, 305
Toothplate passed *per anum*, 952
Torquay, visit of Princess Louise to, 1173
Touting for special hospitals, 574
Towers-Smith, Mr. W., the treatment of influenza, 163; the treatment of obesity, 1246
Town life and disease, 195
Townsend, Dr. C. W., the Mortality of Acute Lobar Pneumonia, *rev.*, 609
——— Dr. H. R., nasal tumour, 483
Trachea, fracture of the, 1210
Tracheotomy under difficulties, 1130
Tracings, sphygmographic, 483
Transfusion apparatus Munchmeyer's, 115
Traube, Professor, proposed memorial to, 678
Tredegar, diphtheria in, 733
Trélat, Professor, obituary notice of, 814
Trephining, two cases of, 236; for old hemiplegia accompanied by severe headache, 424; for abscess of the frontal sinus, 426; in actinomycosis of the brain, 709; for cerebral tumour, 863; in a case of intracranial suppuration, 891
Tresidder, Dr., influenza, 672
Tresilian, Dr. F., carbolised oil in the treatment of scabies, 781
Trestrail, Mr. H. E., dilatation instead of support of the perineum, 1009, 1232
Trevelyan, Dr., cystic disease of the breast, 549; laryngeal phthisis, 1250
Treves, Mr. F., the present position of abdominal surgery, 899; a German English Dictionary of Medical Terms, *rev.*, 963
Trichinæ at St. Petersburg, 1338
Trichinosis, severe punishment for selling pork affected by, 518
Trichloracetic acid as a test for albumen in the urine, 681
Triplets, hydramnion, and a cardiac monster, 199; heredity as to, 541; case of, 601
Trituration, the maturation of immature senile cataract by, 1072
Trocar, a guarded capillary for suprapubic puncture of the bladder, 83, 163, 219; new expansion, 675
Tröltsch, Dr. A. F. v., death of, 160
Tropics, ether inhalers in the, 163
Tubercle, of thyroid, 667
Tuberculosis, prophylaxis of, 44; balsam of Peru in, 92, 863; the study of, 435; in Vienna, 571; laryngeal, peculiar obstructive form of, 715; laryngeal treatment of, 747; in birds, with observations on the relation of the disease to leprosy, 785; bovine, the Agricultural Department and, 791; the meat trade and, 1079; with aspergillus niger simulating actinomycosis, 1194; of the pleura and lung, the surgical treatment of, 1363; emphysema and, 1508
Tubes, retention, for constriction of the œsophagus, 426; capillary, filling with vaccine lymph, 995
Tucker and Co., Messrs., eucalyptus disinfectant fluid, 139
Tuke, Dr. J. B., the surgical treatment of intracranial fluid pressure, 8; *v.* Young, 377; Reports from the Laboratory of the Royal College of Physicians of Edinburgh, *rev.*, 552
Tumour, intracranial, 301; nasal, 483; cancerous, successful removal of from the pancreas, 561; Rokitansky's, case of, 669; cerebral trephining for, 863; myxomatous, removal from pelvis, 960; pancreatic, diagnosis of, 1043, 1278; corneal (? fibroma) in a man aged 72, 1072; ovarian, 1074; of brain, 1135; thyroid, apparently malignant which all but disappeared after tracheotomy, renewed growth in an undoubted sarcomatous form, 1249; very large, removal of from neck, 1422
Tumours, fibroid of uterus, 15; micro-organisms in, 498; glandular of tongue, 545; of the uterus, treatment of by electricity, 570; coccygeal, three cases of, 663; corneal, 670; orbital, 725; fatty, 877; multiple tubercular in the brain of a child, 1244; of the pelvis simulating ovarian tumours, 1429
Turchi, Professor M., obituary notice of, 986
Turkey, cholera in, 681, 1321
Turner, Dr. F. C., gumma of the heart, 667
——— Mr. G. R,, a case of thyroid tumour apparently malignant which all but disappeared after tracheotomy, renewed growth in an undoubted sarcomatous form, 1249
——— Turner, Dr. P. D., the reform of the University of London, 450
——— Sir W., elected member of Athenæum Club, 760; honorary degree of D.C.L. conferred on, 1494
Turning, a difficult case of, rendered easy by placing patient in the genu-pectoral position, 888, 1055
Turton, Mr., primary cancer of omentum, 1136
Tweed, Mr. J. J., presentation to, 1373
Twin, a sireniform, 253
——— pregnancy, a healthy and a macerated fœtus, 129
Twynam, Mr. G., calculus impacted in the ureter removed by operation, 240
Typhoid Fever. *See* Fever, Enteric
Typhus fever. *See* Fever.

U.

Ueber das reiskörperchenhaltige Hygrom der Sehnenscheiden, Dr. E. E. Goldmann, *rev.*, 1201
Ulcer, duodenal, after a burn, 128; specific, epithelioma on site of, 606; perforating of duodenum, 893; gastric, with symptoms of perforation, etc., 1013
Ulceration, tubercular, of bladder, cured by scraping, 1011
Umbilicus, sebaceous cyst of, 667
Underbidding, 105
Union, Medical Defence, donation to, 112; and the members of the General Medical Council, 207, 270;

annual meeting of, 318; in Ireland, 339, 461; meeting at Cardiff respecting, 445; meeting of, 760; meeting of South Wales and Monmouthshire District of, 1052; the work of, 1116; meetings of Executive Committee of Metropolitan division of, 1161, 1448; prosecution by for assumption of medical titles, 1402; union, proposed students, 617
United States of America, obituary in for 1889, 35; the Peculiar People in, 88; nursing in, 216; medical education in, 518, 850; physical strength in, 522; treatment of lunatics in, 854; the study of insanity in, 1467; yellow fever in, 1520
Universities, German, students at, 317, 1393, 1520; Russian, students at, 421; German, teaching of medical jurisprudence at, 737; Austrian, students at, 860; Scottish, reform in teaching in the, 906; German, foreign students at, 992
University of Aberdeen, town council, representative on the court of, 94; the court of, 314, 1325; athletics at, 442; double attendance at lectures at, 500; professors at, 502; close of winter session, 683; examinations at, 735; proposed increase of fees at, 736; compulsory public health examination, 855, 915; pass lists, 870; medical preliminary examinations at, 972; opening of the summer session at, *ib.*; the medical faculty at, 973; the election of Rector of, 1211; athletics, 1224, 1267; special subjects, *ib.*; examinations, *ib.*; anatomy fees at, 1267; reform of the, 1386; the lord rectorship of, 1442; the general council of, 1460; class hours at, 1498
———— American, the history of an, 140
———— of Basle, admission of women at, 698
———— of Berlin, notes on, 619, 804, 856; the academic year at, 1520
———— of Bonn, new pharmacological institute at, 1115
———— of Cambridge, pass lists, 52, 1224, 1281, 1460, 1515; State medicine at, 106, 1435; degrees, 215, 332, 456, 578, 636, 697, 1045, 1460; teacher of vaccinations at, 332, 511; curator in zoology, *ib.*; electors to professorships, 395; additional lectures in botany, 511; pass examinations, *ib.*; University of Toronto, 578; Philosophical Society, *ib.*; medical examinations at, 636; scholarships and exhibitions, *ib.*; pathology, 697; examinations for the ordinary degree, *ib.*; Physiological Society, *ib.*; health lectures, 758; congregations for medical degrees, *ib.*; lectures in botany, *ib.*; natural science scholarship, *ib.*; advanced lectures on pathology at, 971; news from, 990, 1172, 1224, 1281, 1405; examiners, 1109; the proposed new regulations for the natural science tripos, 1224; honorary degrees, 1404; scholarships in natural science at, 1460; readership in morphology, *ib.*
———— of Copenhagen, students at, 872
———— of Dorpat, students at, 396, 1512; medical diplomas at, 1283
———— of Dublin, pass lists, 52, 457, 1172; parliamentary representation of, 736, 1278
———— of Durham, pass lists, 990, 1046, 1515
———— of Edinburgh, and medical graduation fees, 313; the university court of, 313, 456, 914; professors at, 502; the examinations in clinical surgery at, 573; proposed publicity at oral professional examinations of, 617; medical reform at the, 855; the general council of and medical reform, 914; the council of and extramural teaching, 1266; the final examination at, 1267
———— of Giessen, vote of funds to, 1336
———— of Glasgow, election of Council assessors, 34; the register of the general council of, 200; professors at, 502; close of winter session, 758; honorary degrees at, 854; pass lists, 927; meeting of general council of, 1027, 1109, 1324; graduation ceremony at, etc., 1045; the examination for D.P.H. at, 1211, 1325, 1453; the extension board of, 1453; the local examination board of, *ib.*
———— of Halle, the chair of surgery at, 335; opening of new hygienic institute at, 1283
———— of Harvard, presentation of playing fields to, 1520
———— of Helsingfors, 250th anniversary of, 396
———— of Kiev, medical degrees at, 396
———— of Lausanne, the medical faculty of, 1227
———— of London, draft scheme for the reconstitution of, 37, 153; pass lists, 52, 395, 456, 1334; proposed enlargement of buildings of, 142; meeting of convocation of, 143, 215, 1171, 1515; the proposed changes at, 208; the relations of the graduates and convocation of to the proposed reform of the University, 267, 324, 384, 450, 507, 572; conference on reform of, 316; meeting of committee of senate of, 372; the provincial colleges and the reconstruction of, 382; and degrees for medical students, 629, 680, 692, 809, 864, 923, 983, 1105; and provincial colleges, 760; the reform of, 968, 1026; and the Royal Colleges, 1086; election of examiners, 1109; the proposed reconstitution of, *ib.*; the vacant seat on the senate of, 1262; the intermediate M.B. examination of, 1343
———— of Montpellier, sixth centenary of, 517
University of Oxford, examinations in medicine and surgery at, 870; the chair of comparative anatomy at, 1269; news from, 1404, 1459; question of examination of women in medicine at, 1459
———— of Paris, students at, 699; foreign students at, 1223
———— of Rostock, opening of new medical and surgical clinic at, 337
———— Royal of Ireland, vacancies in the senate of, 35, 255, 412; examinerships in, 255, 314; convocation of the, *ib.*; the calendar of, 1046; pass lists, 1172
———— of St. Andrews, pass lists, 991
———— of San Francisco, grant for new buildings of medical college of, 478
———— of Strassburg, notes on, 99, 379, 443
———— of Toronto restoration of library of, 811
———— Trinity, Toronto, the examinations in medicine of, 991
———— of Tubingen, students at, 1339
———— of Vienna, students at, 430; opening of dental out-patients' department at, 991; and students' photographs, 1407
———— of Victoria, award of gold medals at, 795; examinations for degrees at, 697; pass lists, 813
———— of Zürich, students at, 292
Unna, Dr. P. G., physiology of the skin, 1032; a disclaimer, 1332
Upton, Mr. J. R., Mr. Stanhope and the army medical staff, 751; Society of Apothecaries and its members, 1166
Uræmia, diphtherial, the kidneys in, 962
Urethra, electrolysis in stricture of, 47, 881, 942, 1043, 1364, 1442; prolapse of the mucous membrane of the in cholera, 854; prolapse of the mucous membrane of in old women, 1147; stricture of four years after electrolysis, etc., 1249
Urethritis, simple, gonococcus in, 322; recurrent granular, case of, 481
Uric acid, case of, 494; in the urine, the history of, 721; effect of salicin and salicylate of soda on compared, 954
Urine, certain substances found in the which reduce the oxide of copper upon boiling in presence of an alkali, 169; some practical points in the treatment of retention of, 592; M. Guyon on the retention of, 626; two cases of retention of, 673; trichloracetic acid as a test for albumen in, 681; the history of uric acid in the, 721; retention of from a hydatid cyst in the pelvis, 1248; report on excretion of balsams in the, 1365; tests for albumen in, 1509
Urobilinuria, the significance of, 43
Urticaria, vinegar in, 1056, 1175; of infancy and childhood, 1250
Uruguay, German science for, 518
Uterine. *See* Uterus
Uterus, fibroid tumours of the, 15; rigidity of os of, incisions, recovery, 233; cancer of the, 298; malformed, 299; complete prolapse of the cervical zone of preceding labour at full term, *ib.*; removal of appendages of, 426; disease of discovered after death, 462; myomata and, 497; fœtal retention in fibroid disease of, 500; treatment of tumours of by electricity, 570; removal of fibroid of, 606; epithelioma of the, *ib.*; complete transverse laceration of, 720; electrical treatment of fibroids of, 852; total extirpation of the, 853; myoma of the becoming sarcomatous, 1069; malignant adenoma of the cervix of, 1136; atrophy of the, superinvolution, 1150; pregnant, unusual tolerance of the, 1208; complete extirpation of cancer of, 1439
Uvula, elongation of producing laryngismus, 286, 357; papilloma of, 298

V.

Vaccination, and syphilis, 29; the antiseptic after-treatment of, 233, 478, 890, 1010, 1068, 1176, 1288, 1411; choleraic, 505; alleged transmission of syphilis by, 561; alleged injuries from, 614; at Dublin, 617; in Ireland, 737; History and Pathology of, Dr. E. M. Crookshank, *rev.*, 788, 842; certificates of, 810; small-pox and, 872; successful prizes for in Italy, 1051; successful grants for, *ib.*; and septicæmia, 1227; in Germany, 1384
———— Commission. *See* Commission
Vaccinations-Statistik, Kritik der, Dr. J. Körösi, *rev.*, 431
Vaccinator, a new, 433
Vaccinators, public, payment of awards to, 438, 799
Vaccine, human, a prophylactic in canine distemper, 923, 983; gout, 1331
———— lymph, filling capillary tubes with, 995
Vaccinia of the eyelids, note on, 1483
Vacher, Dr. F., sanitary experts and the charge of obstructing justice, 326
Vacy-Ash, Surgeon-Major, presentation to, 160
Vade-Mecum, the Microtomist's, Mr. A. B. Lee, *rev.*, 1141
Vagina, congenital absence of, 299; sudden extroversion of in a nulliparous female, 478; double, 1016; rupture of the, 1497
Vaginitis, retinol in, 1103
Valencia, medical congress at, 1115
Valvulitis, vegetative aortic, fatal case of, 1355
Vaporiser, and odorator, the Leicester, 24
Varicella, gangrenosa, 18; hæmorrhagic, 132
Varicocele as a disqualification, 105
Varix of the femoral lymphatics, 725
Vaseline, 461
Veeder, Dr. M. A., coincidence of influenza in England and America, 1288
Vegetable diet as a therapeutic agent, 1331
Vein, portal, thrombosis of the, with suppurative peritonitis, 181
Venesection, in puerperal eclampsia, 889, 1300; in inflammation, 1055
Ventilation, antiseptic, of hospitals and sanitariums, 273; household, 392; of sewers, 989, 1114
Ventnor, the climate of, 163
Vermiform Appendix, Inflammation of the, Dr. T. G. Morton, *rev.*, 1019
Vermont, diploma selling in, 699
Vernon, Mr. H., depilatory, 875
Vertebra, fifth lumbar, necrosis of a portion of the, 1195
Vertigo, Menière's, and the semicircular canals, a new theory, 792, 888, 1010
Vesiculæ seminales, extirpation of, 1509
Vestries of London, the sanitary staff of, 513
Vichy water, intestinal calculus from abuse of, 1439
Victoria, the chief health officer for, 143; influenza in, 1405
———— British Columbia, opening of hospital by Duke of Connaught at, 1283
———— Cross, presentation of to Surgeon Crimmin, 33; presented to Surgeon Le Queene, 452
Vienna, influenza epidemic in, 41, 97, 150, 204, 627; correspondence from, 43, 266, 322, 384, 571, 627, 746, 808, 863, 922, 1040, 1276, 1400, 1508; official report of epidemic influenza in, 266; proposed formation of a Dermatological Society in, 396; tuberculosis in, 571; ninth congress of internal medicine at, 977; the hygienic museum at, 1465; inquiry as to prostitution in, 1520
Vin Mariani, 964
Vinegar in urticaria, 1056, 1175
Viney, Dr. J. E., Influenza, its Prevention, Symptoms, and Treatment, *rev.*, 303
Virchow, Professor R., the 70th birthday of, 850
Viscera, transposition of, 19, 962; thoracic, relation of subdiaphragmatic abscess to, 1002
Vision, relation of the cortex to, 1147; congenital dexiocardia without displacement of, 1441
Visits of courtesy, 812, 867, 925
Vitreous body, the artificial, 293
Vivo beef juice, 790
Voigt, the late Professor C. A., 511
Volkmann, Professor R., proposed memorial to, 318, 731, 910, 1281; the literary testament of, 336
Volunteer Medical Staff Corps, promotions and appointments in, 51, 106, 156, 210, 271, 332, 389, 453, 510, 575, 633, 695, 753, 812, 868, 926, 986, 1045, 1107, 1168, 1222, 1281, 1334, 1403, 1463, 1513; uniform of volunteer brigade-surgeons, 509; result of examination at volunteer ambulance school of instruction, 632, 1168; volunteer surgeons, 752, 1044; rank for volunteer surgeons, 1168; dinner, 1281, 1393
———— Brigade Bearer Company, North London, inspection of, 1514
Volunteers, university, 1267
Volunteers' eyesight, 1324
Volvulus of the small intestine, 1195; of the sigmoid flexure, 1440
Vomiting in pregnancy, 43, 903; incontrollable in pregnancy, menthol in, 1382
Vulliet, M., Leçons de Gynécologie Opératoire, *rev.*, 904

W.

Wade, Deputy Surgeon-General F. W., farewell dinner to, 868
Wahl, Professor E. v., death of, 318; obituary notice of, 393; the late, 582; proposed memorial to, 758
Wainwright, Mr. J. G., elected treasurer of St. Thomas's Hospital, 731
Waldo, Dr., case of acromegaly, 301, 662
Walker, Dr. A. W. H., poisonous effects of exalgine, 1246
———— Mr. B., muscæ volitantes, 301
———— Mr. W. H., obituary notice of, 923
Wallace, Dr. D., the cystoscope, 17
———— Dr. T., hydatids of the pelvis, 427
Wallace-James, Dr. J. G., fish and leprosy, 1118
Waller, Dr. A. D., the reform of the University of London, 324
Wallet, the vaccination, 1141
Walley, Professor T. A., A Practical Guide to Meat Inspection, *rev.*, 1076; the prophylaxis of canine distemper, 1167

Walsham, Mr. W. J., St. Bartholomew's Hospital Reports, *rev.*, 553
Wanderings in Search of Health, Dr. H. C. Taylor, *rev.*, 1199
Ward, Dr. A. O., bedside charts and notepapers, 25
——— Miss E. E., passes primary examination for fellowship in the Royal College of Surgeons in Ireland, 255
Waring, Mr. H. J., London University, 208
Warming and ventilation, household, 392
Warts, electrolysis for, 571
Washhouses, baths and, 157
Water, as a vehicle of contagion, 43
——— Analysis, the Student's Handbook of, Dr. R. G. S. Chew, *rev.*, 82; during a typhoid fever epidemic, 626
——— closet system, 18
——— gas, poisoning by, 253
——— supplies, public, lead in, 139, 439
——— supply of London, the, 614, 1284; of Lyons, 992
Waterlow, Sir S., proposed portrait of, 680
Waters, potable, the action of on lead, 71, 420; mineral, 84; moorland, observations on the factors determining the plumbo-solvent action of, 1197
Watson, Mr. F. S., rigidity of os uteri, incisions, recovery, 233
——— Mr. W. S., case of primary glaucoma at the age of 22, 668
Watt, Dr. T. M., an improved feeding cup, 1489
Weather and disease, 20
Weaver, Mr. J. J., presentation to, 807
Weber, Dr. H., elected corresponding member of the Berlin Verein für Innere Medizin, 1024
Webb, Mr. T. L., bacillus of tubercle in sputum, 1016
Weichselbaum, Professor, investigations on the pathology of influenza, 322
Welch, Apothecaries Company *v.*, 753
Weljamenowa, Dr. E. P., gold medal conferred on, 139
Wells, Sir T. S., elected honorary member of the Trinity Historical Society, Dallan, Texas, 457; appointed Bradshawe lecturer, 910; note on mesenteric and omental cysts, 1361
West, Dr. S., thrombosis of the portal vein with suppurative peritonitis, 181; cancer of omentum, 422; Cheyne-Stokes breathing in granular kidney, 545; paroxysmal hurry of the heart, 605; bronchial casts from bronchitis crouposa, 663
West Ham, the drainage of, 337
West Kensington, diphtheria at, 336
Westcott, Mr. W. W., the mandrake, 620; the Extra Pharmacopœia, *rev.*, 904
Westphal, Professor, illness of, 56; obituary notice of, 332
Wethered, Dr. F. J., primary carcinoma of the pancreas, 296
Weymouth, the influenza epidemic at, 149
Wharry, Mr. H. G., case of rupture of the right lung, liver, and right kidney, without injury to abdominal thoracic walls, 1369
Wheat coffee, 727
Wheaton, Dr., tuberculosis with aspergillus niger simulating actinomycosis, 1194
White of egg, antimicrobian properties of, 322
White, Mr. F. F., major operations on old people, 177
——— Dr. J. S., lead poisoning, 18; excision of ankle, 671; radical cure of hernia, *ib.*
——— Dr. J. W., the relations of subdiaphragmatic abscess to the thoracic viscera, with three illustrative cases, 1002
White, Dr. T. C., teeth in dermoid cysts, 549
——— Dr. W. H., intussusception of jejunum in an adult due to a polypus, 76; cases of Thomson's disease, 241; trephining for old hemiplegia accompanied by severe headache, 424; on the parallelism between the three thermic mechanisms and Dr. Hughlings Jackson's three levels, 919, 1105; contracted granular kidneys in young persons, 1193
Whitehead, Mr. W., loose bodies in the knee-joint, 607
Whitham, Dr., old drawings, 962
Whooping cough, ouabaïn in, 950; in Paris, 1235; severe mortality from, in Aberdeen, 1442; sulphur vapour in, 1508
Wigles worth, Dr. A., new safety driving rein, 25
Wild, Dr. R. B., diseased kidneys, 427
Wilkes, Mr. W. D., Toogood *v.* Wilkes, 925
——— Toogood *v.*, 400, 462, 925, 934
Wilkins, Mr. J., foreign body in the brain, 542
Wilkinson, Dr. W. C., M. Pasteur and the rabbit pest in Australia, 692
Will, Dr. O., strangulated hernia, 135; the telephone as a bullet finder, *ib*; resigns surgeoncy of Aberdeen Infirmary, 973
Willett, Mr. E., rupture of spleen, 77; embolism of gluteal artery, 423; fracture-dislocation of spine, paraplegia, operation, death from pneumonia two months later, 786
——— Mr. G., management of horses, 995
Williams, Dr. C. J. B, proposed memorial to, 28
——— Dr. C. T., case of basic tubercular cavity, 241; case of phthisis and psoas abscess, 481
——— Dr. D., the epidemic of influenza, 103
——— Mr. J., presentation to, 518
——— Mr. J. R., practice in British Columbia, 1287
——— Mr. Le L., English and foreign health resorts, 104
——— Dr. R. M., the reform of the University of London, 451
——— Mr. W., scarlet fever and the puerperal condition, 233
——— Mr. W. R., two corrections, 1410
Williamson, Mr. G. E., a case of cerebral abscess localised and opened, 235; dentist's drills, 339
——— Dr R. T., Pal's method of staining nerve tissue, 244
Willoughby, Dr., The Natural History of Specific Diseases, *rev.*, 1488
Wilson, Dr. C., enlargement of the spleen, 782
——— Mr. T., scarlet fever and puerperæ, 780
——— Dr. T. S., recurrent palpitation, 724
Winckel, Dr. F., A Handbook of Diseases of Women, *rev.*, 487; A Textbook of Obstetrics, *rev.*, 1429
Windsor, sanitary condition of, 1025
Winter resorts. *See* Health resorts
Witnesses, medical, at inquests, 574, 986, 1168, 1224
Wolfe, Dr. J. R., Original Contributions to Ophthalmic Surgery, *rev.*, 845
Wolfenden, Dr. R. N., œdema of the larynx a sequence to influenza, 541
Wolseley, Lord, on ambulance work, 57
Woman, aged 63, cyclic hæmaturia of four years' duration in a, 178; tobacco amblyopia in a, 962
Womb. *See* Uterus
Women, Clinical Lectures on Diseases of, Dr. J. Matthews Duncan, *rev.*, 81; puerperal and menstruating, influence of the influenza wave on, 356, 477; a Handbook of Diseases of, Dr. F. Winckel, *rev.*, 487; strongminded, a paradise for, 630; a Practical Textbook of the Diseases of, Dr. A. H. N. Lewers, *rev.*, 1019; old, prolapse of the urethral mucous membrane in, 1147; medical education of in Glasgow, 1152; the hygienic training of, 1158; university honours for, 1496
Wood, Miss C. J., Handbook for the Nursing of Sick Children, *rev.*, 431
——— Mr. F. C., a case of tic-douloureux, 1344
——— Dr. H. C., Nervous Syphilis, *rev.*, 433
——— Professor J., presentation to, 1321
——— Dr. J. B., obituary notice of, 454
——— Dr. T. O., the New Lunacy Act, 1889, *rev.*, 790; the working of the New Lunacy Act, a warning, 1219, 1401
Woodforde, Mr. A., an appeal, 1119
Woodhall Spa, opening of new hospital at, 1338
Woodhead, Dr. G. S., appointed director of new laboratory at the Examination Hall, 251; Reports from the Laboratory of the Royal College of Physicians of Edinburgh, *rev.*, 552; presentation to, 736, 1090
Woodhouse, Dr., pseudohypertrophic paralysis, 673
Woods, Dr. H., hospital reform, the extravagant expenditure, 213; hospital reform in Ireland, 453; penny a week medicine, 635; the cost of an outpatient, 756; free medical relief for city clerks, *ib.*; salts of hypiodous acid, 952
Wood wool tissue, 487
Worcester, the influenza epidemic at, 149
Word-blindness, case of, 45
Work, short hours of, 1262
Workhouse, the, and its Medical Officer, Dr. A. Sheen, *rev.*, 964
Workhouses, stimulants in, 1209, 1219, 1337
Working classes, hospitals and, 275, 335
Worthington, Dr. L., cyanosis from monobromacetanilide, 357
Worthy, a forgotten medical, 1205, 1343
Wright, Dr. E. O., receives testimonial from Royal Humane Society, 1048
——— Mr. G. A., osteomyelitis, 962; adenoma of the rectum, *ib.*
——— Rev. G. H., alcohol and childhood, 1471
Wyllie, Mr. G., obituary notice of, 210
Wynne, Dr. J. D., contracted pelvis, 429

Y.

Yarr, Surgeon M. T., a case of rupture of the duodenum, 1131
Yearbook of Treatment, the, *rev.*, 188, 279; of Pharmacy, *rev*, 366; of the Scientific and Learned Societies of Great Britain and Ireland, *rev.*, 1077
Yeo, Dr. I. B., Food in Health and Disease, *rev.*, 302
Yeomanry, appointments, etc., in medical staff of, 271
Yorkshire, the literary shrines of, 271; proposed infectious hospital for the North Riding of, 394; lead-poisoning in, 974, 1029, 1097, 1155
Young, Tuke *v.*, 377
——— Dr. A., death of, 1092

Z.

Zanzibar, gift of German Emperor to found hospital at, 991, 1270
Zenana mission, the, 1046
Zetland, Lord, addresses to, 35; banquet to, 684
Ziegler, Dr. E., Lehrbuch der allgemeinen und speciellen pathologischen Anatomie, *rev.*, 247; Beiträge zur pathologischen Anatomie und zur allgemeinen Pathologie, *rev.*, 486
Ziemssen, Professor v., celebrates 60th birthday, 7
Zimmerman, Dr. P., death of, 1227
Zululand, leprosy in, 103

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ON TWO CASES OF LONG-STANDING DISLOCATION OF BOTH SHOULDERS TREATED BY OPERATION, WITH FURTHER OBSERVATIONS ON THE CYANIDE OF ZINC AND MERCURY.

Delivered before the Hunterian Society, November 27th, 1889.

By Sir JOSEPH LISTER, Bart., F.R.S.,

Professor of Clinical Surgery in King's College.

Mr. President and Gentlemen,—I once had the terrible misfortune of causing the death of a patient from rupture of the axillary artery in an attempt to reduce a dislocation of the shoulder. In January, 1873, a man, aged 58, presented himself at the Royal Infirmary of Edinburgh with the symptoms of an ordinary subcoracoid luxation, which he said had been caused by a fall five weeks and a half previously. I afterwards learned that eight weeks had really elapsed since the accident. Having no reason to doubt his word, I proceeded to make free but not at all violent movements, first with manipulation, and then with the pulleys. Not succeeding in these attempts, I decided to wait a day or two in the hope of a more favourable state from softening of the textures through irritation by the first trial. I had scarcely expressed this determination when my attention was directed to an enormous swelling below and behind the axilla, almost as big as a man's head, doubtless due to rapid extravasation of blood. No pulse was to be felt at that wrist, implying that the bleeding proceeded from the main vessel. I cut down at once in the axilla and turned out a mass of clots, and as nothing appeared wrong with the lower part of the vessel, except absence of pulsation, I divided both pectoral muscles up to the collar bone, so as to obtain access to the upper part of the axillary artery. I then discovered an orifice about one-sixth of an inch in diameter in the posterior part of the wall of the vessel in that region. Having tied the vessel above and below this orifice, I took off the head of the bone so as to enable me to place the humerus in its normal position, and left the patient, though considerably reduced, chiefly by the extravasation that had occurred before I operated, in hopes of a satisfactory result. He rallied for a while, but sank about three hours later. On *post-mortem* examination we found that the surface upon which the head of the bone had rested in its new situation simulated cartilage in smoothness and firmness, and was formed of a dense fibrous structure, strengthened with a considerable amount of osseous deposit in the form of spicula, proceeding chiefly, though not exclusively, from the coracoid process and the surgical neck of the humerus. A broad and strong fibro-osseous band, thus connecting the humerus with the coracoid process, had lain over the head of the bone, and at the same time was intimately connected throughout by condensed tissue with the sheath of the axillary artery which lay over it. Thus the vessel, instead of being surrounded by loose and yielding structures, as in the natural state, was attached through the medium of the osteo-fibrous band to the coracoid process on the one hand and the neck of the humerus on the other; and when these were separated from one another by the attempts at reduction, the artery, as well as the band, was necessarily subjected to violent traction. Accordingly the band, strong as it was, was found to have been torn right across, and the rent in it was exactly opposite to the rupture in the artery. An atheromatous condition of the vessel served to explain still further the disaster.[1] The knowledge of the fact that a condition thus strongly predisposing the axillary artery to injury, when traction was made upon the humerus, might be developed within eight weeks of the occurrence of the luxation has ever since made me feel a great horror at attempts at reduction of long-standing subcoracoid dislocation. Accordingly in the cases which I have now to relate I determined to adopt what I hoped would prove a safer mode of procedure.

T. C., a robust labourer, aged 47, was engaged on April 17th, 1887, in felling trees; and having climbed up one, fell a distance of forty feet on his outstretched arms, producing subcoracoid luxation of both shoulders. The dislocations remained unreduced, and eight weeks after the accident he was sent to King's College Hospital for relief. On admission, both limbs presented the usual characters of subcoracoid dislocation. He was in a very helpless state, unable to dress himself, with the arms almost fixed in a slightly abducted position, and rotation very limited, particularly on the right side. He occasionally experienced numbness and venous congestion in the hands and arms. After considering for a few days what course it would be best to adopt, I proceeded on June 13th, nine weeks and a half after the accident, to operate on the left side in the following manner. Having made an incision from the coracoid process downwards and somewhat outwards, in the interval between the deltoid and the pectoralis major, I divided the tendon of the subscapularis muscle at its insertion, and then with a periosteum-detacher proceeded to separate the soft parts from the head of the bone and the inner part of its neck. This having been done so as to make sure that the vessels were entirely detached from the bone, I applied the pulleys in a manner which I need not describe in detail. As the pulleys dragged on the humerus, some fibrous bands were felt to be put on the stretch, and these were divided. The head of the bone still refusing to return to its normal position, the bone was more completely cleared, and the pulleys were again applied. This failing, the head of the bone was protruded through the wound as if for its resection, the external rotators being cut through at their insertions; after which the pulleys were again employed, the direction of the traction being altered from time to time by changing the position of the operating table. The pulleys were then suddenly relaxed by pulling on a slip knot arranged for the purpose, and at the same moment rotation outwards and adduction of the limb were performed. The head of the humerus was thus brought nearer to the glenoid cavity; it went still nearer on a second attempt of the same description, and at a third the head of the bone slipped into its normal place. I need not describe the patient's progress during the first few days further than to say that all went on favourably as regards the state of the wound and his general condition.

[1] For a full report of this case see *Edin. Med. Journal*, March, 1873,

Such being the case, on the following week I proceeded to operate on the other shoulder in a similar manner, except that, guided by our experience on the left side, I here at once protruded the head of the bone, dividing the attachments of all the rotators. In this instance, at the second attempt, the pulleys drew the bone into its proper position. The wound on this side, as on the other, remained without disturbance. On August 3rd the patient put on his coat and waistcoat unaided for the first time after the accident. The movements were continually improving. There was never any suppuration from within, either on the right side or on the left; but the passive motion which we maintained seemed to keep up a serous oozing from the interior, and it was nearly two months before the wound on the right side was perfectly cicatrised. On August 22nd, the day after healing was complete, the patient was discharged. On November 2nd, two months later, he came to the hospital for inspection. The arms could then be raised to a right angle with only slight movement of the scapula; and rotation was much improved. Some stiffness of the upper arms in the region of the biceps was observed, more marked on the right side than on the left; other movements were normal. Of his present condition you will be able to judge for yourselves, as he has kindly given us the opportunity of seeing him here this evening.

[The patient was now introduced.] You see that the shoulders have their natural rounded form. You are aware, of course, that the rounded form of the shoulder depends partly on the head of the bone being in its proper place, and partly on the deltoid having its due development. Here we have on each side a massive deltoid over the bone *in situ*.

[The patient stated that he could do any hard agricultural work as well as ever. He exhibited all the natural movements of the arms in their normal degree, except elevation of the limb, which he could not do far above the horizontal level. He said, however, that he still found an improvement in that respect going on, so that he could lift, for instance, a key from the top of a clock for the purpose of winding it up, which he could not do a few months ago.] This, gentlemen, was the first case of double dislocation of the shoulder that I happened to have seen, and, strangely enough, before this man left the hospital another example of the same thing made its appearance, due to a very different cause.

C. D., aged 23, was admitted into King's College Hospital on July 26th, 1887. Seven months before his admission the patient, who was an epileptic, dislocated both shoulders in an epileptic fit. He was sent to my colleague, Dr. Ferrier, with a view to the treatment of his epilepsy. Dr. Ferrier, however, found that there was not much that he could do for him, but thought it possible that I might be able to help him with regard to the state of the shoulders. Both humeri were found to have been dislocated in the subcoracoid position. There was considerable movement of the limbs, due to the fact that the scapulæ moved with extraordinary freedom along with the humeri. Nevertheless, he was in a pitiable condition; he could not dress himself, he could not put his hands to the gluteal region, and I need not say what a state of miserable dependence that fact implied. The muscles, especially those of rotation, were extremely atrophied. There were remarkable hollows above and below the spines of the scapulæ, so much so that some medical men who saw him doubted whether such extreme atrophy of the muscles could be explained by mere disuse. Encouraged by the case you have just seen, I determined to attempt to relieve him by operation. On July 29th I operated on the left shoulder in the same manner as on the former patient. The soft parts having been completely detached from the upper end of the humerus, the pulleys were applied, when the head of the bone returned into position at the first attempt. As regards the after-progress I need not go into details. Passive motion was begun thirteen days after the operation, but we found in this case that there was a remarkable tendency to the occurrence of adhesions, making movements extremely difficult. We put him twice under chloroform, and moved the limb under the anæsthetic. The wound healed in six weeks without any suppuration except from the surface of the granulations; but the recovery of power was so extremely slow that for a while I feared no good would result from what we had done. In course of time, however, under the influence of passive movement and massage, together with galvanism, he improved so much that at length he besought me to operate upon the other side also. He could now dress himself, and he was no longer in the state of miserable dependence to which I have before referred. He could also lie upon that side, a thing which he could not do before the operation, and he wished that the other limb should be as favourably circumstanced.

But six months more had elapsed after the first operation, and the result of that procedure, although distinctly successful, had not hitherto been by any means brilliant, and I decided that in this case, instead of detaching the soft parts from the end of the humerus, and attempting reduction, I would merely cut down upon the head of the bone and remove it piecemeal by chisel and hammer without disturbance of the attachments of the external rotators. For a study of the skeleton with the humerus in the subcoracoid position had shown me that the removal of the articular portion, without interfering with the tuberosities, would allow the bone to drop back into relation with the glenoid cavity. This was done on January 27th, 1888, and the immediate result entirely answered my expectations. The bone went readily into its place, as I anticipated, and, the wound following the usual aseptic course, the recovery of movement was, in the first instance, much more rapid than it had been on the other side; and on March 22nd he was in a condition to leave the hospital. I afterwards had reason to regret that I had not followed the same course on the right side as on the left. On June 12th, 1888, he came to show himself. Both arms were continuing to improve in strength, but the left was now considerably stronger than the right, and its movements more perfect. He could put both hands behind his back; but with the left he could touch the angle of the other scapula, whereas with the right he could only reach as high as the top of the sacrum. He also complained of some pain in the thumb and elbow of the right side, that on which the head of the bone had been removed, while there was no uneasiness whatever on the left side, where the bone had been left intact. I should have been glad if this patient could have presented himself here this evening, but on inquiry I learn that he has gone to America. His brother writes as follows: "In the absence of my brother, I beg to acknowledge the receipt of your letter of the 22nd instant. He sailed for America in June last, where he is working on a farm, and I am thankful to say is enjoying good health. After he came home he had several fits, neither of which appears to have hurt his shoulders; but for some three months before he went, and since he has been abroad, they have not returned." That is a happy result, which I am afraid we can hardly attribute to our surgical procedures. "Before he went he had nearly gained full use of his arms and shoulders, the only difference being that he could not raise them in a horizontal position above the shoulder. By slightly bending his head and raising his hand from the elbow-joint, he could brush his hair and remove his hat, and he tells us he thinks they still get a little stronger; but from the fact that he is able to earn his living on the farm by *very* hard manual labour, the operation must be considered a grand success."

Now, gentlemen, it seems to me that the result of these two cases is encouraging to us to adopt a similar course in other cases of old subcoracoid dislocation of the shoulder. In the man who has presented himself before you the attachments of all the

rotators to the tuberosities of the humerus were divided, and yet you saw that they have completely re-formed; rotation is perfect, both external and internal. And in the other patient, although the dislocation had been of so much longer standing, the use of the previously wasted rotators had been completely restored. I would advise that when the surgeon feels in doubt as to whether it is prudent to make attempts at reduction, or when such attempts do not succeed, he should, in the first place, cut down upon the bone by the usual incision from the coracoid process downwards and a little outwards, and then with a curved periosteum-detacher freely separate the soft parts from the inner side of the upper end of the humerus. You will then be sure that no damage will be done to the axillary vessels in any manipulations that you may make. In many cases you will doubtless succeed by this means; but if this fails, then these instances show that you may proceed to turn out the head of the bone, detaching the insertions of the rotator muscles; and then in all probability you will be able to effect reduction, and, after reduction, you will have a thoroughly useful limb. Should even this procedure fail, removal of the head of the bone remains open to us, with promise of a good, though inferior, result.

Mr. President, I have hitherto felt considerable hesitation in publishing cases in which the safety and success of an operation are essentially dependent upon strict antiseptic management; and my principal efforts for some years past have been directed to an endeavour to procure, if possible, greater simplicity and, at the same time, greater efficacy in our antiseptic methods. At a recent meeting of the Medical Society[2] I brought forward a kind of dressing which I believe will prove more satisfactory than any which has been hitherto employed. For the successful antiseptic treatment of a wound two essential points are of course necessary. In the first place we should proceed so as to leave nothing septic in the wound before we apply the dressing, and in the second place we should put on such a dressing as we can thoroughly trust to keep out septic mischief until that dressing shall be changed.

I had intended to bring before you this evening some points with regard to the former of these objects—the means by which the wound can be kept aseptic till the conclusion of the operation; but since the communication that I made to the Medical Society I have been led to make further investigations into some matters regarding the use of the materials I then described, which seemed to me of sufficient importance and interest to warrant me in taking this opportunity of bringing them before you. The material, I may remind you, is a sort of double salt, an amorphous powder, insoluble in water, composed of cyanide of mercury in combination with cyanide of zinc. It does not seem to be a true double cyanide, inasmuch as the proportion of the mercurial element is considerably less than that which should be in a true double salt; nevertheless the mercurial element, as I have found, is of essential importance to the full antiseptic efficacy of the material. It was necessary that this powder, if introduced into a gauze or other fabric, should be fixed so as to prevent it from dusting out, for it is highly irritating to the nostrils, and besides, if it dusted out, the dressing charged with it would lose more and more of its virtues. I described at the Medical Society a means by which this was prevented; how by the use of starch the powder might be fixed in any fabric which was charged with it. But I have long felt that it would be an exceedingly desirable thing if this material could in some way be coloured, because, being perfectly colourless, if a gauze is charged with it, we have to trust entirely to the manufacturer as to whether the antiseptic element is present in due proportion or is not. It would be very advantageous if it could be coloured so that we might see by the tint where the antiseptic substance was, and whether it was uniformly distributed or otherwise. Therefore, before publishing the note which I had promised as to the preparation of the substance, I made attempts to stain this material. I tried various forms of dye, and I found that some of the aniline dyes are precipitated by this zinco-mercuric cyanide, and some are not. For instance, magenta is not precipitated in the least, but methyl-aniline violet and gentian violet, which seems to be a mere variety of the same thing, these are precipitated, and an exceedingly small amount of the dye is sufficient to give adequate colour to the double cyanide. I proceeded to charge a piece of gauze with some of this dyed cyanide, to see how it would tint it, and when it was dry I was much surprised to find that the gauze charged with the tinted cyanide did not dust in anything like the same degree as a gauze would have done which had received the untinted salt; so much so that a gauze charged with the tinted cyanide was very much on a par as to dusting with the gauze charged by means of starch.

[2] JOURNAL, November 9th, 1889.

Of course, if this were so, it would be a very satisfactory arrangement; we should dispense with the starch, and also with a quantity of sulphate of potash, which was used for purposes that I need not here refer to; we should greatly simplify the method of manufacture, and also, by getting rid of the starch, we should make our gauze softer, and more comfortable to the patient. It seems a remarkable thing that the dye should thus be able to fix the powder. Of course, we understand how the starch does it. The starch particles becoming attached to the particles of the cyanide, glue them, as it were, to the fibres of the fabric. But how can we explain this dye, in the minute quantity in which we use it, answering the same purpose? I have here some gentian violet dissolved in 50,000 parts of water, and you see the great colouring power that this dye possesses. If I take a piece of gauze and dip it into the solution up to a certain point, you will see the gauze coloured up to that point, but the part that is moistened above by capillary attraction is colourless, showing the avidity with which the fabric seizes the dye. The dye has a remarkable fondness for the fabric; at the same time it is attached to the cyanide, for it is precipitated by it. We can thus understand that the dye may act as a go-between, attaching the cyanide to the fabric by virtue of its affinity for the fabric on the one hand and for the particles of the cyanide on the other. The mode of attachment is altogether different from that by starch, but the thing is done nevertheless. It seems to me astonishing that the dye should have this power. The quantity of gentian violet used is exceedingly small. We take, say, 20 grains of the salt, and diffuse it in 16 ounces of a liquid containing only 1-50,000th part of the dye, draw a piece of the fabric through it, and so charge it with the requisite amount of cyanide. If now we consider what proportion the gentian violet bears to the cyanide which it fixes, we find that there is only about one grain of the dye to 140 grains of the salt. But more than that: the molecule, the atom of the dye, is an exceedingly complex and heavy one; so that if we consider how many there are in comparison with the atoms of the cyanide which it fixes, we find that there is only one molecule of the dye to nearly 600 molecules of the cyanide salt. It is simply wonderful that each molecule of the dye should have the power of fixing such a multitude of other molecules. It seems another instance of what I have ventured to call solid solution. It is not a chemical combination, it is not a combination of one atom with one atom, but it is an attachment of one molecule with a multitude of other molecules. I have often contemplated with amazement the familiar fact of the solution of a soluble salt in water. Put a bit of common salt into a tumbler of water, and, as everybody knows, it will be quite uniformly distributed in a second or two. This marvellous fact implies that every molecule of the chloride of sodium has an area of a multitude of molecules of water in relation to it. If there were not the arrangement of a definite number of molecules of water round every molecule of chloride of sodium, there would not be an equable solution. So, I conceive, on the same sort of principle, without chemical combination, this dye influences a multitude of particles of cyanide in its vicinity. Here is a piece of gauze charged in the way I have described, and you notice its delicate violet tint; and we have the satisfaction of knowing that, wherever we see the dye, there is the antiseptic salt; you also observe that, when freely handled, it does not dust materially. Thus we have the two advantages combined, one of which I had not hoped for—that while we have the material dyed so as to show its presence by its tint, it is also prevented from dusting.

Note.—After the above paper had been read, I was mortified to find that some gauze, charged by aid of gentian violet, dusted to a very inconvenient degree. This appeared to be due to the influence of the bichloride of mercury, which was used in weak solution (1 part to 4,000) along with the gentian violet in the water in which the cyanide salt was diffused. Bichloride of mercury interferes, to a certain extent, with the precipitation of the gentian violet, and, leaving some of the dye in solution, causes tinting of the gauze independently of the presence of the cyanide salt, and at the same time it impairs the efficacy of the dye in fixing the salt to the fabric. Yet the use of the bichloride of mercury is a matter of great importance, for reasons which I have

given elsewhere,[3] and it became necessary to look for some other dye on which the bichloride might not exert this prejudicial influence. I have found that there are several colouring matters which answer the purpose fairly well. Thus both carmine and Prussian blue attach the cyanide salt to a cotton fabric perfectly so long as it is moist, but when it is thoroughly dry they are not very good as regards the question of dusting. The dye which I have found to comply best with all the requisite conditions is logwood, or, rather, the essential ingredient of logwood, hæmatoxylin, which is a definite crystalline substance, and not unduly expensive.

The manner in which I have found it best to use this substance is the following: It is incomparably better to apply it to the freshly precipitated and wet cyanide than to mix it with the salt after its particles have been aggregated in the process of drying. It may be well to mention here the manner in which the cyanide is prepared. Cyanide of potassium, cyanide of mercury, and sulphate of zinc are mixed together in solution, in quantities proportioned to the atomic weights of 2 KCy, $HgCy_2$ and $ZnSO_4+7\ H_2O$; the cyanide of potassium and cyanide of mercury being dissolved together in an ounce and a half of water for every 100 grains of potassium cyanide, and added to the sulphate of zinc dissolved in three times that amount of water, the precipitate is collected in a strainer, and, when well drained, is washed with two successive portions of water equal in quantity to that used for the solutions, namely, 6 ounces for every 100 grains of potassium cyanide, at least this amount of washing being essential in order to free the precipitate sufficiently from the highly irritating soluble salts which are associated with it in its formation. The precipitate having been thus washed and drained, but not dried, it is thoroughly diffused with pestle and mortar in distilled water (6 ounces for every 100 grains of potassium cyanide), containing in solution 1 part of hæmatoxylin for every 100 parts of the cyanide salt, the amount of which is known from the circumstance that the dry product of cyanide salt is almost exactly equal in weight to the potassium cyanide employed. Hæmatoxylin is readily soluble in a small quantity of hot water, and remains in solution when added to a large quantity of cold water. The cyanide salt, while it precipitates the hæmatoxylin, changes its colour to a pale bluish tint. This is advantageously enhanced by the addition of a little ammonia to the mixture, in the proportion of one atom of ammonia ($NH_3=17$) to each atom of hæmatoxylin ($C_{16}H_{14}O_6 3H_20=356$). More than this amount proves prejudicial. The ammonia is added in a dilute form, and it is convenient to have the dilution such that one fluid drachm of the ammoniacal liquid shall correspond with one grain of hæmatoxylin. The dye is further economised by allowing the ammoniated mixture to stand for three or four hours, and stirring it occasionally, so that the ingredients may react thoroughly upon each other. If the mixture is filtered immediately, there is considerable loss of colouring matter. The dyed salt, having been drained and dried at a moderate heat, is levigated, and may then be kept for any length of time fit for use. When employed for charging a dressing it is diffused by means of pestle and mortar in solution of bichloride of mercury (1 to 4,000) in sufficient abundance to drench the fabric thoroughly, for which 4 imperial pints to 100 grains of the salt will be found adequate. This will give a percentage of between 2 and 3 of the cyanide to the dry gauze. For reasons which I have stated elsewhere,[4] the gauze should always be used moist; and if it be prepared for immediate use, as by the dispenser of a hospital, the process of drying may be omitted; the gauze, after being hung up for a while to drain, being deprived further of superfluous moisture by placing it for a while in a folded sheet. It may afterwards be conveniently kept moist by wrapping it in a piece of mackintosh cloth. When obtained dry from the manufacturer, it should be moistened again with the weak corrosive sublimate solution before it is used.

An article recently published in the *North American Review* entitled, "The Open Door of Quackery," is the joint production of Dr. Austin Flint, Professor Doremus, and Dr. Eggleston. The last named is responsible for the statement "that there are not a dozen American medical colleges out of 117 that would be tolerated for a moment in any foreign country that pretends to be civilised." The *Medical Record of New York* quotes this statement with approval.

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3 *Vide* JOURNAL, *loc. cit.*
4 *Vide* JOURNAL, *loc. cit.*

REMARKS
ON
VARIOUS DISEASES OF THE SKIN,

Made at a Demonstration of Patients given at the East London and South Essex District of the Metropolitan Counties Branch.

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1. THE first case shown was one of prurigo infantum. The patient was a male child, aged $2\frac{1}{2}$ years. The skin bore evidence of the irritation in numerous blood crusts formed on papules that had had their heads scratched off. No other definite lesion was present at the time of the demonstration. The father, however, who accompanied it, said that the disease began at the age of six months with "bumps" like the sting of nettles or bug bites, and that these reappeared from time to time. The itching was greatest at night, being forgotten or absent in the daytime. The child was not badly nourished, but patients often become wasted, peevish, and miserable from the constant interruption to their night's rest. The disease is generally worse in cold weather. This is the disease described as lichen urticatus by many writers. In most cases it persists for some years, but about the age of 7 or 8 gradually disappears. In a few cases it persists and becomes what is known as Hebra's prurigo. In the majority of cases local applications do all that can be done for its relief. The most important of these is a bath (ordinary children's bath) of warm water, to which one or two tablespoonfuls (according to age) of liq. carbonis detergens have been added. The bath should be placed before a fire, and the child be given a sponge, and encouraged to sponge itself all over for half-an-hour, the temperature of the bath being maintained during this time. It should then be quickly dried and put to bed. In addition to this, a lotion of carbolic acid, made less volatile by the addition of glycerine (acid. carbolic. ℥ss.—℥j, glycerine ℥j, aq. destil. ad Oss.), should be sponged rapidly over the child when awakened by the itching. Most cases are controlled by this treatment, though few are cured. When the child is worn out by restless nights, a dose of chloral, 3 to 8 gr., at bedtime, will often get a good night's rest, with diminution of the itching; or tr. cannabis Indicæ (♏ v to x) three times a day may be given. Occasionally three to four grains of quinine, given in milk at bedtime, is of great service.

2. The next case shown was a boy of about 10, but looking younger. His father said that four years before, after a severe attack of measles, a spot appeared on his face, which continued to increase in size, and was followed by the appearance of similar spots in various parts of his body, about eighteen in all. They each increased slowly in size, varying from that of sixpence to a five-shilling piece. He had been sent to the country and to the seaside without benefit; the only treatment that had been of service was "an operation" which had succeeded in some cases but not in others. There were a number of patches of reddened and thickened, rather translucent, skin, slightly tubercular in places. The case was shown as one of either strumous dermatitis or multiple lupus. Though no logical distinction could be drawn between the two, the term strumous or tubercular dermatitis was convenient for cases in which the disease was in nature more inflammatory than neoplastic. It destroyed the skin, however, leaving scars, and the only effectual treatment was destroying each patch.

3, 4. Next two cases of lupus erythematosus were exhibited, both undergoing cure. The first was that of a girl, aged 16. When first seen it had lasted eighteen months, and affected the bridge of the nose and each cheek in red patches covered with seborrhœic greasy scales. There was slight destruction of the skin in places. Citrate of potash, in drachm doses, had been given. Some patches had been treated with the application of collodion, and others with Duhring's lotion of sulphide of zinc (zinci sulph., potas. sulphuret., āā gr.xxx., sp. vini rect., ℥iij, aquæ ℥iv). The latter application had succeeded best in this case. The second case was a woman, aged about 40, who had the disease over an extensive area, including the scalp. She was practically cured, only a small

patch remaining on the bridge of the nose. At one time collodion, at others Duhring's lotion, had suited it best. Citrate of potash in large doses is occasionally of much service.

5. The next case shown was a woman, aged 36. She had not been seen for six months, and was asked to present herself for examination at the demonstration. She presented a rather lurid redness on the backs of the arms and backs of the legs, interspersed amongst which were numerous scars, mostly of a circular shape. In passing the hand over the affected parts, there were found some deep-seated, solid patches, about the size of peas. She had been under observation with this condition for about seven years. It got better or even well during the summer, and bad or worse in the winter. It was just beginning for about the seventh time. The case, which is fully recorded and depicted in the Clinical Society's *Transactions* for the present year, p. 15, was regarded as belonging to the lupus family, partaking in some respects of the characters of lupus vulgaris and lupus erythematosus. Treatment had not been found to influence it. It was a most unusual one in its characters and situation.

6. Next was shown a case which, when first seen, it was difficult to say whether it was lupus or syphilis. It was now regarded as lupus *and* syphilis. The patient was an unmarried woman, aged 44. The disease began at the age of 8, and had persisted until now. The appearance when first seen was extremely like syphilitic ulceration. It affected the greater part of the face and the lips, had spread from one part to another, leaving superficial scars where it had healed. No history of syphilis was obtainable,



Fig. 1.—From Photograph by Mr. Roger Hutchinson.

though carefully inquired for. This and the fact that it began at the age of 8, and that no manifestation of inherited syphilis was present, led to the belief that it was lupus. Now came the interesting point. After various plans of treatment had been employed without effect, iodide of potassium alone, and with perchloride of mercury, was tried, and the disease began to heal. Numerous relapses had occurred; each had yielded to iodide and mercury, though it was found that their action was increased by the simultaneous, or occasional, use of iron and cod-liver oil. It was practically cured now, with numerous soft white scars. The facts narrated seemed to justify the diagnosis—lupus and syphilis.

7. In connection with the last the next case shown was a woman, aged 29, suffering from a tuberculo-ulcerative syphilide of the face. The patient had some tubercles with much crust, beneath which there was ulceration of the skin. The characters distinguishing this syphilide, sometimes called "syphilitic lupus," from true lupus were pointed out. The patient had only been under treatment one week, but already great improvement had followed the administration of iodide of potassium and an ointment of calomel.

8. Another case of syphilis was exhibited—a man of about 40, with a tubercular and ulcerative eruption on the forehead and scalp, closely resembling "acne varioliformis." So close was the resemblance in many cases that many experienced dermatologists regarded all cases of acne varioliformis as syphilitic. That this case was syphilitic was beyond question. The patient had had primary syphilis fourteen years before. That acne varioliformis was sometimes independent of syphilis was, however, quite clear, as in a case Dr. Mackenzie had described and depicted in the Clinical Society's *Transactions*, vol. xvii, p. 227.

9. The next case shown was one of purpura rheumatica, occurring in a middle-aged woman. She had been suffering for about three months, and presented numerous hæmorrhagic spots on the forearms and arms, legs and thighs. She had had rheumatic fever years before, and had some swelling of one ankle with the present attack. The disease was a very definite one, characterised by a purpuric eruption, chiefly, but not necessarily, confined to the extremities, coming out in successive crops, usually occurring in the later part of the day, and associated with a feeling of great tension in the affected parts, and often with itching. The spots were often raised slightly on the first appearance, but were hæmorrhagic from the first. The right of the disease to be regarded as rheumatic was evidenced from the purpura coming on in some cases during an attack of acute rheumatism, from its being attended by definite symptoms of rheumatism of a slighter character in others, and from its occurring in patients who had pre-



Fig. 2.—From Photograph by Mr. Roger Hutchinson.

viously suffered from well-marked rheumatism with resulting heart disease. In cases where there was no rheumatism present, and no history of past rheumatism, its characters were so like those that occurred in the typically rheumatic, that in such cases it might be regarded *per se* as evidence of rheumatism. It sometimes yielded quickly to turpentine, in doses of ten to thirty minims, three times a day, but sometimes was very rebellious and lasted for many months.

10. The next case exhibited was one of lichen planus in the retrogressive stage. It was shown to illustrate the difficulties in diagnosis such a case would present if seen for the first time. It was true one was not often called upon to make a diagnosis at this stage, as a patient getting well under one doctor did not usually take a fresh doctor's opinion. Still, circumstances might occur in which it might be necessary to make a diagnosis in such a case. The patient was a woman about 50 years of age. She presented a number of brown stains on the fronts of the legs and a few on the fronts of the forearms. The skin was not thickened, and there was no itching or burning complained of. Such a condition might

be mistaken for a syphilide; indeed, lichen planus is not infrequently diagnosed as syphilis, even when in its typical stage, by those inexperienced in the disease. Careful examination, even in the present condition, revealed the presence of small smooth flat-topped papules. When the patient first came under observation the characteristic papules, some with central depressions, were well marked, the eruption had a violet tint, and was attended with intolerable burning and itching. There were well-marked patches of leucoplakia buccalis, the remains of which were still slightly visible when exhibited. The patient had been treated with Unna's ointment (acid. carbolic. ♏xx. hydrarg. perchlor. gr. ij., ol. olivæ ♏xx., ung. zinci ox. benzoat. ad ℥j.) Arsenic was given at the commencement, but did not agree, and since then quinine had been substituted.

11. The next case was one partaking somewhat of the nature of psoriasis and having some of the characters of eczema. The patient was a well-nourished brunette, aged 43. Two-and-a-half years ago, the disease began with scaly patches on both knees. Under treatment it subsided, but recurred again a year ago, when, in addition to the knees, one elbow was also attacked. It was rough and dry until recently, when the patches on the legs began to discharge fluid "like water," which stiffened linen. When she first came under observation about one month before being exhibited, the patches on the knees were very red, hot, and weeping. They had, however, well-defined raised borders. This is the form of psoriasis which has been described as *psoriasis eczémateux*. It occasionally led to difficulties in diagnosis, and was important to recognise, as the ordinary treatment for psoriasis was not appropriate. In so far as it partook of the nature of eczema, it required treatment suitable for that condition, namely, soothing local applications. In the present case a lotion of glycerole of subacetate of lead had taken away the heat, and stopped the discharge, and the condition was thereby greatly improved. Later, stimulating applications, such as tar or ichthyol, should be cautiously used, and arsenic given internally.

12. The next patient exhibited was an example of a very rare disease, primary sarcoma of the skin, or, to give it its exact name, sarcoma idiopathicum multiplex (pigmentosum) cutis (Kaposi's type). The patient was a Polish Jew, aged 45. He first came under observation about eighteen months ago, when notes were taken by Mr. Schorstein, and he dated the onset of his disease two-and-a-half years before that. It began with swelling of the hands, and six months later of the feet. The latter were pigmented from the first, but the swelling of the hands, according to the patient's statement, occurred six months before they became pigmented. The eruption gradually spread over the hands and feet, and patches appeared on the thighs and elsewhere. It was accompanied by no pain, and only slight itching. When he first came under observation there were patches of discoloration on both upper and lower extremities. A typical patch was slightly raised, of a deep purple (plum) colour. Nodular patches were also to be seen and felt here and there. The patches felt hard, but there was no pain, heat, or loss of sensation, and the skin moved freely in all but one or two places over the underlying tissues, but it moved *en bloc*, and had lost all suppleness. The eruption was situated on the hands and feet, and slightly on the thighs. The mucous membranes were free from disease, and had never been affected. He stated that some of the patches had disappeared, leaving usually a yellow stain, but sometimes no signs of their existence. He was weak, and somewhat wasted. The case was quite new in my experience, and I was unable to determine its nature. He remained under treatment six weeks. His general health improved, but the local condition remained unaltered. Later, he came under the care of Dr. Pringle, who showed him at the Dermatological Society. Dr. Pringle had him under care at the Middlesex Hospital, but the disease resisted treatment. To Dr. Pringle is due the credit of ascertaining later that it was a case of primary multiple sarcoma of the skin of Kaposi's type. The patient has again come under my care, and the disease has made great advances since he was previously under my observation. The hands and feet (Figs. 1 and 2) are now greatly swollen, and have numerous fungating and ulcerating masses upon them and the integument is thickened, hard, and of bluish colour. The case conforms very definitely to Kaposi's type of sarcoma cutis, which has been carefully studied, and described also, by Amicis, Léon Perrin, and Funk. The disease generally occurs in persons between 40 and 60 years of age. It does not appear to be hereditary. It occurs chiefly in the labouring classes, especially in those subjected to fatigue and hardship. It may remain limited to the extremities for one to several years, during which time some spots disappear and others make their appearance. Ultimately, in all but a few cases, the disease becomes generalised, the mucous membranes and internal organs invaded, and the patient sinks into a state of marasmus, from which he dies. Microscopical examination has shown that the disease is a sarcoma, which is pigmented from blood exudations, and not a melanotic growth. A few cases have recovered from the administration of arsenic, especially when given subcutaneously. This is interesting in connection with the occasional cure of lymphadenoma (lymphosarcoma) by arsenic.

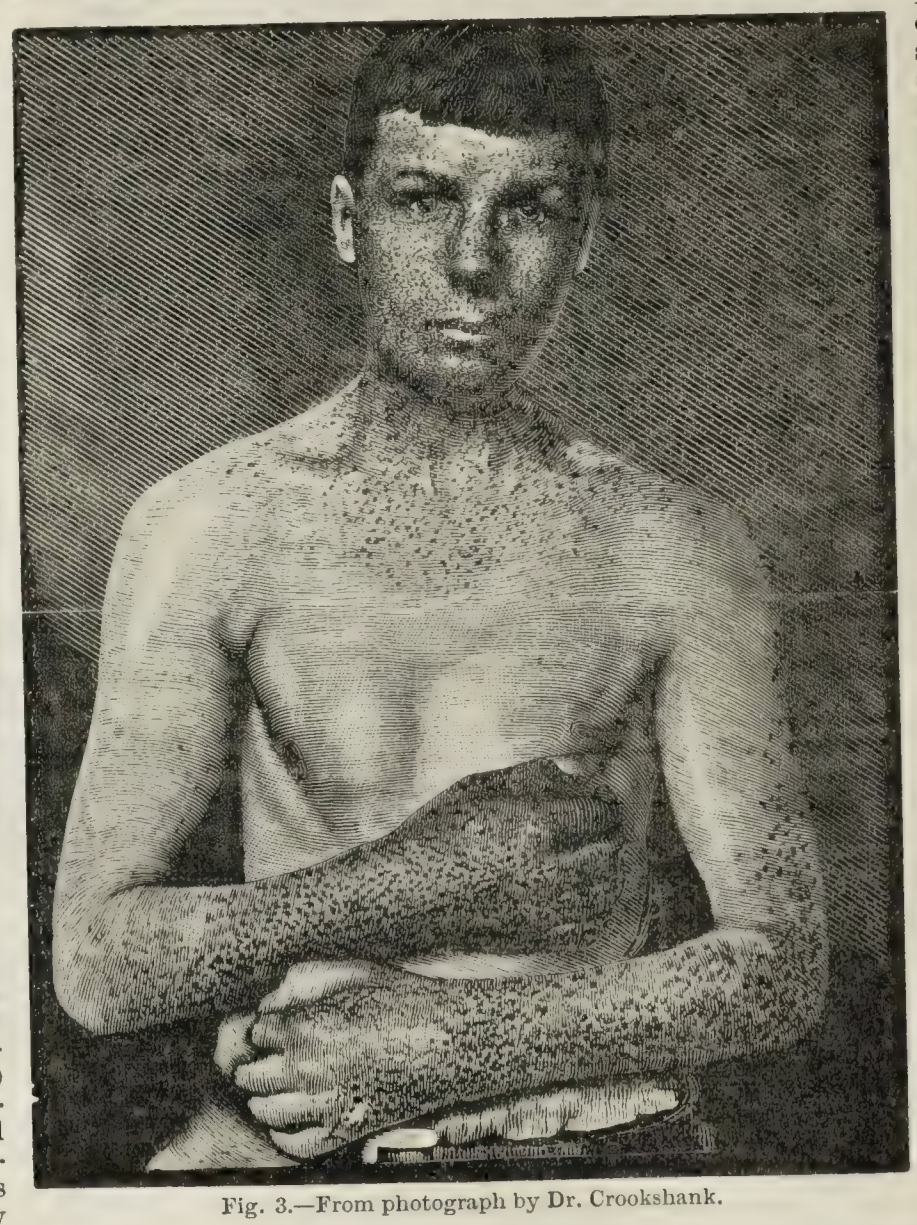


Fig. 3.—From photograph by Dr. Crookshank.

13. The next case was likewise a rare disease—xeroderma pigmentosum, also first described by Kaposi. The patient was an imbecile lad of 20, sent to me by Dr. Day, of Lower Edmonton. From notes by Mr. B. E. Dawson it is gathered that at the age of 3 or 4 years, whenever he was exposed to the sun, he became red and the face blistered, and when a little older he became freckled. At first the freckles faded somewhat with each winter, but of recent years there has been no change with the seasons. At the present time the exposed parts of the body—namely, the face, neck, ears, external surfaces of the arms, posterior and external surfaces of the forearms, and external surfaces of the hands are of a reddish-brown colour; the skin of these parts is rough, dry, and easily puckers. Scattered over these parts are numerous brownish-black pigmented spots, on an average about 2 millimètres in diameter, and interspersed amongst them are numerous white spots of an atrophic character (Fig. 3). The skin of the legs below the knees is rough and rather pigmented, but the condition is not nearly so marked as in the upper extremities. Cases of this rather rare disease resemble each other very closely. The disease begins in early childhood or infancy, and affects exclusively the parts that are uncovered in children. It is at first an exaggerated condition of freckles. Later, the skin becomes rough, atrophic spots and vari-

cosities appear, and eventually warty excrescences and fungating growths (on the face) make their appearance, which may fungate and ulcerate, and eventually, after the disease has lasted many years, bring about the patient's death. The tumours, examined microscopically, have been proved to be epitheliomata. Dr. Radcliffe Crocker, who has given an admirable description of the disease in the Medico-Chirurgical *Transactions*, and in his manual of *Diseases of the Skin*, has shown that in one case the tumours were papillomata, The disease, though not hereditary, has a tendency to run in families. The peculiar distribution of the pigmentation, the roughness and spots of atrophy of the skin, and the history of its origination in early childhood, generally in the first or second year, render the diagnosis easy. Unfortunately, it is a disease for which treatment so far has done but little. Nothing has been successful in arresting it. Treatment of the ulcers and tumours when they appear saves the patient suffering and retards the final stage; and treating the conjunctivitis which results from the ectropion caused by the puckering of the skin of the face, may prevent their appearance. I am indebted to Dr. Crookshank for taking the photograph illustrating this case.

14. A very curious, and, indeed unique, case was next shown. In an elderly man, an enormous patch of scaly dermatitis, with well defined margin, was present on the back, and the disease was limited to this part (Fig. 4). It had healed partly or entirely once or twice, leaving only a staining, but recurred; on one occasion he had an attack of bullæ on the feet. The case had been shown at the Dermatological Society, but no one had ventured to give it a name. No cryptogam was present. No treatment had been permanently successful in dealing with it.

15, 16. The last two cases were examples of a somewhat rare disease, though by no means so uncommon as the previous two—dermatitis herpetiformis. The first was a man aged 40. The disease began nine months ago with an eruption on the front of his chest, which, from his description, appears to have been an erythema; later appeared blisters, accompanied by such great itching as to prevent his sleeping at night. When he came under observation, three months ago, he had clusters of vesicles, arranged somewhat symmetrically, over both mammary and scapular regions, shoulders, and both lumbar regions near the spine, but isolated vesicles were scattered sparsely on other parts of the trunk and extremities. He had had a few bullæ, one of which contained blood. No vesicles on mucous membranes. Since then he has has had many bullæ, some containing blood, papules, and a few pustules, the latter at the mouths of the hair follicles. When shown there were no grouped vesicles, and only the remains of bullæ; all itching has now ceased. He had been treated with soothing local applications, and the administration of arsenic, and later, quinine. To the latter the chief benefit was probably due.

The second case was a much more serious one, which had been under observation within a week or so of its origin, nearly four years ago. The patient was a male, now aged 41. The disease began after exposure, followed by a cold in the head, loss of voice and pains in the chest, and about a week later little blisters came out in his mouth, on the lips, inside and out, and gradually spread nearly all over his face, on and behind the ears, neck, chest, arms, hands, penis and scrotum, and inside of knees. Fresh spots came every day and old ones died away. When seen about one week after its onset, his face was irregularly red, covered with small blisters in all stages of development and retrogression, many surrounded by a zone of redness. Grouped vesicles of rather larger size were on the neck. The chest was covered with a centrally arranged patch of circinate erythema and vesicles. The inside of the arms was similarly affected. There were grouped vesicles on the penis and scrotum, and vesicles and bullæ on the extremities. There were several vesicles on the tongue and inside of the mouth. There was a remarkable and unusual freedom from pruritus. Since its commencement four years ago, the skin had never recovered its normal appearance. Various phases had occurred. For a long time vesicles and bullæ continued to come out on the extremities, genitals, and buccal mucous membrane, with frequent attacks of circinate erythema. At one time the greater part of the body was covered by soft, flat, rather large scales, which gave rise to an appearance not unlike psoriasis. The "scales," however, were really flattened flaccid bullæ, such as occur in pemphigus foliaceus. At this time he fell into a marasmic condition which occasioned grave anxiety. At one time he had a certain amount of urticaria, spontaneous and factitious. At the present time his skin is a good deal pigmented, partly from arsenic and partly from the recurring dermatitis, interspersed amongst which are minute white atrophic spots or superficial scars. One or two bullæ only were present when he was exhibited; his tongue was glazed from superficial glossitis his general nutrition was still fair. His skin, however, was everywhere so sensitive and tender that the slightest knock excited a bulla. Innumerable plans of treatment had been perseveringly tried, but neither internal nor external remedies had sufficed to cure the disease. Arsenic exercised the greatest influence, but this fell short of being curative. Duhring had published a case that went on for twelve years. The disease is a very interesting one, and has been described under a variety of names. From its occurring in pregnant women it had received the name of "herpes gestationis." It had been called "pemphigus pruriginosus." The late Tilbury Fox and Radcliffe Crocker preferred the term "hydroa." It seemed in this case, as in others recorded, to have been induced by cold, and cold influenced it even at the present time to a marked degree.

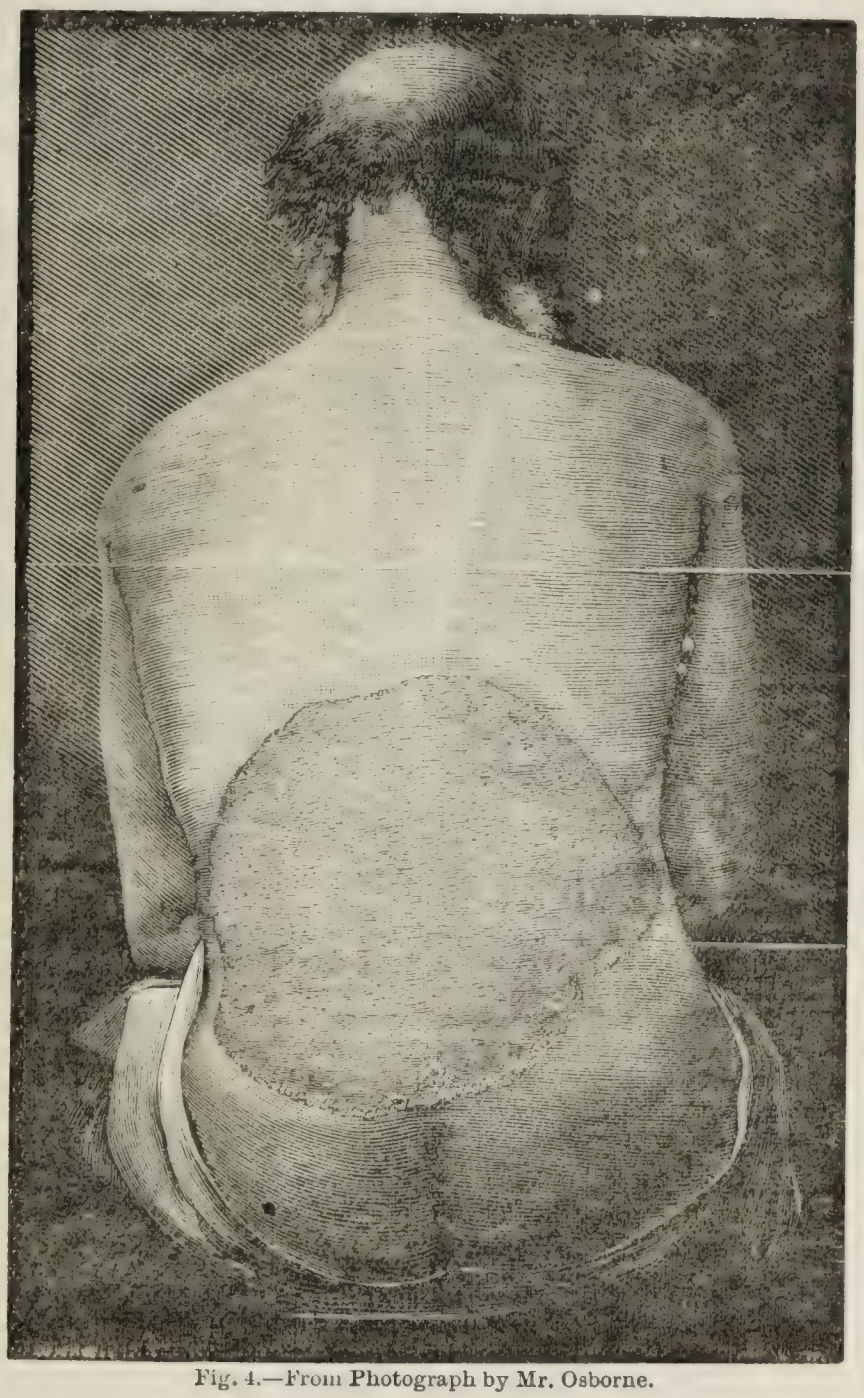


Fig. 4.—From Photograph by Mr. Osborne.

PROFESSOR VON ZIEMSSEN, of Munich, the editor of the well-known *Cyclopædia of Medicine*, celebrated his 60th birthday on December 13th.

DR. ALEXEI P. DOBROSSLAWIN, Professor of Hygiene in the Military Medical Academy at St. Petersburg, died on December 4th of typhoid fever at the age of 47. He was one of the leading sanitarians in Russia, which he represented at the International Congress of Hygiene at Vienna. He was the author of several works on hygiene, and for many years the editor of a popular journal bearing the title *Sdorowje* ("Health").

THE SURGICAL TREATMENT OF INTRA-CRANIAL FLUID PRESSURE.

By J. BATTY TUKE, M.D., F.R.C.P.E., F.R.S.E.,
Member of the General Medical Council.

On May 5th, 1889, Dr. Claud Muirhead drew my attention to the subject of the following case, who had been admitted the day before into Ward 39 of the Royal Edinburgh Infirmary. I am indebted to Dr. Muirhead for the clinical report, and for permission to publish it; and I give it *in extenso*, as the case presents the following points of interest: (1) the condition of the brain was ascertained during life; (2) the results of surgical operative procedure were somewhat remarkable; and (3) its collation with another case in which surgical measures were adopted warrants various suggestions for the treatment of "head cases."

R. S. W., male, aged 32, married, commercial traveller, admitted, at his wife's request, suffering from "strangeness of manner." Father died of heart disease; mother alive. No family history bearing on the case.

History given by Wife and Mother.—Previous to present illness patient had been bright, clever, active, and sober. About four months before marriage his hair began to fall out, he suffered from sore throat and headache; was treated with mercury till his teeth became loose. Four months after marriage his wife noticed her own hair becoming thin; she suffered from sore throat, and she became somewhat deaf; six months after marriage she aborted, and a second time at the sixth month. Two children were subsequently born, the eldest of which is barely seven. Patient's present illness commenced two months ago, when his mother noticed alternating conditions of depression and excitement. There was cause for depression, as he had lost his situation, and had made frequent unsuccessful attempts to get employment. His wife said he would sit for days in the house, and not notice any member of the family. If she gave him a paper, he would look at it carelessly, and then allow it to drop from his hands as from those of a man falling asleep. At meals he would take up his spoon and fork instead of his knife and fork. If he showed any desire to go out, she noticed that he would wander into the lobby, then back again to the sitting room, sit down, and forget his intention; this would happen several times a day. Memory failed in many ways; he would go out and stray about for hours, forgetting where he was. For three months previous to admission he had shown no sexual desire.

Report of Case taken Four Days after Admission.—When admitted, patient easily and readily reconciled himself to the hospital, and spoke of it as his own house. When questioned as to his occupation, he states he is a commercial traveller, working from Carlisle; that his method of business is to go to India every two years to purchase stock, which takes ten years to dispose of, when he returns to the East. His business affords large profits; for example, he sells a chair for £2,000, which cost him £70. He is consequently a very rich man. For all this there is no foundation. He is also very strong, and possesses great muscular power, and can perform very extraordinary feats. He is weakly, pliable, and is easy of management; his memory of recent events is very defective; he did not recognise his wife and children till his attention was specially directed to them, and then only in a vague manner. He sometimes knows he is in Edinburgh, but generally speaks of being in Carlisle. In almost the same minute he speaks of his great riches, and asks for twopence for a shave, or begs for "a fill" of tobacco. Appetite good; has a tendency to overeat himself. He frequently tries to strip off his clothes, and walk naked through the ward. He has slept well and quietly, except on the night of his admission, when, being somewhat restless, one seventy-fifth of a grain of hyoscine was administered. Temperature since admission has ranged between 98° in the morning to 101° and 102° at night. Pulse 74; first sound of heart accentuated. Patient complains of an intense burning pain in the crown of his head, which is constantly present; it is relieved by the icebag. His articulation is impaired; he stumbles over words, and makes mistakes when reading, which he does very slowly, pronouncing syllable by syllable. When tested, he read "excess" for "success," and pronounced "dilution" with difficulty. Words are slurred if not pronounced very slowly. Hearing not impaired. When tested as to smell, he says hypobromite of soda has no smell, sulphuretted hydrogen is disagreeable, ammonia is hot, but does not recognise it or the odour of lavender. As to taste, he recognises whisky as sweet, but cannot distinguish between it and wine; can distinguish between tea and coffee. Patient suffers from a perceptible amount of anæsthesia combined with analgesia over the whole body. His muscular irritability is not diminished; knee reflex absent; plantar reflex absent, although the soles are sensitive. Tests of muscular sense fallacious. Muscular force very good. The pupils are unequal and variable, the left being generally larger than the right, though the opposite condition has been observed. The pupils are sluggish and almost insensible to light. The field of vision is not contracted. The ophthalmoscope shows a healthy fundus and disc, with slightly dilated veins, but no tortuosity. Motor functions: When lying down or sitting nothing is noticeable, but when standing up, with the feet close together, his body moves very perceptibly from side to side, and backwards and forwards; this movement is increased when the eyes are closed, though he has no tendency to fall. When asked to walk, he seems to brace himself up for the effort; the feet are planted somewhat apart, and the heels are jerked down, the toes being raised more than normally. He easily loses his balance, stumbles over small obstacles, and shows some hesitancy in turning round. When walking with his eyes closed he widens the basis of support still more, and, although he walks fairly straight, he staggers a good deal. When holding out his hand it is shaky, and the fingers are constantly moving, besides being affected by fine fibrillar tremors. He cannot raise a glass of water to his mouth steadily. When silent the face muscles are quiet, but twitch when he opens his mouth to speak, especially those of the lips, the upper one being the worst. He protrudes his tongue with a jerk, and when kept out it twitches in fine fibrillar waves. The tongue is large, white, and flabby, with well-marked furrows in the sides, and indented by the teeth.

During the fortnight after admission many of the symptoms became more marked; articulation became more difficult, and there was greater mental confusion. Greater difficulty was shown in answering simple questions, and he forgot what he had been speaking about almost immediately after the words were uttered. He did not recognise where he was. He was perfectly happy, the condition of *bien-être* being well marked; at times he would assume a business-like air, and count over large sums of money; at others he would pace the ward, and strike out at some imaginary object. He began to see some imaginary persons, but rarely spoke to them, generally using signs and gestures. During the two following days he had depressed turns, his happy condition suddenly turning to sadness and weeping; as suddenly the state of joyousness would return. On admission there was a slight cloud of albumen in the urine, which soon disappeared.

The congeries of symptoms above narrated pointed to what is generally termed "general paralysis of the insane," probably, almost certainly, of syphilitic origin. This condition is admittedly desperate, very few cases, and those somewhat doubtful, of recovery having been recorded. Intracranial pressure, produced by at least two morbid processes presently to be discussed, is known to exist in general paralysis. After very careful consideration of the case between Dr. Muirhead, Mr. John Duncan, and myself, it was determined to advise the friends to allow trephining to be performed. It was fully explained to them that the procedure would be experimental, but was warrantable on the following grounds: (1) the case was almost certainly sure to result in death in from twelve to twenty-four months; (2) that there was little likelihood of any harm following the operation; (3) that the case was in an early stage of the disease; and (4) that a hope of some improvement being effected might be entertained. Consent was given, and on May 17th the operation was performed by Mr. John Duncan. The patient having been placed under chloroform, of which he required a large quantity to procure complete anæsthesia, Mr. Duncan made a semilunar incision around the left parietal eminence and reflected the periosteum; several vessels required ligature, The trephine was applied a little above and in front of the parietal eminence; the bone was found to be five-sixteenths of an inch thick; the disc was removed, and the dura mater exposed. No signs of bulging of the brain into the hole were observed. An exactly similar procedure was followed at the identical spot on the right side. Here the bone was thicker, being six-sixteenths of an inch in thickness. On removing the disc the dura mater bulged markedly, almost filling the circular pit. The dura mater was not opened, as it was deemed of importance to see what would be the result of simply exposing it. The discs were not returned, the wounds were stitched up, dressed antiseptically, and were found practically healed twenty-four hours after the operation was completed. No systemic irritation was noticeable;

the pulse did not rise, nor was temperature increased beyond what had been noted previous to the operation. On recovery from the chloroform no change in the inequality of the pupils was noted, but on the following morning they were almost equal, and reacted better to light than previously; this continued for five days. The most obvious result was the change in the mental condition of the patient; his intellect was distinctly clearer; for the first time since admission he recognised the fact that he was in a hospital, his manner was calmer, and he was evidently more sane than he had previously been. He ceased to have hallucinations, asked for what he wanted in a rational manner, and the headache disappeared. This improvement, however, only lasted for five days, when the old symptoms returned, with the exception of headache. The rules of the infirmary forbidding the retention of insane persons, it became necessary to remove him, and he was accordingly sent to the Morningside Asylum. Unfortunately I was obliged to leave Edinburgh at this time on official duties, otherwise I would have endeavoured to take measures by which R. S. W. could have remained under my observation, when I certainly should have advised the removal of other discs in the neighbourhood of the longitudinal sinus, or another operative procedure on the manifestly affected side. I much regret not having communicated on the subject with Dr. Clouston, who, I know, would willingly have assented to any measures being taken likely to procure relief: but circumstances stood in the way of my doing so. Dr. Clouston thinks that the operation may possibly have modified symptoms, as the patient since coming under his care has been remarkably tranquil. I saw R. S. W. lately, found him much demented, with ataxic symptoms very well marked. He is showing progressive symptoms of a downward tendency. The scalp is drawn inwards in the trephine holes; pulsation is not to be felt on pressing the fingers into either of them.

On July 28th, 1889, Dr. Claye Shaw removed bone from the skull in a case of "general paralysis," trephining having been performed "on the right side of the skull over the central sulcus, and about two inches outside the longitudinal fissure.....The operation consisted of making two holes with a trephine, cutting away the intermediate bone so as to make an opening about an inch and a half long by three-quarters of an inch wide, cutting away the dura mater, and letting out a considerable quantity of subarachnoid fluid."[1] The patient's general condition was much improved by the operation, and he was, in Dr. Claye Shaw's opinion, at the date of his report, no longer insane.

In a letter addressed to the Editor of the BRITISH MEDICAL JOURNAL on November 23rd, Dr. Revington maintains that Dr. Claye Shaw has failed to satisfy, even partially, the following conditions, which are demanded for the performance of a new and serious operation: (1) the establishment, by an unassailable theory, of the pathological processes to be remedied; (2) the sufficiency of the mechanical means competent to produce the result intended; and (3) the absolute relation of cause and effect as regards the operation, and the subsequent improvement. It may be admitted that Dr. Claye Shaw is not very clear as to his reasons for believing that relief from pressure would be obtained by the operation, and his attempted analogy between it and nerve-stretching is somewhat bewildering; still, he is much nearer the mark than Dr. Revington when the latter says that "giving the brain more space to expand by making a hole an inch and a half by three-quarters of an inch is to talk mechanical nonsense;" that intracranial fluid of more than normal quantity is necessarily "compensatory;" and that "the only way to relieve pressure due directly to fluid in the convolutions would be to slice them as freely as we incise œdematous subcutaneous tissue." I am afraid Dr. Revington's propositions give expression to at least three errors; in dealing with them *seriatim* I hope to show that Dr. Claye Shaw and I were warranted, by theory at least, in taking the measures we severally adopted.

If we assume that the average compressibility of brain matter included in the dura mater is at all comparable with that of water, it is certain that a very small increase of the capacity of the retaining membrane would materially diminish the internal pressure. In his *Properties of Matter* (p. 190) Tait gives the following empirical expression for the average compressibility of water: $\frac{v_\circ - v}{p\, v_\circ} = 0.0000489 - 0.00000025t - 0.0000000067p$, where v is the volume at $t°$ C. and p atmospheres, $v_\circ$ at $t°$ C. and one atmosphere. At this rate, taking our ordinary temperature (say 15° C.), we should find that the volume of water is altered by an atmosphere to the extent of 0.000045, that is, 0.0045 per cent. only. In other words, supposing a rigid chamber absolutely full of water, the addition of a $\frac{22}{10000}$ part of its volume would produce a pressure of one atmosphere; and, conversely, the withdrawal of a $\frac{22}{10000}$ part of its volume, under the circumstance of an additional atmosphere, would reduce the pressure to that of the external air. To emphasise the expression, supposing a fluid so situated was under the pressure of 100 atmospheres, the withdrawal of $\frac{1}{220}$ of its bulk would reduce the pressure to that of the atmosphere. If it is added that the pressure of an additional atmosphere would crush the convolutions into a shapeless mass, it is evident that the increase of the capacity of the dura mater need be very small in order to procure diminution of the pressure of its contents. If, therefore, the operation of trephining be followed by well-marked bulging of the dura mater, it is absolutely certain that there must be a corresponding increase in the capacity of that membrane, and, consequently, a diminution of the pressure of its contents, supposing any pressure to exist caused by their overgrowth. The actual amount of this diminution of pressure would be perhaps difficult to calculate *a priori;* but the difficulty should not be insuperable; imitative experiment should enable us to form a fair estimate of its amount.[2]

Up to this point I have been speaking of intracranial pressure as if it affected the contents of a closed sac. It is so generally stated in pathological works that the cranium is a "practically closed sac" that this expression has assumed the position of an axiom, and we have been taught that morbid processes going on in the brain are to be considered as acting under very different conditions from those occurring in other parts of the body. This is, to a certain extent, true, but only to a certain extent. The dura mater is not a closed sac; were it so we should have pressure diffused equally all over, which we know not to be the case. It has numerous and extensive extra skeletal relations. Through each foramen of the base of the skull, and of the vertebral column, lymphatic vessels pass out, the sectional area of which is very considerable. The immense activity of the contained organs demands free exit of the products of waste and unused material.

The phenomena of intrameningitic fluid pressure depend not so much on the rigidity of its bony covering as on the rapidity of the production of fluid, and the resistance offered to its exit by the extraskeletal tissues and fluids. In health, of course, the lymphatic system is patent, but under conditions of disease it becomes impaired, generally, perhaps, by the action of increased arterial pressure and venous obstruction, and, locally, by the products of inflammation. When inflammatory action affects the membranes themselves, or their contents, exudation of serum is greater than can be carried off by the lymphatic conduits; still, a large portion of it is removed, otherwise we should have the brain and spinal cord submitted to such an amount of pressure as would necessarily produce death. Thus, even in disease, the dura mater cannot be regarded as a closed sac, for although fluid pressure is being exerted within it a large proportion of the fluid must and does escape. Consequently, the amount of pressure produced by the accumulation of fluid can only be estimated by fractions of the pressure of an atmosphere, and the volume of fluid withdrawn need be proportionately small to procure modification of symptoms, as compared with what would need to be set free under the pressure of an atmosphere. Further, in the case described by me, the pressure was either confined to one side or it was unequal, as the dura mater bulged out on the right side only, the disc removed from which was thicker than that taken from the left. Sections of the bone showed thickening of both plates, especially the outer, with a corresponding thickening of the trabeculæ of the diploë, in the spaces of which at some points were collections of small round cells resembling granulation tissue more closely than the ordinary red marrow. In some parts of the sections there was nothing but fatty tissue. The thickening of the inner table must have produced some diminution of the intracranial capacity; but the marked bulging indicative of fluid pressure is to be accounted for by inflammatory processes occurring in the membranes, and giving rise to increased fluid pressure in certain circumscribed areas which, in this case, may have been represented by the whole superior and lateral aspects of the right hemisphere, and may possibly have corresponded with the area of

[1] JOURNAL, November 16th, 1889, p. 1090.

[2] I am endeavouring to devise a method of experiment bearing on this subject and on the compressibility of brain matter.

inflamed bone. Thus the bulge of dura mater would only affect a limited area of confined fluid, and would give a relatively larger amount of relief from pressure. For these various reasons, therefore, I maintain that in my case relief was obtained directly from the operation, although the amount of bulge may have not held more than twenty or thirty minims of fluid. The investigations of Naunyn and Schreiber, and those of Adamkiewicz, show that definite series of phenomena accompany very slight variations of pressure, and we have a right to infer that even a very small diminution of morbid pressure is followed by at least temporary change in symptoms.

Dr. Revington speaks of excess of cerebro-spinal fluid being compensatory. It is no more compensatory under the conditions we are now discussing than any other form of dropsy; it is an effusion produced by morbid processes going on in the brain. In brain syphilis we have a well-marked arteritis, endarteritis diminishing the lumen of the vessels, and, what is of even greater importance in the production of dropsy, periarteritis, which thickens the adventitia, and occludes more or less thoroughly the perivascular lymphatics by deposits of leucocytes, and, in some cases, by what might be called granulation tissue, and in others by layers of coagulable fibrin. Thus obstructed lymph can make its way but imperfectly by the natural channels to the piamatral space (or, as it is generally, but improperly, called the subarachnoid space), and becomes diffused through the tissues, finding paths to the various lymphatic cisterns as best it may, injuring and displacing cell and fibre, and impairing their functional activity.

The cells are directly affected by this morbid process, for their lymphatic envelopes and conduits are more or less occluded; they cannot convey the products of waste to the perivascular spaces; they become dilated, and the cells are bathed in a poisonous acid fluid, which may act as a stimulant or a depressant. If we accept the views of Heynsius and Preyer, the variety of action depends on the chemical reaction of the fluid. At the same time, an inflammatory process is going on affecting the neuroglia.

We have thus two morbid processes in action, one consisting in increase of connective tissue, which surely does not call for compensation, and one productive of exudation, which is poured out more quickly than the occluded channels are competent to remove. Intracranial, or rather be it said intrameningitic, pressure is a necessary result. In those cases in which we have that typical congeries of symptoms which we term "general paralysis of the insane," similar processes are going on, differing mainly in their rapidity of action, and in their less well-marked tendency to formation of new perivascular tissue. Alongside of, or probably as an immediate consequence of, these morbid processes, we have occurring that series of progressive meningitic changes so characteristic of the condition, and as a result we have further interference with the passage outwards of fluid from the brain substance in the first instance, and from the meningitic channels and spaces downwards in the second, in consequence of the obliteration of conduits leading to the cisterns at the base to the wide piamatral (subarachnoid) space in the spinal canal, and to the ventricles.

Dr. Claye Shaw does not report bulging in his case on removal of the bone; but, even supposing it did not occur (or only to the small extent which is observable in all cases), its absence does not preclude the existence of abnormal pressure within the dura mater. It might be, indeed certainly was, present, although not to the extent of being able to exercise sufficient force to stretch the tough unyielding membrane when the restraining bone was removed, but still possessing sufficient power to have an evil influence on the brain tissues. But Dr. Claye Shaw did to his patient what I should certainly have done to mine had he remained under my care—he opened the dura mater, and allowed the escape of cerebro-spinal fluid from the *subdural* space, not, as he states, the subarachnoid space. In so doing he performed a thoroughly scientific physical experiment, and took the most effectual means of relieving pressure by withdrawing from a circumscribed area fluid which was being produced more rapidly than the impaired conduit system was capable of withdrawing. In this class of cases the inflammatory processes are mostly, and particularly in the early stage of the condition, confined to an area of the superior and lateral aspects of the convolutions, roughly indicated by placing the two open hands on the top of the head, palms downwards, inner aspects touching each other, and the hypothenar elevations resting on the temporal protuberances. Outside this area the evidences of disease on the surface of the convolutions, milkiness and opacity of the pia mater, are usually faint or absent; in fact, they fade as they recede from the focus of disease, much as the blush of inflammation fades as it recedes from the centre of an implicated patch. In a word, the products of inflammation become diffused in the connective tissue more thoroughly as they leave the focus, and become less apparent. Thus we have evidence of inflammatory pressure circumscribed, as most inflammations are, by resistance of connective tissue, tension being produced slightly by arterial pressure agency, considerably by venous congestion, mainly by the general lymphatic changes.

When the dura mater was opened, the fluid pressure in the subdural space was reduced to that of the atmosphere, and gradually that affecting the subjacent tissues was relieved by the action of the Pacchionian villi. Under the previously existing pressure, these important organs could not act in withdrawing the fluid from the lymph spaces of the pia mater (the subarachnoid spaces), but as they exercised their function, the œdema of the brain substance was relieved, and with it tension. Thus "the mechanical means were adopted which were competent to produce the result intended."

Whether the good results are merely temporary or are to be permanent, the operation is fully justified, whether tested by theoretical principles or by consequences. The dropsical sacs were tapped, and we have a right to presume that, as in all such sacs, absorption of fluid by natural channels became feasible. The operation was presumably followed by the same results as follow on diminution of tension in a pleura or peritoneum, and a reasonable hope may be entertained that, as a consequence of healthy action of the lymphatics and blood vessels being now possible, the process of sclerosis has been stayed. It is a pity Dr. Claye Shaw could not give a more accurate estimate of the amount of fluid that escaped than "a considerable quantity," and did not state whether any oozing was encouraged during the days following the operation. Dr. Revington's statement that the only method of relieving an œdematous brain is "to slice the convolutions freely" is (to paraphrase an expression of his already quoted) anatomical and pathological nonsense.

To my mind the two cases taken together are most important; the first was only temporarily relieved by an imperfect operation, the second was benefited for a much longer period, if not permanently, by a much more thorough surgical proceeding. The collation of results warrants, in my opinion, repetitions of the operation in cases in which the symptoms have not advanced too far to preclude a reasonable hope of good being done. I shall certainly have no hesitation in recommending it in the early stage of "general paralysis." In the first place, the condition is, practically speaking, hopeless if left to itself: secondly, the operation is not dangerous to life, in point of fact, it is extremely simple; thirdly, it is a strictly scientific proceeding, and bears analogies to those undertaken in other dropsical regions; and, fourthly, the results obtained by the two operations already performed warrant the measure. I would suggest that such a large aperture as was made in Dr. Claye Shaw's case (an inch and a half by three-quarters of an inch) is unnecessary, as the withdrawal of fluid from the subdural space can be easily procured by a smaller opening. It might be found desirable to keep the aperture in the dura mater open for some length of time, so as to procure a slow constant drain, which might add some danger to the operation, but with carefully adjusted antiseptic dressings this source of danger should be slight.

It has been suggested by Dr. James Adam[3] that Dr. Claye Shaw's case might have been one of those rare instances in which a condition causing the group of symptoms called general paralysis of the insane has been recovered from. As during thirty years of a large experience he has met with only two such cases, the odds (to use common parlance) are against the suggestion that Dr. Claye Shaw dropped on such a rarity. It may have been so, but even if such an extraordinary fortuitous collocation of events did occur, the measures adopted seem to have assisted recovery; but this theory may, for all practical purposes, be set aside. Certainly, before recommending such an operation, the utmost care should be exercised in excluding cases of alcoholism, which not infrequently simulate general paralysis. In fact, the whole question as to how far "general paralysis of the insane" can be considered a pathological entity must be undertaken; and I venture to suggest that the case I have narrated may have some bearing on it.

The consideration of these two cases has led me to the conclusion that there are other brain conditions which might be relieved

[3] JOURNAL, November 23rd, 1889, p. 1189.

or cured by surgical interference. I cannot but believe that certain cases characterised by coma, delirium, and acute mania, produced by a congested and dropsical condition of the brain, or by meningitis, and in which there is a distinct tendency towards death, might be benefited by relief of pressure by puncture of the dura mater. It must be borne in mind that congestion and dilatation of the cerebral arteries and veins produces obstruction of the perivascular lymphatics in the same manner as the conditions already spoken of act. The mere dilatation occludes them partially, and the rapid accumulation of leucocytes outside the vessels helps to maintain and increase the obstruction. In the large majority of such cases death ensues from accumulation of fluid, and we are compelled to sit helpless and hopeless in their presence. One is warranted in asking, Are our resources of treatment exhausted? Death, we believe, results from intracranial pressure, which lowers and destroys the functional activity of the brain. If we relieve this pressure there would certainly be hope, founded on the reasons already advanced, that reparative processes might ensue on removing, by gradual draining, cerebro-spinal fluid from the vertex. I am not at present prepared to say whether it would be possible to tap the cerebello-medullary cistern in cases of basilar meningitis; but it really matters not whence the relief is obtained so long as the fluid is removed, for in such cases, inflammation not having existed for such a length of time as to cause blocking of the conduits in the meninges by organised material, and these remaining patent, free communication exists between all parts of the encephale. When we produce the analogies of the immediate good results of lifting bone which has been depressed for even long periods, and of the removal of tumours from the brain, why should we shun the displacement of a material which we know to be almost, if not quite, as potential in the production of death, or, of what is worse, hopeless insanity, simply because it is water? The procedure is simpler in the case of the diffused watery tumour than in that of the solid growth, and can be adopted without complicating existing conditions.

I cannot conclude this paper without insisting on the following points: (1) The necessity of keeping in view the vast influence exercised by the lymphatic system of the encephale in morbid processes. The implication of the lymphatics is a great and immediate cause of many cerebral symptoms, is easily produced, and is easily relieved. If not the prime, it is a very early, factor in the production of the phenomena of many forms of insanity, being the immediate sequence of vascular changes. It is curious to remark how traditional mistakes as to the anatomy of the cerebral lymphatic system have been handed down from one text-book to another; for example, in Quain's *Anatomy* we find the arachnoid described as a separate membrane, and the pia mater as a double membrane dipping as such into all the sulci. The simple fact is that the pia mater is a double membrane, the outer or parietal layer of which (the so-called arachnoid) bridges the sulci, and the inner only dipping into them, sending off lymph channels round each vessel, through which it receives the lymph into its spaces on the surface of the brain, transmitting it to the cisterns at the base, and by the Pacchionian villi to the subdural space, and the superior longitudinal sinus. It bears close analogies to the pleura and peritoneum. The whole subject is simplified if we speak of two membranes only, the dura and the pia mater; and of two lymph spaces, the subdural and the piamatral. Nomenclature would be simplified, and the general appreciation of the lymphatic system of the encephale made easy.[4] (2) I would deprecate the theory that morbid processes going on in the brain are to be regarded as being conducted under materially different conditions from those acting in other parts of the body; and (3) I would ask, that being the case, Why not apply the same systems of treatment?

THE SURGICAL TREATMENT OF GENERAL PARALYSIS.

By R. PERCY SMITH, M.D.,
Medical Superintendent of Bethlem Royal Hospital.

It has been a matter of surprise to me that no superintendent of an asylum or physician in lunacy practice of sufficiently long experience, and whose opinions would have great weight, should have ventured to criticise Dr. Claye Shaw's report of a case of general paralysis treated by trephining, published in the JOURNAL of November 16th. I feel certain that there must be very few men in such posts who have read Dr. Claye Shaw's report of his case but must have felt that the whole bearing of the case was not stated with sufficient completeness.

In the minds of those unfamiliar with the disease, it seems to me that, from the report of the case, the impression might be produced that it was rather a new thing for a case of general paralysis to be discharged "recovered" from an asylum or hospital; but surely it is well recognised that such cases frequently show marked improvement, for a time at least, and that they may have to be discharged "recovered" because there are not sufficient symptoms to warrant their legal detention, though the physician under whose care they have been may have the strongest feeling in his own mind that they will eventually relapse and end fatally. This course has had not infrequently to be resorted to at Bethlem, and I give here, very briefly, a few instances.

CASE I.—A. K., aged 41, was admitted July 5th, 1884. For two months he had had pain in the head, and had become extravagant and intemperate. On admission he was full of exalted delusions of strength, wealth, and powers of all sorts; he wrote misspelt, untidy letters with tremulous hand, his knee-jerks were absent, his gait somewhat ataxic, his pupils minute and not acting to light, his speech and tongue tremulous. He was considered to be an ataxic general paralytic. During the next twelve months his mental symptoms improved so much that he was discharged "recovered" in September, 1885. There remained, however, tremor of lips and tongue, the pupils and knee-jerks were as before, and, of course, the case was not for a moment looked upon as a cure of general paralysis. Nothing has, however, been heard of him since, and he may have died.

CASE II.—W. H. S. M., aged 34, captain of a telegraph ship, admitted July 6th, 1885. History of syphilis. Depression for five months, then, on admission, extravagant, exalted, excited, with unequal pupils, exaggerated knee-jerks, tremor of lips, tongue and cheeks, and speech trouble; but in March, 1886, having lost his excitement and delusions, and in great part his abnormal physical signs, he was sent on leave of absence, and eventually discharged "recovered." This case was thought to be one of general paralysis, but he was able to resume work, and for nearly eighteen months he acted as chief mate of a steamer in the East Indies, remaining apparently in good health, but, from being an irritable man, he had become easy-going, and he was noticed to sleep too much. He, however, was able to perform the complicated and important duties of chief officer without any accident. In June, 1888, his wife brought him up to the hospital; he was then losing power, was thin, and had marked tremor of the lips and tongue, bladder weakness, and commencing dementia. He was readmitted, and died in the hospital.

CASE III.—G. S. R., aged 34, a clergyman, admitted October 16th, 1886. Had suffered from syphilis in youth. Had had an unusually brilliant university and athletic career. From July, 1885, he had been sleepless, and had had two or three attacks of what was described as "coma." He had lost memory and nerve power, and had occasional excitement. On admission he had tremor of tongue and lips, unequal pupils, blurred and difficult speech, exaggerated knee-jerks, loss of memory, and much mental confusion and delusion that he was watched. There was considered to be no doubt as to his having early general paralysis. By the end of December, however, there was great mental and some physical improvement, and in March, 1887, he was discharged "recovered." Subsequently a letter from his father announced his "complete recovery," that his "delusions have entirely left him." He resumed clerical duty, and went on a continental tour, doing chaplain's work, and during this period his relations considered him perfectly well. In July of the same year, however, he suddenly became furiously maniacal, with intense exaltation, eroticism, and obscenity, and with marked physical signs again. He was brought over to England with great difficulty, was readmitted to Bethlem, and, after some weeks of great excitement, he died in a series of convulsive seizures.

CASE IV.—J. S., aged 46, a post-office official, admitted November 14th, 1884. For some time he had been restless, "odd," sleepless, had become intemperate, and then violent and threatening. On admission he was the "world's provider," a great orator, thought he had unlimited wealth, wrote to the Queen and Prince of Wales, and was constantly writing letters. His speech was

[4] The existence of a third, the epicerebral lymph space of His, is more than doubtful.

thick, pupils unequal, tongue tremulous; there was loss of smell for pepper, and defective memory. After some months of this condition he became quieter, and appeared to be getting weak minded, and then in May, 1885, he was seized with a series of convulsive seizures affecting principally his left side, and leaving a temporary paralysis and anæsthesia, and attended with a rise of temperature to 104° F. There was considered to be no doubt as to the nature of the case, he having had all one could want to make a diagnosis of general paralysis. The sequel is, however, interesting. From the time when he had these seizures, he has had no more symptoms. He had to be discharged "recovered" after an interval, and understanding that he probably had a progressive disease, and that the outside world would probably be too great a strain for him, he decided to remain here as a voluntary boarder, so he is still under observation. He is perfectly intelligent, has no loss of memory, manages his own affairs, and has no affection of speech, lips, or tongue, or other physical signs of general paralysis.

This case may, with some probability, be looked upon as a cure, but the patient being still under observation the details have not yet been published, there being, of course, the chance of the condition being merely a long remission. Mickle[1] quotes many recorded instances of long periods of remission and of real or supposed recovery, and gives some of his own cases. He adds: "It is noteworthy that several of the above-mentioned instances of recovery or of very prolonged remission have supervened on accidents, violent injuries or diseases of such a kind as to produce so-called 'revulsive effects.'"

In face of these facts I do not feel disposed to admit Dr. Claye Shaw's claim that "the operation has been justified by success." By his own admission the patient still has prominent bulbar symptoms in contrast to some of the cases I have given above, and I doubt whether the trephining has had more to do with the relief of the other symptoms than any other injury might have had.

It is surprising to me that Dr. Claye Shaw should not have referred to the fact of remissions occurring thus in general paralysis; this, I think, is a most important omission. Nothing is said as to the presence or absence of a history of syphilis.

Everyone must admire the boldness Dr. Claye Shaw has shown in resorting to trephining in an attempt to arrest this terrible disease, in which the physician, as a rule, stands powerless to do anything but guide the patient as gently as possible to the almost inevitable fatal termination, but I think few will care to resort to it from reading the case as it stands at present.

I have not touched on Dr. Claye Shaw's view of the pathology of the case, which has been discussed by Dr. Revington in your issue of November 23rd. I have failed to find in Dr. Claye Shaw's paper the expression "fluid in the convolutions," which Dr. Revington states is there, and I think it is a matter of regret that the latter should have used the expression "mechanical nonsense" in his criticism. With the exception, however, of these points, and the remark that I do not think it a universal custom to incise freely simply œdematous subcutaneous tissue, I agree with his letter.

Everyone will anxiously await for a further history of this case, which I hope will not be lost sight of. Though the patient may not be insane at present, I think there is little doubt he is merely in a period of remission, and that he will not remain long out of an asylum.

AMPUTATION AT THE HIP-JOINT, WITH THE SKEWER METHOD OF SECURING THE VESSELS.

By ROBERT JOHN GARDEN, M.D.,
Surgeon, Aberdeen Royal Infirmary and Sick Children's Hospital; Lecturer on Clinical Surgery and Dermatology, Aberdeen University.

I HAVE read with interest the account in the JOURNAL of November 9th by Mr. Thomas Myles of a proposed new method of performing amputation at the hip-joint. The following notes of a case in which I performed this operation will show that the method adopted by me was almost the same as that proposed by Mr. Myles.

A. A., aged 21. Leg began to give trouble in June, 1887, pain being referred both to the hip-joint and the knee. The pain increasing, patient, who was a marine, was sent to Portsmouth Hospital, and was treated for sciatica. Morbus coxæ being diagnosed, a stiff bandage was applied for six weeks, followed by a ten-pound weight extension for three months. In July, 1888, he was invalided, came to Aberdeen, and was admitted into the Royal Infirmary. Extension was tried. A Thomas's splint was applied afterwards, and the patient was allowed to go home. In the beginning of 1889 an abscess formed and burst on the inner side of the thigh, and he was readmitted to the infirmary in February. For a time he did well, but towards the end of March his temperature, which had been about normal, suddenly rose to 102° F., and continued hectic. On April 18th a large abscess in anterior aspect of the thigh was opened from end to end. This was not followed by any marked improvement, and about the beginning of May patient expressed a wish that something radical should be done. It was resolved, considering his age and the extent of the disease, to remove the limb at the hip-joint, and on May 28th this was done.

Since the unhealed wound which remained after the operation for opening the abscess in April would have been in the centre of an anterior flap, I resolved to amputate by lateral flaps. My operation differed from that suggested by Mr. Myles, inasmuch as I first cut the outer flap with a small knife, cutting from skin inwards. The bleeding vessels were secured by ligatures. By cutting the outer flap in this way it can be formed of better shape than by transfixion, owing to the prominence of the trochanter major. Further, a thorough examination can be made of the joint and upper part of the bone, in the event of its being deemed desirable, after the real state of the parts has been observed, to give the patient a chance of retaining his limb by excision. I then introduced a skewer from before backwards, exactly as proposed by Mr. Myles, the parts with the vessels being compressed by an elastic band. A long amputation knife was now introduced by the side of, but below, the skewer, and a large internal flap cut by transfixion. The head of the femur was then disarticulated—an easy process, for it was much wasted and softened by disease. The arrest of the bleeding was most complete, not more than a tablespoonful of blood having been lost.

Satisfactory progress was made after the operation, and the skin wound healed almost by first intention. A little discharge from the deeper parts continued for some time; but this is not to be wondered at considering the nature and extent of the disease.

I have had considerable experience of amputation at the hip-joint. The result has been uniformly successful, as in my fourteen cases I have had no death due to the operation. All my cases recovered except a child aged 9 months (whose leg was removed for a large sarcoma of the thigh) who died of measles contracted after the operation. So far as cutting the flaps is concerned, I pretty much followed the plan recommended by Furneaux Jordan, combined with the skewer securing of the vessels as suggested by Spence.

My experience does not lead me to regard the risk from shock as very great. The operation as described above removes the wound well away from the anus; and by the skewer method, both when antero-posterior and lateral flaps are formed, all danger from bleeding is effectually removed.

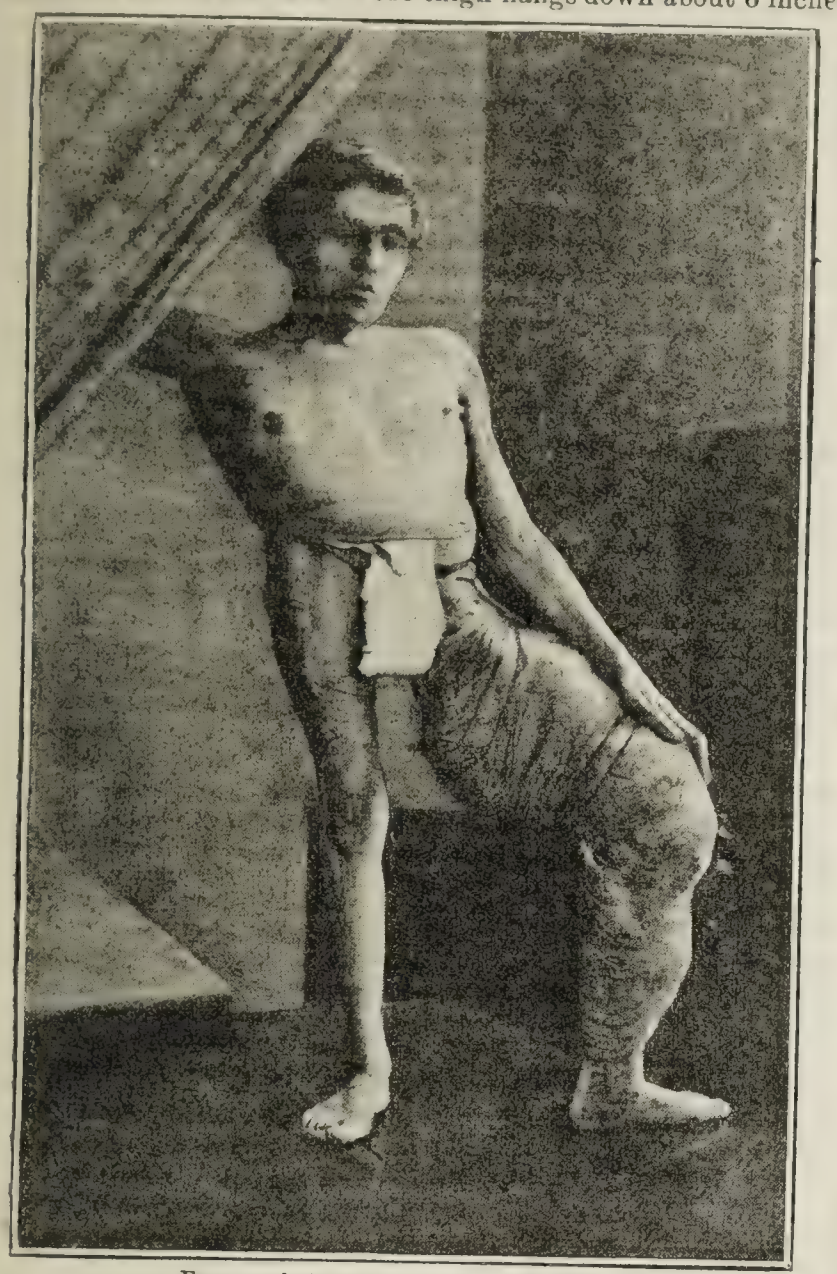
A CASE OF ELEPHANTIASIS TELANGIECTODES AND MOLLUSCUM FIBROSUM.

By WILLIAM CALWELL, M.A., M.D.,
Surgeon to the Ulster Hospital for Women and Children, Belfast.

THE patient is a little, good-natured young man, aged 28, somewhat deficient, however, in the higher mental faculties. His father and sister, according to his own statement, suffered from small subcutaneous tumours, resembling the molluscum fibrosum of himself. Over his own body, except on hands and feet, are these sessile tumours, more or less subcutaneously movable, varying in size and elevation, frequently with large comedones, and some having the skin a dusky bluish-red. The left lower extremity is 5½ inches longer than the right, hence he suffers from lateral curvature; the left thigh is 18, the right 14 inches long, and there is great irre-

[1] *General Paralysis of the Insane*, second edition, pp. 209 and 387.

gular hypertrophy of the left femur; and on the anterior aspect of the left tibia is a large osteal growth, about 6 inches long, 2 broad, and 1 in depth; the left foot is a little larger than the right. One large mass of the loose folds of the elephantiasis exists on the outer and anterior part of the left thigh; another commences on the inner side of the same part, and runs down the posterior; a similar fold runs along the calf. When the limb is held horizontally, the fold on the back of the thigh hangs down about 6 inches.



From a photograph by Mr. A. W. Esler.

The skin over these folds is rough, with large papillæ, in many of which are comedones, and the whole fold has a "lobulated doughy feel, like that of a pendulous mamma." On much exertion the folds may swell somewhat, giving the patient a sensation of fulness and tension, and a fall on the left knee caused a huge hæmatoma in the fleshy growth, both of which facts would be expected from the usually assigned pathology of Virchow and Kaposi, of fibro-vascular hypertrophy. The two conditions have existed since infancy. The resemblance to two cases already published in the JOURNAL, namely, the "Elephant Man" (May 11th, 1886), and another described by Dr. Wetherell (March 9th, 1889), will be evident. In the present one little or no change has taken place during the last two years.

The case illustrates (1) the affection being congenital, (2) its occurring in one somewhat imperfectly developed in mind and body, (3) the connection between the two forms of the disease, (4) the usual pathology assigned, (5) a condition analogous to the fibro-vascular hypertrophy of the subcutaneous connective tissue taking place in the osteal tissue (?). As the pathology, etc, will be found in Hebra on *Diseases of the Skin*, vol. iii (New Sydenham Society), Hutchinson's *Rare Affections of Skin*, Liveing's *Handbook of Skin Diseases*, and elsewhere, further repetition is unnecessary.

DR. DOUGAN, of Portadown, has been appointed by the Lord Chancellor a justice of the peace for the County Armagh.

SURGICAL MEMORANDA.

AMPUTATION AT THE HIP-JOINT.

MR. MYLES has done good service in calling attention to the advantages of the low method of amputation at the hip-joint, though he is in error in calling it "new." To Mr. Furneaux Jordan undoubtedly belongs the credit of introducing it into British surgery. I do not believe that any surgeon who has once employed the low operation would by choice again use the high one. The former has all the advantages which your correspondents Mr. Vaughan and Dr. Will describe. The methods of performance may vary somewhat, but the essential points are an incision running down the femur from above the trochanter and transverse division of the structures of the thigh about the upper third. The procedure I prefer is to enter the knife midway between the top of the trochanter and the crest of the ilium, well towards the back, and to make an incision running down to the level of the upper third of the thigh. It is much easier to do this before the transverse incision is made than after. The transverse incision is best made as a circular wound. The bone is then disarticulated with ease and a competent assistant is here of great value by inverting and everting the limb at the proper times. All vessels easily found are now tied and the face of the stump is sutured, but not the longitudinal incision. Next the cavity is tightly plugged with small sponges enclosed in gauze; these are easily withdrawn next day one by one, and the gauze twisted into a wisp is slipped out. This plan controls hæmorrhage absolutely without subjecting the patient to the delay and shock involved in picking up and tying every vessel. Of course the sponges have to be properly prepared and the stump properly dressed. I have never had after-hæmorrhage and the advantages of shortening this operation are very great, as shock is so prominent a risk. The longitudinal incision may be left open more or less freely, according to the probabilities of discharge in each particular case.

Many years ago Professor Chiene showed me the skewer and explained its use. I do not, however, think it quite reliable. In one instance when amputating at the shoulder-joint, the divided vessel slowly retracted till it went above the skewer and began to bleed into its sheath. In the elastic tube or cord we have a much more convenient and manageable means of stopping bleeding. It controls not merely the principal vessel but the whole circulation of the limb. In my last hip amputation in a man of 20, the total hæmorrhage was trivial; in fact I have no doubt the man had more blood in him after than before the operation, for the limb was first rendered bloodless. My present mortality, where the operation was done for disease, is one in six.

RODERICK MACLAREN, M.D.,
Carlisle. Senior Surgeon to the Cumberland Infirmary.

THERAPEUTIC MEMORANDA.

ANTIFEBRIN AS A HYPNOTIC FOR CHILDREN.

AMONGST the many hypnotics which at present are being so liberally supplied by the chemists to the medical profession, it is well not to lose sight of the value of antifebrin in certain groups of cases. Although the drug suggests more that its action is to hinder the development of febrile condition, or, when that condition exists, to lower the temperature, still in many cases in my practice it has proved a valuable hypnotic and analgesic.

Its value has been most evident in cases of broncho-pneumonia, croupous pneumonia, and bronchitis, and that more especially in cases where children have been the sufferers. The marked relief which has frequently followed its administration has in many cases been extremely gratifying. Cases of fretful insomnia of the young, possibly partially caused by pain, fever, or general *malaise*, have been speedily relieved by the drug, and from six to eight hours of refreshing sleep have been induced. After sleep the awakening was natural, there being no excitement nor confusion of thought. There was no period of excitement observed before the drug took effect. Along with the onset of sleep there was a fall of temperature, frequently a copious perspiration, at the same time the respiratory acts were slowed and the pulse-rate diminished. In no case have any evil effects been noticed, although the success of the drug induced its employment in a large number of cases.

The need of a safe hypnotic for children, such as antifebrin seems to be, will, I think, be readily appreciated, the number of cases where it is required being unfortunately very large. It is still further enhanced as a serviceable drug for children by the fact that it is comparatively tasteless, and also by the smallness of its dose; the dose being from two to five grains, depending of course on the age of the child. A useful way of prescribing it, I have found, is to place the powder on the dorsum of the tongue either alone or mixed with a little powdered sugar. It might also be given in the form of a mixture—the drug being insoluble in a watery menstruum—suspended by the aid of mucilage and sweetened by any of the various flavouring syrups. There is yet another important advantage in hospital and general practice over many recently introduced hypnotics, in the comparative cheapness of the drug.

JOHN GORDON, M.D.,
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TERATOLOGICAL MEMORANDA.

A CASE OF GASTRO-SCHISIS.

THE accompanying photograph represents a child born on November 25th. I was sent for to assist the mother, who was getting worn out by the tediousness of the labour. I was out, however, when the message came, and on my arrival the child was born, and dead, having breathed once or twice. The appearance of the monster was very peculiar, and, of course, gave the nurse "a turn."

The liver and part of the small intestine were projecting through the umbilical opening, which also admitted the insertion of two fingers. The abdominal wall below the umbilicus was covered with serous membrane only, the skin and muscle being absent from the anterior aspect of the abdomen.



In both groins was a diminutive penis—without the urethra—and the scrotum. There was no anal opening. The legs were both abducted from arrested development and displacement of the pelvic bones. There was also talipes varus.

The mother on being informed that the child was dead—but not deformed—accounted for its death by an injury she received when she was about "half time." Her little girl tumbled downstairs, and bumped against her mother, who tried to catch her at the bottom.

I am indebted to my friend Dr. F. L. H. Brown for the excellent photograph taken under rather trying circumstances.

Fishponds, near Bristol. WILLIAM BROWN, M.D.

PHYSIOLOGICAL MEMORANDA.

NOTE ON BILATERAL DEGENERATION IN THE PYRAMIDAL TRACTS RESULTING FROM UNILATERAL CORTICAL LESION.

THE extremely interesting preliminary communication on the central motor innervation of the larynx, by Dr. Semon and Professor Horsley, which appeared in the JOURNAL of December 21st, is based on such a large number of observations, and emanates from such competent authorities that, as appears to me, it may be considered to establish the important conclusions the observers draw.

One point brought out by their researches possesses especial interest in my eyes, and that is the very perfectly bilateral character of the representation of the adductor movements of the cords in the cortex of each hemisphere right and left. I insisted with considerable stress some time ago,[1] when recording the results of experiments I had made upon the brain of the dog, on the frequency with which injury to the cortex of one hemisphere is followed in the dog by descending pyramidal degeneration in the lateral column not only in the opposite half, but in both halves of the spinal cord. The same has been observed in the case of the human pyramidal tracts by Professor Pitres, and Dr. Hadden and myself have since his placed a case on record.[2]

While pursuing experimental investigation into the anatomy of the pyramidal tract in the monkey, I have repeatedly obtained bilateral degenerations, that is, degeneration in the pyramidal tracts in the lateral columns of both halves of the spinal cord as a result of single small destructions of the cortex of one hemisphere only. When the cortical destruction has involved limb centres alone, the bilateral character of the descending degeneration has not been marked. On the other hand, it is very markedly present when the lesion in the cortex borders upon the great longitudinal fissure just mesial to the sulcus identified by Professor Horsley as in the Macacus representing the superior frontal of man.

But I find that in the monkey the descending degeneration secondary to lesion of the limb areas of the cortex, though it may be bilateral in the cord, is not bilateral at the base of the brain, that is to say, it is, for example, in the region of the pons, confined to fibres of the pyramidal tract of one side only—of course, the same side as the cortical lesion. And this is true even of the pyramidal degeneration descending from that cortical area (probably trunk area), which, as just mentioned, yields degeneration so markedly bilateral in character in the spinal cord. In this case also the degeneration is, at the base of the brain, confined to the one pyramidal tract only.

I have, however, drawn attention to the fact that in the dog the degeneration secondary to unilateral injury of the cord area of the cortex may, even at the base of the brain, be bilateral, that is, involve nerve fibres in both pyramids right and left. On studying the anatomical effects of unilateral cortical lesions at the lower end of the Rolandic fissure of the monkey, that is, the region, or the immediate neighbourhood of the region, in which Dr. Semon and Professor Horsley have discovered bilateral representation of certain movements in the larynx, I was at once met by a degeneration which, hardly descending into the spinal cord at all, is, at the base of the brain, fairly symmetrically bilateral, affecting fibres in the pyramidal tracts on each side of the median line. To give an instance: After a small cortical ablation at the place in question in the left hemisphere, I have, at the level of the exit of the rootlets of the fifth cranial nerve, found the left pyramidal tract with 196 degenerated fibres in it, the right pyramidal tract with 167 degenerated fibres in it.

I have been following the details of this degeneration for some time, and am still engaged in so doing, but the anatomical evidence already afforded by the cases I have accords so well with the conclusions of Dr. Semon and Professor Horsley, that I have thought it might be worth, even in the present preliminary fashion, to put it before those who are interested in the subject.

CH. S. SHERRINGTON, M.A., M.B., etc.
St. Thomas's Hospital.

[1] *Journal of Physiology*, vol. vi, p. 177, 1885.

[2] On a Case of Bilateral Degeneration in the Spinal Cord, etc., *Brain*, Part xxxii, January, 1886.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

MONDAY, DECEMBER 23RD, 1889.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

On Mitral Stenosis in Children.—Dr. SANSOM read a paper on this subject which was founded on forty cases clinically observed and nineteen *post-mortem* examinations, all in children of 12 years of age and under. In regard to morbid anatomy, mitral stenosis, in its least pronounced degree, was evidenced by a ring of granulations around the mitral aperture on its auricular aspect; these vegetations might be friable, fibrin covered, or fibrous and firmly fixed. The subjacent structures were firmer than usual, and formed a thickened ring. The thickening might further involve the curtains, cords, and columns of the mitral valve. In the more pronounced stenoses the mitral curtains were found to form a funnel, the ventricular aperture of which might be of varying degrees of exiguity to the dimensions of a crow-quill. The surrounding thickening might be extreme to cartilaginous transformation. "Funnel-mitral" was to the "button-hole" in the child in the proportion of eight to one, whilst the button-hole form was the more frequently observed form in adults. The left auricle was often greatly hypertrophied or dilated; its wall might be a quarter of an inch in thickness, or it might be dilated outwards and its wall very thin. The left ventricle was usually of normal or subnormal dimensions; when enlarged it was usually in association with general hypertrophy of the heart and pericarditis. The right chambers were almost invariably dilated. Mitral stenosis was not a congenital malformation. It was observed in one case of congenital anomaly, but then it was distinctly the result of fatal endocarditis. It was extremely rare under the age of 5 years. It might be considered as invariably the result of endocarditis. In every case examined *post mortem* there was an association with endocarditis, pericarditis, or both these affections combined. In regard to etiology, the cases showed a very strong association with rheumatism. In the more severe forms of rheumatism, mitral insufficiency was a far more frequent result than mitral stenosis, whilst in the slighter forms the proportion of the latter to the former greatly increased. The author considered that mitral stenosis was the result of a limited and slow endocarditis, whilst mitral insufficiency was due to the retraction of the mitral curtains, the result of a more widely spread and more intense inflammation. Cases were quoted showing that mitral stenosis was manifested occasionally without any evidence of rheumatism. The signs of such cases were either protracted malnutrition, or a sudden lesion of the nervous system. Except chorea, no sudden nervous lesion—for example, hemiplegia, epilepsy, hemichorea—was evidenced in the subjects of mitral regurgitation apart from stenosis. The author considered it probable that, in rare instances, mitral stenosis might be initiated in children by a form of endocarditis which was non-rheumatic. A probable initiating cause was fright, well defined terror, or night terror In such case a temporary arrest of the heart's action was followed by a violent palpitation, and in the distorted conditions of blood pressure violence might be done to the delicate valve structures of the child. So a limited endocarditis might be initiated at the valve edges, the first lesion, perhaps, being minute hæmorrhages, such as had been experimentally produced in animals (by increasing the blood pressure in the aorta) by Professor Roy and Mr. Adami.—The PRESIDENT asked what was the experience of the Fellows in regard to the frequency of mitral stenosis in children. He thought such cases occurring in children were more hopeful than when occurring in adults. He said he could hardly accept Dr. Sansom's explanation of the causation of the heart mischief apart from rheumatism in the absence of more extended observation.—Dr. WILBERFORCE SMITH said he had scheduled about 900 cases of fatal heart disease in children, and had been struck by the enormous preponderance of females over males in the persons attacked, there being, roughly speaking, ten times as many girls as boys. With regard to the prognosis, he mentioned several cases which had gone on for upwards of twenty years.—Dr. PERCY KIDD said it was important to note the great frequency of the affection in children. His *post-mortem* experience had demonstrated the far greater frequency of stenosis over regurgitation, the most common form being the "button-hole" variety.—Dr. CARR asked what was the pathological significance of the small granulations so often met with round the valves, no evidence of which had been present during life.—Mr. JAMES BLACK asked whether Dr. Sansom believed that the auricles contracted, or whether the blood was drawn into the ventricles by suction.—Dr. SANSOM in reply said he believed that some contraction of the auricles did take place.

On a Case of Abscess in the Left Temporo-Sphenoidal Lobe.—Mr. WATSON CHEYNE read a paper on this subject, which will be published in full.—Dr. BEEVOR thought that delirium would justify trephining. He supposed the seat of the abscess was at the junction of the post temporo-sphenoidal lobe with the angular gyrus.—Mr. BLACK and Dr. MATHESON also spoke on the case.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, NOVEMBER 27TH, 1889.

FANCOURT BARNES, M.D., Vice-President, in the Chair.

Fibrous Tumours of the Uterus.—Dr. BANTOCK showed four specimens. Three of the cases had made excellent recoveries. Remarks were made by Mr. H. A. REEVES, Mr. L. TAIT, Dr. FENTON, and the CHAIRMAN, and Dr. BANTOCK replied.

Ruptured Tubal Pregnancy.—Mr. LAWSON TAIT related a case in a married woman, aged 26. She was seized with sudden pain in the hypogastrium, and brought to the hospital in a state of collapse. On opening the abdomen, the rush of blood was as if he had opened a hydrant. It was found that a tubal pregnancy was ruptured in the right Fallopian tube. Having tied the broad ligament and cut off the ovary and tube, he removed pounds of clots and blood serum from all parts of the abdomen. It was forty-eight hours before the pulse could be counted, but the patient had made a good recovery. The rent was not more than a quarter of an inch in extent, the fœtus being of about the fourth week. Mr. Tait related a second case which was almost unique, because the patient was single, and the operation was done not for hæmorrhage, but to relieve pain. Fifteen months previously she contracted gonorrhœa and a tubal pregnancy; then she had a violent attack of peritonitis. Her former menstrual history was irregular, having had several intervals varying from three to six months. When he saw her he found a mass in the pelvis, with retroverted uterus. He thought it a myoma fixed by peritonitis, but on opening the abdomen found an apparently adherent cyst. By enucleation and pushing in a trocar, nothing could be got out. As he proceeded he came to the edge of a rent, and six or seven ounces of blood welled up. It proved to be the right Fallopian tube, which had ruptured into the peritoneum, opened out like a sort of mushroom, and contracted adhesions; beneath these an ovum of the tenth to the twelfth week was found, and a placenta. The case was an exception to the rule he had laid down of intraperitoneal ruptures proving fatal. Mr. Tait also showed a pair of appendages removed that day for chronic hypertrophy.—Remarks were made by Mr. REEVES, Mr. HILLS, and Dr. BARNES.

Ectopic Gestation.—Mr. LAWSON TAIT read a paper on some recent remarks on ectopic gestation, in which he pointed out that while the ovum might be absorbed, placental tissue remained as a clue to what the nature of the case had been. He protested against being credited with views which he repudiated, and with practices which he did not inculcate.

Insanity cured by a Pessary.—Dr. BENINGTON read notes of a case in which he had been called to a married woman supposed to be in labour. Examination proved she was not even pregnant. The uterus was acutely retroverted, and he introduced a Hodge's pessary, leaving the patient comfortable, but under the idea she was going to be delivered. In the evening she asked what he had done with the child. She gradually recovered her reason. Some months afterwards, however, she had to be removed to an asylum for acute melancholia. Dr. Benington saw her, and on finding the uterus again retroflexed, he inserted a support, "much to her comfort" she said, and she rapidly recovered her mental health.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 6TH, 1889.

H. CAMPBELL POPE, M.D., President, in the Chair.

Operative Statistics.—Mr. BRUCE CLARKE read a paper on nine years' experience of his operative practice at the West London Hospital. He exhibited a table of 296 operations of various kinds, most of them so-called major operations, with a mortality of ten cases, only four of which were to be ascribed to the operation

These included a tumour of the bladder, a tumour of the prostate, a nephrolithotomy, and a case of radical cure of hernia. Six died of the disease; these included cases of hernia and intestinal obstruction, which were practically moribund on admission. The table included 39 tumours, without a death; 18 amputations, with 2 deaths, both due to gangrene, for which they were performed and which returned in the stump and terminated their existence some some few hours after operation; 28 cases of opening of joints, all but one of which recovered, with good movement; and some 60 cases of exploration of the peritoneal cavity, in which, if the acute cases before referred to as being moribund on admission were excluded, only 1 death had taken place, and that was the radical cure of hernia. The series included over a dozen kidney operations, 7 lithotrities, and 13 cases of cystotomy, two large stones from which were exhibited.—A large series of pathological specimens illustrative of the cases were exhibited from the museum of the hospital by Mr. DUNN. The table embraced all the cases of operation which had been under Mr. Bruce Clarke's care except a few of the slighter cases, in which no death had occurred. He pointed out that in no instance had he amputated a limb in consequence of a joint lesion, acute or chronic.—Remarks were made by the PRESIDENT, Mr. EDWARDS, and Mr. KEETLEY, and Mr. BRUCE CLARKE replied.

Unusual Bladder Growth.—Mr. HURRY FENWICK described an unusual recurrent bladder growth. He showed wax models of growths in the bladder of a lady, aged 43. She had had hæmaturia for two years. The electric cystoscope showed a hazelnut-sized cancerous growth overlapping the mouth of the left ureter, the rest of the bladder being perfectly healthy. The urethra was dilated, and the tumour, which had a long pedicle, was snared and cut off with scissors. Microscopically, it proved to be a villus-covered carcinoma. After six months' complete rest, the symptoms recurred. The scar was seen to be perfectly healthy, but there was another tumour on the opposite side of the bladder, behind the right ureteral opening. There were two small satellite growths in the neighbourhood of the principal tumour. All three were carefully dissected off the bladder wall, and the patient made a good and rapid recovery. The second growth was shown to be benign. The unusual features of the case consisted in (1) a bladder cancer being pedunculated; (2) a bladder which had already developed a cancer, subsequently forming an innocent growth; (3) the formation of satellite villous growths in the neighbourhood of the benign tumour. It was contended that this little group of irritative growths demonstrated the existence of some permanent irritation in the bladder.—Remarks were made by Mr. EDWARDS, Mr. BRUCE CLARKE, and Mr. KEETLEY, and Mr. FENWICK replied.

Exhibits.—Mr. PERCY DUNN exhibited specimens of Impacted Calculi of the Urinary Bladder, and a Tumour of the Thyroid.—Mr. EDWARDS showed a case of Distension of the Abdominal Veins.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, DECEMBER 13TH, 1889.

HENRY E. ARMSTRONG, M.R.C.S., President, in the Chair.

Table of Deaths.—Dr. REGINALD DUDFIELD read a paper entitled "Some Suggestions for the Revision of the Tables of Deaths from all Causes," in which he remarked that the need for such revision was generally felt by statisticians and sanitarians, and that the revision should be completed before the approaching census. All changes introduced difficulties in the way of social comparison, but such difficulties already existed owing to fashion and caprice in the description of diseases, and to the progress in more accurate diagnosis. He showed in parallel columns the tables drawn up by the Society in 1874, that of the Registrar-General adopted in 1881, and one that he put forward now for consideration. Any such classification should include a minor and a major scheme, for use respectively by the medical officer of health and by county authorities, as well as by the Registrar-General, differing only in the numbers of their out-divisions. The circumstances and conditions of the community as regarded distribution and density of population, the relative proportions of the sexes at various groups of ages, its increase or decrease since the last census, etc., were necessary to give any value to numerical returns of causes of deaths. Especially important was it that the death-rate of infants under 1 year, and of children under 5 years of age, should be calculated on the numbers living at those ages, and not, as was too commonly the case, on the total population or the deaths from all causes at all ages, since the proportion of the children differed greatly in different communities. The local meteorological phenomena should also be recorded, as in Mr. Glaisher's tables, either by the medical officers of health or some other trustworthy observer. Among the changes suggested in his tables were the division of the zymotic class into (1) specific febrile; (2) specific neoplastic, namely, syphilis, tubercle, etc.; and (3) zootrophic or diseases of animals communicated to man; and the omission of simple continued fever and others which indicated defective diagnosis or mere symptoms. He desired more explicit instructions for the guidance of superintendent registrars in the selection of the cause of death where two or more diseases were certified as occurring together, or in one union, and suggested a conference of sanitarians and statisticians to formulate a system which should be, as far as possible, at once pathological and etiological.—In the discussion that followed, Dr. NEWSHOLME pointed out the need for breaking up the zymotic groups in the returns of medical officers of health, since some, as whooping-cough and measles, stood in no relation to the sanitary condition of the population; and Drs. CORFIELD and SYKES deprecated any elaborate analysis of deaths from local diseases, since the medical officer of health had no concern but with such as were preventable by measures undertaken for the improvement of the public health.—Pending a revision it was agreed that the Registrar-General's tables should be followed as closely as possible, and that a large proportion of deaths should be lumped together as "other causes."

Suburban Infectious Hospitals.—Mr. ST. CLAIR SHADWELL read a short paper on the need for infectious hospitals in suburban districts around London, the populations of which were increasing with extraordinary rapidity, and where overcrowding precluded isolation at home, but which, with few exceptions, were as yet unprovided with such hospitals, which the public must be taught to look on as provisions for isolation and not as centres of infection. In most cases, he believed, the cost and the fear of increasing the rates deterred the authorities from their erection, but Section 131 of the Public Health Act permitted the combination of districts for the purpose, while Section 139 authorised the Local Government Board to compel such combination, and ought, he considered, to be put in force, though in his opinion it would be better that the charge, like that of lunatic asylums, should be thrown on the county rate. As an illustration of the danger arising from the absence of means of isolation, he mentioned that in his own district two cases of scarlatina on a dairy farm had been the cause of a large number in the neighbourhood, and probably of many more in London, whither the milk was sent.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, DECEMBER 4TH, 1889.

Professor A. R. SIMPSON, M.D., President, in the Chair.

Rickets simulating Pseudo-hypertrophic Muscular Paralysis.—Dr. CHARLES KENNEDY showed a boy aged 3 years with peculiar straddling pose and waddling gait, which had been distinctly more marked some five months ago. The appearances suggested pseudo-hypertrophic paralysis, but there were no other signs of the disease, and the boy was undoubtedly "rickety."

Skin-grafting.—Mr. A. MILES showed a boy, aged 10, who had been successfully treated for a very extensive ulcer of the leg—the result of a burn—by skin-grafting. The special interest in the case lay in the fact that the skin which had been used was that of a young greyhound. Strips of six inches in length and half an inch in breadth were applied. The ulcer was entirely closed over in the course of six weeks, and the boy, who was operated on three months ago, had now a healthy, useful limb.

Progressive Idiopathic Muscular Atrophy in a Young Child.—Dr. JOHN THOMSON showed a girl, aged $4\frac{1}{2}$ years, in an almost complete state of powerlessness. The loss of power had come on gradually between the end of her first and the middle of her second year. Twelve months ago the legs were unaffected, but now the legs were paralysed. There was no hereditary history. As the child sat on the President's desk, the back was seen to be rounded, the head and shoulders drooping, and the arms and legs hanging comparatively powerless. Sensation was undisturbed. The patellar tendon reflex was abolished. The muscles of the face and eyes appeared to be unaffected, but all the other voluntary muscles seemed gravely disturbed. There was no loss of coordination. The muscles were not apparently much wasted, and there was no hypertrophy.

The Cystoscope.—Mr. DAVID WALLACE gave a historical sketch of the cystoscope and its application to medicine, showed the instruments and explained the various modifications which had been suggested. He had found the cystoscope to be of real service in the diagnosis of several cases.

Cyst of the Inferior Turbinated Body.—Mr. REGINALD E. HORSLEY read a paper, descriptive of a case in which he had been able to diagnose the presence of a cyst at the end of the inferior turbinated body. Reports of such cases were comparatively rare. The patient suffered from troublesome reflex symptoms—"nervousness," dyspnœa, and a sense of impending suffocation, asthmatic seizures, with dryness of the nose. The presence of the cyst was ascertained by digital examination. The cyst was burst with the finger, and all symptoms disappeared.

The Technique of Laparotomy.—Dr. T. HALLIDAY CROOM recorded his experience, from an analysis of 200 cases, of the relative value of varying methods of procedure in the practice of laparotomy. Every important detail in connection with the operation was discussed.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF MEDICINE.

FRIDAY, DECEMBER 13TH, 1889.

JAMES LITTLE, M.D., in the Chair.

Extra-pleural Abscess Simulating Empyema.—Dr. WALTER SMITH related the case of a gentleman, aged 30, who consulted him for a severe pain in the right side, attended with pyrexia and general ill-health. The pain had suddenly set in six weeks previously. The physical signs seemed to indicate a right pleural effusion, and there was marked tenderness along the eighth and ninth ribs. Pus was detected by hypodermic puncture, and when the abscess was opened about a pint of fœtid sanious pus escaped, and necrosis of the rib was found to exist. Notwithstanding free drainage and careful dressings the foul discharge persisted, the abscess cavity extended downwards, hectic fever was established, and the patient sank at the end of three months. The *post-mortem* examination disclosed an enormous gangrenous cavity in the wall of the thorax, fragments of several necrosed ribs from the seventh rib downwards projecting externally. Right lung partially adherent; no fluid in either pleural sac. Heart and pericardium healthy. The abscess had further destroyed the right half of the diaphragm, and had extended downwards in the abdominal wall to a considerable distance. Its cavity was bounded by the pleura above, in front by the abdominal skin, and posteriorly by the liver, colon, and right rectus abdominis muscle, which was black and soft. The colon was adherent to the liver. The abdominal viscera were healthy, and there was no diffuse peritonitis.—The CHAIRMAN said he had, at the instance of Dr. Smith, seen the case in question at an early period of the patient's illness. The structure over one of the ribs was slightly swollen, and there being very distinct tenderness on pressure, he concluded that there was disease of the rib itself—disease perhaps of only one rib then. He considered it would have been worth while to have taken the three ribs away, having regard to the good results which he had himself several times observed from the removal of ribs in empyema.—Dr. JOHN WILLIAM MOORE desired more information as to the distribution of the dulness on percussion over the right side of the chest, because in the textbooks there was a distinction drawn between the arched dulness on percussion, due to the liver being displaced upwards, and the very horizontal line caused by any form of fluid effusion into the pleura. Again, Dr. Walter Smith had not indicated whether the dulness on percussion changed with the position of the patient, a circumstance which was a recognised factor in the diagnosis of intrapleural effusion. The free evacuation given to the contents of the fœtid abscess by the drainage tube might account for the intact nature of the skin below. It was only when there was pressure that dermatitis occurred, shown by œdema and discoloration.—Dr. R. A. HAYES remarked that though in ordinary cases of pleurisy with effusion the line of dulness was to some extent horizontal, yet in those of people lying for some time in bed, after the occurrence of the pleuritis, a certain amount of adhesion took place round the edges of the pleura, and the fluid became encysted, so that the effect of position did not afford much assistance in diagnosis, but, on the contrary, was rather illusory.—Dr. WALTER G. SMITH, in reply, said the dulness extended posteriorly to the level of the angle of the scapula, and anteriorly to that of the lower border of the fifth rib. He regretted that the bolder course had not been adopted, not because it would certainly have saved the patient's life, but it might have afforded a better chance of recovery. Two reasons deterred him from taking that course—namely, uncertainty as to the seat of the abscess, and the fear arising from the fœtid gangrenous nature of the discharge that any excision of the ribs would be a certain avenue to septicæmia, so that the last state of the patient might have been worse than the first.

Case of Empyema treated by the Radical Method.—Dr. R. A. HAYES read notes of a case of empyema treated by the radical method. The patient, who had been shown at the last meeting, was a constabulary recruit, and Dr. Hayes mentioned the comparative frequency with which large effusions occurred in these men, often coming on without pain or other usual symptoms. The case recorded was suspected to be tubercular, there being severe hectic and wasting, but no tubercle bacilli could be detected in the sputum. The fluid had remained serous for three months, and then became purulent. When a free incision was made by Mr. Edward Hamilton, the patient at once improved, lost his fever, gained weight, and was now quite convalescent. Dr. Hayes commented on the advantage of having the assistance of a competent surgeon to make these incisions, especially in long-standing cases.—After some remarks by Fleet-Surgeon FFRENCH MULLEN, Mr. F. T. HEUSTON said he had, chiefly owing to the Chairman's kindness, operated in a great number of cases of empyema. Many of the textbooks indicated the fifth or sixth intercostal space, mid-axillary line, or thereabouts, as the proper position for an incision; but in his opinion that was bad surgery, as free drainage would be impossible. The patient would not lie on the wounded side, and there would remain below the wound a cavity in which pus would collect and probably decompose. He preferred to make the incision in the scapular line or posterior to it, as low down as possible, selecting the eighth intercostal space, but keeping above the diaphragmatic attachment to the ribs, this being the most dependent position and allowing the most satisfactory drainage. Next in importance to the place of incision was the necessity of having free drainage for a lengthened period. He agreed with Dr. Hayes in thinking that irrigation should be used only when necessary instead of as a regular means of treatment. He preferred permanganate of potassium or a solution of boric acid for this purpose. The question of removal of ribs depended on the particular case. If the lung was collapsed in chronic cases and would not expand, and the pus had been there for a lengthened period, he did not see how the cavity would close unless the chest was allowed to collapse by the removal of one or more of the ribs. In such cases it had been his habit to examine with the electric light the condition of the lung through the drainage tube opening, when, if there was no evidence of the lung expanding after a fortnight of free drainage, he removed a sufficient number of the ribs.—Dr. A. W. FOOT said what he did in such cases was to draw off the pus with an aspirator, wash out the pleura, using a warm solution of iodine, but never anything else, unless fœtor arose as the indication for special treatment. Cases of excision of the ribs he had seen generally die of pyæmia.—After remarks by Dr. GLASGOW PATTESON, Dr. W. G. SMITH, Mr. DOYLE, and the CHAIRMAN, Dr. R. A. HAYES replied.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, DECEMBER 4TH, 1889.

JOSEPH WHITE, F.R.C.S.Ed., President, in the Chair.

CLINICAL AND PATHOLOGICAL EVENING.

Ruptured Popliteal Aneurysm.—Mr. ANDERSON showed a woman, aged 61, who had noticed a pulsating swelling behind the knee for a year. She was in the habit of walking long distances, and during one of these walks was seized with sudden and great pain in the leg and faintness, and had to sit down in the road. On admission into the Nottingham General Hospital it was evident that an aneurysm which had existed for some time in the right popliteal space had given way. There was very distinct evidence of a large blood extravasation into the upper part of the calf, and distensile pulsation could be felt all over it as well as in the aneurysm proper. The limb was much swollen, but the tibials could just be felt at the ankle. Pressure on the femoral stopped the pulsation and lessened the size of the swelling. The artery was

tied at the apex of Scarpa's triangle in two places with a carboised silk ligature, and the artery divided between. The wound healed in ten days without suppuration, and the aneurysm ceased to pulsate and disappeared. The hæmatoma in the calf remained, and at the end of six weeks, as it showed no signs of diminution in size, it was laid open freely and a mass of fluid and coagulated blood, dark and treacly in character, was turned out. The wound healed by granulation, and the patient was well within three months from the date of her admission.

Suprapubic Lithotomy.—Mr. ANDERSON showed a boy, aged 10, on whom he had operated in the Nottingham General Hospital. Seven Lembert sutures of fine carbolised silk were used to close the bladder wound. An attack of acute pneumonia supervened on the second day after operation, but in spite of this the bladder wound healed without leakage. The boy was shown just one month after his admission into hospital.

Cases.—Mr. GRAY showed a case of Lupus of the Mouth, involving the right side of the hard palate, and extending backwards to the uvula. It had been present for four years, as evidenced by soreness and spitting of blood. Patches of well-marked lupus were also present on the left side of the neck. There was no history of syphilis. The actual cautery was suggested as a method of treatment. Mr. Gray also showed a case of Parotid Tumour in a man, of two years and a half's duration. It was lobulated and freely movable upon the deep structures. The patient was admitted for orchitis, the result of suppression of gonorrhœal discharge. The tumour was not affected by the inflammation of the testicle.

Specimens.—Dr. HANDFORD showed: 1. Tubercular Gland which had ruptured into a Bronchus, from a case of Acute Tuberculosis and Tubercular Meningitis. Dr. Handford traced the general and meningeal affections to the rupturing of the tubercular gland. 2. Bacilli of Tubercle and Leprosy. 3. Bovine Actinomycosis.—Mr. TRESIDDER showed a specimen of Carcinoma of the Stomach from a man aged 56. The organ was infiltrated by a diffuse cancerous growth extending from the œsophageal end to the pylorus; the walls were much thickened, and the cavity of the stomach lessened. The stomach was adherent to the under surface of the liver, to the transverse colon, the pancreas, the spleen and the diaphragm, and involved by direct extension the base of the left lung. Vomiting was never a prominent symptom and during the latter two months had been conspicuously absent.—Mr. ANDERSON showed: 1. Photograph of a case of Mid-tarsal Dislocation. 2. Acute Periostitis and Arthritis. 3. Tubercular Testis. 4. Calculous Pyelo-nephritis.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, DECEMBER 19TH, 1889.

C. N. GWYNNE, M.D., President, in the Chair.

Anthrax.—Mr. BENSON read notes of a case of anthrax in a woman, aged 50, employed in sorting horsehair imported from Siberia. A small pustule had appeared on the chin three days before he saw the patient. When he first saw her there was a dark brown spot, the size of half-a-crown, in the centre of a hard, brawny mass of inflamed tissue, covered with small vesicles, which extended beneath the chin. The neighbouring lymphatic glands were also enlarged. There was great prostration and severe pain, interfering with sleep. The pulse was 120, temperature 100°. He made a crucial incision through the mass, which bled freely, and afforded great relief. The case had since progressed favourably; the slough was separating, and exposing a healthy granulating surface.—Dr. CLEAVER showed some of the bacilli, under the microscope, from the blood after incision. None were found in the serum from the vesicles.

Specimens.—Dr. HARGREAVES exhibited (1) a Stomach showing a mass of scirrhus about the middle of the lesser curvature, and portion of the Liver showing secondary deposit. The patient, a woman, had suffered for four months from dyspepsia, vomiting, but no hæmatemesis, and, latterly, she had become jaundiced. Cancer was diagnosed from the cachexia and a hardness felt at the margin of the liver. There were also some enlarged cervical glands. (2). A Mammary Tumour and Two Glands from the Axilla of a woman, aged 35. The tumour was situated in the left breast, and its origin was attributed to a blow received eighteen months before. Six years previously the patient had a tumour about the size of a walnut removed from the right breast; this had also been attributed to a blow. There had been no recurrence in the right breast.

Lead Poisoning.—Dr. SINCLAIR WHITE showed a case of lead poisoning in a girl, aged 8. There was paresis of the extensor muscles of the hands and of the flexors of the feet. The latter, owing to pointing of the toes, compelled the patient to lift the feet high off the ground, and produced a remarkable gait. The "blue line" was faintly discernible. The girl drank Redmires water, which contained from 0.30 to 0.45 of a grain of lead per gallon. Her mother, who was suffering from severe lead poisoning, attributable to the same cause, was likewise exhibited to the society.

Poisoning by Coal Gas.—Mr. MAKEIG JONES read short notes of a case in which ordinary coal gas had escaped from a leaky main into an old drain, and thence through a connected sink pipe into a house, severely poisoning two boys sleeping in the room above the sink. A candle was lit in the room, but no explosion took place, showing that there was less than 10 per cent. of gas present.

Varicella Gangrenosa.—Mr. STANIFORTH read notes of a case of varicella gangrenosa in a boy aged 17 months. The vesicular eruption was preceded by about twelve hours by a scarlatina-like rash, and the patient's mother stated that the whole family had suffered from "scarlet fever and measles" four months previously, which Mr. Staniforth thought indicated a family tendency to a scarlet rash as a preliminary to an exanthematous eruption. On the sixth day of the disease most of the vesicles had dried up into hard black scabs, surrounded by erysipelatous-looking areas, varying in size from a sixpence to a florin. By the tenth day the whole of the vesicles, except those on the head and face, had become converted into deep circular ulcers which had a clean punched-out appearance, and exposed the fascia. In the centre of several were ashen-grey sloughs. Three weeks and a half after the commencement of the attack the ulcers began to heal. During the attack the child was very restless, the pulse rapid and feeble, and the temperature at first high but subsequently about 100° F. There was no family history of syphilis or tuberculosis. The patient had had vaccinia and measles, and had been suckled at the breast. Another member of the family began with varicella exactly fifteen days after the appearance of the rash in the former case, but recovered in ten days without any complications.

Water-Closet System.—Dr. CLEAVER read a paper on the proposed water-closet system for Sheffield, in which he gave an account of the trough system with its disadvantages and dangers in comparison with the separate water-closet system on the old plan. He next went into considerable detail concerning the Sheffield water supply, showing that the surplus of four million gallons *per diem* was at the present time being consumed at the rate of half a million in two years; so that at the present rate of increase of the town and suburbs the water supply would only last about ten or twelve years at the most. Attention was drawn to other systems of dealing with excreta, such as greater care and supervision over ashpits, and burning the refuse, destructor furnaces with combustion chambers, etc., and it was argued that it would be better carefully to consider such means of dealing with refuse before endangering the water supply of the town.—In the discussion which followed, Dr. HUNT, Mr. ARTHUR JACKSON, Mr. MAKEIG JONES, Dr. GWYNNE, Dr. SINCLAIR WHITE, and Mr. PYE SMITH took part.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, DECEMBER 5TH, 1889.

W. H. NICHOLLS, M.R.C.S., Vice-President, in the Chair.

Graves's Disease.—Dr. HOLLIS read notes of a case of Graves's disease with papillitis in a young woman. She attributed her illness to the removal of her tonsils three months before: she became weak, thin, and pallid; hæmoglobin falling to 54 per cent. of normal, pulse rising to 156 on slight exertion; exophthalmos and goitre slight; discs red, blurred, indistinguishable from rest of fundus, vessels buried, hæmic cardiac murmur and well-marked *bruit de diable* audible over right lobe of thyroid, which was more enlarged than left, urine normal. The patient was in attendance, and the discs were examined by several members.

Lichen Planus.—Dr. MACKEY exhibited a woman with well-marked and typical lichen planus.

Perityphlitis.—Mr. WILLOUGHBY FURNER then introduced the subject of perityphlitis for general discussion, in a short paper. The causes of typhlitis were predisposing and exciting. The predisposing causes were habitual constipation, and over-stretching

of the cæcum, struma (meaning by that a tendency to tubercular disease), sedentary habits, dysentery, gout, typhoid, and perhaps syphilis. The exciting causes were habitual constipation, injuries, foreign bodies in the appendix, masses of hardened fæces, violent exercise, cold, and twist of the cæcum, as reported by Sir W. Gull in *Guy's Hospital Reports*, 1858. Mr. Furner laid much stress upon delayed and deferred defæcation as a common preliminary to an attack of typhlitis, and mentioned a case in illustration; he also noted that in obstruction of the rectum, cancerous or otherwise, the greatest strain and distension occurred in the cæcum. There were three varieties of typhlitis:—1, simple; 2, suppurating; 3, relapsing. The symptoms in the simple form were simply those of peritonitis localised in the right iliac fossa, and the treatment was medical, namely, rest in bed, low diet, milk in small quantities, leeches, poultices, opium, castor oil, or enemata; the doubt in these cases was always when and how to get the bowels to act. The suppurative form was due to ulceration or gangrene of the appendix, produced either in the appendix itself, or in consequence of its abnormal contents, or in consequence of strangulation of the appendix by adhesions produced about the cæcum. Perforation might be the first clear evidence of disease. When an abscess had formed it should be opened, but unnecessary exploration was undesirable to avoid all risk of tearing down adhesions. Mr. Furner strongly condemned the use of the aspirator or exploring needle in these cases. The relapsing form was also due to disease of the appendix, and it was in these cases that the operation of removal of appendix was to be recommended. Mr. Furner concluded by giving notes of two cases in which the appendix had been removed by operation on account of relapsing typhlitis, one case being fatal, the other successful.—Dr. HOLLIS related a case of suppurative typhlitis in which the pus was evacuated by means of the aspirator with complete success, the patient remaining quite well for at least two years afterwards.—Dr. MENZIES threw doubts upon constipation as an important factor in these cases, and upheld the use of exploratory punctures in suitable cases.—Mr. VERRALL asked what the ultimate result would be in cases after evacuation of pus in the suppurative form. He drew attention to the difficulty of differentiation in women between typhlitis and inflammation about the ovaries and Fallopian tubes; he mentioned a case in which the aspirator failed to strike pus, which an incision subsequently evacuated, and condemned aspiration.—Dr. MACKEY considered that a large number of these cases recovered under ordinary judicious medical treatment; he drew especial attention to the grave responsibility imposed on the physician to decide when to abandon opium and give an aperient, and pointed his remarks by several cases illustrating this difficulty.—After some remarks from Mr. F. TREVES, Mr. FURNER replied.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 3RD, 1889.

T. C. DENBY, M.D., President, in the Chair.

Othæmatoma.—Dr. A. BRONNER read notes of a case of non-traumatic othæmatoma, successfully cured in three weeks without deformity, by a large incision and plugging with gauze.—The PRESIDENT and Drs. RABAGLIATI, BELL, and MAJOR joined in the discussion.

Radical Cure of Hernia.—Dr. A. RABAGLIATI read notes of a successful case of radical operation for congenital inguinal hernia, with removal of atrophied testicle lying in the canal, and of a case of removal of piece of omentum adherent in the inguinal canal, causing constipation and local discomfort.—Remarks were made by the PRESIDENT and Dr. BELL.

Intestinal Obstruction.—Dr. A. RABAGLIATI then read a paper on acute intestinal obstruction, dealing exhaustively on the question of diagnosis.—The PRESIDENT and Drs. BELL and MAJOR joined in the discussion.

WESTERN DISTRICT OF THE METROPOLITAN COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

SATURDAY, DECEMBER 21ST, 1889.

T. B. CHRISTIE, M.D., F.R.C.P., C.I.E., Vice-President, in the Chair.

Transposition of Viscera.—Dr. CHEADLE showed a case of transposition of the viscera in a boy, aged 13, who had been sent into the hospital for left pleurisy with effusion. This condition obscured the diagnosis for a time, but when the fluid in the chest subsided careful examination showed that the liver and stomach were transposed, and the heart not merely pushed aside as had been supposed, but transposed to the right side.

Exophthalmic Goitre.—Dr. CHEADLE showed a case of exophthalmic goître in a male subject. He considered that the symptoms were due to disorder of the medulla and upper cervical portion of the cord, the region of the cardio-inhibitory, accelerator, vasomotor, vomiting, and glycogenic centres, all of which were—some constantly, some occasionally—involved in the disease. The special interest of the case lay, first, in the fact that the patient was a man; and, secondly, as an example of perfect recovery maintained for more than twenty years. The patient was first seen in February, 1868, when he was suffering from all the characteristic vascular excitement, marked exophthalmos, and greatly enlarged thyroid, which pressed on the trachea so as to produce extreme dyspnœa, so that the patient could not lie down, and was compelled to sleep in a chair. Tincture of iodine was given freely, and in the course of a week marked improvement had taken place, and he continued steadily to improve. With regard to the question of sex, Dr. Cheadle's experience was only one male to thirty females. With regard to the ultimate issue, the statements of authorities were vague. He had followed out a number of these cases, and found the tendency to be towards slow recovery in from one to five years. In four cases seen at intervals of from eight to twenty-two years after the onset of the complaint, and in four others seen at shorter periods recovery appeared complete, yet for years there remained a quickened pulse, a certain amount of exophthalmos, and enlargement of the thyroid. Respecting the condition of the heart, his experience was that it was generally not affected beyond the presence of a functional *bruit*, produced by the violent contractions of the heart driving the blood into a dilated atonic vessel. Another point on which obscurity existed was as to the immediate cause of death in fatal cases. Some had said that it came from pulmonary congestion and anasarca, as in dilated heart, whilst Trousseau gave instances in which it was due to cerebral hæmorrhage. Dr. Cheadle had met with no instance of either. Cases were on record of death from pressure on the trachea, from acute mania, and from various intercurrent affections. Of the eighteen cases personally observed by Dr. Cheadle, three had proved fatal; one from incontrollable vomiting, with convulsion and slight paralysis of the left arm; the second from incontrollable vomiting and diarrhœa: the *post-mortem* examination disclosed no morbid condition; the third patient died suddenly from spasm of the glottis due to pressure of the enlarged thyroid on the recurrent laryngeal. One of the gravest dangers Dr. Cheadle considered was persistent vomiting with diarrhœa. Absolute rest was essential in the acute stage of the disease, and opium with digitalis or belladonna; galvanism was useful in the more chronic state, but caused undue excitement in the acute form.

Hepatic Ascites.—Dr. CHEADLE also showed a case of recovery from extreme hepatic ascites after repeated tappings and doses of pot. iodide, 15 to 20 grains. Early and frequent tapping with Southey's trocars was strongly recommended, as purgings were futile.

Raynaud's Disease.—Dr. CHEADLE showed a case of Raynaud's disease. This was a marked example of that curious spasm of the arterioles of the extremities, with subsequent distension of the capillaries with venous blood, first described by Raynaud in 1862, under the title of local asphyxia. The fingers were more often affected than the foot. The parts were first white, bloodless, and cold, then blue and tinged, sensation to touch destroyed, although intense pain accompanied the attack. As a result, there was local death of tissue. In this case small cicatrices at the tip of the fingers showed some destruction of true skin.

Myxœdema and Sporadic Cretinism.—Dr. CHEADLE also showed cases of myxœdema and sporadic cretinism. He remarked that the occurrence of the remarkable changes which distinguished the cretinosed state under four or perhaps five separate conditions rendered the question of its etiology most interesting. The conditions were (1) endemic cretinism, when it occurred in children dwelling in a goîtrous district, and developed in early infancy; (2) sporadic cretinism occurring in children without any reference to goîtrous district, congenital or developed in early infancy; (3) idiopathic myxœdema supervening on previously healthy persons almost always in middle life; (4) surgical myxœdema occurring after removal of the thyroid gland, as shown by Kocher and Reverdin, and confirmed by Mr. Victor Horsley; (5) the condition called acromegaly.

Acromegaly, etc.—Mr. SILCOCK showed three cases of acrome-

galy, two being in women and one in a man. He drew special attention to the cases in which the disease, though easily demonstrable, was not so marked as in most of those which had hitherto been recorded, observing that the condition was probably much more common than was supposed, because it had not been looked for. He also showed cases of hyperostosis of the frontal bone in which marked improvement had been effected by the removal of part of the diseased bone; of exostosis of the frontal sinus; of distension of the frontal sinus associated with nasal polypi, and probably frontal sinus polypi; of recovery after compound depressed fracture of the frontal bone, with wound of brain and fracture of anterior fossa of base of the skull; of traumatic meningocele, and several others of surgical interest.

Vote of Thanks.—The proceedings closed with a vote of thanks to Dr. Cheadle and to Mr. Silcock for the interesting cases they had exhibited, and to Dr. Christie for presiding at the meeting.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, DECEMBER 19TH, 1889.

T. F. HOPGOOD, M.R.C.S., President, in the Chair.

Case.—Dr. PEARCEY showed a young woman with mammæ of enormous size. She was in the sixth month of her first pregnancy. The breasts were extremely painful to the touch, and appeared to be a source of great discomfort to the patient owing to their weight.—Dr. SQUANCE thought the case was one of simple hypertrophy, that the breasts were full of milk, and that great relief might be given if the milk was drawn off.—The PRESIDENT was of the same opinion.

Specimens.—The following specimens were shown:—By Dr. COLLIE, the Uterine Appendages from a Case of Pyosalpinx; by Dr. G. BERWICK, a Ruptured Kidney; by Mr. LEGAT, Photographs of Malignant Growth; by Mr. HOPGOOD, Cancer of Omentum and Fibroid of Uterus.

Hydatids of Liver—Mr. MORGAN exhibited a number of hydatids which he had removed from a liver cyst. The patient was a miner, aged 31, and was first admitted into the Sunderland Infirmary under the care of Dr. G. Welford, suffering from a prominent irregular swelling in the abdomen over the liver. After medicinal treatment for a period, the exploratory needle was used, and some clear non-albuminous fluid drawn off. Hooklets were found on microscopic examination. Mr. Morgan afterwards operated by an incision through the strong capsule forming the cyst wall. Four hundred broken and forty intact cysts were then evacuated, and a drainage tube placed in the wound. It was three weeks since the operation, and the patient was doing well.—Dr. SQUANCE gave an account of the pathology of the disease, and showed microscopic preparations of the scolices he had obtained.—The PRESIDENT, Drs. WELFORD, LARCOMBE, and BERWICK made remarks.

Papers.—Dr. LOW read papers on (1) Phthisis (first portion); (2) Medical Memoranda.—Dr. BREWIS read a paper on Puerperal Insanity, recording several cases treated successfully with chloral and bromide of potassium.—Mr. ROBINSON gave a brief account of four cases he had seen.—The PRESIDENT and Dr. LOW joined in the discussion.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THURSDAY, NOVEMBER 14TH, 1889.

J. MURPHY, M.D., President, in the Chair.

Cases.—Mr. PAGE exhibited four cases of Excision of the Elbow. One of the patients, a man, had been admitted suffering from pyæmia, the result of opening an abscess with a dirty lancet. All the patients had good serviceable joints.—Drs. GOWANS and ANDERSON made remarks.—Dr. LIMONT showed a man, aged 60, suffering from Leukoplakia; there was a history of excessive smoking for forty years. The man noticed the change on his tongue eight months ago; treatment had not been beneficial; there were now several ulcers present, and round one there was a suspicion of induration.—Dr. LYON SMITH showed a woman who had suffered from False Keloid following burns of the face. The keloid, measuring two inches by one, was excessively painful. It was dissected up, and a graft of skin of the same size taken from the arm stitched in its place; all connective tissue was removed from the graft, and slits were made in it for drainage. In six weeks tactile sensibility had appeared in the graft.

Specimens.—Dr. CRISP exhibited an Anencephalous Fœtus; the mother was weak and anæmic, and had previously had two children, who both died of inanition soon after birth.—Dr. LIMONT exhibited an Aneurysm springing from the abdominal aorta close to the superior mesenteric. Symptoms were present for five months, and were at first pain in the back and vomiting, and latterly jaundice, hæmatemesis, and distension of the stomach. Dr. Limont also showed a Calcareous Pericardium from a man, aged 40. Thirteen years previously he had an attack of rheumatic fever; since that time he had had cardiac symptoms. Indications of syphilis were found on the body. On admission aortic and mitral murmurs were heard, but very faintly. The pericardium had a thick calcareous layer on its anterior and diaphragmatic aspects. On cutting across one of the thickest masses, a soft, caseous-looking material was found in its centre, the calcification having apparently taken place in unabsorbed fibrin or pus.

Weather and Disease.—Dr. SQUANCE read a paper drawing attention to the exacerbation during decrease of atmospheric pressure, and amelioration during increase of atmospheric pressure of the symptoms of certain diseases. Migraine was noticed as recurring on the approach of a markedly diminished pressure, whereas in areas of high pressure, diarrhœa occurred in summer and bronchial affections in winter. The effects of variation of temperature was pointed out, also the result produced by the variable amount of moisture in the air. Attention was drawn to the alleged effects of low barometric pressure on wounds. The probability of atmospheric conditions modifying the infectivity and virulence of disease germs was suggested, and also the possibility that the infective fevers were all produced from one germ modified by various conditions so as to give rise to various diseases.—Professor PHILIPSON could not accept the possibility of the virus of one infectious disease being so modified by atmospheric influences as to give rise to a different disease. The virulence of contagium might be varied, but not the disease.

THURSDAY, DECEMBER 5TH, 1889.

J. MURPHY, M.D., President, in the Chair.

THE Examiners in Medicine and Surgery of the University of Durham, Dr. Sidney Coupland and Mr. Bellamy, were introduced by the PRESIDENT.

Cases.—Professor PHILIPSON exhibited a man who had suffered from Neuralgia of the Inferior Dental Nerve for two years and a half, and upon whom extraction of molar teeth was primarily carried out, and subsequently division of the nerve.—Dr. ARNISON, who performed the operation, gave in detail the various steps of the same. He trephined over the sigmoid notch, removing three-quarters of an inch of bone; fished up the nerve with a blunt hook, and cut off half an inch of it. A salivary fistula followed, which subsequently healed.—Mr. BELLAMY asked if nerve-stretching had been tried.—Mr. FOTHERGILL thought the case one of great interest from a dentist's point of view, and asked if the teeth were decayed.—Professor PHILIPSON and Dr. ARNISON replied.—Mr. PAGE showed four patients who had been operated on for Radical Cure of Hernia. He had operated upon two of them by the open method. In one of the cases, a boy aged 6—the subject of congenital hernia—one testicle had to be removed. In another of the cases, a man previously operated upon eight years ago for strangulated hernia, a double sac was found containing uncovered large intestine.—Mr. BELLAMY had operated upon a case where there was a double sac; the second sac was strangulated.—Dr. OLIVER remarked upon the descent of large intestine external to the peritoneum.—Dr. HUME, who had been present at the operation, alluded to the sac lying in front of the large bowel.—Mr. WILLIAMSON exhibited a man under whose Gluteal Muscles a large Cyst-like Mass could be seen and felt; an impulse was communicated to it by coughing. A large swelling could be felt *per rectum*. It was regarded as an abscess due to disease of the lower lumbar vertebræ, which had escaped by sacro-sciatic foramen.—Mr. BELLAMY having remarked upon the surgical procedure about to be adopted, Mr. WILLIAMSON replied that in opening the abdomen above the ilium he could get at the diseased bone more readily, and could keep the wound more antiseptic.—The PRESIDENT exhibited a case of Popliteal Aneurysm. which had been cured by Pressure. After the application of tourniquets pulsation disappeared, and the tumour became solid. The aneurysm was compressed for four hours for eighteen days.—Dr. HUME exhibited a man from whose Great Sciatic Nerve had been Removed a Tumour the size of a kidney. The nerve had to be divided close to its exit through the notch, and then it was sutured. Cutaneous sensibility over the greater part of the leg was at first destroyed, but had now largely returned. The patient could walk remarkably well.—Dr. COUPLAND congratulated Dr. Hume, and raised the question of transplantation of nerve.

Specimens.—Dr. A. E. MORISON showed a specimen of Ruptured Subclavian Aneurysm. A man aged 63, suffering from axillary aneurysm, whose subclavian Dr. Morison tied, did well; a year afterwards he was consulted by the same patient for aneurysm of the left femoral artery, which the patient himself had treated by pressure at night, working during the day, and in a week the tumour became solid.—Dr. MURPHY alluded to the last two exhibits, and spoke of digital pressure as a method of treatment not, in his opinion, sufficiently tried. He showed Carte's and Signoroni's tourniquets.—Mr. BELLAMY said he had had an aneurysm of the innominate treated by relays of students. The patient was cured forty-eight hours afterwards, but ultimately died of cancer of the rectum.—Dr. HUME mentioned a case treated by modified pressure; the tumour solidified in four hours and a half.—Mr. WILLIAMSON thought the temptation to ligature the vessel in these cases was very great.—Dr. SIDNEY COUPLAND alluded to the cases of abdominal aneurysm which had been published by Dr. William Murray and Dr. Heath, of Newcastle. He thought the application of pressure not at all times an easy matter.—Dr. RIDLEY said Dr. Murray's case had exhausted all the students present: it required eighteen hours for its solidification. —Dr. OLIVER alluded to some of his cases—one where, though the tumour was now perfectly solid and no longer pulsating, it had not so far decreased in size to any extent.—Dr. BENINGTON exhibited a Hemisection of an Anencephalic Fœtus. The case which had occurred in his practice a few years previously was interesting from an obstetrical point of view. The mother was tall, had a high palate, and one of her brothers had a cleft palate.—Dr. LIMONT showed Sections of Brain from which Mr. Page had removed portions of cerebral tumour. The tumour was seen to press upon strands of motor fibres passing down to the mid centres. The patient died from encephalitis. On microscopical examination the tumour was found to be a glioma.—Dr. COUPLAND asked whether the tumour had not grown from the pia mater.—Mr. PAGE described the operation and alluded to the difficulty there was in distinguishing between brain and tumour.—Dr. EASTWOOD mentioned one of his cases of cerebral tumour where the symptoms were those of melancholia, and a tumour was found *post mortem* in the parietal region.—Dr. LIMONT exhibited a Dermoid Cyst of the Ovary. Mr. Page had operated. Symptoms had been present for five years. The patient had made a good recovery.—Dr. LIMONT also showed a specimen of the Heart in Pericarditis, removed from a man who had been admitted suffering from a wound of the scalp. Dr. Limont regarded the pericarditis as of rheumatic origin.—Dr. LIMONT and Mr. PAGE showed two Solid Tumours of Ovary removed from a woman 40 years of age. On microscopical examination they were found to be encephaloid cancer.—Dr. HUME showed a specimen of Cancer of Rectum, which he had removed from a man aged 39. It was a round-celled sarcoma properly speaking. The patient did well. Four days after the operation he had a peculiar crackling over the region of the liver which spread upwards upon the chest. At first it felt like peritonitis, but was surgical emphysema. He had several attacks of this, and disappearances. He was now all but well, and was recovering from a prostatic abscess.—Dr. A. E. MORISON exhibited an Aneurysm which involved the second and third parts of the Subclavian. The aneurysm had sloughed, the patient dying suddenly. Dr. A. E. Morison also showed a Larynx, the seat of acute Inflammatory Œdema. Patient died three hours after tracheotomy.—Dr. Morison also showed a specimen of Absence of Costal Cartilages, and Sarcoma of Lower End of Femur.—Dr. SQUANCE exhibited several drawings of the various malignant and non-malignant Tumours, also of Ovarian Tumours, for which he received the thanks and congratulations of the Society.—Dr. MURPHY exhibited Vesical Calculi.—Dr OLIVER exhibited a specimen of Cancer of Lung. During life from the distended veins on the trunk and dulness over the right chest, there was no difficulty in diagnosing the case. Dr. Oliver also exhibited a Heart, the seat of recent Ulcerative Endocarditis. A few days before death, the patient—a woman—had had a rigor, followed by rise of temperature. This was followed by hæmaturia, and the kidneys *post mortem* were found to contain numerous recent infarcts.—Professor PHILIPSON made remarks.

THE Shah has, through his Ambassador, Prince Malcolm Khan, conferred the Imperial Decoration of the Lion and Sun on Dr. Robert Slater Mair, M.D.St. Andrews, F.R.C.S.Edin., Physician to the Persian Embassy in London. Dr. Mair is a Vice-President of the Harveian Society, and was formerly Deputy-Coroner at Madras.

REVIEWS AND NOTICES.

DU SANG ET DE SES ALTÉRATIONS ANATOMIQUES. (The Blood and its Anatomical Alterations.) By Professor GEORGES HAYEM. Paris: G. Masson. 1889.

PROFESSOR HAYEM states in his preface to this book that it is to be regarded as an essay on clinical hæmatology founded on the anatomical history of the blood. It is the fruit of nearly forty years' study by the bedside and in the laboratory, pursued almost without interruption. In another place he says that his book, in spite of its size, is a long original memoir, and that he has had to omit all questions of history and, with a few exceptions, all discussion of opinions. The book does not pretend to be a complete treatise on the blood; its title announces that it is concerned chiefly with the anatomical elements of that fluid, and the passages we have alluded to in the preface point out that it is the author's own observations that he has here collected together. M. Hayem's name is so well known in connection with the microscopic anatomy of the blood that it is superfluous to add that he is thoroughly competent to write such a book. He gives a list of ninety-two original papers he has previously written on the subject, and those who have read these know that they are not only remarkable for quantity but that their quality is excellent; while they indicate great thoroughness of work and originality of thought.

In the present work the interest is sustained throughout, and the 1,000 pages are by no means so formidable as at first glance they appear. The book is well illustrated, written in a clear and interesting style, and, as a piece of original work, must be regarded as a masterpiece. Unfortunately the demand for such scientific treatises is not very great among the members of the medical profession, but we nevertheless wish the present volume every success.

The book is divided into six parts. Part I is entitled *Technique*, and consists of six chapters. These all relate to the methods adopted for the examination of the blood. The microscopical methods of examination are described with especial fulness. M. Hayem much prefers the method of drying the blood rapidly before it is examined to the usual method of examining a drop of blood while still liquid, as in the latter case the formed elements, especially the blood tablets, undergo rapid disintegrative changes. For the enumeration of the corpuscles the author describes an instrument of his own, which is constructed on the same principle as those generally in use in this country, but has, in addition, certain modifications, suggested during the many experiments of this kind that M. Hayem and his assistants have made. The methods of measuring the corpuscles, and of estimating the amount of hæmoglobin in them, are described and call for no special notice. The chapter on the spectroscopic examination of the blood is very meagre, but is supplemented, to a slight extent, later in the book. The same may be said for the chapter on the examination of the serum. In fact, wherever chemical methods and results come in, they are treated much less fully than the anatomical subjects, with which the book is more particularly concerned.

Part II treats of the anatomy of the blood, and is naturally divided into sections dealing with the three varieties of formed elements that occur in the blood. A very full description of these in human blood is first given; a chapter on the comparative anatomy of the blood follows; and a third chapter deals with the proportion in which the corpuscles occur in the blood of man and in the lower animals.

The red corpuscles are throughout spoken of as "hæmaties"; the colourless ones as "leucocytes"; and the third element as "hæmatoblasts." It is somewhat unfortunate that the term hæmatoblast should be used in different senses by different anatomists. M. Hayem, however, is perfectly logical in using the term for the blood tablets or *Blutplättchen*, for he regards them as immature hæmaties; he finds that many of them are faintly coloured by hæmoglobin, and describes many intermediate forms between the colourless and minute hæmatoblasts, and the fully-formed hæmatie. In mammals the hæmatoblasts have no nucleus. The leucocytes are divided into three fundamental types—the homogeneous, the slightly granular, and the very granular.

The same three kinds of formed elements are found throughout the vertebrate kingdom, the most marked difference being the

presence of a nucleus in the red discs of the lower vertebrates. Here, also, according to Hayem, nucleated hæmatoblasts, generally spindle-shaped, are found; and here, also, intermediate forms are described; these are easily discoverable during the renovation of the blood which occurs after a considerable hæmorrhage.

With respect to the question of the number of corpuscles present, we have space only to quote his figures for human blood: 5,000,000 red discs per cubic centimètre is still regarded as the normal average; in the same volume of blood there are 255,000 hæmatoblasts and 6,000 leucocytes.

Part III is entitled "The Physiology of the Blood." Here the modifications that the blood undergoes with age, digestion, food, menstruation, etc., and during the course of the circulation, are described in detail. A short chapter follows on the total amount of the blood of the body, and the concluding two chapters deal with the question of the coagulation of the blood in an interesting historical manner; for here M. Hayem departs from his usual custom of not discussing opinions and theories, probably because he feels that the time has not yet arrived for anyone to hold a positive opinion on the subject. Full justice is done to the late Dr. Wooldridge's work on coagulation, and he sums up as follows with regard to it: "Wooldridge has made us acquainted with a large number of facts which show the insufficiency of the theories at present held; a general and complete theory, however, cannot be deduced from his own work." M. Hayem considers that Wooldridge erred in considering that the corpuscles took no part in fibrin formation, and also in looking upon the precipitate obtained by cooling peptone plasma as being composed of hæmatoblasts.

Histological researches have shown Hayem the important part played by the hæmatoblasts in forming fibrin; they become partly incorporated with the network, and apparently partly dissolve. The red corpuscles, he also considers, have far more to do with fibrin formation than the white; he in fact regards the leucocytes as the most stable of all the formed elements of the blood, though he admits that in the lymph they must furnish a coagulative principle.

The subject of Part IV is the pathological anatomy and physiology of the blood; here again naturally anatomy comes to the fore, while chemistry retires to the background, for, as the author says, "since the downfall of blood-letting, no medical man would dare to bleed his patients merely to study the chemical alterations in their blood,"—whereas, of course, a drop of blood is sufficient for the microscope. Each variety of formed element is first taken up, and its variations in number, colour, size, shape, etc., described fully; subsequently the different forms of anæmia, infective and inflammatory processes, and lastly icterus, albuminuria, and cachexia are described *seriatim* so far as relates to their influence on the corpuscles and on the colour and reaction of the serum. One method of investigation will be new to many readers, and that is the examination of the fibrin network, which shows variations from the normal under the microscope in many diseases. In the hands of a competent and practised observer, no doubt much might be learnt from investigations of this kind. We are, however, inclined to think that the difficulties of the method, the very slight differences in appearance, and the consequent very large opportunity for the display of the imaginative powers of the observer, will prevent examinations of the fibrin network under the microscope from becoming very generally used.

The fifth part of the book will be found one of the most interesting; it deals with the development and renovation of the blood; the subject that will attract most attention here is that of the renovation of the red discs in the adult. M. Hayem's views on this point are original, and we must say not fully proved; in one part, indeed, the author himself apologises for putting forward a view supported by such incomplete evidence.

The method adopted for ascertaining the mode of renovation of the discs was to bleed an animal, and subsequently to enumerate the corpuscles at intervals, observing also their changes in form. It was found that as the red corpuscles diminished the hæmatoblasts increased, and intermediate forms between hæmatoblasts and hæmaties increased also; then the red discs increased in number, and simultaneously the hæmatoblasts diminished until they become normal in number, when the discs were also normal. This is illustrated graphically by charts and curves.

Similar curves are given for different diseases in which it is shown that "sanguinification," that is, the power of converting hæmatoblasts into red discs, varies considerably.

The question, however, next arises, Granting that the discs are developed from the hæmatoblasts, where do the hæmatoblasts come from? The author admits that in fœtal life, while nucleated discs are being produced, the vasoformative cells, the spleen, and marrow may give rise to red corpuscles; he also admits that exceptionally and in very profound anæmic conditions nucleated red corpuscles may appear in the adult. He denies, however, that the so-called hæmopoietic viscera have anything to do normally with the production of red corpuscles, but considers that the hæmatoblasts originate from the pre-existing red discs. This is a strikingly original view, and amounts to saying that the red corpuscles have the power of self-multiplication. It is, however, just this point that is not at present supported by sufficient facts, as Professor Hayem himself admits.

The concluding chapters (Part VI) are on pathology; the various blood diseases are fully treated, both as regards symptoms, etiology, and pathology. They are all illustrated by numerous clinical records, which are exceedingly full, and will form perhaps, to the practical physician, by no means the least interesting part of the volume.

AN EPITOME OF THE SYNTHETIC PHILOSOPHY. By F. HOWARD COLLINS. With an Introduction by HERBERT SPENCER. Williams and Norgate. 1889.

THE origin of this volume, which will be to many a valuable compendium of the Spencerian philosophy as a whole, is frankly disclosed in the first words of the preface. "After spending several years in the self-imposed task of making indexes to my books, Mr. F. HOWARD COLLINS volunteered to make an epitome of *The Synthetic Philosophy;* and asked me whether, if an epitome were satisfactorily made, I would agree to the publication of it. After some hesitation I consented." It is, therefore, a faithful piece of discipleship which this painstaking volume offers to the philosophic reader—a kind of extended index or outline map of the vast regions of Mr. HERBERT SPENCER'S metaphysics. Mr. Collins himself describes the method of his five years' work. "The object of the volume is to give in a condensed form the general principles of Mr. Herbert Spencer's philosophy as far as possible in his own words. In order to carry out this intention, each section has been reduced, with but few exceptions, to one-tenth; the 5,000 and more pages of the original being thus represented by a little over 500." The *Epitome*, therefore, represents the original, as he hopes, "as it would be seen through a diminishing glass, the original proportion holding between all its varied parts."

To review such a book adequately would be to review the Spencerian philosophy itself; and apart from the fact that our columns are hardly the place for such an undertaking, it may be doubted whether the time has not already gone by.

The *First Principles* were published long ago, if we measure not in years but in the movement of thought. The keynote which the present redaction strikes in the headnote to its first chapter recalls us vividly to the change of the world's attitude; for it claims that the famous doctrine of "the unknowable" is but a better expression of the views developed by Mansel and Sir Wm Hamilton. It is as if one talked of the thinkers of the Middle Ages. And in truth the whole reasoning of these earlier sections of the book forces on one all the while the conviction that in its essence and logic it is pre-Kantian. It is the last of the many vain attempts to construct a philosophy of the universe of being upon that old untenable theory of knowledge which Locke left to English thinkers as a *damnosissima hereditas*. Berkeley, Hume, Hamilton, the Mills, and Mr. Herbert Spencer, and a hundred men of less leading, have been crippled by these old fallacies, always recurring in some new and subtle form, of which Locke's "tabula rasa" was the beginning. Doubtless the faithful followers of Mill or of Spencer would deny it, and would believe the modern tendency to prescribe a careful appreciation of Kant as a "prolegomenon of any future metaphysic" to be a sort of demented obscurantism. Nevertheless, there is but little doubt that this most careful and excellent handbook to Spencerianism finds its philosopher already a little out of date.

Such criticisms, in any case, would apply only to what we have ventured to call the metaphysical part of the system. The scientific side of it must be judged by another standard; and, indeed, the whole scheme of articulated theories, biological, psychological, and sociological, commands the respect which is due to a great conception of the ordered unity of things. Every such effort cannot but advance, even by its failures, the work of

science. The bewildering range of paragraphs suggests at once all the fields of controversy open to modern thought. The data of ethics, the nature and office of the state, the relation between mind and body, the history of religion—all these and many more are but incidents in the encyclopædic progress through which Mr. Collins follows his master.

Throughout, the statement, if summary, is lucid, and it is not infrequently the case that the condensation makes the logic easier to follow than the cumbrous elaboration of the original. To one point of special interest at the moment we may call attention. In the synopsis of the *Principles of Biology* will be found in its due place Mr. Spencer's general statement of the "evolution hypothesis." Reading it again in the light of the later discussions, one is struck with two things: In the first place, evolution, in the Spencerian sense, is opposed to nothing except what he calls the "special creation hypothesis," which means a very anthropomorphic view of things, representing the Creator as making organisms separately without any coherence at all. In the second place, evolution itself is a very wide word. It means merely "the production of all organic forms by the slow accumulation of modifications upon modifications, and by the slow divergencies resulting from the continual addition of differences to differences." There are very few people nowadays, even among the most orthodox, who would not accept this formula, especially when it is supplemented by the other admission that this hypothesis as well as the other "implies an inscrutable Cause." In this, as in other things, the appearance of a bare but accurate summary of the Spencerian dogmas will serve a useful purpose if it brings busy people back to a consideration of the general principles which underlie all their thinking, but which are too apt to be either assumed without precision of statement, or practically forgotten in the immediate urgency of details.

THE DISEASES OF THE MADRAS FAMINE OF 1877-78. By ALEXANDER SOUTER, M.D., Brigade-Surgeon, Her Majesty's Indian Army; Principal and Professor of Medicine, Medical College; and Senior Physician, General Hospital, Madras.

DURING the famine in Madras of 1877-78 the author had charge of the sick of a "Famine Relief Camp." This work contains an account of the diseases from which the patients suffered and died, and the pathological appearances observed and recorded are the outcome of 459 necropsies. The book is illustrated by nine plates taken, not from the morbid specimens examined by himself, but, oddly enough, with one exception, from the *Medical and Surgical History of the War of the Rebellion in the United States of America*, by Barnes and Woodward. The causes of death in the 459 necropsies are tabulated. As might have been expected, alvine fluxes caused the greatest number, namely, 347; dropsy comes next with 22 cases; pneumonia, 22; cholera, 13; phthisis pulmonalis, 19; atrophy, 12; hepatic abscess, 4, one of them in a child. We strongly suspect that the cases of hepatic abscess were one and all of septic origin, although this does not appear to be the opinion of the author. The cases of alvine flux are divided into those without ulceration, 64; with ulceration, 132; with diphtheritic effusion, 84; with combined ulceration and diphtheritic effusion, 67. The above cases of alvine flux are described as having presented much the same kind of symptoms, namely, the belly hot, generally much retracted, with the walls tensely drawn over the viscera, with, in many cases, tenderness on pressure over the colon. In only a few did the stools present the dysenteric character on admission; some of the most fœtid stools were found to prevail in cases where the gut was, after death, found free from apparent disease. The author gives a careful description of the various forms of disease presented to his observation in the "Famine Camp;" and when we consider that this enormous amount of labour was carried out in addition to his ordinary duties as professor in a medical school and chief physician to a large hospital, it shows that the authorities in India do not spare their medical officers, but, regardless of hours and climate, heap work on their shoulders that would make even our railway officials stand aghast. It is in the highest degree creditable to the author of this treatise that, instead of "shirking," as is the resource of the overworked at home, he found time and energy to keep this interesting report of his extra labours, and this without, so far as we can see, a word of remonstrance or complaint. Truly, now as always, the Government of India is well served by its overworked and not overpaid medical servants.

NOTES ON BOOKS.

Die Heilquellen des Taunus. Herausgegeben von Hofrath Dr. GROSSMANN in Schlangenbad. 12mo., pp. 448. (Wiesbaden: J. F. Bergmann. 1887.)—This book, although published two years ago, has strangely reached us only now. It gives an excellent account of the resources of the springs of the Taunus Mountains, varying as they do in their qualities according to the differences they exhibit in the relative amounts of chloride of sodium and of carbonate of soda. The accounts are furnished by bath physicians of good standing at the various localities; and we observe that the account of Homburg is written by Dr. Dietz, who has for so long maintained such a well-deserved reputation at that place.

Manuel d'Autopsies. Par THOMAS HARRIS, M.D.Lond. Traduit sur la Première Édition Anglaise et annotée, par le Docteur H. SURNONT. (Bruxelles: A. Manceaux, Libraire Éditeur. 1888.)—This little work is a faithful translation of the manual of the Assistant Professor of Pathology at Owens College. Such a book was certainly required in this country, and we are glad to see that its merits are recognised abroad. It will doubtless be largely in request among students about to commence practical pathology, while the useful medico-legal hints it contains should render it a useful addition to the working library of every practitioner.

A Practical Treatise on Eczema and its Treatment. By M. J. RAE, M.D. (Churchill. 1889.)—Dr. Rae has prepared this treatise with the object of placing before his readers a complete yet succint history of eczema and its treatment, and he has succeeded in his intention. The views of dermatologists, English and foreign, who have written on eczema up to the most recent publications, receive full consideration. Dr. Rae has indeed been most catholic in his selection of authorities. The views of those who consider eczema to be the expression of constitutional taints of recognised types, and who treat it by drugs specially directed to counteracting these taints, receive equal consideration with those authors who have in their writings recommended local applications of the most varied kinds. Practitioners whose experience has been sufficiently large to enable them to discriminate will find in this work a valuable repertory of drugs and formulæ both for internal and external use, but the student whose experience has not been large, and who prefers to take his instructions *ex cathedrâ*, will find himself embarrassed by the profusion of remedies which are recommended in the book. Dr. Rae himself does not consider the diathetic theory necessary to explain the causation of the disease, but believes that researches have shown that eczema depends for its manifestation on some peculiar condition of the nervous system. What that peculiar condition, however, may be, or how it acts, is not stated. Dr. Rae occasionally does not shrink from expressing his own views in decided language. For example, he remarks that there have come under his own observation many cases where fatal or serious results have followed applications to the face or head of infants for the speedy removal of eczema, and he is satisfied of the danger of quickly causing the disappearance of an eruption during the period of dentition. Dr. Rae would do good service if he would take occasion to publish a record of similar cases, as undoubtedly many experienced men are only too gratified when they can succeed in quickly curing such eczematous eruptions in children, and are not aware that they have observed any disagreeable consequences follow. The various more modern methods of applying pastes, Goa powder, medicated gelatine, chrysarobin, pyrogallic acid, and other remedies are fully explained, and practitioners who have much to do with the treatment of eczema may find it useful to have this monograph ready for reference.

A Short Manual of the Bath Mineral Waters. By ARTHUR E. W. FOX, M.B., F.R.C.P.Edin., etc. Second edition with plans, 12mo., pp. 108. (London: Simpkin, Marshall, Hamilton, Kent, and Co. 1890.)—*Bath and her Thermal Waters.* By SAMUEL CRADDOCK, M.R.C.S. 12mo., pp. 76. (Bath; *Bath Chronicle* Office. 1889.)—As for guides to Bath, the cry is "Still they come!" Dr. Fox's excellent book has already reached a new edition; and Dr. Craddock's little work appears to offer a capital shillingsworth of information in a neatly got-up form.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

ELIXIR OF CHLORALAMIDE.

MESSRS. WYLEY AND CO., Coventry, have sent us a specimen of their elixir of the new hypnotic chloralamide. Upon examination we find it to be essentially an alcoholic solution of the drug, with flavouring adjuncts. It mixes readily with water, and there is no separation, even after long standing. The taste of the chloralamide is well covered, and, altogether, it is a very pleasant mode of administration. It is stated to contain 15 grains of chloralamide in each fluid drachm. The label very properly states that it is incompatible with alkalies and alkaline carbonates.

ANTISEPTIC PASTILLES.

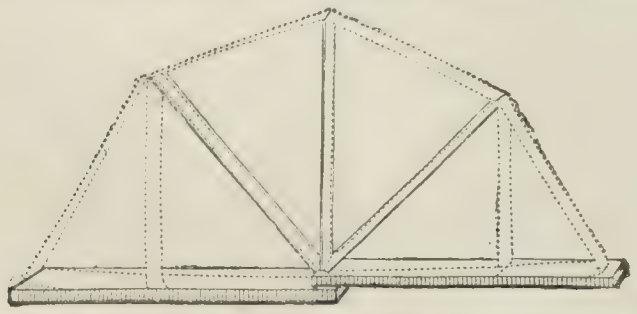
THESE pastilles, sold by Messrs. F. Newbery and Son, King Edward Street, are hard white pellets, which are intended to be dissolved in water, and thus form an antiseptic solution to be used as a nasal application to be sniffed up the nose, or as a spray; also as a mouth wash. They weigh fifteen grains, and are composed of sodium bicarbonate and borax, with small quantities of benzoate and salicylate of sodium, thymol, menthol, and oil of gaultheria. They readily dissolve in water, when crushed, forming a very alkaline solution, which proves to be highly antiseptic. They will be found to be very convenient for patients who have to use antiseptic solutions frequently, as they do away with the necessity of having large quantities of solutions on hand.

CHLOROFORM PREPARED FROM ACETONE.

WITHIN the last few years the preparation of chloroform from acetone has to a great extent replaced the old method of manufacturing from alcohol. The chloroform obtained by this process is less liable to contain those chlorinated products to the presence of which the alarming symptoms which have sometimes followed the inhalation of chloroform have been attributed by some. This mode of preparation was indicated by Liebig as far back as 1832, and the reason of its recent employment in the manufacture of chloroform is due to the fact that acetone can now be prepared at a cheap rate and perfectly pure. Messrs. J. F. Macfarlan and Co., of Edinburgh and London, have sent us a sample of a quantity of chloroform prepared by them from acetone in 1880. We have submitted it to a thorough examination, and find that it is a very pure preparation. The fact that it has kept since 1880 without any alteration is a great point in favour of chloroform prepared from acetone.

"THE LEICESTER" VAPORISER AND ODORATOR.

MR. A. DE ST. DALMAS, of Leicester, has devised a convenient arrangement for the vaporisation of volatile disinfectants. It consists of a broad band of loose calico stretched upon a light

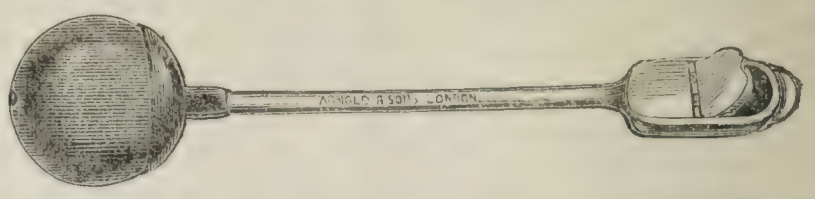


fanlike framework, the whole folding easily into a shallow oblong tin box. It is portable, and, for its size, exposes a very large amount of evaporating surface.

NEW VAGINAL INSUFFLATOR.

HAVING always had a decided objection to the usual routine treatment of erosion of the os and cervix (accompanied or not by vaginal leucorrhœa) by glycerine tampons, I was pleased to read, about a year ago, of the method adopted by Dr. Schwartz, of Halle, namely, the application of powdered boric acid.

The credit given to the dry treatment of sores and wounds in general surgery induced me also to give this a trial. I found that the insufflators usually sold held very little; and as it requires at least half an ounce of powder for each application in these cases, I had a vaginal insufflator made to contain it, and which the illustration will help to explain. It is similar in form to a covered



spoon, and, on the lid being raised, it can be easily filled by being dipped into any receptacle containing the powder. When filled, the lid is closed, and, on being introduced into the vagina, the rubber ball is compressed a few times, and the powder deposited on the os and vaginal walls

I have had excellent results in cases of slight erosion of the os, and also in cases of leucorrhœa, whether of long or short duration (in conjunction, of course, with general treatment). The convenience of this form of insufflator should recommend it, as it can be used with or without the speculum.

The vagina should be washed out in all cases to remove the secretions thoroughly, previous to the application of the powders, and thus obtain their full value. I have found a powder composed of equal parts of alum, oxide of zinc, and boric acid very useful as a general rule, but the practitioner can choose the powder best suited to the case at his own option.

The comfort of the patient is another consideration; and those who have experienced the discomfort of the glycerine tampon and other moist applications have invariably expressed a wish for the dry treatment in preference.

The makers of the vaginal insufflator are Messrs. Arnold and Son, West Smithfield, who have carried out the idea to my complete satisfaction.

ALEXANDER DUKE, F.K.Q.C.P.I.,
Ex-Assistant Master Rotunda Hospital, Gynæcologist to Steevens's Hospital.
Dublin.

SPLINT FOR FOOT-DROP.

BY BERNARD ROTH, F.R.C.S.

I HAVE devised a new elevating spring for foot-drop due to paralysis of the anterior tibial muscles, whether occurring in infantile paralysis or in the paralysis of adults.

It consists of a curved rod B C of well-tempered steel moulded to the posterior outline of the leg below the knee, and more convex posteriorly than indicated in the figure. The upper end, B, of the spring fits a socket in an ordinary tranverse leather band, A, buckled round the calf, while the lower end, C, fits a hole in the back of the heel of the boot, where it may either be a permanent fixture or made to extend to a spring catch, D, in front of the heel. A steel plate is embedded in the sole to prevent the latter yielding to the weight of the foot. The spring should form, when not being worn, an acuter angle with the sole of the boot than is shown in the illustration, and its strength should be sufficient to keep the patient's foot at a right angle, or less, with the leg while walking.



The following are the advantages claimed for this splint:—

1. First and foremost its simplicity and durability as compared with the constant renewing of elastic tractors, and the frequent breakage of complicated steel springs for foot-drop.
2. Its sightliness; from the spring being placed behind the leg, it is scarcely noticed when worn.
3. Its comfort to the patient in being very light and not catching the dress, as is the case with other foot-drop splints where the spring is attached to one side of the leg.
4. Lastly, and not its least advantage, is its cheapness.

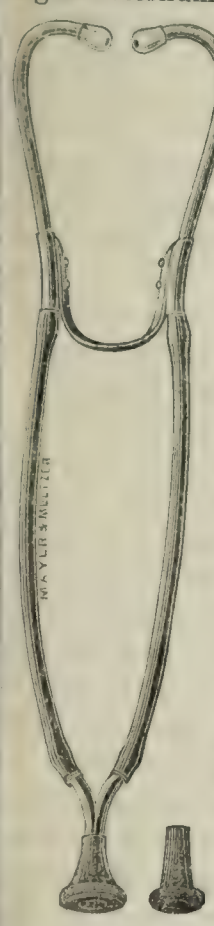
I have employed this instrument for the last two years with gratifying results. It is not only very efficient in children, but it

enables adults afflicted with hemiplegia or paraplegia, who are beginning to walk again, to do so without the toes dragging the ground and without the leg being forced to describe a semi-circumduction at the hip with each step, which is so distressing to witness. With this splint applied, the foot and leg can be carried directly forwards, to the great comfort of the patient and with much less fatigue.

I have to thank Messrs. Mayer and Meltzer, of Great Portland Street, W., for carrying out my ideas in the designing of this efficient little instrument.

AN IMPROVEMENT OF THE STETHOSCOPE.

HAVING experienced some difficulty in getting immediate adjustment of the ordinary stethoscope in very thin persons, and in those who have been the subjects of rickets, etc, with rough irregular sternums, the idea of a soft inflated india-rubber cap or ring suggested itself to me. I have used the cap now for more than two years, and learning lately that several medical men and students have adopted it, I am desirous to make known what advantages I believe it to possess.



I originally designed it as a cushion to be put on any stethoscope in auscultating an uneven chest wall. The cardinal point was, Does the cap influence the conducting power of the instrument? I have tried all sizes of caps on all kinds of stethoscopes, and have come to the conclusion that over wood it does not add to the conduction of sound, but over metal it adds to the acoustic value of the instrument in so marked a degree that I should like auscultators to give it a fair trial and judge for themselves, as it only costs a trifle. Having established, at least to myself, that the conducting power of a metal chest piece is increased, I am free to state certain other merits which it possesses.

First, it gives instant conveyance to the ear of the sound listened to, and can be stamped down, as it were, with a decided movement almost of force (as it cannot hurt), whereas the wood or metal end must be put down carefully and cautiously. In outdoor hospital work this will be found a clear gain after a little familiarity in using. Secondly, I have made a point of trying both the cushioned and the bare stethoscope on numbers of patients, and on asking them which instrument they liked best, the answer has always been in favour of the one with the soft end. There can be no comparison in the feeling conveyed in the touch, and this is by no means a trifle, as patients are very sensitive over these matters.

In conclusion, I may say that the binaural stethoscope, with the metal upper part and metal spring, pear-shaped ear-pieces -not globular, as I and others have had to consult the aurist om using the latter—plain india-rubber tubing of large calibre -not small, as it warps or kinks—with an india-rubber cap over s metal end, forms the best stethoscope with which I am acquainted. Messrs. Mayer and Meltzer, Great Portland Street, ve made the caps to my entire satisfaction.

Weymouth Street, W. JAMES MURRAY, M.D.

POROUS INDIA-RUBBER BELLADONNA PLASTER SPREAD ON KID.

R. A. DE ST. DALMAS, Leicester, has sent samples of plaster, hich are exceedingly pliable and very evenly spread. The aster also possesses the advantage of being porous, and, as it is read upon kid, it combines support with the special properties belladonna.

EUCALYPTUS DISINFECTANT FLUID.

IS is a mixture of eucalyptus oil with another aromatic vola- oil, which has the odour of oleum origani. It is perfectly soluble rectified spirit, but not at all miscible with water. The prepaion, which is made by Messrs. J. Tucker and Co., 51, Paddington eet, W., is well adapted for use as an antiseptic surgical dress- or for fumigations, but it will be likely to be found an obtion to its being freely sprinkled about sick rooms, as recommended, that the stain produced by it takes some days to disappear. We have also received a number of preparations of eucalyptus manufactured by the same firm, consisting of emulsions, ointments, pessaries, etc. These are exceedingly well made.

NEW SAFETY DRIVING REIN.

DR. ARTHUR WIGLESWORTH (Liverpool) writes: When attached to the staff of the "Osmanli Irregular Cavalry," located at Schumla in 1856, I possessed a little Arab charger, whose idiosyncrasy disposed it to "bolt" on every possible occasion, neither snaffle nor curb, nor both together, being sufficient to restrain it. It occurred to me that by some kind of "leverage" I might be able to succeed; and I did precisely what is described in your issue of November 23rd regarding the "new" driving rein, *minus* the attachment to the tail band, that is, I fastened the end of the rein to the saddle, passed it through the ring of the snaffle, and held the other end, with the result that I was able to check the morbid propensity to bolt. But I should hesitate to use such a rein in driving in a town, as it would prevent a horse "getting his head" when he happened to slip, and be more likely to cause him to come down altogether; and anyone who has had, as I have, some forty years' experience in driving, will know that such a rein will neither prevent jibbing nor rearing, though it will prevent star-gazing, but no better than a martingale. It might, however, be used as an adjunct to an ordinary rein with a bolting horse, and I doubt if any horse could go any distance if firmly held by such a rein.

MR. W. H. SERJEANT (31, Moorgate Street, E.C.) writes: Dr. Wyke Smith says that my rein has "no curative effect in shying." When one considers the numerous causes which bring about shying in horses one would hardly expect to cure with any single appliance. What I claim for my rein is that it prevents shying, as was expressly stated in the JOURNAL.

The fact is, both Dr. Smith and Dr. Napier fail to understand the principle on which my rein works. The rein being attached to the crupper strap and passing through a ring on the belly-band, and then through the ring of the bit, gives the driver perfect command over the whole vertebral column of the animal. Anyone with the most elementary knowledge of mechanics can see from the diagram in the JOURNAL that the first effect of tightening the rein is to flex the head of the animal, and the pressure being continued—as might be required with bad horses—to deepen the concavity of the back, which effectually prevents kicking and buck-jumping. The ring of the bit is very little, if at all, below the level of the ring on the crupper, so that the horse's head is certainly not drawn down, as Dr. Napier contends.

The hunting editor of *Land and Water*, September 16th, says "head and tail are acted upon simultaneously, and the horse can do nothing in the shape of rearing, kicking, and bolting." Dr. Napier ten years ago conceived an idea for controlling pullers by fastening the reins to the tugs. Such an arrangement has to my knowledge been in use more than thirty years. Perhaps he may yet appreciate the advantage of extending the points of attachment to the tail; the many disadvantages he found with his system will then be entirely done away with. The same gentleman remarks that a Liverpool bit cannot be used with my rein; as a fact, however, the majority of those using the rein prefer this bit to any other. It is unfortunate that this gentleman had not seen the rein in action before rushing into print. The best authorities on such matters in this country (who have seen and used it) are unanimous in their praise of it, and such letters as appeared in the *Field*, November 9th, *Land and Water*, etc., ought to convince the most sceptical. I only claim for the rein what I or any other man accustomed to driving can actually accomplish with it, and should Dr. Smith or Dr. Napier care to bring any horses to my next show, I shall be pleased to prove to them that all my statements are absolutely correct. In advising people to try the rein without obtaining it from the proper manufacturers Dr. Napier shows ignorance of the working of the Patent Laws.

BEDSIDE CHARTS AND NOTEPAPERS.

DR. A. OGIER WARD (Tottenham) writes: There has lately been considerable interest shown in shorthand for medical men; but whether shorthand or longhand be used, one difficulty has always existed: that of the portability of charts and of records of cases which are seen now at home, now in the consulting room. If a book be used in the consulting room, notes taken at the bedside must be transcribed after the day's work. In the hope of inducing others to adopt a simple uniform plan for all cases, I venture to submit the following chart.

The chart occupies a space of five inches and a half by three inches and three quarters, and is printed on one of the six surfaces of a paper folded like a business letter, the other five blank surfaces being available for notes. Twenty or more can be carried in a pocket-case without unpleasant bulging, yet the paper is opaque to writing. The printed surface shows name and date; spaces for twenty-one daily records of pulse, temperature, respiration, morning and evening, in the same graphic form, and others for stools and urine.

Each morning I take the chart for each case to be seen, and a few to spare, and with stylograph or aniline pencil I record at the bedside all necessary notes. Cases when concluded are sorted away alphabetically. I also have blank sheets of the same size for cases which do not require temperature, etc., to be recorded; and for such as, later on, need it, I have single slips with charts printed which can be tacked on to the blank sheets. These blank sheets I recommend for use in the consulting room, as very often one has to visit patients who began by coming to the surgery; thus the record is continuous and no transcribing is required.

Many cases lose all value from the neglect of notes of the early stages, and many an important case is lost to the profession because of the labour of note transcribing. A simple, uniform, portable arrangement such as this will be found to encourage habits of accuracy in clinical observation, and to maintain that interest in the daily work the lack of which makes a doctor's life a dreary slavery.

These charts are sold by E. A. Davis, 139, Oxford Street, at 3s. per 100; blank forms and single slips at rather less.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 4TH, 1890

THE GENERAL MEDICAL COUNCIL.

THE powers and status of the "General Council of Medical Education and Registration" have recently come under the consideration of tne judges in two different cases. In one Mr. Leeson has sought in vain to restrain the Council from removing his name from the *Register* on the ground of unprofessional conduct, and in the other Mr. Partridge unsuccessfully claimed damages for the removal of his name from the *Register* of dentists, which removal the courts had previously decided to be irregular. The Medical Act, 1858, empowers the Council to remove from the *Register* persons whom they shall, "after due inquiry, judge to be guilty of infamous conduct in any professional respect." The Council judged Mr. Leeson to be guilty of such conduct, because they found that he acted as cover so as to enable an unqualified person to practise as a medical electrician, and ordered his name to be removed from the *Register*. Mr. Leeson applied for an injunction to prevent their removing his name, but Mr. Justice North, and afterwards the Court of Appeal, decided that the Council had jurisdiction to inquire into such a charge, and, if they found it proved, to remove the name of the practitioner implicated; and that, unless it could be shown that the Council had not acted honestly, no court could consider and review the correctness of their decision. The competence of the tribunal to decide that particular case was, however, impugned and the decision jeopardised on another ground. It is a well-established principle of English law, and of abstract justice, that no man should act as judge in a case in which he has any interest or bias. The proceedings against Mr. Leeson were instituted by the Medical Defence Union, and two of the members of the Council who tried the case are subscribers to the Union. This, it was argued, gave them a bias or interest, and so rendered the decision of the Council void. Mr. Justice North and Lord Justice Cotton held that under the circumstances this argument failed, and Lord Justice Bowen, with some hesitation, agreed with them; Lord Justice Fry dissented, The opinion of the majority of the Court of Appeal of course prevailed, and the jurisdiction of the Council to remove Mr. Leeson's name is thus affirmed. But for the future it will be well for members of the Council to remember Lord Justice Bowen's advice, and for those who belong to the Medical Defence Union, or any similar association, to retire from the consideration of any case brought before the Council by the union or association of which they are members.

The case of Mr. Partridge was different from that of Mr. Leeson. He had succeeded in persuading a court of law to restore his name to the *Register*, in spite of the Council removing it, because his name had been removed not in consequence of a decision of the Council that he had forfeited his right to remain on the *Register*, but merely in consequence of the withdrawal of his diploma by the College of Surgeons in Ireland, which had originally granted it. They withdrew it because Mr. Partridge ignored a condition they impose requiring the holders of their diplomas not to advertise for business. The Court of Appeal, when deciding in Mr. Partridge's favour, were careful to say that it was still open to the Council to consider his case, and remove his name if they saw reason for doing so. He brought an action against them claiming damages for the removal of his name. Whether he had sustained any damage in fact seems doubtful, as he had to admit that his income during the time that his name was off the *Register* was larger than it had been previously. The case was, however, decided by Baron Huddleston on a totally different ground. Mr. Partridge could not suggest that the Council had been actuated by any improper motives in removing his name from the *Register*. He had convinced the courts that they had exceeded their powers, but that was all. Under such circumstances, the learned judge held that there was no cause of action, and consequently withdrew the case from the jury and decided in favour of the defendants. There may possibly be an appeal, but the decision seems to be right. The Medical Council are entrusted by Parliament with quasi-judicial powers, and it has long been established that an action will not lie against such a body for any mistaken exercise of powers that it possesses. The party aggrieved must go further and show that the decision against him was actuated by some improper motive, so as to render it not truly a judicial decision at all, or he must fail. With a body constituted as the Medical Council is, it is to be hoped that proof of improper motives will always be impossible because such motives will always be non-existent. Complaints are sometimes made that the Council are not sufficiently active in the interests of the profession; but, when they feel constrained to punish a practitioner for unprofessional conduct, they do so for the benefit of the profession, and in the discharge of an unpleasant duty. It is satisfactory to find that their independence, when acting within their powers, is recognised and supported by the judges.

DOCTORS AND PROVERBS.

IN the proverbs, maxims, and popular phrases of all ages and countries, doctors have for the most part been severely dealt with. When *Punch* some years ago said, "A doctor is one who kills you to-day to prevent you from dying to-morrow," he merely echoed a sentiment which long use has invested with a sort of sanctity. Mr. Robert Christy has lately published two large volumes of the proverbs of all nations,[1] and we have been interested in noticing how universal is the cus-

1 *Proverbs, Maxims, and Phrases*, compiled by Robert Christy, two vols London: T. Fisher Unwin.

tom of satirising the medical profession in these old saws. It is not often the patient gets so hardly dealt with as in the German proverb which declares that "A physician is an angel when employed, but a devil when one must pay him." True, somebody said that "A disobedient patient makes an unfeeling physician," but what are these weak defences of our order in comparison with the terrible things with which the whole world of apophthegm pelts the unhappy doctor? The German aphorisms are particularly hard upon him. Here are some samples:—"Hussars pray for war and the doctors for fever," but in view of the new Notification of Diseases Act, they will probably cease to do that in this country. "A young physician should have three graveyards;" "A new doctor a new gravedigger;" "No physician is better than three," which is in opposition to the older maxim that "In a multitude of counsellors there is wisdom;" "New doctor new churchyard;" "Who has a physician has an executioner." All these sayings would seem to imply that however eminent the Germans may be in diagnosis, they are not uniformly successful in treatment. Spanish proverbs are grimly sarcastic at our expense "The earth hides as it takes the physician's mistakes;" "If you have a friend who is a physician, send him to the house of your enemy." They have a rhyme, too, which goes somewhat in this style:—

> And, doctor, do you really think
> That asses' milk I ought to drink?
> It cured yourself, I grant it true,
> But, then, 'twas mother's milk to you.

The French proverbs are not so polite towards us as they might be. For instance, "The doctor is often more to be feared than the disease;" and it was Voltaire who described a physician as "A man who pours drugs of which he knows little into a body of which he knows less." The Italians are not any better. "No good doctor ever takes physic;" "Physicians alone are permitted to murder with impunity." But the Greek comedian beats the record for attributing downright malice. "No physician takes pleasure in the health even of his best friend."

There is a caustic humour about some Hebrew maxims which we should scarcely have expected. "Do not dwell in a city whose governor is a physician." "That city is in a bad case whose physician has the gout." Massinger said that "most physicians, as they grow greater in skill, grow less in religion;" but, however true that might have been in his time, it cannot be said now. We do not know who it was who uttered the sarcasm, "You need not doubt; you are no doctor." Nor can we say who the rude person was who elaborated the couplet,

> With respect to the gout,
> The physician's but a lout.

Impertinent, certainly, but no fool was he.

Proverbs which deal with health apart from the doctors have more sense than some of those we have quoted. The Spaniard says, "He that sits with his back to a draught sits with his face to a coffin." "Of the malady a man fears he dies." Doubtless the treacherous nature of the climate of northern and central Spain is answerable for the following, 'He that would be healthy must wear his winter clothes in summer."

The surgeon and his art do not appear in more than half a dozen of the "wise saws" of the world. "A good surgeon must have an eagle's eye, a lion's heart, and a lady's hand" is as respectful as it is true to the facts. Five of the six appear to be of English origin, the foreign one being of Italian: "Tender surgeons make foul wounds."

Medicine is the subject of some good maxims, such as the German one, "Dear physic always does good," and the Spanish, "What cures Sancho makes Martha sick."

The Chinese have curious notions about zymotic diseases. "Starve the measles and nourish the small-pox" is scarcely intelligible on the germ theory, but it is quite as scientific as some of our own on the same lines. "One year a nurse and seven years the worse" is a little ambiguous. The Arabs say, "Among wonderful things is a sore-eyed person who is an oculist." "Diseases are the tax on our pleasures" is English in origin and application.

INDECENT ADVERTISEMENTS.

THE Act passed in the last session of Parliament dealing with the above subject will be a matter of considerable interest to members of the medical profession, and may be of great importance to the public generally. The Indecent Advertisements Act will, we hope, exercise a wholesome check upon an evil which, it is to be regretted, has been permitted for so long a time to exist.

Hitherto the Statute Book has contained no provisions to protect the public from being brought into contact with the class of advertisements to which the Act refers, and which have been so largely exhibited and distributed in public places in recent years.

The only law relating to the subject was contained in the Act passed in the fifth year of King George IV, intituled an "Act for the Punishment of Idle and Disorderly Persons and Rogues and Vagabonds in that part of Great Britain called England," under which every person wilfully exposing to view in any street, road, highway, or public place any obscene print, picture, or other indecent exhibition might be imprisoned for a period not exceeding three calendar months. This Act was amended in the year 1837 so as to include a "window or other part of a shop or other building situate in any street" within the provisions of the principal Act. These enactments, it is obvious, did not extend to the practices which the present Act was passed to suppress.

The Act in question comes into operation on January 1st, 1890, and it is provided that any person shall, on summary conviction, be liable to a penalty not exceeding 40s., or, in the discretion of the court, to imprisonment for a period of not longer than one month, with or without hard labour, who affixes to or inscribes on any house, building, wall, hoarding, gate, fence, pillar, post, board, tree, or any other thing whatsoever so as to be visible from any street, public highway, or footpath, or whoever affixes to or inscribes in any public urinal, or delivers or attempts to deliver, or exhibits to any inhabitant or to any person being in or passing along any street, public highway or footway, or throws down the area of any house, or exhibits to public view in the window of any house or shop any picture or printed or written matter which is of an indecent or obscene nature.

It is also expressly declared that any advertisement relat-

ing to syphilis, gonorrhœa, nervous debility, or other complaint or infirmity arising from or relating to sexual intercourse, shall be deemed to be printed or written matter of an indecent nature within the meaning of the Act.

The person who gives or delivers to any other person any such indecent picture, or printed or written matter, with the intent that the same should be so affixed, inscribed, delivered, or exhibited, is liable to a penalty not exceeding £5, or, in the discretion of the court, to imprisonment for a term of not more than three months with or without hard labour. The punishment provided for the principals who issue such advertisements may possibly be considered to err on the side of leniency, but the power given to award imprisonment instead of a fine will possibly have great weight in carrying into effect the objects of the Act. Any constable or other peace officer is empowered to arrest without warrant any person whom he finds committing any offence against the Act, and proceedings may be taken against offenders in the courts of summary jurisdiction, that is, in London, the police courts.

Proceedings are directed to be taken in manner provided by the Summary Jurisdiction Acts, under which the first step is to attend before a magistrate, and, what is technically termed, lay an information, which consists in stating the grounds of complaint either verbally or in writing. If the magistrate thinks the information sufficient he will issue a summons, returnable on a certain day, when the case will be disposed of. The magistrate also has power to award costs to the successful party. The Act may indirectly have the effect of doing more good than at first sight appears, for it will, if we mistake not, greatly interfere with the business of that class of men from whom the advertisements in question emanate, and thus attack the root of the evil. Medical men have greater opportunities than others of knowing what mischief is done by means of these advertisements, and we think they may be relied on to set the law in motion in any case of violation of the provisions of the Act coming under their notice. It may, of course, entail inconvenience and loss of time to lay information, and to attend in support of summonses obtained; but, knowing how great a benefit will be conferred on the public if these advertisements are stamped out, we feel sure that medical men will not suffer the Act to remain a dead letter for fear of incurring a little trouble and annoyance in putting the law in force.

Dr. E. Symes Thompson will give his next course of Gresham lectures on the evenings of January 21st, 22nd, 23rd, and 24th, at 6 P.M. The subject of the course will be "Heredity."

The London post-graduate course will be opened by an address by Mr. Jonathan Hutchinson, President of the Royal College of Surgeons, on "The Aims and Methods of the Post-graduate Course," at the rooms of the Medical Society in Chandos Street, on Wednesday next, at 8.30 P.M.

The President and Council of the Harveian Society of London have issued invitations to a *conversazione* to be held on the evening of January 16th at 8 o'clock, at the Stafford Rooms, Edgware Road, when the election of officers and Council for the ensuing year will take place. The retiring President, Dr. T. Buzzard, will also deliver his farewell presidential address; after which there will be music, with smoking.

The Lord President of the Council (Viscount Cranbrook) has appointed Sir Owen Roberts, Sir Hugh Owen, K.C.B., and Dr. Isambard Owen to be Governors of the University College of North Wales, Bangor, for five years from December 31st, 1889.

In the report of the last meeting of the Royal College of Physicians, published in the Journal of December 21st, it was stated that a resolution to the effect that the medical curriculum should be extended to five years was agreed to. We regret to learn that the resolution adopted was to the effect that, even admitting the desirability of extending the curriculum to five years, the College did not see its way to recommend the adoption of the change. That a change in this direction is inevitable has been recognised by the Education Committee of the General Medical Council, and there is every reason to believe that it will be enforced sooner rather than later.

We regret to announce the death of Professor S. Botkin, one of the best known physicians in Russia, which occurred at Mentone on December 24th. Paralysis of the heart was the immediate cause of death, but he had long been suffering from disease of the liver. On December 13th Mr. Lawson Tait was called to Mentone to see Professor Botkin, and found him suffering from an impacted gall stone, but the condition of the patient was so serious in other respects as to preclude any idea of operative interference. Dr. Botkin, who was in his 58th year, was physician in ordinary to the Emperor and the Imperial Family, and Professor of Clinical Medicine in the Military Medical Academy of St. Petersburg.

THE LATE DR. C. J. B. WILLIAMS.

In order to perpetuate the memory of his father in connection with the Brompton Hospital, of which he may be considered one of the founders, and with which he was connected for more than half a century, Dr. C. Theodore Williams has decided to give 500 guineas to endow a ward which shall be named after him. Dr. Williams has just received a reply from the Chairman of the Committee of Management accepting the offer in very warm terms.

THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

Many communications have been forwarded to this office, and to the offices of the Medical Sickness, Annuity, and Life Assurance Society, asking for an extension of this Society to the Colonies. In respect to such applications we are asked to state that it is not found possible to extend the operations of the Society beyond Great Britain; and, if it were necessary, it is open to colonial bodies of medical men who may desire to follow in these steps to form a society on a local basis. The question of examination and of periodical payments of life and sickness premiums require careful local supervision.

THE RECENT POOR-LAW CONFERENCE.

At the recent Poor-law Conference Mr. Acworth, M.L.C.C., read an interesting paper on "Poor Law Progress and Reform in the Metropolis." He advocates the transference of some of the duties of the Metropolitan Asylums Board to the County Council. He points out that the Asylums Board, being a Poor-law authority pure and simple, provides seven infectious hospitals (accommodating nearly 4,000 sick persons), and an infectious ambulance service for the benefit of patients who were expressly declared by Act of Parliament not to be paupers. He might further have argued that it was equally illogical that the administration

of the Vaccination Laws, which is a sanitary duty and not a Poor-law duty, should remain in the hands of boards of guardians now that County Councils have been established. It is doubtful, however, whether members of County Councils would care about undertaking these duties, which, we may safely say, have on the whole been admirably performed by the humbler representatives of English public life. To provide against epidemics of small-pox and to administer the affairs of an infectious hospital is work which entails some risks and much personal inconvenience; while, at the same time, it has never as yet been considered worthy of public honour or reward. Perhaps it might become more fashionable if it were undertaken by County Councils, but at present we fear that it would prove to have very little attraction for those who are ambitious of public honour or distinction.

HEALTH OF EASTBOURNE.

We learn on inquiry that rumour has considerably exaggerated the prevalence of diphtheria at Eastbourne. The cases have been almost entirely confined to the east end of the borough, and to the small streets inhabited by the working classes. Steps have been taken to remedy the private tributary drainage in the small streets alluded to, which has, in some cases, been found to be defective. The disease has now, we are informed, nearly subsided.

DEATH UNDER CHLOROFORM.

A patient, aged 65, was admitted to the Queen's Hospital, Birmingham, with a tumour in the abdomen. An exploratory operation being decided on, and the patient assenting, chloroform was administered by one of the house-physicians. Before complete anæsthesia had been attained, and before any attempt had been made to commence the operation, the patient suddenly gave one or two gasping inspirations and then ceased to breathe, and the heart stopped. Every effort was made to restore him, but without avail. The heart was carefully examined the day before the administration, and was believed to be quite healthy, an opinion confirmed at the *post-mortem* examination, when no morbid condition was found in that organ. There was malignant disease of the stomach.

HABITUAL INEBRIATES.

To all interested in the care and treatment of habitual drunkards, a pamphlet just issued by Oliver and Boyd from the Edinburgh Press will be welcome. The most remarkable feature is that, though the diseased condition of many drunkards is thoroughly recognised, and a powerful argument for drastic legislation to compulsorily receive and detain inebriates in special homes is based thereon, the author is a member of the legal profession. In this publication there are presented an analysis and explanatory memorandum of a Scotch Bill, drawn by Mr. Charles Morton, W.S., late Crown Agent for Scotland, embodying legislation for "inebriety caused by disease, which is curable under proper treatment." Among the useful information given are full reports of discussions on the suggested Bill at the Medico-Chirurgical Society of Edinburgh, with resolutions of the British Medical Association and the Society for the Study of Inebriety endorsing the leading provisions of the contemplated measure.

VACCINATION AND SYPHILIS.

An inquest was recently held at Birmingham on a child vaccinated by the public vaccinator, Dr. Robinson, the infant dying two months later. It was alleged that previous to vaccination the child had been healthy, that it was never well afterwards, that the sores had never healed, and that syphilis had been inoculated with the lymph. A Mr. Tovey, L.S.A., who had attended the child subsequent to the vaccination, found that it was improperly fed, and altered its diet. Two or three days later he saw indications which led him to believe that the child was suffering from syphilis. It appears that he did not examine the vacccination sores until after death, and then at the request of the mother, and he then declared the sores to be syphilitic. Fortunately, Dr. Robinson was able to prove that the child from whom the lymph was taken was perfectly healthy, and that four other children vaccinated from it at the same time had remained well. He also expressed a positive opinion that the deceased had not suffered from syphilis. Dr. Carter, senior physician to the Queen's Hospital, also spoke positively as to the absence of syphilitic lesions in the deceased. The jury at once returned a verdict of "Death from exhaustion, induced by improper feeding," and expressed their opinion that not the slightest reflection had been cast upon vaccination.

THE COLOUR-VISION OF RAILWAY SERVANTS.

Mr. Clement Stretton has addressed a letter to us with regard to the remarks in the Journal of December 14th, p. 1356, which affords a striking confirmation of our statement that Holmgren's wools are on many railways used in a most improper manner, and by persons who are entirely ignorant of the nature of the test and its objects. He says: "I am pleased to tell you that now we are having our members (that is, of the Associated Society of Locomotive Engineers and Firemen) instructed in wool shops we are having no trouble, as they all pass. This, however, does not seem safe from a public point of view. To-day I have a case of a man suspended because he says the enclosed wools (a yellowish-green and a rose) are yellow and red. I have sent him to a wool shop; he is now able to pass quite well." Naming colours forms no part of the test, and the names of the colours should be used neither by the examiner nor the examinee. The object is to discover defects in colour-vision, and it would be applicable equally if the subject had not been taught the names even of the primary colours.

CLINICAL STUDENTS AT ASYLUMS.

About twelve months ago, the College of Physicians was appealed to by the Metropolitan Asylums Board for advice on a question which had been raised by some of its members, namely, the desirability of affording means for clinical study and research at the Imbecile Asylums under their charge. The opinion of the College was to the effect that it was desirable to afford such facilities for really earnest, advanced students (already qualified to practise) who were making a special study of certain kinds of nervous disease. It was not anticipated that there would be more than one or two such students at any time, but if any student is inspired with the wish to add to our knowledge by observations such as those of M. Charcot, and can give evidence of his ability to conduct research, it is clearly desirable that he should have facilities for doing so in this country. Some remarks made at a recent meeting of the St. Saviour's Guardians seem to show that there is a misunderstanding on the part of some of the managers of the Asylums Board with regard to the views expressed by the College of Physicians. We are glad to hear that the majority of the Board are in favour of affording facilities for study at their asylums, and we trust that the committees which are responsible or the administration of the Leavesden and Darenth Asylums will see that the resolutions of their Board are carried into effect.

INSANITARY HOUSES.

Mr. William Mosson Kearns, of Lake House Park, Essex, was summoned recently by the local authority at Southwark Police Court for not having complied with a magistrate's order requiring him to complete within a specified time works for the removal of

nuisances injurious to health at 18, Guy Street. The works required were not finished for seven days after the time allowed for their completion had expired. The evidence given in the case showed that the house, which was let at 14s. a week, had been for months in a most dilapidated and filthy state. A drain pipe opened direct into one of the living rooms, and according to the statement of the sanitary inspector, as reported, there had been several deaths from preventable disease amongst the occupants. From the report before us, the medical officer of health does not appear to have given evidence. The magistrate having already made an order in this case, had power to inflict a penalty on the owner of £5, and 40s. per day for the seven days during which the works which he had previously ordered remained unexecuted. The penalty was richly deserved, but it must be remembered that for several weeks the poor people occupying this house had been obliged to endure a condition of things which was undoubtedly dangerous to their health. After the service of the statutory notice by the order of the local authority, a considerable time must, we presume, necessarily be allowed before a summons can be applied for. Another week passes before the summons can be heard. Then if the magistrate is satisfied of the existence of nuisances injurious to health, he can make an order. But it is not until that order has been neglected that penalties can be imposed. This process evidently needs to be shortened in the interests of the poor people who are compelled to live in these houses. The case we have here recorded exhibits the weakness of local sanitary authorities in a painful manner.

GIFT OF A HOSPITAL CONVALESCENT HOME.

THE magnificent new year's gift of £100,000 to found a convalescent hospital by an anonymous benefactor is the outcome of a well-conceived scheme to increase the resources and thereby the efficiency of the metropolitan hospitals. The original proposal appears to have been to establish convalescent institutions on so large a scale that every hospital in London should have under its direct control a considerable number of beds to which patients awaiting operation, or who, for other reasons, were likely to be benefited by change of air for a short period, could be sent. Of the value of such a privilege to the medical and surgical staff of a hospital there can be no two opinions; and several hospitals in this country already enjoy this advantage. The Atkinson Morley Hospital at Wimbledon is under the management of the authorities of St. George's Hospital, and the patients drafted from St. George's to Wimbledon are visited weekly by a physician and surgeon of St. George's. In this way patients may be, and often are, kept under continuous treatment, while at the same time enjoying the advantages of a more bracing climate than can be found in London itself. The Jaffray Suburban Hospital discharges very similar functions towards Birmingham, while at Manchester the principle has been extended still further, the children's hospital having been built outside the town, a dispensary only being maintained in its midst. The founder of the Hospital Convalescent Home for London calculates that a country hospital containing fifty beds can be built and endowed for the sum which he has vested in trustees—Sir William Savory and Mr. W. H. Cross, of St. Bartholomew's Hospital, together with the founder himself. It is proposed at present to confine the operations of the new institution to the service of one or two hospitals rather than to strain its energies in attempting to cover a wider field.

SECRET REMEDIES IN HYDROPHOBIA.

A FEW days ago a large rabid dog bit a number of persons at Heywood, in Lancashire. The sequel unfortunately illustrates to what an astounding degree ignorance of the ordinary methods of reasoning exists, even in the "canny north." Of the unfortunate victims the worst case seems to have been treated by a herbalist, whose name is given equal prominence with that of Dr. Hunt, of Heywood, to whom the remainder of the cases were taken. Of course the herbalist we expect to hear of on such occasions, but some people may be surprised to learn that a grocer of Colne also possesses a remedy, one which has not only been known for 100 years, but has been successfully applied (?) in 500 cases during the last decade. The value of this remedy seems to have been vouched for by the chief constable of Clitheroe, who wrote to the Mayor saying "that no doubt he had read in the papers" letters which the constable had written advocating the employment of the medicine. The language used is characteristic: "It has made some splendid cures, and is also cheap." The last clause reminds one of the lady who believed not only that the vendor of a quack remedy against epilepsy had acted generously towards the working man in reducing the price of the bottles from 14s. to 12s., but that the medicine would certainly cure, because it was guaranteed in the advertisements so to do. The Mayor and Corporation of Heywood have, it is said, put themselves into communication with the grocer, who is quite ready to accept the heaviest medical responsibility for a modest remuneration.

THE BRADFORD INFIRMARY.

WE publish elsewhere a letter from Dr. Bell, of Bradford, in which he seeks to defend the proposal to enforce a charge on certain of the out-patients attending at the Bradford Infirmary. The adverse opinion expressed in these columns on December 21st was endorsed by a meeting of the medical practitioners in Bradford specially summoned to consider the proposal. Almost every general practitioner present had cases to relate of private patients, suffering from ailments of the most simple kind, who had passed from under their charge to be treated gratuitously in the infirmary. It was stated that, in some cases, owners of mills, who used formerly to pay an annual sum of £20, £30, or £40 for attendance on the work-people, had discontinued this, and, by subscribing a small sum to the infirmary, obtained the necessary attendance. Members of the infirmary staff present at the meeting spoke very strongly of the abuse of the out-patient department, and it is clearly their duty to make their views known officially. Their position is, no doubt, one of some delicacy, but if there is, as we gather, almost, though, unfortunately, not complete, unanimity on the main issue, there is every reason to expect that the governors of the infirmary will listen to the opinion of the medical profession in the town as expressed by the special meeting above-mentioned, by the previous meeting of the Medico-Ethical Society of Bradford, and by many members of the medical staff of the infirmary itself.

THE DANGERS OF PERFUNCTORY SANITARY INSPECTION.

AT an inquest recently held in London, the coroner, Dr. Danford Thomas, made some very apposite remarks on the necessity for a thorough examination of the drainage where there was any reason to suppose that disease might have been produced by defective sanitary arrangements. The inquest was held on the body of a male child, 3 years old; it was proved that death was due to diphtheritic inflammation of the throat, and the jury returned a verdict accordingly. The father, in the course of the inquiry, said that several other of his children were similarly affected, and he added that the sanitary inspector had been to look at the drains "but didn't think much was the matter with them." The coroner said it was not sufficient to merely "look" at the drains. Appropriate tests must be applied to ascertain whether sewer gas permeated the atmosphere of the house. It was credibly believed

that diphtheria and other zymotic diseases did arise through defective drainage. That being so, it was always necessary to have a thorough inspection. The nose could easily detect the presence of coal gas but not sewer gas. In the case of some of the largest West End mansions cesspools—the existence of which had been previously unknown to the occupants—had been detected when the kitchen floors were taken up. He held an inquest on the body of a young woman who was supposed to have been murdered at a house in Harley Street. During the search for the remains a huge flag-stone in the cellar was removed, when beneath this was found an immense cesspool. Frequently all the family in a house would complain of headache, sore throat, and of sickness, and would go away into the country, returning in robust health. Then the old symptoms would return, and ultimately the original cause would be found to be defective drains or the presence of a hidden cesspool.

THE RUSSIAN INFLUENZA: FEATURES OF THE EPIDEMIC.

ALTHOUGH the existence of an epidemic of dengue fever in Asia Minor during the past autumn, and certain peculiarities in the symptoms observed in some of the sufferers from the present European epidemic have caused some doubts to be expressed, further information tends to confirm the opinion we ventured a few weeks ago that the disease is really epidemic influenza. Professor Leyden in Berlin and Dr. Proust in Paris have both expressed the same view as to the nature of the malady. Epidemic influenza is a specific fever, which must not be confounded with the local affection of the nose and throat to which the term influenza is commonly applied in this country. It is important that this should be generally recognised, for epidemic influenza, though a mild disease if properly treated, may become dangerous to life if neglected. This is particularly true of the present epidemic, for observers in all countries agree that relapses are very apt to occur. This has been noticed by our correspondents in St. Petersburg, Vienna, and Paris, and a well-known practitioner in the West End of London writes to us, with reference to the cases now and recently under his treatment: "I am convinced that it is a most dangerous disease to trifle with, owing to the relapses, which, so far as I have seen, have occurred on the eighth day. I think the public should be warned to go to bed directly they have the shivering and lumbar pain." Dr. Proust, in Paris, expresses the same opinion. In his official letter to the Minister of the Interior he warns sufferers that exposure to cold, not merely while the disease is at its height, but during convalescence, may altogether change the character of the disease. Most of the deaths which have occurred would seem to have been due to imprudence. The attack produces a good deal of anæmia and nervous depression, and any imprudence committed before complete recovery may bring on a fatal attack of pneumonia or bronchitis, which might otherwise have been avoided. The poison of influenza, having entered into the system, does not always attack the mucous membranes of the nose and chest. In some persons it is the stomach and digestive organs which are attacked, leading to violent vomiting or colic and diarrhœa; most of the cases hitherto observed in London appear to have been of this class. In other cases catarrhal symptoms of any kind are absent or very slight, but the nervous prostration which ordinarily accompanies is present to a severe degree, the poison appearing to have specially selected the central nervous system.

THE NOTIFICATION OF MEASLES.

MEASLES is not one of the diseases included in the Notification of Infectious Diseases Act; but as every sanitary authority has the power, under certain conditions, of including other infectious fevers besides those specified in the Act, we are not surprised to hear that at least one authority has already decided to include measles in the list. As might be expected, the first result of such an experiment which is likely to attract public attention is the immediate cost of the notification certificates. In Kidderminster it is reported that £100 has already been paid in half-crown fees to the medical men of the borough for notifying cases as directed by the Act. In the course of an epidemic of measles even in a comparatively small community, the number of cases of this disease to be notified will apparently be very large—probably larger than those of all the other diseases specified in the Act put together. The question naturally arises whether the information thus obtained can be usefully applied to the public advantage. We think it can, and we trust that the Town Council of Kidderminster and its official advisers will thoroughly investigate the causes which lead to a high mortality from this disease, and which tend to make epidemics malignant in character. Hitherto the etiology of measles has been comparatively little studied, and there is consequently much to be done by sanitary authorities in this direction. The expenses entailed by the recent Act may be regarded as heavy if the information obtained is turned to no practical account; but, on the other hand, if it is made the subject of skilled and careful inquiry, it may lead to very important results. Measles not only causes a heavy mortality amongst children, but sometimes it leaves behind it results which permanently impair the health and vigour of those which have been the subjects of its attack in early life, and which tend to make them less capable citizens. We owe much to the authorities of our large towns, who of late years have frequently taken the initiative in advancing the interests of the public health. We hope that the Town Council of Kidderminster will prove to be a pioneer in a new and important field of progress.

ENTERIC FEVER AT THE LONDON BOARD SCHOOLS.

AT a recent meeting of the School Board for London questions were asked of the Chairman of the Finance Committee as to whether it was intended to give compensation to those persons whose health had suffered from the defective drainage at some of the comparatively newly erected Board schools. Sir Richard Temple replied that no claims had been made, and that the Finance Committee were unable to make compensation without an order from the Board. We are of opinion that if the persons injured are in a position to prove that the cause of their illness was defective drainage at the schools where they were employed, they would do well to prefer such claims. These schools have been built within the last few years, that is, since the time when the dangers of defective drainage may be said to have become part of general or popular knowledge. It seems high time that our public bodies should now be made to feel a responsibility where preventable illness ensues from defective drainage of buildings built under their orders. The scandals which have recently prevailed, not only with regard to the Board schools, but also with regard to the Courts of Justice and the Stock Exchange, show clearly enough that comparatively little care has been taken by those in authority to guard against defects in drainage of public buildings, which are the necessary results of cheap work insufficiently supervised. The School Board has lately advertised in the *Builder* for clerks of the works at salaries of three guineas a week! The persons appointed will, we presume, be expected to supervise the work of large and important firms of builders and contractors, whose servants would be remunerated at a much higher rate; and, if so, it cannot reasonably be expected that the supervision will be efficient. We have already stated that in our opinion it is a mistaken policy for the Board to accept the lowest tenders for building and at the same time not to afford adequate supervision of the work. The

best check on such a course of action is by establishing the pecuniary liability of public bodies for disasters against which it is their duty to provide. If claims for compensation for injury inflicted through drainage defects are raised and maintained, we may then expect to see an alteration in the policy, not only of the School Board, but of other public bodies which are responsible for the erection of buildings at the expense of the ratepayers. On public grounds we feel it to be our duty to advocate these claims for compensation, provided the source of the injury can be proved by medical and other evidence to have been defective drainage of these schools. We further maintain that our educational authorities should be the first to establish the principle that neglect, which leads to what is now considered easily preventable illness, entails pecuniary liability on the representative authority responsible for such neglect.

LEAD POISONING IN SHEFFIELD.

RARELY has a more serious charge been brought against a corporate body than that which, as our Sheffield correspondent states, has been publicly brought against the corporation of that town. Four years ago the then medical officer of health, Dr. Sinclair White, drew attention to the alarming amount of lead poisoning which existed in the town, and pointed out with overwhelming evidence that the source was contamination of the drinking water. Since that time the water supply of the town has passed out of the hands of a private company into the charge of the corporation, but no steps have been taken to mitigate the evil; the only thing that has been done is that the Water Committee have requested their engineer (Mr. Eaton) to report "on the effect of the Sheffield water on lead, and as to the best means of treating the water with a view of counteracting any such effect that it may have." It would appear that the Water Committee do not realise the serious nature of the trouble they are called upon to cope with if this resolution is to be regarded as an expression of all they intend to do at present in the matter. A tabulated statement of 1,129 cases furnished by some half-dozen medical men has been published in a local paper. Wrist-drop, colic, constipation, dyspepsia, and anæmia are in greater or less degree present in all the cases, and in only one of them was there no blue line on the gums; these cases occurred almost entirely during the last two years, and of course represent but a fraction of those in the town during that period. If the corporation cannot be aroused to a more active performance of that most important duty, namely, looking after the health of their fellow citizens, we would suggest that the aid of the Local Government Board should be invoked in order to bring them into the necessary frame of mind.

TUBERCULOUS MUTTON AT LINCOLN.

THE *Lincoln Gazette* furnishes some interesting particulars regarding a case in which the urban sanitary authority prosecuted a farmer for causing to be offered for sale a sheep which was unfit for human food. Mr. Hebb, who appeared on behalf of the authority, stated that, on December 10th, Mr. Giles, inspector of nuisances, had his attention drawn to a trolley in which was a beast and a ewe sheep. As the sheep appeared to be entirely unfit for human food, the officer seized it, and had it killed. Afterwards Dr. Harrison, medical officer of health, examined the carcass, and found that it was "in an emaciated condition, and suffering from a disease which was likely to spread." The magistrates were accordingly applied to for an order to destroy the carcass, and, the order being obtained, the carcass was destroyed. The sheep belonged to Mr. Sanders, a farmer of Fillingham, who had sent it to market, and for this he was summoned. Inspector Giles was in the Fat Stock Market when he noticed the sheep, which was being taken to "Richardson's Auction Ring." The market, though properly for the sale of human food, had in time past been used for other purposes, that is, for the sale of animals to be used for dog-food, or to be boiled down for pigs. New regulations had, however, been recently posted up that nothing was to be brought into the market but animals or meat intended for human food. Dr. Harrison said he examined the carcass on December 10th. After the skin was removed it weighed but 38 lbs.; the flesh was pale and watery, and the lungs were studded with tubercle. The carcass was diseased and unfit for food. Meat from a tuberculous animal could not be eaten without danger to health. The defendant's foreman stated that he sent the sheep to market by his master's instructions. It was thin, but he was not aware that it was diseased. He told the waggoner to take it to Richardson's auction, and make what he could of it. The defendant said he sent the ewe to market, but did not intend it for human food. He had been in the habit of sending animals that were not doing well to the auction, and this was the first time there had been any complaint about it. He did not know the sheep was diseased, but he did not expect it to sell for more than 4s. or 5s. The notices referred to had only been posted three weeks, and the defendant had not been in the market for ten weeks. The magistrates, after a long private consultation, said that there was no doubt the sheep was diseased and unfit for human food. The bench were very much astonished to hear that it had been the custom in the Fat Stock Market from time immemorial for meat of an improper character to be exposed. They had taken into consideration what defendant had said, that he had not seen the notices. The penalty might have been £20, or an alternative they would not mention. They would not be severe but the defendant would have to pay £5 5s., including costs. This must be almost the first instance of a fine being inflicted under the 117th Section of the Public Health Act in respect of a live sheep. We congratulate the Lincoln Sanitary Authority on the success of their prosecution.

THE IMPROVEMENT OF INSANITARY DWELLINGS.

THE Kensington Vestry is doing a good service in printing and widely distributing Dr. Dudfield's valuable monthly reports. No. 12 of the series for 1889 will interest many readers of medical and sanitary literature. It deals especially with the ever pressing subject of the housing of the poor, upon which Dr. Dudfield, as an experienced medical officer of health, and one well versed in sanitary law, has much to say. He contends that the law is not sufficient for dealing effectually with an obstructive defendant or bad landlord, and that there is no power by which a vestry can effect abatement of a nuisance expeditiously. In Dr. Dudfield's opinion, what is wanted is power to sanitary officials to initiate proceedings by notice upon discovery of a nuisance, and power to the magistrates to inflict a penalty for the offence of creating nuisance. Bad landlords know that they incur no penalty by disregarding for a considerable period the requirements of the sanitary authority as set out in their notice, and they act accordingly. We would recommend the Sanitary Committee of the London County Council to carefully consider the suggestive remarks in Dr. Dudfield's last report before urging on the Government amendments of the law which may not be so useful as those suggested by hard-working and experienced local authorities in the metropolis. The demolition of buildings unfit for habitation may sometimes be advisable, but, as a rule, such demolition aggravates the evil of overcrowding. But, on the other hand, by making the law stronger in regard to the removal of nuisances which render homes unfit for habitation, the Government would enable local authorities to prevent houses becoming unfit for habitation, and would thus be conferring an immense benefit upon the poorer classes of the community.

BIRTHDAY HONOURS.

In the official list of new year honours occur the names of William Scovell Savory, Esq., ex-President of the Royal College of Surgeons, who has had conferred on him the honour of a baronetcy; Sir Oscar Clayton, C.M.G., F.R.C.S., who is made a C.B.; Charles Lennox Peel, Esq., C.B., Clerk of the Privy Council, who takes a K.C.B.; Brigade-Surgeon George King, M.B., Bengal Medical Service, Superintendent of the Royal Botanical Gardens, Calcutta, is made a Companion of the Order of the Indian Empire; Thomas Irvine Rowell, Esq., Principal Civil Medical Officer of the Straits Settlements, receives the decoration of the Order of St. Michael and St. George; and Tahria Topan, Esq., the founder of the hospital at Zanzibar, has had conferred on him the honour of knighthood. Mr. Savory was for several years President of the Royal College of Surgeons, and held that honourable post at the inauguration of the buildings of the joint Colleges on the Embankment, and of the statue of the Queen, which was unveiled by the Prince of Wales. On a former occasion, it is understood that Mr. Savory declined the honour of knighthood, and the present distinction will be universally recognised as due to his professional rank and public services.

A GRAVE QUESTION OF HOSPITAL ADMINISTRATION.

A controversy which took place at the recent meeting of the Committee of the Exeter Hospital Saturday Fund affords an interesting and most instructive insight into the manner in which artisans have come to regard subscriptions paid to such funds as a cheap form of insurance against accident and disease. A case in which a man in the employment of Messrs. Downe and Baker, of Exeter, had failed to obtain treatment at the West of England Eye Infirmary, was made the occasion of a motion to refuse any grant to the infirmary The speech of the delegate who made this motion is so characteristic, that we propose to quote in full, with the notes of applause, without which much of its significance would be lost, the report of his remarks, which was published in the *Devon and Exeter Gazette*. It runs as follows:—

"The committee of that fund was composed of working men (hear, hear), who collected money from working men, who were entitled to the benefits of institutions which they supported. (Hear, hear.) How could the committee go to fellow working men for support to institutions the by-laws of which debarred them their benefits? (Hear, hear.) Because a man received 25s. per week or over he was refused treatment. If a man made a false statement relative to his earnings he was admitted, but because a man told the truth he was debarred. The Eye Infirmary, or any other institution that was open to receive subscriptions from working men, should make its rules to suit the working men (Hear, hear.) He would propose that the Committee should withhold all assistance to the infirmary to show the disgust of the working classes at the treatment they had received. Last year the sum of £37 12s. 7d. was devoted to the infirmary from the city and county, and when working men applied for treatment they were told that they were not objects for charity. If a man was in receipt of 30s. or 35s. a week, he could not afford to pay many guinea fees. (Hear, hear.) It was a wrong principle for the Infirmary Committee to hold out an open hand for £37 from the wage-earning class, and then subject them to such restrictions. (Hear, hear.)

This untenable doctrine has been well criticised in an able and temperate letter signed "F.R.C.S.," published in the *Gazette* on December 26th, and if the speech above quoted were an isolated expression of opinion it would not have been necessary to occupy space by reproducing it here. But it is not so. The same opinions are held and expressed in London and in every large town throughout England. It is, we would venture to say, one of the most important factors in the present state of medical charities and it is one which will become increasingly prominent. Briefly put, it is, Shall the hospitals continue to be medical charities? We do not believe that working men desire to act unjustly, and it is quite certain that the medical profession will never refuse to give its services freely to the sick poor. But if every man who subscribes to a hospital is to be entitled to treatment, then a hospital *quâ* these subscribers ceases to be a charitable institution, and the position of medical men towards it must be fundamentally different.

PRESENTATION OF THE VICTORIA CROSS TO SURGEON CRIMMIN.

A full dress parade of all the troops in garrison was held at Poona on December 6th, to witness the presentation of the Victoria Cross to Surgeon Crimmin, Indian Medical Service. The ceremony was witnessed by a large crowd of spectators, among whom were the Duchess of Connaught and Mr. Childers. The troops were drawn up facing the west front line. H.R.H. the Duke of Connaught, accompanied by his staff, and Sir John Sterling Maxwell, the Hon. E. Willoughby, and Lieutenant Milner, Scots Guards, rode up at a quarter past eight, and the troops formed three sides of a square, the infantry being the base, the cavalry and artillery the wings. Surgeon Crimmin was then led up by Surgeon-General Webb, Indian Medical Service, followed by all the doctors in garrison, to the Duke of Connaught, who pinned the cross on his breast. After doing so H.R.H. the Duke of Connaught said: "Her Majesty the Queen has been pleased to confer on you the Order of the Victoria Cross. I have great pleasure in carrying out Her Majesty's commands. I most heartily congratulate you, Surgeon Crimmin, on the great honour that has been conferred on you, and on the great bravery displayed by you in devotion to your duty when serving with the 27th Beloochis at the action near Lwekaw, in Eastern Karenni. This is the first time I have had the pleasure of presenting a Victoria Cross, and I need not say how greatly this is enhanced by giving it to an officer of the Bombay Army, who has so nobly carried out his arduous duties in the field, risking his life in attending the wounded under a heavy fire. May you live long to wear this much-coveted distinction, and to set an example of bravery and devotion to all who have the honour of serving the Queen and their country." The troops were then re-formed into line, and marched past, Surgeon Crimmin occupying a place by the side of the Duke at the saluting base.

"AN OLD FELLOW-STUDENT."

On December 27th the Bristol magistrates sent to prison for nine months Frederick Clark and Ellen Clark, of middle age, who were convicted on the clearest evidence of having obtained, and attempted to obtain by fraud, sums of money from members of the medical profession in Clifton. The *modus operandi* adopted by them was this. The man, having copied certain information from a medical directory, would write a letter to a medical gentleman, asserting that he had been a fellow-student of the person addressed at a college, a school or hospital. Owing to ill-health and misfortune, the writer was in straitened circumstances, and, being too weak to come personally, had sent his wife, in the hope that some temporary assistance would be given him. Dr. E. Long Fox was led by these means to give the applicant assistance. Dr. A. Prowse, Mr. W. H. Harsant, and Mr. J. H. Wathen, all residents of Clifton, were, among others, similarly visited by the woman, but not with equal success. When the prisoners were apprehended, the man had in his possession two memorandum books, one containing the names of medical gentlemen, and the other information in reference to various London hospitals, and their respective staffs for several years. The police found at the lodgings of the prisoners a number of letters which had evidently been received from medical practitioners in London and other places. All of them referred to remittances of money, and were directed to various names and addresses. A medical

directory and other medical books were also discovered among the belongings of the prisoners. A report from the metropolitan police, with whom the Bristol authorities communicated, showed that the prisoners had carried on like practices in London, whence they came, with more or less success.

SCIENTIFIC EVIDENCE AT INQUESTS.

OUR attention has been drawn to the report of two inquests in recent numbers of a northern periodical, in which the cause of death was, or rather ought to have been, investigated by a coroner's jury. In the first the body of an infant was found on the bank of a river, having apparently been washed up by the tide; the only evidence taken, besides that of the labourer who discovered the body, was that of the police constable, who testified that the body was that of a female child, and had been newly born if born alive at all. The body was too much decomposed for him to ascertain whether the child had been properly attended to at birth. It had been in the water probably three weeks. The features and one arm had been bitten away by rats, and, in his opinion, it was impossible to make any medical examination of the body. He further expressed his opinion that there were no marks of violence on the body. The coroner having summed up the jury promptly returned a verdict of "Found Dead." Not long since we had occasion to comment on a case where the policeman gave it as his distinct and unbiassed opinion that an infant had died in a fit, but the policeman in this instance seems to have gone a step further, and to have been able to foresee that nothing which he had not already discovered could be made out by a medical examination. The next thing will be that a policeman will make a *post-mortem* examination. In the other case a fourteen weeks old infant was put to bed at 11.30, and was found dead in bed the next morning; the mother kindly supplied the necessary amount of expert testimony herself, and told the coroner and jury that the infant had been suffering from teething for a week, and that she was of opinion that the child had died in a fit. Verdict: "Found Dead." It would be interesting to know what the Lord Chancellor thinks of such (mis-called) inquests.

SCOTLAND.

THE classes in connection with the Edinburgh University and Edinburgh School of Medicine will be resumed, after the recess, on Tuesday, January 7th.

THE INFLUENZA EPIDEMIC.

RUMOURS are afloat as to the presence of the epidemic of influenza in Edinburgh. It is stated that a number of the post-office *employés* are on the sick list from this cause, while from one or two of the large business establishments news has come that work has, in part, had to be suspended. The Public Health Committee of the Edinburgh Town Council are taking steps to have the old fever hospital in the Canongate put into fit condition for the reception of patients of the poorer classes if the epidemic should become pronounced.

THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH: ANNUAL DINNER.

THE annual dinner of the Royal College of Physicians of Edinburgh took place within the Hall of the College, on Thursday, December 19th. The President, Professor T. Grainger Stewart, M.D., occupied the chair, and was supported on the right by the Lord Provost of the city, and on the left by the Hon. Lord Kyllachy. Dr. Peel Ritchie, Vice-President, and Drs. P. A. Young, Treasurer, and G. A. Gibson, Secretary, were croupiers. There was a numerous and distinguished company, representative of the navy, the army, the church, law, medicine, etc. The toast list included "The Queen," "The Prince and Princess of Wales and Royal Family," proposed by the President; "The Navy, Army, and Reserve Forces," proposed by the President and responded to by the senior acting officers of the different services present; "The Lord Provost, Magistrates, and Town Council of Edinburgh," proposed by the President, and responded to by the Lord Provost; 'The Houses of Parliament," proposed by the Vice-President, Dr. Peel Ritchie, and responded to by the Solicitor-General for Scotland; "The Royal College of Surgeons, and the Faculty of Physicians and Surgeons of Glasgow," proposed by Dr. Sibbald and responded to by Dr. John Duncan, Edinburgh, and Dr. Yellowlees, Glasgow; "The President of the Royal College of Physicians of Edinburgh," proposed by the Right Hon. J. B. Balfour, Q.C., and responded to by the President; "The College of Justice," proposed by Professor W. T. Gairdner, Glasgow, and responded to by the Hon. Lord Kyllachy; "The Clergy," proposed by Professor Greenfield, and responded to by the Rev. Dr. Whyte, Edinburgh; "Commercial and Engineering Enterprise," proposed by the Treasurer, Dr. P. A. Young, and responded to by Sir John Fowler; and "The Universities of Scotland," proposed by Dr. R. W. Philip and responded to by Professor David Masson. The proceedings, which lasted till close to 1 o'clock, were brought to a conclusion by the President's proposing "*Floreat Res Medica!*"

GLASGOW CHARITY ORGANISATION SOCIETY.

DURING the past year no fewer than 4,467 cases of persons applying for relief were investigated by this Society, being 631 less than last year. Of these 910 were found undeserving, and 217 were found not requiring aid, while 1,089 were assisted directly by the Society, and 1,741 were indirectly assisted by being referred to the proper quarter for help. During the year the offer of work was made to 338 men, and was declined by 87. Professor Gairdner, who occupied the chair at the annual meeting, said that it was notorious that a great deal of charitable medical relief was practically wasted because it was given to persons who ought to get medical relief in other ways. In regard to the outdoor practice of the infirmary there was no way of restraining it so effectively as by bringing the Society to bear upon it.

GLASGOW UNIVERSITY: ELECTION OF COUNCIL ASSESSORS.

THE result of the voting for the election of three Assessors from the General Council to the University Court was declared on December 20th. It was as follows:—For Dr. Hector C. Cameron, 1,654; Sir John Neilson Cuthbertson, 1,616; Mr. David Hannay, 1,372; Mr. R. Vary Campbell, 1,038; Sheriff Guthrie, 1,036; Dr. D. C. McVail, 894. Before the declaration of the poll a protest was lodged on behalf of the unsuccessful candidates on the grounds that the candidates were not properly designated, and that the academic degrees of two of the candidates had not been stated in the voting papers. There is some talk of the probability of carrying the question to the Court of Session.

EXCESSIVE INFANT MORTALITY.

AT a recent meeting of the Police Board of Greenock it was reported that during October and November 217 deaths had occurred, equal to 15 per 1,000 of the population, per annum. Of the total, the deaths of children under 5 years of age amounted to 41 per cent., and the remarkable fact placed alongside of this high infant mortality was, that the deaths occurred not in the houses of one apartment, but in the two and three roomed houses. Bailie Anderson, who made the statement, said that in those houses there was no great evidence of poverty, in fact rather the appearance of comfort, and yet it was in such houses that the large number of infant deaths occurred. "It was not a pleasan

thing for him to say, but in the interests of the public and of those who could not help themselves, he had to echo what their medical officer himself believed to be the cause, so far as Greenock was concerned—and his opinion was shared by certain members of the Public Health Committee—and it was that the infantile mortality was high in consequence of a laxity on the part of many mothers." A somewhat excited discussion seemed to have followed this statement, but no evidence seems to have been laid before the Board in support of the statement, nor yet were any definite charges made. If the returns of the Health Committee support such charges, they ought to have been produced, or at least the nature of their evidence indicated. The benefit to the public would also have been much greater if it had been indicated in what special directions the mothers alluded to erred, and what steps were necessary to set right so unhappy and unnatural a state of affairs.

IRELAND.

SUDDEN DEATH OF DR. RAVERTY.

On December 21st Dr. Henry Raverty, of Bray, died suddenly at the age of 54. He was ascending the steps at Westland Row railway terminus when he fell forward and expired. He had been suffering from disease of the heart for some time. Dr. Raverty had a large general practice, and his death is much regretted.

INFLUENZA IN IRELAND.

It is reported that six cases of influenza, which present symptoms similar to those described as characterising the epidemic on the Continent, have been sent to hospital at Westport. The disease is supposed to have been introduced by a foreign sailor.

ROYAL UNIVERSITY.

Another vacancy on the Senate is caused by the death of Mr. McMorrogh Kavanagh, making the third existing. One of these places will undoubtedly be filled by the appointment of the new President of Queen's College, Belfast, which has been unrepresented since the death of the Rev. Dr. Porter. The other two will go to Roman Catholics, but no selection has yet been made.

TYPHOID FEVER.

Last week twenty-seven cases of typhoid fever were admitted into Dublin hospitals where infectious diseases are treated, being eleven over the admissions of the previous week, and two over the week ending December 14th; 108 remained under treatment on Saturday, and two died during the week.

VICEREGAL VISITS TO HOSPITALS.

Her Excellency the Countess of Zetland has paid visits to the Hospital for Incurables, the National Children's Hospital, and Jervis Street. She conversed with the patients, making each a small gift of flowers, and inspected all the wards and the general arrangements for the carrying on of the work. In each case she was received by several members of the staff, and she was pleased to express her approval of the general management.

ADDRESSES TO THE LORD LIEUTENANT.

On Monday, December 23rd, a deputation from the King and Queen's College of Physicians, with the President, Dr. Lombe Atthill, presented an address to the Earl of Zetland on his assuming the office of Viceroy in Ireland. The address congratulated his Excellency on his appointment, and briefly referred to the powers of the College and the work which it had accomplished. On December 30th an address was presented by the President (Dr. Meldon) and Council of the College of Surgeons. His Excellency made suitable replies, and intimated that he and Lady Zetland hoped soon to visit the last-named institution.

TESTIMONIAL TO A FACTORY INSPECTOR.

On December 21st a deputation, consisting of Drs. Purdon, Dundee, Manley, and Newett, representing some twenty-four certifiying surgeons in Belfast and North-Eastern Factory District, waited on Mr. H. J. Cameron, Inspector of Factories, at his residence, Lower Crescent, Belfast, and presented him with an illuminated address on the occasion of his removal, after fifteen years' residence, to a similar post in London. Mr. Cameron, in his reply, stated that he had always received the greatest assistance from the certifying surgeons of his district, and if anything of importance happened he could depend on them to let him know. It is gratifying to see the cordial relations that exist between the inspector and the surgeons of the district.

THE CHRISTMAS SEASON IN THE HOSPITALS.

In all the Dublin hospitals special arrangements were made for the suitable entertainment of the patients on Christmas day. This was especially the case in the Meath, the National Children's, the Richmond, the Whitworth, Sir Patrick Dun's, and the Royal Hospital for Old Soldiers. In the Richmond and the Whitworth entertainments were provided on Monday and Tuesday evenings last. Christy minstrels and magic lanterns gave great pleasure to the poor inmates. The wards were splendidly decorated, and with the aid of the staff and a large body of students, the superintendents of nurses—Miss Hughes and Miss M'Donnell—were enabled to carry out most successfully their benevolent purpose.

GALWAY COUNTY INFIRMARY.

Lately, in the case of O'Hara *v.* the Governors of the Infirmary, an application was made by the plaintiff that the return to the order dated July 18th for a writ of *mandamus* be set aside as frivolous, and that a peremptory *mandamus* be issued for the election of a surgeon to the Galway Infirmary. It was contended that the return was embarrassing, inasmuch as it stated that no quorum of legally qualified governors could be procured, owing to the fact that some of them were suffering from permanent infirmity; and that pending contemplated changes in the government of the institution, the ordinary governors in the exercise of their discretion appointed a competent and duly qualified surgeon to the office temporarily. The Court made an order that the governors amend the return, so as to enable the relator to traverse before a jury the question of fact as to the inability to procure a quorum of legally qualified governors.

OBITUARY FOR 1889.

United States of America.

Among the losses which the medical profession in the United States has sustained during 1889 have been those of Dr. Francis B. Kane, Professor of Clinical Medicine in the University of California; Dr. E. Bruen, Conjoint Professor of Physical Diagnosis in the University of Pennsylvania; Dr. J. B. Manson, of Georgia, who met with a tragic death at the hands of the father of a child who died of typhoid fever while under his care; Dr. Isaac E. Taylor, founder of the Bellevue Hospital Medical College, New York; Dr. S. W. Gross, Professor of Surgery in the Jefferson College, Philadelphia; Dr. J. C. Dalton, for thirty-four years Professor of Physiology in the College of Physicians and Surgeons, New York; and T. B. Harvey, Professor of Diseases of Women in the Indiana Medical College.

France.

Among those members of the medical profession in France who have gone over to the majority in the course of the past year, may be mentioned Philippe Ricord, for whom, in the words of an

enthusiastic Spanish writer, "syphilography is in mourning"; Dr. P. Bricon, a member of the editorial staff of the *Progrès Médical;* Dr. Dutrieux Vey; Dr. Maurice Perrin, formerly President of the Paris Academy of Medicine; V. A. L. Legouest, Medical Inspector-General of the French Army, and well known for his works on military and operative surgery; and in the closing days of the year, Dr. Damaschino, a prominent member of the profession in Paris; Professor Bonnemaison, of Toulouse; Dr. Brasseur, President of the Paris Odontological Society; Dr. Léon Damas, Professor of Midwifery, Dr. Martins, Professor of Botany, and Dr. Moitessier, Professor of Physics, in the University of Montpellier; Dr. Thau, of Montpellier; Dr. Denucé, Dean of, and Dr. Oré, Professor in, the Medical Faculty of Bordeaux; Dr. Bolliet, Aix-les-Bains; Dr. Dépéret-Muret, Professor of Internal Pathology at Limoges; Dr. Noel Pascal, of Passy, editor of *La Santé Publique*, and author of numerous works on hydrotherapeutics and hygiene; Professor Lallement, of Nancy, and Professor L. Perroud, of Lyons.

Germany.

Germany has lost, among many others of less note, G. F. B. Adelmann, for many years Professor of Surgery at the Russian University of Dorpat; the celebrated R. von Volkmann, of Halle; Surgeon-General von Lauer, the trusted physician of the late Emperor William; Rudolf Voltolini, the well known laryngologist of Breslau; Professor Jacobson, the eminent ophthalmologist of Königsberg; Professor R. Gscheidlen, of Breslau; Professor Krukenberg and Professor Anton Geuther, of Jena; Professor Reichenbach, of Hamburg; Dr. B. Weissenborn, of Jena; Dr. J. Rosenthal, of Würzburg; Dr. Heinrich Hoffmann, of Frankfort-on-Main; Dr. H. A. Pagenstecher, formerly Professor of Zoology at Heidelberg; Professor K. F. W. Nasse, of Bonn; Dr. Petruschky, of Königsberg; Dr. Emil Bergerat, of Munich; Dr. Adolf Abarbanell, of Berlin; Dr. Paul Meyer, of Strassburg; Professor Nuhn, of Heidelberg; Professor Jacobsen, of Rostock; and Dr. Brelmer, of Görbersdorf.

Austria Hungary.

In Austria Hungary the following medical men have died during 1889: Regimentsarzt Dr. Ritter v. Kleemann; Professor Soyka, of Prague; Dr. Franz Mühlvenzel; Professor Johann Peyritsch, of Innsbruck; Professor Alfred v. Biesiadecki, of Lemberg; Dr. Franz Seligmann, of Goritza; Dr. Richard Wittelshöfer, of Vienna; Dr. Leopold Wittelshöfer, of Vienna; Dr. Moriz Frey, of Vienna; Dr. Gustav Verzar, of Vienna; Dr. Josef Markbreiter, of Vienna; Dr. Charles Schilder, of Vienna; Dr. J. Tieftrunk, of Prague; Dr. George Hofmann v. Wellenhof; Professor Breisky; Professor Max Leidesdorf, of Vienna; Dr. H. Quiqueretz; Professor R. Ultzmann, of Vienna; and Professor Johann Wagner, of Buda-Pesth.

Belgium.

Belgium has lost, amongst others, Dr. Chantrain, Physician to the King of the Belgians; Dr. Felix Vandenschriek, President of the Belgian Medical Federation; Dr. Alphonse Leclerc, formerly editor of *Le Progrès Médical Belge* and *La Santé;* Dr. Vandevivière, a well-known alienist and President of the Belgian Society of Psychological Medicine; and Professor Wasseige, of Liège.

Italy.

Italy has to mourn the loss of Count Pietro Loreta, a surgeon whose operative skill and enterprise had made his name known throughout the world; Giuseppe Meneghini, Professor of Geology and Mineralogy in the University of Pisa; Enrico Buonamici, of Florence; Tebaldo Falcone, a distinguished medical journalist; Luigi Barzanó, the distinguished electrotherapeutist of Milan; Michelangelo Porporati, medical superintendent of the Turin Lunatic Asylum; Senator Gaetano la Loggia, Director of the Palermo Asylum; Enrico Albanese, Professor of Clinical Surgery at Palermo; Dario Maragliano, Professor of Psychiatry in the University of Genoa; Tommaso Vernicchi, of Naples, author of numerous works on surgical pathology; Ambrogio De Marchi Gherini, a favourite pupil of Scarpa's and for forty years the leading surgeon of Milan; Giuseppe Riscaldini, one of the companions of Garibaldi and medical attendant of the late Signor Cairoli; Giuseppe Burresi, of Florence; and Carlo Pavesi, for many years editor of the *Annali di Chimica.*

Spain.

Death has been active in the ranks of the medical profession in Spain. Among others who have been called away may be mentioned Gabriel Lopez Pereda, Professor of Clinical Medicine, and Pedro Lletget y Diaz-Ropero, Professor of Botanical Pharmacy in the University of Madrid; Felix Garcia Teresa, founder of the Spanish Gynæcological Society; Antonio Manté, formerly Secretary of the Sanitary Council, Madrid; Valeriano Herrera, one of the physicians to the Royal Household; Mariano Garcia Morales, of Madrid; T. Martinez y Muñoz, Subinspector of Military Sanitation; J. Piñero Perez, of Madrigal de las Torres, who was decorated for his services in two cholera epidemics; Joaquin Gimeno, Professor of Pathology at Saragossa, and editor of the political paper *La Derecha;* Francisco de P. Folch y Amich, for fifty-six years Professor of Pathology at Barcelona; Rafael Marenco y Gualter Professor of Midwifery and Dean of the Medical Faculty in the University of Cadiz; Pascual J. Hontañon y Cabezas, formerly professor in the same university; and Francisco Granizo Ramirez, of Granada, a medical officer of high rank in the Spanish army. In connection with Spain may be mentioned Dr. Joaquin G. Lebredo, one of the leading physicians of Havana.

Portugal.

Portugal has lost, among others, Vicente do Espirito Santo Esteves, of Lisbon; Mathias da Costa Pereira Duarte, of Buarcos; and Francisco Pinheiro de Freitas, of Alfarellos.

Brazil.

In Brazil, the medical profession is poorer by the loss of Manoel T. de Macedo Soares, of S. Paulo, a distinguished pathologist, who died of beri-beri; João G. da Costa Aguiar of the same city; João Henrique Braune, well-known both as a medical practitioner and as Professor of Greek in the Collegio Pedro II at Rio de Janeiro; Gourches Fontes, Baron de Rio Doce, a member of the Imperial Academy of Medicine; Manoel Fernandes Eiras, who presented in his practice the somewhat anomalous combination of laryngology and mental diseases; J. Costa Velho, of Rio de Janeiro; and Caetano de Almeida, Professor of Histology in the University of the same city.

Russia.

In Russia the following medical men among others have died during the year: Dr. Gorlitsyn, Medical Inspector of the province of Estland; Dr. Ivanovski of Wilna; A. Bieltsoff, teacher of surgery in the Military Medical Academy of St. Petersburg; F. Holm, Chief Physician of the Hospital for Women of the same city; K. Werigo, consulting physician to the Nikolai Military Hospital; Johannes Brock, Professor of Zoology at Dorpat; Oscar Prevôt, Chief Physician of the Gynæcological Department, Moscow Lying-in Hospital; Dr. Neese, an Emeritus Professor of Kieff; Dr. Lesh, Professor of Pharmacy in the Medico-Chirurgical Academy of St. Petersburg; Professor E. E. Eichwald of the same city, one of the leaders of the profession in Russia; Dr. Victor C. Kandniski, a well known alienist; Dr. Ernst Barthel, an authority on the diseases of women and children; Dr. N. J. Koslow, a military medical officer of high rank; Professor E. von Kade, of St. Petersburg, the leading representative of the Pirogoff school of surgery in Russia; Dr. A. P. Dobrosslawin, Professor of Hygiene in the Military Medical Academy of St. Petersburg; Dr. H. Gaethgens, of Riga; and Professor S. Botkin, the leading physician in Russia.

Poland.

In Poland Dr. Alexander von Walther, Inspector-General of the Civil Hospitals in Warsaw; W. Orlowski, Director of the Hospital of the Child Jesus at Warsaw; Vasili Ulyanin, Professor of Comparative Anatomy and Embryology in the University of Warsaw; and Professor Titus Chalubinski, of the same University, have died during the year.

Other Countries.

Holland has lost the illustrious F. C. Donders, and Professor van Braun Houckgeest, of Groningen: Switzerland, Hermann von Meyer, Professor of Anatomy at Zürich: Denmark, Dr. Barfoed, Professor of Chemistry in the University of Copenhagen: Sweden, Dr. C. B. Mesterton, Lecturer of Surgery and Midwifery in the University of Lund; and Professor Elias Heymann, of the Carolina Institute at Stockholm: Norway, Professor Worm-Müller, head of the Physiological Institute of Christiania: Servia, Dr. Petrovich, Body-Physician to the King: Mexico, Ricardo Vertiz, Professor of Ophthalmology in the National School of Medicine, and Louis Ordaz, who did good service by making European medical works known to his countrymen: the Argentine Republic, Dr. Pedro A. Pardo, Minister of his Government at Lisbon.

UNIVERSITY OF LONDON.

THE following is the draft scheme for the reconstitution of the University on the general lines indicated by the Report of the University for London Commission, approved by the Senate of the University, and now under the consideration of the governing bodies of the Royal Colleges of Physicians and Colleges.

I.—*Objects of Incorporation.*

1. The purposes of the incorporation of the University to be so defined as to include, in addition to the existing purposes, the promotion of regular and liberal education throughout Her Majesty's dominions, and especially in the metropolis and its neighbourhood.

II.—*Constitution, etc.*

2. The University to consist of—
   i. Senate,
   ii. Convocation,
   iii. Constituent Colleges,
   iv. Faculties,
   v. Boards of Studies,

with the Queen as Visitor.

III.—*Senate.*

3. To consist (in its final form) of the Chancellor and 37 Fellows to be appointed as follows:—

i. The Chancellor and nine Fellows to be nominated by the Crown (hereinafter called Crown Fellows)	10
ii. The Chairman of Convocation and nine other Fellows to be elected by Convocation (hereinafter called Convocation Fellows) . . .	10
iii. Twelve Fellows to be elected by the Faculties .	12
iv. If and when University and King's Colleges, London, respectively shall become constituent Colleges, the President of University College, London; the Principal of King's College, London	2
v. The Presidents and Chairmen of each of the following bodies (hereinafter respectively called the Royal Colleges and Legal Bodies), if willing to act, namely, the Royal College of Physicians of London; the Royal College of Surgeons of England; the Council of Legal Education; and the Incorporated Law Lociety	4
	38

4. If and whilst any Faculty shall not be constituted by reason of a deficiency of Constituent Colleges, or for any other reason, the Crown may nominate Fellows in lieu of the Fellows to be elected by such Faculty, and such nominated Fellows shall have all the powers of and be subject to all provisions relating to Fellows in whose place they are nominated.

5. The Senate may resolve that the President or Principal or other chief officer of any Constituent College for the time being shall *ex-officio* be a member of the Senate.

6. Of the nine Fellows to be elected by Convocation in addition to the Chairman of Convocation, two shall be elected by the members of Convocation who are Graduates in Arts, who shall vote as such accordingly; two in like manner by the Graduates in Laws, in Science, and in Medicine, respectively; and one more by each of the said Faculties in rotation.

7. Members of Convocation holding degrees in two or more of the said four subjects to be entitled to a vote in respect of each of such subjects.

8. Of the twelve Fellows to be elected by the four Faculties, three shall be elected by each Faculty.

9. The Fellows, other than the Chairman of Convocation, shall retire as follows; that is to say, in every year there shall retire:—
   (*a*) One of the Crown Fellows.
   (*b*) One of the Convocation Fellows.
   (*c*) One of the Fellows to be elected by each Faculty.
   (*d*) One of the Fellows to be nominated by the presidents or chairmen of the Royal Colleges and Legal Bodies.

10. The Fellow of each group to retire on each occasion shall be the one who, at the time of retirement, has been longest in office under his then existing appointment, or when several have been in office for the same period the one who shall be ascertained by lot.

11. Power to the Crown and electing bodies to fill up casual vacancies occurring by death, resignation, or otherwise; but any person so appointed shall retain his office so long only as the vacating Fellow would have retained the same if no casual vacancy had occurred.

12. Power to renominate and re-elect.

13. The existing members of the Senate to continue as at present; but no new Fellow shall be nominated by the Crown until the number of present Fellows appointed by the Crown not on the nomination of Convocation has fallen below nine, and then only so as to bring the number up to nine; and no new Fellow shall be elected by Convocation unless or until the number of present Fellows appointed by the Crown on the nomination of Convocation has fallen below nine, and then only so as to bring the number up to nine.

14. Until Convocation shall be in exercise of its powers to elect the whole nine Fellows eligible by it, the election of Fellows shall be by the Graduates as follows:—the first shall be elected by Graduates in Arts, the second by Graduates in Laws, the third by Graduates in Science, and the fourth by Graduates in Medicine, and so on in succession.

15. The power of the Faculties to elect Fellows, and the power of the President and Principal of University and King's Colleges, London, if Constituent Colleges, to become Fellows, and the like power of the Presidents and Chairmen of the Royal Colleges and Legal Bodies to become Fellows, shall take effect at once.

16. The retirement clause (No. 10) to come into full operation only when the Senate is constituted entirely in accordance with paragraph 3; in the meanwhile retirement shall follow the rules laid down in paragraph 10 as nearly as may be.

17. In the event of any question at any time arising as to the order of retirement or the Fellow to retire, the same shall be determined by the Vice-Chancellor, whose decision in writing shall be final.

18. There shall be a standing Committee of the Senate in each Faculty, consisting of twelve members.

19. The Standing Committee for the Faculty of Arts shall consist of the President and Principal of University and King's Colleges, London, and the three Fellows elected by the Faculty of Arts, and seven members to be elected by the Senate.

20. The Standing Committee for the Faculty of Laws shall consist of the Chairmen of the two Legal Bodies, the three Fellows elected by the Faculty of Laws, and seven members to be elected by the Senate.

21. The Standing Committee for the Faculty of Science shall consist of the President and Principal of University and King's Colleges, London, and the three Fellows elected by the Faculty of Science, and seven members to be elected by the Senate.

22. The Standing Committee for the Faculty of Medicine shall consist of the two Presidents of the Royal Colleges, the three Fellows to be elected by the Faculty of Medicine, and seven members to be elected by the Senate.

23. Applications for Examinerships shall be referred to the Standing Committee in each appropriate Faculty, whose duty it shall be to consider the said applications, and to report to the Senate thereupon. The Examiners in each Faculty shall be appointed by the Senate after consideration of such reports respectively.

IV.—*Convocation.*

24. All elections by Convocation under this scheme to be conducted in such manner as Convocation may from time to time determine.

V.—*Constituent Colleges.*

25. The Constituent Colleges shall be selected from such institutions in or near London as (1) give academical instruction upon a complete system and an adequate scale in all the faculties, and prepare, or are intended to prepare, students for degrees in the University; (2) give instruction upon an adequate scale in one or more even though not in all the faculties, and prepare, or are intended to prepare, students for degrees in the University.

26. University and King's Colleges, London, shall, if willing, be forthwith Constituent Colleges.

27. The first list of Constituent Colleges shall be settled by a Committee of Selection to be appointed immediately on the grant of the Charter.

28. The Committee of Selection shall consist of fourteen Members, of whom seven shall be elected by the Senate, and seven by Convocation. If Convocation fail to elect, the whole fourteen shall be elected by the Senate. The Chairman shall be named by the Senate, and shall have a second or casting vote.

29. It shall be an instruction to the Committee of Selection to consider in respect of every institution seeking admission the following points:—

(*a*) The character of the teaching, and of the educational appliances.
(*b*) The character of the foundation.
(*c*) The average age of the students.
(*d*) The number of students proceeding from the College to the University.
(*e*) The relation of the College to any other University.

30. The Senate shall have power from time to time, after the settlement of the first list, to admit new Constituent Colleges, but shall previously invite an expression of opinion from the Board or Boards of Studies interested.

31. On the admission of each Constituent College the following matters shall be determined by the Committee of Selection, or by the Senate, as the case may require, namely:—

(*a*) The Faculty or Faculties to which the College shall belong.
(*b*) The number of members of the Faculty or Faculties to represent the College.
(*c*) The qualification of such members.
(*d*) The mode of election of such members by the College.

32. Power to be given to the Senate, after consultation with the Board or Boards of Studies interested,—

(*a*) To increase or diminish the number of the members of any Faculty or Faculties representing any constituent College.
(*b*) To remove any institution from being a Constituent College, subject to an appeal to Her Majesty in Council.

33. The affiliation of Colleges to the University, as now existing, to cease.

34. The institutions from which the University receives certificates for Degrees in Medicine (hereinafter called the recognised Medical Institutions) to retain their right of giving such certificates, whether they be or be not Constituent Colleges.

35. Power to be given to the Senate after consultation with the Board of Studies of the Faculty of Medicine from time to time to revise the list of recognised medical institutions, and to determine in what branches of medical education the certificates of each of the said institutions shall be received.

VI.—*Faculties.*

36. There shall be four Faculties, namely:
(1) Arts.
(2) Laws.
(3) Science.
(4) Medicine.

37. All departments of knowledge of which examinations may be held by the University, and not included in any other of the Faculties, shall be included in the Faculty of Arts.

38. Each Faculty shall consist of the representatives of Constituent Colleges.

39. Each Faculty shall have the following powers and duties:—

(*a*) To elect three members of the Senate.
(*b*) To elect members of a Board of Studies.
(*c*) To advise on the admission of any Constituent College.

40. The Chairman for the time being of the Board of Studies shall be the Chairman of the Faculty.

VII.—*Boards of Studies.*

41. There shall be a Board of Studies in each Faculty.

42. Each Board of Studies shall consist of:—

(*a*) Such a number of members elected by the Faculty, being four, eight, twelve, or sixteen, as the Faculty shall from time to time determine.
(*b*) Two members of Convocation elected by the members of Convocation who are Graduates in the subject with which the Board of Studies is conversant.
(*c*) An Examiner in each subject in the Faculty in which examinations are for the time being held in the University.
(*d*) If the Board of Studies shall so think fit such persons, whether members of the University or not, eminent in the subject of the Faculty, not exceeding two in number as may be elected by the Board.

43. One fourth of the members of the Board elected by the Faculty shall retire each year.

44. Any casual vacancy in the members elected by the Faculty occurring by death, resignation, or otherwise, shall be supplied by the members of the Board; but any person so appointed shall retain his office so long only as the vacating member would have retained the same if no casual vacancy had occurred.

45. The members of the Board elected by Convocation and the co-opted members shall retire every four years.

46. Retiring members of the Board shall be re-eligible.

47. In the event of any Faculty not being constituted by reason of deficiency of Constituent Colleges, or otherwise, the Crown may nominate members of the Board in lieu of the members to be elected by the Faculties, and such nominated members shall have all the powers of and be subject to all the provisions relating to the elected members in whose places they are nominated.

48. The Examiners in each subject may, if more than one, agree upon one of themselves to be the member of the Board of Studies (Clause 43, Subclause 3). In case they fail to agree the one of the Examiners who has for the time being held his office for the longest time without break shall be the member. In case more than one Examiner has held office for the same time, the Examiner shall be nominated by the Vice-Chancellor in writing.

49. Each Board of Studies shall have the following powers and duties:—

(*a*) To elect a Chairman every year.
(*b*) To consider and report to the Senate upon any matter referred to it by the Senate.
(*c*) To represent to the Senate its opinion on any matter connected with the degrees, and examinations, and teaching of the subjects of its Faculty.
(*d*) To deliberate, if so requested, in conjunction with the Senate or any Committee thereof.

50. Boards of Studies shall, if so from time to time requested by the Senate, and may, if they shall from time to time think it desirable, meet and act concurrently on particular subjects.

VIII.—*Matriculation and Degrees.*

51. The Senate shall have the following powers:—

(*a*) To admit as matriculated students, without passing the Matriculation Examination of the University, such students of the Constituent Colleges as (1) have completed their eighteenth year; (2) shall produce evidence satisfactory to the Senate of (*a*) their diligent attention during an academical year in a Constituent College at lectures on the general subjects of the Matriculation Examination, or such of these subjects as the Senate may from time to time appoint; and of (*b*) their proficiency in the general subjects of the said examination, as tested by examination within the said Constituent College; and (3) shall pay to the University such part of the matriculation fee as the senate shall from time to time determine.

(*b*) To accept in lieu of the passing of any Intermediate Examinations in Arts, Music, Laws, or Science (1) evidence satisfactory to the Senate (*a*) of diligent attendance during an academic year in a Constituent College at lectures on the general subjects of the Intermediate Examination, or such of these subjects as the Senate may from time to time appoint; and (*b*) of proficiency in the general subjects of the same examination as tested by examination within the said Constituent College; and (2) the payment to the University of such part of the fee on such Intermediate Examination as the Senate shall from time to time determine.

(*c*) To place in the same position as Constituent Colleges for the purposes of the two preceding clauses (*a*) and (*b*) any Colleges not in or near London which may satisfy the Senate that they give academical instruction upon an adequate scale upon the necessary subjects, and from time to time to remove Colleges from this position.

(*d*) To accept in lieu of the passing of the Preliminary Scientific Examination in Medicine certificates that the students have passed at the Royal Colleges examinations which are to the satisfaction of the Senate a sufficient test of competent knowledge in the subjects of the said Preliminary Scientific Examination, and the payment to the University of such part of the fee on such Preliminary

Scientific Examination as the Senate shall from time to time determine.

(*e*) In the event of the establishment of a second Examination for the Degree of M.D. not requiring the attainment of so high a standard as the present examination, to confer on all existing M.D.'s of the University and all who may hereafter pass the examination which will require the attainment of the higher standard, the right to describe themselves as M.D. with honours (M.D.Lond. honours), and on all existing M.B.'s the Degree of M.D.

52. Candidates to be admitted to Matriculation and all Degrees other than Degrees in the Faculty of Medicine without regard to their place of education.

53. Candidates for Degrees in the Faculty of Medicine to show that they have passed the required courses of instruction in one or more of the Constituent Colleges in that Faculty or recognised Medical Institutions.

54. Power to be given to the Senate with the consent of the Chancellor and Vice-Chancellor to confer Honorary Degrees.

IX.—*Professors.*

55. Power to hold real property, and to accept grants, gifts, devises, and legacies for the purposes of the University, including the establishment of Professorships, and Lectureships, whether attached or not to any particular College, and the furtherance of regular and liberal education and of original research.

56. Power to the Senate in the event of the establishment of Professorships or Lectureships to assign to the Professors or Lecturers a representation on the Faculties.

OUT-PATIENTS AT COUNTY LUNATIC ASYLUMS.

WITHIN the last year or two there has been frequent reference made to the desirability of bringing the medical practice of our lunatic asylum system more in line with that which exists in connection with our general hospitals and infirmaries. It has been especially felt that up to the present time there has been a want of the means of procuring skilled advice in cases of the milder forms of mental disease among the poor, where the patients (in the earlier stages of their malady), though not sufficiently ill to become inmates of an asylum, were yet incapacitated from following their employment.

It is acknowledged on all hands that many forms of mental disease are most curable in the first three months of the attack; and, however that may be, the fact remains that patients have not as yet been sent to the county asylums for expert advice and treatment until they were "bad enough" to be certified and sent as inmates. A new departure has recently been taken by the committee of the West Riding Asylum, near Wakefield, which in its effects will be far reaching and calculated completely to change the present routine line of action with regard to the early treatment of the insane poor. They have decided, with the sanction of the West Riding County Council, to organise an out-patient department, where patients can not only receive advice but can also be provided with medicine at a nominal cost (that is, the cost price to the asylum). The persons applying for such advice and treatment as out-patients will only be required to procure a recommendation from a registered medical practitioner, justice of the peace, chairman of a board of guardians, or a member of the Wakefield Asylum Committee.

The development of this scheme will, of course, throw more work upon the existing medical staff of the asylum, and we notice with some surprise that one of the resolutions adopted by the County Council was:—

"That the arrangements to be made be such as not to interfere with the ordinary duties of the staff or to cause any expense to the institution."

We presume that the recommendations necessary for the procuring of this out-patient treatment will only be given to those who may be unable to pay for medical advice in the usual way, otherwise the dispensing of gratuitous medical relief by an important public authority might lead to some of the abuses which are now so much complained of in connection with general hospitals. We notice that one of the resolutions adopted by the council is directed against this danger:—

"That it be an instruction to the medical superintendent to exercise due discrimination with respect to the cases to be dealt with, so as to prevent the above arrangement from interfering with the practice of the medical men in the West Riding, or in any way bringing the asylum authorities into conflict with them."

By all means let what is necessary for the efficient treatment of insanity among the poor in its earlier stages be provided; but do not let the county asylum be the means of providing those well able to pay with treatment at the expense of the ratepayers. In the event of this scheme proving a success, we may expect to see other asylum committees following the example of the Wakefield Committee.

THE CARE OF FEEBLE CHILDREN.

ON Thursday, December 19th, an important deputation, introduced by Professor Gladstone, F.R.S., and the Hon. Lyulph Stanley, presented a memorial from the Council of the British Medical Association to the School Board of London, showing the importance of instituting an inquiry into the condition of their school population as to the development and brain condition of the pupils in primary schools. Dr. Bridgwater, President of the Council, Dr. Farquharson, M.P., and other gentlemen attended the deputation, and Dr. George H. Savage acted as spokesman. The text of the memorial is as follows:—

The Memorial of the Council of the British Medical Association to the members of the School Board for London concerning the appointment of a committee for the scientific inquiry as to the condition of the school population, showeth that the Section of Psychology of the British Medical Association having conducted an investigation, and having made and considered a report as to the average development and brain power among children in primary schools, is of opinion that it is desirable that further scientific inquiry should be conducted by the School Board for London, and other educational bodies, and by the Government, for the purpose of determining the condition of portions of the school population which need special forms of education, for classifying them, and for ascertaining the relative and absolute numbers of such as need special training. Such inquiry should be conducted in selected public elementary schools, certified industrial schools for the blind and deaf, and other exceptional schools, as well as among groups of children exempted from, or summoned for non-attendance at, school.

This investigation should be conducted by personal examination of the children along definite lines, as well as by inquiry of the teachers.

Further, it is desirable that schools should be examined where exceptional methods of education are employed, such as Slöjd and technical instruction, with a view to determining the effects of such methods upon the children.

THOMAS BRIDGWATER,
President of Council, British Medical Association.
CLAUDIUS GALEN WHEELHOUSE,
President, British Medical Association.

It will be remembered by our readers that in July we published the report of a Committee of the Association who had given much labour to investigating in detail the physical and mental condition of over 5,000 children seen in schools. Many facts of great social importance and pathological interest were then published, and a further report is about to be issued from the Cambridge University Press. The work of that Committee has given to the profession a body of physical signs easily observable, such as are highly indicative of the condition of development of the child, in body and in brain, as well as of the balance of the nerve centres found in such common conditions as those termed "nervousness," "exhaustion," "hysteria," etc. In this and other branches of their work the Committee received much assistance from the original researches of Dr. Francis Warner. The value of this work is not only in a body of facts accumulated, and so arranged as to give much information, but chiefly in presenting the foundation for a new section in the department of State Medicine, rendering it possible, upon an established basis, to make a medical inspection of schools, a matter of no light importance at a time when the School Board for London is leading the way in carrying a reform, the need of which we have long pointed out, in appointing medical officers. Such an example will probably soon be followed in other cities.

Speaking for the deputation, Dr. Savage said they represented the Council of the largest Medical Association existent, who had hitherto assisted in carrying on this work, and had paid for it in part. Really good education for children must be suited to the ends in view, and, though it could not be differentiated to an unlimited extent, yet there were special groups of children who needed special training. This was well recognised in the case of the blind and the deaf; so also special provision should be made for those nervously weak and unfitted for examinations. A committee of the Association examined over 5,000 children, obtaining results that had been published; such numbers were not sufficient for a complete generalisation. At least another 50,000 should be ex-

amined. Any expense thus incurred would be more than repaid by pointing out the weak-brained children for special education, and as a result lessening the numbers of paupers, criminals, and lunatics. Some means of investigation, such as that introduced by Dr. Francis Warner, was recommended.

It is the proper work of our profession to determine what points it is of importance to observe, and to describe them; when our signs are well described, then many observers can use them. This work has so far been done under the auspices of the British Medical Association; it is now very desirable that teachers and others conversant with children should be taught how to note accurately the condition of pupils in schools; such information and training might be effected by lectures and demonstrations. The scholastic profession are not unappreciative of the bearing of this work upon their own. In an article in the current number of the *Journal of Education*, on "The Scientific Examination and Classification of Children," the writer shows clearly that in the administration of public funds for the purposes of elementary education no principle has been arrived at which gives general satisfaction. Care should be taken that no harm results from anything done, as many think has resulted from applying to various persons and places, radically differing, certain hard-and-fast standards of estimation, which in their turn induce unwise attempts to adjust results by main force. The writer of this article proceeds: "To make any induction about children of any scientific and practical value, we should satisfy ourselves that we have thoroughly examined a sufficient number. By this means we shall get trustworthy statistics as to the average condition of the school population—one-sixth of the whole country—in relation to special conditions, as, for example, to sex and standard and particular local circumstances. The British Medical Association are endeavouring to secure these ends, and teachers can do much to strengthen their hands." The questions here involved are many, and they are important. We hope that this new and useful line of work will be continued and extended for the benefit of the rural as well as town population.

CENTENARY OF ABERDEEN MEDICO-CHIRURGICAL SOCIETY.

THE members of the Aberdeen Medico-Chirurgical Society celebrated the centenary of their Society by a dinner in the Society's hall on Saturday, December 14th. The company, which numbered over seventy, included guests invited by the Society, private guests of members, and the members. Amongst the Society's guests were:—Mr. P. Esslemont, M.P., Lord Provost Stewart; Principal Geddes, Sheriffs Dove-Wilson and Brown. Dr. Tylor, F.R.S., Oxford, and Dr. MacAlister, Cambridge, were also present. Professor Smith-Shand, the President, occupied the chair. Dr. R. J. Garden and Dr. Edmond were croupiers.

The hall was tastefully decorated for the occasion, the valuable portrait of Sir James MacGregor having special honours.

Professor SMITH-SHAND, who proposed the toast of the evening, gave a brief and interesting sketch of the origin and development of the Society. It took rise amongst a band of ardent-minded students, who at first were simply content to meet in each others' lodgings to promote a study of the science of medicine. Ere long, becoming more ambitious and numerous, they obtained the use of a class-room in Marischal College for their meetings, the members defraying the cost of this class-room by a weekly contribution of one penny each. Conspicuous in this group of eager minds was one James MacGregor, who threw his Celtic enthusiasm into the work of the young society; he ultimately entered the army, became Director-General of the Army Medical Department, and was made a baronet. Sir James MacGregor's interest in the Society was a life-long one; he was its constant benefactor; he gave liberal donations to the building of the stately hall, as well as to the museum and library; while his valuable contributions on many medical subjects to the Society's *Transactions* continued while he lived.

The present hall was built in 1820 and cost £3,000. For a long time the Society was divided into two sections, a senior and a junior, the former consisting of graduates only, while the other was devoted to students. But, as the development of teaching took place in the University, the junior section gradually grew smaller, and, in 1863, ceased to exist, no formal separation having taken place.

The membership, which numbers fifty-one, consists entirely of graduates, nearly all of whom are resident in the city. Monthly meetings are held during the winter session to promote the development of medical science and for the promotion of good fellowship.

Dr. R. J. GARDEN, Vice-President, proposed the founders of the Society, and in a masterly speech detailed many of the quaint peculiarities of character and discussion that agitated and coloured the meetings in the early days. Dr. Garden appealed for a restoration of the junior section, to which he would look for renewed vigour to the senior section, and thought that such a bond of fellowship would tend to correct a too mechanical ideal of medical education and study.

The meeting was very enjoyable, and a gastronomic success. It is to be hoped that this refreshment of the members may enable them to buckle themselves to renewed exertions to develop a scientific knowledge of their profession, and to leave as valuable a record of good work done as their predecessors.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

THE Committee will be pleased to hear from gentlemen who may have any of the following volumes to spare, which are required to complete sets in the Library:

American Surgical Association (Transactions). Vol. IV.
Braithwaite's Retrospect of Medicine. Vols. I—LVII, LIX—LXI, LXVII and LXXIII.
Edinburgh Obstetrical Society (Transactions). Vols. I, II, III, V, VII, and XII.
Guy's Hospital Reports. All prior to 1870 (and 1871-72), and 1878.
Lancet (The). From 1871 to present date.
London Medical Record. All since 1885.
Mac Cormac's Surgical Operations. Part I. (Smith, Elder and Co.)
Medical Society of London (Proceedings). Vols. V, VI, VII, IX, X, XI.
Medical Times and Gazette. All since 1865.
Philadelphia College of Physicians (Transactions). Vols. VI, VII, and X. Third Series.
Registrar-General's Report of Births, Deaths, and Marriages in England. 1888.
St. Bartholomew's Hospital Reports. Vols. I—V.
St. George's Hospital Reports. Vols. I—V, Vol. X and onwards.
St. Thomas's Hospital Reports. 1872, 1876, 1880-81, 1888.

THE EPIDEMIC OF INFLUENZA.

The Progress of the Epidemic in Russia, Germany, Denmark, France, Italy, Spain, England, and other Countries.—Characters Observed in Paris.—The Epidemic in Vienna: Overcrowding of the Hospitals.

THE following notes contain a sketch, founded on the most reliable published information at present available, of the progress of the existing great epidemic:—

The first cases recognised in Europe were observed in St. Petersburg about October 15th, and by November 12th it seems to have spread over nearly the whole of European Russia, for we find it reported from such widely different points as Riga and Pskov, in the Baltic provinces; Wilna, on the confines of Poland; Kaluga and Moscow, in Central Russia; and Sebastopol, on the Black Sea. The number of cases in St. Petersburg alone has clearly been enormous, even if some hesitation is felt in accepting Dr. Butz's estimate of 650,000, or nearly three-fourths of the total estimated population. At present the information from Russia in Asia is too meagre to permit of the formation of a definite opinion as to whether the disease travelled from Siberia to St. Petersburg, or *vice versâ*. Indeed, so far as is yet known, neither hypothesis can be maintained, for the epidemic was first noticed in Tomsk, an important commercial town of Central Siberia—separated by nearly 2,000 miles from St. Petersburg—about October 15th, that is to say, at the very time when the epidemic was beginning to develop with rapidity in St. Petersburg. It appeared in the Caucasus about November 11th, while at Merv, 500 miles to the East, it was so bad towards the end of December that 35 per cent. of the garrison were reported to be laid up. At this date the epidemic was decreasing in St. Petersburg, and even in Berlin.

According to the statement recently made by Professor Leyden, influenza broke out in Berlin towards the end of November, and spread very rapidly. It prevailed very severely during the middle period of that month, and Professor Leyden estimated that a third of the inhabitants of the city were suffering from it. It began to decline by December 25th. Meanwhile it had spread rapidly in central and southern Germany, and was on December 18th present in nearly every important town from Hamburg in the north to Munich in the south. It was severely felt at Frankfort, and in Mainz the tramway service was partially suspended, owing to the

large number of men on the sick list; it was present in Dresden on December 23rd, and had got as far south as Prague on December 27th, on which day over a hundred cases were reported there. Already, however, it had reached Vienna, and although the existence of an epidemic was denied on December 11th, it appears to have been practically admitted on the following day; it was present in Belgrade on December 16th, and at Bucharest and Sophia on December 24th.

Meanwhile the epidemic had also extended westward, making its appearance in Brussels about December 12th, and in Antwerp about December 16th. During the following fortnight it spread extensively in these two cities, rendering it necessary to close the schools, and seriously affecting the garrisons. It had already appeared in Amsterdam, in which city it began to decline about December 24th, making its appearance, however, about this time in other Dutch cities.

In Copenhagen, also, the epidemic appears to have begun early in December, and to have attained considerable proportions; the number of cases notified in the week ending December 21st was over 6,000. It has since declined, the number notified in the week ending December 28th being about 3,000.

Cases are stated to have been observed in Paris as early as November 17th, but the disease first began to assume epidemic proportions about November 26th, when a large number of persons employed in the Magasins du Louvre (the "Universal Provider" of Paris) were attacked; the number of cases in this shop rapidly increased, until it reached 670 on December 10th. The epidemic does not appear to have prevailed to any serious extent in the French provincial towns, but so large a number of cases occurred at Monte Carlo as seriously to interfere with the engrossing occupation of gambling.

The epidemic was first heard of south of the Pyrenees on December 12th, at Malaga. On December 14th there were a few cases in Madrid, one of the earliest reported being that of the boy-King. It rapidly spread, causing much sickness among the soldiers, and by December 29th most of the Spanish provinces had become affected. It appeared in Lisbon and Oporto about the end of the third or beginning of the fourth week in December, and prevailed very extensively in both cities.

In Italy the first cases were reported from Rome on December 13th. A few days later its presence in Verona was officially admitted, but denied in Rome; it has prevailed extensively in Milan, Spezia, and other towns, and a few cases were reported to have occurred in Turin and Gaeta on December 30th. The epidemic, however, does not appear to have taken any hold in Rome, and it is seriously doubted whether any true cases have occurred.

In this country the epidemic has not as yet attained serious proportions, and its presence has been questioned. A consideration of all the information at our disposal, however, leads to the conviction that there has been an epidemic prevalence of influenza in the West of London and in the western suburbs during the last ten days; it has, however, not spread with the rapidity observed in St. Petersburg, Berlin, Vienna, and Paris. Its severity may be gauged by the statement of a correspondent practising in Shepherd's Bush, who informs us that he had recently seen four or five new cases a day. There has certainly been no distinct epidemic of the disease in East London, but it is stated that an outbreak has occurred this week in Dr. Barnardo's homes. There is no doubt that influenza has prevailed very extensively among horses in this country. One firm of carters in London had over one hundred horses laid up at one time about a fortnight ago, and one of the railway companies a still larger number. The epizootic, though sufficiently extensive to raise the price of cartage, has not attained the proportions sometimes observed, and has not much interfered with the efficient management of the parcel traffic which is so enormous at this period of the year.

Influenza began to become epidemic in the northern part of the United States about December 17th, when cases were reported in New York and Boston. It appears to have spread with considerable rapidity, so that a large number of persons in various parts of the United States had been attacked by December 27th.

Our Paris correspondent writes that M. Brouardel stated, during the discussion at the Academy of Medicine, that *grippe* is always characterised by the precursory symptoms of headache, nausea, prostration, symptoms which are not present in pulmonary catarrh, which has been described as *grippe*. According to M. Rochard the present epidemic is the same as that which appeared in 1837. Dengue fever, of which he has observed several cases in Senegal, is quite a different affection, and is confined to tropical countries. M. Colin was of the same opinion concerning dengue fever. *Grippe* is independent of all human means of transmission, and travels through thickly populated centres as through uninhabited regions with the rapidity of light or electricity. This fact would distinguish it from dengue fever. M. Dujardin-Beaumetz considered that reserve should be made as to naming the present epidemic until the two affections have completed their evolution. Dengue fever is possibly the form influenza takes in warm climates. M. Bucquoy is attending a college in which *grippe* has appeared. All the patients complain of pain in the limbs, and especially in the knees; the latter is a symptom observed in dengue fever. The pillars of the fauces and, subsequently, the soft palate, are very red, and a rash, which differs in hue and intensity, is almost invariably present. M. Bucquoy is not prepared to affirm that the affection is dengue fever, but he considers it a curious coincidence that this affection and *grippe* have appeared simultaneously. M. Roy de Méricourt, who has studied numerous cases of dengue fever at Reunion Island, is convinced that it is quite distinct from the present epidemic, and stated that it is always accompanied by a papulous eruption on the back of the limbs. The different varieties of *grippe* actually observed are due to the different temperament, age, and sex of the patients. M. Ollivier raised the question whether it would not be advisable to break up the schools and colleges in which *grippe* has appeared, but this idea was combated by MM. Brouardel and Bucquoy on the ground of the benign character of the affection, and the facility of curing it. Complications are very rarely observed. M. Proust stated that at St. Petersburg the epidemic appeared to be disappearing. Dengue fever, which appeared in Constantinople last August, appears to be abating. It has presented all the characteristics of an infectious disease, spreading successively to all quarters of the town, and finally to the villages on the Bosphorus. It was usually found that the affection was transmitted by persons who had contracted it in an infected locality. Defective ventilation, overcrowding, and a bad state of the drains were apparently favourable to its development. Linen was found to be an agent in the transmission of dengue fever. Dr. Schwartz observed isolated cases in different families which employed a washerwoman suffering from the affection.

Writing under a later date our correspondent adds: The epidemic of *grippe* assumes a more malignant character, and does not confer immunity by an attack; there are many instances of the same person being seized two or three times. The cephalalgic and muscular pains, which were at the onset of the epidemic the striking symptoms, are now combined with serious pulmonary trouble, bronchitis, pneumonia, and broncho-pneumonia. Tuberculous conditions become aggravated, dangerous pneumonia and pleurisy set in, and in many instances cause death.

M. Potain's assertion that the spleen becomes enlarged is verified by a large number of Paris doctors; it is therefore more than probable that the *grippe* now reigning here is, as Dr. Pitain believes, an infectious illness. The daily mortality is 100 per day more than it was this time last year, which brings up the daily death-rate to 300.

The War Minister and the Minister of Public Instruction have closed all the schools and *lycées* under their jurisdiction. In some of the French towns there are so many soldiers attacked with *grippe* that they are treated in the barracks, the hospitals being all overcrowded. The Paris *Assistance Publique* have set up temporary buildings and ambulance tents in the open spaces belonging to the Paris hospitals. The epidemic is so general that trade is injured; butchers and bakers in a pecuniary sense suffer considerably; entire loss of appetite habitually attends an attack of *grippe*, but those not attacked complain of want of appetite. Paris has seldom witnessed such a sad Christmas season; gaiety seems to have passed away from Paris life for a time; the season of *étrennes* is one of illness and convalescence—some recovering, others seized.

Our Vienna correspondent writes: A third part of the whole population of Vienna was, and is, suffering from influenza. In the majority of cases the disease had the nervous and catarrhal character; the gastric symptoms had been observed in a relatively small numbers of cases. In the vast majority of cases the epidemic ran a rapid and mild course; but, on the other hand, I have full authority to state that the influenza was the immediate cause

of death in some patients in the General Hospital who were suffering from various conditions of the lungs, such as bronchitis, pleurisy, catarrhal pneumonia, etc. In some cases the influenza itself was the cause of the development of catarrhal pneumonia with a fatal issue. In general, the influenza had a deleterious influence on those patients who had already been weakened by other ailments. In one case in the General Hospital, influenza became complicated with encephalitis, and led to a fatal issue, as was proved by the *post-mortem* examination. The rumour that the epidemic had also given origin to typhoid fever is false. Great embarrassment has been produced by influenza in the obstetrical departments of the General Hospital, as the commencement of real puerperal fever can frequently hardly be distinguished from the prevailing epidemic. The duration of the affection is very short, from 24 to 36 hours, but relapses are the rule, and the affection then lasts 8 and 10 days, and even longer.

Besides the principal types of the affection there are some of peculiar character. In my own case nausea was the most distressing feature of the complaint. I fell ill quite suddenly, with symptoms of fever and prostration and a sense of weariness in all the limbs; I had a temperature of 40° C., and severe headache. Owing to the pyrexia I had also delirium, which made those attending me fear that the disease was typhoid fever. The illness came to an end in twenty-four hours, when I felt only weary and prostrate; but in a few days relapse occurred; the symptoms were, however, less severe than in the first attack. Antipyrin, brandy, and the application to the head of cold compresses of vinegar and water gave some relief.

Last week the number of applications for admission to the hospitals on account of influenza was exceedingly great. For many years the hospitals have not been so crowded as they are at present. On Sunday, December 22nd, about 70 men and 40 women, suffering from influenza, applied for admission into the General Hospital; out of these only 50 could be admitted, and the rest had to be sent away for want of beds. At ordinary times from 30 to 40 persons are at most admitted into the General Hospital on Sundays. The same proportion prevailed in the other Viennese hospitals. Under these circumstances extraordinary measures had to be resorted to, and at the instance of the director of the General Hospital, Professor Charles Böhm, and the Statthaltereirath, Dr. v. Karajau, as well as the directors of the two clinics of internal medicine, Professors Nothnagel and Kahler, the so-called clinical "Reservezimmer" (reserve rooms) were placed at the disposal of the patients. On the evening of the same day all the clinics and wards for internal medicine were overcrowded. For urgent cases an affiliated branch of the General Hospital was placed at the disposal of the patients suffering from the epidemic. This institution, which is situated at Währing, a suburb of Vienna, is a small hospital, and contains only 110 beds; out of these 70 were occupied on the same day. The Wieden and Rudolphstiftung hospitals, which were also overcrowded, had the patients transported into the Kaiser Franz Joseph Spital, which, on other occasions, is reserved for cases of small-pox, etc. Should these measures prove insufficient, emergency hospitals will have to be erected.

The epidemic has been very severe among the tramcar and post-office *employés;* among the latter, those whose work exposed them much to the weather suffered most.

Among the pupils and teachers in the public schools influenza is so prevalent that the Christmas holidays have been prolonged. In the Imperial and Royal Opera, the performances had to be very frequently changed, owing to the sudden illness of the singers. A considerable increase of the epidemic has taken place among the troops of the Vienna garrison, in the 21st Jägerbataillon. Almost all the officers and a great part of the troops have suffered from the disease; and the same is true of several other barracks in Vienna. The druggists are doing an enormous trade in antipyrin, quinine, phenacetin, salicyl, etc. Medical men have frequently to make from forty to fifty visits a day. The Christmas holidays and the New Year's Eve (*Sylvesterabend*), which is usually one of the merriest evenings in Vienna, have been comparatively melancholy. Professor Nothnagel had the opportunity of making clinical observations of influenza on himself.

The epidemic seems to have reached its highest point at Vienna, but no exact statistics are yet forthcoming.

Numerous cases of influenza are announced from Lemberg, Cracow, Buda-Pesth, Temesvar, Klausenburg, etc.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 15th day of January next, at 2 o'clock in the afternoon.

December 26th, 1889. FRANCIS FOWKE, *General Secretary.*

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on January 15th, April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, December 25th, March 27th, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

GLASGOW AND WEST OF SCOTLAND BRANCH.—This Branch will meet on January 9th, 1890, at 4.30 P.M., in the Faculty Hall, 242, St. Vincent Street, Glasgow, to discuss the subjects of the abuse of medical charities and Dr. Rentoul's proposed Public Medical Service. The annual general meeting of the Branch will take place on January 23rd; but of this further intimation will be given.—A. NAPIER, Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting of the session will be held on Thursday, January 16th, 1890, at the Hackney Town Hall, at 8.30 P.M. Dr. Brodie Sewell, late President of the Branch, will preside. The evening will be devoted to the reading and discussion of papers, not exceeding ten minutes in length, by members of the District. Members proposing to read papers are requested to communicate as soon as possible with the Honorary Secretary, J. W. HUNT, 101, Queen's Road, Dalston, N.E.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, January 31st, at 3.15 P.M., in the Radcliffe Infirmary. Notice of papers to be read and cases shown, etc., should be sent to W. LEWIS MORGAN, Honorary Secretary, 42, Broad Street, Oxford, on or before January 17th.

WE regret to record the death of Dr. Alexander J. Struthers, M.B.Aberd. and C.M., Surgeon, Army Medical Staff, and son of Professor Struthers, which occurred at Aldershot on Saturday, December 28th. His death was due to uræmic poisoning, and not, as stated in some papers, to an overdose of morphine.

MICROBIOLOGY IN BRAZIL.—The Medical Faculty of the University of Rio de Janeiro has recently reorganised its laboratory of experimental physiology, so as to bring it up to the level of modern scientific requirements. It is intended that the laboratory shall also serve for microbiological research, and for the preparation of anthrax virus, etc., for inoculation. The laboratory will be under the direction of Dr. Lacerda.

SPECIAL CORRESPONDENCE.

PARIS.

Tincture of Iodine.—Vomiting during Pregnancy.—The Significance of Urobilinuria.—Water and Dust Vehicles of Contagion —General News.

M. François Cartier, in his hospital practice, has tested the action of tincture of iodine administered internally. In 19 cases of vomiting, 11 of the patients (6 men and 5 women) were tuberculous. At an early stage of the disease iodine gave good results. In the case of 3 patients at the second and third periods, vomiting ceased from the moment it was administered. In 5 cases of advanced tuberculosis with cavities, the vomitings continued, but were less frequent. They ceased during 4 to 6 days, and reappeared with aggravated fits of coughing. In other cases of advanced tuberculosis the patients complained of nausea, but did not vomit. Tincture of iodine appears to be especially efficacious in cases of vomiting connected with alcoholic gastritis, simple ulcer, pregnancy, and chlorosis. It might be of service in the vomiting which sometimes accompanies the convalescent period of typhoid fever. M. Cartier concludes that iodine tincture is especially useful in cases of vomiting in patients affected with torpid and distinctly scrofulous tuberculosis. In other cases he considers that it may be useful when other remedies, milk diet, cocaine, opium, ether, etc., have proved inefficacious.

M. Guéniot, chief surgeon at the Maternité Hospital, in his interesting thesis on the etiology and treatment of vomiting during pregnancy, discusses at length the method of employing obstetrical intervention or provoking abortion. Dubois, who divides this period of vomiting into three stages—the wasting, the febrile, and the syncopal—considers that in the first instance medical means alone should be adopted, and, in the second, obstetrical intervention. In the third instance he considers the case a hopeless one. MM. Tarnier and Pinard, on the contrary, have saved the lives of women by provoking abortion at the third period. M. Guéniot considers that the uterus, the nervous system, and the stomach, should be acted on. In the case of the uterus it should be ascertained that it is not misplaced, that there is no tumour, and that the cervix is not ulcerated or inflamed. In the first case the pelvis should be elevated, or Gariel's pessary employed. Should a tumour exist, an operation may be necessary, and, in case of ulceration, cauterisation with red hot iron should be employed. When a hyperæsthetic state of the genital passages can be detected, baths, emollients, and vaginal suppositories are strongly recommended. Subacute inflammation of the appendices or periuterine tissue should be treated with belladonna ointment and poultices. In many cases anomalous rigidity of the uterine tissue is only revealed by the effects of artificial dilatation of the cervix, or those caused by frictions of belladonna; therefore M. Guéniot considers it advisable to resort to methodical dilatation of the cervix, even when the uterus appears normal. This should be effected with the finger, but in the case of a first delivery an aseptic *tige de laminaire* may be first applied. It is usually sufficient to enlarge the external os and the cervix, but the internal os sometimes requires dilatation. The operation should be effected gradually in four or five minutes. It is preferable to repeat it during several days rather than to employ violence. A quarter of an injection, with chloral, or the application of cocaine to the cervix, has a beneficial anæsthetic action. In the case of reflex transmission M. Guéniot recommends sleep, which may be produced by injections of bromide (1 to 2 grains) combined with chloral. Great attention should be paid to the diet. Solid food should be completely dispensed with. Milk (diluted), light broth, beef-tea, should be given in small quantities (a teaspoonful every half-hour or hour). Vals or Vichy alkaline water in small quantities should be the only drink given. Employed as a gargle and a drink these waters frequently modify the symptoms. M. Guéniot considers it a great error to fear the wasting effects of a reduced diet. The principal indication is to cure the vomiting and restore the stomach, and this can only be done by observing a strict diet.

M. Hayem considers that urobilinuria, when habitual, persistent, and varying in degree, has a clear pathological significance, and is a valuable indication in forming an early diagnosis in diseases of the liver. He regards urobilin as the characteristic colouring matter of hepatic incompetency. He has observed urobilinuria in the following cases: 1. At the beginning of alcoholic cirrhosis. 2. In cardiac patients in whom the liver is not enlarged it may be an indication of incipient hepatic lesions. 3. In numerous acute affections when observed in alcoholic patients, such as typhoid fever. When a large proportion of urobilin is detected in this affection, reserve should be made with regard to the prognosis. 4. In newly delivered and nursing women. 5. In most forms of cachexia. Urobilin has a feeble colouring power, and is found in pale urine. The deep colouring of urine observed in certain affections (fever with perspiration, lassitude, overfatigue) is usually due to urochrome.

The transmission of typhoid fever by drinking water has again been discussed at the Société Médicale des Hôpitaux. M. Vaillard, Professor at the Val de Grâce Hospital, has gathered numerous proofs of the truth of this theory during the late typhoid epidemics in the barracks of Melun, Cherbourg, Mirande, etc. He allows that it is extremely difficult to identify the typhoid bacillus in the water, and in his researches has always been careful to compare the cultivations exactly with Eberth's bacillus, extracted from the spleen of a typhoid patient. But the prophylactic measures for typhoid fever are incomplete, if only taken with regard to water. The typhoid bacillus may lodge itself in the dust on the floor, and between the boards of rooms occupied by typhoid patients, as was recently the case in an epidemic in a Russian barracks. Typhoid fever, like tuberculosis, is transmitted by dust. M. Richard cited an instance of the transmission of typhoid fever by dust. In a barracks in Hanover, in which perfectly pure water was used, typhoid fever appeared during three or four consecutive years. It was only after all the clothing of the troops was disinfected that the epidemic disappeared.

Two cases of glanders are reported from Lucinges, a village in the Haute Savoie. The Consulting Committee of Hygiene of France has suggested that a list of those contagious diseases which come under the head of Article 1 of the law of July 21st, 1881, should be published in every community, and that those affections which may be transmitted from animals to human beings should be clearly specified in the above publications. This measure would also involve the obligation of making public the existence of such an affection immediately a case appeared.

VIENNA.

Inflammation of Cowper's Glands in Measles.—Rubidium-ammonium Bromide in Epilepsy.—Actinomycosis Hominis.—Respiratory Cerebral Centre and its Relation to the Larynx.—Massage in Intermittent Fever.

At a recent meeting of the Royal Society of Physicians of Buda-Pesth Dr. S. Róna related a case of inflammation of Cowper's glands during measles. Such a complication has not hitherto been recorded in connection with an acute exanthem. The patient, aged 16, who was admitted into the hospital with severe measles, became aware, on the second day after his admission, of a swelling in the perineal region, which in three days assumed the size of a hazel nut. Examination by the rectum revealed the presence of a swelling of the right Cowper's gland. The application of ice and an ointment of iodide of potassium effected a cure.

In a recent number of the *Gyógyászat* Dr. Rottenbiller gives some particulars as to the effect of rubidium-ammonium bromide. He tried it on five patients suffering from epilepsy whom he had had under observation for a long time. In the first stage nothing was given; in the second the patients, on an average, received 3 grammes of the drug in the day; in the third 6 grammes; in the fourth none; finally, in the fifth stage, 6 grammes of bromide of potassium were exhibited in the day. The following are his conclusions: 1. Rubidium-ammonium-bromide is an efficient anti-epileptic remedy. 2. In doses of from 2 to 3 grammes it has no great effect. 3. Six grammes a day act more energetically than equal doses of potassium bromide.

At a recent meeting of the Royal Society of Physicians of Buda-Pesth Dr. Josef Lumniczer brought forward a case of actinomycosis in man. The patient, aged 77, had suffered from cough for two years, and had vomited blood for several years. In June, 1889, he became affected with a painful swelling in the right axillary region, which was opened by his medical attendant, giving exit to serous pus. In August several small abscesses formed over the sternum, which, in three or four days, burst spontaneously, the resulting opening showing no tendency to heal. When admitted into the surgical clinic on October 10th several

thick infiltrations and numerous ulcers with sharp edges were noted over the chest. The sound penetrated as far as the sternal bone, the cartilages of the ribs, and into the anterior mediastinum; it could be introduced into a cavity 10 centimètres long, extending towards the axilla. A similar cavity, 8 centimètres long, was found over the fourth rib. The ulcers exuded serous pus, in which very small bodies were visible with the naked eye. On microscopical examination they proved to be actinomycetes. The patient had no fever, but he coughed much, and actinomycetes were found in the sputum.

Dr. Grossmann, of Vienna, recently read a paper on the Respiratory Centre and its relation to the Larynx, before the Imperial Royal Society of Physicians. The lecturer discussed two questions. The first was whether there existed one sole centre for respiration, as had been stated by Flourens; or whether there were several such centres. Experiments were made on rabbits. When sections were made upwards from the level of the calamus scriptorius as far as the middle cerebral ventricle, respiration entirely ceased, and the life of the animal could not be saved even by artificial respiration. If, however, the section was made two millimètres above the middle cerebral ventricle, the respiratory movements of the chest and larynx continued. Transverse sections between the third and fifth cervical vertebræ made thoracic respiration cease, but laryngeal and nasal respiration still continued. On transverse sections between the fifth and sixth cervical vertebræ, nasal, laryngeal, and thoracic respiration remained intact. If—by two sections—the nucleus of the facial nerve and that of the phrenic were separated from the centre of the vagus, no impulses for respiration were conveyed. It became evident from these experiments that the isolated nucleus of the vagus could supply normal respiration as little as the isolated nucleus of the facial nerve and that of the phrenic nerve could do so. Two centres had to stand in connection in order to keep up rhythmic respiration. A lesion of the nucleus of the vagus was more dangerous than a lesion of another respiratory centre only for the reason that the connection between the centre of the facial nerve and that of the phrenic nerve was interrupted. The second question was as to the determination of the territory for the roots of the laryngeal nerves. The research showed that the nerves supplying the larynx derived their origin from the medulla oblongata in three fasciculi; experiments by sections and by irritation proved that each laryngeal muscle had its own isolated nerve fasciculus. In this way Dr. Grossmann succeeded in producing abductor and adductor movements as well as tension of the vocal cords by isolated irritation. The upper and middle fasciculi contain all the nerves which supply the larynx, whereas the lower fasciculus supplied only the muscles of the nape of the neck. The superior and middle laryngeal nerves derive their origin from the upper fasciculus, while the inferior comes from the middle fasciculus.

In the *Internationale klinische Rundschau*, Dr. Alois Fénykövy states that he had the opportunity of observing an epidemic of intermittent fever among some squadrons of the Austrian army. About one thousand soldiers were treated for intermittent fever each year. One of these cases was that of a soldier in whom neither the cold nor the hot stage was observed. He only suffered from severe vomiting, which quinine alone could check. Another case was characterised by severe sciatica. On one occasion, when no quinine could be procured, Dr. Fénykövy ordered these patients to be rubbed on the back with unguentum simplex "ut aliquid fiat." This was done twice a day. At the next morning's visit he found that the attack of fever which had regularly occurred had not made its appearance. The rubbing was then carried out on seventy patients suffering from intermittent fever, only unguentum simplex without the slightest addition of quinine being used. In sixty cases of quotidian fever, the attack did not occur any more, but in ten "tertian" cases the massage had no effect. The same treatment was afterwards tried in more than a hundred cases, and in the vast majority the result was satisfactory.

RIVIERA.

Prophylaxis of Tuberculosis.—Sanitation.—Home for Invalid Ladies.—English Club.

THE prophylaxis of tuberculosis has been engaging the attention of the profession of San Remo, the initiative having been taken by the German physicians, who are represented by eight or nine members in that town. Several meetings have been held and a committee formed, a president of each nationality, English, German, and Italian, being elected. The Italians are keenly alive to the importance of the subject, and the local profession is well represented at all the meetings. A code of regulations has been drawn up and forwarded to all the hotel and *pension* keepers, and to the proprietors of all villas that are let for the season to visitors. This has, on the whole, been very well received and acceded to, exception only being taken by some of the more fashionable English hotels to the recommendation to place spittoons in the public saloons, a superfluity in their case, but a necessity in the smaller inferior German hotels and *pensions*. The complete disinfection of rooms, bedding, carpets, etc., inhabited by tuberculous patients, with other recommendations, has been cheerfully agreed to, and will be carried out.

It is unquestionable that there have been some grounds for the accusation of indifference to proper sanitary precautions in this and other things recently adduced, both in the German and English journals, the explanation probably being that, owing to the extraordinarily good climatic conditions of this favoured coast line, such indifference may be indulged in with impunity for a length of time. As regards typhoid and drainage poison generally, San Remo has enjoyed a wonderful immunity up to the present time, this being due probably to the absence of any so-called *system* of drainage at the east and west end bays of the town, the parts inhabited by the foreigners; and in the vigilance of the medical men, with the co-operation of the hotel landlords, in isolating the very occasional imported cases, with the disinfection of all excreta. The thoroughness of these measures, with the very perfect water-supply which San Remo possesses, will perhaps warrant the assertion which has been made that endemic typhoid is unknown there, certainly amongst the visitors.

The Home for Invalid Ladies of Limited Means continues to prosper. Some structural alterations, by means of which three additional rooms have been secured, which were suggested by the Empress Frederick, the patroness of the home, during her stay here, have been carried out during the summer, and the arrangements are admirable in all respects. There are still two or three vacancies for patients this season, which the profession in England may avail themselves of. The charge is twenty-five shillings a week, inclusive of everything, but the social position and limited means of applicants must be guaranteed.

An English club was inaugurated at San Remo by a successful public luncheon, about forty being present, on December 14th, the chair being taken by Dr. Freeman. It is established on a sound basis, and will probably prove a great attraction to the place, the want of one having been long felt.

EGYPT.

Drainage of Cairo.—Hospitals in Upper Egypt: Necessity of European Supervision.—Proposed Antirabic Institution.—The Season.

There seems some chance at last that an attempt will soon be made to improve the drainage of Cairo. Mr. Baldwin Latham, who has been here for some weeks, is preparing a comprehensive plan for removing all night-soil on to the desert, where it will be disposed of by means of irrigation. There are no engineering difficulties in the way, the only drawback being the cost. It is proposed to meet this by a loan on the security of a house-cess, which shall not be seizable for the purpose of paying interest on the National Debt. As the law at present stands, all taxes are hypothecated to the bondholders, but it is hoped that the political agents of the various Powers may be induced to consent to an exception being made in this case. Mr. Latham estimates the length of the sewers to be laid down at 240 miles, and calculates that the total expenditure required will amount to £1 per head of the population, that is to say, about half a million sterling. The city is to be divided into about twenty-five districts, each of which will be provided with a subterranean automatic pumping apparatus, into which the sewage will gravitate from the houses. The motive force will be generated in a central station, and transmitted to the districts by hydraulic power, the water being afterwards made use of for flushing purposes. If the above figures are correct, and the works can be carried out, Cairo will be a very cheaply drained town.

Sir Evelyn Baring has just returned from a tour in Upper Egypt

in the course of which he visited and inspected all the Government hospitals and dispensaries. The British Consul-General is satisfied that on the whole progress has been made, but until properly contrived buildings can be erected it is, of course, quite out of the question to expect anything approaching to perfection. At Assouan the hospital is administered by the military authorities, and is in every respect superior to the civil hospitals. This is not to be wondered at, for it is a new building on a magnificent site, and the public purse-strings are always much more readily relaxed on military requisition than when the demand is made by the civil department. Another reason for the superiority of the Assouan establishment is to be found in the fact that it enjoys constant European supervision. The Egyptian doctor is unfortunately not yet sufficiently alive to the virtues of cleanliness, nor till a new system of instruction arises in the school of medicine does there appear to be any likelihood of his becoming so when left to his own devices. Under an energetic Englishman he works well, and good results are obtained; but abandoned to himself he speedily relapses, and having no means of keeping himself *au courant* with medical science, it is really no fault of his that he should rapidly lose any little knowledge he acquired during his career as a student.

There have been several cases of hydrophobia lately in Egypt, so, notwithstanding the fact that 15,000 ownerless dogs have been destroyed in Cairo alone by the police, the public is considerably exercised, and efforts are being made to induce Government to establish an anti-rabic institution in Cairo. There are at present in Paris several Egytian medical students, and it is suggested that one of these should be told off to undergo a course of training with M. Pasteur, with a view to the introduction of his system into the country. This seems reasonable, and it is hoped that no economical reasons may be allowed to stand in the way.

The weather is delightful now, clear and cool, in fact almost too cold. Numberless visitors are arriving daily, and the season promises to be most successful. A first class hotel, with accommodation for sixty or seventy people, has been opened at the Pyramids. There is a resident medical man and an apothecary, and the enterprising proprietor has started a four-horse coach service for the convenience of his patrons.

LIVERPOOL.

Case of Word-Blindness.—Hydrophobia and Pasteurism.—Scarlatina in the Police-Courts.—Hospital Appointments.

Dr. Glynn, senior physician to the Royal Infirmary, has recently had a case of mind-blindness under his care. The patient, a man of middle age, fell from a height and sustained a fracture of the skull in the occipital region. Soon after the accident his visual perception centres were involved, to the extent that he was unable to distinguish the characters and uses of the objects about him. He was in no way paralysed, but he had lost all skill with his tools, and had to a great extent forgotten their names and uses. On trying to sew a piece of leather—part of his usual occupation—he went hopelessly wrong, did not see that he was blundering, and refused to be put right. When he came under Dr. Glynn's care the mind-blindness was confined to the inability to recognise written and printed words, and to some extent single letters. Other objects and persons he recognised without difficulty. He had no motor aphasia nor word-deafness, and he was able to write quite readily, but after writing his name he was immediately unable to read it. If, however, his forefinger was made to trace the letters he was able to name the word, and he sometimes succeeded in reading by forming the letters in the air. The patient also had right hemianopia in the right eye, with concentric constriction of the field of vision, and in the left eye vision was restricted to the region around the yellow spot. There was a depression of bone over the occipital lobes, which was raised by Mr. Reginald Harrison. The patient left the hospital soon after the operation, before any careful observations of its results could be made; but it was definitely ascertained that the field of vision was increased. Dr. Glynn is of opinion that the lesion causing mind-blindness was in this and similar cases situated in the occipital lobes, disease of which also causes homonymous hemianopia. He thinks that cases in which mind-blindness had been attributed solely to lesion of the angular gyrus may be reconciled with this view on the supposition either that a coexistent lesion of the occipital lobe has been overlooked, or that the lesion of the angular gyrus was sufficiently deep to implicate the fibres proceeding from the occipital lobe. On any supposition it is difficult to explain in the present case the almost total amblyopia of the left eye, unless we suppose in the right hemisphere the presence of a lesion causing crossed amblyopia, and in the left one causing homonymous hemianopia. This supposition would afford a simple explanation of the case if the patient had been left-handed, but such was not the case.

Dr. Barron, the Professor of Pathology in University College, has devoted much attention to the pathology and treatment of rabies, and communicated an analysis of his experiences of Pasteurism at a recent meeting of the Medical Institution. He has known of twenty cases of bites by rabid dogs in a little over two years. Four children were bitten at Lancaster and were all treated by M. Pasteur. One died of hydrophobia within ten days of their return home, but the rest remain well. A lady living at Aigburth and her housemaid were, in January, 1888, bitten by a dog which was subsequently proved by inoculation experiments to have been rabid. They were both treated by M. Pasteur, and both remained well. In the following July the lady was again bitten by a dog proved to be rabid; but Dr. Barron, judging that the protection acquired by inoculation was not likely to have passed away, did not advise any further treatment, and no bad results followed. In the latter part of January, 1889, nine children and a man were bitten by a rabid dog at St. Helens. They all went to Paris and underwent the intensive treatment; and all remain well. In the end of June, 1889, a little girl was bitten by a rabid dog at Runcorn. Two days later she went to Paris in charge of one of the Dover Street nurses, and she now remains well six months after the bite. That this dog was rabid was placed beyond all doubt by the fact that of the three rabbits inoculated from its medulla all died of paralytic rabies.

While a charge of a somewhat trivial nature was being heard in the City Police Court recently one of the persons charged stated that in order to attend the court that morning she had been forced to leave at home a young child of hers who was dying of scarlet fever. Another of her children was also ill in the house with the same complaint, and so was the baby she had at present in her arms. The woman fainted immediately after making this statement, and the magistrate, Mr. Edward Whitley, M.P., dismissed the police charges and ordered the constable to report the matter immediately to the medical officer of health.

The appointment of Mr. Robert Jones to the Royal Southern Hospital creates a vacancy at the Stanley Hospital for an honorary surgeon. Mr. Arthur H. Wilson, who has for some years held the office of assistant surgeon to the Stanley Hospital, has been elected full surgeon to that institution. Dr. Percy Marsh has been appointed physician to the Infirmary for Children.

SHEFFIELD.

The Continuance of Lead-Poisoning by the Water-Supply.—The Muzzling Order.—"Sequah."

The effect of the drinking water on the piping, and the causation of lead-poisoning thereby in certain districts of the town, is again exciting a good deal of attention. The waterworks have now passed into the hands of the Corporation, and the Water Committee appear no more easy to move than was the old company. The local papers of both political parties are engaged in a crusade on the subject, and in support of their "call to action" they publish the opinions of medical men and particulars as to the number and localities in which the cases have occurred. Professional opinion is fairly agreed as to the prevalence of lead-poisoning, which can be attributed to the water supply. There is evidence of this action of the water having been recognised many years ago. Dr. Sorby, F.R.S., in a recent letter to a local paper, mentions this fact, and states also that some time later, when fresh soil was exposed for new works, the water became harder, and lead was present in less quantity than before. He thinks the probable subsequent increases may be due to the soil having been exhausted of the soluble salts.

The Board of Agriculture have issued an order enforcing the muzzling of dogs in the whole of the West Riding, including the boroughs. This of course overrules the decision of the Town Council to make no order on the question.

"Sequah," the itinerant practitioner to whom reference was made in my last letter, has bidden farewell to Sheffield. His reception by the hard-headed Yorkshiremen has not been to his taste. At one of his last meetings he said that he should not

leave the town with regret. In no town had he been so insulted, so abused, gibed at, or his actions so misconstrued and misrepresented as in Sheffield. It is the more, therefore, to be regretted that the clerical support has not been disavowed. It is curious that whilst Herring and "his baths," during the small-pox epidemic, received the support of a member of the School Board, "Sequah" is now able to state that he received countenance from another prominent member of the same Board. So much for enlightenment in a nineteenth century School Board! At one meeting "Sequah" said that a surgeon at Middlesbrough was so impressed with the oil that he had thrown up his practice, entered the firm of Sequah and Co., Limited, and was selling the Oil and Prairie Flower at a rapid rate in Kilmarnock. The statement, if verified, seems to deserve attention.

GLASGOW.

Clinical Instruction in Fevers.—The Sale of Unsound Meat.—Glasgow University Students' Union Bazaar.

A DISCUSSION on clinical instruction in fevers has been going forward in the columns of the *Glasgow Herald* between Professor W. T. Gairdner, of the University, and Dr. D. C. McVail. A short time since attention was called in the JOURNAL to the difficulty that had arisen in regard to the teaching of this important subject. Dr. Allan, of Belvidere Fever Hospital, has for many years given clinical demonstrations at the hospital. But the great distance between the University and the hospital rendered it somewhat difficult to get the main body of students to attend regularly. During the past few years Professor Gairdner offered Dr. Allan the use of his class-room at the University; and there Dr. Allan has lectured with much acceptance to the students, demonstrations being still given at the hospital. When in August the appointments were made to the new St. Mungo's College, Dr. Allan's name appeared on the list as lecturer on fevers. Some time afterwards Dr. Allan withdrew his name, and further intimated that he had determined to desist altogether from continuing his instruction on epidemic disease. It was insinuated that this attitude of Dr. Allan's was due to pressure, presumably by the University authorities, and owing to jealousy of the new College. Hence the correspondence. Professor Gairdner has, on his own part and on behalf of the University authorities, frankly and unreservedly faced this charge, and has categorically denied the existence of any jealousy whatever on the part of the University, or any effort to monopolise the services of Dr. Allan, and has stated that any effort of his has been limited to indicating his resistance to anything which would deprive the University students of the instruction in epidemic disease which was so necessary an element of their training. Dr. McVail, on his part, has declared that no intention existed on the part of the St. Mungo College governors to appropriate in any exclusive sense Dr. Allan's services as a teacher of epidemic disease; but Dr. Allan's course of instruction connected with St. Mungo's College was to be given at the Fever Hospital. To it all students were to be welcome, and no assurance has been given that, while the hospital instruction was to be open to all, the intention was not that Dr. Allan should cease his course at the University. It is evidently this assurance Professor Gairdner seeks, and, in the interests of his students, seems justified in seeking; for, while technically Dr. Allan's services could not be said to be monopolised by St. Mungo's College, so long as the hospital instruction was equally open to University students, yet the long distance between the University and the hospital would make them practically exclusive, unless the course at the University were continued. There can be no doubt that Dr. Gairdner was not only justified in seeing that the interests of the University students were not sacrificed, but bound to do so. A practical suggestion, made by Dr. McVail, that each of the medical schools should appoint two delegates to interview the Hospital Committee of the Town Council and Dr. Allan, in order to arrive at a settlement satisfactory to all parties, has been accepted by Dr. Gairdner, and ought to lead to instruction on epidemic disease being established on a permanently useful basis.

The Glasgow authorities are pursuing with energy their effort to prevent completely the sale of unsound meat for food, and they are meeting with considerable difficulty in the task. Carcasses ostensibly sold to be boiled down for manufacturing purposes may yet find their way into the market, unless the sanitary authorities, having condemned the carcasses, are able to take some guarantee that it will be impossible to sell them for food purposes. A satisfactory guarantee is obtained if the carcasses are immersed in some chemical solution—picric acid, for example—before passing beyond the reach of the authorities. A recent case shows the difficulties that are encountered. Of a consignment of live cattle from America a number had to be slaughtered on board ship owing to injuries, etc., during the voyage. The sanitary inspector found fourteen of the carcasses in the reception lairs at the wharf in process of being skinned and dressed as if for sale. He detained them, and they were examined by Dr. Russell and veterinary experts, who pronounced them to be in an advanced state of decomposition, and quite unfit for food. After being condemned, one of the carcasses was cut up by the owner and exposed for sale as human food, though it also showed patches of gangrene. The owner refused to permit the sanitary inspector to have the carcasses chemically treated, and, while the discussion was still going on, sold them for manurial and soap manufacturing purposes. The case was therefore brought before the sheriff on a petition that he would order the destruction of the carcasses, or such disposal of them as would render it impossible for them to be used as food. The sheriff had not the slightest hesitation in granting such an order. He held that once the authorities condemned the carcasses, they were entitled to hold them till they had a guarantee that they would not be sold for human food. Even if the owner offered to sell them for purposes other than those of food, the authorities were not entitled to let them go trusting to the honesty of the man who bought them that he would use them only for the alleged purpose. "I hold," he says in his judgment, "that, under the Act, measures should be taken to prevent the possibility of the carcasses being disposed of for human food, and that it does not matter how respectable the purchaser is, the owner has no right at his own hand to take carcasses that have been condemned out of the hands of the authorities and sell them to whom he will. It is no answer to say, 'You can come down on the purchaser after the sale.' The evil may be done by that time, and it is in order to prevent the possibility of evil that a statute like this has been passed." There is no doubt the sheriff's decision is the only one compatible with the public safety; and it will greatly strengthen the hands of the sanitary authorities in their efforts to prevent unsound meat being foisted on the public.

The total proceeds of the four days' sale at the Glasgow University Students' Union Bazaar, opened in the Bute Hall of the University on December 18th by the Chancellor, the Right Hon. the Earl of Stair, and Vice-Chancellor Caird, along with the proceeds of an extra day, have been £13,716. When all expenses are paid, £12,000 in round numbers should be left for the Students' Union and the gymnasium and athletic club. This is £2,000 in excess of the sum asked for. The money thus generously provided will furnish the Students' Union buildings and provide a sum for their annual maintenance, will materially assist in securing the efficiency of the gymnasium, and will probably aid other deserving University schemes. We understand that the Volunteer Medical Staff Corps, formed in connection with the University, require only uniform and equipment to enable them to put forward a conclusive claim for Government recognition, and their claim to a portion of any surplus can hardly be overlooked.

CORRESPONDENCE.

THE EPIDEMIC IN RUSSIA.

SIR,—From my own experience of the epidemic of influenza in Russia, I can add little to what I said in my previous letter, as that was written on the eve of leaving for England. For much of the following I am indebted to Dr. Butz, surgeon to the Mary Magdelene Hospital in St. Petersburg.

As regards the course of the present epidemic, it seems to have come across, if not originated in, Siberia, and thus to have followed, as on so many previous occasions, a westerly course. It was first noted in Tomsk (Siberia) on October 15th; on October 31st it appeared in the Caucasus, and on the 1st November in Viatka. About this last date it was reported from Moscow, Riga, Vilna, Tver, Pskov, Sebastopol, Kaluga, and other places. In St. Petersburg the disease appeared as an epidemic in the last days of October. Dr. Ssokolov, in a paper read before the Society of Russian Physicians, in St. Petersburg, said that there were few cases about the middle of October, and I have little doubt that a catarrhal attack, from which I suffered about that time, was an early case o

influenza. The first cases occurred in the Vassily Ostrov, the largest of those "islands" on the south bank of the Neva, on which a great part of the city is built. The disease spread rapidly, the patients soon numbering thousands, and the condition of affairs was soon reached of which my earlier letter gave a brief outline. Dr. Butz reckons that the numbers attacked were over, rather than under, 650,000, or more than two-thirds of the population. He adds: "Of all the persons I know hardly one has escaped. In the Mary Magdalene Hospital the whole medical staff (myself excepted, luckily), has had it in a more or less severe form. Several patients in the surgical wards, who had undergone an operation, and were doing well, suddenly fell ill (high fever, headache, etc.), without any tangible cause. Many have been laid up two to four times. All ages and all classes have caught the infection.....The period of incubation seemed to be about two days; stadium prodromale is short, often only a few hours. Three forms have been observed, namely (1) nervous form, with neuralgia and rheumatic pains; (2) with bronchitis, laryngitis, rhinitis, conjunctivitis, and fever—these symptoms last even when the fever falls; (3) gastric form, with indigestion, vomiting, lasts one or two days. There is sometimes herpes labialis or nasalis, erythema, urticaria, very rarely meningitis or pneumonia; the last complication often causes death. There have been a great many cases where the symptoms were so slight as to cause no inconvenience whatever. Some recover very quickly, and are able to go about their business as soon as the temperature becomes normal; others take a long time, and are very unsettled and low-spirited. There have been cases of relapse after five to seven days of seemingly good health. Quinine, antipyrin, antifebrin, natrium, salicylicum, etc., have all done good.....A great many cases of pneumonia have been reported. Now the epidemic is rapidly decreasing (from want of numbers, I suppose)."

Dr. Ssokolov, in his paper quoted before, gives the following interesting details of 134 cases admitted before November 14th to the Alexander barrack hospital. Of these 26 were admitted in October, 108 in November. Their ages were as follow: 21 were from 11 to 15 years of age; 33 from 16 to 20; 57 from 21 to 35; 8 from 36 to 45; 5 over 45. There were 98 males and 36 females. Most of them fell ill suddenly. After one or more fits of shivering, high fever (39° to 40° C.) set in, and headache and the other well-known symptoms of influenza, particularly the low spirits and great prostration. In some there was severe hyperæmia and œdema of the conjunctivæ. The pulse was small and quickened. In some cases the liver and spleen were enlarged, the region of the kidneys tender, the quantity of urine diminished, often traces of albumen in the urine; generally constipation, seldom diarrhœa. Temperature fell on the third, fourth, or fifth day after much sweating. On an average, the illness lasted eight days and a half; two of the patients died, both suffered from chronic disease, one of the heart, the other of the kidneys; *grippe* and acute broncho-pneumonia caused or quickened the end. At the *post-mortem* examination of fatal cases there have been found bronchitis fibrinosa purulenta, gastritis acuta, pneumonia catarrhalis acuta, often duplex.

Dr. Vassilieff, in the same Society of Russian Physicians, summed up as follows: 1. Influenza is a disease *sui generis*, infectious, caused by a microbe yet unknown. 2. It is often epidemic, increases rapidly, spreads widely. 3. Epidemics have been at all seasons. 4. They often appeared at the same time in different parts of the globe. 5. Their duration varies according to density of population. 6. It is not known what starts the epidemic or what causes it to come to an end. 7. Some say it is not contagious, as it often remains local.

The weather in St. Petersburg previous to the present outbreak had been variable. Last winter was a decidedly severe one; the change to summer was rapid, in May and June the weather was very warm and fine. The next three months were damp and cool; October was wonderfully mild and open, but November was wet and raw, though mild for the time of year, the average temperature for the month ending November 15th being 1.6° above zero (instead of the usual temperature at this period, which is just 1.6° below zero, Réaumur). The mean height of the barometer for the same period was 761.3 millimètres. The wind was persistently from the west and south-west.—I am, etc.,

FRANK G. CLEMOW, M.B.

Earl's Court Square, S.W., December 24th.

P.S.—The dates in the above are all according to the Russian calendar, twelve days behind the English.

SIR,—The following suggestion as to the nature of influenza which has occurred to me may, perhaps, not be uninteresting to such of your readers as have opportunities for testing its correctness which I may not enjoy.

It will be remembered by the older generation of physicians that a great chemist, Dr. Prout, ascribed this disease to the inhalation of an irritant gas, remarking particularly, I believe, on the close analogy between the effects of seleniuretted hydrogen and the ordinary symptoms of influenza. If stated thus, his theory is open to a fatal objection—the diffusion of gases would, according to a well-known law, disperse the agent equally throughout the atmosphere. It is also contrary to the antecedent probability that, like all other epidemic diseases, influenza is caused by some living organism. May it not, however, be true that such bacterium or bacillus acts not directly, but by producing some gaseous substance, which is the immediate cause of the disease? The action of a gas seems far more in accordance with the way in which an epidemic of influenza spreads than that of any solid body, organic or inorganic. The well-known observations of Schönlein and others on the relation between the presence or absence of ozone in the air and this malady point in the same direction.

The absence of an incubation stage in many, if not in all, cases seems incompatible with supposing the virus to be a bacterium which has to develop its effects in the body, and suggests rather that the proximate cause of influenza is to be looked for in the product of some such agent in the atmosphere.—I am, etc.,

St. George's Retreat, December 24th. J. R. GASQUET.

SIR,—Having just returned from Paris, where I had the honour of meeting Dr. A. Herbert, I should like to mention one or two facts about the influenza epidemic which I learnt from him. The most important is with regard to the great tendency to relapse which characterises the disease, and which often produces an irregular form of broncho-pneumonia. Any exposure to cold after apparent recovery is very apt to produce this alarming complication. It will be well for English practitioners to keep this in mind if an outbreak of the disease occurs here, as seems only too probable. Dr. Herbert thinks that the number of fresh cases is now diminishing in Paris, but that they tend to be of more serious type than formerly. Fatal cases, however, are rare, in spite of the exaggerated rumours in the newspapers.—I am, etc.,

DAVID B. LEES, M.D., F.R.C.P.

Weymouth Street, W., December 30th.

ELECTROLYSIS IN URETHRAL STRICTURE.

SIR,—In the JOURNAL of December 21st is a letter from Mr. Swinford Edwards on the subject of electrolysis in urethral stricture, in which he criticises some of the statements which appeared in my paper on that subject. His remarks are mainly directed to the treatment of multiple strictures, and to my definition of the term "cure," and I will reply briefly to both of them. Had my friend Mr. Edwards been present at my paper he would have heard that I advocated that each stricture should be treated separately, and I further pointed out that inasmuch as some of the deep strictures were undoubtedly of a spasmodic character, as was first demonstrated, it was doubly necessary that the precaution of treating each stricture separately should be adopted, and with a view to emphasise this fact still further, I related an instance in which I had treated by electrolysis a stricture which proved to be spasmodic, and which, though actually aggravated by electrolysis, was at once cured by urethrotomy.

As to my definition of the term cure, I only use the term as signifying that there has been no recontraction, and that no instrument has been needed to dilate the passage. One of my cures is at present in St. Bartholomew's Hospital under my care for stone in the bladder; he underwent electrolysis four years ago, and his urethra now admits No. 10 English, though no dilatation has since been practised. Another case I know is well three-and-a-half years after electrolysis, who had previously had external urethrotomy performed without any permanent benefit.

I could produce many cases in which a resilient stricture has been rendered tolerant of dilatation, in which a gleet has been arrested, and other conditions have been much benefited by the treatment, but I do not term these cures, nor, I gather, does Mr. Edwards.

No one would emphasise or endorse more fully than I should Mr. Edwards's remarks on the need of patience. It is the key to the treatment.

I must not, however, take up your space further, but would refer those who are interested in the subject to my paper, which I hope shortly to publish *in extenso*.—I am, etc.,

Harley Street, W. W. BRUCE CLARKE.

THE HOUSING OF THE POOR.

SIR,—In reference to the comments in the JOURNAL of December 28th on the proposals of the London County Council for the amendment of Torrens's Acts, I would ask leave to point out that it is not the fact that the Council have made any suggestion that they should supersede the local sanitary authorities; all that they have suggested is that these authorities should be empowered under the Acts in question to acquire and clear small unhealthy areas, and, if their suggestions were adopted, it would mean that the vestries and district boards would have greatly increased and not diminished powers.

A member of the deputation that waited on the Home Secretary, and who explained that the Council had expressed no opinion on the point, indicated that the expense of effecting such clearances should be borne out of the metropolitan and not the local rates, and that for this reason the London County Council should be the local authority in connection with these Acts.

Seeing that Torrens's Acts, if amended in the direction proposed, would be largely used in substitution for Cross's Acts, there would be strong reason for relieving the vestries and district boards of the burden of expense involved and for casting it upon the general rate for the expenditure of which the Council is responsible; but, in any case, after what I have stated I think you will see that it is hardly fair to stigmatise the proposal of the Council as "involving the degradation of all local sanitary authorities, good or bad alike."—I am, etc.,

December 24th. A MEMBER OF THE COUNCIL AND ONE OF THE DEPUTATION.

*** It will be observed that our correspondent avoids reference to Lord Compton's "five points," the first of which clearly indicates the desire of his Committee to obtain power which would place all local authorities in a position inferior to that which they at present occupy. The second paragraph of our correspondent's letter seems to indicate the line of argument which no doubt will be adopted in introducing the clauses.

MASON TESTIMONIAL.

SIR,—The case of Mason *v.* Chevens, to which you referred in the JOURNAL of December 7th as "Libelling a Poor-law Medical Officer," is one in which the whole profession should feel indebted to Mr. Inglis Mason for undertaking, and especially the Poor-law medical officers, as he obtained for them a valuable legal decision with respect to their attendance on pauper cases.

Though Mr. Mason obtained a verdict against the newspaper which libelled his professional conduct, the damages given were only nominal, and he has incurred heavy expenses in the performance of what was really a public duty. Some of his medical friends have started a testimonial to reimburse part of his expenses. Anyone wishing to join may send subscriptions to Dr. C. E. Addison, Colchester, or to me.—I am, etc.,

J. SINCLAIR HOLDEN, M.D.,
President of the East Anglian Branch of the British Medical Association.

Sudbury, Suffolk, December 19th.

THE WESTERN MEDICAL SCHOOL, GLASGOW.

SIR,—Allow me to correct a serious error in the JOURNAL of December 28th, where it is stated that the Western Medical School, Glasgow, has terminated its existence. Although the sudden withdrawal of three of its teachers to another medical school in September last prevented suitable arrangements being made for the present winter session, the school is still in existence, possesses the nucleus of a staff of teachers, and is doing some teaching. Further, arrangements are in contemplation for placing the school on a permanent basis and carrying it on with greater efficiency in future sessions.—I am, etc.,

Glasgow, December 31st. J. N. MORTON, Secretary.

A DISCLAIMER.

SIR,—I have had numerous letters lately about Dr. Reed, on whose behalf I signed an appeal in the JOURNAL some time ago. Will you kindly allow me to state that his present proceedings are unauthorised by me, and that he has no permission to use my name?—I am, etc.,

R. FARQUHARSON.

Reform Club.

MEDICO-LEGAL AND MEDICO-ETHICAL.

A DIRECTOR AS CERTIFYING FACTORY SURGEON.

A. W. L. J. writes: I have just gone into partnership with D. B. with a view to succeeding him in a few months. Mr. G., who employs a fully qualified assistant, is our only opponent. I called upon Mr. G., as is customary. Five weeks have now passed, and Mr. G. has neither called nor taken the slightest notice of me. What course should I adopt? Further: A factory has lately been opened, and Mr. G., who is a director and shareholder, has been appointed and is now acting as certifying factory surgeon. Now the Act says, ".....And no person can be appointed certifying factory surgeon to any factory or workshop he occupies, or in which, or in any business carried on in which, he is interested."

*** With reference to the case in question of the appointment of certifying factory surgeon, illegal though it be, we would counsel our correspondent, if he wishes to avoid being on undesirable terms with the present holder thereof, not to take any personal action in the matter; but if such a course is ultimately determined on by the senior partner, it will be better effected through the medium of the recognised "candid friend," who may point out to Mr. G. his true position. Such hint may possibly induce him to vacate the office in order to save the annoyance of an enforced resignation. For our views on the subject of Mr. G.'s omission to return our correspondent's visit of courtesy, we would refer him to the answer given to "F. L. N." in the JOURNAL of November 23rd, page 1190, column 1.

MIDWIFERY ENGAGEMENTS.

AGGRIEVED writes: A patient asked me to attend his wife in confinement about six weeks before her term. I met him about the time expected, and he informed me that I might be sent for at any time. After about a week, I hear that the patient has been confined, and that they have had a neighbouring practitioner in attendance. Of course I feel annoyed at this, and wish to know if I can recover any fee for my engagement.

*** The irritating occurrence of which our correspondent has just cause to complain is, we know but too well, a more or less frequent incident in the daily life of a medical practitioner; and although we consider that "Aggrieved" is equitably entitled to the obstetrical fee, we cannot advise him to sue the husband for it, inasmuch as, irrespective of the trouble, loss of time, and annoyance in attending county court proceedings, there is something more than a possibility of his being non-suited, as has lately been the case under like circumstances, in which the judge non-suited the plaintiff on the ground that he had not rendered any *de facto* professional service to the wife of the defendant. Nevertheless, he cannot well err in intimating to the husband, who engaged him, that payment of the customary fee will be required.

FEES FOR ATTENDANCE ON THE FAMILIES OF MEDICAL MEN.

A STICKLER.—We transcribe for the information and guidance of our correspondent the following rule from the *Code of Medical Ethics*, which was submitted to and cordially approved of by some of the most eminent and representative practitioners of the day, including the late Sir Thomas Watson, the Nestor of the profession.

"All legitimate practitioners of medicine, their wives, and children while under the paternal care, are entitled (not as a matter of right, but) by professional courtesy to the reasonable and gratuitous services—railway and like expenses excepted—of the faculty resident in their immediate or near neighbourhood, whose assistance may be desired. In the case, also, of near relatives who are more or less dependent upon a professional brother (other than wealthy), it will likewise be well, at his request, to forego or to modify the usual fee. On the other hand, a son or daughter altogether independent of the father or the widow and children of a practitioner left in affluent or well-to-do circumstances should be charged as ordinary patients unless feelings of friendship, or other special reasons, render the attendant practitioner averse to professional remuneration; in such cases the rule need not apply. Moreover, if a wealthy member of the faculty seeks professional advice, and courteously urges the acceptance of a fee, it should not be declined, for no pecuniary obligation ought to be imposed on the debtor which the debtee himself would not wish to incur."

TWO FAMILY DOCTORS.

X. Y. Z. writes: The vicar of a parish in a seaside town calls in a medical practitioner, who attends himself, his servants, and his relations. The medical man is no stranger to him, and had been known to the vicar's parents many years before. He was the senior medical man of the place. We will call him "A." The period over which the attendance lasts is about two years. A few days ago, a child being ill, the vicar sends for another medical man, "B.," and after the lapse of several days writes a friendly letter to A., stating that he intends to have two doctors, one (A.) to attend himself and wife, and B. to attend to his children (two in number) and on his household. May I ask you to express an opinion on the ethical aspects of this case, and, if you consider it desirable, in the interests of the ordinary medical attendant that such arrangements should be made. As the vicar states he will place himself and wife under A.'s care there does not appear to have been any dissatisfaction or disagreement. A. hears nothing from B.

*** Personally annoying as undoubtedly are such incidents as that on the ethical aspects of which "X. Y. Z." invites our opinion, we note with regret that they are of more or less frequent occurrence; and, further, that since the right of a family to change or to add to the number of their medical advisers is unquestionable, it was, from a professional point of view, perfectly legitimate on the part of the vicar to seek other advice in the case in question. Moreover, inasmuch as it was a new illness, so to phrase it, and not a case of pure supersession, it would not devolve upon B. to notify the fact of his ac-

tendance to "X. Y. Z." Under the circumstances, we would venture to suggest to our correspondent that he will act advisedly in accepting the altered position with a good grace.

MEDICAL OFFICERS OF HEALTH AND OTHER PRACTITIONERS.

T A. C. writes: Messrs. L. and C., two partners, of whom the latter is newly come into the district, attend a young child which dies of diphtheria; shortly afterwards they are consulted by the parents, whom they find to be affected with unmistakable diphtheritic patches on the tonsils, and treat them vigorously and successfully with painting of glycerine and carbolic acid and the internal exhibition (after gargling) of liquor hydrargyri perchloridi. As the patients were absolutely alone, and in very poor circumstances, Mr. C., at the request of the local board of health, seeks and obtains their consent to removal to an infectious hospital. In the meantime, however, a relation of the patients calls in Mr. H., a neighbouring practitioner, who at once takes charge of the cases, without any communication with Messrs. L. and C., assures the people that they are not suffering from diphtheria, but tonsillitis, and dissuades them from moving to the hospital. Here, so far as Messrs. L. and C. are concerned, with the exception of a note of remonstrance to Mr. H., the affair ends. The sequel, however, appears in the surveyor's report at the next meeting of the local board of health, in which it is stated that Dr. B., the medical officer of health for the district (who, by the way, is stated to be Mr. H.'s partner), had seen the cases later, although he had refused to do so when they were under the care of Messrs. L. and C., and assented to the diagnosis of simple tonsillitis. Now, as regards diagnosis, surely the practitioners who had seen the diphtheritic patches before they were destroyed by treatment would be in the best position to give an authoritative opinion; but apart from this the questions arise: 1. Was Mr. H. justified in contradicting the diagnosis of the first attending practitioners without any consultation with them? 2. Was the medical officer of health justified in refusing to visit the cases, because they were under the care of other practitioners? 3. Was he (the medical officer of health) justified in disputing their diagnosis publicly without addressing any communication to them, and that notwithstanding the fact that he only saw the patients at a comparatively late period after the appearances of the disease had been modified by treatment?

*** If the above statement be a correct version of the facts of the case we need scarcely remark that Mr. H. (who we apprehend, is a young and more or less inexperienced practitioner), in assuming charge of the patients alluded to without any communication with or the assent of Messrs. L. and C., committed a grave breach of medical etiquette, and subjected himself to severe criticism; he should, moreover, have refrained from impugning the diagnosis of the responsible attendant practitioners, who, under the circumstances related, were in a far better position than himself to form a sound opinion as to the true nature of the disease.

With reference to the alleged plea of the medical officer of health for declining to visit the cases, it must be regarded as inadmissible, inasmuch as, on being notified of the existence of contagious disease, it would devolve upon him in virtue of his office to do so, in relation to which we may further note that it would be his duty to abstain from professional interference with regard to the diagnosis (except in a case of palpable error) and treatment of the practitioner in attendance.

AN INTRUDER.

. G. writes: A practitioner living seven miles from me, and having a practice in his own neighbourhood, presumably a good one, without apparent reason comes and puts up a card in a baker's window in my village, with the announcement thereon that he intends to come here twice a week. He has not a single patient here so far as I know, nor can I gather his reason for attempting to practise here. I would ask (1) as he has not called on me nor given me notice of his intention to practise, is he not guilty of a breach of professional etiquette? (2) As he has a good practice of his own and has no encouragement to come here, is he not guilty of a somewhat ungentlemanly attempt to poach and take the bread out of another man's mouth?

*** H. G. may take it for granted that a practitioner who can so far repudiate his accepted duty to maintain the honour and dignity of his profession as to have affixed in a village baker's window so derogatory an announcement as that above alluded to, is little likely to fulfil his ethical obligation to call upon the local resident practitioner into whose legitimate sphere of professional work he would appear to be unreasonably desirous of obtruding himself. Such itinerant visits, however, are, in our opinion and for reasons which will readily suggest themselves to our correspondent, ill-calculated to seriously damage an established steady practitioner.

A CIRCULAR.

New Leeds and Sheepscar Dispensary. Advice and medicine, 6d.; visits at home, with medicine, 1s.; confinements, 7s. 6d.," etc.

*** Such is the announcement made through the medium of a half sheet printed circular by a L.R.C.P.Lond. and M.R.C.S. Our correspondent will do well, with the view to uphold the dignity of the profession to solicit thereto the attention of the authorities of the Colleges mentioned by forwarding one of the circulars, enclosing therewith a short note or brief, protesting memorial signed by himself; if it be supported by the signatures of two or more resident practitioners it may result in an explanation of such derogatory conduct being sought from the erring practitioner.

LIBEL SUIT AGAINST AN ARMY SURGEON.

The Queen's Bench, Dublin, on December 21st, the case of Sullivan *v.* Kerr came before the court on a motion for liberty to amend the defence by a plea of privilege. The plaintiff is staff-sergeant in the Army Hospital Corps, and the defendant is a brigade surgeon. It appears that the latter went to Paris, having twenty-eight boxes of property in the medical store room. At Paris he received a letter and a telegram stating that the boxes had been broken open and the valuables stolen. He thereupon wrote a letter to the Surgeon-General for Ireland. The innuendoes were that the letter conveyed that plaintiff had either himself feloniously stolen the goods or was a party to stealing them. The defence was a traverse of the libel without the innuendoes and a traverse of the innuendoes. The motion was granted.

CHARGE OF MANSLAUGHTER ARISING OUT OF A CASE OF RUPTURE OF THE UTERUS.

An action was heard at the Warwick Assizes on December 20th, against Mr. F. R. A. Evans, L.R.C.S.I., L.K.Q.C.P.I., L.M., of Birmingham, by the Treasury, following a verdict of manslaughter given by a coroner's jury. In the JOURNAL of September 21st, 1889, p. 681, was published a letter from Dr. Evans, giving a very full statement of the case. This letter was put in as evidence against the prisoner. The allegation made by the Treasury in this action was that the prisoner had, by his culpable and criminal negligence, caused the death of the woman in question.

Dr. A. C. Clarke said, on July 24th, the prisoner called and told him he had a confinement; that rupture of the womb had taken place. The witness put the deceased under chloroform. On examination he found a large rent extending from the cervix into the body. The intestine was protruding through the rent to the extent of six inches; the mesentery was torn, but the bowel itself was intact. He proposed abdominal section as the only means of saving her life; but, after consulting with Dr. Evans, he thought it would be a useless operation, as he considered the injury fatal.

Dr. R. C. Gilroy said he delivered the woman, At the time he was called in the woman was in a state of collapse.

Professor Clay, Professor of Midwifery at Queen's College, Birmingham, said he made a *post-mortem* examination on July 31st. The woman had been about six months pregnant. There was extensive peritonitis and a rupture of the womb four inches in extent, commencing at the os. The cause of death, in his opinion, was exhaustion caused by rupture of the uterus and intestine. The child weighed 2 lbs. 2 ozs., and was sixteen inches in length. The deceased was a well-developed, muscular woman. The treatment of Dr. Evans, supposing it to be a premature labour with six months' child, was not the proper one to adopt.—Messrs. F. A. Clay, E. Trickelmann, George B. Buttery, Adams, and J. Bennett also gave medical evidence.—The counsel for the defence submitted that there was no evidence of criminal ignorance or inattention.

His lordship said there was certainly no evidence of inattention. The attention was close and unremitting. He could not say there was no case, because it was always very difficult to say whether there was or not.—The prosecuting counsel said he did not wish to press the case unduly against the prisoner.—The judge said it might be that the jury had made up their minds already. In a case of this kind, where a medical man was accused of manslaughter, they must be satisfied he had caused the death of his patient by great and grievous and unpardonable negligence and want of skill. A man was not to be convicted on a charge of this kind unless there was a very serious case indeed.—After a brief consultation the foreman of the jury said: We think there is not sufficient evidence.—His lordship: I quite agree with you. It is a very harsh prosecution indeed. I think it might very well have been dropped after the investigation before the magistrates.—A formal verdict of not guilty was then returned and the prisoner was acquitted.—His lordship said he would disallow the costs. He thought very hard measure had been dealt out to this man. He thought the magistrates having most carefully investigated the case, and there being, in his judgment, no reasonable evidence against the prisoner, the charge might very well have been dropped.

QUEEN'S BENCH DIVISION.

Partridge *v.* the General Medical Council.

(Before Mr. Baron Huddleston and a Special Jury).

This case arose out of circumstances which have already been before the Courts. The plaintiff was a dentist in practice in the Old Brompton Road for some twenty years, and in 1878 he underwent an examination in Dublin and received a diploma. Upon that occasion he signed an undertaking that he would not attract business by advertising so long as he had the diploma. Subsequently his diploma was forfeited upon the ground that he had advertised, and his name was removed by the defendants from their register, the consequence of which was that the plaintiff was deprived of the right to sue for his fees.

The Court had decided upon mandamus that the defendants had no right to do this, and the plaintiff claimed damages for injury that he had suffered from their act. Mr. Baron Huddleston, however, upon the conclusion of the case for the plaintiff, held that no action would lie without proof of malice, and no malice had been proved in this case. Judgment was given for the defendants.

SUPREME COURT OF JUDICATURE: COURT OF APPEAL.

Leeson *v.* The General Council of Medical Education.

(Before Lords Justices Cotton, Bowen, and Fry.)

The judgment of the Court of Appeal in the case of Leeson *v.* the General Council of Medical Education was given on Saturday, December 21st.

Lord Justice Cotton, in giving judgment, said: The Medical Council is a body formed under the 21st and 22nd Vict., c. 90, an Act passed for the purpose of enabling persons requiring medical aid to distinguish between qualified and unqualified practitioners; and power was given to the Council, constituted under the Act, to remove from the register of practitioners the name of any person guilty of professional misconduct. The proceedings in the present case are taken with reference to the exercise by the Council of that power. The first point argued was that the matter in respect of which the Council adjudicated was not within the powers given within Section 29, inasmuch as the charge did not allege that Mr. Harness was practising as if he were a duly qualified practitioner. I cannot accede to that view, and I have no doubt that the charge as stated was such as to justify the Medical Council in the decision they arrived at if they were only satisfied of the facts. In my opinion it would be wrong to consider whether the Medical Council arrived at a right conclusion upon the evidence that was brought before them, the Act of Parliament having given them jurisdiction in such matters, and the evidence before them being taken not only not upon oath, but not being confirmed by rules which are observed in courts of law. Mr. Leeson

seems to have had every consideration given to him. He was present at the inquiry. He was represented by his solicitor. And in my view we cannot interfere with the conclusion at which the Council arrived. There is another point as to which there is a little more doubt. It is suggested that the decision of the Council must be considered as bad, as having been made by a non-competent tribunal, and the ground for that is that two members who were present when the case of Mr. Leeson was considered were subscribers to the Medical Defence Union, by whom the case was brought forward. But it must be borne in mind that the Medical Defence Union was formed not only to prosecute offenders against the Act, but to defend those against whom charges were brought unreasonably; and I do not think that they can be considered as prosecutors in a case of this kind. More than that, it is only the Council of the Defence Union that has power to bring complaints of this nature before the General Council. The two gentlemen referred to were not members of the Defence Council, and they could not, according to the Articles of Association, have exercised any control as to the manner in which the complaint was brought forward. In my opinion this objection, which is a very serious one, cannot prevail, and we ought to hold that Mr. Justice North was right in refusing the injunction.

Lord Justice Bowen concurred on both points.

Lord Justice Fry agreed with regard to the first point, but on the second point he said it was a matter of public policy that judicial proceedings should not only be free from actual bias and prejudice, but that they should be free from the suspicion of bias and prejudice, and he did not think that subscribers to an association for the purpose of carrying on prosecutions could be said to be free from bias in prosecutions instituted by that association. If the matter, therefore, had rested with him, he should have held that the decision of the Council in this case was invalid, and in so doing he thought he should best maintain the dignity and influence of the Medical Council.

The appeal was therefore dismissed with costs, in accordance with the opinion of the majority of the judges.

Mr. Rigby asked that the removal of Mr. Leeson's name might be suspended pending an appeal to the House of Lords. Lord Justice Cotton refused, observing that if the House of Lords differed from this Court they could order the name to be restored. Lord Justice Bowen said according to their own judgment they had no power.

NAVAL AND MILITARY MEDICAL SERVICES.

THE SURGEON-GENERALSHIP IN BENGAL.

We have lately received several communications, mostly condemning, but some defending, the recent selection of a successor to Sir Benjamin Simpson in the one surgeon-generalship left to the Indian Medical Service in Bengal.

Deputy Surgeon-General Rice, who had been about thirty years in civil employ, was the officer selected and promoted over the heads of three distinguished officers, Deputy Surgeons-General Thornton, C.B., Farrell, C.B., and Morice, all of whom had remained in military employ and seen much field service.

Now, as we have declared before, it is not our intention to canvass the respective merits of these officers, who, each and all, are admitted to be able men, both eligible and deserving of promotion. None are more willing than the three superseded officers to acknowledge Dr. Rice to be an able and experienced man, while he in turn will freely allow them to be most capable and distinguished men, two being Companions of the Bath. But while it must be recognised that such supersession is grievously unfair to individuals, we are concerned less with the personal than the broad public bearings of a system which not only admits of such supersession but affords grounds for the defence of it. The officers who have remained in military employ naturally reason that this selection indicates that the highest position in the Bengal medical service is in future to be reached only through civil employ. They are perfectly justified in the inference, for there is not a hint that the three superseded officers were physically, mentally, or morally unfit for promotion; but they lacked civil experience. It has been put to us in this form: the selection was made because "the post of Surgeon-General with the Government of India is regarded as a civil appointment, and was accordingly given to a medical officer possessing the largest civil experience." We have communications defending it on that very ground. If such be the case, we do not object; but it is the duty of the Indian Government to clearly avow it, and let medical officers understand it as a new "condition of service." But broader issues are involved, the chief of which is whether the grand and historic service is to be considered civil or military? It must be either one or the other; it cannot be both. On the face of it, the title of surgeon-general shows the appointment in question to be military; if it were civil some such title as chief medical commisioner to the Government of India would be more appropriate. It is all very well to say that the function of the surgeon-generalship is mainly civil in advising on civil hygiene and administration; but are there not likewise military duties? Unquestionably. The surgeon-general advises the Government in the selection of medical officers for military promotion in the higher grades. The appointment in its history and title is undoubtedly military; if it is to be civil in future, let it be so declared, and let its title be altered from military to civil. Above all let the avenue by which it can only be reached be clearly announced, and let us hear no more of this heart-breaking work of supersession. Both the efficiency and concord of the Indian Medical Service are seriously threatened. Meanwhile, how are the three superseded officers to be compensated? It has been suggested they should receive the honorary rank of surgeon-general on retirement, which we should be very pleased to see, although we think it would be hardly sufficient compensation or solatium for the injury inflicted. If changes and reforms are needed at the expense of individuals, Government should be made to feel that such are dear, and cannot be cheaply compensated by honours which cost nothing.

PAY GRIEVANCES OF THE MEDICAL STAFF SERVING IN INDIA.

A well-informed correspondent sends us the following suggestive observations on this important question. To fully understand the grievances, preliminary explanation is necessary.

I. *How Indian Pay is made up.*—(1) Of English pay converted into rupees. (2) Tentage, according to rank. (3) Forage, according to rank. (4) Gratuity, a boon or batta given to those of captain's rank and under. The chief grievance connected with the above is that, although during the past twenty-five years the Medical Staff have, through successive warrants, had several rises in their English pay, the Indian is still based on a scale existing in 1864; that the captain's rank given to surgeons and the new rank of brigade-surgeon have been altogether financially ignored in India. The Indian Government, therefore, have been obtaining the services of the Medical Staff, especially during the past ten years, below their market value as obtains in other parts of the Empire.

II. *What Charge Pay Means.*—Quite apart from fixed pay, and following the lines of the old Company's commercial days, it has been customary in India to give extra pay for extra work. The "command pay" given to an officer commanding a battalion is a case in point. The Medical Staff complain they get no charge pay for the management and financial responsibilities connected with large hospitals. Charge pay should at least be given when the number of beds exceeds 200. Nothing is killing the life and energy of the medical service more than its crushing system of equal pay. There are no rewards, no means of drawing out energetic men. The easiest billets are naturally now sought for. Charge pay would stimulate a natural selection of the fittest.

III. *Total Cost of the Service.*—This need not be much increased if the distribution of the money was different. Let those in responsible positions have extra pay. Let those who like work earn more money. Warrants giving an all-round increase of pay are pleasant enough, but they will not develop an energetic staff; this can only be done by financial stimulus on commercial lines, well understood and acted upon in almost every other line of life and branch of the service but the dead-level Medical Staff.

ARMY MEDICAL STAFF: EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office orders with the notice. The first post on Thursday mornings is the latest by which advertisements can be received.

Surgeon, stationed in Dublin city, wishes to exchange with one stationed in England or Scotland, or one having a short time to complete abroad. Has yet about 18 months' more home service before being ordered abroad.—Address "Surgeon," British Medical Journal Office.

THE NAVY.

The following appointments have been made at the Admiralty:—Deputy Inspector-General Henry Hadlow, to Haslar Hospital, January 6th; Ludlow T. Colthurst, Staff-Surgeon to the *Penguin*, January 14th; Alfred H. L. Cox, Surgeon to the *Pembroke*, additional, December 21st.

THE MEDICAL STAFF.

Brigade-Surgeon F. Howard, M.D., Principal Medical Officer with the China Field Force, has had to return to Rangoon from the front, under the medical charge of Surgeon J. J. Moran. It is not said what ails Dr. Howard.

Dr. George Gordon Robertson, M.D., Deputy Inspector-General of Hospitals, died recently at Edinburgh. In 1834 he was appointed an Assistant-Surgeon in the army. After twenty-six years' service he retired on half pay with the rank of Deputy Inspector-General, having been for twenty years Assistant-Surgeon and Surgeon to the Royal Scots, and First-Class Surgeon from 1854 till 1888.

The Royal College of Surgeons in Ireland have conferred upon Surgeon Thomas Heazle Parke the Honorary Fellowship of the Institution "in recognition of his distinguished services in the expedition of Henry Stanley across Africa." A telegram from Zanzibar, dated December 20th, says that Surgeon

Parke is dangerously ill with bilious fever at Zanzibar, but we are glad to add that later telegrams report him to be slightly better.

Surgeon R. W. E. H. NICHOLSON, who is serving in the Bombay Command, has leave to England for ninety days on medical certificate.

Quartermasters and Honorary Lieutenants WILLIAM MORRISON and SAMUEL WARREN have been granted the honorary rank of Captain.

ARMY MEDICAL RESERVE.

SURGEON WILLIAM MICHAEL HARMER, F.R.C.P.Edin., of the 2nd Volunteer Battalion East Kent Regiment (late the 5th Kent), is promoted to be Surgeon-Major in the Reserve, ranking as Major.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON GEORGE KING, M.B., of the Bengal Establishment, Superintendent of the Royal Botanical Gardens at Calcutta, has been nominated a Companion of the Most Eminent Order of the Indian Empire.

Deputy Surgeon-General W. WALKER, M.D., Bengal Establishment, has retired from the service, which he entered as Assistant-Surgeon, August 4th, 1855, attaining the rank of Deputy Surgeon-General, October 24th, 1882. He served in the Indian Mutiny campaign in 1857, and was in the engagement with the Neemuch and Indore mutineers, and at the action of Futtehpoore Sikree (medal).

Surgeon-Major H. W. HILL, M.B., Civil Surgeon of Maunbhoom, is appointed to be Registering Officer for the district of Maunbhoom.

Surgeon-Major W. A. D. FASKER, M.D., Bengal Establishment, on return from leave, is posted to the civil medical charge of the Furruckabad district.

Surgeon-Major J. MCCONAGHEY, M.D., Bengal Establishment, Second Class Civil Surgeon, having returned from deputation duty, has resumed charge of the civil medical duties of the Fyzabad district.

Surgeon W. G. P. ALPIN, M.D., Bengal Establishment, Second Class Civil Surgeon, is transferred from Fyzabad to Pilib'heet.

Surgeon-Major H. J. HAZLETT, Madras Establishment, is reappointed Surgeon, fourth district, Madras, from date of relief at Poona by Brigade-Surgeon Fox.

Surgeon-Major P. MURPHY, M.D., Bombay Establishment, Civil Surgeon of Nassick, has leave of absence for twelve months on private affairs.

Surgeon-Major S. O'B. BANKS, F.R.C.S.I., Bombay Establishment, is promoted to be Brigade-Surgeon from November 19th, *vice* Brigade-Surgeon E. H. R. Langley, retired. Brigade-Surgeon Banks entered the service as Assistant-Surgeon, October 1st, 1866, and served in the Abyssinian campaign in 1867-68, and was at the capture of Magdala (medal).

Surgeon L. F. CHILDE, Bombay Establishment, is appointed Professor of Pathology and Morbid Anatomy, and Curator to the Pathological Museum, *vice* Surgeon-Major G. Waters, transferred.

Brigade-Surgeon D. E. HUGHES, M.D., F.R.C.S., Bombay Establishment, is appointed Professor of Hygiene, sub. *pro tem.*, *vice* Surgeon-Major G. Waters, transferred.

Surgeon C. H. L. MEYER, M.D., Bombay Establishment, is appointed Professor of Hygiene from the date on which Brigade-Surgeon Hughes ceases to act as First Physician, Jamsetjee-Jejeebhoy Hospital, and to be Professor of Hygiene, sub. *pro tem.* For purposes of precedence in the College, Surgeon Meyer remains senior to Surgeon Childe.

Surgeons W. G. THOROLD and A. C. YOUNAN, M.B., both of the Bengal Establishment, have passed the examination in Hindustani by the higher standard.

The services of Surgeon S. C. NANDI, M.B., Bengal Establishment, are replaced at the disposal of the Military Department.

Surgeon-Major G. BAINBRIDGE, Bombay Establishment, is allowed furlough to Europe for one year on private affairs.

Surgeon-Major J. M'CLOGHRY, F.R.C.S.I., Bombay Establishment, is appointed to act as Civil Surgeon at Kurrachee during the absence of Surgeon-Major Bainbridge.

The services of Surgeon A. F. FERGUSON, M.B., C.M., Bombay Establishment, are replaced at the disposal of the Commander-in-Chief.

Surgeon-Major WILLIAM NAPIER KEEFER, Bengal Establishment, has retired from the service, which he entered as Assistant-Surgeon, October 1st, 1869, becoming Surgeon-Major twelve years thereafter. He served with the Looshai Expedition in 1871-72 (medal with clasp), and with the Jowaki Afreedee Expedition in 1877-78 (clasp). He was also engaged in the Afghan war of 1878-80, and was present at the attack and capture of Ali Musjid and with the Zaimusht Expedition (medal with clasp). Served in the Egyptian war of 1882, and was present at the battle of Tel-el-Kebir (medal with clasp, 4th Class of the Osmanieh, and Khedive's Star).

The retirement of Brigade-Surgeon T. E. B. BROWN and Surgeon-Major GEORGE HENDERSON, M.B., both of the Bengal Establishment, and which have been already announced in the JOURNAL, has received the approval of the Queen.

THE VOLUNTEERS.

SURGEON R. F. COOK, M.B., 1st Newcastle-on-Tyne Engineers, Fortress, and Railway Forces, is promoted to be Surgeon-Major, ranking as Major.

Mr. J. H. A. LAING, M.B., is appointed Acting-Surgeon to the Queen's Rifle Volunteer Brigade (late the 1st Edinburgh).

Acting-Surgeon G. R. GREEN, 1st Volunteer Battalion West Yorkshire Regiment (late the 1st West Riding of Yorkshire), has resigned his appointment, which was dated April 3rd, 1886.

Mr. DAVID ROBERT OSWALD, M.B., is appointed Acting-Surgeon to the 7th Volunteer Battalion Argyle and Sutherland Highlanders (late the 1st Clackmannan and Kinross Volunteers.

SUGGESTIONS ON ARMY MEDICAL ORGANISATION.

"I.V.R.C." sends us a long communication on the above subject, from which we extract the following:

1. *Title of Officers in Charge of Hospitals* should be "Officers commanding," instead of "in charge," which would assimilate to the usual army title.

2. *Appointment of Adjutants to large Hospitals* should be a selected medical officer officially recognised and paid.

3. *District Quartermasters.*—Duties should be handed over to the Quartermaster of the headquarter hospital, who should be responsible to a paid District Brigade Surgeon, who would act as Brigade-Major for the Principal Medical Officer of the district.

4. *A Territorial Organisation for the Medical Staff Corps, including Militia and Volunteers*, would weld all into a higher territorial unit, to be called a "brigade." Thus, "Scottish Brigade Medical Staff Corps" would include the various divisions in Scotland; would fall in well with and be under the District Brigade-Surgeon. The title division should not be given to a single company. The London companies should be organised as complete bearer companies and field hospitals in a brigade.

5. *Staff Officer at Headquarters.*—Title not sufficiently expressive; should be Assistant Adjutant-General.

6. *Director-General.*—A title based only on civil War Office work; the army title should be Surgeon-General-in-Chief, while he would still remain Director-General Army Medical Department.

7. *Military Titles and Military Training.*—Absolutely essential; all others at best but stepping-stones. No surgeon should leave Aldershot without having first passed the easy examination for lieutenants for captain; a surgeon-major should pass as a major in matters of law and command. All other examinations should be voluntary, like passing the Staff College.

8. *Medical Staff College.*—To be the title of Netley Medical School. The term "staff" to be limited to men who had passed through this College—the *élite* of the Royal Medical Corps.

MEDICAL OFFICERS' TITLES.

"DISTINCTIVE RANK" sends us two cuttings from the *Irish Times* of December 19th, the first being the announcement of the death of a widow of a sergeant-major, but printed surgeon-major; the second a "military libel suit," Sullivan *v.* Kerr, heard in the Queen's Bench Division before Mr. Justice Harrison, wherein the suitors are described, the plaintiff as a "staff-surgeon" and the defendant a "surgeon" in the "Army Medical Corps," the true rank and description of the parties being a staff-sergeant in the Medical Staff Corps and a brigade-surgeon of the Medical Staff. These examples show the ambiguity existing in the public mind regarding the present titles of the officers of the Medical Staff.

*** Ambiguity is too mild a word; it is ignorance of the crassest description. The above is an example of incompetent reporting and careless proof reading, which we should not have expected from such a source. Notwithstanding that the volunteer movement has popularised the army immensely, its inner life still remains a sealed book to multitudes of otherwise fairly educated civilians. The ignorance connected with military medical corps and titles is doubly dense; but it must be confessed they are confusing and misleading, and probably the opponents of the profession chuckle over the fact that they are so. The above examples of reporters' ignorance is much on a par with that of the old woman who boasted her daughter was married to an officer and when asked what sort didn't know, but it was a general or a corporal—at all events, one of the "rals!"

OBITUARY.

GEORGE ASHMEAD, L.R.C.P., L.R.C.S.EDIN., AND L.M.

THE death is announced of Mr. George Ashmead, L.R.C.P., L.R.C.S.Edin., medical officer of health to the Brierley Hill and Quarry Bank urban sanitary authorities, from inflammation of the lungs. He had been ailing for some two months with a slight attack of bronchitis, but it was only quite recently that his illness rapidly developed. Mr. Ashmead had a distinguished student's career. Among the local appointments which he filled were those of medical officer to the Kingswinford No. 4 and public vaccinator to No. 2 districts of the Stourbridge Union. He was a certificated factory surgeon; surgeon to the local police force and fire brigade; he was also a lecturer on natural science under the Science and Art Department of the Committee of Council on Education. The deceased, who was about 45 years of age, and had been twice married, was much respected.

SURGEON-MAJOR CHARLES WASHINGTON SHIRLEY DEAKIN, I.M.S.

THE following particulars have been furnished us by an Indian medical officer of the life and services of Surgeon-Major Charles Washington Shirley Deakin, of the Bengal Medical Service, who, as we noted in the JOURNAL of December 14th, died of enteric fever at Jhelum, in the Punjab, on November 17th, 1889, aged 40. Dr. Deakin was educated at the General Hospital, Birmingham, and University College, London, took the diplomas of L.R.C.P. Lond. and L.S.A. in 1873, and F.R.C.S. England and S.Sc.C. Cambridge in 1876, and entered the Bengal army as surgeon on September 30th, 1873. He became surgeon-major on September 30th, 1885. For many years he was stationed at Allahabad, the seat of government of the North-west Provinces, as junior civil surgeon, and while there was well known as an ardent worker not only in his own profession but in everything which conduced to the welfare of his station. In 1883 he was one of the founders of the North-west Provinces and Oudh Branch of the British Medical Association, which, however, languished and died after Dr. Deakin had left Allahabad, the head-quarters of the Branch. The *Pioneer*, the leading Indian newspaper, in mentioning his

death, speaks of him as "well known a few years ago as one of the most skilful surgeons in these Provinces." Dr. Deakin had twice to take sick leave, in 1876, and again, in 1885. On his return from leave in the beginning of 1886 he was posted as civil surgeon to Mirzapur, but subsequently reverted to military duty, and when the 34th Pioneers was raised in 1887, he was posted to the medical charge of the regiment. With it he served in the Hazara or Black Mountain campaign of December, 1888, and was mentioned in dispatches for gallantry at the action of Kotkai. Dr. Deakin also for many years published and edited the *Indian Medical Journal*, which comes to an abrupt conclusion with his death.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

SECOND EXAMINATION FOR THE DEGREE OF M.B.—Michaelmas Term, 1889. Part I. Pharmaceutical Chemistry. Examined and approved:

Alston, Clare; Blumfeld, Caius; Bowes, Caius; Burkill, Caius; Burton, Joh.; Buttar, Pemb.; Cameron, Joh.; Carr, Trin.; F. P. Cayley, Trin.; Cornwall, Trin.; Crosby, Caius; Daniel, Emman.; Day, Caius; A. C. Fry, Pemb.; Garner, Emman.; A. H. Godson, Joh.; Goodman, Joh.; Groth, Jesus; Hedges; Sid.; H. B. Hewitt, Clare; Higgins; Hill, Trin.; Hofmeyr, Trin. H.; Hood, H. Cav.; Jackson, Clare; Langmore, Joh.; Lidderdale, Trin.; McCarthy, Caius; Mackenzie, Caius; G. J. K. Martyn, Caius; Mitchell, Queens'; Moore, H. Selw.; Murphy, Caius; Nachbar, Clare; Nesham, Trin.; Nix, Caius; Noble, Caius; Norris, Christ's; Nowell, Cath.; Penny, Pemb.; L. Roberts, Caius; Sandall, Joh.; A. Shillitoe, Trin. H.; Sparks, Caius; Stanton, Magd.; Still, Caius; Taylor, Emman.; Todd, Clare; Wanklyn, Caius; Webb, Clare; Williamson, Trin.; Windsor, Emman.; Windsor; Woodward, Down; Wright; F. C. Young, Joh.

THIRD EXAMINATION (PART I) FOR THE DEGREES OF M.B. AND B.C.—Michaelmas Term, 1889. Examined and approved:

B. Smith, Down; Barnard, King's; Belben, Christ's; Carter, Pemb.; Colvin-Smith, Caius; J. W. Dickson, Jesus; H. L. Dixon, H. Cav. Durham, Christ's; Fletcher, Trin.; Gillibrand, Queens'; W. S. Griffith, Trin. H.; Handson, Caius; Hardwicke; Kellett, Joh; Knox, H. Cav.; C. H. Leaf, Trin.; Martley, Trin.; E. J. D. Mitchell, Caius; Morris, Trin.; Newman, Caius; Pilcher, Clare; Remfry, Christ's; Rendle, Christ's; Rolfe, Clare; J. W. Russell, Trin. H.; A. H. Smith, King's; Trevithick, Trin.; Tuppen, Caius; Usher, Caius; C. Wild, Jesus; E. C. Williams, Christ's; J. C. Wright, Joh.; Wyman, Trin.; Yeoman, Caius,

THIRD EXAMINATION (PART II) FOR THE DEGREES OF M.B. AND B.C.—Michaelmas Term, 1889. Examined and approved:

C. E. Baker, Trin.; Barnard, King's; Beauchamp, Caius; Bickersteth, Trin.; Cayley, Pemb.; Cobbett, Trin.; H. J. Cooper, Caius; Cooper-Pattin, Jesus; Curwen, Joh.; G. H. S. Daniell, Caius; Dewhurst, Trin.; Dickson, Caius; Drysdale, Joh.; Duigan, Christ's; Edkins, Caius; Edwards, Joh.; Francis, Joh.; W. Gordon, Trin.; C. C. Heywood, Trin.; Lambert, Pemb.; Low, Caius; Remfry, Christ's; Rendel, Clare; Rendle, Christ's; Ronald, Trin.; Saunders, Trin.; Scott, Pet.; Shaw, King's; Stabb, Caius; H. Stanley, Pet.; Stokes, Pemb.; Treadgold, Down; Wadeson, Joh.; Wait, Joh.; C. E. Williams, Caius.

Examined and approved for the Degree of Bachelor of Surgery:

Hurry, Joh.

Examined and approved for the Degree of Master of Surgery. Michaelmas Term, 1889:

Knaggs, Caius.

LONDON.

B.S. EXAMINATION. 1889.—Examination for Honours. Surgery:

First Class.—A. G. Francis (scholarship and gold medal), St. Bartholomew's Hospital; C. McG. Kitching (gold medal), Guy's Hospital; R. D. Mothersole, Guy's Hospital; B. G. A. Moynihan, Yorkshire College.

Second Class.—G. B. M. White, University College.

DUBLIN.

AT the "Comitia Hiemalia (Winter Commencements) for Michaelmas Term, held in the Examination Hall of Trinity College, on Thursday, December 19th, 1889, the following Degrees in Medicine, Surgery, and Midwifery were conferred by the University Caput in the presence of the Senate:

Baccalaureus in Arte Obstetriciâ.—R. W. H. Jackson.

Baccalaureus in Chirurgiâ.—J. Simpson.

Baccalaurei in Medicinâ, in Chirurgiâ, et in Arte Obstetriciâ.—J. D. Alexander, W. P. Kennedy, E. L. Luther, B. M'Carthy, R. F. M'Craith, T. North; L. Perrin, W. S. Ross, W. F. Russell, W. W. Shackleton, R. Smyth; G. W. Tate; R. H. Woods.

Magister in Arte Obstetriciâ.—C. M. Moore.

Magister in Chirurgiâ.—H. J. O'Brien.

Doctores in Medicinâ.—W. H. Allen, C. A. Digby, H. Disney, J. B. Hopkins, J. G. A. Kane, E. W. Kerr, J. F. Knott, J. A. Matson, C. M. Moore.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE BRADFORD INFIRMARY.

SIR,—Referring to your leaderette on "The Bradford Infirmary," allow me to say that "the well-informed correspondent who has addressed us upon the subject" has been very much mistaken if he has supposed that "a proposal to make a charge of 6d. to every out-patient has been made to the Board of Governors." No such proposal has ever been made, or even mentioned, at any meeting of the medical staff or of the Board of Governors. The out-patient department is overcrowded, and it is necessary to do something to check those who are not justified in applying; it has therefore been suggested that an officer should be appointed to inquire into the circumstances of all applicants for treatment. This would shut out many who at present impose upon the charity. It has also been suggested that the weekly wage limit which would entitle people to gratuitous treatment should be, for a married couple, 18s. a week, with 2s. additional for each child; and that those families whose incomes are between this—gratis limit—and the present wage limit of the infirmary, which is 18s. for parents and 5s. added for each child, should contribute a small sum towards the cost of their treatment.

If patients whose incomes do not exceed this contributory limit cannot afford to pay the ordinary moderate fees charged by most medical practitioners, and are still able to contribute something to the funds of the infirmary, I know no sufficient reason why they should not be allowed to do so. These checks would diminish the abuses of the out-patient department without the necessity of creating greater evils such as provident dispensaries or the proposed Public Medical Service.

I am anxious to remove the shadow which at present rests upon my colleagues in consequence of such a gross misrepresentation of the above suggestions. If any still remains, it must be upon me.—I am, etc.,

J. H. BELL, M.D.,
Honorary Medical Officer, Bradford Infirmary.

THE PROPOSED PUBLIC MEDICAL SERVICE.

DR. ROBERT R. RENTOUL (Liverpool) writes: I regret that the members do not seem to have grasped my ideas as to the above. They are these:—That we must have a cash scale of fees for those of the industrial classes making under 25s. and 40s. per week. The details can be altered if need be. The point to grasp is this: If the hospital committees say, "We shall co-operate with you, and turn away all those making over the 'wage limit,' but before doing so, we must know where and by whom such cases are to be treated." At present, although we secure co-operation, such patients would have nowhere to go but to the prescribing chemists, quacks, bogus clubmen, and unqualified practitioners. They could not go to the provident dispensaries, for these do not give treatment until one has been a member for a month. Where, therefore, are they to go? My idea is that in the above service there should be two departments—a cash or immediate payment, and a provident; and that those provident dispensaries already existing should establish a cash department. But I do not think it a matter of vital importance whether such cash patients are treated at the doctors' homes, at their own homes, at a provident dispensary, or at a public medical service. The point is to let the employers of labour and subscribers to hospitals note that we have a practical scheme ready. If we do not, then we shall perpetrate two great blunders now working much evil in Manchester. There, if a patient who is slightly over their "wage limit" go to the hospital he is told that he may secure free hospital treatment for one month if he give a guarantee he has joined their provident dispensary. Now the "entrance fee" to the provident dispensary is 6d. and 1d. per week. Therefore, if a man pay 7d. to the provident dispensary he thus purchases hospital treatment for 7d. This is one of the weak points in the Manchester Infirmary scheme, and must be avoided by us. But if we can secure a cash system of fees for immediate treatment, either by one practitioner, or by several combining, we shall avoid this error.

May I point out another fault in the Manchester system? By the laws of their provident dispensary, a provident dispensary doctor has a right to send a provident patient to the infirmary, and no question must be asked, and he must receive free treatment. Now their provident dispensary has done away with the 35s. "wage limit;" for why, none seem able to tell, and so a clever mechanic has only to join the provident dispensary, and if he b

making even up to 45s. or 60s. wages he can claim hospital treatment as a right. Thus the provident dispensary doctor can, like his club brother, rid himself of a troublesome patient by sending him off to the hospital, and so the hospital surgeon or physician is imposed upon. I trust the Manchester doctors will not rest until they have removed these obnoxious regulations. I mention these facts to show that we must not take anything for granted. I do not think it too much to say that we are on the eve of important changes. The resolutions should command the attention of the entire medical profession. But in discussing them I would suggest that we take a wide view of the subject, and leave out, as far as possible, local and personal considerations. The hospital doctor will not suffer if his hospital agree to reject ineligible cases; the club doctor will notice that the scale proposed is higher than he now receives; and the general practitioner will notice that the charges suggested for the medical service are higher than he now receives from that portion of the industrial classes who are making under 25s. and 40s. per week. Nor will the hospital teacher find himself out of pocket if he allow the Poor-law Medical Service Staff to take their part in educating the student in those branches in which the General Medical Council say he is so deficient. Our present evils are, to a large extent, inherited. It is altogether our own fault if we do not succeed. The only pity is, it would seem that those who have gone through the toil stage of general practice, and have entered a more lucrative one, will not come among the younger men and help them.

A SPECIAL meeting of the East Anglian Branch was held on December 13th, 1889, at the Norfolk and Norwich Hospital, the President, Dr. J. SINCLAIR HOLDEN, in the chair, for the purpose of considering the resolutions brought forward at the General Meeting at Leeds by Dr. Rentoul and Mr. J. Brindley James.

The PRESIDENT spoke of the abuse of medical charities, which he considered very prevalent. He pointed out that, in considering the feasibility of any new scheme, such as the proposed Public Medical Service, they must take into account not only its capability or otherwise of supplying a want both to the profession and to the public, but also its practicability, whether its scale of payments was adapted to those who should benefit by the scheme, and also what would be the probable result of its competition with existing sick clubs and benefit societies.

Dr. Rentoul's propositions were then discussed *seriatim*, each resolution being introduced and explained by Dr. BARNES, one of the Secretaries of the Branch. A lengthened discussion took place, in which the PRESIDENT, Sir PETER EADE, Drs. BARNES, BEVERLEY, COMBE, CROWFOOT, D. DAY, ELLISTON, and FIELDING, and Messrs. T. W. CROSSE, W. H. DAY, T. H. MORSE, W. S. WARLTERS, and other gentlemen took part.—Mr. W. H. DAY condemned Resolution 1 as an interference with the rights of hospital governors.—Sir PETER EADE objected to the wage limit, and thought that no great abuse existed in the out-patient department of the Norfolk and Norwich Hospital, and recommended the plan of checking abuse, which, in his opinion, had worked well there—namely, that of appointing an "admission and discharge committee," whose duty was to see that the applicants were suitable objects for the charity.—Other speakers objected to a fixed wage limit, pointing out that it must necessarily vary in different districts, whilst others challenged Sir Peter Eade's opinion as to the comparative absence of abuse of the Norwich Hospital.—The HOSPITAL SECRETARY, in reply to a question, stated that in spite of the action of the Committee, the number of out-patients of the Norwich Hospital had largely increased during the past few years.—Ultimately, the following amended resolution was proposed by Dr. BEVERLEY, seconded by Dr. CROWFOOT, and carried unanimously: "That medical practitioners and the managers of our medical charities in the various towns and cities meet together and decide who are eligible for out-patient medical aid, and that either the Manchester system of checking abuse, or that used at the London and St. Bartholomew's Hospitals, be put into force."

Dr. Rentoul's second and third resolutions were proposed *pro formâ* by Dr. BARNES, but failed to find a seconder.

In the discussion on Dr. Rentoul's resolution, Dr. ELLISTON spoke of the present unsatisfactory state of the rules of benefit societies, in which the members generally concurred; and the following resolution was proposed by Dr. BEVERLEY, seconded by Mr. ELLISTON, and carried unanimously: "That the present system of attendance on members of friendly societies is unsatisfactory, and that this meeting suggests that in each district conferences be called to discuss this matter, to which existing friendly societies and the local members of the profession send representatives."

"That Dr. Rentoul's fifth proposition, relative to Poor-law infirmaries and fever hospitals being opened for the clinical instruction of medical students, be approved" was proposed by Dr. BARNES, seconded by Dr. ELLISTON, and carried unanimously.

Dr. Rentoul's resolution relative to a Royal Commission on medical charities, and Mr. Brindley James's motion concerning the out-patients' department of hospitals and the existence of provident dispensaries were discussed, but no resolutions were passed.

On the question of the report to be made to the Council of the Association, it was proposed by Dr. BARNES, seconded by Dr. CROWFOOT, and unanimously resolved: "That in the opinion of this meeting the schemes proposed in Resolutions 2 and 3 are, under present circumstances, impracticable in this district." And it was further resolved unanimously: "That the Secretaries report these resolutions to the Council of the Association as the opinions of this meeting on the questions submitted to them."

The meeting closed with a vote of thanks to Dr. Holden for presiding, and to the governors of the Norfolk and Norwich Hospital for the use of their board room for the meeting.

DR. RENTOUL'S SCHEME SOUND IN PRINCIPLE.

Modification of Details.

DR. CHARLES G. L. SKINNER (Harpurhey, Manchester) considers that Dr. Rentoul's scheme is founded on a sound principle, and believes that the committee will be able to devise a workable scheme. He hopes that as a result of the proposed Royal Commission the present abuse of out-patient departments will cease, but thinks that some provision must be made for the large class whose earnings will be only slightly over the wage limit. This the Public Medical Service would do. He regards with special approval the proposed rule that no unqualified man shall be allowed to do any work in the Service. Such a reform would, he believes, put more money into the pockets of medical men than any reform of hospital administration. The rule as to dispensing being done only by chemists he also looks upon as an important move in the right direction, calculated to do much to check counter prescribing, by recognising more fully the true status of a chemist. He, however, thinks that it would be a mistake to allow chemists to sit on the committee, they should simply be contractors for the supply of certain articles; that chemists ought not to be empowered to refuse to dispense a prescription to anyone known to be above the wage limit; that rule 6 as to death certificates is unnecessary; that to establish branches would be a needless expense, since patients could be seen at the private residences of the medical practitioners; that the obstetric fees are too high, and the gynæcological too low, and the medical fees generally too low in proportion to the dental.

THE DISADVANTAGES OF THE PROVIDENT DISPENSARY SYSTEM

Acute Cases: Chronic Invalids: Advertising.

A PROVIDENT DISPENSARY MEDICAL OFFICER writes: As there seems to be in some quarters a disposition to look for the remedy for hospital abuse in the provident dispensary system, I shall be glad if you will give me the opportunity to point out some of the "benefits" conferred by that system on the medical profession in Manchester and Salford.

The fee received for a visit or consultation averages barely 4½d. The bulk of the members are the wives and families of skilled workmen, with incomes ranging from 30s. to 60s. a week. The onus of objecting to the admission of improper members is considered to lie with the medical officers, and, where they decline to accept the odium of this detective work, no control is exercised.

The management of the dispensaries by the lay committees is such that the working expenses swallow up more than 50 per cent. of the gross income; and this notwithstanding, in some of the branches, after payment of the medical officer's pittance, a considerable balance remains every year, and these branches are steadily becoming endowed institutions.

Chronic invalids, whose treatment must be lifelong, are admitted to membership at the ordinary rates; and patients suffering from acute attacks may, by payment of 5s., receive attendance until cured, and then withdraw the next day if so disposed

A large proportion (I believe about one-sixth, but I write from memory) are non-paying members, and these are all children requiring much attendance.

There is another side of the provident dispensary question which more nearly affects the profession at large; it is that by their extensive advertising (cheap handbills, house-to-house canvassing, etc.) the dispensaries compete so unfairly with junior members of the profession, that it is becoming more and more difficult for them to commence practice in a reputable manner. In my own immediate neighbourhood, out of six new practices commenced during the last three or four years, five have been by advertisement, the main cause being, I have no doubt, the difficulty of otherwise competing with the advertising dispensary.

The Club and Provident Dispensary Systems.

A. A. M. thinks it would greatly simplify matters if each medical practitioner who takes club patients would take them all at a uniform rate, then merging all his club appointments into one, the management of which he could easily superintend. He describes a provident dispensary which earns a small income, and yet does not contain 1 per cent. of members making over 25s. a week. Persons joining must be in good health, pay an entrance fee of 6d., and 4d. monthly in advance. In a family containing three children under 14, only three were charged for; 1d. is paid for each card. Members are required to attend at the surgery between certain hours if not too ill; if too ill notice must be given before a certain hour, otherwise an extra fee of 1s. 6d. is charged for the first visit.

THE DORSETSHIRE COUNTY LUNATIC ASYLUMS AT CHARMINSTER AND FORSTON.

THE number of patients under care and treatment in these asylums during the year 1888, was 495; 70 cases were admitted, and 69 discharged or died, and there remained on the books at the close of the year, 426. The cases admitted were on the whole unfavourable, very few being of the "acute or curable class," and to this cause Dr. MacDonald attributes the low percentage of recoveries, which stands at 37.3 Of the 38 men admitted, 32 were hopelessly incurable on admission. Still, as Dr. MacDonald says: "In the interests of these, too often mental and physical wrecks of humanity, I hope no mistaken or erroneous notion of how they might be treated will prevent their early removal to the asylum, where, if not cured (for they cannot be renewed) they are at any rate nursed and taken care of." Nor in his opinion is the workhouse the proper place for them. With regard to idiots the same complaint is made in this, as in other asylums, that there is as yet no special place provided for them. Surely a few counties here and there could join together and provide district idiot asylums throughout the country. We commend this suggestion to the Asylum Committees of the County Councils which have recently come into office, and we trust in the near future to see steps taken to remove this evil which has so long been the subject of complaint.

Dr. MacDonald adopts an admirable plan for acquiring more accurate knowledge of the previous history of his cases than the usual statutory form gives. He sends out privately a form of questions to the practitioners who have signed the certificates of insanity in each case, and in 80 per cent. these have been returned "full of facts of great and special interest." The proportion of deaths to the daily average number of the patients resident is about the usual rate of asylum mortality, namely, 9.5 per cent. The average cost per head for the maintenance of the patients is only 7s. 11¼d. per week, and this sum is 7⅜d below the average of other county asylums.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

FEES FOR DEATH CERTIFICATES.

QUOUSQUE TANDEM writes: There is a matter, at first sight a trivial one, which does not appear hitherto to have attracted attention, but as it involves the loss of some thousands of pounds yearly to the profession I think it calls for a remedy, and in the hope that some practical suggestions may be elicited from other members of the Association I crave a little of your valuable space to state the case.

Some years ago we were constantly applied to when a patient died, not only for a certificate of the cause of death for the registrar, but also for copies of the same for insurance and other societies, for each of which we were able to make a charge, according to our discretion. A certificate can only be filled up by virtue of our professional position. This we have worked and paid for, and the country has no claim on us for gratuitous services. In signing the certificate we incur considerable responsibility; we give out our diagnosis for public criticism, our facilities for forming it by *post-mortem* examination or otherwise being very limited, and yet first difficulties are put in our way in claiming any fee whatever, and then our work is passed into the hands of the registrar and immediately becomes highly remunerative. Why cannot we insist on a fee for the original certificate? Why have we no interest in the copyright? When the registrar is applied to for a copy he does not put pen to paper until two shillings and sevenpence is paid down. In the recent Act for notifying infectious diseases we are allowed two shillings and sixpence for the notification, but we have first to write our certificate, then to post it and affix a penny stamp, and then to keep a record, and send in an account at the end of the quarter, after which we may receive our half-crown—a very different thing from the two shillings and sevenpence in cash taken by the registrar before filling in the blanks of his copy of our certificate.

*** We have invariably and consistently maintained that an injustice to the profession was committed when the Registration Act imposed upon its members the compulsory duty of furnishing for the use of the State medical certificates of the cause of death without making any provision for the payment of a fee for the service. It should be remembered, however, to the honour of the profession, that it was in great measure owing to its influence that the Registration Act of 1837 made provision for the registration of the cause of death, and it was with the full sanction and concurrence of the Royal Colleges of Physicians and Surgeons that an appeal was made to the profession to fill up the forms of certificate to be supplied by the Registrar-General for the purpose. The duty thus undertaken remained voluntary until the amendment of the Registration Act in 1874, which made the duty compulsory, but still made no provision for the payment of a fee. It is clear that no fee can be insisted upon until the Registration Act of 1874 is either repealed or amended. It should, however, be borne in mind that the medical practitioner is the legal informant of but one of the many facts recorded in the death register, and that the medical certificate is now absolutely devoid of legal value except for the purpose for which it is given, namely, for the transference of its contents to one of the nine columns of the Death Register. Our correspondent states that some years ago practitioners were constantly applied to for copies of their certificates of the cause of death for insurance purposes. It is true that since the Friendly Societies Act of 1875 it has been made illegal for registered societies to pay insurance money without a registrar's certificate of the registration of the death. This was done in the public interest to check the over-insurance of infants and children, and it must, moreover, be clearly borne in mind that a medical certificate of the cause of death can never legally take the place of a certificate of the registration of the death, since in a majority of cases medical certificates are given on a mere statement that the death has taken place, of which fact they can never, under present conditions, be accepted as evidence.

SEWAGE OF SMALL TOWNS.

MEDICAL OFFICER OF HEALTH asks for the names of any small towns or villages which have dealt with their sewage by a combined process of precipitation and intermittent downward filtration.

*** Coventry, Hertford, and Leyton in Essex have tried processes of precipitation combined with intermittent downward filtration for dealing with their sewage.

DUTIES AND POWERS OF MEDICAL OFFICERS OF HEALTH UNDER THE NOTIFICATION ACT.

BICEPS.—There is nothing in the Notification of Infectious Diseases Act which gives power to the medical officer of health to visit cases for the purpose of diagnosis or to enter the house for the purposes of disinfection. The powers which the sanitary authority and its officers possess are simply those of the Public Health Act, and nothing more. We are sorry to see from the letter of "Biceps" that friction has arisen. It should be remembered by the medical officer of health that the practitioner has duties to the individual, while, on the other hand, "Biceps" should not forget that the official has duties to the public. We counsel moderation on both sides.

MEDICAL OFFICERS OF HEALTH AND OTHER PRACTITIONERS.

A. H. J.—Upon the facts submitted to us we have no hesitation in replying:

1. That, speaking generally, a medical officer of health is exceeding his duty in disputing or criticising the certificates of medical practitioners.

2. That as medical officer of health he had no right to enter the hospital and take away papers or reports relating to cases under the charge of another practitioner.

3. That a member of the hospital committee is clearly within his rights in making full inquiries into a death in the hospital which has been registered as due to "pyæmia."

RE-DRAINING HOUSES.

CIVIS writes: Can the sanitary authorities re-drain a pair of houses I own without my consent? The sanitary authorities have re-drained the houses without acquainting me. Have they not exceeded their duty? Can they make me pay for the drainage under such circumstances?

*** The circumstances are not stated with sufficient completeness to enable a useful opinion to be expressed on the case. We would, however, refer our correspondent to the general provisions relating to drainage contained in the Public Heath Act, 1875, especially to Section 24, which provides that "where any house within the district of a local authority has a drain communicating with any sewer, which drain, though sufficient for the effectual drainage of the house, is not adapted to the general sewerage system of the district, or in the opinion of the local authority, otherwise objectionable, the local authority may, on condition of providing a drain or drains as effectual

the drainage of the house, and communicating with such other sewer as they think fit, close such first-mentioned drain, and may do any works necessary for such purpose, and the expenses of those works, and of the construction of any drain or drains provided by them under this section, shall be deemed to be expenses properly incurred by them in the execution of this Act." If, therefore, the proceedings of the sanitary authority in the case in question have been taken under this section the expenses would be defrayed by the authority (if in an urban district) out of the district fund and general district rate.

WHAT IS A PAUPER?

A CORRESPONDENT, who has recently been appointed district medical officer in a country union, asks: "What constitutes a pauper?" and whether workmen earning the usual wages of the district have a claim on his services as Poor-law medical officer? he being informed by the relieving officer that he (the relieving officer) cannot refuse to give a medical order to anyone who applies.

*** Our correspondent evidently means what entitles a person to become a pauper, which everyone does who applies for and obtains an order for medical attendance at the expense of the ratepayers. This is a very difficult question to answer. No rigid rule can be laid down in reference to it. Every case ought to be decided on its own merits. Absolute inability on the part of the applicant to provide medical attendance for himself or family if sick should be the main reason for a medical order being granted. A relieving officer who gives medical orders to all applicants thereby proclaims himself to be absolutely unfit for his duty, which is fully to investigate every case of application for relief of whatever kind; if this is not done any pauper who could read or write might be deputed to grant medical orders, and so save the expense of a paid official being engaged for the duty.

ARE CLUBS "PUBLIC INSTITUTIONS"?

FRIENDLY asks: 1. Are friendly societies medical institutions "public institutions" as meant in the Notification of Infectious Diseases Act? 2. Are the medical officers of such institutions entitled to the fee of 1s. or the fee of 2s. 6d. for reporting infectious cases to the medical officer of health? 3. Is it customary for a medical officer of health to acknowledge the receipt of such reports to the surgeon forwarding same?

*** 1 and 2. The Act gives no definition of "public body or institution," and the phrase has not acquired a definite legal meaning elsewhere. A club, maintained by the subscriptions of the members is not in ordinary language a public institution, and there seems to be no reason why the medical officer of such a club should be restricted to the lower fee. Practitioners should in such cases claim the half-crown; if local authorities refuse to pay it would be worth while to bring a test case into court and have it properly argued.

3. It is not customary for a medical officer of health to acknowledge the receipts of ordinary reports or certificates sent under the Act.

ATTENDANCE OF MEDICAL OFFICERS AT MEETINGS OF BOARDS OF GUARDIANS.

A CORRESPONDENT asks whether the guardians of a union, in which he has been a district medical officer for some years, can now by their order compel him and his colleagues to attend all meetings of the board.

*** All Poor-law medical officers are liable to be called upon to attend any meeting of the guardians if their attendance is necessary for a special purpose, but we apprehend that any order for district medical officers to attend all meetings of the guardians, unless previously agreed to by the medical officers, would not be upheld by the Local Government Board, as such regular attendance would undoubtedly be an unnecessary tax upon their time.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns, including London, which have an estimated population of 9,555,406 persons, 5,493 births and 4,304 deaths were registered during the week ending Saturday, December 21st. The annual rate of mortality in these towns, which had risen from 19.0 to 23.1 per 1,000 in the three preceding weeks, further rose to 23.5 during the week under notice. The rates in the several towns ranged from 14.1 in Brighton, 14.8 in Birkenhead, and 16.3 in Birmingham to 30.3 in Wolverhampton, 32.1 in Manchester, 33.2 in Bolton, and 33.6 in Blackburn. In the twenty-seven provincial towns the mean death-rate was 26.0 per 1,000, and exceeded by 4.2 the rate recorded in London, which was 21.8 per 1,000. The deaths registered during the week under notice included 128 which were referred to whooping-cough, 73 to scarlet fever, 73 to measles, 52 to diphtheria, 52 to "fever" (principally enteric), 35 to diarrhœa, and not one to small-pox; in all, 413 deaths resulted from these principal zymotic diseases, against 383 and 378 in the two preceding weeks. These 413 deaths were equal to an annual rate of 2.3 per 1,000; in London the zymotic death-rate was 2.0, while in the twenty-seven provincial towns it averaged 2.4 per 1,000, and ranged from 0.5 in Cardiff, and 0.6 in Huddersfield and in Halifax to 3.6 in Bristol, 3.8 in Salford, 4.4 in Wolverhampton, and 5.3 in Plymouth. Measles showed the highest proportional fatality in Birmingham, Newcastle-upon-Tyne, and Bradford; scarlet fever in Liverpool and Plymouth; whooping-cough in Newcastle-upon-Tyne, Birkenhead, Bolton, Leeds, Salford, Wolverhampton, and Bristol; and "fever" in Sunderland and Wolverhampton. The 52 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 27 in London, 5 in Manchester, 3 in Portsmouth, 3 in Salford, 3 in Sheffield, 2 in Birmingham, 2 in Plymouth, and 1 in Newcastle-upon-Tyne. No fatal case of small-pox was recorded, either in London or in any of the twenty-seven provincial towns; and no small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, December 21st. These hospitals contained 1,526 scarlet fever patients on the same date, against numbers increasing from 538 to 1,596 in the twenty-five preceding weeks; 105 new cases were admitted during the week, against 151 and 133 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 6.2 per 1,000, and slightly exceeded the average.

During the week ending Saturday, December 28th, 4,248 births and 4,007 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,555,406 persons, The annual rate of mortality in these towns, which had risen from 18.2 to 23.5 per 1,000 in the five preceding weeks, declined to 21.9 during the week under notice. The rates in the several towns ranged from 11.6 in Norwich, 16.9 in Nottingham, and 18.5 in Huddersfield to 26.7 in Liverpool, 27.0 in Preston, 28.7 in Plymouth, and 31.4 in Blackburn. In the twenty-seven provincial towns the mean death-rate was 23.2 per 1,000, and exceeded by 2.9 the rate recorded in London, which was 20.3 per 1,000. The 4,007 deaths registered during the week under notice in the twenty-eight towns included 140 which were referred to whooping-cough, 57 to scarlet fever, 57 to measles, 52 to diphtheria, 34 to "fever" (principally enteric), 33 to diarrhœa, and not one to small-pox; in all, 373 deaths resulted from these principal zymotic diseases, against 378 and 413 in the two preceding weeks. These 373 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic death-rate was 2.0, and corresponded with the mean rate in the twenty-seven provincial towns, among which it ranged from 0.0 in Huddersfield, 0.3 in Leicester, and 0.5 in Birkenhead and in Bolton to 3.0 in Liverpool, 3.2 in Bristol and in Halifax, and 4 in Salford. Measles caused the highest proportional fatality in Bristol; scarlet fever in Salford, Preston, and Plymouth; whooping-cough in Leeds, Portsmouth, Bristol, and Wolverhampton; and "fever" in Plymouth and Halifax. Of the 52 deaths from diphtheria recorded during the week under notice in the twenty-eight towns, 26 occurred in London, 6 in Manchester, 6 in Salford, 4 in Hull, 2 in Liverpool, and 2 in Plymouth. No fatal case of small-pox was recorded, either in London or in any of the provincial towns; and no small-pox patients were under treatment in any of the Metropolitan Asylums Hospitals on Saturday, December 28th. These hospitals contained 1,541 scarlet fever patients on the same date, against 1,596 and 1,526 at the end of the two preceding weeks; 97 cases were admitted during the week, against 133 and 105 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 5.6 per 1,000, and was below the average.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, December 21st, 781 births and 667 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had been 23.9 and 23.6 per 1,000 in the two preceding weeks, rose again to 26.1 during the week under notice, and exceeded by 2.6 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Greenock and Paisley, and the highest in Dundee and Glasgow. The 667 deaths in these towns during the week under notice included 88 which were referred to the principal zymotic diseases, equal to an annual rate of 3.3 per 1,000, which exceeded by 1.0 the mean zymotic death-rate during the same period in the twenty-eight English towns. The highest zymotic death-rates were recorded in Edinburgh and Leith. The 304 deaths registered during the week in Glasgow included 14 from whooping-cough, 11 from measles, and 4 from diphtheria. Seven fatal cases of scarlet fever were recorded in Leith; 14 deaths from measles, and 3 from diphtheria, occurred in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.1 per 1,000, against 6.2 in London.

In the eight principal Scotch towns 796 births and 630 deaths were registered during the week ending Saturday, December 28th. The annual rate of mortality, which had been 23.6 and 26.1 per 1,000 in the two preceding weeks, declined again to 24.6 during the week under notice, but exceeded by 2.7 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among the Scotch towns the lowest rates were recorded in Perth and Leith, and the highest in Dundee and Glasgow. The 630 deaths registered in these towns during the week included 77 which were referred to the principal zymotic diseases, equal to an annual rate of 3.0 per 1,000, which exceeded by 1.0 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Glasgow and Edinburgh. The 296 deaths registered in Glasgow during the week under notice included 13 from measles, 7 from whooping-cough, 6 from "fever," 5 from diphtheria, and 5 from diarrhœa. Twelve fatal cases of measles occurred in Edinburgh, and 3 of diphtheria in Leith. The death-rate from diseases of the respiratory organs in these towns was equal to 7.4 per 1,000, against 5.6 in London.

HEALTH OF IRISH TOWNS.

IN the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, December 21st, were equal to an annual rate of 29.4 per 1,000. The lowest rates were recorded in Armagh and Wexford, and the highest in Dundalk and Galway. The death-rate from the principal zymotic diseases averaged 4.1 per 1,000. The 229 deaths registered in Dublin during the week under notice were equal to an annual rate of 33.9 per 1,000 (against 27.8 and 32.2 in the two preceding weeks), the rate for the same period being 21.8 in London and 26.1 in Edinburgh. These 229 deaths included 19 which resulted from the principal zymotic diseases (equal to an annual rate of 2.8 per 1,000), of which 5 were referred to measles, 5 to "fever," and 4 to whooping-cough.

During the week ending Saturday, December 28th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 25.4 per 1,000. The lowest rates were recorded in Newry and Lisburn, and the highest in Belfast and Sligo. The death-rate from the principal zymotic diseases averaged 3.3 per 1,000. The 166 deaths registered in Dublin during the week under notice were equal to an annual rate of 24.5 per 1,000 (against 32 2 and 33.9 in the two preceding weeks), the rate for the same period being 20.3 in London and 24.0 in Edinburgh. These 166 deaths included 11 which resulted from the principal zymotic diseases (equal to an annual rate of 1.6 per 1,000), of which 6 were referred to different forms of "fever," and 3 to whooping-cough.

PROFESSOR CANALIS, Director of the Bacteriological Institute at Rome, is now in St. Petersburg, by order of the Italian Government, to study the nature and course of influenza "on the spot."

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen having passed the necessary examinations have been admitted by the two Colleges Diplomates in Public Health.

Name.	Qualification.	Medical School.	Address.
Bailey, Charles Frederic	M.D.Lond., M.R.C.P.L., & M.R.C.S.Eng.	St. Barth.....	Exminster, Devonshire.
Bampfylde, James .	M.R.C.S.Eng.	Guy's	Malabar House, Bexley, Kent.
Davar, Framroz Shavaksha	L.R.C.P.L. & M.R.C.S.Eng.	Bombay.....	24, Montague Place, W.C.
Harris, Arthur Wellesley	M.R.C.S.Eng.	Charing Cross	Holborn Infirmary, Archway Road, N.
Holberton, Henry Nelson	L.R.C.P.L. & M.R.C.S.Eng.	St.Thomas's...	East Molesey, Surrey.
Hunter, William Lovell	M.D.Dublin	Dublin	Pudsey, Yorkshire.
Kealy, John William Gregory	M.R.C.S.Eng.	King's Coll....	Moreland Terrace, Forton.
Kempster, William Henry	M.B.Durh. & M.R.C.S.Eng.	Westminster and Durham	255, Lavender Hill, Clapham Junction, S.W.
Morgan, George Frederic Elliot	L.R.C.P.L. & M.R.C.S.Eng.	Guy's	Hartlepool Hospital.
Morgan, William Pringle	M.B.Dublin	Dublin	Seaford, Sussex
Norman, Frederick .	L.R.C.P.L. & M.R.C.S.Eng.	St. Barth.....	3, Holland Road, Brixton, S.W.
Paget, Charles Edward	L.R.C.P.L. & M.R.C.S.Eng.	St. Barth.....	Town Hall, Salford, Lancashire.
Poland, James Harry	M.R.C.S.Eng.	Guy's	Littlehampton, Sussex
Roberts, Arthur.....	M.D. St. Andrews & M.R.C.S.Eng.	Manchester...	Keighley.
Sylvester, George Holden	F.R.C.S.Eng. & L.R.C.P.L.	St. Barth.....	Army Medical Service, Devonport.
Taylor, Lot Albert...	L.R.C.P. Edin. & M.R.C.S.Eng.	Birmingham .	Brierley Hill, Staffordshire.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen having passed the requisite Fellowship examinations, have been admitted Fellows during the last quarter:

S. H. A. Stephenson, M.B., Bramdean House, High Road, Hanwell, London, W.; K. M. Scott, M.B., c.o. Messrs. T. Cook and Son, Cairo, Egypt; R. C. Holt, 56, Colne Road, Burnley, Lancashire; K. M. Douglas, M.D., 30, Melville Street, Edinburgh; W. E. Sprague, M.D., Belville, Ontario, Canada; C. A. Altmann, M.B., Tanunda, South Australia; L. Demetriadi, 30, New North Road, Huddersfield; H. E. D. B. Cheriton, Thurlow Park Road, West Dulwich, London, S.E.; R. Anderson, Surgeon-Major A.M.D.; A. Kirwan, Surgeon-Major A.M.D.; I. Taylor, M.B., Overnewton, Sydenham, Victoria, Australia; C. A. P. Mitchell, M.D., A.M.D.; A. E. Morison, M.B., Brougham Terrace, Hartlepool; J. Hutcheson, M.D., 8, Nelson Street, Edinburgh; H. J. Stiles, M.B., 5, Castle Terrace, Edinburgh; J. Watson, M.B., Royal Infirmary, Hull; G. H. Hume, M.D., 4, Elliston Place, Newcastle-on-Tyne; S. O. Stuart, A.M.D.; A. W. F. Noyes, Collins Place, Melbourne, Australia; A. W. Hughes, M.B., 42, George Square, Edinburgh; F. E. Welby, Colonial Surgeon, St. Helena; S. G. Campbell, M.D., Durban, Natal, South Africa; W. A. Mackay, M.D., 8, Calle Monasteria, Huelva, Spain; S. K. Ray, A.M.D.; R. G. Naylor, Audlem, Cheshire; W. G. Sym, M.D., 58, Queen Street, Edinburgh; R. Jones, 22, St. George Square, Liverpool; J. Hern, M.D., 13, Conisciffe Road, Darlington; R. J. H. Scott, 15, Bladud Buildings, Bath; S. Rumboll, Belgaum House, Woodhouse Lane, Leeds; W. H. B. Clapp, Surgeon-Major A.M.D.; W. S. Armitage, 10, Findhorn Place, Edinburgh; L. R. Colledge, A.M.D.; K. A. Grossmann, M.D., 70, Rodney Street, Liverpool.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the December meetings of the Board of Examiners for the Qualification in Public Health, the following medical practitioners, having passed the necessary examinations, were admitted Diplomates in Public Health.

R. Banks, M.B., Rutherglen; R. Davidson, M.B., Shettleston; A. J. Hall, M.A., M.D., Rothesay; J. Hern, M.D., Darlington; R. P. Jack, M.B., Dunoon; C. J. King, M.B., Pollokshaws; J. Maxwell, Tobermory; J. Rowat, M.B., Kilmarnock; J. P. Tannock, M.B., Greenock; W. Whitelaw, M.D., Kirkintilloch.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen having passed the Qualifying Examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and were admitted as Licentiates:—

On December 13th, 1889:

Hildyard, Nathaniel, University College Hospital.
Blake, Hubert Elliot, University College Hospital.
Cutler, Lennard, St. George's Hospital.

On December 18th, 1889:

Wolfe, Robert Inglewood, Cork, Leeds, and London Hospital.
Du Cane, Edgar, Richmond Hospital, Dublin, Royal University, Dublin.
Barber, George Thomas Congreve, Queen's College, Birmingham.
Burton, William Edward, University College, Liverpool, and University College, London.
Jones, Thomas Eyton, University College, Liverpool.
Whitehead, Elihu Theophilus, St. Thomas's Hospital.

On December 19th, 1889:

Marris, William, Middlesex Hospital.
Trist, Hore Browse, St. Bartholomew's Hospital.

JAMES MURRAY'S ROYAL ASYLUM: PERTH MEDICO-PSYCHOLOGICAL ASSOCIATION.—At the examination held in the Royal Edinburgh Asylum on December 16th, the following gentlemen passed, and are entitled to the certificate in psychological medicine:

F. A. Elkins, M.B., C.M., Royal Edinburgh Asylum; H. J. Younger, M.B., C.M., Smithson Asylum, Greenock.

A METEOROLOGICAL station has been established on the tower of Strassburg Cathedral.

PROFESSOR CREDÉ, the distinguished German obstetrician, celebrated his 70th birthday on December 23rd.

DR. A. CARDARELLI has been appointed Professor of Pathology and Clinical Medicine in the University of Naples.

DR. JULIUS ALTHAUS has been elected an Honorary Member of the Medical Society of the county of New York.

DR. G. GRANVILLE BANTOCK has been elected an honorary member of the Société Belge de Gynécologie et d'Obstétrique.

DR. ROBERT BARNES has been elected an Honorary Member, and Dr. Fancourt Barnes Honorary Corresponding Member, of the Imperial Society of Medicine of Constantinople.

IN consequence of the prevalence of scarlet fever at Sheldwick, a village near Faversham, it has been deemed advisable to close the schools for a fortnight.

MEDICAL MAGISTRATE.—Mr. W. Inglis Mason, L.R.C.P., M.R.C.S., Sudbury, Suffolk, has been placed on the commission of the peace for that borough.

A BUTCHER, doing a large business in the poorer part of Worcester, has been sentenced to two months' hard labour for exposing for sale meat unfit for human food.

PROFESSOR WESTPHAL, of Berlin, the well-known neurologist, is so seriously ill that for a considerable time past he has been unable to discharge the duties of his office. His place is taken in the meantime by Dr. Oppenheim.

IT is announced that the editorship of the *Archiv der Pharmacie*, the organ of the German Pharmaceutical Society, will from the beginning of the present year be in the hands of Professor E Schmidt, of Marburg, and Dr. H. Beckurts, of Brunswick.

LORD GEORGE HAMILTON, First Lord of the Admiralty, wil take the chair at the sixty-ninth annual court of governors of the Dreadnought Seamen's Hospital at the Hôtel Métropole at 3 P.M on February 18th.

THE report of the Norwich Hospital Saturday and Sunday Fund is not of a satisfactory character, the total sum raised in 188 being not so large as any of the past six collections for the Hospital Sunday Fund.

THE Mercers' Company, on December 20th, ordered the following sums to be paid to certain London hospitals:—London, £1,000 Guy's, £1,000; Middlesex, £1,000; St. Mary's, £1,000; King's College, £500; Westminster, £500.

THE typhoid fever epidemic which prevails in the village o Linlithgow Bridge is said to be spreading with rapidity. O December 28th there were over twenty cases and no signs o abatement. The drainage of the locality is being inquired int and, pending an examination of the water, two wells have bee closed.

THE question of the appointment of a medical officer for th county of Glamorgan was, on a resolution of the Chairman, di cussed at a recent meeting of the Local Government Committee o the Glamorgan County Council, and, the opinion of the majorit being in favour of deferring the question, the resolution was with drawn.

LORD WOLSELEY ON AMBULANCE WORK.—Lord Wolseley, in distributing recently the certificates at a branch of the St. John Ambulance Asociation, bore testimony to the value of such instruction as the Association afforded, both in the crowded streets and on the battlefield. Speaking of the latter, he said had he known as much years ago as he now knew he could have rendered invaluable service. He had seen men bleeding to death beside him, not knowing how to help them. With regard to the kindred association of hospital nurses, he bore high testimony to the value of their work in the hospital camp in the Soudan, which was under the charge of Colonel Duncan during the war.

HARVEIAN SOCIETY OF LONDON.—The following is a list of the names of gentlemen proposed by the Council as officers of the Society for the year 1890: *President:* *Thomas Bryant. *Vice-Presidents:* F. H. Champneys, M.B.; *J. E. Lane; *S. Mackenzie, M.D.; R. S. Mair, M.D. *Treasurer:* G. P. Field, *Hon. Secretaries:* Robert Maguire, M.D.; *D'Arcy Power, *Council:* *T. Buzzard, M.D.; J. H. Drew; J. H. Jackson, M.D., F.R.S.; *W. H. A. Jacobson, M.Ch.Oxon.; M. Handfield-Jones, M.D.; D. Lees, M.D.; *C. B. Lockwood; G. E. Norton; *H. W. Page, M.C.Cantab.; *S. Phillips, M.D.; W. Sedgwick; F. Treves. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year. The election will take place at the annual general meeting of the Society, to be held on Thursday, the 16th instant.

A CORONER'S COURT FOR MANCHESTER.—At a recent meeting of the Manchester City Council, it was unanimously resolved that steps should be taken to provide new and more suitable premises for the Coroner's Court. Hitherto inquests have been held in a small room in John Street, which is not only exceedingly ill adapted for the purpose, but even, from its utter inadequacy, calculated seriously to damage the health of those who are compelled to attend the court. The medical officer of health, Dr. John Tatham, hearing that the subject was about to be brought before the Council, addressed a timely letter to the Mayor, urging the extreme importance of providing proper mortuary accommodation, and pointing out the inconveniences, not to say dangers, which might arise from bodies being retained in private dwelling-houses for the purposes of a coroner's inquest. It is to be hoped that the recommendations of Dr. Tatham will receive that attention which the great importance of the subject deserves when the new arrangements are being made.

PATHOLOGICAL SOCIETY OF LONDON.—At the meeting on Tuesday next the following will be proposed for election as the officers and council for the year 1890:—*President:* W. H. Dickinson, M.D. *Vice-Presidents:* James Andrew, M.D.; *Sir Joseph Fayrer; *P. Henry Pye-Smith, M.D.; Henry G. Sutton, M.B.; Richard Barwell; *J. Neville C. Davies-Colley; F. Howard Marsh; *J. Warrington Haward. *Treasurer:* William Cayley, M.D. *Honorary Secretaries:* Samuel West, M.D.; *S. G. Shattock. *Council:* Charles Edward Beevor, M.D.; Sidney Coupland, M.D.; *F. G. Dawtrey Drewitt, M.D.; William Ewart, M.D.; Percy Kidd, M.D.; David B. Lees, M.D.; Stephen Mackenzie, M.D.; *G. Newton Pitt, M.D.; George Thin, M.D.; William Hale White, M.D.; William Anderson; *Charles A. Ballance; *Edgar Crookshank; R. J. Godlee; *William Hickman; Jonathan Hutchinson, jun.; George Henry Makins; Herbert Wiliam Page, M.C.; Bernard Pitts, M.B.; A. Quarry Silcock, M.D. The gentlemen whose names are marked with an asterisk were not on the Council, or did not serve the same office during the past year.

PROFESSOR HEGAR.—On December 17th Professor Alfred Hegar, of Freiburg, celebrated his silver jubilee as head of the Obstetrico-Gynæcological Clinic in that University. A congratulatory address was delivered, and a *Festschrift*, written in commemoration of the occasion by several of his most distinguished pupils, was formally presented to him. This work, which is published by F. Enke, of Stuttgart, under the title *Beiträge zur Geburtshilfe und Gynäkologie*, contains the following contributions: On the Treatment of Malignant Neoplasms of the Uterus, by R. Kaltenbach; On Supravaginal Amputation of the Puerperal Uterus, by C. Stahl; On Hæmoglobin in the Blood in the Last Months of Pregnancy and in Childbed, by C. Reinl; Castration in Osteomalacia, by A. Hoffa; Neuroses Consecutive to Gynæcological Diseases, by E. Odebrecht; On Retention of the Uterine Mucous Membrane during and after Menstruation, by C. von Kahlden; Cases of Supravaginal Amputation of the Uterus for Myoma, by A. Schmalfuss; The Definitive Results of Castration for Uterine Fibroma, by W. Wiedow; Small-Cyst Degeneration of the Ovary, by G. Bulius; and Plastic Operations for the Restoration of Lacerated Perineum and the Cure of Prolapsus, by E. Sonntag.

PROPOSED OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY FOR THE NORTH OF ENGLAND.—A preliminary meeting, called by circular, was held at the Queen's Hotel, Manchester, on December 20th, for the purpose of considering the advisability of instituting an obstetrical and gynæcological society for the North of England. There was a large attendance of gentlemen from Manchester, Liverpool, Leeds, and surrounding towns. Letters or telegrams of apology for absence, and giving in adherence to the scheme, were received from Professor Chas. J. Wright, Leeds; Dr. Lloyd Roberts, Manchester; Mr. William Alexander and Dr. Macfie Campbell, Liverpool; and many others. Professor John Wallace, Liverpool, occupied the chair. He delivered a short address on the objects of the meeting, and called upon Dr. Sinclair, Manchester, to supplement his remarks. Dr. James Braithwaite, Leeds, then proposed the following resolution: "That it is desirable to establish an obstetrical and gynæcological society for the North of England, with centres in Manchester, Liverpool, and Leeds." This was seconded by Dr. Burton, Liverpool, and supported by Drs. Walter and Buckley, Manchester, and on being put to the meeting was carried unanimously. On the motion of Dr. Briggs, Liverpool, seconded by Mr. Mayo Robson, Leeds, the following provisional Committee was appointed to prepare a scheme for the working of the society, and to report to a meeting to be held at the same place on January 17th—namely, Dr. Braithwaite, Messrs. Wright and Robson and Dr. Hellier, Leeds; Drs. Wallace, Briggs, Burton, J. Armstrong, and Macfie Campbell, Liverpool; and Drs. Lloyd Roberts, Sinclair, Walter, Buckley, and Donald, Manchester. This Committee to have power to add to their number, it being understood that the added members would be drawn chiefly from the surrounding towns. Dr. Sinclair, Oxford Road, Manchester, is acting as secretary, *pro tem.*

MEDICAL VACANCIES.

The following Vacancies are announced:

BEDFORD GENERAL INFIRMARY.—Resident Surgeon. Salary, £100 per annum, with apartments, board, and washing. Applications by January 22nd to the Secretary.

BIRMINGHAM AND MIDLAND COUNTIES SKIN AND LOCK HOSPITAL.—Additional Medical Officer. Applications by January 4th to the Honorary Secretary.

BRISTOL EYE HOSPITAL.—Non-resident House-Surgeon. Salary, £120 per annum. Applications by January 22nd to Mr. F. R. Cross.

DERBY BOROUGH ASYLUM.—Clinical Assistant. Board and residence. Applications to Dr. Macphail, Borough Asylum, Rowditch, Derby.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Surgeon. Board and lodging. Applications by January 9th to the Secretary.

GERMAN HOSPITAL, Dalston (Western Dispensary).—Honorary Medical Officer. Applications by January 15th to the Assistant Honorary Secretary.

MERCER'S HOSPITAL, Dublin.—Physician. Applications by January 7th to A. McGucken, Esq., Registrar.

PAROCHIAL BOARD OF SANDWICH.—Medical Officer. Applications to the Inspector of Poor.

ROYAL BERKS HOSPITAL, Reading.—House-Surgeon. Salary, £80 per annum, with lodging. Applications by January 7th, 1890, to the Secretary.

VICTORIA HOSPITAL FOR SICK CHILDREN, Chelsea, S.W.—House-Physician. Salary, £50, with board and lodging. Applications by January 4th to the Secretary.

VICTORIA HOSPITAL FOR SICK CHILDREN, Chelsea, S.W.—House-Surgeon. Salary, £50, with board and lodging. Applications by January 4th to the Secretary.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—Honorary Medical Officer. Applications by January 6th to the Honorary Secretary.

MEDICAL APPOINTMENTS.

ALBERT, Henry Louis, M.R.C.S., L.D.S., appointed Lecturer in Dental Surgery and Dental Surgeon to St. George's Hospital, *vice* Augustus Winterbottom, resigned.

BURGHARD, F. F., M.S., M.D., appointed Assistant Surgeon to King's College Hospital.

CALVERT, W. D., L.R.C.P.Lond., M.R.C.S.Eng., appointed House-Physician to the Sussex County Hospital, Brighton, *vice* Gerald G. Hodgson, resigned.

COLMAN, Walter Stacy, M.B., M.R.C.P., appointed Assistant-Physician to the North-West London Hospital, *vice* E. J. Edwardes, M.D., resigned.

CROOKE, G. F., M.D., appointed Lecturer on Practical Pathology at Queen's College, Birmingham.

DEANS, William, M.B.Aberd., C.M., appointed Medical Officer to the Edenfield District of the Haslingden Union.

DUCKET, C. Alexander, M.R.C.S.Eng., L.S.A., appointed House-Surgeon to the Great Yarmouth Hospital.

HELLIER, John B., M.D.Lond., M.B., M.R.C.S.Eng., Lecturer on Diseases of Women and Children at the Yorkshire College, elected Senior Surgeon to the Leeds Hospital for Women and Children, *vice* Mr. Scattergood, resigned.

HICKS, P., B.M., B.S., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Warneford Hospital, Leamington Spa, *vice* B. Rice, M.D.Lond., resigned.

HINGSTON, Andrew, M.R.C.S., L.S.A., reappointed Medical Officer of Liskeard Union District.

HODGSON, G. G., M.R.C.S., L.S.A., appointed House-Surgeon to the Sussex County Hospital, *vice* F. J. Paley, M.D., M.B., M.R.C.S.Eng., resigned.

HYNE, Frederick Alex., M.R.C.S.Eng., L.S.A., appointed Medical Officer for the St. Justin Roxland District of Truro.

IDESON, J. J., L.S.A., reappointed Medical Officer to the Colne District of the Burnley Union.

JOLLY, Sydney Blake, M.B.Cantab., M.R.C.S.Eng., L.S.A., appointed Medical Officer of Health to the Lewisham District.

JOWERS, F. W., M.R.C.S., L.S.A., appointed Consulting Surgeon to the Sussex County Hospital.

JOWERS, R. F., F.R.C.S.Eng., appointed Assistant Surgeon to the Sussex County Hospital, *vice* W. Furner, F.R.C.S.

KNYVETT, H. F., appointed Assistant House-Surgeon to the General Infirmary, Northampton, *vice* T. A. Durrant, M.R.C.S., resigned.

KYNASTON, Albert Edward, L.R.C.P.Edin., L.M., M.R.C.S., L.S.A., appointed Medical Officer for the Osbournby District of Sleaford.

LAWSON, Samuel, L.F.P.S., L.M.Glas., reappointed Medical Officer to the Marsden District of the Burnley Union.

LOCKWOOD, W., M.B., C.M., appointed House-Surgeon to the West Bromwich Hospital.

LUND, T., M.B., B.S., appointed House-Surgeon to the Doncaster General Infirmary and Dispensary, *vice* J. K. Robinson, M.B., resigned.

MCLAGAN, Henry G., M.B.Durh., appointed Resident Ophthalmic Officer to the General Infirmary at Leeds.

MACMAHON, Edmond John Ryan, L.K.Q.C.P.Irel., L.R.C.S.I., L.M., appointed Medical Officer to the Fourth District of the Northleach Union, *vice* A. W. Gabb, M.R.C.S., L.S.A., resigned.

MARTIN, Sidney, M.D., appointed Pathologist and Curator to Middlesex Hospital, *vice* Leopold Hudson, F.R.C.S., L.R.C.P., resigned.

MAYNARD, E. F., appointed Assistant House-Surgeon to the Sussex County Hospital, *vice* W. D. Calvert, L.R.C.P.Lond.

MELLER, Charles Booth, L.R.C.P.Edin., L.M., M.R.C.S., L.S.A., appointed Medical Officer of Health for the Cowbridge District of the Bridgend and Cowbridge Rural Sanitary Authority.

MONEY, Angel, M.D., appointed Physician to the Guardian Insurance Company.

MOORE, Frederic Hone, L.K.Q.C.P.Irel., L.M., L.R.C.S.I., appointed Medical Officer of the Littleport District of the Ely Union, *vice* W. A. H. Barrett, L.R.C.P., L.S.A., resigned.

PHILLIPS, Easton Abbiss, M.R.C.S.Eng., L.S.A., re-elected Medical Officer for the Dunham District of the Retford Union.

PHILLIPS, J., M.D., M.B., M.R.C.S.Eng., appointed Assistant Physician and Assistant-Accoucheur to King's College Hospital.

PRIESTLEY, J., M.D., C.M., M.R.C.S.Eng., appointed Resident Medical Officer to the Grantham Friendly and Trade Societies' Medical Institute, *vice* T. Smith, M.D., resigned.

RHODES, James, M.R.C.S., L.S.A., reappointed Medical Officer to the Glossop Union and Rural Districts.

ROGERS, George Arthur, M.R.C.S.Eng., L.S.A., re-elected Medical Officer of Health for the Limehouse District.

ROGERS, G. Pigott, L.R.C.P.Edin., L.R.C.S., L.M., appointed Medical Officer to the Fourth District of the Greenwich Union.

RYGATE, Brougham Robert, M.B.Durh., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health for the Parish of St. George-in-the-East.

SAVILE, G. Townsend, M.D.St.And., L.R.C.P.Edin., M.R.C.S.Eng., L.S.A., re-elected Medical Officer for the Clarborough District of the Retford Union.

STANLEY, D., M.B., C.M., appointed Resident Medical Officer to the St. Pancras and Northern Dispensary, *vice* F. Boxall, L.R.C.P., M.R.C.S., resigned.

STIRLING, Alexander Williamson, M.D., appointed Medical Officer of Health for Grays, *vice* S. J. J. Kirby, M.D., resigned.

STOCKER, E. G., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Physician to the West London Hospital.

STUBBS, Robert Pickering, L.S.A., appointed Medical Officer for the Filingsdale District of Whitby.

TEED, F. L., appointed Public Analyst for Camberwell.

TENCH, Montague, L.R.C.P., M.R.C.S., L.S.A., appointed Resident Obstetric House-Physician to the Middlesex Hospital, W.

THOMSON, Theodore, M.B.Lond., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health for the Borough of Sheffield.

WELLBURN, Edgar Duesbury, L.R.C.P.Edin., L.R.C.S.Edin., L.M., L.F.P.S. Glasg., appointed Medical Officer of the Sowerby District of the Halifax Union.

WHYTE, Andrew, M.D.Aberd., M.B., C.M., appointed Medical Officer of the Merthyr Cynog District of the Brecon Union, Vaccination Officer for the Merthyr Cynog and Brecknock Vaccination Districts, Medical Officer of Health for the Merthyr Cynog Rural Sanitary District, *vice* Dr. J. Williams, resigned.

WILKINSON, J. H., M.R.C.S., L.R.C.P., appointed Resident Assistant to the Wolverhampton and Staffordshire General Hospital.

WILSON, Arthur H., L.R.C.P.Lond., M.R.C.S.Eng., elected Surgeon to the Stanley Hospital, Liverpool, *vice* Mr. Robert Jones, F.R.C.S.

WOODS, Oscar, B.A., M.D.Dub., L.R.C.S.I., appointed Medical Superintendent of the Cork District Asylum, *vice* J. Dwyer, M.D., deceased.

YOUNGER, H. J., M.B., C.M.Glasg., appointed Assistant Medical Officer to Greenock Parochial Asylum and Poorhouse, *vice* F. A. Elkins, M.B., C.M. Edin., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Edmund Owen: The Lettsomian Lectures. On Subjects in Connection with the Surgery of Infancy and Childhood. Lecture I.

TUESDAY.

SOCIETY FOR THE STUDY OF INEBRIETY, 11, Chandos Street, Cavendish Square, W., 4 P.M.—Mr. J. R. McIlraith: The Law relating to Drunkenness and Inebriety.

PATHOLOGICAL SOCIETY OF LONDON (20, Hanover Square), 8.30 P.M.—Dr. Hunter: The Pathology of Duodenitis after Burns. Dr. Hale White: Intussusception of Jejunum. Mr. James Berry: Thirty-three specimens illustrating Diseases of the Thyroid Gland, together with a collection of photographs and casts. Mr. Lockwood: Retroperitoneal Hernia. Dr. Delépine: Cardiac Calculus. Mr. Willett: Ruptured Spleen. Mr. D'Arcy Power: Ruptured Spleen. Mr. Solly: Myxofibroma of Pelvis. Card Specimens:—Mr. Spencer: 1. Caries of Vertebræ in a Dog. 2. Intestinal Obstruction and Abscess in a Dog. Mr. Raymond Johnson: Sublingual Dermoid.

WEDNESDAY.

ROYAL MICROSCOPICAL SOCIETY, King's College, W.C., 8 P.M.—Mr. A. D. Michael: On the Variations of the Female Reproductive Organs, especially the Vestibule, in different Species of Uropoda.

BRITISH GYNÆCOLOGICAL SOCIETY, Hanover Square, 8.30 P.M.—Specimens will be shown. Mr. Bowreman Jessett: On the Surgical Treatment of Cancer of the Uterus. Annual Meeting.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Dr. Matthews Duncan and others. Dr. William Duncan: Should Pregnancy be terminated prematurely in cases of Phthisis? Dr. Herman: Five cases of Puerperal Eclampsia especially illustrating the Temperature and Urine in this Disease. Dr. Amand Routh: Urethral Diverticula.

LONDON POST-GRADUATE COURSE, Rooms of the Medical Society of London, 8.30 P.M.—Introductory Address by Mr. Jonathan Hutchinson, F.R.S., On the Aims and Methods of the Post-graduate Course.

FRIDAY.

CLINICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Annual meeting. Cases:—Mr. W. G. Spencer: Case of Traumatic Aneurysm of the Back following a Fracture Dislocation of the Spine in the Dorso-lumbar Region, and presumably connected with the Lumbar Arteries. Dr. Andrew: Case of Hæmorrhagic Varicella. Dr. H. D. Rolleston: Case of Desquamation in Large Flakes in Typhoid Fever.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement. The first post on Thursday mornings is the latest by which advertisements can be received.

BIRTHS.

AMBLER.—December 26th, at Ampthill, the wife of Richard Ambler, L.R.C.P. & S.Edin., and L.F.P.& S.Glas., of a daughter.

O'DWYER.—On 24th December, at Harpenden, Hertfordshire, the wife of Brigade-Surgeon T. F. O'Dwyer, Medical Staff, of a daughter.

SCOTT.—At Musselburgh, N.B., on December 26th, 1889, the wife of Thomas Scott, M.D., of a son.

WYLIE.—On Christmas Day, at Mountfield, Streatham, London, S.W., the wife of David T. Wylie, L.R.C.S.I., L.K.Q.C.P.I., etc., of a son.

MARRIAGES.

DODD—BARNES.—December 21st, at St. Saviour's, Preston, Brighton, by the Rev. R. Court Gazeley, many years Rector of Wayford, father of the bride, Walter Harry Dodd, L.R.C.P.London, fourth son of Grantham Robert Dodd, solicitor, Highbury, to Emily Augusta, widow of the late Rev. Thomas Barnes, M.A., Rector of Loxton, Somerset, and granddaughter of the late John Alexander, Esq., of Newbury, Berks, and Uphaven, Wilts. No cards.

DOWNES—GRAY.—On 28th December, at St. Michael's and All Angels', West Croydon, by the Rev. W. H. Hickson, Howard Downes, L.R.C.P., M.R.C.S., of Danehurst, Hornsey, youngest son of the late William Samuel Downes, of 14, St. Mary's Road, Canonbury, to Sarah Sophia, eldest daughter of the late Samuel Gray, of Croydon.

WILLIAMS—FOX.—On December 19th, at the Parish Church, Clifton, by the Rev. Canon Ainger, assisted by the Rev. Talbot Greaves, M.A., and Rev. Patrick Watson, Patrick Watson Williams, M.B.Lond., 14, Westbourne Place, Clifton, to Margaret Long, daughter of Edward Long Fox, M.D.

DEATHS.

ROSS.—On December 24th, at 8, St. George's Place, Brighton, John Harris Ross, M.D., aged 47.

ROSSETTI.—On the 10th August, at her residence, Hamilton Street, Hokitika, New Zealand, Catherine, the beloved wife of F. Rossetti, M.D., in her 66th year. Deeply regretted. R.I.P.

STRUTHERS.—At Aldershot, on December 27th, Alexander James Struthers, M.B., surgeon in the army, aged 31 years.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK' JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C , London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

QUERIES.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

SURGEON-MAJOR M. I. MACCORMACK, M.D. (15, Pembridge Place, W.) writes: I am gradually getting blind, and am awaiting operation for cataract in both eyes. Do you or any of your readers know of any place where I could be taken in as a paying patient, or of any private practitioner who would receive me on terms to be arranged? If so, perhaps they would kindly address me direct.

A MEMBER would be glad to know what age is best for operating on webbed fingers; the present age of the patient is about two months.

DR. A. F. C. CAMERON (Liverpool) asks for information respecting Andrew Knox Blackall, whose portrait, painted by Sir J. Reynolds, is in the Board Room of Worcester Infirmary. He was apparently a professor of Anatomy, judging by the bones and injected aorta in the picture. Our correspondent is also anxious to obtain information respecting Dr. W. Addison, who published a paper on the Medical Topography of Malaria in the *Transactions of the Provincial Medical Journal* for 1736.

NÆVUS asks: Where can I hire Paquelin's cautery or an electrical accumulator with apparatus for treating a nævus?

HOME FOR LEPER.

A MEMBER would be glad to know of an institution or home for a patient, aged 30, suffering from leprosy. The patient is a Catholic.

HOME FOR CHILD WITH RHEUMATOID ARTHRITIS.

SPES asks to be recommended a suitable asylum for a male child, aged 6 years, suffering from rheumatoid arthritis. The young sufferer has been absolutely crippled for the last two years, and is indeed a pitiable object, with but very little, if any, hope for even improvement. A home in the north of England would be much preferred, as it would be more accessible for the parents of the afflicted little one.

CARDIAC PULSE AUDIBLE TO PATIENT.

MEDICUS HIBERNICUS writes: I am 70 years of age; six years ago I began to get deaf, and am now "hard of hearing," not by any means quite deaf. *Pari passu* with the deafness I became conscious of hearing my heart-beats, and am now greatly disturbed and bothered thereby. At night, particularly, I suffer from this trouble, which keeps me, sometimes for hours, awake and makes me quite nervous. May this be due to the deafness?

ANSWERS.

DELTA.—The Infectious Diseases (Notification) Act can be obtained from Eyre and Spottiswoode, East Harding Street, Fetter Lane, E.C.

INQUIRER should apply to Messrs. Williams and Norgate, 14, Henrietta Street, London, W.C.; or Messrs. Dulau and Co., 37, Soho Square, London, W.

FIL DESPERANDUM.—1. Apply to Mr. C. J. Radley, Secretary to the Medical Sickness, Annuity, and Life Assurance Society, 26, Wynne Road, Brixton. 2. Send to Dr. Anningson, Cambridge, for the documents and list of books connected with the Cambridge Sanitary Science Examination.

CHLOROFORM IN MIDWIFERY.

BELL writes: Mrs. A. asks Dr. B. to attend her in her confinement; he calls and agrees to do so, when she insists on his promise "to give chloroform at the bad part." B. courteously declines the case. Did he act properly? I may add that the case did not in any way contra-indicate chloroform.

*** A medical man undertaking a case can only do so on the condition that he is unfettered as to the line of treatment. He must be at liberty to exercise his discretion.

ARTIFICIAL SALICYLIC ACID.

F.R.C.S.ED.—Salicylic acid prepared by Kolbe's process from carbolic acid is always contaminated by acids differing from salicylic acid. It is well known that considerable percentages of higher phenols are common in carbolic acid, and when they are treated as they are in Kolbe's method they are changed into homologues of salicylic acid,[1] the cresols into hydroxytoluic acids, and the xylenols into hydroxyxylenic acids, just as phenol proper is changed into hydroxybenzoic acid (salicylic acid). The presence of these homologous acids in artificial salicylic acid was first indicated in 1878 by J. Williams,[2] who found that the calcium salt of the foreign acid is much more soluble in water than calcium salicylate, and on this fact he based a method of separation which consists in saturating a boiling solution of salicylic acid with calcium carbonate; causing the salicylate of calcium to crystallise out as completely as practicable, and then upon acidulating the mother liquor the acid is obtained. In certain physical characters this acid is distinctly different from salicylic acid, but in the leading chemical relations it agrees with it and also with its isomers. The acid liberated from the separated crystals of calcium salt after purification agreed in all points with true salicylic acid. Mr. Williams was of opinion that the acid not salicylic formed 15 to 20 per cent. of the better qualities of salicylic acid in the market. In 1883 Dr. E. R. Squibb[3] gave the opinion that the better grades of the well crystallised acid of the market contain 4 to 5 per cent. of something which is not salicylic acid, and for which he says he knows no test. Very little further investigation of the presence and proportion of the homologous acids has since that time been reported. Carbolic acid is especially liable to be present in artificial salicylic acid which has been sublimed. This can be detected by nearly neutralising with sodium carbonate and agitating the liquid with ether. On gently evaporating the ethereal liquid the carbolic acid may be recognised by its smell, taste, and chemical reactions. The salicylic acid of commerce is now far purer than was formerly the case. It is impossible by chemical reagents to distinguish artificial from natural salicylic acid, the two being identical. The difference in their appearance, however, is characteristic; the natural acid occurs in acicular crystals resembling those of strychnine, while the artificial is in fine white silky crystals like quinine, which are often of a pink tint.

MADEIRA OR THE CANARY ISLANDS?

DR. H. COUPLAND TAYLOR writes: Having resided both in the Canary Islands and in Madeira, and having lately been engaged in writing upon them for a book on foreign health resorts which I hope soon to publish, I hope your correspondent "A Member" will find the following answers to his queries satisfactory. Madeira and the Canary Islands may be most economically reached by the British and African and the African Company's steamers from Liverpool, but they are not always very satisfactory. Madeira may be most quickly and comfortably reached by the Cape mail steamers of either the Union or the Castle Lines, sailing from Southampton and Dartmouth (and London) respectively. Teneriffe may also be best reached by the fine ships of either the New Zealand Shipping Company or Shaw, Savill, and Co.

As to the question "Which of the two groups is preferable?" it is difficult to shortly estimate their rival merits, and there is really little to choose between them. The Canary Islands are on the whole drier, but otherwise the climates are very similar; also, being free ports, they are rather less expensive. In other respects Madeira has the advantage, especially as regards accommodation and food.

As to the best place of residence, the question is narrowed down to the four places, Las Palmas in Grand Canary, Santa Cruz and Puerto Orotava in Teneriffe, or Funchal and its suburbs in Madeira. Las Palmas is the only place in Grand Canary which is at present opened up, and which affords any accommodation, but one cannot conscientiously recommend it as a health resort for chest cases. Santa Cruz is lacking much in accommodation and in any English society, so that really the choice lies between Orotava and Funchal. Small furnished houses in the streets of the town are obtainable in both places at very much the same rents, say £5 to £6 a month. No small villas in good situations are obtainable at Orotava, as the few there were have been eagerly snapped up since the rush of English to that place commenced, and rents have consequently doubled. There is a considerable choice of such furnished villas, however, round Funchal at rents from £60 to £100 per season, little more being asked for the remainder of the year. Plate and linen are not supplied in either place. The cost of living depends, of course, on the persons themselves and the style desired. The hotels are rather cheaper at Funchal, and the catering is decidedly better than in Orotava. The usual price charged is 10s. a day for each adult, but a reduction can be obtained for the season. As a rule, it may be estimated that for any number over two the taking a house is the cheaper, though it of course entails the trouble of managing foreign servants who do not understand English.

NOTES, LETTERS, ETC.

ERRATA.—In the M.D. passlist of the London University in the JOURNAL of December 21st, p. 1424, Dr. M. L. Gabriel is described as of St. Thomas's Hospital instead of St. Bartholomew's.—In the same JOURNAL, p. 1431, line 4 from bottom, for "*gun*powder" read "*gum*powder."

ARMY DOCTORS AND CIVIL PRACTITIONERS.

AN INDIGNANT PHYSICIAN writes: Civil practitioners have, in my emphatic opinion, a grave right to complain of those army doctors who practise in the districts in which they are located. Such practice represents so much deducted from the too oft scanty incomes of their civil brethren. Why should they do this? They have fixed salaries and pensions for their old age, and they have received nothing but substantial support of every description from their civil brethren. It is no excuse, but quite the contrary, that some of this work puts no fees into the pockets of the military doctors.

TREATMENT OF DIPHTHERIA.

DR. GEO. MUNDIE (Canterbury) writes: Mr. Alfred Stanley, of Birmingham, in the JOURNAL of December 14th, advocates the treatment of diphtheria by sulphur, in three different forms; no doubt a potent remedy, but I doubt if it is superior to iodoform when applied in the form of spray, which I should think was very much less disagreeable.

[1] Biederman and Pike, 1872, *Ber. d. chem. Ges.*, 5, 323; *Watts's Dict.*, vii, 394, viii, 2023.

[2] *Pharm. Journ.* (3), viii, 785.

[3] *The Ephemeris*, i, 411, November, 1883.

Cysts of the Cerebellum.

Dr. W. B. Hadden (Cavendish Square, W.) writes: In your report of my paper on Cyst of the Cerebellum read before the Pathological Society, and published in the Journal of December 21st, I referred to a similar case recently recorded by Dr. Major. The explanation of the origin of these cysts, to which I alluded, was made by Mr. Althorp, of Leeds, not by Mr. Shattock, as reported in your columns.

Dengue and Influenza.

Surgeon E. J. Erskine Risk (Milton Barracks, Gravesend) writes to point out the resemblance in certain respects of the epidemic at present prevailing in Europe with the rapid course and spread, the frontal or occipital headache, great aching in the eyeballs, fever, general *malaise*, rheumatic pains in back, joints, and limbs, and the complications as in dengue, namely, catarrh, swelling of the lymphatic glands, etc., and it will, perhaps, have been noticed to be followed by more or less anæmia or debility.

It would be interesting to know if a rash has been noticed in this epidemic, general and diffused, bright red, especially on chest and abdomen, as in dengue, lasting from one to three days, disappearing on pressure, and sometimes followed by great skin irritation and desquamation, especially of the palmar aspects of the hands and feet. The onset is sometimes very sudden. In my own case I felt quite well in the morning and had a good appetite for breakfast, and during the time I was walking back to my bungalow in the Punjab, a distance of less than a mile, great frontal and occipital headache came on and spread down the spine, with throbbing and burning of the eyeballs, and fever.

Dengue fever has been noticed to both follow and precede outbreaks of both yellow fever and cholera. In 1886 dengue was very prevalent amongst the soldiers in garrison in Umballa, Punjab, and was followed in the next year (1887) by an outbreak of cholera, chiefly in the native city. I should say this was merely a coincidence, though a belief does prevail as to its being a precursor of the more serious epidemic. The treatment found most successful was belladonna extract in quarter-grain doses, t.d.s., or nearly as good results from a mixture of bromide of potassium gr. x and quinine gr. v, t.d.s.

COMMUNICATIONS, LETTERS, etc., have been received from:

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To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication, and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

BOOKS, etc., RECEIVED.

Transactions of the Ophthalmological Society of the United Kingdom. Vol. IX. Session 1888-89. London: J. and A. Churchill.

The Prevention of Measles. By C. Candler. London: Kegan Paul, Trench and Co. 1889.

On Diseases of the Rectum and Anus. By Harrison Cripps, F.R.C.S. Second edition. London: J. and A. Churchill. 1890.

Insomnia and its Therapeutics. By A. W. Macfarlane, M.D. London: H. K. Lewis. 1890.

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LECTURES
ON THE
SURGICAL ASPECT OF HEPATIC ABSCESS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
Surgeon to the Hospital and to University College Hospital.

Lecture I.

It is needless to tell anyone connected with this institution that the chest contains many more organs than the student of anatomy is disposed to put into it. You must cut off the trunk at the level of the third lumbar vertebra—that is, at an inch above the umbilicus—to include everything that is enclosed between the thoracic parietes; and think what a range this will give you. The stomach and spleen, the liver and the kidneys, the transverse colon and the duodenum, to say nothing of the aorta and the vena cava, the pancreas and the bodies of the vertebræ, and other more obscure and puzzling structures. We are much too apt to look at the body as consisting of distinct anatomical regions, and, while we are devoting our attention to one, to miss what is going on in the adjoining one. To illustrate my meaning, let me recall a case that occurred to me not long ago, in which a most able surgeon had been directing his attention to the abdomen in the search for a spinal abscess, and a distinguished physician to the chest in a supplementary search after the cause of the patient's trouble, which was pain in the back and palpitation apparently of the heart. I saw the patient, who, by the way, was the subject of old hip disease, casually, and was on the point of missing, as they had done, the cause of the trouble, when, as he was about to dress, he pointed out to me that his flutterings were just at the margin of his ribs; and thus, by a mere piece of good fortune, I was able to discover that they were caused by a large aortic aneurysm. But this is not all; the chest often contains morbid products which have made their way up or down from quite distant parts. Thus, a pericæcal abscess may burst into either pleura, and an abscess starting from the cervical vertebræ may, in the same way, enter the mediastinum or the pleura. I need therefore offer no apology for introducing to your notice the subject of abscess of the liver, the symptoms of which are in very many cases more or less thoracic. If I were to apologise, it would be on different grounds. It may seem presumption for any London surgeon to treat of this matter, because, even with exceptional advantages, none of us can have a very large experience of it, at least as compared with our *confrères* in tropical countries. I have, however, had rather unusual opportunities, chiefly because of the friendship of Sir Joseph Fayrer, to which I owe many of the facts I propose to bring before you, and to whose kindness and knowledge of the subject I desire hereby to bear testimony. I would also apologise for discarding the methodical manner of the textbook, and adopting a somewhat disjointed style—illustrating what is said by the cases that have, from time to time, come under my notice.

In the first place, then, I must clear the way by getting rid of one form of hepatic abscess which was very familiar to us in my student days, and which then, at all events, was as common in this country as it is in the tropics, though its cause was usually different—I mean *multiple pyæmic abscess*. This form is often much less easy to diagnose than the single abscess, and is generally not amenable to surgical treatment, or, if this be attempted, it is unsuccessful. In hot countries it is not infrequently the result, or, at all events, the concomitant of dysentery, or some other ulceration of the bowel. In this country it may arise from the same cause, but it more generally depends upon an abscess in connection with the cæcum, or upon any wound giving rise to pyæmia; and there is a rare condition that might almost be included under this head—namely, suppurative inflammation of the portal vein, or pylephlebitis, about which also a word or two must be said. I will first give examples of the old-fashioned pyæmic abscess.

Case I.—E. J., a married woman, aged 54, was admitted into University College Hospital, November 20th, 1874, on account of two deep wounds at the inner side of the lower end of the left forearm, produced by putting her hand through a window some days before. She was previously healthy. A diffuse cellulitis set in, accompanied by suppuration, for which incisions were made, and all was progressing favourably, the temperature being under 100° F., though the pulse was rapid for more than a week. Then came on the following train of symptoms.

November 28th. First rigor with a temperature of 104°.

November 30th. Second rigor. Basic *râles* on both sides; a little harsh breathing, but no alteration in percussion sounds.

December 1st. Third rigor, with a temperature of 105.8°. The tongue was brown and dry.

December 2nd. A slight rigor, No. 4. A crop of herpes labialis made its appearance, and the patient was noticed to be very sallow. Very likely she was slightly jaundiced.

December 3rd. Rigor No. 5, also slight. Delirium set in and tracheal *râles* were heard. Dr. Roberts diagnosed bronchitis, but could discover no pneumonia. Severe pain at the hypochondrium was complained of.

December 4th. The delirium continued, and the patient gradually sank and died.

At the *post-mortem* examination, extensive recent adhesions were found in the right pleura, and from twelve to twenty embolic abscesses in the right lung; but the left lung and pleura were healthy. The liver was large, and weighed seventy-two ounces. It contained a very large number of abscesses; so many indeed, that it was impossible to slice it across without opening more than one of them. Their capacity varied from a few minims to one or two drachms, and their contents consisted of bright yellow pus. There was an old deep scar on the surface of the liver. No joint was involved in the original mischief, and no phlebitis was discovered. The symptoms here were simply those of acute embolic pyæmia, and there was nothing to direct attention to the liver, except the sallow colour, which is almost always present in pyæmia, and the hypochondriac pain on the last day. The pus, it will be observed, was bright yellow. This I think may be taken as a very typical example of the condition under discussion.

The next case is of the same nature; but here there was nothing at all to draw the attention to the liver, except that it was enlarged; and, as the patient was obviously the subject of amyloid disease, this fact was of little importance.

Case II.—E. H., aged 9, came into University College Hospital, August 20th, 1873. She was highly tubercular in appearance, and had a marked tubercular history. From the age of two years she had had chronic hip-joint disease, which had suppurated and left sinuses. She was in the hospital for eight months, and during this time she submitted to a series of operations for the removal of the dead bone, culminating in excision of the hip-joint. She had a varying temperature, but one almost always of a hectic type, and she suffered from one attack, if not two, of erysipelas and died at last exhausted—the climax being hastened by diarrhœa. She had no rigors. *Post mortem* the liver was found to be very large, extending three inches below the ribs in the nipple line and markedly amyloid. Throughout its substance were numerous abscesses, the largest of which contained perhaps a drachm of yellow pus. There were also numerous pyæmic abscesses in the lungs, especially the left, and some were also found in the right kidney. No clots were found in the veins either of this or the former case; and yet it is almost certain that they were present at the seats of the original mischief.

The presumed mechanical cause for embolic abscesses in the liver and other viscera than the lungs is that septic clots escape into the venous circulation from softening thrombi in the veins at the seat of the primary mischief and are arrested in the lungs, where they give rise to the well-known conical patches of pulmonary apoplexy, followed by gangrene, round which suppuration is set up. Some of the original septic clots, however, it is supposed, may be so minute as to pass through the lungs and thus enter the *arterial* systemic circulation; or fresh ones may be formed in the pulmonary veins and thus be launched upon the same course. These then may stick in any of the systemic capillaries; but why this arrest should so frequently occur in the viscera, and so seldom in the muscles and cellular tissue the mechanical theory is unable to explain.

But there are other ways in which embolic hepatic abscesses may perhaps be caused. The late Dr. Wooldridge has shown[1] that the injection into the jugular vein of a dog of a special proteid substance obtained from various tissues (particularly the thymus gland) will cause clotting in the portal vein, the extent of the

[1] *Transactions of the Pathological Society of London*, vol. xxix, p. 421.

clotting depending upon the amount of the fluid used. These infarctions are hæmorrhagic, and do not result in suppuration, but it is conceivable that in cases of pyæmia such a material may be the cause of infarctions which, under such circumstances, are extremely likely to become the seats of suppuration. It is moreover not necessary that the emboli should reach the liver by means of the hepatic artery, as there are two feeders for the hepatic capillaries; and in cases of multiple abscess following dysentery and typhlitis, and in cases of *fistula in ano*, etc., we may look to the tributaries of the *portal vein* itself for the local source of mischief. It appears to be certain also that thrombosis and subsequent suppuration may occur in the *hepatic veins* or their tributaries.

Pylephlebitis suppurativa is a rare disease, and very difficult of diagnosis; but, as it is not unlikely that a surgeon's opinion may be asked when it is present, it is right to give a brief outline of it in this connection. It almost always depends upon suppurative inflammation in the parts where the portal vein originates, but it may depend upon a variety of causes. Frerichs gives them under the following heads: 1. Traumatic—there is a solitary case on record of a fish bone penetrating the stomach, and entering the portal vein. 2. Ulcerative processes in the intestinal canal and stomach; the most common locality being the vermiform appendix, and less frequently the rectum. 3. Abscesses of the spleen opening into the portal vein. 4. Suppuration in the mesentery and the mesenteric glands. 5. Abscesses in the liver, and diseases of the bile ducts; gall stones. 6. Inflammations of Glisson's capsule. The symptoms are usually preceded by those of the disease or injury upon which it depends, such, for example, as typhlitis. The special symptoms consist of pain in the epigastrium, the right or left hypochondrium, the cæcal or the umbilical region. Then follow rigors, usually frequently repeated at more or less irregular intervals. The liver and spleen are enlarged and tender, and slight or severe jaundice occurs. The stools are either loose, copious, and bilious, or there may be constipation. Then should follow the ordinary symptoms of peritonitis, the temperature usually becoming hectic, and at last there is delirium and death. Ascites does not appear to be frequent, though it is the rule in plastic thrombosis of the portal vein; but distension of the abdominal veins has been observed. In Dr. Wooldridge's experiments no ascites occurred, however extensive the thrombosis was. The disease, which appears to be absolutely hopeless, may run its course in a fortnight, but usually lasts from five to six weeks. Sometimes in addition to these symptoms are superadded those caused by the development of metastatic abscesses in other parts of the body. After death the liver is, in the majority of cases (three quarters), found to be enlarged on account of abscesses in its interior; but, if there be none, the size is unaltered. The portal vein is occupied by clots which are more or less broken down into the condition of pus. The characters of the spleen resemble those of the liver. I did not have the chance of making the necropsy myself in the two cases which are to follow; but the symptoms of them are so remarkably like those which have been described by writers upon this question as at all events to justify a short description of them.

CASE III.—On August 31st, 1889, I saw for the first time a member of our own profession, aged nearly 50, who had suffered for some years from obscure pains at the epigastrium, accompanied or followed by intestinal colic, which had been diagnosed as neuralgic, but which, it is possible, might have originated from trouble in the gall bladder, for it is well known that intestinal colic is often the most marked symptom of both biliary and renal calculi. Whilst taking his holiday in Scotland, about a month before, he was seized with a pain which, as far as we could learn, started somewhat in the same manner as on former occasions, but which led up to what appeared to be an attack of typhlitis. As this, however, did not subside, but began to be accompanied by rigors, he returned to his home in the midlands. The rigors continued and became more severe, occurring usually twice a day for a fortnight or more, when they ceased; but only to be replaced by periodical rises of temperature, accompanied by most of the unpleasant symptoms usually associated with a rigor. During this time the pain extended up into the right hypochondrium and epigastrium, and these regions became excessively tender; and ultimately an indefinite dulness showed itself below the margin of the ribs, and there were signs of compression of the base of the right lung. The patient became slightly jaundiced, and rapidly lost flesh, and passed into a somnolent and occasionally semidelirious state. A few days before I saw him an exploring needle had been passed through a lower intercostal space in the right back, but only blood had escaped into the syringe. The abdomen was distended. The bowels acted, the stools being clayey and unformed at first, often in small lumps: later they contained more bile and were more formed. There was some vomiting, at first of undigested food, and later of bilious material. The tongue was dry and brown, and there was an erythematous rash on the wrists and ankles and some other parts of the body. At this time there appeared nothing for the surgeon to do, but a week later, September 6th, as the dulness had increased, it was thought right to make an incision at the upper end of the right *linea semilunaris*, but this only led down to a large collection of dark blood clot, which was apparently shut off in this part of the peritoneum. No good followed, and on September 25th the patient died, eight weeks from the onset of the illness. The temperature towards the end lost its hectic type, but remained constantly high, 101° to 102.5°, reaching 104° two days before death, when there was a rigor.

At the necropsy, the liver was found to be universally covered by recent adhesions and creamy lymph, and contained numerous abscesses, varying in size from that of a shot corn to cavities containing two drachms. It was studded through with them. No clots, suppurative or adhesive, were observed in the portal vein. The gall bladder could not be found, though a careful search was made for it. The cavity which had contained the clot communicated with the peritoneum by an opening of the size of the finger. There was a large abscess in the spleen close to the hilus, and the splenic substance was very soft and diffluent. The intestines were matted together, and there were abscesses in the mesenteric glands; one being just below the pancreas. There was an abscess under the iliac fascia on the right side, about the length of the finger, extending down to the pubes, possibly connected with the appendix, which was blackened, but intact. There were recent adhesions in the right pleura, but no abscesses in the lungs. There is therefore no actual evidence that this was a case of suppurative pylephlebitis, but as the branches of the portal vein were not slit up, the evidence is not conclusive against it; for it is well known that the clots are sometimes only found in the smaller branches of the vein. It reads almost exactly like some of those quoted by Frerichs, with the curious additional symptom of the peritoneal hæmorrhage, for which I am unable to account, though it is worthy of notice that Dr. Wooldridge frequently, in the course of his experiments, observed subperitoneal hæmorrhage on the gall bladder, the contents of which, in one case, were very tenacious colourless mucus, which, he says, if it had entered the common duct would infallibly have produced jaundice.

CASE IV.—The next case is more obscure, and it is possible that some mischief about the gall bladder may have been at the bottom of the trouble. I saw the patient on August 18th, 1888, with Drs. Forman and Whitelaw, of Stoke Newington. He was a barman, aged 19, and his illness began on June 2nd with diarrhœa of typhoid type, and pain and tenderness over the cæcum. After three days' treatment this subsided, but on June 16th he hurried home, and immediately he felt ill and had a rigor, and pain and tenderness came on at the *scrobiculus cordis*, and continued till the time of our consultation, but the old cæcal tenderness did not return. The rigors persisted generally (as in the last case) twice daily for five weeks, and were followed by profuse sweating, the temperature being of a hectic type. Rapid emaciation ensued. The belly became distended with fluid, and there was dulness at both bases. The bowels were sometimes loose, sometimes bound, motions always offensive.

The patient was seen by Dr. Bruce, and the diagnosis suggested (though the case was admittedly most obscure) of subdiaphragmatic abscess, which I was asked, if I saw my way to do so, to open. I did not, however, see what was to be done beyond ascertaining the fact that there was serous fluid and not pus in the peritoneum and in both pleuræ, and so he was left alone, and he lingered till the beginning of September, three months after the commencement of his illness, death occurring at last from hæmorrhage into the stomach, which, it will be observed, is one of the recognised symptoms of plugging of the portal vein.

At the necropsy, it was found that the lungs reached no lower than the fourth rib, so great was the pressure from below, but there was only a slight excess of fluid in the pleuræ and the pericardium, and nothing else abnormal in the thorax. On cutting into the liver, however, Dr. Forman found a large abscess on the under surface, containing about half a pint of matter about the consistence and appearance of French mustard. The liver tissue was intensely congested, and resembled that of the spleen; it was

throughout studded with tiny collections of ordinary looking pus. The gall bladder was empty and shrunken, and the abscess was in a direct line with it. The abdomen contained about a gallon of fluid. All the other organs were healthy. A gummous-looking clot was noticed in the portal vein, which, in fact, was filled by it; so this, I have little doubt, was a case of the sort under discussion.

I have nothing further to say about the relation of the bile ducts to hepatic abscess beyond this: Mere obstruction of the bile duct does not give rise to suppuration, but if ulceration have occurred from the passage of a gall stone either along the ducts or directly from the gall bladder into the intestine, it may produce an abscess, either by causing extensive suppurative phlebitis of the portal vein, or by starting the process in the smaller vessels, and so originating what might be called a local pyæmia of the liver. It is also possible that, in cases where a stone has been impacted, and has caused ulceration, the ducts may become distended with pus, and the extension of a purulent collection thus formed may give rise to a genuine abscess of the liver.

Of the diagnosis of so-called *tropical abscess* of the liver, it is quite unfitting that I should speak, even if I were able to do so. In talking to people who have been in India and other countries where malarial troubles are common, one cannot help being struck with the fact that some will say that they have suffered from one form of malaria, others from another, others again describing two or more distinct kinds. Some, again, will say that they have had attacks of liver, others not; but almost all of them who have abscess of the liver have at one time or another had something of the malarial nature. One is led to conclude that the tropical abscesses are of two sorts; one the multiple which appears to be of the pyæmic kind we have just been considering. The other, which is usually, though not quite invariably, single, is apparently the most advanced stage of the attacks of hepatitis to which reference has been made. What part dysentery plays in the history of hepatic abscess has been the subject of much discussion, some maintaining that it is the cause, others the result, and others merely an accidental concomitant. Certain it is that many people who have abscess of the liver have never had dysentery, and it is of course well known that only a very small proportion of patients with dysentery ever develop liver abscess. I think it may be equally certainly stated that, if a patient with abscess of the liver be passing dysenteric stools, or much mucous discharge with the motions, the chance of his recovery, when the pus is evacuated, is very much diminished. I said that surgical treatment of a case of multiple abscess was very hopeless, and I will now give an example of a bad case of this kind to illustrate my meaning. Unfortunately it is impossible to do much more than hazard a guess as to whether any particular case is single or multiple.

Case v.—E. S., a Bohemian Jew, aged 36, had been resident in Kimberley for eight years, and had enjoyed good health there, without fever or dysentery; but he developed intermittent fever on his way home at Madeira, in July, 1883, and this continued for two weeks after his return to Germany. It was then absent for three months, but returned in April, 1884, accompanied by pain in the right lobe of the liver, and this continued with slight intermissions till May 7th. The patient was attended by Dr. Dunbar Walker, of Notting Hill, and had seen Sir Wm. Gull and Sir Joseph Fayrer. By this time the liver reached down to the umbilicus, and an abscess was obviously pointing at the epigastrium. He was stout, flabby, of a muddy colour, with a foul tongue and a weak pulse, and a temperature varying from normal in the morning to 102° or 103° in the afternoon. I opened the abscess, after ascertaining the presence of adhesions, and evacuated about half a pint of disagreeably smelling yellow pus. There was a good deal of bleeding. The temperature was normal for all the next day—but on this day only; it afterwards began to rise in the afternoon, the patient always becoming much worse at this time of day; and by the 17th it had again a range of from normal to 103°. The pulse was weak and rapid, 110 to 150. The tongue coated and dry, though he continued to take milk. The bowels acted freely and the motions were plentifully bilious, but the abdomen was distended with gas. Thus, though the abscess behaved quite well, the discharge being sweet and small in amount, we felt sure he had another. Accordingly, on the 14th, a week after the first operation, at Sir Joseph Fayrer's suggestion, I first punctured the liver just below the ribs, a little outside the first opening, and failing to find pus at three inches, I passed the needle through the seventh or eighth space at the lower part of the axilla and drew out three or four ounces of yellow pus, from a depth of four inches. The wound was then enlarged, and using the cannula as a guide, dressing-forceps and the finger were passed into the abscess. This caused terrific hæmorrhage, and I was obliged (in the weak state of the patient) to plug the wound. Two days later I removed the plug and introduced a long tube, which appeared to drain the abscess satisfactorily for a time. But the general state showed no improvement, and ten days later a fine trocar was passed deeply through the lateral wound and evacuated a quantity of pus, probably a third abscess, though this is not quite certain. But none of these evacuations did the patient the slightest good, and on June 3rd, nearly five weeks after the first operation, he died, and though we could not obtain a *post-mortem* examination I have no doubt that his liver was riddled through with abscesses.

Case vi.—I have had another case: An Indian officer, Major L., aged about 40, whom I saw with Sir Joseph Fayrer and Mr. Leedham, in which the evacuation of the abscess gave the patient no relief; but this case was complicated with diarrhœa, and the discharge from it was unusually profuse. He was very thin and emaciated at the time of the operation, March 16th, 1886, and he lived only a fortnight, having become much more emaciated before death. I can only record this as an unsuccessful case without being able to account for it, except on the theory of its being one of multiple abscess.

I will try now to draw a picture of the subject of a tropical hepatic abscess as it will be seen by an English surgeon. The patient will probably be a man (I have only met with one case in a female), and he will probably have been resident in India or some tropical country. It may be, however, that he will have contracted his disease during a casual visit, as happened with Case v., or with a young American whom I saw this year, and to whom I will refer later, who was travelling round the world, and was taken ill at Colombo. He will be sallow, partly from combined anæmia and mild icterus, and partly from the bronzing which is caused by the burning tropical suns. Rarely will there be yellow jaundice; I have only seen one case, that referred to by Sir Joseph Fayrer in his book on tropical diseases, p. 193. He will be thin and anxious looking, and walking slowly as if in pain, but though his limbs and face will have fallen away, the abdomen will be full and more or less motionless. The tongue will be pale and furred, and the extremities tending to be cold and clammy. The liver will probably be enlarged, perhaps considerably, but sometimes scarcely extending below the ribs; but he is sure to say that he has been told that at one time it was very large. There will most likely be a prominence, either at the epigastrium or a little to the right, or else in the lower part of the right axilla. If in the latter situation, the dulness will almost certainly be raised, and the intercostal spaces slightly bulged; but when the patient lies on his left side, a position he is sure to find excessively disagreeable, both the bulging and the increased dulness will diminish or disappear. This, however, will not be so marked if the abscess be actually pointing through the ribs; and in this case the tenderness will be superficial. But, if the matter should be at some depth from the surface, it may require considerable pressure to elicit any tenderness at all. His appetite will be very capricious, and his temper too; he will be languid in his movements, and look as if he were sick to death of the struggle for life. The bowels will, in most cases, be confined, but this is not certain, and the motions will probably be pale. The temperature will be slightly raised, but in some cases will be considerably above the normal. The urine will be scanty and high coloured. This is only intended as a general description to which there are, no doubt, many exceptions, and it is possibly very different from one that would be given by an Indian surgeon who sees this disease in its earlier stages. The surgeon would probably be asked to explore such a liver with the aspirator, and now let me interpose a word of warning, lest anyone should fall into a mistake which I once made.

Case vii.—I was asked to puncture the liver of a young man who had been in South America, and who had much the appearance of my supposititious patient; but he had a well-marked hectic temperature, and the tenderness of his very large liver was very diffuse. He had also a large and tender spleen. He had been examined by several physicians, but somehow attention had not been paid to the fact that he had frequent nose-bleeding, spongy gums, and had had petechial spots upon his legs. I introduced a needle in the two usual situations mentioned above, but found nothing, and in a few hours he was dead of hæmorrhage into his peritoneum. I need not say that he was the subject of leucocythæmia; nor, I hope, that, in considering any subsequent cases, this

one has always held a prominent place in my mind. It should, however, be added, that a puncture of the liver, if there be no adhesions, is never free from danger from this cause. A large vessel wounded near the surface of the liver may, in a healthy subject, give rise to fatal hæmorrhage, and thus, though considering the great rarity of the occurrence we must not be deterred from doing it, I think it behoves us not to speak too lightly of the performance to the patient or to his friends.

It has been often asserted that, in cases of suspected liver abscess, mere puncture of the liver has been followed by a sudden improvement of the symptoms; and in the face of the numerous cases, and the facts that similar results have followed puncture of an inflamed testicle, or of a painful kidney, it would be unwise carelessly to deny the possible causal relation of the two phenomena.

CASE VIII.—I once was attending a man aged about 30, who was a great drinker, and who had considerable hepatic enlargement and tenderness. The most tender spot was decidedly prominent at the epigastrium and I thought fluctuated, so I introduced the needle of an aspirator (I will not say into the liver, but certainly through the abdominal wall) and drew off, to my surprise, a few ounces of clear serum. From that moment the patient began to mend, and rapidly recovered from his urgent symptoms. What was the nature of his trouble I cannot say—perhaps a localised serous peritonitis.

Supposing pus to have been discovered, there can be no doubt that the best plan is to give exit to it at once by making a hole large enough to admit the finger and afterwards a drainage tube of the same size. Most likely, if the abscess form a prominent swelling, and almost certainly if the skin be reddened, the surface of the liver will be adherent to the abdominal walls; and, if the liver dulness in the axilla be markedly increased upwards, it is probable that the lower part of the pleura will have been obliterated by adhesive inflammation, but it is not safe in any case to assume the presence of these adhesions. It is therefore wise if the incision is to be made in front, to cut down very cautiously through the abdominal wall and to ascertain the state of the case. If no adhesions be met with it is not difficult by means of a full-curved needle held in a needle-holder (Hagedorn's is very good) to pass a series of stitches through the parietal peritoneum and pretty deeply into the substance of the liver. The stitches should be in a double row, they may be from one-half to three quarters of an inch long, and should overlap one another. I did this in one case (Case XVI.) in which the abscess was so near the surface that a drop or two of pus escaped when the stitches were being put in, but good adhesions formed as I unfortunately had the opportunity of seeing *post mortem*. If the abscess be pointing at the side, the incision should be below the normal line of the pleura if possible (roughly not more than two inches above the margin of the ribs in the mid-axillary line). But if it be made higher we must keep a look out for two serous cavities—the pleura and the peritoneum. If the pleura be opened it will be necessary to stitch the diaphragm to the costal pleura as I once did in a case which will be described later on (Case XVIII). It would no doubt be very difficult to stitch the liver to the diaphragm in this situation, but I have no doubt it might be done, and ought to be done, but the opening in the chest-wall would have to be even larger than in the case I have mentioned.

I do not think that the escape of a little pus into the peritoneum would of necessity prove fatal. I expect it sometimes actually happens, as I believe that the precautions I am recommending are very often omitted. But there can be no doubt that such a contamination should be avoided. Liver pus is presumably as irritating as the contents of a hydatid cyst, and though our dread of interfering with the peritoneum is gradually diminishing, we should not think of admitting this to it under any avoidable circumstances. I always consider that this occurred in the case of an enormous abscess which I opened through one of the lower intercostal spaces (Case XII). Immediately on recovering from the anæsthetic the patient complained of acute pain on the left side of the abdomen, and he continued to have great abdominal pain, much distension, and almost constant vomiting for some days, though there was little or no rise of temperature.

The most convenient form of tube, I think is the flanged tube, such as we use for empyema; and it should be, as I said, in most cases as large as the finger, and of a sufficient length to go well into the cavity—three or four inches, or even longer. For trouble is very often met with afterwards from the fact of the tube being pushed out, or the track becoming oblique. I know of no way to guard against this obliquity of the opening, because it is impossible to calculate in what way the contraction of the liver, which is sure to be very considerable, and which varies in proportion to the size of the abscess, will take place. The tube is often pushed out by the deep part of the wall coming in contact with the superficial long before the proper time has come for its removal. As a rule the tube should not be taken out till the discharge has almost stopped. But I have known a case (Case XII) where a very copious colourless discharge continued for a long time, and was at last stopped by very materially shortening the tube and then removing it.

The sort of dressing which it is best to employ is not very easy to determine. It must certainly be antiseptic. I have found, in my last two cases, Sir J. Lister's new cyanide of mercury guaze answer admirably. If this be not at hand, there is nothing better than carbolic acid gauze. The alembroth gauze or any soluble preparation of mercury must on no account be employed. I am not sure that it may not have an evil effect on the liver, and it is certain to result in irritation of the skin, and indeed this is a difficult thing to avoid, whatever antiseptic be used. If the discharge be at all copious, the dressing must be very extensive and will very likely want changing within a few hours. Afterwards the frequency of changing will depend altogether on the amount of the discharge. The necessity of keeping the tube in until the discharge is very much reduced was well shown in the following case.

CASE IX.—Mr. W., a young lawyer, had contracted in India a tropical abscess situated deeply in the liver, which had been opened through an intercostal space some time before I saw him at the desire of Sir J. Fayrer. The tube had been shortened to about two inches, and occupied only the outer end of a sinus nearly six inches long. The patient suffered constantly from a hectic temperature with daily great elevation. He had constant diarrhœa, and a most capricious appetite and temper. I introduced a series of straight bougies, of gradually increasing size, into the sinus, until it was large enough to admit a fair sized flanged drainage tube, thus ensuring a satisfactory escape for the matter. The diet was also very rigidly limited. He immediately lost his hectic temperature, the diarrhœa soon stopped, the appetite improved, and he made a good recovery, although the abscess had of course become septic. This is the right and only way of dealing with such cases.

The character of the pus met with at the first opening varies considerably; sometimes it is plain creamy pus, but often it is chocolate coloured. Afterwards it is most common, if the abscess be kept really aseptic, not to have any more true pus formed; but the discharge consists of two materials: a thick tenacious dark morone-coloured or more or less bile-stained mass of mucus, mixed with clots of blood, which is found on the dressings immediately round the wound; while, further away, the dressing is soaked with a copious thin fluid, sometimes quite colourless, sometimes slightly, sometimes deeply, bile-stained. But as I have hinted above, there is occasionally a considerable discharge of actual bile, which may come on at first or during the process of cure, and which may gradually diminish, or may suddenly come to a conclusion.

In making the first incision, if any considerable depth of liver tissue have to be traversed, very free hæmorrhage is likely to occur, as happens in the case of incisions made into the kidney. This must be treated by plugging the wound with the finger for a minute or two, when, in all probability, it will cease; but, if this be not the case, a plug of antiseptic material must be left in for a day or two. This hæmorrhage, when it is seen for the first time is truly alarming, but it need give rise to no anxiety.

At Sir Joseph Fayrer's suggestion I have had made an instrument for aiding in the opening of deep liver abscesses, which I have previously shown here in a lecture on abscess of the lung. It consists of a trochar either sharp or blunt, which, as well as the corresponding cannula, is grooved upon one side. This is to be plunged into the abscess, and then a fine pair of dressing forceps is to be run along the groove, and the track is to be widened by expanding the blades; or, if thought safe, a bistoury may be employed for this purpose.

MEDICAL MAGISTRATE.—The Lord Chancellor has added the name of Alexander G. Davey, M.D., etc., Fellow of the Sanitary Institute, to the Commission of the Peace for the borough of Ryde.

THE CONNECTING LINK BETWEEN THE HIGH-TENSION PULSE AND ALBUMINURIA.

Read in the Section of Medicine at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

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I HAVE previously mentioned the great interest which the writings of the late Dr. Mahomed on the pre-albuminuric stage of Bright's disease have had for me, in connection with uric acid, as a cause of high pulse tension, and I have pointed out that many of the symptoms of this stage which he mentions appear to me to be the work of uric acid.[1]

Dr. Mahomed considered that the symptoms of the early stage of Bright's disease were due to a poison in the blood, and I have suggested and believe strongly that those very symptoms are just the ones which an excess of uric acid in the blood produces; and I have thus come to believe that the high tension which, as I have said, I can produce or remove at pleasure, may be the cause of the kidney disease rather than the other way.

And, thinking over this matter, and looking for a possible connection between high pulse tension and albuminuria and nephritis, it has seemed to me that in the writings of Professor Semmola, of Naples, there may be contained just the connecting link required to show that the high pulse tension of uric acid may be the absolute cause of the nephritis, and that thus it may be possible to explain in the most simple manner the frequent association of chronic nephritis with gout.[2]

I have for several years carefully read and reread all the writings of Professor Semmola which have been published in French, and to which I have had access; and I have been more and more convinced, not only of the great care bestowed on all his work, the truthfulnes with which it has been reported, and the caution with which inferences have been made, but also of its very great importance as an aid to the elucidation of many obscure points in the pathology of Bright's disease. And it has been a matter of considerable surprise to me that so little notice has been taken in this country of the researches of this great Professor, who is evidently held in high esteem in his own country and in France.

There is a short notice of some of his conclusions in the BRITISH MEDICAL JOURNAL, vol. ii, 1886, p. 885; but in textbooks, when Professor Semmola's name is mentioned, it is dismissed in a few words with the remark that his experiments are insufficient,[3] and without, so far as I know, any attempt to discuss the questions which he raises.

Since the above was written, Dr. Saundby's very able *Lectures on Bright's Disease*[4] have appeared, and as he, unlike the writers of some of the textbooks to which I have referred, devotes considerable space to the discussion of Professor Semmola's arguments, I now add a few remarks on one or two of the chief points he adduces against them.

As it is impossible to go minutely into the matter without more than doubling the length of this paper, I must summarise, and say that the chief points urged by Dr. Saundby are: (1) the fact noticed by Tizzoni that albumen from the urine of a case of morbus Brightii did not cause albuminuria when injected into the circulation of animals; and (2) the assertion of Snyers that egg-albuminuria—that is, the albuminuria caused by the injection of egg-albumen into the veins or skin—leaves no ill effects on the kidneys.

It may be noted in passing that this assertion of Dr. Snyers is in direct antagonism to the results of many carefully made and fully recorded experiments by Professor Semmola. Then, on turning to Snyers,[5] it becomes evident that he bases his argument to a large extent on the experimental criticisms of Stokvis; and on turning to the writings of this latter authority,[6] it becomes clear that his facts are not nearly so fatal to Professor Semmola's arguments as might be supposed; for, first of all, Stokvis found that the injection of egg-albumen did sometimes lead to persistent albuminuria; and, with regard to these cases, he says (page 302): "Il nous semble probable que nous avons determiné dans un cas une hyperemie des reins sans le savoir ni le vouloir et que c'etait finalement de l'albumine du serum qui passait dans les urines," which is almost precisely Semmola's conclusion from the same facts. Again, Stokvis draws conclusions against the presence of diffusible albuminoids in the blood in Bright's disease on the strength of one single experiment, in which he injected 60 cubic centimètres of serum (from a case of Bright's disease), containing 7.7 per cent. of albumen, into a dog weighing about 14 pounds.

It seems to me obvious that, as the diffusible albuminoids in the blood serum of advanced Bright's disease bear only a very small proportion to the non-diffusible, the dose of diffusible albumen in this case was probably much too small, and that Semmola would not have expected a positive result from such an experiment, unless the serum was from an acute case; but this point is not mentioned. The same remark applies to Tizzoni's experiment with the albumen from the urine of Bright's disease, for here, especially in advanced stages, the diffusible albumens bear an even smaller proportion to the non-diffusible than in the blood serum, and Semmola himself is careful to advise the use of the albumens of the blood serum of acute cases, and not those of the urine.

Further, though I speak in this paper only of the indirect effects of plus tension in causing albuminuria through deficient skin activity, I am quite aware that high arterial tension has a direct effect on the kidney circulation, and possibly also on its nutrition, and I intend to go into this matter in a future paper; but it does not appear to me that any alteration of kidney circulation or even of its structure will account for an excess of diffusible albuminoids in the blood serum, and in the matter of this excess of diffusible albumen and its excretion in the saliva, sweat, and bile Dr. Saundby acknowledges that Professor Semmola has the support of Vulpian and others; and some of the facts given even by Stokvis are not unfavourable to Semmola's assertion.

Lastly, Dr. Saundby quotes from his own experience cases of albuminuria lasting for many years without kidney mischief becoming obvious, and he argues from them that the kidney was not injured by the passage of albumen; but against this I think that some of the cases in Dr. G. Johnson's most interesting paper[7] may fairly be quoted as evidence in favour of a different conclusion.

I now propose to go at some length into the points in Professor Semmola's researches which seem to me to bear on the relation of albuminuria, and possibly of nephritis, to pulse tension.

Now, Professor Semmola has shown[8] by experiments, which, to my mind, are as sufficient and conclusive as any I have ever read of, that in animals the injection of a certain quantity of a foreign albumen into the skin causes not only albuminuria, which lasts so long as the injections are continued, but that, if the injections are kept up for a certain number of days, you get in the urine not only the foreign albumen originally injected, but also the serum albumen from the blood; and that, if the injections are now suspended, the serum albumen will continue to pass in the urine for some considerable time. He has also found that the passage of the foreign albumen causes irritation in the kidney, especially in the glomeruli; and he infers that the passage of the serum albumen is the result of this irritation, and it is proportional both in time and quantity to the extent of the irritation. He further shows that, if this kidney irritation by the passage of a foreign albumen is kept up for some time, definite structural change takes place with permanent injury to the kidney, and chronic discharge of serum albumen—in fact, nephritis.

He also shows, in reply to those who would be inclined to argue that there is no albuminuria till there is a kidney lesion, however slight, that where there is a foreign albumen in the blood (heteroalbuminæmia), it is excreted not by the kidney only, but by the liver in the bile, by the salivary glands in the saliva, and by the sweat glands in the perspiration; and that the passage of this foreign body causes irritation, and eventually parenchymatous change in the excretory organs concerned; and, further, that when albuminuria is due to conditions local to the kidneys, as conges-

[1] JOURNAL, February 9th, 1889.
[2] See M.D. Thesis, *Formation and Excretion of Uric Acid*. John Bale and Son, 1888, p. 29-30.
Sir W. Roberts's *Urinary and Renal Diseases*. Ed. iv, p. 204; and Professor Grainger Stewart *On Albuminuria*. Edinburgh, 1888, p. 55.
[4] London: Hamilton Adams. 1889.
[5] *Pathologie des Nephrites Chroniques*. Bruxelles. 1886.
[6] *J. de Méd. de Bruxelles*. 1867.
[7] JOURNAL, vol. ii, 1889, p. 419.
[8] *Archives de Physiologie*, 3d series, iv, and elsewhere.

tion, and not to morbus Brightii, then there is no albumen in the bile, saliva, and sweat—this fact serving, as he remarks, to distinguish the one kind of albuminuria from the other.

We have here, therefore, the presence of a foreign albumen in the blood, causing eventually the passage of serum albumen in the urine, and in time setting up a nephritis, which, carried beyond a certain point, progresses independently of its first cause: a nephritis due to hetero-albuminæmia. But, in proving that a nephritis may result from the continued passage of a foreign albumen through the kidney, the important researches of Professor Semmola are by no means at an end, for he goes on to show that the hetero-albuminæmia, which is the cause of the albuminuria and of the nephritis, may be brought about in other ways besides the mechanical introduction of a foreign albumen under the skin.

Thus he shows that in the serum of normal blood there is only about 4 per cent of albuminoids that will dialyse, and that when from any cause this small percentage of dialysable albuminoids is exceeded, albumen at once appears in the urine and other excretions; and, according to him, one of the most potent causes of an excess of dialysable albumen in the blood is a deficient activity of skin function. Thus he says there is a constant relation between (1) activity of skin function; (2) amount of dialysable albuminoids in the blood serum; (3) appearance of albumen in the urine; and he mentions many facts, both clinical and experimental, in support of these statements.

We have, then, according to Professor Semmola, the following sequence of causation: (1) deficient activity of skin function; (2) hetero-albuminæmia, that is, excess of diffusable albuminoids in the blood, these having failed to reach or fallen away from the condition of elaboration necessary for assimilation and the nutrition of the tissues; (3) albuminuria which, if allowed to continue for a certain length of time, sets up changes in the structure of the kidney.

There are, according to Professor Semmola, other organs besides the skin whose deficient action may cause hetero-albuminæmia, as the liver; but the action of the skin is that with which I am specially concerned in this paper.

It is interesting to remember how constant a feature of Bright's disease is deficient skin activity, whatever may be thought of its position in the chain of causation; and Professor Semmola [9] makes a very interesting suggestion when he says that many skin diseases are really attempts on the part of the skin to perform excessive work, and that when the so-called skin disease (psoriasis, eczema, etc.) is "cured" by mechanical means, the skin is foiled in its attempt to do extra work, and an albuminuria or nephritis at once results; and he says that he has seen upwards of fifty cases illustrating this sequence of events, and my impression is that this is no new observation I have not seen any thorough or effective criticism of Professor Semmola's work, and it would be useless for anyone to attempt to criticise without repeating his experimental work, which, however, it has obviously taken a large part of a lifetime to elaborate.

My object, however, is merely to point out that, taking Professor Semmola's own estimate of the importance of skin function in the causation of hetero-albuminæmia, albuminuria, and nephritis, it is not difficult to see that high pulse tension and albuminuria may be related to each other as cause and effect, and that thus the observations of the late Dr. Mahomed, previously referred to, as well as several other points of which I have still to speak, may receive a simple explanation.

I have several times spoken of the cold extremities and contracted skin vessels which are such common accompaniments of high arterial tension, as during an attack of headache, when it may, as I have said, be impossible to keep the feet warm by anything short of sitting with them in hot water[10]; and this shows, I think, that the cold extremities are not merely the result of external conditions, for if any source of external cold is removed they ought to keep warm; but they do not.

It seems to me, therefore, that the cold extremities and contracted skin vessels are not the cause of the high pulse tension, but its result, the contracted arterioles diminishing the circulation of blood in the skin and extremities. And we can now, I think, see how high pulse tension may be the cause of deficient activity of the skin, and thus, as pointed out by Professor Semmola, of hetero-albuminæmia, albuminuria, and nephritis; and the sequence of chronic nephritis on years of high pulse tension, cold hands and feet, headache, and other troubles of the pre-albuminuric stage, as described by the late Dr. Mahomed, receives an explanation which seems to me to meet all the facts of the case, and also to throw new and important light on the causation of several forms of albuminuria hitherto regarded as functional, and perhaps unimportant.

Not to mention the albuminuria of scarlet fever, in which the skin functions are so obviously interfered with, but in which there may also be other factors, as a poison in the blood, one of the kinds of albuminuria having an apparently simple causation is that which follows a cold bath in an apparently healthy individual.

It may be said that an albuminuria which follows a cold bath is due to failure of the heart and consequent stasis in the kidney, but it is surely an extraordinary thing that the heart should fail at the time of the morning cold bath just after a night's rest; then, beyond the cold and blue extremities, there are no obvious signs of heart failure, but I should have no difficulty in showing that these may be present (as in a uric acid storm) when the heart is acting strongly and well. On the other hand, we often see severe morbus cordis with all the signs of general congestion and disturbance of circulation, and yet the albuminuria from this cause is slight or inconstant. And it seems to me, in a word, that many of the explanations of these so-called functional albuminurias are insufficient and inconsistent with some or more of the facts; while Professor Semmola's work on the importance of skin function in the causation or prevention of hetero-albuminæmia will afford us a simple and consistent explanation of many or all of them. Thus Professor Semmola takes a case of Bright's disease from its very beginning, shows that it took origin in the climate of a cold damp valley, which interfered with the proper performance of the skin functions. He bleeds the patient, and shows that the albuminuria is accompanied by an excess of diffusible albuminoids in the blood serum. He then removes the patient to a drier and warmer place, uses every possible means to increase the activity of the skin function, and further gives milk as a diet, because he considers that its albumiuoids require less elaboration than those from other sources, to render them fit for assimilation and the nutrition of the tissues. It seems to me that there is an interesting point here, for as the mammary gland is essentially a greatly enlarged and highly developed skin gland,[11] one might expect that the albuminoids elaborated in it would not require any further skin action to render them assimilable. And, lastly, when by these means the patient has been brought back to comparative health, and the albuminuria has ceased, he again draws a little blood, and shows that the amount of diffusible albuminoids in the serum has returned to normal.

It seems to me, then, that interference with skin function and hetero-albuminæmia is a much better and simpler explanation of the causation of an albuminuria by a cold bath than those above mentioned. And if interference with skin function by external cold will have this effect, it hardly needs any words of mine to point out that contraction of the arterioles, depriving the skin of its normal blood-supply is likely to have just the same effect. And such a contraction of the arterioles is, I believe, the work of uric acid when it causes on the one hand high pulse tension, and on the other, cold extremities and contracted skin vessels.[12]

Further, it is obvious that external cold and damp will have more effect on the skin of a person who is subject to this contraction of the arterioles than on one in whom they are generally freely dilatable. And we have here again, it will be observed, a simple explanation of the frequent association of Bright's disease with uric acid.

I have recently been much interested in the writing of Dr. Dukes [13] on the albuminuria of adolescents which is, as he points out, associated with a pulse of high tension.

The causation of this form of albuminuria on the theory that I am here working out is sufficiently simple. Thus—1, high pulse tension, due to uric acid or other poison in the blood, and many of the symptoms seem to me to point strongly to uric acid; 2, deficient skin function from the deficient blood-supply of contracted arterioles; 3, hetero-albuminæmia causing albuminuria, and if this is long continued leading to nephritis.

On the other hand, the explanations given by Dr. Dukes that the albuminuria is due to heart failure is, to my mind, quite inadequate to explain all the conditions. Thus, he says, the albuminuria is removed by lying in bed and a milk diet; or, if kept i

9 Previous reference p. 312.
10 JOURNAL, Feb. 9th, 1889, p. 291.
11 Hermann, *Physiol., Trans. of*, Ed. v, p. 121.
12 JOURNAL, February, 1889, p. 291.
13 JOURNAL, vol. i, 1889, p. 625.

bed, any diet will do, but if up and about the patient must have milk only; and from this it will be seen that the heart is equal to its duties on any diet while the patient is in bed, but if he is up and about it is only equal to its duties when he is on milk. Is there any reason to think, then, that the heart of a growing lad is better nourished and innervated on a diet of milk than on an ordinary diet of meat, bread, potatoes, etc.? I know of no reason, and it seems to me that this is a serious objection to the theory of causation by heart failure.

But on the theory that we have to do with hetero-albuminæmia from deficient skin activity, all these difficulties disappear. The patient has no albuminuria while in bed, no matter what diet he is on, for the warm and equable temperature kept up by the blankets all over the body overcomes the action of uric acid on the arterioles, allows of a free circulation of blood in the skin, and an efficient performance of its functions; and I have previously pointed out[14] that exercise causing perspiration, or a hot bath, will overcome the effects of uric acid on pulse tension and the skin in just the same way.

The patient has no albuminuria when he is up and on milk, because, as mentioned above, this is the food which, according to Professor Semmola, requires least elaboration to make it assimilable. Again, in those cases the albuminuria is most marked after meals, and especially after breakfast; and if it is due to heart failure this seems an extraordinary thing, for it is at its worst just at the time one would expect the heart to be strongest, that is, in the morning after a good night's rest, and when it has just been further stimulated by a meal. If the albuminuria were due to heart failure it would probably be worst at the end of the day's work, and apart from the stimulus of food and drink.

If, however, the albuminuria is the result, as I am suggesting, of high tension pulse and consequent hetero-albuminæmia there is no difficulty in explaining the facts observed for the few hours succeeding breakfast, that is, "the alkaline tide," is just that period of the day at which there is generally most uric acid in the blood and the largest excretion of it in the urine, and as a consequence of its presence in the blood most excess of pulse tension;[15] and the same occurs after other meals, as the alkali in the food is being taken up and enters the circulation; but it is always most marked after breakfast, because the acid tide of the night has almost run itself out, and is easily overpowered. And this corresponds exactly with the observed facts regarding this albuminuria, while the heart failure theory does not. Further, after meals there are, no doubt, more albuminoids coming into the circulation that require elaboration by the skin to make them assimilable than at other times.

I have previously pointed out[16] the relation which a uric acid storm, with its contracted arterioles and cold skin and extremities, seemed to me to bear to Reynaud's disease, and also to paroxysmal hæmoglobinuria. And with regard to this latter disease, Professor Semmola considers not only that albuminoids may, owing to deficient skin action, fail to be rendered fit for assimilation by the tissues, but also that albuminoids, previously elaborated, may fall away from the condition necessary for assimilation; so that in an attack of paroxysmal hæmoglobinuria, when the skin vessels are contracted and the surface blue and cold, we may have not only albuminuria, caused in the way I am suggesting, but the process of albuminoid degeneration may be carried still further and affect the hæmoglobin itself.

And there is an experiment which to my mind seems to support very strongly this mode of causation, namely, the hæmoglobinæmia, which can be produced in some people by ligaturing and squeezing a finger.

I have for a long time been impressed with the strong resemblance of a paroxysm of hæmoglobinuria to a uric acid storm, as seen in migraine, and described by me in previous papers. And, indeed, I have seen attacks practically indistinguishable from those of paroxysmal hæmoglobinuria occur in the subjects of migraine, apparently in place of an ordinary attack; and in a case of paroxysmal hæmoglobinuria, in which I was able to get the urine excreted at the time of the attack, there was a markedly excessive excretion of uric acid, and the family history, previous health, and many of the symptoms preceding and accompanying the attack were just those of a uric acid storm, as seen in migraine.[17]

[14] JOURNAL, February, 1889, p. 290.

It is interesting to note that in undoubted Bright's disease also more albumen is excreted at this period of the day (Saundby, p. 15 and elsewhere).

[16] JOURNAL, February 9th, 1889, p. 291.

[17] *St. Bartholomew's Hospital Reports*, vol. xxiii.

I do not consider that one or two such cases prove much as to the causation of paroxysmal hæmoglobinuria, but I think that it may be of some interest to consider them here in connection with what I am saying with regard to the causation of albuminuria; for I believe it has been shown[18] that paroxysmal hæmoglobinuria is preceded and followed by albuminuria, so that we have some ground for assuming that both are due to the same cause, and that the hæmoglobinæmia which is the cause of the hæmoglobinuria is only a further more severe stage of the hetero-albuminæmia which is the cause of the albuminuria, not in this case only, but in Bright's disease in general; but I hope to publish a full account of the above-mentioned cases at a future time.

I would also refer to a very interesting paper by Drs. Bristowe and Copeman read at the Medical Society of London on April 29th, 1889, and especially to what is said there of the relationship of paroxysmal hæmoglobinuria to Raynaud's disease. The authors of this paper lay stress on the action of cold in producing these troubles, but they do not explain why cold should affect the blood of their patient differently from that of other people; their patient, however, is an omnibus conductor, aged 41, and liable, if I may so put it, to beer and the gout which I have shown that it produces,[19] and I would like to suggest, in the light of my previous remarks, that uric acid, through its effects on the arterioles and their circulation,[20] was a factor in the production of Raynaud's disease and hæmoglobinuria in this individual by cold; and in the description of his attack[21] the cold extremities, dying fingers, shivering, and headache all correspond to the common symptoms of a uric acid storm as seen in ordinary migraine.

Further, Dr. Bristowe is led to the conclusion[22] that there is no relation between hæmoglobinuria and Raynaud's disease other than that the paroxysms of both are apt to be induced by the same cause, namely, exposure to cold; but, if my explanation is correct, both are due to the contraction of the vessels of the skin and extremities by uric acid, its action being aided and intensified by cold, and thus their frequent association is easily accounted for.

It is also possible that, in addition to the deficient elaboration of albuminoids by the skin of which I have been speaking, the presence of much uric acid or other nitrogenous product of metabolism may have a direct destructive action on the red corpuscles, and this is, I think, no new suggestion; indeed, it has been shown that creatinin has this destructive effect on the corpuscles.[23]

And there are several facts which bear as collateral evidence on the question of the causation of albuminuria by deficient skin action and hetero-albuminæmia, as the frequent connection of albuminuria with scarlet fever, measles,[24] and other diseases affecting the skin.

The relation to dyspepsia,[25] too, is of interest, for dyspepsia has, as I have often pointed out, most intimate causative relations to a uric acid storm, and so to high pulse tension and deficient skin action; but dyspepsia may have a double action, for, apart from its influence on uric acid, it may render some of the albuminoid products of digestion more than usually unfitted for the nutrition of the tissues, and may thus throw extra work on the liver, skin, and other organs of metabolism, already hampered perhaps by uric acid and its effects on the circulation.

Some difference has been noticed between the albumen excreted in the albuminuria of adolescents or in "functional" or "cyclic" albuminuria and that of organic disease; as Dr. Pavy[26] has pointed out that the albumen of cyclic albuminuria is precipitated by an organic acid, while serum albumen is not so, and Dr. Maguire[27] says that the presence of much paraglobulin in the urine is in favour of a functional origin for the albuminuria, but much serum albumen is a sign of organic disease.

It seems to me that in these observations we have in outline the natural origin of nephritis which Professor Semmola's experiments have so closely imitated; in the so-called functional albuminuria we have the hetero-albuminæmia and excretion of a foreign (that is, insufficiently elaborated) albumen, as in Semmola's injection experiments, which is at first irregular and only occurs, as

[18] Dr. Ralfe, *Lancet*, vol. ii, 1886, p. 764.

[19] M.D. Thesis, prev. ref., pp. 6-10, and *St. Barthol. Hosp. Reports*, vol. xxiv.

[20] JOURNAL, February, 1889, prev. ref.

[21] *Lancet*, vol. ii, 1889, p. 256.

[22] *Lancet*, vol. ii, 1889, p. 308.

[23] *Comptes Rendus de la Soc. de Biologie*, 1877, p. 159.

[24] *Lancet*, vol i, 1889, p. 1001.

[25] Sir W. Roberts, *Urinary and Renal Diseases*, p. 197, and Dr. Ralfe, *Lancet* vol. ii, 1886, p. 764, and JOURNAL, vol. ii, 1886, p. 1012.

[26] *Lancet*, vol. i, 1888, p. 712.

[27] *Lancet*, vol. i, 1886, p. 1052, *et seq.*

shown above, at those times when the excess of uric acid in the blood and the high pulse tension are likely to be most marked, later on if the first stage is not recognised, treated, and cured, we get serum albumen as well as the albumen which is precipitated by an organic acid, that is, as Professor Semmola would put it, the continued passage of a foreign albumen through the kidney has at last caused irritation and structural change, so that it now allows the passage of the normal albumen of the serum as well as the foreign albumen, and if the process is not stopped Bright's disease begins; and this is in accord with the experience of Dr. Johnson and also of Dr. Dukes that many of these functional cases end in Bright's disease.[28]

Professor Semmola's writings and experiments must speak for themselves, but it seems to me that if his views on the functions of the skin in the elaboration of albuminoids are correct we have here a connecting link between the high tension pulse of uric acid and albuminuria and eventual nephritis, which may be of considerable importance.

In this short paper nothing beyond a mere outline of the main points has been attempted, but if the suggestions now made are correct much further evidence of their truth will no doubt be forthcoming.

RESULTS OF THE PORRO-CÆSAREAN OPERATION IN ALL COUNTRIES, FROM ITS INTRODUCTION TO THE CLOSE OF 1888.

By ROBERT P. HARRIS, A.M., M.D.,
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[A Second Contribution.]

A chronological record in progress was given in this Journal for March 30th, 1889, page 708, counting 250 Porro operations for the thirteen years ending with December 31st, 1888. Additions and corrections made in the past six months have enlarged the list of cases for the same period to 264. These have recently been retabulated in the order of their occurrence, and a new analysis made with much care, to show the work of each respective country into which the operation has been introduced. The value of a chronological method of recording is proven by the clearly-established fact shown therefrom, that in all countries, with the exception of France, in which there have been twelve or more operations there can be exhibited a growing improvement in the results attained. Thus, there were six deaths following the first seven Italian operations, and only seven deaths after the last thirty. Italy saved 20 out of her first 46 cases, and 27 out of the next 45. Austria saved 17 out of her first 30 cases, and 25 out of the balance; her second, 30. Following her last 20 operations there were but 2 deaths, or 10 per cent. The early record of Germany was so discouraging that out of it grew the Sänger-Cæsarean method and its modifications. The first 7 cases were all fatal, and but 6 recovered out of 22, or the first half of all those in her credit. Of the second 22 there were 17 recovered; and of the last 15 only 2 died from the operation, a third death having been suicidal. England lost 7 out of her first 8 cases, and then saved 4 in succession. Mr. Tait claims to have had three additional operations without a death, but has not reported the cases; which would enlarge the credit of England to 15, and her recoveries to 8. This would have been a very remarkable success in the early days of the operation, but is much less so now. The late Professor Breisky performed his first operation in Prague on July 9th, 1878, and his eighth and last in Vienna on September 28th, 1888. Not one of his eight operations, covering more than ten years, had a fatal termination, and all of the children were living. Dr. Hubert Riedinger, of Brünn, also aided in a remarkable manner in establishing the credit of Austria. His first operation preceded that of Professor Breisky by twelve days, and his seventh was nine days before the eighth of Breisky. The seven women recovered, and but one child was lost. Up to the last of December he had not performed an eighth operation. France, as already mentioned, has not improved her record by experience. On the contrary, she has retrograded. The first five operations saved three women and three children; the second five, one woman and five children; the third, one woman and two children, and the two additional saved one woman and two children. There has not been reported one French Porro case belonging to the past four years, and the operation would appear to have been abandoned by its early advocates.

Seventeen operations belonging to the last four years, ending on December 31st, 1889, have been reported to me in answer to letters, of which four terminated fatally. The records of these four years are respectively as follows: 1885—24 cases, 7 deaths; 1886—23 cases, 4 deaths; 1887—18 cases, 5 deaths, 1 suicide; 1888—28 cases, 4 deaths. Of the first 50 women out of the 264 cases recorded 30 died as the result of the operation; and of the last 50 but 10, a reduction of the death-rate from 60 per cent. down to 20.

Of the whole 264 women 117 died from the operation, divided as follows: 74 out of the first half, that is, 132, and 43 out of the second 132. Thus it will be seen, under several forms of calculation, that the Porro operation of to-day, under proper management, is far less fatal than that of five years ago, as in 1884, when 17 women died out of 29, or nearly 58 per cent.

As the day of experiment has passed, and the technique of the operation has been established by experience, there is no reason why there should not be a large percentage of cases saved—certainly 80 per cent.—and with due care as to time of operating and condition of strength in the patient, even more than this. The operator ought to be able to make a prospective prognosis in a given case, and should, if possible, so order the preliminary steps that "unfavourable" will not have to be written in rating the prospects of the patient. It is a well-established fact that few cases rated as "favourable" before the operation have died, and that still fewer marked as as "unfavourable" have not. The respective credits of the several countries in which the Porro operation has been performed (not including that of 1889) stand as follows:—

No.	Country.	Cases.	Saved.	Lost.	No.	Country.	Cases.	Saved.	Lost.
1	Italy ...	91	47	44	8	Belgium ...	5	3	2
2	Austria ...	60	42	18	9	Scotland ...	5	1	4
3	Germany ...	44	23	20*	10	Switzerland	6	5	1
4	France ...	17	6	11	11	Australia ...	2	2	0
5	England ...	12	5	7	12	Holland ...	1	1	0
6	Russia ...	10	8	2	13	Spain... ...	1	0	1
7	UnitedStates of America	8	2	6	14	Mexico ...	1	0	1
					15	Japan... ...	1	1	0

* And 1 suicide.

It is proper, in this connection, to state the results of the conservative Cæsarean section up to the same date, January 1st, 1889, as many may be under the impression that the Porro operation is quite equal to it in its ability to save life. Like the latter, the new method of performing the old Cæsarean section is also passing through a stage of diminishing mortality, and there is a very marked contrast for the better between the work recently done and that of the years 1882, 1883, 1884, and 1885; and particularly is this the case in the United States of America. Out of the first 20 cases operated upon in all countries, there were 9 deaths; out of the second 20, there were 6; and of the last 40 in 1888, there were only 6. The following table will show the operations in contrast:—

No	Country.	Cases.	Saved.	Lost	No.	Country	Cases.	Saved.	Lost
1	Germany ...	94	81	13	7	Holland ...	9	9	0
2	Austria ...	32	26	6	8	England ...	3	1	2
3	UnitedStates of America	26	11	15	9	India	2	1	1
4	Russia ...	10	7	3	10	Switzerland...	2	1	1
5	France ...	4	2	2	11	Denmark ...	1	1	0
6	Italy ...	4	2	2	12	Norway ...	1	1	0

There were 57 operations in Europe in the year 1888, with deaths; and 13 in the United States of America, with 8 death There have been 34 operations in America, with 18 deaths.

Professor W. R. Smith, M.D., D.Sc., F.R.S.Ed., barrister-a law, announces a special course of lectures in Hilary Term barristers, law students and others at King's College on Monday Wednesdays, and Fridays at 4 P.M. We referred recently to series of lectures on forensic medicine by Professor Meymott Tic to the law students of the Middle Temple. Both the legal a medical professions have much to gain by the adoption of the precedents.

[28] Grainger Stewart, prev. ref., p. 168.

NOTE ON TESTS FOR COLOUR BLINDNESS.[1]

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At the last meeting of this Association at Glasgow I demonstrated some models of tests for colour blindness. Through various circumstances it has not been possible to have them turned out in large quantities up to the present. Meanwhile, some criticism has been brought against my tests. I should, perhaps, not have answered, considering that the criticism appeared in the lay press; but it was asserted to be backed up by a medical authority competent in the matter, but whose identity I am ignorant of. This slight controversy appears to me due to nothing else but a mere oversight.

Owing to the great difficulties which I met in the way of the practical multiplication of my models, and which were purely accidental from one cause or another, there were only a few sets made altogether. As I demonstrated at the Glasgow meeting, some of these twin-coloured tests were to be used by lamplight, some by daylight. I showed how, by means of pale greenish-blue glasses, the lamplight set could be changed into a daylight set, while a certain pale yellow glass held in front of the daylight set made it answer for gas or lamplight. It seems that these two sets have become mixed up, and the misunderstanding arose through the lantern not being supplied with the blue and yellow glass discs.

As far as the principle of the tests is concerned, I need not say anything here. It has been said in those criticisms to which I before alluded that Holmgren's test is the best because it is at once simple and infallible. It certainly is a simple test and a very good one, and I should not like to be without it; but infallible it certainly is not.

Not so very long ago a case came under my notice where a red-green blind person—well educated—acquitted himself perfectly well of the examinations (repeated ones) with Holmgren's wools, but failed to recognise some of my glass letters and other tests. I am sorry to have to keep the gentleman's name to myself, as he strongly objects to having his defect known; but for those who perhaps think my experience in this instance too exceptional I need only refer to similar experiences published by Professor Pflüger of Berne. He found in a post-graduate course on ophthalmology which he was then giving to sixteen army surgeons that there were two of them completely red-green blind, as proved by his own and other tests; but when tried with Holmgren's wools they made not the slightest mistake.

This may suffice to show that Holmgren's test is not sufficient for *every* case of colour blindness. Especially in the case of the educated we have to be extremely careful, and men who prepare for the command of a ship belong to this class.

I may just mention another point in connection with this, not of a very first-rate importance in itself, but not to be neglected when it comes to the examination of large numbers. In order to compare the quickness with which different tests could be applied I examined schools. For Holmgren's tests the average time for each schoolboy was about five minutes, so that not more than twelve could be tested in an hour. With the twin-coloured tests I could easily go through the tenfold number in the same time. Once the teacher, who soon very kindly helped me, hit upon a very expedient plan, when I wanted some colour-blind boys quickly for some other purpose. He took a few of my glass discs, held the sample disc up, and said to a class where no investigations had been held before: "You see this letter; it is a B. Write it down on your paper. Now, I hold up another letter; write down what this is." Up went four boys, who said they could not distinguish any letter at all; and these four were soon found to be red-green blind.

This shows that a considerable advantage may be derived from the promptness which my tests admit when perfect. The only drawback I have been able to detect up to the present is the difficulty in producing them, and the great amount of personal annoyance and fatigue they imposed upon me. For these reasons I have tried to modify them. Instead of the glass mosaic I tried to get patterns printed on gelatine, after the style of the imitation stained glasses. I have not been able to obtain any proper samples to be shown at this meeting to-day. It seems as though manufacturers do not care to put themselves to great trouble for any scientific or other work which, to all expectations, "does not pay." I then made an attempt to have a sample letter printed in some twin colours, without any trace of gloss on them, and for this purpose I thought a white woollen material would be the most suitable. For this I had to go across the Channel to one of the best known firms in Saxony, and I have pleasure in showing you herewith the first batch, which I only got quite recently. The colours are not quite perfect yet, but it will be sufficient to show what can be done. I intend going to the manufacturer at an early date, and we may be able to obtain something good. These prints could easily be multiplied to any extent, would be cheap, and could be mounted in any suitable form.

I may add that this mode would have the additional advantage of allowing an edition of prints adapted to non-typical colour blindness, such as experienced in tobacco amblyopia, etc. At present I have not had time nor a sufficient number of cases to have settled the colours suitable for those defects.[2]

[1] Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association held in Leeds, August, 1889.

[2] Since the above paper was written, I have been engaged in designing a test on an entirely different principle, which will obviate the difficulties of manufacture referred to above, and which I hope to bring forward very shortly.

OPERATION FOR DEAFNESS AND TINNITUS, DUE TO IMMOBILISATION OF THE OSSICLES, AND FOR OTORRHŒA.[1]

By SAMUEL SEXTON, M.D.,
New York.

I have been led to operative procedures in otherwise irremediable deafness or otorrhœa largely by the increased facilities afforded us in examining the fundus of the ear by the electric light, and by the advantages in diagnosis through the use of illuminating and magnifying lenses, which can be easily applied to the aural speculum. By these aids one can examine the drum of the ear minutely, and operate on the delicate parts with the same safety as elsewhere. I cannot go into all the details of the procedures in these cases, but they can be found in my work on the ear.[2]

It has been found that in a large number of cases of purulency of the drum, with greater or less loss of the drumhead, and perhaps with old sinuses leading through the membrana flaccida into the atticus tympanicus, that a cure can scarcely ever be hoped for by the ordinary treatment. In these cases I remove the remains of the drumhead from the auditory plate and annulus by means of a small tenotome, and then detach the diseased anvil and hammer with forceps, after loosening their attachments and separating the incus from the stapes where they remain united. There is rarely any hæmorrhage where the granulation tissue has been previously reduced by treatment.

The principal results of the operation are the arrest of purulency, the drum cavity becoming lined with dry, whitish cicatrical tissue, and often a marked improvement in the hearing. In these cases the advantages of the most important principle of modern surgery is illustrated, namely, the establishment and maintenance of drainage, for in a few weeks, or months at most, according to circumstances, the parts healed, and the presence of a larger or smaller pus reservoir was done away with. It is surprising to observe in many cases the decided improvement in general health.

The operation in schlerosing aural catarrh, where immobilisation of the ossicles has occurred, does not differ greatly from the above.

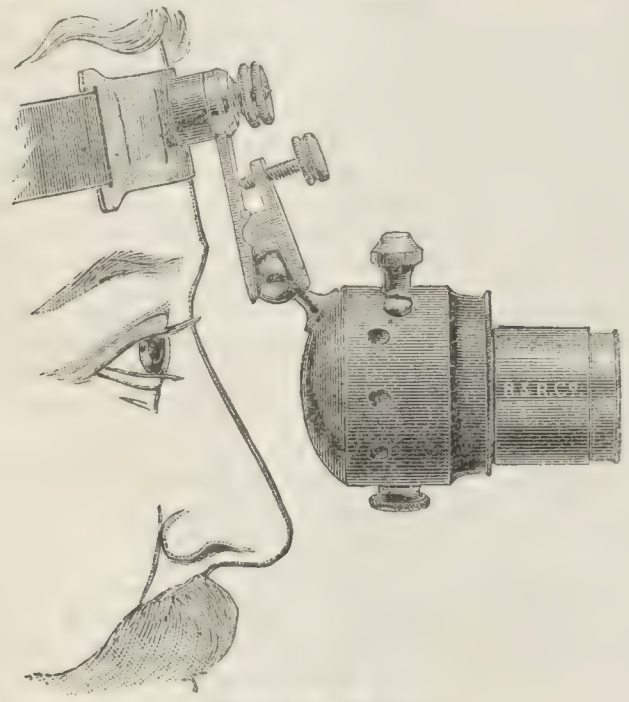
The cases selected were (1) those where ordinary conversation could no longer be heard close by, or a sound tone of voice at a distance of from three to five feet, though the indications could not all, of course, be stated so briefly; and (2) where distressing noises in the ear and head existed in connection with more or less deafness. The results I have obtained in a three years' experience have been exceedingly gratifying; hearing was improved in greater or less degree—often very greatly—and in some very marked cases of tinnitus there had been a cure.

Perhaps the best test of one's results in these cases is the gratification shown by patients; their own experience is better

[1] Read in the Section of Otology at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

[2] *The Ear and its Diseases.* New York: Wood and Co. 1888.

than any tests we can apply. I have been entirely satisfied, after a very considerable experience, with my results. The operation, under the illumination afforded by my head lantern, containing an electric lamp, is easy and safe. The drumhead is detached all around by a small tenotome, an opening for the introduction of which is previously made with a trowel-pointed knife, which may also be used to detach the fastenings of the hammer and to divide the tensor tympani muscle. The tissues in front of the incudo-stapedial joint are then pushed aside with a blunt silver probe, and any oozing blood wiped away with cotton, when the joint may be divided with the angular knife made for that purpose. The separation usually occurs with a distinct snap. The long arm of the incus, which is usually in view, is then seized with forceps, and is very easily brought away. The malleus is best secured with the foreign-body forceps (known by my name), but often it can be brought down with Toynbee's aural dressing forceps. Care must be taken else the tip of the manubrium may be caught in the bottom of the drum, and broken. Usually there is but little bleeding, though the ether narcosis under which both operations are done tends to increase the vascularity about the head. Hot water is useful in arresting bleeding, poured in on cotton-wool. It is best to place these patients on restricted diet for some weeks before the operation, and to keep them recumbent afterwards for a day at least. In some cases there is no subsequent suppuration or reproduction of the drumhead, but in a certain number, the percentage of which I cannot at the moment recall, there is more or less discharge and more or less rapid reproduction. When this occurs it is best to not interfere, but in a few months remove the membrane, which is not a painful proceeding, using cocaine if required. In all cases where there is a tendency to gradual reproduction, the edges of the advancing tissue may be turned back, so to speak, by painting the presenting membrane with collodion containing either salicylic or tannic acid.



Electric head-lantern.

There has been a reluctance on the part of some of the older otologists to enter into a somewhat new field of aural surgery, but the speaker believed we should come to it before long. In otorrhœa we may prevent the extension of purulent processes to the brain, for exacerbations can scarcely no longer occur. In sclerosing aural catarrh we may in all cases, with but few exceptions, expect to improve hearing, and in all it may confidently be promised, from the speaker's experience at least, that the further progress of deafness will be arrested.

The operation requires, after complete narcosis, from ten to twenty minutes for its completion, though in otorrhœa, owing to the greater liability to bleeding, it may sometimes require a longer time.

An alarming epidemic of measles is reported to be raging at Alton, Hants. All the public schools are closed, and over 300 cases are reported. Several deaths are said to be taking place daily.

CACTUS GRANDIFLORUS IN SOME FORMS OF HEART DISEASE.

By A. ORLANDO JONES, M.D.
Harrogate.

The difficulty of finding a remedy for some forms of heart disease, and the fact, which is more or less recognised, that digitalis, strophanthus, and convallaria, although very valuable, are not always reliable in the varied conditions of the heart with which we meet, appeared to be a sufficient reason for bringing under notice a drug which I had found useful in many cases, namely, cactus grandiflorus. I do not presume that it is a panacea for all forms of disease to which that organ is liable; I only claim for it that is likely to prove to be a useful adjunct to our resources in some conditions of the heart.

By the cases to which I propose very briefly to refer, I may be able to show that this remedy may fill a gap where other remedies appear to be lacking, for instance, the beneficial action of digitalis is often most marked where the heart has been overstimulated, as in cases of delirium tremens; and, on the other hand, its action has been not infrequently disappointing when dealing with a feeble heart, especially if that feebleness is excessive and of long duration. But the able and valuable expositions of the virtues of digitalis by Dr. Lauder Brunton and others will be so fresh in most memories that for the purpose of a slight comparison with cactus grandiflorus I need only briefly refer to the fact that the action of digitalis is divided into three stages.

The first is that of stimulation of the vagus. The second action is the sudden depression of the vasomotor apparatus of the renal arteries. The third stage is the depression of the vagus, exhaustion of the ganglia, weakening of the heart, and, as Dr. Mitchell Bruce very wisely puts it, the circulation begins to fail.

But with cactus grandiflorus, the remedy to which I wish to draw attention, the action seems to be the very opposite, that is, the final stage of the action of the drug is, that it strengthens the heart, and consequently the circulation improves, therefore, the final result of the exhibition of this drug is the reverse of that seen in digitalis.

Thus where digitalis appears to be a drug that is most applicable to sthenic or over-stimulated conditions of the heart, cactus grandiflorus appears to be applicable to asthenic conditions of the heart.

This cactus grandiflorus is a native of Jamaica and Vera Cruz. A good description of this species is given in Green's *Botanical Dictionary*. It belongs, of course, to the order Cactaceæ, the flowers being very large, the calyx measuring about a foot in diameter. It is possible that other plants of this order may be equally valuable as possessing properties that will control the heart's action, for Robert Bentley, in his valuable work on botany, states that the fruit of many species is useful in febrile diseases.

The first case to which I would draw attention was a youth of about 13 years of age, of strumous diathesis, weedy habit, very feeble, and the heart very weak. Under the steady exhibition of cactus the heart improved, and the patient grew to be a fairly healthy young man.

The next case I will mention was a man, aged about 60, who came to me saying that he could not continue his work owing to the suffering produced by exertion. I found him to be suffering from mitral disease, accompanied with loud mitral murmur, and gave him cactus and ammonia. He so far improved that he was able to resume work, and continued it for some years till he left the neighbourhood.

A third case, a more important one, came under my care about seven years ago, at the age of about 40, apparently in a far-gone and hopeless condition of enfeebled heart, liver disease, and general dropsy, extending from head to foot. The legs were very much distended with fluid; they were hard and turgid and nearly bursting. The patient had been tapped several times previous to coming to me. The heart sounds were barely audible; the pulse could scarcely be found at the wrist.

The first time of tapping, after coming under my care, the operation was performed very successfully by Mr. Nunneley, of Leeds, when twenty-six pints were drawn off from the abdomen.

During the last six years the patient has been tapped about fifty times, the quantity gradually diminishing. Mr. Nunneley

who has always operated since I have had charge of the case, states that he is not aware of a similar case being on record.

The dropsy is now confined chiefly to the abdomen, the legs, feet, hands, and arms having become almost normal, though the thighs are distended at times. All the organs have improved in their action, but the improvement in the heart's action is the most marked. The exhibition of cactus has been continued throughout, but other drugs have been given freely as occasion has required, in order to meet the disordered condition of other organs; for instance, for a lengthened period constipation has been a very persistent symptom, refusing to yield alike to pil. hydrarg. and mist. sennæ co., belladonna or cascara, but latterly even this symptom has materially lessened.

A fourth case was that of a young woman, about 20 years of age, who suffered from a very severe attack of rheumatic fever, when, towards the end of the fever, a loud mitral murmur developed. The exhibition of cactus and alkalies resulted in recovery so far that she has been able to resume her work.

Other cases might be brought forward, but these will perhaps suffice to suggest that cactus grandiflorus offers an interesting and valuable field for research, especially in the treatment of asthenic conditions of the heart.

NEW AURAL INJECTOR AND EVACUATOR, WITH A FLEXIBLE EUSTACHIAN CATHETER.[1]

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and the Portsmouth and South Hants Eye and Ear Infirmary.

Since the publication of my paper in the JOURNAL[2] on Tinnitus Aurium, and its Treatment by a New Method of Alternate Injection and Evacuation of Air, I have considerably modified my apparatus, and have now adapted it for self-application. It consists of one hand ball fitted with a recoil spring, which increases the force and rapidity of its expansion (Fig. 1). The injecting

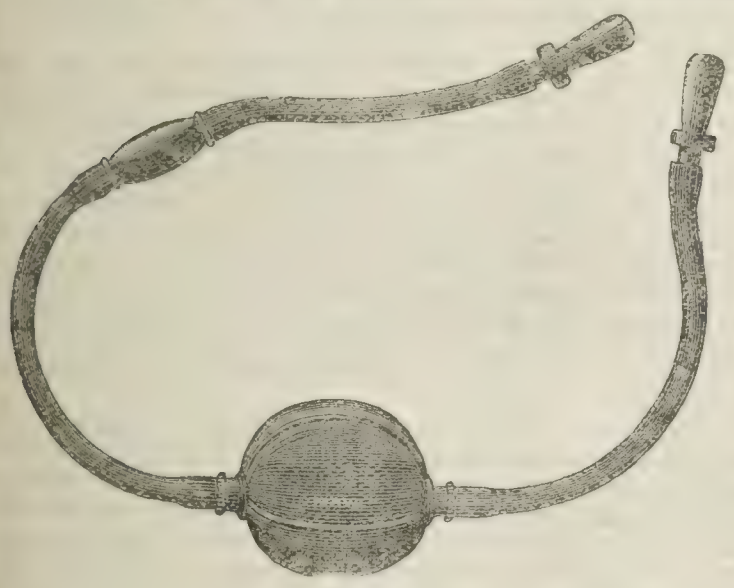


Fig. 1.

and evacuating tubes both terminate in a vulcanite joint, to which a nasal piece of soft rubber can be attached. The nasal pieces are made in different sizes, and several of them are supplied with each instrument. When medicated air is to be used, the volatile substance must be dropped upon a pledget of cotton wool placed in the vulcanite box, which is fixed on the injecting tube. In this way I use chloroform, ether, creasote, pinol, and many other remedies. For the successful application of the treatment it is essential that the patient should be instructed to practise injection and evacuation of the tympanum in the following manner: The nasal orifices must first of all be carefully wiped dry, and the nose pieces adjusted, *so as to securely and completely plug the nostrils.* The nasal tubes are now held in position by the forefinger and thumb of the left hand, and the hand ball is elevated and compressed by the right, and then allowed to expand by its own elasticity. During the steady performance of these movements the patient should take a full inspiration, and while holding the breath and pressing the lips together he should make an expiratory effort, just as if he were in the act of blowing through a tube. With many patients the entrance of air into the tympanic cavity is rendered easy by the act of deglutition, for the muscular movements of the pharynx act directly upon the open ends of the Eustachian tubes. As a general rule, my patients require very little instruction, and soon become very skilful with the instrument. The alternate method presents many advantages over other forms of tubal inflation. It promotes the drainage of the tympanum and the discharge of pent-up fluid into the pharynx. It also proves of material assistance in cases of collapsed and adherent membrane. Its daily application is especially useful in the treatment of tinnitus aurium caused by abnormal tension, and also in other forms of chronic middle ear disease.

The apparatus for alternate injection and evacuation with the Eustachian catheter is represented in Fig. 2. The tubes are

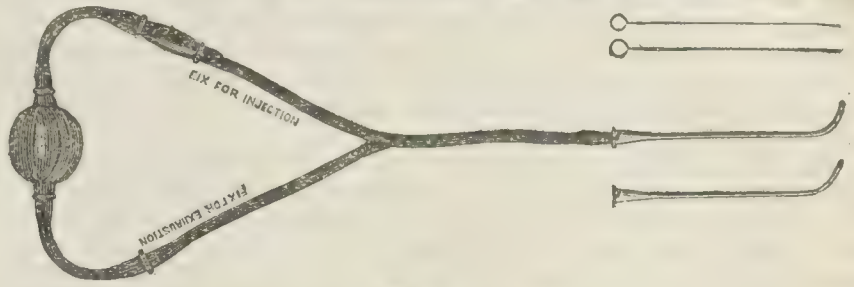


Fig. 2.

joined together, and near their junction a vulcanite terminal is fixed for the insertion of the catheter. The flexible catheter is a flattened tube of soft metal, and it can be readily bent to any shape by protecting the bore with the stilette (Fig. 2). For the successful application of the Eustachian catheter, it is often necessary to adapt the instrument to the curvatures of the nose and pharynx. Sometimes the nasal passages are by conformation irregular, or they become tortuous and obstructed by morbid changes in the bone or lining membrane; in other cases the position of the tubal orifices and mucous folds of the pharynx require a special flexion of the beak. For some patients I keep a catheter always bent and ready. The instrument must be carefully washed and deodorised after each operation.

In performing the operation of alternate injection and evacuation of the tympanic cavity, the hand ball must always be attached to the catheter after its introduction. The surgeon should elevate and compress the hand ball with the right hand, and hold the catheter and close the nostrils with the left; at the same time, he must direct the patient to practise the movements already described. During the expansion of the hand ball, the catheter should be drawn outwards for half an inch, for by this manœuvre the evacuating power will be increased. Special care must be taken to prevent twisting or kinking of the india-rubber tubes. Sometimes the point of the catheter gets lodged in the folds of the pharynx, so that the injection of air is obstructed. When this occurs, the instrument should be rotated a little, and then replaced over the Eustachian orifice. If from any cause considerable difficulty is experienced in passing the flexible metallic catheter through the nasal meatus, I substitute for it a fine vulcanite instrument, which can be bent to any curve by gentle heat.

In conclusion, I desire to mention that all the instruments described in this paper have been made for me by Messrs. Maw, Son, and Thompson, of London.

[1] Exhibited in the Section of Otology at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.
[2] See JOURNALS of February 26th and March 26th, 1887.

THE ACTION OF POTABLE WATERS ON LEAD

By Surgeon GILBERT KIRKER, M.D., R.N.
[Communicated by The Director-General of the Medical Department of the Navy.]

While engaged in some investigations in connection with the bacteriology of drinking water last summer, I read Mr. Power's memorandum on Lead Poisoning by Certain Public Water Supplies, etc., which is contained in the report of the medical officer of the Local Government Board for 1887. My interest was particularly aroused by Mr. Power's suggestion that the seasonal variations in the action of water on lead, which had been observed by Dr. Sinclair White at Sheffield, might be owing to low organic life;

and I at once made some experiments with the object of testing it. In some waters, under certain conditions of storage, a rapid and great multiplication of micro-organisms takes place; and these waters, while undergoing this process of fermentation, as I have pointed out elsewhere,[1] appear to be especially unwholesome. The change alluded to manifests itself by a great increase in the number of colonies obtained by a bacteriological examination, and by the appearance of a new chemical substance or substances, which particularly attests its presence by modifying the reaction between ammonia and Nessler's solution.

Into equal portions of three samples of rain water from the same underground tank I put similar pieces of lead. Though the three samples were originally from the same source, through different conditions of storage they had come to exhibit the process of fermentation and deterioration in different degrees. From cultivations of $\frac{1}{3}$ cubic centimètre of two, one was found to contain 2,310 microbes per cubic centimètre, and the other 8,823. The number of microbes in the third had not been actually determined, but 0.5 cubic centmètres of another sample, which had been treated the same way, yielded on cultivation an uncountable number of colonies. I have, therefore, no doubt that the number in this one was much higher than in either of the other two. Chemical examination also showed the samples to be affected by the process in the same order.

The pieces of lead were put into the waters on June 13th, and on the following day they were tested qualitatively. The result was that the degrees of indication of the presence of the metal were, in a marked manner, in the same order as the samples had manifested deterioration. It is not probable that the micro-organisms directly attacked the lead; the solvent action was most likely due to the chemical products which accompanied their multiplication.

Now I have noticed that in the course of the year waters generally suffer from deterioration in direct proportion to their increase of temperature; and as it was at the season when they are warmest that Dr. White found the Sheffield water to act most on lead, it appears to me probable that Mr. Power's suggestion is correct, and that my experiments point towards the explanation of the varying action of water supplies on lead pipes.

In conclusion, I may offer the suggestion regarding what appears to be the possession of abnormal and constant plumbo-solvent action by the moorland water supplies of many of the northern towns of England, that the products of combustion, which in that part of the country are poured into the atmosphere in great quantity and variety, give them this power. These gain access to the waters by being washed by the rain out of the air and off the grass, where they have been deposited by the wind.

INJECTION AND ASPIRATION WITH HYPODERMIC SYRINGE FOR DIAGNOSTIC PURPOSES.

By FREDERIC TRUBY KING, M.B., B.Sc.,
Medical Superintendent, Seacliff Asylum; Lecturer on Mental Diseases to the University of Otago, New Zealand.

TENTATIVE aspiration by means of the hypodermic syringe has come to be so much employed of late years, that a simple suggestion of a means by which the result may be rendered more reliable seems worth noting. One of the strongest objections to the ordinary use of a hypodermic needle for diagnostic purposes is that a positive result can alone be regarded as of certain value. The fact of obtaining no pus or other fluid, even when several punctures have been made affords no reliable evidence as to the non-existence of a fluid-containing cavity. In the majority of cases pus will readily flow through a needle, but the lack of reasonable certainty in the event of a negative result is highly unsatisfactory. The suggestion I have to offer is as follows. Draw water into the syringe until it is about one third full, and, after puncturing, slowly expel a few minims into the supposed cavity, then gently withdraw the piston, and, if a collection of fluid exist, we are practically sure to obtain a specimen of it for naked eye or microscopic identification. I first tried this plan in a case where only a negative result could be obtained by the ordinary method, though the pus flowed freely when it was diluted. Since then I have used it in a large number of cases with a view to testing its value, and have never failed to satisfy myself with a single puncture. There is rarely any necessity to expel more than about three minims of water, but, if this fails, the piston may be driven further home, or even worked in and out several times.

The advantages of this simple combination of injection and aspiration appear so obvious, that I am quite prepared to hear that the plan has been already adopted, but my excuse for drawing attention to the matter is that I have not come across anyone who has practised it. Through the finest needle fluids of ganglions, bursæ, hæmatomata, or any form of abscess flow readily when diluted. In order to see clearly the effect of passing a few drops of water into a viscid fluid some coloured water was injected into glycerine. Owing to the high specific gravity of the latter, the water rose to the surface too rapidly to allow of much mixing at the point of emission; but, in spite of this, it was found that by directing the needle to the surface more fluid could be withdrawn than there had been water injected.

Pure glycerine will not pass through a fine needle by the suction of an ordinary syringe unless pressure be exerted on the fluid. The effect of tension is obvious, and may be easily demonstrated as follows. Fill a bottle with glycerine, and cover with an india-rubber cap; puncture the cap with the needle of a hypodermic syringe which has been half filled with glycerine. Withdraw the piston and no fluid will follow; but, after injecting enough glycerine to render the cap moderately tense, a portion of the fluid will slowly flow back into the syringe if the piston be again withdrawn. This points to the value of increasing the tension of thick or viscid fluids by injecting into the containing cavity. The rapidity with which one fluid injected into another of different specific gravity rises or falls, as the case may be, is of some importance. A few degrees of difference in the case of a non-viscid fluid will almost prevent admixture at the point of injection, and, though movement is much slower in viscid fluids, it is desirable to approximate the density of the injecting fluid as nearly as may be to that of the medium into which it is to be thrown. For ordinary use, a solution of phosphate of soda or even sodium chloride, with a density of about 1030 to 1040 would probably be the most useful.

As previously stated, I have been in the habit of using water (boiled), and this has answered quite well, but it is an advantage to have a fluid which, when expelled, will remain at the point of the needle. The fluid which returns first into the syringe is then nearly pure; further suction draws in a larger proportion of morbid material until it may become so thick as to be incapable of passing through the needle. I may here summarise the principal factors in the certainty of the result when aspiration is preceded by injection. 1. The needle is cleared; 2, the tension of the fluid is increased; 3, the fluid is rendered thinner. Where a syringe is used both for injecting and aspirating, great care is necessary in the after cleansing and disinfecting of the cylinder of the syringe.

Recently I have made a few experiments with a view to ascertaining how far "injection and aspiration" might be valuable in determining the nature of solid tumours in doubtful cases, but my field of observation is at present too restricted to enable me to state much upon this subject. In dealing with solids, a precisely similar method to that described above may be used, only that in addition the structure should be broken up slightly at the point of the needle by a teasing and circumducting motion. If it be designed not to penetrate to the full depth, it is well to put a stop in the middle by thrusting it through a piece of cork, for by this means we are enabled to keep the point accurately in the region of disintegration and injection. The specimen may be readily stained by drawing into the cylinder a few drops of solution of hæmatoxylin or picrocarmine, and allowing the fluid to stand for a few minutes before expelling a portion into the microscopic slide. The identification of a fatty tumour presents no difficulty, as an emulsion-like mixture of fat and water will readily pass into the syringe, and can be examined microscopically. Only a single drop may be got to flow back, but this is ample for diagnostic purposes. Sarcomata (unless very fibrous), soft cancers, etc., should be easily identified, for it will be found that liver cells can readily be withdrawn, and examined, indeed, some pieces of tissue large enough to cover half the field of a Hartnack microscope (Mag. 350) will come through the needle besides an abundance of smaller pieces of tissue and isolated cells. The operation is practically painless.

[1] *Sanitary Record*, April, 1889.

A CASE OF THOMSEN'S DISEASE.

By ALEXANDER COOK, L.R.C.P.Ed., L.F.P.S.G., L.S.A.Lond.,
AND
BENJAMIN SWEETEN, M.B., C.M.Ed.,
Cardiff.

H. F. B., aged 19 years, a joiner, complained of difficulty of walking and of ascending stairs, experienced entirely at the commencement. He lived and was brought up in a healthy part of Devonshire till the last two years, when he came to Cardiff. His father, aged 50, suffered in the same way from childhood; for some years the condition gradually advanced, but for the last ten years he has improved to an appreciable extent. His mother has always been perfectly free. The patient has one brother, aged 23, who is not affected, and two sisters, aged respectively 21 and 16, the elder of whom is slightly affected, chiefly in the legs, which is specially noticeable on going upstairs. His paternal and maternal grandparents are unaffected. His father has also two brothers and three sisters who are unaffected, as are their families. A distant relative on the father's side—probably a second cousin—is also affected, being almost as bad as the patient.

The patient never remembers being without the affection, and it was early noticed by his mother. He has always been a teetotaller and never uses tobacco. He is of a very healthy appearance, and never had a day's illness in his life other than the present affection. He was unable to take part in the usual boys' games, from being unable to start at once, for example, to run or kick. The patient is well developed and muscular, especially in the lower extremities, and presents nearly all the usually described features of the disease.

He can rise immediately from a sitting position, but is unable to start walking at once. and stands helpless, though evidently making a strong voluntary effort. When once started he can, after a few steps, get along with moderate ease, but experiences a similar difficulty in attempting to break into a run or step high. The muscles, when once contracted, remain for from five to ten seconds in a state of spasm, resisting all efforts to overcome it. The same is seen in the other voluntary movements of the body, especially the arms and neck, but the eyes are unaffected. He is unable to shake hands; he can grip, but he is unable to loose it, and cannot do the shake.

The muscles of the mouth are also affected, interfering with his speech, the mouth not being properly opened. The father is affected in much the same manner, but in his case the eyes are now and have been to a greater extent affected. The various systems are all normal; axillary temperature 98.8°. He perspires profusely, and appears heated after what to other people would appear but moderate exertion. He is 5 feet 7 inches in height, weighs 11 stone, chest measurement 36 inches. The condition is decidedly worse now than when he first noticed it, and patient thinks it is still progressing.

This is evidently a case of Thomsen's disease. In this case the hereditary nature of the disease is well brought out, and also the fact that it is often congenital. In Finlayson's *Clinical Manual* and elsewhere it is mentioned as a leading feature of the disease that there is great difficulty in rising from the sitting posture; here this is totally absent, the patient being able to rise immediately; but now comes in his great difficulty of starting to walk, which he is unable to do for some seconds—about 10. A primary movement is readily performed, but the difficulty is caused by the tonic contraction thus produced; thus he can readily flex the forearm, but after this primary movement the contraction continues, and extension cannot be performed till it passes off. The natural cure, which occurs to a certain degree as time goes on, is seen in the father's case, who began to improve about middle life. Bristowe says: "The characteristic feature of the disease is a brief check to the use of the voluntary muscles coming on at the moment when it is first attempted to put them into action after rest." That the affection comes on after an interval of rest is so in this case; but it is not a check to the initial movement that occurs, but to any immediately succeeding movement. In this as in other cases recorded the patient was worse when nervous, when attention was directed to his infirmity, or when fatigued.

Pathology.—This seems to be entirely a functional derangement; nutrition is perfect; there are then left three factors: the motor cells, the connecting nerves, or the muscle cells; the probability is that the nerves are unaffected. In some of the cases examined the muscles have been healthy, in a few the muscle fibres have been enlarged and the nuclei more numerous. It may be supposed that, after a period of rest during which the motor cells have acquired their maximum force, the voluntary impulse causes an excessive discharge of motor energy, which of itself sets up a second and succeeding discharges in the same cells, and thus the muscle is again stimulated to contraction before it has had time to relax from the first contraction, and that, after the cells have been thus relieved of their excess of energy, they become more stable, and are able to work smoothly. Or a similar theory might be applied to the muscle cells.

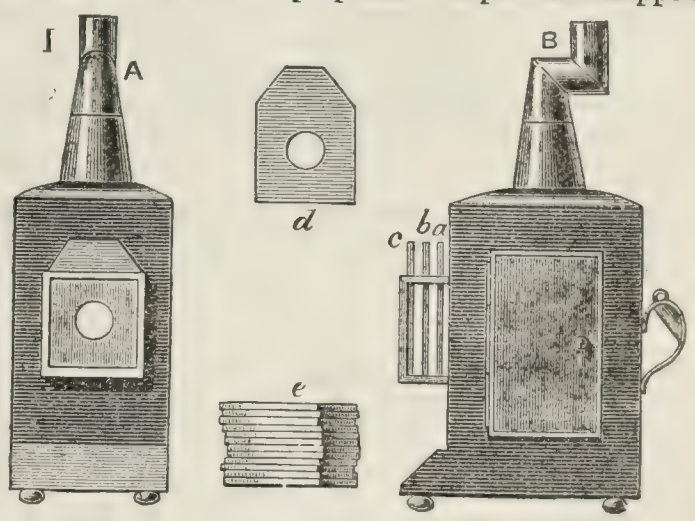
Treatment.—Nerve stimulants and nerve sedatives, as well as electricity to the muscles, have been tried, but in this as in all other recorded cases, treatment has been futile.

OPHTHALMOLOGICAL MEMORANDA.

TWO NEW TESTS FOR COLOUR BLINDNESS.

The Lantern Test is the one which I recommend for the testing of sailors and railway *employés*. With it we can exclude dangerous persons, and dangerous persons only, allowing the slighter degrees of colour blindness to pass, as for all practical purposes they are normal sighted.

The apparatus of the test consists of a lantern and twelve slides; six slides contain coloured glasses (standard red, yellow, pure green, standard green, blue, and purple), and six contain modifying glasses (ground, ribbed, and four thicknesses of a special kind of neutral glass). I notice that since my paper on "The Tests for Colour Blindness" was read, several tests, in which neutral glass forms an element, have been proposed. To prevent disappointment



The set of figures comprised in I represents the Lantern Test for colour blindness; II the Classification Test.

I will state that the neutral glasses used in this test are not ordinary pieces of smoked glass. They were selected first by spectroscopic examination in accordance with my theory of psycho-

physical perception. I thought that with a certain kind of glass I could change the colour of a light to a colour blind person, whilst leaving it unaltered to the normal sighted. I then examined a number of educated colour blind persons, and found my expectations were verified in every particular. On knowing the class a colour blind person belonged to I could predict the answers which he would give. In each class they are always the same, hence the certainty of the test.

The object of the test is to ascertain whether a candidate can distinguish under all circumstances the red, green, and white lights. The colours, other than the red and green, are used to prevent guessing.

1. The candidate should be seated at a distance of 15 feet from the lantern.

2. He should be asked to name the colour of the light produced by a coloured glass (1 to 6) alone, or in combination with the modifying glasses (7 to 12).

3. A candidate should be rejected: (1) If he call the red green, or the green red, under any circumstances. (2) If he call the white light, under any circumstances, red or green, or *vice versâ*. (3) If he call the red, green, or white light black, under any circumstances.

4. A candidate who makes mistakes other than those mentioned above should be put through a very searching examination.

Fig. A shows the lantern as presented to the candidate. Fig. B shows a side view of the lantern, with three slides in it, *a* being a coloured glass, *b* and *c* modifying glasses; *d* is the front view of a slide, *e* the pile of twelve slides.

Fig. II shows the Classification Test. This is intended more for scientific purposes, and not as a practical test. With it an examiner can easily make himself acquainted with the mistakes of the colour blind, and thus appreciate the answers given by the candidate when examined by the Lantern Test. It may also be used as a confirmatory test. The test colours are orange, violet, red, and blue-green. These are labelled 1, 2, 3, and 4 respectively. The box contains a series of representative colours and those which are especially confounded with the test colours—150 wools, 10 skeins of silk, 10 pieces of coloured cardboard, and 10 pieces of coloured glass, Figs. *a*, *b*, *c*, and *d* respectively. The candidate is told to match the test colours.

For further information, see my pamphlet on *The Detection of Colour Blindness from a Practical Point of View* (Baillière and Co.).

F. W. EDRIDGE-GREEN, M.D.

Finsbury Park.

THE OPERATIVE TREATMENT OF CICATRICIAL ECTROPION.

ALLOW me to call the attention of your readers to a method which obviates the cicatricial depression so common in these cases, and which was pointedly alluded to by Mr. Mackinlay.

I carefully separate the lid and adjoining skin from the subjacent tissues, pare a small portion of the opposite edges of the upper and lower eyelids, and having brought them into apposition secure union by sutures (which are removed in a week), thus establishing an artificial ankyloblepharon which is maintained for a month or longer according to the nature of the case. The dissection necessary to free the lower lid so that it may come into easy contact with the upper leaves a raw surface, and if this is allowed to heal by granulation the lid is sure to be drawn down again, and you get the depressed cicatrix already alluded to; if, however, a sufficiently large graft of skin is taken from some other part of the body and used to fill the gap, the difficulty is at once overcome, and the result, when all goes well, is everything that can be desired. I have already, in a paper published some years ago, illustrated by photographs the charming results attainable in this way, and the accompanying photograph of an interesting case now in process of treatment will make my meaning plain.

The patient, a girl 11 years of age, fell into the fire six years ago, thus inflicting a severe burn upon the cheek, which resulted in a most disfiguring ectropion. In order to remedy this condition I simply detached the cicatrix, fastened the lids together, and filled up the gap with a large flap of skin taken from the inside of the right arm. The flap is not prepared in any way; and, unlike Thiersch and others, instead of a mere shaving of epidermis, I remove the whole thickness of skin. The photograph was taken a week after the transplantation of tissue (which adhered without the slightest tendency to sloughing). It shows the lids adherent (the new skin is mapped by the lines on the cheek) and judging from experience I have no doubt that when the lids



are separated the deformity, which has made the child miserable for years, will be entirely removed.

CHARLES BELL TAYLOR, M.D., Surgeon to the Nottingham and Midland Eye Infirmary.

SURGICAL MEMORANDA.

CASE OF SEVERE COMPOUND COMMINUTED FRACTURE OF THE HUMERUS TREATED BY CONTINUOUS IRRIGATION: RECOVERY.

U., aged 45, fell from a tree on August 5th, 1889, and entered the hospital on August 9th, having been carried two days journey on a bedstead. At the upper third of the the left arm, anteriorly, was a wound passing across the front of the limb, and obliquely inwards to the axilla, the deep fascia of which was opened up, due to destruction of the anterior muscular wall. Length of wound 7 inches in breadth (with arm to side) $3\frac{1}{2}$ inches; depth of cavity 4 inches. Bone below tuberosities shattered for 4 inches. No portion absolutely detached. Insertions of pectorales lacerated extensively. Wound intensely septic and sloughing. The patient, a powerful man, was pale and evidently suffering from septic absorption. It almost appeared as if amputation at the shoulder was the only chance of life, but the foul condition of the wound rendered inoculation of any fresh surface only too certain. In consultation, a visitor (Dr. M., Army Medical Staff) advised amputation; it was, however, finally decided to try to save the arm. It was placed in a long posterior splint. Extension with a 3 pound weight was kept on for a few days. Continuous irrigation with dilute permanganate solution was arranged. For the first forty-eight hours the patient "swam" for his life, with sapræmia, and a temperature of 104° F. The fœtor of the wound steadily diminished. Portions of the slough were removed daily.

August 16th: Steady improvement. August 19th: The wound has closed very much, and is covered with pale granulations; no extension of suppuration up or down; arm still swollen and hard no fœtor; is taking food well. August 23rd: Limb in good position; irrigation still maintained, as wound becomes foul if discontinued. August 29th: Counter-drainage to back of arm; irri

ation stopped. August 31st: Loose sequestrum 3½ by ¾ inch removed. September 24th: Wound healed; scar linear; free movement of fingers and wrist; cannot raise arm from side or flex elbow; probably, with consolidation of fibrous tissue of union, and after practice, will recover somewhat the use of the latter joint.

The case is recorded as an illustration of the lengths to which conservative surgery may be safely pushed. It also shows the great value of continuous irrigation. Injuries of such severity must always cause anxiety and often doubt as to whether amputation should be resorted to or not. As far as this case is concerned, the risks of secondary amputation seemed almost as great as those of conserving the lamb. If the patient had been seen at the time of the injury the balance of opinion might quite possibly, owing to the extensiveness of the wound and shattered condition of the bone, have been in favour of amputation; and yet there would in reality have been a still better chance of saving the limb then, because septic changes would not have supervened.

Kashmir. ERNEST F. NEVE, M.D., F.R.C.S.E.

OBSTETRIC MEMORANDA.

SCARLET FEVER AND THE PUERPERAL CONDITION.

The question raised by Dr. Macdonald in the JOURNAL of December 7th, namely, whether puerperal women are really as specially susceptible to contract and suffer severely from scarlet fever as is generally held to be the case, is one of considerable importance, and one in which I have taken great interest for some years under very favourable circumstances for observation. For a number of years I have rarely been without scarlet fever in some part or other of my district, and every year have been called upon to investigate numerous outbreaks of that disease. I have personal notes of considerably over twenty instances in which scarlet fever and a confinement have been going on in the same cottage, often in the same room, and in every case under conditions where anything approaching efficient isolation was impossible. In no single one of the above cases has the puerpera contracted fatal scarlet fever, though some have passed through an ordinary attack of the disease, and the risk of the incidence and severity of the disease has appeared to be precisely what would be anticipated amongst a similar number of adults under similar conditions of exposure.

It has sometimes occurred to me whether puerperal scarlet fever is not a disease to which the well-to-do classes are more prone than the wage-earning class, but this is a point upon which the opinion of any one individual is of very little value. Certainly amongst the wage-earning class the advent of childbirth is regarded with less anxiety (and with reason) than amongst the upper class, and I have seen certainly one case of puerperal fever in which mental worry and anxiety seemed a marked factor in determining the development of the attack.

Although I feel confident that the risk to a puerpera from special liability to scarlet fever is over-estimated, I by no means undervalue the utmost practicable isolation under all circumstances and in every case of infectious disease, but I believe that some good and by result if we can conscientiously make light of a risk which is certainly believed in and dreaded by educated lay people generally and at least by many of the profession.

Shrewsbury. W. N. THURSFIELD, M.D., D.P.H., Medical Officer of Health.

CLINICAL MEMORANDA.

DIPHTHERIA AND MEASLES.

On the afternoon of November 20th I was called to see a child aged 3½, whose parents had just removed from a house in which their eldest boy had, four months previously, died of diphtheria. The child for a few days had complained of sore throat and of feeling unwell. When first seen the temperature was 105.5° F., prostration was marked, and the tonsils and uvula were completely covered by false membrane. For local treatment the throat was carefully swabbed every third hour with a 1 in 2,000 solution of corrosive sublimate.

On the following night a typical measles rash made its appearance, the throat rapidly cleared, and in less than twenty-four hours the little patient had capillary bronchitis of a most alarming character, which for two days threatened her life and then gradually disappeared. Thus far the child had taken milk and beef-tea fairly well; but from November 25th to the 28th inclusive absolutely refused all nourishment. On the morning of the 29th, however, she began to recover her usually good appetite, and has since practically made up the amount of flesh she lost during her illness.

Blackpool. EDWARD KINGSBURY, M.B.

GLYCOSURIA.

I HAVE read with great interest the paper by Dr. Goodhart on "Transient Glycosuria of Neurotic Origin," in the JOURNAL of December 21st, having met with a case very similar to those recorded by him, and in which so far the issue has been satisfactory.

A young man, aged 20, applied to me suffering from boils and general *malaise*. Dyspeptic symptoms were well marked, as also increased quantity of urine. His relations with his father in business matters were not satisfactory, and he was extremely irritable and testy, at times gloomy, melancholy, and with a suicidal tendency. He travelled in connection with the business, and when absent from home appeared to be better. Sugar was constantly found in the urine whenever I examined it, though variable in quantity. He derived benefit from taking iron and strychnine. There was obscure history of a blow on the head when a boy at school, but nothing definite appeared to follow it. As he frequently went to London, I advised him to consult Dr. Pavy, who carefully examined him, and on one occasion at least failed to find any sugar in the urine, but found it at another time. This may doubtless be accounted for by the removal of the exciting cause during his prolonged absence from home. As matters did not improve, and the friction between his father and himself intensified, he at last decided to go abroad, and on return from one of his London journeys informed me that he had taken his passage in a vessel for Australia. As I had no experience in such cases of the effects of a sea voyage, and probable sickness and inability to adhere to the proper diet, I hesitated as to sanctioning his going; but he had taken his passage and would go.

The result has been most satisfactory. He has migrated between New Zealand and Australia, has got married, and a photograph sent home a few months ago (it is now about two years since he left England) shows a marked improvement in his condition. He has got stout and looks cheerful and well, and says that he is so.

This is clearly a case of neurotic origin. Doubtless the glycosuria tended to keep him weak and irritable and of a fretful temper, and this in turn aggravated the disease. I have asked his friends to beg him to get his urine examined, but have not heard the result. Probably these cases are more frequent than generally supposed. As I think the case interesting in connection with Dr. Goodhart's paper, I shall be glad if you will give it insertion in the JOURNAL.

There is no history of gouty diathesis in the family.

Clifton. JOHN EWENS.

WOUND OF THE RIGHT LUNG FOLLOWED BY IMMEDIATE RECOVERY.

THE following case affords an interesting example of the healing power of Nature.

G. A., a Maltese labourer, aged 42, of a strong constitution, received on the night of April 13th, 1889, a bayonet wound in the right side of his back. He complained at once of an acute pain in the chest, and had a bloody expectoration immediately on receiving the wound. He was removed to his house in a state of collapse, and I was summoned at once.

On examination I observed dyspnœa, sense of stricture and suffocation, an expression of anxiety and pallor. Blood was coughed up in mouthfuls, florid in colour, and occasionally with clots. There was also some bleeding from the external wound, through which air came out of the chest with a hissing noise during expiration.

I dressed the wound with carbolic oil, but soon after there was a repetition of the previous symptoms—namely, sense of suffocation and spitting of blood. Being a very serious case, I called my friend, Dr. Cannataci, to assist me, and share with me the responsibility. He agreed with me that there were the physical signs of a penetrating wound of the chest, with injury of the right lung. The magistrate came in order to hold an inquiry into the

case, but the patient was in such a miserable state that the magistrate had to suspend his investigation. A minister of religion was called in, as all thought the case would end fatally. The dressing was completed by surrounding the chest with a large flannel bandage, using a moderate compression, and a sedative mixture was prescribed, while perfect rest was enjoined, making the patient lie on the wounded side. Things went on just the same for about three hours, during which the man remained in a great danger. At 3 o'clock in the morning he slept, and on awakening after four hours I found him much better, all the serious symptoms having abated. The cough gradually subsided, and two days after the patient was completely recovered.

It is astonishing how both the external and internal wounds were healed up in so short a time. I repeat again "the case affords an interesting example of the healing power of Nature."

Malta. G. F. INGLOTT, M.D., D.M.O.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

ANNUAL GENERAL MEETING.

TUESDAY, JANUARY 7TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

The Pathology of Duodenitis after Burns.—Dr. WILLIAM HUNTER began by giving the following history of the subject: In 1842 Mr. Curling drew attention to it in a paper before the Royal Medical and Chirurgical Society. Since then a considerable number of cases had been recorded by various observers, and now there was a widespread belief in the existence of some connection between the injury to the skin and the duodenal affection; but up to the present time no satisfactory explanation of its nature had been given. Mr. Curling's suggestion that the suppression of the excretory functions of large tracts of skin caused increased action with consequent ulceration of Brunner's glands had no physiological foundation, and Dr. Brown-Séquard's, that it was due to some disturbance of the sympathetic system, was a mere euphemism for ignorance. The author then mentioned that Dr. Wilks had collected a series of twelve cases which gave no corroboration to Mr. Curling's suggestion, and Mr. MacCarthy had only observed the duodenal lesions twice in eight years in the *post-mortem* room of the London Hospital. The author considered that the relation might be explained by some experiments which he had recently conducted, in which he found that, after injecting into a dog from 3 to 5 grammes of toluylendiamene subcutaneously and then killing the animal some three to seven days later, there was intense duodenitis, caused by the irritation of the poison excreted in the bile. He then described in detail some of the experiments; in one in which the animal was killed seven days after the insertion of the drug the stomach was empty and its mucous membrane normal, but the mucous and submucous coats of the duodenum at a level of eight inches beyond the pylorus were so congested that the lumen of the gut was almost blocked and was nearly filled by inflammatory mucus, and many of the follicles in the small intestine as far down as the lower end of the ileum were also congested. In another experiment the dog was killed three days after the insertion of the poison, and there were what looked to be three or four small ulcers in the duodenum, together with congestion of the whole intestinal tract beyond. On examining the ulcers microscopically there was found to be no actual loss of substance, the appearance being due to the congestion of the mucous and submucous coats around follicles in the wall of the intestine. There might be one or more of these ulcerated-looking spots or merely simple congestion. In some cases of death after burns congestion had been described as being confined to the neighbourhood of the opening of the bile and pancreatic ducts, and in others it had extended as far as the lower end of the ileum, and exactly similar conditions had been present in the experiments with toluylendiamene. If one assumed an analogy between the result produced by the injection of the drug toluyendiamene and the pathological condition sometimes found in the duodenum after death from burns, and which occurred within ten days of the burning owing to perforation of the duodenum and subsequent peritonitis, or from ulceration through the wall of an artery, one might conclude that congestion was always present but only very rarely proceeded to ulceration, and this would explain the difference between Mr. Curling's and Dr. Wilks's conclusions, as the latter's cases related to death soon after the burn and in the former's death did not occur until a later period. The author then showed that there was another very striking similarity between the action on the blood of the drug toluyendiamene and the changes caused by burns. In both there were marked changes in the blood, and in both hæmoglobinuria had been known to occur. These results were due probably in the case of burns partly to the high temperature and partly to the absorption of the disintegrated products by the blood. He had found that toluylendiamene began to be excreted in the bile in an hour and a half to two hours after subcutaneous injection, but it was not all excreted by this channel, and a portion was probably broken up in the body and the products excreted in the urine. The result produced by the drug depended upon the animal experimented upon. In dogs it produced jaundice without hæmoglobinuria, in cats hæmoglobinuria but no jaundice, and in rabbits neither jaundice nor hæmoglobinuria, facts which showed that results obtained experimentally on animals could not be transferred directly to human physiology or pathology, and he summed up by suggesting that the changes when present in the duodenum, both after burns and after toluylendiamene poisoning were due to the excretion of irritant poisons from the body in the bile.—Mr. BOWLBY, in a considerable experience had only once seen congestion of, and never ulceration of, the duodenum after death from burns, neither had he ever seen a case of hæmoglobinuria after burns.—Dr. JOB COLLINS said that he had made some injection experiments on guinea-pigs with toluene and toluylendiamene in conjunction with Dr. Lauder Brunton, and had found that both drugs produced a largely increased secretion of bile.—Sir JOSEPH FAYRER had examined many bodies which had died after burns, and, as he had never found duodenal ulcerations in these cases had come to the conclusion that there was no truth in the idea —Dr. PERRY said that in making indices for the *post-mortem* records at Guy's Hospital he had not come across a single case o duodenal ulceration after burns, but he could not speak from memory as to congestion.—Dr. HUNTER had himself never found any congestion of the duodenum in cases of death after burns The object of his paper was to give an explanation of how duodenal congestion and ulceration could occur in such cases.

Intussusception of the Jejunum in an Adult due to a Polypus.—Dr. HALE WHITE showed a specimen taken from a middle-aged man, who was admitted in too collapsed a condition for operation but clearly suffering from intestinal obstruction. At the necropsy there was found some recent peritonitis. There was also a intussusception of the jejunum, which commenced 2 ft. 6 in. from the pylorus. The intussusception was ten inches long. All the coats were engorged with blood, and there were some bubbles from decomposition. For an inch above the bowel was thickened as though it had been included in the intussusception. Inside the bowel was found a hard, pear-shaped polypus, which was attached to the inner coat at the most forward part of the intussuscepted portion. It was about three-quarters of an inch long and pedunculated. This case was a very rare one, as the intussusception was unusually high up, was due to a polypus, and had occurred in an adult.

A Cardiolith.—Dr. DELÉPINE described the following specimen which was sent to him by Dr. MANN.—The following notes have been abstracted from Dr. Mann's letters. A. N., a female child aged 5 years, was taken ill seven days before death with diphtheria. She was for three days under observation, and apparently died of cardiac failure. On opening the heart, a hard concretion was found in the right ventricle. The other lesions were the usual ones of diphtheria. The concretion was situated between the right segment of the tricuspid valve and the inner aspect of the part of the cardiac wall forming the right border of the organ. It extended from the point of insertion of the valve to the basis of some of the small papillary muscles. In shape it was irregularly rhombic and much flattened, its optical section being lenticular. The longest diameter (obliquely antero-posterior) measured about three-quarters of an inch. The other diameters were from above downwards about half an inch, from side to side a quarter of an inch. The inner surface, the one in contact with the valve, was slightly nodulated. The outer surface was smooth except at four places near the posterior end of the stone, where it was adherent to the endocardium, through four short, fibrous-looking bands. The mass was of a yellowish-white colour, and looked like a small piece of bone covered with a distinct, smooth, glistening membrane, continuous through the fibrous adhesions with the endocardial membrane. The concretion felt hard, but in some parts was distinctly elastic, as if the hardness were due to the prese

a thin shell of bone. The internal parts were rather soft and anular. On microscopical and chemical examinations, it was und that the concretion was composed of four concenic strata. 1. An external layer of laminated endotheum, very thick in the neighbourhood of the adhesions, in elsewhere. The superficial layers of that coat were composed well-formed endothelial cells, staining well with ordinary reents. The deeper layers were less distinct, stained badly, and ere partly calcified. 2. The next coat was much thicker, and as apparently composed entirely of rounded masses of carbonate calcium, at places it was evident that this material had been posited in the midst of laminated fibrous tissue resembling the ep layers of the endothelial stratum. In other regions more eply situated *débris* of fibrin and brown pigment could be regnised with some difficulty. 3. More internally still there was irregular layer composed of more or less crystalline transparent asses of phosphate of calcium mixed with hæmatin and typical ystals of hæmatoidin. 4. Quite in the centre of the concretion, id forming its nucleus, there was a soft material partly comsed of distinct, coarse, fibrin filaments mixed with much granular *ibris*, all much softened by or soluble in weak hydrochloric acid. me pigment was also found in that layer. From this structure was evident that the concretion was nothing else than a cardiac rombus or polypus, partly calcified, adherent to the cardiac all, and covered with endothelium. The concretion was of inrest in various ways: 1. From the position of the stone it seemed ident that it could not have given rise to much trouble during e. 2. From its structure there could be little doubt that it had en growing slowly by accretion for years, and that it was quite ssible it might have begun to form during fœtal life. 3. The position of endothelial layers on the surface of the thrombus ve support to the view that organisation of thrombi was due to dothelial proliferation. In this case, however, owing to the sence of necessary elements for vascularisation, the deep layers, they become separated from the nutrient fluid by more perficial layers, successively degenerated and became calcified. twithstanding the general allusions made to the organisation d calcification of thrombi in various general textbooks it was t easy to find actual reference to cases similar to the one here scribed. The most satisfactory descriptions would be found in l books.[1] The author had not been able to find that any similar se had been recorded in the *Transactions* of the Society. Finally, proposed the term cardiolith for the above condition, as nilar conditions when found in veins were known as phlebohs.—Dr. NORMAN MOORE said that polypus of the heart was rely a firm clot, and that Dr. Matthew Bailey had long ago own that such a condition as that described by Dr. Delépine s merely a calcareous deposit in the heart imbedded in the clot, d torn off with the latter at the *post-mortem* examination. Dr. DELÉPINE said that there were two kinds of polypi. A y, like his, had been very carefully described by Rokitansky, alsh, and Laennec as being underneath the endocardium, but at there were many others described, which were those to which . Norman Moore had referred. In answer to Dr. HADDEN he d that there was no *ante-mortem* clot attached to the cardioh itself, but that there were *ante-mortem* clots in the other vities of the heart.

Rupture of Spleen.—Mr. EDGAR WILLETT showed a specimen ich had been taken from the body of a woman, aged 39, who d on the third day after a street accident. The spleen had been n for more than two inches on the outer surface near the upper rgin; the rupture was closed by a firmly adherent clot.—The ESIDENT said that he had several times seen spleens which had overed from previous lacerations.

Card Specimens.—Mr. SPENCER: (1) Caries of Vertebræ in a Dog; Intestinal Obstruction and Abscess in a Dog.—Mr. RAYMOND HNSON: Sublingual Dermoid.

Election of Officers.—The meeting terminated with the election officers for the year. The list proposed by the Council and pubhed in the JOURNAL last week was adopted.

Report.—The SECRETARY (Mr. R. J. Godlee), in his report, said at two honorary members of the Society (Professor Donders, Utrecht, and Dr. C. J. B. Williams) had died during the past ar.

[1] Rokitansky's *Manual of Pathological Anatomy*, vol. iv. p. 215 (Sydenham iety), 1852; Hasse, *An Anatomical Description of the Diseases of the Organs Circulation and Respiration*, p. 148 (Sydenham Society), 1846; Laennec, *A eatise on the Diseases of the Chest, and on Auscultation* (John Forbes's translan), p. 657, 1827.

Votes of Thanks.—Votes of thanks were proposed and carried to the retiring officers of the Society.

Presidential Address.—The PRESIDENT then gave his annual address, and commenced by thanking the Society for the honour it had done him in re-electing him. He then briefly reviewed the work of the Society during the past session, and referred to the excellence of the forthcoming volume of the *Transactions* of the Society. He maintained that the meetings had retained their interest in spite of the disadvantages during the change of location of the Society and the temporary insufficient accommodation. He hoped that the migration to the West would not cause the Society to leave its wisdom behind it, but that the future would furnish as good a record as the past forty-three years had done. The Society had been considering not only the operations of Nature but also very definite natural results—not merely that Mr. So-and-So knew of something which would cure this, that, or the other, an assertion into which the equation of the observer largely entered, but that disease was governed by immutable laws which, if not eternal, were at least coeval with the human race and even with the animal kingdom. The records should have the property of endurance which belonged to the truth of Nature; and it might be that some of them might retain a value after the language in which they were written had become obsolete, so that a person who would consult them would need to be not only an inquiring pathologist but a curious student of old English. Finally, he said a word about the manner as well as the matter of the work, and urged members to keep as much as possible to the old custom of making their communications verbally rather than simply reading their papers. The first plan had been pursued during the past year with great benefit to the Society. Such short addresses, though they might be less polished, were more effective than written essays, their brevity preventing that flagging of the attention of the Society so often noticed under lengthy readings.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 6TH, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

Surgery of Infancy and Childhood.—The first Lettsomian lecture was delivered by Mr. EDMUND OWEN on "Selected Subjects in the Surgery of Infancy and Childhood." Beginning with the treatment of enlarged glands of the neck, the lecturer remarked that the presence of branching scars implied a blame either of the parents for not seeking advice in good time, or of the medical attendant for not availing himself of the means at his disposal to effect a cure without waiting for suppuration and consequent loss of tissue. He urged that instead of painting the skin over the glands with iodine or iodide of lead, the duty of the surgeon was to remove the enlarged glands without loss of time, and before the patient had been exposed to the risk of the adjacent glands becoming enlarged, and the organism exposed to the dangers of septic absorption. He then took up the question of causation, and pointed to the pharynx and tonsils as being likely sites for the entrance of septic poisons into the system. After alluding to the advantages attending constitutional treatment, change of air, etc., in enlargement of the glands, for which no exciting cause could be made out, the lecturer cautioned his listeners that perfect success could not be guaranteed in every case, or even in most cases, as the result of a first and single operation, but he claimed, however, that the effect of removal of as much as possible of the diseased tissue was always attended with marked benefit to the patients' general health and a period of arrest, if nothing more, in the further progress of the malady. He then proceeded to describe the *technique* of the operation: He makes an incision along the anterior border of the sterno-mastoid, over the tumour, of sufficient size to allow of the necessary manipulations, extending through the skin and down to the deep fascia, completing the laying bare of the glands by means of a steel director and forceps. Vessels are torn through with the forceps so as to prevent unnecessary hæmorrhage until the only connections of the gland are the lymphatic vessels above and below. The enlarged glands are then removed without difficulty, the cavity which remains being washed out with a mercurial solution and dried, the edges being brought together by means of sterilised horsehair sutures and a small drainage tube inserted. To prevent any scars as the result of the sutures these are removed not later than the second or third day. A strip of moist protective is placed over the wound, surmounted by a pad of cotton wool, and

the patient is placed in bed, the head and neck being steadied with sandbags and perfect immobility maintained. The next day the dressing is removed, and the drainage tube, and possibly the sutures removed, the edges being approximated by strips of waterproof strapping. The child is kept recumbent as long as possible, and when allowed to get up, the neck is kept at rest by means of a stock of stiff buckram covered with linen. If, on making the incision, a suppurating cavity is found, the lecturer advocated laying the cavity well open, cleaning it out thoroughly, and making due provision for drainage. In a few cases it has been found necessary to divide the attachment of the sterno-mastoid muscle in order effectually to deal with the enlargements beneath it. He insisted upon the fact that the progress effected in the surgical treatment of enlarged glands in this situation was mainly due to Mr. Pridgin Teale. The lecturer narrated a case in which he had operated on a child for a sarcomatous gland of the neck, and pointed out that although in certain cases no treatment short of extensive operation could possibly prove of avail, and though the shock attending such an operation might be sufficient of itself to determine a fatal result, yet, as the alternative was inevitable death, he urged that the most serious risk should be unhesitatingly accepted, and the operation undertaken. The lecturer passed on to discuss congenital cystic hygromata. He was of opinion that they were best left alone, or at the most tapped, as they rarely caused serious symptoms, and proved very troublesome things to deal with if operated upon. He mentioned that although he had seen dozens of these dilated lymph spaces in infants and children, he had never met with them past the age of puberty. He inferred, therefore, that absorption invariably took place, preceded or not by inflammation. He showed drawings and photographs of several cases of this kind illustrating their principal clinical features. He pointed out that the tumour of hygroma was altogether different from "hydrocele of the neck," due to non-closure of one of the branchial clefts, with subsequent distension of the cavity. Thus created, it differed in having a definite rounded contour, and in consisting of a single cyst, which on evacuation left the neck its normal shape. Such tumours were, he said, easily cured by incision and drainage. He concluded by alluding to the experimental researches of Horsley and others bearing on the effects of the removal of the thyroid gland in connection with cases of sporadic cretinism, and urged that in these days of restless, active, and aggressive surgery, control experiments upon living animals were not only justifiable but necessary.

ERRATUM.—In the report of the meeting of the Medical Society, in the JOURNAL of January 4th, column 1, line 12 from bottom, for Dr. Wilberforce Smith read Dr. Fred J. Smith.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, JANUARY 2ND, 1890.

THOMAS BUZZARD, M.D., F.R.C.P., President, in the Chair.

Aural Complications in Acute Specific Fevers.—Dr. HILL remarked that more than 50 per cent. of the cases of chronic ear disease, dating from early life, were traceable to the aural complications of fevers. The somewhat higher percentage observed before Meyer demonstrated the importance of naso-pharyngeal obstructions was doubtless due to the fact that the exanthemata were potent exciting factors in the induction of adenoid overgrowth of the pharyngeal tonsil, and indirectly to ear lesions, in subjects of "lymphatic temperament," and cases now rightly attributed to post-exanthematous "adenoid growths" were formerly classed amongst the direct aural complications of acute fevers. After detailing English and foreign statistics on the relative frequency of aural symptoms in the course of scarlet fever, measles, whooping-cough, typhoid, and other fevers, the often permanently destructive nature of these complications on the membrana tympani and ossicula, if untreated at the time, was pointed out, and contrasted with the rapid recovery from perforation, discharges, and impaired function when similar conditions were properly treated. In measles, pneumonia, and pertussis, in which the inflammation spread by the Eustachian tube, the otitis could often be prevented, and nearly always arrested or limited to the non-suppurative variety by appropriate inflation and naso-pharyngeal treatment. If neglected, suppuration of the middle ear resulted from tubal obstruction and accumulation and retention of tympanic secretion; the tendency of this acute stage to suppuration was more marked when the middle ear became involved in scarlet fever, small-pox, and diphtheria, and if unrelieved by immediate cision of the membrane at the onset of pain, or evidence of intratympanic accumulations, the destructive processes above alluded to resulted, and frequently involved the labyrinth also. If on establishing proper tympanic drainage, together with inflation by the Eustachian tube, and antiseptic cleansing by the meatus, the pain was unrelieved, the application of leeches, or if necessary incision for mastoid inflammation, and the use of Leiter's continuous cold coil for less limited pain, were recommended. Anodynes internally often afforded temporary relief, but a thorough examination should always be made, and appropriate surgical measures adopted. In cerebro-spinal fever, mumps, and occasionally in typhus, the labyrinth was primarily involved. Such a complication might be aggravated by such remedies as salicin and quinine, which were best avoided in labyrinthine disease; iodide of sodium or potassium, the biniodide of mercury internally, and pilocarpine hypodermically, were most serviceable. Aural symptoms should always be looked for in the course of acute fevers, in the same way that the heart, lungs, and urine were from time to time investigated. With appropriate nasal and pharyngeal treatment, otitis could often be prevented or mitigated in severity; if enlarged tonsils or adenoid growths interfered with such treatment, they should be removed. Whilst the administration of anodynes was indicated for pain, other measures, including early incision of the tympanic membrane, were necessary in order to limit rapidly destructive suppurative processes in the middle ear and labyrinth.—The PRESIDENT remarked upon the extreme importance of diminishing in any way the great dangers which resulted from ear disease caused by the specific fevers. Those who met with many cases of cerebral abscess and other brain lesions from this cause would best appreciate the points of Dr. Hill's paper.—Mr. LENNOX BROWNE said difficulties arose in attempting to treat patients suffering from acute specific fevers who had ear troubles, and the patient's friends were often much disinclined to any interference. He thought a rise of temperature in the course of a specific fever was a guide to the diagnosis of ear trouble as of other complications. Some of the ear troubles of acute fevers were due to pharyngeal and not primary aural trouble, but only when there was no discharge from the external meatus. When discharge was present there was always aural disease. The order of importance of the specific fevers in relation to the production of aural trouble was, in his experience, the following: Scarlet fever, measles, pertussis, and mumps. Purulent catarrh was rare in diphtheria. He himself would not incise the tympanic membrane unless there was very great congestion or evidence of fluid in the ear. There was no danger of leaving a hole in the tympanic membrane after such an operation. When, however, rupture of the membrane resulted from ulceration, a permanent opening was frequently left. Unlike Dr. Hill, he had found atropine of great service in relieving aural pain. He supported Dr. Hill in his recommendation to scrape the throat free from growths, even during an acute fever.—Dr. SPICER inquired as to the method of using pilocarpine. An enlargement of the pharyngeal tonsil should be treated before an acute specific fever occurred.—Dr. HILL, in reply, said pilocarpine should be injected subcutaneously in the form of a 2 per cent. solution.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

FRIDAY, DECEMBER 6TH, 1889.

AUSTIN MELDON, P.R.C.S.I., in the Chair.

Compound Luxations of the Ankle.—Mr. CROLY read a paper on this subject, illustrated by three cases. The first was that of a farmer whose right foot was caught in a mowing machine, causing compound dislocation of tibia and fibula forwards on the dorsum of the foot; the tendons on the front of the ankle were injured, the entire front of the joint being laid open. The dislocation was reduced under an anæsthetic, the wound dressed antiseptically, free incisions were made subsequently to relieve tension, and the patient recovered with a very useful foot, and walked as well as ever at the end of a year. The second case occurred in a coal porter of very intemperate habits. The dislocation was caused by his foot having been caught between the shaft of a coal dray and the horse's shoulder (the horse having fallen as he was being led up a hill). Three inches of the lower extremity of the right tibia protruded through the soft parts: the lower end of the fibula was comminuted, and the foot forcibly everted. The parts having been washed with antiseptic lotion, reduction was effected.

large drainage tube was passed through the joint, and antiseptic dressings applied. Jointable splints were applied to the limb in the flexed position. Six months subsequently the articulate end of the tibia, with about an inch of the shaft fractured obliquely, was removed, after which the wound healed. Several portions of the fibula were removed through an opening on the outer side of the joint, and the patient recovered with a very firm foot. The third case was that of a man, aged 28, who fell from a rick of straw and received a compound dislocation of the tibia and fibula outwards. Reduction was effected, the wound having been enlarged. The patient, who was a man of most abstemious habits, made a very rapid recovery. In three months he walked up and down the ward before the class, and his foot was now not in the slightest degree lame. The patients, with drawings of the dislocations at the time of their occurrence and photographs, were exhibited to the Society.—Mr. MYLES, Mr. BARTON, Mr. NEWELL, Mr. TOBIN, and the PRESIDENT joined in the discussion, and Mr. CROLY, in reply, said he had given forty-four recorded cases without death on the authority of Sir Astley Cooper, and those cases had been before the days of antiseptic surgery. Injuries to the ankle-joint were not favourable to primary amputation, and, therefore, students should be cautioned not to rush for an amputation knife in cases of compound dislocation of the ankle. In the cases which he had described he enlarged the wound to give room for drainage, and antiseptic surgery was carried out in its integrity. He considered that if the tibia and fibula got dirty the case was one for resection, but if not it was one for reduction. Tenotomy of the tendo Achillis was injurious, as weakening the back of the leg by taking away needful support.

Battey's Operation.—Mr. J. K. BARTON read a paper on a case of Battey's operation. Hysteria complicated surgical diseases in a way calculated to mislead the surgeon in either of two ways—1. reflex phenomena due to hysteria might render the case apparently more dangerous than it really was, and thus induce the surgeon to recommend a serious or dangerous operation which was not really necessary; or, 2, the opposite effect might follow. A maid of all work, aged 26, had suffered for a year from severe pain in abdomen, which was greatly swollen and tympanitic. Reflex vomiting was so severe as to require nutrient enemata for six weeks. The diagnosis was "inflammatory disease in left ovary," and all remedies, after a protracted trial, having failed to give relief, Battey's operation was performed in February, 1889. Both ovaries and Fallopian tubes were ligatured and removed; both were hard, white, and about three times their normal size. The patient recovered without a bad symptom. In a month she was up, and in two she had left hospital and returned to earn her own living. When seen lately she presented a remarkable contrast to the condition in which she was for six weeks previous to the operation, being healthy, vigorous, and cheerful.—Mr. O'CALLAGHAN said the operation described by Mr. Barton was not Battey's but Mr. Lawson Tait's. Battey had simply removed the ovaries, but Tait removed the ovaries and appendages. As to chronic inflammation, from the history of the case there was not a symptom of it. Had there been any there should have been considerable adhesions, with hysterical and almost maniacal symptoms. So far as he could judge, Mr. Barton's case had not been successful.—Dr. FREDERICK KIDD did not gather from the paper that there had been any examination *per vaginam*. In his opinion any appreciable enlargement of the ovary could be discovered by a manual examination. All the pain seemed to be developed on the left side, and yet the right ovary was more affected than the left.—Mr. MYLES asked: Were they to assume that every young woman who suffered from hysterical symptoms was to be deprived of the power of reproducing her species? Often hysteria suddenly disappeared, and the text writers recommended early and congenial marriage—treatment which had proved successful, though not quite so showy as abdominal section.—Mr. THORNLEY STOKER said Mr. Barton had not impressed upon his mind that the case was one of such extreme gravity as would justify the operation. Nor did he think that the result of the operation justified its performance, for the patient remained nearly as hysterically insane as she was before, although she passed into a condition of somewhat improved physical health.—Dr. PATTESON regarded the diagnosis as inadequate to indicate operative procedure—the left ovary being the seat of all the symptoms, though the right proved to be more enlarged and more diseased.—Mr. BARTON replied. In the opinion of his colleagues and himself the girl was dying of long-continued disease—disease producing constant vomiting, extreme exhaustion, and intolerable suffering, so lower-that she must soon have passed into a condition practically incurable. The serious character of the operation he did not at all blink, nor did he suggest or think that it should be lightly undertaken. So far as could be done he had explained the nature of the operation to the patient, and she deliberately assented to it. Before he operated he had every reason to believe that there was inflammation, and the sequel showed he was right, as Dr. Bewley's report demonstrated even that there was chronic inflammatory action. The case was more successful than some of his critics seemed to think. From being reduced to the last stage of emaciation, suffering constant pain, and bedridden, as she was at the time of the operation, the girl was now, as the result of the operation, restored to health and strength, capable of performing the functions of a domestic servant, as she had been doing for months, without any hysterical nonsense about her, and with a fair prospect before her, though she would have to forego marriage happiness.

SOUTH INDIAN AND MADRAS BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

FRIDAY, MAY 3RD, 1889.

Dep. Surg.-Gen. S. B. ROE, C.B., Vice-President, in the Chair.

Aortic Aneurysm.—Surgeon-Major W. R. BROWNE showed a patient, who, like one shown at a previous meeting, presented a large pulsating tumour—in all probability an aortic aneurysm—in the dorsal region to the left of the vertebral column.

The Burmah Campaign.—Surgeon-Major H. W. A. MACKINNON, D.S.O., read a short review of the Burmah campaign. The medical officer's work, he said, was incessant; not only was he obliged to accompany columns from posts, and share in the dangers of surprises and ambuscades, but when the troops returned to quarters for a few days his work began again with the attendance on the fresh sick and newly wounded, besides the large hospital list that he had left at his post. Most of them were fairly worn out with diarrhœa, fever, and nervous exhaustion. During the campaign no bodies of troops encountered the enemy without medical aid at hand, and in no campaign had the evidence been so fully confirmed of the utility of the doctor on service. His dogged perseverance at the post of duty, his moral support, which was incalculable, his devotion to his charge, heedless of his own complaints, and serving in many instances on reduced pay and small prospects of recognition, tended to exemplify to his small circle that he was a worthy member of a profession second to none. The chief forms of disease were malarial fevers (ague and typho-malarial fever), bowel complaints, hepatic abscess, and, among the Europeans, venereal disorders. Intractable diarrhœa merging into dysentery, generally hæmorrhagic, was the greatest trouble. Beri-beri was only met with in the northern stations. Cholera attacked the flotilla on the passage up the river in November, but it became more virulent in December after the troops had been landed at Mandalay. Cholera subsequently visited several of the up-country posts.

Purpura Hæmorrhagica.—Surgeon-Major E. F. DRAKE-BROCKMAN read notes of a case of purpura hæmorrhagica observed in a European teacher, aged 50. The menstrual functions had become irregular, but she was otherwise in fair general health when, on June 23rd, 1883, soon after a visit to the hills, she had a feverish attack preceded by rigors and bilious vomiting. The febrile paroxysm recurred several times, and vomiting was intractable. On July 3rd she suddenly vomited a bloody fluid and passed a very large bloody stool, containing blood which coagulated. At the same time a large "bruise" was noted by her nurses over the left mamma. On examination this organ was found to be half as large again as the right, and heavier and tenser. The urine collected next day was normal. The vomiting continued, and several small bloody stools were passed. On July 5th three dark hæmorrhagic spots were observed on the left forearm and thigh. During the afternoon of the following day she passed a tarry stool. The ecchymosis over the breast had neither increased nor diminished. The portion of the skin covering the ecchymosis had shrunk, and had all the appearances of commencing senile gangrene. On July 7th she passed four more tarry stools and the vomiting recurred. She gradually sank, and died that evening. Dr. Drake-Brockman observed that the case was an acute form of the disease, and was accompanied by a rather high degree of febrile action. In conclusion he quoted from Mr. Watson Cheyne's paper on the discovery of micro-organisms in the blood in two cases, communicated to the Pathological Society of London in 1884, and reported in the JOURNAL at that time.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, DECEMBER 12TH, 1889.

D. C. LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Dermoid Cysts of the Ovaries.—Mr. LAWSON TAIT exhibited tumours removed from a patient a few days before in London. They were two suppurating dermoid tumours, one of which had made a connection with the rectum. They contained the usual fatty material, a quantity of hair, some pieces of skin, and bony elements from which grew milk teeth, many of which were lying loose in the cavity of the tumour. At the time of the operation she suffered from multiple pyæmic abscesses, apparently arising in the cutaneous veins. The tumours were universally adherent, and the operation had been delayed almost beyond hope of recovery. It was as difficult as anything of the kind could be, but Mr. Tait was glad to say the patient was making an admirable recovery.

Œsophagotomy.—Mr. BENNETT MAY exhibited a female patient, aged 22 years, on whom he had successfully performed œsophagotomy for the removal of a tooth-plate carrying three teeth, which had been swallowed during sleep eleven months previously, and had remained impacted in the œsophagus above the level of the sternum. The immediate symptoms were a sense of choking and pain in the gullet, followed by violent retching and loss of voice; but, as she recovered the power of swallowing liquids, the foreign body was thought to have passed into the stomach. It could not be felt externally, but could be detected by a metallic probang. The œsophagus was found to be thickened and adherent by inflammatory changes. It was not sutured. She was fed per rectum for the first week and by an œsophageal tube for the second. She was then able to swallow without leakage through the wound. A large goître which complicated the operation had since disappeared, and she was now quite well and able to swallow any kind of food.

Spinal Injury.—Mr. LANGLEY BROWNE showed the two following cases: 1. Fracture dislocation of the spine from indirect violence. In July, 1888, a man received a fracture dislocation of the spine between the seventh and eighth vertebræ by a forcible bending forward of his body. When seen, three days after the accident, there was displacement at the seat of injury and complete paralysis below. He was moved on a mattress to the hospital, and was suspended by his head and arms. The displacement was reduced with considerable difficulty and a strong Sayre's jacket was put on. He was able to move his limbs in a fortnight, and by carefully washing out the bladder with boracic lotion, the cystitis which existed was overcome in three weeks. He stayed in bed 104 days, and wore his jacket for three months more. He made a complete recovery, and has now resumed work as a collier. 2. Fracture of spine from direct violence. In March, 1889, through the fall of a heavy iron girder upon a man's back, he sustained a comminuted fracture of the spine with displacement at the eighth dorsal vertebra; three separate pieces of bone could be felt. He was seen a few minutes after the accident, removed to the hospital in an ambulance, suspended, and put up immediately in a strong Sayre's jacket. No paralysis followed, and the man made a perfectly easy recovery, remaining in bed 118 days. His jacket was then removed and he was allowed to leave the hospital. He had remained well since.

Cerebellar Lesion.—Mr. MARSH exhibited a patient with symptoms of a lesion, probably affecting the middle lobe of the cerebellum. J. B., aged 44, a drayman in the employ of the London and North-Western Railway, was admitted into the Queen's Hospital on August 1st, 1889. A packing case, weighing about 1 cwt. had fallen on the top of his head from a height of eight or nine feet. He was unconscious for some time, and vomited both when rallying and for the greater part of the next twenty-four hours. The scalp was contused over the vertex and left parietal eminence, and soon after his admission a swelling without any discoloration of the skin appeared at the back of the neck, especially marked on the left side, indicating a possible fracture of the posterior fossæ of the base of the skull. He complained of persistent headache over vertex and giddiness at times. No symptoms of any intracranial lesion developed during the three weeks he remained in the hospital. After his discharge the headache became worse; it was continuous and bilateral, generally referred to the vertex beneath the seat of injury, sometimes occipital lesion, never to the frontal. He had attacks of giddiness when he got up in the morning, or if he stooped down, or looked upwards when walking; and, in addition, about a week later he noticed that he staggered and fell backwards under these same conditions. He became afraid to move about in the dark for fear of falling. These symptoms somewhat increased, and about the beginning of November he had a distinct fit; according to his wife's statement, "he first ran backwards for a few steps and fell down unconscious, remaining so for about ten minutes, and gradually coming round." A week later he had a similar attack, otherwise he kept much the same. The man was admitted on December 4th. He was a strong plethoric-looking man, and had been deaf from childhood, which made him seem quiet and stupid. He complained of the persistent headache, giddiness, and the staggering and falling backwards, and he described a sensation as of something very cold striking through him from his head to his feet when the staggering came on. There was no sickness or feeling of sickness. On examination there was a little tenderness of the scalp over the left parietal eminence, and a little thickening of the pericranial tissues there. The patellar reflexes were exaggerated; there was no ankle clonus, and the higher reflexes were normal. Examination of the ears showed a retraction of the tympanic membrane, with undue prominence of the handle of the malleus on both sides; both Eustachian tubes were patent. Hearing, watch, R. = pressure, L. = $\frac{2}{60}$. There was no tinnitus. Examination of the eyes showed the pupils equal and reacting to light, slight nystagmus, fundus normal, no optic neuritis. On rising up suddenly from the recumbent posture, or looking upwards when walking, or stooping down, or standing up with the eyes shut, the patient staggered backwards, and would have fallen if not caught. There was no tendency to rotation, or to go either to the right or to the left, except as a result of trying to regain the balance. On resting and recovering himself he could walk about all right, provided he looked straight in front or slightly downwards. These symptoms pointed to the middle lobe of the cerebellum as the part affected; the lesion could not be an extensive one at present. The future progress of the case and its amenability to treatment are of interest, and will be duly reported.

Exophthalmic Goître.—Mr. HALL EDWARDS showed the following case: E. S., aged 17, first noticed an enlargement in her neck two years and a half ago. She had complained of palpitation for two years. She complained of a feeling of great debility, was unable to sleep, and suffered occasionally from severe attacks of headache. Her speech was affected very much at times, when her voice was so husky that she had great difficulty in making herself heard. She had never menstruated. Her appetite was good, and the eyesight was unaffected. The measurement of the neck round the swelling was 14 inches. The thyroid was equally enlarged on both sides. The eyes were lustrous and very prominent. The case was of interest from the fact that her father suffered from the same disease for twenty-five years, and eventually died from heart complications due to it.

Syphilitic Headache.—Dr. FOXWELL showed a man who had for several years suffered from intense vertical headache. There was a clear syphilitic history. He had been treated in various metropolitan or other hospitals, and by private practitioners. Small doses of iodide of potassium had been given for long periods, but, curiously enough, never large ones. Dr. Foxwell put him on 20 grains of the drug thrice daily. The next week he returned, saying, his pains had all left him in three days. He remained taking the same dose for three weeks quite free from pain. Then slight iodism and some depression caused the drug to be changed for a tonic of acid and strychnine. At the date of report, a fortnight later, his pains were as bad as ever.

Malignant Disease of Bladder.—The discussion on Mr. Barling's paper on malignant disease of the bladder was resumed by Mr. BENNETT MAY.—Mr. BARLING replied.

Typhlitis and Perityphlitis.—Mr. LAWSON TAIT read a paper on typhlitis and perityphlitis. A discussion followed, in which Mr. WILLIAM THOMAS, Dr. SAUNDBY, Mr. BENNETT MAY, Mr. BARLING, and Dr. FOXWELL took part.—Mr. TAIT replied.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, DECEMBER 18TH, 1889.

JOSEPH WHITE, F.R.C.S.Ed., President, in the Chair.

Stone in Children.—Dr. MARSHALL reviewed briefly the various views held in reference to the development of lithæmia, and expressed his belief in the importance of errors of diet in its production, particularly the abuse of milk and substitution of this

uid for water as a drink. A quotation was given from Heister, ritten 150 years ago, showing that the fact that "stone" was ver found in the children of the rich had been fully understood the surgeons of his time. Mr. Plowright's observations in conection with sodium chloride were also advanced and warmly pported. The writer of the paper stated that he had for many ars advocated the free use of common salt as well as water. ie value of Contrexéville water was also pointed out. In ssing, the statement was made that enlarged tonsils and chronic aryngitis were in some way connected with the same dietetic rors. In spite of the conflicting evidence from India, Dr. arshall still held to the belief that the abuse of the farinacea as largely answerable for the development of "stone." A small ifice to the urethra—which, as was pointed out, became smaller hen the prepuce was adherent to the orifice at the time of a circmcision being done—was noted as being very common, and a obable cause of imperfect emptying of the male viscus. ampneys's observations on this question were mentioned to exain the existence of the adhesion, and a case was cited illusating the fact that all the so-called classical symptoms of stone the bladder might be present, but the trouble exist really in e kidney. Prolapsus ani and blood in the urine were spoken of at the best but weak evidence of calculus in the bladder. Dr. arshall could not support the general rule advanced by Walsham at in every case of prolapsus ani the boy should be "sounded." to treatment, the great improvement by the introduction of holapaxy was insisted on, and the opinion expressed that all rgeons operating on children must adopt it. The "lateral" eration would have to be given up, although reluctantly, in vour of the sectio alta, but the case of the latter was at present complete. The arguments of incontinence and impotence so quently adduced against Cheselden's operation were dealt with. e former was stated always to get well at puberty if it occrred, and the latter was unsupported by Dr. Marshall's expence, and no distinct evidence could be found bearing upon the estion. Reference was made to the work of Freyer, Keegan, and alsham, and calculi were shown, the result of twenty-six sucssful lateral lithotomies (no death having occurred amongst Dr. arshall's cases), besides the products of cases of litholapaxy. Marshall concluded by saying it was scarcely credible that s than four years' work should render Cheselden's operation nost historical, and seemed likely to send the lithotomy staff much into oblivion as Hertoloup's table and instruments, or e gorget so much revered in the past. Dr. Marshall also owed a calculus (uric acid) weighing $2\frac{1}{2}$ ounces removed retly by himself by litholapaxy, and read notes of the case, ich was successful. In addition, Dr. Marshall showed some eresting calculi for Mr. Wright. Two were preputial, and one instance of disintegration of a calculus in the bladder.—In dissing the regional distribution of stone, Dr. HANDFORD drew ention to the probable relation between scanty water supply, ecially in rural districts, and the local incidence of the disler.—The PRESIDENT and Mr. PRYCE also made remarks.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, DECEMBER 4TH, 1889.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimens.—Dr. PURSLOW showed specimens from two cases of ortion. In one the embryo with membranes came away at out the fifth week, apparently as a result of mental excitent caused by a quarrel. The patient, aged 32, had seven ldren and no previous miscarriage. She did not sustain any ury in the quarrel, but she began at once to lose blood, and er a month was taken with pains, and the embryo was pelled with its membranes intact. Its length was half an inch. the other case, abortion occurred at the fourteenth week, and placenta showed hæmorrhages into its substance. The ient, aged 26, had one child and no previous miscarriage. She d well-marked primary and secondary symptoms of syphilis fore the birth of the first child, which was mature and well own, but showed marked signs of inherited syphilis. Dr. Purw drew attention to the fact that the woman, who had wellrked syphilis, should give birth to a child at full term, and er on, though no fresh manifestations occurred in the meanile, should abort at an early stage.

Paper.—Mr. JORDAN LLOYD read a paper on intestinal obstrucn and its treatment by abdominal section.

Cases.—Dr. CARTER showed a case of Chronic Spasmodic Paralysis.—Mr. W. THOMAS exhibited a patient who had suffered from Necrosis of the Lower Jaw, probably after injury. The left half, including the ramus and condyle, and the alveolar process, containing many teeth, had been easily removed entire. In such cases Mr. Thomas was strongly in favour of leaving the sequestrum until quite loose before attempting to remove it, and to keep the mouth as pure as possible by means of antiseptic lotions.—Mr. THOMAS also showed three cases of Nævi—one in the back, another in the parotid region, and a third in a young infant over the anterior fontanelle—treated by the application of Collodion. Collodion was painted over them and the surrounding skin, the application being usually carried out by the mother. In all, considerable improvement had resulted, rendering further treatment by operation unnecessary. He pointed out the absolute freedom from risk or danger, and the advantages it offered in some situations where almost all methods were unsafe.—Dr. SUCKLING showed a man, aged 51, suffering from Complete Paralysis of all the Muscles, Internal and External, of the Left Eye. There was ptosis and complete immobility of the eye; the pupil was in a position midway between extreme dilatation and contraction, and did not react to light or accommodation. The patient could see well with the left eye, but the power of accommodation was lost. There was no optic neuritis or other change in the fundus, and no protrusion of the globe. There was slight anæsthesia in the distribution of the supraorbital and supratrochlear branches of the ophthalmic nerve, and also in that of the nasal branch on the side of the nose. The sense of smell was much diminished in the left nostril, and there was a little discharge on that side. Taste was unaffected, hearing was much impaired, but this had been the case for some years. The patient's illness commenced about Christmas, 1888, with shooting pains on the left side of the head in front of the ear. Six months before the date of report a small lump appeared on the left side of the neck, immediately behind the vertical ramus of the jaw. This lump had immensely increased in size, there being now a large nodulated mass in the left parotid and submaxillary regions. He had difficulty in mastication, and could not open his mouth very much on account of the mass behind the lower jaw. The facial nerve was unaffected, as was also the right eye. The nerves paralysed were the third, fourth, ophthalmic division of the fifth, and sixth on the left side, and Dr. Suckling was of opinion that the growth had commenced in the sphenomaxillary fossa, and had damaged the ocular nerves as they pass through the sphenoidal fissure, the growth then spreading through the spheno-maxillary fissure to the surface. The absence of optic neuritis, vomiting, and headache showed that the growth was not intra- but extracranial. The patient was cachectic and rapidly emaciating, there being little doubt that the growth was malignant. There were no trophic changes in the left eye, but this might be accounted for by the protection afforded the eye by the dropped eyelid.

REVIEWS AND NOTICES.

CLINICAL LECTURES ON THE DISEASES OF WOMEN. Delivered in St. Bartholomew's Hospital. By J. MATTHEWS DUNCAN, A.M., M.D., LL.D., F.R.SS. Lond. and Ed. Fourth Edition. London: J. and A. Churchill. 1889.

As the author of these *Lectures* is a recognised authority, with very strong opinions and a large following, the appearance of a new edition is a matter of some importance to the profession. Even were the older lectures free from any alterations in the new issue, that fact would be of interest, for it would signify that the author had not changed his mind respecting certain subjects discussed in those lectures. The supporters and opponents of Dr. DUNCAN'S views will, however, find more in this edition than mere emendation or maintenance of opinion. They will find five new lectures, all on subjects very prominent at the present moment. These new lectures treat of Myxoma of the Chorionic Villi; Extra-uterine Gestation; Sterility; Dermoid Cysts; and Hysteria, Neurasthenia, and Anorexia Nervosa.

The first is a good pathological and clinical sketch of its subject. The lectures on Sterility and Hysteria are suited for the instruction of students, for whom they were originally designed. The remainder include much "contentious matter." Dr. Duncan speaks with his usual clearness and decision on extra-uterine gestation. Hence he allows his critics to distinguish with facility

certain questionable assumptions. He writes: "Thus an ovarian pregnancy may become ovario-tubal." He never states definitely that there is such a thing as ovarian pregnancy, though its existence is implied in the sentence just quoted. We should have liked some arguments or evidence in support of the theory, still much disputed, that this variety of ectopic gestation really exists. The author holds that the fœtal sac may change its site, and that it is a good rule to classify the varieties of the disease according to the original site. That site, he insists, is determined by the insertion of the placenta. He stoutly maintains that the placenta cannot be transplanted.

The great difficulty in proving the existence of non-tubal primary varieties of ectopic pregnancy is evident. Specimens of fœtal sacs, manifestly situated in the middle of Fallopian tubes, abound in museums. Where are examples of the other alleged varieties, equally plain to the naked eye, to be seen? Where can we see a very early fœtus and its membranes as neatly ensconced in the ovary or in some corner of the peritoneal cavity, as is so often observed in a tubal sac? Turning to the delivery of a uterine decidua in ectopic gestation, Dr. Duncan refers to membranous dysmenorrhœa, where the discharge, according to him, is a thin membrane, and almost always lacerated. He has never seen an entire, thick, rich decidua discharged in one piece except in extra-uterine gestation, and in cases where he suspected or satisfied himself of very early abortion. The author's opinions on rupture of the sac will be read with much interest. He does not hold that intraperitoneal hæmorrhage is necessarily fatal, either primarily or as a form of hæmatocele. Dr. Duncan states that "In none of the many cases which have come under my observation have I seen a hæmatoma of the broad ligament and beneath it, a condition which might be produced when a tubal pregnancy ruptures into the tissues separating the layers of the broad ligament." The author observes that he cannot prove, yet does not doubt, that an early embryo, lodged in the peritoneal cavity, may be absorbed. It is hard for him to believe that an embryo so old as six weeks, when ossification has begun, can disappear entirely in this way. In cases where blood has been found, but no ovum, he notes that had an ovum existed it would hardly have been absorbed before the blood. The above statements are very worthy of consideration.

In the lecture on Dermoid Cysts we regret to find that tapping for diagnostic purposes is strongly advocated. The following comment on one case where this principle was carried out will not meet with universal assent. "You observe that by aspiration we reached sufficient security in diagnosis and guidance in treatment. You will notice, also, one of the dangers of aspiration in the peritonitis—fortunately local—which followed it. We felt need of more assurance in diagnosis before proceeding to the great operation." The danger of drawing off "eight ounces of grumous fatty fluid," as in this case, is certainly as great as the risk of the "great operation." The author unfortunately lays down the rule "that an ovarian dermoid should be removed by laparotomy if it becomes dangerous in any way, or if it grows quickly." No variety of ovariotomy is safer, simpler, and more satisfactory than the early removal of a dermoid cyst; and none more dangerous, difficult, and likely to prove impossible to complete than an operation for the extirpation of an old and adherent dermoid. The surgeon must, if he can, remove a dermoid before it becomes dangerous.

The new, like the older, lectures are commendable for the clearness of their style, for freedom from personality, and for an absence of long columns of references, valuable to the specialist, but confusing to the student and practitioner for whom the *Lectures* are intended.

THE STUDENTS' HANDBOOK OF WATER ANALYSIS. By ROGER G. S. CHEW, M.D., etc. Calcutta: I. C. Bose and Co. 1889.

THIS work is a compilation from various authors, which purports to give directions for all kinds of water analysis, which may be intelligible to students without the aid of books of reference, etc. Bacteriological as well as chemical methods of examination are described. Full directions are also given for preparing reagents and standard solutions—a most important matter, since it is never safe to trust to standard solutions which have been made by others, unless the process of preparation has been carefully and personally superintended by the analyst himself.

The author culls his information from the flowers of the labours of many workers. Thus, chapter vi describes Wanklyn's process for determining free, albuminoid, and total ammonia, whilst chapter viii gives the details of Frankland's processes for determining organic carbon and nitrogen in waters. We do not find, however, any mention of Tidy's "oxygen process."

The following passages are in need of correction and revision: On page 2, line 22, *et seq*, the student is led to believe that steam has a density of 0.622, if the density of water=1; the fact being, of course, that 0.622 represents the density of steam when air=1.

On page 17, line 26, is a passage which savours of spontaneous generation, namely, disease germs are said to have been "propagated by organic matters which water contains."

On page 18, line 21, carbonic acid gas is said to be "the most mischievous" gas dissolved in natural waters. This statement appears to be very far from the truth. Certainly carbonic acid gas is not mischievous to those who drink it in aqueous solution; on the contrary, it is most grateful to the stomach; and, although this gas enables water to dissolve substances which it could not otherwise attack—such as calcium carbonate—yet the substances so dissolved are not noxious to animals and are often essential to the life of plants, without which animals could not exist at all.

On page 41, line 22, sulphuretted hydrogen is said to be detected by a putrid odour, on boiling the water after addition of a little copper sulphate. This must be a mistake, for the addition of the copper salt would prevent H_2S from escaping.

At bottom of page 57, bottles are said to be sterilised by heating them at 18° C. for three or four hours in air, as a preliminary to their use for the biological examination of waters.

We question the efficacy of the iodine process for estimating the quantity of sulphuretted hydrogen in natural waters, which is given on page 75, inasmuch as other reducing agents would convert the iodine into hydriodic acid, such as nitrites, and some organic substances which might be present in the water.

Subject to further correction, the work of Dr. CHEW is a most useful compendium of the best processes at present in use for determining the nature and quantity of the ingredients of natural waters.

THE DETECTION OF COLOUR BLINDNESS FROM A PRACTICAL POINT OF VIEW. By F. W. EDRIDGE-GREEN, M.B. London Ballière, Tindall, and Cox. 1889.

THIS very suggestive pamphlet should be read by all who are interested in colour blindness, for the subject is approached from the practical side; and although the author holds a theory which is not so far generally accepted, he has not attempted to make facts which have been stated by others fit into it, but has endeavoured to ascertain exactly, as far as may be, what the colour-blind do see, using as the basis of his observations the actual spectrum, and for his subjects educated adults. It is evident that apart from all theoretical considerations, facts obtained in this way have a definite value.

From an examination of 101 colour-blind persons in this way the author has constructed a classification of the varieties and degrees of colour blindness of which the following is an outline:—

A person with average colour vision sees in the spectrum six distinct colours—red, orange, yellow, green, blue, and violet (indigo is seen by some as a separate colour). These the author calls "approximate psycho-physical colour units," the term "approximate" indicating that the colour is not quite uniform throughout, but is sufficiently homogeneous and sufficiently different from the other colours to prevent any difficulty in classing it as a distinct colour; the phrase, however, is obviously too elaborate for everyday use, and we shall, without meaning to be disrespectful, call them shortly "units." The author found that colour vision may exhibit two different defects: there may be a diminution in the number of units, and there may be shortening of the spectrum at one or both ends, or these defects may be combined. This diminution in the number of units is the backbone of the writer's classification of the colour blind.

As we descend from the normal condition the first unit to disappear is the orange, the red passing directly into the yellow; the condition constituting five-unit colour vision. This defect would have little practical importance if unaccompanied by shortening. When we descend to the four-unit, blue and violet form a single colour reaching up to the green; in the three-unit the yellow goes, so that the red and green merge into one another; in the two-unit the red and green form a single colour, separated from the violet by a band of neutral tint of varying extent.

Shortening of the red end of the spectrum is important, because e rays at the extreme left are the most penetrating, and a fog ty cut off all the red rays except these. The writer would con- ler as unfit for positions in which interpreting signals is neces- y all who possess less than four units, those who have much ortening at the red end of the spectrum, and those having entral scotoma.

We gather that the author does not accept either the Young- lmholtz theory or that of Hering, but it is obvious that a classi- ation such as he proposes, being entirely independent of theory, d resting solely on what the colour blind see, has great advan- ges. A large part of the pamphlet is occupied by a description the methods of testing that the writer recommends. We pur- sely abstain from mentioning these; there is no doubt that the sent methods of conducting the tests are, as we have often nted out, disgraceful. The tests used for the mercantile marine very inefficient, and, as the candidate may be examined as en as he likes, he stands a very good chance of passing eventu- y. On the railways matters are even worse, the examination en being conducted by a clerk who has had no training what- er for the purpose, and the tests employed being in many tances simply childish. On some lines no tests whatever are ployed. There are signs that at length the authorities are wak- up; it is most important, therefore, that tests should be adopted w and regulations framed which will obtain the confidence ll, and not require changing for a long time. It is undesirable, refore, that the views of any individual should be brought into minence; it would be better that these tests and regulations uld be thoroughly well considered by a committee of those o are best qualified to form an opinion, and that definite con- sions having been arrived at, they should be pressed upon the horities.

ATUM.—The author of *The Diseases of the Madras Famine* (published by H. . Lewis), reviewed in the JOURNAL of January 4th, is Brigade-Surgeon orter. M.D.

NOTES ON BOOKS.

The Drink Question; its Social and Medical Aspects.—By Dr. TE MITCHELL. (London: Swan Sonnenschein and Co.)—This n interesting presentation, addressed to the lay public, of the ieral temperance question. The writer treats of the State l Society in their relation to temperance, passing in review liquor laws of different countries. The economic aspects of tinence are also depicted, attention being drawn to the enor- us waste of the nation's resources through indulgence in intoxi- ing drinks. Stress is laid on the prevailing belief that the ater portion of our expenditure on pauperism and the pun- ment of crime is due to alcohol. Mr. Hoyle is cited as authority the statement that the direct and indirect annual cost for aking and its results is, in the United Kingdom, £263,000,000. the chapter on the educational and social aspects of the question. importance of teaching the young the nature and properties of oxicants is strongly urged. The serious mortality from intem- ance is discussed at considerable length, as also is the part yed by alcohol in the genesis of disease. In the account of nentation the chemistry of the subject is not quite up to e, there being no allusion to the yeast cell as a saccharomyces. airly accurate account is given of the behaviour of alcohol in living body, and of the pathological degradations of alcohol- ; but with the well-known baldness of the redoubtable Sir frid Lawson and other temperance champions so conspicuously ore us, we can hardly agree with the writer in attributing number of bald heads amongst us to "the universal indulgence lcoholic liquors." The book is dedicated to the members of the ish Women's Temperance Association, and is well calculated to her the cause which that association has so deeply at heart.

Hazell's Annual for 1890. By E. D PRICE, F.G.S. (London: ell, Watson, and Viney, Limited. 1890.)—*Hazell's Annual for 0* is a most able and admirable production. It is a cyclopædic ord of men and topics of the day, including upwards of 35,000 cise articles on an immense variety of topics of current tical, social, biographical, and general interest, revised up to very moment of publication. The information is brought up o late a date as to include the death of Mr. Martin Tupper. book is a very valuable desk companion.

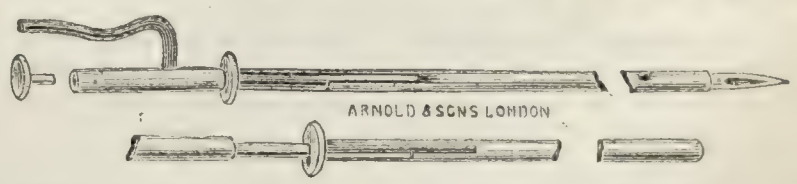
Guide Médical à l'Exposition Universelle Internationale de 1889 à Paris. Par MARCEL BAUDOIN. (Paris: E. Lecrosnier et Babè. 1889.)—This work is an explanatory handbook to the surgical and physiological sections of the Exhibition, and also deals in less detail with other scientific apparatus. It is so profusely illustrated, and the instruments depicted are so clearly explained, that it gives those interested in such subjects almost as clear an idea of the more important inventions and modifications as though the instruments in question were actually before them. We notice much that is new, much that is already well known in this country. The plates of the ophthalmic department show us many old and valuable instruments. Among the gynæcological instruments we note several innovations, but in all special departments in surgery individual operators invent and use their own special instruments, which seldom obtain universal hold on the profession. Indeed, though a work of this kind is invaluable as showing us the apparatus in use among our Continental brethren, it also well-nigh alarms us when we think on the enormous multiplication of instruments of all kinds, and makes us reflect whether surgeons should not rather aim at making more simple means sufficient for their operative procedures. This book should be well studied by our leading mechanicians, who are alone able to separate the wheat from the chaff. There are in each of the departments inventions, modifications, and novelties, which are well worthy of trial in our larger schools and hospitals.

The Invisible Powers of Nature. By E. M. CAILLARD. (London: John Murray.)—This little book contains, in a pleasant and readable form, much valuable information regarding common physical laws and phenomena. It is of course rudimentary in scope and style, but the illustrations are so clear, that the book cannot fail to be useful and instructive to the very young beginner. Such subjects as gravitation, the properties of liquids and gases, heat, light, electricity, all receive attention. The practical uses of electricity, illustrated by the telegraph, are well and clearly expressed. To anyone who has never studied or thought of these subjects we cordially recommend this little book. As a primer to boys about to commence more serious study of these subjects we can also recommend it. Such works are most useful to the young, as calculated to arouse an intense interest in such subjects, which alone can carry them through the arduous study of the more advanced branches of science.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A GUARDED CAPILLARY TROCAR FOR SUPRAPUBIC PUNCTURE OF THE BLADDER.

THE accompanying woodcut illustrates a guarded capillary trocar which I have made more especially for suprapubic puncture of the bladder in cases of retention. After it has been introduced into the bladder the guarding cannula may be slipped down over the point of the hollow trocar and fixed there by an arrangement of the bayonet-joint kind. At the end of the instrument there is a small removable plug, and so, in case of the trocar getting



blocked up, a piece of wire can be passed along its entire length without removing it from the bladder.

The instrument can also be used instead of the more cumbersome aspirator for exploring suspected tumours and for evacuating abscesses. It has been fitted, with the necessary length of capillary indiarubber tubing, into a very neat little case, which occupies a minimum amount of room. It is made by Messrs. Arnold, of West Smithfield.

ALEX. G. R. FOULERTON, Resident Assistant-Surgeon to St. Bartholomew's Hospital, Chatham.

FOOD PREPARATIONS: BORACIC PRESERVATIVES.

We have examined food preparations bearing the names of "lobster pâté," "sardine pâté," "game pâté," and "hygienic caviare," and we regret to find that they all contain boracic acid, of course added for the purpose of preservation. The "hygienic caviare," especially, contains a considerable quantity of the "preservative." The extending use of so-called "preservatives" sold under such names as "glacialine," etc., for food products is a serious matter. We cannot countenance the indiscriminate dietetic use of such preparations under any circumstances, but where the foods which contain them are advertised as specially fitted for invalids, we feel bound to say that the proceeding is even more open to objection. On the other hand, care and cleanliness had probably been exercised in putting up these foods. We have to add that they were covered with pieces of tin-foil. We are glad to find that this foil was free from lead and zinc, but we have to point out that the use of any metallic foil is undesirable for such preparations.

In connection with this matter, and with the certificates forwarded to us, we think it is to be regretted that members of the profession should recommend food products for special dietetic purposes and for invalid use which have not been submitted to independent analytical examination.

COCOA ESSENCE.

We have received and examined samples of Messrs. Cadbury's "Cocoa Essence." This preparation is guaranteed to be pure cocoa, from which about two-thirds of the fat has been removed. On analysis, this statement is found to be correct; the sample before us is entirely free from added starches and sugars, and contains an amount of fat to which objection cannot reasonably be taken. The quantity of fat contained by the cocoa bean is very large; it amounts, in fact, to nearly half the weight, and it is obvious that the presence of so large an amount of fat makes an unprepared cocoa too rich for many persons. It is, therefore, to be regarded as quite permissible to remove a certain proportion of the fat from cocoa, so long as the fact is stated. It is, moreover, a fact that much of the so-called "cocoa" of the shops is grossly adulterated with sugar and starches; it is not so generally known that even the "basis," that is, the "cocoa" in these articles, is itself frequently composed to a large extent of what may justly be termed refuse material. It is often asserted that the only object of these adulterations is to counteract, for the benefit of the public, the excessive richness of pure, unprepared cocoa. It is plain that such a position is not really tenable, and that the proper course if anything is removed or added is to state the fact with full particulars.

PHOSPHORISED COD LIVER EMULSIONS.

From a pharmaceutical point of view this is an extremely good emulsion of cod liver oil. There is no appearance of separation after standing some days, and ordinary microscopic examination shows no distinct globules of oil. We have been able to obtain from it 50 per cent. of oil, and on boiling it with dilute sulphuric acid in a dark room, free phosphorus was detected by the luminosity of the steam. It is stated by the makers, Messrs. C. J. Hewlett and Son, Charlotte Street, E.C., to contain one-hundredth part of a grain in each tablespoonful. It is not too thick; the taste is agreeable, somewhat between lemon and almond, but the emulsion has a decided odour of cod-liver oil.

KARSWOOD RUBBER SILK.

This new waterproof substance, prepared by Mr. E. G. Hughes, chemist, Manchester, is intended to be a substitute for oiled silk and gutta percha tissue. It possesses qualities which make it preferable to the two latter materials as a dressing. It does not deteriorate by keeping, even in a hot climate, and bears a high temperature both in the air and in a fluid medium. The rubber silk is thin and light, and can be applied to any surface without any mechanical trouble through crumpling or splitting. On account of the above properties it is well suited for covering dressings, poultices, wet bandages, etc.

GLYCERINE SUPPOSITORIES.

Mr. Paul Metz, 2, New Zealand Avenue, Barbican, E.C., has sent us specimens of glycerine suppositories. They are of two kinds, one prepared with cacao butter and the other with soap, and are of various sizes, according to the quantity of glycerine they contain. We find that when placed in water at a temperature of 100° F. the suppositories with a soap basis dissolve completely within ten minutes, but those made with oleum theobromatis were unable to liquefy at this temperature.

PREPARATIONS OF SALUFER AND COCAINE: APPLIANCES.

Messrs. Reynolds and Branson, 13, Briggate, Leeds, prepare silico-fluoride of sodium in the form of cubes, which are very convenient for the preparation of an antiseptic solution for dressing or cleaning the hands. The cubes are easily crushed, and dissolve readily. This new antiseptic possesses the great advantages of being non-toxic and non-irritant.

The same firm has also sent a specimen of Salufer Wool; it is a fine absorbent material, and well adapted for antiseptic dressing. Cocaine Wedges, specially intended for obstetric use; they contain 1 grain of cocaine and 5 grains of boric acid in each, and have oleum theobromatis as a basis. We find they readily melt at the temperature of the body. Cocaine Cones, containing 2 per cent. of cocaine, are intended to be used as an application in irritable affections of the skin; the effect of the cocaine contained in them can be readily perceived if the cone be rubbed upon the tongue. The Universal Bandage Winder is a very handy and effective instrument; it can easily be fixed to a table, and any width of bandage up to 4 inches can be rolled; it will be found to be very useful to nurses. The Universal Clinical Charts are so designed that temperature may be registered every three, six, twelve, or twenty-four hours. They are well adapted for the purpose, and will no doubt meet with appreciation.

GERM FLOUR AND BREAD.

We have examined samples of germ flour and of germ bread and biscuits. Germ flour is the invention of Mr. Richard Smith, who has patented his process of preparation. The embryo or germ of wheat, as is well known, is richer in certain constituents —among which are fat, nitrogenous substances, and phosphates —than that portion of the grain which constitutes ordinary wheaten flour. It is claimed that this process applied to the germ prevents the diastasic action which is set up by it if it is used in the making of bread and the consequent injurious effects upon the bread, and from the nature of the process this is no doubt the case. We have made baking tests with the germ flour and have obtained very satisfactory results with it. The flour, bread, and biscuits are free from irritating particles and from adulterants; they are of very pleasant flavour and taste, and the bread is of good texture.

MINERAL WATERS.

We have examined the following samples of the Stretton Hill Mineral Water Company's preparations:—table water, soda, potass lithia and seltzer waters, and lemonade. The water used is a pure one, and contains a very small amount of dissolved mineral matter. The samples were found to be well charged with carbonic acid, to be free from traces of poisonous metals, and to contain the substances named on the labels.

A Large Hairy Mole.—Large hairy moles have frequently been described, some covering the greater part of the body. Dr. Max Joseph described in the *Deutsche med. Wochenschrift* not long ago a case where a pigmented hairy mole formed a natural covering like a pair of bathing drawers. The patient was a robust young man, aged 22. He was quite beardless; the hair of his scalp was fair. The loins were enveloped in a large mole, bearing dark brown hairs over an inch in length. The skin underneath these hairs was smooth and deeply, though irregularly, pigmented. The mole was not symmetrical, beginning lower on the trunk and ceasing higher up on the thigh on the left side; the inner part of the left thigh was also free from hair. There was a deep depression in the nævus at the level of the twelfth dorsal vertebra. A large number of small moles grew on the back, chest, and face, some hairy, some only pigmented. The axillary and eyebrow hair were normal, as in the scalp. Dr. Joseph noted that the moles were not distributed in such a manner as to indicate lesion of any nerve or group of nerves. No other member of the patient's family was affected. His mother boldly maintained that when she was carrying him she was alarmed by a bear at a menagerie

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 11TH, 1890.

THE NEW MUZZLING REGULATIONS.

THERE is equal reason to regret and to complain of an article this subject fulminated against Mr. Chaplin by the *Standard* January 4th. The article in question was characteristic of the ti-muzzling agitation, but, in spite of inventiveness and false louring, nothing will hide from reasoning people the real cts upon which the present muzzling regulations have been amed by the President of the Board of Agriculture. These cts, collected and published *in extenso*, as they were nearly ree years ago by the Select Committee of the House of rds on Rabies in Dogs, etc., are known to every scientist. The article in question purports to be a review of the circumstances under which muzzling has become necessary, but consists really of two incompatible parts, one being an usive attack on Mr. Chaplin, the other being a summary of ost of what is not true about the muzzle. The former of ese is put forward for obvious reasons both as exordium and coration, and is positively nothing more than an attempt to lame political rancour on this, the most innocently scientific bject that can be conceived. The praiseworthy and eminently humane efforts of the Government to stamp out a fell ease, affecting not only man, but the lower animals as well, e writer tries to hamper and block by raising party feelings. But if any points in the article really bear on the subject the extermination of hydrophobia, they are to be found in e other division of the subject, that to which the article ould obviously have been confined—namely, How can rabies prevented, and, looking at the matter from a common ise point of view, what is likely to result from the working the regulations? The writer of the article, by ingenious nuendo and by forgetfulness or ignorance—perhaps both—ntrives to convey the following amazing statements: rst, that the muzzle causes and "propagates" rabies, at "mad dogs do not travel far," that "the mptoms of approaching rabies are well known to all io are really familiar with dogs," that the muzzle is "torture" and "wanton cruelty." All these are old, well-rn fabrications which have done service for the last few ars. To those who are unfamiliar with the proceedings of pular agitators it must seem extraordinary that such reatedly exploded fictions should find credulous listeners. But e fifteen years which are said to elapse before any truth is ally recognised by the public at large have not half expired. Six years ago the bare existence of rabies was doubted by many, and only three years ago denied utterly by the originators of the agitation, which our able and usually well-advised contemporary has so unaccountably fathered.

Nothing but the steady refutation of false statements and the publication of the splendid results already effected by muzzling regulations in this country will bring about the desired freedom, not only from hydrophobia, but also from the muddy stream of misrepresentation with which some are ready to besmear this, which, thanks to M. Pasteur, is one of the clearest pages in the annals of disease.

A solitary outcry of the kind we have felt obliged to refer to in the above terms does, in the end, real good to the progress of sanitary science and preventive medicine, for it shows to what desperate straits and to what unsavoury depths a writer is reduced when he is championing the cause of a few selfish and unfeeling individuals against the health of the nation and the welfare of the canine race.

The measures adopted by the President of the Board of Agriculture are calculated to secure the local eradication of the disease from the Home and the Northern Counties, which are the most important centres of its propagation. It does, indeed, appear strange that those who profess to guide public opinion should fail to remark that Mr. Chaplin's action is not, as the *Standard* mischievously asserts, "stupid" or "a pure fad," but is guided by the general principles which have been so successful in stamping out other contagions of animals, and which are endorsed by the whole civilised and veterinary world.

THE SACRIFICE OF EDUCATION TO EXAMINATION.

MR. AUBERON HERBERT raised questions of great importance in the true interests of educational improvement when he issued his protest against the sacrifice of education to examination, and forcibly drew public attention to the evils of an overgrown system of competitive examinations. A volume recently issued by Mr. Auberon Herbert,[1] consists of a couple of hundred pages, containing short papers on the subject of examinations by a large number of persons well acquainted with the practical educational value of examinations of many kinds; most of these contributors were signatories of the "Protest," but a fair number of objectors have given their opinions for maintaining the *status quo*, having no better method to suggest in substitution. We cannot say that the important issues raised by the "Protest" are in any way decisively answered by this large collection of opinion on the matter, or that any line of remedial action for an admitted evil stands out prominently as receiving a large consensus of opinion among those who write with the authority of experience. However, all who are interested in advancing mental growth and culture by educational methods may learn something of the evils that have resulted, and will continue to result, from trusting too largely to the value of examinations, which are too often improperly used by candidates, and all may gain some hints as to lessening the bad results upon education. The field presented for the reader's consideration is

[1] *The Sacrifice of Education to Examination: Letters from "all sorts and conditions of men."* Edited by Auberon Herbert. London and Edinburgh: Williams and Norgate.

so wide, commencing with the control exercised by the State over primary education, and passing up to competitive examination for university honours and the higher appointments under the Government, that it may be useful to have the expression of so large a body of opinion. We should like to have seen more direct evidence as to the good or evil effects of the various classes of examinations; this the signatories of the "Protest" hoped might be effected by a Royal Commission, or other public inquiry. There is a strong expression of opinion against the folly of students entering upon a severe competitive examination as a simple means of winning a money prize, as being harmful to true mental culture—yet, if scholarships are to be abolished, as some would have, how is the able but poor man to be helped along the difficult path of learning? Should fellowships and bursaries be given without competition, and who is to be entrusted to make a wise and impartial selection? We must deal with humanity as we find it, and certainly the opinion of higher class students, especially those of the medical profession, is that the introduction of a compulsory examination system has proved an incentive to work, has given to individual men a means of testing their individual mental capacity, and has afforded the public a means of estimating educational success. Examinations for young children, such as those about to enter a school, appear by general consent to be a test which should, if possible, be done away with; in primary schools the children benefit but little by examination, though some kind of assessment of school work is necessary in the interests of the public who pay. Many of the papers in this volume deal rather with defects in teaching, and in examining, than with the intrinsic evils of the examination system. In fact, the opinions elicited would have had greater weight had they been classified according as they dealt with education or examination, and the class of examinations dealt with. The methods of examination under Continental Governments are explained by some writers, and the question whether teachers should be examiners is entered into by several correspondents. Mr. Auberon Herbert says well when he speaks of the value of mind shaping mind, and the advantage of personal contact of the student with the mind of a great teacher—no examination intervening—but, then, most teachers are not "great men." We thoroughly sympathise with the editor in his view that various methods of education should be used, according to the temperament and nature of the pupil; and it may be hoped that improvement will follow the attention that has been drawn to the subject.

THE OLD AND NEW PHRENOLOGIES.

PHRENOLOGY is a better word than psychology; only it cannot be sent into current English till the old phrenology of Gall and Spurzheim is certified to be dead. This is admitted by everyone save by Mr. Bernard Hollander, who, in a paper read before the Anthropological Institute,[1] has recently tried to show that the views of Gall have been unjustly set aside. What is even more remarkable, Mr. Hollander finds confirmation of the old phrenology in the discoveries of Ferrier, Hitzig, Exner, and others. We are not inclined to subscribe anything to the credit of Gall and Spurzheim. They kept up a noisy and futile controversy for half a century, and caused a great deal of mind force to be wasted in wrong directions. The only lesson worth speaking of which the phrenologists left behind is a telling illustration of the enormous misleading force of mental predisposition. In fact, the rise and diffusion of phrenology form a very curious and instructive chapter in the history of human error. At one time phrenology counted as its supporters a number of men eminent in science and literature. Amongst these may be mentioned Broussais, Bouillaud, Jules Cloquet, August Comte, Ferrus, Vimont, and Voisin in France; and in Britain Dr. Elliotson, Dr. Macnish, Sir William Ellis (the physician of Hanwell), Dr. Evanson, and Dr. William Gregory. The phrenologists held that the different mental faculties were localised on the surface of the brain, and next on the convex of the cranium. They did not assign any function to the convolutions reposing on the base of the skull, nor to those opposed to one another in the middle line, like the *gyrus fornicatus*. Indeed, it seemed as if there were no functions left for these extensive areas of the brain; for the phrenologists included in their thirty-three organs a pretty exhaustive list of all the mental faculties. Nothing looked easier; you did not require even to have seen a brain; you had just to learn the situation of the organs on the phrenological bust, and then you could make out the character of any person by measuring and feeling his head. The phrenologists gave out with much solemnity that in this way they derived important aid in treating prisoners, lunatics, pupils, and indeed all classes of men.

It is to be noticed that phrenologists paid great attention t the different temperaments, and their noteworthy observation upon these conditions no doubt helped them in making suc cessful guesses as to character. By the year 1850 almost al scientific men had turned their backs upon phrenology. I 1875 a book, entitled *The Skull and Brain, and their Indi cations of Character*, by Nicholas Morgan, was published, b the help of a bequest, for the propagation of phrenology. I this apology, an attempt was made to throw discredit upo Ferrier's observations as hostile to the views of Gall an Spurzheim. In fact, the two phrenologies are incompatible Mark out a chart with the new brain localisations, and com pare it with one of the old phrenological busts, and it is a once apparent that they assign different functions to the sam areas. Ferrier's motor spheres are occupied by such faculti as secretiveness and acquisitiveness, and the visual sphere Munk covers the adhesiveness and philoprogenitiveness of Gal Nevertheless, Mr. Hollander thinks he can show areas on th brain in which the old discoveries are confirmed by the ne ones.

This is the way he goes to work. The organ of veneratio was placed by Gall at the top of the head, near the new mot centre for raising the shoulders and moving the arms. prayer, the hands are brought together in obedience to an i born tendency, and shrugging the shoulders expresses patien and the absence of any intention to resist. Respectful peop do not resist authority, and veneration leads to reverence f superiors in rank. The reader might be disposed to conclu from this that the French must be an eminently religio people, and in no way disposed to resist authority, since th are much given to shrugging their shoulders. It is, to say t

[1] *A Demonstration of Centres of Ideation in the Brain, from Observation and Experiment.* By Bernard Hollander, Esq. London: Harrison and Sons. 1889.

east, doubtful whether holding the hands together as a sign f submission is an innate action. It seems to have originated n the East, where vanquished combatants held out their hands ogether as a sign that they were ready to submit to be bound, gesture often represented in the Assyrian sculptures. Following Ir. Hollander's argument, one would think that the organ of ombativeness would be near the motor centres of the hands nd feet, but the phrenologists placed it away behind the ear.

Mr. Hollander observes that the outward sign of a joyous motion is a drawing up of the corners of the mouth and eye-rows, and the motor centres for the corresponding muscles is ear what the phrenologists called the organ of hope; now hope allied to cheerfulness. General paralysis—almost invariably ssociated with a feeling of optimism—often begins with embling at the corners of the mouth and outer corner of the ye. General paralysis thus turns out to be a morbid affec-on of the organ of hope, causing the characteristic trembling the muscles, as well as the insane delusions of grandeur.

Mr. Hollander will have it that Dr. Ferrier has discovered ie gustatory centre in the tip of the lower temporal convo-ition, although Ferrier himself is doubtful. Mr. Hollander eks to identify this with the organ of alimentativeness, which indeed not far off, though placed higher up in Combe's renological chart. It is somewhat awkward that Gall ither admitted hope nor alimentativeness, though they were cognised as organs by the later phrenologists. It is singular iat Mr. Hollander has missed the only good point which all really made. He placed the organ of language in the bital portion of the brain, and his disciples, especially Bouil-ud, collected a number of pathological cases supporting this ctrine. These observations at last led to the discovery of ax and Broca, fixing the centre for spoken words in the left ird frontal gyrus, in the neighbourhood of the place indi-ted by Gall.

STUDIES IN THERAPEUTICS.

I.—The Relation between Chemical Constitution and Physiological Action of Certain Sulphones.

fter Kast had shown[1] that sulphonal (diethyl-sulphone-di-ethyl-methane) has a hypnotic action, it became a matter of terest to determine how far other similar compounds act in e same way, and especially whether it is the ethyl or methyl oups, or the sulphur-containing radicles of the sulphonal nich are the most important. This research has now been ndertaken by Kast in conjunction with Professor Baumann, d these investigators have recently published their results in oppe-Seyler's *Zeitschrift für physiologische Chemie*, vol. xiv, 52.

Sulphonal belongs to the group of chemical substances called sulphones, and fourteen of these have now been examined. ie disulphones fall into three groups, which may be repre-nted by the general formulæ (1) $CH_2(SO_2R)_2$, (2) $CHR'(SO_2R)_2$, and (3) $CR'R''(SO_2R)_2$, R, R', and R'' being mono-lent alcohol radicles, and these may be either different or entical.

Of the fourteen disulphones examined, five of them passed rough the body unchanged, and were found as such in the ine. As might be expected, these have no physiological action. The names of these five inactive bodies are diethyl-sulphone, ethylene-diethyl sulphone, methylene-dimethyl-sulphone, methylene-diethyl-sulphone, and ethylene-dimethyl-sulphone.

The remaining nine disulphones were decomposed in the body, and either did not appear in the urine at all, or only in very small quantities. It is evident that the solution of the question investigated must rest with the experiments in which these bodies were used. Those which contained only methyl radicles, or only one ethyl radicle had little or no hypnotic action; thus ethylidene-diethyl-sulphone, propylidene-dimethyl-sulphone, dimethyl-sulphone-dimethyl-methane, dimethyl-sulphone-ethyl-methyl-methane come into this group; but even here it was noticed that if an ethyl group were present, a hypnotic effect, though slight, was produced; a compound without ethyl radicles was practically inoperative. This was brought out still more markedly by experiments with disulphones containing numerous ethyl radicles; and the more numerous these radicles the deeper the sleep produced. Sulphonal itself, and dimethyl-sulphone-diethyl-methane with which it is isomeric, both contain two ethyl groups, and they are precisely equal in their power of producing sleep. Propylidene-diethyl-sulphone, and diethyl-sulphone-methyl-ethyl-methane (trional), both contain three atoms of ethyl, and act more strongly; while the most strongly hypnotic of the whole group was found to be diethyl-sulphone-diethyl-methane (tetronal), which contains as many as four ethyl radicles. This research thus shows most conclusively that the SO_2 and methyl groups are not the radicles upon the presence of which the hypnotic effect of these compounds depends, but that it is due to the presence of the ethyl radicle, and increases with the number of ethyl groups in the molecule. The experiments were carried out both on dogs and men.

[1] *Berlin. klin. Wochensch.*, 1888, No. 16.

It is stated that the Council of King's College, London, are about to confer the distinction of an honorary fellowship upon Surgeon Ferdinand S. Le Quesne, formerly a medical student of the College, and recently the recipient of the Victoria Cross for "conspicuous bravery and devotion to duty" under fire in British Burmah.

Some kindly communications from India, which are too complimentary to allow us to reproduce them, mention that the testimonial from the army medical officers of India will include Surgeon-General Maclean, C.B., and Dr. Farquharson, M.P., in addition to those first named in the notice which we recently quoted from the *Indian Medical Gazette*.

THE LATE DOWAGER EMPRESS AUGUSTA.

The Dowager Empress Augusta, whose death from influenza occurred on January 7th, at the age of 79, showed throughout her long life a keen appreciation of the important services rendered to the State by the medical profession. She took a deep interest in the progress of medical science, and especially of military surgery. She on several occasions enabled the Red Cross Society to offer prizes for improvements in the appliances of this branch of surgery, but her greatest achievement was the foundation of the Vaterländischen Frauen Verein, in 1866. This valuable organisation, which has for its object the care of the sick and wounded, and is active in relieving not only the sufferers during war, but those who have been overtaken by the calamities of peace, now

consists of 500 branches scattered throughout the German empire and has upon its rolls 50,000 members. During the campaign of 1870-71 the late Empress directed the work of this Society with great success. Over 6,000 male and female nurses were sent to the seat of war, and the services of three times that number were enlisted to tend the sick and wounded who were invalided to Germany.

"AN INDIAN OCULIST."

DR. DAVID WILLIAMS, of Truro, has forwarded to us an explanation of the facts which satisfies us that the comments made in the article under the above heading in the JOURNAL of December 7th, pp. 1295-6, ought to be considerably modified. While we cannot admit that this journal could take any other course except to express its disapproval of the presence of a medical man (especially one holding the qualifications of Dr. David Williams) at any operation performed by an unqualified person, we willingly withdraw any part of the article which may seem to impute that Dr. David Williams did more than commit, in our opinion, a grave error of judgment. And we are quite ready to believe that, much as we differ from the conclusion at which he arrived, Dr. David Williams has satisfied himself that his motive was a proper one.

THE PECULIAR PEOPLE IN AMERICA.

A RELIGIOUS sect in New York, calling themselves New Evangelists and holding doctrines identical with those of the sect called Peculiar People in this country, are believed to be frequently the cause of spreading infection. In two cases recently their refusal of medical treatment and neglect of the most ordinary sanitary precautions was brought under the notice of the Society for the Prevention of Cruelty to Children. The Board of Health was induced to take the matter up, and the fathers in both cases, and two women of the sect who acted as nurses, were arrested on the charge of endangering the public health by disobeying an order to keep themselves isolated during the existence of diphtheria and scarlet fever, respectively, in their homes. A conviction was obtained in all four cases, and heavy fines, with the alternative of imprisonment, inflicted. The action was brought under the local penal code, which gives far more stringent powers than are possessed by sanitary authorities in this country.

CEREBRAL SYPHILIS AND GENERAL PARALYSIS.

DR. L. R. REGNIER, after a series of observations which are published in the *Revue de Médecine*, has come to the conclusion that syphilis cannot be considered as either a direct, predisposing, or occasional cause of progressive general paralysis. The same occasional causes may produce paralytic dementia in subjects free from syphilis, and may set up specific symptoms in patients who have had syphilis. It is specificity which creates the difference between the two diseases. The anatomical lesions are different, and when found together in the same case are clearly independent of each other. The two diseases, as a rule, run an entirely different course. The principal and essential distinction, in respect to prognosis, is the curability of the one and the hopelessness of the other.

THE WORK OF THE METROPOLITAN ASYLUMS BOARD.

WE print elsewhere a letter from Mr. Acworth, who is a member of the Metropolitan Asylums Board and also of the London County Council, in which he advocates the transference of the sanitary duties of the Board to the Council. He explains that his proposal for a transfer of the infectious hospitals is founded on a desire for simplicity and symmetry of administration, which he thinks would mean in the long run economy and efficiency. It may be so; but we are still doubtful whether his colleagues on the County Council would at all wish to undertake the duties of an Infectious Hospital Board for London. The duties of this Board are both onerous and responsible; and, as we have already observed, the immediate work of supervising the administration of these large hospitals has never yet been recognised by public distinction. Moreover, the County Council has a great many highly important duties to perform which belonged to the Metropolitan Board of Works, and which, if thoroughly and efficiently performed, must entail great sacrifice on the part of its members. The administration of the Vaccination Laws, to which Mr. Acworth refers in his letter, is also one of the thankless tasks which public men have to undertake. The prejudice which has been excited of late years on the subject of vaccination has made the work of those who promote it anything but enviable.

THE PREVENTION OF LEAD POISONING.

THE Water Committee of the Sheffield Town Council, upon whom devolves the urgent duty of taking immediate steps to prevent lead contamination of the drinking water, has under consideration a report prepared by Mr. Eaton. The processes for preventing access of lead to the stomach through the medium of drinking water may be divided into three groups, namely: (1) processes for preventing the water from dissolving lead; as an example of such treatment, we may mention the addition of lime to the water, whereby free acids are neutralised, and their solvent action upon lead avoided; (2) processes for avoiding contact of the water with lead, for example, by using slate cisterns, galvanised iron cisterns and glass-lined or tin-lined pipes; and (3) processes for removing lead from the water after it has been dissolved thereby, as examples of which filtration through compressed carbon, sand etc., may be instanced. Mr. Eaton estimates the cost of treating the Sheffield water so as to avoid any solvent action upon lead at £20,000, with an annual expenditure of £350 to maintain efficiency. It appears that the Sheffield water contains free acid, therefore filter beds of flint and limestone are proposed as preventive. Clearly it is more satisfactory to strike the evil at its root by treating the water before it gains access to the poisonous metal in such a way as to prevent it from being contaminated thereby, than to trust to measures for preventing contact with the metal, or for removing it after it has been dissolved in the water.

LOCAL SELF-GOVERNMENT IN LONDON.

UNDER the heading of "London Vestries" a correspondence is going on in the *Times* which is very instructive to those who take an intelligent interest in the questions connected with London Government; it is especially so to those who know what local self-government means in the large provincial towns. On the one hand, we have Mr. Hamer and H. T. P. writing in favour of centralisation and the establishment of a Bureau at Whitehall or Spring Gardens for the detailed sanitary administration of five millions of people, and a city nearly ten times the size of Birmingham or Manchester. On the other hand, Mr. Mark Judge and Mr. Edward Lucas are in favour of developing the principle of local self-government in London, and giving much greater power and responsibility to local authorities. The most remarkable letter which has yet appeared is that from Mr. Higginbottom of Islington. This gentleman thinks that the real remedy for the existing condition of things is the stimulation of local interest in the important questions of sanitary government. When the ratepayers will allow themselves to be moved to action, men of intelligence will be forthcoming to work for them. His experience shows that not only is it difficult to obtain the best men to serve on vestries or district boards, but to obtain men at all. His own election at Islington was a remarkable example of the lack of interest by the ratepayers in the issues which were being decided

At the eleventh hour there was found to be no candidate to represent a ward with a population of 25,842. He was asked to fill the gap, and was declared duly elected with a total of thirty votes! Islington has a population of about 350,000, and a rateable value of about a million and a half. That is to say, if this part of London alone could be taken from out of its surroundings, and placed in the Midlands, it would constitute a city which as regards wealth and population would occupy a position somewhere between Birmingham and Nottingham. Let anyone who knows the life of those towns imagine a state of things in which there is no candidate for the municipal representation of a ward containing a population of 25,000 persons.

RAYNAUD'S DISEASE.

WRITING on certain local disorders more or less cognate with Raynaud's disease, Mr. Jonathan Hutchinson points out in the last issue of his *Archives of Surgery* that the definition of the disease has been much widened since Raynaud's time, and that "symmetrical gangrene of the extremities" would now only be a suitable appellation for a small minority of the cases. As now understood and used, the name includes all marked forms of liability to recurring derangements of the circulation in the extremities which are marked by defective arterial supply. Symmetrical development of the symptoms is still almost an essential feature—which is tantamount to saying that the disease depends upon general and not local conditions. In its early stages, at any rate, the phenomena must be regarded as the outcome of functional derangement. All persons are potentially the subjects of Raynaud's disease; that is, in all there is a proclivity, under certain conditions, for the extremities to become cold and to pass through the two stages of blueness and whiteness, and it is only when this normal proclivity becomes exaggerated to a serious extent that a person can be said to suffer from Raynaud's disease. Mr. Hutchinson is anxious that other results than a tendency to gangrene should be recognised as belonging to this disease; thus, he holds that all changes in the circulation and nutrition of the extremities which are brought about by the nervous system, and which occur in the extremities because they are peripheral and at a disadvantage as regards the influence of cold and their supply of blood, are in essential nature allied to the disease in question. The cases quoted in illustration of this association are of extreme interest.

PROFESSOR SCHRÖN, OF NAPLES.

PROFESSOR SCHRÖN, of Naples, has been nominated by the Common Council of Naples to the freedom of the city and nationalisation as an Italian subject. The nomination was confirmed unanimously on December 22nd. For twenty-five years Dr. Schrön has been a highly esteemed teacher in the University of Naples, and has been for many years past Professor of Medicine. His lectures and pathological demonstrations are admirable, and he is as useful at the bedside as in the theatre. The appointment of a German to an Italian professorship very naturally was at first attended with some opposition, but this soon faded away under the personal popularity of a successful teacher, and Dr. Schrön some ten years ago was able to establish an international hospital, where all the sick are admitted without distinction of creed or nationality. The Empress Frederick paid a visit to this hospital lately, and expressed her great satisfaction with its principle and mode of administration. We are happy to be able to state that Dr. Schrön was generously aided by an English lady resident in Naples, Lady Ashburton, who gave £6,000 towards the foundation and support of the hospital. It is now supported chiefly by foreigners resident in Naples, and by the shipping of our own and other countries. We heartily congratulate Professor Schrön on the success of his beneficent career and on the recent recognition of his merit.

OPHTHALMIA AT HANWELL SCHOOLS.

THE condition of these schools, to which we have repeatedly called attention, seems to go from bad to worse. Of 993 children, 576 are said to be on the sick list, 386 of that number being in the infirmary and 344 suffering from ophthalmia. Dr. Stephenson reports that there are no acute cases now, and relapses are infrequent, though he adds he could only regard the improvement as temporary until the patients were treated in the new buildings which are being specially erected for this purpose.

NEGLECT OF BURIAL.

Two cases of neglect of burial have come under our notice during the last few days. One of these occurred at Battersea, and in this case it was stated before the coroner, Mr. H. Braxton Hicks, that the undertaker refused to bury the body because he was not fully paid in advance. From the report before us, the body appears to have remained at the house in which the death occurred for eleven days. In the second case, the Clerk to the St. Olave's District Board of Works attended before the magistrate at Southwark Police Court to ask for an order under the Sanitary Act for the interment of a woman who he said had died nine days before Christmas. On Christmas Eve the body was removed by the sanitary inspector to the public mortuary. According to the information received by the sanitary inspector, the son raised sufficient money for the burial by means of a "friendly lead;" but instead of burying his mother he had spent all the money in drink, and the corpse remained in the same room as the son and his children occupied. We are glad to learn that in this case a public mortuary had been provided by the local authority to which bodies may be removed pending interment. Sir Edwin Chadwick, in his evidence before the Royal Commission on the Housing of the Poor, in 1884, dwelt on the necessity of such provision being made in every parish or district in London. The horrors of overcrowding are brought home to us with dramatic force when the dead or the living lie huddled together in the dwellings of the poor. All will agree that it is the duty of sanitary authorities to lessen the evils accompanying overcrowding as far as they possibly can. But surely there should be some power to punish the wretch who obtained money to bury his mother and then spent it on drink. Offences of this kind, we are informed, are not uncommon.

STANDARDS FOR MILK ANALYSIS.

AT the annual meeting of the Society of Public Analysts, Mr. Adams, F.R.C.S. and F.C.S., public analyst for the County of Kent, the president of the Society, gave his address. Mr. Adams dwelt on the importance of establishing standards for milk analysis. Formerly this was impracticable, as there was universal ignorance about the constitution of milks of various qualities, but of late years there had been a vast accumulation of knowledge on the subject of milk analysis, and it was quite possible to establish a standard for professedly pure milk. At the present time official referees and public analysts experienced great difficulty in certifying whether a milk was adulterated or not, owing to the want of a standard which all authorities could recognise as the lowest limit to which unadulterated milk might fall. The fact that great natural variations obtained in the quality of milk was the strongest argument in favour of fixing a standard. Mr. Adams has himself contributed very materially to the perfection of milk analysis, and we hope that the opinions he has expressed in his presidential address will attract the attention that they deserve. At the present time we suspect that a great deal of the milk sold is largely adulterated with water, and the fact that it can be sold with impunity is mainly due to the want of a common standard for public analysts and official referees.

SEC. 126 PUBLIC HEALTH ACT.

A FEW days ago the *Globe* commented upon a case at Pontefract in which a mother, who conveyed her daughter when suffering from scarlet fever in a crowded third-class carriage, was actually let off with a fine of five shillings. Our contemporary observes that, although there was at first some reason for leniency in the punishment of dangerous offences of this kind, the time has come for our administrators of the law to harden their hearts in cases where public conveyances are used by patients suffering from scarlet fever; otherwise the leniency of punishment will be likely to create the popular impression that after all the offence is trivial. We agree in this argument, but at the same time we desire to point out that, before magistrates grant summonses or juries find true bills in such cases, they should satisfy themselves on two points, namely: (1) that there is ground for believing that the person was actually suffering from (not incubating) scarlet fever when the public conveyance was used; (2) that the sick person, or those in charge of the sick person, were aware of the nature of the disease. A case which has recently come under our notice at Newcastle-on-Tyne sufficiently proves the need of this caution. There is no evidence to show that a person whilst incubating scarlet fever is a source of danger to others.

THE INFECTIOUS DISEASES (NOTIFICATION) ACT.

THE Corporation of the City of London has given the necessary statutory notice of the adoption, in respect of the Port of London, of the provisions of the Infectious Diseases (Notification) Act, 1889. By Section 13 the provisions apply, not only to houses, but to every ship, vessel, boat, tent, van, shed, or similar structure. Dr. Collingridge, the medical officer of health for the Port of London, has pointed out to the Port Sanitary Committee the desirability of the Act being adopted in the port, as there would then be compulsory notification of all cases of infectious disease occurring on any ship, vessel, or boat lying within the district of the port. It would also include the compulsory notification of diseases on sailing barges, which have hitherto been exempt from the provisions in that respect of the Public Health or Canal Boats Acts. We understand that the Act will be formally adopted at the meeting of the Common Council on January 16th.

THE CHOLERA BACILLUS.

PROFESSOR NUSSBAUM, recently speaking on this subject, said: "Since Koch discovered the cholera comma bacillus it has come to be known that no human being living at the place where the epidemic rages escapes this poisonous fungus, for it is in the air we inhale, in the water we drink, upon the food we eat. It is in the soil, and when this is moist and unclean multiplies with extraordinary rapidity. In spite of this fact, in a city of, say, 200,000 persons, visited by cholera perhaps but 1 per cent., that is, 2,000, will be attacked. The other 180,000 persons remain unimpaired in health, although they have all inhaled, swallowed, and drunk the cholera bacillus. It is known with certainty that the cholera bacillus is dangerous only to those persons whose stomach is not in a healthy state, and jeopardises life only when it passes into the intestines. A healthy stomach will digest the bacillus, and therefore it does not reach the intestines in a living state. It will be remembered that Koch succeeded in imparting cholera to guinea-pigs by using opium injections (into the abdominal cavity) and giving the comma bacilli, with soda solution, in the food. Of thirty-five guinea-pigs thus experimented on thirty died with the characteristic symptoms and *post-mortem* appearances of cholera, whereas a large number that received the cholera bacilli alone remained healthy. In most infective diseases it has been shown that the presence of the specific germ is only one element in the causation. A particular condition of the receptive organism is equally essential.

THE CAUSATION OF RICKETS.

KASSOWITZ has recently put forward at some length his views on this subject.[1] The old theory of a deficiency of lime salts in the food has already been given up, though it is allowed that unsuitable food and chronic diarrhœa may keep up the existing disease. Pathology shows us that the bones are not simply deficient in lime, but that a condition of inflammatory hyperæmia exists in the affected parts. This is the essential element of rickets. As regards the theory that disturbed digestion is the cause of rickets, statistics from Vienna by Kassowitz, and from Christiania, Munich, and Kiel by other authors, prove that rickets is most prevalent in the spring, reaching its maximum in May and June, and then declining to its minimum in November, whereas digestive disturbances are most prevalent in summer and autumn. Statistics also show the evil of close confinement in winter. A long residence in closed rooms (and the breathing of impure air) seems to be the most potent factor in the causation of rickets. Hence the rapid recovery on removal of patients to the seaside or amongst the mountains. If this hygienic (the best) treatment cannot be adopted, help must be given in other ways. Children should be sent out properly clad into the fresh air daily. Lime salts should not be given—ordinary food contains plenty of lime—nor should starchy foods be restricted and a meat diet advocated; the former are by far the most suitable for children. Acting on Wegner's discovery that phosphorus in small doses restricts the formation of vessels in the growing bones of young animals, Kassowitz[2] advocates its exhibition in cod-liver oil as a means of overcoming the hyperæmia of the bones. The dose of phosphorus given is half a milligramme in a teaspoonful of oil. This treatment is already in use in this country, and deserves a still more extensive trial. But, after all, hygienic measures must take the first rank in importance. The disease is plainly one of defective hygiene, that is, more plainly than is the case with other diseases.

THE INOCULATION OF LEPROSY.

THE *Transactions* of the First Dermatological Congress, held at Prague on June 10th and 12th, 1889, contain a paper by Dr. Arning, who inoculated the condemned criminal with leprous tissue at Honolulu. Dr. Arning, in this paper, gives a detailed account of the circumstances connected with the inoculation, of the local manifestations which followed it, and of the subsequent condition of the man as reported to him from the Sandwich Islands. He summarises the whole case as follows:—An apparently healthy, strikingly vigorous man, without any hereditary taint of leprosy, was in the end of September, 1884, inoculated with lepra material, which was taken directly from a child who was the subject of grave tubercular leprosy, and who had passed through an attack of leprous fever. The chief inoculation consisted in the insertion of a small piece of a tubercle in the left forearm. Four weeks afterwards there occurred rheumatic pains, first in the left shoulder, then in the other joints of the left arm, and later a painful swelling of the ulnar and median nerves, all these symptoms occurring without fever, and with very little constitutional disturbance. During the next six months the neuritis gradually abated, and there formed a small leprous nodule in the keloid looking inoculation scar. In the edges of this keloid scar sixteen months after the inoculation lepra bacilli could be found. There comes a gap in the continuous observation of the patient, on account of Dr. Arning's departure from Honolulu, but it is known that in December, 1887, there were unmistakable symptoms of leprosy in the man. After another year, in September, 1888, the patient was the subject of fully developed leprosy, and, according to the latest reports received, dated March, 1889, there were evi

[1] *Wiener med. Wochenschr.*, Nos. 28, etc.
Berliner klin. Wochenschr., November 18th, 1889.

dences that the unfortunate man is already in a condition of marked marasmus, the accounts given pointing to leprosy of the viscera with diminution of the symptoms in the skin. Dr. Arning considers that this history points to a causal connection between the disease and the inoculation which he performed, and he is disposed to consider the peculiar rheumatic affection of the joints of the left arm with the affection of the ulnar and median nerves as the first expression of the differentation of the disease in the system. Dr. Arning does not consider that the progress of this case shows that there is a four weeks' incubation period in leprosy. He does not think that there is any fixed incubation period, but that, analogous to tuberculosis, the poison finds its way into the system through an unknown portal, without any typical primary disturbance. Sooner or later it is localised in the peripheral system. It often remains, however, for years with very few symptoms, and then, either slowly or with paroxysmal exacerbations, diffuses itself through the entire organism.

SACCHARIN IN CYSTITIS.

It was recently stated that a writer in the *New York Medical Record* had found the administration of saccharin extremely useful in correcting the offensive odour of ammoniacal urine. The affection is so distressing, often embittering the last years of life, that it will be interesting to draw attention to a similar observation but of earlier date, which was published by Dr. James Little, of Dublin, in the *Transactions of the Royal Academy of Medicine in Ireland*. The paper was read in April, 1888, more than a year before the note appeared in our esteemed American contemporary. Dr. Little's cases are so interesting that they may be quoted. The first was that of an old lady, aged 80, with purulent ammoniacal urine; she had passed phosphatic calculi, and the bladder probably contained many others, but the patient refused any surgical interference beyond the occasional introduction of a soft catheter and the washing out of the bladder by the lady who acted as nurse. "Quinine and boric acid," Dr. Little continues, "when taken in fair doses, always purified the urine, but about three months ago her stomach became so irritable that these drugs could not be borne, and the washing out of the bladder by a weak warm sublimate solution could no longer be practised, as the passage of the catheter had become exquisitely painful. The consequence was that the urine became so offensive that the odour met one on the stairs, and the patient's attendants had often to leave the room to avoid being sick. In this difficulty it occurred to me to try saccharin. I directed six of the tabloids to be used daily. In three or four days the urine was no longer offensive. The patient has continued their use ever since, and the urine has not again become ammoniacal, though there is little, if any, diminution in the quantity of contained pus. Since the foregoing case came under my observation, I have had four other opportunities of observing the effect of saccharin in patients who were passing ammoniacal urine. They were all males; one a case of catarrh of the bladder, in a paraplegic gentleman; one a case of chronic cystitis, with enlarged prostate; and two cases, in which there had existed stricture of the urethra, but in which, although a surgeon had successfully dilated the stricture, the urine remained ammoniacal. In all these cases the saccharin was distinctly useful, but in all its administration had been combined with the daily use, by the patient himself, of a catheter, so as to prevent the accumulation of residual urine in the bladder—a precaution without which no drug will, I think, prevent decomposition of the urine."

THE SCHOOL BOARD AND CHILDREN IN WANT OF FOOD.

The recent action of the London School Board in sanctioning an organisation for the feeding of school children has drawn a very reasonable and timely remonstrance from the Charity Organisation Society, which criticises the policy and methods of relief proposed. The points in the action of the Board most open to criticism are the lack of accurate statistics, and a want of consideration of the causes of ill-feeding which they endeavour to palliate, not to prevent. The argument that parents are too poor to feed their children because they do not pay the school fees may be met by the inverse argument that remission of fees is an encouragement to ask for dinners for the children, and a wholesale supply of food. To start free feeding is to attract poverty to the neighbourhood, and though dock labourers are paid 10 per cent. more than formerly, and many others in proportion, still in South London the demand for free dinners has increased in three years from 251,000 to 498,000. By all means let every endeavour be made to supply dinners when wanted on a commercial basis, but past experience has shown that free distribution of food increases the permanent distress. By wise continuous pressure, the amount of pauperism has been diminished; the Charity Commissioners have withdrawn about £50,000 a year from parochial doles, which encouraged pauperism, and that sum is available for removing some of the permanent causes of poverty, such as want of technical instruction and the want of means of recreation, which has so largely led to intemperate habits. To endeavour to provide free feeding for 43,000 children sounds like kindness at this Christmas season, but if carried into practice will assuredly increase existing evils. Let the cases of poverty be searched for, and when possible removed; individual cases of distress may be dealt with, but to give free meals is not the work of a purely educational body such as the School Board.

A NEW EXPECTORANT.

Cocillaña, the bark of an undetermined species of guarea, discovered in Bolivia in 1883 by Professor H. H. Rusby, has been recommended by Dr. Reynold W. Wilcox[1] as an expectorant. The powdered bark produces nausea, a metallic taste, early discharge of mucus, and afterwards dryness of the throat, slight giddiness, slight perspiration, and has some action on the bowels. A concentrated tincture of the bark, given in doses varying from ℥ss. to ℥ij., in cases of acute and chronic bronchitis was found to have a most satisfactory expectorant action. The effect is produced after from three to six hours, the expectoration becoming more watery and cough easier. The drug appears to act by stimulating the muciparous glands, and Dr. Wilcox considers that it is to be preferred to ipecacuanha in that it does not readily cause nausea when given in doses sufficient to produce the expectorant effect. It is not suitable to cases of senile bronchitis with bronchiectasis, owing to its markedly increasing the bronchorrhœa. The tree from which the bark is obtained reaches the extreme height of 30 or 40 feet; the bark is thick and ash-coloured; the branches bear large pinnate leaves with small inconspicuous flowers in the axils. No adequate chemical examination has yet been made, so that the constituent to which its medicinal powers are due is not known.

THE ELECTRICAL PHENOMENA OF THE HUMAN HEART.

A special meeting of the Berlin Physiological Society was called by Professor Dubois-Reymond on December 27th, in order to see a demonstration by Dr. Augustus Waller on man and uninjured animals of the electromotive action accompanying the beat of the heart. Besides the ordinary members of the Society, the leading physicists of Berlin were invited, and Professors Helmholtz and Kundt witnessed the experiments. Dr. Waller employed the capillary electrometer magnified 1,250 times, and

[1] *New York Med. Journal*, December 28th, 1889, p. 710.

thrown on a ground glass screen in one of the lecture rooms of the Physiological Institute, and demonstrated the electromotive action of the heart on a horse and on a dog. The horse stood in a courtyard near the lecture room; electrodes were attached to his extremities by firm bands, and the wires from the electrodes were passed through the window to the electrometer in the preparation room adjoining the lecture room. The dog stood in the lecture room. In the library of the Institute Professor Dubois-Reymond allowed the demonstration to be made on himself so that the pulsations might be seen directly through the microscope by all the members present. Dr. Waller's work in this direction is well known, and formed the subject of his introductory address delivered at St. Mary's Hospital at the opening of the session 1888-89.[1] A Montyon Prize was afterwards awarded to him in Paris for his investigations.

HEADACHES AND OCULAR DEFECTS.

A RECENT number of the *Ophthalmic Review* contains an interesting and valuable paper by Dr. F. W. Marlow, Professor of Ophthalmology in the University of Syracuse, on the relationship between headaches and the different forms of ocular defects, whether muscular or refractive. His paper is based on an examination of 215 patients, of whom 160 were the subjects of headaches. As regards muscular errors, the patients were tested by the apparatus, and, according to the methods recommended by Dr. G. T. Stevens, of New York, astigmatism is of all defects the most common cause of headache, but is not so certain to produce headache as hyperphoria, not more than 10 per cent. who suffer from this defect escaping headache. It may be well to explain that hyperphoria is the tending of one visual line above the other, and is consequently an evidence of weakness of either the superior rectus of one eye or the inferior rectus of the other. Next to esophoria, or a tendency to convergence, hyperphoria is by far the most common muscular defect, and, when co-existing with astigmatism, is absolutely certain to result in headache.

A POSSIBLE SUBSTITUTE FOR BELLADONNA.

RATHER more than a year ago a rhizome was offered in the London drug market as a substitute for the root of belladonna under the name *belladonna scopola*. As the juice of the plant from which the rhizome was derived was reported to possess mydriatic properties, and it appeared that an abundant supply of the plant could be obtained from the Carpathian mountains and other districts in Austria-Hungary, where the plant grows wild, the drug was made the subject of an investigation in the Research Laboratory of the Pharmaceutical Society, and the results were given in a series of papers read before the Society on Wednesday evening last. The plant yielding the rhizome has been identified by Mr. E. M. Holmes as *scopola carniolica* of Jacquin, the generic name having been corrupted since it was given into *scopiola*. The plant was evidently closely allied to belladonna, and a comparative microscopical examination of sections of belladonna root and scopola rhizome made by Mr. Greenish showed great similarity in the histological features, which were, however, somewhat more pronounced in the former than in the latter. Chemical investigation of scopola rhizome, made by Professor Dunstan and Mr. Chaston, revealed the additional fact that it contained hyoscyamine in relatively considerable quantity, but apparently no other alkaloid. It was decided, therefore, to test the therapeutic properties of the drug, and for this purpose standardised preparations corresponding in alkaloidal strength to the official preparations of belladonna were made by Mr. Ransom. Originally Dr. Lauder Brunton undertook to make the therapeutic experiments, but unfortunately he was compelled by circumstances to abandon them before they were completed; but, as far as they were carried, they seemed to show that galenical preparations of scopola have properties similar to, if not identical with, those of belladonna. The therapeutic work was taken up by Sir Dyce Duckworth, who recentl reported that so far he had found preparations of scopola equally efficacious with those of belladonna in cases where they had been used to check profuse sweating, relieve pain, and quicken the circulation. In some respects scopola even seemed to present advantages, as, for instance, in the uniform freedom from dryness of mouth following its administration. Further experiments are being made with it as suitable opportunities occur.

[1] See JOURNAL, October 6th, 1888.

A CASE OF CREOLIN POISONING.

A MAN took about a quarter of a litre (nearly nine ounces) of creolin with suicidal intent. He soon became unconscious, and in this condition was admitted into hospital. Next morning he regained consciousness, and suffered from severe vomiting for twenty-four hours. The urine was coloured greenish-black, and showed cresol reactions; albumen was present, also blood corpuscles, kidney epithelium, and cylinders. After three days there was slight icterus, and the patient complained of painful cramps in the arms, of clonic kind. After this his condition gradually improved, and he was discharged cured in the third week after admission. The temperature rose on the third day to 37.9° C., but for the next six days remained below 36.5° C. Isolated anæsthesia and paræsthesia in the region of the radial nerve made their appearance some days after convalescence. Dr. van Ackeren, who reports the above case in the *Berlin med. Wochenschr*, 1889, No. 32, is of opinion that, in all cases in which creolin is used as a disinfectant, the urine should be examined for the dark coloration and for albumen. But the case cited is in fact a most powerful testimony of the innocuousness of creolin, especially as compared with carbolic acid. For if this enormous quantity, nearly half a pint, taken into the stomach, did not kill the patient, external applications of small quantities would probably have no appreciable physiological effects. Behring made direct experiments on the subject, and found it difficult to induce direct poisoning by creolin in guinea-pigs and rabbits, owing to its small absorbability. In the acute form of poisoning, nervous symptoms predominated, with lowered temperature; in the subacute form, kidney alterations were caused. Experiments by the author and Dr. Kaupe showed also the slight absorbability of creolin. This substance is at present of uncertain composition, and it is to be hoped that a definitely constituted product will ultimately be put forward for use.

BALSAM OF PERU IN TUBERCULOSIS.

THE treatment of tuberculous processes by injections of balsam of Peru, pure or dissolved in ether, has been highly commended by Dr. Landerer, of Leipzig. This treatment has proved especially successful in tuberculous diseases of joints. If suppuration had not occurred, injections were made into the neighbouring tissue, and healing was thus induced almost without exception in every case. Seventy-four cases were treated. The cases of suppuration all but two (spondylitis), were also cured by direct applications after removal of diseased bones by erasion. As regards tuberculosis of internal organs, intravenous injections were employed. The experiments on healthy and infected dogs are detailed in the *Münchener med. Wochenschr.*, 1888, Nos. 40, 41, and 1889, No. 4. Microscopical preparations were presented to the Surgical Section of the Naturforschen Versammlung, showing that the injections caused inflammatory centres in the tuberculous areas in the lungs. Capillary ectoses and leucocytes in great number were evident, and, although the bacteria tuberculosis were present their masses were not large and confluent as in other infected but untreated animals. The above were the appearances in a

animal forty-eight days after infection and twenty-eight days after beginning of treatment. In another dog, sixty-eight days after infection and forty-eight days of treatment, a colossal emphysema was manifest, the tuberculous foci were calcified and partially encapsuled in new tissue; the bacteria had almost totally disappeared. The histological examinations were under the control of Dr. Hauser (Erlangen). Applied to human beings this treatment has yielded encouraging results. In two advanced cases (cavernous) life was prolonged; in two incipient cases, in both of which tuberculous joint disease had previously required amputation of the foot, a perfect cure resulted. The results so far, says Herr Landerer, encourage to further trials; he does not claim more at present.

EXTIRPATION OF CYSTS AND ADENOMATA OF THE THYROID GLAND.

THE excellent results obtained by Mr. Charters Symonds in his treatment of these growths by extirpation, as detailed by him at a recent meeting of the Clinical Society in a paper of which we published an abstract on December 21st (p. 1390), will serve to draw the attention of other surgeons to the method of treatment therein recommended. Mr. Symonds laid stress upon the following points: the median incision to be made in all cases; the capsule of the cyst to be looked for—as a rule, it is at once seen if the tumour be superficial or a part of it project beyond the margin of the gland; when the cyst is found to contain fluid all is to be evacuated and the cyst peeled out; if the tumour be solid it is to be enucleated. The capsule must be exposed, and patiently looked for. In some cases the margin of the gland must be raised up. In two of Mr. Symonds's cases the lobe was removed on the supposition that the growth was incapsuled intimately; but afterwards this was not found to be the case. All his eight cases did well, primary union resulted in every one of them; and there was no hæmorrhage in the simple cases. The author of the paper furnished copies of printed explanatory notes respecting his cases, which were highly appreciated by the members of the Society attending the meeting. The rapid recovery of his patients generally contrasted favourably with the much slower progress of patients treated by other methods. Thus, tapping and injecting with perchloride of iron is apt to produce hectic, and some patients thus treated have almost lost their lives. In fact, when much solid material exists in the growth injection is unsuitable. If such cases be treated by injection serious results are likely to occur. If the cyst be opened and sutured to the skin, and stuffed, the case is long under treatment, the resultant scar is large, and there is more danger than when excision is performed. Possibly a small incision and scooping out of the tissue may in some cases succeed; but it appears to be attended with much danger of hæmorrhage. In one of Mr. Symonds's cases which was exhibited the resultant cicatrix was only an inch and a quarter long, though an adeno-cystoma, measuring 3 by 2 inches, had been removed. In this case the fluid had been first evacuated, after the manner recommended.

DESTRUCTIVE RESEARCH.

A SHORT interim report has been published[1] by Dr. George Sternberg, who was commissioned by the United States Government to study the pathology, and especially the bacteriology, of yellow fever. He made *post-mortem* examinations in thirty cases during residence last summer in Havana. He states that the micrococcus of Dr. Domingos Freire, of Rio Janeiro, the so-called cryptococcus zanthogenicus, was not found in any one of the cases. The liquefying bacillus of Dr. Paul Gibier, which was somewhat rashly proclaimed to be the cause of yellow fever, was only found in one-third of the cases; and a third organism, described by Dr. Carlos Finlay, of Havana, under the name of tetragenus febris flavæ, Dr. Sternberg finds to be a common atmospheric organism in the city of Havana, rarely present in the blood or tissues of yellow fever patients. In all the cases cultivations were made from the blood, from one of the cavities of the heart, from the interior of the liver, the spleen of the kidney, urine drawn through the wall of the bladder, and material from the stomach and intestines. A piece of liver and kidney was also preserved in each case, by wrapping it in an antiseptic material; the exterior was thus kept sterile, and after forty-eight hours appeared, as a rule, quite fresh, and upon cutting into it it was found to contain numerous and various micro-organisms. The cut surface had a decidedly acid reaction. The micro-organisms found under these circumstances were bacilli of various species, and corresponding with those found in the contents of the intestine. They have been isolated by the use of Esmarch tubes and carefully studied. Possibly one or the other of them may be the veritable yellow fever germ, but up to the present time no satisfactory evidence has been obtained that such is the case.

[1] In the *Journal* of the American Medical Association, November 30th, 1889.

SCOTLAND.

THE medical classes in connection with the Edinburgh University and School of Medicine were resumed on Tuesday, after the Christmas recess.

WE are informed that Dr. Thomas Best Gibson has been appointed Assistant to Dr. D. J. Hamilton, Professor of Pathology in the University of Aberdeen.

THE ROYAL SOCIETY OF EDINBURGH.

AT the third ordinary meeting of the Royal Society of Edinburgh, on Monday, January 6th, Dr. J. Berry Haycraft gave an account of experiments extending the current knowledge of volitionary movement, and explanatory of the production of muscle and heart sounds. Dr. Alex. Bruce communicated a paper on a hitherto undescribed connection of the inferior olivary body of the medulla oblongata.

THE UNIVERSITIES' COMMISSION.

THE Commission on the Scottish Universities is now in session at Edinburgh, under the presidency of the Hon. Lord Kinnear. The Commissioners have concluded that it is inexpedient at this stage that oral evidence be called for on the general question considered in report of the Royal Commission of 1876, but that persons desirous of laying their views on such questions before the Commission should be invited to do so in the form of printed statements; and that further consideration of the question as to oral evidence be postponed until the University Courts have intimated to the Commissioners the course they intend to take in the exercise of the rights conferred by Section 19. The Commission has heard oral evidence on the subject of theological tests from Professor Milligan, Principal Donaldson, Principal Geddes, and Dr Walter Smith. The Commission has also fixed as a quorum for the University Councils ten for every thousand or fraction of a thousand on the roll of the University Council.

PROFESSOR CHIENE ON THE VALUE OF A HEALTH SOCIETY TO A COMMUNITY.

THE present series of the Edinburgh Health Lectures was brought to a close on Saturday, December 28th, when Professor Chiene discussed the work done by the Society since its foundation. Bailie Russell, Convener of the Public Health Committee of the Town Council, presided. Professor Chiene expressed the opinion that the community had largely benefited by the information thus dis-

seminated. A recent decision in the Second Division of the Court of Session, which was given against the Dean of Guild Court, showed that the present law was not sufficiently stringent, and that overcrowding, with bad sanitation, in any part of a tenement was still consistent with the law of the land. Unless they insisted that all feuing plans be submitted to the Dean of Guild Court, and thereby insured that sufficient air space was arranged for in each feuing plan, as years rolled by another improvement trust would be necessary to drive air shafts through districts that were now being feued and crowded to their utmost limit by buildings. Professor Chiene emphasised the urgent necessity for inspection of the milk supply, holding it to be one of the first duties of the County Councils to press upon the Government of the day the importance of carrying through a Health Act, which would ensure the inspection. It would be the duty of the Health Society to become more aggressive. They must press upon the School Boards of Scotland the immense importance of educating children with regard to the simple laws of health. They must also insist on thorough sanitary inspection, and they should encourage the registration of plumbers and architects. The County Councils must see that the medical officers were not hampered in their endeavours to prevent and mitigate disease, and they must adopt the Compulsory Notification Act, and require that there be a Central Board in Scotland, to whom weekly returns of all infectious diseases occurring throughout Scotland were submitted. After Professor Chiene's lecture the annual meeting of the Edinburgh Health Society was held, when it was resolved to continue the labours of the Society with renewed effort.

DEATH OF DR. JAMES MORTON.

GLASGOW has lost one of its oldest and best known practitioners, Dr. James Morton, who died suddenly on December 31st, of aneurysm of the aorta. He had known for some considerable time of the condition in which he was placed, but it was while out walking that the fatal issue occurred. Dr. Morton was a native of Ayrshire, and studied at the University of Glasgow. He took the licence of the Edinburgh College of Surgeons in 1844, and a year later the St. Andrews degree. In 1851 he became a Fellow of the Glasgow Faculty. For over twenty years he was one of the Surgeons of the Glasgow Royal Infirmary; and became widely known because of his treatment of spina bifida by injection of iodine. The estimation in which his medical brethren held him was shown by his election in 1887 to the presidential chair of the Glasgow Faculty of Physicians and Surgeons, and he held that office when the British Medical Association visited Glasgow in 1888, and at the close of the meeting he was one of those honoured by the University by its honorary doctorate of laws. For many years he occupied the chair of materia medica in Anderson's College, the interests of which he did much to forward.

ABERDEEN TOWN COUNCIL ASSESSORSHIP AT THE UNIVERSITY COURT.

AT a meeting of the Town Council, held on January 6th, Bailie Crombie was elected to represent the Town Council at the University Court. We trust that the merits of the selected candidate may become as evident by his future actions as his supporters could desire. The qualifications that he may possess for the appointment evidently do not impress himself, for he stated that, "if he should find that he was unable to discharge the duties, he would at once return to their hands the trust so kindly given him." It is to be feared that an appointment such as this too often affords a battlefield for rival and jealous factions, and that candidates may be selected for other reasons than their capacities for the special duty. The Aberdeen Town Council might very fittingly have honoured itself and secured the respect of the public by nominating such a worthy representative as Dr. Alexander Bain, a man whose lifelong interest in university matters, and whose business aptitude in all things pertaining thereto, might have stilled even the angry ambitions in the breasts of municipal rulers.

IRELAND.

THE Right Hon. Chief Baron Palles has been appointed by the Crown to the Senate of the Royal University, in room of the late Earl of Granard.

HOSPITAL FESTIVITIES.

IN addition to the *fêtes* for the patients in several of the Dublin hospitals which have already been named, concerts, Christmas trees, and other forms of entertainment have been provided at the Meath and Sir Patrick Dun's Hospitals and St. Joseph's Hospital for Children. Many amateurs assisted in the pleasant gathering, and gave great delight to the patients.

DISPENSARY MEDICAL OFFICERS IN DUBLIN.

THE medical officers of the South City Dispensaries have applied for an increase of salary. At present they receive only £125 a year, while the officers on the North Side receive £145. The case which was put forward was a very strong one, and there is no reason to doubt that the request will be acceded to.

NOTIFICATION OF INFECTIOUS DISEASE.

THE Dublin Corporation, on Monday, January 6th, resolved to adopt the Infectious Diseases (Notification) Act, 1889, for operation in the city. The new order will take effect from March 1st. The Town Commissioners of Kingstown have resolved to postpone the question for three months, so that inquiries may meantime be made as to the working of the Act in other places.

DEATH OF DR. JOHN ISLAND DONOVAN, J.P., OF SKIBBEREEN.

WE regret to have to record the death of this gentleman, which occurred at his residence in Skibbereen, at the early age of 40, after a lingering illness. Dr. Donovan was a Master in Surgery and Doctor in Medicine of the Queen's University in Ireland, a Justice of the Peace for the County of Cork, and a Fellow of the Obstetrical Society of London. He was very popular among all classes, and was the fifth son of the late Dr. Donovan, who was a very eminent physician, and whose heroic services during the famine years is still remembered.

HEALTH OF DUBLIN.

THE Registrar-General's report for the week ending December 7th states that the deaths, which are 20 under the average for the corresponding week of the last ten years, represent an annual rate of mortality of 27.8 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 27.3 per 1,000. During the first forty-nine weeks of the current year the death-rate averaged 25.4 per 1,000, and was 3.3 under the mean rate in the corresponding week of the ten years 1879-88. The number of cases of enteric fever admitted into the principal Dublin hospitals in which cases of infective disease are treated was 24, being 3 under the admissions for the preceding week; 29 enteric fever patients were discharged during the week; 2 died; and 131 remained under treatment on December 7th, being 7 under the number in hospital on Saturday, November 30th. Four cases of typhus were admitted to hospital, against 2 for the

preceding week; 9 cases of this disease remained under treatment in hospital.

A DEFAULTING ACCOUNTANT.

One of the morning papers publishes an article with reference to the defalcations of the accountant to Swift's Hospital for Lunatics and to Steevens's Hospital. Curiously enough, it is attempted to make political capital out of a series of embezzlements which in their essential character are not peculiar to any party or creed in the world. The discovery was made some weeks ago, and the defaulter made an effort to return some of the money. The actual proportions of the gross deficit which have been lost by each hospital is not yet fully known, but the total sum probably amounts to about £6,000. The accountant has disappeared, and some of his creditors have, it is stated, brought his case into the Court of Bankruptcy, so that the details will soon be known. But in this case it is alleged that the return of moneys which he made before his departure will be challenged, and it will be claimed that they should go into the general fund under the Court proceedings. In any event, however, the hospitals in question will be heavy losers.

IRISH LUNATIC ASYLUM APPOINTMENTS.

The observations which we made on the recent appointments in the Lunacy Department in Ireland have led to a correspondence in one of the daily papers which adopted our views. We objected to the appointment of visiting physicians to the position of resident superintendents, to the exclusion of the assistants who are trained in the service, and who legitimately look for promotion. Nothing that has been said on the other side has altered our position. The visiting physician may know very little of mental diseases; the scope of his work and study lies outside these, because his practice is among the general sane public for disease other than mental. The work of managing an asylum is peculiar, and requires long training, to which the visiting physician cannot pretend. To say that like appointments have already been made in Ireland is a poor defence; they ought not to have been made; and if mistakes have been committed, it is the more necessary that they should not be multiplied. The study of mental disease is in these days a very special one, and it is to the men who are able to observe it daily and constantly that we look for instruction regarding it. In England, the resident medical superintendents have been the most active workers in developing the systematic study of lunacy, and if this is to be the case in Ireland, the same methods of service must be adopted. The best men will certainly not seek place in a department in which a practice exists, which means that, no matter how well they work, their efforts may be ignored and the prizes be given to outsiders.

THE EPIDEMIC OF INFLUENZA.

The epidemic of influenza has spread with great rapidity throughout the country during the past week. In London, the number of cases has become very large, and medical men are in many districts so overtaxed that it has become impossible to keep a record of cases attended. No estimate can be formed of the actual number of cases, but that it is undoubtedly very large is shown by the experience of businesses employing large numbers of men. Thus at the General Post Office, out of a total of 5,000, the number of absentees is 1,806, a large proportion of whom are suffering from the epidemic; of 1,900 telegraph boys, 372 are laid up, and 384 persons engaged at the Central Telegraph Office are off duty. The South London Tramways Company have during this week been obliged to reduce the number of cars running. In several of the police divisions many constables are laid up. The troops have suffered considerably. In the Home District especially the number of cases has taxed the resources of the military hospitals. Numerous cases have occurred at the Wellington and Kensington Barracks and at Hounslow. The Herbert Hospital at Woolwich is full. As many as twenty cases a day have occurred among the Life Guards at Windsor. The epidemic has appeared at Aldershot, and cases have also occurred among the garrisons at Dover, Sheerness, and several depôts. A large proportion of the men employed in the Royal Small Arms Factory at Enfield and at other Government factories are incapacitated. Large numbers of cases have been seen in the out-patient departments of most of the metropolitan hospitals, and at several of these institutions the propriety of opening special wards so as to permit of the admission of the more severe cases is under discussion. In the Eastern Counties it is severely felt in certain districts, and in Lincolnshire, especially in the neighbourhood of Lincoln and Grantham. Reports of the prevalence of the epidemic come from nearly every district in Essex. The epidemic prevails also at Guildford, Godalming, Farnham, and throughout rural West Surrey.

Metropolitan District.

In reply to a note of inquiry addressed to the Secretaries of the Districts of the Metropolitan Counties Branch, we have received the following interesting letters, which contain much valuable information as to the progress of the epidemic in London and the suburbs.

Dr. J. W. Hunt (Dalston, N.E.) writes: Epidemic influenza is prevalent in Dalston to a very large extent. I am seeing more cases every day than I am usually in the habit of seeing for all other diseases put together. In fact, I am so pressed that I have not time to go into figures and tell the exact numbers. Most are cases of males, and are, I believe, contracted in the City or West End, nearly all the male population of this part being engaged in business in such places. The character of the symptoms varies much. In nearly all the muscular pain is most marked, and in many the severe headache is a prominent symptom. In very few is there much nasal catarrh or conjunctival symptoms. In a few cases the abdominal symptoms are the leading feature. In very few indeed has there been much tonsillitis. The temperature in most cases is below 102° or 102.5°. Cases improve very much in twenty-four hours under salicylate or antipyrin, or the two combined, but there is often much subsequent troublesome bronchial catarrh. The depression after the febrile attack has passed away is a most prominent feature. Nearly all the cases are in adults, bearing out what I said before, that it is imported from other neighbourhoods. Excuse these fragmentary remarks, written at a late hour. The pressure has been too great to go in for elaborate scientific investigation. There are a large number of mild cases in which the patients continue to get about and pursue their business.

Dr. George Henty (Camden Road, N.) writes: I have to report that the epidemic influenza has visited the North of London as well as the North-West, very generally, but at present the cases are of a very mild type: catarrhal fever, with great lassitude, frontal headache, pains in the limbs, and a general chilliness for two or three days, such as is felt in mild cases of malaria. Some cases are attended by a rose-coloured rash, and the temperature rises to 102°. In a private case the temperature was 104°, followed by congestion of lungs, which cleared off in three days. On calling at the Great Northern Central Hospital in Holloway Road, the house-physician informed me that there were many cases treated in the out-patient department, and a great many applications to be taken into the wards; that three of the medical staff were suffering from it, and two or three nurses. He also records a case of temperature of 104°, with rash, and that many of the patients in the surgical wards complained of mysterious aches and pains which retarded their recovery. A great many cases were suffering from bronchitis, but their temperature was only 101°. The medical staff were of the opinion that the cases were quite distinct from those of ordinary catarrh, and their supposition was that the nature of the epidemic was malarial. At the North-West and Metropolitan Free Hospitals the cases were also very numerous. At two or three of the largest establishments, where many hands are employed, in Islington, they had not yet felt its influence, on my making an inquiry on Tuesday, so that I think

it is either mild in its influence, or it may not have travelled on yet so far. I think a warning ought to be given that the heroic and indiscriminate doses of antipyrin and quinine are doing great harm in the treatment.

Dr. R. PERCY SMITH (Bethlem Royal Hospital, London, S.E.) writes: We have had a few cases of influenza here. Dr. Hyslop, the assistant medical officer, was the first sufferer. He had fever (102°), severe headache, and general pains, and a moderate amount of catarrh, followed by prolonged prostration. Three male attendants have suffered from it. One with pains, prostration, fever (102°), and no catarrh, the attack lasting only two days; one had only slight fever, considerable catarrh, but much prostration and lassitude; while the third has had a moderate amount of fever, but severe headache and general pains, and great prostration with acute bronchitis. So far no patient on either side and no female attendant has suffered. A visitor in my house has had a mild attack, with slight fever, severe pains, and very little catarrh. In the family of one of the clerks, resident in a detached building, three female members have suffered. In one the symptoms were mainly pulmonary, and in the two others the head symptoms predominated, with very considerable pyrexia. No case has occurred yet in King Edward's School (240 girls), which is under the medical care of the physicians of this hospital.

Dr. H. LESLIE BATES (St. Albans) writes: Influenza is prevailing here to a considerable extent in an epidemic form. I have noticed in my cases sudden onset, great amount of prostration, temperature 100° to 102.6°, pains in limbs and back (in some cases, usually in strong men past middle life, the pain in the back has been most acute), more or less bronchitis. One patient developed pneumonia; in another, the attack was succeeded by purpura and a general very low condition. The drugs I have used have been antipyrin and quinine in combination, salicylate of soda, and diaphoretics. Plenty of light, nourishing food; champagne.

Dr. W. C. STEELE (Ealing) writes: The epidemic has been prevalent for the last three weeks; several hundreds have been ill. The temperature runs up to 102° to 104°. On the first day there is sickness or nausea, intense headache, insomnia, rheumatic pains in the back and limbs. There is slight conjunctival congestion, but no nasal catarrh; profuse perspiration follows. On the second day the temperature falls to 99°; appetite returns, but great weakness and anæmia remain for three or four days more. Six cases have been serious, but no deaths have occurred; patients are left in a very debilitated state. Most of the doctors have been confined to their beds.

BIRMINGHAM.

Our Birmingham Correspondent writes: Is the epidemic influenza in our midst or not? is a question eagerly discussed by all classes, both lay and medical. A few people assert with confidence that they have been declared by their medical advisers to have had "Russian influenza," but these are probably examples of vainglorious boasting. The best evidence that the regular epidemic has not set in is to be found in the condition of the public services. Whether it be amongst the police, the post office officials, the gas department, or the health department *employés*, there is no unusual abstention from duty other than may be accounted for by the remarkable climatic changes or by the special demands made upon the men by a special season—such a demand, for instance, as is made upon the letter carriers at Christmas.

The hospitals are not yet applied to by sufferers from the disease, the sick clubs have no unusual strain upon their purses, and, lastly, the death-rate, 23 in 1,000 per annum, is not above the average at this time of the year. At the same time, it must be acknowledged that not for years has there been such an amount of "cold in the head" as there has been during the last three weeks, and one hospital physician is just knocked over with an attack of influenza which he regards as undoubtedly of the epidemic kind. The only conclusion one can come to is that the severe form which has existed on the Continent, and is now in London and other places, is preceded in Birmingham by a wave of mild influenza, which will shortly be succeeded by an outbreak of that severe variety which is known as the epidemic.

LIVERPOOL.

Our Liverpool Correspondent writes: The influenza epidemic first made its appearance here about the end of last week, the earliest cases occurring in a mercantile house that is largely engaged in correspondence with France. On January 6th the keeper of a lodging-house used by emigrants was attacked by symptoms of the complaint, and was seen by Dr. Hope, assistant medical officer of health, who pronounced the case to be undoubtedly one of epidemic influenza. On the same day a case was admitted to the Royal Southern Hospital, and a few other cases came to the knowledge of the authorities. Several cases have since been reported in Kirkdale, Walton, and Toxteth Park. They are all of a mild type, and as yet but few have been seen at the hospitals, most of the cases occurring among the classes who do not receive charitable relief; but there is little room to hope that the city will escape the visitation that other towns have experienced. The season is unhealthy, and the death-rate exceptionally high.

BRISTOL.

In reply to an inquiry Dr. E. MARKHAM SKERRITT (Clifton) writes: Epidemic influenza has made its appearance in this neighbourhood within the last day or two, but the cases have up to the present been comparatively few.

GLASGOW.

Our Glasgow Correspondent writes: What is popularly called an "influenza cold" is undoubtedly at present widely prevalent in Glasgow and its suburbs. Such attacks, however, are quite common in the moist, relaxing climate of Glasgow and the West of Scotland, and, so far as is known, the form of cold prevalent at present presents the ordinary features of more or less increase of temperature, pains in the back and limbs, and general catarrhal symptoms, readily yielding to ordinary treatment. The physical and mental depression which attends and follows the attack is very noticeable and striking. There is no doubt that within the last eight or ten days a remarkably large number of people have suffered from such a complaint; but then the weather, with its unusual mildness, its sudden alternations of temperature and barometric pressure, the absence of frost and the large amount of rain, culminating early in the week in a violent and sudden thunderstorm, is just the kind likely to conduce to this variety of health disturbance. While many people are suffering—and in many instances two or three of a household are affected about the same time—nevertheless the disease has in no way assumed the characters of an epidemic. At the post office, while the usual number of persons are absent through illness, the sick list is not abnormally large for the season, and no case of influenza has been certified. It is a point worthy of consideration also that the fear of the "Russian influenza," as it is popularly termed, is so great that many cases are coming under medical notice which, but for this fear, would not have been heard of.

ABERDEEN.

Our Aberdeen Correspondent writes: In spite of the numerous false alarms, Aberdeen has not yet been visited by Russian influenza. So far as I know an abnormally large number of catarrhs, and what popularly is termed "influenza" prevail, but no well-defined case of the dreaded stranger has yet been seen. The weather keeps unseasonably mild, with fogs, alternating with plashes of rain and sunshine.

EDINBURGH.

Our Edinburgh Correspondent writes: There is distinct evidence that the wave of influenza has reached Edinburgh. From various medical men cases are reported of considerable severity, while the number of less serious cases, apparently of similar nature, is large. The list of those affected includes several medical practitioners. In some of the public institutions of the city work has been delayed, owing to the illness of the *employés*. More than one Catholic school, which should have reopened this week, remain closed in consequence of thirteen Sisters of Mercy, who are teachers having been attacked by influenza in St. Catherine's Convent. On the other hand, there is a good deal of illness of a simple catarrhal character, which has been wrongly described as influenza. No case of influenza has applied for admission to hospital.

DUBLIN.

Our Dublin Correspondent writes: The influenza epidemic has appeared in Dublin and Belfast, and is gradually spreading over Ireland. There is no new phase in the disease to record. The symptoms are similar to those observed in London and elsewhere. A large proportion of the cases would under other circumstances be described as the ordinary influenza with which we are

familiar; but a certain number present symptoms which are very grave. Any deaths that have occurred are due to complications, such as bronchitis and pneumonia.

Cork.

Our Cork Correspondent writes: Numerous cases of influenza have appeared within the past few days in Cork and neighbourhood, and it is expected that the epidemic will spread rapidly.

Paris.

Our Paris Correspondent writes: The current medical opinion is that the epidemic shows a tendency to diminish. Nevertheless, the average mortality is still higher than it was at the corresponding date last year. Last week the daily mortality from all causes reached 418, the normal average being 180. Next week's returns will indicate more accurately the state of the epidemic. The statistics furnished by the Municipal Statistic Office show that up to the age of 15 the *grippe* has caused few deaths, from 20 to 40 the mortality has been increased, and from 40 to 60 the highest. Very few deaths have occurred among the population over 60 years of age. Phthisical, cardiac, and hemiplegic sufferers, also people attacked with albuminuria, have paid the heaviest tribute. The Minister of Public Instruction has deferred the opening of the schools and *lycées* until January 12th. Professor Damaschino was among the victims, death resulting from pulmonary sequelæ. In many of the hospitals the *chef*, house-surgeons, and dressers are ill, and have to be replaced by a complete medical staff. We regret to state that M. Ollivier, Professor of the Medical Faculty, and hospital physician, has had a sharp attack; fortunately all danger is now tided over, and this much-esteemed professor and physician will soon resume his duties. M. Olliivier is the only member of the Academy of Medicine who at the onset of the epidemic foresaw the probable danger. At a Tuesday meeting he urged that the colleges and *lycées* should be closed; naturally one voice was useless to obtain this wise measure, all the others being against it. Nevertheless, the following Saturday all the members voted it unanimously, and urged its immediate observance. The Minister of the Interior has issued a most wise and humane decree: woollen clothes are to be distributed among the poor unable to buy them. The Paris Public Assistance has directed that patients suffering from chronic diseases be removed from the Paris hospitals, and sent to the Nanterre Home, in order to leave empty beds for acute cases. The War Minister has directed the military authorities to have only moderate military exercise performed by the soldiers under their command, and as much as possible to perform these exercises under cover, in order to protect the men from the effects of sudden chill or too long exposure to cold; also to distribute hot tea twice a day to the soldiers whenever this is requested by a medical man. In all barracks rooms are to be kept sufficiently warm ready for patients who can be treated in barracks, and thus avoid overcrowding the hospitals. The outdoor sentinel service at public buildings, etc., is to be lessened as much as possible. All soldiers not in strong health are to be allowed to return to their families on furlough. The scanty attendance at the theatres is good indication of the state of Paris under the influence of the *grippe*. The Paris population at all times crowd to theatres, but at this season of the year places have generally to be taken weeks before the date fixed on. At the present moment the best places can be had at a moment's notice. At the official receptions held on January 1st, by the President of the Republic and the different Ministers, the epidemic also told its tale; what were crowded rooms last year were this year sparsely filled. The whole of France is now invaded by the epidemic—north, east, south, and west. Brest is one of the towns most severely attacked; there are 665 patients at the Marine Hospital, among whom are 43 midshipmen. At Montpellier one-half of the railway officials are unable to be on duty, soldiers have to replace post-office officials, daily papers have no compositors; the daily death rate has increased from 4 to 5 to 8. At Bordeaux the epidemic is general, but not malignant in character; an isolated hospital has been opened. At Marseilles and Arles, and the region on the lower part of the Rhone, the epidemic is severe; special measures have been taken by the *Général Chef* of this region to protect the soldiers against the inroads made by the *grippe*. The Mediterranean training ship has been ordered to remain at Toulon; there are so many patients on board that all the manœuvres are deferred. Up to the present time Mentone, Nice, and the Riviera are left untouched, and are crowded with people taking refuge from the common invader; it is to be feared that these towns will also be visited, and the sanitary and municipal authorities will show their wisdom in taking precautions in time. It is at Algiers in a severe form. At Lyon and throughout the centre of France it is slowly making its way, and the opening of the schools and colleges has been deferred until the epidemic shows signs of being on the wane.

Vienna.

Our Vienna Correspondent writes: At a meeting of the Imperial Royal Society of Physicians of Vienna, held on January 3rd, Professor Nothnagel delivered a lecture on influenza. He said the affection must be reckoned among the infectious diseases, which were produced by the penetration of bacteria into the organism. The evidence of this was not yet absolutely conclusive; the specific microbe had not yet been discovered, as our modern methods of bacteriological investigation were scarcely ten years old, and no large epidemic of influenza had been observed during this period. There was, however, in Professor Nothnagel's opinion, no doubt about the bacterial character of influenza, though the bacteriological proof had not yet been furnished. The whole body symptoms, and the clinical course of the disease, as well as its epidemiological behaviour, pleaded in favour of such a supposition.

In conformity with our modern views on the nature of bacterial affections, we had to admit that in influenza also the bacteria which gained entrance into the organism (probably by the lungs) set up processes there by which a specific virus, characteristic of the disease (toxin ptomaine), was created. It was not the direct influence of the bacteria which produced the affection; this was due to the poison created by the bacteria in the human body. The clinical symptoms of the influenza were occasionally varied to such a degree that, in two cases of the disease, we might think we had to do with two quite different affections. This appearance, however, was not only characteristic of influenza, but it was also observed in other infectious diseases. The poison of typhoid fever, for instance, in one case gave origin to pronounced cerebral symptoms; whilst in another it produced intestinal symptoms; in a third pulmonary disturbances; and in a fourth derangements in the kidneys, etc., though the poison was the same in all these cases. In the same way the complex of symptoms of influenza was different and manifold. The difference could be explained by the varying power of resistance of the different organs to the poison. The various symptoms might be summarised as follows: Fever was almost invariably present, with more or less elevation of temperature and the symptoms depending thereon. Apyretic influenza did occur, but was very rare. Besides the general symptoms of fever there were others referable to different organs. Most frequently the mucous membranes of the respiratory organs were affected (the nose, the larynx, and the ramifications of the bronchi). Secondly, there were nervous symptoms, such as sleeplessness, headache, neuralgia, pains in the muscles of the back, the extremities, etc. In other cases the digestive tract was chiefly affected. Anorexia, which lasted for some time after convalescence had begun, was one of the commonest symptoms. The duration of the affection was variable; in slight cases it scarcely lasted for twenty-four hours; in other cases, however, and even in throat complications, it lasted for a week, and even two and three weeks; convalesence was protracted.

Influenza was in general only a troublesome complaint; occasionally it might be a painful affection, but in the vast majority of cases perfect recovery took place. This was due to the fact that the intensity and the duration of the fever were, as a rule, not of a dangerous character, and delicate organs were either not at all or only very slightly affected. In the lungs urgent symptoms might supervene when the catarrh became very severe, and also affected the delicate ramifications of the bronchi when capillary bronchitis and broncho-pneumonia developed. But even this complication—though the symptoms were very severe—was well borne by persons who otherwise enjoyed good health. If, however, weak and old persons or little children became affected with influenza it might prove fatal, and this was especially the case with persons suffering from pulmonary and cardiac affections. With regard to the relation between pneumonia and influenza, which now formed a question of importance in Vienna, Professor Nothnagel said that, so far as the pneumonia was catarrhal, the facts referred to above should be taken into consideration. Whether the percentage of this complication was higher in the present than in former epidemics could not be said, as statistics were not yet forthcoming

on the subject. It was not, however, this form of pneumonia which created alarm, but the croupous variety, which really occurred at present more frequently than before. It might be said with certainty that there was no close or essential connection between these diseases; but a certain external influence could not be denied. This was to be understood in the following way: Influenza and croupous pneumonia were two morbid processes entirely different in character; the latter could never develop directly out of the former. If a patient suffering from influenza became also affected with croupous pneumonia, this was nothing more than a coincidence, the one process having prepared the soil for the development of the other. At the present season, cases of croupous pneumonia were frequent, and before the outbreak of the influenza such cases were observed in no small number. This epidemic of pneumonia now persisted, and it was only the frequency of its occurrence which was increased by the influenza epidemic. This came about in the following way: croupous pneumonia, as was well known, was also due to specific bacteria (pneumococci). These no doubt frequently reached the lungs without producing pneumonia; in such a case they were expired again. It was known by experience that pneumonia developed more readily in persons suffering from pulmonary catarrh. In influenza, bronchial catarrh was of very frequent occurrence, and thus explained the coincidence of an epidemic of pneumonia with one of influenza. Moreover, it was not the fact that all the cases of croupous pneumonia now occurring in Vienna were in patients suffering from influenza, a large number of them had not previously suffered from influenza. The usual mode of the spread of influenza was through the air, as the specific bacteria were most probably inherited; whether the affection was at the same time contagious could not be stated with certainty, but it was probably so. From the above-mentioned facts, it was evident that there could be no question of real prophylactic remedies.

It would be well to avoid immediate contact with patients suffering from influenza, and in the case of old and weak patients this precaution was particularly indicated. The scientific mode of treatment would be to give some substance which would kill the specific bacteria, as quinine destroys the organisms of intermittent fever. Unfortunately, no such remedy was known at present. Treatment was thus limited to relieving the troublesome symptoms, particularly those referable to the nervous system and the respiratory apparatus. Antipyrin, phenacetin, antifebrin, etc., could be recommended. The lungs should be watched with the greatest care, and every precaution should be taken during convalescence. Compared with the other epidemic diseases, such as scarlet fever, measles, cholera, typhoid fever, or the plague, the present epidemic was very mild; it derived its serious character only by the coincidence of the epidemic of pneumonia.

During the last week the number of the patients suffering from influenza who were admitted into the Vienna hospitals was increasing. In the last days of the week a decrease of the intensity of the affection could be observed in the general hospital, both among the patients and the medical and nursing staffs. The emergency hospital for epidemic diseases was officially opened on January 4th for the reception of influenza patients. It contains 300 beds.

The weekly reports of the Statistical Department of the Vienna "Magisträt" (lord mayor's office), respecting the mortality among the Vienna population, quite distinctly showed the consequences of the influenza epidemic in Vienna. A considerable increase of mortality was observed in Vienna, particularly during the last three weeks. Furthermore, that the affections of the respiratory organs, especially the lungs, had more frequently a fatal issue than before, and that numerous old and weak persons had succumbed to the epidemic. The following synopsis refers to the mortality in Vienna during the last eight weeks of the past year, as shown by the statistics:

Week.	Total Deaths	Inflammation of the Respiratory Organs.
Nov. 3 to 9	... 306	... 29
„ 10 to 16	... 317	... 54
„ 17 to 23	... 349	... 65
„ 24 to 30	... 362	... 64
Dec. 1 to 7	... 369	... 68
„ 8 to 14	... 413	... 73
„ 15 to 21	... 464	... 86
„ 22 to 28	... 717	... 180

During the first half of November the death-rate was under the average; no striking increase was noticed till after the first week of December. The days with the greatest mortality were December 24th with 95 deaths and the 28th with 85 deaths.

A considerable decrease of the cases of influenza was observed on January 4th in the General Hospital. The total number of patients admitted was 95; among these there were 40 cases of influenza. On January 3rd Professor Kahler stated that the influenza showed a decrease in the previous two days. He expressed the opinion that the epidemic would last only a few weeks more. Professor Kahler keeps all his influenza patients in the hospital for some days after perfect recovery.

It should be mentioned that all the other infectious diseases have been less frequently observed in Vienna during the epidemic of the influenza. The sanitary report of December 22nd to 28th shows that only one case of small-pox was observed during the week. As to the other infectious diseases, there was a decrease of measles by 31, of scarlet fever by 9, and of whooping-cough by 7; there were only 2 cases of typhoid and 4 of puerperal fever.

The *Prager med. Wochenschrift* of January 1st contains the following remarks about the influenza at Prague: "The influenza spread very rapidly in Prague and its suburbs. It occurred in numerous cases in a rather malignant form, and it often became complicated with intense inflammation of the mucous membranes of the respiratory apparatus. The occurrence of lobular pneumonia has up to the present been rarely observed. The epidemic has also invaded the Prague General Hospital. The cases observed in the town frequently permitted of the supposition of a direct transmission of the infection from person to person. The disease, as a rule, occurred in single families."

The epidemic has increased in number and intensity to a high degree at Brünn (Moravia), Linz (Upper Austria), Klagenfurth (Carinthia), etc.

Professor Schnitzler, who has been suffering from pneumonia of exceptional severity, following on an attack of influenza, is now recovering.

The Vienna Doctoren-Collegium has postponed its meetings for an indefinite time, owing to the exceptionally heavy professional work thrown on its members by the prevailing epidemic.

Mr. JOHN OAKLEY (Holly House, Halifax) has addressed to us a communication in which he expresses the opinion that the disease is of a malarial character, and that its endemic prevalence is favoured or determined by meteorological conditions. He points out that during the last two months the atmospheric pressure has undergone rapid and wide variations from day to day; the temperature during the same period has been alternately warm and cold, the earth has been saturated with moisture, and the atmosphere has been damp, foggy, and stagnant. Similar conditions appear to have existed during periods of prevalence of influenza from the twelfth to the nineteenth century. These barometric variations produce an altered condition of the blood vessels and an irritable condition of the nervous system, and the sudden variations of temperature also predispose to the absorption of the malarial poison upon which he supposes influenza to depend. The variation in the symptoms he attributes to the idiosyncrasies of the patients, and he points to the enlargement of the spleen which has been observed during the epidemic as further evidence of its malarial nature. He contends that the disease is endemic rather than epidemic, that it attacks a large number of individuals widely separated over a large area, that these individuals become foci for its rapid spread in epidemic form, but that personal contagion is a subordinate cause in the diffusion of the disease. He concludes with the following observations on treatment: The treatment must be preventive. A light diet and a regular evacuation of the bowels are of the greatest importance. Quinine in small doses three or four times a day should be given. The drug is most effective in destroying the action of malarial poison. Those who come in contact with persons suffering from the disease should also be advised to wash the conjunctivæ with an antiseptic lotion, to spray or wash out the nares with the same and to inhale a volatile antiseptic. Unfortunately, the physician is frequently consulted too late, the attack has commenced. If, however, the patient is seen in time, 10 grains of quinine will frequently cut short the disease. Each case will of necessity require skilled treatment to treat the special complications as they arise.

NOTES
ON
SOME GERMAN UNIVERSITIES.

By WALTER K. SIBLEY, M.B.Camb.

I.—THE UNIVERSITY OF STRASSBURG.

(Continued.)

Examinations: Maturität, Physikum, Candidatus Medicus, Staats-Examen. Lectures: Scholarships.—Title of Doctor.—Public Speaking.—Assistants.

The system of examinations in Germany is simple, there being but one qualification given by the State. The examinations for this are held in all the universities, and are practically the same throughout the country. A student commences medicine after passing his final school examination, the *Maturität*, which he usually does between the ages of 18 and 21. He then joins some university, after having matriculated, that is, paid a small fee and filled up some papers of the university in which he intends to study.

There are two semesters, or terms, every year, a winter and a summer. After four semesters a student generally goes in for his first examination in the *Physikum* or *Vorprüfung*, in anatomy, physiology, physics, chemistry, botany, zoology, and mineralogy. The examination is entirely *vivâ voce*, lasting some three hours, abont half an hour being devoted to each subject. In this examination no papers are written, nor is there any practical work; thus, for instance, in anatomy no parts or even bones are shown. Although a student is supposed to take all the subjects at once, it appears possible to take most of them separately. If he is plucked in any subject, he takes this up again after an interval of at least six weeks, unless he fail in anatomy or physiology, in which case he must take the whole examination again.

Until a student has passed this examination, he devotes the whole of his time to the subjects set, and does not trouble himself about clinical work. Having passed this the student, who before was designated as *Studiosus Medicus*, is now *Candidatus Medicus*, and a student, who has passed his *Physikum*, is much offended at being addressed as "student" instead of "candidate," and he has the latter title printed on his visiting cards.

A candidate now prepares himself for his final examination, working in the various laboratories and hospitals, in which, generally towards the end of his time, he becomes *amanuensis* (clerk or dresser). This post he holds for a month, but he may occasionally hold it for two months, and may, of course, be *amanuensis* first in the medical and then in the surgical wards, or *vice versâ*.

The student goes to lectures or not, as he likes. He has to take out and pay fees for definite courses, but no record is kept of his attendance, nor has he periodical examinations or prize examinations unless he is one of the holders of scholarships, who have to do satisfactorily in periodical examinations in order to retain them. Thus, if a candidate holds a money scholarship and ceases to keep up his work, the scholarship is withdrawn—a very good plan, for we so often see in England men with scholarships obtained upon first commencing their curriculum who never do good work afterwards, the scholarship holding good for three or four years without any conditions as to what use the student makes of it.

Some nine semesters, that is, four and a half years after commencing medical studies, or two and a half years after passing the first examination, a candidate may present himself for his final or *Staats-Examen*, which consists of the following subjects, each forming a part or section by itself:—1, Anatomy; 2, Physiology; 3, Pathological Anatomy and General Pathology; 4, Surgery and Ophthalmoscopy; 5, Medicine; 6, Midwifery and Gynaecology; 7, Hygiene.

It is possible for a candidate to pass in all these sections in four months, but most take six months over it, and each consists of written, practical, and oral parts. Each section is done separately, and a candidate must finish one section before he proceeds to the next. As each section takes about two weeks, the candidate often has to wait some days between the various sections. We will proceed to give a condensed programme of the various parts of the *Staats-Examen*, together with an outline of the method of conducting the examination itself.

I. *The Anatomical Examination.*—1. To dissect out one of the chief cavities of the body, and to demonstrate the parts and relations, or to expose and describe topographically a region of the trunk or of an extremity. 2. To demonstrate one of the anatomical preparations dissected by himself, and then to give a disquisition upon a subject from osteology, and also one from the digestive, nervous, or vascular systems. 3. To prepare and explain a microscopical anatomical preparation, and to mount a histological one.

II. *The Physiological Examination.*—To discourse upon two given physiological subjects.

III. *The Pathological Anatomy, and General Pathological Examination.*—1. To make a *post-mortem* examination, and to write a description of the same. 2. To describe one or more pathological anatomical preparations, and then to discourse upon a subject from general pathology, and from pathological anatomy.

IV. *The Surgical and Ophthalmoscopical Examination.*—This consists of four parts, three in the surgical, and one in the eye clinic. A. 1*a*. To examine in the presence of the examiners, on two successive days, a patient, and to state the general outline of the case, together with a plan of treatment, and to record the case at once in one of the books; to write at home on the same day a critical essay on the case, which is to be given to the examiner the next morning. 1*b*. For the next seven days to visit the patient at least twice daily, and to write out a clinical journal of the case with notes as to progress and treatment. If the patient should die in the meantime, he must be present at the *post-mortem* examination, and write out the results. During these days he is also examined on other cases. 2. To give a disquisition on a point of operative surgery, and to discuss orally the value of some general method; to perform an operation on the body, together with ligature of an artery, and to show his knowledge of the instruments. 3. To give a disquisition on the bones and dislocations; to indicate the procedure on the dummy, and to bandage according to the rules of the art. B. To examine an eye case, to write it out fully and finish it at home, to watch and treat the case under the direction of the examiner, and to note the progress of the case for three days; also to be examined in other eye cases.

V. *The Medical Examination.*—1*a* and 1*b*. The same as in the *Surgical;* he is also examined in diseases of children and the nervous system. 2. To write a discussion on some medicine, and orally to give the maximal doses of given drugs.

VI. *The Midwifery and Gynæcological Examination.*—1*a*. To examine and attend a woman in labour in the presence of one of the assistants, to state the prognosis and probable course of events, and within twenty-four hours to write a critical essay on the case. 1*b*. To visit the patient for the next seven days, twice daily, and to note the progress of the woman and child; during this time to show a general knowledge of pregnancy and diseases of women, and in case of the death of the patient to write out an account of the *post-mortem* examination. 2. To show a knowledge of the operations, and to diagnose the presentations on a dummy.

VII. *The Hygiene Examination.*—To discuss orally two given subjects.

Having passed these two examinations, the *Physikum* and the *Staats-Examen*, he is a qualified practitioner, and entitled to call himself *Praktischer Arzt*.

If a medical man wishes to become *Doctor*, he must pass another examination for this degree, which examination is not so hard as the *Staats-Examen*, but costs more money; for this he has a thesis to write. Here again he can take his M.D. in whatever university he pleases, not necessarily in the same where he has passed his final examination. This is usually done after the *Staats-Examen*, but in the universities of Prussia he can do it before if he wishes.

The *Staats-Examen* takes place, as we have seen, in the various universities, and generally the professors of the same universities are the examiners; but this is not necessarily so, the examination itself having nothing whatever to do with the university, but with the State. It is thus fairly uniform in severity.

It is quite different with the degree of *Doctor*, which is given by the university under conditions agreed upon by the several universities separately, the main item for the degree being a thesis which is supposed to consist of original work; but here the boundaries of original work are very broad. Thus the thesis often con-

sists of some statistical matter or the like. Having written a thesis, he must get one of the professors of the university to pass it; the candidate must then get it printed at his own expense, and a copy has to be sent to every university throughout Germany. The rest of the examination is generally purely formal, and consists of a short friendly discussion over the thesis.

The fee for the degree varies in the different universities from 300 to 500 marks (£15 to £25), and the cost of printing the thesis adds about another 200 marks, but this may be often considerably lessened or even avoided when it is accepted by one of the various medical journals, and therefore printed by them.

Special arrangements are made by the different universities for foreign medical men wishing to take their degree, the two fixed items being the fee and the thesis.

In Leipzig there appears to be a special arrangement by which foreign practitioners can do the *Staats-Examen* and *Doctor-Examen* together. The M.D. degree in itself without the *Staats-Examen* is no qualification, and the possessor of it cannot call himself *Arzt*.

The striking feature of the German examinations as compared with ours is the absence of written answers to set questions. A list of short questions to be answered on paper is unknown here, not only in the universities but also in the elementary schools. The examinations are almost entirely oral, nor do they consist of yes or no answers to catchy questions, where the number of correct answers given is in proportion to the good luck of the candidate.

Whatever are the failings of a German student, he undoubtedly learns to speak—a faculty which is sadly conspicuous by its absence in the majority of our students; in the examinations he has to discuss or speak upon a given subject for about half an hour, and this he has to do in every section of the examination, though, of course, he may be interrupted and questioned by the examiner in the middle of his speech. The result of this training is that every medical man in Germany can speak, and generally does upon every possible occasion. I am sure that this preliminary training in speaking would, if introduced to a greater degree into our teaching, be exceedingly beneficial. The system we often saw pursued in some of the wards in Paris struck us as very good; the professor, his intern and externs (assistant and clerks), would separately examine a case and give a short discussion upon it as to signs, diagnosis, and treatment. This would be gone over in turn, first by the clerks, then by the assistant, and afterwards the professor would criticise both, each giving his reasons for diagnosis and for treatment. This is done upon every new case admitted into the hospital, so that every clerk becomes well accustomed to discuss cases at the bedside with his colleagues and his superiors. But I believe this principle may be carried too far, so that in after-life, when once started upon a subject, the individual never knows when to stop. We have often observed that it is very hard to get a short, concise answer to a simple question out of a German. He must always make a small speech upon it, and, although this must be very good for the memory, it is often burdensome to the hearer. Thus, in asking a definite question we can obtain no answer without first hearing a few pages of some textbook practically repeated by heart; we noticed that many of the senior students were unable to give an opinion upon any given case, but were most fluent in particulars of cases of a somewhat similar nature that they had read of. Here speaking aloud is carried somewhat too far, while with us it is completely neglected. Advanced as the Germans are in most of their systems of education, none of the universities or examinations are as yet open to women. Women here are still treated as inferior animals, and debarred from most of the higher intellectual paths open to the other sex.

LIST OF AUTHORS AND OTHERS WHO HAVE PRESENTED BOOKS TO THE LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

FIFTH LIST.

The following books have been presented by their respective Authors.

ILLINGWORTH (C. R.). The Abortive Treatment of Specific Febrile Disorders by the Biniodide of Mercury. 1888.
JACOBSON (W. H. A.). The Operations of Surgery. 1889.
MITCHELL (Dr. Kate). The Drink Question: its Social and Medical Aspects. 1889.
MOORE (Norman). Visceral New Growths; Bradshaw Lecture. 1889.
PLAYFAIR (W. S.). A Treatise on the Science and Practice of Midwifery. 5th American Edition, from 7th English Edition. 1889.

Presented by THE ASSOCIATION FRANÇAISE POUR L'AVANCEMENT DES SCIENCES.

COMPTE RENDU DE LA 16ME SESSION, TOULOUSE. 2 vols. 1887.
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THE INDIAN MEDICAL JOURNAL. 1882. 1889.

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Presented by ERNEST HART, Esq., London.

ARMY MEDICAL DEPARTMENT, REPORT FOR 1887. 1889.
BERNTHSEN (A.). A Textbook of Organic Chemistry. 1889.
BOSTON GYNÆCOLOGICAL SOCIETY (Transactions). Vol. I. 1889.
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———— Memoirs and Memoranda in Anatomy. Vol. I. 1889.
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FINLAYSON (James). An Account of the Life and Works of Maister Peter Lowe. 1889.
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HAMILTON (J. B.). Enteric Fever in India. 1888.
HUCHARD (Henri). Maladies du Cœur et des Vaisseaux. 1889.
HUGHES (D. E.). Compend of the Practice of Medicine. 3rd Edition. 1888.
IRELAND (W. W.). Through the Ivory Gate. Studies in Psychology and History. 1889.
JAMES (Prosser). A Guide to the Alterations in the British Pharmacopœia of 1885. 3rd Edition. 1889.
KINKEAD (Professor R. J.). A Guide for Irish Medical Practitioners. 1889.
KLEBS (Dr. E.). Die Krankhaften Storungen des Hauts und der Zusammensetzung. 1889.
LAW (D. J.). Captain Lobe; a Story of the Salvation Army. 1889.
LEIDY (Joseph). An Elementary Treatise on Human Anatomy. 2nd Edition. 1889.
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LYONS (F. A.). Translation of L. von Lesser's Surgical Emergencies. 1883.
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PORTER (Alex.). Diseases of the Madras Famine of 1877-78. 1889.
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ZIEGLER (Professor E.) Beiträge zur Pathologischen Anatomie. Band IV. 1888

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MARTIN (H. S.). Johns Hopkins University. Studies from the Biological Laboratory. November, 1889.
MEYER (Dr. Hermann von). Der Klumpfuss und seine folgen für das ubrige Knochengerüst. 1888.
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RUFFER (M. A.). Experimental Investigation into the Nature of the Disease produced by the Inoculation of Bacillus Pyocyaneus. 1889.
WEBER (A. S.). Traitement par l'Électricité et le Massage. 1889.
WOOLDRIDGE (L. C., the late). The Coagulation Question. 1889.

Presented by the LEWIS MEMORIAL COMMITTEE.

PHYSIOLOGICAL AND PATHOLOGICAL RESEARCHES OF THE LATE T. R. LEWIS. 1889.

Presented by Messrs. MACMILLAN and Co.

FOSTER'S TEXTBOOK OF PHYSIOLOGY. 2 vols. 5th Edition. 1889.

Presented by J. C. B. MOHR, Freiburg.

CLOETTA. Lehrbuch der Arzneimittellehre. 6 Aufl. 1889.
VIERORDT. Echinococcus. 1886.
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Presented by the NEW SYDENHAM SOCIETY.

LEXICON OF MEDICINE AND THE ALLIED SCIENCES. Part XVI. 1889.

THE ANNUAL MEETING OF THE ASSOCIATION AT BIRMINGHAM.

THE Mayor of Birmingham has taken occasion officially to express to the Executive Committee of the forthcoming annual meeting, of which Dr. W. F. Wade is Chairman, the great interest which he takes in the Association, and has indicated his intention to invite it to a *conversazione* on Wednesday evening, July 30th, in the Council House and Art Gallery, unless prevented by the assize arrangements, and, in that case, in the Town Hall.

ASSOCIATION INTELLIGENCE.

COUNCIL.
NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 15th day of January next, at 2 o'clock in the afternoon.

The following Committees will also meet:—

Tuesday, January 14th, 1890.—Branch Organisation Committee, 3.0 P.M.—Premises and Library Committee, 4.0 P.M.—Arrangement Committee, 5.0 P.M.—Proxy Voting Committee, 6.0 P.M.—*Wednesday, January 15th, 1890.*—Journal and Finance Committee, 11.0 A.M.

January, 1890. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890.
ELECTION OF MEMBERS.

MEETINGS of the Council will be held on January 15th, April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 27th, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting of the session will be held on Thursday, January 16th, 1890, at the Hackney Town Hall, at 8.30 P.M. Dr. Brodie Sewell, late President of the Branch, will preside. The evening will be devoted to the reading and discussion of papers, not exceeding ten minutes in length, by members of the District. Members proposing to read papers are requested to communicate as soon as possible with the Honorary Secretary, J. W. HUNT, 101, Queen's Road, Dalston, N.E.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, January 31st, at 3.15 P.M., in the Radcliffe Infirmary. Notice of papers to be read and cases shown, etc., should be sent to W. LEWIS MORGAN, Honorary Secretary, 42, Broad Street, Oxford, on or before January 17th.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital, on Thursday, January 30th, at 4 o'clock P.M. Gentlemen proposing to read papers, show cases, etc., will communicate as early as convenient with JOHN W. BYERS, M.D., Honorary Secretary, Tower Crescent, Belfast.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

A MEETING of this Branch was held at Birmingham on Thursday, December 12th, Mr. D. C. LLOYD OWEN, President, in the chair.

New Members.—The following members of the Association were elected members of the Branch: Messrs. George Heaton, Samuel Nicklin, J. R. Ratcliffe, and Christopher Martin.

Dr. Rentoul's Proposals.—The report of the committee appointed to consider Dr. Rentoul's proposals was received and adopted.

The scientific proceedings will be found at p. 80.

NEW SOUTH WALES BRANCH.

THE eighty-sixth general meeting of this Branch was held in the Royal Society's Room on Friday, November 1st, 1889. Dr. FIASCHI, the President, was in the chair, and twenty-one members were present. The minutes of the previous meeting were read and confirmed.

New Members.—Dr. TRINDALL, of Helensburgh, was elected a member of the Branch and Association.

Communications.—The PRESIDENT read a paper on a case of Goître treated by Electrolysis, for Dr. MARANO, who was unavoidably absent.—Mr. G. T. HANKINS read some notes on Wind Instruments, their relation to Health and Disease, with Special Reference to Phthisis and Emphysema of the Lungs, with demonstration and exhibits. A discussion ensued, in which Drs. SCOT SKIRVING, BEITH, O'REILLY, JENKINS, and FIASCHI took part.—Dr. CAMPBELL WILLIAMS read notes of a case of Inguinal Colotomy, which was discussed by Drs. WORRALL, HANKINS, and WM. CHISHOLM.

Notices of Motion.—The following notices of motion were read:—1. That a committee be appointed to explain to newly arrived medical men who intend practising in New South Wales the laws and ethics regulating medical conduct in the colony. 2. That such committee seek the assistance and co-operation of any delegates commissioned for the same object by the sister medical assembly in Sydney.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE third meeting of the session was held, by the invitation of the Medical Superintendent, Dr. Robinson, at the Infirmary, Bancroft Road, on December 19th. The chair was taken by Dr. ALEXANDER GRANT.

Cases.—After the transaction of the usual formal business, Dr. ROBINSON showed a number of cases in the wards of the Infirmary, including Osteitis Deformans, Myxœdema, Locomotor Ataxy,

Alcoholic Paralysis, Spastic Hemiplegia, Spastic Paraplegia, Athetosis, and others.

Votes of Thanks.—Votes of thanks to Dr. Robinson and Dr. Grant brought an enjoyable meeting to a close.

BORDER COUNTIES BRANCH.

THE winter meeting was held at the County Hotel, Carlisle, on December 20th. In the absence of the President, Dr. Barnes occupied the chair.

Proposed Medical Service.—The discussion upon Dr. Rentoul's resolution will be found at p. 107.

Communications.—Dr. BARNES read a paper on Cases of Severe Local Effects following the External Application of Arnica.—Dr. LOCKIE showed a Renal Calculus removed by Dr. Maclaren, and gave particulars of the case.—Dr. DEVLIN showed the Cysts removed from a Case of Double Ovariotomy by Dr. Maclaren.—Dr. LEDIARD showed the following: 1. A patient with Skin Disease characterised by large vesicles on the dorsum of the fingers of both hands; he called it hydroa. 2. A child, aged 7, whose knee had been treated by scraping out the Diseased Joint; the joint was firmly ankylosed, and the limb was not shortened. Dr. Lediard also showed the following specimens: 1. An Extensive Epithelioma of the Lower Lip, recently removed, with photograph taken the day after operation, showing the way the new lip was formed. 2. A Cast of an Elbow-joint from a case of Locomotor Ataxy, which had existed for seven years. Various other joints of the body were affected with Charcot's disease. 3. A Cystic Sarcoma of the Muscles of the Leg in a lad aged 10, which had been amputated. Recovery ensued, but it was believed that the left lung was now the seat of secondary deposit. 4. A Spindle-celled Sarcoma from the parotid region of an infant aged 4 months. The tumour was large, and had grooved the ramus of the jaw; a portion of the parotid gland was spread over the growth. Recovery followed removal. 5. A Parovarian Cyst removed from a woman aged 41; the cyst contained thirteen quarts of clear fluid. Recovery followed operation. Dr. Lediard also showed his new Colour Test for Railway Purposes, demonstrated its use, and explained the objections raised to the various methods of testing at present employed.

Dinner.—After the meeting the members dined together in the hotel.

SPECIAL CORRESPONDENCE.

PARIS.

Salts of Copper in Pulmonary Phthisis.—Injections of Carbolic Acid.—Pulmonary and Laryngeal Phthisis.—Bacilli Inoculation.—Preserving Blood.—General News.

M. CHARLIER, the author of the *Specific Treatment of Pulmonary Phthisis*, regards salts of copper as the specific remedy for that affection. He even recommends employing this substance in cases in which the diagnosis is not actually determined, as the success of the treatment greatly depends on its being employed at an early stage of the disease. The doses are from 5 to 15 centigrammes. He strongly recommends a nourishing diet and tonics during this treatment.

Dr. Eugène Fairre, who has brought out a work on *Hypodermic and Parenchymatous Injections of Carbolic Acid*, considers that alcohol should never be present in pure carbolic acid solutions. Glycerine and camphor, if mixed with the solutions, render the injections less painful. The antithermic action of these injections is particularly evident in traumatic fever consecutive to operations. In erysipelas, phlegmon, boils, malignant pustules, and elephantiasis subcutaneous carbolic acid injections have a very beneficial action.

Dr. Liebermann's work on the *Etiology and Treatment of Pulmonary and Laryngeal Phthisis* proves the author to be an adversary of the microbian theory as respects pulmonary and laryngeal phthisis. He attributes these affections to the inflammation of the pneumogastric nerve. Unfortunately his opinions are not supported by experimental demonstrations, and from his anatomical and pathological descriptions it is evident that he has taken secondary lesions for pathogenic deterioration.

In a note read before the Biological Society, M. Courmont states that the filtered cultivations of bacilli, when injected in the proportion of 1 cubic centimètre to 2 lbs. of an animal, do not produce death, but render the animal liable to succumb to tuberculosis later. Experiments have proved that one healthy animal is killed by the primary inoculation to sixteen which succumb to secondary inoculation.

Before the same Society M. Malassez stated that he has tried to preserve blood by mixing it with syrup. He obtained a delicate preparation of hæmoglobin, in which the bands characteristic of the reduction could be detected seven or eight years afterwards.

The *Therapeutical Annual* for 1888, which contains a preface on the progress of therapeutics in 1888, by Dr. Dujardin-Beaumetz, gives a short description of all the new remedies mentioned in the *General Bulletin of Therapeutics* for the same year.

M. Cornet, who has studied the treatment of epilepsy, publishes a work on the subject, from which it appears that bromide of gold has a beneficial action on certain epileptic patients. Vertigo, in epilepsy, will diminish or even disappear under the influence of bromide of camphor, and picrotoxine, in doses of $1\frac{1}{2}$ to 2 milligrammes has a beneficial effect in epileptic attacks.

M. Leudet has investigated the question of the transmission of phthisis between married people. Out of 112 widows or widowers of tuberculous persons only 7 contracted tuberculosis, and these appeared to have a predisposition for the disease. Of 80 married couples, only 27 had children who became tuberculous. He concludes that the instances in which tuberculosis proves contagious among the well-to-do classes are very rare.

M. Vallin, at the Academy of Medicine, suggested that a commission should be named to ascertain the influence of heredity and contagion in propagating tuberculosis, by obtaining statistics from all the physicians in France. By this means effective prophylactic measures may be discovered.

M. Lagneau stated that the greatest number of deaths in Paris are due to tuberculosis. The number of youths exempted from military service on account of disease of the chest is larger in cities than in the country. Fresh air constantly renewed is the best means of checking the development of tuberculosis.

MANCHESTER.

Resignation of Office by Principal Greenwood.—Royal Infirmary and St. Mary's Hospital.—Cremation Society.—Owens College Medical School.

EVERY old student of Owens College will regret to learn that Dr. Joseph G. Greenwood, Principal of the College, has, for reasons of health, deemed it advisable to resign the office of Principal of the College. Under Dr. Greenwood's fostering care, during a period of nearly forty years, the college has grown from small dimensions to magnificent proportions. Everyone regrets the retirement of Dr. Greenwood. He has been succeeded by Professor A. W. Ward, Vice-Chancellor of Victoria University and Professor of History in Owens College, an appointment which has met with universal approval inside and outside the college.

At the recent monthly meeting of the Board of Management of the Royal Infirmary, a letter was read from the Chairman of St. Mary's Hospital, suggesting that a portion of the land of the infirmary facing Portland Street should be used for the erection of the enlarged St. Mary's Hospital which it is proposed to build. The proposal is that the two hospitals should be sister hospitals, each strictly maintaining its own individuality. St. Mary's asks only the site. The matter was referred to the Infirmary Committee.

The Manchester Cremation Society have approached the Parks and Cemeteries Committee of the Town Council with a view to securing a site in the Southern Cemetery for the erection of a crematorium.

The Christmas recess at Owens College began on December 20th, and lectures were resumed on Tuesday, January 7th.

CORRESPONDENCE.

THE INFLUENZA EPIDEMIC: REQUESTS FOR INFORMATION.

SIR,—The epidemic of influenza appears at length to have reached this country, and I am engaged in collecting for the Medical Department of the Local Government Board information which may help to elucidate the unsettled questions relating to the etiology of this disorder. I trust to your kindness to be

allowed, through your columns, to ask for the assistance of your medical readers towards this end.

The points on which I especially wish for information are:

1. The dates of the earliest occurrence in their respective localities or practices of cases of influenza presenting distinctive characters (among which I may especially mention marked nervous depression, out of proportion to the gravity of the catarrhal or other local symptoms, and not infrequently commencing suddenly), or of such as were the precursors of an extended prevalence of similar cases.

2. Cases illustrating the introduction of the disease by importation from elsewhere, as from abroad, from other localities, or in the case of institutions from outside; or showing its mode of propagation among persons and animals, by infection or otherwise; or, on the other hand, cases in which its origin in imported infection could apparently be excluded, for example, in ships at sea.

3. Cases in which the length of the incubation period of the disease could be fixed.

I shall be greatly obliged to any of your readers who may favour me with information on any of the above points. Communications may be addressed to me as below, leaving the postage unpaid.—I am, etc.,

H. FRANKLIN PARSONS, M.D.,
Medical Inspector Local Government Board.

Local Government Board, Whitehall, January 6th.

SIR,—Will you permit me, on behalf of the Committee appointed by the Clinical Society of London to draw up a report on the duration of the period of incubation and of infectivity in infectious diseases, to ask for notes of cases observed during the present epidemic which may throw light on the length of these periods in epidemic influenza? The transmission of this disease by infection has been denied, but it is probable that in a certain proportion of cases this is the effective means of propagation.

Cases in which an attack has followed at a definite time after short contact with a previous case would be specially valuable, and it is possible that the earliest cases in a locality may afford evidence of this kind. Notes of such cases will be gratefully received by either of the Honorary Secretaries of the Committee—Mr. Shirley Murphy, 41, Queen Anne Street, W., or yours, etc.,

25, Old Burlington Street. DAWSON WILLIAMS.

SIR,—If the advocates of dual notification have any faith in their measure, surely they ought not to hesitate to put it in force before the influenza has obtained a thorough hold of the population. The disease is clearly infectious, and in some districts abroad it has been shown to attack nearly 50 per cent. of the population, and there are several fatal cases. The poison is said by some to be diffused through the air; but this same thing was said about cholera when we were in ignorance as to its origin. By some it is said to be dengue fever.—I am, etc.,

Surbiton. F. P. ATKINSON, M.D.

SIR,—Might I, through your columns, direct the attention of the profession to the remarkable influence which, in my experience, salicin has in counteracting the symptoms and arresting the course of the disease? Given in doses of 20 to 30 grains every hour or four or five hours, and then every two or three hours, I have found to abolish the symptoms and allay the fever so rapidly that the patient enters on permanent convalescence generally within twelve, and always, so far as my observations have gone, within twenty-four hours of the commencement of such treatment. He must, of course, be in bed and be properly nourished.

Salicylate of soda I have not tried, as it might not be safe to give that drug in full dose in a disease which has marked prostration for one of its characteristic features. Salicin is quite safe. It should be continued for a week three or four times a day to prevent relapse.—I am, etc.,

Cadogan Place, January 4th. T. J. MACLAGAN.

NITRATE OF PILOCARPINE IN NERVOUS ATTACKS.

SIR,—As I have received some letters asking me the dose of nitrate of pilocarpine to be prescribed in cases of infantile fits of various kinds, will you allow me to state: For an infant a few months old I begin with a hundredth of a grain three times a day, and gradually increase to a twelfth of a grain, which dose I have frequently given to a child 1 year old. I never inject it subcutaneously, and do not think the hypodermic method a good one in infancy. The rectum ought to be used more frequently in infantile therapeutics and diagnosis.—I am, etc.,

Harley Street, W. ANGEL MONEY.

THE NEW SYDENHAM SOCIETY.

SIR,—The Council of the New Sydenham Society will feel much obliged if you will allow me a brief space in the pages of the JOURNAL to explain to our members and to the profession generally the somewhat peculiar position in which we find ourselves at the beginning of the New Year.

We have three books just ready for issue which we shall feel obliged to hold back for some months, unless we can make a considerable addition to last year's income. Our translators and printers are, in fact, ahead of the subscription list. We have had a prosperous year, our income having been nearly £500 more than in the previous one, and we have already issued an average number of books.

What I wish to make definitely known is that if a moderate number of new members could be immediately obtained we could, within the current month, issue the second volume of Henoch on *Diseases of Children* for the current year, 1889-90. If this cannot be done, this volume, as well as the two others now ready, must wait awhile, and must count in the series for 1890-91. As the volume is now in Mr. Lewis's hands, it seems to the Council a great pity that its issue should be deferred, and we confidently hope that an effort will be made by our members and others to obtain the necessary funds. Two hundred new members, subscribing each for two years, would secure this desirable result. The works which we have already issued for 1889 are the following: *Charcot's Clinical Lectures on Diseases of the Nervous System*, vol. iii; *Atlas of Illustrations of Pathology*, Fasciculus vii (containing Urinary Calculi, Enlarged Prostate, etc.); *Cohnheim's Lectures on General Pathology*, vol. ii; *Lexicon of Medicine and the Allied Sciences* (Based on *Mayne's Lexicon*), by Henry Power, M.B., and Leonard W. Sedgwick, M.D.; Part xvi.

If, as I suggest, new members will subscribe for two years at once, they will obtain for 1888 (in addition to the above for 1889) the following four: *Spiegelberg's Textbook of Midwifery*, vol. ii; *Lexicon of Medicine and the Allied Sciences*, Part xv (completing vol. iii); *Henoch's Lectures on Diseases of Children*, vol. i; *Cohnheim's Lectures on General Pathology*, vol. i.

Mr. Lewis, our agent, will have pleasure in giving details as to the terms on which the first volume of *Spiegelberg* and the previous issues of the *Lexicon* can be obtained separately.

During the year we have printed a full list of our members and of those who act for us as local secretaries; this list can be had on application. It will be seen that in many large towns we have very few members, and that not a few have no local secretary. The Council will be very glad to receive the names of any who are willing to act for us in the latter capacity. Our experience is that the success of the Society depends, in a very large measure, upon the activity of our local secretaries.

I may just add, in conclusion, that our *Lexicon of Medical Terms*, the somewhat slow progress of which some years ago was regarded with discouragement by our members, is now well advanced into its fourth volume, and may be considered to be at least two-thirds complete. As to its excellence, I believe there are no two opinions.—I am, etc., JONATHAN HUTCHINSON,

January 7th. Hon. Sec. New Sydenham Society.

LEPROSY IN ZULULAND.

SIR,—I notice that in the JOURNAL of October 12th it is stated that leprosy is very prevalent in Zululand. From inquiries made and personal observation as a resident in different parts of the country for a year and a half, I think the disease is not so generally prevalent as would be implied from this statement. It certainly does exist amongst some families in a few districts, but it is difficult to get the patients under personal observation, because they are afraid of compulsory segregation. It seems not to spread, but to remain in particular families, because the natives of other families will not knowingly associate or intermarry with them.

The real object of this communication is to mention a few of the customs of the Zulus bearing on the etiology of the disease. Their food is almost entirely vegetable—most mealie meal; a cow is killed only on grand occasions. The whole family eat out of one common dish, and use their fingers instead of spoons. They never eat fish of any kind. They wash their persons frequently, but their clothes—what little they wear—only occasionally. The fact

that they do not eat fish and still have leprosy seems to indicate that fish diet is not the sole cause of the disease.—I am, etc.,

SURGEON M.S.

THE WORK OF THE METROPOLITAN ASYLUMS BOARD.

SIR,—May I say a word in reference to your comment on my recent paper at the Central Poor-law Conference? It is true that I advocated the transfer of the sanitary work of the Asylums Board to the County Council; but in return I proposed that the County Council should surrender to the Asylums Board, or rather to a remodelled central Poor-law authority, the control of the lunatic asylums. I also suggested that unquestionably the administration of the vaccination laws ought to be transferred from the guardians to the new district councils.

May I also—having had for several years the honour of a seat on the Metropolitan Asylums Board, during almost the whole of which time I have been a member of the Small-pox Hospital Committee—thank you for the testimony you bear that its work has, "on the whole, been admirably performed." My proposal for a transfer of the infectious hospitals to the County Council was founded on a desire for simplicity and symmetry of administration, which, in the long run, must mean economy and efficiency, and certainly not on any belief that the County Council could forthwith better the administration of the Asylums Board.

—I am, etc., W. M. ACWORTH.

West Dulwich, January 6th.

ENGLISH AND FOREIGN HEALTH RESORTS.

SIR,—Dr. I. Burney Yeo's comments on Sir Edward Sieveking's communication to the JOURNAL of December 21st would seem to require some further remarks, touching as they do upon a subject of deepest moment both to medical men and the public.

Dr. Yeo's instructive paper is prefaced by a paragraph which appears to convey that, in the recent discussion which has been going on in the lay press, he and other authorities upon climatology and health resorts have been severely criticised for recommending certain patients to winter out of these islands. That this may have been so I do not deny; but such censure has probably been passed in ignorance, and it forms no part of the case for the home health resorts. Indeed, so far is this from being so that those who, like myself, advocate the advantages of home seaside resorts, would, in nine cases out of ten, be quite ready to accept Dr. Burney Yeo's *ipse dixit* upon the question of the most suitable climate for any given patient, and it is not against himself or any other authority on the subject that the severe criticisms to which he feelingly alludes have been passed. These criticisms, as I read them, have been passed, and often justly passed, not upon Dr. Burney Yeo and other "fashionable London physicians," but upon those in the rank and file of the profession who confidently recommend places concerning the climatology of which they know but little, and that little by hearsay; and, further, the evil which undoubtedly exists would be mitigated, if not entirely dispelled, if patients, before being packed off abroad, were sent to consult one of the said fashionable London physicians who, like Dr. Burney Yeo, have made a special study of climatology.

What is claimed for the health resorts on our south-west coast, such as Falmouth and Sidmouth and several others, is not that they are superior or even equivalent to the Riviera in matters purely climatological, but that the difference in climate is, in a large number of cases, counterbalanced, and more than counterbalanced, by other considerations. These may be briefly stated thus:

1. Distance from home.—A very important question to business men, to whom it is a serious matter to withdraw themselves from ready access to their representatives, and also to others who do not wish to be cut off from easy communication with their friends and relatives. There is, further, the long journey, which nearly always proves excessively fatiguing even to those invalids who possess the means to command every luxury in travelling.

2. Expense.—This requires no amplification; but it is, perhaps, well to mention that, as against the extortionate prices demanded abroad for food and accommodation, board and lodging during the winter months can be obtained at Sidmouth—and, I doubt not, elsewhere—in first-class hotels for the small sum of two guineas and a half per head weekly.

3. Home Comforts.—By this I mean the kind of food and cooking to which the invalid is accustomed, English servants and attendants, and, above all, English precautions against cold. All the precautions abroad are directed against heat, and bitterly cold east winds are not peculiar to these islands. Under this head it is well to recall the earthquakes, our immunity from which and from the fear of them adds materially to our comfort.

4. Sanitary Conditions.—Here the superiority of home stations is beyond dispute. Until quite recently there have been no reasonable precautions abroad to prevent illness from decomposing sewage, let alone the offence both to eyesight and to smell, and even now no one in his senses thinks of drinking water "raw" whilst on the Riviera, and the risk of infection from other sources is very far from being reduced to a minimum.

Finally, in comparing home with foreign health resorts during winter months only, a very important factor in climatological treatment is apt to be lost sight of, namely, the desirability of selecting places with an equable climate, more especially for such cases as are recommended to take up their permanent abode at a distance from our large centres.

In this matter I again claim superiority for our south-western stations, and I append, as interesting in this regard, the following table, given by my friend, Dr. Radford, of the mean temperature of each month for the last twenty years as taken at Sidmouth:

January	40.9°	February	42 2°	March	42.7°
April	46.4°	May	50.8°	June	56.7°
July	59.9°	August	60.2°	September	56.8°
October	50.8°	November	45.5°	December	41.4°

—I am, etc., LL. LEONARD B. WILLIAMS, M.B., Ch.M.

Sidmouth, December 30th.

THE FORCEPS—A DEATH TRAP.

SIR,—Last week I attended a healthy young primipara, assisting her when exhaustion was setting in with the forceps. My hands had been soaked in sublimate solution, and the forceps smeared with carbolised glycerine. The uterus contracted firmly, and there was no oozing after delivery. In two days fever, and there was no oozing after delivery. In two days fever, ending fatally, set in. I could not imagine how this patient became infected till I took the wooden handles off my forceps. Beneath the wood was a good coating of blood—dry, black, and dirty; there was plenty of the same stuff round the screws and in the screw holes; this, I think, explained the septicæmia. The traction expresses this poisonous stuff, liquefied by soakage, and from the hands of the doctor, notwithstanding the early sublimate soakage, the patient is poisoned. We have got to the time of day when the handles should be metallic, and of one piece with the blades. I put my handles in the fire, and when I put the blades in position for the future will put a towel round the flats to protect my hands.—I am, etc., SECALE.

CLINICAL TEACHING IN DUBLIN.

SIR,—Seeing a review of Dr. Nixon's handbook of hospital practice in the JOURNAL for December 14th, may I be allowed to offer some remarks on the clinical teaching in the Dublin hospitals?

One often hears, or used to hear, of the excellence of the clinical teaching in Dublin, but what are the facts? As far as I know there is no hospital in Dublin where a proper system of note-taking is carried out. At some of the hospitals students do take a few desultory notes in their own note-books, but there is no regular, methodical system of note-taking, such as obtains in the London hospitals. Students in Dublin are not compelled to take continuous systematic notes of the cases, and to enter them on the sheets, to be afterwards preserved in the hospital records.

I shall be scarcely believed by English medical men when I say that in no Dublin hospital, so far as I know, are there any notes of cases preserved, nor are there any pathological or *post-mortem* records. A history sheet hanging over a patient's bed in Dublin is unknown; such a thing does not exist. There is not even a record of the condition of the urine kept. The teaching in the hospitals is mainly bedside teaching, and as such is excellent; but what I maintain is that the students are not taught to be systematic and methodical in their note-taking and ward work. It is this they should be taught, and not why Dr. "So and So" thinks a patient has or has not tubercular meningitis.

In my opinion, this entire absence in Dublin of any clinical or pathological records may largely account for the fact that the Dublin School of Medicine has somewhat fallen from its high estate. Let any man compare the systems of clinical teaching as carried out at a London and a Dublin hospital. In the former the notes are kept, and thoroughly written up, by properly a

pointed clerks and dressers. In the latter they are either not written up at all, or are written anyhow and by anybody. When the clinical teaching in Dublin lacks all real thoroughness, is it at all extraordinary that the mortality at the Dublin pass-examinations should be so high, a point to which Dr. Kidd of Enniskillen calls attention in the JOURNAL for this week?

I have often heard medical men in Dublin say that the London hospital physicians and surgeons do not do as much clinical teaching as the Dublin men do. Perhaps not, but in London every student must of necessity take accurate notes of his cases, and he is, at any rate, taught to be systematic in his work. The Dublin student may or may not take notes of his cases just as he himself pleases, and the note-taking, such as it is, is done in a thoroughly slipshod and careless fashion.

IRISH SURGEON.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PERPLEXED.—"C.'s" engagement with the nurse only commencing on January 14th, "C." cannot enforce the contract before that time.

M.D. BRUX.—This degree, if obtained since June 30th, 1887, will not enable the holder to practise medicine in this country, as he would not be entitled to be registered under the Medical Acts.

DENTISTS AND SURGEONS.

M. L. S.—If a surgeon is duly registered under the Medical Acts he can practise dentistry and recover fees therefor. There is no legal objection to his putting up a name-plate and calling himself "Surgeon-Dentist."

FEES FOR EVIDENCE GIVEN BEFORE MAGISTRATES.

J. H. J. writes: On October 17th I was requested by the local policeman to attend and give evidence before the magistrates, at a distance of some twelve miles from my home. The case was one of stabbing, and after hearing my evidence the magistrates committed the boy to prison for three months. After a little time I made application to the clerk of magistrates for my fee; he replied that I was not entitled to any fee as the case had not been sent for trial to the assizes. I should like to know whether I can recover any fee, and to whom I should make application.

*** We can only refer to the Statute 29 and 30 Vict., c. 32, s. 1, under which it seems a magistrate may grant a certificate for payment of a witness examined in cases not committed for trial, and to which the attention of the clerk to the magistrates should be drawn.

DIVISION OF EXPENSES.

A. S. writes: A. and B. are in partnership, and interested in the practice, A. as to two-thirds and B. as to one-third share. B. has no house of his own but sleeps and has his breakfast at A.'s house, where he sees and dispenses for all his patients, sharing the consulting room with A. Will you kindly say what you consider a proper sum for B. to pay A. per annum?

*** The amount which should be paid by B. to A. should be one-third of the agreed rental value of the consulting room, and any other room used in receiving patients and dispensing, and in addition a proper sum for bed and attendance and partial board as lodger.

LICENTIATES OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

VENIS writes: Can a Licentiate of the Colleges of Surgeons and Physicians be called to account for keeping a dispensary in London, where the charge for medicine and advice is sixpence?

Would the College of Physicians of Ireland, for instance, consider such conduct compatible with the dignity of the profession?

*** Every candidate before being admitted a Licentiate of the King and Queen's College of Physicians in Ireland, subscribes a declaration in which he consents to surrender the diploma received from the College if he keeps open shop for the sale of drugs. He also solemnly and sincerely promises to endeavour to maintain the honour of the College, and engages not to endeavour to obtain practice or to attract public notice by unworthy means; further declaring that violation of any of the conditions specified in his declaration renders him liable, *inter alia*, to expulsion and surrendering of his diploma. If our correspondent furnishes the Registrar of the College, Dr. J. V. Moore, with proofs of any of its licentiates acting in opposition to the terms of the declaration, steps will doubtless at once be taken to put a stop to such conduct, and to punish the offender.

SCIENTIFIC EVIDENCE AT INQUESTS.

Dr. W. F. O'GRADY (Swinton, near Manchester) writes: As a rider to your article in the JOURNAL of January 4th, on "Scientific Evidence at Inquests," let me give my experience. I have been in practice here ten years, and hold a public appointment to a school numbering 800 souls; and during this time I have been connected with about twenty-five inquest cases, but have never once been summoned. At first I used to give the police officer a note, "to help him with his report," but I found the coroner used the notes as evidence, and invariably forgot to send my fee.

Last year I had a "railway case;" a woman was found dying on the line; she had marks of three distinct injuries occurring at different times: 1. A punctured wound extending for nearly two inches into the brain in the right frontal region; the instrument must have been withdrawn straight, as there was no laceration. 2. A lacerated wound of scalp extending from the forehead to the occiput, due to some sharp corner of the engine. 3. As she lay on her back on the line the coal box of the engine scraped the lower part of the body from the knees to the umbilicus and drew her petticoats over her face as she was found. In this important case, which was carefully watched by the Lancashire and Yorkshire Railway, and concerning which most varied rumours, as to suicide, murder, etc. were current, the policeman gave medical evidence.

Again, I was sent for to see a child who had been placed in bed perfectly well, but half an hour afterwards was found dead. The heart was beating so I used artificial respiration for half an hour, but to no purpose. An inquest was held, and after a very careful inquiry, costing the country about £4, twelve intelligent men brought in a verdict of "Found dead." Some scoffers would suggest that a *post-mortem* examination would explain satisfactorily in a majority of cases, but our coroner takes no notice of such. The gentleman has just been appointed coroner to the County Borough of Salford. At the above inquest the foreman—a public official and a very clever fellow—suggested that medical evideuce was desirable. "Yes," said the coroner, "but you see doctors are very chary of giving information unless they are paid for it."

M.B. writes: Your article on "Scientific Evidence at Inquests" brings to my recollection a case in my own experience. I was called to see a man who was supposed to be dying; I saw him five minutes before, apparently hale and hearty, speaking to a relation of his, and near his own room. However, when I arrived the man was dead, and to all appearance from heart disease. The verdict the coroner advised the jury to return was as follows: "Died from eating tinned salmon to his supper the night before." The other members of the family partook of the same, and none of them suffered in the slightest.

UNDERBIDDING.

W. H. writes: I have been resident in a small village for the last eleven years, and during that time I have been medical officer for it. Recently another medical man came to practise here, and when he had been but a few months, he made application to the local authority for the medical officership, stating that he would accept of the situation "at whatever they would like to fix." (*Verbatim.*)

I was altogether unaware that an application had been made, and accordingly S. D. was by a narrow majority appointed medical officer. After some correspondence with the Board of Supervision, the appointment was declared an informal one, and the local authority's proceedings were cancelled, while I was still held to be medical officer of the parish. Was S. D.'s conduct professional?

*** To our correspondent's simple and specific question, we reply that a more unethical procedure than that alleged to have been adopted by the practitioner in question could not well be—by which, moreover, he has laid himself open to severe criticism. It is by such and like proceedings and the practice of underbidding that, as we had occasion lately to remark, the public are not unnaturally led to undervalue and cynically criticise the profession of medicine.

POOR-LAW AND DISPENSARY MEDICAL OFFICERS.

H. F. writes: I am a parish medical officer, and had to officially report on a case where application had been made for parish relief. The patient was under the care of a dispensary surgeon (public). Meeting the surgeon I, out of courtesy, informed him that I had to visit his patient, and if he wished it would meet him in consultation. This he considered unnecessary. I visited and reported, but said nothing to the patient or friends as to diagnosis or treatment.

Upon his next visit the dispensary surgeon marked the patient's recommendation "transferred to parish," and so got rid of a non-paying patient, but saddled me with one. Was not that a mean requital for an act of courtesy, and should I not be justified in omitting to communicate with him in similar cases?

*** Provoking as the incident in question may have been to our correspondent, it is we think scarcely necessary to remind one innately ethically disposed, that even a recurrence of such, irritating though it be, would not justify him in omitting to fulfil his moral obligation to the profession (and alike to himself as a conserver of the true ethical principle), which in such and like cases devolves upon the interviewing practitioner. Need we add that the *morale* of the strictly ethical members cannot fail to exercise a more or less important influence over those who might be otherwise inclined.

NAVAL AND MILITARY MEDICAL SERVICES.

VARICOCELE AS A DISQUALIFICATION.

J. G. N. W. is informed that a small varicocele without pendency would not disqualify for admission to Sandhurst; the regulation disqualifying in recruits is, varicocele with unusual pendency of the testicle; of course a large varicocele, with or without pendency, would disqualify. A successful operation would remove the objection. We would advise him to consult some experienced military medical officer, who would give an opinion whether the varicocele in the case to which he alludes would disqualify without an operation; it is always a question of degree.

MEDICAL TITLES.

"M.S." regrets we did not approve of his suggested title, "Army Ambulance Corps;" there is no reason it should not have the prefix "Royal," as we suggested, it seems more expressive than "Medical;" he does not hesitate to affirm that the medical department has suffered much from ambiguity both in corps and grade titles. The old title, "Army Hospital Corps," was dis-

tinctly more expressive than that of the present "Medical Staff Corps." The title should distinctly express an army connection.

"MEDICUS" condemns the double title, and hopes it is not too late to induce the committee to change their recommendation on that point, in view of the feelings of the department so clearly expressed. He asks how are medical officers to be introduced and addressed in society? Will they be called Colonel-Major Dr.?

"JUSTITIA" says both he and his friends are much disappointed with the recommendations of the Committee on these points; why should medical officers, men of liberal and generally university education, be invariably placed under all other officers? He often feels humiliated to find his name in garrison circulars under those of striplings who were unborn when he was already serving his country. Solid rank and military titles are required, and nothing else will allay agitation. Meanwhile, intending recruits for the department should be warned against entering.

*** Medical officers are denied solid status and definite titles, first because the spirit of Junkerism and caste wants to keep them in a lower position, and to inflict humiliation on a profession they would fain consider inferior to their own. The same spirit more or less exists in all armies, but in the more progressive countries has been or is now being swept aside, and the just claims of medical officers recognised, and proper position accorded to them. Our own country will in time follow suit, but not until enlightened public opinion forcibly overcomes the narrow and selfish spirit which opposes such military reforms.

THE NAVY.

THE following appointments have been made at the Admiralty:—HENRY A. W. RICHARDSON, Staff-Surgeon to the *Asia*, additional, January 3rd; WILLIAM E. REDMAN, to be Surgeon and Agent at Bridlington Quay.

Surgeon PERCY BELLAMY BURY, M.B., C.M., died at Cambridge on January 1st, at the age of 34. His commission was dated February 26th, 1883. He was Surgeon of the *Myrmidon* during the operations in the Eastern Soudan in 1884-85, and had received the Egyptian medal and the Khedive's bronze star.

THE MEDICAL STAFF.

SURGEON-MAJOR WILLIAM CHARLES GASTEEN, M.B., has retired on retired pay. Entering the service as Assistant-Surgeon March 31st, 1868, he became Surgeon March 1st, 1873, and Surgeon-Major March 31st, 1880. He served in South Africa during the Zulu war in 1879, and in the operations against Sekukuni (medal).

Surgeon P. J. B. O'SHAUGHNESSY has resigned his commission, which was dated August 4th, 1883.

Surgeon R. E. MOLESWORTH, who is serving in the Bengal Command, is appointed to the civil medical charge of Ranikhet, in addition to his military duties, *vice* Surgeon-Major R. N. Mally, proceeded to England.

Surgeon H. V. DILLON, from half pay, to be Surgeon, *vice* W. B. Stokes, M.B., who has retired on temporary half pay. Surgeon Dillon, who is now restored to the establishment, retired on half pay February 28th, 1889.

Sergeant-Major J. BEACH, of the Medical Staff Corps, is appointed Quartermaster, with the honorary rank of Lieutenant, *vice* Captain A. Platt, retired.

A Royal Warrant has been issued to provide in certain cases for the retention of Surgeons-General beyond the age laid down for compulsory retirement. The Warrant states: "The appointment of Director-General of the Army Medical Department shall be for seven years, and the retirement of the other officers of the Medical Staff shall be compulsory at the following ages (except that if it should in any particular case be considered that the interests of the public service would be materially advanced by the further retention of a Surgeon-General on the active list, the age for the retirement of such Surgeon-General shall be extended to 62): Surgeon-General and Deputy Surgeon-General, 60 years; Brigade-Surgeon, Surgeon-Major, and Surgeon, 55 years."

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR R. COBB, Bengal Establishment, Civil Surgeon of Monghyr, is appointed to act as Civil Surgeon of Hooghly.

Surgeon-Major JOSEPH WILSON, M.D., Bengal Establishment, Officiating Civil Surgeon of Hooghly, is appointed to act as Civil Surgeon of Monghyr during the absence on deputation of Surgeon-Major R. Cobb.

Surgeon S. LITTLE, M.D., Bengal Establishment, Officiating Civil Surgeon of Umballa, is appointed to officiate as Superintendent of the Chenawan Central Gaol from November 4th, *vice* Surgeon H. J. Dyson.

Surgeon-Major T. E. L. BATE, Bengal Establishment, assumed charge of the Civil Surgeoncy of Delhi and Superintendentship of the lunatic asylum at that station on October 26th, relieving Surgeon G. F. Nicholson, transferred.

Surgeon G. F. NICHOLSON, Bengal Establishment, Civil Surgeon, is transferred from Delhi to Umballa, where he assumed charge of his duties on November 1st.

Surgeon H. J. DYSON, Bengal Establishment, Officiating Civil Surgeon, is appointed to officiate as Deputy Sanitary Commissioner, Punjab, from November 7th, *vice* Surgeon-Major J. O'Neill.

Surgeon-Major J. O'NEILL, Bengal Establishment, is posted to Kurnool as Civil Surgeon, and assumed charge on November 13th.

Surgeon-Major W. H. CADGE, Bengal Establishment, Superintendent of the Central Prison, on return from leave, is posted to the Central Prison at Agra.

Surgeon W. G. THOROLD, Bengal Establishment, on being relieved of the civil medical charge of Kheri, is appointed to officiate as Deputy Sanitary Commissioner, North-West Provinces and Oudh, Third Circle, *vice* Surgeon-Major G. Griffith, on deputation to the Second Circle.

Surgeon J. ANDERSON, Bengal Establishment, on being relieved of his duties of Officiating Civil Surgeon at Agra, is appointed to the civil medical charge of Kheri as a temporary arrangement.

Brigade-Surgeon C. SIBTHORPE, Madras Establishment, Professor of Surgery Madras Medical College, is appointed to act as Principal of that College during the absence of Brigade-Surgeon A. Porter, M.D., on furlough.

Surgeon-Major A. M. BRANFOOT, Madras Establishment, Superintendent of the Lying-in Hospital and Professor of Midwifery at the Medical College, is permitted to return to duty from furlough granted from February 24th last.

Surgeon M. A. T. COLLIE, M.B., C.M., Bombay Establishment, is appointed to act as Physician, European General Hospital, Bombay, in addition to his other duties, during the absence of Brigade-Surgeon A. N. Hojel. Surgeon Collie was appointed to act as Secretary to the Surgeon-General with the Government of Bombay, in addition to his own duties, from August 13th to October 14th, 1889.

The services of Surgeon-Major J. MCCLOGHRY, F.R.C.S.I., Bombay Establishment, are placed at the disposal of Government in the Civil Department.

Surgeon A. F. FERGUSON, Bombay Establishment, in medical charge of the 17th Native Infantry, has leave to Europe for one year on medical certificate.

Surgeon W. E. JENNINGS, Bombay Establishment, officiating in medical charge of the 7th Native Cavalry, is directed to officiate in medical charge of the 6th Native Cavalry during the absence of Surgeon-Major J. McCloghry on civil employ.

ARMY MEDICAL RESERVE.

Correction.—In our last issue the name of Surgeon-Major WILLIAM MILSTED HARMER, F.R.C.P.Edin., was inadvertently misprinted.

THE VOLUNTEERS.

SURGEON C. F. BRYAN, of the 1st Volunteer Battalion Leicestershire Regiment (late the 1st Leicestershire), has resigned his commission, which bore date July 26th, 1884.

Acting-Surgeon T. G. HALL, of the 1st Volunteer Battalion West Riding Regiment (late 4th West Riding of Yorkshire), has resigned his appointment, dated April 25th, 1888.

Acting-Surgeon E. T. CROUCH, 3rd Volunteer Battalion Hampshire Regiment (late the 3rd Hampshire), is promoted to be Surgeon.

Mr. NIGEL STARK, M.B., is appointed Acting-Surgeon to the 1st Volunteer Highland Light Infantry (late the 5th Lanarkshire).

Surgeon-Major (ranking as Major) F. MATHESON, M.D., of the 7th Middlesex (London Scottish), has resigned his commission, with permission to retain his rank and uniform. Dr. Matheson's commission as Surgeon dated from July 22nd, 1874, and that of Surgeon-Major from November 27th last.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

STATE MEDICINE.—The Syndicate, in their annual report, stated that 46 candidates entered for the recent examination, of whom the great majority attained a very satisfactory standard of efficiency, only 9 failing to obtain the requisite proportion of marks. The number of entries far exceeded that in any previous year, this fact being due, in the Syndicate's opinion, to the enhanced value attached to the qualification by the Medical Act, 1886, and the Local Government Act, 1888. The Syndicate ask for powers to appoint additional Examiners when the number of candidates is unduly large for the four Examiners hitherto deemed sufficient.

DURHAM.

AT the examination for Degrees in Medicine and Surgery at the University of Durham, held in December last, the gold medal for the best essay for the year 1889 was awarded to Frederick William Edridge-Green, M.D. The subject of the essay was "Colour Blindness."

HOSPITAL AND DISPENSARY MANAGEMENT.

OUT-PATIENT HOSPITAL REFORM.

DR. ROBERT R. RENTOUL (Liverpool) writes: It is with pleasure one notices that Dr. C. G. Skinner, of Manchester, and others grasp the importance of providing efficient medical and surgical treatment for those wage earners who are making under 40s. per week per family. If members think it better to try how a wage limit of 35s. will work I shall be agreeable. I think 45s. too high. As regards dispensing by doctors, the law at present is that no doctor, unless he has an L.S.A., has the right to charge a patient more than the actual cost of the ingredients. It is better we should act within the law. At the same time, we should draw up a scale of charges for drugs dispensed; but let us cease trading in drugs. Surely the days of the chemist *cum* apothecary *et* medico should be ended. The system survives only because we can make a percentage out of the quantity of physic poured into the patient. In country districts, of course, a doctor his son, daughter, and in some cases the male or female servant must dispense. If members think that chemists should be excluded from the committee of the Public Medical Service, this can be easily arranged.

I fear we must—at least in large towns—have branches for such a service. Once we agree to a scale of fees for the treatment of wage earners, (*a*) at their homes, (*b*) at the doctors', or (*c*) at branches, it will be easy for each locality to arrange. But then the important question of checking the admission of patient

to the medical service comes in. If we have no central authority this cannot be done.

Broadly stated, the medical treatment of that portion of the population extending up to the working classes should comprise three systems: first, the Poor-law Service, for those in receipt of Poor-law relief; secondly, the Medical Charities Service, which should attend to the comparatively poorer portions of the working classes; and thirdly, a Public Medical Service, which should provide for those of the working classes making up to 40s. Working it out, therefore, on this basis, the following plans should be put into force. Each town or city should be divided into one or more districts. In each district there should be a Poor-law Service, a medical charity, and a Public Medical Service. All three should work in harmony. An applicant, for instance, applies to the relieving officer for outdoor medical relief. He is found to be ineligible. Then the relieving officer, knowing the rules of admission to the medical charities, sends the applicant on. The applicant has his social circumstances inquired into by the hospital inspector, who finds him ineligible for out-patient treatment, and, knowing the rules of a Public Medical Service, gives him a ticket and sends him to one of the doctors of such a service, who accordingly treats him. For so far, therefore, a complete inquiry has been made into the patient's circumstances, and thus fraud is prevented.

Two schemes are protected from abuse, namely, the Poor-law Service and the out-patient departments of the medical charities, and those who are sent on to the Public Medical Service by the hospital inspectors. The important question next comes, how are we to prevent the remainder from abusing the Public Medical Service who come to be treated either as cash or provident patients, for in all times past doctors have ruined every scheme with which they have had to deal in a business way. If we succeed in shifting hospital abuses on to another scheme, then only evil will be perpetuated. I think, therefore, in order to prevent abuse of a Public Medical Service, we must have a definite "wage limit," a form for patients to fill up, a notice printed on forms supplied to patients stating the objects of the service; and, finally, strong penal clauses against those medical practitioners who will permit abuses to exist. If doctors will only learn to pursue honesty as a policy, cease to carry on the present sad and degrading competition as seen in hospitals and other schemes, and if they will learn to be somewhat of business men, then we shall succeed. It has always seemed strange to me that the various doctors practising in a district cannot combine and fix a scale of fees. Are we really such an underhand and double-dealing class that we cannot afford to do so? All other classes combine—the clergy, barristers and lawyers, servants, wage earners, business men of all grades; even the Government fix the scale of taxes on the amount of our incomes and house rent, why, therefore, if all these combine can we not do so? It is all very fine high falutin to say it is "unprofessional," whatever that means, but since I knew of a case where a very "professional" doctor took a patient from a young "brother" and sent it to his hospital, thus stealing the patient and robbing his "brother" of his fees, I fight rather shy of so-called "professional" conduct. Many of us wish to see the present, or what is now known as "professional" conduct, a thing of the past, and to let plain, honest, and businesslike actions have a fair trial. The clergy up till late used, when moving from a poorer to a richer charge, to say that "the finger of Providence" pointed them to go forward. Lately, one of the number told them that the "finger had been amputated" and that they had from henceforward resolved to say that the new charge was taken because it was more remunerative.

Now I think the public would think more of us, and we would have more respect for each other, if there were less talk about "non-professional" actions, and a more manly determination—unfettered by the fear of hospital committees, club secretaries, and suchlike—to carry out the old advice of doing to others as we wish others to do to us. I have all along said that the present hospital and club difficulties are only matters of honesty *versus* dishonesty. A doctor joins a hospital, and cares nothing for his neighbour so being he can "get on." The club doctor "cuts" his predecessor's price, so as to get the club, with, if possible, the wives and children. The provident dispensary doctor is afraid of giving offence, and is too lazy to try and set things right. The newly-started practitioner thinks he will catch some families from his predecessor if he flies "the cheap kite." The business man, paying his *employé* a small wage, knows very well that the latter cannot pay for medical services for his wife and family. He therefore sends a guinea to a hospital, and, for all practical purposes, buys so many "tickets of recommendation," which he uses for his workpeople or their families. He deals in the cheapest market, calls his action philanthropic, and quietly laughs at the doctors. Charity, no doubt, covers an enormous multitude of sins, but it can scarcely be asked to cover so broad a farce as this one. In 1870 the Committee appointed to report on out-patient hospital administration, presided over by Sir W. Fergusson, reported: "The subcommittee believe that many masters and employers of labour contribute to hospitals with the object of providing medical assistance for their servants and workmen at a cheap rate." (This was twenty years ago. We ought, as practical men, to be proud of our efforts since then!) I notice that at St. George's Hospital the following were in-patients: 7 housekeepers, 16 ladies' maids, 56 cooks, 29 butlers, 37 grooms, 16 footmen, 73 coachmen, and 53 general servants. It would be interesting to know what was the social standing of the out-patients; and were they, like the above, sent by their employers?

It has been suggested that an association should be started so as to bring about hospital reform. We have, however, our own Parliament; and, if we fail to do our duty to it, we would fail elsewhere. I regret that members of our Association do not make it a living centre. Look at the large number of members unattached to any Branch. I find that there are 1,354 unattached members of our Association. Although the 34 home Branches have 6,430 members, the above, if they joined the Branches, and tried to press on for reform, would be of great service.

In conclusion, may I ask members to fill up the form circulated in the JOURNAL of November 9th, 1889, p. 65 (Advertisements)?

AT a meeting of the Border Counties Branch held at Carlisle on December 20th, 1889, the three following resolutions were unanimously adopted:—

1. Proposed by Dr. LOCKIE, and seconded by Dr. CAMPBELL: "That this meeting recognises the fact that abuses do exist, and that reform is urgently needed."

2. Proposed by Dr. DOUIE, and seconded by Dr. THOMSON: "That in the opinion of this meeting the establishment of a public medical service is impracticable."

3. Proposed by Dr. CAMPBELL, and seconded by Dr. DEVLIN: "That, in the opinion of this meeting, the workhouse infirmaries and hospitals for the treatment of infectious diseases ought to be utilised for clinical teaching.

THE BRADFORD INFIRMARY.

SIR,—Dr. Bell's letter quibbles about words, playing on the terms "*Weekly Board*," "*the* Board," etc., of the Infirmary. After his proposal had been brought before the medical staff of the infirmary it was referred by them, with his consent, to the Medico-Ethical Society. At the meeting of that Society Dr. Gordon, one of Dr. Bell's colleagues at the infirmary, explained the proposal to the Society, with the result that the Society strongly condemned it. The Society, feeling the importance of the subject, desiring that the whole of the profession might have the opportunity of passing judgment on the scheme, and with a view to letting Dr. Bell (who does not belong to the Medico-Ethical Society) propose his own views, summoned a meeting of all the members of the profession in the town. Dr. Bell attended the meeting and explained his scheme. The result was that the following resolution was carried: "That this meeting of medical practitioners of Bradford and neighbourhood, specially assembled to consider the question, expresses the strongest disapproval of any system of accepting payment from out-patients at the infirmary for the professional services of the medical staff, which are gratuitous, or for medicines prescribed by them." Dr. Bell stated that he had not "brought the subject before" the authorities of the infirmary, but when interpellated by Dr. Goyder admitted he had "mentioned" the matter. After the two meetings referred to above, and the resolution adopted after Dr. Bell's own speech in behalf of his scheme, surely he is not in ignorance of the views of his brethren. Would it not be best for him graciously to abandon his objectionable proposal entirely?—I am, etc., ONE WHO WAS PRESENT.

GUY'S HOSPITAL NURSES.—A presentation of silver medals to nineteen sisters and nurses who had been for the past five years and upwards at Guy's Hospital, was made in the Court Room on January 7th by Mrs. Lushington. Several of the recipients had been at the hospital for periods varying from fourteen to twenty years.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN THE FOURTH QUARTER OF 1889.

THE vital and mortal statistics of the twenty-eight great English towns dealt with by the Registrar-General in his weekly returns are summarised in the accompanying table. During the three months ending December last 71,486 births were registered in these twenty-eight large towns, equal to an annual rate of 30.0 per 1,000 of their aggregate population, estimated at upwards of nine and a half millions of persons. In the corresponding periods of the three preceding years the birth-rate in these towns was 31.4, 31.8, and 30.6 respectively. In London the birth-rate last quarter was equal to 29.4 per 1,000, while it averaged 30.6 in the twenty-seven provincial towns, and ranged from 24.1 in Brighton, 25.6 in Bradford, and 25.9 in Nottingham to 34.5 in Sunderland, 35.1 in Preston, 38.3 in Newcastle-upon-Tyne, and 39.0 in Cardiff.

The 46,204 deaths registered in the twenty-eight towns during the fourth quarter of this year were equal to an annual rate of 19.4 per 1,000, against an average rate of 21.0 in the corresponding quarters of the seven preceding years, 1882-88. The death-rate in these large towns was lower last quarter than in any December quarter on record. In London the rate of mortality was only 17.8 per 1,000, while it averaged 20.8 in the twenty-seven provincial towns. The rates in these provincial towns ranged from 15.7 in Birkenhead, 15.9 in Brighton, and 16.2 in Leicester and in Nottingham to 25.1 in Sunderland, 25.8 in Newcastle-upon-Tyne, 26.0 in Manchester, 26.5 in Preston, and 28.7 in Plymouth.

During the quarter under notice 4,799 deaths were referred to the principal zymotic diseases in the twenty-eight towns, equal to an annual rate of 2.0 per 1,000. In the fourth quarter of the seven preceding years, 1882-88, the zymotic death-rate in these towns averaged 2.8 per 1,000. The lowest zymotic death-rates in the twenty-eight towns last quarter were 0.6 in Huddersfield, 0.7 in Leicester, and 1.1 in Brighton, in Halifax, and in Cardiff; while they ranged upwards in the other towns to 3.1 in Bolton, 3.2 in Preston, 3.4 in Salford, 4.5 in Sunderland, and 7.2 in Plymouth. The 4,799 deaths referred to the principal zymotic diseases included 969 which resulted from whooping-cough, 928 from scarlet fever, 798 from measles, 762 from diarrhœa, 700 from diphtheria, 640 from "fever" (principally enteric), and 2 from small-pox. The 969 fatal cases of whooping-cough recorded in the twenty-eight towns during the fourth quarter of this year were equal to an annual rate of 0.41 per 1,000, which was slightly below the mean rate in the corresponding periods of the seven preceding years, 1882-88. In London the whooping-cough death-rate last quarter was equal to 0.42 per 1,000, while it averaged 0.40 in the twenty-seven provincial towns, and was highest in Portsmouth, Bolton, Hull, Bristol, and Wolverhampton.

The 928 deaths referred to scarlet fever were equal to an annual rate of 0.39 per 1,000, which exceeded the low rate recorded in the fourth quarter of last year, but was considerably below the average rate in the corresponding periods of the seven preceding years; the rate of mortality from this disease in London did not exceed 0.24 per 1,000, while it averaged 0.51 in the twenty-seven provincial towns, among which the largest proportional fatality of scarlet fever was recorded in Salford, Blackburn, Liverpool, Bolton, and Plymouth. The number of scarlet fever patients in the Metropolitan Asylums Hospitals, which had been 541, 547, and 1,206 at the end of the first three quarters of the year, further increased almost throughout the three months under notice, and was 1,541 at the end of December; the admissions, which had been 614, 625, and 1,449 in the three preceding quarters, further rose to 1,886 during the three months ending December last. The 798 fatal cases of measles were equal to an annual rate of 0.34 per 1,000, which showed a further decline from the rates in the first three quarters of the year, and was below that in the December quarter of any year on record. In London the measles death-rate was 0.30 per 1,000, while it averaged 0.37 in the twenty-seven provincial towns, and was highest in Preston, Nottingham, Bradford, and Sunderland. The 762 deaths referred to diarrhœa were equal to an annual rate of 0.32 per 1,000, which was considerably below the mean rate in the corresponding periods of the seven preceding years, 1882-88. In London the rate of mortality from this disease last quarter did not exceed 0.23 per 1,000, while it averaged 0.39 in the twenty-seven provincial towns, and was highest in Salford and Preston. The 700 fatal cases of diphtheria were equal to an annual rate of 0.29 per 1,000, corresponding with the high rate in the last quarter of 1888, which

Public Health Statistics relating to Twenty-eight Large English Towns, for the Fourth Quarter of 1889.

Towns.	Estimated Population middle of 1889.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
				Births.	Deaths.	Principal Zymotic Diseases.										
28 Towns	9,555,406	71,486	46,204	30.0	19.4	2.0	4,799	2	798	928	700	969	640	762	2.1	155
27 Provincial Towns	5,203,668	39,642	26,901	30.6	20.8	2.2	2,836	1	475	666	252	513	421	508	3.0	169
London	4,351,738	31,827	19,320	29.4	17.8	1.8	1,963	1	323	262	448	456	219	254	0.9	137
Brighton	121,807	731	484	24.1	15.9	1.1	32	—	5	5	1	6	6	9	3.3	141
Portsmouth	141,253	1,179	636	33.5	18.1	1.9	66	—	—	6	10	28	13	9	0.9	137
Norwich	94,510	780	398	33.1	16.9	1.4	34	—	8	1	7	2	8	8	1.8	146
Plymouth	78,225	596	559	30.6	28.7	7.2	141	—	2	104	16	5	8	6	0.7	175
Bristol	229,361	1,626	998	28.5	17.5	1.7	99	—	4	10	6	57	5	17	2.1	154
Wolverhampton	82,544	655	450	31.8	21.9	2.9	59	—	8	4	3	24	4	16	2.4	197
Birmingham	454,835	3,338	2,050	29.5	18.1	1.8	203	—	61	68	8	21	7	38	2.6	155
Leicester	150,520	1,186	607	31.6	16.2	0.7	26	—	—	3	2	3	9	9	2.8	174
Nottingham	237,812	1,534	961	25.9	16.2	1.8	108	—	50	12	1	9	18	18	1.1	175
Derby	98,529	700	416	28.5	16.9	1.2	30	—	2	3	9	2	5	9	1.6	179
Birkenhead	102,541	803	401	31.4	15.7	1.6	40	—	2	5	4	7	14	8	1.2	139
Liverpool	606,562	4,278	3,314	28.3	21.9	2.7	403	1	62	135	18	71	65	51	6.3	177
Bolton	114,670	896	630	31.4	22.0	3.1	88	—	6	26	7	23	12	14	1.4	152
Manchester	378,800	3,217	2,450	34.1	26.0	2.3	214	—	13	47	38	28	38	50	2.1	169
Salford	234,283	1,677	1,092	28.7	18.7	3.4	196	—	12	48	55	16	23	42	2.7	150
Oldham	142,405	953	698	26.9	19.7	1.5	54	—	5	10	4	19	6	10	5.2	183
Blackburn	121,275	928	731	30.7	24.2	2.3	69	—	13	25	1	9	6	14	2.6	194
Preston	104,194	910	687	35.1	26.5	3.2	83	—	22	7	5	10	16	23	3.2	240
Huddersfield	92,825	604	453	26.1	19.6	0.6	13	—	1	2	3	2	1	4	7.7	174
Halifax	81,080	560	460	27.7	22.8	1.1	23	—	3	3	3	2	8	4	4.8	159
Bradford	235,056	1,499	1,248	25.6	21.3	2.3	132	—	51	14	2	21	24	20	2.2	193
Leeds	357,449	2,873	2,000	32.3	22.5	2.1	187	—	4	34	6	57	54	32	1.8	160
Sheffield	327,227	2,708	1,672	33.2	20.5	1.8	148	—	6	61	18	17	19	27	4.4	163
Hull	208,017	1,644	1,146	31.7	22.1	1.9	98	—	5	4	5	44	18	22	4.5	197
Sunderland	134,193	1,154	840	34.5	25.1	4.5	152	—	101	12	6	6	14	13	1.3	188
Newcastle-on-Tyne	160,983	1,536	1,036	38.3	25.8	2.7	108	—	28	9	10	24	11	26	2.0	173
Cardiff	112,712	1,094	467	39.0	16.6	1.1	31	—	1	8	4	—	9	9	1.3	133

exceeded that in the fourth quarter of any year on record. The diphtheria death-rate in London last quarter was equal to 0.41 per 1,000, while it averaged 0.19 in the twenty-seven provincial towns, among which, however, this disease was fatally prevalent in Plymouth and Salford. The 640 deaths referred to different forms of "fever" (including typhus, enteric, and simple and ill-defined forms of continued fever) were equal to an annual rate of 0.27 per 1,000, which slightly exceeded the very low rate in the last quarter of 1888, but, with that exception, was below that in the corresponding quarter of any year on record. The rate of mortality from "fever" in London during the quarter under notice was only 0.20 per 1,000, while in the twenty-seven provincial towns it averaged 0.32, and was highest in Manchester, Preston, and Leeds. Only 2 fatal cases of small-pox were registered in the twenty-eight towns during the three months ending December last; of these, 1 occurred in London and 1 in Liverpool. During the whole of the year 1889 only 7 deaths were referred to small-pox in the twenty-eight towns. Only 1 small-pox patient was under treatment in the Metropolitan Asylums Hospitals during the last three months of 1889.

The rate of infant mortality in the twenty-eight towns, measured by the proportion of deaths of children under 1 year of age to registered births, was equal to 155 per 1,000 during last quarter, which was below the average rate in the December quarters of the seven preceding years, 1882-88. In London the rate of infant mortality did not exceed 137 per 1,000, while it averaged 169 in the twenty-seven provincial towns, among which it ranged from 131 in Cardiff, 137 in London and in Portsmouth, and 139 in Birkenhead to 193 in Bradford, 194 in Blackburn, 197 in Wolverhampton and in Hull, and 240 in Preston.

The causes of 991 or 2.1 per cent. of the 46,204 deaths registered in the twenty-eight towns during the fourth quarter of 1889 were not certified, either by registered medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 0.9 per cent., while it averaged 3.0 in the twenty-seven provincial towns, among which it ranged from 0.7 in Plymouth and 0.9 in Portsmouth, to 4.5 in Hull, 5.2 in Oldham, 6.3 in Liverpool, and 7.7 in Huddersfield.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

The Isolation of Infectious Disease.

The annual meeting of the Birmingham and Midland Branch of the Society of Medical Officers of Health was held recently at the Council House, Birmingham. The report was adopted, and Mr. Henry May was elected *President* for the ensuing year. The following officers were also re-elected:—*Vice-President:* Dr. Underhill; *Treasurer:* Dr. Bostock Hill; *Secretary:* Dr. Page.

The President read a paper on the Isolation of Infectious Disease, in which he dwelt upon the important part played by isolation in preventing the spread of infectious disease. Mr. May urged the desirability of probationary wards and nurses being provided to receive the frequent mistaken and doubtful cases which were sent in, and he also argued in favour of a graduated charge for the patients. This policy had been adopted in the manor of Aston, the guardians making a payment for destitute cases; and his experience was that though there were many difficulties of detail in arrangements for obtaining a payment, they were not insuperable.

Mr. Hollingshead said he would like to see a hospital for the isolation of measles and diphtheria. He was opposed to exacting payment for patients in the public hospital.

Dr. Bostock Hill agreed that an infectious hospital established by the sanitary authority should be free.

Dr. Alfred Hill said the notification of infectious disease would of itself promote the establishment of hospital. He disagreed with the President with respect to payment. In Birmingham they very early found it would not work; the fee was a deterrent. Instead of 400 or 500 patients in the city hospital, if fees had been charged they would not have had more than 40 or 50.

ARE NURSES IN A HOSPITAL FOR INFECTIOUS DISEASE ENTITLED TO MEDICAL ORDERS AS PAUPERS?

Scius asks whether a woman who is in the receipt of parochial relief and becomes engaged by the medical officer of health as a nurse in a hospital, under the control of the Sanitary Authority, and then ceases to have relief, is entitled to his services as Poor-law medical officer, if she is taken ill during the performance of her duties as nurse, and under what circumstances the relieving officer is authorised to call in the union medical officer to attend (gratis) a patient not in receipt of parish relief.

*** It is the duty of a relieving officer to provide medical relief to all applicants within his district, if he is satisfied that they have not the means to provide it for themselves. In many cases he would be justified in giving an order for the workhouse, where after admission the requisite medical relief would of course be provided.

FEES PAYABLE FOR REPORTING CASES UNDER THE NOTIFICATION OF INFECTIOUS DISEASES ACT.

Enquirens writes: I shall be very much obliged if you or any of your readers will inform me what steps should be taken to obtain payment of fees for reporting cases occurring in my practice, falling under the proclaimed category in the above Act. In October I received various papers and forms, *inter alia* one stating a fee of 2s. 6d. was payable for duly notifying cases of certain named diseases, and that within a month of reporting the same, an account was to be sent in claiming the fee payable.

In November, 1889, a case of scarlet fever occurred. I at once reported it on the prescribed form to the medical officer of health for my district, and on November 30th forwarded my account to the clerk of the local Board of Works, from whom I had presumably received the documents. No notice was or has been taken of this claim.

In December, 1889, another case occurred and was duly reported. And on December 30th I repeated my claim for the November fee, and claimed the December fee in addition. Up to this time there is still no notice taken. If the fees are not to be paid, why should we be compelled to pay postage on the certificates we send in? If they are to be paid, to whom should we look for payment? These cases occurred, I may add, in a London district, and were duly admitted into the local fever hospital as scarlet fever.

*** It is customary for local authorities to make their payments for notification certificates quarterly. The quarter has only just terminated, and we presume that if the payments have not already been made, they will be paid very soon.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 6,450 births and 4,889 deaths were registered during the week ending Saturday, January 4th. The annual rate of mortality in these towns, which had been 23.5 and 21.9 per 1,000 in the two preceding weeks, rose again to 25.2 during the week under notice. The rates in the several towns ranged from 14.5 in Leicester, 16.4 in Birkenhead, 16.6 in Huddersfield, and 17.7 in Nottingham to 31.1 in Bolton, 31.7 in Blackburn, 32.2 in Preston, and 32.8 in Manchester. In the twenty-seven provincial towns the mean death-rate was 24.8 per 1,000, and was 3.2 below the rate recorded in London, which was 28.0 per 1,000. The 4,889 deaths registered during the week under notice in the twenty-eight towns included 166 which were referred to whooping-cough, 80 to measles, 59 to diphtheria, 52 to scarlet fever, 34 to "fever" (principally enteric), 32 to diarrhœa, and not one to small-pox; in all, 423 deaths resulted from these principal zymotic diseases, against 413 and 373 in the two preceding weeks. These 423 deaths were equal to an annual rate of 2.3 per 1,000; in London the zymotic death-rate was equal to 2.4, while it averaged 2.2 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Derby and in Huddersfield, and 0.7 in Oldham to 3.1 in Bristol, 3.9 in Salford, 4.5 in Bolton, and 5.3 in Plymouth. Measles showed the highest proportional fatality in Bradford, Norwich, and Liverpool; scarlet fever in Blackburn and Plymouth; and whooping-cough in Plymouth, Salford, Bolton, Newcastle-upon-Tyne, Birkenhead, and Bristol. The 59 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 32 in London, 5 in Salford, 4 in Birmingham, 2 in Plymouth, 2 in Bolton, 2 in Sheffield, and 2 in Newcastle-upon-Tyne. No fatal case of small-pox was recorded during the week, either in London or in any of the twenty-seven large provincial towns; and only one small-pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday, January 4th. These hospitals contained 1,509 scarlet fever patients on the same date, against 1,526 and 1,541 at the end of the two preceding weeks; 115 cases were admitted during the week, against 133, 105, and 97 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 9.9 per 1,000, and considerably exceeded the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, January 4th, 801 births and 686 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had been 26.1 and 24.6 per 1,000 in the two preceding weeks, rose again to 26.5 during the week under notice, and exceeded by 1.3 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Greenock and Aberdeen, and the highest in Leith and Glasgow. The 686 deaths in these towns during the week under notice included 83 which were referred to the principal zymotic diseases, equal to an annual rate of 3.2 per 1,000, which exceeded by 0.0 the mean zymotic death-rate during the same period in the twenty-eight English towns. The highest zymotic death-rates were recorded in Perth and Edinburgh. The 312 deaths registered during the week in Glasgow included 10 from whooping-cough, 9 from measles, and 3 from diphtheria. No fewer than 28 fatal cases of measles occurred in Edinburgh, and 3 deaths from scarlet fever were recorded in Leith. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.9 per 1,000, against 9.9 in London.

HEALTH OF IRISH TOWNS.

In the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, January 4th, were equal to an annual rate of 30.4 per 1,000. The lowest rates were recorded in Wexford and Londonderry, and the highest in Armagh and Lisburn. The death-rate from the principal zymotic diseases averaged 4.6 per 1,000. The 236 deaths registered in Dublin during the week under notice were equal to an annual rate of 34.9 per 1,000 (against 33.9 and 24.5 in the two preceding weeks), the rate for the same period being 28.0 in London and 25.9 in Edinburgh. These 236 deaths included 16 which resulted from the principal zymotic diseases (equal to an annual rate of 2.4 per 1,000), of which 5 were referred to different forms of "fever," 3 to measles, and 3 to whooping-cough.

OBITUARY.

PROFESSOR GÉZA v. ANTAL, M.D.,
Buda-Pesth.

AN eminent Austro-Hungarian urologist has been swept away in the person of Professor Géza v. Antal, who died on December 20th, at Buda-Pesth, of typhoid fever.

Professor Géza Antal v. Magyar-Dellö was born of a noble family of Nagy Enyed, in Hungary, in 1846. He made his preliminary studies at the Lyceum of Marosvásárhely in Hungary, and commenced his medical career in the Vienna Medical Faculty in 1865. He went later to Buda-Pesth, where he took his M.D. degree in 1870. From 1870 to 1873 he practised at the Rochus Hospital there, and in the surgical wards of the university clinic. He then became assistant in the surgical clinic, and occupied this office for about four years. In 1876 Dr. v. Antal became *Privat-docent* of surgery. After the death of Professor Koloman Balogh he became co-editor, publisher, and proprietor of the *Orvosi Hetilap*, which is the leading medical journal in Hungary.

In 1882 Dr. v. Antal was appointed extraordinary professor of surgery in the Buda-Pesth Royal University, and in 1884, after the retirement of Professor Emerich Poor from the post of chief surgeon of the Rochus Hospital, Professor v. Antal was appointed his successor. In this position, as well as in his capacity of member of the Buda-Pesth Medical Faculty, Professor v. Antal displayed considerable scientific activity, and gained the esteem of all his colleagues. He had the reputation of an excellent specialist, and was very busy as a practitioner.

Owing to a previous attack of typhoid fever he became so deaf some years ago that often, in consultation, it was only possible to communicate with him in writing. His advice was, nevertheless, very much sought for, even in the highest classes.

In urology his activity was vast, and most branches of this science were enriched by him. In the Royal Hungarian Academy of Science, as well as in the Royal Society of Physicians of Buda-Pesth, he delivered numerous lectures on the subject. He also published numerous valuable articles and treatises in the *Orvosi Hetilap*. Dr. v. Antal was, moreover, a contributor to the *Centralblatt für Chirurgie*, the *Allgemeine med. Centralzeitung*, and numerous other German medical journals. His chief work appeared about a year ago under the title *Spezielle Pathologie und Therapie der Harnröhre und Blase*, in 16 Vorlesungen mit 6 Chromolitho-graphien, einer Litho-graphischen Tafel und 55 Holzschnitten (Special Pathology and Therapy of the Urethra and the Bladder, in sixteen lectures, with six chromo-lithographs, one lithographic plate, and fifty-five woodcuts). The same work was also published in the Hungarian language. This book excited a great interest, not only in Hungary but abroad. It is characterised by great perfection in the physical methods of examination, and a number of novel operative procedures. Professor Antal paid particular attention to endoscopic explorative methods in the examination of the urethra and the bladder. By means of the endoscope he made studies as to the treatment of strictures of the urethra. He constructed the aëro-urethroscope, and made excellent cystoscopic diagnoses of tumours of the bladder. He even succeeded in extirpating polypi of the bladder *per vias naturales*. Professor v. Antal was not a mere specialist, but a surgeon of the highest ability.

On December 5th he became affected with typhoid fever for the second time, and succumbed to this disease on the 20th, being much deplored by all who knew him.

PROFESSOR BOTKIN, M.D.,
St. Petersburg.

SERGEI PETROWITSCH BOTKIN, whose death we announced last week, was born at Moscow in 1832. In 1850 he began the study of medicine in the University of that city, obtaining the licence to practise in 1855. He then went to Sebastopol, where he served in the hospitals under Pirogoff until the end of the Crimean war. He afterwards studied in Paris under Claude Bernard, and in Germany under Virchow, Hoppe-Seyler, Traube, Ludwig, and other leaders of the scientific movement. On his return to Russia in 1860 he took his doctor's degree, and was appointed Assistant to the Chair of Therapeutics in the Military Medical Academy at St. Petersburg, then occupied by Schipulinski. The latter having died in the following year, Botkin succeeded him both in the professorship and in his post as chief physician to the hospital. Both these appointments he continued to hold up to the time of his death, a period of twenty-eight years.

From 1861 onwards his career was one of brilliant success. Patients came to him from all parts of Russia, and in 1870 he was appointed *Leibmedicus*, or body physician, to the Emperor Alexander II, whom he accompanied throughout the Russo-Turkish war in 1877. After the death of that sovereign, Botkin was retained in the same responsible position by his successor. He was greatly trusted and even beloved, not only by the Imperial family but by his countrymen generally, especially by the poor. He was no less successful as a teacher, and at present more than twenty of his pupils occupy professorial chairs in the various Russian universities. He had naturally great influence, and in the distribution of his patronage—if the expression may be allowed—purity of Russian blood is said to have been a necessary passport to his favour. If this was a weakness, it was a pardonable one in a country where professional loaves and fishes have been almost monopolised by foreigners.

In addition to his labours as professor and as practising physician, Professor Botkin found time to take an active part in sanitary administration, the management of hospitals, poor-houses, etc. He was a copious contributor to medical literature, not only in the periodicals of his own country, but in the leading scientific journals of France and Germany. His "Cursus der Klinik der inneren Krankheiten" is said by the *St. Petersburger medicinische Wochenschrift* to mark an epoch in Russian medical literature.

The list of decorations and other marks of distinction conferred on Professor Botkin is refreshing as showing that a physician is sometimes honoured for the need his patrons have of him, but perhaps the best testimony to the genuine worth of a man who was himself so much the favourite of fortune is the statement which we have seen in an English non-professional paper that in him the poor of St. Petersburg feel they have lost a true friend.

JAMES BOWER HARRISON, M.D.ST.AND., M.R.C.P.LOND., F.R.C.S.ENG.

WE regret to announce the death of Dr. Bower Harrison, which occurred suddenly on January 2nd at his residence, The Mount, Higher Broughton, Manchester. The deceased was the son of the Rev. William Harrison, descending from a line of preachers dating back to 1662, and cousin to W. Harrison Ainsworth, the novelist. After the usual school teaching Dr. Harrison was articled to Mr. W. R. Whatton, F.R.S., a well-known surgeon in Manchester. On the completion of his medical curriculum he became one of the resident medical officers of the Manchester Royal Infirmary. His medical career was creditable alike to his talents and industry. In 1836 he became Licentiate of the Society of Apothecaries and a Member in the following year. In 1852 he was made a Fellow of the Royal College of Surgeons of England. The University of St. Andrews conferred upon him in 1856 the degree of Doctor in Medicine, and in 1859 he became a Member of the Royal College of Physicians of London. For some time he held the office of surgeon to the Ardwick and Ancoats Dispensary.

Dr. Harrison was a prolific writer, and contributed, in addition to the medical journals, to *Chambers's Edinburgh Journal*, *Household Words*, etc. By a paper in the Dublin *Medical Quarterly* and a letter addressed to the Earl of Shaftesbury, on the expediency of submitting certain branches of trade and manufactures to medical inspection, he was instrumental in leading to a Government inquiry into the condition of children employed in unhealthy occupations. Among his contributions to medical literature may be cited the following: *Popular Medical Errors*, 1851; *The Medical Aspects of Death and of the Human Mind*, 1852; *On the Contamination of Water by Lead*, 1852; *Familiar Lectures on Diseases of Children*, 1862.

Dr. Harrison enjoyed an extensive practice, and was much respected.

GEORGE SHIELD STILES, M.R.C.S.

MR. GEORGE SHIELD STILES, who died at Chippenham on Friday, January 3rd, was a son of Captain George Stiles, R.N., and was born at Wootton, near Ryde, Isle of Wight, on December 30th, 1805.

Mr. Stiles, who came of an old naval family, long resident at Wootton, was educated at Mr. Bricknell's school at Devizes, and, having declined a cadetship in the Honourable East India Company's service (accepted by his brother, the late Colonel Henry Stiles) and chosen the medical profession, was apprenticed to Mr

Nathaniel Seccombe, surgeon, at Plymouth. Mr. Stiles afterwards studied at St. George's Hospital and the Windmill Street School of Medicine, becoming a Member of the Royal College of Surgeons of England in 1831, and commencing practice in the same year. In conjunction with other medical men there he worked gratuitously during the cholera epidemic in that and the following year, being presented with the freedom of the City of Plymouth and a handsome silver-gilt snuffbox as a memento of his services. At the end of 1832 Mr. Stiles began to practise successfully at Sutton Benger, Wilts, leaving there for Chippenham in 1846, where he continued to practise until three years ago, when failing health compelled him to retire.

He married in 1834 Louisa Frances, daughter of the late Rev. Jeremiah Awdry, Rector of Felstead, Essex, by whom he had a large family, seven of whom survive him.

PIETER JAMES CHIAPPINI, M.D. Edin.

INTELLIGENCE reaches us of the death of Dr. Pieter Chiappini, which took place at Cape Town on September 10th, 1889. The deceased, who was the son of Mr. Antonio Chiappini, an Italian painter, was born on February 10th, 1810. Having taken his medical degrees at Edinburgh, he served as surgeon to the colonial forces in the Kaffir war of 1834. Subsequently he practised his profession with success at Cape Town. For many years latterly he had retired from practice, and travelled much in Europe, and visited Britain, returning ultimately to the land of his birth. His body was interred at Mowbray Cemetery on September 12th, 1889.

Deputy Surgeon-General (Retired) THOMAS KNOX BIRNIE.

HIS medical officer died on December 31st at St. Leonard's at the age of 64. Entering the army as an assistant surgeon in November, 1852, he served with the 1st Royals in the Crimea from May 5th, 1855, taking part in the siege of Sebastopol, and being present at the fall of the fortress. He received the medal with clasp and the Turkish medal. In 1860, in which year he reached the rank of surgeon, he served throughout the campaign in North China, and was present at the storming and capture of Sinho and Tangku and the surrender of Pekin. For this campaign he received the medal with two clasps. He became surgeon-major in November, 1872, and was placed on half-pay in 1879, receiving the honorary rank of deputy surgeon-general twelve months later.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having passed the necessary examinations, were, at the quarterly meeting of the Council on January 9th, admitted members of the College, namely:

E. Hobhouse, St. Thomas's Hospital, 9, Spring Gardens, S.W.; G. R. Saunders, St. Bartholomew's Hospital, 45, Upper Gloucester Place, S.W.

Dr. W. P. Brabazon, of Lymm, Cheshire, has been placed on the commission of the peace for the County of Cheshire.

Professor Moriz Rosenthal, the well-known electro-therapeutist of Vienna, died on December 30th in the 55th year of his age.

The Duke of Cambridge has promised to preside at the forty-fifth anniversary dinner of the German Hospital on April 23rd, at the Whitehall Rooms, Hôtel Métropole.

Her Excellency the Countess of Zetland paid a visit to the City of Dublin Hospital this week, and was pleased to express her approval of its management.

Medical Magistrate.—Mr. Thomas Linnington Ash, L.R.C.P. Edin., M.R.C.S.Eng., Holsworthy, has been appointed a justice of the peace for the County of Devon.

The Malvern Urban Sanitary Authority have decided to include whooping-cough and measles in the list of diseases under the Infectious Diseases (Notification) Act.

Ten vacancies occur in the Medical Department of the Royal Navy. An examination of candidates for commissions will be held in February next, forms to be had on application to the Director-General, Medical Department of the Navy.

A new wing to the Sunderland Infirmary, which has been built at a cost of between £14,000 and £15,000, raised by voluntary contributions in memory of the late Mr. James Harteley, M.P., was opened last week by Alderman Preston, and handed over to the charge of the trustees of the infirmary.

The Muzzling Order in London.—An order has been issued by the Board of Agriculture appointing Major J. T. Tennant their Chief Travelling Inspector, as the officer to carry out the recent order for the muzzling of dogs within the district of the London County Council.

The Birmingham Hospital Sunday Fund amounted to £5,166 15s. 5d. After payment of the expenses of collection (£233 18s. 2d.) a sum of £4,825 3s. 1d. was handed to the governors of the General Hospital; £65 to the Jaffray Suburban Hospital, and smaller sums to other hospitals.

Black Pox.—A telegram from Baden (near Vienna), dated January 4th, states that black pox (*schwarze Blattern*) has been observed at Mayerling, Heiligenkreuz, Alland, and the surrounding regions. The sanitary authority has taken measures to prevent a spread of the disease to Baden.

Serious and fatal accidents from football still happen with painful frequency. The latest instance occurred on Monday, December 30th, when Lieutenant Lyon, aged 22, stationed at Aldershot, was seriously injured, suffering concussion of the brain and internal hæmorrhage, which proved fatal.

A deputation from the Birmingham Ear and Throat Hospital attended by invitation a meeting of the trustees of the William Dudley Trust on December 24th, when the chairman of the charity handed the deputation a cheque for £500 as a Christmas donation towards the building fund of the new hospital shortly to be erected in Edmund Street at an estimated cost of £6,000.

Another example of the extreme care which ought to be exercised with regard to the instruments used in abdominal section is afforded by a report which comes from Pittsburgh, U.S.A. A pair of forceps were left in the abdominal cavity by the surgeons who operated. Another surgeon was subsequently called in, who detected the presence of a foreign body, reopened the wound, and extracted the forceps.

New School of Naval Medicine in France.—It is stated that the French Minister of Marine will shortly introduce a Bill for the establishment of a School of Naval Medicine, in addition to the three already in existence. The new school is to be in connection with a recognised Faculty of Medicine, and as it must also be in a seaport town, the choice of a "local habitation" for it is practically limited to Bordeaux, unless the preparatory school at Marseilles is promoted to the rank of a "Medical Faculty."

Surgeon-Major Bostock, C.B.—We are glad to hear that Surgeon-Major Bostock, C.B., has recovered from an indisposition which has for a short time prevented his fulfilling the duties of chairman of the Western Hospital. Mr. Bostock has for many years been a volunteer in the fever hospital service of London, and under his chairmanship the Western Hospital has been very successfully administered. His services are very highly appreciated by his colleagues, and it is hoped that they will soon receive the recognition to which they are so fully entitled.

Medico-Psychological Association.—At the examination held at Bethlem Hospital on December 19th and 20th, 1889, the following gentlemen passed, and are entitled to the certificate in psychological medicine: James Paton Boyd, M.B., C.M.Glas.; Hubert Carpenter Bristowe, M.B.Lond., M.R.C.S.Eng.; James H. Earls, M.D.; Francis Neel Gaudin, M.R.C.S.Eng., L.S.A.Lond.; Arthur Edward Patterson, M.B., C.M.Aberd.; John James Pitcairn, L.R.C.P., M.R.C.S.; Arthur Price, M.R.C.S., L.S.A.; William Johnson Smyth, M.B., C.M.Edin.; Gilbert Henry Wickham, B.A.Camb., M.R.C.S., L.S.A.; Mr. D. J. Williams.

Inebriate Criminal Responsibility.—An exhaustive abstract of the present law as to drunkenness and inebriety was presented to the Society for the Study of Inebriety on Tuesday by Mr. J. R. McIlraith, M.A., LL.B., of the Middle Temple. A remarkable deliverance of Mr. Justice Stephen was cited, wherein the learned judge plainly laid down that a disease secondary to drunkenness (such as delirium tremens) was free from responsibility for criminal actions. Other judicial deliverances to a like effect, with which our readers are familiar, were also cited. While there have been cases in which a plea of irresponsibility on the ground of delirium tremens was negatived, the preponderance of our administration of criminal jurisprudence has been in favour of the validity of the plea.

LEPERS AT THE CAPE.—The writer of the article in *Blackwood's Magazine* on lepers at the Cape has expressed the opinion that it is not advisable that the lepers there should be relieved by the private generosity of people in England. He considers that it is the duty of the Cape Government to ameliorate the condition of these unfortunate people. He suggests, however, that luxuries in the shape of books, toys, etc., might be usefully sent, and states that Messrs. Donald Currie and Co., of the Castle Line, and the Directors of the Union Steamship Company have undertaken to convey such parcels free of charge. He is gratified that he is able to state that the Cape authorities have discontinued the practice of supplying the cast-off clothing of lunatics to the lepers, and that each patient has been supplied with a shirt and bed linen.

FIRST PREGNANCY LATE IN MARRIED LIFE.—An interesting life-history is published by Dr. A. Nieden in the *Centralblatt für Gynäkologie*, No. 50, 1889. A German couple married in America. The bride was aged 18, the bridegroom, a wholesale merchant, 30. They lived together in perfect harmony for twenty-five years in the land of their adoption. Menstruation had been absolutely regular from the fifteenth year. The couple returned in time to celebrate their silver wedding in Germany, and only a few weeks after the wife had come back to the Fatherland her period ceased. As she was then 44 she believed that the climacteric had set in, until the symptoms of pregnancy developed. Labour was normal, and a robust female child, weighing 9 lbs., was born. The fortunate mother was able to suckle her child. After weaning the period returned, and did not cease till the 50th year. In this case the character of the wife was above suspicion, and normal marital relations had been constant until the pregnancy. Although Dr. Nieden enters into no hypothesis, it is reasonable to suppose that the change of climate was the chief factor in curing sterility.

CLINICAL SOCIETY OF LONDON.—The following are the names of the officers and council of the Clinical Society of London proposed for election for the year 1890 at the annual meeting to be held this (Friday) evening:—*President:* Christopher Heath. *Vice-Presidents:* *Charlton Bastian, M.D.; R. D. Powell, M.D.; C. T. Williams, M.D.; *H. G. Howse, M.S.; *Septimus Sibley; Alfred Willett. *Treasurer:* W. M. Ord, M.D. *Council:* *J. Abercrombie, M.D.; *C. E. Beevor, M.D.; *R. L. Bowles, M.D.; T. Churton, M.D.; T. C. Fox, M.B.; A. E. T. Longhurst, M.D.; S. Mackenzie, M.D.; T. J. Maclagan, M.D.; A. Money, M.D.; I. Owen, M.D.; *P. H. Pye-Smith, M.D.; *E. Diver, M.D.; *W. H. A. Jacobson, M.Ch.; *J. R. Lunn; *Malcolm Morris; *R. W. Parker; C. W. M. Moullin; S. F. Murphy; C. J. Symonds, M.S.; *J. K. Thornton. *Honorary Secretaries:* Thomas Barlow, M.D.; *William Henry Bennett. The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during the preceding year.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—At a meeting of the members held at their rooms, 3, Bolt Court, Fleet Street, on January 7th, the following officers and council were elected for the year 1890:—*President:* Sir Trevor Lawrence, Bart., M.P. *Vice-Presidents:* D. B. Balding, Esq., F.R.C.S., J.P. (Chairman of Council); Robert H. Lloyd, M.D. *Treasurer:* C. M. Frost, Esq., F.R.C.S. *Honorary Secretary:* J. Wickham Barnes, Esq., F.R.C.S. *Auditor:* Walter Smith, M.D. *Council:* D. B. Balding, Esq., J.P. (Royston); J. Wickham Barnes, Esq. (London); Dr. R. Fegan (London); Dr. A. Forsyth (London); C. Frost, Esq. (London); Dr. Gayton (London); Dr. C. Cross (London); Dr. J. B. Gidley-Moore (Ongar); Dr. R. H. Lloyd (London); W. Owen, Esq. (London); H. W. Roberts, Esq. (London); Dr. Walter Smith (London); J. Milward, Esq. (Cardiff); Isaac Flower, Esq. (Codford, Wilts); Dr. W. Woodward (Worcester); Dr. Sheen (Cardiff); James Crocker, Esq. (Bingley); T. Walford, Esq. (Reading); H. Stear, Esq. (Saffron Walden); G. M. Evans, Esq. (Bridport); B. C. Gowing, Esq. (Salisbury); E. P. King, Esq. (Chepstow); Dr. Pearse (Botesdale); A. T. V. Packman, Esq. (Rochester); J. Bain Sincock, Esq. (Bridgwater); T. Sanders, Esq. (South Molton); Dr. Martin O'Connor (Chatteris). In addition to other business, the case of Mr. Stokes, of the Oundle Union, was further considered, and he was recommended to regard his present appointment as a permanent one.

AN ACTION FOR MALPRAXIS IN BELGIUM.—A painful sensation has been caused throughout the medical profession in Belgium by a case in which heavy damages have been successfully claimed from a surgeon for what appears to have been one of those undeserved and unavoidable misfortunes to which Sir James Paget has devoted a fascinating chapter of his *Clinical Lectures and Essays* under the title of "Calamities of Surgery." Dr. Deschamps, surgeon to the Hôpital des Anglais at Liége, whose works on orthopædic surgery have earned for him recognition and reward from the King of the Belgians, has lately had an action for malpraxis brought against him by the parents of a child aged 3½ years on whom he performed osteotomy. Gangrene set in and amputation of the leg became necessary. The unfortunate surgeon has been condemned to pay 9,000 francs (£360) to the child and 1,000 francs (£40) to the father. The grounds of the decision were that the consent of the father had not been asked before the operation was performed, and that Dr. Deschamps himself had stated in one of his books that a period of six years should be allowed to elapse before osteotomy was carried out. Dr. Deschamps has appealed against the decision, and the matter has been taken up by the Medico-Chirurgical Society of Liége, the "Concorde Médicale" of Namur and other professional associations in Belgium which have determined to support him "morally and materially." We are sure that we express the views of the general body of the medical profession in this country in saying that we sympathise with our Belgian *confrère*, and hope that his appeal to a higher court will be successful.

MEDICAL CONGRESS IN CUBA.—The first Cuban medical congress will meet at Havana on January 15th. Most of the principal members of the profession in the island are expected to take part in the proceedings. Among the subjects down for discussion are: Hæmatochyluria; The Use of Mercury in the Torrid Zone; Physio-pathological Studies of Cuban Women; Origin of Yellow Fever in Cuba, and others suggested by the *genius loci*. In the surgical department an English reader cannot fail to be struck by the great preponderance of ophthalmological subjects and the total absence of cancer.

SIR ANDREW CLARK.—At the last meeting of the Metropolitan Division of the Medical Defence Union, held at 429, Strand, Mr. Ernest Hart in the chair, Dr. Campbell Pope, Honorary Secretary, announced that Sir Andrew Clark, Bart., President of the Royal College of Physicians, had made a donation of £10 to the funds of the Union.

THE London Post-Graduate Course was opened on Wednesday evening by an Address by Mr. Jonathan Hutchinson, F.R.S., who pointed out that the necessity for post-graduate teaching became greater every day as the field of knowledge grew daily larger. Sir William Roberts proposed, and Mr. W. Adams seconded, a vote of thanks to Mr. Hutchinson, whose address was listened to with great attention by a large audience.

MEDICAL VACANCIES.

The following Vacancies are announced:

BEDFORD GENERAL INFIRMARY.—Resident Surgeon. Salary, £100 per annum, with apartments, board, and washing. Applications by January 22nd to the Secretary.

BELGRAVE HOSPITAL FOR CHILDREN, 79, Gloucester Street, Pimlico, S.W.—House-Surgeon. Board, etc. Applications by January 25th to the Honorary Secretary.

BIRMINGHAM AND MIDLAND SKIN AND LOCK HOSPITAL.—Additional Medical Officer. Particulars of, and applications by January 14th to, the Honorary Secretary, 13, St. Paul's Square, Birmingham.

BOARD OF WORKS FOR THE ST. SAVIOUR'S DISTRICT.—Medical Officer. Salary, £200 per annum. Applications to Mr. W. H. Atkins, clerk, Emerson Street, Bankside, Southwark, S.E. Election January 20th.

BRISTOL EYE HOSPITAL.—Non-resident House-Surgeon. Salary, £120 per annum. Applications by January 22nd to Mr. F. R. Cross.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80, advancing £10 per annum to £100, with board, furnished apartments, etc. Applications by January 28th to G. Fell, Esq., Solicitor, Aylesbury.

DERBY BOROUGH ASYLUM.—Clinical Assistant. Board and residence. Applications to Dr. Macphail, Borough Asylum, Rowditch, Derby.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Residence, board, etc. Applications by February 1st to House Governor.

GERMAN HOSPITAL, Dalston (Western Dispensary).—Honorary Medical Officer. Applications by January 15th to the Assistant Honorary Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.—House-Physicians. Applications by January 16th to the Secretary.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.—Honorary Aural Surgeon. Applications by January 31st to H. Teague, Esq., Secretary, 38, Barton Arcade, Manchester.

MORPETH URBAN SANITARY AUTHORITY.—Medical Officer of Health. Salary, £20 per annum. Applications to the Clerk.

PAROCHIAL BOARD OF BIRSAY AND HARRAY.—Medical Officer. Applications to the Inspector of the Poor.

PENZANCE UNION.—Medical Officer for Union Workhouse, Madron. Salary, £35 per annum, extra midwifery fee of 10s. Applications by January 11th to Mr. Cornish, Clerk, Penzance.

PENZANCE UNION.—Medical Officer and Public Vaccinator to No. 1 District. Salary, £15 per annum and extra operation fees. Applications by January 11th to Mr. Cornish, Clerk, Penzance.

RATHDOWN UNION, RATHMICHAEL DISPENSARY.—Medical Officer. Salary, £130 per annum and fees. Applications to Mr. Alexander Doran, Honorary Secretary, Quinsboro Road, Bray. Election on January 21st.

STRAND UNION.—Dispenser, L.S.A., for Workhouse, Upper Edmonton. Salary, £100 per annum. Applications to Mr. C. F. Dorrell, 13, Henrietta Street, Covent Garden.

MEDICAL APPOINTMENTS.

ARNOTT, James, M.B.Durh., B.S., appointed House-Surgeon to the Royal Infirmary, Newcastle-on-Tyne, *vice* S. J. Allden, M.B., resigned.

BARNETT, Horatio, L.R.C.P.Lond., M.R.C.S.Eng., B.A.Camb., appointed Medical Officer for the Fourth District, Church Stretton Union, *vice* Cecil A. P. Osburne.

BURD, George Vanhouse, L.R.C.P.Edin., L.M., M.R.C.S.Eng., reappointed Medical Officer for the Northlew and Bratton Clovelly Districts, Okehampton Union.

COOPER-PATTIN, W. H., M.B., M.R.C.S., L.R.C.P., appointed Medical Officer to the York Dispensary, *vice* E. L. Haynes, resigned.

CORCORAN, Thomas, L.R.C.S.I., L.A.H.Dub., appointed Medical Officer of Health to the Loughborough Rural Sanitary Authority, *vice* W. Grimes Palmer, deceased.

CUNNINGHAM, A., M.B.Glas. and C.M., Oldbury, elected Assistant Surgeon to the Out-patient Department of the West Bromwich District Hospital.

DEAN, H. P., M.B., M.S., B.Sc.Lond., F.R.C.S.Eng., appointed Surgeon to Out-patients, Great Northern Central Hospital, *vice* C. E. H. Cotes, F.R.C.S.Eng., resigned.

DILL, R. G., M.R.C.S., L.R.C.P.Edin., appointed Anæsthetist to the Gordon Hospital for Fistula, S.W., *vice* C. J. Ogle, M.R.C.S., L.S.A., resigned.

DINGLEY, E. A., M.D.Lond., M.R.C.S.Eng., elected Assistant-Surgeon to the Out-patient Department of the West Bromwich District Hospital.

DURRANT, T. A., M.R.C.S., appointed House-Surgeon to the General Infirmary, Northampton, *vice* A. E. Godfrey, M.B., resigned.

EDDISON, John Edwin, M.D.Edin., M.R.C.S., elected Honorary Consulting Physician at the Leeds Hospital for Women and Children, *vice* Dr. Clifford Allbutt.

ELLIS, Hyacinth D'Arcy, L.R.C.P.Edin., M.R.C.S.Eng., appointed a Certifying Surgeon under the Factory Acts, *vice* George Ashmead, L.R.C.P., deceased.

FAULKNER, H., L.R.C.P.Edin., L.M., appointed Medical Officer of the 3rd District, Tendring Union, *vice* T. Peat, M.R.C.S., deceased.

FURNER, W., F.R.C.S., appointed Surgeon to the Sussex County Hospital, *vice* F. W. Jowers, M.R.C.S., resigned.

GRANGE, F., M.R.C.S., L.R.C.P., appointed Junior House-Surgeon to the Blackburn and East Lancashire Infirmary, *vice* R. J. Stephens, M.R.C.S., L.S.A., resigned.

GRIFFIN, Lawrence T., Ext. L.R.C.P.Lond., L.R.C.S.I., L.M., appointed Resident Medical Physician to the Killarney District Lunatic Asylum, *vice* Dr. Woods, resigned.

HALE, E., L.R.C.P.Lond., M.R.C.S., appointed Junior House-Surgeon to the Royal Southern Hospital, Liverpool, *vice* W. Croft Helme, M.B., C.M.Edin., resigned.

HARRISON, Alfred James, M.B.Lond., M.R.C.S., L.S.A., reappointed Physician to the Bristol General Hospital.

HELLIER, John B., M.D.Lond., M.B., M.R.C.S.Eng., Lecturer on Diseases of Women and Children at the Yorkshire College, elected Honorary Surgeon to the Leeds Hospital for Women and Children, not Senior Surgeon, as announced last week.

KENNEDY, John Alex., M.B., C.M., appointed Medical Officer to the East Chapelton Industrial Reformatory for Girls, *vice* Dr. Gray, resigned.

LATHAM, G., L.R.C.P., L.R.C.S.Edin., elected Assistant Surgeon to the Out-patient Department of the West Bromwich District Hospital.

LAVERICH, J. T. B., M.B., C.M., D.P.H., appointed Medical Officer of Health to the Hinderwell Urban Sanitary Authority, *vice* J. V. Laverich, L.R.C.P., who has accepted a seat on the Board.

LEE, Barnard J., L.S.A., appointed Medical Officer for the Claycross District of the Chesterfield Union.

LLOYD, J. Hellings, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer for the Kentisbeare District, Tiverton Union.

M'CANN, F. J., M.B., C.M.Edin., appointed House-Surgeon to the West London Hospital.

M'LAGAN, D., M.B., appointed Resident Ophthalmic Officer to the Leeds General Infirmary.

M'NAIR, George, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the First Diddington District of Woodstock.

MAGUIRE, J. H., L.K.Q.C.P.I., appointed Medical Officer of the Chesterton District, Wolstanton and Burslem Union.

MOLLOY, Leonard G. S., B.A., M.D., B.Ch.Dubl., appointed House-Surgeon to Sir Patrick Dun's Hospital, Dublin.

NICKLIN, S., L.R.C.P.Lond., M.R.C.S.Eng., late Assistant House-Surgeon to the General Hospital, Birmingham, appointed Resident Medical Officer to the Victoria Hospital, Burnley, *vice* J. F. Woodyatt, L.R.C.P.Lond., M.R.C.S.Eng., resigned.

NOYES, J. H., M.R.C.S.Eng., L.R.C.P.Edin., appointed Medical Officer for Soothill Nether, Dewsbury Union.

PODE, E. D. Y., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the Royal Albert Hospital, Devonport, *vice* W. H. G. Green, M.R.C.S., L.R.C.P., resigned.

ROBINSON, Henry, L.R.C.P., L.R.C.S.Edin., L.M., reappointed Medical Officer for the Hasland District of the Chesterfield Union.

RODEN, Percy Austin, M.B.Aberd., C.M., appointed Medical Officer of Health to the Droitwich Urban Sanitary Authority.

SEQUEIRA, H. James, M.R.C.S.Eng., L.S.A., appointed Medical Officer of the Third District, City of London Union.

SNELL, E. Hugh, M.B., B.S.C.Lond., M.R.C.S., L.R.C.P., appointed House-Physician to the Queen's Hospital, Birmingham.

WALLIS, P. E., M.R.C.S.Eng., L.R.C.P.Edin., appointed Medical Officer of Health to the East Grinstead Urban District.

WALTERS, Charles Astley, M.R.C.S.Eng., L.S.A., reappointed Medical Officer for the Second District of the Cheltenham Union.

WATSON, J. R., M.B.Edin., C.M., appointed Medical Officer and Public Vaccinator for the Harrogate District, Knaresborough Union, *vice* G. T. A. Atkinson, M.B.Edin., C.M., resigned.

WINDLEY, William, M.R.C.S., L.S.A., appointed Medical Officer for the South District, Bingham Union, *vice* H. Williams, L.R.C.P., M.R.C.S., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. T. Churton: Notes on an Epidemic of Pneumonia. Mr. C. B. Keetley: Cases of Nephrolithotomy and a Case of Partial Nephrectomy for Injury.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Election of Officers. Dr. Scanes Spicer: On Nasal Obstruction and Mouth Breathing as Factors in the Etiology of Disorders of the Teeth.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Dr. Octavius Sturges: On Acute Lung Affections in Infants and Young Children.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Mr. Thomas F. Chavasse: Successful Removal of the Entire Upper Extremity for Osteochondroma. Dr. James Cagney: The Mechanism of Suspension.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Psoriasis and Allied Diseases.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Theodore Williams: On the Diagnosis of Pulmonary Tuberculosis. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. W. Lang: Ophthalmoscopic Cases.

HOSPITALS ASSOCIATION, Westminster Hospital, 8 P.M.—Miss Broadwood, of Ockley: On Cottage Nurses and their Training.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 7 P.M.—Annual General Meeting. The President (Dr. W. Marcet, F.R.S.) will deliver an Address on Atmospheric Dust.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.—Quarterly Meeting of the Executive (4.30 P.M.) and General (5 P.M.) Councils.

THURSDAY.

LONDON POST-GRADUATE COURSE, Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Dr. H. H. Tooth: On the Anatomy of the Medulla Oblongata and Spinal Cord. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Dr. Octavius Sturges: On Chorea and Allied Disorders.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Annual Meeting, President's Address, and *Soirée*.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Theodore Williams: On the Diagnosis of Tubercular Excavation.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: On Erythema; its Varieties.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement. The first post on Thursday mornings is the latest by which advertisements can be received.

BIRTHS.

PRICHARD.—On December 30th, at 14, Windsor Place, Cardiff, the wife of R. Prichard, M.D., of a son.

THIELE.—At Aldershot on December 26th, 1889, the wife of C. W. Thiele, M.D., Army Medical Staff, of a son.

MARRIAGE.

BONTOR—COLLS.—On the 4th instant, at Holy Trinity, Barnes, by the Rev. G. J. Story, M.A., vicar, Sidney Algernon Bontor, M.B., of Great Berkhamsted, son of Thomas Bontor, of Castelnau, Barnes, to Ada, eldest daughter of Lebbeus Colls, of Castelnau, Barnes.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Operation Days.*—M. Th. F., 1.30; Tu. W. S., 2.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2 30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1 30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C, London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

QUERIES.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

DR. G. F. WELSFORD (Woodstock, Oxon) asks for the name of the maker of a system of booking by loose sheets enclosed in wooden case.

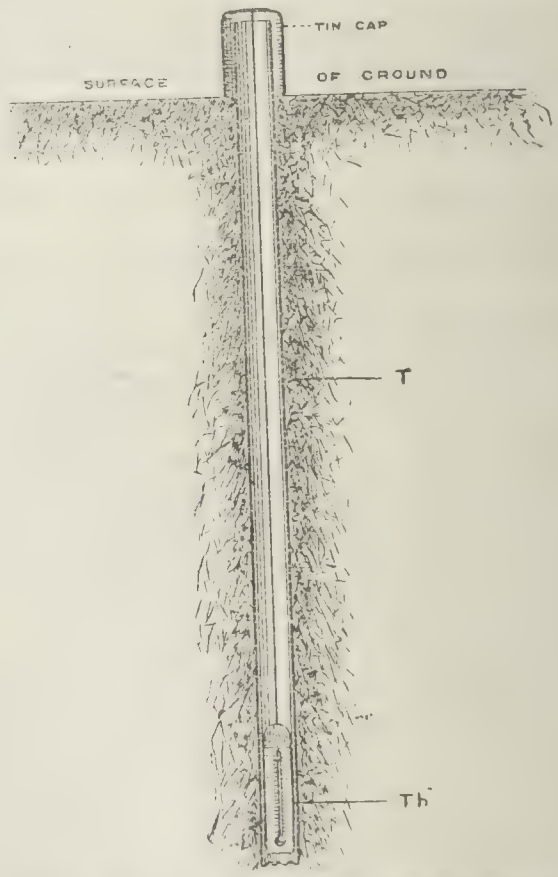
ANSWERS.

F. M. B.—Lewis's Library will probably answer the needs of our correspondent.

C. C. B., Belford.—Our correspondent would do well to apply to the National Temperance Publication Depôt, 33, Paternoster Row, E.C.

EARTH TEMPERATURES.

J. H. P., inquires how the temperature of the earth is taken at a depth of four feet?



*** We have referred this question to Dr. Henry Tomkins, B.Sc., Medic Officer of Health for Leicester, who writes: I have a hole dug in the grou to the required depth; into this an iron tube, about $1\frac{3}{4}$ inch in diameter, inserted, projecting about 3 inches above the surface, over which a tin c fits. A delicate thermometer is fitted into a wooden holder, the diameter the latter such as to just fit the tube easily; this is connected with a ch to the outside of the tin cap, and thus raised and lowered to the requi depth.

Canary Isles or Madeira.

A. B. (Villa Orotava, Teneriffe, Canary Islands) writes: In reply to the query in the Journal of December 7th, as to the relative merits of the Canary Islands and Madeira, I may state that from an intimate knowledge of Teneriffe and Madeira I am decidedly of opinion that the former is preferable. The climate of Madeira is damp and relaxing, while that of Teneriffe is dry and bracing. The latter, too, is under the Spanish government and has free ports; Madeira being in the hands of the Portuguese, and vexatiously harassed with duties. I know of no spot in this island (Teneriffe) more favoured in weather throughout the year than the one from which I am writing (Villa Orotava). It stands at an elevation of more than one thousand feet above the sea, and is thus entirely free from the intense heat so usually experienced in the lower lying parts of the valley. The scenery too is superb. There has recently been opened, under English management, a good hotel (The Hesperides), whence a tariff of charges will be sent on application. Private houses are difficult to procure, being mostly taken by English residents and visitors, at high rents. I would advise your applicant to take up his abode at an hotel until he finds a suitable residence.

The Medical Service of the Leeward Islands.

Senex writes: In answer to the inquiries from "Juvenis," in the Journal of November 23rd, I beg to state that since the beginning of 1887 several appointments have been made to the medical service of the Leeward Islands. At this moment there are two districts vacant. I would strongly advise "Juvenis" to enter the medical service in British Guiana or Trinidad; if he likes hard work, has a sound constitution, and is a total abstainer, he cannot fail to do well in the long run. If he must have his daily allowance of alcohol, he had better keep out of the tropics.

Since I wrote my last letter no fewer than three medical officers have died in the colony. *Verb. sap.*

NOTES, LETTERS, ETC.

Erratum.—The photograph of Figure 3 in Dr. Stephen Mackenzie's paper on Skin Diseases, published in the Journal of January 4th, was taken by Dr. Radcliffe Crocker.

The Certificate in Sanitary Science and Medical Registration.

Surgeon-Major George J. H. Evatt writes: Under the recent Medical Act, medicine, surgery, and midwifery form the curriculum for medical registration, but it needs no great foresight to see that within a measurable distance the certificate in sanitary science, now quite apart from medical registration demands, must one day be included as an essential for registration.

If the five-years course now advocated for study becomes the rule, then the sanitary certificate course may well be included—and students can thus qualify themselves for future employment as health officer.

I should imagine that very little parliamentary pressure might any day compel the Local Government Board to make the sanitary certificate essential for all sanitary appointments, and later on for Poor-law posts. Until that day comes, the relation of sanitary science to the medical profession will be incomplete.

Meteorological Observations at Eastbourne (1889).

R. R. Sheward, F. R. Met. Soc., sends the following notes on the climate of Eastbourne. The means and sums for the year show the mean daily maximum temperature to have been 55.1°, and the mean daily minimum to have been 45.1°, hence giving a mean daily range of temperature of precisely 10°; the actual mean (between the daily maximum and minimum) was 50.1°, and of the sea 50.7°, hence the sea for the whole year was some half a degree warmer than the air, apparently pointing to a branch of the Gulf Stream washing the shores of the south coast. There was scarcely any difference in the mean temperature of the air during the three warmest months of June, July, and August, being 60.7° 60 7°, and 60.6° respectively, whilst the three coldest months of January, February and March, gave a mean temperature of 40.0°, 39.3°, and 40.6° respectively, the difference therefore between midwinter and midsummer being a small fraction lower than 21°; observation of the difference in temperature from morning to morning at the hour of 9 A.M. gave a mean for the year of 2.8°, thus showing but slight change from day to day, and the imperceptible manner in which the seasons slowly merge the one into the other. The duration of sunshine for the year was 1,526 hours, or nearly 100 hours below the normal of the past four years, with 78 sunless days, or three lower than the normal.

Observations for the four years, 1886-89, show that the mean amount of sunshine upon each day wherein the sun shines is 5 hours 40 minutes, and the mean amount of rain upon a day wherein rain falls is 0.19 inch.

Chlorine Solution.

R. Alexandey D'Evelyn, B.A., M.B. (Ballymena) writes: The success I have had in treating cases of diphtheritic sore throat, diphtheria, scarlatinal throat, etc., prompt me to draw attention to sol. chlorini, which, although not a new remedy, still is one of undoubted efficacy, if properly prepared. The quantities are: ℞ Potas. chlor. grs. iij; ac. hydrochlor. pur. mi; aq. ad. ℥j. Place the potas. chlor. in a dry bottle, add the acid, then cork tightly, until the gas ceases to be given off, add the water gradually and shake well each time. In cold weather the potas. chlor. and the bottle should be warmed. This solution should be made fresh when required, as it does not keep well. For adults, use as a gargle every hour or so, and for children either as a mixture, or brushed over the affected parts frequently. I consider this is a more reliable preparation than the chlor. sodæ of the *B.P.*, and is not unpalatable.

The Laurie Case: The Medical Evidence.

R. D. Campbell Black (Glasgow) writes, with reference to a paragraph in the Journal of December 21st, in which reference is made to a pamphlet by Dr. Black, on the "medical evidence" in this perplexing case: Pardon me saying that I am amazed at this criticism. Are there not innumerable natural causes of death in which death is instantaneous? What I maintained, and what I still maintain is, that when a dead body is found, no matter how it may be mutilated or injured, and the thoracic and brain cavities are empty, it is impossible to say what may have been the cause of death; in other words, it is impossible to say that death might not have resulted from some disease of the brain, or of the organs contained in the chest cavity. Assuming, however, that in the case of Rose death was due to the injuries to the skull and vertebral column, I concluded that the death must have been instantaneous, that it occurred from a fall on the vertex of the skull, or at least that the injuries were so caused, and I succeeded in demonstrating, in the interests of truth and justice (however disagreeable the task from the professional point of view), that the medical theory of the causation of these injuries, for the prosecution, was untenable, unscientific, self-contradictory, and consequently valueless, and I have in my possession the most ample evidence that this view is supported by medical jurists of the highest eminence, and by several prominent judges in Scotland.

The Graduation of Hypodermic Syringes.

Dr. G. Hodgson Higgins writes: The following list shows the result of very careful comparison of fifteen hypodermic syringes with a guaranteed minim measure.

Syringe.	Registers.	Contains.		Increase Per Cent.
1	20	24		20
2	20	20		nil.
3	20	25		25
4	15	18		20
5	20	26		30
6	20	22	on the glass	10
	20	23	on stem piston.	15
7	20	20		nil.
8	10	17		70
9	10	30		200
10	20	21		5
11	20	24		20
12	15	19		27
13	15	19		27
14	15	20		33
15	15	18		20

These fifteen syringes were not selected with a view to measurement, but have all been used at some time or other in practice. Out of that number only two are absolutely, and one practically, correct the others varying in all cases by increasing the dose and never by decreasing it. Including those which are correct, the average increase is 34.8 per cent.

If a chemist supplied a medical man with a solution of twice the strength indicated on the label, I presume he and not the doctor would be held responsible if any accident occurred, and to my mind the instrument maker is, morally at least, equally responsible for his own error.

The case is far more serious in this instance, for an emetic can mitigate the evil in the one case and in the other the physician may be utterly unable to deal with the results of his misfortune from the very moment it takes place.

*** Attention has on several previous occasions been directed to the frequency with which hypodermic syringes are incorrectly graduated. We believe that many instrument makers are alive to the danger of this, and our correspondent's interesting communication may serve to call the attention of other makers who have as yet failed to understand the dangerous consequences of such careless workmanship.

Re Dr. Frederick Moon: An Appeal.

In July last, Dr. Moon, of Greenwich, being misled by a false statement of a patient, passed a sound into a pregnant uterus. This was followed by septicæmia, peritonitis, and death of the patient. The coroner's jury returned a verdict of "Wilful murder," and Dr. Moon was detained in prison for three months, bail being disallowed, and tried at the October sessions of the Central Criminal Court. Although Drs. Barnes, Braxton Hicks, Galabin, Hayes, M. Handfield Jones, Peter Horrocks, and others were present, ready to give evidence for the defence; yet, without calling a single witness, he was fully acquitted by the jury; and Mr. Justice Stephen, before whom the case was tried, expressed his full agreement with the verdict. A large number of medical men of the locality gave testimony to character. Three months' absence from practice, and the heavy expenses of the defence, amounting to over £900, are a heavy penalty for a man who was pronounced innocent; and we, having a full knowledge of the case, venture to appeal to the profession to assist in defraying the legal expenses. We, the undersigned, know Dr. Moon to be an upright and honourable man, and earnestly commend this case to our professional brethren.

Robert Barnes, M.D. | Alfred L. Galabin, M.D.
J. Braxton Hicks, M.D. | Peter Horrocks, M.D.
M. Handfield Jones, M.D.

Dr. Horrocks, of St. Thomas Street, Southwark, has kindly consented to act as treasurer, to whom subscriptions may be forwarded.

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TREATMENT OF MASTURBATION.

MR. GEORGE C. PEACHEY (Portslade) writes: I cannot agree with Mr. Roberts as to the inadvisability of performing circumcision in these cases. Irritation of the glans has, with very little doubt, a great influence in the production of the habit, and in many cases this irritation arises from an accumulation of smegma beneath a long and contracted prepuce—hence the necessity for circumcision.

The theory that the operation should not be performed because thereby the glans is exposed to the irritation of the dress will scarcely hold water, for if this were so, the habit of masturbation would logically be very common with the Jews, which in my experience it is not.

I lately had a case of masturbation in a boy aged 6 years, who was cured by circumcision, and in this case I noticed that for the first few weeks after the operation the habit continued, but has now entirely ceased (six months after operation). This I explain by supposing that the glans took some time to accustom itself to the irritation of the dress.

As to the Jewish origin of circumcision, if sacrificial, as Mr. Roberts suggests, it is strange that a sacrifice should have been chosen which was only possible to one sex, and it may be asked why this same "sacrifice" was performed upon the bodies of male infants, who died before the eighth day, the usual date of circumcision?

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. W. A. Meredith, London; Mr. J. N. Morton, Glasgow; Dr. Norman Kerr, London; Dr. Saundby, Birmingham; Professor W. R. Smith, London; Mr. P. Boobbyer, Nottingham; Dr. J. Brown, Bacup; Dr. R. W. Savage, London; Dr. R. P. Smith, London; Dr. J. B. Tuke, Edinburgh; Surgeon; Messrs. G. Mason and Co., London; H. G. McLagan, M.B., Leeds; Dr. J. F. Little, London; Dr. F. C. Turner, London; Mr. W. F. C. Bartlett, Totnes; Dr. W. L. Morgan, Oxford; Mr. G. F. Welsford, Oxon; Dr. B. C. Kerr, London; Mr. R. A. Murray, Stockport; Mr. H. De Styrap, Coatham-on-the-Sea; Dr. R. Jones, Redhill; The Earl of Meath, London; Dr. W. Milligan, Manchester; Mr. Macnamara, London; Messrs. W. J. Bush and Co., London; Dr. Myers, London; Dr. C. B. Taylor, Nottingham; Mr. J. F. Mannix, Cahirciveen; Mr. E. Bailey Denton, London; Mr. T. G. McLauchlan, Edgbaston; Mr. F. Round, Southport; Mr. B. Kuhn, London; Mr. J. Worthington, South Lowestoft; Mr. H. A. Martin, Surbiton; Mrs. P. 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BOOKS, ETC., RECEIVED.

Practical Guide to the Demonstration of Bacteria in Animal Tissues. By Dr. H. Kuhne. Translated, with the consent of the author, and edited by Vincent Dormer Harris, M.D. London: Baillière, Tindall, and Cox. 1890.

The Latin Grammar of Pharmacy. By Joseph Ince, F.C.S., F.I.C. Fifth Edition. London: Baillière, Tindall, and Cox. 1890.

A Manual of Palæontology. By Henry Alleyne Nicholson and Richard Lydekker. Vols. I and II. Edinburgh: W. Blackwood and Sons.

A Handbook of Quantitative Analysis. By John Mills and Barker North. Illustrated. London: Chapman and Hall.

Affections Chirurgicales des Reins et des Urétères. By A. Le Dentu. Paris: G. Masson. 1889.

The Uses of Electrolysis in Surgery. By W. E. Steavenson, M.D.Cantab. M.R.C.P. London: J. and A. Churchill. 1890.

Transactions of the Association of American Physicians. Fourth Session. Held at Washington, D.C. Vol. IV. Philadelphia: Association of American Physicians.

Yearbook of Pharmacy, from July 1st, 1888, to June 31st, 1889. With the Transactions of the British Pharmaceutical Conference. London: J. and A. Churchill. 1889.

A Treatise on Headache and Neuralgia. By J. Leonard Corning, M.D., M.A. London: H. K. Lewis. 1890.

The Pulse. By W. H. Broadbent, M.D. London: Cassell and Co., Limited.

Food in Health and Disease. By I. Burney Yeo, M.D. London: Cassell and Co., Limited.

Old Age. By G. M. Humphry, M.D., F.R.S. Cambridge: Macmillan and Bowes. 1889.

A Practical Treatise on Nervous Exhaustion. By G. M. Beard, A.M., M.D. Edited, with notes and additions, by A. D. Rockwell, A.M., M.D. London: H. K. Lewis. 1889.

Leprosy and its Prevention. By Robson Roose, M.D. London: H. K. Lewis. 1889.

Lectures on Obstetric Nursing. By Theophilus Parvin, M.D. London: H. Lewis. 1889.

A Treatise on Diseases of the Nose and Throat. By Frank H. Bosworth, A.M., M.D. Vol. I. New York: W. Wood and Co. 1889.

The Surgical Treatment of the Common Deformities of Children. By Walter Pye, F.R.C.S. Illustrated. London: Simpkin, Marshall, and Co. 1889.

The Rheumatic Diseases (so-called). By Hugh Lane, L.R.C.P.Edin., and Charles T. Griffiths, L.R.C.P.Lond. London: J. and A. Churchill. 1890.

Traité des Maladies du Testicule. By Ch. Monod and O. Terrillon. Paris: Masson. 1889.

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CLINICAL REMARKS
ON THE
SYMPTOMS AND CONDITIONS WHICH JUSTIFY NEPHROLITHOTOMY,

THE CHIEF CONDITIONS SIMULATING RENAL CALCULUS, AND SOME PRACTICAL POINTS IN THE OPERATION OF NEPHROLITHOTOMY.[1]

By W. H. A. JACOBSON, M.Ch.Oxon., F.R.C.S.,
Assistant-Surgeon to Guy's Hospital; Surgeon to the Royal Hospital for Children and Women.

In explanation of the choice of my subject I am very strongly of opinion that nephrolithotomy is one of those advances in modern surgery in which the operation has outstripped the diagnosis. What with the pitch of excellence to which our anæsthetics, our instruments, and the aseptic precautions both during and after the operation have been brought, what with the comparative simplicity of the viscus which we attack, and its, as a rule, uncomplicated surroundings, the operation of nephrolithotomy has been rapidly perfected, while the diagnosis, unhappily, often lags behind. To speak only from my own experience, I would say at once that, while I have seven times removed calculi by nephrolithotomy, several of which are before you, I have on five occasions explored kidneys for stone both by multiple puncture and by incision without result. These five cases must be mentioned. The first was lithic acid in a hypochondriac, who greatly exaggerated his symptoms and who, having heard of nephrolithotomy, asked for the operation. Both Dr. Pye-Smith, whose patient he was originally, and I were very doubtful about the existence of a calculus. After the operation his pain was lost with suspicious rapidity, and he remained well when seen last, seven months later. The second was a case of movable kidney, becoming painful after gonorrhœa, which perhaps set up slight pyelitis. The third was a case of malignant disease around the last dorsal nerve. These cases are more fully alluded to later on. The fourth was a case of granular kidney. This was a patient, aged 61, with constant hæmaturia and left lumbar pain. As the specific gravity of the urine did not exceed 1012, I contented myself with exploring the kidney with a needle, after it had been exposed. Bronchitis, running into bronchopneumonia, largely due to foggy days, carried off this patient on the fourth day. The kidneys were granular, the left especially so. I should have acted much more wisely if I had watched this patient longer, but the hæmaturia had baffled much painstaking on the part of the medical man who sent him to me, and I attached far too much importance to uric acid crystals in the urine. This occurred to me before the papers of Dr. West and Mr. Bowlby, to which reference is made later, had appeared. The fifth case was, I believe, in the light of a larger experience, very early tubercular disease.

Mr. H. Morris, in his address before the Medical Society in 1885, said he knew of fifteen cases more or less typically indicative of renal calculus in which an exploratory operation failed to find a stone. I have strong reason to believe that, while every successful case of nephrolithotomy is usually published, a large number of unsuccessful explorations are never heard of.

With this conviction, that the operation for the removal of a renal calculus has become a simpler matter than the diagnosis of their existence, I venture to bring before you the following points, all of them of much importance in the treatment of renal calculus, which form the heading of my paper.

A.—The Symptoms and Conditions which justify Nephrolithotomy.

1. Continued hæmaturia or passage of blood and pus. 2. Pain or tenderness in the loin and elsewhere. 3. Points connected with the previous history, for example, family history, *habitat*, habits, lithiasis, oxaluria, passage of previous stones, renal colic. 4. Frequency of micturition. 5. Absence of any condition in the rest of the urino-genital tract to explain the symptoms (Morris). 6. Failure of previous treatment.

1. *Continued Hæmaturia or Passage of Blood and Pus.*—I may at once be criticised for putting this first; and, indeed, it is somewhat difficult to decide which symptom of renal calculus is clinically the most important. On the whole, I am inclined to agree with an old friend, G. A. Wright, of Manchester,[2] who considers "renal hæmaturia as the only single symptom of anything like cardinal importance," if of more than a year's standing, without evidence of nephritis, and if without a coexisting renal swelling.

A few words as to the character of the hæmaturia of renal calculus and the fallacies which must be borne in mind. It is a hæmaturia of long standing, often repeated, frequently increased by exercise, rarely profuse, and never producing anæmia, as in growth of the kidney. Always intimately mixed with the urine, its tint varies from a bright or deep red (which I think are rare) to a smoky or porter-like colour.

Fallacies: (*a*) Hæmaturia may be absent from first to last. This, an undoubted fact, is one very difficult of explanation. It was the case with this calculus which I removed from a man aged 22. And this is the more extraordinary, as you will find that the stone is covered with minute crystalline spicules, a condition which would have appeared certain to lead to oozing from the inflamed mucous membrane of the pelvis in which this stone lay. The only explanation that I can give is that at the operation I found the abdominal muscles extremely rigid; even when the patient was fully anæsthetised they gave the impression to the scalpel of cutting through tissues frozen by ether. Now, if it is fair to suppose that on the other side of the kidney the quadratus and psoas were as firmly contracted, the kidney and the stone in its pelvis may have been so firmly held that no irritation by the calculus could take place, and thus no hæmaturia.

(*b*) Another fallacy is that the hæmaturia of calculus may be only temporary, present for a while and then cease altogether. This occurs, though rarely, when a small renal calculus becomes encysted.[3]

(*c*) The value of hæmaturia, though only occasional, is shown by a case of Dr. Owen Rees, to which Mr. Morris has drawn attention. It was that of a young lady with lumbar pains and frequent micturition, which were both put down to the hysteria which was markedly present. After a while, hæmaturia was found to be present on several occasions, and eventually, after death, a mulberry calculus was found in one kidney.

Other fallacies are presented by the host of kidney conditions which may give rise to hæmaturia, namely, (1) the passage of uric acid crystals; (2) tubercular kidney; (3) granular kidney; (4) growths; (5) increased intrarenal pressure, etc. To these I shall refer later.

2. *Pain and Tenderness, Lumbar and Elsewhere.*—(*a*) Fixed Lumbar Pain. Characters: Usually dull, gnawing, pricking or aching, increased usually by exercise, twisting from side to side, or flexing the body. Sometimes it is relieved by pressure of the hand, leading to thickening and vascularity of the parts when they are incised at the operation.

(*b*) Radiating Pain, for example, in the testis, region of the small sciatic nerve, calf, foot, or in the intestine simulating colic. It is easy to see how readily the pain of a renal calculus, if limited to distant parts, and if occurring without hæmaturia, may mislead.

Another point with regard to the pain of renal calculus is the frequency of nocturnal exacerbations. The explanation of this is doubtful, whether, as Mr. Morris has suggested, from the passage of flatus in the colon, at this time over a stone in the pelvis, or, as I venture to think more probable, as accounting for stone both in the pelvis and in one of the calyces, to the concentration of the urine, and consequent deposit of crystals, which takes place at night, is unsettled. The fact, however, is undoubted. In the case of a patient, aged 58, who had suffered from symptoms of renal calculus for thirty years, and from whose left kidney I removed this huge calculus, the pain at night was often so severe as to drive him from his bed into his garden or the streets of the town in which he lived.

[1] Read at the Newport meeting of the South Wales Branch of the Association.

[2] *Medical Chronicle*, March, 1887, p. 463.

[3] Dr. Church, *Path. Soc. Trans.*, vol. xx, p. 239. A calculus of oxalate of lime, weighing 95½ grains, removed from the body of a woman about 35, was situated in a pouch almost completely shut off from the pelvis of the kidney. The kidney did not appear to have suffered from the presence of the stone. For many years no renal symptoms had existed, but when a child the woman had made frequent complaints of pain and tenderness in the lumbar region.

With regard to tenderness, Mr. Jordan Lloyd,[4] in a paper to which I shall have again to refer, writes thus: "I attach great importance to the evidence to be obtained by immediate percussion over the suspected organ, a method of investigation which has not received that amount of attention to which it is entitled. It is best practised from the loin, just beneath the space between the tips of the last two ribs, and should be made in a direction upwards, forwards, and slightly inwards. It is best for the patient to stand upright before you. The blow should be sharp and decisive, and of force sufficient to affect a structure situated several inches below the surface. It may also be practised from the front, at a point midway between the umbilicus and ninth rib. When a calculus is present, the patient will complain of sharp, stabbing pain at the moment of percussion. Other conditions doubtless give rise to percussion pain, but not of the characteristic stabbing of calculus."

Having only become acquainted with these remarks the other day, I have had but one opportunity of testing Mr. Lloyd's statement. It is that of a man, aged 56, with all the symptoms of a stone in the left renal pelvis. While percussion on the right side elicited nothing unusual, when it was practised on the left the patient said, without any leading questions, "you stab me there."[5]

3. *Points in the Previous History.*—Time will only allow of my noticing a few of those given above, namely, lithiasis and oxaluria, history of a previous stone, history of previous colic.

The history of long-standing lithiasis and oxaluria is of obvious importance, from the fact that the habitual passage of crystals or gravel and the formation of a calculus lie not far apart. But there is another point which has not, I think, received sufficient attention, and that is that in patients who have habitually, for many years, passed uric acid and oxalate of lime, there is a most serious risk that the minute anatomy of their kidneys will have become seriously damaged by the constant presence of the above crystals. We should all be agreed as to the damaging effect of multiple calculi on the secreting tissue of the kidney. I would suggest that in the future the results on the kidney of the daily passage of crystals of uric acid and lime oxalate must receive sufficient attention before patients at all advanced in life are submitted to nephrolithotomy. Furthermore, it is obvious that long-continued lithiasis and oxaluria will very likely have led to the formation of bilateral stones.

With regard to the passage of a previous stone, I believe it to be a clinical fact that if an intelligent patient, with symptoms of renal calculus, has never passed gravel, this points to the existence of a small single calculus. Again, the passage of numerous, even very numerous, small calculi does not by itself point to a condition requiring nephrolithotomy. I still see, occasionally, a man, aged 69, who has passed in his lifetime 218 small calculi; 78 of these have come away during the last twelve months, chiefly, I think, from his taking my advice and drinking daily two quarts of filtered and boiled Thames water, close to the banks of which he lives. He is hale, vigorous, and cheery, and it is difficult to see how nephrolithotomy could have bettered his condition, if performed forty years ago.

Under the heading of Renal Colic, I would point out that the vomiting and nausea which are thought to be characteristic of the agony of a descending calculus may also be caused by a stone which is distending the renal pelvis, and which has not yet begun to make its way down.

4. *Frequency of Micturition.*—The coexistence of irritability of the bladder with renal calculus is well known, and may be explained either by nerve disturbance, or by the blood and pus, or the over acid urine which often accompanies stone in the kidney.

I have only time to draw attention to two points: (1) We all know that it is to the pelvis and hilum that the nerves are most freely distributed, and that it is this part of the kidney which is most closely associated with the bladder. A point on which I seek information is this. If a patient has renal calculus and no bladder irritability, does the absence of this symptom point to the stone being in one of the calyces and not in the pelvis of the kidney? The importance of this distinction, if it be one, will be recognised by anyone who has performed nephrolithotomy. A question always arises before the operation, namely, Where shall I find the stone, in the kidney itself or in its pelvis? A stone in the pelvis is, as a rule, easily found and removed. A stone in the tissue of the kidney, even if near the surface, is much more difficult to find, while one embedded in a deeply lying calyx may be overlooked, as in Mr. Morris's well known case.[6]

(2) The other point with regard to bladder irritability is that it may be of value in making that most difficult diagnosis between calculous and tubercular kidney. Thus if a patient with hæmaturia, lumbar pain, etc., has irritability of the bladder which is not relieved by rest in bed, which continues by night as well as by day, it is probable that this is due not to trouble in the kidney alone, but to coexisting ulceration of the bladder, probably confirmed by examination of the prostate and vesiculæ seminales in the male, and by digital exploration of the bladder in the female.

5. *Absence of any Condition in the rest of the Genito-urinary Tract which will explain the Symptoms* (Morris).

6. *Failure of Previous Treatment to give Relief.*—I can only touch on two points here. The first, the question of the advisability of trying to exert any solvent action on a calculus in the kidney. Whilst, for myself, I attach the greatest importance to the use of large quantities of water, it is rather because this, by washing out the kidneys, removes collections of crystals, and gets the patient into a better state for operation, than because I believe in its possessing any actively solvent action upon the calculus. I do not forget that Dr. Roberts has proved by experiments on calculi, both those without the body and those in the bladder, that urine rendered alkaline by fixed alkali has a distinctly solvent action. Dr. Ralfe has reported a case[7] of a patient, aged 37, who, after suffering from uric acid gravel for some years, had a violent attack of renal colic, with profuse hæmaturia, no calculus or gravel being discharged. Alkaline treatment was at once resorted to, and for a time afforded relief, but the patient could not be persuaded to continue it systematically. He was then ordered to drink copiously of soft water—filtered rain water. Two years later he began to pass grit and scales of calculous matter with his urine; and shortly afterwards, after a severe attack of colic, he passed the shell of what had evidently been a solid calculus.[8]

But it must be remembered that, as my late colleague Dr. Hilton Fagge pointed out,[9] such solvent treatment is only worth trying in the case of uric acid calculi. He at the same time showed that the greater relative frequency of lime oxalate calculi over those of uric acid, especially in patients after early adult life, is much more marked than is generally believed. Another point on which I seek information is, how far belladonna and opium are of any use in promoting relaxation of the ureter fibres when a stone has left the pelvis and is very slowly making its way down the ureter?

I pass on to the second part of my paper.

B. The Chief Conditions Simulating Renal Calculus.

These are: (1) Lithiasis, and, to a less degree, oxaluria; (2) tubercular kidney; (3) pyelitis, not tubercular; (4) movable and (5) aching kidney, especially if associated with (6) neuralgic conditions; (7) disease in organs contiguous to the kidney; (8) disease of lumbar spine; (9) interstitial shrinking nephritis; (10) malignant disease of the kidney, especially of its pelvis and malignant disease around last dorsal nerve.

1. *Lithiasis.*—I have already alluded to this condition, as one which simulates renal calculus by the hæmaturia which crystals of uric acid may cause. Lumbar and testicular pains are also points which mere lithiasis shares with renal calculus. The diagnosis will not be difficult by watching the result of treatment which only gives relief in the one, but clears up the other. Exercise, again, is a test. A patient with renal calculus, who declines or is unsuited for operative treatment, is often much crippled in carrying out palliative treatment, and made worse by the exercise which is otherwise so essential to him.

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4 *Practitioner*, vol. xxxix, p. 178.

5 Four days later I performed nephrolithotomy, and removed a small hedgehog oxalate of lime calculus from the top of the left ureter.

6 *Med. Chir. Trans.* vol. lxviii.

7 *Path. Soc. Trans.* vol. xxxiii. p. 206.

8 Dr. Ralfe (*Diseases of the Kidneys*, p. 523) points out that "the solvent action of distilled water is due to several influences. In the first place, by causing a low specific gravity of the urine, it induces disintegration, since Rainey has shown experimentally that bodies placed in solutions of different density to those in which they were formed undergo molecular disintegration. Again, chemical analysis has shown that those calculi that undergo spontaneous disintegration are always poor in inorganic constituents, the use of soft water diminishes the supply of these, even if it does not actually act as a solvent on those forming the outer crust of the calculus, and so increases the tendency to disintegration. Lastly, soft water probably diminishes the catarrh of the urinary passages, and by diminishing the swelling of the mucous membrane allows a small stone to pass which was before obstructed.

9 *Medicine*, vol. ii, pp. 373, 383.

2. *Tubercular Kidney.*—Lumbar pain and tenderness, frequent micturition, hæmaturia, are all common to tubercular kidney and renal calculus. The chief aids in the diagnosis appear to me to be: (*a*) the pyuria; (*b*) careful examination of the urine; (*c*) early pyrexia; (*d*) early exploration of the kidney.

a. Pyuria.—This is usually present early in the case with a proportionate amount of albumen, without much hæmaturia, the blood often occurring only as a thin layer over the pus at the bottom of the urine glass, or as small thready clots. With all the pus the urine is strongly acid at first, then more feebly so, but often remains slightly acid to the last.

b. Careful Examinations of the Urine.—The sediment contains caseous matter, and sometimes *débris* of connective tissue can be made out, a point of much importance. Finally, there is the bacillus tuberculosis. While I am well aware of the frequent want of success in demonstrating the presence of the bacillus in urine as in bone, I may add that it was found in three out of the eight cases in which I have been asked to explore tubercular kidney.

c. Pyrexia.—I do not here speak of the hectic which accompanies the advanced stage, but of the pyrexia which may be an important factor in the diagnosis much earlier in the case. Often intermittent at first, and liable to be overlooked in the anorexia, nausea, and debility which accompany it, later on, and too late, it becomes only too evident and confirmed.

d. Early Exploration of the Kidney.—I would most strongly urge this step, with a twofold object: (1) to clear up the case, and (2) to perform nephrectomy if the kidney is found to be the site of so fatal a disease. If I am told of the unwisdom of this step, owing to the probability of both kidneys being affected, I would reply that, as a rule, both kidneys are not affected at an early stage. Thus Dr. Fagge[10] gives a list of thirteen cases which show "the characters of tuberculous disease of the kidney at its commencement." In only three of these were both kidneys affected, and in all these tubercular mischief was present in the bladder also. If during this early exploration one or two pyelitic dilatations are found, extirpation of the kidney should be performed while the organ is still small and movable, and before the rest of the genito-urinary tract becomes involved.

I need not remind my hearers of the miseries which lie before a patient with established tubercular kidney, the results of ulceration of his bladder, with, perhaps, vomicæ in his prostate, and the inevitable course downhill—arrested, it may be, for a little while by nephrotomy and drainage.

My own experience of nephrotomy in established tubercular kidney is most unfavourable, the relief being slight and short-lived, and not arresting long the hectic and increasing debility. On the other hand, in two cases in which I have been able to perform nephrectomy early the result has been very satisfactory. One, a very frail woman, aged 40, operated on two years and a half ago, has remained free from tubercular trouble since; the other, a young man, operated on eleven months ago, has been able to complete his terms at Cambridge, and to take a curacy near Ipswich.

3. *Slight Pyelitis, not Tubercular.*—This condition may by hæmaturia, pus in the urine, lumbar and testicular pain, simulate renal calculus closely. It may follow a gonorrhœa, perhaps a previous stone, or occur in women after pregnancy; probably, as Dr. M. Duncan thinks, from some parametritis extending up the psoas to the perirenal fat and kidney. Five months ago I explored the kidney of a collier from this town, whose life was made wearisome by constant aching in the right loin and testicle, gradually coming on after gonorrhœa. The urine contained no blood, but persistent oxalate of lime crystals, not removed by treatment. On examination of the kidney, both by multiple puncture and by incising the organ near its pelvis, so as to explore this and the adjacent calyces; the pelvis seemed dilated, and the kidney itself was distinctly "movable." It was accordingly sutured. The wound soundly healed, and during the five months in which he was kept under observation there has been no return of the pain. Whether this case was one of pyelitis after gonorrhœa, or an early tubercular kidney, must remain undecided.

4. *Movable Kidney*, especially if associated with neuralgia, pyelitis, or if occurring with some of the reflex causes of neuralgia to be mentioned below.

5. *Aching Kidney.*—Under this title Dr. M. Duncan has described a condition, especially common in women, which may simulate renal calculus. Its chief features are a heavy wearying pain deep in the side, usually accompanied by tenderness, often great; the pain often runs in the course of the great sciatic or anterior crural, and is often accompanied by irritability of the bladder, and, frequently, by pain in the course of the ureter. The disease is liable to be aggravated by exercise. The chief points in the diagnosis of this condition are, Dr. Duncan points out, the absence of blood and pus, the fact that the "aching" often occurs only at the menstrual periods and is always worse then, from the intimate connection between the kidneys and the generative organs, not only developmental but pathological.

6. *Nephralgias Due to Disease in Parts adjacent to the Kidney.*—Dr. Ralfe[11] gives some of these; one, he thinks, is duodenal ulcer. Thus, a patient had many symptoms of renal colic, and three attacks of paroxysmal pain accompanied by vomiting, great tenderness in the right renal region, urine loaded with uric acid, but no pus or blood. The patient, who was losing flesh, recovered with treatment directed to duodenal ulcer. The same writer gives another interesting instance of intestinal irritation simulating nephralgia by causing severe pain in the right hypochondriac region. The patient was treated for biliary colic, and a few days later, instead of a gall stone, a large round worm was passed, giving relief to the pain.

7. *Gall Stones retained in the Gall Bladder* may be taken for right renal calculus. Dr. Murchison pointed out long ago that they not infrequently coexist. My old friend, G. A. Wright, of Manchester, has recorded a case[12] in which the right kidney was explored for a calculus believed to be in the ureter. On exploring this tube a hard spot was felt near the brim of the pelvis, and taken for a stone in the ureter. A calculus the size of a pigeon's egg was removed and found to be a gall stone. Acute peritonitis carried off the patient, and a stone was found to exist in the pelvis of the right kidney, with its apex in the ureter.

While on the subject of nephralgias due to conditions of viscera near the kidney, I may refer to some remarks of Mr. Godlee[13] in which he insists that repeated attacks of intestinal colic, especially if accompanied by nausea, may be the only symptoms of the presence of either a renal or biliary calculus, and that this fact should lead the practitioner to investigate the state of the kidney and urine, bearing in mind the possibility of the symptoms being due to renal or biliary calculi.

8. *Spinal Disease.*—The great difficulty which may arise in diagnosing between certain cases of spinal caries and renal calculus is not yet sufficiently recognised. A writer, already quoted from (G. A. Wright),[14] thus alludes to this matter. "Where a local patch of caries of a vertebral body exists, and especially where deep suppuration occurs and presses upon the kidney, as in a case of my own and one or two others which I have seen, nearly all the symptoms of a calculus have been present. In my own case, without any deformity or tenderness of the spine, there was unilateral rigidity, testicular pain, intermission of symptoms, increased frequency of micturition, nausea during attacks, and oxaluria with local pain and tenderness. Subsequently an abscess developed, and on exploration a small patch of caries was found, and the kidney was felt exposed in the anterior wall of the abscess cavity. Probably, as in floating kidney, obstruction of the vessels and ureter may arise and cause symptoms, so that pressure of the spinal abscess may disturb the kidney and quite possibly give rise to hæmaturia."

9. *Interstitial Shrinking Nephritis.*—This condition may simulate renal calculus both by hæmaturia and pain. Dr. S. West[15] drew attention to the hæmaturia which may accompany granular kidney, and published three cases, aged 21, 19, and 24; in the first the hæmorrhage was profuse. Mr. Bowlby[16] also published three cases, aged 73, 49, and 64; two of these died, and the kidneys were found markedly granular. He points out the following as distinguishing this condition from renal calculus. The specific gravity of the urine, after the blood has cleared up, only 1008 to 1015; tortuous arteries, cardiac hypertrophy, and high arterial tension; blurred, ill-defined discs, some retinitis and effusion amongst the blood vessels. The paper concludes with the following warning: "Unless it be recognised that blood may emanate from a kidney which is simply granular, operations may be undertaken for the removal of renal calculus."

[10] *Medicine*, vol. ii, p. 488.

[11] JOURNAL, 1888, i, p. 183.
[12] *Lancet*, 1885, i, 563.
[13] *Practitioner*, xxxix, p. 246.
[14] *Med. Chron.*, No. 6, p. 642.
[15] *Lancet*, 1885, ii, 104.
[16] *Clin. Soc. Trans.*, xx, 14.

I have only time just to mention two other conditions which may simulate renal calculus; they are:—

10. *Growth of the Kidney in its Early Stage, and Malignant Disease, involving the last Dorsal Nerve.*—I have not had sufficient space for the quotation of cases; but I may briefly allude to one here which shows how closely the presence of renal calculus may be simulated, and how misleading evidence may be. Four years ago a patient, aged 44, came under my care with hæmaturia, wearing pain, tenderness in the right loin and thigh, and oxaluria. His childhood had been passed in Norfolk, and as a lad he had been cut by Mr. Birkett for stone in the bladder. I sounded him twice, and finding no stone, I swept the sound in contact with the bladder in different directions, in the hope of detaching fragments of growth, if one were present. No relief being given by drugs, I explored the right kidney, and could find nothing abnormal. Four days after the operation, while all seemed to be doing well, the patient died very suddenly. The *post-mortem* examination showed (1) a primary carcinomatous growth in the bladder of a somewhat unusual kind; it involved the apex, as a flocculent, superficially-ulcerated area; (2) a ring of secondary deposit surrounding the last dorsal nerve, just at its exit from the spine; (3) a mass of enlarged glands around the inferior cava, and at one spot sprouting into it.

C. Chief Practical Points in the Performance of Nephrolithotomy.

1. To count the ribs. That this is not an unimportant detail is proved by the fact that Prof. Dumreicher, of Vienna,[17] accidentally opened the pleural cavity in an attempt to remove a pyelonephrotic calculous kidney. *Post mortem*, the last rib was found to be rudimentary, and the pleura projected a good deal below the lower edge of the eleventh rib.

2. To make a sufficiently free incision, especially in a stout patient, and a deep loin. Additional room may be gained by converting the usual lumbar incision into a T-shaped one, or by making use of Konig's incision, in which the muscles are cut through as far as the rectus, and the peritoneum pushed forwards. A small stone in a kidney will always be liable to be overlooked, but a surgeon does not give his patient or himself a fair chance who is content with exposing the kidney through a limited incision, and then trusting to punctures with a needle.

3. To pack away with sponges the colon, which is often troublesomely distended with flatus in these cases.

4. If the stone cannot be felt either in the pelvis or after palpation of the posterior and anterior surfaces of the kidney, this should be drawn up and out of the wound as far as possible, and again examined, a careful watch being kept upon the pulse.

5. In puncturing the kidney, to try, as far as possible, to open the calyces systematically.

6. If palpation and acupuncture fail to find a stone, the kidney should be carefully opened and sounded. I will recur to the subject of hæmorrhage shortly, and take first the best site of opening the kidney. Hitherto in five doubtful cases I have incised near the pelvis, as the viscus is thinner here, and as the surgeon can better reach the calyces. Mr. Jordan Lloyd, however, recommends the following method of exploring the interior of a normal kidney:[18] "When the kidney is exposed through a lumbar wound I puncture its lower end with a long-bladed tenotome in a direction upwards and inwards, making for the lowest of the calyces. If the surgeon is observant and his knife is keen he will readily appreciate the moment when a cavity is struck by the altered resistance offered to the puncturing instrument..... It is important, because a tenotome may be pushed up to its handle in a normal kidney without tapping its interior cavity, having travelled *along* the kidney substance rather than *through* it. Into this opening I pass a child's bladder sound, and systematically explore the whole of the pelvis." It is advised that the blade should be not more than one-third of an inch in length, a stem of about 7 inches, and the size of a No. 3 English catheter. It should be passed at once to the top of the kidney cavity, a distance of nearly 4 inches, and the exploration should be carried out systematically from above downwards, the point being rotated in all directions, so as to investigate both tubes and calyces as the instrument is withdrawn. In this manner Mr. Jordan Lloyd has succeeded in finding a calculus, after needling and palpation had been assiduously tried with negative results.[19]

7. Hæmorrhage from an incision into the kidney is certainly arrested by firm, careful plugging with strips of sal alembroth gauze. On the five occasions on which I have used this plan I have removed the strips the next day with the aid of a few minutes' anæsthetic, gas sufficing for this. It is said that this plugging may cause vomiting. This did not occur in any of my cases. It ceases on the removal of the plugs. Care must be taken that the plugging is thoroughly done. If inadequate it will have to be repeated in a few hours—perhaps more than once—thus leading to exhaustion and setting up cellulitis, which may of itself be fatal, owing to the important relations of the kidney.

8. Sources of difficulty in removing the stone.[20] The chief of these are: (1) A very mobile kidney, which gets away deep in the wound; (2) a stone situated on the anterior surface and near the entrance of the vessels; (3) a small stone in a sacculated kidney, the stone falling into one of the sacculi, and thus being hard to find.

9. Multiple calculus in a suppurating, damaged kidney. If the question of nephrectomy arise this step should, as a rule, be deferred, and the kidney thoroughly drained, for (1) additional shock and loss of blood will be avoided. (2) The condition of the opposite kidney, very possibly calculous also, will be made clearer by waiting. (3) The bulk of the kidney will be lessened by drainage. (4) Though a source of discomfort (if an open sinus persist) it may still do some and important work.

10. If the kidney has been much disturbed it should be stitched *in situ*.

17 See a paper by Dr. Lange, of New York (*Ann. of Surgery*, October, 1889), in which he calls attention to the investigations of Dr. Holl on this matter.

18 *Pract.*, xxxix, 173.

19 The same paper contains very helpful remarks on the nature of the kidney pelvis. I have only space for a few of them. Failure to find a stone when present "depends mainly on two points: First, an inaccurate conception of the precise nature of a kidney pelvis, and, secondly, the faulty methods adopted for the examination of the kidney's interior..... Instead of the pelvis being a funnel-shaped membranous sac it really consists of a cluster of branching tubes, so that the procedure of exploring the kidney's interior by means of a finger introduced into the pelvis through an opening in the kidney substance is practicable only in dilated kidneys, and is absolutely impossible when we are examining the interior of the viscus in anything approaching a normal condition. I have not yet found a healthy human kidney into the primary pelvis tubes of which I could introduce my index finger."

20 The various positions which calculi may occupy in the kidney and the precautions demanded in dealing with them have, very recently (JOURNAL, November 16th, 1889), been fully dealt with by Mr. H. Morris. His remarks will repay most careful attention.

LECTURES
ON THE
SURGICAL ASPECT OF HEPATIC ABSCESS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
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Lecture II.

It will now be convenient to give a few typical examples of tropical abscess, it being understood that it is difficult to meet with a case which does not present some special peculiarity.

Case x.—Lieut. H., age 26, invalided home from India with threatening liver abscess, was seen by Sir Joseph Fayrer some months before he came under my care. He was put under treatment and much improved, so that he considered himself well enough to take open-air exercise, hunting, and so forth. On returning to show himself, it was found that he had an abscess pointing at the epigastrium, over which the skin was slightly reddened. There was great tenderness at the epigastrium, and some over the lower ribs in the axilla. He was strong, well-built and well nourished, but with the characteristic dirty yellow complexion described above.

I opened the abscess in the epigastrium, finding plentiful adhesions, on February 5th, 1884, letting out 4 to 6 ounces of yellow pus. The discharge in this case assumed the characters I have just described: thin serum and dark red muco-pus. It gradually diminished, and the abscess was completely closed by March 11th

The case presented the following features of interest: 1. The temperature up to March 4th was usually normal or subnormal in the morning, but rose to 99° or just over 99° in the evening. 2. The bowels were very obstinate, not acting except after a sulphate of soda mixture and an enema. 3. Tenderness and pain continued for three weeks, during which time he could only lie on his right side, or on the face, 4. The tongue was clean and the appetite for the first few days was good for milk; but soon he had almost absolute anorexia and nausea. At last, after three weeks, he suddenly felt a desire for a boiled potato, and his appetite returned. During this time his temper was abominable.

There was considerable trouble with the tube in this case. The dressings were of carbolic acid gauze.

Case xi.—Lieut. W., aged 23, was under the care of Sir Joseph Lister and Sir Joseph Fayrer, but I had the privilege of assisting at the operation and dressing the case afterwards, and am kindly allowed to publish it. In November, 1878, he had fever and hepatitis in Hyderabad, from which he recovered. In May he had hepatitis and jaundice; in September, hepatitis and diarrhœa, there having been traces of blood for some months previously. In October he was sent to England, where he arrived in December. At this time he was jaundiced, with a furred tongue, no appetite, clayey motions, profuse night sweats, and occasional rigors. The liver dulness was increased upwards, and an abscess was projecting over the lower ribs in the axilla. Temperature from normal to 101°. On December 20th Sir Joseph Lister opened the abscess in the seventh intercostal space, 3 inches outside the nipple. Profuse hæmorrhage occurred for a few minutes, but quickly stopped. He recovered without a bad symptom, except one slight attack of ague. The jaundice quickly disappeared, the tongue cleaned, and the appetite returned. The wound was completely healed about February 20th. The only peculiarity in this case is the occurrence of intense jaundice, which certainly is not common. I have not seen it in any other case.

Case xii.—Lieut. M., aged 27, went to India in 1877, and stayed there for four years, returning in 1880. During his time in India he had several attacks of fever, and was at last almost invalided with it. He remained at home till 1882 and quite recovered his health. He first began to feel pain in the right shoulder in May, 1883, which was followed by pain in the right side and loss of appetite and power of digestion. His bowels acted freely, the motions being light-coloured and loose. He had no rigor, no vomiting, and no dysentery. He became yellow, but not actually jaundiced. His habits with regard to alcohol were very temperate. When I saw him in November, at the request of Sir J. Fayrer he was emaciated and of an ashy colour, but he was not really jaundiced. The tongue was clean, the pulse 92 and moderately strong, the temperature a little over 99°. The skin was cool. The bowels only acted with medicine, the motions being sometimes light, sometimes dark. The liver dulness was not increased downwards, and only slightly upwards (fifth rib in the nipple line, sixth anterior axillary line, seventh posterior axillary line). The upper extent of the liver dulness distinctly diminished when the patient lay upon the left side, which I believe is an important point to notice, as it probably indicates that the pleura is not abolished by adhesions to the upper limit of the dulness, but simply that the lung is pushed away by the enlarged liver. The recognition of this fact may save the unnecessary opening of the pleura. The right side measured 1 inch more than the left at the level of the xiphoid appendix. The whole of the hepatic area was tender, but the most tender spot was in the tenth interspace, 6 inches from the spine and $3\frac{1}{4}$ inches above the tip of the twelfth rib. The abscess was opened on November 1st, 1883, after ascertaining the presence of pus with an aspirator near the tenderest spot, but rather lower down so as to be sure of avoiding the pleura. When I introduced my finger into the wound it felt as though there were no adhesions between the liver and the diaphragm, but the pus flowed freely, and there was no difficulty in replacing my finger by the tube; but when he awoke from the anæsthetic he was much collapsed, and complained of intense pain on the left side of the abdomen. In spite of opiates the pain and tenderness continued on the left side for three days. There was also a great deal of vomiting for a week, and much prostration, but in the meantime the discharge from the wound diminished, and remained quite free from smell under carbolic acid gauze dressings. The temperature on the third day reached 100.2°, but was for the rest of the first week normal. At the end of this time the bowels acted, the tongue cleaned, and he started on a rather tedious but complete recovery, only interrupted by a short attack of tonsillitis.

This case was slow because of the large amount of discharge, which was mostly serous and bile-stained, necessitating daily changing of dressings for more than three weeks. Then it somewhat rapidly diminished and the abscess had closed at about the end of the eighth week. The peculiarities of this case are: 1. That it is probable that a very little of the pus escaped into the peritoneum (though I am not quite sure of it) and set up a mild form of peritonitis, very likely quite local. 2. That in all probability a bile duct of some size leaked into the abscess, and so kept up the quantity of the discharge.

Tropical abscess of the liver is much less frequently met with in women than in men; which, considering that it appears to be distinctly due to climatic influences, being much more common, for example, in some parts of India than in others; and considering also that, though it sometimes occurs in the most temperate, it is often preceded by injudicious eating or drinking, is not to be wondered at. For the latter cause is certainly less likely to be present in women than in men, and the occupation of men naturally leads them more into places where they are exposed to malarial influences. It is, however, well known that people who have never been out of England may suffer from a hepatic abscess, not to be distinguished from tropical abscess, and that others who have been abroad years before, but have long resided in England, may be similarly affected.

Case xiii.—I have met with one case in a lady. Mrs. E., aged about 30, went to India in January, 1888, and was married in November. She suffered from boils, dysentery, and hepatic congestion. The liver became much enlarged (four inches below the ribs) and very tender, and the temperature rose at times to 103°. I saw her in August, 1889, with Sir J. Fayrer and Dr. Mair. She was then very much emaciated and slightly jaundiced. The liver was large and tender, and there was marked prominence at the epigastrium, a sense of nausea being caused by manipulating the liver, which is a not very uncommon symptom. On August 24th some blood and, it was thought, some pus, had been passed from the bowel. I opened the abscess at the epigastric prominence, finding good adhesions. The abscess contained a very large quantity of pus. The dressings were of cyanide gauze. The liver, in a few days, came up under the margin of the ribs, leaving only an indefinite sense of resistance in the loin, the nature of which could never be ascertained. It ultimately completely disappeared, and the abscess was entirely healed, except a small superficial button of granulations, in a little over two months. The discharge, after the first week or ten days, was quite trifling, and she quickly put on flesh, but remained rather yellow after the abscess had closed.

Case xiv.—Mr. G., aged about 30, was an example of a patient with hepatic abscess who had never left England. He was under the care of Sir Joseph Lister (who has given me leave to publish the case) in 1877. The abscess, which was small, pointed at the epigastrium, and was opened there. It was treated with carbolic acid gauze, and he made a good recovery in five or six weeks, interrupted only by a mild attack of erysipelas. Mr. G. is now alive and well.

An abscess of the liver may burst in several different directions: (1) through the abdominal or thoracic wall; (2) into the stomach; (3) into some part of the intestine; (4) into the pelvis of the right kidney; (5) into the lung; (6) into the right and perhaps into the left pleura; (7) into the pericardium; (8) into the peritoneum.

Let me here interpose a few words of anatomy. How different is the liver of to-day from the liver of our studentship! Then it was a flat body, with two plane or at most somewhat uneven surfaces, and a circumference, the latter being broad and thick behind, but thin in front and to the left. Now we recognise three well-marked surfaces, following the careful method of observation taught us by His; and we know exactly what fits into each of the numerous and well-marked impressions. As of old the upper surface is closely applied to the diaphragm, and for a very small space both the right and left lobes are in contact with the abdominal wall at the epigastrium; but we are able to make out a distinct impression close to the crossing of the suspensory and coronary ligaments corresponding to the under surface of the heart. The Spigelian lobe is banished to the posterior surface, and no longer bounds the foramen of Winslow, this function being fulfilled by the caudate lobe; but the Spigelian lobe rests against the bodies of the tenth and eleventh dorsal vertebræ and the right crus of the diaphragm and the aorta. Next, to the right, comes the vena cava in its special

fossa, while still further to the right is the space between the two layers of the right lateral ligament, which touches the diaphragm opposite the tenth and eleventh ribs and has a distinct little impression for the suprarenal capsule. Here, that is at the tenth interspace, we might puncture the liver without wounding the peritoneum, but not without traversing the pleura and the lung. The under surface of the left lobe has a beautifully curved surface corresponding to the upper half of the anterior surface of the stomach, including the pylorus, which should touch the neck of the gall bladder. Then comes the gall bladder in its own special fossa, and just to the right of its neck is a well-marked pit for the first part of the duodenum. Still further to the right are two obvious fossæ separated by a pretty sharp ridge; the anterior reaches the free border of the gland, and receives the hepatic flexure of the colon; the posterior reaches the posterior surface, and is occupied by the kidney.

The longest axis of the liver is directed from behind forwards and to the left. The lower border corresponds nearly with the margin of the ribs behind and as far forwards as the ninth right cartilage, and then it stretches across, ascending somewhat, to reach the left eighth cartilage. The upper limit is marked on the surface of the chest by a line drawn from the fifth right to the sixth left chondro-sternal articulation, but varies, as does the lower border, somewhat with inspiration and expiration. The right lung, however, lies in front of the liver as far down as the upper border of the sixth rib in the nipple line, and the heart as far down as the fifth interspace on the left side. It extends, as a rule, 1½ to 2 inches to the left of the left border of the sternum.

The recognition of these facts is all-important in coming to an understanding of the method of rupture of a hepatic abscess.

1. I have already sufficiently explained the two most common situations in which a hepatic abscess may make its way *through the parietes of the body*—namely, either in the neighbourhood of the epigastrium or through a lower intercostal space, usually in the axilla. But it by no means follows that an abscess bursting externally may not have previously opened in some other direction. It should also be added that any abscess which has found its way amongst the planes of the abdominal wall may burrow between them to some distant situation, such, for example, as the umbilicus. Thus I may mention a case of abscess of the gall bladder, which pointed in the right lumbar region, from which situation gall stones were extracted.

Another puzzling case of a somewhat similar nature was

CASE XV.—W. E. M., a civil engineer, aged 31. He went to India in September, 1879, and had good health till 1887, except for occasional and slight attacks of fever, the first of which was when he had been out only three months. He was twice laid up with boils, but had no dysentery and no hepatic trouble. He was almost a teetotaller. In April, 1887, he went to Burmah, had malarial fever in May, and was invalided in July. He returned to England and saw Sir Joseph Fayrer, who found the liver enlarged but no suspicion of abscess. He went back to Burmah in December, 1888. There was a strong history of tubercle in the family.

The report of Mr. Darwin, of Rangoon, says that he first came under observation in April, 1889, for an ulcer on the leg and bubo, the result of an abrasion through walking and riding. He had also an inflamed throat and fauces. He went to work in an unsatisfactory state of health, and had a few attacks of fever. In May he was still troubled with his throat; nothing was observed wrong with chest or liver. June 17th he had a stitch on the right side, and friction was heard at the base of the lung at the seat of pain. This was followed by a slight dulness at the right base and increase of the area over which friction sounds were heard. The temperature rose to 101°, and it was thought slight friction was heard on the left side. By the 23rd the temperature had come down to normal, and the only sign remaining was a little dulness at the right base. He was recommended for twelve months' leave. Between July 8th and 24th he was at the Rangoon Hospital, and was treated for hepatic pains, debility, and slight febrile symptoms.

On his return to England he consulted Dr. Lauder Brunton, who sent him on to me. I saw him on September 23rd, 1889. He was then in fair general health, walking about and feeding like anyone else. He had a prominent red swelling over the eighth right cartilage, evidently an abscess. There was a little enlargement of the liver downwards, but it was very slight, and there were no abnormal physical signs in the chest. It was agreed that the diagnosis was doubtful, but that it lay between tubercular disease of a costal cartilage and an abscess of the liver. I have described the course of the symptoms and the physical signs in some detail, so as to make more clear the difficulty of coming to a definite diagnosis. The bowels were acting well, and the skin, though brown, could hardly be said to be jaundiced.

On the 25th I made an incision into this, and opened first a cavity in the subcutaneous tissues; then a small opening led down to another compartment beneath the edge of the rectus, at the bottom of which was the rib cartilage, exposed but not at all roughened. Round the lower border of this another track led into a cavity of much larger size, containing perhaps 4 ounces of pus, which was either in the substance of the liver or in the adhesions formed between it and the diaphragm and abdominal walls. It was very irregular in shape, and the interior was marked by pits and bands. In the pus were found a number—thirty to forty—of minute, flat, square bodies with rounded edges, hard and smooth, like small and curiously-shaped gall stones; they were found on examination to consist of cholesterine. A drainage tube was put in and the wound was dressed with cyanide of mercury gauze. The patient made a good recovery. For the first few days he was feeling perfectly well. Afterwards he had occasional slight rise of temperature up to 99° F., and a sensation as if a rigor might be impending. At these times also his appetite fell off. He left for Eastbourne on October 19th, and returned to see me on November 20th. There was then a spot an eighth of an inch across unhealed from which no discharge had come for several days, and into which a probe could not be introduced.

I have never seen such bodies as these described either in a gall bladder or a hepatic abscess, and the question must remain undetermined as to where they were formed, especially as the exact position of the abscess could not be decided when the finger was introduced, but I have little doubt that it was a genuine abscess of the liver, and that the bodies were not formed in the gall bladder. The difficulty of finding the track in this case was rather considerable, and it is therefore important as indicating the care that must be observed and the necessity for a free incision in abscesses which burst close to the margin of the ribs.

2. I have no experience of abscess *bursting into the stomach*; but we are assured by Indian surgeons that it is by no means uncommon for this method of evacuation to lead to a perfectly satisfactory cure.

3. On the other hand it is well recognised that for an abscess to *burst into the intestine* is not a very favourable, though by no means necessarily a fatal, condition. It will be remembered that in the case of the lady described above it is possible that this may have occurred, yet she made an excellent recovery, and this is quite consistent with the fact that a similar result sometimes happens when the same thing occurs when a basic pulmonary abscess, or an empyema follows the same course. The most common portions of the gut to be perforated are the transverse colon and the duodenum. It is important to recognise the characteristic white flocculent appearance which is presented by pus that has traversed any considerable length of the intestinal canal. It has quite a different look from pus recently evacuated from an abscess, and may readily be supposed to be some of the ingesta curiously altered in character. In the following case the abscess had opened into both these viscera.

CASE XVI.—Mr. G., aged about 34, a barrister from Bombay, came under the care of Dr. Stanley Smith, with whom I saw him on August 7th, 1888. Dr. James Arnott, of Bombay, reports that he saw him on June 1st, 1888, and found him suffering from severe pain just over the position of the gall bladder, and fever ranging from 99.5° to 102°. This lasted for a month, when the temperature fell, and continued apparently in the neighbourhood of 100° till he came under notice. The pain quickly subsided, but tenderness remained, and extended far back on the right side. The liver was considerably enlarged downwards, and percussion over it caused nausea and vomiting, which indeed were troublesome symptoms throughout. The tongue was always foul, and the bowels were kept open by means of purgatives. Dr. Arnott made the diagnosis of a hepatic abscess opening into the stomach or some part of the intestine, being, I presume, led to this opinion by the character of the vomiting. His general health improved on the voyage home, and the tongue cleaned, but by July 28th a distinct bulging had begun to show itself at the epigastrium, which, by the time he reached England, was undoubtedly a pointing hepatic abscess. On August 4th he had a severe rigor in the early morning, but at 10 A.M. the temperature was normal. He was thin, emaciated, and sallow, but not jaundiced nor very anæmic. His manner was remarkably lethargic. The liver reached the umbilicus, and pres-

sure over the tender promin nce caused nausea. The bowels were constipated, the motions dark the tongue clean, the pulse small, the skin moist, and he re quire l a fire even on a hot August day.

I made a vertical incision ab ut an inch and a half below the margin of the ribs, a little abov the most prominent part of the swelling, that is, about the mi dle (from side to side) of the rectus, and, after dividing the bdominal wall, found no adhesions at the part of the liver ex osed I therefore separated the rectus from the posterior layer of it sheath, so as to expose a portion such as is shown in the s etch (Fig. 1). Then with Hagedorn's needles, two rows of stitches were applied, the outer being interrupted and of silk (*e*), the inner continuous and of catgut(*f*). The needles went right into the liver substance, and the closure was, as far as could be ascertained, complete. But so near was the pus to the surface that, in introducing the needles, a drop or two of matter escaped at one or two points, which was carefully sponged away. I therefore thought it wisest to open the abscess at once, introducing a large drainage tube. An ounce or two of thick yellow pus, with a faint smell, escaped. I did not squeeze it nor introduce the finger. It was dressed first with unprepared gauze soaked in a 1 to 4,000 sublimate lotion, outside which was placed a mass of alembroth gauze. The operation took one hour and a half, but was well borne.

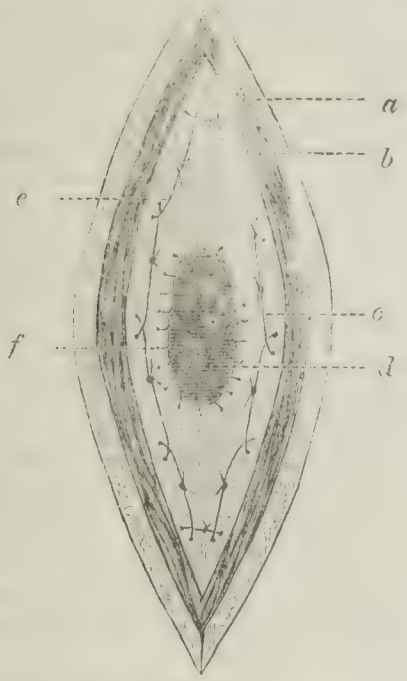


Fig. 1.

a. Subcutaneous fat.
b. Rectus.
c. Sheath of rectus.
d. Liver.
e. Interrupted suture.
f. Continuous suture.

The patient never improved, however, after, but remained in a curious dazed lethargic state, taking all the food given to him, but without appetite. His temperature was usually subnormal, but for two or three days reached 99°, falling again afterwards. A few days after the first operation a fresh pointing took place rather lower down, and it was then ascertained that both this and the original opening communicate l with a large cavity more deeply situated. Diarrhœa now set in, the motions being dark and containing sago-grain masses of mucus. He became gradually weaker, and died on August 15th, eight days after the original operation.

At the *post-mortem* examination we found the lower part of the liver, that is, the part at which the second opening was made, adherent to the abdominal wall by old adhesions, and that the adhesions formed by my stitches were complete and sufficient, but that there was no recent general peritonitis. The main abscess had three principal diverticula; two I have already described, the third reached the under surface of the liver and communicated with the first part of the duodenum and the transverse colon. Throughout the large intestine there was extensive, but apparently not very old, ulceration.

I think this is a very important case from two points of view: first, as showing that we cannot be certain, even when an abscess is actually almost pointing, that the liver will be found adherent; and, secondly, that, by careful stitching, perfectly sound adhesions may be formed, and that there is no danger in proceeding at once to evacuate the matter. This is just what the experience of gastrostomies, colotomies, enterotomies, etc., would lead one to expect, and it is a useful piece of knowledge in connection with the question of opening putrid or other abscesses of the lung. Thirdly, it seems to show that the fouling of an abscess by a communication with the bowel is a dangerous condition, though I confess that the case is complicated by the presence of the ulceration of the intestine. The occurrence of diarrhœa, and especially if mucus be present, I regard as a point that should make us give the most grave prognosis.

ON THE CENTRAL MOTOR INNERVATION OF THE LARYNX.

By Professor Dr. H. KRAUSE,
Berlin.

In an article under the above title,[1] Dr. Felix Semon and Mr Victor Horsley refer to a large series of experiments carried out on different species of animals in 1886 and 1887, as they say, "with a view of investigating the central motor innervation of the larynx." They continue to state that they have been prevented from completing their researches, but having been requested to publish their results, if only in a preliminary form, they wish to comply and to add the deductions which they think may be legitimately concluded from their experiments. They distinctly state that "their above mentioned article is only a preliminary communication, and that they will publish a full account shortly before the Royal Society and the International Medical Congress at Berlin."

Now as they say that their experiments were made "with a view of investigating the central motor innervation of the larynx," I deem it necessary to state that already, in 1883, I published my researches: "On the relations of the cerebral cortex to the larynx and pharynx."[2] The latter were concluded under request and direction of Professor H. Munk, who at the same time determined with absolute accuracy the area whence stimulation of the laryngeal muscles could be effected in accordance with the results of his researches on the localisation of the cerebral cortex. These results of mine the authors have on a former occasion, 1886, recognised as the first investigations on this subject. In my paper I have gathered—as far as I know with sufficient clearness[3]—amongst others, the points which the authors in their "preliminary communication," assert to be the chief results of their own investigations. To prove the above assertion, I shall place in the following lines, *seriatim* and in juxtaposition, the deductions of the authors and the corresponding paragraphs of my own paper.

1. They find a motor centre in each cerebral hemisphere, situated in the monkey just posterior to the lower end of the preventral sulcus at the base of the third convolution, and in the carnivora in the precrucial and neighbouring gyrus.....that stimulation of this point produces complete bilateral adduction of the vocal cords.....and finally, that stimulation of the more peripheral parts of the area evokes "less and less perfect adductions as they proceed from the focus outwards, and when the extreme margin of the area is excited, only what is known as the 'cadaveric position' is assumed by the vocal cords."

With reference to these points, I extract the following passages:[4] "The area to be stimulated is the gyrus præfrontalis (Owen)" (the animals used in each case being dogs). Again, all my experiments show that unilateral stimulation produces bilateral movements of the vocal cords. Not to leave any doubt, however, I shall quote the following experiment *verbatim* (page 206): "Experiments performed July 12th, 1882: Skull opened on the right side, and complete section of the left recurrent laryngeal nerve (during stimulation); movements of the right vocal cord are observed, which passes beyond the middle line approaching the

[1] Journal, December 21st, 1889.

[2] *Sitzungsberichte der Königlichen Academie der Wissenschaften* und *Archiv für Anatomie und Physiologie*, 1883.

[3] In regard to this point I think it justifiable to cite a passage from Jules Soury's work, *Des Fonctions du Cerveau, etc.* Paris, 1886, page 80, where he says: "La vérité est que ce travail de H. Krause, inspiré par les doctrines et expériences de Munk, est un modèle de solidité scientifique et d'élégante précision."

[4] *Loc. cit.*, *p.* 204.

left cord, the latter being in the cadaveric position." Finally, on page 205, I quite distinctly state that stimulation of the gyro-præfrontalis (at a spot marked in the figures accompanying my essay) brings about the following results: "partial or total closure of the glottis and aditus laryngis."

As to the "cadaveric position," I write, on page 206: "Experiment performed July 15th, 1882. On changing the position of the electrodes upwards to the extreme lateral margin of the sulcus cruciatus, there results (again) the position of the cords midway between phonation and deep inspiration;" and again, page 205: "Experiment performed June 26th, 1882. In one case, all the muscles apparently being in a state of tension, that position of the cords midway between phonation and deep inspiration was noticed which Ziemssen calls 'cadaveric position,' but which, there being tension of all the muscles, we must consider as a condition of total equilibration of all the muscles acting on the arytenoid cartilages." We thus see that abduction may also be brought about by stimulation of this area, in contradiction to the assertion of the authors who say: "(2) We have not been able to find an area of representation in the cortex of the abductor movements of the vocal cords."

As to point (3) touching their experiments on extirpation of one of these cortical areas, after which "no paralysis of the cords is observed," I beg to compare their results with my own. I performed[5] unilateral extirpation of this area on ten dogs, and subsequently removed the corresponding area of the opposite side. These animals were kept alive four to five months. Now, I have shown that, "after the first extirpation (on the left side), no essential or permanent disturbance of the voice occurred; I have even shown that, after double extirpation, the dogs have only lost the psychical representations of the movements of the vocal cords necessary to phonation, and that some of them had preserved the rude reflex approximation of the cords as we find it in the newborn animal with its squeaking, whining voice."

4. The authors continue: "We have observed that on powerful long-continued excitation of the laryngeal area true epilepsy of the vocal cords supervenes, gradually spreading to the neighbouring muscles of the face, neck, head, and upper limbs." Against this I point to page 205: "Experiment performed July 4th, 1882. During continued excitation respiration ceases completely. After the third excitation convulsions occur, in which, besides the muscles of the neck and fore limbs, those of the larynx participate in such a manner that complete closure of the glottis immediately alternates with slight opening of the same (as we observe it laryngoscopically during the act of laughing)."

I think that the above comparison and juxtaposition of the respective results show an almost complete coincidence, so that I could only be flattered to find them in so perfect an agreement with myself; if the authors in this, their "preliminary communication," had not altogether omitted my name, and simply replaced it by the sentence: "We carried out...experiments... with a view of investigating the central motor innervation of the larynx."

This vindication of their right of discovery seems to me to be all the more out of place as this right belongs neither to me nor to the authors; for whilst I simply investigated an area previously mapped out with almost mathematical accuracy by Professor H. Munk on the surface of the cerebral cortex, there remained for the authors only to show that not only the dog, on which I experimented, but also the monkey, cat, and rabbit enjoy the privilege of having their vocal mechanism presided over by a motor centre in the cortex.

[5] *Loc. cit.*, p. 206.

ACUTE INTESTINAL STRANGULATION DUE TO A BAND WITH ACTIVE TUBERCULAR PERITONITIS: LAPAROTOMY: CURE.

By ARTHUR E. J. BARKER, F.R.C.S.,
Surgeon to University College Hospital, etc., etc.

I DESIRE in this short paper to record somewhat in detail a case belonging to a group of diseases at the present time attracting the closest attention both of physicians and surgeons. The pathology of tubercular affections generally appears to be gaining daily in interest, and doubtless this is due in some measure to the opportunities which surgery affords of studying the processes in actually living tissues, and in parts hitherto considered inaccessible to inspection during life. Surgery offers opportunities, moreover, of examination of the tissues involved at a stage of the disease far earlier than that usually met with in the *post-mortem* room, and consequently in a condition much more likely to yield accurate information to the pathologist.

Among all the tubercular affections none are of more absorbing interest than those of the serous membranes, and first among the latter stands the peritoneum.

Tubercular peritonitis has been so recently and fully discussed by Dr. Douglas Powell and other leaders of the profession,[1] that all general questions regarding the disease need not be alluded to here. I wish simply to describe a case which presented many points of interest, and leave it for the study of others, after a few suggestions of my own.

The case is briefly as follows:—A. A., aged 23, a domestic servant, was admitted into University College Hospital on April 27th, 1889, at 9.45, with severe symptoms of intestinal obstruction. She was a delicate girl, and wore an anxious expression. Her family history was good, and she herself had hitherto enjoyed excellent health, except that about three months ago she had an attack of pain low down in the abdomen lasting one day, but unaccompanied by vomiting or constipation. For some weeks before the present attack she had diarrhœa on and off. On Tuesday, April 23rd, patient was, however, in her usual health. On Wednesday, 24th, while travelling by rail, she was suddenly seized with severe pain across the abdomen below the umbilicus. She had had a simple meal a short time previously. At 10 p.m. she vomited some frothy fluid. After this the pain remained almost constant, though not so severe as at first. There had been no action of the bowels or passage of flatus since the onset, and vomiting had been frequent, and always after food. The matters rejected became green soon after the commencement, and on the 27th are said to have first become stercoraceous. She was treated outside the hospital, first with half an ounce of castor oil on the 24th, and later with opium pills and enemata.

When I first saw her at 9.45 P.M., on April 27th, soon after admission, the pulse was 80, and irregular in rhythm and strength. She had also a loud mitral systolic murmur. The abdomen was uniformly distended, not tense, and was perhaps a little fuller over Poupart's ligament on the right. Pain was general, but chiefly noticed below the umbilicus. Tenderness was also general, but was most felt in the iliac fossæ. There was no mapping out of the intestines. The abdominal respiratory movements were fairly and equally marked on both sides. The percussion note was tympanitic, but there was slight deficiency of resonance in both flanks. There was no increased resistance to pressure anywhere. The tongue was moist and slightly furred. Examination by vagina and rectum, negative; no signs of hernia.

REMARKS.—The very sudden onset of the attack, with early vomiting and complete obstruction of bowels from the first, suggested mechanical strangulation as by a band or twist. The evidence of peritonitis, however, was rather against this diagnosis, and appeared more to point to perforation of the vermiform appendix, as did also the slight extra fulness in right iliac fossa. Rupture of any other part of the intestine seemed to be excluded by the absence of collapse and the duration of the symptoms. I therefore decided to explore the neighbourhood of the cæcum by a short incision, and if nothing was found there, to make a formal exploration of the abdomen by median incision.

Operation.—The usual antiseptic precautions having been taken a two-inch cut was made obliquely downwards and inwards, about an inch to the inside of the right anterior superior spine of the ilium. On opening the peritoneum some clear amber-coloured fluid escaped, but nothing abnormal could be felt with the finger. Some small intestine, however, which presented in the opening, was drawn out and was found to be studded thickly with tubercles of varying size. This coil was empty and relaxed, suggesting obstruction higher up. I then made a median incision below the umbilicus for four inches. The first thing noticed here was adhesion of the omentum to the abdominal wall at the seat of incision, and a quantity of clear fluid with flocculi. The small intestine which presented was much distended and congested, and thickly studded with countless tubercles, as was also the omentum, but the transverse colon above was clear of them. On passing the fingers down to the right side of the pelvis, a round pocket was entered behind. This was found to be produced by a twist of the mesentery on itself. The gut at this spot was fixed

[1] British Medical Association Meeting, 1889; the JOURNAL, December 14th, 1889.

to the brim of the pelvis by a strong band of organised lymph as thick as a crow quill. By very strong traction this was torn through at its pelvic end, and then came into view as a spur about two-thirds of an inch long attached to the intestine at one end, the other being freshly torn. A little higher up the intestine was marked with a transverse constriction, evidently caused by being crossed by this band, and above this groove it was distended and congested, while below it was small and empty. A little below the band there was also a slight kink in the gut, due to an adhesion of the peritoneal surfaces around a tubercle as large as a hemp seed. This mass was cut through, and its contents, which were cheesy, were squeezed out, the kink being thus relieved.

All obstruction having now been overcome the peritoneum was carefully sponged dry after the cavity immediately under the wound had been flushed out freely with hot boiled water. Several drachms of iodoform emulsion were then poured into both wounds among the intestines, and the abdomen was completely closed with silk sutures in the usual manner. No drain tube was inserted. A salicylic wool dressing completed the operation, which had lasted forty-seven minutes. The pulse at the end of this time was 125, and weaker than before, but not alarmingly so.

At 2 A.M. 3 minims of morphine solution were given hypodermically. At 4 A.M. the patient vomited 8 or 10 ounces of dark green bile-stained fluid. At 8 A.M. 2 minims of morphine solution were given, soon after flatus was passed. At 11 A.M. a "large quantity" of bile-stained fluid was again vomited. I now ordered enemata of 5 ounces of hot water with 2 drachms of brandy every two hours and peptonised suppositories of beef and milk alternately every four hours, and also 2 minims of morphine solution quartis horis. Nothing at all was to be taken by the mouth. The hot water enemata were given to allay thirst, as I have been in the habit of using them for this purpose for some years past in typhoid cases.

After the first twelve hours there was no vomiting for some days, and there was nothing special to note. Twenty-four hours after the operation the temperature was 101 and pulse 88, regular, and good. Thirty-six hours after admission she seemed very well, and complained of nothing but hunger. Temperature 100°, pulse 88, respirations 22. On the fourth day the hot water enemata were only given every fourth hour, and she was allowed to have a little iced tea. The morphine was continued as before. On the fifth she was not so well and she vomited in one act about 8 ounces of greenish brown fluid, and hiccoughed for some time after. This was the last attack of vomiting. The brandy was stopped, and she was given a little liquid peptone. She had three offensive fluid motions during the day. On the sixth day she felt much better and only complained of hunger; peptones as before; three bowels during the day. On the eighth day, after drinking some tea, she felt nausea, but did not vomit. After this there is nothing to note except uninterrupted convalescence. The first dressing took place on the tenth day, when I found perfect union of the wounds everywhere. The stitches were then removed and a firm bandage was applied over wool. The abdomen was flat and soft everywhere and not tender. Hunger was now her only complaint, and a desire to be allowed to get up (eleventh day), about which she got very cross until the risks were fully explained to her. On the fourteenth day the abdomen was encircled with a broad strip of American adhesive plaster in order to support the parts when the patient should get up. This was permitted on the thirty-first day after operation, and a week later she went to the Convalescent Home at Eastbourne. All symptoms of tubercular peritonitis had completely disappeared, and the abdomen seemed normal in all respects.

Several points about this case appear to me to deserve special notice. In the first place, the patient's family history was good; the only trace of evidence of tubercle among her near kin discoverable was that one brother had "abscess in the neck." The patient's health, too, had been excellent, and, except for an attack of pain in the lower part of the abdomen three months before admission, we can learn of no illness. Whether this pain had anything to do with the beginning of the tubercular peritonitis or not must remain uncertain; but it appears not improbable that it followed on the rupture of a caseating gland in the mesentery, as also that the occasional diarrhœa noted above may have followed inoculation at that time of the peritoneum. I think that the most reasonable hypothesis in regard to the onset of the disease of the peritoneum in this case may be stated as follows. That it occurred at the time the first pain was felt with the softening and rupture of a caseous mesenteric gland into the serous cavity by which the latter was inoculated directly in the immediate neighbourhood of the escaped matter. If it had started as a blood disease, why should it have affected one part of the peritoneal cavity and not the rest? The tubercle bacilli or their spores, if present in the blood, might have infected a limited part of the serous covering, if this had been damaged by any antecedent disease depressing its vitality. There is, however, no history of any abdominal complaint until immediately before the present attack. There was, to be sure, some diarrhœa off and on for some weeks before the latter; but this was most probably subsequent to the infection of the peritoneum, to judge by the state of maturity of many of the tubercles observed at the operation. But if we suppose the patient to have received tubercular matter with her food while in fair health—as, for instance, through infected milk—the whole process is not difficult to explain. Here the *materies morbi* would be taken up by the surface of the intestines and carried to the nearest lymphatic glands. There may possibly have been only enough to infect one group of the latter, and, the patient being comparatively vigorous, the tissue elements of the gland may have got the better of the bacilli and encapsuled them for a time completely. Ultimately, we may suppose that the focus of hyperplasia in the gland underwent the usual fatty degeneration, and the resulting caseous matter ruptured into the abdominal cavity and inoculated all the serous surfaces in the neighbourhood. This sequence of events, at all events, appears to be common. Once the peritoneum becomes the seat of tubercle, the tendency to form bands of adhesion is great, as is well known. The inflammatory exudation is in many cases just enough to throw out plastic lymph around some of the foci, and this is drawn out into bands and threads while being organised into fibrous tissue. And here, as Dr. Powell remarks, is one of the gravest dangers of tubercular peritonitis. For, though the infective process may subside, these bands are very prone to cause internal strangulation sooner or later, as in the present case. Whether this patient would have recovered from the peritonitis if the sudden onset of internal strangulation had not called for laparotomy, which, besides averting the immediate risk from complete obstruction, enabled me to cleanse the tuberculised area, it is impossible to say. But one fact is remarkable as bearing upon this point, namely, that many of the tubercles were already caseating. This would appear to indicate that, at all events, there was some tendency in the disease to obsolescence. On the other hand, however, there were countless remaining which presented the well known pearl grey, translucent appearance of active growth.

But whether the patient might have ultimately recovered from the tubercular process or not without the benefits of operation, I cannot help thinking that the latter contributed much to the rapid cure. For though the tubercles themselves were not and could not be removed, a large quantity of fluid, probably charged, if not with bacilli at all events with their spores, was washed and sponged away, and so the dosage of the poison was reduced, the further spread of inoculation over fresh surfaces was arrested, and, perhaps, no more morbid material was left behind than could be disposed of by the tissue elements of a fairly vigorous individual. Again, whether the iodoform and glycerine emulsion poured freely over the affected intestines may have contributed also to the arrest of the tubercular process cannot of course be proved. But from what I have seen of its action when injected into tubercular abscesses elsewhere, I am forced to the belief that either the iodoform or the glycerine does exercise some inhibitory or destructive action on tubercle growth. Some months ago I published in the JOURNAL an account of an original method of carrying out this principle of thoroughly flushing out and cleansing tubercular abscesses connected with hip disease after excising the diseased joint surfaces, where the results have shown a complete parallel to the present case; and I hope soon to produce four or five fresh cases treated similarly at one of the societies. In some of these the procedure mentioned, combined with the injection of the cavity with iodoform emulsion, has resulted in complete arrest of the tubercular disease as well as by union by first intention of the wound.

In these four cases the immediate arrest by operation of a tubercular process which had been visibly and steadily advancing in the hip for months in spite of treatment was the most remarkable thing of the kind I have ever seen. The only parallel appears to be in cases such as that now recorded, and it appears to me complete. In both a large quantity of tubercular matter was removed thoroughly from an area apparently involved in active growth, and

all the surfaces affected were soaked in iodoform emulsion. In neither the abdominal nor hip cases was any drain tube employed, so that there could be no question of the carrying off gradually and continuously of the disease products subsequently to the operation. In both instances the same procedure seems to have put an end to the local disease.

Of course all these cases are being watched carefully at short intervals for a possible return of the local or general affection; but though many months have elapsed since some of them were operated on, there is no evidence up to date of local mischief except in one, and the general condition continues steadily to improve.

A METHOD OF ADMINISTERING ETHERISED NITROUS OXIDE AS A GENERAL ANÆSTHETIC IN MINOR SURGERY.

By J. FREDERICK W. SILK, M.D.Lond.,
Anæsthetist to Guy's Hospital (Dental School), to the Great Northern Central Hospital, and to the National Hospital for Epilepsy and Paralysis, Queen Square.

In selecting an anæsthetic for use in minor surgery the following points should be attended to, namely:

1. It should be as nearly as possible "safe."
2. Little or no previous preparation of the patient should be required.
3. The anæsthesia induced should be perfect.
4. The after-effects should be practically *nil*.

Of known anæsthetics, nitrous oxide is the one that fulfils more of these requirements than any other, and one is strongly tempted to direct one's attention to the possibility of utilising it in some form or another in all cases.

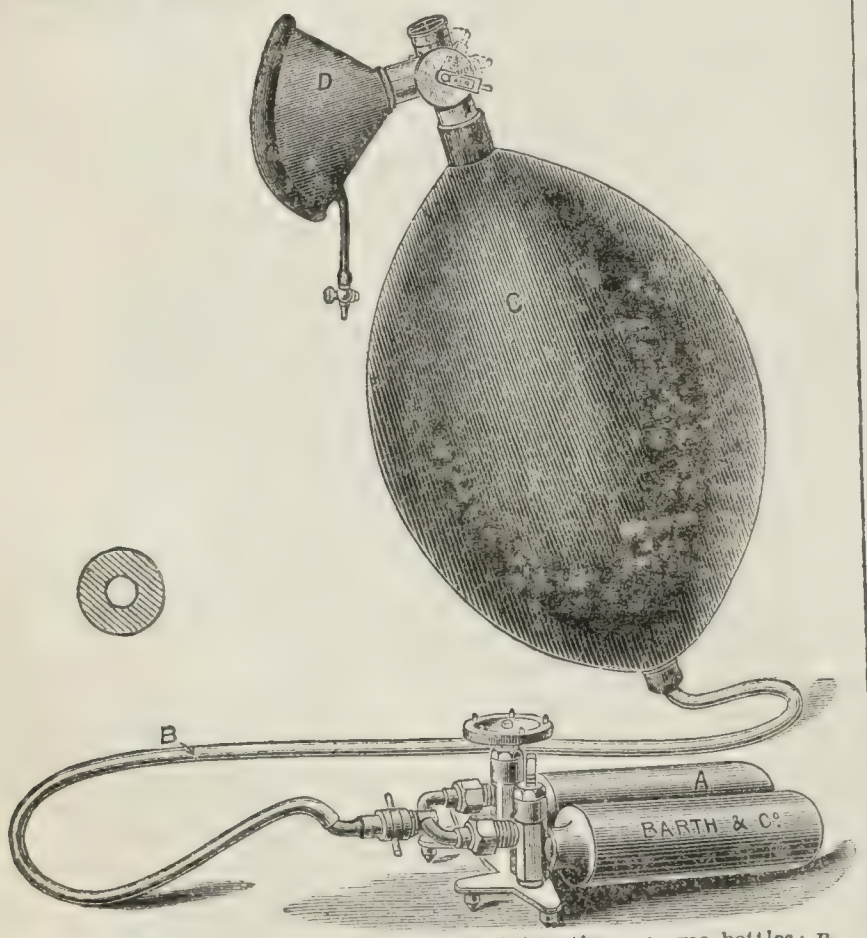


Fig. 1.—Apparatus arranged for direct administration. A, gas bottles; B, conducting pipe, a section of which is represented above; C, reservoir bag; D, face-piece.

I would remind you in the first place that nitrous oxide anæsthesia in its purest and most unobjectionable form is not, as some would have us believe, merely a matter of asphyxia; and, on the other hand, that the specific anæsthetic properties of the gas are such that its administration absolutely undiluted with air has hitherto been considered essential for the production of satisfactory narcosis. Now it is obvious that this exclusion of air, although it may intensify the specific action, can only be continued for very short periods, for periods so short in fact that the full specific anæsthetic effects have barely time to develop before phenomena due simply and solely to arrested tissue metamorphosis or oxygen starvation make their appearance. In other words, the period of primary narcosis, or that due to a single continuous application of the facepiece without the admission of air, is short, and hence the objection to the use of gas alone in minor surgery. In order to overcome this difficulty you will see at once that two courses are open to us. We may either administer the gas mixed with air or some other oxidysing agent, or we may increase the specific anæsthetic power of the gas, so that a deeper narcosis may ensue before the development of symptoms of oxygen starvation. The first of these alternatives hardly as yet comes within the range of practical anæsthetics, but the second has been in vogue for some time, and it is to a method of doing this that I venture to draw attention.

The production of full ethereal anæsthesia I do not propose to describe, the ether in the following method is used simply as an adjunct to the nitrous oxide, which is the main anæsthetising agent.

The accompanying figure (Fig. 1) represents the apparatus which I usually employ myself for the administration of nitrous oxide alone. Full details of the working of this apparatus, and of the phenomena of nitrous oxide anæsthesia, are contained in my little manual on the subject, and I do not, therefore, propose to discuss the matter at any length here. I may, however, point out that the main features of the apparatus in question are: a pair of steel bottles (A) containing the liquefied gas, which on escaping through the conducting tube B expands fully in the reservoir bag C, and is inhaled through the facepiece D; between C and D is a three-way stopcock, by working which we are enabled either to shut off the gas from the facepiece entirely, or to admit the gas during inspiration only, or to allow of free in-and-out respirations into the bag. The question now is, How is it possible to adapt this apparatus and method so as to permit of the admixture of small quantities of ether vapour with the gas inhaled? Many plans have been suggested, and many forms of apparatus have been contrived; the one to which I would now draw attention recommended itself to my notice mainly on account of its simplicity and lightness, and having used it a good many times I can say confidently that for the purpose for which it is intended it is quite effectual.

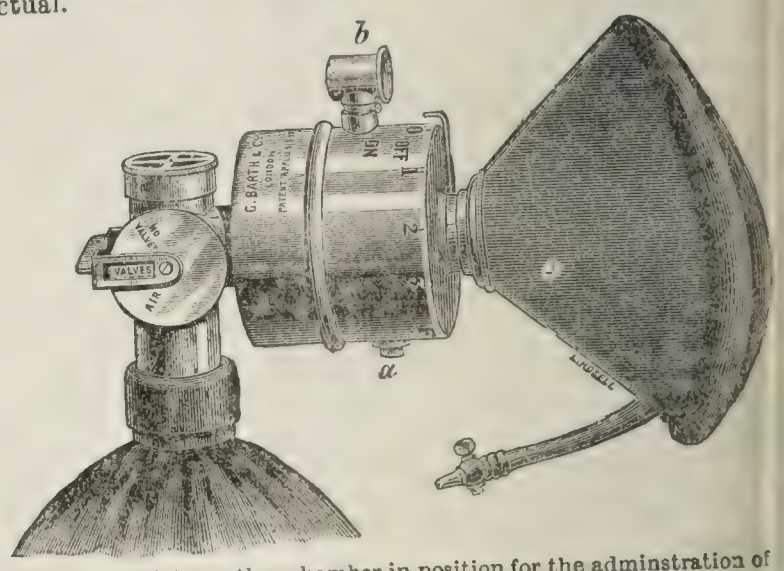


Fig. 2.—Miniature ether chamber in position for the adminstration of etherised nitrous oxid.

Fig. 2 represents the apparatus in position. Those who are familiar with the portable ether apparatus devised by the late Mr. Clover will at once recognise the principle of the chamber I am describing. It consists simply of a metal reservoir, surrounded in half its extent with a water jacket; the air or gas inhaled becomes charged with ether vapour by passing through a central tube and over the liquid ether. It differs from Mr. Clover's apparatus in the following particulars:

1. It is much smaller, holding only half an ounce of ether.
2. The central tube passes right through the chamber, so that the latter can rotate freely and independently of either bag or face-piece.

If we wish to administer etherised gas to a patient with this apparatus the central tube is removed, half an ounce of ether

poured into the reservoir through *b* (which opens and shuts by a simple reversing movement), the central tube is reinserted, the index turned to o, and the whole fitted as in the figure. In cold weather the chamber should be dipped for a few seconds in hot water, and dried before being charged. Before applying the facepiece all odour of ether should be got rid of, and this can readily be done either by turning on the stopcock and forcing a little gas through the tube and facepiece, or, better, by the administrator applying the facepiece to his own face, and taking one or two deep inspirations of air.

It is an important advantage claimed for the use of etherised gas that it is almost immaterial in which position the patient is placed—upright, supine, or semi-recumbent, at the convenience of the operator. The mouth should, by preference, be propped open as for tooth extraction, but it is not essential. The administration is commenced precisely as though gas alone were being used; the ether chamber is, for the time being, ignored, and, as it is completely cut off, the odour of ether should not be perceptible to the patient. After the first five or six inspirations the ether chamber is turned sharply so that the index points to 1, two or three more respirations are permitted, and another movement to 2 is made, and so on, until all the gas inhaled passes over the ether before reaching the facepiece, that is, the index points to F.

If the phenomena of profound nitrous oxide anæsthesia have not by this time developed, the valves in the threeway tube may be cut off and a few respirations in and out of the bag, across the ether, may be allowed, until the subsultus, stertor, or jactitations and spasm warn us to desist. The reservoir bag should of course be kept full the whole time in order to counteract leakage, and to avoid the subjective sensation of suffocation which is sometimes complained of if the supply of gas is scanty.

Now as to the phenomena due to the use of etherised gas. In the main these are or should be simply those of gas alone, but of course in children, in bronchitic adults, and in elderly people, the first few inspirations of gas may not succeed, as they usually do, in benumbing the sensitive mucous membranes of the larynx, trachea, etc., and a certain amount of cough and laryngeal spasm may follow the first admission of ether; but this usually subsides quickly, and if not severe may be neglected.

The pulse is often, as we should expect, slightly accelerated with the influx of ether vapour, and secondarily to this acceleration the lividity is usually very marked, but as it is probably due less to asphyxia than to retardation of the blood-oxidising processes, it need not cause alarm. The conjunctivæ become as a rule markedly injected, but the dilatation of the pupil is even less constantly an indication of profound anæsthesia than is the case with nitrous oxide alone. Nor should we rely too much upon the abolition of conjunctival reflex as an indication for the commencement of the operation; it is one of the peculiarities of nitrous oxide anæsthesia that the eye reflexes are often abolished quite early, so that it is better to wait for the commencement of some other phenomena, such as twitching of the eyelids or of the extensor tendons, stertor, etc., the inhalation being continued during the performance of the operation. If the mouth is the scene of operation, the narcosis must of course be profound, in order that advantage may be taken to the fullest extent of the primary anæsthesia, but the point beyond which it is inadvisable to proceed varies vastly with each individual case.

Next as to after-effects; these, of course, vary with the amount of ether inhaled. In favourable cases no more after-disturbance is to be anticipated than with gas alone. The patient is a little longer coming round, and, may be, is somewhat staggering in gait and excitable in manner for some one or two minutes, but at the end of that time is usually quite able, as far as the anæsthetic is concerned, to get about his ordinary work. With a little more ether, and slight prolongation of the narcosis, lassitude and depression is complained of for the rest of the day. Others again may be actually sick, or suffer from headache, but these latter phenomena are, or should be, if the anæsthetic is administered with judgment, quite the exception, and we should aim at prolonging the nitrous oxide anæsthesia alone, rather than at the development of ether narcosis.

If the operation takes longer than was at first anticipated, the anæsthesia may be prolonged by removing the facepiece with every three or four respirations for the admission of a small quantity of air, the ether supply being kept full on all the time; this I believe to be a better plan than the use of more or less complicated taps for the admission of air to the apparatus itself, and not the less so because it entails rather more vigilance on the part of the anæsthetist.

Next, as to the duration of the primary anæsthesia which it is possible to induce by this means, that is, the anæsthesia which ensues after a single application of the facepiece before the admission of any air. I find that, as a rule, it is very difficult to convey to the mind of an operating surgeon by mere figures the actual extent of the operation which it is possible to perform in a comparatively brief period. If one could induce surgeons to forget for the moment that the available anæsthesia with nitrous oxide alone is, approximately, thirty seconds, and to remember only that that brief period suffices for the extraction of two, three, or sometimes even more teeth, I feel sure that the use of this very satisfactory anæsthetic in general surgery would be greatly extended.

In the same way with etherised gas, the period of available primary anæsthesia induced by the method I have attempted to explain I have found to average 47.6 seconds (eighteen observations, longest time 77 seconds, shortest 33 seconds), but I have records of the removal of no less than ten teeth while under its influence, and of the performance of many minor operations, such as opening abscesses, scraping glands, tonsillotomy, for Meibomian cysts, sounding for stone, etc., and many other small operations of about the same duration will occur readily to most so that I hardly need to enumerate them.

ENGLISH AND FOREIGN WINTER RESORTS.

By CHARLES ROBERTS F.R.C.S., ETC.,
Late Assistant-Surgeon Victoria Hospital,

THE relative merits of our English winter resorts and those of the South of France and North of Italy cannot, I think, be settled in the summary manner adopted by Dr. Burney Yeo, in the JOURNAL of December 21st. If, indeed, we must accept his four propositions that the advantages of such resorts depend on (1) the amount of sunshine, (2) the warmer temperature dependent on it, and (3) the smallest number of rainy days and the greater absence of atmospheric humidity, there is no room left for criticism. But are sunshine and a very dry atmosphere the only, or, indeed the chief, requirements of the majority of invalids in the winter months? Where these conditions exist in the greatest perfection there must necessarily be a wide variation of day and night temperature from the sun's rays on the one hand, and the free radiation on the other—rapid changes which it is difficult to meet by clothing, and which can only be fully overcome by free bodily exercise.

In estimating climates we allow ourselves to be hampered by the ubiquitous bugbear phthisis, which, if the prevailing views of its pathology are correct, is a disease for hygienic rather than for climatic treatment. The subject is also too much influenced by the bodily sensations of healthy persons whose muscular system is ready to meet the wide variations of temperature, and whose minds are free to entertain the charm of new scenery and physical surroundings. If we omit phthisis, what are the diseases which require a better winter climate than London or the inland districts of our islands? Chronic rheumatisms and strumous disease of children, which disable the body for active exercises; functional nervous diseases and overwork, which require an even and soothing climate, and not an exciting dry one like that of the South of France, where fairly healthy persons sleep with difficulty; liver, dysenteric, and gastric diseases, which require a narrow range of temperature, and are not benefited by a high one; and chronic pulmonary diseases (not phthisical), which also require a narrow range of temperature and which are not always benefited by a very dry temperature.

With regard to judging climates by meteorological observations, it is very misleading to trust to mean results. The same mean temperature may be derived from a very wide range and from a narrow range, and the minimum (which is the temperature which damages or kills the invalid) may be higher with a low mean than with a high one. The minima are not given in Dr. Yeo's tables, but it is quite possible that the higher mean temperature of San Remo is due to the higher maxima for an hour or two in the middle of the day (which are of little value to the invalid) than to a higher absolute temperature of the twenty-four hours. When the range is wide the mean temperature may not occur for more than a couple of hours in the twenty-four, while with a narrow

range the mean may be the same for many hours. Again, in comparing the hours of sunshine, it must be borne in mind that San Remo is seven or eight degrees south of Falmouth, and the days are considerably longer at the former than the latter place. The same months are compared, but not the same seasons. This, of course, should be all in favour of San Remo, as it is the winter months which invalids wish to escape from; but practically it is not so, as the rapid fall of temperature about sundown on all the stations on the Riviera drives the invalid indoors before sunset, and thus makes the southern day as short as the northern one, where no such changes of temperature occur. Moreover, the therapeutical value of sunshine has not yet been scientifically made out. It has an important psychical effect which of course is beneficial to invalids, but it is its frequency rather than its intensity, its quality rather than its quantity, which is beneficial.

Even the excess of rainy days, that is, days on which some rain falls (the quantity should be given) at our English stations is not such a formidable condemnation of them as at first sight appears. A rainy day is a less evil than an east wind or a mistral, which are dry winds and accountable for much of the dryness of the Riviera atmosphere (records of which ought to be given in all climatic data), and is less injurious, more tolerable to bear, and more easily surmounted by domestic arrangements at home than abroad, and it is the nature of the soil much more than the relative humidity of the atmosphere which is of importance. The humidity of Falmouth as given by Sir Edward Sieveking for the winter months, 83.6, compares favourably with that of midland England, which is 90.2, and it is no doubt still lower at our more eastern stations where the rainfall is much less than at Falmouth.

Meteorological instruments are at best rude guides to climate, and a more delicate test is to be found in the vegetation, as plants indicate not only the minimum temperature and atmospheric humidity, but also the nature of the soil. It is time moreover that this question of climates should be decided by clinical observation, rather than theoretical demonstration. A set of tables showing some useful clinical results would do more to establish the claims of places at home or abroad to the confidence of medical men than the mere opinions of advocates "fashionable" or otherwise. There is a large class of invalids who stand in need of a good winter climate, but who cannot go to the "fashionable" stations abroad on account of expense, or family or business arrangements. Children are especial sufferers in this respect, and if our own stations are not quite equal to the more distant ones, we shall do well to make the most of them, and if we must make comparisons, let it be with other parts of our own country, especially with our great smoky towns, from which invalids have most occasion to escape. If we do this we shall probably find slight differences in meteorological conditions as demonstrated by instruments, but we shall be certain of more sunshine, fresh air, and restfulness for body and mind. The Mediterranean stations are not available for more than one or two per cent. of our invalids who require good winter quarters, and we should be grateful for any additions to our much too limited list of home stations. Our much abused climate has bred up the strongest, healthiest, and most energetic races of the world, and it is only its rougher features which require to be tempered to the wants of our invalids in winter. I have visited the Mediterranean Stations from Tangier and Malaga to Corfu and Cairo in the winter months, and I do not therefore write from prejudice or ignorance, but from experience of our own winter resorts as compared with them.

TOXICOLOGICAL MEMORANDA.

TOXIC EFFECTS OF ATROPINE DROPS.

ONE or two letters on this subject have recently appeared in the JOURNAL. Cases of atropine delirium similar to the one related by Dr. Tyson are not very uncommon in ophthalmic practice. Children are most liable to suffer in this way, but occasionally the same symptoms result in the adult from the use of atropine drops. As Dr. Chaldecott indicates in the JOURNAL of November 9th, the poisoning is due, not to the atropine really necessary for the eye, but to the excess which runs down the lachrymal duct into the throat.

My object in writing now is to draw attention to the fact that these alarming results can, in my experience, be entirely prevented by using atropine in the form of ointment whenever it has to be applied repeatedly to the eye. Atropine (not the sulphate) is, I understand, soluble in warm vaseline, so that an ointment of any ordinary strength (say four grains to the ounce) can be readily prepared. A small piece of such an ointment introduced inside the lower lid on the tip of a camel-hair pencil will act on the eye quite as powerfully as an aqueous solution of the same strength. For the past two or three years I have always ordered atropine in this form, and have not met with a single instance of atropine poisoning following.

I need hardly say that, for ordinary purposes of ophthalmoscopic examination, atropine or homatropine drops are preferable to ointment, since the drops of oil from the latter keep floating over the surface of the cornea for a considerable time, and prevent a good view of the fundus. It is in cases where the alkaloid has to be used repeatedly that I should recommend an ointment in preference to an aqueous solution of atropine.

Queen Anne Street. R. MARCUS GUNN.

PATHOLOGICAL MEMORANDA.

DUODENAL ULCER AFTER A BURN.

FROM the records of a great many cases of this lesion, it appears that:—1. It may occur three or four days after a burn or scald, or may be delayed for many weeks. 2. In two cases it followed not a burn but a frost-bite. 3. In only one case (P. Hewett) is it recorded that the raw surface of the burn took on an unhealthy action at the time when symptoms of duodenal ulceration were first observed. 4. Not one case showed true pyæmic abscesses elsewhere: nor, in most of the cases, is there any record of marked signs during life of pyæmia or septicæmia: nor are there other lesions found *post mortem:* the duodenum suffers alone.

Many theories have been suggested as to the causes of this lesion: that it is due to an "acute oligocythæmia"; to dissolution of the red blood corpuscles; to the administration of ardent spirits immediately after the burn; to septic infection, aided perhaps by self-digestion; to embolism. But the experiments of Brown-Séquard, who found that section of the lumbar cord, or of the sciatic and anterior crural nerves, prevented congestion and ecchymoses of the viscera, in dogs whose lower extremities had been burned, show that the nervous system is concerned in the production of this lesion. The frequent occurrence of invagination in burnt children, and the case of sudden acute tympanites after a burn, recorded by Dr. Gibb, point in the same direction.

Perhaps this congestion or ulceration of the duodenum after a burn is in some cases akin to the congestion and suppuration of the parotid in injury or disease of the pelvic or abdominal viscera, a lesion which may be associated with septic infection, but is associated also with reflex nerve influences, and is a solitary focus of inflammation in nine cases out of ten. The duodenum lies closer than any other part of the intestines to the great sympathetic plexuses: it is not fanciful to suppose that the first step toward ulceration is made by some alteration or suppression of its secretions, brought about by the influence of the nervous system.

Wimpole Street, W. STEPHEN PAGET.

TERATOLOGICAL MEMORANDA.

FŒTUS, WITH DUPLICITY OF RIGHT LOWER EXTREMITY; ARM PRESENTATION.

THE following case was attended by me on the night of the 10th July, 1880:—

M. B., a poor laundress, of Labbar, Malta, 32 years of age, being at the end of her second pregnancy, after a good day's work, on July 10th, came home, and shortly afterwards labour pains began. The midwife of the district was called in, and attended her for nearly two hours, during which time the pains became severe, and the membranes were ruptured. On examination the midwife discovered a preternatural labour, and asked for a medical man. I was called at about 10.30 p.m., and found the pains severe, the general state of the woman satisfactory, and the fœtus in the second anterior dorsal position, with protrusion of the left arm. There was moderate hæmorrhage, and the os uteri not fully dilated. When it became more dilated I performed, without difficulty, the turning of the child.

I brought out a large female child with three legs, the supe

numerary limb springing out from the internal upper part of the right thigh, forming at the place of insertion a big projection. The third leg was about a quarter of an inch shorter than the two normal lower extremities, but much thinner. It presented five digits, besides the great toe. The woman recovered in a short time, but the child died after two days through congenital debility. The mother absolutely refused to allow a *post-mortem* examination, or to let the child be kept in the museum of the Central Hospital. I cannot, therefore, give any description of the anatomical connections of this supernumerary leg with the rest of the body.

Malta. G. F. INGLOTT, M.D., D.M.O.

OBSTETRIC MEMORANDA.

TWIN PREGNANCY; A HEALTHY AND A MACERATED FŒTUS.

ON September 1st, 1889, I was called to Mrs. B., in her second labour, and one month before she expected. On examination I found the proverbial "bag of shells" presenting, and also a brown grumous discharge. I told those present that the child would probably be dead. After a slight interval the pains recurred, and a healthy sac presented, which I ruptured, and a small healthy boy was soon born. For a moment the first presentation puzzled me, but on putting my hand on the abdomen I found a large mass in the uterus, which was quickly extruded, and presented a fairly healthy, though small, placenta, with two cords, to one of which, withered down to its insertion, a macerated four to five months' male fœtus, still in its sac, was attached. The placenta on this side had a patch of fatty degeneration.

Remarks.—Since her first confinement, five years before, the mother had had two miscarriages; and in the present pregnancy, from the second month to delivery at eight months, she had suffered from severe salivation, spitting as much as two pints in twenty-four hours for some days. Could this have caused the death of one fœtus in any way? The eight months' fœtus died at one month of bronchitis and pertussis. No history of syphilis in family.

Fordingbridge. HERBERT V. RAKE, M.R.C.S.Eng., L.S.A.

CLINICAL MEMORANDA.

INFLAMMATION OF COWPER'S GLANDS IN DENGUE.

IN the JOURNAL of January 4th, 1890, I read in the special correspondence from Vienna a report of a case of measles related by Dr. S. Rona in which this complication occurred, and you mention "such a complication has not hitherto been recorded in connection with an acute exanthem." Allow me to inform you that in the outbreak of dengue which has been endemic here for four years, I have had frequent cases in which this complication has occurred, and surely dengue, with its chest eruption, etc., must be looked on as an exanthem. I have reported cases in which there was acute orchitis or acute inflammation of Cowper's glands and ducts in the male, and acute ovarian inflammation and salpinx in the female.

I brought this matter before the British Medical Association at their meeting in Dublin in 1887. The same thing has occurred in pet dogs that have taken the disease from actual contact with patients, profuse urethral discharge in dogs and vaginal discharge in bitches. Epistaxis in men and profuse flooding in females are also complications that I have been called on to treat in dengue.

JOHN RINGWOOD, Medical Officer, Kells Fever Hospital, Ireland.

ACUTE PEMPHIGUS.

SOME cases which have recently been under my care seem to point to an acute pemphigus.

W. G., aged 3 years, was taken with diarrhœa and sickness on October 23rd. On October 26th I saw the case first; there were about thirty large vesicles scattered all over the body and extremities; they had red bases, were painful, and where the crusts had been rubbed off in the more advanced ones, large excoriations were left. Temperature 103°. This child remained extremely ill for three or four days, and was convalescent on November 7th.

E. G., aged 6, was seized with convulsions on October 29th, and next day developed many vesicles about the size of a pea; there was diarrhœa and sickness. Temperature 104°. Convalescent by November 4th. This child had ascarides.

L. G., aged 11, had diarrhœa and sickness on November 1st. Temperature 102°; and on November 3rd about a dozen vesicles appeared. Convalescent November 6th.

These cases were all children in one family, and in each case the vesicles have left a purple stain, which is fading gradually.

Dulverton. G. F. SYDENHAM, M.R.C.S.

THERAPEUTIC MEMORANDA.

TREATMENT OF INFLUENZA.

I FIND, after treating about fifty cases of the disease, that it can be cut short as easily as an ordinary bronchial attack by the following medicines in combination:—Spiritus etheris nitrosi, half an ounce; liquor ferri perchloridi fort., half a drachm; vinum ipecacuanhæ, one drachm; tinctura opii, twenty minims; glycerine, half an ounce; water to six ounces; one tablespoonful of the mixture to be taken every two hours. When the bowels are confined I give three grains of calomel. By this treatment the disease is readily cut short in twenty-four hours, leaving the patient rather weak and slightly affected with a cough, curable by sulphuric acid and opium in ordinary doses. I have seen but one case of the gastric form, which I treated successfully on general principles. If the bronchial catarrh were aggravated and extensive, and there were symptoms of great depression and collapse on seeing a case, I would omit the opium and ipecacuanha, and give full doses of iron and nitrous ether.

Accrington. C. R. ILLINGWORTH, M.D.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GREAT NORTHERN HOSPITAL.

CASE OF ANKYLOSIS OF TEMPORO-MAXILLARY JOINT: EXCISION OF THE CONDYLE AND NECK OF THE JAW.[1]

(By HERBERT WILLIAM ALLINGHAM, F.R.C.S., Surgeon to the Hospital.)

G. F., aged 8, was brought by his mother, who gave the following history: About three months previously he had tumbled from a wall ten feet in height and had fallen upon the point of his chin, making a wound about an inch in length just below the symphysis. He was taken to a neighbouring chemist, who treated the wound; but from the time of the accident the lad complained, whenever he moved the jaw, of pain in the region of the right temporo-maxillary joint. Moreover, the jaw became stiff, and continued to grow even stiffer.

On examining him carefully, I found the following condition: There was a scar an inch in length below the symphysis, but I could not discover any signs of fracture about the horizontal or vertical ramus. The right temporo-maxillary joint, however, seemed tender to the touch, and the condyle was more prominent than that on the left side. He could open his mouth only half an inch, and could not advance the lower jaw, nor was he able to effect any lateral movement. He complained of occasional pain when he bit on any hard substance, and could not protrude his tongue. Accordingly, under ether I forced open the jaw; but in a fortnight it returned to its former stiff condition. I repeated the operation and told the lad to keep the jaw open by means of a cork. Again I was disappointed; once more the jaw reverted to its contracted state, although the cork treatment was continued for over a month. I then left him alone for quite two months, as he complained of pain about the joint. At the expiration of this period I decided to excise the condyle and neck of the jaw.

On December 7th, 1887, chloroform being given, an incision was made over and along the zygoma for about two inches, and downwards along the posterior margin of the jaw for the same distance. The skin was dissected downwards off the parotid fascia, and this fascia and the masseter were then divided from the lower border

[1] Shown at the Medical Society of London.

of the zygoma and pushed down, so that the facial nerve and parotid gland were left uncut. The external carotid was accidentally divided and had to be tied. When the masseter had been separated to the same extent as the skin incision, I introduced a small saw (Adams's) and tried to saw through the neck of the jaw, from above downwards, so as to weaken the bone. I could not completely saw this through, and with difficulty succeeded in passing one limb of a curved cutting bone-forceps over the sigmoid notch, and with great force cut the bone obliquely through the partially-sawn and therefore weakened portion. Hereupon I strove to disarticulate it; but the condyle was too firmly ankylosed. Then, after freely dividing the capsule, I put an elevator into the joint and forced the condyle from the temporal bone. After a few cuts with the knife, the soft parts were divided and the condyle and neck of the jaw removed (specimen shown). There was no bleeding, and a drainage tube was introduced. The masseter and parotid fascia were sewn (with buried catgut sutures) to the zygoma, and the skin stitched with horsehair sutures. Antiseptic dressing was employed and carbolic acid was used during the operation.

December 8th. The patient had passed a comfortable night, but there was a little oozing and slight facial paralysis; temperature 101.2° F.

December 9th. Wound dressed, drainage tube taken out; facial paralysis rather worse, and more marked in upper half of the face; temperature 100.2°.

December 13th. Less facial paralysis; stitches all removed; wound dressed with zinc ointment; patient could move jaw freely.

December 16th. Jaw opened; more paralysis of temporal, malar, and some of infraorbital branches of the facial nerves; temperature 98.6°.

December 20th. Less paralysis; wound healing and discharge scanty; wound strapped up; mouth to be opened every day with gag.

December 24th. All healed; jaw more movable; paralysis improving; no pain or tenderness.

December 30th. Wound healed except for a small sinus at upper and posterior parts; no pain; patient eating well; able to open mouth about an inch; very little lateral movements; facial paralysis of upper half of face, none of lower; temporal malar branches of facial nerve evidently not yet recovered from their division; occipito-frontalis completely, and orbicularis palpebrarum partially, paralysed. The patient was discharged.

January 10th, 1888. Patient could open mouth better; some rotatory and antero-posterior movement; scar still red, but all sound.

November 2nd, 1888. I saw the boy again; he could then open his mouth to its full extent, protrude the lower jaw, and slightly rotate it from side to side; there was no facial paralysis whatever.

Many operations have been devised for the treatment of this very troublesome complaint, but they are too well known to us all to need enumeration. The case I have laid before you to-night will show that the operation of excision of the condyle and neck of the jaw, though somewhat difficult to perform, is nevertheless a method of treatment likely to produce extremely satisfactory results. It is just a year since I excised the condyle and neck of the jaw which I now hand round, and you will easily perceive from an examination of the boy, G. F., now before you, how thoroughly successful and gratifying the operation has been. He has recovered the full use of his jaw, and suffers from no facial paralysis whatever. I shall not hesitate to repeat this method of treating ankylosis of the jaw whenever occasion may require.

CUMBERLAND INFIRMARY.

A CASE OF PERNICIOUS ANÆMIA; ADMINISTRATION OF ARSENIC; TRANSFUSION; RECOVERY.

(Under the care of Dr. LOCKIE.)

M. G., aged 21 years, a pale anæmic-looking girl, was admitted to the Cumberland Infirmary on December 28th, 1888, complaining of pain in the chest and head, shortness of breath, and palpitation of nine weeks' duration. Has had epistaxis on two occasions, and lately has been suffering from diarrhœa and œdema of the legs. During the time mentioned she has been taking iron in the form of Blaud's pills, but without benefit.

On the morning before admission she had severe pain in the precordia, vomited, and then fainted, and these symptoms induced her friends to bring her to the hospital.

On admission she is very anæmic, the mucous membranes being almost colourless. Heart's action weak and rapid; pulse 120 per minute. A blowing systolic *bruit* can be heard in the mitral area and a loud systolic murmur over the whole of the base of the heart, also a *bruit de diable* in the neck. There is tenderness in the splenic region, and the percussion dulness of this organ is 4½ inches. Has copious diarrhœa. Menses have ceased since last June. Temperature 102°.

December 30th. The temperature, which has been as high as 103°, became normal this morning; diarrhœa continues in spite of remedies; red corpuscles 2,010,000 per cubic millimètre.

January 5th. Has not improved, although the diarrhœa has ceased; tongue is dry and furred, and the patient very thirsty; temperature varies from 99° to 102°, pulse from 112 to 140 per minute. She is having liquor arsenicalis, 1 minim, thrice daily.

January 9th. The diarrhœa has recommenced, and she has troublesome epistaxis, which recurs almost as soon as it is stopped.

January 11th. Her condition is much worse; the constant diarrhœa and repeated epistaxis have weakened her greatly; pulse is weak and compressible, 132 per minute; there are numerous hæmorrhages into both retinæ in the neighbourhood of the optic disc. She is slightly delirious at night.

January 13th. She is in a very collapsed condition, repeatedly fainting, delirious, and very restless; pulse 138, very weak. Transfusion decided on, and 4 ounces of blood from the arm of the porter, with 2 ounces of sodium phosphate solution, injected into the median basilic vein of the patient by Dr. Maclaren. 10 P.M. She has had a rigor, during which the temperature rose to 106°, and there was slight vomiting. Her pulse is now much stronger than before the transfusion.

January 15th. Has slight epistaxis, which was easily controlled; diarrhœa has ceased; temperature 100°, pulse 120.

January 19th. The temperature has gradually become normal, pulse 88. She is taking 3 minims of liq. arsenicalis thrice daily.

January 24th. The arsenic has been increased gradually to 6 minims, three times a day, and she is slowly improving. She still has slight attacks of epistaxis but no diarrhœa. The heart condition remains the same.

February 21st. She is now taking 12 minims of liq. arsenicalis thrice daily. All the cardiac *bruits* have gone, and, except for some shortness of breath, she has no symptoms.

March 29th. Lately she has been strong enough to take walking exercise daily, and to-day is to be sent to the Silloth Convalescent Home. She is now well, and does not complain of any symptoms. The red corpuscles have increased to 4,790,000 per cubic millimètre.

REMARKS BY DR. LOCKIE.—This is the youngest patient whom I have seen the subject of pernicious anæmia, the disease being rare in early life. Out of 110 cases collected by Dr. Coupland, 7 only occurred below the age of 20. Between 20 and 30, however, 26 cases occurred, 18 of them being in females. The case adds another illustration to the many now published of the good effects of arsenic in this disease. I regret it was not more freely administered in the early stages of the treatment, the copious diarrhœa leading to its administration in small doses only. Transfusion undoubtedly turned the scale towards recovery, which was completed by the free administration of arsenic.

Although we have in arsenic a remedy of the very greatest value in this disease, a boon for which the profession is much indebted to Dr. Byrom Bramwell, in very few cases is the recovery permanent. According to my experience, nearly all have relapses, and though in the earlier of these the good effects of the remedy may be again seen, there comes a time, sooner or later, when it ceases to have any influence.

A CORRECTION: PATHOLOGY OF DUODENITIS AFTER BURNS.

DR. WILLIAM HUNTER points out the following *errata* in the report of his paper on Duodenitis after Burns, read before the Pathological Society (JOURNAL, p. 76): Line 21, for "3 to 5 grammes" read 0.3 to 0.5 grammes." Line 28, for "at a level of eight inches beyond," read "for a distance of eight inches starting from." Line 45, from "If one assumed".....to "a late period:" this sentence conveys a more decided opinion that the author ventured to express.

THREE persons, a man and two children, who were badly bitten at Leicester, on January 8th, by a rabid dog, have been taken to Paris by Dr. Henry Tomkins, medical officer of health for the borough, for treatment at the Pasteur Institute.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 14TH, 1890.

Sir E. H. SIEVEKING, M.D., President, in the Chair.

Successful Removal of the Entire Upper Extremity for Osteochondroma.—Dr. THOMAS F. CHAVASSE read this paper. The patient, a male, aged 40, was admitted into the General Hospital, Birmingham, in January, 1889, for a large osssifying enchondroma of ten years' duration, growing from the upper portion of the right humerus. The operation performed was resection of the middle third of the clavicle, ligation of the first part of the axillary vessels with carbolised silk, the formation of oval skin flaps, and removal of the remaining outer third of the clavicle, the scapula, and arm *en masse*. Secondary hæmorrhage occurring on the seventeenth day necessitated ligature of the subclavian artery in the second part of its course. The patient recovered and is still living. The tumour itself, after removal, weighed 18 lbs. Attention was directed to the systematic method of removal of the entire upper extremity advocated by M. Paul Berger, and to the hæmorrhage and shock occurring at the time of and after the operation. A tabulated list of twenty-nine cases in which similar operations have been performed was presented. A cast of the limb in its entirety, prepared after his own method by Mr. Charles Cathcart, a portion of the original tumour showing its structure and attachment to the humerus, and photographs of the patient before and after the operation, were exhibited.—Mr. JESSETT read some notes on a case in which he had recently removed the scapula for recurrence after the arm had been removed for a sarcomatous growth commencing after a fracture of the humerus, in a lad aged 22.—Mr. HEATH called attention to the three classes of cases of removal of the scapula, namely: (1) when the scapula alone was removed; (2) when the scapula was removed after previous removal of the arm; (3) when the scapula and whole limb were removed at the same time. The present case belonged to the third class, and, while congratulating Dr. Chavasse on the success of his case, he was unable to agree with the suggestion of removing a piece of the clavicle. This must complicate the operation. No surgeon could lay down any rules to guide another surgeon, as there was the greatest difference in the size and shape of the tumours. In his one case he first amputated the arm at the shoulder-joint, and so was enabled to control the main vessels before proceeding to remove the scapula; and this would often, he thought, be the better course to pursue. He drew attention to the fact that the subclavian artery was not tied in its continuity in the second part of its course, but that the surgeon followed the artery up from the wound and tied it as high as was possible; this was behind the scalenus anticus muscle.—Mr. BARWELL considered that the removal of the central part of the clavicle was quite unnecessary. He preferred to commence these operations from in front, and at once secured in his own case the third part of the subclavian artery. He did not tie the vein till later on in the operation. The remaining steps must depend on the size and situation of the tumour, and no rule to meet all cases could be made. By commencing in front, the surgeon could examine the condition of the subclavian glands, for, if enlarged, it was necessary to remove them.—Mr. HULKE congratulated the author on the brilliant success of his operation. He did not understand why the scapula had been removed at all, for there was no clinical evidence of implication of the scapula or the muscles attached to that bone.—Mr. ADAMS asked what the original diagnosis was. It was evident now that the tumour was an enchondroma, and of a non-malignant nature. What was Dr. Chavasse's opinion previous to operating?—Dr. CHAVASSE in reply asked that this paper might be regarded as mainly an effort to secure a systematic method of removing the whole extremity as recommended by M. Berger, and a wider method of removal than was at present usual. He contended that removal of a piece of the clavicle was necessary, so as to secure both artery and vein at once, for there was great danger of death from the entrance of air into the veins. He insisted that some rules were necessary for the guidance of surgeons in removing these tumours, for at present there were none. His original diagnosis was that the case was one of an enchondroma which was undergoing some sarcomatous change. The scapula was removed because no skin flap could be obtained without doing so; he considered this absolutely necessary. His patient was alive and well in 1890.

The Mechanism of Suspension in Locomotor Ataxy.—Dr. JAMES CAGNEY in this paper attempted to establish the *modus medendi* of suspension and to determine the best method of effecting it. He opposed the two-fold assumption that it was possible to stretch the spinal cord or the nerve roots by suspending the weight of the body from the head or elsewhere, and that such a stretching if it were possible could produce any change in the lesion of tabes. The paper included results of measurements and observations made on the living subject before and during suspension and on the dead body under various conditions. These tended to show that in all cases alike the effect of suspension was to cause a shortening of the distance between the first dorsal and the last lumbar spines. There was usually an elongation of that surface in the cervical region, which, however, was less than the shortening elsewhere. Measurements of the dead body showed that at the same time the anterior surface of the vertebral column was considerably elongated throughout, slightly in the neck, and most in the dorsal region, but it was contracted or unchanged in the lumbar. Thus the effect of suspension would be to straighten out the vertebral curves, and this in a different manner in the different regions. The effect upon the spinal cord and its membranes would vary in each case according as they lay in the concavity or on the convexity of a curve, and with the manner in which the curve tended to straighten under the influence of the body's weight. An important distinction was to be made between the cord and its membranes. Relaxation of the membranes implied relaxation of the cord, but tension of the former did not necessarily imply stretching of the cord. The facts cited were held to prove (1) that a total shortening of the spinal canal was obtained in suspension; (2) that in the lumbar region the cord was unaffected or slightly relaxed, in the cervical region the membranes were somewhat stretched; (3) the consideration of the dorsal region was of chief importance because the dorsal curve was the most extensive and because the lesion in tabes was, for the most part, contained within it. Here the cord lay upon the convexity of the curve, and by stretching this *post mortem* the bodies were separated anteriorly, their posterior borders were pressed together, while the neural arches and spinous processes were approximated. Since, however, the neural arches enclosed the spinal cord, the latter was also shortened. This effect was produced by gravity and it was further aided by muscular tension during life. Measurements showed that the shortening of the line along the spinous processes of the vertebræ was greater in the living body than in the dead. It was inferred that suspension caused a relaxation, not a stretching, of the spinal cord, and that such a relaxation might affect a sclerosis in two ways—(1) mechanically, by breaking down adhesions; (2) by removing impediment to the circulation. The splanchnics were the only nerve structures which could be seen to stretch in the process, and certain of the accidents which attended on suspension were referred to this cause. It was contended also that muscular tension was an effective force and that a rational method should be based on its application. Suspension from the head was admittedly dangerous and inconvenient; according to the views submitted in the paper it was also useless. The best results might be expected from suspension from the axillæ alone or from suitable gymnastic movements.—The discussion on Dr. Cagney's paper was adjourned till January 28th.

The PRESIDENT informed the Fellows that the new buildings were rapidly approaching completion, and that he hoped that the Library would be available for reference in about four weeks.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 10TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Case of Traumatic Aneurysm of the Back following a Fracture-dislocation of the Spine in the Dorso-lumbar Region, and presumably connected with the Lumbar Arteries.—Mr W. G. SPENCER described this case. The patient was a man, aged 58, who had met with a fracture-dislocation in the dorso-lumbar region of the spine about a year and a half before. An aneurysm had developed on either side of the spine at the level of the injury. As a result of the injury the eleventh and twelfth dorsal and the first lumbar spines formed an angular prominence. He complained of constant burning pain across the left loin and down the left leg to the knee. There was also an exaggerated patellar reflex, and

partial anæsthesia of the skin of both feet. He had no symptom of vascular troubles, and was not aware of them. The heart was affected with aortic disease, the pulse was regurgitant in character, the arteries, especially the brachials, were very tortuous, and there was a small stationary aneurysm at the bifurcation of the left carotid. On either side of the spine was a pulsating expansile swelling, extending from the level of the tenth rib downwards for four inches, and for about two inches outside the outer border of the erector spinæ. The swellings were approximately symmetrical. No *bruit* could at first be heard. During three months there was a slight increase, so that the tumour extended about six inches from the spine on the left and four inches on the right; also a loud *bruit* became audible on the left. No abdominal tumour nor any pulsation could be felt; the iliacs and the circulation in the lower limbs were perfectly normal. It seemed, therefore, that any aneurysm of the aorta, renal or splenic arteries, might be excluded. There were left the lumbar arteries. If the aneurysm arose from the lumbar arteries, the extension backwards might be explained by there being a layer of lumbar fascia in front, separating the aneurysm from the abdomen. It was mentioned that no aneurysms of the lumbar arteries were recorded, and *a priori* their anatomical position rendered an aneurysm unlikely to occur. Still the most probable diagnosis appeared to be an aneurysm, hour-glass in shape, having the long axis horizontal, connected with the lumbar arteries on both sides, the two sides being joined by a narrow neck in front of the spine. The patient was still suffering much pain. This appeared to be chiefly due to the fracture, and not to the aneurysm. It was probable that removal of the laminæ of the displaced vertebræ might ease his pain; but this operation was contraindicated by the presence of a pulsating swelling on either side of the spine, and the other vascular troubles. —The PRESIDENT thought that the small size of the lumbar arteries was opposed to the opinion that they could be the source of so large an aneurysm. He suggested that the swelling in the loin was due to bulging of the aorta backwards; fusiform dilatation of that vessel could not be easily detected from the front. He was opposed to surgical interference in such a case.—Mr. MAKINS thought the swelling might possibly be due to a collection of blood at the back, transmitting pulsation, which might be connected with the lumbar arteries. He presumed that it was not connected with the spinal canal. The only treatment that seemed promising was galvano-puncture.—Mr. JOHN MORGAN was of opinion that the swelling might be an abscess around the broken bone, into which a large vessel entered. A young man had been admitted into Charing Cross Hospital, having a fractured lower jaw, which was treated with an interdental splint, that answered its purpose well. But a large swelling formed on the outer side of the jaw, from which, when it was punctured, pus and arterial blood escaped. As the hæmorrhage continued, the carotid artery had to be ligatured. In that case the artery opened into the abscess cavity, and he thought it possible that in Mr. Spencer's case there was a similar condition of things.—Mr. SPENCER, in reply, stated that he had been unable to find that an aortic aneurysm ever occurred posteriorly. Which artery had been wounded and had caused the hæmatoma? There had been no rise of temperature nor other signs of abscess, though the patient had been for a long time under careful observation. The fracture too was simple, not compound, as was the fracture in Mr. Morgan's case. The paralysis after ligature of the carotid supplemented some observations made by Mr. Horsley and himself on the blood supply of the middle cerebral artery, in which they had noticed that after ligature of the carotid the circulation through the middle cerebral artery was much interfered with.—Dr. ORD had seen two cases in which an aneurysm of the abdominal artery had ruptured posteriorly. One, a sacculated aneurysm, had pushed its way between the aorta and the vertebral column, and had so pressed the artery that circulation in the lower half of the body had been completely arrested, and death had followed. —Dr. BARLOW had also seen an aneurysm arising from just below the diaphragm which had become manifest posteriorly.

Case of Hæmorrhagic Varicella.—Dr. ANDREW described two cases of varicella. One was attended by profuse hæmorrhage from the alimentary canal (hæmatemesis and melæna) and by ecchymoses in the skin. In the other, an instance of varicella gangrenosa, described by Mr. Hutchinson, ulceration took place in the varicella vesicles, with an offensive purulent discharge and general symptoms of septicæmia. The two cases occurred in the course of the same epidemic of varicella in a large school.

Desquamation in the Third Week of Enteric Fever.—Dr. ROLLESTON read the notes of a boy who, in the commencement of the third week of enteric fever, desquamated, the skin of the trunk and thighs coming off in large flakes, while the skin of the hands and feet came off in small bran-like scales. There was no history pointing to scarlet fever, and there was no evidence of any dermatitis or erythema which might account for the desquamation of the skin. The interest of the case centred in the diagnosis of enteric fever, which seemed certain, being shaken by evidence which at first sight suggested scarlatina.—Dr. E. CLAPHAM described a somewhat similar case of typhoid fever in the course of which there were bright red patches as large as a half-crown, from which, at the end of three weeks, flakes as large as a crown-piece peeled off. In that case there was no suspicion of scarlet fever; but the patient had a relapse of the typhoid symptoms, though eventually he completely recovered.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 8TH, 1890.

A. L. GALABIN, M.D., President, in the Chair.

Specimens.—Dr. WILLIAM DUNCAN: Uterus with Multiple Fibroids; Diseased Kidneys from a case where Death from Cerebral Hæmorrhage occurred during the fifth month of Pregnancy.—Dr. J. MATTHEWS DUNCAN: Dr. Münchmeyer's Transfusion Apparatus.—Dr. CARTER: 1, Ovarian Cyst, partly Glandular, partly Dermoid; 2, Dermoid of both Ovaries; 3, Lipoma of Left Labium Majus.

Should Pregnancy be Terminated Prematurely in Cases of Phthisis?—Dr. WILLIAM DUNCAN read a memoir on this subject, based upon a case in his own experience. A woman, aged 27, had borne two children, both labours had been difficult and symptoms of phthisis, to which she was already subject, increased during both pregnancies. Her period ceased in August, 1889. Two physicians of authority had seen the patient, and considered that pregnancy, especially if it continued to term, would shorten her life. There was a cavity near the left apex; the lower part of the left lung and the upper part of the right showed signs of crepitation. The patient was placed in the lithotomy position, the cervical canal rapidly dilated by Hegar's dilators up to No. 22, the fingers inserted and the fœtus and membranes removed. The uterine mucous membrane was curetted, the cavity irrigated with a hot mercurial douche, and a twenty-grain iodoform bougie was introduced into the uterus and retained there by a glycerine plug passed up to the os uteri. The operation, performed on September 14th, lasted twenty-five minutes. The patient made a good recovery. Dr. William Duncan believed that during pregnancy phthisis was not retarded, as was formerly believed, but hastened. This was especially the case in women between 20 and 30 years of age. When phthisis was progressive, in early pregnancy, there could, in Dr. William Duncan's mind, be no question but that the proper course to pursue, after careful consideration of the case in consultation, was to empty the uterus of its contents. This could safely be done in the manner indicated by the author. Even when the phthisis was stationary, it was safer to empty the uterus at once than to let the pregnancy proceed to term. When the patient was seen for the first time late in pregnancy, the child being viable, the case was different. Dr. W. Duncan would be guided, under these circumstances, by the condition of the lungs. If phthisis were stationary though well marked, he would wait till full term had nearly arrived, and then, in order to save the patient all suffering and the strain on her system consequent on natural delivery, he would dilate the cervix with graduated bougies, followed by the hydrostatic dilators, until it was sufficiently expanded to permit of delivery by the forceps or version, as the case indicated. Full antiseptic precautions would be taken. If, however, the pulmonary disease were markedly advancing, the interests of the mother and child would be best served by effecting delivery in the same manner without delay, instead of waiting until the full term had been reached.—Dr. CULLINGWORTH observed that Dr. W. Duncan's patient had been under his own care. A physician had recommended that abortion should be induced, but that gentleman believed in a new treatment for the cure of pulmonary tuberculosis by inhalation of heated air. Dr. Cullingworth had not so much faith in that treatment, nor did he think that the chances of life in a pregnant phthisical woman were improved by the induction of abortion. He therefore declined to undertake or acquiesce in so serious a step. He was glad that Dr. W

Duncan had brought the subject before the Society.—Dr. HERMAN thought that if Dr. William Duncan's view that the existence of pregnancy hastened a fatal termination in cases of phthisis were true, the induction of abortion would be proper treatment. Unfortunately, Dr. Duncan had not brought forward any scientific or sound statistical evidence in support of his doctrine.—Dr. PLAYFAIR thought that the new line of treatment suggested by Dr. William Duncan's case was quite unjustifiable when phthisis was incipient, and liable to serious abuse. Dr. Duncan had very properly held a consultation before operating, and now openly submitted his case to the criticism of the Society; but others might dispense with such safeguards and shelter themselves under the authority of Dr. W. Duncan's name. When phthisis was advanced the matter was different, but there were not sufficient grounds for concluding that the new treatment would materially check or alter the progress of the disease. Moreover, it was an open question whether, the mother being already the subject of advanced organic disease, the interests of the child should not be considered. On the whole, therefore, while he admitted the force of some of Dr. William Duncan's arguments, he believed that his case was a dangerous precedent, and that the course adopted by him would neither be generally adopted nor followed.—Dr. PRIESTLEY, in a paper on the Induction of Abortion as a Therapeutic Measure,[1] had laid down as a rule that abortion was only a legitimate operation when the life of the mother was so imperilled by the continuance of pregnancy that emptying the uterus presented itself as the only alternative to save the patient. He could not express any opinion on the present case, but it was hard to conceive any circumstances in which phthisis, without some other complication, would justify the induction of abortion. Since Cullen had first noted that phthisis was retarded during gestation, nobody had contradicted his statement till very recently, when it had been asserted that the disease progressed as usual during pregnancy. If the latter theory were true Dr. Priestley still failed to see how the induction of abortion could be preferable to leaving the pregnancy to go on full term.—Dr. CHAMPNEYS commented upon the pathological and ethical aspects of the case. What good abortion did, what harm pregnancy might do, was unknown. In diseases like cancer, and perhaps phthisis, where the mother's life was practically forfeited, her claims, as against those of the fœtus, deserved less attention. In diseases like eclampsia, which depended on pregnancy, and would probably cease after pregnancy, it was recognised as a proper proceeding to procure abortion. To procure abortion on the grounds that the child would be in any way unhealthy, was very questionable. As phthisical women were very often very prolific, Dr. Champneys asked how many times Dr. William Duncan was prepared to procure abortion, as he was logically bound to do, if he were right on this occasion, in this or any similar case. Dr. Champneys also failed to see any reason for *accouchement rapide* in this case.—Dr. J. MATTHEWS DUNCAN said that it was not established that pregnancy injuriously affected the progress of phthisis. Consumptives often bore fine healthy children, and the danger of the fœtus being infected by tubercle in the mother's system was apparently not great. If removal of the fœtus were decided on, he could not prefer the rapid method of delivery.—Dr. AMAND ROUTH noticed that phthisis, more or less stationary during pregnancy, often advanced rapidly during lactation. It was lactation, therefore, that ought to be suppressed. Only in some cases, where late in pregnancy (the child being viable) dyspnœa was urgent, could the induction of labour be justifiable.—Dr. LEITH NAPIER thought that a waiting policy was the wisest. In his experience a very advanced case of phthisis had improved during pregnancy, and recovered from labour at term; whilst abortion in phthisis was a grave matter.—Dr. JAMISON did not agree with the author of the paper as to the justifiability of the practice therein recommended. The cure of tubercular disease by hot inhalations after labour was not in accordance with the everyday experience of phthisis. The children of phthisical mothers did not necessarily die soon after birth; on the contrary, they were often quite healthy, and remained free from consumption throughout life. Pregnancy, according to all but a very few authorities, did not accelerate the progress of phthisis; indeed, Dr. Jamison believed that it retarded the disease. He wished to know if the physical signs in Dr. W. Duncan's patient had improved since the induction of abortion. The statement of the patient as to her own feelings was never reliable in phthisis.—Dr. ABRAHAM WALLACE held that the subject of phthisis in relation to pregnancy lay on the borderland of pure medicine and midwifery, and ought not to be approached from the standpoint of the obstetric specialist alone, but required to be considered in all its aspects.—Dr. WILLIAM DUNCAN, in reply, said that he was very glad that the question had evoked such an active discussion. He could not quite agree with the opinions expressed by the various speakers. He dissented from the assertion that "pregnancy should not be terminated unless it threatened the patient's life." He mentioned the case of a patient in Middlesex Hospital, who last year had severe puerperal eclampsia. Recently, when five months' pregnant, she was readmitted with acute nephritis, double optic neuritis, and retinal hæmorrhages. The ophthalmic surgeon having stated that, if the pregnancy were allowed to go on, the patient would probably become blind, Dr. W. Duncan had no hesitation in emptying the uterus. He thought that the induction of abortion gave a distinct advantage by doing away with the dangers connected with parturition and the puerperium. He did not, of course, mean that all cases of phthisis complicating pregnancy called for interference. Each case must be judged on its merits, and after careful consultation with another physician, who should share the responsibility. Neither did he mean that, having once terminated pregnancy in a given case, the same treatment should be pursued if impregnation took place. On the contrary, if the patient neglected the warning given to her, she—being entitled to choose—took the responsibility, and must submit to the risks. Dr. Duncan regretted that he could give no statistics either proving that life was shortened in these cases, or showing the effect of pregnancy on a phthisical woman. He was, however, one of those who did not believe much in statistics. The statements on these points were those which were given in all the leading works on obstetrics.

Five Cases of Puerperal Eclampsia, especially illustrating the Temperature and Urine in this Disease.—Dr. HERMAN, the author of this communication, described five cases, of which the chief features were as follows: Case I. First pregnancy; premonitory symptoms a few hours only before fits; convulsions commencing during first stage of labour at term; not ceasing with delivery; ceasing after morphine; seven fits in all; temperature rising slightly during fits, falling after cessation of fits; diminution in quantity of urine during fits; diuresis after delivery and cessation of fits; urine during fits nearly solid with albumen (much paraglobulin), blood and casts; rapid disappearance of albumen and blood after delivery; diminished elimination of urea during fits; increased elimination of urea following delivery. Complete recovery.—Case II. Second pregnancy; premonitory symptoms three weeks before fits; intra-uterine death of fœtus; fits coming on at eight months' pregnancy; eight fits; fits ceasing after morphine and before delivery; slight pyrexia, continuing four hours after last fit, then abating; polyuria throughout temporarily increased after delivery; urine containing half its bulk of albumen (much paraglobulin); increase of albumen following fits; albumen diminished after delivery, but still persisting even months afterwards; diminution of urea elimination during fits; restoration to normal of urea excretion commencing after cessation of fits; retinitis albuminurica.—Case III. First pregnancy; premonitory symptoms forty-eight hours before onset of fits at five months' pregnancy; about sixteen fits; spontaneous premature delivery; urine solid with albumen (largely paraglobulin); cessation of fits, fall of temperature, and diminution in albuminuria following administration of morphine and preceding delivery; diminution of urine and of urea excretion (both absolute and in proportion to the urine) during period of fits; re-establishment of urine and urea secretion commencing after cessation of fits and before delivery. Recovery. —Case IV. Ninth pregnancy; symptoms a week before fits, at seven months' pregnancy; three days' treatment by milk diet in hospital before fits; retinitis; four fits only; morphine given after second fit; death by coma five hours after last fit; subnormal temperature; fits preceded and accompanied by slightly increased diuresis; albuminuria diminished by rest and milk diet; fits accompanied and followed by increase of albuminuria and hæmaturia; steady diminution in urea percentage preceding fits and continuing till death; absolute urea excretion diminished throughout, but no greater diminution preceding or accompanying fits. No necropsy. —Case V. First pregnancy; symptoms about thirty-six hours before fits, at eight months' pregnancy; intra-uterine death of fœtus; twenty-four fits in all, extending over sixty hours; ceasing before delivery; delirium for forty-eight hours after fits; slight pyrexia, subsiding before cessation of fits; during period of earlier fits urine solid with albumen, and diminished in quantity, but percentage of

[1] *Trans. Obstet. Soc.*, Vol. XXII, 1880.

urea not diminished; increase in quantity of urine and percentage of urea, and diminution of albuminuria before cessation of fits. Complete recovery. The author pointed out the differences between the cases themselves and between them and other published cases, and drew the inference that puerperal eclampsia was a disease not having a uniform clinical history any more than a uniform morbid anatomy.—Dr. PRIESTLEY found it difficult to discuss Dr. Herman's important paper in all its bearings. He was struck with the absence of that high temperature, as indicated by the thermometer, which Continental writers held to be usually present during the progress of puerperal convulsions. The same foreign authorities noted that, on the other hand, in convulsions the result of general uræmia the temperature fell progressively until death. The question was disputed by Winckel, Charpentier, and others. Dr. Herman's valuable memoir proved that much more was to be learnt, and that puerperal eclampsia had not a uniform clinical history.—Dr. HORROCKS endorsed the last words of Dr. Priestley, and distinguished at least two forms of puerperal eclampsia. In the first variety there was no albuminuria. This form he treated as epilepsy complicating pregnancy, giving large doses of bromide of potassium (in one case 90 grains) by the rectum. In the second form albumen appeared in the urine; the administration of morphine was dangerous in this variety of eclampsia, especially when the uræmic element prevailed. He had found that the temperature rose, as a rule, in eclampsia; in some cases he found that it continued to rise for a few hours after death.—Dr. W. S. A. GRIFFITH remarked that there were two points in the clinical history of the nephritis of pregnancy, with or without eclampsia, about which information was much needed. Firstly, in what proportion of cases had there been any evidence of pre-existing nephritis, complicating scarlatina or diphtheria, for instance? Secondly, how many cases died eventually from or with kidney disease? According to what he had learned from Dr. Gee, very many cases did in later life develop symptoms of chronic nephritis. The disease was not so temporary as was generally believed.—The PRESIDENT thought that Bourneville's theory that eclamptic attacks raised, whilst uræmia lowered, the temperature applied not only to separate cases, but to the different elements in the same case. If, therefore, the uræmic convulsions, as evidenced by diminished secretion of urea, preponderated in proportion to the frequency of the convulsions, it might be expected that the elevation of temperature would be interfered with. He asked if this principle would explain any of the anomalies observed in Dr. Herman's cases. In the President's experience it was chiefly in untreated cases that very marked elevations of temperature occurred, and chloroform or bleeding especially counteracted it. In one case, untreated until the patient was moribund, he had found the temperature as high as 110°.—In reply, Dr. HERMAN, after referring to disputes amongst foreign authorities, assented to Dr. Horrocks's division of puerperal eclampsia into two forms. The cases where albuminuria was very slight differed from those where the urine almost solidified on boiling. All the cases now related had one feature in common, a diminution in the excretion of urea during the time in which the fits were occurring. These cases, so far as they went, did not support the view that the elevation of temperature was in proportion to the number of the fits. In Case v, where the fits were the most numerous, the highest temperature was not attained.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 13TH, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

Notes on an Epidemic of Pneumonia.—Dr. T. CHURTON read a paper, discussing the clinical features of an epidemic of pneumonia with a view to determining the causes and contagiousness of the disease. Also as to the *rôle* of the micrococcus of Friedlander in its production. Out of 490 cases, the details of which he had ascertained by observation and inquiry, 273 occurred in men, 106 in women, and 111 in children under 15 years of age. He pointed out that, so far as could be made out under the microscope, the alveolar walls were affected to a very slight extent, even in the acute affection, and he attributed the exudation of the fibrinous material to interference with the epithelium which under normal circumstances prevented its taking place. He also pointed out that the morbid condition which gave rise to pneumonia was likewise capable of giving rise to pleurisy, pericarditis, etc. The chief objects of the paper were (1) to elicit more accurate information as to the exact cause or causes of death in pneumonia; (2) to invite closer attention to the phenomenon attending death from pneumonia; (3) to emphasise the great simplicity of the discoverable anatomical facts of pneumonia; and (4) to suggest the probability that a drug or a method of treatment will hereafter be found which will (in the earlier stages, at least) do for the pneumonic exudation, and for the tissues, which, by their disorder, allow it, what salicylates now do for the rheumatic exudation and the tissues permitting it.—The PRESIDENT expressed his conversion to the belief that pneumonia was a blood and not a lung disease, resembling in its course the zymotic diseases. He said that he had often examined the sputum of patients for the purpose of ascertaining the presence of the micrococcus, but with only limited success. He observed that in their endeavour to ward off cardiac failure, practitioners were very apt to overstimulate the heart so as positively to depress it.—Dr. MAGUIRE observed that in addition to the ordinary division of pneumonic cases into croupous and catarrhal, it was necessary to distinguish between the epidemic and sporadic. He had found the micrococcus almost invariably present in the lungs in the epidemic form, but only occasionally in the sporadic form. He added that it was not much good searching for the micrococcus in the sputum, which contained another micrococcus very difficult to distinguish from the pathogenetic organism, though itself devoid of any causal relation to pneumonia. He concluded by saying that as the micrococcus was not present in all cases of pneumonia, and as other microorganisms had been found, it was still very doubtful whether it was really at the root of the disease.—Dr. FINLAY deprecated the routine use of stimulants in these cases, and urged that, when resorted to, their use should be discontinued as soon as the patient was convalescent.—Dr. LITTLE mentioned several cases tending to prove the contagiousness of the disease, and recommended the use of strychnine as a cardiac tonic when such was required. He agreed that it was undesirable and unnecessary to stimulate unduly, and mentioned a case in which the happiest results had followed the application of leeches to the chest.—Dr. CHURTON, in reply, alluded to the curious suddenness of the onset of the disease in some cases, of which he gave an example, and said that in from ten to fourteen days all local signs might have disappeared from the lungs. Absorption was sometimes delayed as in syphilitic subjects, but this generally yielded to iodide of potassium. He agreed that nux vomica, strychnine, and iron were the best cardiac tonics.

On Some Cases of Nephrolithotomy and a Case of Partial Nephrectomy for Injury.—Mr. KEETLEY read notes of four rena cases, three of nephrolithotomy and one of partial removal b lumbar incision of the lower fourth of a kidney crushed in tw by a waggon wheel. (1) A girl aged 14, with symptoms of sup puration in the left kidney, had that organ opened, drained, an two small branched calculi removed. After rather prolonge treatment she recovered completely and was exhibited. (2) gentleman aged 44 had symptoms of renal calculus all his life when a child he had his bladder sounded by Mr. Solly. Fo thirty years he had not passed twenty-four consecutive hour without pain, and was accustomed to take his rest piecemea Calculus in the right kidney having been diagnosed by Dr. Alfre Buck, nephrolithotomy was performed by Mr. Keetley and 1 calculi removed from the right kidney, perhaps the larges number recorded as taken away during life. A period of depre sion after operation was treated by oxygen inhalation. Conv lescence was rapid and uninterrupted. The patient, who attend the meeting, has been well free from pain ever since the oper tion fourteen months ago. A large rough calculus, the shape the last joint of the thumb, with a disc-shaped base, had block the way into the ureter for the numerous smooth calculi, whi formed and rolled on each other behind it. (3) A young man w crushed by a waggon wheel (which did not pass over him), a the ninth, tenth, and eleventh ribs broken. Blood in the uri Five or six hours after the accident he showed signs of serio recurrent hæmorrhage in the loin. Through an incision a m of blood clot was scooped out, and also the separated lower end the kidney, one bleeding point compressed with forceps and deeper one with sponge pressure. The forceps were removed the end of the operation, the sponges in twelve hours. Con lescence was rapid. No urinary fistula; no hydronephrosis. T patient was shown. (4) A young woman aged 25, with grea enlarged, hard, and thickened right kidney, abnormally moval and much pus in urine. When first placed under ether alarmi symptoms showed themselves, and the operation was deferr Afterwards the kidney was exposed, palpated, and searched w

a needle, under cocaine used locally. Ultimately nephrolithotomy was performed and the calculus removed. Pain disappeared at once. The kidney was contracting and appetite had returned, but there was still pus in the urine. The calculus (examined by Dr. Thudichum) was composed of phosphate of lime and oxalate of lime mixed. Case 1 was originally diagnosed by Dr. Colman, case 3 by Dr. Arkwright, and case 4 by Dr. Crombie, of Brentford. The last case was operated on only a month ago. The procedure in the nephrolithotomy cases was in each lumbar incision, kidney opened at convex border by blunt instrument (such as polypus forceps or steel director) and finger, removal of calculus, wash out with warm sublimate solution (1 in 2,000), kidney plugged for twelve hours with iodoform gauze dipped in the same lotion, drainage, etc.—Mr. BOWREMAN JESSETT mentioned the case of a woman who had been operated upon by him several times for recurrent blockage of the ureter by renal calculi, and asked Mr. Keetley whether any urine had escaped from the incision.—Mr. KEETLEY, in reply, said that urine did come away, showing that the kidney was still capable of excretion.

LEICESTER MEDICAL SOCIETY.

FRIDAY, DECEMBER 6TH, 1889.

C. W. COOPER, M.B.Cantab., M.R.C.S., President, in the Chair.

Specimen.—Dr. BENNETT showed a case of Morbus Cœruleus dependent probably on patent foramen ovale.

Cholecystotomy and Crushing of Impacted Gall-stone in Cystic Duct.—Mr. MARRIOTT read notes of the following case. P. R., male, aged 42, had had eight children. Had had "inflammation of bowels" twenty years ago and severe pain in right hypochondrium ten years ago. Four years ago began to have pain at the epigastrium; this became very severe three weeks previously to admission to Leicester Infirmary, and was accompanied with vomiting. Had never noticed jaundice. Urine high coloured. Swelling in right hypochondrium. Vomit bilious. Stools were never white. On admission there was fulness over the liver, and below it a pear-shaped swelling outside the right rectus. On August 27th, 1889, an incision, three inches and a half long, was made over the most prominent part of the tumour. The gall-bladder was seen in the wound, and the fluid, which was clear and limpid, was withdrawn by an aspirator and the gall-bladder then opened. A gall-stone which was loose in the cavity was removed and another felt firmly impacted in the cystic duct. A long time was spent in fruitless efforts to dislodge or break up the stone, but the patient had finally to be sent back to bed with the stone still remaining fixed in the duct. The gall-bladder was stitched to the skin. The patient had no bad symptoms, and on the 30th Mr. Marriott enlarged the original incision to one inch below the umbilicus, and made his way to the outside of the cystic duct, when the stone could be felt. He tried to split it with a needle thrust through the duct, but failed. He then seized the stone with a pair of forceps having its blades guarded with india-rubber, and, using both hands with much force, succeeded in crushing the stone and removing the fragments. The abdominal wound was then stitched up and a drainage tube left in the gall-bladder. The temperature was 100° on the night of the operation, but never higher; the wound healed rapidly, and the patient, who was shown to the Society, stated that she felt well.

Cholecystotomy.—Mr. BOND related a case in which he had opened and drained the gall-bladder in March, 1889, for urgent symptoms with retention of bile, owing to obstruction in the common duct. A biliary fistula resulted, and although large quantities (twenty to forty ounces) of bile were discharged daily, the patient continued in good health and gained in weight. As the fistula did not close, a second exploratory operation was undertaken in November, 1889, to ascertain the condition of the common duct. No calculus was detected. Immediately following on this operation bile began to flow into the duodenum more freely, until a month afterwards only half an ounce to one ounce of bile escaped by the fistula in twenty-four hours. It was suggested that some stretching of the duct or rupture of adhesions had been the cause of the relief.—Dr. PRATT had estimated the urea passed by Mr. Bond's patient, and found that, when a small quantity of bile was passed by fistula, the urine was of a lighter colour than when a large quantity of bile was discharged, but that the amount of urea was unaffected by the biliary flow.—Dr. TOMKINS suggested, in explanation of the colour, that probably the total amount of urine was greatest when the escape of bile was greatest.

Vital Force.—Dr. BENNETT read a paper on this subject, which was discussed by Dr. PRATT and several other members.

ABERDEEN, BANFF, AND KINCARDINE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WEDNESDAY, DECEMBER 18TH, 1889.

J. E. FOWLER, M.D., President, in the Chair.

Strangulated Hernia.—Dr. OGILVIE WILL communicated the details of an unusual case of strangulated hernia, on which he had operated successfully, and showed a large piece of omentum which he had removed therefrom.

Accidental Injury.—Dr. GEORGE GIBB read notes of a case of accidental injury in which, as the result of sudden compression of the abdomen between the ground and a heavy granite block, there were produced large conjunctival hæmorrhages, punctiform ecchymoses studded over the face, neck, and shoulders, total loss of taste and smell, and other symptoms pointing to brain injury. The phenomena were to be explained by rupture of capillaries and arterioles due to the sudden check to the current in the abdominal aorta from pressure, the ventricle meantime driving on the blood. The possibility of the main site of the head injury being in the temporo-sphenoidal lobe was mentioned.

The Telephone as a Bullet Finder.—Drs. OGILVIE WILL and MCKENZIE DAVIDSON made a joint communication on the use of the telephone in the detection of bullets or pieces of metal in the body, and described a case in which it had been successfully used in finding a bullet lodged in the antrum.

REVIEWS AND NOTICES.

A TEXTBOOK OF HUMAN ANATOMY, SYSTEMATIC AND TOPOGRAPHICAL; with Special Reference to the Requirements of Practical Surgery and Medicine. By ALEXANDER MACALISTER, M.A. M.D., F.R.S., F.S.A., Professor of Anatomy in the University of Cambridge. London: C. Griffin and Co.

IT has often been questioned whether two separate textbooks are necessary for the study of human anatomy—a systematic treatise in which the various structures, bones, muscles, etc., are dealt with in separate sections; and a purely topographical description of the body intended to serve as the student's guide, philosopher, and friend during his practical researches with the scalpel. Up to the present time the reply has been given in the affirmative by the persons most concerned, for few pupils, however economical of labour and money, have neglected to provide themselves with the regulation *Gray* or *Quain* for home consumption, in addition to the thumbed and greasy companion of their dissecting room labours; but it has always remained possible that some especially gifted author might produce a single volume fitted to satisfy all their requirements. The work we are about to review is an attempt to supply the want.

Professor MACALISTER'S textbook has long been expected, and is at length before us in the form of a handsome volume of about 750 pages, well and closely printed, with useful differentiations of type, a lavish supply of illustrations, and a good index. The first impression left upon the mind of the reader is decidedly favourable, and the perusal of a few pages will enable him to perceive that he has really a new book, and not a mere patchwork of worn-out plagiarisms. A closer acquaintance will show that the descriptions have for the most part been written after a careful preliminary examination of the structures, and that details which were heretofore practically beyond the student's reach have been set forth in rich profusion—a profusion, indeed, that may not give unalloyed satisfaction to all those for whose benefit the gift is designed. But the most characteristic and valuable feature of the book is the constant endeavour on the part of the author to explain the morphological significance of the various structures met with in the course of dissection, and thus to bring our knowledge of the human frame into its right position as a branch of the science of anatomy in the broadest sense of the term.

This tribute having been paid—and it is a high one—we may examine how far the work justifies its title as a textbook of human anatomy, "with special reference to the requirements of practical medicine and surgery." Of course, in such a vast array of facts as are here marshalled we have no right to complain of a few omissions, even though these include some points of practical

moment to the surgeon, as, for example, the researches of His upon the development of the face, or such long-known facts of descriptive anatomy as the connection of the short muscles of the thumb with the extensor tendon; nor need we be hypercritical over minor errors and discrepancies that are sure to be righted in a subsequent issue, or over a certain hardness of style that makes the book rather difficult reading; but, unfortunately, there are certain defects of construction which call for notice. These are, in the first place, the want of proportion in the treatment of the different sections of the subject; and, in the second, a lack of consideration for the intellectual difficulties of readers who are not members of the author's class, and are hence unable to profit by his oral explanations. The volume being compiled for the benefit of future practitioners of medicine and surgery, the more truly scientific its ideal the better, for science and practice are one if both be of the right kind; but the matter due to the embryologist or comparative anatomist, interesting though it is, should not take the place of the information necessary for the training of surgeons; if something *must* be sacrificed to the exigencies of space, the surgeons would yield up the former rather than the latter. It is certainly more important that the medical student should understand the interrelations of structures which he must expose or approach in the course of surgical operations, and the points in the mechanism of the articulations and in the action of the muscles that bear upon problems of disease, accident, or deformity, than that he should be able to recite the exact number and position of the centres of ossification in the auditory capsule, or the names of the ligaments of the sphenoid, or the weight of the liver at different periods of fœtal life. It is but fair to the author to state that he has warned off the beginner, at least from dwelling on these latter points by printing them in smaller type.

But while the author has often furnished morphological and descriptive details with unprecedented minuteness, especially in the sections of osteology and neurology, he has in other directions fallen short of his own ideal, and has made brevity take the place of clearness and accuracy. To choose two or three examples, almost at random: If we refer to page 275 for the action of so important a muscle as the serratus magnus, all that we find is that "it draws forward the scapula, especially at its lower part, rotating it around a central axis. Or, the scapula being fixed, it can act as a muscle of inspiration," a statement that may be questioned. Then, turning to page 131, to learn something about the mechanism of costal respiration, we are presented with an explanation of the inspiratory expansion of the chest walls that leaves something to be desired. The thorax is enlarged by "the rotation of the ribs around the back-and outward-running axis of their necks. The costo-vertebral articulation only allows this one motion of rotation, but the ribs are so remarkably curved that this slight rotation of the end produces not only an elevation of the anterior extremity, but an eversion of the rib, thus enlarging the cavity vertically, sagittally, and transversely." This is certainly condensed, but it is hardly self-explaining. Another instance may be seen at page 176. A description is there given, in rather severe mathematical form, of the curves of the condyles of the femur, which is obviously meant to be printed in small type for the expert, rather than in large type (as it stands) for the student.

In the more purely topographical anatomy certain shortcomings are also apparent. As two examples we may point to the description of the subclavian artery (p. 548), where such important facts as the upward extension of the pleura behind the vessel, and the descent of the thoracic duct in front of the first stage of the artery are not alluded to; and to the account of the relations of the thyroid body (p. 631), in which several details of importance to the operative surgeon are omitted. Again, in the enumeration of the regions of the abdomen (p. 368) the description does not coincide with the diagram, and the level of the plane of section between the middle and lower zones is made to differ from that adopted in the most widely read textbooks. In the sketch of cranio-cerebral topography (p. 706) the author introduces Dr. R. W. Reid's diagram, but without explaining its meaning, and, after a few words of warning as to the uncertainty of the various systems devised to aid the surgeon, proceeds to give some indications for localising the principal fissures that would probably puzzle the operator who in an emergency could obtain no better guidance.

The custom of English writers on anatomy has been departed from in certain particulars. In the first place all references to authors are designedly omitted—a practice which may be justifiable in the case of long-established facts, but is certainly inconvenient in relation to those of recent discovery, especially when they appear for the first time in a student's textbook. Secondly, the familiar English unit of length is replaced by the French metrical terms, and consequently while the purely scientific worker may reap a certain benefit, many of Professor Macalister's readers will be forced to go through the process of converting millimètres into inches whenever they wish to form an idea of the admeasurements which teem in his pages. Thirdly, all anatomical variations are omitted, the author proposing to publish a complete list hereafter in a separate volume. Lastly, much of the nomenclature is new to textbook readers. This has been rendered necessary in most instances by the more minute description of certain structures, but in some cases the familiar names of *Quain* and *Gray* have been set aside without other justification than an apparent desire for international uniformity. Everyone knows that a large number of our anatomical terms are either philologically, morphologically, or otherwise objectionable, and a good-sized volume has already been devoted to the subject by a distinguished author, but there has hitherto been a tacit agreement on the part of writers to accept the *fait accompli* as, under present circumstances, the least possible evil. Perhaps an international congress of anatomists will one day be convened to discuss the question, but until then a textbook writer who innovates must take the risk of being misunderstood. Thus the term "sacral aorta" may be preferable from the morphological point of view to that of "middle sacral artery," but the advantages conferred by the alteration are small compared with the drawbacks, especially when the writer who adopts the new designation does not refer to the earlier name. Again, Professor Macalister proposes to call what has hitherto been known as the transverse portion of the arch of the aorta "the transverse aorta," disregarding the claims of the "ascending and descending portions of the arch" to their ancient titles. If the term is merely an abbreviation, three words instead of nine, it may possibly be defended; but would not precision refuse the title "transverse" to a vessel that has scarcely an inch of lateral deviation from the antero-posterior direction?

In conclusion, we are glad to welcome the book as one that bears an unmistakable stamp of erudition and labour, and one that will be valued both by teachers and pupils as a work of reference for innumerable morphological and descriptive details which can not yet be found in any other volume of the same kind: but we doubt whether it is yet in a form to serve as the sole anatomical textbook of the medical student. We sincerely hope to be able to congratulate the author more unreservedly after the appearance of a second edition.

PHYSIOLOGY OF BODILY EXERCISE. By FERNAND LAGRANGE, M.D. International Scientific Series. Vol. lxvii. London: Kegan Paul, Trench and Co. 1889.

THE last addition to this well known series of scientific manuals treats of a subject which is generally passed over with scant notice in more solid and serious treatises on physiology. Muscular contraction it is true is always fully dealt with, but the application of this knowledge to the muscular contractions of every day life or bodily exercise is almost entirely left out of consideration. No doubt those who write on physiology proper consider that the necessity of muscular work is a matter of general knowledge and of common sense, and it is therefore more suitable in every way that such a subject should be treated, from this point of view, in a popular and attractive form. These two adjectives, popular and attractive, are exceedingly fitting as applied to Dr. LAGRANGE'S book. There is at the same time a great deal of scientific interest in it, and some of the author's suggestions would perhaps bear useful fruit if more fully investigated. The author divides his work into six parts, but for our purposes it will suffice to divide it into two, the first part dealing with the theoretical aspect of contraction, exercise, and work with their concomitant fatigue, the second with the practical application of these principles in the description of various exercises of speed, strength, endurance, and so on, and the results of such exercises in producing chest development, deformity, and the like. In both parts of the book, theoretical and practical, we confess to a certain amount of disappointment, so far as regards the matter. The style through

is excellent, lucid, graphic, and in many parts with a useful dash of humour in it. It is perhaps this very lucidity which will occasion the scientific reader the same feeling of disappointment which we have ourselves experienced; physiological principles are made too simple, difficulties fade away too easily. On the whole, however, the spirit as opposed to the letter of our scientific knowledge on the subject of muscular work is very fairly given. An instance of this may be taken in the account of reflex action which Dr. Lagrange gives; he however says that the afferent and the efferent nerve fibres are both attached to the same nerve cell. From the popular reader's point of view, or even for the grasping of the *modus operandi* of reflexes, it matters but little whether these fibres are attached to the same or to different nerve cells, but as a matter of fact the fibres are attached to different nerve cells, and it would have done the popular reader no harm to have stated the facts correctly. Or again, the account of the relation between heat and work, between kinetic and potential energy is stated in a general sense, correctly; it is given with admirable clearness, and with the use of similes drawn from common surroundings and every day life; but on descending to details we find the same shakiness about the less important facts. It is unnecessary to multiply instances of this kind, the two alluded to are sufficient to show the character of the scientific portion of the book. Glycogen is spoken of in one place as a hydrocarbon, and inosite in another is included among nitrogenous substances; these are mistakes of another nature, which have evidently escaped the author's notice during proof-reading; the book as a whole is very free from clerical errors.

The subject of fatigue is dealt with very fully, and it may interest our readers to hear a little in detail what are Dr. Lagrange's views upon this most obscure subject. The first indication of fatigue is breathlessness, and the question is asked why certain forms of exercise produce breathlessness and others do not; the muscular actions that produce respiratory troubles all necessitate a very great expenditure of force in a very short period of time; the simultaneous contraction of large muscles, such as the leg muscles, in an action like running, is the kind of contraction followed by breathlessness, which, according to the author, is an expiratory, not an inspiratory, dyspnœa. The essential cause of breathlessness is stated to be a poisoning of the system with one of its own products of dissimilation, or, to use the present fashionable phrase, "auto-intoxication" by carbonic acid; the carbonic acid produced cannot be got rid of quickly, hence it accumulates and stimulates the respiratory centre in the medulla. He quotes cases in which death has occurred while a person is breathless from severe exertion; we are, however, hardly ready to conclude with Dr. Lagrange that death in these cases is actually produced by excessive carbonic acid poisoning. It is curious to note that, although Dr. Lagrange is more familiar with athletic exercises than we are in the habit of regarding Frenchmen to be, he makes no reference to what the runner terms "second wind;" if the theory propounded be correct, no doubt it is due to the great power possessed by the respiratory centre of adapting itself to altered conditions. Fatigue proper and its accompanying pains and stiffness is put down to four sets of causes: (1) material through small lesions of the motor organs; (2) auto-intoxication by the waste products of work, and of these he regards uric acid as one of the most important. This view is held because the urine some hours after severe exercise in an untrained individual contains a deposit of urates, that is, during the time when stiffness is most apparent: and he compares fatigue both to febrile disorders and to gout on this account. As, however, there are no observations recorded on the amount and concentration of the urine excreted, we feel considerable difficulty in accepting this view. Recent physiology teaches us that muscular work does not depend on nitrogenous metabolism, and that uric acid is formed in the liver, not in the muscles; still less are we able to follow the author in comparing fatigue with gout, for in the latter condition we have a diminished, not an increased, excretion of uric acid; (3) exaggerated use of the living tissues; this occurs particularly in the form of fatigue which Dr. Lagrange designates as overwork, or organic exhaustion. A graphic picture is given of a Herculean acrobat whose underfed body died from phthisis a few weeks after the author's interview with him. He only dined well when the takings were good. Strong men of this kind appear nowadays to be in little danger of a similar end; (4) dynamic exhaustion of the motor elements; a number of obscure phenomena in which the nervous system is chiefly concerned are included under this head.

Turning now to the practical part of the book, we first find a chapter on training, which is very largely taken from Dr. Worthington's book on obesity; it contains nothing that will be new to English athletes. The rest of the book is devoted to a description of various exercises, and their effects on the body; those that produce deformity are those which, like fencing, call into play one set of muscles, and leave the rest of the body comparatively inactive. The most healthy exercises are those that call into play the co-ordinate action of most of the muscles of the body, and Englishmen generally will be glad to hear that Dr. Lagrange fully approves of rowing and swimming on this account. In some cases the author is a little carried away with his subject, and the way in which he extols certain forms of acrobatic feats partakes too much of the enthusiast to be quite practical. We may admire feats of agility and balancing, and they may produce less tendency to deformity than gymnastics do, but we cannot all be rope dancers or india-rubber men, nor do we feel inclined to burst into panegyrics over the training of a circus girl who climbed to the top of a pyramid of bottles and poised herself like a bird on the top of the highest without displacing any of them, even though her trunk did not deviate from the vertical by a millimètre. The prizefighter, too, that product of England, the land of sport, that man so different from other men, comes in for a fair share of attention; and Dr. Lagrange seems to hesitate whether to admire him for his physique or loathe him for the brutality of the sport in which he engages. On the whole, however, he prefers "French boxing," a form of sport in which blows are delivered by the feet as well as by the hands, because more muscles come into play; we doubt whether the Englishman's dislike of those who kick will be lessened on this account. In spite of this blemish, the result of ultra-enthusiasm, the book is full of practical and useful hints, and is nowhere dull or uninteresting. Some of the points discussed will raise a smile in those with the sense of the ridiculous; the grave treatment of the important question why cats seldom become fat inevitably reminds one of the famous posers Mr. Samuel Weller used to put to his master. We must, however, not forget that sometimes our own countrymen are carried away by their subject, and give utterance to remarks which raise the smile of ridicule. Mr. Grant Allen, for instance, extolling the costume of the ballet as that most suitable for grace and action, is quite on a par with Dr. Lagrange in his ecstasies over the grace of figure to be observed in clowns.

THE RHEUMATIC DISEASES (SO CALLED), WITH ORIGINAL SUGGESTIONS FOR MORE CLEARLY DEFINING THEM. By HUGH LANE, L.R.C.P.Ed., M.R.C.S.Eng., Honorary Physician to the Eastern Dispensary, Bath, and CHARLES T. GRIFFITHS, L.R.C.P. Lond., M.R.C.S.Eng., Resident Medical Officer to the Royal Mineral Water Hospital, Bath. London: J. and A. Churchill. 1890.

CHRONIC rheumatic affections form so large a part of medical practice; they are so intractable in treatment, and diminish so sadly the happiness and usefulness of the lives of those who suffer from them that any work which promises to extend our knowledge of their nature, or to increase our therapeutic resources, is sure to be welcomed. The work before us is a careful and conscientious clinical study of chronic rheumatism, using the term in its widest sense, and contains an attempt to classify the cases on a system which shall be at once pathologically sound and clinically convenient.

The authors speak throughout from clinical experience, their facts are drawn from actual observation of patients, and the theories they advance are grounded mainly upon a careful analysis of 1,200 cases. This being so it will be readily admitted that the result of their labours will repay careful study. The class of cases dealt with is classified under four heads: Chronic rheumatism, chronic rheumatic arthritis, rheumatoid arthritis, and chronic gout. The third and fourth classes are sufficiently distinct, but the division between the two first-named is not so well marked. The term chronic rheumatic arthritis is limited to cases in which the rheumatic history is very distinct, the joint deformities, which are often extreme, supervening as a rule soon after an acute attack of rheumatism. These cases remain very liable to attacks of subacute rheumatism. Under the term chronic rheumatism are classed together that large proportion of cases in which there is often no distinct history of acute or subacute rheumatism, in which pains and neuralgia are prominent symptoms, and in which

rheumatic affections of muscles and fascia rather than of joints are prominent symptoms.

The chapter on rheumatoid arthritis is the fullest in the book, and contains the most valuable clinical material. The early stage of the disease is especially well described, and the concomitant neural symptoms are well worked out.

The volume is illustrated by excellent pencil drawings, reproduced by lithography, of typical cases. We may instance particularly a drawing of the hands in an early stage of rheumatoid arthritis, and of the feet from another case of the same disease, illustrating a peculiar displacement of the toes to the fibular side, analogous to the previously recorded ulnar displacement of the fingers.

We may recommend the work as a modest and careful study in a peculiarly difficult field of clinical observation.

CLINICAL AND CHEMICAL OBSERVATIONS ON PLUMBISM. By JOHN BROWN, M.D., etc. London: Simpkin, Marshall, and Co.

THE author has studied carefully and scientifically the outbreak of plumbism at Bacup during the past two years. He has found that middle-aged persons are more frequently attacked by symptoms of lead poisoning than either the young or the old; and that females suffer more than males, especially from the epileptic type of plumbism. Further, he finds that alcoholism not only predisposes to lead-poisoning, but also interferes with recovery therefrom.

As regards the cause of the blue line on the gums, Dr. BROWN believes that the source of the sulphur in the lead sulphide which forms the blue line is the sulphocyanide of potassium constantly present in the saliva, the sulphur of which may form sulphuretted hydrogen under the action of nascent hydrogen gas produced during butyric and other fermentations in the mouth.

Besides colic and wrist-drop, the author has observed epilepsy and convulsions, frontal headache, mania, melancholia, general paralysis, absence of patellar tendon reflex, muscular tremors and atrophy, insomnia and asthenopia, as results of lead poisoning.

The water, which caused lead poisoning in Bacup was supplied by the Rossendale Waterworks Company. It is very soft and possesses an acid reaction, the acidity being due to sulphuric acid. The author observes that filtration removes lead from this water, compressed carbon filters being specially efficacious.

He recommends the use of iron pipes for conveying the water, or glass-lined pipes, and the use of slate or galvanised iron for cisterns, instead of lead. Treatment of the water with limestone or carbonate of soda is also suggested to prevent any solvent action upon lead. The author has found by analysis $\frac{1}{10}$th of a gr. to 2 grs. of lead per gallon; and he states that lead sulphate is soluble in water to the extent of 2 grs. per gallon.

NOTES ON BOOKS.

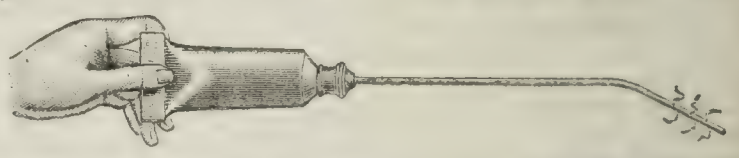
Transactions of the Hong Kong Medical Society. Vol i, 1889.—The Society was founded in 1886, with Dr. Patrick Manson for its first President; and this, its first publication, contains the papers during the first two years of the Society's life. Dr. Manson is the chief contributor, both as regards the number of his papers and their intrinsic interest. We notice a paper by him on endemic hæmoptysis, and later on in the volume a single case of this rare occurrence is recorded. Dr. Manson also contributes a case of liver abscess and a note on the operative treatment of elephantiasis of the scrotum and one on the treatment of intestinal flux. His two papers on pemphigus contagiosus and tinea imbricata, dealing as they do with skin affections of which but little is known in this country, must be ranked as of at least equal importance with any in the volume, whilst his note on a peculiar body found in the fæces after persimmon-eating is a subject with which we are not at all familiar. Persimmon, it may be mentioned, is a species of vegetable. Dr. Hartigan contributes five cases of aneurysm and a paper on tetanus neonatorum; Dr. Jordan has one on aneurysmal varix and one on the coexistence of beri-beri and syphilis in the same patient; Mr. James Cantlie writes on muscular pains in the febrile state; and amongst the rest are interesting cases of liver abscess, and an important paper on the malarial fevers of Hong Kong.

Die ersten zehn Jahre der Myringoplastik, etc. By Professor E. BERTHOLD.—(*The First Ten Years of Myringoplasty etc.*) Berlin: August Hirschwald, 1889. In this pamphlet of 44 pages Professor Berthold relates the various observations in myringoplasty which have been made by different observers since he first introduced the subject of healing old perforations of the tympanic membrane by tranplantation of skin in 1878. Human skin, frog's skin, rabbit's cornea, membrane of fowl's egg, and gold beater's skin, have been severally used for promoting the closure of old perforations. At the present time the author employs two methods chiefly. For large perforations he applies a piece of skin to the inner wall of the tympanum, the edges fitting under the margins of the membrane like a watch glass in its frame. Certain conditions are necessary, such as almost or complete cessation of the suppuration in the tympanum and division of any adhesions between the membrane and inner tympanic wall. The granulations also require preparation by scraping or slight burning with the galvanic cautery. Small perforations the author treats by covering them with a piece of egg skin and applying to this each day by means of a wool pellet a little spirits of turpentine. As soon as the least burning is felt the application must be stopped, or too much irritation will be produced. The pamphlet concludes with particulars of twelve cases in which these methods (including transplantation of rabbit's cornea) were employed with good results.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

INTRA-UTERINE OINTMENT INTRODUCER.

WE have received from Messrs. R. Sumner and Co., of Liverpool, an intra-uterine ointment introducer made by them at the suggestion of Dr. Duke. In the accompanying figure the ointment is



seen escaping from the holes at the end of a vulcanite stem as pressure is made on the collapsible tube containing the material it is intended to introduce into the uterus. We have tested the little apparatus, and find that what happens in practice is slightly different from what is figured in the diagram, for all the ointment comes out of the lowest hole (that nearest to the collapsible tube), little or none escaping from the distal holes. This defect could easily be remedied by only having one perforation, and that near the uterine end of the tube.

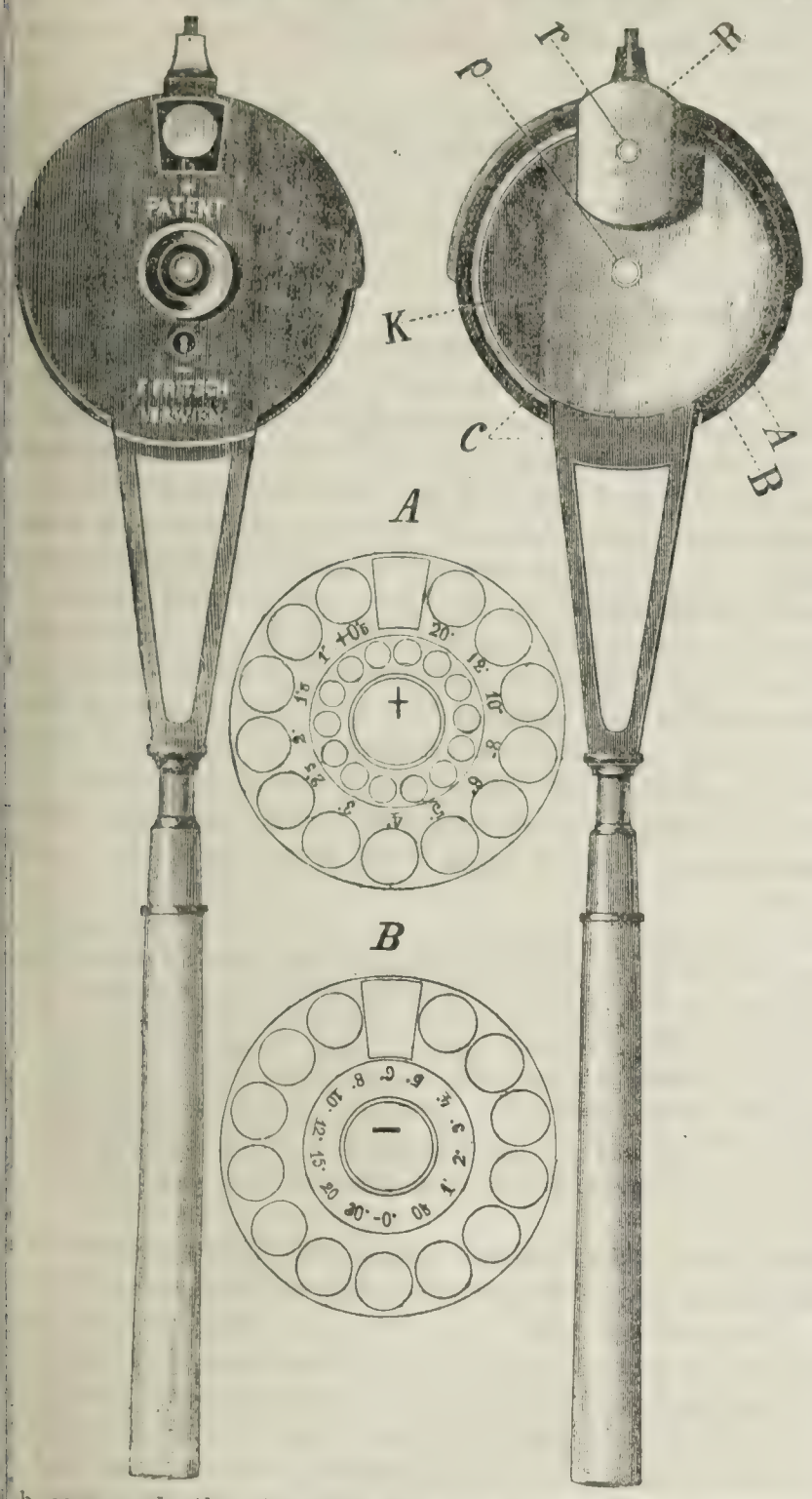
DR. L. BORTHEN'S NEW REFRACTION OPHTHALMOSCOPE

THE principal advantage claimed for this ophthalmoscope is that the transition from the direct to the indirect method of examination is made without any mechanical transference of the mirrors and consequently with much greater facility than is possible in any existing refraction ophthalmoscope equipped with a swing mirror.

Two discs, each bearing thirteen spherical lenses, giving a range of from + 0.5 to + 20 D. and − 0.5 to − 30 D., can be turned round a central perforated axis, which also forms the central aperture of the large mirror, the ordinary concave mirror used for the inverted image. Situated in front of the upper part of the large mirror is a small concave mirror of much shorter focus (8 centimètres) which can be inclined to either side at an angle of 25 degrees. The central aperture of this smaller mirror corresponds to an aperture in the larger mirror behind it, both being so adapted that they correspond with the centres of the lenses as they are successively presented by the movement of the revolving discs. Thus the smaller mirror can be used for examination by the erect image and for the determination of conditions of refraction. A plane mirror can, when occasion requires, be substituted for the small concave mirror.

The essential principle of this ophthalmoscope is founded on Dr. Borthen's observation that a mirror of short focus can be placed in front of another of larger size and longer focus without interfering with the efficiency of the latter for examining by

he inverted image. The short focus mirror could have been rranged so that the centres of both mirrors correspond. But here he position of the small mirror would have been less convenient,



h as regards the observing and the observed eye. Then also lens-bearing discs would have to be placed excentrically as ards the large mirror, just as in the ordinary ophthalmoscopes, l more space would be taken up.

he ophthalmoscope is made by Fritsch, of Vienna.

EUCALYPTUS DISINFECTANT FLUID.

SRS. TUCKER AND CO. write to say that the odour of oleum origani, which have stated that the above preparation appears to have, is not due to the esence of this oil, but to the thymol contained in it.

GOLD medal has been conferred by the Society of Friends of earch on the Russian lady doctor, E. P. Weljaminowa, for an y on "The Female Populations of the Caucasus."

E regret to hear that Professor von Nussbaum, of Munich, is ll with influenza that serious apprehensions are felt as to his lition.

HE Town Council of St. Petersburg has unanimously decided, onsideration of the services of the late Dr. Dobrosslawin, Pro- or of Hygiene in the Military Medical Academy, to have his sons educated at the expense of the city.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 18TH, 1890.

LEAD IN PUBLIC WATER SUPPLIES.

THE fact that in recent years the water supplied to many towns has for some reason come to possess the power of dissolving lead to an extent sufficient to produce widespread prevalence of lead-poisoning among the consumers is a matter which deserves the most serious attention of the sanitary authorities. Owing to the number of cases and to certain other circumstances, special attention has been directed to the water supply of Sheffield, but the evil exists to a hardly less extent in Huddersfield, Mirfield, Dronfield, Bacup, and other towns. We are glad to see that the report of the large number of cases at Mirfield (no fewer, it is said, than 47 within the last twelve months) has led the County Council of the West Riding to appreciate the importance of the subject. At a recent meeting the following resolution was adopted on the motion of the Chairman of the Sanitary Committee :—

That in view of the great danger to the public health through the contamination of drinking water by lead in many parts of the West Riding, and especially in Mirfield, and of the present uncertainty as to the means of prevention, the Local Government Board be urged to direct an immediate and comprehensive inquiry, the results of which would serve for the guidance of local authorities, and, if required, as a basis for future legislation.

It must be admitted that at the present time our knowledge of the circumstances that endow water with the power of dissolving lead is incomplete. Mr. W. H. Power's suggestive report in the last *Report of the Medical Officer* to the Local Government Board proved this if nothing more. It may be remembered that Dr. Sinclair White, in his report on the Sheffield water supply, brought out very clearly one point, which will probably prove to be of very great importance. He showed that the water supplied to that part of Sheffield in which the majority of the cases occurred had a distinctly acid reaction. As to the nature of this acid, however, the evidence is still inconclusive. The opinions obtained by Dr. White were to the effect that the acid was probably sulphuric, derived from pyrites. It will be observed that Dr. John Brown, in his very careful and valuable study (reviewed at p. 138), of Plumbism at Bacup during the last two years, has found that the soft water supplied to that town possesses an acid reaction due to sulphuric acid.

The power of any particular water to dissolve lead is not, however, a constant quality; it is influenced by conditions of temperature, pressure, and perhaps by other physical circumstances, and the theory has been hazarded that it may be in

some way connected with the presence of minute organisms. The interesting note by Dr. G. Kirker, R.N., communicated to the JOURNAL by the Director-General of the medical department of the Navy last week (p. 71), affords striking evidence on this head. Dr. Kirker found that the power of certain samples of water to dissolve lead was directly proportional to the number of micro-organisms which they respectively contained. Upon this hypothesis the acid reaction which renders water capable of dissolving lead may be due, not to sulphuric acid derived from a pyritous soil, but to the chemical products of bacterial action. Possibly both theories may turn out to be well founded. Further knowledge upon these and other related points is urgently needed, and the reports of Dr. White, Mr. Power, and Dr. John Brown will afford bases for the future inquiries which it may reasonably be expected the Local Government Board will energetically push on at an early date.

Meanwhile the demand for an inquiry on a large scale does not exonerate the local authorities from their responsibilities. In Sheffield, for instance, the water supply is now in the hands of the municipality, which is directly responsible for the purity of the water supply, and will no doubt be held to its responsibilities by public opinion. Science may not yet be in a position to explain all the intricacies of the problem, but experiment has shown that water may be so treated by comparatively simple means on a large scale as to deprive it of its solvent action. This may be done, according to Dr. White, by keeping it for a few hours in contact with fragments of freshly-broken Derbyshire limestone. Messrs. Crookes, Odling, and Tidy advocate systematic and continuous filtration of the water, with recourse to such modifications of the ordinary filter-bed as will ensure the efficient silication of the water. Lead poisoning is an insidious and serious disease, and it is the bounden duty of municipal authorities to make immediate use of any means which experience has shown may serve to diminish if not entirely to eradicate the evil.

THE HISTORY OF AN AMERICAN "UNIVERSITY."

A MOST astounding account of the systematic way in which the business of selling the degree of M.D. has been conducted in some parts of America was recently published by the *Boston Sunday Herald*. According to the report before us, there are five of these "bogus diploma mills" in the United States (one each in New Jersey, New York, Ohio, Vermont, and New Hampshire), and one in Canada, at Montreal. The investigations of our contemporary were specially directed to the proceedings of an institution calling itself by a high-sounding title—*Universitas Trinitatis, Collegium Medicinæ et Chirurgiæ, Reipublicæ Vermontis*. Under the law of Vermont, which is a disgrace to the statute book of any State, it would appear that any body of men—four in the case of the "Trinity University"—can make application to any Town Clerk for articles of incorporation. The articles are apparently granted forthwith, without reference to the Secretary or any other official of the State. As a matter of fact, the Secretary of the State of Vermont, when applied to for information about this "Trinity University," replied:

> I am unable to find that the institutions you name have been organised under our State law, nor do I know of their existence.

Yet at the time this letter was written the "Trinity University" was hard at work selling its diplomas for sixty dollars, and six days after its date its Dean forwarded to Mr. A. H. G. Hardwicke, described as a well-known hardware dealer of Buffalo, a beautiful Latin diploma which declared that since the said

> Alan H. G. Hardwicke has proved to us that he has given himself during the accustomed time and according to law to the art of medicine, and has shown to the examining instructors that he is well grounded in medicine and surgery, we, the faculty of this University, with the authority entrusted to us by the laws of the State of Vermont, admit the said man to the rank of doctor of medicine, and give and grant unto him all rights, freedoms, and honours belonging to that station.

Now it does not appear that Mr. Alan H. G. Hardwicke had proved anything of the kind, nor that the "examining instructors" had had, or indeed seriously sought, any opportunity of ascertaining that he was "well grounded in medicine and surgery." In fact, Mr. Hardwicke knew nothing of medicine or surgery, being, as has been already said, a successful and respected dealer in hardware. For the purpose of investigating, and, if possible, exposing the whole scheme, he applied to the person calling himself Dr. H. F. Bradbury, Dean of the Trinity University at Burlington, or Bennington, Vermont, for there seems to be a little confusion here, which is, however, of the less importance, as the Dean lived neither at Burlington nor at Bennington, but at Nashua, N.H. At first some small pretence was made of requiring some sort of examination; this is what "the Dean" says in his first letter:

> We can get you a much better article than the Bellevue. We can get you an article from a college in Ohio for 150 dollars, dated 1880, or one from a university in one of the New England States for 60 dollars. This latter will be dated the coming May. Your brother has ordered one of the latter. I enclose circular. All business must be done with me, not sent to the university. I should like very much to see you. Wish you could come this way, and when here get your article. You should send thesis, and also pass some kind of an examination, so you can swear in court of law it was granted after due examination. Send money by express.

Then, after some business details, the letter concludes with this injunction: "I trust everything will be confidential."

This was on April 13th, 1889. By April 22nd the Dean will be more easily satisfied as to his correspondent being able to show that he is well grounded in medicine and surgery. "If you write a good thesis," he tells him, "we will pass you on the examination." Subsequently the Dean appears to have preferred to get his letters in rather a roundabout way:

> Your letter sent to me to Lowell forwarded to me at my present address. Use the name Freeland, and the Lowell address generally, in corresponding on this business. My full name is H. Freeland Bradbury (card enclosed). I can get you the desired article from a first-class house for 60 dollars.

At this point the *Herald* took up the investigation, which had previously been directed by Dr. D. S. Adams, the President of the New Hampshire State Board of Censors. The *Herald* having made inquiries on the spot it was finally determined that Mr. Hardwicke should attempt to obtain one of the diplomas. No great difficulty was encountered, and, after a little fencing, the Dean consented, on August 18th:

> "To send the goods C.O.D.[1] This," he adds, "is something I never did, and it is not customary in this business. However, if you give me your word as a gentleman that you will take the arti-

[1] "C. O. D.": Cash on delivery.

from the expressman just as soon as it gets to Buffalo, without any delay or exposure, I will send it."

Accordingly, the following letter was, on August 27th, 1889, addressed to "Dear Mr. Hardwicke," whom the writer, so far as appears, had never seen :

We have shipped to you this A. M. goods, C. O. D. 60 dollars. per agreement. We sent by the name of E. L. Needham, as we did not wish to put our name on the express. Please take it as soon as arrived.—Yours faithfully, DR. BRADBURY.

In it the recipient—"a well-known dealer in hardware" be t remembered—found his learning set forth in most official Latin : "Quoniam inter omnia Academica Corpora, secundum eges institua [*sic*] mos antiquus et honestus factus est, magno ionore donare, eos qui studium fideliter dederint Literis et Scientiæ et Artibus Utilibus, atque se interdum integriter por-averint, Igitur quum Alan H. G. Hardwicke" [hardware nerchant, to wit !] "nobis se Arti Medicinæ per tempus usi-atum et secundum leges operam dedisse demonstrait" [*sic*], and o on as translated above.

Secundum leges, there is the rub. The Secretary of the State of Vermont knew nothing of this "Trinity University," nd even the town clerk of Bennington, when inquiry was nade of him, though he could send "copy of articles of agree-ient of Trinity University of Vermont so-called," adds : "The arties have never been here so far as I know." Yet the rticles had been duly "recorded March 25th, A.D. 1889, at o'clock A.M. by E. A. Booth, town clerk." So that it ould seem that this University, founded, according to the odest claims of its parents, "for the purpose of education nd charitable purposes," but confining its operations mainly, report be true, to selling diplomas *doctoris medicinæ* to hard-are dealers and others, is not an illegal body ; neither is it, the report in the *Herald* states the case correctly, the only stitution of the kind in Vermont. There has also, it is said, een incorporated at Rutland, Vermont, the "Vermont Medical ollege or second medical college of the Medical Health So-ety for scientific and medical purposes."

We can only regret that the *Herald* did not turn its limelight n this benevolent institution. Its articles declare that it has en formed for the

ssemination of sanitary and medical knowledge, the preparation persons of both sexes for teaching and practising the art of aling and preservation of health, and for conferring upon such rsons, when duly qualified, the degree of doctor in arts, medica [*sic*], other certificates of qualification as the faculty and president the corporation may think proper and just.

is said to have granted a large number of diplomas to ung men, who are now practising in all sections of the nited States.

The way in which the existence of the "Trinity Uni-rsity" became known is instructive. A person practising dicine in Buffalo applied to be admitted a member of an ociation of physicians in that city, and produced one of the lomas of the "Trinity University." Since this person s in practice, it is probable, or at least possible, that his loma had been registered by the State, or that similar lomas may have been registered by the officials of other tes. Some of them, as appears from this investigation, not very careful, and think very little of registering the ndation of a university before breakfast, apparently for-ting all about it shortly afterwards.

Now, it was, if we remember right, recently held by the Supreme Court of South Australia that any person holding a diploma entitling him to practise in a foreign State must be admitted to the *Register* in the Colony. We commend the facts revealed by the *Boston Sunday Herald* of September 29th, 1889, to the very serious attention of the public and Parliaments of Australia. They may help to convince the public that the Medical Board of the above-mentioned colony did well to resign rather than incur the responsibility of giving their official sanction to the interpretation of the law adopted by the Courts, and may contribute to induce the Colonial Legislatures to pass a reasonable law.

For the root of the matter, however, we must look to the public spirit of the American people, who cannot long continue to tolerate a scandal which has been frequently exposed by the public press, and has been unceasingly condemned by every respectable member, not only of the medical, but of every learned profession in the United States.

THE NATIONAL LEPROSY FUND.

THE subscription dinner in aid of the National Leprosy Fund presided over by H.R.H. the Prince of Wales, of which a report will be found in another column, is noteworthy as a public manifestation of the decision that has been taken by prominent personages and authorities in this country to grapple with the disease.

The ravages of leprosy in India and its extension at the Cape were certain, sooner or later, to force the Government to direct attention more forcibly than has been done of late years to the necessity for more extended study of the malady, and for the care of its victims ; but there can be no doubt that the tragic circumstances connected with the death of Father Damien, and the interest shown in the matter by the Prince of Wales, have fortunately brought the matter before the attention of the public more immediately and more forcibly than would otherwise have been the case. The influence of his Royal Highness in promoting and furthering a public question of this kind is recognised, and the scientific aspects of the question, and more certainly the alleviation of much suffering, will follow from the kindly and sympathetic interest and energetic action which have been manifested by the Prince. His speech contains a succinct but clear statement of the most important facts regarding lepers and leprosy, and we are glad to read in it that the Indian Government, which has long taken an interest in leprosy, is likely to take a more active part than hitherto in its prevention and treatment in India. We are also glad to find it confirmed that the Cape Government has set to work in the promptest manner to remedy the evils which were so recently and painfully brought before the notice of the British public by a writer in *Blackwood*.

The statement that there is a steady and appreciable diminution in the number of lepers in the Hawaiian Islands since isolation was enforced in the affected districts confirms what has already been shown in Norway, that leper asylums on a sufficient scale are of the first importance in all countries where the disease prevails, both for the merciful treatment of the patients and for the protection of the community.

To provide asylums for lepers in the English colonies and

in the Indian Empire is far beyond the possibilities of charity even in England, but the promotion of the study of the disease by the establishment of scholarships and otherwise is an object fitting public spirit in this country, and well within its reach. The handsome sum subscribed at this dinner is a proof that money will be forthcoming so long as its distribution is entrusted to the very competent Committee who have taken advantage of the public emotion in order to, as far as is possible, procure the means of radically dealing with an evil in the face of which medical science is as yet almost powerless.

SURGEON PARKE, M.D., of Mr. Stanley's expedition, has been decorated by the Khedive with the fourth class of the Medjidieh.

THE National Pension Fund for Nurses has received a New Year's gift of £10,000, contributed by about one hundred gentlemen. The bonus fund of the association, apart from contributions given by nurses, now amounts to £36,000.

IT is practically settled that enlargement of the buildings of the University of London, in Burlington Gardens, rendered necessary by the increase in the number of undergraduates, shall be commenced this spring.

THE report of the public auditors appointed by the Hospital Saturday Fund, to investigate the books and accounts of the St. John's Hospital for Diseases of the Skin, having been read and considered by the delegates of the fund, a grant of £59 has been made to the hospital.

MR. PETER REID, a governor of several hospitals and charitable institutions, is said to be the donor of the munificent sum of £100,000 for the purpose of founding a convalescent home in connection with one or two metropolitan hospitals, to which we recently referred.

THE Prince of Wales opened on Thursday the Royal Victoria Hospital, Bournemouth. Dr. Robert Thomson, Chairman of the Hospital, gave on Wednesday night a dinner at his residence to the Committee and medical staff of the charity, when he was presented with his portrait.

A COMPLIMENTARY dinner has been given to Surgeon Crimmin, V.C., by his brother medical officers in India. Surgeon-General Pinkerton, who took the chair, paid a high tribute to Surgeon Crimmin's services and bravery, and said, so far as he could learn, Surgeon Crimmin was the first medical officer of Her Majesty's Indian Medical Services who had received this decoration, and he trusted it would not be the last.

THE LATE EMPRESS AUGUSTA.

WE understand that the International Committee at Geneva of the Red Cross Society have under consideration a proposal for permanently commemorating the great good which the late Empress Augusta accomplished by promoting the principles of the Red Cross and improving the methods of carrying on the work of the Red Cross Societies.

THE HIGH DEATH-RATE IN LONDON.

THE very marked increase in the mortality of London last week, notwithstanding the comparative mildness of the weather, in conjunction with the prevalence of influenza, makes a short analysis of this increase more than usually interesting. The death-rate in London last week, which was as high as 32.4 per 1,000, exceeded that recorded in any week, with three exceptions, since 1873; and though all these previously recorded excessive death-rates succeeded a continuance of fog and very cold weather, the present increase in the mortality can hardly be, to any extent, attributable to this cause. Though there was some increase in the deaths from most of the principal diseases, the excess was most marked in the fatality of diseases of the respiratory and circulatory systems. Of 2,747 deaths from all causes registered in London during the week ending last Saturday, 715 were referred to bronchitis; these were more than double the average number in the corresponding week of the ten preceding years, which was only 352. The 253 deaths from pneumonia showed almost precisely the same proportional excess, the average number being only 123. The deaths referred to diseases of the circulatory system numbered 275, whereas the average number was 140. In no other principal class of diseases is much excess shown; indeed, notwithstanding the 67 deaths directly referred to influenza, the zymotic mortality last week almost corresponded with the average.

MEDICAL HEROISM.

THE *Pioneer of India*, in giving an account of the results of the Chloroform Commission, draws a very engaging portrait of Dr. Brunton, and tells a characteristic story worthy of record. "Even to the inquiries of a stranger Dr. Brunton is most courteous and anxious to explain everything. No one who has come into contact with him can help being fascinated by the charm of his manner and the extent of his knowledge. But soft and gentle though he may appear, he has also the inflexible nerve of the man of science and the operator, as witness an incident in this Commission. They were attempting to administer spirits of wine to a strong pariah dog, which got excited and struggled violently; none of the assistants could tackle him. Dr. Brunton thereupon approached the dog, which at once flew at him and bit him severely in the wrist; but, unmoved, he seized him, held him down, and administered the dose. When he released the dog the wrist was bleeding from two severe wounds. Everyone of course was alarmed, not only at the accident but at the terrible possibilities. 'It does not matter,' he quietly remarked, as he held out his hand to be dressed, 'I thought something of this kind might happen, so before I came out *I had myself inoculated by Pasteur* in Paris.' There is heroism also in a Chloroform Commission." Dr. Brunton has, we hear, now returned to London.

A NIGHT MEDICAL SERVICE FOR LONDON.

THE evidence given at a recent inquest points to the need that exists for the establishment of a night medical service in the metropolis similar to that which has long been in operation in Paris and New York. The woman, whose death was the subject of the coroner's inquiry, was taken suddenly ill about half-past 12 on a Sunday night. Her son, on being informed of the illness of his mother, at once went in search of a medical man; but after pursuing his search from 12.30 to 4.30 A.M., during which time he had called upon a number of doctors, who were unable to attend, returned home to find that the deceased had died in the meantime. The evidence of Dr. Cyril Lloyd Jones, who was the medical man first called upon to attend the case, but who was unable from indisposition to leave the house, pointed to the fact that if the woman had been attended earlier he did not think anything could have saved her. The facts, however, showed, as the coroner observed, the necessity of there being some regular system with regard to night visitation. There was, he said, no legal obligation for a doctor to attend at any time, and he took the very sensible view that it is impossible for a man to do night and day duty. Self-preservation, he said, was the first law of Nature, and there ought to be some remedy provided whereby the poor ought to have a doctor who was ready to conduct cases at night. The initiative, he thought, should be taken by the parochial authorities. We have often insisted in these columns on the urgency that exist

for a well-organised night medical service, and suggested that the medical authorities should, in concert with the police, organise some such system, which would effectually meet the wants of the suffering poor in this respect. Dr. Henri Nachtel, of Paris, read a paper at the New York Academy of Medicine, in 1880, on the system of night medical service carried out in Paris, which resulted in a committee being appointed to investigate the question, and a service was ultimately adopted for that city. The Paris Medical Night Service is organised in the following manner: The medical men who are to be on the staff give in their names at the *mairie* of the district. The list of these medical men, with their addresses, is sent to every police station in each district. Anyone desiring medical aid goes to the nearest police station, or tells the first policeman met with in the street, who immediately fetches one of the doctors on the list, and takes him to the patient's house. When the patient cannot pay, the policeman gives the doctor a printed paper stating that he fetched him to attend such a case. Every month the *mairies* pay the holders of these tickets at the rate of five francs a visit. The *mairie* calls upon the patient to pay, but where inability is urged the debt is paid from a fund voted by the Municipal Council for this purpose.

CHIEF HEALTH OFFICER FOR VICTORIA.

Dr. D. Astley Gresswell has been appointed chief of the new Health Department for the Colony of Victoria at £1,000 a year. Dr. Gresswell has had a very distinguished career both as a physician and in the Department of Public Health. He has held office in the hospitals of the Metropolitan Asylums Board, in the Physiological Laboratory of St. Bartholomew's Hospital, and in the Medical Department of the Local Government Board. During his studies abroad he received a grant from the Scientific Grants Committee of the British Medical Association, and on presenting a thesis on Scarlatina for the degree of Doctor of Medicine at Oxford, the University authorities decided to publish it through the Clarendon Press as of "exceptional excellence." In 1884 Dr. Gresswell took the diploma in Public Health at Cambridge. We wish him every success in the important career for which he is so specially fitted.

UNIVERSITY OF LONDON.

At the meeting of Convocation to be held on Tuesday next the proposed new Charter cannot be considered, as it is not yet sufficiently advanced to be submitted to that body. Dr. Baines will again urge upon the Senate the request made by Convocation in 1887 that the Senate would select an appropriate motto for the University. Mr. W. J. Spratling will propose that the recommendation of the Senate that Bachelors of Medicine should receive the M.D. degree be restricted to men who have passed the M.B. with honours, and that the same course be adopted with regard to Bachelors of Arts (and the M.A. degree), and Bachelors in the other Faculties. Mr. T. Tyler and Mr. W. T. Lynn will move resolutions in opposition to two proposals of the University for London Commission respecting Constituent Colleges, and respecting the omission of the Matriculation Examination in the case of students of certain privileged colleges and institutions. They will also draw attention to the disparity in the numbers of graduates in the different Faculties, considering that the proposal to create four Faculties with equal powers is unreasonable; they propose finally to condemn the scheme of reconstitution recommended by the Commission as being totally unsuited to the wants of the University. Mr. W. T. Lynn will propose certain regulations affecting the Matriculation Examination which he desires to see adopted. Mr. W. L. Carpenter will propose resolutions respecting a scientific degree suitable for engineering students which he urges the Senate to adopt; and Dr. W. J. Collins will move the following resolution:—"That in view of the recent changes made in the Examination in Subjects relating to Public Health, this House respectfully urges upon the Senate the equity of conferring the degree M.D. (San. Sci.) upon those who had previously been awarded the Diploma in Public Health."

CLINICAL SOCIETY OF LONDON.

The annual meeting of the Clinical Society took place after the ordinary meeting on Friday, the 10th instant. Dr. W. B. Hadden and Mr. J. H. Morgan were appointed scrutineers of the ballot, and reported that the gentlemen proposed as office-bearers for the coming year, and whose names were published at page 112 of the Journal of last week, had all been elected. The Council's report was again highly satisfactory. It gave the number of the present members of the Society as 502, and stated that three ordinary members (Dr. Habershon, Dr. Fish, and Dr. Protheroe Smith) and three honorary members (Dr. C. J. B. Williams, M. Ricord, and Professor von Volkmann) had died during the past year. The Treasurer's report showed a balance in hand of over £50, whilst the sum of £600 remains invested. Dr. Andrew moved that the report of Council be adopted and printed in the forthcoming volume of the *Transactions*. This was seconded by Dr. A. E. Garrod, and carried unanimously. Mr. G. H. Makins moved a vote of thanks to the retiring vice-presidents and other retiring members of the Council; the proposition was seconded by Dr. S. Phillips, and carried unanimously. Sir Dyce Duckworth proposed in eloquent terms a vote of thanks to the energetic retiring surgical secretary, Mr. R. W. Parker; Mr. J. H. Morgan seconded this resolution, which was carried with applause, and suitably acknowledged by Mr. Parker. The President, Mr. Christopher Heath, thanked the members for his re-election; after which the proceedings terminated.

THE NEW LABORATORIES OF THE LONDON COLLEGES.

The announcements which have appeared in the general press respecting certain innovations at the Examination Hall of the Colleges of Physicians and Surgeons are premature. There can be no definite arrangements in the laboratories until a director is appointed. Meanwhile, however, we understand that several very capable gentlemen have already informally announced their intention to become candidates for the post of Director of the new laboratories erected by the Royal College of Physicians and the Royal College of Surgeons on the Thames Embankment. The appointment will be made for one year, but the Director will be eligible for reappointment for six years. After this period he could only be continued in office by a special vote of the two Colleges. The salary of the appointment will not exceed £500 a year. There is a strong feeling that the appointment should not be restricted to Fellows or Members of the Colleges, but that the best available Director should be chosen irrespective of the source from which his diplomas are derived. The laboratories under able direction ought to become a great centre for the scientific study of medicine in London. A great part of the space will be devoted to the pathological laboratories, but the wise decision has, at the suggestion of the Royal College of Physicians, been arrived at to set apart a room for use by members of the medical profession holding a diploma from either of the Colleges for the purpose of short clinical investigations.

SANITARY INSPECTORS FOR EAST LONDON.

At the last meeting of the Shoreditch vestry it was proposed to appoint an extra sanitary inspector, the work of the sanitary department being admittedly in arrears. According to the recommendations of the Royal Commission there should be at least four competent sanitary inspectors for the district, and, having regard

to its character, we are of opinion that six inspectors would not be found too many if the authority is really desirous of promoting sanitary work. The salary of an official of this kind averages about £150 a year, so that the annual cost of the staff of inspectors to the parish would be £900. We find that the population of Shoreditch is 127,000, composed chiefly of the poorest classes, and that the rateable value is only £642,000. In the City, on the other hand, the resident population is not more than 52,000, and it is chiefly composed of those who need comparatively little sanitary supervision; at the same time, its rateable value is enormous; it is estimated at £3,800,000, or about six times that of Shoreditch, so that here we have in close proximity two districts, one of which is very poor, and greatly in need of sanitary inspection, and the other enormously rich, and with comparatively few poor people to look after. The City depends upon Shoreditch and other East-end districts for its labour, and there can be no justice in throwing the taxation which should be shared by the City entirely on to the poorer district. We are, generally speaking, in favour of local self-government, but we are free to admit that the conditions obtaining in the east end of London are without parallel, and call for some special provision.

THE STRAND IMPROVEMENT SCHEME.

THE scheme for widening the Strand at Holywell Street from 40 feet to about 100 feet will, if carried into effect, be a most important street improvement. But we are told that the Improvements Committee of the County Council regard this improvement as merely an instalment of their complete scheme, which consists, besides this, of cutting a street, 90 feet wide, through the network of streets and courts lying between Holborn and the Strand. Such a street would, in one sense, be a great and much-needed improvement; but, on the other hand, we must not overlook the fact that these "improvement schemes" displace large numbers of the labouring classes, and that it is sometimes necessary for them to live in the vicinity of their places of employment. When the County Council presents its matured scheme, the wants of the labouring classes will doubtless receive full consideration. The scheme will, we presume, be carried out under the provision of the Cross Acts, which allow of the rehousing of the displaced persons in the vicinity. Considerable latitude has been taken by authorities in the interpretation of the term "vicinity," but in the case of the Strand it would be difficult to find any spot available for dwellings of a suitable kind within a mile, unless some of the land on the site cleared under the Acts were made available for the purpose.

PROSECUTIONS BY THE APOTHECARIES' SOCIETY.

THE Apothecaries' Society is continuing to render important service to the profession and to the public by prosecuting illegal and unqualified practitioners. Two successful prosecutions have been instituted at Birmingham against men named Welch and Key. The judgment of his Honour Judge Chalmers is both interesting and important:

With regard to Welch, he said, there was no dispute as to the facts. He accepted Detective Thomas's evidence as correct, but had reserved his decision to consider the question of law which had been raised. The substantial point in these questions was whether the defendant was practising as an apothecary and not as a herbalist, who was permitted to practise under an old Act. He called himself a herbalist, and said to the detective: "I am not a doctor; I am the person who prescribes." It was an absurd anomaly that in the nineteenth century the beneficial and necessary monopoly of a great scientific profession like medicine should be limited by an Act 350 years old, which began by a recital concerning societies, witchcraft, and other inconveniences, and which was passed when surgeons and barbers were of the same calling. But so it was. It was never, however, intended that herbalists should treat and prescribe for obscure diseases, such as nervous debility, when the symptoms were mainly subjective. The Stamp Act licence to sell medicines clearly did not cover the present case. Speaking broadly, the cases covered by those Acts were those in which the patient treated himself, relying on his own judgment, and not those where treatment and medicine was procured by the person dispensing the medicine. He gave judgment for the plaintiffs for the penalty of £20 claimed, and stayed execution for fourteen days, with leave to defendant to appeal. In the case of Jesse Key, trading as Curtis and Co., his Honour said the facts were still stronger against the defendant than in the case of Welch. Key had palmed himself off as a medical man on the detective. He would give judgment against him for the two penalties of £20 each which the plaintiffs claimed. He gave leave to appeal in this case also.

THE RECENT ARMY MEDICAL WARRANT.

THE short Warrant just issued providing for the retention of surgeons-general, in certain cases, till the age of 62, is the first—it cannot be the only—outcome of the recommendations of Lord Camperdown's Committee. It only directly affects surgeons-general, the compulsory retirement of all other ranks remains as before. But, as we said when reviewing the recommendation standing by itself, while it applies only to the top rank, it affects all beneath it. This is inevitable. The extension, we believe, has been carried out on very strong service grounds advanced by the Director-General; but while Mr. Stanhope has thus admitted their force, he cannot but see that interference with the flow of promotion at the top seriously compromises the legitimate, if not fairly guaranteed, expectations of certain deputies and brigade-surgeons. On a similar occasion, when retirement was curtailed from 65 to 60 years, certain officers were compensated. We will say no more at present than that we earnestly hope that fair and honourable precedent will now be followed.

EARLSWOOD SCHOOLS FOR BACKWARD AND WEAK-MINDED CHILDREN.

THERE are but few institutions where special and efficient educational training is provided for backward and weak-minded children. There is a large class of children not imbecile, not exactly belonging to the class called "feeble-minded," but still less bright than other members of the family; children who are unable to play with others, solitary in their habits, backward and deficient in some mental faculties, and difficult to train. Such children are unfit for the competition of ordinary school life where they are exposed to ridicule and become discouraged; these children need special training, which it is often difficult for their parents to obtain for them, and when they are left in the home untrained they become intractable and troublesome. At Earlswood there is a specially-trained staff of skilled governesses, teachers, and nurses, and the Board of Management have arranged to receive private pupils at moderate charges. This will be a great boon to many middle-class families. In these schools the child begins to learn from object lessons; he is taught to employ his fingers and to use his hands by Kindergarten exercises, being afterwards encouraged by easy stages to perform such work as he may be capable of. The class of children referred to is one that demands more attention than it has received in past years, and there are indications that the importance of this matter is attracting public attention. A committee of the Charity Organisation Society is trying to arrange for the care of feeble-minded, epileptic, and crippled children among the poorer classes on the lines recommended by the late Royal Commission on Blind and Exceptional Children, and it is hoped that the London School Board will make suitable provision for such children in connection with their schools. These weak-brained children are a source of danger if neglected. The care of them is not only a philanthropic work, it is necessary to the well-being of the State.

SCOTLAND.

THE directors of the Sick Children's Hospital, Edinburgh, have granted an application on behalf of the Scottish Association for the Medical Education of Women for permission to attend the hospital for the purpose of receiving clinical instruction in the diseases of children.

DR. ROBERT KIRKWOOD, a retired member of the medical profession, who possesses high qualifications for the post, is, as has already been announced, a candidate for the County Councillorship of Ayrshire. Dr. Kirkwood has given evidence of his interest in and acquaintance with sanitary questions, which have to be so largely dealt with, especially in Scotland, by the County Councils, and the pamphlet which he published in 1882 on the sanitary laws shows that he has been one of the most diligent pioneers in the movement for improving the health of the population in the West of Scotland. It is very desirable that on every County Council there should be some members of our profession, and Dr. Kirkwood would undoubtedly serve his county well.

SICK ROOM COOKERY.

THE excellent series of lessons in sick room cookery has recommenced at the Royal Infirmary of Edinburgh. The lessons are open to all medical students on payment of a very moderate fee. The system of instruction, the institution of which was in large measure due to the efforts of Mr. Chiene, has proved a most valuable adjunct to the medical curriculum.

THE SCOTTISH ASSOCIATION FOR THE MEDICAL EDUCATION OF WOMEN.

THE Scottish Association for the Medical Education of Women has not gone to sleep. In a business-like and praiseworthy fashion it has set about the elaboration of a thorough course of medicine at Edinburgh, which shall be open to all. Among other important steps, the Association has applied for and received permission from the directors of the Royal Edinburgh Hospital for Sick Children to attend the hospital, for the purpose of receiving clinical instruction in the diseases of children. Ladies' *cliniques* will be held during the months of February, March, and April, and will be open to all ladies who may desire to obtain a medical education. The Association has further received the promise of influential support, medical and general, in Edinburgh and throughout Scotland, so that there can be little doubt that the question of the training of women in medicine will receive a more satisfactory and complete solution than has been possible hitherto.

THE DEVELOPMENT OF THE NERVOUS SYSTEM.

ON Wednesday, January 15th, Professor Hamilton, of Aberdeen University, addressed the Philosophical Institution of Edinburgh on the development of the nervous system, and summarised a number of the more important of recent contributions to the discussions which the study involves. He concluded that the complex nervous system originated in a number of sense organs in the skin; that in course of time these sense organs sank deeply into the body wall and became modified into nerve cells and fibres; that the nervous system then assumed the form of a ring with the alimentary canal passing through it, and with a small brain-like ganglion placed on the ring above and another below the gullet; that this simple ring, with its two ganglia, formed the type of architecture in the brains of all the higher vertebrates, although the part of the original alimentary canal which the ring surrounded had become obsolete; that the vertebrate spinal cord was probably the united ganglionated cord of the invertebrate, and that the canal in its centre was most likely the original invertebrate alimentary canal, while the ventricle in the brain was probably originally the invertebrate stomach; that as development went on, the ganglia on the ring became much more highly organised, and ended in the calling into existence of the primitive cerebrum of vertebrates low in the scale; and that, lastly, as this cerebrum grew in proportions and became a prominent object, functions were translated to it which formerly were inherent in parts of minor importance, these parts lapsing correspondingly into a state of comparative obsolescence or complete inertness.

IRELAND.

CONVERSAZIONE AT THE COLLEGE OF SURGEONS.

ON Saturday, January 11th, Dr. Meldon, the President of the Royal College of Surgeons, invited a very large company to the College to meet the Countess of Zetland and other members of the Viceregal Court at an afternoon *conversazione*. Over one thousand guests were honoured by receiving cards. Her Excellency was most warmly received by the great crowd which occupied the central hall, and the President made a short and appropriate address of welcome. He requested Her Excellency to unveil the bust of the late Dr. John Denham, which has been presented to the College by his widow, and this act was very gracefully performed. An excellent concert followed. A large proportion of the company inspected the many interesting objects on exhibition, and it was a late hour before the last of the guests took their departure. The whole affair was admirably managed.

THE SANITARY CONDITION OF BELFAST.

A VIGOROUS correspondence, begun by Mr. John Lanyon, C.E., has been going on in the Belfast press regarding the sanitary condition of the city, the recent epidemic of typhoid, now on the decline, having served to draw public attention to the subject. Mr. Lanyon has drawn attention to the following amongst other evils: The existence of cesspools, which overflow and discharge into the roadside channels; the small size and filthy condition of many of the yards in the poorer quarters; the keeping of pigs in yards unsuited for such purposes, and the entire absence in some quarters of all sanitary conveniences. These evils are more or less common to most large cities, and it cannot be said that the condition of Belfast is worse than the average, but it is well that every effort should be put forth to awaken the public mind to an adequate sense of the pressing need of sanitary reform.

THE CAMPBELL BEQUEST.

THE late Henry Campbell, Esq., of Belfast, who died some time ago, left the bulk of his large fortune, amounting to over £200,000, to be devoted to charity. It was vested in three trustees, who, under the terms of the will, were empowered either to devote the money to the erection of a large public school, to be called the Campbell College, or to the founding of a hospital. It is now announced that the trustees have decided to build the College first, since it seemed to occupy the first place in the testator's mind, and to devote any surplus that may remain from the ample funds at their disposal to the second object, namely, a hospital. The necessity for a new general hospital for Belfast is making itself daily felt, the wants of the town having, owing to its extraordinarily rapid development, quite outgrown the accommodation of the Royal Hospital, which is usually inconveniently crowded. It is also much to be desired that Belfast should be provided with a new fever hospital. The present fever hospital is intended for the poor, and there is only a very limited amount of accommodation elsewhere for the better classes.

M. PASTEUR has been elected a member of the Academy of Moral and Political Sciences, Paris.

THE EPIDEMIC OF INFLUENZA.

Great Increase in the Death-rate in London and Paris.

A Comparison with Former Epidemics.

There was a marked increase in the mortality from influenza in London during the week ending January 11th. During the week ending January 4th only 4 deaths were referred to this disease, while in the following week, ending Saturday last, no fewer than 67 fatal cases were reported, together with a very large excess of mortality from diseases of the respiratory organs, no fewer than 1,068 deaths being referred to these diseases, being almost double the average. Of the 67 persons whose deaths were referred to influenza last week in London, only 4 were under twenty years of age, while 24 were aged between twenty and forty, 28 between forty and 60 years, and 11 were aged upwards of sixty years. During the great influenza epidemic which prevailed in London at the end of 1847 and the early part of 1848 the general mortality showed, as is the case at the present time, a large excess above the average for the season. In the two months during which influenza was most fatal in 1847-8 the weekly deaths exceeded the average by about 60 per cent., and the deaths attributed to lung diseases during the same period showed an excess of no less than 90 per cent. The fatal cases of influenza during this period averaged 176 weekly, though these deaths represented only 10 per cent of the excess in the general mortality.

From the latest returns from Paris it appears that the death-rate in that city is almost unprecedentedly high. The rate of mortality was only 20.2 per 1,000 during the week ending November 2nd, 1889, since which time it has steadily increased week by week until it reached 31.2 in the week ending December 21st, 53.7 in the last week of 1889, and further rose to 61.7 per 1,000 during the week ending January 4th. The average death-rate in the corresponding period of recent years was only 25.1 per 1,000; the death-rate during the week under notice was therefore considerably more than double the average. The 2,683 deaths registered in Paris during the week ending January 4th included 89 which were directly referred to influenza, 37 to typhoid fever, 32 to diphtheria, 24 to whooping-cough, and 3 to small-pox. The most noticeable feature of the return is the extraordinary fatality of diseases of the respiratory organs. To these causes alone no fewer than 977 deaths were referred, against only 155 in the corresponding period of 1889; and of these 977 deaths 500 resulted from pneumonia, against only 52 in the first week of 1889. The greatest excess in the mortality from pneumonia and bronchitis occurred among persons aged between twenty and sixty years, 376 deaths having been recorded, against only 21 in the corresponding week of last year. The deaths of males aged between twenty and forty years were more than double those of females at the same age; while among persons aged upwards of sixty years the deaths of females exceeded those of males.

Warm Weather and the Epidemic.

Epidemics preceded by High Thermometric Readings.

The mean temperature during the month preceding this outbreak, and during the two months of its greatest mortality, exceeded the average. It is worthy of note that from the middle of October until the middle of December, when the maximum mortality prevailed, the temperature each week, with one exception, exceeded the average for the season. During the milder epidemic of influenza which prevailed in March, 1851, the deaths from all causes during that month, of which only 155, or about 3 per cent., resulted from influenza, exceeded the average by 24 per cent.; while the mortality from diseases of the respiratory organs during the same period showed an excess of no less than 85 per cent., almost corresponding with that prevailing in the great epidemic of 1847-8. During March, 1851, the month of this smaller epidemic, the mean temperature exceeded the average, and in the preceding two months the temperature showed a very great excess. With regard to the present epidemic, the temperature during the past two months has almost corresponded with the average, and the weekly mortality from diseases of the respiratory organs has showed an excess on only two occasions during November and December last. Thus it will be noticed that comparatively mild weather has prevailed prior to each of the three periods since 1847 during which influenza has been epidemic in London, and notwithstanding the general rule that the mortality from diseases of the respiratory system remains below the average while mild weather prevails, there has, in each of these periods, been a very great excess in the death-rate from these diseases. This suggests the probability that a large number of deaths, the causes of which were referred simply to some disease of the respiratory system, was connected in some way with the prevailing epidemic.

The Epidemic in England.

In response to inquiries addressed, on January 14th, to the officers of Branches of the British Medical Association in England we have received the following replies, which, supplemented by the notes from our special correspondents, give the most complete view of the present incidence of the epidemic which has yet been published. In London it can be confidently said that the worst is past, except in Hampstead and some of the northern suburbs, where a large number of new cases have recently occurred. The epidemic among the troops in the Home District is rapidly diminishing.

Brighton.

Our Brighton Correspondent writes: The epidemic is present in this town, but, with few exceptions, only in a very mild form. It is not confined to any particular class.

Birmingham.

Our Birmingham Correspondent writes: I have little to add to my note of last week. A few cases of influenza have been treated at hospitals, and a few cases occur in private practice, but there is not a widespread epidemic of the kind which has been prevalent on the Continent, though the ordinary cold is still most unusually prevalent. In those "epidemic" cases which occur the catarrhal symptoms are, as a rule, subordinate to the pains in the head, back, and legs.

Cardiff.

Dr. A. Sheen, Honorary Secretary to the South Wales and Monmouthshire Branch, writes that after a few mild scattered cases influenza became widely prevalent about January 8th, but now (January 14th) it seems to have done its worst. The cases mostly have been mild in character, the symptoms, coming on somewhat suddenly, being usually severe headache, pains in the limbs, a temperature rising up to 103° or higher, and great amelioration of symptoms within forty-eight hours. In some instances gastric symptoms have been prominent. In public departments the post office officials seem to have suffered most. Mercantile houses and places of business have been put to some inconvenience by many of their *employés* being attacked, but so far I have not heard of a single death or of any serious complications. There have been no cases at the Union Industrial Schools, nor at the workhouse. On January 7th special arrangements were made at the Infirmary for the admission of urgent cases of the disease or its complications, but, fortunately, the accommodation provided has not been needed. The house-surgeon at the Infirmary, Mr. J. Thomas, tells me that the first case came under his observation amongst the out-patients on January 2nd. Since that date there have been many cases in daily attendance. I have not seen any serious complications. The number of new cases fell off on January 11th, 12th, and 13th, but on January 14th there were several fresh cases. The majority of cases are adult males. The highest temperature was 103° F. Most of the children attacked have had nausea and anorexia. Quinine, antipyrin, and chlorodyne, either separately or combined, have given every satisfaction in treatment. In the outlying districts the epidemic has been prevalent, but not universally, Cadoxton and Barry, about six miles off, being the greatest sufferers. Ordinary catarrh has been unusually prevalent. The mildness of the weather may have had something to do with the absence of sequelæ as pneumonia and bronchitis.

Dr. Taylor states that the epidemic of influenza commenced in his practice on January 4th, in the person of the post office *employés*, several of whom were seen that day; on the Sunday, Monday, and following days, many more cases were attended to, and during the week ending January 11th about fifty post and telegraph *employés* were invalided; several railway men were also laid up. On January 9th the boys on board the *Havanna*

were first attacked, in all about twelve. All the cases were of a mild type, high fever at the onset but passing off quickly; no complications of any kind, and in only about three cases has there been any relapse, and this due to bronchial catarrh, not to pneumonia. The latest cases have shown a more decided severity of symptoms, with bronchial catarrh. The epidemic is now subsiding. Adults and young people have suffered more frequently than very young children. The symptoms have been high fever, ranging from 102° to 103.5° and 104° F.; intense throbbing headache, flushed face, sore throat, pains in the back and legs for the first twenty-four to thirty hours, followed by great prostration and by return of a good appetite. No deaths.

Cheltenham.

Dr. G. Arthur Cardew, Honorary Secretary of the Gloucestershire Branch, writes: Influenza made its appearance in this town the week before last, since which time it has become very general. Most of the cases I have seen have begun with throbbing of the head and eyes, high temperature (103° F.), pain in the back and limbs. Temperature falls in two or three days, and defervescence is followed by extreme weakness, loss of appetite, and catarrhal symptoms. I hear of many in a family being attacked, but curiously enough at present all mine have been isolated ones. As far as I can ascertain the cases are not at all serious, and at present the number of cases is not very large. I am writing this in great haste to catch the post.

Exeter.

Dr. P. Maury Deas, Honorary Secretary of the South-Western Branch, writes: So far as I have been able to learn, there has been no general or extensive outbreak of influenza as yet in this district; but there have been, in Exeter and the neighbourhood, a certain number of cases which, from the suddenness of their onset and other features, seem to be undoubtedly instances of the prevailing epidemic. Several such cases, presenting the characteristic symptoms have occurred among the troops both in the Artillery and the Infantry barracks. Cases in private practice of somewhat severe febrile catarrh have also been more numerous than usual at this time of the year; and this is more noticeable from the weather having been exceptionally open and mild. Three male attendants at Wonford House are now under treatment whose symptoms have led me to put them down as case of genuine influenza. In all the three there have been first *malaise*, giddiness, and general weakness, followed by moderate pyrexia, with more or less general muscular pain. On the second day profuse perspirations and, in two, development of catarrhal symptoms with irritating cough. One or two other cases have also occurred where giddiness, *malaise*, and muscular pains have existed for a day or two, but passed off without further symptoms.

Leicester.

Dr. Frank Pope, one of the Honorary Secretaries of the Midland Branch, writes: While the cases of nasal and bronchial catarrh have been very numerous during the last week, owing doubtless in great measure to the extreme variations of temperature, as much as 30° F. in the preceding week, there have not been many cases of the genuine "Russian" influenza as in more southern districts. At the same time, well-marked cases are not absent, characterised by a short fever of about forty-eight hours' duration, temperature 102° to 104°; pains in head, loins, and limbs, and followed by a feeling of great prostration. Catarrhal symptoms may or may not be present. Pneumonia is prevalent, but not more so than frequently at this time of year. The general mortality, which was under 15 per 1,000, rose last week to over 23. Adopting the newspaper method of gauging the prevalence of the epidemic, I find that out of about 150 members of the borough police force only one is absent from this cause. None of the numerous porters or other *employés* at the Midland passenger station are reported as suffering from influenza, and the total number of absentees is not larger than usual at this season. Three or four of the sisters and nurses at the Leicester Infirmary have taken the disease, and a case or two have occurred in the surgical wards. A member of the staff has been laid up for a few days. The number of influenza cases treated as out-patients has been small.

Lincoln.

Dr. W. A. Carline, one of the Honorary Secretaries of the Midland Branch, writes: There is no epidemic of influenza in Lincoln or neighbourhood. Cases of catarrh with slight elevation of temperature have not been uncommon.

Liverpool.

Our Liverpool Correspondent writes: Since my last report several cases of influenza have occurred in the city and neighbourhood, but nothing of the nature of an epidemic can be said to exist. But few cases have been seen at the hospitals, and, contrary to the usual incidence of zymotic diseases, the upper and middle classes seem to have furnished a large proportion of the sufferers. The Bishop of the diocese has been ill with the complaint, as have also the family of Colonel Blundell, of Crosby Hall, the case of Mrs. Blundell having ended fatally.

Manchester.

Our Manchester Correspondent writes: In view of the possible, and very probable, visitation of Manchester by the influenza, a conference of public authorities and representatives of medical charities was held in Manchester last week. It was considered undesirable by the representatives of the Royal Infirmary to admit cases of influenza into the Infirmary. Ultimately it was agreed: 1. That it is understood the guardians of the poor shall provide accommodation for pauper patients. 2. That the authorities of the Royal Infirmary, the Ancoats Hospital, and the Hulme and Chorlton Dispensaries should undertake the responsibility of providing advice and medicine for the home patients of their respective dispensary districts. 3. That provision for patients suffering from severe complications incidental to the disease should be made in temporary hospitals or buildings, to be provided and maintained by the Corporation of Manchester. The occurrence of a few cases of the disease has been reported in Manchester.

Nottingham.

Dr. H. Handford, one of the Honorary Secretaries of the Midland Branch, writes: There has certainly not been in Nottingham any such serious and widespread epidemic (of influenza) as has been described in St. Petersburg, Berlin, Paris, or even London. During the past summer and autumn enteric fever was prevalent in an unusual degree, and in a very severe form, and is still more abundant than usual at this period. At the present moment, both in private practice and in the wards of the hospitals, cases of pneumonia, bronchitis, rheumatism, and general catarrh are remarkably numerous. But, in addition, it is the opinion of many of the doctors that they are meeting with numerous instances of a disease with which they were previously unfamiliar, and which is characterised chiefly by muscular pains, especially in the back; chilliness, not often amounting to a distinct rigor, headache and pains in the eyeballs, and a rise of temperature varying from 100° to 104°, often falling to normal within twelve hours, and generally within twenty-four, but liable to relapse. Most cases are sporadic, but some seem to affect the whole household. Coryza with these symptoms is infrequent. The accompanying prostration is certainly both remarkable and very enduring. Many of one's friends have suffered from these muscular pains and pyrexia, and almost everyone one meets is "limp." Catarrh has been very widespread for the past two months. About twenty or thirty instances of a malady characterised chiefly by these symptoms and called influenza, attacking five to twenty per cent. of the *employés* of large business establishments, or running through private households, have been made known, but the specific nature of the malady has not been established beyond dispute, and in no instance have the cases been sufficiently numerous to cause a suspension of business. About five or six fresh cases diagnosed as influenza by these muscular pains, but without coryza or sore throat, are treated in the out-patient department of the general hospital every day. And among the in-patients one or two cases have been carefully observed, the characteristic being the sudden rise of temperature to 103° or 104°, and its fall to normal within eighteen hours, without subsequent rise. There has been no epidemic among the nurses, servants, or resident staff, but more than the usual number of cases of catarrh.

Newcastle-on-Tyne.

Our Newcastle Correspondent writes: There seems little doubt that influenza is very prevalent in Newcastle just now, but as yet the cases seem very mild, and present much the same symptoms as an ordinary cold. Two or three medical practitioners hav

been confined to the house, complaining of muscular pains, severe catarrh of nose, throat, and conjunctivæ, with prostration.

One of our daily papers has lately published the results of interviews with several of the local practitioners. Dr. Drummond and Dr. Oliver, physicians to the infirmary, both doubt the presence of the epidemic form of the disease. Dr. Wilson, surgeon to the dispensary, has had three or four cases which he considered were examples of the epidemic; three were sailors from Gothenberg; all were suffering from excruciating pain in the head, high fever, and great prostration. So far as I can gather, most of the medical practitioners have had cases of influenza of a mild form, and but few which might be deemed severe examples of the epidemic. It is difficult to find out the true extent of the disease; there is no out-patient department at the infirmary. At the dispensary there have been from thirty to forty cases of the disease, and the resident medical officer, Dr. Ridley, has been down with it himself. Several cases have occurred in the post office, and also amongst the clerks of some of the merchants on the quay, and also in the railway company's offices. There was no discussion on the epidemic at the last meeting of the Medical Society.

Northampton.

Dr. C. J. Evans, Honorary Secretary of the South Midland Branch, writes: In reply to your telegram of to-day asking for particulars of the influenza in this district, I have made inquiries in various directions, and with the following result: The epidemic is undoubtedly very prevalent in this district, and is probably on the increase. The cases are, for the most part, of the ordinary type; but here and there are met with occasional sporadic cases of exceptional severity—(?) Russian variety. These latter are attended by a high temperature, are characterised by their sudden onset, and are accompanied and followed by great prostration, this last symptom following on most of the cases in a lesser degree. Some of the cases are marked by rheumatic pains; others are without the catarrhal symptoms. I think there is a tendency, among the artisan and labouring classes, at any rate, to magnify the symptoms; certainly there are numerous cases which would not be classed as belonging to the epidemic had they occurred at any other time than the present. Large establishments do not appear to have suffered much here.

Mr. Percival states that there have been no cases at the workhouse. None of the *employés* of the London and North Western Railway have been laid up, and only a few of the *employés* at the Midland Railway. A gentleman left for London perfectly well; he was seized suddenly in the train with shivering, which was followed by all the other symptoms.

Mr. Marriott's cases have been numerous, chiefly dispensary patients; the number is rapidly increasing.

Mr. Rae has seen private cases only; not many. The disease had rapidly attacked all in the house. The symptoms have been: high temperature (102° to 104° F.); in some, rheumatic pains; occasional absence of catarrhal symptoms. Lord Spencer and several of his household have been attacked.

Mr. Kennedy has seen the disease principally among club patients and their families. Work has doubled during the last fortnight. Mr. Kennedy and his deputy have both been laid up with it. None of the cases have been followed by bronchitis or pneumonia.

Mr. Cogan, medical officer to the post office and gaol, has seen a few severe cases, with high temperature, symptoms mostly mild, but often exaggerated. There have been no cases at the gaol or post office.

Mr. Moxon has seen numerous mild cases and a few very severe, the temperature rising to 104°. In some cases there have been rheumatic pains, in others no catarrhal symptoms. The onset has been sudden, and several cases in the same house have been attacked simultaneously. It is undoubtedly something more than ordinary influenza. No cases have been followed by bronchitis or pneumonia, but one by pleurisy.

Mr. Evans has seen many mild cases, with here and there a severe one—severe headache and throbbing of eyeballs, lumbar pains, profuse coryza, and rheumatic pains. In one case a patient, the subject of exophthalmic goître, went to town, and was seized there and came back with influenza, followed by extensive bronchitis.

Dr. Evans has heard of no cases in which any rash was observed.

Oxford.

Our Oxford Correspondent writes: The epidemic of influenza at Oxford has been extensive, but the character of the outbreak is light. At the Clarendon Press and several other places where large bodies of men are employed a considerable number of hands are down with the disease. As a rule, the cases last three or four days, and then convalesce. The most striking feature in the attack is the suddenness with which it commences, a patient being well during the early part of the day, and then, without warning, feeling depressed and ill. The symptoms are those described in the outbreak in London: lassitude, fever ranging from 99° to 102°, gastro-intestinal catarrh, and often catarrh of the respiratory tract. It is only in elderly people or in those specially prone to inflammatory affections of the respiratory mucous membrane that the disease has proved serious by the supervention of pneumonia or bronchitis. Not a few business men and others who are compelled by the nature of their callings to keep to work have passed through an attack of influenza without being absent from their work for more than a few hours. The disease does not appear prevalent to any extent in the surrounding country, and only a few patients have presented themselves for treatment at the Infirmary. The fever wards at the Radcliffe Infirmary have been opened for cases, but at present there are only three patients under treatment there.

Penrith.

Dr. J. Altham, Honorary Secretary of the Border Counties Branch, writes: As far as I am able to judge, there is no epidemic of influenza in this district. It is reported that there have been cases in Carlisle, and in this immediate neighbourhood there have been here and there cases of influenza of the ordinary type. I have had the care of one family in a village six miles distant, who have all been more or less affected, but they are liable to these attacks, and had not been exposed to any special source of infection.

Sheffield.

Mr. Arthur Jackson (Honorary Secretary of the Yorkshire Branch) writes: So far as I have been able to learn, influenza does not seem to have arrived here. There are believed to be three cases, all of which have been imported from a distance. Our hospitals are, I believe, quite free from any such case. I have made inquiries in public offices, where salaries are paid during illness. Amongst 1,000 people employed in these places, there are some thirty invalids, which is rather under the average considering the time of the year. One only is reported as suffering from influenza, and he is known to have organic disease.

Shrewsbury.

Mr. J. A. Bratton, Honorary Secretary of the Shropshire and Mid-Wales Branch, writes: Although there have been many cases of "feverish cold" in the town and district for the last six weeks the first typical case of influenza was noticed only about ten days ago. Since then the epidemic has been gathering way, and is now fairly prevalent. It is also spreading to the surrounding country. No death has as yet been directly attributed to it, but the worse has yet to come. One practitioner at least is "down with it.

Suffolk.

Dr. Edgar G. Barnes (Vice-President of the East Anglian Branch) writes: Influenza has prevailed very extensively in Ely and the surrounding districts since January 5th. For about fourteen days previous to this cases of a suspicious nature were seen but it was not till the 5th and 6th that any considerable number of cases occurred, since which date they have become more numerous daily. The different parishes in the district are not equally affected. In some, as for example Occold, the outbreak is so extensive that scarcely a house has escaped having one or more of its inmates affected, and the school attendance was reduced in a few days from 107 to 40. Other parishes are at present but slightly affected. The cases generally are of a mild description, and no fatality has been reported. The symptoms vary considerably, and seem to divide the disease into four varieties, the initial and concluding stages being, however, the same. In all the attack commences with chilliness or occasionally rigor, and is frequently sudden in its onset; the temperature rises commonly to 101° or 102° F., occasionally to 104°; there is intense frontal headache and pains in the back and limbs, the pa

in the back being frequently as marked a feature as in small-pox, and pains down the thighs are frequently loudly complained of. This stage arrived at, the varieties of the disease begin to show themselves. In the one set—and these do not number more than 5 per cent. of the whole—nasal catarrh and coryza are prominent symptoms: but in other cases these symptoms are conspicuous by their absence. In a second set of cases—and these are by far the majority—symptoms of bronchial irritation occur, a hard, dry cough frequently recurring with scanty expectoration, sometimes tinged with blood. The third set of cases is characterised by the occurrence of copious diarrhœa without griping; whilst the fourth variety shows an eruption on the skin consisting of rose-coloured spots, usually distinct, scattered over the entire surface of the body and limbs, but not appearing to any great extent on the face, and very evanescent, rarely lasting more than a few hours. The disease, therefore, appears to expend its energy in some cases on the conjunctivæ and the mucous membrane of the nares and fauces: in others on the bronchial mucous membrane; in others on the intestinal mucous membrane; and in others on the skin. In all, after the fever has lasted from 24 to 72 hours there is a sudden fall in temperature to the normal accompanied by perspiration and great prostration—the latter out of all proportion to the duration of the illness—and there is left behind for days an irritating cough, which occurs spasmodically from time to time, and appears in this respect to have some analogy to whooping-cough, usually without much expectoration, and without any decided physical signs in the lungs, and there is a tendency for this cough to be aggravated, and symptoms of nasal catarrh to be produced by slight exposure to cold; and the disease shows an aptitude to relapse if sufficient care be not taken during convalescence. It is liable to become complicated by bronchitis or pneumonia, and hence to assume more formidable characters.

Concurrently with this epidemic there is a marked increase in the catarrhal affections usually prevalent in winter. In considering this disease, the question presents itself, Is it really influenza such as was known in 1847 and in previous outbreaks? the comparative absence of catarrhal symptoms in the present outbreak being noticeable; or is it some other form of disease hitherto unknown to us? It presents in many of its features a close resemblance to dengue or the dandy fever of the West Indies, but is less severe. May not it be this or an allied fever modified by climatic conditions?

Worcester.

Dr. George W. Crowe, Secretary of the Worcestershire and Herefordshire Branch, writes: We have had a considerable number of cases within the last ten days, mostly of a mild character. It has, in most cases, commenced with neuralgic pains in the limbs and back, high temperature (about 102° to 103°), and little or no coryza. Some few cases have been ushered in with acute gastric symptoms, vomiting, and diarrhœa. The acute stage last three or four days, and there is the usual prostration afterwards. There appears to be a slight decrease in the number of cases within the last few days. The disease appears to spread by infection in many cases, as, if one member of a household is taken, several other cases follow in the course of two or three days. There are a few cases among the police force and the soldiers at the dépôt.

Weymouth.

Mr. William Vawdrey Lush, Honorary Secretary of the Dorset and West Hants Branch, writes: There appear to be some cases of influenza in the town and neighbourhood of Weymouth, some of the catarrhal variety, and others with nervous and muscular symptoms, as frontal headache, rheumatic-like pains in the loins and legs, with marked loss of muscular strength. In one family three persons were attacked, and all had otitis with discharge. The cases under my observation have not been severe, and I know of no death. I am informed that there are cases on board H.M.S. *Minerva* in Portland Roads. There are none in the county hospital, nor do I hear of any in the town of Dorchester, but in a certain manor house some five miles distant, a case having been imported from London, out of a family of eight or nine others only one escaped. These had catarrhal symptoms, with somewhat high temperatures.

Scotland.

There is increasing evidence of the presence of an epidemic of influenza in the city of Edinburgh, though within the last day or two it would seem that the number of cases is diminishing. The cases, while not infrequently severe, are, as a rule, not alarmingly serious. Several of the medical teachers have directed the special attention of their class to this subject, and have suggested lines of treatment and of observation which have been commented on somewhat cynically in the daily papers. It is understood that, should the wards of the Fever Hospital, which have been set aside for influenza cases, be called into requisition, special facilities will be afforded for those who may desire to study the unusual epidemic. It has been notified to the Public Health Committee of the Town Council that the Royal College of Physicians of Edinburgh is prepared to take the matter up and institute a searching inquiry into the nature of the affection, if a male and female ward were placed at its disposal for observation. The Committee, while accepting the College's offer, has, meanwhile, no material to offer, as no cases have yet been received into the wards set apart.

There is little doubt that Aberdeen has now been visited by an epidemic of influenza. It made a marked outbreak at Oak Bank Industrial School, where between forty and fifty of the boys were laid down. But within the past week it has made rapid strides, so that every part of the city has its numerous cases. Several medical men have had to pay toll to its demands. The epidemic at present is mild, and no very serious nor fatal cases have occurred. The symptoms are quite the same as those so fully reported by our various correspondents, which may be grouped into the nervous, bronchial, and gastric.

Ireland.

Thus far the outbreak of influenza in Dublin has not been of a violent character. The scare which has been produced by its gradual approach has had the effect of crowding the various dispensaries with applicants for relief, and the medical staffs have not spared their efforts in dealing with the sick. Cases of pneumonia and bronchitis develop here and there, and amongst these there have been some deaths, especially where people think it right to brave the disease by walking about when attacked by it. Several medical men have been rather seriously ill, but, so far, no fatal cases have occurred in their ranks. Amongst the official classes we regret to learn that Mr. A. Balfour, Chief Secretary for Ireland, is ill, and confined to his bed. Her Excellency, Countess Zetland, and some of her children are also victims, but they are all progressing very favourably.

The disease has broken out in Limerick and also in Fermoy, in the County Cork. This latter is an important military station, and very many of the soldiers, as well as civilians, have been attacked with the disorder. It is reported that a death from influenza has arisen at Limerick.

In spite of many statements to the contrary, it can no longer be doubted that Russian influenza is widely prevalent in Belfast. In one of the large business houses thirteen of the *employés* have been simultaneously attacked, and cases have occurred in private practice where whole families have been suddenly prostrated. Fortunately, the attacks are, on the whole, mild, and no fatal cases have yet been announced. There would seem to be two modes of invasion—one by sneezing, running at the nose, smarting of the conjunctiva, and severe frontal headache, and another in which myalgic pains are the most marked feature of the incipient stage. In most cases the temperature runs high, and the great prostration following the attack is the most marked and constant feature of all. Some of the most troublesome cases have been those of persons who have endeavoured to fight the attack off, and who, after three or four days, have experienced an alarming amount of cardiac weakness.

Paris.

Our Paris Correspondent reports that the epidemic is decidedly diminishing. This tendency is evident all over Paris, but especially in the part of Paris which lies on the left bank of the Seine. Pneumonia has caused more deaths than any other complication; next in order of fatality have been bronchopneumonia and acute bronchitis, then the chronic conditions which are favourable to lung complications, such as phthisis and cardiac affections. In the provinces there is also a slight improvement, excepting at Brest, Rouen, and those towns situated on the lower part of the Rhône. In all these localities the epidemic is intense. At Rouen, the public service is

quite disorganised. Few tramways run, owing to the illness of drivers and conductors. Numbers of large manufactories are at a standstill, half their workpeople being laid up with influenza. At Nimes, Marseilles, Chartres, and other localities there is the same state of things. At the Saumur Cavalry School, numbering 1,200 pupils, there are 300 ill. Two of the three army surgeons are also suffering from the epidemic. In Algiers, the epidemic continues to spread; many of the bazaars are shut. Corsica has not escaped. Last week there were at Bastia only 22 of the soldiers of the 111th infantry regiment in sound health; the others were all invalided by *la grippe*. The Clothing Commission appointed by the Minister of the Interior to buy warm clothing for distribution among the poor has accomplished half of the purchases to be made by it; these have been sent to the hospitals and Bureaux de Bienfaisance. A great many people have sent large sums of money to the Assistance Publique to be distributed among the poor and the sufferers from the epidemic. MM. Salomon, de Rothschild, and Ruel have forwarded considerable sums of money. L'Union des Femmes de France has shown great energy in organising measures for the relief of the poor. An editor of a political paper interviewed M. Pasteur to learn his opinion concerning the prevailing epidemic. M. Pasteur began the conversation by telling him that he and all his staff had been ill with it, and had not, therefore, been able to make any scientific investigation. He thought it was probably of microbian origin, but offered this opinion only as an hypothesis, not as an assertion. The present epidemic may result from the microbe of ordinary influenza, its virulence being more intense, or from that of pneumonia, its virulence being diminished. In answer to the further question whether the disease was contagious or miasmatic, M. Pasteur answered: "Doctors had better distinctly own they do not know anything about it. *Il faut chercher.*" The question must be investigated. Everyone will approve M. Pasteur's scientific reserve.

Vienna.

Our Vienna Correspondent states that the epidemic has not yet manifested any considerable decrease, though during the last two days the number of the patients who were really suffering from influenza, and who applied for admission into the General Hospital, showed a certain decrease. During the last week, and, in spite of the creation of an emergency hospital of which I spoke in my last report, the clinics and medical wards of all the Vienna hospitals were overcrowded, and a certain number of beds had to be made up on the floor of the wards. The total number of patients in all the Vienna hospitals (inclusive of the "Communal Spital," the "Währinger Filiale," and the "Sophien Spital"), amounted last week to 3,566. The statements as to the benignity of the influenza seem to have lost some of their truth, as several deaths have occurred during last week. The cause of death in most cases has been some pulmonary complication; some cases have also been recorded in which uncomplicated influenza led to a fatal issue. Among the complications observed at Vienna have been otitis media, meningitis, and neuralgia. Professor Fuchs, director of the second clinic for eye diseases in the general hospital, in a clinical lecture which he delivered last week, brought before his audience a very interesting case. The patient had become affected with influenza a few days before his admission. He presented the usual symptoms, namely, severe headache, shivering, and bronchial catarrh. The peculiar complication to which Professor Fuchs directed attention was that on one cornea there were numerous vesicles of a rather large size; similar vesicles had already disappeared from the other cornea, and left behind large and small ulcers. Professor Fuchs stated that during the last few weeks he had observed several such cases in his private practice. Similar appearances were observed in the case of catarrhal fever. It was, nevertheless, strange that such symptoms should supervene after an attack of influenza. The ulcers in the case in question showed a dendritic ramification over the cornea; hence they had to deal with "keratitis dendritica."

Discussion at the Medical Officers of Schools Association.

At a meeting of the Association of Medical Officers of Schools, held on January 15th, a discussion took place on the desirability or otherwise of allowing schoolboys to return to their respective schools at the close of the holidays, in view of the existing and widespread epidemic. It was incidentally mentioned, in the course of the debate, that at several of the leading public schools throughout the country this question had already been settled by a decision not to extend the holidays, a view quite in accordance with the resolution which was arrived at at the termination of the discussion, in the following terms: Having regard to the prevalence of epidemic influenza, this meeting of the Medical Officers of Schools Association does not, under present circumstances, consider it necessary or advisable to recommend an extension of the holidays in the case of public schools situated in the country. It was felt that the case of schools in London was quite different, and no expression of opinion was given as to what should be done in their case. With reference to one, namely, Christ's Hospital, it was stated that the return of the boys has been postponed owing to the large number of the staff who are at the present moment suffering from the epidemic.

A Correction.

Dr. W. Steele (Ealing) writes: I am afraid an error occurs in my communication addressed to you last week respecting the influenza in Ealing. The epidemic has been, and still continues to be, a very general one, and several of the doctors have been affected, and some confined to their bed. Several cases have given anxiety principally on account of a high temperature and chest complications. The postmen particularly seemed to have suffered, whilst the members of the police force have been pretty free from it. Antipyrin and salicin in the early stage, with quinine later, have been most useful. The period of incubation appears to be about twenty-four hours. Marked anæmia and debility continue for some days.

THE NATIONAL LEPROSY FUND.

The Prince of Wales took the chair at a dinner at the Hôte Métropole on January 13th in aid of the National Leprosy Fund About 120 guests were present. After the health of the Queen had been honoured the Prince of Wales proposed the toast of th evening, "The National Leprosy Fund." Having made a refer ence to the death of Father Damien, and the presence at th dinner of his brother, Father de Veuster, he proceeded to describ the objects of the fund, saying that if a sufficient sum could b collected it had been decided that a portion of the fund should b set apart and placed under the control of trustees for the endow ment of two scholarships, the holder of one of which would mak it his business to study the disease in the United Kingdom and i Europe, while the holder of the other would go abroad and stud the disease in India, China, our Colonies, and elsewhere. Fo tunately for us, he added, the cases of leprosy in this countr were very rare, and, in fact, it might be said that it scarce existed among us at all, and he sincerely trusted that any mon that might be obtained might not be the means of inducing in poverished lepers to come to us from other countries and to spre the disease among us. He had no fears upon the point himse but he thought that for many reasons it would be most undes able that lepers from abroad should be drawn to this countr Touching upon statistics connected with leprosy in India, in t Cape Colony, and in Norway, he observed that the wide prevalen of leprosy in the Indian Empire had long occupied the attent of the Government, but the extent even of the disease there w not accurately known. The census of 1881 gave 131,618 as t number of lepers in all India, and 53,886 of these were credited the Bengal Presidency alone. He had little doubt that th figures were much under the mark, and at present there must considerably over 200,000 in India, though it was difficult to co to any precise conclusion on the subject. In 1887 it was e mated that not more than 2,000 Indian lepers, or hardly 1 cent. of the whole number, were located in hospitals or asylu The vast majority roamed over the country as beggars, shun friendless, and uncared for, until they dropped down and died perhaps drowned themselves in some public well. The t number of leper hospitals or special wards in India was only and some of these were very small. In Bengal there were b asylums, with room for only about 300 patients. Nine of t leper institutions were entirely, and 5 were partly, mainta out of public funds. He was glad to say there was a possib —he hoped a probability—of the State taking a more active than hitherto in the prevention and treatment of leprosy in In In 1882 it was officially stated that provision could not be r for all the lepers in the Presidency except at a greater cost the Viceroy was prepared to recommend without other assist being granted. It appeared to him, however, imperative something should be done, not only for the sake of the unh lepers themselves, but for the benefit of the whole commu and there was a general impression that, at all events in districts, the disease was increasing in India as well as in of our Colonies. The total number of lepers in the Cape C

was estimated at 600, and there was reason to fear that there were in addition numerous unrecorded cases. It was satisfactory to learn from the Blue Book issued by the Cape Government in 1889 that the Legislative Council had dealt so exhaustively with the subject, and had initiated such practical measures to deal with the defects which existed in the Robben Island leper establishment. The number of male lepers in the island amounted last year to 90; they were accommodated in 5 wards, and he feared from the report of the Government Committee that both in regard to the system of accommodation and to the management of the institution there was much to be desired. The Cape Government had taken into careful consideration the reconstruction and enlargement of the building, and a system of improvement in the entire interior administration, such as, for instance, adequate hospital appliances and proper clothing. The Committee were of opinion that leprosy was on the increase in the colony, that its further spread was to be apprehended, and that the most effectual means to check its course was to pursue a rigorous system of complete segregation. The remarkable diminution of lepers in Norway since the establishment of leper asylums in that country in 1856 was thought by most authorities to indicate the success of segregation and isolation. Before 1856 there were certainly not less than 2,900 lepers, known to be such, in the country, and the disease was believed to be increasing; while at present there were probably no more than 1,000, and the number was gradually but surely diminishing. There had never been room enough in the Norwegian asylums for all the lepers, and in fact they had never contained more than 800 at any one time; but even this partial segregation, and its result, showed the value of the system. Those lepers who were not in the asylums were now obliged to submit to a certain amount of isolation in their own homes. The public had gradually become educated to the importance of the system, and no doubt the efforts of the Government to eradicate the disease were appreciated by the great mass of the population. He wished also to say from his own personal experience in visiting Norway in 1885, when he had an opportunity of inspecting one of these institutions, that it was impossible that they could be better managed. In the Hawaiian Islands the number of lepers was at one time nearly 800, but there had been a steady and perceptible diminution since 1884, owing to the system of isolation being in force in the infected districts. Since he came there he had learnt that a lady was going out to nurse the lepers in Molokai, and she would sail on Saturday next from Liverpool. She was 27 years of age, and was the daughter of a clergyman of the Church of England, although she had been a Roman Catholic for the last eight years. He did not think that this was an improper occasion for wishing her "God speed," and to express a hope that she might do much to mitigate the suffering of the unfortunate people she was going to. He was sure that he should not call upon them in vain to help them in starting this fund, which he looked upon as of great importance, not only for our own country, but for what our country comprised, our Indian Empire and our colonies.

Sir ANDREW CLARK, in speaking to the toast, asked, Was the work they desired to promote real? Was it necessary? Could it be done? And, if so, how? The evidence was conclusive that not only did leprosy exist in larger measure than in recent years, but that new centres were springing up in various quarters and the old centres were widening, and before England and the civilised world there was looming a condition of affairs which might by growth threaten civilisation. Was the work practicable? Guided by the results of modern research in maladies of this nature, it must be seen that it was practicable to grapple with leprosy. But how? The experience of more than 1,000 years proved that the old methods and the old men, in spite of the study devoted to the disease, were unavailing. But knowledge had made previous strides within the last fifty years, and what was now wanted was that young men, fresh methods, and new zeal should be brought to bear on the subject. Men should be sent to the centres of leprosy to find out what were the conditions of its existence, for to deal with the disease successfully there must be some knowledge of the conditions of its growth. There might be complete confidence that the committee would have the impartiality and acuteness to find the right men to study the disease where only its conditions could be accurately studied. The present condition of lepers was terrible enough; but the disease was slumbering, and it took a long time to develop into greater proportions. If it ever assumed a certain growth, its devastations would be terrible.

The BISHOP OF LONDON next proposed the toast of "The Committee."

Mr. JONATHAN HUTCHINSON (President of the Royal College of Surgeons), in responding to the toast, said that the duty could not have fallen into the hands of one who felt a deeper interest in the leprosy question. He avowed his conviction, founded on a very considerable study of the question, that the movement now started would have for its results practically the ending of the disease. Only earnest and steadfast devotion and attention to the disease were needed in order to discover the causes of leprosy and the means of putting an end to it. The discovery of the remedy might not immediately follow that of the cause, but it would follow with sure and certain steps, and he believed that it was not very far distant. At present few cases came under the observation of British doctors; the disease was out of their ordinary walks of life, and it was no man's duty to study it. The tree was ripe for shaking, for an immense amount of isolated facts and individual observations had been collected, and it was only necessary that some strenuous and energetic effort should be made to bring the whole of these facts to one centre to solve the puzzle of leprosy and to learn how to exterminate it. Those who were favoured to live to the end of the century would see a very important step taken in this direction. As to the proposals of the committee, he would not say that they were unanimous as to the relative importance of the various objects to be attained by the fund. In proposing to erect a memorial to Father Damien, his notion was that every penny should be applied exactly as he believed Father Damien himself would have applied it—namely, to the advantage of the lepers. The best memorial would be the perpetuation of the spirit in which Father Damien himself worked. As to what His Royal Highness had said about the segregation of lepers, that was a matter on which further investigation might prove that two opinions were tenable. Lepers from Norway had passed in large numbers into the United States, but no focus of leprosy had set up there; the lepers had ceased to be lepers, or had not been capable of spreading the disease by infection or by heredity. In England itself there were a certain number of lepers residing, not in the least isolated, and yet no focus of leprosy was created. Some of the lepers coming to England grew well, the great majority improved, and in no case was there any necessity for segregation. If the disease were contagious, or perpetuated by heredity, it was so only in those places where it originated. He believed that the greatest work which had been done in reference to the study of the disease was the publication of a report on the matter by the College of Physicians twenty-five years ago. Benevolence and human sympathy had begun the movement for the relief of the lepers, and now science should step in to finish the good work. While thanking the company for the way in which they had wished success to the committee, he must also thank His Royal Highness for the personal effort which he had made in the matter. It was known only to the members of the committee to what extent the Prince of Wales had engaged his personal interest in the work; and without exaggeration it could be said that the commencement of the movement was due to His Royal Highness, as well as the position at which it had now arrived. Royalty in earlier times had given a similar patronage to Jenner's new discoveries in vaccination, at a time when they were sorely in need of such help; and he believed that the present movement, if it had not such a world-wide influence as vaccination, would end the miseries of that large and miserable section of the community—the lepers.

The ARCHBISHOP OF CANTERBURY subsequently proposed "The Health of the Prince of Wales," to which the PRINCE briefly responded. In doing so, he took occasion to express his thanks to the Duke of Norfolk, Sir Andrew Clark, Sir Guyer Hunter, Sir Algernon Borthwick, and the other members of the Dinner Committee.

The HONORARY SECRETARY (Sir Somers Vine) announced that as the result of the appeal £2,500 had been collected in connection with the dinner, making a total, with the sums previously received, of £7,000. He added that a further sum of £5,000 was required.

THE LONDON POST-GRADUATE COURSE.

THE address delivered by Mr. Jonathan Hutchinson, F.R.S., President of the Royal College of Surgeons, on January 8th, sketched the objects and arrangements of the London Post-Graduate Course for this year. The objects of those who had organised and of those who had expressed their intention to at-

tend the course were to attempt to express in deeds their faith in medical science and their desire that the British profession shall not only keep well up with the times but shall maintain its foremost place. Apart from these objects, the numerous adhesions to the couse served to pay a not undeserved compliment to the human mind itself in asserting its zeal for knowledge quite apart from all compulsion to its attainment. A belief was thus avowed that amongst English-speaking medical men there were many who were willing and eager to work for the further development of their professional skill after they had obtained all they sought in the form of diplomas and legal qualifications to practise. It was to the whole of this latter class that the term "post-graduate" applied, and it was to provide for their requirements that the organisation had been formed. In the metropolis—and not only there—there was an overwhelming supply of clinical material, and there was a large amount of professorial and teaching ability not unwilling to find scope for its exertion which was now allowed to rust unused simply because it had no opportunity for employment. In making these latter assertions, he referred not only to the smaller hospitals which have no schools attached to them, to the numerous special hospitals, to the large workhouse infirmaries, sick asylums, and other institutions which might, under suitable conditions, be utilised for teaching; but also to the large class of highly skilled specialists and others who had never had the good fortune to become attached to general hospitals, and also of those—a yearly increasing number—who, under modern rules of retirement from hospital duties, have lost their teaching opportunities, it might be, almost in the prime of life. It was believed also that there was a large number of qualified medical men living in London, some of them from abroad, but many our own students, who would gladly avail themselves of facilities for further clinical study, and that were such facilities afforded this number would greatly increase.

The post-graduate course would not at all be in competition with existing medical schools, which were all occupied in the instruction of students preparing for graduation. The lecturer who attempted to meet the wants of those who were well advanced must but too often pass over the heads of the younger students. The interests of the latter would almost inevitably be sacrificed if the attempt were made to instruct both together. The attempt to introduce post-graduate instruction into general hospitals possessing medical schools was to be deprecated. The organisation at present consisted of an association of the following special hospitals: the Hospital for Consumption and Diseases of the Chest, Brompton; the Hospital for Sick Children, Great Ormond Street; the National Hospital for the Paralysed and the Epileptic, Queen Square; the Royal London Ophthalmic Hospital, Moorfields; and the Hospital for Diseases of the Skin, Blackfriars. In each of the hospitals named the staff and managing committee had agreed to admit those who entered to the post-graduate course to receive instruction in their walls.

The character of the lectures, and all details as to how far they might partake of the nature of clinical demonstrations, was left to the lecturer himself and to the staff of the hospital concerned. Each hospital was responsible for its own arrangements. The list of lecturers comprises the names of Dr. Theodore Williams, Mr. Lang, Dr. Howard Tooth, Dr. Sturges, Dr. Payne, Mr. Gunn, Mr. Owen, Mr. Quarry Silcock, Dr. Beevor, Dr. Barlow, Dr. Kingston Fowler, Dr. Ormerod, Mr. John Morgan, Dr. Buzzard, Dr. Abercrombie, Dr. Green, Mr. Victor Horsley, Mr. Bernard Pitts, Dr. Roberts, Dr. Bastian, Dr. Angel Money, Dr. Percy Kidd, Mr. Brudenell Carter, Dr. Hadden, and Dr. Gowers. Prospectuses and further particulars can be obtained from Dr. Fletcher Little, 60, Welbeck Street.

"That the list is a good one," Mr. Hutchinson continued, "I venture to assert without fear of contradiction; that it is a very imperfect one I freely admit. You will see that our selection has been restricted to the staff members of the five hospitals which I have named, and of a necessity many of those whom we might have expected to be foremost in such a movement as this are not in it. We have as yet no central institution, no neutral ground, no place to which, without any regard to the hospital to which he may chance to belong, we can invite a lecturer, and find for him a theatre and a class. Although, however, it may perhaps seem that we are for the present somewhat exclusive, I assure you that this is only from necessity. Our designs are comprehensive, our aims catholic. We hope in the end to secure as post-graduate teachers all who have zeal and ability to teach post-graduates. As yet we are in a sense homeless. In what exact way our want of a home may eventually be supplied we cannot at present foresee. It may be that some one of our general hospitals, with its museum, dissecting rooms, etc., all ready to hand, may determine to forego the education of students and take us in, or it may possibly be that we shall arrange with one of those hospitals which at present has no school attached to organise itself for our purposes. In the meantime, we must do the best we can, and it is matter for congratulation that, apart from our movement, there are in London now in progress developments in several directions which will tend to give this city increased attractions to the post-graduate class. Our Medical and Chirurgical Society has much increased its accommodation both for readers and public meetings; the British Medical Association has opened a valuable library and reading room; the College of Surgeons has enlarged its library and opened it to evening readers, and, still more, it is about to nearly double the accommodation of its noble museum and to add to it a gallery of clinical illustrations of disease as seen in the living patient. Lastly, the united Colleges of Physicians and Surgeons have nearly completed a splendid building, with theatres and work rooms, which is to be devoted to the encouragement of research, and very possibly to some objects not wholly out of the sphere of those which we aim at. Thus I think we may thankfully believe that the present is a period of considerable professional activity in London, and that the omens are favourable for the launching of such a scheme as that which I have been requested to recommend to you to-night. Its aims are the more perfect development of medical knowledge throughout the British Empire, its methods the further utilisation of the medical institutions of this great metropolis."

INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

We have received the following for publication:—

To the Local Government Board, to the County Council for the County of Wilts, to the several Boards of Guardians in the said County, and to the several Sanitary Authorities of the said County.

Your Lordships and Gentlemen,—We, the undersigned medical practi-
tioners beg to ask your perusal of the accompanying letter, and venture to
solicit your support when the matter comes before the Wilts sanitary authori-
ties, our desire being to protect the public from the great danger they will run
if a gentleman in practice is engaged when the present health appointments
terminate, and the Infectious Disease (Notification) Act, 1889, is carried out, for
by it the medical officer of health will be informed of diseases as they arise, and
it will be his duty to visit the cases at once, and thoroughly investigate their
origin, take measures to secure their isolation, and prevent their exten-
sion, etc.

For you to share our views, we feel we need only point out what a serious
thing it would be for a medical officer who has just been inquiring into an out
break of small-pox, diphtheria, scarlet fever, or puerperal fever, immediately
on his return home to be summoned to a case of childbirth. These diseases ar
all mentioned in the notice of the adoption of the Act by the various sanitary
authorities, and under the circumstances enumerated would, with an almos
certainty, dangerously affect the patient he attended, and perhaps cost such
patient her life, more especially with the latter, puerperal fever; so well is thi
fact known to medical men, that many in private practice cannot be induced t
accept a health appointment, that they may not be the means of the communi
cation of disease from infected places to patients they attend, the cause
which it has been their duty to ascertain.

The idea of combining the districts of several unions is really an extension
what the Chippenham Board of Guardians did some time ago when they ama
gamated the Poor-law medical districts, and appointed one health officer f
their whole union, because they thought one could do the work better tha
many. This is now our feeling in the matter, for we know that if neighbourin
unions combined, the health work would be far better performed by one wh
gave the whole of his time to his duties, for he would have none of the worri
and anxieties attendant on treating serious cases of illness which, when lives a
trembling in the balance, would solely occupy the thoughts of the medical m
in whose charge they were, and prevent him giving the thought and attentio
to his health duties which are necessary for their proper performance, a
which the public have a right to expect.

A combination of several districts would be a saving to the ratepayers, w
could then obtain the services of a gentleman possessing special and super
qualifications for the office at a yearly salary which, when divided between t
districts, would amount to less than it does now they are separate, and wh
our present medical officers of health appointments expire, the opportuni
would occur for the changes to be effected without compensation for loss
office.

An important fact we earnestly desire to point out to you is that it has lo
been known to those in high authority in health matters that where unio
are combined, and one medical officer appointed, the health of those combi
districts is far better than in the smaller ones where private practitioners h
the charge of them. Another salient point, too, is the invidious position o
medical officer of health who engages in private practice, for it must be, to
the very least, a very awkward thing for him to be the means of puttin
patient of his to expense to have work done which may be imperative to
vent the extension of disease when that patient differs with him in opinion,
thinks the outlay unnecessary; this, when the Infectious Disease (Notif
tion) Act, 1889, is in working order is a thing sure to occur very frequentl

an officer of health really does his duty.—We are, your lordships and gentlemen, your obedient servants,

ALGERNON SUDLOW, Castle Combe
JAMES HENRY CRISP, Lacock
THOS. FITZHERBERT SNOW, Box
HENRY M. JAY, Chippenham
J. PERCIE GARLIKE, Sutton Benger, Chippenham
ARTHUR G. WOOD, Corsham
MERVYN S. WILSON, Chippenham
JAMES P. MARTIN, Box
J. ELLIS CRISP, Corsham.

To the Secretary of the Local Government Board.

SIR,—We, the undersigned, being the whole of the medical men resident within the rural sanitary district of the Chippenham Union, and the urban district of the municipal borough of Chippenham, in both of which Dr. William Briscoe is the medical officer of health, beg to call your attention to the fact that he is in private practice, and, in addition to it, holds a large number of clubs and other appointments, which will make it impossible for him to carry out the duties required under the Infectious Disease (Notification) Act, 1889, which act the sanitary authorities above referred to have decided to adopt, and we would wish you to urge the Chippenham authorities to combine with others to appoint a medical officer of health who would devote the whole of his time to the duties, and be restricted from taking private practice and other appointments.

So much do we feel the importance of this, that as long as the medical officer of health is in private practice we shall not notify disease to him; but if, on the other hand, the medical officer of health does not hold any other appointment, or engage in private practice, we will one and all give him our loyal and hearty support.—We have the honour to be, Sir, your obedient servants,

ALGERNON SUDLOW
JAMES HENRY CRISP
THOS. FITZHERBERT SNOW
HENRY M. JAY
J. PERCIE GARLIKE
ARTHUR G. WOOD
MERVYN S. WILSON
JAMES P. MARTIN
J. ELLIS CRISP.

ASSOCIATION INTELLIGENCE.

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, January 31st, at 3.15 P.M., in the Radcliffe Infirmary. Notice of papers to be read and cases shown, etc., should be sent to W. LEWIS MORGAN, Honorary Secretary, 42, Broad Street, Oxford, on or before January 17th.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital, on Thursday, January 30th, at 4 o'clock P.M. Gentlemen proposing to read papers, show cases, etc., will communicate as early as convenient with JOHN W. BYERS, M.D., Honorary Secretary, Tower Crescent, Belfast.

SPECIAL CORRESPONDENCE.

MANCHESTER.

Salford Hospital for Infectious Diseases.—Seeking the Measles.—Manchester Medical Society.

SALFORD is to have a new hospital for infectious diseases, to be erected on a plot of land about thirteen acres in extent. The building is to have three spacious, well-ventilated and well-lighted pavilions, with 144 beds. The cost is estimated at £50,000.

An exceptionally large number of children having died at Darrington within the past fortnight—44 as against 11 in the corresponding period in 1888—the Chairman of the Sanitary Committee stated there seemed to be an idea prevailing among others that their children had to have the measles, and, having to have the disease, it was as well to get it over. Whenever there was the chance, therefore, they put their children in the way of contracting the disease, to the danger of the community generally.

The annual meeting of the Manchester Medical Society was held at Owens College last week. In the annual report it was stated that the Committee had under their consideration the possibility of establishing a central medical institution. The cost of a suitable site, with building, furnishing, etc., in the city would be not less than £10,000, while an income of £300 beyond the present annual income would be required.

CORRESPONDENCE.

LONDON UNIVERSITY RECONSTRUCTION SCHEME.

SIR,—The draft scheme for the reconstruction of the London University, as published in the JOURNAL of January 4th, contains such startling innovations and such flagrant injustice to existing graduates of the London University, that I must ask for a few lines to express, not only my own views, but also those of every London graduate with whom I have spoken on the question.

1. The present graduates have spent time and money to obtain what is acknowledged to be a university degree of the highest standing; the giving of degrees (with exactly the same title) for a less severe curriculum and examinations will inevitably lower the estimation of such degrees, and injuriously affect the present graduates.

2. To confer the M.D. degree on all existing M.B.s is unjust to the existing M.D.s who have had to pass an examination in logic and psychology as well as medicine; while to confer the title of "Honours" degree on all existing M.D.s is unjust to those graduates who have taken honours, and who already have the right, if they choose, to add the word "Honours" to their names.

3. To dispense with matriculation and preliminary science under certain conditions is distinctly a retrograde step, and contrary to all the tendencies of modern medical education, which is very properly seeking to exclude unfit men at the outset of their professional career.

If it is proved that in the past the London University has been a failure, then by all means let it be abolished, and let its graduates retain whatever distinction they may have acquired; at the same time, let the reconstructed university be a new one in name as it will be in fact, and give what distinction it can to its own degrees, without attempting to trade on the prestige and traditions of over half a century.

The clamour for an easier degree arises from those who hope to reap a rich harvest of students' fees by offering as a bribe an M.D.Lond. to the crowds of men who regard a university degree as essential to successful practice, and who are not sufficiently industrious or intellectually capable of fulfilling the very moderate requirements for a pass degree. I feel that the time has arrived for London graduates to protect their rights, and should be glad to support any attempt to form a "London Graduates' Defence Association."—I am, etc.,

M.D.LOND. (HONOURS).

ENGLISH AND FOREIGN HEALTH RESORTS.

SIR,—Dr. Leonard Williams, whose letter on the subject indicated above, appears in the JOURNAL of January 11th, remarks: "And even now no one in his senses thinks of drinking water 'raw' whilst on the Riviera." Dr. Williams evidently does not know that most of the health resorts in the Riviera have their separate water supplies. This is notably the case in San Remo, where the water is abundant and of excellent quality. It is laid on to all the hotels, *pensions*, and all, or nearly all, the private houses and such as are let to winter visitors.

Then, again, Dr. Williams writes: "There have been no reasonable precautions abroad to prevent illness from decomposing sewage, let alone the offence both to eyesight and to smell." One would almost be led to infer from the language used in this sentence that the sewage was lying about in the open, without any attempt at its conveyance to a distance or to the cleansing of the towns. A great deal has been already done as to the disposal of the town refuse; but in many cases, it must be admitted, much more is required to be effected before matters are in a satisfactory condition in this respect. I believe if the same rigorous conditions were applied to many of the towns in England, their state would sometimes be found anything but perfect.

Dr. Williams refers to the equability of the climate of Sidmouth, and he gives the mean monthly temperatures for the whole year. But I would point out—though I have no desire to contest the climate of Sidmouth—that this is not enough to establish the fact of equability. The daily range of temperature and the mean temperature require to be determined. There may be great ranges of temperature with a moderate mean monthly range. Turning to my book on San Remo, and to my meteorological observations taken there for the last ten years, I find that the extreme daily variation of shade temperature does not exceed 14° F., and this point it reaches only very rarely; while the mean

range for the six months of the winter season is but a fraction over 5°.

Now with regard to "home comforts." Very much more than is just is usually made of this plea. Most of the visitors to the Riviera live in hotels and *pensions;* some of these are extensive and thoroughly well appointed, with excellent food and plenty of prompt attendance; in fact, there is too much food, and some of this too rich, people being often tempted to indulge somewhat to excess. Those persons living in villas usually bring with them one or more English servants.

I consider Dr. Burney Yeo has done good service by his note. There seems to have been for a long time past a determination to run down even the best of foreign health resorts. In making this remark I do not refer in any way to the letter of Dr. Leonard Williams.—I am, etc., ARTHUR HILL HASSALL, M.D.Lond.

San Remo, January 12th.

THE "PORRO-CÆSAREAN" OPERATION.

SIR,—Will you permit me once more to protest against the misuse of facts made by Dr. Harris in his paper with the above-rendered title?

The great leading principle of all such operations is to relieve a parturient woman from a child which cannot pass by the natural passages. The main details of the old operation (Cæsarean) as compared with that introduced by Dr. Porro is that in the former the body of the uterus is opened, emptied, and left; whilst Dr. Porro opened the uterus, emptied, and removed it. How any proceeding comes to be called a "Porro-Cæsarean" operation is to me inexplicable. Dr. Harris says I claim to have done three such. I claim nothing of the kind.

What I do claim is this: I have three times performed the old Cæsarean section, and all the patients have died. I have seven times amputated the pregnant uterus, and six of the patients are living. The introduction of the detail of removing the body of the uterus is, therefore, in my mind, one of cardinal importance, and that condition is not impressed upon me merely by the recoveries but by the easy nature of the operation and the easy process of recovery. Dr. Harris writes further to introduce a "library paper" kind of classification of the operation against which, as a practical surgeon, I protest; and for this purpose he huddles together all sorts of cases indiscriminately in what may be called the "lucky bag" method of statistics—gather all the rubbish of the bazaar together, dip in your hand and pick out what kind of result you can get. Such a method is pure nonsense. Take three cases of amputation of the pregnant uterus, two of which are gathered from my own experience and the third from an instance in the experience of a friend. The first woman was at the full time, with advanced malignant disease of the cervix and vagina. I watched till labour set in and amputated the uterus. The child lived. The mother died on the sixth day from sloughing of the malignant masses. I am obliged to reckon this as my one fatality. The second case was known to have a pelvic deformity through which a living child could not pass. Dr. Hoare placed her under my care towards the end of the ninth month. Within an hour of the commencement of labour I amputated the uterus, and both the mother and the child are now living. A friend of mine amputated the uterus after ineffectual efforts had been made to deliver the woman, these efforts including nearly every form of obstetrical ingenuity and lasting nearly thirty hours. The child, of course, had been eviscerated and the maternal parts fearfully bruised. The mother died about five days after, not from the operation, but from sloughing of the passages due to the efforts of the misguided obstetricians. This case ought not to reckon as a death from amputation of the pregnant uterus, yet it is in Dr. Harris's table.

I ask any of your common-sense readers if any just conclusions can be made concerning the details of an operation from a higgledy-piggledy collection of cases such as given by Dr. Harris, in which elements of qualification such as these exist. I think not.

This operation, above all others in abdominal surgery, will be that of emergency, will have to be done by men unaccustomed to the general run of special work. The principles upon which it is founded must, therefore, be unhampered by literary confusion, and its details must be laid down on the broadest of possible lines by men of practical experience. Fanciful incisions and complicated sutures will frighten and confuse the men who will have it to do, and who ought to do it, and I protest in the name of humanity against such misleading representations as are constantly falling from the pen of Dr. Harris on this subject.

I have already indicated my belief, and my growing experience confirms it, that in such a case the true method of statistical investigation is to display for each case the period at which amputation of the uterus is performed after the commencement of labour. If it be performed within a reasonable number of hours and before the patient has been unfairly handled, the mortality will be a mere bagatelle, and clearly, therefore, this class of case must not be confused and mixed up with the cases in which all sorts of ineffectual efforts have been previously made, to the exhaustion of the patient and the irretrievable damage to the tissues concerned. In such cases the mortality is fearful, and the only one just conclusion is that we must draw a limit to the efforts to be made which are short of amputation of the pregnant uterus, and that, I believe, can only be done by drawing it at the line of the destruction of the child, for two lives have to be considered and not only one.—I am, etc., LAWSON TAIT.

THE INFLUENZA EPIDEMIC.

SIR,—In connection with the important question of the susceptibility of particular constitutions to certain diseases, it has occurred to me that some data might be furnished by collecting statistics of the persons suffering from the prevalent complaint, and noting whether such persons are what would be considered as "fair" or "dark." It is needless to point out that such data could only be furnished with any degree of accuracy by medical men who know exactly whether a patient is suffering from the true influenza or not. Also it is evident that the observations, to be of any use, should be conducted on as large a scale as possible, and it is for this reason that I have ventured to appeal through your columns for assistance. The medical officers attending at hospitals must have ample opportunities of collecting information. As there may be differences of opinion as to the correct definition of a fair or dark complexion, all that would be necessary would be to supply particulars on the following points: (1) sex; (2) age; (3) colour of hair; (4) colour of eyes; (5) colour of skin, whether considered fair or dark. If any medical men who have the opportunity of studying the malady from this point of view will make notes and forward them to me, I shall be happy to collate the results, and to make them known if they lead to any definite conclusion.—I am, etc.,

RAPHAEL MELDOLA, F.R.S.

Brunswick Square, W.C., January 10th.

CLINICAL TEACHING IN DUBLIN.

SIR,—I was amazed to see the letter from "Irish Surgeon" in the JOURNAL of January 11th. He states: "I shall scarcely be believed by English medical men when I say that in no Dublin hospital, so far as I know, are there any notes of cases preserved, nor are there any pathological nor *post-mortem* records. A history sheet hanging over a patient's bed in Dublin is unknown; such a thing does not exist," etc.

I am glad to say that statement is altogether untrue. In the hospital I was in (the Richmond), systematic notes of every case admitted were taken by the resident students on printed forms, and hung up on cards at the foot of each patient's bed. A similar system was, and I am sure still is, in force at at least five of the other Dublin hospitals—namely, Sir P. Dun's, the Mater, Meath, Rotunda, and Coombe.—I am, etc.,

G. AINSLIE JOHNSTON.

Ambleside.

SIR,—The letter in the JOURNAL for January 11th signed "Irish Surgeon" is very misleading, and it would have been as well if the writer of it had ascertained the true state of affairs before "fouling his own nest" in the way he has done. In one, at any rate, of the Dublin hospitals regular notes of cases are taken by the students. At Sir P. Dun's Hospital I remember distinctly, a a student five years ago, that anyone who chose to take charge o cases and make notes on them (and many availed themselves o the opportunity) were given so many beds per month, durin which time they made full notes, under the guidance of th physician or surgeon on duty, of each case in these beds. Ther was a "history sheet" hung up over each bed, on which ever particular of the case—history, symptoms, physical signs, trea ment, diet, etc.—was entered. This sheet contained a temperatu chart and also a diagram for clinical use, upon which all tremor dulnesses, etc., were filled in by the student.

In the event of death taking place when in hospital, the resu of the *post-mortem* examination was noted at the end of the shee

which was then laid by to be bound together with the sheets of all other cases into a half-yearly volume as the "Hospital Reports." All beds not so taken charge of by "clinical clerks" were taken by the medical resident for the time being. I do not say that *all* these notes were as complete as they might have been, but many of them were as full as "Irish Surgeon" himself could wish to have them.

I cannot speak from experience of the other hospitals, but have always understood that the same system of note-taking by students was pursued in some of them at any rate.—I am, etc.,

THEODORE BELL, B.A., M.B., B.Ch. (Dublin).

Kempsey, Worcester.

HOSPITAL AND DISPENSARY MANAGEMENT.

CONFERENCE OF MEDICAL MEN AND HOSPITAL ADMINISTRATORS IN BIRMINGHAM.

AN influential gathering of the representatives of the hospitals of Birmingham, of the general body of practitioners, and of the Board of Guardians and the Provident Dispensary met at the Council House, Birmingham, on Wednesday, January 15th, under the presidency of the Mayor, to discuss whether hospitals are abused in Birmingham, and what remedy can be applied.

The MAYOR, in opening the conference, said the discussion might for simplicity be resolved into an inquiry whether considerable abuse existed in Birmingham in the matter of giving public relief at the ordinary hospitals. He referred to the various past stages of the question at which the matter had been discussed, and to the recent report and memorial of the Charity Organisation Society. The inquiry of the latter Society, when analysed, showed, however, only one unsatisfactory case out of over 250 applications. The inquiry at the Royal Free Hospital, however, gave more startling figures: out of 641 cases it was found that 2 could afford to pay a private practitioner; 231 could afford to subscribe to provident dispensaries; 169 were suitable for free medical relief; 57 should have been relieved by the Poor-law; in 103 cases false addresses were given; and in 69 sufficient information could not be obtained. From the close attention which he had given to the subject during the last five weeks and numerous discussions which he had held he feared that the interests that had grown up around this matter were most divergent—whether one looked at it from the point of view of hospital subscribers, medical administrators, or patients. He did not wish to throw cold water on the conference, however, and he hoped before the meeting was over he should learn that there was a practicable solution. He might call attention to one matter which did not seem to have been prominently brought forward—that the number of medical men in proportion to population had very considerably increased. Taking *Kelly's Directory*, it seemed that in 1865 there were 170 practitioners in Birmingham—one to every 1,826 of the population. In 1876 the number was 191—one to every 1,919. In 1890 the total had risen to 285, or one for every 1,596 of the population. This increase would commend their medical friends to their sympathy, for even if no remedy could be found for the state of things that obtained in the hospitals, they could not but thank the medical men for having settled down in Birmingham in such numbers that there was no difficulty in finding a doctor when one was wanted.

Mr. PRIESTLEY SMITH, in the course of a long and able speech, pointed out that there were thirteen voluntary hospitals in Birmingham competing with each other for public support. The chief defects were those which this competitive system inevitably led to. They were, in the first place, attempting and professing to do that which they could not do adequately; and, secondly, doing that which was unjust to those who supported the hospitals, injurious to those who used them, and an imposition on the medical profession. They were always begging for money, and never getting enough, and, with all their vast expenditure, they were not treating their patients as they ought to be treated. Outpatients were kept waiting for hours, and then seen at a rate which he should be sorry to describe in public; and the in-patients were far more numerous than the beds at disposal. And, more important still, the number of applicants was constantly and steadily increasing from year to year. During the last twenty years it had increased four times as rapidly as the population, and that fact alone amply justified the holding of the meeting. The collections for Hospital Saturday were to some extent a compulsory tax amounting to a hospital tax which the working men felt gave them a right to be treated for sickness at the hospitals without inquiry or reference to their means. The Hospital Saturday movement should be made a real insurance and applied to self-supporting provident institutions. On behalf of the medical profession he asked for a fresh and impartial inquiry. He pointed out that this indiscriminate extension of charity was unjust to charitable donors and injurious to those who used the hospital. The hospitals opened their doors to a greater number of cases than they could possibly treat. It also hindered the development of true provident institutions, and was an imposition on the hospital medical staff in one direction and general practitioners in the other. He advocated co-operation instead of competition among the hospitals, and alliance with the guardians of the poor on the one hand and a true provident system on the other. He hoped that Conference would end in the constitution of a permanent council. A considerable number of applicants should be referred to the Poor-law guardians, and a still larger number should become members of well-organised provident institutions, and there would remain a class who were fit subjects for hospital treatment.

Mr. S. BOWEN, clerk to the Birmingham Board of Guardians, said that when it was found that persons to whom an urgent order for medical attendance had been given could afford to pay for a doctor they were made to refund the cost of the relief already given and the order was cancelled. Could not some such system be adopted by the hospital authorities?

Mr. HARTLEY (Skin and Lock Hospital) said the fault was largely that of the medical men themselves. Mr. Smith had spoken about the medical profession striking. He (Mr. Hartley) wished they would. Lay committees of the hospitals would thus be relieved of a good many difficulties. One of the difficulties was that the medical profession were so anxious to take these appointments at the hospitals, and kept them as long as they could. They kept these appointments year after year.

Mr. H. GRIFFITHS (Charity Organisation Society) said there was a large number of people who would endeavour to get medical relief for nothing if they could. Mr. Ball had spoken as though this was a complaint which affected only medical men, but as a matter of fact it was of interest to every member of the community.

After some further discussion, in which Mr. BALL (Hospital Saturday Committee) took part, Mr. PRIESTLEY SMITH moved the following resolution, which was carried with two dissentients:

"That a committee, the constitution of which shall be left to the Mayor, be appointed to inquire into the question of the medical treatment of the poorer classes, and to report, with suggestions as to any desirable reform, to a future meeting of this Conference."

BRITISH MEDICAL BENEVOLENT FUND.—The annual general meeting of subscribers to this fund was held on January 14th, at 34, Seymour Street, Portman Square, W., Sir James Paget, Bart., F.R.S., President, occupying the chair. The treasurer read his financial statement, from which it appeared that a sum of £1,297 had been received in subscriptions, £544 in donations, making together £1,841, and that 159 applicants for grants had been relieved in sums varying from £5 to £20, at a cost of £1,724. In the annuity department, £1,362 10s. has been given to 65 annuitants of £20 each. Two Dunlop gift annuities of £15 were given in May from a special fund, and seven medical men had received an increase of £6 to their annuities, from a fund specially raised for that purpose. The chief feature of the year in this department was the receipt of large legacies, enabling the Committee to invest £7,000, the interest of which will be available for increasing the number of annuitants. The Committee noticed with regret the death of three vice-presidents, Dr. Cumberbatch, Dr. Habershon, and Mr. Webber. The last-named gentleman had acted for many years as Financial Secretary, to the great advantage of the fund. Dr. E. L. Birkett was elected a Vice-President, and Mr. George Field (late Honorary Financial Secretary) and Mr. J. Roche Lynch were elected to fill vacancies in the list of members of the Committee. The officers of the fund were re-elected; to their honorary services is due the fact that the whole expense of working the fund (amounting to upwards of £10,600) is, inclusive of printing and postage, less than £120 for the year. Votes of thanks to Dr. Jonson, Chairman of Committees, to the Treasurer, Dr. Broadbent, and to the Honorary Secretary, the medical press, and the Chairman for presiding, closed the proceedings.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL EXAMINATION.

We observe ten commissions in the Medical Staff are offered for competition next month. This is a small number and seems to indicate still further reductions in establishment. Small though it be, we would strongly advise intending candidates to pause and weigh well the situation before going forward. There is not a sign yet, except the little Warrant extending the age for service of Surgeons-General, of what Mr. Stanhope means to do with the recommendations of the Committee. This will probably not be made known until Parliament meets, which will not be until after the examination. The prospect before candidates entering the Medical Staff at present is certainly not that of entering a happy family.

CHANGES OF STATION.

The following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

		From	To
Dep. Surg.-Gen.	S. Archer	Ceylon	—
Brig.-Surgeon	W. C. Robinson ...	Gosport	Ceylon.
,,	A. F. Preston, M.B. ...	Bombay	—
,,	W. W. Tomlinson ...	Malta	—
Surgeon-Major	P. L. Kilroy	Hulme	Sierra Leone.
,,	S. K. Cotter, M.D. ...	Parkhurst ...	Bengal.
,,	F. G. Adye-Curran, M.B	Dublin	Bermuda.
,,	O. F. Molloy	Belfast	Bengal.
,,	J. M'Namara, M.D. ...	Aldershot	,,
,,	W. H. Briggs... ...	Tipperary... ...	Woolwich.
,,	S. H. Carter, M.B. ...	Bengal	Aldershot.
,,	I. B. Emerson... ...	Birmingham ...	Madras.
Surgeon	H. J. M'Laughlin, M.B. ...	Madras	Birmingham.
,,	O. E. P. Lloyd	West Africa ...	Madras.
,,	J. J. Falvey	Training School, Aldershot	Aldershot.
,,	C. A. Webb	Devonport ...	Bombay.
,,	A. E. J. Croly	Dublin	,,
,,	G. W. Robinson	,, ...	Madras.
,,	J. Watson, M.D.	Belfast	Bengal.
,,	A. O. Geoghegan	Woolwich... ...	,,
,,	C. R. Egan, M.B.	Dublin	Bombay.
,,	J. M. Jones	Seaforth	Salford.
,,	C. R. Woods, M.D.	Lancaster ...	Madras.
,,	J. O. G. Sandiford, M.D. ...	Cork	Tipperary.
,,	C. G. D. Mosse	Shorncliffe ...	Bombay.
,,	E. D. Farmar-Bringhurst ...	Waterford ...	Madras.
,,	J. M. Irwin, M.B.	Bengal	Dublin.
,,	E. O. Wight	Netley	Madras.
,,	J. D. T. Reckitt	Dover	Shorncliffe.
,,	E. H. L. Bell, M.B.	Bengal	Dover.
,,	R. H. Firth	,, ...	,,
,,	G. Nelis	,, ...	—
,,	R. R. H. Moore	Bombay	—
,,	J. R. Barefoot	York	Hulme.
,,	C. J. Holmes, M.D.	Cahir	Cork.
,,	A. Stables, M.B.	Dublin	Clonmel.
,,	W. Turner	Preston	Birmingham.
,,	G. F. Alexander, M.B. ...	Edinburgh ...	Fort George.
,,	H. S. Peeke	Sheffield	York.

THE NAVY.

The following appointments have been made at the Admiralty:—Walter Bowden, Surgeon to the *Goshawk*, additional, January 7th; William J. Maillard, Surgeon to the *Ganges*, additional, January 8th; Percy V. Jackson, Surgeon to the *Duke of Wellington*, additional, January 8th; Nicholas C. Ridley, Surgeon to the *Wildfire*, additional, January 8th; Elvington F. S. M'Kay, Surgeon to the *Duke of Wellington*, additional, January 8th; Alexander Maclean, M.B., Surgeon to the *Vivid*, additional, January 8th; Thomas C. Rowland, Surgeon to Haslar Hospital, January 8th; Joseph H. Whelan, M.D., Surgeon to Chatham Hospital, January 8th; Anthony Kidd and James M. Rogers, Surgeons to Jamaica Hospital, January 13th; William R. M. Young, Surgeon to the *Ready*, January 13th.

THE MEDICAL STAFF.

Brigade-Surgeon W. C. Robinson has succeeded Brigade-Surgeon S. Archer as Principal Medical Officer in Ceylon.

Surgeon-Major P. L. Kilroy has succeeded Surgeon-Major R. C. Eaton as Principal Medical Officer at Sierra Leone.

Surgeon R. F. Adams, M.B., is brought on the strength of the British forces in the Bombay command from December 17th, the date of his arrival at Bombay.

Surgeon P. J. B. O'Shaughnessy, who is serving in the Bengal command, has leave to England from the date of availing himself of it, on private affairs, pending retirement.

Brigade-Surgeon R. W. Davies died at Meerut, India, on January 8th, aged 48. His commissions bore date: Assistant-Surgeon, March 31st, 1864; Surgeon, March 1st, 1873; Surgeon-Major, April 28th, 1876; and Brigade-Surgeon, April 2nd, 1889. During the war in Afghanistan in 1878-80, he was engaged in several small expeditions against the tribes on the Khyber line of communications, and received the medal granted for the war.

INDIAN MEDICAL SERVICE.

The promotion of Surgeon-Major Robert Bowman, of the Bombay Establishment, to be Brigade-Surgeon, already announced in the Journal, has received the approval of Her Majesty.

Surgeon John Garvie, Bengal Establishment, is appointed to the officiating medical charge of the 6th Punjab infantry, *vice* Surgeon D. T. Lane, M.D.

Surgeon-Major J. O'Brien, M.D., Bengal Establishment, civil surgeon, of Burdwan, is appointed to act as civil surgeon of Darjeeling, during the absence on leave of Brigade-Surgeon J. G. Pilcher.

Surgeon-Major G. Price, M.D., Bengal Establishment, officiating civil surgeon of Bhangulpore, is directed to act as civil surgeon of Burdwan, during the absence on deputation of Surgeon-Major J. O'Brien, M.D.

Surgeon-Major R. L. Dutt, M.D., Bengal Establishment, officiating civil surgeon of Backergunge, is appointed to be Civil Surgeon of Purneah.

Surgeon W. G. P. Alpin, Bengal Establishment, supernumerary civil surgeon 2nd class, is transferred from Gilghit to Bijnore, *vice* Surgeon G. H. Fink, proceeded on privilege leave.

Surgeon R. Robertson, Madras Establishment, is granted leave to proceed out of India on medical certificate for 182 days.

The following is the allotment of annuities of the Bombay Medical Fund for 1890: Deputy Surgeon-General T. Murray, £252; Brigade-Surgeon R. C. Thorp, M.D., F.R.C.S., £210*; Surgeon-General L. S. Bruce, £210; Surgeon-Major H. Wakefield, £168*; Surgeon-Major F. H. Plumptre, £168*; Surgeon-Major G. E. Seward, £168.* (* These sums lapsed to Government, the officers having received a refund of their subscriptions.)

Surgeon J. G. Jordan, M.B., Bengal Establishment, has leave of absence for 122 days; and Surgeon-Major A. B. Strahan, Bengal Establishment, medical officer 44th Goorkha Light Infantry, has leave for one year.

Surgeon G. C. Hall, Madras Establishment, has returned from furlough out of India.

The services of Brigade-Surgeon W. S. Fox, Madras Establishment, are replaced at the disposal of the Public Department from December 15th.

Deputy Surgeon-General J. Kirkpatrick, M.D., late of the Madras Establishment, died at Hamilton, N.B., on the 3rd instant, aged 70.

THE VOLUNTEERS.

Lieutenant W. B. Macdonald, M.B., 1st Haddington Artillery, is appointed Acting-Surgeon to the same corps, which he joined as a lieutenant August 19th, 1885.

The undermentioned gentlemen have resigned their commissions: Surgeon V. H. Fisher, M.B., 2nd Volunteer Battalion East Yorkshire Regiment (late the 2nd East Riding of Yorkshire), commission dated February 1st, 1889; Acting-Surgeon A. V. Ford, 3rd Volunteer Battalion Hampshire Regiment (late the 3rd Hampshire), commission dated March 4th, 1882; Acting-Surgeon P. A. Murdoch, M.B., 2nd (South) Middlesex, commission dated May 13th, 1882; Acting-Surgeon T. A. Dickson, 2nd Volunteer Battalion Argyll and Sutherland Highlanders (late the 2nd Renfrewshire), commission dated February 7th, 1883; Surgeon E. W. Willett, M.B., London Division Medical Staff Corps, commission dated June 13th, 1885.

Mr. Alfred Barber, M.B., is appointed Acting-Surgeon to the 1st Volunteer Battalion Yorkshire Regiment (late the 1st North Riding of Yorkshire); and Mr. Charles James Marsh is appointed Acting-Surgeon to the 2nd Volunteer Battalion Somerset Light Infantry (late the 2nd Somerset).

MEDICAL VALOUR.

Retired R.N. writes: The generous terms in which the Duke of Connaught commends the valour of Surgeon Crimmin to the imitation of the army are as honourable to the speaker as they are doubtless most gratifying to the medical officer himself. We have here for the second time in the course of a few months a doctor, a so-called "non-combatant," placed in circumstances calling not alone for exceptional courage and devotion, but for actual capacity to fight. "At one time," reports the commanding officers of the mounted infantry to the brigadier-general, "while attending a wounded man, Surgeon Crimmin was surrounded by the enemy, and defended himself and the wounded man, killing some of the Karens," and much the same story is recorded of Surgeon Le Quesne.

We commend these incidents to the attention of Mr. Stanhope, and would ask on what ground of reason and common sense the military and combatant character should be withheld from medical men wearing the Queen's uniform, to whom, in the course of ordinary duty in the field, such purely military responsibilities attach? It is surely nothing short of an abuse of language and an outrage on common intelligence to call these men "civilians," and it says little for the sense of fairness of the military advisers of the War Minister when they stigmatise as merely sentimental grievances as solid and real as those of which the medical staff of the army complain.

It is matter of common notoriety that to the civilian character attributed to the military medical officer is due the disgraceful fact that now it is all but impossible for a military medical officer to present himself for ballot at a good London service club without the certainty of rejection, and that even those medical officers whom Her Most Gracious Majesty and her princely sons deem worthy of honour are not thought good enough by the great paladins and fire-eating majors of Piccadilly and St. James's, but would by them be incontinently blackballed as "only doctors."

If this, too, is in the estimation of Mr. Stanhope merely a sentimental grievance, it is one which we hold involves an intolerable insult to our honourable profession, and one which it is high time should be remedied. In the meantime, and as a temporary measure, it may be respectfully suggested that a hint from the royal princes who are patrons and members of the club referred to, and who have on so many occasions manifested their sympathy with and appreciation of the medical servants of the Crown, would do much to abate a scandal as discreditable to the institutions which lend themselves to it, as it is grossly insulting to the medical profession.

"HART'S ARMY LIST."

The fifty-first annual volume of *Hart's Army List* shows no sign of loss of vigour. Its reputation for fulness and accuracy in connection with all matters relating to the officers of the army, whether retired or on active service, is too well established to admit of dispute, and its contents are too well

known to need to be particularised here. We do not know that we should have given it even this brief notice had it not been that we see that the editor has, for the first time, given the qualifications of medical officers other than the usual ones of M.B. and M.D.—has given them in some cases, that is; notably in the Bengal and Bombay Establishments, whereas, in the case of the Madras officers and among the members of the Medical Staff, they are conspicuous by their absence. It can hardly be that the latter are not collectively the equals in attainments of their colleagues in Bengal and Bombay. Possibly the editor is looking to be supplied with fuller information from the individual members of the profession. But whether this be so or not, we should recommend all concerned to see into the matter for themselves and at once to supply the evidently numerous omissions. At the same time a word of thanks is due to the editor for his evident desire to meet the wishes of medical men generally, and he may fairly look for their co-operation.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PATIENTS AND PRACTITIONERS.

. B. S. writes: May I ask you to express an opinion on the following case? 1. On October 28th, 1889, I was called to a Mrs. T., a stranger to me. I examined the patient, and my inquiries elicited that she had a similar illness in the spring, when she was attended by Mr. L. of this town. I asked why she had not sent for him. Her reply was that she understood he was out of town. I then offered to prescribe for her, and to withdraw from further attendance in favour of Mr. L., whom she could send for in the morning. This the patient and both daughters refused to do, but insisted on my continuing in attendance. I had no intimation from either of them that Mr. L. had actually been sent for; I therefore agreed to see her again on the following day. Query: Was my action up to this point consistent with medical ethics?

2. On the same evening, October 28th, I received the following note:—"Dr. S.,—I was up at B——— when those people came; will you keep the case, or shall I call to-morrow as I have attended before?—Yours very truly, T. L. L." To this I replied the same night that I had offered Mrs. T. the option of sending for him, but that she wished me to continue in attendance. On the following morning, before going on my rounds, I received the following:—"Dr. S.,—By all means do as you wish, but understand for the future I will neither give nor take quarter. You wish it rough, rough it shall be.—Yours 'fraternally,' T. L. L." I took no notice of this "fraternal" letter beyond again reminding Mrs. T. on my visit that day that I was perfectly willing to give up the case. During that day, October 29th, Dr. L. wrote Miss T. as follows:—"Dear Miss T.,—Thanks for your note. I am sorry I was out, but trust your mother is better. Had Mr. S. been a gentleman he would have retired knowing you were my patient.—Yours sincerely, T. L. L." Query: Was Mr. L.'s conduct as above described consistent with the rules of medical or social ethics?

3. At Mr. L.'s instigation, the secretary of the local Branch of the Association wrote me, proposing the question in dispute between Mr. L. and myself should be brought before the Council of the Branch for arbitration. I at once agreed to the proposal conditionally on Mr. L. apologising for the words he used concerning me in his letter to Miss T. dated October 29th. Mr. L. then wrote me as follows:—"Sir,—Under the circumstances, I withdraw and apologise for describing you as no gentleman, but I shall continue to press my charge of unprofessional conduct against you.—Yours, etc., T. L. L." I refused to accept the above as an apology, and Mr. L. refused to give any other. A meeting of the Council was held, Mr. L. brought his charge against me in my absence, and, on the evidence produced, the arbitrators decided that I had not acted in accordance with well-known rules of medical ethics.

4. I subsequently found that Miss T. had written Mr. L. under date October 30th explaining why she had sent for me, and concluded her letter as follows:—"Earnestly trusting that you will continue to consider us as your patients." On discovering that she had written as above, I wrote her, demanding an explanation. She came to see me, and said her father had made her write to that effect, but that neither her mother, her sister, or herself intended employing Mr. L. again. I asked her to give me a full explanation in writing, which she promised to do. She sent me a further letter of explanation, but the same not being satisfactory, I told her I should forthwith discontinue my attendance on the family which I have done.

In the above case I willingly grant, first, had I known Mr. L. had been sent for I should have withdrawn from the case at once; secondly, that Mrs. T. acted in a two-faced manner, as they wished to keep on good terms with Mr. L.; thirdly, had Mr. L. apologised in a proper manner, he would have saved himself and me a great deal of useless bother.

*** Assuming that the above recorded statement be a fair representation of the facts of the case, of which it bears the impress, it well illustrates one of the most fruitful sources of the unhappy disputes, heartburnings, and jealousies that too frequently disgrace an otherwise noble profession, namely, misrepresentation, or suppression of the truth by patients or their friends rather than direct unethical conduct on the part of the practitioners.

In reference to the case before us, we would observe that a thoughtfully unbiassed consideration of the several points involved in the alleged facts presented in Mr. S.'s communication, leads us to the conviction that, in view of the patient's and her two daughter's insistence, he, Mr. S., was medico-ethically justified in accepting charge of the case; at the same time, we think that, on receiving Mr. L.'s first note, he would have shown a wise discretion in resigning attendance on Mrs. T., and intimating the fact to her by courteous note. Be that as it may, we cannot but view with regret the inoperate and very discourteous language applied to Mr. S. by Mr. L., and which, in our opinion, he should have unreservedly withdrawn. Neither can we, moreover, under the circumstances related, absolve Miss T. from her moral obligation in the case to do unto Mr. S. as she herself would wish to be done by.

OLD BAD DEBT.

H. K. writes: A. B. and C. are partners in a firm. C. goes out, and a new partnership deed is drawn up, the new firm being composed of A. B. and D. Certain patients owe heavy bills, and are able to pay now and then small instalments. Is it customary for all the debts owed to the old firm by these persons to be paid off before the new firm of A. B. and D. receive any remuneration for their services? No statement has been made about past bad debts in the new partnership deed for the simple reason that the old partnership is never once mentioned.

*** A. B. and D. can require payment for their services before the debts due from their patients to the old firm have been liquidated. C. should have required the terms of the liquidation to have been expressly defined in writing on the dissolution of the old firm.

FEES TO MEDICAL WITNESSES.

ALPHA.—A medical witness in the case mentioned is entitled to a fee of £1 1s. per day if resident in the town in which the action is tried, and if resident at a distance from the place of trial £2 2s. to £3 3s. per day, inclusive of everything except travelling expenses. The scale is not so liberal in criminal cases.

A HARD CASE.

HOUSE-SURGEON writes: I was recently subpœnaed on behalf of the Queen to give evidence in a case committed for trial. I attended two days. Two other practitioners, also subpœnaed, attended four days. At the end of the case the judge directed only one day's expenses should be paid to the medical witnesses, although all other witnesses were paid expenses for each day's attendance. Have we no redress against this order?

*** We are not aware of any appeal from the judge's order as to the remuneration of witnesses in the case in point.

LAX AGREEMENTS.

MEMBER B. M. A. writes: A. engages B. as assistant on a fixed salary. In the communications that passed between them, A. told B. that he would require to sign the usual bond. The bond, however, was never signed, but A. can produce proof from the party who wrote the letter to his dictation that such was the understanding. After remaining for three years with A., B., on payment of a certain sum, was to receive an appointment held by A., and the rest was "for the right to practise in the town." B. soon afterwards wishes to withdraw from this agreement, which is duly cancelled by mutual consent. B. at once sets up in practice on his own account. Can A. legally sue B. for breach of contract?

*** A. would probably be required to prove (1) The contract, which we gather was comprised in certain correspondence; (2) what was meant by the "usual" bond, assuming that the terms of it were not expressly defined; (3) that A. had not waived it. We doubt whether A. could successfully maintain an action.

USE OF FOREIGN NON-REGISTRABLE DEGREES.

Z. writes: Having recently had to reside for a year for certain business purposes in a German university town, I took the opportunity to obtain the degree of M.D. from its university. This I did after passing a complete examination, publishing a treatise on a medical subject, and publicly defending twenty theses. Previously to obtaining the degree I was already a duly registered M.R.C.S., L.R.C.P.Lond., and F.R.C.S.Edin. Now for my query. Can I be legally interfered with for signing my name to certificates, etc., as follows:—John Jones, M.D.Marburg, M.R.C.S., and L.R.C.P.Lond? My degree of M.D. is not registrable, nor do I particularly wish it to be so, my other diplomas being already on the *Register*.

*** There is no legal objection to our correspondent signing his name as proposed, but the name of the university in question must be appended to the degree.

SURGICAL TREATMENT OF GENERAL PARALYSIS.—Dr. John Batty Tuke (Edinburgh) writes:—You might have been saved some space and I some time had I noticed Mr. Harrison Cripps's clinical memorandum on Dr. Claye Shaw's case in the JOURNAL of November 30th. I beg to apologise to him for my oversight, and also for not having mentioned in my paper on the subject that it was he who performed the operation.

BATHS AND WASHHOUSES.—The great boon which well managed baths and washhouses in crowded districts are is well illustrated by some statistics of the baths and washhouses maintained by the parish of St. James, Westminster, which have recently been issued by the clerk Mr. Harry Wilkins. The establishment was opened in 1852, and was shortly afterwards enlarged; during these thirty seven and a-half years nearly two million tickets have been issued to washers in the laundry and over four million to bathers; the receipts from bathers alone have averaged about £3,000 a year. During 1889 the number of bathers was no less than 104,766, and the number of washers 47,583. The number of persons using the swimming bath was comparatively small; if the proposal to build a larger swimming bath is carried out, the number of swimmers will probably rapidly increase. The establishment has cost from first to last a good deal of money, but the value of such an institution in a crowded neighbourhood cannot be estimated from an inspection of the profit and loss account. It has an important influence on public health, and has also an important bearing on the moral and physical well-being of the poorer sections of the working classes.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FOURTH QUARTER OF 1889.

In the accompanying table will be found summarised the vital and mortal statistics of the forty-one sanitary districts of the metropolis, based upon the Registrar-General's returns for the fourth or autumn quarter of last year. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of deaths occurring in the institutions of London among the various sanitary districts in which the patients had previously resided. By this means alone can trustworthy data be secured upon which to calculate reliable rates of mortality.

The 31,827 births registered in London during the three months ending December last were equal to an annual rate of 29.4 per 1,000 of the population of the metropolis, which showed a further decline from the rates recorded in the corresponding periods of recent years. The birth-rates in the various sanitary districts showed the usual wide variations, the sex and age distribution of the population differing greatly. In St. Martin-in-the-Fields, London City, Kensington, St. George Hanover Square, and St. James Westminster, the birth-rates were considerably below the average; while in Shoreditch, Stepney, St. George-in-the-East, Whitechapel, and Fulham, where the population contains a large proportion of young married persons, the birth-rates showed a marked excess.

The 18,987 deaths of persons belonging to London registered during the quarter under notice were equal to an annual rate of 17.5 per 1,000, which was as much as 3.0 below the mean rate in the fourth quarter of the ten preceding years, 1879-88, and was lower than that in the corresponding period of any year on record. The lowest death-rates during the three months ending December last among the forty-one sanitary districts were 12.4 in Kensington and in St. George Hanover Square, 13.5 in Hampstead and in Battersea, 13.6 in Lewisham, 14.2 in Hackney, and 14.5 in Wandsworth; in the other districts the rates ranged upwards to 23.0 in Fulham, 23.6 in Bethnal Green, 24.2 in London City, 24.5 in Whitechapel, 26.4 in St. George-in-the-East and in Stepney, and 26.5 in Holborn. During the quarter under notice 1,942 deaths were referred to the principal zymotic diseases in London; of these, 455 resulted from whooping-cough, 439 fram diphtheria, 323 from measles, 261 from scarlet fever, 253 from diarrhœa, 210 from different forms of "fever" (including 7 from typhus, 193 from enteric or typhoid fever, and 10 from simple and ill-defined forms of fever), and 1 from small-pox. These 1,942 deaths were equal to an annual rate of 1.8 per 1,000, which was 0.5 per 1,000 below the mean rate in the corresponding periods of the ten preceding years, 1879-88. The lowest zymotic death-rates among the various sanitary districts last quarter were recorded in Strand, Plumstead, Lewisham, St. George Hanover Square, and Hampstead, in none of which sanitary districts did it exceed 1.0 per 1,000. The zymotic rates ranged upwards in the other districts to 2.4 in Chelsea and in

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths occurring in Public Institutions, during the Fourth Quarter of 1889.

Sanitary Areas.	Estimated Population middle of 1889.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 births.
LONDON	4,351,738	31,827	18,987	29.4	17.5	1.8	1,942	1	323	261	439	455	7	193	10	253	137
West Districts																	
Paddington	112,590	694	452	24.7	16.1	1.6	44	—	4	3	10	14	—	7	—	6	146
Kensington	196,226	897	604	18.3	12.4	1.1	53	—	3	7	19	11	—	9	—	4	117
Hammersmith	102,453	678	427	26.6	16.7	2.0	52	—	—	7	15	19	—	7	—	4	159
Fulham	66,441	729	380	44.0	23.0	3.0	49	—	10	11	—	13	—	3	—	12	162
Chelsea	104,375	709	462	27.3	17.8	2.4	62	—	18	5	9	19	—	4	—	7	147
St. George, Hanover Square	87,944	402	271	18.4	12.4	0.9	20	—	—	2	6	1	—	4	—	7	129
Westminster	54,875	357	301	26.1	22.0	2.0	27	—	1	6	7	6	—	1	—	6	151
St. James, Westminster ...	27,231	144	105	21.2	15.5	2.1	14	—	1	3	—	3	—	3	1	3	153
North Districts																	
Marylebone	149,639	1,071	669	28.7	17.9	1.3	47	—	9	1	11	11	—	6	—	9	138
Hampstead	57,534	364	194	25.4	13.5	1.0	14	—	1	—	3	5	—	4	—	1	143
St. Pancras	245,291	1,767	1,118	28.9	18.3	1.9	119	—	24	8	30	29	—	10	1	17	138
Islington	337,596	2,323	1,308	27.6	15.6	1.2	101	—	11	14	24	17	—	22	1	12	130
Hackney	244,109	1,633	863	26.9	14.2	1.4	84	—	6	16	34	9	—	9	—	10	103
Central Districts																	
St. Giles	39,344	292	221	29.8	22.5	1.8	18	—	4	1	2	5	—	3	—	3	153
St. Martin-in-the-Fields ...	14,836	57	69	15.4	18.7	1.4	5	—	—	2	1	1	—	—	—	1	286
Strand	28,896	158	142	22.0	19.7	0.4	3	—	1	—	1	1	—	—	—	—	200
Holborn	29,937	231	198	31.0	26.5	1.6	12	—	—	2	6	—	—	2	—	2	167
Clerkenwell	70,860	560	359	31.7	20.3	2.4	43	—	22	3	5	1	—	4	—	8	133
St. Luke's	52,000	453	240	35.0	18.5	2.0	26	—	10	7	3	2	—	1	—	3	132
London City	37,054	157	223	17.0	24.2	1.4	13	—	2	3	3	2	—	—	—	3	134
East Districts																	
Shoreditch	125,310	1,102	663	35.3	21.2	2.9	90	—	7	20	29	12	1	4	—	17	167
Bethnal Green	132,079	1,153	776	35.0	23.6	4.1	134	—	46	13	32	34	—	5	—	4	172
Whitechapel	66,916	669	408	40.1	24.5	3.1	52	—	20	—	12	6	—	3	—	11	153
St. George-in-the-East ...	46,142	435	303	37.8	26.4	2.9	33	—	7	5	10	2	—	2	—	7	153
Stepney	58,888	536	387	36.5	26.4	4.8	71	—	20	8	12	14	1	6	1	9	153
Mile End Old Town	115,889	982	661	34.0	22.9	3.9	114	—	40	23	24	16	—	3	—	8	153
Poplar	190,896	1,448	793	30.4	16.7	1.1	53	—	1	4	12	13	—	7	3	13	153
South Districts																	
St. Saviour, Southwark ...	27,084	198	147	29.3	21.8	1.8	12	—	—	4	5	—	—	—	—	3	167
St. George, Southwark ...	60,133	523	301	34.9	20.1	1.6	24	—	2	4	1	9	—	3	—	5	167
Newington	123,278	939	561	30.6	18.3	1.9	59	—	1	16	13	12	—	13	1	3	153
St. Olave, Southwark	14,500	120	76	33.2	21.0	2.2	8	—	4	1	—	—	—	—	—	3	153
Bermondsey	90,143	787	414	35.0	18.4	1.6	36	—	8	4	6	5	4	4	—	3	153
Rotherhithe	44,316	326	165	29.5	14.9	1.2	13	—	2	—	8	—	—	—	—	12	167
Lambeth	289,474	2,189	1,253	30.4	17.4	1.9	137	1	11	19	27	54	—	12	1	12	153
Battersea	165,927	1,302	557	31.5	13.5	1.3	54	—	1	7	10	22	—	8	—	6	153
Wandsworth	130,489	971	471	29.8	14.5	1.1	35	—	—	4	12	9	1	5	—	4	153
Camberwell	264,999	1,787	990	27.1	15.0	1.5	98	—	8	14	20	40	—	9	—	7	153
Greenwich	160,376	1,298	712	32.5	17.8	1.8	72	—	15	10	9	23	—	4	1	10	153
Lewisham (excluding Penge)	67,161	426	228	25.5	13.6	0.9	15	—	3	1	—	3	—	5	—	3	153
Woolwich	37,212	302	205	32.6	22.1	1.1	10	—	—	1	2	6	—	—	—	1	153
Plumstead	81,265	658	310	32.5	15.3	0.8	16	—	—	2	6	6	—	1	—	1	153

Clerkenwell, 2.9 in St. George-in-the-East and in Shoreditch, 3.0 in Fulham, 3.1 in Whitechapel, 3.9 in Mile End Old Town, 4.1 in Bethnal Green, and 4.8 in Stepney. In the east districts the zymotic death-rate last quarter averaged 3.0 per 1,000, or exactly double that which prevailed in the rest of London. Compared with the preceding quarter, the fatality of measles, scarlet fever, diphtheria, and whooping-cough showed a marked increase.

Only one death from small-pox was recorded in London during the fourth quarter of this year. This fatal case belonged to Lambeth sanitary area. This was the only death from small-pox in London during the whole of 1889. No small-pox patients were under treatment in any of the Metropolitan Asylums Hospitals at the end of December, and only one was admitted during the last three months of the year. Measles showed the highest proportional fatality in St. Luke's, Whitechapel, Clerkenwell, Bethnal Green, Stepney, and Mile End Old Town; scarlet fever in Shoreditch, Fulham, and Mile End Old Town; diphtheria in Holborn, Mile End Old Town, Stepney, Shoreditch, St. George-in-the-East, and Bethnal Green; whooping-cough in Hammersmith, Chelsea, Fulham, Lambeth, Stepney, and Bethnal Green; and enteric fever in Stepney and Newington.

Infant mortality in London last quarter, measured by the proportion of deaths under one year of age to births registered, was equal to 137 per 1,000, against an average rate of 142 in the corresponding periods of the five preceding years, 1884-88. Among the various sanitary districts the rates of infant mortality were lowest in Wandsworth, Hackney, Battersea, St. Saviour Southwark, Kensington, and St. Olave Southwark; while they ranged upwards in the other districts to 164 in St. George Southwark and in Stepney, 165 in Holborn, 169 in Woolwich, 170 in St. George-in-the-East, 179 in Strand, and 281 in St. Martin-in-the-Fields.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, January 11th, 6,334 births and 5,235 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 21.9 and 25.2 per 1,000 in the two preceding weeks, further rose to 28.1 during the week under notice, nearly the whole of this increase being attributable to the high death-rate in London. The rates in the several towns ranged from 17.4 in Birkenhead, 18.1 in Brighton, and 19.4 in Halifax, and in Nottingham and in Wolverhampton to 29.0 in Leeds, 30.4 in Plymouth, 32.4 in London, and 33.8 in Manchester. In the twenty-seven provincial towns the mean death-rate was only 24.5 per 1,000, while in London, as before stated, it was as high as 32.4, and exceeded that recorded in any week since February, 1882. The 5,235 deaths registered during the week under notice in the twenty-eight towns included 396 which were referred to the principal zymotic diseases, against 573 and 423 in the two preceding weeks; of these, 177 resulted from whooping-cough, 55 from measles, 49 from scarlet fever, 40 from diphtheria, 39 from "fever" (principally enteric), and from diarrhœa, and not one from small-pox. These 396 deaths were equal to an annual rate of 2.1 per 1,000; in London the zymotic death-rate was equal to 2.4, while it averaged 1.9 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Birkenhead, in Halifax, and in Cardiff, and 0.3 in Leicester to 3.3 in Liverpool, 3.8 in Norwich and in Bristol, and 4.0 in Plymouth. Measles showed the highest proportional fatality in Norwich; scarlet fever in Plymouth; whooping-cough in Portsmouth, Liverpool, London, Wolverhampton, Hull, Bolton, and Bristol; and "fever" in Huddersfield. No case of small-pox was recorded during the week, either in London or in any of the twenty-seven provincial towns, and only one small-pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday, January 11th. These hospitals contained 1,434 scarlet fever patients on the same day against 1,541 and 1,509 in the two preceding weeks; 65 cases were admitted during the week, against 97 and 115 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 3.0 per 1,000, and was almost double the average.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, 900 births and 750 deaths were registered during the week ending Saturday, January 11th. The annual rate of mortality in these towns, which had been 24.6 and 26.5 per 1,000 in the two preceding weeks, further rose to 29.0 during the week under notice, and exceeded by 3.9 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Greenock and Aberdeen, and the highest in Glasgow and Edinburgh. The 750 deaths in these towns during the week under notice included 33 which were referred to the principal zymotic diseases, equal to an annual rate of 3.6 per 1,000, which exceeded by 1.5 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the highest zymotic death-death-rates were recorded in Greenock, Leith, and Edinburgh. The 330 deaths registered during the week in Glasgow included 16 from measles, 10 from whooping-cough, and 3 from diphtheria. Twenty-four fatal cases of measles, 6 of "fever," and 4 of diphtheria were recorded in Edinburgh, and 3 deaths were referred to diphtheria in Greenock. The death-rate from diseases of the respiratory organs in these towns during the week under notice was equal to 8.9 per 1,000, against 12.6 in London.

HEALTH OF IRISH TOWNS.

During the week ending Saturday, January 11th, the deaths registered in the 18 principal town districts of Ireland were equal to an annual rate of 33.7 per 1,000. The lowest rates were recorded in Armagh and Dundalk, and the highest in Wexford and Dublin. The death-rate from the principal zymotic diseases averaged 4.5 per 1,000. As many as 299 deaths were registered in Dublin during the week under notice, equal to an annual rate of 44.2 per 1,000 (against 24.5 and 31.9 in the two preceding weeks), the rate for the same period being 32.4 in London and 33.5 in Edinburgh. These 299 deaths included 20 which resulted from the principal zymotic diseases (equal to an annual rate of 3.0 per 1,000), of which 7 were referred to measles, 6 to whooping-cough, and 4 to different forms of "fever."

RESIDENT AND NON-RESIDENT POOR-LAW MEDICAL OFFICERS.

INVESTIGATOR writes as follows: Three medical men are resident in a district, yet a medical man resident outside has been appointed district medical officer. The appointment has been sanctioned by the Local Government Board, in violation of the order of May 25th, 1857, which says this shall only be done when necessary. In this case it is not necessary, and it is dishonest of the Local Government Board to induce men to reside in the district by making such an order, and then to deprive them of the remuneration they reasonably expect. I now claim the assistance of the profession to get this injustice rectified, or to show me how the Local Government Board can be compelled to do their duty, or to point out—what is quite possible—that the opinion I hold is incorrect.

*** It appears to us to be quite contrary to the spirit of the order issued by the Local Government Board for the guardians to appoint a non-resident district medical officer if any others fully qualified reside in the district and apply for the appointment when vacant. We do not, however, consider the guardians would be justified in determining the appointment of a non-resident simply because a fresh resident came to the district and applied for it, as, if such action became general, any non-resident medical officer might at any time be deprived of his appointment without any fault of his own.

OBITUARY.

DEPUTY SURGEON-GENERAL JAMES KIRKPATRICK, M.D.

THE death is announced of Deputy Surgeon-General James Kirkpatrick, M.D., of the Madras Medical Service. He received his medical education in Edinburgh, and, after obtaining his degree there, continued his studies in Paris. In 1842 he entered the Madras Medical Service, and served for some years with the 4th Madras Light Cavalry and other regiments. Subsequently he received a civil medical appointment in the Mysore Commission, and for many years was senior medical officer to the Commission. He was well known in that part of India as a skilful surgeon, a kind and successful general practitioner.

On his retiring after thirty years' service, he settled in Edinburgh. In the late discussions on the Military Medical Services he was much interested, and took an active part in promoting a memorial on the subject from the retired medical officers of the services resident in Edinburgh.

On December 28th, while on a journey from Edinburgh to Hamilton, he was taken ill in the train, and, after a few days' illness, died at Hamilton on January 3rd.

JOHN SHARMAN, M.R.C.S.ENG., L.S.A.LOND.

WE have to announce the decease of Mr. John Sharman, who died on January 6th at Gipsy Road, West Norwood, at the age of 56 years. He had been in practice for more than thirty years in that district, and his loss will be greatly mourned by a large circle of friends. He had been in ill-health for many years. Mr. Sharman, who was a student at the London Hospital, was House-Surgeon and Demonstrator of Anatomy there, and House-Surgeon to St. Mark's Hospital for Fistula, Lecturer on Anatomy at Grosvenor Place School of Medicine, Assistant Surgeon to Abersychan Ironworks, Surgeon to the Finsbury Dispensary, Surgeon to the Norwood Cottage Hospital, Medical Officer to Lambeth Schools and district at Norwood and public vaccinator, and medical officer to numerous societies. He is succeeded in his practice by his son, Mr. J. Schutze Sharman.

DEPUTY SURGEON-GENERAL C. E. SMITH, M.D., M.R.C.S., L.S.A.

THE death occurred last week, after a brief illness, of Dr. Charles E. Smith, Deputy Surgeon-General, retired. The deceased, who was attached to the 10th Hussars, had just completed his 53rd year. He became Assistant-Surgeon in the army on April 20th, 1859; Surgeon, March 1st, 1873; Surgeon-Major, July 11th, 1874; and when he was placed on the retired list on May 30th, 1885, he had attained the rank of Brigade-Surgeon with the honorary rank of Deputy Surgeon-General. After his withdrawal from the service he entered into partnership with a surgeon of Worthing, and was also one of the honorary medical officers of the local infirmary.

MEDICAL NEWS.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination in Anatomy and Physiology at a meeting of the Board of Examiners on January 13th, namely:

E. H. Batchelor, G. Hepworth, and H. Keighley, students of Yorkshire College, Leeds; R. L. Chapple, of Leeds and Mr. Cooke's School of Anatomy and Physiology; T. H. Price, of Queen's College, Birmingham; A. E. Milner, C. G. Morris, of Bristol Medical School; W. E. Bond, of St. Bartholomew's Hospital; and E. Du Cane, of Carmichael College, Dublin.

Passed in Anatomy only.

H. Taylor, and W. Thomas, of Yorkshire College, Leeds; C. E. Brooks, A. L. Knapman, H. Litherland, and H. Richardson, of Owens College, Manchester; E. G. C. F. Atchley and A. L. Flemming, of Bristol Medical School; W. H. Allen and J. A. Hogg, of Queen's College, Birmingham; T. P. Stokes, of Sheffield Medical School; E. Smallwood, of University College, Liverpool; and W. G. Pretsell, of Glasgow University.

Passed in Physiology only.

A. H. Bradshaw and E. Howgate, of Yorkshire College, Leeds; S. Carter, of Owens College, Manchester; J. Craigie, H. F. Cook, and H. W. Nott, of University College, Liverpool; G. Allcock and H. Lowe, of Queen's College, Birmingham; J. E. H. Phillips, of Charing Cross Hospital; H. Boam, of University College; and W. A. Green, of Dublin; and Mr. Cooke's School of Anatomy and Physiology.

Passed in Anatomy and Physiology on January 14th.

O. W. Gange, A. E. Pryse, and H. J. Scharlieb, of University College; E. Sutton, of London Hospital; F. Elvy and G. M. Keevil, of Middlesex Hospital; V. Howard, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; H. S. Maw, of St. Bartholomew's Hospital; A. T. Duka and H. G. White, of St. George's Hospital; E. E. Frazer, of Guy's Hospital.

Passed in Anatomy only.

E. M. Nelson, of Yorkshire College, Leeds; F. B. G. Stableford, of Queen's College, Birmingham; J. F. Smart, of St. Thomas's Hospital; J. D. Hessey, of Middlesex Hospital; E. D. Madge, of Middlesex Hospital and Mr. Cooke's School of Anatomy and Physiology; J. J. Mooney, of Owens College, Manchester; E. H. Bingley, E. S. Hemsted, and T. Heywood, of St. Mary's Hospital; C. E. Bashall and J. Wood, of St. Thomas's Hospital; A. Allport, of Guy's Hospital; G. R. Adcock, R. H. Crowley, of St. Bartholomew's Hospital; J. E. Owens, W. C. Orme, of London Hospital; E. Sly and C. Williams, of King's College; and L. P. Tomlinson, of St. George's Hospital.

Passed in Physiology only.

H. A. Beetham, of Yorkshire College, Leeds; H. K. Hunter and H. H. Tipping, of Queen's College, Birmingham; G. H. Jones and H. E. Pittway, of Middlesex Hospital; E. E. W. Roe, of Guy's Hospital; E. W. Brewerton and G. F. Holt, of St. Bartholomew's Hospital; and John Kyffin, of London Hospital.

DR. ANTON FRIEDRICH VON TRÖLTSCH, Professor of Ear Diseases in the University of Würzburg, whose name is a household word among otologists, died on January 9th, after a lingering illness.

PRINCE ALBERT VICTOR received on January 9th, at Calcutta, a deputation of the Leper Asylum Committee, who solicited from his Royal Highness permission to call by his name an asylum, which it is proposed to build.

OPEN SPACES.—Petitions are being extensively signed in North London against the proposal of the London County Council to make a new road across the Parliament Hill fields, which were recently acquired as an addition to Hampstead Heath.

HORSEFLESH.—A sausage manufacturer of Reading named Myers, who was found with horseflesh on his premises, has been fined by the magistrates £5 for having failed to comply with the conditions of the Act, which requires that the fact that horseflesh for human food is dealt in should be notified in conspicuous character, in front of the shop.

PRESENTATION.—On Saturday, January 11th, Surgeon-Major R. Vacy-Ash, M.S., was presented with a very handsome silver inkstand, by the ladies of the Advanced and Ambulance Classes of the Brighton Branch of St. John Ambulance Association. The classes have been most successful, every lady gaining the vellum certificate.

"ACCIDENTAL DEATH FROM HYDROPHOBIA!"—This, says the *Daily Telegraph*, was the verdict returned by a Westminster jury sworn to inquire how Henry Faircloth, fourteen years of age, came to die. Let those, it adds, who so violently complain of the "muzzling order" consider the circumstances under which this unfortunate lad lost his life. A stray dog bit him in Lupus-street, Pimlico. Although the wound was immediately afterwards cauterised, symptoms of hydrophobia—the most agonising of all diseases—soon appeared. Faircloth was tended as carefully and as skilfully as possible in St. George's Hospital, but his sufferings increased in intensity until death put an end to his pain. An examination of the dog showed that rabies had full possession of the animal. How many persons may have been bitten before the constable despatched it with his truncheon nobody knows. At Bradford a dog has just been killed which had bitten eight people. And yet some persons complain of the discomfort caused to their pets by the "muzzling order."

VESICAL ALBUMEN.—Professor Guyon (*Annales des Mal. des Organes Génito-urinaires.* December, 1889), has recently drawn attention to this subject, chiefly in connection with stone in the bladder. Albumen is constant in cases of calculus when cystitis is present, but when the vesical mucous membrane has not suffered, the albumen may only be found in the urine at certain times which correspond with movement on the part of the patient. Professor Guyon states that he recently operated on a patient who consulted him for intermittent albuminuria, which turned out to be due to stone in the bladder. In this case blood was not clearly visible to the naked eye, but the microscope demonstrated its presence.

MANCHESTER MEDICAL SOCIETY.—At the annual meeting of this Society held on January 8th, the following were elected office bearers for the year 1890:—*President:* James Ross, M.D. *Vice-Presidents:* S. Buckley, M.D.; P. H. Mules, M.D.; F. A. Southam, M.B.; Graham Steell, M.D. *Treasurer:* C. E. Glascott, M.D. *Secretary:* T. C. Railton, M.D. *Members of Committee:* H. A. G. Brooke, M.B.; J. S. Bury, M.D.; A. M. Edge, M.D.; F. M. Granger; A. H. Griffith, M.D.; H. R. Hutton, M.B.; T. Jones, M.B.; F. W. Jordan; B. J. Massiah, M.D.; S. H. Owen, M.D.; G. A. Wright, M.B.; W. Yeats, M.D. The above, with the past presidents of the Society and two representatives of the council of the Owens College, form the Committee. *Library Committee:* A. M. Edge, M.D.; A. Emrys-Jones, M.D.; S. Moritz, M.D.; J. Ross, M.D.; W. Yeats, M.D. *Auditors:* H. Lund, M.B.; C. E. Richmond.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting held on January 9th, the following list of officers was adopted:—*President:* *W. Mitchell Banks, F.R.C.S. *Vice-Presidents:* A. Bernard, M.B.; Richard Williams, M.R.C.S.; *Damer Harrisson, F.R.C.S.Ed.; *D. M. Williams, L.K.Q.C.P. *Honorary Treasurer:* J. N. Cregeen, L.R.C.P. *Honorary General Secretary:* E. W. Hope, M.D. *Honorary Secretary of Ordinary Meetings:* *A. Barron, M.B. *Honorary Librarian:* C. G. Lee, M.R.C.S. *Council:* T. H. Bickerton, M.R.C.S.; W. Macfie Campbell, M.D.; Stanley Gill, M.D.; R. Hughes Jones, L.R.C.P.; G. W. Steeves, M.D.; G. Westby, M.K.Q.C.P.; *H. Briggs, F.R.C.S.; *W. Carter, M.D.; *P. Davidson, M.B.; *G. G. Hamilton, F.R.C.S.Ed.; *A. Samuels, M.D. *Joseph Wiglesworth, M.D. *Microscopical Committee:* A. Barron, M.B.; T. R. Bradshaw, M.D.; J. E. Gemmell, M.B.; T. B. Grimsdale, M.B.; G. G. Hamilton, F.R.C.S.Ed.; *C. Macalister, M.B.; J. R. Logan, M.B.; Rushton Parker, F.R.C.S.; F. T. Paul, F.R.C.S. J. Wiglesworth, M.D.; and Arthur Wilson, M.R.C.S. *Auditors:* *G. W. Steeves, M.D., and *T. Bushby, M.B. Those marked * did not hold the same office last year.

MEDICAL VACANCIES.

The following Vacancies are announced:

BARNSTAPLE UNION.—Medical Officer and Public Vaccinator for the No. District. Salary, £90 per annum, and usual fees for vaccination and midwifery cases. Applications by January 23rd.

BEDFORD GENERAL INFIRMARY.—Resident Surgeon. Salary, £100 per annum, with apartments, board, and washing. Applications by January 22nd to the Secretary.

BELGRAVE HOSPITAL FOR CHILDREN, 79, Gloucester Street, Pimlico, S.W.—House-Surgeon. Board, etc. Applications by January 25th to the Honorary Secretary.

BOARD OF WORKS FOR THE ST. SAVIOUR'S DISTRICT.—Medical Officer. Salary, £200 per annum. Applications to Mr. W. H. Atkins, clerk, Emerson Street, Bankside, Southwark, S.E. Election January 20th.

BRIERLEY HILL LOCAL BOARD.—Medical Officer of Health. Salary, £ per annum. Applications by January 20th.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—Honorary Surgeon in Ordinary, A Fellow or Member of one of the Royal Colleges of Surgeons of Great Britain and Ireland. Election, Friday, February 7th.

BRISTOL EYE HOSPITAL.—Non-resident House-Surgeon. Salary, £120 per annum. Applications by January 22nd to Mr. F. R. Cross.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80, advancing £10 per annum to £10 with board, furnished apartments, etc. Applications by January 28th to G. Fell, Esq., Solicitor, Aylesbury.

FISHERTON ASYLUM, Salisbury.—Assistant Medical Officer. Salary, £ per annum, with board, lodging, and washing. Applications address Dr. Finch, Salisbury.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Residence, board, etc. Applications by February 1st to House Governor.

HOLSWORTHY POOR-LAW UNION.—Medical Officer and Public Vaccinators. Nos. 4 and 5 Districts. Salary, No. 4 District, £28 3s. per annum. Salary, No. 5 District, £25 15s. per annum, including in each case all fees excepting those for midwitery cases, etc. Applications not later than January 21st to Cecil Bray, Clerk, Union Offices, Holsworthy.

HOLSWORTHY POOR-LAW UNION.—Medical Officer of Health for the Rural Sanitary Authority. Salary, £30 per annum. Applications by January 21st to Cecil Bray, Clerk, Union Offices, Holsworthy.

LIVERPOOL STANLEY HOSPITAL.—Junior House-Surgeon. Salary, £70, with board, etc. Applications by January 30th to J. E. Bennett.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.—Honorary Aural Surgeon. Applications by January 31st to H. Teague, Esq., Secretary, 38, Barton Arcade, Manchester.

MERCERS' HOSPITAL, Dublin.—Physician. Applications by January 20th to Anthony M'Guckin, Registrar.

MORPETH URBAN SANITARY AUTHORITY.—Medical Officer of Health. Salary, £20 per annum. Applications to the Clerk.

PARISH OF THE UNITED PARISHES OF WHITTLESEY.—District Medical Officer and Public Vaccinator. Salary as District Medical Officer £70 per annum, with usual extra fees. Fees for vaccination and revaccination 3s. and 2s. per case respectively. Applications not later than January 25th, endorsed "Applications for Medical Officer," to John Peed, clerk, Whittlesey, near Peterborough.

PAROCHIAL BOARD OF BIRSAY AND HARRAY.—Medical Officer. Applications to the Inspector of the Poor.

RATHDOWN UNION, RATHMICHAEL DISPENSARY.—Medical Officer. Salary, £130 per annum and fees. Applications to Mr. Alexander Doran, Honorary Secretary, Quinsboro Road, Bray. Election on January 21st.

ST. MARY'S HOSPITAL, W.—Qualified Assistant in Electro-Therapeutic Department. Applications by January 23rd to Thomas Ryan, Secretary.

SOWERBY BRIDGE LOCAL BOARD OF HEALTH.—Medical Officer of Health. Salary, £30 per annum. Applications not later than January 29th to the Chairman of the Sanitary Committee, J. Smith, Esq.

STRAND UNION.—Dispenser, L.S.A., for Workhouse, Upper Edmonton. Salary, £100 per annum, Applications to Mr. C. F. Dorrell, 13, Henrietta Street, Covent Garden.

WESTERN FRIENDLY SOCIETY, GLASGOW.—The appointment of Medical Adviser, vacant by the death of Professor James Morton, M.D. Applications to be lodged by January 20th at 10 A.M. Further information from John Mann, C.A., Manager.

MEDICAL APPOINTMENTS.

ADAMS, James, M.D.Aberd., F.R.C.S.Eng., appointed Medical Officer to the Eastbourne Borough Sanatorium, *vice* H. S. Gabbett, M.D.Dub., M.R.C.P.Lond., resigned.

ARBUCKLE, Hugh Wight, M.D.Aberd., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Thorne Rural Sanitary Authority.

ARKWRIGHT, J. A., M.R.C.S., L.R.C.P., appointed House-Physician to the Victoria Hospital for Sick Children, Chelsea, *vice* W. W. Ord, M.B., resigned.

ARMITAGE, J. Auriol, M.D.Edin., C.M., B.A.Camb., elected an Honorary Gynæcologist to the Wolverhampton and Staffordshire General Hospital.

BARRETT, J. W., M.R.C.S.Eng., L.S.A., reappointed Medical Officer to the Workhouse, Kings Lynn Union, for three years.

BAXTER, R. H., L.R.C.S.I., L.A.H.Dub., appointed Surgeon to the Bristol Cotton Works, *vice* E. H. Warner, M.D., resigned.

BOWHAY, A., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., appointed Medical Officer for the Calstock District, Tavistock Union.

COCKEY, Edmund Percival, M.R.C.S.Eng., M.B.Lond., M.D., appointed Medical Officer to the 8th District, Chelmsford Union.

DUKE, A. F., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Cheltenham General Hospital, *vice* E. J. Tatham, M.R.C.S., M.B.Camb., resigned.

EDMONDS, George, M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant House-Surgeon to the Derbyshire General Infirmary, *vice* Wm. Kirkpatrick, M.D., resigned.

GRINFIELD-COXWELL, John E., L.K.Q.C.P.Irel., M.R.C.S.Eng., appointed Medical Officer to the Worthing Post Office.

HUMPHREY, Charles Beyer, L.R.C.P., L.R.C.S., and L.M.Edin., etc., appointed Medical Officer to the 7th District (Horsmonden), Tonbridge Union.

KEMPE, Arthur, M.D.Brux., M.R.C.P., appointed Medical Officer of Health to the Budleigh Salterton Local Board.

LAIRD, Thomas, M.B., Mast Surgy.Glas., appointed Medical Officer to the Soothill Upper District, Dewsbury Union.

LARKIN, F. Charles, F.R.C.S.Eng., elected Assistant Surgeon to the Stanley Hospital, Liverpool, *vice* Arthur H. Wilson, M.R.C.S.Eng.

LATHAM, George, L.R.C.S. and L.R.C.P.Edin., appointed Assistant Surgeon to the West Bromwich District Hospital.

MAYLARD, A. Ernest, B.S., M.B.Lond., appointed Senior Visiting Surgeon to the New Victoria Infirmary, Glasgow.

MORTIMER, J. D. E., F.R.C.S., appointed Surgical Registrar to the Hospital for Sick Children, Great Ormond Street, *vice* R. C. Priestley, M.A., M.B., resigned.

MUIL, William, M.D.Aberd., C.M., reappointed Medical Officer for the Kirkby-Moorside Rural District.

NEWMAN, Horace Townsend, A.B., M.B., M.D.Dub., L.R.C.S., etc., appointed Medical Officer and Public Vaccinator for the Audlem District, Nantwich Union.

NEVELL, G. T., M.R.C.S.Eng., L.R.C.P.Edin., appointed Medical Officer of Health to the Buckland Monachorum District, Tavistock Union.

RISDON, G. Owen, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., appointed Medical Officer and Public Vaccinator to the Second District, Wells Union.

SCHACHT, F. F., B.A., M.B., appointed Physician to the Chelsea Hospital for Women, Fulham Road, *vice* J. Mackern, B.A., M.D.

SEQUEIRA, H. J., M.R.C.S., L.S.A., appointed Medical Officer of No. 3 District of the City of London Union.

SYKES, William, L.R.C.P.Edin., L.M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Mexborough Urban Sanitary Authority.

TURNER, Frederick, M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Buxton Urban Sanitary District.

WILSON, Thomas, M.D.Lond., B.S., M.R.C.S.Eng., elected an Honorary Gynæcologist to the Wolverhampton and Staffordshire General Hospital.

WOLVERSON, Thomas, L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the No. 2 District, Wolverhampton Union.

YOUNG, C. W. F., M.D.Lond., appointed House-Surgeon to the Victoria Hospital for Sick Children, Chelsea, *vice* W. H. C. Staveley, M.R.C.S., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Edmund Owen: The Lettsomian Lectures: On Subjects in connection with the Surgery of Infancy and Childhood. Lecture II.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Mr. Edmund Owen: On the Early Recognition and Treatment of Spinal Disease.

TUESDAY.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Mr. James Berry: Thirty-three Specimens Illustrating Diseases of the Thyroid Gland, together with a collection of Photographs and Casts. Dr. Samuel West: Cases of Suppurative Peritonitis with Pus in the Portal Vein. Dr. Delépine: *Sable Intestinal*. Mr. Lockwood: Retroperitoneal Hernia. Dr. D'Arcy Power: Ruptured Spleen; Repair of Kidney after Rupture. Mr. Solly: Myxofibroma of Pelvis. Card Specimen:—Mr. Bidwell: Polypus from Trachea of Dog.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Eczema and its Varieties.

WEDNESDAY.

HUNTERIAN SOCIETY, 8 P.M.—Clinical evening.

BRITISH GYNÆCOLOGICAL SOCIETY, Hanover Square, 8.30 P.M.—Mr. Bowreman Jessett: The Surgical Treatment of Uterine Cancer. President's Inaugural Address.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Theodore Williams: On the Diagnosis of Tubercular Infection. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock; Ophthalmoscopic Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Dr. C. E. Beevor: On the Anatomy of the Brain with reference to Localisation. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Mr. Edmund Owen: On the Later Stages of Spinal Disease.

FRIDAY.

CLINICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Mr. G. Buckston Browne: Two Rare Cases of Sacculated Vesical Calculi in the Male successfully Removed by Suprapubic Cystotomy. Mr. Twynam (of Sydney): Case of Calculus impacted in the Ureter. Mr. Lockwood: Case of Excision or Erasion of Hip-joint through Anterior Incision and permanent Closure of the Wound. Mr. Butlin: Two Cases of Glandular Tumour of the Tongue.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Theodore Williams: On the Diagnosis of Pulmonary Fibrosis.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: The Diseases known by the name of Lichen.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement. The first post on Thursday mornings is the latest by which advertisements can be received.

BIRTHS.

MANSELL.—January 13th, at 46, Wellington Square, Hastings, the wife of E. R. Mansell, of a daughter.

MARRIAGE.

MACWATT—BLYTH.—At St. Paul's Church, Umballa, on December 18th, 1889, by the Rev. M. C. Sanders, Robert Charles MacWatt, M.B., Indian Medical Service, to Blanche Mathilde, youngest daughter of the late Lieut.-General F. S. Blyth, C.B.

DEATHS.

GILROY.—At Waterbeck, Ecclefechan, on January 13th, Lizzie, beloved wife of James Gilroy, M.B., aged 29 years.

HOMFRAY.—On January 9th, at 16, Arlington Villas, Clifton, Charles Augustus Homfray, M.R.C.S., J.P. co. Somerset, aged 57 years.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Operation Days.*—M. Th. F., 1.30; Tu. W. S., 2.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C, London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

ANSWERS.

T. DE V. asks where a leper in an advanced stage could be received as a gratuitous patient.

*** So far as we can ascertain there is no asylum for lepers in this country, and the patient could only be taken into a hospital in the ordinary way, or sent to one of the Poor-law infirmaries in the same way that two lepers were sent the other day to the Whitechapel Infirmary. Our correspondent might do well to communicate with Sir Somers Vine, the Honorary Secretary of the Leprosy Fund Committee, Adam Street, Adelphi.

R. G. E. should write, stating the facts, to the Dean of the Medical Faculty of Paris (M. le Doyen de la Faculté de Médecine de Paris).

M.B.—The question is too vaguely expressed. A printed document containing particulars of the colonial medical services can be obtained on application to the Colonial Office.

☞ EXCISION OF MECKEL'S GANGLION.

F.R.C.S. asks for a description of the operation for the removal of Meckel's ganglion as recently performed in France for the cure of facial neuralgia.

*** Our correspondent will find a full description of the different operations for removal of Meckel's ganglion in the sixty-seventh volume of the *Transactions of the Royal Medical and Chirurgical Society*, which contains a page 145 a paper on this subject, with cases, by Dr. T. Chavasse, of Birmingham. Mr. Clutton has also published an article on the same subject in the fifteenth volume of the *St. Thomas's Hospital Reports*. Mr. Jacobson, in his work on *Operative Surgery*, has also given a clear description of the many operations that have been devised from time to time for attacking the ganglion, and for dividing the second division of the fifth nerve in the spheno-maxillary fissure. There are two chief methods, and each of the other procedures is simply a modification of one or other of these. One of these methods was devised and carried into practice by Carnochan, of New York, in 1856. In this the surgeon starts from the front of the face, and works backwards through the antrum, taking the nerve as a guide. In the second, which has been practised for the most part by German surgeons, and which is known as the Lossen-Braun method, the spheno-maxillary fossa and Meckel's ganglion are approached from the side of the head by dividing the zygomatic arch and turning it backwards, together with the masseter. In removal of Meckel's ganglion for the cure or relief of severe and obstinate neuralgia, Carnochan's method is that usually performed in this country and the United States. Carnochan made a V-shaped incision in the soft parts of the face, and then divided the soft parts from the apex of the V to the angle of the mouth. At the French Congress of Surgery held in Paris in October last, Dr. Paul Segond advocated the German method, and related two cases in which he had successfully performed the Lossen-Braun operation with some slight modificatsons. The following is a modified form of Carnochan's operation described by Mr. Bowlby in *Heath's Dictionary*, vol. ii, p. 73:—

"A crucial incision is made in the cheek, with its centre opposite to the infra-orbital canal. Bleeding having been checked, a portion of the anterior wall of the antrum is removed with a half-inch trephine. A stout bristle, piece of quill, or a slender probe is then passed as a guide along the infra-orbital canal, and the floor of the latter is carefully cut away from below with bone scissors, until the posterior wall of the antrum is reached. During this part of the operation, great care must be taken to avoid injuring the infra-

orbital nerve. The trephine is now applied to the posterior wall of the antrum, and the bone having been removed, the ganglion will be most easily found by carefully tracing the nerve until its connection with the ganglion is reached. The latter may then be cut away with curved blunt-pointed scissors. Hæmorrhage may be best avoided by taking great care not to lacerate with the trephine the soft structures posterior to the antrum.

Ether Inhalers in the Tropics.

D. H. B.—"Rubber" does not stand tropical heat at all well, so that any inhaler of which it forms a necessary part soon gets out of gear. We believe that ether is not easily obtained in the tropics.

The Tuson Helmet.

Surgeon.—The makers of the Tuson helmet are Messrs. Thomas Townend and Co., 17 and 18, Lime Street, London, E.C. For training of bearer companies see *Manual for Medical Staff Corps*.

Prescribing in Newspapers.

M.R.C.S., M.R.C.P. (Worcester).—We regret to see the correspondence in the *Worcester Daily Times*. We strongly hold the view that the sending of prescriptions for influenza or for other ailments to daily papers is a proceeding as mischievous in the public interest as it is generally condemned by professional opinion. If it were really useful from a public point of view there would be much more to be said in favour of it; but, in point of fact, any such proceeding is calculated to do an immense amount of harm and can do but very little good. It is perfectly well known to every thinking man that a general prescription cannot be applicable to other than a limited number of patients. The same complaint affecting patients of various ages and avocations, differing in their habitual conditions of health and constitution, never is or can be suitably treated by any one formula. In any dozen cases such varieties and complications present themselves that no sane person probably ever wrote an identical prescription for any dozen successive cases of the same affection. Our correspondent is therefore quite at liberty to quote our emphatic opinion, which is, we fully believe, that of the whole profession, that prescribing by general formulæ addressed to unskilled persons is a practice as dangerous and useless as it is undignified and misleading. When formulæ are published in medical papers they are, of course, addressed to skilled readers capable of deciding on their applicability to any given case and on the modifications suitable to each such case. These conditions do not exist when they are addressed to a technically unskilled public. It is in the latter case that we think they deserve unreserved condemnation.

NOTES, LETTERS, ETC.

The Forceps: a Death-Trap.

Dr. A. D. Keith (Aboyne, N.B.) writes: We have now, and have had for many years, midwifery forceps such as "Secale" describes, and without such abominations as wooden handles, screws, and screw-holes in which to store up for future use any amount of septic material. If "Secale" will be at the trouble to refer to my article in the Journal of May 4th, 1889, he will there find my views on the Assilini forceps, and if he once tries them, I am safe to say he will have no hesitation in pronouncing them the perfection of tools, and certainly there is no possibility of dirt accumulating on or about them.

Dr. Geo. P. Atkinson (Pontefract) writes: If your correspondent "Secale" in the Journal of January 11th will refer to the Journal of March 30th, 1889, he will find the date of a letter of mine showing the value of Easton's syrup in cases of want of power of the uterus to contract and expel its contents by natural force. Much previous sorrow and nursing had exhausted the natural power, and in an hour of much need I devised this remedy.

Dr. Archd. D. Macdonald (Liverpool) writes: "Secale's" letter, with the above sensational heading is a good example of the *post ergo propter* reasoning which all men at one time or another have resorted to. I venture to say that his words at the outset, "when exhaustion was setting in," partly explain the case. The forceps should be applied long before exhaustion begins; and "Secale" need not mind though the difficulty be such as to cause the perspiration to pour over his nose, and his back to ache for thirty-six hours afterwards, as was my experience in a recent successful case, and a few before it. What is his proof? (1) He found blood below the wood of his forceps handles, and about their screws. He will pardon me pointing out that there is thereby shown previous carelessness in cleansing his forceps, which only provided fodder for coming micro-organisms. (2) He assumes the blood, etc., referred to to have been "poisonous stuff liquefied by soakage." That the "stuff" was poisonous could only have been proved to be a truth by cultivations of it showing micro-organisms usually associated with puerperal septicæmia. It is not quite clear whether the "soakage" by which the stuff was liquefied was the solution of corrosive sublimate. If so, the disinfection was futile, assuming the death to have been due to septicæmia. Solution of iodine is, I believe, the better preventive of micro-organismal secretion in cases of child-bearing, and the instruments should be entirely submerged in such solution in warm water before use, as well as the fingers frequently dipped during the progress of the case. With such care new wood would serve "Secale" well, as (3) the old wood appears to have been a little loose, allowing the reception of the stuff.

Obstetricians will not take the wood off their forceps on account of this case, and "Secale" will require to make certain that his towel substitute is quite aseptic before using it. "Secale's" conclusion is that forceps handles should be metallic. We all believe they should at any rate be aseptic, and that, whether metallic or wooden in part, as streptococci in activity may stick about handles of whatever material they be made.

"No *living* blood-poison producing micro-organism anywhere" is the gospel of prevention, and the wish of us all: "clean" soap, water, towels, napkins, hands, instruments, bedding—and the douche, if necessary, after all.

My intention in writing has not been censorious, but only to consider the lessons of the case, in which "Secale" has my sympathy.

The Climate of Ventnor.

Dr. J. B. Martin (Ventnor, I.W.) writes: May I again request the favour of your giving insertion in the Journal of the amount of clear sunshine recorded by Mr. E. Kilburn, St. Lawrence, Undercliff, compared with that for Kew during the last year? The record of bright sunshine at the Undercliff would be far greater but for its falling into shade soon after 6 P.M. during the summer months, which is notably the case at St. Lawrence, where the observations were taken, the cliffs at the back being some of the highest along the range of the Undercliff.

	Undercliff. h. m.	Kew. h. m.
January	66 45	26 —
February	63 32	54 30
March	96 57	73 30
April	115 22	68 —
May	179 50	158 30
June	203 53	185 30
July	229 15	182 —
August	167 40	141 —
September	171 20	153 30
October	119 2	82 —
November	49 47	46 —
December	38 15	34 —
	1501 38	1204 30

The foregoing tables contain the record only of clear sunshine, and do not include days which might otherwise come under the head of sunny days, haze, mist, or the passing of a light cloud arresting the powers of the recording instrument. With regard to the Undercliff, some allowance during the summer months must also be made in the early morning, in consequence of the sun rising behind the high ground of Dunnose.

Army Surgeons and Civil Practitioners.

Army Doctor writes: "An Indignant Physician," in the Journal of January 4th, has, I fear, allowed his indignation to get the better of his judgment. He complains of "army doctors" practising in the districts in which they are located. Where then are they to practise? Do not civil practitioners receive fixed salaries and pensions for their old age in respect of union appointments? Yet they practise in the districts in which they are located, and small blame to them. Our profession is not yet, I am thankful to say, subject to the dictates of a trades union, and each member is free to increase his income to any extent by legitimate means. You, sir, warned civilian practitioners of the injury they would do us by joining the Army Medical Reserve. Does the "Indignant Physician" forget that hundreds of civilian practitioners have nevertheless joined this reserve, and does he call their action "substantial support?"

Treatment of Influenza.

Mr. Towers-Smith (London) writes: I beg to make known to the profession a simple and effectual local remedy for coryza, the forerunner of what is publicly called Russian influenza. In the very earliest stage use the following: R. potass. permang. gr. iv; glycerini (Price's) 3j; aquæ rosæ 3j; aq. ad 3j. Apply freely with good-sized camel-hair brush to the nostrils two or three times a day. The antiseptic and astringent qualities of Condy's fluid will be found useful in the early development of coryza. Some time back in the *Globe* "periodate crystals" were mentioned as a specific for influenza, and now, under the name of Weaver's crystals, is being largely sold as a nostrum. Conceiving that periodate crystals meant periodate of potash, I thought some simple Condy applied to the nostrils would answer quite as well; this I have found answer admirably, and trust members of the profession may use it as successfully.

"A Guarded Capillary Trocar."

Brigade-Surgeon F. W. L. Hodder (retired) (Jersey) writes: In the Journal of January 11th is described "a guarded capillary trocar" by Mr. Foulerton, Resident Assistant-Surgeon, Chatham (St. Bartholomew's Hospital). Four years ago, "the guarded aspirating and exploring needle," devised by me, was figured in the Journal, and its objects fully detailed in the description. The first instrument made by Messrs. Evans and Wormull was, through mistake, made as a guarded trocar; but as I had found in practice that the edge of the cannula was apt to catch and push before it tough membranes, I returned it, and subsequently had made the needle guarded from the inside. In the Journal of November 20th, 1886, will be found recorded a case of aspiration of bladder above the pubes with my needle. Up to June last year the needle was regularly advertised by the makers, Messrs. Evans and Wormull.

Peptones as Food.

Dr. G. Herschell (Finsbury) writes: Will you kindly allow me to point out a few questionable points in Dr. Sidney Martin's very able and interesting paper?[1] In the first place as regards peptones, Dr. Martin has evidently from his description not seen or investigated the most recent preparations. He is apparently unaware that there is a peptone in the market, in the form of a sterilised jelly put up in hermetically sealed bottles, which according to a recent analysis by Professor Heaton, Lecturer on Chemistry at Charing Cross Hospital, containing 41 per cent. of peptone and 22 per cent of albumose when dried.

I may say that I am experimenting clinically with this peptone upon a considerable scale, and it is producing such good results in my hands that it has already practically superseded all other methods of administering ready digested food, in the course of my own practice. The second point in which I differ from Dr. Martin, is as regards the mode of administration. He says: "If a large quantity of peptone were given it is quite rational to suppose that much of it would be unabsorbed quickly, and thus much of it would pass into the duodenum, and there be acted on by the pancreatic juice. The trypsin would split some of it up into leucin and tyrosin, and thus render it useless as nitrogenous food."

A due consideration of the facts so admirably elucidated in Dr. Martin's paper, teaches us that the proper way to administer peptones is in very small doses, often repeated, thus imitating artificially the gradual production of the peptone in the process of normal digestion. In this way of giving it,

[1] Journal, December 7th, 1889.

each dose is absorbed before the next one is taken, and very little, if any, will ever reach the duodenum to be acted on by the trypsin in the way Dr. Martin has described.

THE ADMINISTRATION OF CERTAIN DRUGS BY ELECTRICITY.

DR. ARTHUR HARRIES (Pall Mall) writes: In your report of Dr. Cagney's paper on this subject, read on November 7th at the Harveian Society, there are certain statements which are so much at variance with my experience, both in the experimental and therapeutic applications of the cataphoric method, that I feel sure it must include some unintentional errors.

From a fair number of observations with various drugs, I have arrived at the conclusion that electrodes of suitable metal padded with several layers of flannel, are best for working purposes. The positive electrode should correspond in size and shape to the area which it is desired to influence, while the negative electrode should preferably though not essentially be larger. The solution of the drug need not be used at both poles, for reasons which appear in the course of this letter, but it is absolutely necessary that the solution in question should saturate the positive electrode, not the negative as stated in the report. The reasons for this, as I stated to my class in a lecture on the physiological action of the continuous current, delivered on December 5th,[1] are:

a. The direction of mechanical transference of fluids by cataphoresis is always that of the current, namely, from positive to negative.

b. Repeated experiments with a 10 per cent. solution of hydrochlorate of cocaine have distinctly shown that the region covered by the negative electrode, so far from being anæsthetised by the drug, is actually rendered much more sensitive to pain than before the application, while the area covered by the positive electrode becomes insensitive to the passage and action of a needle used to electrolise hair.

The time mentioned in the report, ten to fifteen minutes, was not long enough to give the tests for iodide of potassium in the urine when that salt was used, neither was that period anything like long enough to produce anæsthesia of the skin when cocaine was employed. The report states that the current should be reversed every minute. May I ask why? Possible polarisation does not necessitate these reversals, for as long as a galvanometer in circuit gives evidence of sufficient current strength, that element, polarisation, is negligeable. Further, the results referred to under note *b*, show very clearly that reversals, so far from being of service, actually interfere with the conditions necessary for efficient cataphoresis.

After what I have stated, it is manifest that if a needle be used at all, it must not be in connection with the positive pole, as the report states, but with the negative pole. The chief advantage of such a method is, of course, the reduction of resistance, but there are strong reasons against its employment; chief among these are:

1. Pain. 2. Electrolytic action. 3. The ease with which less painful methods can be used. It would take up too much of your space to discuss these points further at present, but I hope shortly to record a somewhat extensive series of observations, made in conjunction with Mr. Newman Lawrence, not only experimentally but therapeutically, upon which we have for some time been engaged.

I may be permitted perhaps, with reference to the President's remarks, to say that we found a current strength of 10 to 15 milliampères applied for thirty minutes, by means of the pads described above, quite sufficient to pass iodide of potassium into the kidneys in quantity large enough to give distinct chemical tests in the urine. And, for the reasons stated, polarisation is decidedly not desirable when we wish to employ cataphoric medication, which by the way, as far as the iodide of potassium is concerned, is not by any means a new process.

I agree that cataphoric medication has a great future, but I trust sincerely that its near future may be based only on careful observations and accurately ascertained data.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. R. M. Beachcroft, London; Surgeon I.M.S.; Dr. V. Sinclair, London; Dr. Steele, Ealing; Physician and Surgeon; Dr. R. Stockman, Edinburgh; Professor H. Krause, Berlin; Dr. W. Blair, Jedburgh; Mr. C. W. S. Barrett, Hinchley; Dr. D. H. Barley, Leeds; Mr. J. Poland, London; Mr. W. C. Finch, Salisbury; Dr. E. M. Skerritt, Clifton; Lieutenant-Colonel J. N. Dean, Ardwick; Mr. F. C. Larkin, Liverpool; Dr. W. McGowan, Maghera; Our Liverpool Correspondent; Dr. Halliburton, London; Mr. F. Churchill, London; Dr. Ward Cousins, Southsea; Mr. Adams Frost, London; Mr. Towers-Smith, London; Dr. J. B. Haycraft, Edinburgh; Dr. C. R. Illingworth, Accrington; Dr. J. Rouvier, Bayreuth; Dr. W. Collier, Oxford; Mr. T. Holmes, London; Dr. W. Sykes, Mexborough; Dr. R. Saundby, Birmingham; Dr. T. H. Bickerton, Liverpool; Dr. J. Wilding, Bristol; Clarke's Wafer Co., London; Messrs. J. Wright and Co., Bristol; Dr. C. R Drysdale, London; Mr. A. Cooper, London; Dr. J. Brown, Bacup; Dr. G. J. H. Evatt, Quetta; Dr. A. D. Macdonald, Liverpool; Dr. J. Adams, Eastbourne; Mr. J. McElfatrick, Kilrea; Dr. D. Buxton, London; Dr. C. B. Taylor, Nottingham; Mr. J. A. Sharp, Derby; Surg. F. G. P. Lewis, Cork Harbour; Dr. T. C. Railton, Manchester; Mr. J. Whitehouse, Sunderland; Surgeon-Major J. C. H. Peacocke, Karachi; Mr. A. T. Nisbet, Newton Abbot; Mr. H. Smith, Northampton; Dr. G. Thin, London; Messrs. Hazell, Watson, and Viney, London; Dr. Leslie Phillips, Birmingham; Mr. N. Stevenson, London; Dr. W. J. Cummins, Cork; Dr. Myers, London; Dr. Rentoul, Liverpool; Mr. Johnson Smith, London; Sir Spencer Wells, London; Mr. G. Fischer, Jena; Surgeon E. J. E. Risk, Gravesend; Dr. H. Handford, Nottingham; The Secretary of the Epidemiological Society of London; Dr. R. Jones, Redhill; C. S. Evans, M.B., Shaftesbury; Mr. W. Jones, Liverpool; Mr. T. Blair, Leeds; Dr. H. Woods, London; Mr. R. G. Ellis, Shipley; Mr. J. Barker, Shorne; Dr. Henry Tomkins, Leicester; Common Sense; Mr. M. H. Bleakley, Birkenhead; Mr. G. Smith, London; Dr. F. Beach, Dartford; Dr. P. M. Deas, Exeter; Mrs. T. Green, Bordighera; Mr. S. Clogg, Looe; Dr. F. E. Clarke, Boyle; Dr. R. R. Davidson, Cork; Mrs. Sansom, St. Denys; Dr. A. D. Keith, Aboyne; Mr. E. E. Moore, Downpatrick; Dr. A. Robertson, Glasgow; Dr. F. W. L. Hodder, Grouville; Mr. H. A. Lawton, Poole; Mr. B. Hollander, London; Sir Thomas Longmore, C.B., Woolston; Dr. R. Fegan, Blackheath; Mr. G. C. Jack, London; Dr. Lowe, London; Mr. C. W. Harris, London; Mr. J. B. Martin, Ventnor; Mr. W. Bernard, Londonderry; Surgeon-Major R. Vacy-Ash, Brighton; R. Kirkpatrick, M.B., Edinburgh; Dr. H. Corby, Cork; Mr. J. E. Bennett, Liverpool; Our Newcastle-on-Tyne Correspondent; M.B., C.M.; Dr. A. Ashby, Reading; Dr. Williams, Dolgelly; The Secretary of the Hospitals Association, London; F.R.C.P.; Dr. G. Revington, Manchester; Dr. E. Symes Thompson, London; Mr. R. C. Harrison, Ealing; Mr. H. Quilter, London; Mr. C. J. Evans, Northampton; Dr. Alder Smith, London; Dr. T. P. Gostling, Worcester; Dr. F. C. Turner, London; J. W. Eustace, M.B., Dublin; J. Altham, M.B., Penrith; Mr. G. P. Atkinson, Pontefract; Mr. F. Marsh, Birmingham; Mr. H. Wickham, Rufford; Dr. Thorne Thorne, London; M.D. Lond. Honours; Dr. Cardew, Cheltenham; Mr. E. Cresswell Baber, Brighton; Dr. W. A. Carline, Lincoln; Our Manchester Correspondent; T. Bell, M.B., Worcester; Dr. R. T. Smith, London; Dr. W. M. Harman, Winchester; Dr. D. MacRitchie, Huntingdon; Dr. Willoughby, London; Mr. L. A. Barrow, Aston; Dr. T. W. Hime, Bradford; Mr. A. H. Benson, Dublin; Mr. A. Whyte, Brecon; Mr. G. Cadogan Masterman, Stourport; Dr. A. H. Hassall, San Remo; Dr. G. Sims Woodhead, Edinburgh; Dr. J. Davies, Maesteg; A Middlesbrough Practitioner; G. P. O.; Mr. G. A. Johnston, Ambleside; Mr. C. P. Hemmings, Bishop's Waltham; Alpha; Fleet-Surgeon M. F. Ryan, Devonport; Mr. P. J. O'Donnell, Cadoxton; Mr. R. H. Baxter, Bristol; Dr. G. W. Crowe, Worcester; A. E. Maylard, M.B., Glasgow; Mr. J. Hutchinson, London; Mr. W. H. Haley, Wakefield; Dr. Balding, Royston; A Member, Mr. G. S. Johnson, London; F. M. Pope, M.B., Leicester; Dr. H. Campbell Pope, London; Mr. Henry Smith, Northampton; Dr. T. Churton, Leeds; Dr. I. Burney Yeo, London; Dr. A. Sheen, Cardiff; Mr. C. A. Senn, London; Mr. M. C. Rimmer, London; J. Edgar, M.B., Glasgow; etc.

[1] 5th Lecture of Course on Elementary Electro-physiology and Therapeutics, at The Institute of Medical Electricity, 24A, Regent Street.

TO CORRESPONDENTS.

OUR correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the JOURNAL brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

BOOKS, ETC., RECEIVED.

Geographical Mechanism. By J. Spottiswoode Cameron, C.E. London and Manchester: John Heywood.

Practical Guide to the Demonstration of Bacteria in Animal Tissues. By Dr. H. Kuhne, Wiesbaden. Translated and edited by Vincent Dormer Harris, M.D. London: Baillière, Tindall, and Cox. 1890.

The Year Book of Treatment for 1890. London: Cassell and Co. 1890.

The Science of Metrology, or Natural Weights and Measures. By the Hon. H. Noel. London: Edward Stanford. 1889.

A German-English Dictionary of Medical Terms. By Frederick Treves, F.R.C.S.Eng., and Hugo Lang, B.A. London: J. and A. Churchill. 1890.

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REPORTS

TO THE

SCIENTIFIC GRANTS COMMITTEE

OF THE

BRITISH MEDICAL ASSOCIATION.

CONDENSED REPORT ON OSMOSIS EXPERIMENTS WITH LIVING AND DEAD MEMBRANES.

By E. WAYMOUTH REID,

Professor of Physiology at University College, Dundee; late Assistant Lecturer on Physiology to St. Mary's Hospital Medical School.

THE process of diffusion of fluids through animal membranes is well known to be influenced by the vital condition of such membranes. Dutrochet, in some of his early experiments with the cæcum of the fowl, noticed that the osmotic transference of fluid through the walls of the organ was subject to variations, according as the specimen used for observation was fresh or stale. The experiments of Matteucci and Cima with the skins and mucous membranes of various animals seemed to indicate that differences in permeability, present in the fresh condition, and dependent upon the surface of the membrane turned towards the denser of one of the two fluids used in an osmosis experiment, are absent some hours after death, and these observers concluded that: "Le phénomène de l'endosmose est lié à l'état physiologique des membranes." Claude Bernard demonstrated that curare will not diffuse through a piece of gastric mucous membrane from a frog, provided that the experiment is made immediately after the removal of the stomach from the body; when however the tissues composing this membrane are allowed to die, the resistance offered by the living structure disappears, and it becomes permeable by the drug. Experiments with the vesical mucosa by Susini, as regards diffusion of potassium ferrocyanide, and by Cazeneuve and Livon with reference to urea, have also demonstrated how much tissue vitality has to do with the process of diffusion through animal membranes. The numerous instances, moreover, of so-called "selective" absorption and filtration tend to emphasise the fact that in the passage of fluids through membranes in the living body, we have present, in addition to the physical processes of diffusion and filtration, an extremely important and variable factor, namely, the physiological condition of the membrane through which the fluid is passing.

In the present research the skin and gastric mucous membrane of the frog have been employed as membranes through which to study the process of diffusion; in the paper of which this account is an abstract, the experiments with the former membrane alone will be published.

Since variations in vascularity, and probably also in nervous action, affect the process of diffusion in the intact animal, it was considered advisable to take advantage of the persistent vitality of exsected tissue of cold-blooded animals. In order to prolong to the utmost the vitality of the exsected membrane, the fluids used for diffusion experiments should have the smallest deleterious action as regards the life of the tissues, consistent with sufficiently low osmotic equivalent to give a fairly rapid indication of the transfer of fluid through the membrane. The duration of the movement of the cilia of ciliated epithelium from the frog, when the cells were immersed in the fluid, was taken as an index of its depressant action. A 5 per cent solution of pure glucose in normal saline solution was finally adopted as the denser of the two fluids used in the osmosis experiments; in this fluid cilia remain active from four to five hours in winter; as less dense fluid when it was desired to prolong tissue life normal saline solution was employed.

Apparatus for purposes of observation and record of the process of diffusion was used. The ordinary Dutrochet osmometer with supported membrane has been used in some of the experiments, but the results claimed are based on experiments conducted with a form of instrument termed the Oil-discharging Osmometer. In this apparatus the pressure is kept constant in order to avoid error from the occurrence of filtration; the fluid introduced by osmosis into the reservoir of the osmometer displaces an equal volume of oil, which passes into a small vessel, the difference between whose terminal and initial weight indicates the amount of fluid passed through the membrane. The osmometers were always worked in pairs, equal areas of membrane being exposed on each, so that one instrument acted as a control to the results obtained with its fellow.

For recording purposes advantage was taken of the photographic method, in order to avoid friction. Two recording instruments have been used, which are termed respectively the Differential and the Double Recording Osmometer. The differential instrument records the difference between the volume of fluid passed by osmosis through a piece of normal membrane and an equal area of membrane subjected to the conditions of the experiment. This result is obtained by causing the outflow of a pair of discharging osmometers to pass into vessels placed one in each pan of a photographic recording balance. The double osmometer records the rise of the columns of fluid in the tubes of a pair of modified Dutrochet osmometers, in which the pressure at the commencement of the experiment is zero; these tubes are fixed vertically above one another against the front board of a camera provided with a slit behind which a sensitive surface is caused to pass by means of clockwork.

It was first necessary to determine the normal direction of easier osmotic transference of fluid through the living skin of the frog, since Matteucci and Cima have stated that differences of permeability exist in the fresh skin according as the inner or outer surface is made to face the denser of the two fluids used in an osmosis experiment. The fluids employed by these observers were found to be rapidly fatal to the life of ciliated epithelium, and were therefore rejected for experimental purposes. Experiments with a 5 per cent. solution of glucose in normal saline as denser fluid and normal saline as less dense fluid indicated that the direction of easier osmotic transference of fluid through the fresh and living skin is from without inwards, that is, in the opposite direction to that in which filtration takes place with greater ease as demonstrated by Cima and Von Wittich. This condition of easier transfer from without inwards may persist for three days after the death of the animal, at about 10° C., provided the exsected skin be kept in normal saline solution. Matteucci and Cima had come to the opposite conclusion, namely, that osmotic transfer of fluid takes place more easily from within outwards than from without inwards through fresh frog's skin; the occurrence of filtration from pressure in their apparatus, bagging of the membrane, and the employment of fluids tending to depress tissue life seem to have been the causes which led these observers into error. Through dead skin the direction of easier osmotic transfer is, without doubt, from within outwards, that is, in the direction of easier filtration. It was therefore necessary to attempt to determine upon what this action of the living skin is dependent. Either it is the result of a greater resistance to the passage of fluid from within outwards than from without inwards being present, or it is due to the existence of some active force dependent upon tissue life and promoting the flow of fluid from without inwards, or the condition may be the outcome of both agencies. That the fact observed is not the result of greater resistance to the flow of fluid in the direction from within outwards is shown by the fact that filtration occurs with far greater ease in the very direction in which osmotic transfer takes place with greater difficulty at zero pressure; the skin glands have a free opening on the outer surface and one would naturally expect that during life the direction of easier passage of fluid through the cells lining these glands would be that in which fluids pass in the act of secretion. Contrasting the diffusion of solutions of glucose in normal saline and in water, it was found that by *normal saline* the skin is more permeable from without inwards than in the reverse direction, while *water* passes with greater ease from the inner towards the outer surface. More normal saline also is passed from without inwards in a given time through the skin of a vigorous frog than through that of an animal enfeebled at the end of the breeding season.

Such results seemed to favour the assumption that the second of the hypotheses stated above was the nearer to the truth.

If some directing force dependent upon protoplasmic activity is present in the living skin, when the inner surface is turned towards the glucose solution and fluid passing from without inwards, such force, acting from without inwards, would aid the osmotic stream, and immersion of the skin in normal saline would tend to prolong its action; if, on the other hand, the outer surface be towards the denser of the two fluids, and the osmotic

stream, consequently, passing from within outwards, the directing force acting in the reverse direction would be in opposition, so that a diminution in the amount of fluid passed in a given time would result. In other words, the skin would be more permeable by normal saline from without inwards than from within outwards, because in the former case a force exerted by the living tissues aids, while in the latter it hinders the ordinary osmotic transfer of fluid.

When water is employed we are using a reagent destructive of tissue life, hence from without inwards the flow is less than from within outwards, for in the former case we have removed or diminished a force in favour of the osmotic stream, while in the latter the force removed or diminished was against the passage of fluid.

The permeability of the skin in the two directions at various times *post mortem* was the next subject of experiment; it was found that up to three days after death the exsected skin, kept at temperatures varying from 8° to 13° C. in normal saline solution, remained more permeable to normal saline in the direction from without inwards than from within outwards. A short period then occurred during which the permeability in the two directions was found to be equal, to be followed, however, by a third, in which the permeability from within outwards was greater than that in the reverse direction. The period *post mortem* at which the reversal of the direction of greater permeability occurs may be hastened by agents which depress vitality; thus, keeping the exsected skin in glucose solution instead of in normal saline, high temperatures, water, etc., will cause this reversal to occur often as early as thirty-six hours after removal of the skin.

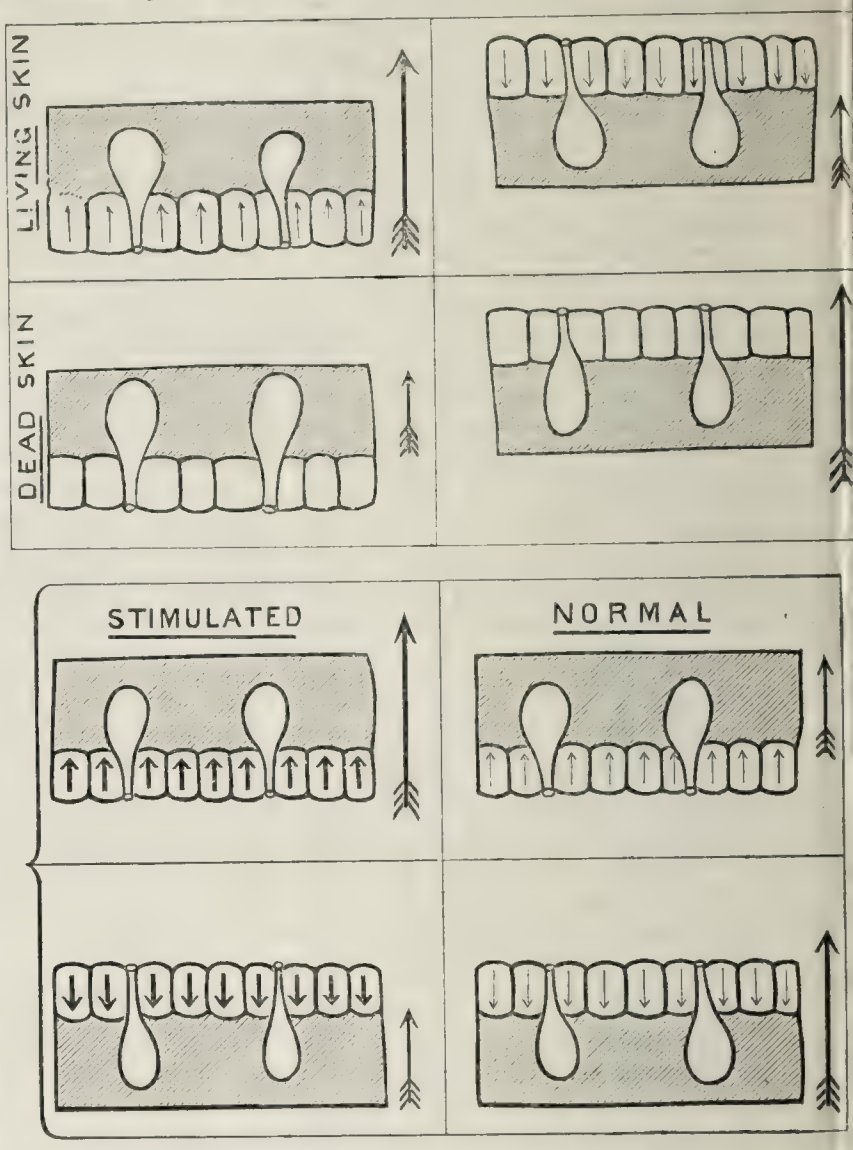
When permeability in the direction from without inwards is examined at various periods *post mortem*, it is found that a gradual diminution occurs till some twenty-four hours or so after death, but that this condition is followed by one of increase of permeability. In the reverse direction—that is, from within outwards—permeability increases from the moment of death of the animal, and with greater rapidity than from without inwards, so that it at first equals the permeability in this direction, and finally comes to be in excess.

The duration for three days of the excess of permeability in the direction from without inwards over that from within outwards cannot, then, be altogether referred to vital directive action, for the permeability from without inwards suffers a diminution during the early periods *post mortem*, a result probably due to tissue death and consequent loss of directive force, but subsequently undergoes an increase, though not with such rapidity as that from within outwards. This increase is probably due to *post-mortem* alteration of tissue, and the reason for its rate being greater from within outwards than from without inwards is probably to be found in the fact of filtration occurring more easily in the former direction, partly, no doubt, on account of the anatomical structure of the skin.

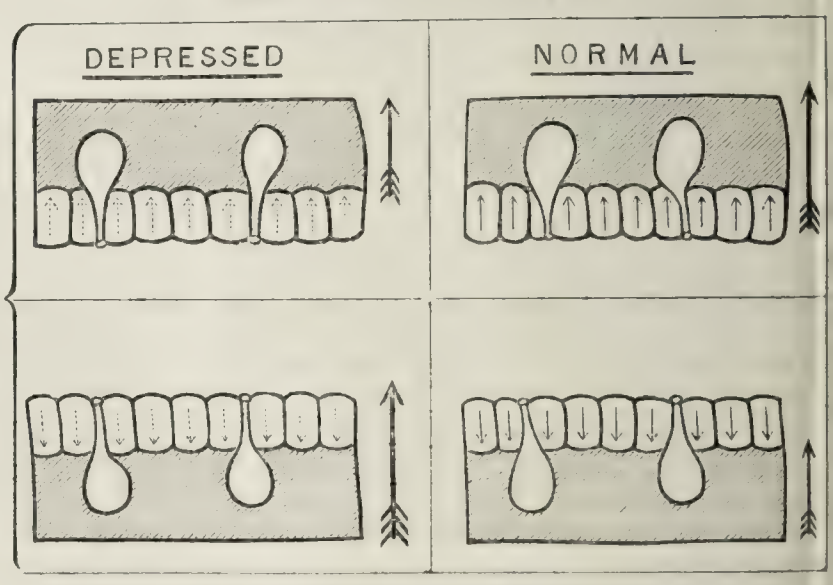
The latter series of experiments upon variations of *post-mortem* permeability were conducted at temperatures varying from 17° to 21° C., and it is possible that a change in the direction of greater permeability occurring at seventy-two hours *post mortem* at 8° to 13° C. may occur as early as twenty-four hours after death when the temperature is higher, if such change be dependent upon tissue death.

Since it is impossible to remove the epithelium of the skin of the frog without rendering it unfit for experiment, the action of depressants and stimulants upon the osmotic transfer of fluid through the living skin was next made the subject of study. With electrical stimulation one is liable to electrolytic and cataphoric error, and this method, though at first tried, was discarded. Alcohol added to the extent of 0.1 per cent. to the fluids used for experiment was, however, found to act as a stimulant. The addition of this reagent causes an increase in the amount of fluid passing from without inwards through the living skin, while in the reverse direction the result is a diminution. Upon skin kept twenty-four hours at 20° C., no differences could be detected between cases where alcohol was present and those in which it was absent. With an undoubtedly dead membrane, such as boiled egg shell membrane, no effect upon osmotic transfer is produced by addition of alcohol to the extent mentioned.

As a depressant, chloroform was used, the fluids being shaken with the drug and filtered. Chloroform causes a diminution in the transfer of normal saline in the direction from without inwards, while an increase is observed in the reverse direction. With dead skin or boiled egg shell membrane it is devoid of action. Thus, in the position of the skin in which alcohol quickens osmotic transfer of fluid, chloroform brings about a slowing, this position of the skin being that in which the inner surface faces the glucose solution, so that the normal saline solution is caused to pass from without inwards. On the other hand, while the quantity of fluid diffused through the skin in the direction from within outwards is diminished by alcohol, it is increased by chloroform.



Action of a stimulant on living skin.



Action of a depressant on living skin.

Explanatory—In all cases the ordinary osmotic stream is supposed to be taking place in direction of large arrow on right of each cut. One layer only of epithelium is represented for sake of simplicity. The small arrows in the cells represent vital absorptive force, and variations in their thickness indicate variations in that force brought about by stimulant or depressant. The larger arrows indicate the net result of ordinary osmosis, hindered or aided, as the case may be, by the vital absorptive force.

These results are considered to be strongly in favour of the hypothesis that the reason for the osmotic transfer of fluid from without inwards through the living skin of the frog being in excess of that in the reverse direction lies in the existence in the living skin of some active absorptive force dependent upon the life of the tissues. A few experiments with discharging osmometers, closed with fresh skin and filled with normal saline, the skin resting on the surface of normal saline in the outer vessel, indicated that the living skin is capable of effecting a transfer of fluid from without inwards, while in the reverse direction, from within outwards (the direction of easier filtration), no such action was observed.

So far the present research seems to warrant the following conclusions:—

1. The normal direction of easier osmotic transference of fluid through the living skin of the frog is in the direction from the outer towards the inner surface.

2. The transference of fluid through the skin in the above direction is intimately associated with the physiological condition of its tissues. Conditions or agents tending to depress vitality diminish the transfer in the normal direction, while stimulants give rise to augmentation.

3. The cause of the easier transfer of fluid from the outer towards the inner surface is probably to be found in the existence of an absorptive force dependent on protoplasmic activity, and comparable to the secretive force of a gland cell.

4. In consequence of the absorptive force acting from without inwards an alteration of the relations of the surfaces of the skin to the two fluids used in an osmosis experiment modifies the rapidity of the transfer of fluid from one to the other side of the membrane, according as the force exerted by the living tissues is with or against the osmotic stream.

CONDENSED REPORT ON THE COAGULATION OF EGG AND SERUM ALBUMEN, VITELLIN, AND SERUM GLOBULIN, BY HEAT.

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AND

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A LARGE number of proteid substances, when in solution, are coagulable by heat. As the temperature of such a fluid is raised, faint opalescence at first appears, and then, at a higher temperature, masses (flocculi) of albumen separate out, in most cases suddenly, from the fluid. It is generally held that each coagulable albumen is so affected at a definite temperature peculiar to itself; thus, egg albumen is said to become opalescent at 60° C., and to separate out in flocculi at 63° C. Unfortunately, hardly two observers agree as to the exact temperature at which opalescence and coagulation occur.

It is hardly possible to explain such differences, either on the assumption that any of the above authors had used imperfect apparatus, or, that they had been guilty of inaccurate observation. It is more probable that the conditions under which the experiments were performed were not always the same. The conditions modifying coagulation which we have studied, are: the rapidity at which the coagulation is allowed to take place, the degree of concentration of the proteid substance itself, the presence of acids and alkalies, and the presence of soluble salts.

The Rapidity at which Coagulation is allowed to take Place.—This is an acknowledged factor varying the indicated temperature of coagulation, and at least one author has alluded to it in the case of the particular albumen studied by himself. If a solution of a coagulable proteid be heated quickly, the proteid will be found to coagulate at a higher temperature than if the heat be applied more slowly. Thus we found that egg albumen diluted with one volume of water, coagulated at 64° C., when slowly heated, the temperature taking forty minutes to reach this point. Another portion of the same solution coagulated at 66° C., when heated rapidly, the experiment taking in this case only one minute. It is not difficult to explain this fact. If a drop of an albuminous fluid is mounted for microscopical examinations, and if it be heated on the stage of the microscope, the process of coagulation can be readily followed out. When opalescent, the fluid will be found to contain numbers of tiny granules. These granules increase in size, and apparently become adherent, and run together to form granular masses or flocculi. This naturally requires time, and if the fluid be heated rapidly the temperature may materially increase above the point at which, were the fluid kept for a sufficient time, coagulation would occur.

The Influence on the Coagulation Point of the Degree of Concentration of the Albumen itself.—We find, as the result of our experiments, that in all the albuminous solutions we have investigated, the coagulation point is considerably raised by diluting the solution, and a very dilute solution may not coagulate even on boiling.

The Effect of Dilution on the Coagulation Point of Egg Albumen.—The egg albumen was always alkaline in reaction, but we decided not to neutralise it. In the first experiments the opalescence of the heated solution alone was observed. (1) Undiluted egg-white became opalescent at 58° C. (2) Egg-white, diluted with one volume of water, became opalescent at 58.75° C. (3) Egg-white, diluted with two volumes of water, became opalescent at 59.75° C. (4) Egg-white, diluted with three volumes of water, became opalescent at 60.5° C. (5) Egg-white, diluted with four volumes of water, became opalescent at 61.75° C.

In the second experiment the appearance of flocculi was noted as well as the opalescence. Opalescence appeared in the undiluted egg-white at 59° C., but did not appear so soon in the diluted portions, occurring about 1° C. higher for each dilution. (1) The undiluted albumen coagulated with the formation of flocculi at 64° C. (2) With one volume of water flocculi formed at 65.5° C. (3) With two volumes of water flocculi formed at 69° C. (4) With three volumes of water a few flocculi formed at 80° C., the albumen never completely separating out. (5) Greater dilutions showed opalescence, but flocculi did not appear.

The Effect of Dilution on the Coagulation Point of Serum Albumen.—Serum albumen is said by Hoppe-Seyler to become opalescent at 60° C., and to coagulate at 72° C. to 73° C., and Schäfer places it at 70° C. Serum albumen was prepared in the following way: The serum from bullock's blood was saturated by the hand with magnesium sulphate, the precipitated globulin filtered off; by this means one obtains a solution of serum albumen in a saturated solution of magnesium sulphate. Dilution was effected by the addition of a saturated solution of magnesium sulphate.

(*a*) Undiluted serum albumen, saturated with magnesium sulphate, becomes opalescent at 77° C., and coagulates at 79° C. (*b*) The same solution, diluted with one volume of a saturated watery solution of magnesium sulphate, becomes opalescent at 79° C., and coagulates at 82° C. (*c*) When diluted with two volumes, opalescence occurs at 79° C., and coagulation at 83° C. (*d*) When diluted with three volumes, opalescence begins at 81° C., and coagulation at 84° C. (*e*) When diluted with four volumes, opalescence begins at 81.5° C., and coagulation at 84.75° C. (*f*) When diluted with five volumes, opalescence begins at 82° C., and coagulation at 85.25° C.

The numbers quoted do not give us the correct coagulation points for diluted solutions of serum albumen; they are the coagulation points of diluted solutions plus magnesium sulphate, which raises the coagulation point considerably, as we shall subsequently see.

In order to eliminate the action of magnesium sulphate, serum albumen was prepared in another way. Blood serum was diluted with two volumes of water, and a stream of carbon dioxide passed through it. The precipitate of globulin was filtered off. By this method the albumen was obtained mixed with a small quantity of globulin. (*a*) The serum albumen became opalescent at 70° C., and coagulated in flocculi at 74.25 °C. The coagulation point being raised two or three degrees above the figure given by Hoppe-Seyler on account of its dilution. (*b*) This solution of serum albumen, diluted with one volume of water, became opalescent at 74°, the opalescence becoming very dense at 78° C. No flocculi appeared.

The Effect of Dilution on the Coagulation Point of Vitellin.—In this case the vitellin prepared from six eggs was dissolved in 300 c.c. of 5 per cent. salt solution. In order to study the effect of dilution, a 5 per cent. solution of sodium chloride was added in all cases. (*a*) The vitellin solution became opalescent when heated to 80° C., and coagulated at 85° C. (*b*) When diluted with one volume of 5 per cent. solution of sodium chloride, the vitellin

became opalescent at 81° C., and coagulated at 85.5° C. (*c*) When diluted with two volumes, it became opalescent at 82° C., and coagulated at 86·5° C. (*d*) When diluted with three volumes, it became opalescent at 82° C., and coagulated at 87° C. (*e*) When diluted with four volumes, it became opalescent at 83° C., and coagulated at 88° C.

The Effect of Dilution on the Coagulation Point of Serum Globulin.—In the first experiment the globulin was precipitated from bullock's blood by magnesium sulphate. The precipitate was, after washing, dissolved in a 5 per cent. solution of magnesium sulphate. It was diluted with a 5 per cent. watery solution of magnesium sulphate. (*a*) The solution of serum globulin in a 5 per cent. solution of magnesium sulphate coagulated at 74° C. (*b*) The solution, when diluted with an equal volume of 5 per cent. watery solution of magnesium sulphate, coagulated at 75° C. (*c*) When diluted with two volumes, coagulated at 75.5° C. (*d*) When diluted with three volumes, it coagulated at 75.5° C. (*e*) When diluted with four volumes, it coagulated at 76.25° C. (*f*) When diluted with five volumes, it coagulated at 77° C. (*g*) When diluted with six volumes, it coagulated at 77° C.

The Effect of Dilution on the Coagulation Point of Hydrocele Fluid.—Hydrocele fluid contains the same proteids as are found in blood plasma, namely, fibrinogen, serum globulin, and serum albumen. The proteid substance when present varies in amount, and the coagulation point varies with it. On diluting hydrocele fluid the coagulation point is raised. (*a*) Hydrocele fluid became opalescent at 65° C.; at 72° C. it assumed the consistence of a thin jelly which thickened, and at 76° C. flocculi separated out. (*b*) Diluted with one volume of water, it became opalescent at 67° C., and coagulated at 81° C. (*c*) Diluted with two volumes of water, it became opalescent at 69° C., and coagulated at 86° C. (*d*) (*a*) Diluted with three volumes of water, it became opalescent at 73° C., and a few flocculi separated out at 90° C. Another specimen of hydrocele fluid, apparently containing less proteid matter, became opalescent at 70° C., and coagulated with the formation of flocculi at 80.5° C. A third specimen became opalescent at 70° C., flocculi forming at 78° C.

General Conclusions regarding Dilution.—In the cases of albumens and globulin existing in a natural condition within an animal fluid, such as white of egg, serum, or hydrocele fluid the point of opalescence is gradually and almost uniformly raised by successive dilutions. The coagulation point, on the other hand, rises rapidly, and the more dilute fluids often refuse to form flocculi, or even to coagulate at all. When a globulin is dissolved in an artificially prepared saline solution, both the point of opalescence and coagulating point are uniformly raised on diluting the solution. The same appears to apply to serum albumen saturated with magnesium sulphate.

The Action of Salts on the Coagulation Point of Albumen.—It is known that the addition of many neutral salts to an albuminous solution has an important action on the temperature at which it coagulates. Some salts are stated to lower and others to raise the coagulation point. It is impossible to explain at present their action, and we have accordingly commenced a somewhat systematic examination of the question. Our results are given in some detail in the *Journal of Anatomy and Physiology*, January, 1890, but we have reprinted in this abstract only one or two tentative conclusions we have drawn from them.

Tentative Conclusions regarding the Action of Salts.—(1) A salt may raise the temperature of coagulation if present in a certain percentage; at another percentage it may lower it. Thus common salt raises the coagulation points of both vitellin and serum globulin when present in moderately small quantity. Large quantities lower the coagulation point. If a proteid be present in a saturated solution of a salt—such as magnesium sulphate—and, if another salt be then added, which by itself would raise the coagulation point, the coagulation point may in this case be lowered. It appears, too, that salts which are most active in raising the coagulation point are most active in lowering it, when added to a solution already saturated by another salt.

Statement as to whether it is possible to speak of the Specific Coagulation Point of an Albumen.—From what has been already said, it is obvious that it is a difficult and perhaps a valueless task to attempt to determine what may be termed the "specific coagulation point" of an albumen. The coagulation point varies with the rapidity of heating, with the concentration of the fluid, with its reaction, and with the saline substances present. All that one can say is that, under such and such conditions, an albumen coagulates at such a temperature. The coagulation points quoted by previous writers cannot be taken in any sense as absolute values for the albumen named, modifying conditions having, as a rule, been totally disregarded. The same may be said of our own results, for the percentage strengths of the albuminous solutions used by us were in no case determined with any care.

On so-called Fractional Coagulation.—So far we have been dealing with albumen in its natural condition, or mixed and possibly combined with neutral salts which we had added. The solutions were alkaline, and, as we found, when dealing with the natural albuminous solution, difficult to coagulate, especially if in a dilute condition. Let us now consider the coagulation point of an albuminous solution to which an acid has been added. On adding an acid to an albumen solution, the coagulation is rendered, as everyone knows, more easy, and it occurs at a lower temperature. The very dilute solutions, uncoagulable in the alkaline solution, are at once coagulated after the addition of a few drops of weak acid. No one has brought this out more clearly than Dr. Halliburton in a most suggestive paper, which will presently be quoted in relationship to fractional coagulation. He showed that the coagulation point of serum albumen varies with the amount of acid present, the greater the quantity added the lower the coagulation point, until finally coagulation could be produced at the temperature of the laboratory. If then the coagulating point depended on the two factors, heat and the amount of acidity, it seemed to him a natural deduction that, on keeping one of these, the acidity, a constant quantity, it might be possible to separate by fractional coagulation two or more albumens mixed together, and having different coagulation points. He investigated serum albumen, and found that if it be neutralised by the addition of some drops of a 2 per cent. solution of acetic acid, and if, further, it be rendered slightly acid by the addition of one drop of the dilute acetic acid to seventy-five drops of the albuminous solution, then it coagulates at 70° to 71° C., and if this coagulum be filtered off, and the solution again brought to the same degree of acidity, a coagulum occurs the second time at 77° to 78° C. If this coagulum be filtered off and the filtrate acidified as before, a third coagulum may be produced at 82° C. Dr. Halliburton considers that the serum albumen, originally regarded as one proteid, in reality consists of three.

MM. Corin and Berard have followed this process of fractional coagulation, applying it to egg-white. This substance, commonly held to consist of albumen and globulin, they believe to consist of three albumens and two globulins. They neutralise some egg white, slightly acidify it, and raise its temperature until opalescence appears; then they keep the temperature constant for a considerable time—an hour or even more. They filter off the coagula, reacidify to the same degree, raise the temperature until opalescence occurs, and then after more prolonged heating flocculi again appear. In this way they have succeeded, as already stated, in fractionating five proteids. Without doubting that it may be possible to fractionate some proteids, nevertheless the results of our own work, and many of the facts, frankly stated by Dr. Halliburton, seemed to throw some doubt upon the correctness of his deductions in the case of serum albumen, and this applied with equal force to the experiments conducted by MM. Corin and Berard on egg albumen.

Our previous experiments have shown that, in alkaline solutions, the more dilute a solution is, the higher is its coagulation point, and we have found that we could never completely precipitate any albumen at the temperature at which flocculi first appeared. The reason of this is very simple; as soon as a solution begins to coagulate, the remnant, still soluble, is practically a more dilute solution of the same proteid, and must be heated two or three degrees more before it will begin to precipitate. In this case, also the coagulating proteid will leave another soluble remnant coagulable at a still higher temperature, and so on. In fact, we may venture to make this general statement—*In order to coagulate completely any proteid it must be heated to that temperature at which its most dilute solutions are coagulable.* We have not made so systematic an investigation upon the effect, on the coagulating point, of diluting *acid* solutions of albumen, but we have assured ourselves that the more dilute solutions coagulate at a higher temperature. One out of several experiments may be quoted the following:—Some egg albumen was diluted with two volumes of water and carefully neutralised. It was then brought to the same degree of acidity as is recommended for fractional coagulation, 1 cubic centimètre of a 2 per cent. solution of acetic acid being added to 75 cubic centimètres of the albumen. This solution was found to coagulate at 53° C. When diluted with one

volume of water, acidulated to the same degree, it coagulated at 54° C. With three volumes of water, it coagulated at 58° C. With seven volumes of water, it coagulated at 62° C. With fifteen volumes of water, it coagulated at 68° C. It is seen, therefore, that dilution has the effect of raising the coagulation point a great many degrees, the more dilute albumen requiring a much higher temperature for its separation. This may be shown in the most striking manner by heating some of the acidulated water to between 60° and 70° C.; and dropping in some acidulated egg albumen; it dissolves. Now divide the solution into two portions, A and B, and heat A to 75° C., and keep B at the original temperature. A will coagulate, showing that although in too dilute a solution to coagulate below 70° C., it could nevertheless coagulate, provided its temperature be raised. B will remain clear, but, if more albumen be dropped into it, a point will be reached, at which it will cease to dissolve, and then it will separate out in flocculi. Here then, without going any further, one has come across an observation which, if it does not explain all the facts described under the head of fractional coagulation, must at any rate account for some of them.

Both Dr. Halliburton and MM. Corin and Berard found that after coagulation the filtrate, which they separated from the clot, was less acid than it was before coagulation had occurred, the latter observers finding that, as a rule, it was actually alkaline. Here, again, is a factor which we cannot afford to lose sight of. If the coagulation point is lowered by acidity, as all persons are agreed, one would expect that, while coagulation is proceeding, and while *pari passu* the acidity is decreasing, that the decrease of acidity would at last bring the coagulation—at that temperature—to a standstill. In this case one would expect, that on re-acidifying to the same degree, another crop of coagula might fall at the same temperature as did the first crop. Dr. Halliburton does not mention any such coagulation, although undoubtedly it occurs, and we have found it on repeating his observations, but MM. Corin and Berard evidently find that one is produced, and in consequence they heat the albumen for an hour or more before filtering off the coagulum. After this time, they found that the albumen never gave a second coagulation at the same temperature. We cannot but conclude from this that their experiments clearly indicate that the albuminous solutions with which they worked must have been very materially changed by the temperature, nor is it at all improbable that very material changes may occur in a solution of egg albumen kept in an acid solution at a high temperature for over an hour; in one of their quoted experiments fractionation lasted over six hours.

We may, we think, make this statement, and one fully borne out by our own experiments, that during coagulation in an acid medium the coagulation point is being continually raised, both in virtue of the albumen becoming more dilute and in virtue of its becoming less acid; these factors bring the coagulation to a standstill, but, after filtering off the coagulum, if the fluid be brought back to its original degree of acidity, and heated to the same temperature, coagula will again form, unless the albumen has undergone some physico-chemical change. It follows, too, that it is impossible to separate two albumens from one another by heat coagulation, unless, during the process of coagulation, the degree of acidity is kept uniform by the addition of small quantities of fresh acid, and unless the coagulation point of *the most dilute solution* of one of the albumens present be below the coagulation point of the other albumen. We became more convinced of this, when repeating in detail the experiments on fractional coagulation. After keeping an albuminous solution, either egg or serum albumen, at the temperature at which flocculi appear, for five or six minutes, and then filtering off the flocculi, we found that fresh flocculi appeared, when the filtrate had been reacidified, and again raised to the same temperature. Two or three crops might be thus removed in the case of egg white. Keeping up the same degree of acidity, and raising the temperature, we were able to get other crops of albumen. We were struck, however, by the fact that, while dealing with the more dilute albumen, the coagulation took place with difficulty, and it was longer delayed. This was particularly the case with egg albumen. If the fluid filtrate from the coagulated flocculi be divided into two parts, and one portion raised gradually in temperature, opalescence followed by the formation of flocculi will appear. If the other portion be raised in temperature and kept for, say, three minutes at a temperature one or two degrees below the temperature at which opalescence appeared in the first portion, it will become opalescent and perhaps form flocculi. We found, in fact, that it was impossible to get the subsequent coagulation at definite points, as indicated by the previous observers, for the coagulation point depended upon the way in which the operations had been carried out. This was especially the case, when dealing with egg albumen, and we have little doubt that MM. Corin and Berard, working with careful method, invariably raised their temperatures to points which perhaps their first experiments had suggested. They, no doubt, produced coagula, but, had they tried the experiment, they would have obtained them equally well at a lower temperature provided they had raised the temperature more slowly. It is not difficult to fractionate egg albumen ten or twelve times.

Another point that struck us was the smaller and smaller amount of coagulation produced, as the temperature of the solution was raised and successive crops produced. This was noticed by Dr. Halliburton in the case of serum albumen. It is certainly the case with egg albumen. This, of course, in itself renders it highly probable that we are dealing in both cases only with one albumen, the more dilute solutions of which are alone coagulated at the higher temperatures. Even supposing that the γ serum albumen, of Dr. Halliburton, of which he "in some case only found a trace," and which coagulates at 82° C., is different from α and β serum albumen, found in greater quantity, and coagulating at lower temperatures, yet fractional coagulation could not give us the means of proving this. One cannot compare the coagulating points of a dilute with a strong solution of two albumens, and presuming that γ serum albumen is a dilute solution of an albumen differing from α and β, yet its coagulation point would be lower than 82° C. in a solution of corresponding strength. It is, of course, possible that serum albumen, may consist of more than one albumen, although it is probable, from what we have brought forward, that all the albuminous matter present coagulates at the same degree of concentration—at or about the same temperature. Other methods may enable the physiologist to separate these, if they exist, from one another, and no methods have in the past yielded such valuable results as those in which separation has been obtained by the addition of neutral salts. Dr. Halliburton has by this means tried to separate the α, β, and γ serum albumens from one another, and frankly states that he has failed to do so.

REPORT ON CERTAIN SUBSTANCES FOUND IN THE URINE, WHICH REDUCE THE OXIDE OF COPPER UPON BOILING IN THE PRESENCE OF AN ALKALI.

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As the immediate result of the ingestion of certain chemical compounds, substances make their appearance in the urine which have long been known to possess the power of reducing the oxides of some metals when in solution, in the presence of an alkali, if that mixture be raised to the boiling point; but considerable confusion has resulted from the difficulty of finding a short and concise process whereby many of these substances may be readily recognised as not belonging to that comprehensive and at present ill-defined group of conditions generally styled as glycosuria. The importance of this group has been greatly enhanced of late years however, by the attempts made to define and differentiate the individual members of which it consists, and to ascribe to each their relative significance, and these efforts have been crowned in some measure by a considerable degree of success.

Musculus and Mering[1] were the first to point out, in 1875, that the substance which makes its appearance in the urine after the administration of chloral hydrate and croton chloral, is not glucose, as was formerly supposed to be the case. In 1878 Jaffé,[2] after studying this substance, gave to it the name of urochloral acid; he also found that it was present after giving orthonitrotoluol by the mouth, and he recognised it as uronitrotoluol.

[1] Musculus and Mering, *Berichte d. deut. chem. Gesell.*, vol. viii., p. 622, 1875.
[2] Jaffé, *Zeitschrift. f. physiol. Chem.*, vol. ii., p. 47, 1878.

Wiedemann[3] found the same substance present in the urine of dogs which had been previously fed upon camphor, and from such a urine Schmiedeberg and Meyer[4] were the first to obtain this substance pure, and analyse it accurately. They found it to be glycuronic acid, and ascertained its chemical constitution to be defined by the formula $C_6H_{10}O_7$. They were able to clearly show its identity with that substance, which had previously been described as urochloral acid and uronitrotoluol, both of which latter substances might more accurately be designated as uroglycuronic acid.

Since that time others have described the appearance of glycuronic acid in the urine after feeding with different drugs, namely, brombenzol,[5] nitro-benzol,[6] phenetol and some of the derivatives of quinine,[7] as well as phenol, benzol and indol.[8] Its presence has also been shown by Mering[9] to follow the administration of morphine and chloroform.

Chemical Properties.—This chemical compound when pure is not crystalline, but appears in white amorphous granules; but in its anhydride condition—$C_6H_8O_6$—it forms fine colourless acicular crystals. It is very readily soluble in water, not so readily in absolute alcohol, and scarcely at all in ether.

Solutions of this acid are very readily decomposed, although they are much more stable in an acid than in an alkaline medium, but at present little is known of its combinations. In the urine it appears in combination with urea, but it is difficult to say whether uroglycuronic acid, or glycuronate of urea best represent its relation to urea; probably, however, the former. It forms more stable compounds in combination with barium or lead, but in each case requires a considerable excess of the base to form the corresponding salt, which in the case of barium is the more stable of the two. It holds the oxide of copper in solution in the presence of an alkali, and reduces it, throwing down the suboxide upon boiling, either in Trommer's or Fehling's tests; and a similar reaction occurs with the oxides of bismuth, mercury, and silver. It readily, when pure, rotates the ray of polarised light to the right 35°, or to half the extent of the deflection by glucose; but many of its combinations rotate the ray to the left. It does not ferment in the presence of yeast (torula cerevisiæ), and thus markedly differs from glucose in this respect.

Preparation.—The best method to obtain this acid from the urine is that recommended by Schmiedeberg and Mayer. A large quantity of urine is evaporated down to a syrup, and then digested with large quantities of damp barium hydrate, in the presence of gentle heat over a water bath. It is then extracted by means of absolute alcohol, which leaves behind the acid, with many other urinary constituents, undissolved.

This residue is then mixed with a large quantity of water and filtered, and, after again adding more baryta to the filtrate, it is again filtered and evaporated down over a water bath. From the solution thus obtained an amorphous baric compound is thrown down of a spongy porous character. To obtain the acid pure from this porous substance it must be washed upon a filter with water and then decomposed by means of sulphuric acid, when it is again redissolved in water and again evaporated down, and dried in vacuo over sulphuric acid, when the crystals of the anhydride form will be obtained.

If the washing of the filter be further treated with more baryta a further quantity of the acid may be obtained, for the compound with barium, though stable in itself, requires an excess of baryta for its formation.

I have found that the process is greatly facilitated by the clarification of the urine by means of animal charcoal, as a preliminary stage before evaporation be attempted. This method, though sufficiently satisfactory for the extraction and preparation of the acid, is not sufficiently accurate in its results to allow of any really valuable quantitative results being gained, but, nevertheless, is by far the best. It is necessary, however, to have large quantities of urine at disposal, in order to conduct the process with any degree of security and satisfaction.

For the definite recognition of glycuronic acid the only reliable means possessed at present is to obtain it pure, but, as already remarked, the process is long and tedious.

The polariscope, unless used with pure solutions of this acid or solutions of known combination, is very apt to mislead, since some of its combinations rotate the ray of light to the left and others to the right; and if glucose be also present very erroneous conclusions may be arrived at. It must also be clearly stated that though the urine be clarified before using the polariscope with either lead or barium solutions, those commonly employed are not of sufficient strength to remove the glycuronic acid if present even in comparatively small quantity. It is therefore necessary to possess a pure solution before this test can with certainty be applied.

There is no doubt, however, that with comparatively small quantities of urine the differentiation of this substance from that glucose, which possesses similar chemical reagents, may be readily arrived at by applying the test of fermentation—a test of great delicacy if conducted properly and with due care, and one capable of demonstrating the presence of smaller quantities of glucose than Fehling's solution of Trommer's test can detect. The fermentation by means of yeast may be conducted over mercury with comparative ease. A long glass tube is filled with mercury, and inverted over a well containing mercury, and the column is sustained by the atmospheric pressure in the well, which should be so constructed as readily to allow of the introduction, by means of a pipette, of the urine, which is thus collected over the mercury. The best yeast to use is the dry German yeast, which should be rubbed down with a little distilled water, and a few drops mingled with the urine before it is introduced into the tube; in that manner all traces of air can readily be excluded.

The whole apparatus should stand in a warm room for forty-eight hours, to allow of the possible disengagement of any gas from the urine, and then the subsequent introduction of a strong solution of caustic potash will readily indicate how much of the gas present is carbonic acid. This latter verification must at all times be conducted, as also must control observations, with the yeast solution and water on the one hand, and on the other with pure glucose solution.

Experiments.—I have now investigated a large number of specimens of urine obtained under different conditions, in order to trace as far as possible the presence of glycuronic acid, and to differentiate it from glucose. The fermentation test was always employed and whenever the quantities of urine obtained were large enough the chemical process was undertaken in its entirety for obtaining the acid pure. I now chronicle my results.

Morphine.—The urine secreted after the exhibition of this drug, either by the mouth or subcutaneously, contained a substance which, from its power to reduce Fehling's solution, has been generally regarded as a transient condition of glycosuria, but, after a close investigation, I find it to be due not to the presence of glucose, but of glycuronic acid.

Chloroform.—I have also satisfied myself that the reducing power of the urine, after the administration of this anæsthetic, is dependent entirely upon this acid, and not glucose. In this manner I have been able to confirm independently the observations of Mayer upon morphine and chloroform, already referred to, and of which at that time I was in entire ignorance. I can, however, add that with chloroform I have found some exceptional instances, in which no reducing substance appeared in the urine, but these exceptions over a large number of observations were undoubtedly rare.

Curare.—The glycosuria, so-called, of curare poisoning has long been known, having been first described by Claude Bernard[10] in 1835, but I have not succeeded, after an extended series of observations, in obtaining any fermentation by yeast of these urines, which appeared otherwise to be so markedly glycosuric. In these instances, however, it is most difficult to obtain large enough quantities of urine to complete the whole chemical process, since the curare itself interferes so decidedly with the secretion of the kidney, and, consequently, I have not been able to separate out the acid in this group of observations.[11]

Ether.—As the result of the administration of ether, I have never found the appearance of this acid nor any reducing substance present in the urine, and it is therefore a useful anæsthetic from observations upon the urinary secretion.

Analysis of Urine Secreted by Right and Left Kidneys: Renal Nerves Intact.—With a view of further investigating the sig-

[3] Wiedemann, *Arch. f. exp., Path.*, vol. vi., p. 230, 1877.
[4] Schmiedeberg and Meyer, *Zeitsch. f. phys. Chemie*, vol. iii, p. 422, 1879.
[5] Baumann and Preusse, *Zeitsch. f. phys. Chemie*, vol. iii, p. 156, 1879, and vol. v, p. 309, 1881; also Jaffé, *Ber. d. deut. chem. Gesell*, vol. xii, p. 306.
[6] Mering, *Cent. f. med. Wissen.*, 1875, No. 75.
[7] Kossel, *Zeitsch. f. phys. Chemie*, vol. iv, p. 296, 1880.
[8] Baumann, *Arch. f. Physiol.*, vol. xiii, p. 299, 1876; also *Zeitsch. f. phys. Chemie*, vol. i, p. 68, 1877.
[9] Mering and Zweifel, *Berl. klin. Woch.*, 1884, p. 24; also *Zeitsch. f. phys. Chemie*, vol. viii, p. 70.
[10] Claude Bernard, *Leçons de Physiol.*, vol. i, p. 339, 1835.
[11] Echard, *Beitrage z. Anat.*, vol. vi, p. 1, 1872.

nificance of this substance, I placed cannulæ in the ureters, and collected for analysis the urine so secreted by the two kidneys separately. I found that, under ordinary conditions, the chemical constituents of the different secretions differed only to such an extent as would be readily accounted for by the difference in the size of the two organs; and I may here remark that the value of the observations of Max Herrmann and Umstimowitsch have suffered very materially from the normal difference between the two organs in weight having been disregarded. I found, as the result of these experiments, that if the reducing substance was present in the urine of one side, it was invariably found also in that of the opposite side.

Section of the Renal Nerves.—Again, in another series of experiments, I collected and analysed the right and left secretions separately after division of the renal nerves upon the left side. These observations, then, differed from those of the preceding group only by the fact that one organ had been completely cut off from all nervous influences from any source without the organ itself. The results which were thus gained are most interesting, and an illustrative series of those experiments is tabulated below.

No. of Observation.	Duration of observation.	Anæsthetic.	Urine. Right.	Urine. Left.	Remarks.
	Minutes.				
I 1 ...	60	Ether	*	*	The renal nerves were divided upon the left side in each instance.
I 2 ...	75	,,	*	*	
II 1 ...	160	Ether and chloral	†	†	
III 1 ...	360	Ether and morphine	†	†	
IV 1 ...	120	,, ,,	†	†	
IV 2 ...	120	,, ,,	†	†	
IV 3 ...	120	,, ,,	†	†	
V 1 ...	120	Chloroform	†	†	
VI 1 ...	60	Ether and chloroform	Lost	*	
VI 2 ...	90	,, ,,	*	†	
VI 3 ...	120	,, ,,	*	*	
VII 1 ...	30	,, ,,	*	† slight	
VII 2 ...	120	,, ,,	*	† marked	
VII 3 ...	180	,, ,,	*	† slight	

* The absence of reducing substance.
† The presence ,, ,,

Ether—Where this was the only anæsthetic employed I never succeeded in demonstrating the presence of this reducing substance in the urine (Experiment I), but when used in conjunction with chloral hydrate (Experiment II) or morphine (Experiments III and IV), it was present in such abundance as to be very readily recognised. This result was produced upon both sides, and although I am not able to state that I could recognise any very marked increase in amount excreted upon the left side, no quantitative analysis having been made, it certainly was present in larger quantity than upon the right. These results may be explained as corresponding to the results gained previously and already noted.

Chloroform.—As was to be expected, when this anæsthetic was exhibited (Experiment V) the reducing substance manifested itself in abundance upon both the injured and also the uninjured sides.

Ether and Chloroform.—In the instance in which these two anæsthetics were combined, a very interesting result was gained (Experiments VI and VII). If the chloroform was given to any pronounced extent, both sides showed the reducing substance, but in those instances where the chloroform was only given at the earliest stages, to allow of the performance of the dissection with greater ease, and its administration stopped before the commencement of the collection of the urine for analysis, a different condition appeared to be induced. Under these circumstances no reducing substance was present in the urine secreted by the normal and uninjured kidney; but in the urine which flowed from the other kidney, the nerves of which had been divided, this reducing substance was readily demonstrated.

In the case of Experiment VI, it was found on the left side but only in small quantity, and limited apparently to only a short period of time (VI L 2), for none could be detected, not even a trace in the first or last stage of the observation. No trace could at any time be obtained on the right side at any stage.

In Experiment VII, however, a further point was illustrated. This substance appeared distinctly throughout the whole period of observation in the left secretion, that is the side upon which section had been performed; but much more markedly during the second period (VII L 2), during which it seemed to reach its maximum, and to be present in quantity, and then again to fall off. There was no trace detected on the right side.

In these instances, therefore, it was found that this reducing substance appeared upon the left side only—upon the side where complete division of the renal nerves had been effected; and also that the greatest output, in the former instance (VI), the only output, was found to correspond with the period of the greatest activity of the renal epithelium, if the eliminative activity may be judged by the respective quantities of normal urinary constituents eliminated.

I have shown elsewhere that the renal secretion, after section of the renal nerves, is a true paralytic secretion, and I find that the greatest abundance—never very large, though distinctly marked—of this substance occurs during the period of the maximal display of energy which is reached just prior to the outset of the stage of exhaustion.

After a very careful and exhaustive chemical analysis of these different specimens I have convinced myself that this substance which is present is not glucose, and that this condition is not, therefore, a form of glycosuria properly so-called, and I have little hesitation in affirming that it is glycuronic acid. It is, however, no easy task to seek out the cause or significance of these results. The animals were fed with a liberal meat diet on the evening prior to the observation, and as the urine showed no tendency to reduce solutions of copper before the experiment it is necessary to conclude that this reducing substance is occasioned by the disturbance of the economy resulting from the experiment itself. Since the administration of chloroform is now recognised as able to establish such a condition in healthy animals by mere inhalation, and as I have never succeeded in producing these conditions without having employed this anæsthetic, I am disposed to attribute the appearance of this reducing substance to the effect of the chloroform inhaled, although it does not at present seem possible to appreciate in what particular manner or by what altered process it is brought about.

The explanation, however, of the appearance of these results upon one side only does not seem to be very simple, but two theories may be offered as capable of accounting for these results. First, this reducing substance may be circulating in the blood as the result of the conditions under which the animal experimented upon has been placed, and that it may be eliminated by the one kidney alone, since the action of the cells of that organ are completely cut off from the central nerves influences which hold the other organ in check; or, secondly, this substance may be formed in the cells of the one organ alone owing to the fact there is a greater activity produced in them by section of the nerves, and this is accompanied by a much greater supply of blood, which is synonymous with an increased supply of pabulum from which the substance is formed.

It has been already clearly shown that a condition may be established in the which both kidneys will produce a similar result, and it is therefore difficult to imagine that this material is already in the blood and is being eliminated upon one side only; but it is not unreasonable to consider that if only a small supply of material be forthcoming, the organ which has the greater supply sent to it, accompanied by an increased activity in the cells themselves, will produce the results described.

I lean to the latter view, since the quantity in which this reducing substance appears in the left secretion is sufficiently abundant to lead one to expect its appearance in the right secretion if the substance were circulating in that form in the blood itself. I am therefore prepared to advance the view based upon these observations, that there is a distinct chemical process presided over by the renal epithelium, which has as its result the formation of glycuronic acid, but the precise nature of that process and upon the presence of what chemical process it is dependent I am at present unable to appreciate.

These observations were made in connection with the lower animals, and I was thus encouraged to further pursue my observations in regard to man. After a prolonged search over several hundred cases of men, both in disease and health, I have succeeded in finding one instance—this is the first and only recorded, I believe—in which this reducing substance has been shown to be excreted in large quantity.

This individual is a man about 24 years of age, who apparently enjoys perfect health and a complete sense of well-being, and does not suffer from any of those symptoms which but too

readily indicate the presence of glycosuria in youth. There is no wasting, no abnormal appetite, or thirst and dryness of the mucous or cutaneous surfaces. There are also no symptoms to point to the presence of cirrhosis of the kidney, and I specially desire to note this, since the presence of glycosuria in some cases of renal cirrhosis has long been recognised. He is, however, passing daily very large quantities of glycuronic acid in a urine which is not increased in quantity or density.

It must not, however, be concluded from these results that the presence of this substance is so extremely rare, for my observations were made upon individuals who were believed to be free from diabetes mellitus, and, since it causes no apparently inconvenient symptoms, its presence may be more frequent than one might be led to suppose. Further, by having shunned all cases of acknowledged diabetes, I may have unconsciously rejected instances of glycuronic acid in the urine as being supposed to be glucose. It is not unlikely, also, that some cases of true glycosuria may have been present also in the urine glycuronic acid, in which case they will mask each other.

The difficulties to be met with and overcome in order to demonstrate the presence of both substances in the same urine are extremely great; and I may also add here that the usual solutions of lead or baryta which are recommended to be added to urine for the purposes of classification before using the polariscope to estimate the quantity of sugar present are not sufficient to eliminate all chances of fallacy in the event of glycuronic acid being present as well as glucose.

LECTURES
ON THE
SURGICAL ASPECT OF HEPATIC ABSCESS.

Delivered at the Hospital for Consumption and Diseases of the Chest, Brompton.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
Surgeon to the Hospital and to University College Hospital.

LECTURE III.

CONTINUING our account of the directions in which an abscess of the liver may rupture, we come next to the following:

4. Hepatic abscess opening into the pelvis of the right kidney is merely mentioned as a pathological curiosity. The fact is recorded by Annesley.[1]

5. For a hepatic abscess to burst into the lung it is necessary that it shall have perforated the diaphragm. This probably, though not of necessity, indicates the presence of peritoneal adhesions, and certainly of pleural adhesions. Such abscesses are situated in the right lobe of the liver, at its upper, and I believe most often at its posterior, part, I think it is most usual for an abscess which is about to, or has already, burst into the lung, to cause an upward increase of dulness, but show little or no appearance of enlargement downwards. The abscess most commonly, if not invariably, perforates the base of the lung and induces, and is often preceded by the signs of, pneumonia in this situation, but not of great extent. If the abscess do not become cured, the prolonged expectoration of its contents will almost certainly give rise to chronic fibrosis and dilatation of bronchi, or extensive disorganisation of the lung. Not infrequently, however, a cure may be thus effected but, as far as I can learn, this is not the most common termination. The rupture probably takes place quite suddenly, and does not give rise to any special premonitory symptoms. The expectoration is at first perhaps pure blood, then either light-coloured or chocolate-coloured pus. Afterwards, according to my experience, it may assume very different characters, either being constantly pus mixed with dark blood, almost entirely bright blood mixed with a little pus, or muco-pus tinged with bile. It is said occasionally to consist almost entirely of bile. The amount of blood daily secreted by a liver abscess is sometimes a source of danger to the patient, and it is remarkable to observe how rapidly this diminishes when an external opening is made; no doubt because of the rest given to the abscess by the subsidence of the cough.

[1] *Sketches of the Most Prevalent Diseases of India.* By James Annesley. Second Edition. London, 1831; p. 485.

An abscess which is being expectorated, but which does not give any local signs of its whereabouts, offers one of the most puzzling problems to the surgeon, for he has to weigh the chances of spontaneous cure against, first, the danger to the lung and to life, if nothing be done; and, secondly, the risks of exploring the liver for an altogether unlocalisable collection of pus. I will give a case in point.

CASE XVII.—Lieut. S., aged 30, was a patient of Sir J. Fayrer, who asked me to see him in August, 1889. He went to India in 1881, and whilst there and in Burmah had dysentery and numerous attacks of fever.

On April 8th, 1888, he had the first symptoms of hepatic abscess. On May 12th, slight hæmoptysis, and on May 21st he expectorated matter. He believes that at this time there was dulness front and back to the level of the armpits, with absence of breath sounds. By June 24th the back had cleared up, and breath sounds began to appear in front. By January 30th he was much collapsed, and was bringing up 30 ounces of blood and pus a day. From that time he began to mend, and he got about and spent the winter in the South of France. While there he was pretty regularly without expectoration for a fortnight at a time, and in perfect health, each period being followed by a relapse. By April he was in bed again, but again he picked up and got about. By the end of June the expectoration had stopped, but in July it recommenced.

When I saw him he was in very fair health, but was constantly expectorating from 6 to 8 ounces a day of bright red blood mixed with some mucus and a little pus, and was of course always

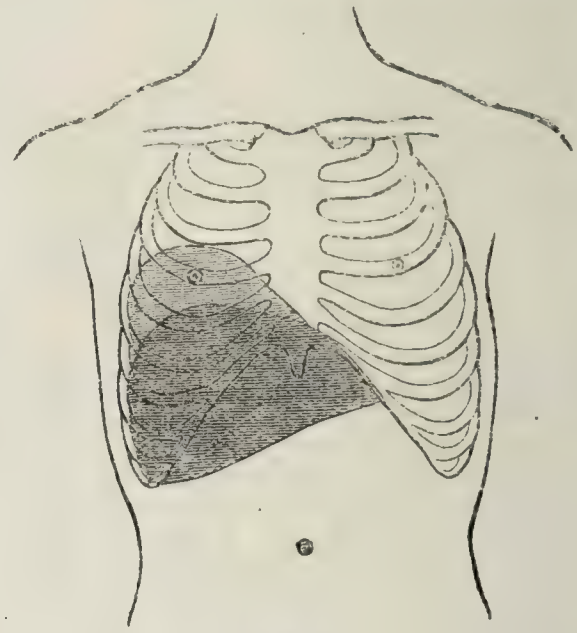


Fig. 2.

coughing. There was dulness in front almost to the nipple, and no breath sound below this line. Vocal fremitus and vocal resonance were abolished below a curved line (see Fig. 2) reaching a little above the nipple, and behind there was dulness and no breath sound below the tenth rib, though vocal resonance could be traced a little lower. The breathing whenever heard was quite normal. The heart's apex was not displaced, and there was no increase of liver dulness downwards, nor was there anything in the way of pain or tenderness by which to localise the abscess.

Under these circumstances, and especially as he had been several times so nearly cured, we advised him to try almost complete rest for the present. I did not see him again, and was much disappointed to see a notice of his death a few days before the delivery of this lecture. His father writes to me that he gradually became worse after I saw him, expectorating at last as much as 37 ounces a day. An attempt was made in Birmingham to reach the abscess, and it appears that the needle passed right through it into the liver, but none was evacuated. At the *post-mortem* examination it was found that the whole of the right lung was hollowed out into an enormous abscess, containing three or four pints of pus, the lower part of which was almost cheesy. There was a layer, one inch in thickness, of vesicular lung at the back. The bronchus opened directly into it, about one inch below its first division. There was a small abscess in the upper part of the right lobe of the liver. The heart was altogether to the left of

the middle line. The left lung was quite healthy, and there was no trace of tubercle in the body.

As the case has turned out, I cannot but regret that an attempt was not made to reach the matter at first, but it is more than possible that it would have proved an unsuccessful search.

Quite different was the following case, which, though it has been previously reported,[2] I must here briefly refer to.

Case xviii.—The patient was at University College, under the care of my colleague, Dr. Roberts. He was a fine strong soldier, who had been in India, but was extremely anæmic, and, in fact, I thought in a moribund condition on account of the large amount of blood-stained mucus daily expectorated. The liver was slightly tender, and could just be detected below the margin of the ribs. In the right back there was dulness, not well defined, one inch and a half above the angle of the scapula, and over this area the breathing was weak, vocal resonance and fremitus were abolished, and coarse *râles* could be heard. There was no tenderness over the lower ribs. Thinking that there was probably an empyema, the dull area was selected for operation, and after ascertaining, as the result of several punctures, the presence of deep-seated matter, the needle was retained as a guide, and the incision was made in the ninth interspace behind. After removal of a piece of the ninth rib, however, it was found that the pleura was healthy, and a pneumothorax was necessarily set up. Being very desirous (for the man's sake) of completing the operation at one sitting, I

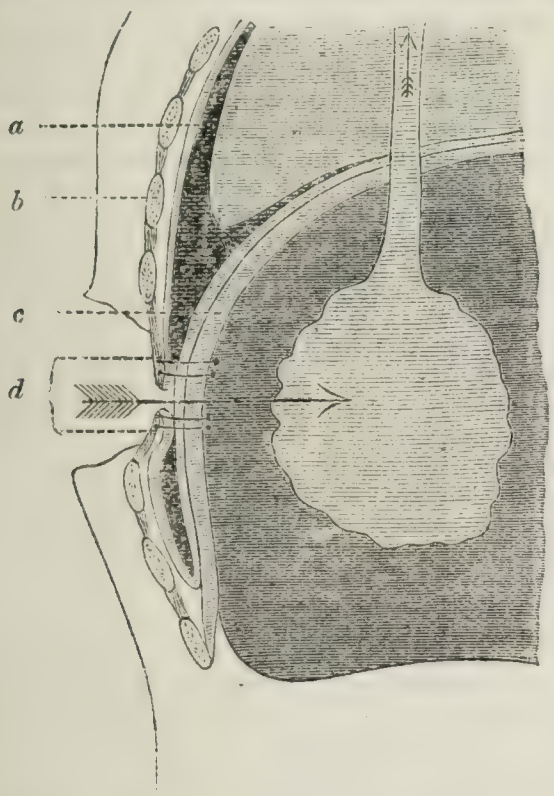


Fig. 3.—Diagrammatic representation of the method of opening the abscess in Case xviii. *a*. Cavity of the pleura; a portion is also shown below the sutures. *b*. Ribs and intercostal muscles. *c*. Diaphragm adherent to liver. *d*. Double row of stitches uniting diaphragm to chest walls. The small vertical arrow indicates the opening from the abscess through the lung. The large horizontal arrow shows the direction of the opening made at the operation, and the position occupied by the tube.

titched up with great care and some difficulty the diaphragm to he costal pleura; and, when I was certain that it was airtight, I pened the abscess through the diaphragm and inserted a large ube. The method of procedure will be made clear by looking at ig. 3. The patient made an excellent recovery, the expectoration radually diminishing and the abscess behaving in the best possible manner.

Had a correct diagnosis been arrived at, probably the opening ight have been made at a lower level and the pleura avoided. The ase, therefore, teaches two lessons: (1) that it will not do to ssume the presence of an empyema or even of adhesions when the ulness is much increased upwards, and (2) that if by chance the leura be opened, the operation may with care be safely concluded vithout endangering the pleura or the patient's life.

An abscess of the liver bursting into the lung may easily simuate a pulmonary abscess.

[2] Journal, October 22nd, 1887.

Case xix.—In the spring of 1885 I was asked by my colleague, Dr. C. T. Williams, to see a man, aged about 30, who had been in India, and who was supposed to be suffering from an abscess in the base of the right lung in front, the peculiarity of the case being the curious brown expectoration, which was very copious, as a result of which the patient was much exhausted, the illness being one of long standing. In the lower part of the front of the right chest were all the physical signs of a pulmonary cavity, and there was a tender spot about the sixth interspace below the nipple. An incision was made at this spot, and passed through pleural adhesions, then through the diaphragm into an obvious liver abscess in the right lobe. The expectoration at once stopped, and the abscess quickly closed without any untoward symptoms.

I shall have to return to this subject when speaking of abscesses caused by hydatids.

6. Frerichs says, in speaking of rupture into the pleura, that it usually causes no remarkable disturbance; a dull pain and slight dyspnœa, together with the physical signs of pleuritic effusion, being the sole indications of its occurrence. The abscess may burst either into the lung, or externally, if it be not treated as an ordinary empyema. My experience of this condition is confined to one case only, but it must be owned that the symptoms at the time of rupture were more marked than those described by Frerichs.

Case xx.—The case was that of a man, aged 34, who had served as a soldier in India for five years, and had suffered from ague. He was admitted under the care of Dr. Roberts into University College Hospital on November 18th, 1885. He had returned to England in 1884, and had remained well till October 28th, 1885, following an occupation in which he was exposed to great variations of temperature; he was then seized with hepatic pains and vomiting, which forced him to keep his bed, and continued with greater or less severity till the time of his admission.

On admission he looked fairly well and was not jaundiced; he complained of constant throbbing pain in the hepatic region, especially at the lower margin of the thorax and the posterior part of the right axilla, over which area there was also tenderness. The appetite was bad and there was diarrhœa, the stools being dark brown and semi-solid. There was very slight enlargement of the liver upwards, none downwards. The spleen could not be felt. The temperature was 102°.

On December 28th he was suddenly seized with very marked signs of right pleurisy, and it was soon obvious that a large amount of fluid had collected in the right pleura, there being dulness in front as high as the clavicle and behind to the level of the angle of the scapula; and the heart's apex being displaced outwards so as to be just outside the left nipple. An aspirator drew off some chocolate-coloured pus. In the meantime blood had on several occasions appeared in the motions.

On December 30th I saw him, and opened the pleura in the seventh intercostal space, just in front of the posterior axillary fold. The finger was introduced with some difficulty between the ribs and felt the diaphragm covered apparently by soft granulations; but no opening through it could be discovered. The fluid consisted of dark brown serum mixed with curdy pus. I used in this case a valved tube (which I was then in the habit of employing, and have described in a previous course of lectures, but have since discarded), and thus no air was admitted into the pleura. The wound was dressed with carbolic acid gauze.

The empyema behaved well enough, but it was impossible to check the now typically dysenteric diarrhœa, and on January 2nd, 1886, the man died. The temperature up to the time of rupture into the pleura had been of a hectic type, usually varying from 99° to 102°; but after that event it was usually normal or subnormal, reaching only on one occasion, the day following, 100°, and on the next day 99°.

At the *post-mortem* examination the liver was not found to be much enlarged, but presented one large excavation of the size of the palm of the hand, and half an inch deep in the centre and lessening towards the circumference, the rupture of which had given rise to the empyema. The rest of both lobes was studded with innumerable minute points of suppuration. There was ulceration throughout the length of the colon.

Case xxi.—In this connection I am able to mention, owing to the kindness of Mr. Roughton, who asked me to see the case with him, the case of a strong young American of most temperate habits, who was travelling round the world and was taken suddenly ill whilst in Ceylon with an acute tropical abscess. The reference to this case will be very brief, as it will

shortly be published by Mr. Roughton. It was opened close to the costal margin, 3 inches from the middle line, and was apparently on the point of healing, when sudden right pleural effusion occurred. This was aspirated several times and had become purulent before Mr. Roughton saw him. He opened the empyema after removing a piece of the sixth rib, just in front of the posterior axillary fold. The cavity did not drain well, and at last there was expectoration of fœtid pus, and an evident bagging of similar material in the deep part of the wound, but the position of the cavity could not be ascertained.

When I saw him he was not losing ground, but had marked clubbing of the fingers. The liver was not apparently enlarged either upwards or downwards, but I suspected some collection of matter in the lower part of the pleural cavity because the right back was almost completely dull, though weak breath sounds could be heard as far as the ninth rib.

I was present at Mr. Roughton's operation on January 12th, which was an endeavour to find the cavity from which the discharge came, in which, after prolonged efforts, we were, apparently, not successful. A trocar, passed through the lower part of the dull area behind, no doubt entered the liver, for, as we afterwards discovered, there was no lung in this situation. Then the original opening was enlarged by removing more rib, and, after cutting through the dense pleura, several tracks were followed up but without success, causing a good deal of hæmorrhage; and it was quite impossible to be certain how far we were working above the diaphragm and how far below it. The case, I think, is a very important one as indicating the great difficulties that arise when an abscess is situated partly above and partly below the diaphragm. The surgeon may expect to meet with very similar trouble in dealing with caries or necrosis of the lower rib cartilages. It has occurred to me more than once. There can be no doubt that ultimately this abscess communicated with the lung as well as the pleura, though whether it burst into the former or the latter first is purely a matter of surmise. This patient, after undergoing an attack of pneumonia and acute albuminuria, is, I am informed, convalescent, and it appeared from the subsequent progress of the case that, in the operation described, Mr. Roughton did really reach the position of the retained pus.

7. Rupture into the pericardium has been mentioned by various observers. The physical signs are sufficiently obvious. The result has always been fatal; but the condition should hardly be beyond the limits of modern surgery.

8. Rupture into the cavity of the peritoneum is one of the least common terminations, for the obvious reason that as the abscess approaches the surface of the liver adhesions are almost certain to be formed. This is quite consistent with our experience of the course of other intra-abdominal abscesses; the amount of surrounding inflammation no doubt distinguishing these cases from those of chronic ulcer of the stomach or intestine, in which, as is well known, rupture is often followed by acute general peritonitis.

Case xxii.—I have not myself met with such a case, but I may mention, as one somewhat of this nature, that of Mr. H., aged about 30, a resident in Calcutta, whom I saw with Sir J. Fayrer in the summer of 1888. He presented typically the signs and symptoms of a large hepatic abscess, the liver extending far down, below the umbilicus, and the dulness being raised very considerably both in front and in the axilla; and marked tenderness being present in the latter situation. An exploring trocar having been introduced through one of the lower intercostal spaces determined the presence of pus, and, on making an opening in this situation, exit was given to 60 ounces of matter which lay between the upper surface of the liver and the diaphragm. It was, in fact, a subdiaphragmatic abscess.

Now a subdiaphragmatic abscess is a rare condition. It may arise from local peritonitis, from perforation of the stomach, or from abscess of the liver, or from suppuration about the kidneys, possibly also from the downward bursting of an empyema, or from the upward travelling of abscesses that originate lower down, say, in connection with the cæcum, or from caries of the costal cartilages. It may easily be confused with a supradiaphragmatic empyema—another rare condition.

A careful search was made in Mr. H.'s case for the opening into the liver, but it could not be found, so a very large drainage tube was inserted and a carbolic acid gauze dressing was applied. The liver at once came up, and it was evident that it was very little, if at all, enlarged; and the abscess followed a perfectly typical aseptic course. The patient rapidly put on flesh and regained his appetite, and beyond the fact that he had for a long time a pulse of 120 or more the case presented no peculiarities.

A few words must now be said about suppurating hydatids of the liver; for if the cyst be situated in the upper or posterior part of the gland the characteristic symptoms of hydatid may be absent, and until the matter is evacuated there may be nothing to distinguish such a case from one of hepatic abscess.

Case xxiii.—The first case I will describe occurred ten years ago (admitted February 26th, 1880) at University College Hospital, under the care of my colleague, Dr. Ringer. It was that of a young woman, aged 20, with a phthisical history, who had lived eleven years in America, but, for the eighteen months previous to admission, in England. There were signs of right empyema, namely, retraction and immobility of the side, the dulness being below the third rib in front, the fifth in the axilla and the angle of the scapula behind. There was a high temperature, 101° to 104°, and marked clubbing of the fingers; no note was made of the liver. There was copious muco-purulent expectoration, which, in March, was noticed to be yellow.

The patient continued much in the same state till July 10th, but gradually became weaker. I was then asked to see her, and made an incision in the back through an intercostal space below the angle of the scapula, giving exit to a large amount of pus mixed with hydatid cysts. An ordinary tracheotomy tube was inserted. The drainage was evidently imperfect, for the expectoration again became yellow. Owing to the closing of the hospital, we now lost sight of the patient; but she returned on October 1st in a moribund condition, and at the *post-mortem* examination we found the right lung full of disseminated tubercle. The liver was of normal size, and contained three hydatid cysts: one close to the junction of the posterior and upper surfaces as large as a walnut, shrunk and calcified, and communicating through the diaphragm with the lung; a second, of the size of a Maltese orange, opening into the common bile duct; and a third apparently still active. The spleen and kidneys were albuminoid. No doubt the opening here should have been much more free, but the case was evidently a most unpromising one for treatment. I would particularly direct attention to the tubercles in the right lung only in connection with the fact that this lung had been constantly irritated for eight months, *à propos* of the question of leaving alone abscesses that are being expectorated.

The last case I will inflict upon you is one of especial interest in connection with thoracic surgery, because it had been diagnosed as an empyema and opened as such; and, to make a full confession, I looked upon it as one myself at first, though I think there were data at hand which should have enabled us to come to a correct diagnosis.

Case xxiv was that of a lady, Miss R., aged 30, whom I saw with Dr. Slater, of Barnsbury, on May 17th, 1889. Her illness began six months before whilst she was staying at Cambridge, which is said to be developing an evil notoriety for hydatid disease. First she was said to have become abnormally stout, and then an abscess formed below the angle of the right scapula. This was punctured and then freely opened by Drs. Ellis and Batten, of Gloucester, and a drainage tube was passed between the ribs. They report that early in January she had pain at the epigastrium and over the region of the liver; that at the time of the operation there was dulness and absence of breath sounds to midway between the angle and the spine of the scapula, and the heart was much displaced outwards, but there was no apparent enlargement of the liver. They clearly recognised some peculiarity about the case, however, because the matter did not flow freely at first, its escape being no doubt prevented by the hydatid cysts; and also because a distinct hepatic enlargement was manifest soon afterwards. It was assumed therefore that there was a second abscess lower down, and that it was probably an empyema depending upon some subdiaphragmatic suppuration.

Before she came to London some burrowing of matter had taken place in the soft tissues of the back, and the tube had slipped out from between the ribs. When I saw her she was thin and very much emaciated; the fingers were clubbed, and the extremities blue. The liver extended two inches below the umbilicus, and was very hard, but it was not easily felt, because the whole abdomen was tense, suggesting from its shape and hardness a football when it was manipulated. Dulness extended up to the third rib in front, and was sharply defined (Fig. 4); behind it faded off gradually halfway up the scapula (Fig. 5). The level of dulness passed across the apex of the axilla. Breath sounds, vocal resonance, and vocal fremitus were abolished over the dull area, except close to the spine.

The heart's apex was in the sixth interspace, one inch outside the nipple. The temperature varied from 101° to 103°. The appetite was capricious. There was no expectoration and no albuminuria. There was an opening discharging pus opposite the ninth rib, outside the angle of the scapula.

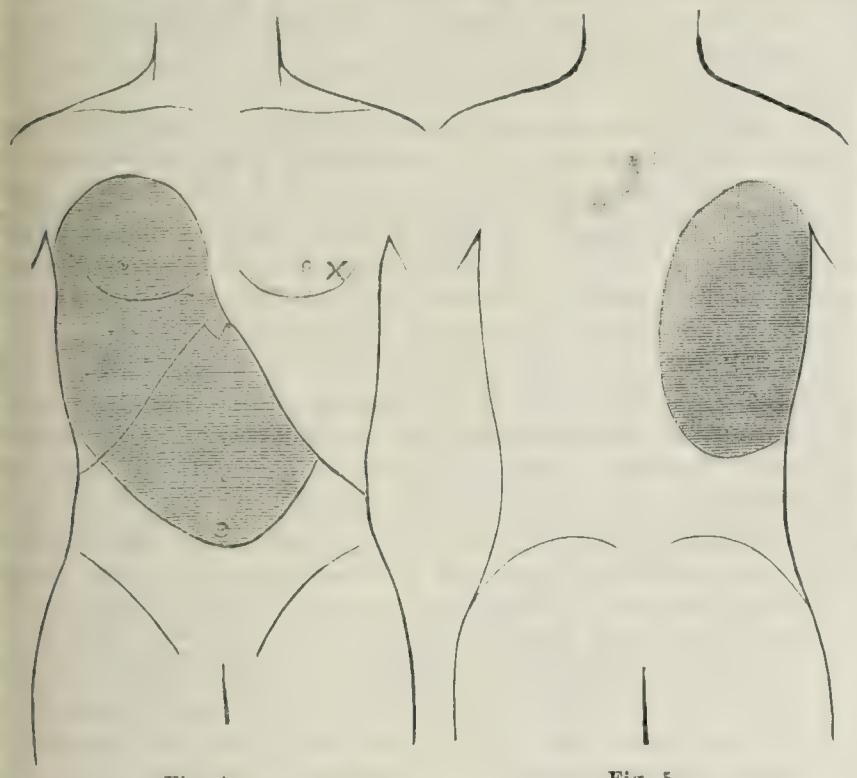


Fig. 4.

Fig. 5.

I enlarged the cutaneous opening, and, at the outer part of the subcutaneous abscess, discovered a small track passing into a cavity within the ribs. This gave exit to a large quantity of pus and hydatid membranes, and then it was found that the cavity was situated altogether beneath the diaphragm, which had been pushed up to this enormous height by the gigantic hydatid cyst.

I would here raise the questions, without venturing to answer them, Whether an enlargement of the liver often or always pushes the heart over more or less than a collection of fluid in the pleura. In this case the dislocation was very considerable. The cavity was washed out with solution of chloride of zinc (40 grs. to ℥j), and the wound was dressed with boracic lint and salicylic wool. The liver rose one inch.

The case progressed favourably, though at one time she was in some danger of sinking from exhaustion, and she became still more extremely emaciated. Whether or not this depended upon the fact that there occurred an enormous flow of pure bile from the wound, half a pint to three-quarters of a pint *per diem* for some time, I will not pretend to say. The result was, however, that bedsores formed over the angles of the scapulæ and the most prominent rib angles. In the course of time, however, this diminished and finally stopped. She began to put on flesh. The motions, previously pale, assumed their natural colour, and by the end of September (four months) the abscess had completely closed.

She is now well nourished, and in good spirits, but there remains a rounded swelling at the epigastrium, freely movable, and connected with the liver. Whether it is another cyst or a distended gall bladder I cannot say, but whatever it is, it appears to be diminishing in size, as may be seen by comparing Fig. 6 with Fig. 7.

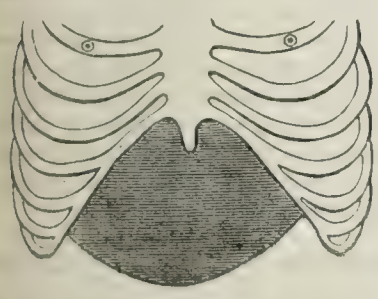


Fig. 6, September 24th.

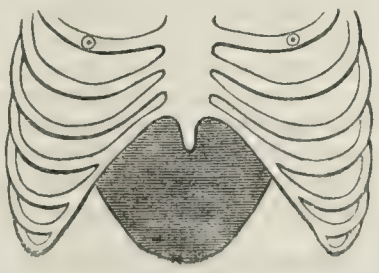


Fig. 7, November 29th.

The subject of these lectures has been so diffusely treated, that it will be perhaps convenient to summarise what has been said with regard to treatment, which is intended to be its essential part.

1. Pyæmic abscesses do not call for surgical interference, or, if in rare cases one should point, it is only opened to relieve symptoms, but without hope of doing permanent good.

2. The same observations apply to abscesses resulting from suppurative phlebitis of the portal vein.

3. Multiple abscesses associated with dysentery or ulceration of the bowels are very unfavourable for surgical treatment. They must however, be opened and treated on the same lines as the single or tropical abscess, because they cannot be certainly diagnosed.

4. Single abscess of the liver, whether tropical or not, must, if it approach the surface, be opened, the following precautions being adopted:

(*a*) If it present at the epigastrium, the presence of adhesions must be ascertained before incising the liver.

(*b*) If through the chest wall, a spot must be chosen below the normal limit of the pleura; but, if by chance either pleura or peritoneum be opened, the opening must be closed with a double row of stitches before incising the liver.

(*c*) Strict antiseptic precautions must be throughout adopted, either carbolic acid or some slightly soluble salt of mercury being employed for the dressings.

(*d*) The tube must be of large size at first, and a tube of some sort must be kept in until the discharge is reduced to a very minute quantity.

If the abscess have burst into the lung, pleura, pericardium, peritoneum, or kidney, and the position of the abscess can be clearly determined, it must be opened without delay. If the position of an abscess be only suspected and the patient be losing ground, it is right to puncture the liver in the most likely situations, bearing in mind that, though usually quite harmless, a slight amount of risk accompanies this very trivial operation. This rule applies to cases in which the abscess has ruptured into any of the cavities enumerated above. If, on the other hand, whether the abscess have ruptured or not, there are no means of diagnosing the whereabouts of the matter, and the patient be not losing or even gaining ground, the surgeon should hold his hand for a time.

5. Hydatids of the upper and back part of the liver are to be treated upon the same lines; but in cases of this sort, and in those of subdiaphragmatic abscess, it must be remembered that the diaphragm may be pushed up to a very great height, thus closely simulating intrapleural suppuration.

6. Empyema, pericarditis, and peritonitis caused by rupture of a hepatic abscess or hydatid must be promptly dealt with on general principles.

ON THE CENTRAL MOTOR INNERVATION OF THE LARYNX.

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AND
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THE communication, under the above title, by Professor Krause, of Berlin, published in the JOURNAL of January 18th, forcibly illustrates the truth of the old adage, that "it seems a pity to take offence where none is meant." Professor Krause evidently appears to think that the terms "investigation" and "discovery" are identical. It seems hardly necessary to point out that this is not so. Inasmuch as he himself found it necessary to controvert only last year, in a special communication, at the meeting of German naturalists at Heidelberg the opinion given out by François Frank—namely, that there was no cortical representation of the larynx[1], it was surely legitimate for us in 1886 to "investigate" the whole question of the motor innervation of the larynx.

As to the question of priority, Professor Krause, in his present communication, says in reference to his own work on the subject: "These results of mine the authors (namely, Semon and Horsley) have, on a former occasion (1886) recognised as the first investigations on the subject."

[1] See *Internationales Centralblatt für Laryngologie*, etc., January, 1890, p. 351.

This statement is not quite correct in this form, for we could not recognise Professor Krause's results as "the first" investigations, because we were well aware that Professor Ferrier had, as far back as 1876,[2] signalised the region in front and below the sigmoid gyrus in dogs as causing occasionally vocalisation, and that Dr. Duret, of Paris, had described in 1878[3] the effects of ablation and of compression of this region with regard to the dog's barking. And we may say here in passing that it certainly appears to us not a little remarkable that Professor Krause, who judges so harshly the omission of his name from a "preliminary communication," should have himself failed, so far as we are aware, to mention the labours of these predecessors of his in any of his complete papers. But it is certainly true that we, in 1886, most heartily and ungrudgingly acknowledged the importance of Professor Krause's investigations on this subject. Why then should we, when we did this in 1886, attempt, as Professor Krause seems to believe, to deprive him of his rights in 1889? The thing is, on the face of it, absurd. If Professor Krause, in return for our politeness—namely, sending him directly a reprint of our preliminary communication—had taken the trouble, if he felt hurt at his name not having been mentioned in it, of writing to one of us and asking for an explanation, instead of taking the course—certainly very unusual under such circumstances—of at once lodging a claim for a priority, which we never contested, not only in the JOURNAL, in which our preliminary communication has appeared, but also in the *Berliner klinische Wochenschrift*, in which neither his nor our own papers on this subject have been published, he would have received a reply which we venture to believe would have satisfied him, and the present discussion would have been avoided.

We had hoped that both the title and the introductory remarks of our first communication would have left no doubt in the mind of any reader that it was intended simply as a report of our own experiments and of nothing else. If we had included a history of the subject, and had entered upon a discussion of the many controversial matters connected with it, the paper would have become very different from what it is now. Thus the fact that not a single name is mentioned in the paper finds an equally simple and natural explanation. The expression "vindication of our rights of discovery," which Professor Krause throws into the discussion, ill fits our purely objective communication. We have nowhere spoken of "discoveries," but have only given our results and the conclusions, which, we think, may legitimately be drawn from them. Surely, though this seems "out of place" to Professor Krause, this is a right which cannot be seriously contested, and if he had only followed the natural course above sketched or had waited a little longer, he would have seen that the use of this right by no means involves the infringement of the rights of others. For it is our intention, as it has been from the very beginning, to do every justice to Professor Krause's investigations in the full account of our work, which we hope to bring before the Royal Society in May or June, and we need not say that this painful and perfectly unnecessary controversy will not in the least alter our plans.

But as Professor Krause in the peroration of his paper is pleased to attempt to reduce our whole work to a mere repetition of his own experiments on different species of animals, we must be allowed to at once energetically protest against this attempt. No doubt we have corroborated by far the greater part of his own experiments, and the fact that we have been able to do so has given us so sincere a pleasure that it is now the more painful to us to be needlessly attacked by him. But at the same time not only are we not acquainted with any experiments of his on the medulla oblongata, not only do we differ on one most important point concerning the effects of cortical stimulation, as will be shown in the conclusion of this paper, but above all we are entirely unaware that Professor Krause has drawn, in print, any practical conclusions such as our own from his experiments, and it will be for him to show that he has done so. The only paper of his on the subject with which we are acquainted is a very short report of his experiments.[4] In this, so far as we can see, not one word occurs as to their practical bearing upon clinical and pathological questions. Nor do we know of any later publication of Professor Krause's in which such important questions as the impossibility of unilateral laryngeal paralysis being caused by cortical lesions, the nature of laryngismus stridulus, of the epileptic cry, etc., have been discussed. It appears to be our crime that we have supplied the deficiency!

Finally, we must decidedly maintain our statement, that we have not been able to find an area of representation in the cortex of the abductor movements of the vocal cords—except in the cat, in which, as stated in our two communications on the subject in 1886[5] and 1889, both peripherally and cortically conditions appear to exist, curiously different from those observed in other animals.

To prevent all misunderstanding we wish to state distinctly that we by no means deny the existence of a general representation of respiration in the cortex. Indeed, it will be seen in our full report that we have observed an influence of cortical stimulation upon respiration especially in young animals, in which the differentiation of the several motor areas is not nearly so perfect as in the adult animal. But we have not been able to find in the monkey, dog, or rabbit, an area in the cortex from which abduction of the vocal cords could be produced in a corresponding manner to the adduction produced from stimulation of the area posterior to the lower end of the præcentral sulcus at the base of the third frontal convolution in the monkey, and of the præcrucial and neighbouring gyrus in the dog and rabbit. And we fail altogether to understand Professor Krause's reasoning, when, in the paragraph of his paper treating of the "cadaveric position" of the vocal cords, he argues from the fact that he obtained this position from stimulation of the extreme periphery of the laryngeal area, that it was "thus seen that abduction may also be brought about by stimulation of this area." To begin with: the expression "abduction" in this connection is absolutely misleading. The "cadaveric position" is that in which the vocal cords are found after death. They do not then, as a rule, stand quite close to the middle line (though sometimes they do), and are in this sense of course somewhat "abducted" from it; but at the same time they are under all circumstances much nearer the middle line (that is, the glottis is considerably narrower) than when they stand in the common respiratory position.[6] How can anyone under these conditions speak of "abduction of the vocal cords being brought about" by stimulation of the præcrucial or præcentral area when the vocal cords become arrested in the cadaveric position? The very reverse of it is true. As to the explanation of this condition, we think it is simple enough, and entirely in concord with our results of stimulation of the medulla, given in our first paper. The electric cortical stimulation acting only upon the most peripheral part of the laryngeal area, that is, the one in which adduction of the vocal cords is but weakly represented, is just strong enough to interfere to some extent with the inspiratory impulses which probably pass rhythmically up the afferent fibres of the pneumogastric nerve to the respiratory centre, and having been transferred in the medulla to the accessory nucleus, are there changed into a tonic innervation of the abductor muscles of the vocal cords ("reflex-tonus" of the abductors, on which Professor Krause himself formerly used to lay great stress[7]), but not strong enough to induce complete closure of the glottis. Thus this phenomenon, that is, the cadaveric position obtained under such circumstances, represents, in our opinion, a conflict between the natural medullary and the artificial cortical stimulation, but does not signify that "abduction" is brought about by stimulation of a cortical area.

With these remarks we take leave of Professor Krause's communication. We deeply regret that personal matters should have been quite needlessly introduced into a purely scientific discussion, and we feel sure that when our full report is published, all our predecessors in the investigation—experimental as well as clinical—of this interesting subject will convince themselves that nothing could have been and is further from our intentions than to deprive any scientific worker of the fruits of his labour.

ANOTHER medical journal has perished for want of an editor. The *Centralblatt für Nervenheilkunde, Psychiatrie, und gerichtliche Psychopathologie* has ceased to appear, as the editor, Dr. A. Erlenmeyer, who founded the periodical twelve years ago, finds himself compelled by the pressure of other engagements to relinquish that post, and no successor is forthcoming.

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[2] *The Functions of the Brain.* First Edition, 1876: p. 150.

[3] *Etudes Expérimentales et Cliniques sur les Traumatismes Cérébraux*, 1878, pp. 142 and 250.

[4] "Ueber die Beziehungen der Grosshirnrinde zu Kehlkopf und Rachen." Sitzungsberichte der Kgl. preussischen Academie der Wissenchaften, 1883.

[5] "On an Apparently Peripheral and Differential Action of Ether upon the Laryngeal Muscles," JOURNAL, September 4th, 1886, p. 447.

[6] Particulars of this, as well as of all the points raised in this last paragraph, will be found in our full report.

[7] See Virchow's *Archiv*, vol. 98, 1884. Reprint, p. 88. *Ibidem*, vol. 102, p. 317.

UNSUSPECTED LEAD POISONING IN CHILDREN.

By JOHN BROWN, M.D., D.S.Sci.,
Medical Officer of Health, Bacup.

Although the literature of plumbism is so voluminous, yet very little has been written as it regards the influence of lead in children. In no work specially devoted to diseases of children can any reference to plumbism be found. For about three years I have devoted considerable attention to plumbism due to water contamination from lead service pipes. In 1888 my attention was drawn to the fact that young children may suffer from plumbism—this is only what might be expected. By careful research I found about a dozen cases recorded, but nothing very striking in connection with the reports.

I am not aware that the blue line in the gums has been observed in children during the first dentition; when present it is a pathognomonic symptom of plumbism. Its absence does not prove the contrary. In children tartar is rarely present compared with adults. This is the reason why the blue line is so seldom found in children. I have notes of four children under 5 years, in whom the blue line was present; also eighteen over 5 and under 10 years; total under 10 years, twenty-two; 10 and under 15 years, twenty cases. Besides these forty-two in which the blue line was present, there were others who were suffering from plumbism in whom no blue line could be found because the teeth were kept free from tartar. In *Brain*, April, 1878, Dr. Buzzard reports a case of well marked lead palsy in which the blue line was absent, due, as Dr. Buzzard believes to the exceeding care which the patient had taken to keep the teeth clean. In adults the blue line is most commonly observed in the gums of the incisors and molars. In children the gums of the incisors are often free, but the blue line may be observed on the gums of the molars. It is often associated with a peculiar form of caries, which attacks the crowns of the molar teeth at their junction with the fang. The surface or cusps of the teeth are sound; there is a cavity about 2 millimètres in diameter, which offers a nidus for food to lodge in. The food is decomposed probably by saprophytes and sulphuretted hydrogen is formed which combines with the albuminate of lead, and is deposited as the sulphide in the capillaries of the papillæ of the gums. The nature and mode of origin of the blue line in the gums are given in the *Medico-Chirurgical Journal*, vol. lix, 1876, page 327, by the late Dr. Fagge. Having made microscopical examination of the blue line I can confirm his views. The line is not continuous, but consists of a series of blackish brown dots, full of minute granules. Each dot is distinct from its fellow.

In twenty-one adults I observed blue patches on the mucous membrane inside the lips and cheeks. In every case it was opposite the deposit of tartar. Dr. Dobie, of Chester, reported two cases in which there were blue patches on the mucous membrane in adults,[1] and he thought it was due to abrasion of the cheeks. From my observations of the twenty-one cases referred to, I am convinced that it is due to the tartar on the teeth. The following is an interesting case. A child, aged 6 years, had the mucous membrane deeply pigmented. The first lower molar on the right was displaced, the fang projecting against the cheek had caused an ulcer which was free from blue pigmentation, but a blue line was on the gums, proving that abrasion is not sufficient to cause pigmentation.

Children are not so susceptible to the toxic influence of lead as persons between the ages of 15 and 50 years. Above and below those ages lead rarely produces the more severe symptoms of plumbism. In children, mercury, antimony and arsenic are known to be tolerated in comparatively large doses. This tolerance of lead in young children is probably due to lead being a nerve poison, and acts primarily on the nuclei of the nerve cells, especially the motor nerve cells. It is noteworthy how slight the symptoms of plumbism are in children in families where the adult members suffer from the most severe forms of the disease. In one house the father and mother were both suffering from lead palsy, colic, constipation, absence of the knee-jerk. The mother had saturnine epilepsy. Two children, aged 7 and 9 years, had the dark blue line; neither suffered from any symptoms calling for treatment. The water used for dietetic purposes by this family was largely polluted with lead. The chief symptoms of plumbism in children are constipation, colic, frontal headache, anæmia, absence of the knee-jerk—this is not constant. In one case it was excessive. There was only one severe case out of forty-two; this was a child aged 4 years. There was dark blue on the gums, severe colic, obstinate constipation, difficult and painful micturition, marked anæmia, tremor of the legs, which was followed by paresis and ultimately paralysis. The father was suffering from plumbism; he had colic, constipation, epileptic convulsions, loss of vision, paralysis of arms, paresis of legs. The mother of the child was also very ill, but had no lead palsy. On analysis the water supply contained $1\frac{1}{2}$ grain of lead per gallon. Under treatment the child made a slow recovery. The symptoms of plumbism in children are usually so slight that they may be easily overlooked. Anæmia is the most common symptom, and is generally well-marked.

[1] Journal, vol. i, 1886, p. 20.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.,

IMPERFORATE RECTUM: OPERATION: CURE.

Mrs. M., primipara, was delivered of a male child late on the evening of January 16th. On inquiry next day I found that the child had passed water quite freely, but no motion of any kind; the nurse had given the child a few drops of castor oil. On visiting my patient on the second day I found that still the child had passed nothing, but seemed fairly comfortable. I directed the nurse to use a small soap suppository, and arranged to see the child again the same evening. When I called in the evening I found that there was still no motion; the child was straining very much, and had vomited on two or three occasions. Suspecting that all was not right, I passed my little finger through the sphincter (which was perfect), and found that the rectum was merely a *cul-de-sac* about an inch and a half in length; but that when the child strained the impulse came direct upon the tip of the examining finger. Having obtained the parents' consent, I decided to operate, with the assistance of my friend Dr. H. Wright. I accordingly guided a small trocar and cannula to the spot where the impulse from above was felt, and, upon piercing the end of the *cul-de-sac*, had the satisfaction of seeing the meconium ooze through the cannula, showing that I had struck the bowel above. Having the parts held aside by a small fenestrated speculum, I next incised crucially, radiating from the puncture of the trocar, and, on passing my finger through the opening thus made, found that the bowel was patent and quite normal beyond. The child had several copious motions, and seemed much relieved. In spite of daily dilatation with the finger, the opening had by March 22nd contracted considerably, and straining had returned. I therefore forcibly dilated the constriction with several fingers in turn, and repeated the operation at lengthening intervals for several months. The straining entirely ceased after a very few dilatations. At the present time the rectum is perfectly patent throughout; no constriction is to be felt, merely a slight corrugation on the walls of the rectum at the point where the constriction was.

Geo. A. S. Gordon, M.A., L.R.C.P., L.R.C.S.Ed., L.F.P.S.Glas.
Gainsborough.

MAJOR OPERATIONS ON OLD SUBJECTS.

Mrs. B., aged 80, a plucky but infirm old lady, injured her left elbow in the summer of 1888. In March, 1889, when first seen by my partner, Dr. Moore, and myself, the left arm was much swollen, and there was a free discharge of thin pus from two or three sinuses about the elbow-joint. On June 12th a circular amputation was performed in the middle of the arm. This step was rendered advisable by the continuance of severe pain and the fact that the patient was failing fast. The joint was found to be disorganised. The wound was kept aseptic, and united by first intention. On the second day the temperature reached 99.4°. On no other day did it exceed the normal. Convalescence was uninterrupted, and on the fourteenth day the patient was able to leave her bed. I heard from her in December; she was then in good health and spirits, having just celebrated her eighty-first birthday.

F. Faulder White, M.R.C.S., L.R.C.P.
Coventry.

FRACTURE OF CORACOID PROCESS.

THE case of fracture of the coracoid process recorded by Dr. Gabb in the JOURNAL for November 30th reminds me of one which occurred in my practice a couple of years ago; and as the accident is recognised to be a comparatively rare one the subjoined particulars may be of interest.

Five or six men were returning from a race, where they had been enjoying themselves "not wisely but too well," when a dispute arose, and one of their number, a rather corpulent man, whilst endeavouring to catch his neighbour's horse by the head, was struck by the shaft of the car. He was conveyed home, and no further attention paid him till next day, when I saw him, and found marked discoloration in the vicinity of the coracoid process, great tenderness on pressure, crepitus on applying the stethoscope and at the same time rotating the arm, and severe pain on trying to move the arm inwards and upwards. The shoulder was brought forwards, the arm bandaged to the side, and the forearm, somewhat elevated, was kept in close apposition to the chest by means of a sling passing under the opposite axilla. The patient was able to do some work in eight weeks, but complete movement was not restored for over twelve months. I cannot say whether the union is really bony or merely ligamentous, as a *post-mortem* examination would be required to decide that.

Ferns, Co. Wexford. G. E. J. GREENE.

HÆMATOMA OF THE NASAL SEPTUM.

A BOY, aged 7, was brought to the West London Hospital on August 18th, 1888, said to be suffering from polypus of the nose. The nose was much enlarged in consequence of each nostril being occupied by a smooth reddish tumour, which protruded beyond the orifice, completely occluding the passage and pressing out the ala on each side. The tumours were nearly symmetrical, that on the right side being slightly larger than that on the left. They had a soft fluctuating feel, and could be seen to merge in the septum just above the columna. No fluctuation could be made out from the tumour on one side to that on the other. There was no pain or tenderness.

The history was that the boy had a fall on the nose three weeks previously which caused his nose to bleed, and slightly abraded the skin of the tip. A few days after this the swellings were noticed, and they had gradually increased till the date of his coming to the hospital. There seemed no doubt that the case was one of hæmatoma or abscess of the septum, and the absence of pain and tenderness pointed to the former.

The boy was kept in bed for a few days, and an evaporating lotion applied. The swelling began to subside at once, and on September 1st he could breathe through the nose. On September 15th the swellings had completely subsided. The dorsum of the nose was somewhat flattened below the level of the nasal bones, and the lower margin of the nasal bones in the middle line projected very slightly, owing to a dislocation of the cartilage at this point. The cartilaginous septum was deviated to the left at the fore part. JAMES B. BALL, M.D.,

Physician to the Throat Department, West London Hospital.

A CURIOUS CASE OF OCCLUSION OF THE CHOANÆ.

Two cases of such I described in connection with a paper on Rhinoscleroma read at the last meeting of the Association at Leeds, and incidentally alluded to the one now in question, a short description of which may be of interest.

Miss R., aged 20, after an attack of scarlet fever at the age of 7 years noticed obstruction of right nares, and about the same time suffered from what appears to have been dacryo-cystitis ending in epiphora of right eye. January, 1889, suffered from severe attack of inflammation in right ear, resulting in chronic otorrhœa with deafness from same. A muco-purulent offensive discharge from right nostril from first.

Anterior rhinoscopy of right nares showed entire disappearance of lower turbinated bone, whose figure and structure was effaced. About the middle of the space was seen a pale white membrane, rising from the floor of the nose attached to the lateral wall of the cavity and the septum, and curving up towards the inferior extremity of the nasal bone, forming a complete transverse curved partition of the space. After careful cleansing from discharge a small pin-point aperture was discovered at its centre.

Posterior rhinoscopy showed as complete a synechia reaching from vomer to the lateral wall and completely blocking posterior right nares.

The treatment consisted after the use of cocaine in effecting destruction of the membrane with galvano-cautery. After effacing anterior synechia, part of which was osseous, this was found distinct and separate from the posterior membrane, which was found harder and more difficult to get at, but yet successfully dealt with. After the nostril was brought into a more healthy condition the otorrhœa ceased, the perforation of drum healed, and hearing returned completely. The epiphora was dealt with in the usual way, although it would seem that the lower end of the lachrymal duct has become involved in the surrounding sclerosis. The restoration of nasal respiration and cessation of discharge from nostril and ear has greatly improved the general constitutional state.

Has this nostril been the site of the peculiar condition named rhinoscleroma, and which has become exhausted?

Very few, if any, of such cases have been observed or reported upon prior to the reference to this in August last.

Newcastle-upon-Tyne. WM. ROBERTSON, M.D.

CYCLIC HÆMATURIA OF FOUR YEARS' DURATION IN A WOMAN AGED 63.

NEARLY two years ago a patient was sent to me by Dr. Fairweather, of Wood Green, with the following interesting history and physical signs: The patient, a widow now for 10, had been married 30, years, and had never been pregnant. Menstruation, established at the age of 11, ceased when she was 51. For eight years after the cessation of menstruation patient was perfectly well. Since the age of 59 she has noted that every four weeks the urine becomes deeply tinged with blood, and this discoloration lasts from eight to ten days, after which the urine assumes again its normal appearance and continues clear, and to all intents and purposes healthy, until the lapse of four weeks, when blood reappears in the urine and again continues to be discharged for eight or ten days. The discoloration is most marked during the first two days of each periodic recurrence, and during these days small clots are occasionally passed. For two or three days before each recurrence of blood in the urine patient complains of aching pains in the front of both thighs and a feeling of distension of the "stomach." There is no pain nor trouble with the water during the inter-hæmorrhagic period, neither is there pain, but a less frequent desire to pass water, during the time that blood is present in the urine; there is, in fact, at this time apparently a blunting of that sensation which calls forth the desire to empty the viscus of its contents.

I have drawn off the urine in this case during an inter-hæmorrhagic period and also during the time that patient has been "poorly," and have thereby been enabled to verify the clinical history as related. For four weeks the urine is, as far as one can judge, healthy, for from eight to ten days it contains blood. The microscopic examination of the urine during the period of hæmorrhage reveals red blood corpuscles in profusion and a very few white. On one occasion I detected two large round cells, one of which appeared to be in the state of dividing into two. These cells were not characteristic. On December 13th, 1889, I saw the patient again; the clinical history and physical signs are just as they were when I first saw her, and she complains of nothing but depression during the time that she is "poorly," the term which she applies to the period during which there is blood in the urine. There has been no loss of flesh nor alteration in the constitutional vigour in any way, for during the inter-hæmorrhagic period she is as active and as fit for duty as ever. The patient will not at present, being, as she says, perfectly well, submit to an exploration of the bladder. Still I cannot help but think that such a clinical history and the associated physical signs are independent of the existence of a new growth. The case is to my mind a very anomalous one, and I am unable at this juncture in the evolution of gynæcology to offer any suggestions regarding its associations.

JAMES OLIVER, M.D., F.R.S.Edin.

Gordon Square, W.C.

POISONING BY COAL FUMES AND SMOKE.

ON December 17th I was asked by Dr. Anderson, of Canonbie, to see two lads who had been poisoned by fumes from a stove. M. A., aged 15, and J. J., aged 19, went to bed at 10 P.M. in a room containing about 1,000 cubic feet of air. There was a small stove in the room, the pipe from which was broken as it passed through the wall close to the stove. The door being shut there was no opening

nto the room. When they went to bed they lit the stove and illed it with coals. At 5.30 A.M. they were found in bed uncon-cious, bathed in perspiration, and the room was full of smoke.

When Dr. Anderson saw them at 7 A.M. they were lying where hey had been found, but the door had been open, and though the moke had disappeared the atmosphere in the room was stifling. hey were at once removed to the kitchen, to which air was freely dmitted, when it was found that the bed was wet with urine. Vhile being removed J. J. retched and vomited some fluid.

When examined in the kitchen at 7 A.M., M. A. was breathing eavily, with a pulse of 114. The pupils were fully dilated, and id not respond to light. Touching the conjunctiva caused no ontraction of the lids. J. J. was breathing stertorously, and the ulse was 110. His pupils were dilated, but responded to light. Ie was sensible to pain.

At 11 A.M. M. A. had dilated pupils, which contracted readily. nd the conjunctiva was sensitive, and without abnormal vascu-arity. His pulse was 120, regular, and of good volume. The espirations were 32 per minute, without noise, and no abnormal ounds were heard on auscultation over the front of the chest. The ostrils were covered with a black coating. He lay as if asleep, ut could be roused to look about him and groan.

At the same hour J. J. lay breathing heavily, with a rattle in his hroat and foam between his lips. His respirations were 28 per inute, and his pulse was 124, varying in fulness. The pupils were arge, and contracted readily. The conjunctiva was very slightly, f at all, sensitive. The nostrils had a black coating so far as isible. A large mucous rattle was heard on auscultating over the ront of the chest. He had been convulsed shortly before 10 A.M. Ie could be roused by severe pinching, when he opened his eyes, crewed up the left side of his face, and tried to stop the pinching vith his left hand. His right arm was limp, but responded to the rick of a pin. Tickling the soles of his feet caused reflex ction.

By noon M. A. was able to indicate that he had pain over the ardiac region. At 5 P.M. he put on his clothes and walked to the loor with a staggering gait, to micturate for the first time. He hen had some tea and bread and butter, slept well during the ight, and walked home next afternoon, a distance of three miles. When home he complained of pain like cramp in the left arm and high, and had pain over the cardiac region when it was touched. Ie was soon all right.

About 10.30 A.M., while ammonia was being held to his nostrils, . J. coughed and expectorated a mouthful of froth, after which he rattle in his throat ceased, and by noon he was more easily oused, but it was 3 P.M before he recognised anyone, and then he vas moving his right arm. Next day he complained of pain in his ight hip, but was able in the afternoon to walk to his brother's ouse, about a mile from where he was employed, and he was soon ll right.

JOHN HADDON, M.D.

Canonbie, N.B.

EARLY PREGNANCY.

WAS asked to attend the wife of a tramcar conductor in her ifth labour. She was a very stout and short woman of 20 years of ge. She had an easy delivery, at the full time, of a healthy well-leveloped male child. She informed me that she had been married efore she was quite 13 years old, out in Australia, to her present usband, and that she was a mother before she had completed her ourteenth birthday. This was her fifth child. All the children ad been born at full time. Two of her five children she had ost in their second year; one evidently from tubercular mening-tis, and the other from tabes mesenterica. The other children are till living. Her statements were in every respect corroborated y her husband.

This case is interesting only as a record of early pregnancy; for hough undoubted cases of pregnancy occurring between the ages f 9 and 14 have been related, yet they are decidedly rare.

Hastings. WORSLEY J. HARRIS, L.R.C.P., M.R.C.S.

SULPHONAL POST-PARTUM.

HAVE not seen or been able to trace any notice of the effects of ulphonal after parturition on the mother or child, and I there-ore think it well to record a case where it was used. One of my atients had used it in doses of 15 grains (taken every third or ourth night) for the last three months of pregnancy with the best ffect, as it seemed to induce rest each time for two nights, and ave no headache or nausea; and as there was much restlessness for two nights after the baby was born I allowed the usual dose to be taken. The result was to give a good night to the mother, and the only drawback was that the child was irritable during the next day. The mother, I may add, nursed the baby entirely.

Of course, I am aware that no definite conclusion can be drawn from one case, but this note may lead to the publication of a series of reports.

In the above-named patient ordinary opiates only caused discomfort and greater restlessness. WILLIAM HAMMOND.

Liskeard.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BUCKINGHAMSHIRE GENERAL INFIRMARY.

(Cases under the care of Mr. T. G. PARROTT.)

[Reported by Mr. H. CAUDWELL, House-Surgeon.]

BELL'S PARALYSIS.

M. M., aged 23, a cook, was admitted on November 30th, 1888, complaining of great pain in right mastoid region, with a profuse bloody muco-purulent discharge from right meatus. The discharge had lasted for twelve months. On examination membrana tympani was ruptured; complete deafness on affected side; no impairment of other ear; right facial paralysis was present; there was ptosis, inability to completely close eye; patient was unable to whistle, and attempted smiling produced distortion of face. Tongue and uvula were unaffected.

Treatment.—Blister over mastoid region; sharp purge; ear syringed twice daily with antiseptic solution and iodoform insufflation. Two days later discharge much less. December 5th. Continuous current applied, and continued daily until December 31st, when the paralysis had quite disappeared; deafness was unrelieved, and still a slight discharge.

REMARKS.—The portio dura was evidently affected external to the gangliform enlargement of the petrosal nerves and to the giving off of the chorda tympani. The ptosis may be explained by the communication of branches of the portio dura with branches of the ophthalmic nerve, which also communicates with the third nerve, in which doubtless some peripheral irritation was set up.

EXCISION OF MAMMA.

MRS. H., aged 46, a stout healthy-looking woman, was admitted with a stony-hard tumour, about the size of an orange, in the right breast, adherent to the nipple, but freely movable over the pectoralis major; axillary glands not involved. The entire gland with the tumour was removed, and also a good deal of adipose tissue, which was very abundant; antiseptic precautions were used throughout. There was free discharge of bloody serum the first day, and subsequently a large quantity of liquid fat came away, which, however, remained quite free from odour. The skin wound united by first intention, and all was completely healed by the sixteenth day. The temperature did not rise above 99.6° F.

DERBYSHIRE GENERAL INFIRMARY.

CASE OF HYDATID OF THE ORBIT.

(Under the care of Mr. SHARP.)

S. T., a lad aged 12, was admitted April 23rd, 1888, suffering from a tumour of the right orbit. His mother stated that it was first noticed six months previously, that it had gradually increased in size, the sight in the eye had failed, and that lately he had complained of pain in the forehead.

On examination there was found to be a tense globular swelling, the size of a large walnut, apparently springing from the floor of the right orbit. The eyeball was displaced upwards and forwards, the cornea being entirely concealed by the upper lid, which was tightly stretched over it. The lower lid was everted, the conjunctiva covering it, and the lower part of the globe being thickened and œdematous. On raising the upper lid the cornea was found to be normal; it was directed upwards and inwards, the eyeball

being fixed in that position. The pupil was dilated, and did not respond to light. There was no perception of light, and the optic disc was atrophied.

On the following day the patient was placed under the influence of ether, and, on further examination, the swelling was found to fluctuate. A trocar and cannula were introduced, and some clear watery fluid was removed. The swelling disappeared, and the floor of the orbit was felt to be displaced downwards. The fluid presented the usual characteristics of hydatid fluid, and, under the microscope, echinococci were seen.

The following day the swelling had reappeared, and the temperature was 100.4° F. Three days later, the patient was again etherised, and an attempt was made to dissect out the cyst, but this being found impracticable owing to the depth it extended into the orbit, a free incision was made, giving exit to a quantity of semi-purulent fluid. A portion of the cyst wall was excised, and free drainage was provided for. A fortnight later, the whole of the cyst wall had come away, the wound closed, and the eyeball had returned to its normal position. A few weeks later a plastic operation was performed on the everted lower lid, and, by the end of August, a casual observation could detect nothing wrong with the eye, it possessing free movement in every direction.

WELSH CALVINISTIC METHODISTS' MISSION HOSPITAL, JOWAI, ASSAM.

A CASE OF SUPRAPUBIC LITHOTOMY.

(Under the care of ARTHUR D. HUGHES, M.B., C.M.GLAS).

U. SIMON SOHBAR, a boy aged 15 was admitted into hospital on November 15th, 1889. He complained of pain and difficulty in micturition, having to pass urine drop by drop every few minutes. His mother stated that the first symptoms began twelve years ago, when the patient was but 3 years old. The sound revealed the existence of a considerably large stone in his bladder. No lithotrite or lithotomy instrument being at hand, it was resolved to remove the stone by the suprapubic operation. On November 20th the patient was put under chloroform. The urine having been drawn off by a soft catheter, the bladder was well washed out with a solution of boracic acid, and then distended by about six ounces of the same solution, a ribbon ligature being placed around the penis. No rectal pyriform bags being available, the largest of Barnes's hydrostatic dilators, well oiled, was introduced into the rectum and fully distended with warm water.

An incision $2\frac{1}{2}$ inches in length was made in the median line, its lower end extending well over the upper margin of the symphysis pubis. The layers of the abdominal wall were then divided, the adipose tissue over the bladder scraped through with the handle of the scalpel, and the bladder exposed. The anterior fold of the peritoneum was seen and pushed up out of the way by a director. Firmly grasping the bladder by tenacula, the knife was introduced between them and an opening sufficiently large to admit the forefinger was made. A large oblong stone was felt lying below the hollow of the prostate. No forceps being within reach, the Barnes's bag was withdrawn from the rectum and the middle finger of the right hand inserted to effect posterior pressure on the stone. Some difficulty was experienced in manipulating the stone so as to make the shortest axis the presenting part to the vesical incision. By a little persuasion this was effected and the stone extracted. (The stone proved to be an oblong calculus, two inches and a quarter in length and one inch and a quarter in breadth. It was nodulated on all sides and more or less encrusted. Weight 493 grains.)

The bladder was well washed out with boracic solution, a drainage tube inserted, and two carbolised catgut ligatures put in the incision. The upper part of the wound in the abdominal wall was closed by silk sutures, apposition being maintained by two deep button sutures at a distance of one inch from the line of incision. A long india-rubber tube attached to the bladder drainage tube led to a vessel under the bed. The wound was dusted with iodoform and dressed with boracic lint and Gamgee tissue. Bladder was washed out with boracic solution and wound dressed twice daily for a fortnight, urine freely passing through tube.

Temperature varied between 99·2° and 100·5°. Passed urine through natural channel, December 3rd. Drainage tube expelled following day. Patient sat up in bed December 5th. Sinus completely closed December 13th. Temperature normal since December 3rd. Discharged cured December 21st, 1889.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 21ST, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

Specimens illustrating Disease of the Thyroid Gland. — Mr. JAMES BERRY read a paper on diseases of the thyroid gland, illustrating it by a series of 34 specimens, 40 photographs, and 16 casts, which had been collected by him in the course of the last five years. Some of the specimens had been removed by operation during life; most of them, however, were from the *post-mortem* room. Two specimens showed the usual condition of the thyroid gland in myxœdema; the organ in each case was greatly atrophied, and quite devoid of glandular tissue. A specimen of senile atrophy was contrasted with the preceding; although much diminished in size, it still contained much well-formed gland tissue. Several photographs of different varieties of cretinism were shown; some of the patients had goîtres, some had not. The majority of the specimens showed the structure of the different varieties of goître. In the early stage of the disease there was usually general hypertrophy of the whole gland, attended with an increased amount of colloid secretion in the thyroid vesicles; to such goîtres the term parenchymatous was usually applied. The specimens showed various stages between this condition and those in which one or more large cysts were present, or in which there was considerable increase in the connective tissue of the gland. Fibrous goître was stated to be probably much less common than was often supposed; many cases diagnosed as such during life subsequently proved to be of a different nature. A specimen of goître from a case of Graves's disease was shown, and attention was drawn to the small size of the thyroid arteries; and other facts also showed that the gland in this disease is not nearly so vascular as is often supposed. Several specimens showed distinctly encapsulated tumours, cystic or solid, imbedded in the substance of the thyroid gland. True simple hypertrophy always involved the whole gland, not merely a part of it; it never caused any great enlargement. Nearly all unilateral goîtres and goîtres of very large size were composed either of cysts or of more or less definitely circumscribed solid tumours of the gland. Examples were shown of goîtres occupying unusual situations, such as near the angle of the jaw; in one specimen a process of gland extended transverely across the neck at the level of the hyoid bone. In one third of the specimens the existence of a "pyramid" or process extending upwards in front of the larynx was demonstrated. The obstruction which an enlarged pyramid would necessarily cause in a tracheotomy or laryngotomy was pointed out. The alterations produced by goître in the position and shape of the trachea were next discussed. All uniform enlargements of the gland caused lateral flattening of the trachea. A specimen was exhibited in which death had occurred from dyspnœa caused by this flattening, and reference was made to numerous other cases of similar nature. Unilateral goîtres and bilateral goîtres, in which the two lobes were of different sizes, caused bending, twisting, lateral and oblique flattening, according to the shape of the goître. Specimens and casts of the interior of tracheas deformed by goître were shown to illustrate these points. Antero-posterior flattening of the trachea was shown to be very rare; goîtres lying immediately in front of the trachea, and not involving much of the lateral lobes, were shown to be rarely the cause of dyspnœa. The apparent softening and atrophy of the trachea, which has been described, was alluded to. Pressure of the goître upon the œsophagus, recurrent laryngeal nerves, and sympathetic nerves was shown by some of the specimens and photographs. Three photographs showed various stages of cachexia strumipriva produced by the total extirpation of goître and others illustrated conditions after partial extirpation. The latter showed the advantage of leaving a portion of the gland sufficiently large to carry on its functions. Eight of the specimens exhibited had been removed by operation, three by the author, five by other surgeons; in most cases the operation had been performed on account of dyspnœa.— Mr. HORSLEY referred to a paper by Dr. Anton von Eiselsberg,[1] Professor Billroth's assistant, which contained the most recent experimental researches on the thyroid. He next referred to Professor Munk's idea that the changes which occurred after removal

[1] Über Tetanie im Auschlusse an Kropf-operationen, aus *Wiener klin. Wochenschrift*.

of the thyroid body were solely due to the disturbance of some of the cervical nerves during the operation, but stated that Dr. Eiselsberg's experiments showed that this was not the case, as he had in animals transplanted the gland from the neck to the abdominal wall, and in those cases in which the operation was completely successful the animals lived, but when the transplantation had been unsuccessful the animals had all died. Although cachexia strumipriva had only once occurred in the British islands, yet he considered that the results obtained experimentally up to the present showed that the thyroid gland could not be removed with impunity, and that whenever it was necessary to remove the gland from the neck, it should be replaced by another being transplanted from some animal into the abdominal wall or elsewhere, and he thought that this should be tried also in cases of myxœdema and cretinism.—Sir JOSEPH FAYRER mentioned the frequency of goître in the Terai district in India, an extremely malarious district, and he had noticed that the thyroid was sometimes enlarged when the spleen was not, and *vice versâ*. In 1850-55, two cavalry officers had treated large numbers of goîtres in the Terai with good results, by rubbing in an ointment of biniodide of mercury, and afterwards exposing the patients in the sun, and one or two such applications had generally been successful. He had himself tried the same means in Calcutta, but his success had not been quite so complete. He mentioned that he had, in one case of an enlarged pulsating thyroid, tied two thyroid arteries each as large as a goose quill, but without any effect in stopping the pulsation in the gland.—Dr. HALE WHITE had examined the thyroid gland in forty consecutive *post-mortem* examinations, and had discovered many changes unassociated with obvious clinical conditions. The cysts were especially liable to contain different products, and the microscopic variations were quite as marked as the macroscopic. He asked what symptoms could be attributed to the senile atrophy of the gland.—Mr. HAWARD referred to the question of the vascularity of the organ, and mentioned a case that he had published in the Society's *Transactions* in which there were secondary thyroid-like tumours in various parts of the body, and that some of these tumours were pulsatile.—Dr. DELÉPINE had seen some dogs from which Professor Schiff had removed the thyroid gland. In many of those that recovered glands of thyroid-like structure had developed in the submaxillary regions.—Dr. ANGEL MONEY asked Mr. Berry if he had noticed an enlargement of the thyroid in cases of chlorosis; he had himself noticed such an enlargement, and in such patients he had found that tetany was liable to occur.—Mr. BARLING mentioned a case quite recently under his notice, in which the right half of the thyroid was much enlarged and very hard, but after three evacuations of large quantities of pus the gland had diminished in size with great relief to the patient. He had regarded the case as one of suppuration of the cysts of the gland.—Mr. SOLLY asked Mr. Berry if he had seen any cases of lardaceous disease of the thyroid, and mentioned such a case which had come under his observation.—Dr. HALE WHITE mentioned a similar case.—Drs. HADDEN and PERRY had seen cases of miliary tubercles in the thyroid, and also lardaceous disease of that organ.—Mr. BERRY replied that he thought that transplantation in strumipriva should be tried, but questioned whether any good in cases of cretinism and myxœdema would occur from doing so. He had tried to ascertain whether there was any connection between the spleen and the thyroid body, but had been unable to establish any connection, though it was a fact that after the removal of the spleen from animals the thyroid had occasionally been observed to become slightly enlarged, but there was no evidence that the reverse happened. There did not seem to be any connection between goître and malaria, as, although Sir Joseph Fayrer had noticed the connection in the Terai district, yet it had not been observed in the Campagna around Rome, nor in malarious districts in this country. He said that the biniodide of mercury treatment had been tried in this country, but without much success. In reply to Dr. Money, he had examined a few exophthalmic goîtres, and found that there was an absence of colloid material in the cysts of the glands. He believed that there was a close connection between chlorosis and exophthalmic goître. Dr. Money's observation about tetany was interesting, as tetany had frequently been noticed after removal of the thyroid. He said that he could lay down no laws as to the relations of abnormal thyroids with various diseases, but he had noticed that fat persons who had died of pulmonary diseases had small red thyroids without any colloid material, and that in very emaciated bodies, as in death from cancer, the thyroids were very frequently large, from the cysts being full of yellow colloid material. Enlarged thyroids did not consist, as a rule, of a mass of vessels, though they often contained large ones. Suppuration of the thyroid generally occurred after typhoid fever or after operation, and Mr. Barling's case of spontaneous suppuration seemed to him an interesting one. He thought that probably in goitrous cretins the changes were due to loss of function and not to atrophy of the gland.

Thrombosis of Portal Vein with Suppurative Peritonitis.—Dr. SAMUEL WEST gave details of a case of thrombosis of the portal vein, the result of suppurative peritonitis in the course of gastric ulcer. The patient, a young woman, aged 22, had had gastric ulcer for some years, and was seized with severe pain in the left side. She gradually got worse, and a week later was thought to have peritonitis. She never had marked abdominal symptoms, and after a few days seemed to develop an empyema, a diagnosis which was confirmed when she began to spit pus. On exploration, a few drachms of pus were obtained from the left side. The *post-mortem* examination showed suppurative peritonitis and an old gastric ulcer, which, however, was so deeply imbedded in fibrous tissue that it seemed unlikely that any recent communication could have existed with the peritoneum. The left pleura was free from pus, but there was a profuse broncho-blenorrhœa of the left side only, which accounted for the pus in the sputum. The portal vein was completely filled with an old decolorised adherent clot and contained no blood, while the branches in the liver were so completely filled with pus that on section they looked like abscesses. Dr. West drew attention to the deceptive nature of the symptoms, which gave no evidence of the peritonitis, while the expectoration of so much pus was strongly suggestive of empyema. There was no ascites and no hepatic symptoms. It was extraordinary that there were no signs of portal obstruction, for that must have been complete, as no blood whatever was present in the vessel. The only other case of the kind was one he had published in the 37th volume of the *Transactions*, but in that instance the pus was in the branches of the hepatic and not of the portal vein.—Mr. STANLEY BOYD had seen two infants with their portal veins full of pus, and outside the veins the tissues contained small-celled infiltration.—Mr. VICTOR HORSLEY asked if the condition found in the lungs in Dr. West's case could not also be due to thrombosis, and somewhat similar to what had been described by Dr. Wooldridge, and asked if there had been any jaundice in Dr. West's case.—Mr. GODLEE asked why Dr. West had not classified his case as one of pylephlebitis; he also asked if rigors had been present.—Dr. SHARKEY had lately seen a similar case to the one under discussion, in which he had been able to trace the thrombosed vessel down to the rectum, but had not been able there to find any cause for the thrombosis. In this case also there was acute peritonitis, which had apparently spread from the vein.—Dr. WEST, in reply to the President, said the contents were undoubtedly pus, and that the splenic vein was probably the one first affected, and that in spite of thrombosis there was no ascites.

Card Specimen.—Mr. BIDWELL: Polypus from Trachea of a Dog.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 20TH, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

Selected Subjects in the Surgery of Infancy and Childhood.—The second Lettsomian Lecture was delivered by Mr. EDMUND OWEN, F.R.C.S., the subject being the treatment of certain congenital defects and deformities. He began with hare-lip, leaving on one side the subject of cleft palate, and proceeded to describe the origin and nature of the deformity from a developmental point of view. He dismissed the idea of maternal impression in the causation of this abnormality, but insisted upon the marked influence of heredity. With regard to the treatment, he advised that when the cleft was slight, and when sucking was not materially interfered with, the operation might be postponed until the child was weaned; but if unassociated with defective roof of the mouth, the operation might be undertaken within a few days of birth. With a defective palate, however, it was best delayed, as the power of sucking would not thereby be improved. He insisted upon the necessity of the child being in a satisfactory condition of general health before proceeding to operate, and he pointed out that many such children died from inadequate nutrition. Passing on to discuss the details of the operation with respect to the use of the intermaxillary bones for filling the front of the palatine

cleft, after the superfluous bone had been removed from the nasal septum, the lecturer pointed out the conditions under which it might prove a hindrance to the success of the operation—namely, that unless it were pushed well home it might exert a pressure against the line of operation in the new lip, and so prevent prompt union; and secondly, that when thrust into the cleft it might fail to secure a proper attachment, and thus prevent the requisite narrowing of the palatine fissure. He then narrated a case in detail, showing the peculiarities of his own method of carrying out the operation. He particularly insisted upon the fact that the piece which was brought across was not a mere paring of one border of the cleft, but a thick wedge-shaped flap, which was boldly tilted down, so as to leave a firm gap into which the opposite side of the lip might be conveniently dovetailed. He mentioned that of late years he had entirely given up the use of steel pins, and had used horsehair sutures in place thereof to the great advantage of the patient, on account of the absence of the scars which the former left. He said he had been pleased with the results of the removal of a wedge-shaped piece from the prominent lower lip, though he did not claim any originality in the method outside his own practice. After the suturing, a scrap of dry lint without collodion was laid upon either lip, and all the slack tissue was gathered towards the middle line and fixed by means of adhesive plaster. Within four or five days all the visible sutures were removed, those at the free border of the lip being dealt with last. He observed that, even when the non-union of the surfaces seemed to threaten failure, something might still be hoped from granulation. The lecturer then passed on to discuss the treatment of coloboma of the eyelid, in explanation of which he gave a case treated by him in conjunction with Dr. Keser. In that case an eyelid speculum was introduced, and the edges of the cleft were pared and carefully adjusted by horsehair sutures, some of which were passed through the tarsal cartilage. Primary union resulted, and the appearance of the eye was rendered normal. The next topic was that of dermoid cysts, the history of which he gave. He also quoted several cases to illustrate the *technique* of the operations for their removal. He called attention to certain tumours at the root of the nose, in order to draw a distinction between them and the simple but interesting orbital dermoids. He showed the photograph of a child with a tumour due to the protrusion of a pouch of dura mater through the top or upper part of the side of the nasal process of the superior maxilla. He observed that in some cases the growths assumed a nævoid character, but in this event, if no great increase in size took place at the periphery, they might safely be left alone; but if, on the other hand, they showed a tendency to enlarge, then they ought to be dealt with at once *secundum artem*. He pointed out that a dermoid cyst on a child's scalp, even though it contained sebacecus matter, was altogether different from a sebaceous cyst or wen which occurred upon the head of an adult. It was subcutaneous, and the skin could be easily moved over it. If the tumour were placed over the anterior fontanelle, removal should be delayed until after ossification was complete, but even then the operation was by no means an easy one on all occasions. The lecturer concluded by referring to a small class of cases which were met with only during infancy—namely, the small tender lumps which were found shortly after birth in the sheath of the sterno-mastoid. He mentioned a case which served to show their connection with wry neck, in which tenotomy and subsequent gymnastic exercises served to remedy the defect. He said he had come across so many cases of wry neck in which the cervical tumour had been noticed shortly after birth that he felt justified in asserting that wry neck was always, or with few exceptions, the result of partial or complete rupture of the sterno-mastoid during parturition. He said that if practitioners were only on the look out for the firm, oval, and painless swelling in the sheath of the muscle, and set to work by gentle massage and manipulation, the hæmatoma would not only be promptly dissipated, but the risk of subsequent occurrence of wry neck would be much diminished. He briefly alluded to two other forms of wry neck, one following exposure to severe cold and wet, and the other due to acute disease of the upper cervical vertebræ.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 8TH, 1890.

SIR T. CRAWFORD, K.C.B., M.D., President, in the Chair.

Leprosy.—Dr. P. S. ABRAHAM presented an analysis of 118 cases of leprosy reported by the assistant-surgeon of the Tarntaran Asylum (Punjab). The particulars were tabulated as to sex, age, variety of disease, its duration, relatives affected, number of progeny, fish diet, and some other details. Our knowledge of the disease, he observed, would be greatly enhanced if full accounts from every asylum were published at regular intervals on a uniform plan. He then read, on behalf of Dr. J. C. Phillippo, of Jamaica, a paper on a Case of the Arrest and Cure of Leprosy by the Internal and External Use of Gurjun and Chaulmoogra Oils. Dr. Phillippo, "as one who had had considerable practical acquaintance with the disease," expressed himself strongly opposed to the fish diet theory. "It was true," he said, "that more leprosy was to be seen in his as in other countries on the sea coast, but this was largely due to the fact that the poorer class of sufferers flocked to the cities and towns which were generally there situated, for the sake of the charity to be obtained in those larger centres of population.....That it was both hereditary and contagious" he firmly believed. With regard to the gurjun and chaulmoogra oils as remedies, he said that "in private practice it was difficult to follow up such treatment." In one case, however, it was carried out with thoroughness and perseverance for nearly six years, and the patient "had now been free from any return of the old symptoms for four years. In 1872 he cut his great toe when bathing; the sore was difficult to heal, reopening at intervals with swelling of the toe for several months. In 1874 he noticed a scaly eruption around the ankle, which, in 1876, became general, the hands swelling, and next the ears and face; other symptoms of leprosy following. In 1879 he was unable to walk, when, towards the end of that year, Dr. Phillippo took him in hand. The gurjun oil with lime-water was rubbed in all over the body twice a day, the patient bathing before each application, though the treatment had often to be intermitted, owing to attacks of fever. It was also taken internally until 1881, when chaulmoogra oil was substituted for internal use. Gradual improvement then set in, at first in the face. In 1884 he began to walk, in 1885 he had quite recovered the use of his legs, and early in 1886 he was considered cured, and discontinued the oils. "From this time," he said, "he ceased to live in grease." Dr. Abraham was inclined to think that many of the reported failures with these oils were due to their insufficient use, both as regarded time and quantity. As a rule it was only in properly appointed special hospitals or asylums that the necessary conditions for such a prolonged and troublesome method of treatment could be secured.

Typhus Fever.—Dr. O. GRANT read a short paper on An Outbreak of Typhus Fever.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

HENRY E. ARMSTRONG, M.R.C.S., President, in the Chair.

FRIDAY, JANUARY 10TH, 1890.

Notification of Infectious Disease.—The meeting was devoted to the discussion of questions arising out of the correspondence that had passed between the Society and the Local Government and Metropolitan Asylums Boards on the working of the Infectious Diseases (Notification) Act. The gravest complaint was that since the discontinuance of the weekly return formerly supplied to medical officers of health of admissions into the hospitals of the Asylums Board, a large number of cases of infectious diseases remained unnotified, the sanitary authorities being consequently unable to take the necessary measures for the removal of the insanitary conditions to which these cases might have been due or to provide against the further spread of infection.—Among such unnotified cases, Dr. DUDFIELD pointed out, were those admitted into general hospitals, or sent from them to those of the Board, as well as those who entered the latter of their own accord.—Dr. SEATON thought that the last were too few to call for consideration, but Dr. WILLOUGHBY assured him, on the authority of Dr. Collie, that during epidemics of small-pox, a large number presented themselves for admission.—Dr. FINDLAY read a correspondence between the authorities of the Middlesex Hospital and the Local Government Board as to the interpretation of that part of Sec. 3 exempting from the duty of notification "hospitals in which persons suffering from infectious diseases were received," which the Board explained to extend to the cases of in-patients only, those occurring among out-patients to be notified to the medical officer of health of the district in which they resided. But as Dr. Findlay observed, many cases of diphtheria and enteric fever were admitted into the wards, and, in the absence of notification, the sanitary authorities remained in ignorance of their occurrence, whereas those admitted into special hospitals had already been

notified by the medical man on whose certificate they were received.—Dr. YARROW read several letters between himself as Medical Officer of the Holborn Union Infirmary and the Vestry Clerk of St. Leonard's, Shoreditch, as to whether that institution did or did not come within the definition of a hospital into which such cases were admissible.—Dr. WILLOUGHBY was of opinion that the legal advisers of the Local Government Board were under the impression that infectious patients within the walls of a hospital were no longer a source of danger to the community, forgetful of the fact that their illness might have been caused by insanitary conditions, and that disinfection of their dwellings might be required. He suggested that the resolution under discussion for the alteration of Section 3 should take the form of requiring the notification of "all cases of infectious disease admitted into any hospital whatever, except when such cases had been received on the certificate of a medical practitioner." This proposition was accepted unanimously; but Dr. CORFIELD wished to extend the duty of notification to the occurrence of such diseases, for example, erysipelas among patients already in a hospital, since these might be due to insanitary conditions of the building itself which ought not to be exempted from the control of the sanitary authorities. Dr. Corfield then stated that the School Board had requested the local sanitary authorities to report to them all cases occurring in families, the children of which attended any of their schools. The principle was approved unanimously, but a long discussion ensued as to the best method of carrying it into effect.—Dr. WILLOUGHBY explained the administration of the School Board, and pointed out that 30 per cent. of the scholars attended voluntary schools with which the Board had no relations, saving that of compelling attendance. He insisted that the only practicable course would be to report such cases to the head master of each school; in this he was supported by Dr. NEWSHOLME, and the resolution moved by Dr. Newsholme was adopted.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, JANUARY 8TH, 1890.

JOSEPH WHITE, F.R.C.S.Ed., President, in the Chair.

Growths in the Naso-Pharynx.—Dr. STEWART read a paper on adenoid tumours of this region. He described the pathology of the vegetations with their far-reaching influence for harm, where nasal obstruction was produced by hypertrophy of the pharyngeal structures, for instance, in the production of mental torpidity in children, catarrhal affections of the respiratory surfaces, malformations of the thoracic walls, and diminished hearing power. Modes of examination and instruments employed were described and the different methods of treatment detailed. In his own practice Dr. Stewart nearly always used anæsthetics and Goldstein's curette for scraping away the growths, throwing the head as far back as possible and producing only partial anæsthesia.

Tubercular Emphysema.—Dr. HANDFORD showed a case of this disease, in which tubercle bacilli were abundant in the sputum and also demonstrable in the pus, obtained by means of a probe from the surface of the pleura. Within eight months of an operation, providing free drainage, the temperature had fallen from a hectic alternation with a mean of 101° to a perfectly normal level, the discharge had diminished by more than two-thirds, and the patient had gained half a stone in weight.

Myositis.—Dr. HANDFORD showed a case of myositis of the upper half of the biceps; the greater part of the structure was of a dense inelastic hardness, and was associated with brachial neuritis.

Ataxic Paraplegia.—A man, age 27, who had been suffering from this disease for some twelve months, was also shown. There was slight optic atrophy, but no loss of light reflex or accommodation; no loss of muscular sense, but slight anæsthesia, analgesia, and inco-ordination.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 10TH, 1890.

A. F. McGILL, F.R.C.S., President, in the Chair.

Tubercular Origin of Pleuritic Effusions.—Dr. BARRS read a paper on an investigation of seventy-four cases of pleurisy under treatment during the years 1880-84 inclusive, and which had apparently recovered, but showing at the present time a death-rate of 57 per cent. Excluding the empyema of children, he thought the majority of cases of pleuritic effusion were of tubercular origin.—Dr. CHURTON had seen a case in which the formation of an empyema (without pneumothorax) was traced over the left lower lobe, while the upper lobe was being destroyed by phthisis. Though phthisis often followed what appeared to be an ordinary pleuritic effusion, it still remained doubtful whether the pleurisy was itself of tubercular origin. Effusion disappeared rapidly in many cases; in three such cases which occurred about sixteen years ago, the patients were now alive and well. He believed cold or a chill to be one of the causes of internal disease; it reflexly lowered the vitality of organs so that they failed to resist or destroy any pathogenic organisms present in them. The investigations of Dr. Barrs into the subsequent fate of patients, many of whom had probably been treated by tapping or aspiration, added to the statements of Dr. Douglas Powell and Dr. Burney Yeo that aspiration for tubercular effusions was often followed by general tuberculosis, lent weight to the suggestion that we ought either to leave chronic effusions alone, or to incise the chest and drain it.—Dr. SWANN said scarlet fever was a not uncommon cause of pleurisy and occasionally of empyema, from which perfect recovery took place. He recalled one case of pleurisy which, owing to the fluid having rapidly reaccumulated after tapping, until sodium salicylate was given, he had regarded as rheumatic; this eventually died, with symptoms of tubercular peritonitis. With regard to cold as a cause, he related a case where a lad accustomed to work in a hot locality on exposure to cold developed pleurisy, from which he recovered.—Mr. E. WARD related two cases bearing on the etiology of pleurisy: Four years ago, he drew 35 ounces of pus from the chest of a boy aged 9, the fluid having been present for six weeks. One year ago the father, a stout, healthy-looking man, had a serous pleurisy. The boy is now perfectly well; the father died last year of phthisis.—Dr. JOHNSTONE referred to the fact that twenty years ago Professor Sanders, of Edinburgh, taught that pleurisy was generally tubercular, while another professor held that it was mostly of rheumatic origin. He had seen at the Ilkley Hospital a large number of cases of pleurisy eventuate in phthisis, and he thought the prognosis of such cases in general very bad.—Dr. PURDY drew attention to the large number of cases of dry pleurisy not of tubercular origin.

The Compulsory Notification of Infectious Disease.—Dr. SPOTTISWOODE CAMERON opened a discussion on this subject. Drawing attention to the recent Act by which sanitary authorities were empowered to establish the compulsory notification scheme, he said it was most important to discover how far it could be carried out, reducing to a minimum the possibility of interfering with medical practitioners. The advantages of the system were: 1. Direct, in that a much larger number of cases were reported than when no such practice existed, and besides the reported cases a large additional number were discovered in the investigation of the reported ones. With an efficient staff of inspectors 85 to 90 per cent. could be ascertained. The community was greatly benefited by the isolation practised, the mortality in hospitals being about half that outside. On the adoption of the Act a large increase of hospital accommodation became necessary; of thirty towns, twenty-three had had to enlarge their hospitals. In Leeds, without compulsory notification, so far as could be calculated from the death-rate, only about one case in four was heard of before death in the case of scarlet fever, and about one in three for typhoid. 2. The indirect advantages were that in every reported case the house was examined sanitarily, and in following up the cases both schools and workshops were visited, thus adding greatly to the general sanitary condition of the town. With regard to the ethical question, the responsibility of the medical man was shifted to the shoulders of the community, so that there was no breach of confidence in reporting the case.—The PRESIDENT thought the important question was, Who should notify? He thought the working of the Act would weaken the confidence between patient and medical man, and in the mild cases no medical attendant would be called in, leading to the greater diffusion of infection.—Dr. EDDISON thought that compulsory notification was inevitable, but he agreed with Mr. McGill that when the public found out that medical men were bound to notify, many cases would go untreated.—Dr. WHITELEGGE said that two years ago a unanimous protest was signed by the medical men of Nottingham embodying the objections to the Act urged by the last speakers. At the present time everything was working smoothly, and the natural apprehensions of the signatories of the protest had been proved to apply to merely imaginary dangers. As an example of the working of the Act, he related an instance in which fifteen cases of scarlet fever were reported

within a very short time. Of these, ten were found to proceed from a single class in a school. In this class a boy was discovered in a desquamating state. There was no interference, except the removal of this boy. He thought there was much less breach of confidence in such a matter than was usual in signing certificates of death where syphilis, etc., had to be noted. The experience of many places had been that, where the householder only was required to notify, reports were seldom received; where the dual system was in force, the householder generally trusted to the medical attendant for notification to the sanitary authority, and the notification of the householder practically dropped out of use.—Dr. BRAITHWAITE related a case where scarlet fever broke out in a small coffee-house; a knowledge on the part of the public of the existence of the disease or the compulsory closing of the house would have absolutely ruined the proprietor. What would the sanitary authority do in this case?—Dr. PURDY saw many difficulties in carrying out the Act in country places. He thought it was a serious omission in the Act that neither pertussis nor measles was included, which in his experience were very fatal diseases.—Dr. CAMERON, in reply, said the practical experience of the Act did not show any increase of uncertified deaths. On the contrary, his experience at Huddersfield led him to the opinion that the carrying out of the Act drew people's attention to the dangerous nature of cases of scarlet fever, which were formerly almost neglected if slight. People got soon accustomed to the notification, and the householder would often say to the medical attendant, "I suppose you will report this case, so it will be all right."

Pathological Specimens.—Mr. E. ATKINSON: Pyosalpinx.—Dr. ALLAN: (1) Gouty and other specimens of Renal Disease; (2) Gouty Toe-joints; (3) Enlarged Spleen; (4) Tibia from a Case of Rickets.—Dr. GRIFFITH showed a case of General Paralysis.

REVIEWS AND NOTICES.

A TREATISE ON GOUT. By Sir DYCE DUCKWORTH, M.D., F.R.C.P., etc., Physician to and Lecturer on Clinical Medicine in St. Bartholomew's Hospital. With Frontispiece and Illustrations. London: Charles Griffin and Co. 1889.

"A KNOWLEDGE of the real nature of gout and of its kindred malady rheumatism," wrote the late Dr. Todd, "is, in my opinion, at the very foundation of all sound pathology." Allowing for a certain epigrammatic licence, the claim is substantially true, for gout is the type of diathetic diseases and presents to the clinical observer problems which involve a consideration of the fundamental laws of pathology. The disease has been for nearly two centuries studied with great care in this country by a succession of eminent physicians, who have each added something to the stock of knowledge or of theory. English physicians, and especially those practising in London, have contributed largely to the literature of the subject, for, to quote from the treatise before us, "London is the head centre of gouty disease, and there is probably more gout and goutiness in London than in any other spot on the globe." Sir DYCE DUCKWORTH thus challenges comparison with some of the most illustrious of his predecessors and contemporaries; but the writer of a new book on gout has this advantage that, owing to the fundamental importance of the pathological questions involved, each advance in our knowledge of pathology gives fresh opportunities for explaining points in the natural history of gout hitherto obscure. Sir Dyce Duckworth's chief antecedent contribution to the literature of the subject was an essay published in *Brain* nearly ten years ago, in which he elaborated the theory that conditions unequivocally of gouty nature were primarily dependent upon a functional disorder of a definite tract of the nervous system, probably the hypothetical joint centre of the medulla oblongata. Upon this theory the primary lesion of gout is considered to be a neurosis, the perverted relations of uric acid and sodium salts in the economy, and all the other elements of gout being a secondary consequence of the primary neurosis.

This is, as Sir Dyce Duckworth points out, in some degree a revival, in the light and using the terminology of modern neurology, of the doctrines borrowed by Cullen from Stahl, who wrote in 1737. Though ingenious, perhaps partly because so very ingenious, the theory has once more failed to be generally accepted, and Sir Dyce Duckworth himself now considers that gout is a neuro-humoral disease; the pathogeny of gout has, therefore, to be discussed under two heads, and, in the present volume, the arguments in support of the neurotic element are well marshalled, while the humoral element receives an equal share of attention. The chapter in which these subjects are discussed is well worthy of perusal. The revival and elaboration of the neurotic theory has undoubtedly done good service in correcting a pathology too purely humoral, but a careful consideration of the facts at present known will tend to make us relegate the neurotic element to a minor, if not, strictly speaking, to a secondary, place. Nothing that has yet been advanced can be taken as proving that the "primordial vice of nutrition" is limited to the nervous system, much less to any part of it. Sir Dyce Duckworth, indeed, recognises the existence of a "basic arthritic diathesis," from which "arise, as branches, two main classes of disorders, commonly recognised as gout and rheumatism." The difficulty of reconciling this with the theory of the great primary importance of the nervous element in the pathogeny of gout will appear to many to be very great, and it is not entirely met by anything in this book; indeed, the author leaves the general impression that he has not yet attained in his own mind to actual certainty on the question of the relative importance of the several elements, and his position will therefore confirm the prevalent opinion that the true attitude, even at the present day, is one of suspended judgment. Sir Dyce Duckworth points out that Sydenham held what was tantamount to a neuro-humoral theory, but with this difference, as we understand him, that he attached more importance to the humoral element. A perusal of the whole passage from which the quotations on page 55 are drawn leaves little doubt that for Sydenham "the impaired concoction of matters, both in the parts and juices of the body" (labefactæ tam in partibus quam succis corporis universis concoctioni), was the primary departure from health, and the defect in the "energy of the spirits" (spiritus animales per totum corpus deficiunt) was the secondary determining, or, at most concurrent, cause of gout.

Next, perhaps, to the pages which contain the discussion of the pathology of gout, most interest will attach to those in which the relation of gout to other morbid states and its influence on these are considered; the section on the relation of gout and rheumatism is largely controversial; the author's views are very fully given and conveniently summarised in a long series of propositions (p. 155); the keynote to the whole is the hypothesis of the existence of the basic arthritic diathesis already referred to; it leads to the wide-embracing propositions that heredity is a strongly-marked feature of the arthritic diathesis, that gouty or rheumatic affections may supervene in the descendants of either gouty or rheumatic people, and that "in the course of many generations transitional modifications may occur, and give rise to unusual forms of arthritis whose place is not quite readily determined." Among the other subjects discussed in this chapter special attention may be directed to the section on glycosuria, in which modern views on the subject are well reflected.

The morbid anatomy of gout is described fully and systematically, and a few excellent illustrations are given which might with advantage have been largely increased in number. The chapter on the hæmatology of gout only serves to show that our acquaintance with the subject has been for many years almost stationary. In describing the clinical features of gout, the classification adopted is: (1) acute (regular) gout; (2) chronic gout—*a*, tophaceous; *b*, deforming; (3) gouty cachexia; (4) irregular (incomplete) gout. This is a convenient arrangement, and a separate chapter on visceral gout and on gout of special organs and textures completes a very careful survey of the whole clinical field; the interest of these pages is often greatly increased by the quotation of illustrative cases clearly and briefly related.

The concluding part of the book is occupied by a series of chapters on treatment. As to acute gout, nothing very novel is said, but the good practice is followed of giving in full the prescriptions in use; a very guarded opinion is given as to the value of salicylate of soda, which the author has in his own experience found to be very inferior to colchicum. The absorbing topic of the diet, and especially the beverages, suitable for the gouty is not neglected, and there is a useful chapter on hydrotherapy and spas.

The *Treatise* is impartial in its discussion of theories, full and accurate in its description of clinical facts, and will be found a trustworthy guide to treatment.

DIE ALLGEMEINE PATHOLOGIE. Von Dr. EDWIN KLEBS. Zweiter Theil. Störungen des Baues und der Zusammensetzung des menschlichen Körpers. Allgemeine Pathologische Morphologie. (General Pathology. By Dr. E. Klebs. Second Part. General Pathological Morphology.) Jena. 1889.

PROFESSOR KLEBS'S great textbook of pathology has advanced a stage. We have now before us the second volume, occupied with "General pathological morphology, or morbid alterations in the structure and composition of the human body"—that is, what is usually understood as general pathological anatomy. It extends to more than 800 large pages, and is beautifully illustrated with forty-seven coloured plates and numerous figures in the text, which are also printed in colours. We need hardly say that this, like all Professor Klebs's work, is distinguished by his usual copiousness and thoroughness. It treats very fully of all the subjects comprised under its title, the discussion of them being brought up to the latest date. Indeed, the criticism might be made that new and controverted topics occupy a disproportionate space as compared with better known but not less important matters, the fundamental facts of the subject being sometimes lightly passed over as if almost too familiar to need mention. A tolerable knowledge of pathology is, indeed, necessary to understand a good deal of this book, which can therefore hardly be regarded as well adapted for students.

The author, in his preface, defends himself against this criticism as applied to his first volume. The student, he thinks, ought to have every subject presented to him in the most complete way, which involves, it would seem, introducing him to the fringe of unsettled doctrine and inadequate experience which bounds positive knowledge on every side, so that he may be shown ideas in the making as well as those completely formed. To all which there is one reply, namely, that life is short and all study is an alternative, and the time devoted by the student to getting up pathological controversies will have to be taken from something else—possibly of more importance. Moreover, the unsparing copiousness with which all these subjects are discussed does not always conduce to clearness. Greater compression of language would, we venture to think, render the exposition more effective. Without exactly looking for what is properly called style in a work of this kind, we are often led to wish for something like the master hand of Cohnheim.

The difficulty of defining what is general pathology is shown by the fact that Professor Klebs includes many topics which are in a high degree special, such as glaucoma, rickets, ulcer of the stomach, xanthoma, etc.; but as these are of great interest to the pathologists, we need not complain. Perhaps the most striking feature in Professor Klebs's general expository method, and a very valuable one, is the wide extension given to most pathological terms, and the avoidance of minute distinctions. Degeneration, for instance, is wisely, as we think, made to include all degenerative processes, though some might be more accurately described as infiltrations or precipitations. Under atrophy, again, a large number of diseases are discussed, some of which are not usually placed under this head, for instance, rickets and cretinism.

The discussion of rickets is very interesting; it is described as a process of "atrophische Wucherung," or atrophic proliferation, and the hyperplastic processes which form a part of the disease are ingeniously connected with the proliferative changes observed by Flemming as a consequence of the removal of fat from adipose tissue in starvation. The parallel is a happy one, and probably the same explanation is applicable to many cases where atrophy or degeneration goes hand in hand with proliferation, either of the same or of a closely connected tissue. Degenerative changes of functional origin in the nerve centres, where the line between inflammation and degeneration is often indefinable, or the tissue changes in myxœdema, of which it is still uncertain to what pathological category they belong, would be instances.

A minute account is given of what was formerly called fœtal rickets or pseudo-rachitis, now generally connected with cretinism, and baptized by Professor Klebs anew as cretinoid dysplasia. The account is chiefly based upon the descriptions of Bode and Eberth, and no notice is taken, we may remark, of the researches of English pathologists on this subject. The remarkable special diseases—acute yellow atrophy and acute red atrophy of the liver—also come in as cases of atrophy.

We now arrive at the progressive pathological processes, which are divided into three groups: inflammation, regeneration, and "Blastom-bildung," including hypertrophy and tumour formation, of which more anon. Inflammation is defined in a series of propositions as follows: 1. It is a group of functional and morphological disturbances, the common feature of which is the reaction of the organism against injuries. 2. Of these the morphological changes are the most constant. 3. Inflammatory growth (or vegetation) differs from normal growth in a disturbance of the equilibrium of the several tissues. 4. These reactive processes serve to a certain extent as a defence against injuries, and are so far salutary, but become pathological if they pass the desired *(gewollt)* and useful limit. Hence inflammation is a departure from the normal process of reaction. 5. All vegetative processes necessary for the preservation of the normal organism, namely, emigration of leucocytes, proliferation of connective and other tissues, appear in an exaggerated degree among the inflammatory morphological changes, but no one of them can be considered essential.

This exposition of inflammation is, however, incomplete because the present volume treats only of structural changes, the consideration of all functional disturbances, including therefore the functional or vascular phenomena of inflammation, being deferred to the third volume. It is clear, however, that Professor Klebs puts the latter phenomena in a secondary place, and consequently rejects deliberately but finally Cohnheim's theory of inflammation. The difficulty of the author's own view evidently consists in distinguishing between inflammation as thus defined and simple regenerative repair.

The main distinction drawn is that indicated above, namely, that in inflammation the reaction goes beyond what is needful or salutary. But Professor Klebs also admits that inflammatory and non-inflammatory repair differ essentially in the presence in the former case of a certain disturbing factor which is absent in the latter, this factor being often, though not always, the action of micro-organisms. Now, this factor is certainly not contributed by the inflammation, but by the injury which set up the process; consequently the difference between the two kinds of repair is the difference between the two kinds of injury which respectively set them up. Inflammation deals with injuries complicated with the said disturbing factor just as non-inflammatory repair deals with injuries of a simpler kind. And if inflammation is necessary for compensating this particular kind of disturbance, how can it be said to pass the desired and salutary limit? Why is one kind of repair or compensation less normal than the other? Doubtless an inflamed part is an abnormal state, but the abnormality resides in the injury, not in the compensating process. It seems, then, on the theory that inflammation is a reaction against injury, impossible to distinguish it from any reaction or repair following any injury; and to some it will appear simpler to define inflammation as merely the injured state which does not come to an end till repair is complete. But to discuss fully this, one of the oldest problems in pathology, is impossible here. We note with satisfaction that Professor Klebs finally abandons the old word *Reiz*, or stimulus, which has led to great confusion of thought in this subject.

The subject of regeneration is very well treated as one of the progressive pathological processes, but we cannot discuss it except to note the great importance attached to karyokinetic changes in nuclei as a sign of the proliferation of tissue.

The third group of progressive pathological changes, including hypertrophy and tumour formation, is discussed with a good deal of novelty and originality.

Hypertrophy is not defined very precisely. It is, however, distinguished from hyperplasia, as being essentially a process in which nutritive material is accumulated in or among the cells in a non-assimilated form. The most obvious instance is hypertrophy of adipose tissue in its well-known forms. Functional or "Arbeits hypertrophie," such as that of muscle, is, in its ordinary forms when called out by exercise, not strictly pathological. When, however, no physiological cause can be found it must be regarded as a pathological process. Certain forms are regarded as new growth. For neoplasia, or new growth properly so called, the author proposes a new name of strange and rather questionable etymology—"Blastom-bildung" or "Blastosis." Blastoma is the general name for hyperplasia causing irregular tissue formation. The product may be typical in form or atypical. In the former case gigantic growth (Riesenwuchs) is the result, either general, producing a gigantic individual, or partial, leading to hypertrophy of particular parts of the body. Atypical blastoma means what is ordinarily spoken of as a new growth.

The subject of gigantic growth has been a favourite one with

Professor Klebs, and he has already published some remarkable cases, not of ordinary giants but of exuberant growth, especially of the skeleton, associated with some deformity. With regard to the case published by Fritsche and Klebs in 1884 we have always derived the impression from their figures that the condition was identical, or nearly so, with what Sir James Paget has described as osteitis deformans. Professor Virchow's authority appears to weigh on the same side. Klebs does not accept this identification, but probably a study of the skeletons preserved in London museums, or even of the published figures, would show that the conditions described under such different names are, at all events, very closely allied, if not identical.

Another remarkable form of "typical blastoma" is what we may call congenital muscular hypertrophy, the excessive development of the muscular system seen in the celebrated "strong men," of whom Londoners have heard so much lately. The tendency to such development generally begins in early life, and is often hereditary. Professor Klebs refers to an individual of this kind now making the tour of German universities and serving as a model for artists. This extreme muscular growth seems to be rather a kind of sport or abnormal development than a high degree of the normal. It is important that the electrical reactions of the muscles in such cases are, according to Klebs, not always normal. The occurrence of such individuals is, we say in passing, a testimony to the fidelity or veracity of the antique sculptors, whose massive figures of Hercules and others have often been thought to be mere ideals or else monstrous exaggerations. The "akromegalie" of Marie is also described as a variety of typical blastoma. The hypertrophies of single limbs and of fingers, such as the cases long ago described by Mr. Curling, come under the same head. An observation which may turn out to be of some importance is that the hypophysis cerebri (pituitary body) and the thymus are often found enlarged in cases of monstrous overgrowth.

New growths, as generally understood, are spoken of as atypical blastoma formation. The classification of them does not greatly differ from that generally adopted, though the names used are different. The infective granulomata are included under the name leucocytoma as belonging to the first division of parablastoma, or what are generally called mesoblastic growths. The etiology of new growths Professor Klebs admits to be the great riddle of pathology, to which we have as yet no answer, but an "ignoramus." Cohnheim's theory finds little favour, and the bacterial hypothesis no more. To discuss this part in detail is impossible. The only distinct novelty appears to be Professor Klebs's theory of the origin of neuroma.

It will perhaps excite some surprise to find the fibrous tumours of nerves, formerly called neuroma but lately classified as neurofibroma, brought back to their original position among growths of nervous tissue. According to the author, the formation of these tumours begins with a proliferation of the nuclei of the nerve sheaths which crowd the nerve trunk, and have been generally regarded as belonging to the connective tissue. At the same time the nerve fibres split up into a bundle of minute threads, which have all the appearance of fibrous tissue but are distinguishable by their reaction with acids. Later on the proliferative process extends from the nerves to their fibrous investments, and new connective tissue is actually produced; but, according to Klebs, a great part of what is described as fibrous tissue in such tumours is really of nervous origin. A similar explanation is given of the origin of glioma of the nerve centres, which, on this view, is originally a growth of nerve tissue with subsequent proliferation of the neuroglia.

Though these views are illustrated by beautiful figures they are so opposed to what seem to be the obvious minute characters of the tumours described that they can hardly be accepted without further discussion. The most evident difficulty appears to be that there is no proof, even on Klebs's showing, of any actual hyperplasia of nervous elements.

In taking leave of this, the most important recent German textbook of pathology, we cannot help regretting, in a work so elaborate and, in some respects, so complete, the rather one-sided character of the literary references. Copious as these are they are almost confined to German, with some Italian sources, French or English authorities being rarely quoted. In these matters the author hardly displays that European or cosmopolitan spirit which has characterised Virchow and other leaders of the older generation of German pathologists.

To speak of English literature only, the *Transactions of the Pathological Society* would hardly seem to have travelled as far as Zürich, for we cannot trace a single reference to these volumes, even in subjects where such references would have been very useful. For instance, in discussing the chemistry of amyloid degeneration Dickinson's views are referred to, and their "refutation" by Wickham Legg, but nothing is said of the results arrived at by the Committee of the Pathological Society in 1871. Such allusions, moreover, as are made in the text to English authors are not always accurate. In speaking of myxœdema Sir William Gull's name is not mentioned, and though the Report of the Clinical Society is alluded to as quoted by Virchow it would not appear to have been read. Possibly, however, it came out too late to be made use of. It seems strange, too, that the first observation of xanthoma or xanthelasma should be attributed to Virchow and von Graefe, while of Addison and Gull there is not a word, and no reference is given to the medical literature of the country where this disease was discovered and has been most often observed. Other instances might be given; but we are far from attributing these omissions to any special want of consideration for English authors.

If, however, in the above details Professor Klebs's work is open to criticism it is not the less to be highly recommended to those special students who are able to profit by its perusal. Its predominant German character is, for English readers, in some respects an advantage; and it gives an admirable picture of the newer and more progressive departments of pathological research.

DISEASES OF WOMEN AND ABDOMINAL SURGERY. By LAWSON TAIT, F.R.C.S.Ed. and Eng., LL.D., Professor of Gynæcology in Queen's College, Birmingham; Surgeon to the Birmingham and Midland Hospital for Women, etc., etc. Vol. I. Leicester: Richardson and Co. Philadelphia: Lea Brothers. 1889.

THE great value of this work lies in the fact that it contains the most recent opinions of its well-known author, conveniently included under one cover. The profession will, perhaps, regret that the remaining volume has not appeared simultaneously with the first, nevertheless the present issue includes quite enough matter for reflection. In the first place, the author's small but important monograph on Ectopic Pregnancy and Pelvic Hæmatocele is incorporated with the present volume. That monograph has so recently been reviewed in the JOURNAL, that we need say no more about its contents, especially as Mr. TAIT'S views on extrauterine pregnancy remain unchanged, and his line of practice continues to be successful. Nor need we dwell upon the author's theories concerning menstruation, further than to note that they are concisely summed up in this volume, which includes a sketch of Dr. Arthur Johnstone's and Mr. Bland Sutton's researches. Dr. Minot's views on the endometrium unfortunately appeared too late for notice in this work. There can be no doubt that few physiological questions are more difficult to settle by research than the nature of the precise changes which go on in the ovary, tube, and endometrium in the course of each menstrual cycle. The opinions of the author on this subject are, for obvious reasons, of great importance.

The first chapters in this work will prove of general utility to practitioners and to gynæcologists. It will interest the specialist well-read in the literature of his subject to study the author's claims as the true discoverer of the condition described in 1885 by Breisky as "kraurosis vulvæ." Although questions of priority are of little or no scientific interest, some importance must be attached to the numerous writings of living authorities on certain morbid conditions of the vulva, the nature of which remains very obscure. The same condition has been described in a different manner, and as a pathologically different disease by various authors, in communications made to societies and journals. Each communication is often quite independent of similar papers, all representing more or less original work, not wholly founded on controversy or on arguments supporting previous opinions.

Whilst affections of the external parts are more carefully described than in most other works on diseases of women, the passages on rupture of the perineum are meagre. Mr. Tait's operation is well described and illustrated by two good diagrams, but the directions would hardly guide a novice. The author gives with characteristic frankness, his very decided views upon another plastic operation. He speaks slightingly of "laceration" of the cervix after labour, which one well-known writer holds to be a somewhat serious morbid condition. "The real trouble,

writes Mr. Lawson Tait, "is the sub-involution and the consequent chronic metritis, ... and nothing more useless than 'Emmett's operation' has even been introduced into surgical practice."

Another subject, which at present lies very prominently before the notice of the profession, receives but scant and unfavourable comment from the experienced author of *Diseases of Women*. He does not find that any permanent good has been derived from electrolysis, in cases of uterine myoma. "If it should prove in future," he concludes, "that uterine myoma can be cured, and its symptoms relieved permanently by any means short of surgical operation, no one will rejoice more thoroughly than I shall, for it will mean that our art has made still further progress. As the matter stands at the time of my writing there seems to be no prospect of this, and we have to be satisfied, at least for the time being, with the successful results of our surgical proceedings." The radical treatment of myoma, it may be predicted almost with certainty, will never be safely undertaken by anybody who is not highly experienced in abdominal surgery, whether he employ the knife to the tumour, the ligature to the appendages, or the electrodes to the uterine cavity or elsewhere.

A considerable portion of this important work is devoted to chronic diseases of the appendages. The author's views and experience relating to tubal disease, its cause, symptoms, and treatment, are given at great length. They are too well-known to require special notice. Ovariotomy is not included in this volume. Many readers will, therefore, look forwards with interest to the next, which, according to a "Table of the Organs Concerned," placed after the title-page of the present issue, should include the surgery of the pelvic bones, liver and gall bladder, kidneys, spleen, pancreas, colon, rectum, cæcum, and small intestines, as well as the breast. Thus in interest it is not likely to fall behind the first volume now under our notice.

HYGIENE AND PUBLIC HEALTH. By LOUIS C. PARKES, M.D., D.P.H.Lond.Univ., Fellow of the Sanitary Institute, Assistant Professor of Hygiene and Public Health at University College, etc. London: H. K. Lewis.

THE provisions of the Local Government Act dealing with the qualifications of candidates for the post of medical officer of health have given a great impetus to the study of hygiene; the number of candidates at the various examinations for the diploma in public health has largely increased, and the moment is certainly opportune for the publication of a concise manual of the subject, the number of such works previously published being very limited. Dr. LOUIS PARKES who has had considerable experience as a teacher at University College, where he has conducted the practical classes in Professor Corfield's laboratory, has written a very clear and practical manual, which will afford a trustworthy introduction to the subject. Real excellence is of course only to be attained by practical experience and laboratory work, but a preliminary acquaintance with the facts and theories upon which practice rests is very necessary if full advantage is to be taken of attendance at a laboratory course.

Dr. Louis Parkes has shown good judgment in devoting a very large part of the space at his disposal to the chapter on the collection, removal, and disposal of excretal and other refuse. The questions involved therein are fundamental, and until the student has grasped their significance, no real progress can be made. The chapters on water, and on air and ventilation are carefully written, and contain directions for conducting analyses of water, and for solving the various problems which arise in connection with ventilation. There is a short but remarkably comprehensive chapter on warming and lighting, in which we find descriptions of some of the newest burners. The next two chapters, on climate and meteorology and on soils and building sites, briefly review the principal points of importance in these divisions of the subject. In the chapter on food and beverages an attempt has been made to compress too many facts into a very limited space, and the result is not altogether satisfactory. The etiology and prevention of the communicable diseases are thoroughly discussed; the results of modern researches both statistical and bacteriological are frankly accepted, and the remarks on the construction of hospitals afford a good introduction to this important subject. The work concludes with an excellent chapter on statistics and the method of conducting statistical inquiries; the mathematical points here and elsewhere throughout the book are illustrated by examples, some of them taken from examination papers; the working out of the problems is given in full, and the work of the student is thus greatly facilitated.

The work is one which may be highly commended; it will undoubtedly obtain a permanent place among handbooks of hygiene intended for the use of candidates for Public Health Diplomas.

A TREATISE ON MATERIA MEDICA, PHARMACOLOGY, AND THERAPEUTICS. By JOHN V. SHOEMAKER, A.M., M.D., and JOHN AULDE, M.D. Vol. I. F. A. Davis, Philadelphia and London. 1889.

THE intention of the authors of this work, as stated in the introduction has been to write a treatise on materia medica, pharmacology, and therapeutics, in which the greatest possible prominence is given to therapeutics, the other subjects being considered only in so far as they conduce to an enlightened application of remedies in the treatment of disease. The plan is excellent; but it demands for satisfactory accomplishment much higher qualifications than are necessary for the writing of a textbook dealing equally, and necessarily briefly, with all branches of the subject. Our knowledge of therapeutics is largely empiric, and is distinctly backward in some respects; opinions as to the value of many drugs and methods of treatment are conflicting and shifting, the fashionable and much belauded remedy of one year is often forgotten the next, while even our most valued medicines have had their ups and downs in professional estimation. The mass of literature on therapeutical subjects is now very large, and probably in no department of medicine have there been so many unreliable and worthless papers written. Hence, wide clinical experience, matured judgment, and a thorough acquaintance with the known physiological actions of drugs are indispensable qualifications in the authors of a work dealing specially with therapeutics. In addition, a great deal of painstaking reading has to be gone through, and a discriminating use made of the material thus collected.

It is difficult to judge of a whole book by one instalment, the volume before us being "devoted to pharmacy, general pharmacology and therapeutics, and remedial agents not properly classed with drugs." The authors state in their preface that they have "postponed the issue of the second volume until such time as would permit them to go over the entire ground again in the special department of drugs." Interesting and valuable as it is, this first volume would also have gained in accuracy and value from a thorough revision. It bears some traces of having been hastily prepared. Besides this, there occur frequent small mistakes in composition and grammar, which are annoying to the reader, and which could easily have been avoided with a little care. The book has, however, many excellencies, the best features of a number of well-known textbooks having been incorporated in it with no small degree of success.

The article on pharmacy is accurately and pleasantly written, while those on water, baths, electricity, climatology, and massage are also presented in an attractive form. Light and music are included as remedial agents, and an account given of their effects on the sick. It is, however, difficult to understand why peroxide of hydrogen, laughing gas, and oxygen come under the heading of remedial agents which are not drugs.

The portion of the book dealing with the classification of medicines (p. 71) lays itself open to criticism in many respects. Thus, under the heading of "Mineral Acids" are included alum, perchloride of iron, oxide of lead, and several other substances equally unconnected with mineral acids. As "phosphorous alteratives" are enumerated hyposulphite of lime and hyposulphite of soda, while malt liquors and wine are stated to be "alcohol in the form of distilled spirit." Instances of similar errors and inaccuracies might be greatly multiplied, but in the next edition the authors will probably rewrite this section of their work. It is too diffuse and inconsequent, digressions are much too frequent, while the propriety of using certain drugs and methods of treatment in preference to others is discussed as familiarly as if this part of the book were the conclusion and not the beginning of a work on therapeutics.

A new edition will no doubt remedy defects such as these, and leave the book to enjoy the popularity which it well deserves.

THE IMMEDIATE AND GENERAL TREATMENT OF ACCIDENTS AND INJURIES. By Sir WILLIAM MOORE, K.C.I.E., Q.H.P., late Surgeon-General with the Government of Bombay.

THIS pamphlet is one of the many handbooks for what is now termed "First Aid." It commences with a short account of the general treatment to be adopted in cases of accident and injuries, and then proceeds to give a description of the blood vessels, but all mention of such things as capillaries is entirely omitted. Bleeding from arteries is to be ordinarily recognised by "vividly scarlet blood rushing out in jets or jerks;" and then, at page 6, the lay person giving assistance is told that, if raising the part does not control the bleeding, "each edge of the wound must be lifted up, carefully examined, and the mouth of any bleeding artery should be seized obliquely with the forceps;" and, again, the friend at hand, if all this fails, is to take "a piece of strong bent wire sharpened at the end," and then to seize the artery with this. Now, if one considers the conditions of the ordinary neighbour when anything like a bleeding wound comes under his notice, such surgical operations do not seem quite practicable. At page 15 it is stated that "for slight bruises, brown paper or cloth steeped in *liquor* is a good application." What liquor? Is it an English or a Latin word? Dislocations, at page 22, are, we are told, to be distinguished from sprains by pressing the swollen part steadily and firmly; if it be a dislocation, the end of the bone is felt firm and hard, while the swelling caused by a sprain is soft and yielding. Under the head of drowning, the Sylvester method of resuscitation is described. Under that of foreign bodies in the eyes, it is recommended that "if a particle of metal is so firmly imbedded in the central part of the eye that it cannot be readily detached, it should be left to separate by the natural process of inflammation;" perhaps it would have been well to have advised that every effort should be made to seek the aid of a surgeon. Under fractures, our friend who is to raise the edge of a bleeding wound, and hook up the artery with a piece of sharpened wire, will find no further direction as to the means whereby he can help us when our femur is broken than by referring to page 34, where the method for putting up a broken arm is described, namely, by means of two thin light pieces of wood; but under the heading of rupture he will find a minute description of the taxis, but whether this is advisable or not must be left to the discretion of our readers. At page 49, under the heading of treatment for snake bites, after trying suction, we are advised to cut out the part with a sharp knife to the depth of a quarter of an inch; but, when cutting out the bitten part, care must be taken not to injure any vein, one is inclined to ask, How can these things be? In the treatment of inflamed wounds and severe bruises, pages 15 to 44, the advice does not rise above poultices and water-dressing, remedies belonging now to ancient history.

With such capital handbooks at hand as exist at the present time, do we need more? At any rate, if new ones be forthcoming, let them come up to the level of those now in print; and this it is impossible to say of the one under notice.

THE YEAR-BOOK OF TREATMENT FOR 1890. London: Cassell and Co.

THE high standard of this publication is fully maintained by this year's issue. As is stated by one of the contributors, "A restless activity continues to prevail in the domain of therapeutics." This constitutes a danger to medical art, for our serials are flooded with accounts of new remedies, which are recommended before their action is understood. Such descriptions, coming as they do for the most part from enthusiasts, are not safe guides to the practitioner; yet year by year a few, in truth a very few, remedies of value are added to our materia medica, and it is of importance that these should be sifted from the others by those best calculated to judge and to express an opinion *ex cathedrâ* on their merits. The editor of the *Year-book* has entrusted each section to a competent authority, who in every case has done his work well. The literature of all countries has been carefully examined, and judicious selection has been made of the abstracts which are inserted. No worthless paper will be found here, albeit the reviewers have not in every case approved of the opinions expressed in the original articles. Their criticisms constitute the great value of the work to the practitioner. In many sections he will find authoritative opinions, based on clinical experience, which will help him to apply in his daily work the laboratory experiments of scientists.

Dr. Mitchell Bruce writes on the diseases of the heart and circulation, and gives a summary at the head of each section, for which the abstracts which follow are used as illustrations. Dr. Markham Skerritt's criticisms on the new remedies for diseases of the lungs are of value, although short and too few in number. The compilation of his section has been most exhaustive. In the chapter on diseases of the nervous system, Drs. Ross and Reynolds give a detailed account of the literature of suspension for locomotor ataxy and of hypnotics. Sir Dyce Duckworth and Dr. Robert Maguire again append to a full account of the treatment of disorders of digestion critical remarks which are especially practical in their bearing. Diseases of the kidneys are treated of by Dr. Ralfe, rheumatism and gout by Dr. Robert Maguire, medical diseases of children by Dr. Goodhart, and continued fevers by Dr. Sidney Phillips. The article on general surgery is by Mr. Frederick Treves. Mr. Walsham writes on orthopædic surgery, and Mr. Edmund Owen on surgical diseases of children. Mr. Reginald Harrison, Mr. Alfred Cooper, Dr. Berry Hart, Dr. Herman, Mr. Malcolm Morris, Mr. Henry Power, Mr. Field, and Dr. McBride contribute articles on their respective specialities, and the work is concluded by an admirable summary of the therapeutics of the year by Dr. Walter G. Smith, of Dublin. The volume like its predecessors, is excellent, and should be in the hands of every practitioner.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, UNITED STATES ARMY. Vol. X. Washington: Government Printing Office. 1889.

THE tenth volume of the *Index-Catalogue of the Library of the Surgeon-General's Office, United States Army*, which reaches us from the Government Printing Office at Washington, extends from O to Pfutsch. It consists of upwards of a thousand pages in small print, and, like all its predecessors, is of immense value to students of medical literature. As an example of its completeness and the way in which it is worked out, we may mention that the references under the head of "Paralysis" occupy sixty-seven pages. This magnificent contribution to medical literature puts the whole of the medical profession under the greatest obligation to the American Government, and especially also to Dr. Billings, under whose immediate auspices it is prepared. Up to date, the ten volumes include references to author titles of 54,298 volumes and 93 002 pamphlets. Under subject titles there are references to 107,419 book titles and 336,772 journal articles. Nothing so useful, complete, and exact has ever yet appeared in this department of medical literature.

ESSAY ON MEDICAL PNEUMATOLOGY. By J. N. DEMARQUAY. Translated with additions by S. S. WALLIAN, A.M., M.D. Philadelphia and London: F. A. Davis. 1889. Pp. 300.

DEMARQUAY'S book was published some years ago, and Dr. WALLIAN is so interested in the subject of the therapeutic applications of oxygen that he has translated it. We are hardly surprised that Demarquay's book has not received much attention, for, although Dr. Wallian has only translated part of it, the translation still contains much of what is usually called "padding." Thus, cases are quoted from the older authors at great length; but such cases are quite useless, for we have no means of telling whether the diagnosis was correct. All this padding not only obscures the point at issue, namely, Is oxygen of any value in the treatment of disease? but it makes the reader instinctively doubt the conclusions of any author who accepts such cases as evidence. Then, again, although we are frequently told of cases said to have been cured by oxygen, we are never told what proportion of such cases usually recover without any treatment or with well-known drugs. For example, let us take the table on page 240, where a list of cases treated by oxygen inhalation is given. Out of 28 cases of anæmia, 17 were cured; out of 24 cases of bronchitis, 13 were cured; out of 7 cases of chorea, 5 were cured; out of 47 cases of constipation, 22 were cured. Other means than the inhalation of oxygen are quite competent to produce results as good as these. The book, too, sadly lacks an account of the experiences of those authors who have tried the administration of oxygen and have found it use-

ess. The authority that the work might otherwise have is weakened by the numerous occasions on which in his translation he translator is compelled to disagree with the conclusions of Demarquay, and to describe his apparatus and experiments as crude.

Judging from this book we should say that Demarquay's enthusiasm for his favourite remedy was so great that he could not fairly be expected to give a judicial opinion upon its value, and that Dr. Wallian has preserved a much more judicial frame of mind, although we suspect that sometimes he has not stopped to ask whether equally good results might not be obtained by ordinary methods of treatment which are less irksome and less expensive than the inhalation of oxygen. We do, however, very much admire the bold way Dr. Wallian speaks out against those semi-quacks who appropriate any new remedy to themselves, especially if it entails an expensive apparatus, for then the unfortunate patient must come daily to the apparatus. Dr. Wallian justly reproves "oxygen specialists" who, as he says, claim too much for the treatment, and thus lose caste with the profession, for which loss, unforunately, they do not care.

The historical part of the book is very good, and has evidently been compiled with great care. On the whole, perhaps the results of oxygen inhalation are most hopeful in cases of narcotic poisoning; and considering how desperate such cases often are, we think that it would be desirable to try the use of this gas oftener than we do at present. Among the most exact experiments quoted are those of Hayem, who reports of oxygen that "it produces a very decided stimulation of the function of nutrition. It augments the appetite, perceptibly elevates the temperature, accelerates the circulation, and increases the body weight. It favours the evolution of hæmatoblasts and of red corpuscles, increasing the proportion of the latter in hæmoglobin as much as 5 to 10 per cent."

The book also contains a short account of the physiological action of hydrogen, nitrogen, and nitrogen monoxide.

NOTES ON BOOKS.

Clinical Lectures on Varicose Veins of the Lower Extremities. By W. H. BENNETT, F.R.C.S. 1889. (Longmans, Green and Co.)—These are four clinical lectures, delivered apparently at St. George's Hospital, with tables of cases treated there by him, and they contain the carefully thought out opinions of the author. It is not intended to be an exhaustive treatise, but affords, in a convenient form, an amount of practical information on certain points connected with varicose veins of the lower limbs, which is not, as a rule, to be obtained from sources readily accessible to the student and practitioner. It is, no doubt, important to keep before the student classes of cases he is most likely to have to treat in practice, and therefore such clinical lectures are of great value at the time, and as these contain tables and conclusions from them of practical use, they are fully worth preserving in the form of a small book; nearly 700 cases are tabulated. The essential causes recognised are a defective condition—generally congenital—of the veins, together with constipation and menstrual or other uterine troubles; and he gives what he looks upon as the best arrangement of valves in the neighbourhood of the saphenous opening, together with an account of the common deviations from the type. The early symptoms of varix are well given, and these will prove useful to practitioners, for they are not easily learned from ward experiences or the out-patient department as a student. The author's advice as to treatment by support and by operation is given in the last two lectures, and is clear and judicious. He evidently favours ligature in two or more places, with division of the vein between, and occasionally excision when a radical cure is wished for; and he gives a list of the class of cases in which operation is advisable.

Diphtheria und Croup in Königreich Preussen in den Jahren, 1875-1882. Ein Beitrag zur Ergründing, Einschränkung, und Heilung dieser Krankheiten von Dr. L. BRUHL und E. JAHR (Kaiserliche Gesundheitsamt); with preface by Professor Oertel. (Berlin: Hirschwald, pp. 112, with charts. 1889.)—Professor Oertel tells us in the preface that this is the first time that a very large statistical material has been examined carefully as regards diphtheria and croup. We know that infection in such diseases does not spread merely by the agency of an infection-carrier, but other co-operating causes are required. Of the nature of these we are still very ignorant. Endemically considered it has already been proved that diphtheria and croup are intimately related to the seasons of the year. The present work proves that epidemics obey the same law; that the maximum mortality from these diseases occurred with the lowest, the minimum mortality with the highest isotherms; also that the mortality increased from west to east, this being contrary to tuberculosis. The authors appear to be satisfied that the origin and spread of croup and diphtheria depend entirely on the temperature and moisture of the air. This conclusion is probably premature. In this work 334,541 deaths from these two diseases during eight years in Prussia are elaborately examined into. The material is thus immense, and the main conclusions put forward are on this account incontestable. The greatest mortality occurred in the second year of life, and that of the first year was about as great, that is, when compared with the living population at these ages. Authors are wrong in placing the greatest mortality at from 2 to 5 years, as Neukomm's statistics show and those of our authors. The mortality decreases rapidly after the second year. The authors found that, statistically speaking, vaccination could have had no influence in causing diphtheria or croup. The chief factor in the causation of diphtheria and croup, or rather, in favouring the disposition towards the diseases, is the change from a moist to a dry air, as in staying in heated rooms in winter, or passing into the open air in summer. Hygienically, much may be effected towards preventing such changes. Occasional applications to the throat cannot disinfect and moisten it properly, and one of the authors (Jahr)[1] has constructed an inhalation apparatus that will admit of the gentle and continuous disinfection of the pharynx, etc., by warm, moist air, in the way so strongly recommended by Oertel. This apparatus can be used with very young children without trouble.

Diabetes; Its Cause and Permanent Cure from the Standpoint of Experience and Scientific Investigation. By EMIL SCHNÉE, M.D., Consulting Physician at Carlsbad, etc. Translated from the German by R. L. TAFEL, A.M., Ph.D. English edition revised and enlarged by the Author. (London: H. K. Lewis. 1889.)—The author believes he has discovered the "real cause of diabetes" in hereditary syphilis. He treats it by mercury, chrome water, and chromate of potassium, in addition to the ordinary dietetic and hygienic plan, and claims great success by his method. Unfortunately, the cases which are cited in support of this claim are reported very briefly, and no details of the plan of treatment are given by which anyone desiring to do so could test these statements, or prove the worth of the method. The book is translated in a very unreadable fashion by one who evidently is acquainted neither with the technicalities of the subject matter nor with English composition. The great bulk of the book is made up of the opinions and views of others.

Egypt as a Health Resort. By F. M. SANDWITH, F.R.G.S. Cr. 8vo, pp. 153. (London: Kegan Paul, Trench and Co. 1889.)—Mr. Sandwith remarks that even in the best of Egyptian guide books there is an absence of matter specially suited to the use of the invalid; and we think he has been very successful in his endeavour to supply this information. After giving short accounts of Port Said, Ismailia, and Suez, he proceeds to Cairo, where he offers excellent remarks on the improved mode of life. Visitors should generally go to one of the hotels, of which Shepheard's is the chief, as the private lodgings are not, on the whole, to be recommended. After a full description of the city and its climate, and of the amusements it now offers to strangers, he pays a visit to the waters of Helouan, on the edge of the desert, and also gives an account of the usual excursion to the Pyramids. Then, returning to Cairo, he considers what is the most suitable season for the voyage up the Nile, and the various modes of making the trip, either by steamer or the old-fashioned Nile boat. He then gives an account of Luxor, and the accommodation it offers to the invalid. We cannot follow him further, but on these and all other subjects he appears to offer us trustworthy information. On the whole, we gather from this work that prices in Egypt are not quite so prohibitive to small purses as they used to be; and it seems to be satisfactorily made out that the Nile offers a good climate for phthisis. One receives from the public prints such accounts of suffering and sickness among troops serving in the desert that one is apt to take an exaggerated view of the un-

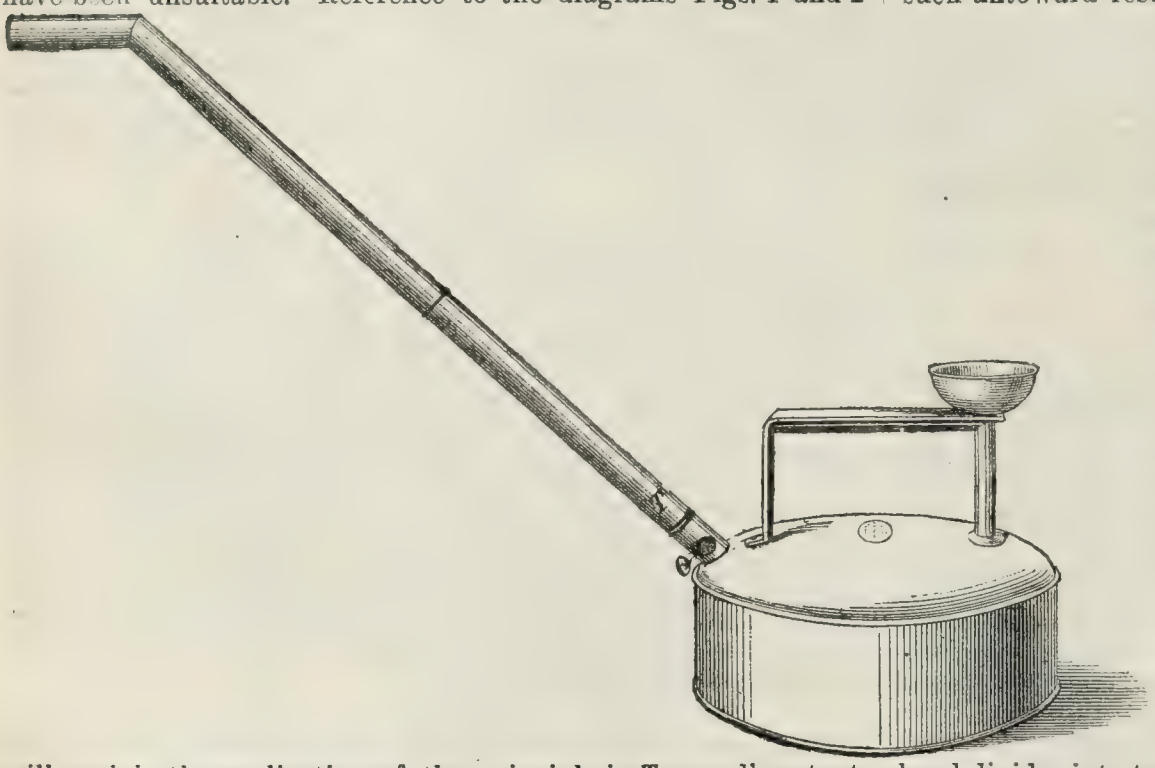
[1] See *Deutsche med. Wochenschr.*, 1888, Nos. 38, 39, and 48.

healthiness of Egypt. It is satisfactory, therefore, to find a writer of judgment like Mr. Sandwith assuring us that the average health of residents is so good, and that the country is almost entirely free from malaria, with the sole exception of Ismailia, where it has only recently appeared upon the construction of a fresh-water canal from Cairo. Our author gives a very fair list of modern writings on the climate of Egypt. He could scarcely be expected to refer to the older works on the subject, with their curious accounts of the baths and medical practices of Cairo.

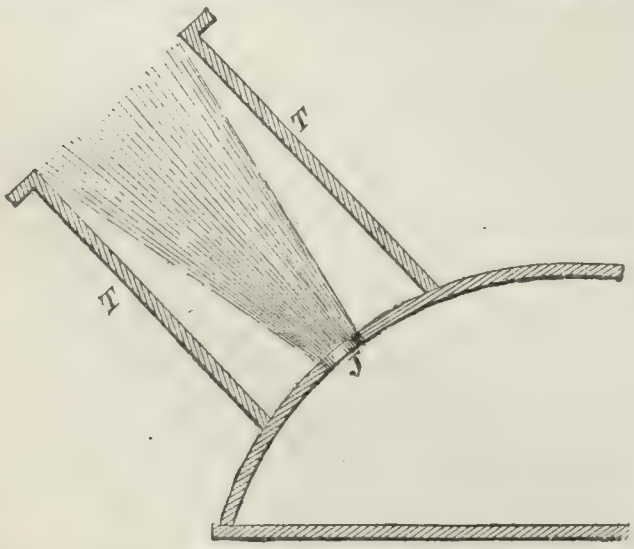
REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BRONCHITIS AIR KETTLE.

A JET of steam, as is well known, may be conveniently employed for producing a current of air, and this method has been used in many ways when more complicated methods by fans or pumps have been unsuitable. Reference to the diagrams Figs. 1 and 2



will explain the application of the principle in Toogood's patent air kettle. As the steam escapes (Fig. 2) in a small stream or jet,

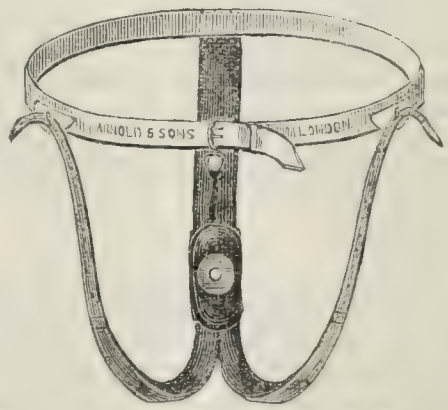


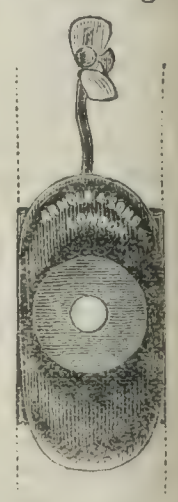
it passes into a tube, which has openings in it through which air can freely enter. A current of air is thus induced to pass along the tube, and by this combination of air and steam a vapour is obtained which can be inhaled directly without danger of scalding, and which is evidently better suited for inhalation than simple steam. The force of the jet depends on the heat employed, and as this may vary when the kettle is placed on an ordinary fire, it was necessary to provide against sudden expansion of steam within the kettle. Instead, therefore, of closing the kettle with a lid or stopper, a feed pipe is employed which rises so as to give sufficient pressure, and at the same time allows water to be poured in without difficulty.

It may be pointed out that when an ordinary kettle is used in the sick room it is not intended for inhalation, but rather for warming and moistening the air of the apartment. Considering how much inhalations are being employed in practice, particularly when medicated with some antiseptic or therapeutic agent, such as carbolic acid, benzoic acid, oil of pine, etc., the advantages of a kettle which can be used on an ordinary fire, or over a gas or spirit lamp, will readily suggest themselves. In the construction of this kettle, the parts are so simply combined that the cost of manufacture is very little more than that of the ordinary kettle, and the price, therefore, will be no objection to its use.

APPLIANCE FOR THE TREATMENT OF PROLAPSUS RECTI.

As relaxation of the lower bowel, leading to its extrusion and prolapse, is a very common occurrence, more especially in the young, and is attended with so much inconvenience and, if neglected, by such untoward results, a means of obviating recurrent prolapse without undergoing an operation of any kind—nearly always so strenuously opposed by both parents and patients—should be accorded extended trial. I have almost always found that liquid, solid, or semisolid applications *per se* were comparatively useless, having also the disadvantage of being more or less painful, and in some cases even producing evacuation followed by extrusion of bowel. The foregoing refers more particularly to prolapse resulting from costiveness, natural delicacy, with straining and threadworms. However, the appliance I have devised will, I believe, meet the requirements of every case, whether arising from vesical stone, urethral stricture, piles, prostatic and rectal disease, or the other causes before mentioned, by giving support when and where needed, namely, at the time of going to stool, and at the junction of skin and mucous membrane. I now append a brief description of my recto-perineal pad. It consists of a strap, which is buckled round the waist, having an india-rubber band passing down between the legs from the middle of the back where it is attached to the waist band. Before reaching the median raphe this perineal band divides into two, and the ends are brought out in front and hooked up to the waist band on either side, permitting of any degree of tension or laxity, as they are provided with a regular





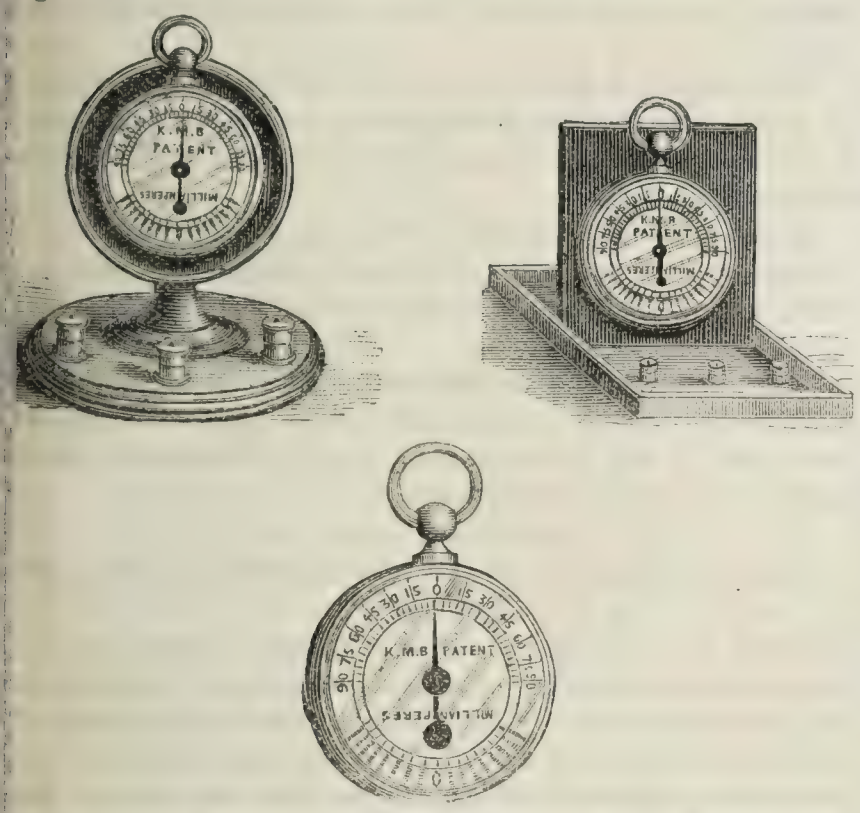
series of holes. There is a sliding air pad or cushion, having a hole in its centre and provided with an easily dilatable flange surrounding the hole; the flange permits of the passage of fæces, but keeps the bowel in position. The pad can be removed at will for cleaning purposes by simply unhooking the ends of the perineal

and and sliding it off; it is kept in position by buttoning to the ader surface of the rubber band. The mouth piece of the in-ating tube is covered with a reversible chamois hood, and lies omfortably in the hollow of the back. This appliance has the ivantages of (1) facility and simplicity of application; (2) com-rt in wear; (3) cleanliness; and (4) efficiency; and was made r me by Messrs. Arnold and Sons, of West Smithfield. The oodcuts show it in position, and the pad separated from bands.

G. E. J. GREENE,
Medical Officer, Ferns District, Co. Wexford.

POCKET GALVANOMETER.

ESSRS. KING, MENDHAM AND CO., of Bristol, have patented a ocket galvanometer. The specimen forwarded to us for inspec-on makes a very good galvanoscope, to show that a current is assing; or would act as a detector in examining a battery for ie purpose of removing faulty cells. It can hardly be useful in edicine for the absolute measurement of current strength. It difficult to suspend or hold the instrument steadily enough, and ie scale is too contracted for most medical purposes, the lowest easurement being 100 milliampères. In the specimen forwarded ie left hand conical hole (the back of the instrument being to-ards the observer) does not conduct; when it is attempted to omplete the circuit through it no effect is produced upon the agnetic needle.



For the purposes above mentioned—namely, as a galvanoscope r detector—this handy little instrument may be found of great se. It is of a very convenient size and shape, and, no doubt, ould be made more useful if provided with a stand as represented n two of the woodcuts.

CONCENTRATED ICELAND MOSS JELLY.

CELAND Moss is said to contain about 80 per cent of amylaceous natter, and is considered to form a nutritious and easily digested liment. The specimen of concentrated jelly sent to us by Messrs. avies, Barnitt, and Hughes, 15, Old Bond Street, Bath, is a very alatable preparation, and in every respect well adapted for the dministration of Iceland Moss as an alimentary substance.

TABLOIDS AND SUPPOSITORIES.

ESSRS. BURROUGHS, WELLCOME AND CO., Snow Hill Buildings, ondon, prepare under the name of Tabloids a number of active rugs in a compressed form. We have specially examined the pecimen of Saccharin Tabloids sent, and find that they are exactly hat they are represented to be. The Tabloids of Antipyrin and of alicin are very convenient for the administration of these emedies, and those of Borax as an application in throat affections. he compressed Papain Tabloids we find to possess considerable digestive power, and the Thirst Tabloids have a very pleasant acidulous taste, dissolving slowly in the mouth with continuous effervescence. The same firm has also sent us specimens of their Zyminised Suppositories (Peptonised Meat) for rectal feeding. These suppositories have been in use for some time, and have been favourably noticed where feeding *per rectum* is necessary or desirable. The Glycerine Suppositories are hollow cones of cacao-butter containing 15 grains of pure glycerine. We find that they melt readily at the temperature of the body, and we have not seen any irritation produced by their use.

HYPODERMIC SOLUTIONS.

WE have received from Mr. W. E. Sacker, 79, Fenchurch Street, specimens of permanent Hypodermic Solutions of Morphine and Ergotine. They are stated to be prepared without the addition of either alcohol or acid, and to be of uniform strength. We have kept these solutions for some time, the bottles being frequently opened, and we have not found any indications of change. In all the cases in which they were used, they acted efficiently and without producing any irritation.

QUININE CHOCOLATES.

THIS preparation sent to us by Messrs. Curtis and Co., 48, Baker Street, Portman Square, London, is a very agreeable method for the administration of quinine. It is like ordinary sweet chocolate, and is without the slightest bitter taste. Each chocolate contains 1 grain of tannate of quinine.

ALBUMINATED IRON: LOZENGES.

ALBUMINATED iron is a preparation which, at the present time, has found considerable favour because it is easily digested and can be borne by a delicate stomach. Messrs. T. Christy and Co., 25, Lime Street, London, have sent us a specimen of dialysed solution of albuminated iron, which bears upon the label the name of J. De Groot, Apotheker, Rotterdam. This solution, upon examination, we find to be in every respect a very excellent preparation. We have also received from Messrs. Christy a sample of their Papain and Cocaine Lozenges. They have a very pleasant taste, and have a decided anæsthetic effect upon the throat, which will render them useful as a local application in affections of that organ.

THE "J.R.P." INSUFFLATER.

MESSRS. S. MAW, SON, AND THOMPSON, London, manufacture an insufflater suggested by Mr. Philpots, which appears to be a very excellent instrument for the purpose intended. It consists of a shallow circular box of hard wood, about an inch in diameter, furnished with a screw lid, and having two openings, one connected with an india-rubber tube with a mouthpiece attached, through which air can be blown, and the other having the delivery tube screwed on to it.

LIQUOR IODI DECOLORATUS.

THIS is a solution of iodine which does not stain the skin. The iodine is in combination with an organic body, which renders it colourless, but at the same time the combination is so loose that a gentle heat, or even evaporation alone, under a glass over sulphuric acid, sets free the iodine. There can be no doubt of the superiority of this loose organic combination for purposes in which free iodine is required, compared with those decolorised solutions of iodine prepared with sodium hyposulphite or alkalies. The manufacturers of the Liquor Iodi Decoloratus are Messrs. Bewley and Draper (Limited), Dublin.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The quarterly court of this Society was held on Wednesday, January 8th, at 8 P.M., at 20, Hanover Square, the President, Sir James Paget, in the chair. Two new members were elected, and the deaths of three reported. Fresh applications for grants were read from two widows and relief was given them, and the deaths of two widows in receipt of grants were announced. It was resolved that a sum of £1,343 be divided among the sixty-one widows, fourteen orphans, and the three orphans on the Copeland Fund. Legacies had been received: £1,000 from the executors of Miss Carpue (first instalment), and £35 2s. 2d. from the executors of Mrs. Elizabeth Douglas (remainder). The expenses of the quarter were £65 19s.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 25TH, 1890.

PROPOSED LEGISLATION FOR THE BLIND AND DEAF.

WE would fain hope that the long-delayed legislation for the benefit of the blind and deaf will soon be carried to a successful issue. The Conference on the Treatment of the Blind, held at the Society of Arts last November, following the Conference concerning the Deaf held in Manchester, prepared the way for the deputation to the Lord President of the Council (Lord Cranbrook) when the representatives of both those classes of sufferers brought forward their views, and urged upon the Government the necessity for giving effect at once to the recommendations of the Royal Commission.

Dr. Armitage, whose devotion to the welfare of the blind is so well known, brought forward a series of resolutions giving practical effect to the decisions of the Royal Commission; and, on the motion of Dr. Symes Thompson, Mr. B. St. John Ackers was desired to point out to Lord Cranbrook what were the main points required for the deaf.

As regards the blind, inasmuch as the large majority become blind between the ages of 45 and 65, the question of education has reference only to a small percentage of the whole number; but there can be no question that the provisions of the Education Act should be brought to bear on this small percentage; that the blind should have compulsory education, inspection, and grants for maintenance; and that this need in no way interfere with the flow of charity which has hitherto done so much.

As regards the deaf and dumb, for whom public benevolence has done comparatively little, there was an absolute unanimity of opinion that deaf children must be sought out and educated with at least as much assiduity as the hearing. They must be brought to school at the age of 7 or 8, and kept there for at least seven years. Thus, if the teaching is efficient, the child would be in a position to enter into life with good hope of success. The educational grant must be at least the equivalent of that for the hearing. Inasmuch as the successful teaching of the deaf requires very special skill, education, and experience, the salaries of the teachers should be good, and inducements should be held out to attract a high class of teachers.

Training colleges for teachers of the deaf, although they have already done good work, require Government aid and recognition. It was Lord Salisbury's Government that appointed the Royal Commission, and let us trust that his Government will obtain the credit of carrying into law the results of its labours.

The time has come for action, and we are giving expression to the earnest desire of the physicians and philanthropists when we say that we earnestly hope that the recommendations of the Royal Commission will be at once carried out. They are mainly these:—

That the provisions of the Education Acts be extended to the blind and deaf, and that power be obtained to enforce the attendance of deaf children at the institute or day-school from 7 up to the age of 16.

That the school authority should be empowered to send children to institutions, or to board them out under proper inspection, and to contribute to their education and maintenance.

That technical instruction in industrial handicrafts be made a part of the curriculum in schools for the deaf.

That training colleges for teachers are of paramount importance, and that these colleges require Government assistance, examination, and inspection, like the training colleges for the hearing; two years' training being regarded as essential for the students.

That training in the anatomy and physiology of the organs of speech and hearing is a necessary preliminary, and that a duly qualified examiner should be appointed to inspect the institution.

It was gratifying to learn from Lord Cranbrook that he considered that the existing training colleges had done good work, and, with slight modifications, might be developed so as to fulfil every requirement.

All the propositions brought forward by the deputation appeared so important that we would fain hope that they will form part of any measure that may be introduced for the benefit of the blind and the deaf.

THE EVIL THAT HAS BEEN SAID OF DOCTORS.

NOTHING is more curious to the contemplative physician of the present day than to watch the steady rise of his profession in public estimation. When he remembers the sarcasms, the biting satires, and the unpleasant jokes which have been from the earliest times directed against him and his art, and then reflects that at the present day the doctor bids fair to occupy a still higher post of honour, he will find abundant food for reflection in the causes which have worked this remarkable change. Looking back at the history of medicine and surgery as practised in ancient Greece and Rome, amongst the Hindus and the Saracens also, we cannot fail to be impressed with the perfection to which surgery at least had attained, and the very rational principles upon which medicine was practised in these early ages. Yet we suspect that it was only here and there that a high-water mark was reached by the medical knowledge of the time, or it would not have been possible that there could have accumulated so great a legacy of satire and contempt of which we are scarcely rid at the present day. An American physician, Dr. T. C. Minor, has just collated from Dr. Witkoski's *Le Mal qu'on a dit des Médecins* a great number of extracts from Greek, Latin, French, and English writers,[1] which reflect in no flattering

[1] *The Evil that has been said of Doctors.* By T. C. Minor, M.D., Cincinnati. 1889

terms against the honour and dignity of our learned calling as it was practised in the times in which the respective authors lived. From Æsop, eight centuries B C., down to George Colman, in 1836, it appears that the hardest things have been said of us, and the wonder is, when they are all brought before us in this tremendous indictment, that our order survived at all. If a fiftieth part of it were true the Governments of all nations should have suppressed us, as they did the order of the Knights Templars.

No doubt a good many of the pleasantries directed against us may be explained on the principle that mankind is prone to pretend to treat with levity the things which it holds most sacred. We make fun of death and Satan, and neither priest nor parson escape our wit. It would be as easy to make a big book of the hard things which have been said against the clergy as against doctors, and it would be far easier to serve the lawyers the same. The point of the joke in these cases is different, however, from that aimed at ourselves. We do not find that anti-clerical and anti-legal sarcasms hit the ignorance and incompetence of the sister professions; the anti-medical jokes, on the other hand, are chiefly directed against the murderous stupidity of the attempts at healing, on which our profession formerly actually prided itself, unless all history lies. If we are now fast rising in public favour; if we are admitted to take part in the highest deliberations of the State, and our advice is sought in almost every detail of social and municipal life, it can only be because our universities and licensing bodies have so raised the standard of medical education, so laboriously striven that we should be worthy of public confidence, that the doctor of to-day bears actually but the faintest resemblance to the pompous empiric—half-magician, half-quack—of the past.

When therefore we read the epigram of Seneca, to the effect "that doctors with as much ignorance as zeal, will murder in the most obliging manner," or that many centuries later, Molière could speak of the faculty as "a pack of asses, fools, and scoundrels," we feel as little affected by the censure as our judges when they read the judgment of history on the doings of a Jeffries or a Bacon, or as our magistrates when they read the strictures of Pascal on their order. It is not for our ignorance the world is inclined to blame us now; if for anything, it is because we are becoming too scientific in the sense reprobated recently by Professor Huxley in his rebuke to Mr. Herbert Spencer.

Perhaps the most noticeable feature running through all the satires collected by Dr. Minor is the pompous assumption, the amazing pretence of wisdom, in all the medical men who are their subjects. From the doctor in the comedy of Plautus, who swore he would cure his patient, if he had to "go short-winded 600 times a day," to Molière's Sganarelle, who protested that he was "the ablest, greatest, and most skilful physician in the vegetable, mineral, or animal faculty," the real blot hit by the satirist is always the pretentious bombast of the ignorant empirics, who doubtless bled, purged, and frightened to death more patients than they cured. We are at least learning now the limits of our knowledge.

Dr. Minor's book is crammed full of good things, which we can appreciate even better than the general public, as the verses which Petrarch wrote on the famous accoucheur who enriched himself at the expense of pregnant women—

"Quas bona pars hominum muliebri condit in antro,
Ex illo Clemens eruit unus opes,"

and that *bon mot* in which a doctor was compared to a priest "as having power to bind and loose." That, too, is an excellent story of De Launay's, of the French lady of fashion who was a brilliant doctor, and especially fond of the society of some Paris physicians, and who when sick sent her valet to say to them "Madame is ill to-day, and does not desire to see a doctor." We can laugh, too, at the story of Chirrac, the French surgeon, who heard a sermon on the raising of Lazarus, and exclaimed, as he left the church, "If he had been my patient they could not have raised him." The wits and poets of more modern times treat us with greater consideration, and however severely the public may sometimes be inclined to judge us, we have at least the satisfaction of knowing that, as Byron says—

"Although we sneer
In health—when sick we call them to attend us
Without the least propensity to jeer."

DEFECTIVE COLOUR VISION AND THE PUBLIC SAFETY.

In these days in which express trains run races, and the waters round our coast are becoming more and more crowded with vessels which become more speedy year by year, the vision of look-out men and engine drivers is becoming more and more a matter of national importance. We have recently commented on the utter worthlessness of the tests used for seamen and railway men, but are induced to return to it by the gravity of the subject and the fact that an interesting discussion on it took place at the Society of Arts on Wednesday last.

We propose in this article to deal only with the question of colour vision; for although good visual acuity is equally essential, any defect in it is more readily discovered.

Mr. Carter gave an account of the physical nature of colour and the Young-Helmholtz theory of colour perception. Dr. Edridge-Green has stated that this theory is not consistent with some of the facts of colour blindness, and in the discussion that followed the reading of the paper he explained his views; we trust that he will accept the challenge offered, and bring the facts on which he bases his objection before the Royal Society or some similar body.

For our present purpose we may disregard all theoretical considerations, the question before us being a strictly practical one: What tests should be employed to prevent colour-blind persons being employed to interpret signals which consist of coloured lights? Mr. Carter advocates most strongly Holmgren's wools; and he quoted the statistics showing the immense number of men that have been tested by this method, with nearly uniform results. It is, of course, possible that there are, as stated by Dr. Edridge-Green, certain forms of colour blindness the subjects of which, by careful instruction in the test, may escape detection; if so, it would, no doubt, be easy to modify the test to a slight extent, but the enormous number of examinations that have been made with this test and the uniformity of the results prove that such cases must, if they exist at all, be very exceptional. Moreover, if the suggestion of one speaker were adopted, that, a complete test

having been made, a candidate should not be re-examined, it would get over most of the difficulty. The most grave charge that Dr. Edridge-Green brought against the test was that it fails to detect those who have shortening of the red end of the spectrum without any other defect; these would doubtless be most dangerous as signalmen. Not much is known of this form of colour defect; and Dr. Edridge-Green will only be performing a public duty if he has the cases that he has seen tested by independent observers.

The conscientiousness of private companies in this matter contrasts most favourably with the supineness of the authorities. We are indebted to Mr. Bickerton for the information that the larger Liverpool shipowners have for some time refused to accept the Board of Trade certificate of normal colour vision, and insist on all their officers being tested by their own examiners. Over the railway companies the Board of Trade in this matter exercise no control, each company adopting what tests it pleases. As we have already pointed out, these on many lines are simply childish; we believe, however, that all the more important main lines would gladly remedy the defect, but are not aware of the condition of affairs. The Great Western, at any rate, have evinced a desire to do the best they can, and sent a representative to the meeting to which we have referred.

We deeply regret to see that quite recently an influential medical contemporary lent its support to the system of testing with actual signals, although it had, a few weeks before, strongly condemned the test. There can be no question whatever that this test is one of the most inefficient possible; it merely shows that on a given occasion, and under most favourable conditions, the examinee did not confound a red and green light, but it affords no guarantee that under other circumstances he would not do so. Now, a person with normal colour sense could under no circumstances make this mistake. That the test is utterly worthless is shown by Mr. Stretton himself, one of its chief advocates, for he admits that with it the examinee must be tested at different periods of the day and night, and in different states of the weather.

It was at one time supposed that Holmgren's test could be used by anyone; further experience has not borne out this view. It would appear absolutely necessary that the examiners should be specially trained for the work, and it surely would be far better that the examination should be conducted by a medical man. Colour blindness being incurable, there is nothing to be gained by allowing a rejected candidate to be re-tested frequently. We would suggest that he should have the right, however, of one appeal to another set of examiners, so that any sense of unfairness might be prevented. In this latter test there could be no objection to a lantern being used which would serve the purpose of demonstrating to an onlooker the mistakes that might arise in actual practice, and the ingenious apparatus described by Mr. Carter and employed on the Belgian lines might be used. In this the size of the light is regulated by an iris diaphragm; the light is first shown as it would appear to a normal eye at the extreme distance at which it would be visible; it is then enlarged at the same rate as it would enlarge if approached at the rate of thirty miles an hour. If expense interfered with the employment of this, Dr. Edridge-Green's lantern might be used; but we are decidedly opposed to any lantern test as a primary test.

It will be seen that the Council of the British Medical Association, at the meeting on January 15th, accepted the proposal which was made to them of appointing a committee to deal with the whole subject practically, and to make suggestions which should be available for the guidance of public officials.

At the meeting of the Council on January 15th, 96 candidates were duly proposed and elected members of the British Medical Association; 61 additional applications were received too late to be dealt with, and will be proposed for election at the next meeting.

The continued increase in the membership, and in the number of subscribers and the sales of the British Medical Journal has since the beginning of the year so much further augmented the demand for copies of the Journal, that its present circulation is raised to considerably over 15,500.

THE "BRITISH MEDICAL JOURNAL."

The largeness of the issue of the British Medical Journal (which it has again been necessary to increase materially since last year), together with the temporary disablement of some of the *employés*, caused an unavoidable delay in the postal delivery of some 5,000 copies of a recent number of the Journal, which has led to many complaints. This general explanation will excuse individual replies. In view, however, of the increasing mechanical difficulties of passing through the press, cutting, and sewing, banding and stamping, so large an issue by the early post, it is now necessary to go to press at an early hour on Thursday. Our correspondents are therefore urgently requested to forward their communications as early as possible in the week when intended for the current issue; and to remember that Wednesday night's post is the latest by which even short and urgent communications can receive attention in that week.

THE LATE LORD NAPIER OF MAGDALA.

The late Lord Napier of Magdala's relations with the medical services were always of a cordial character. His first wife was the daughter of the late Dr. Pearce, who for a long time was secretary to the Medical Board of Madras, and rose to be chief of the Medical Department of that Presidency. Throughout his whole career Lord Napier was always noted as a fair-minded and just man.

BACTERIOLOGY OF INFLUENZA.

Those who have followed the character and spread of the present epidemic on the Continent and in this country must no doubt have come to the conclusion that, like other epidemic diseases, influenza is spread by contagium, and must be due to a living organism, a microbe. The discovery of this has been announced from Vienna. Some of the daily papers, on Wednesday of this week, brought the news that the microbe of influenza has been identified by Drs. Maximilian and Jolles, working in the Vienna Bacteriological Laboratory under Professor Weichselbaum. It is stated briefly that this microbe is similar to, but not identical with, the microbe of croupous pneumonia. Many of the readers of the Journal are aware that Weichselbaum had, independently of Fränkel, of Berlin, shown that genuine croupous or fibrinous pneumonia is due, not to the bacillus of Friedländer, but to a capsulated diplococcus—the diplococcus pneumoniæ—having special morphological and cultural characters. The discovery of the influenza microbe, coming from such a distinguished and re-

liable source, deserves in itself careful attention, and this is enhanced by the fact that in the influenza of the present epidemic both on the Continent and in this country, some kind of pulmonary distemper is one of the conspicuous symptoms; and this, though generally mild and of the character of a slight bronchial catarrh, has yet proved fatal in a certain percentage of cases terminating as severe pneumonia. On the other hand, it is necessary to bear in mind that in these fatal cases the pneumonia is not of the same nature in all cases; the *post-mortem* examination shows it to be in some instances of the character of severe catarrhal or broncho-pneumonia, while in others it is more of the nature of fibrinous pneumonia. Further, it is to be remembered that, except in these fatal cases, the disease itself in its course and symptoms has no more similarity to croupous pneumonia than to typhoid fever, and that the pneumonia, when present, is always of the nature of a secondary complication, supervening on previous pulmonary weakness (age, previous disease, or a chill caught during convalescence from the primary influenza). It is, however, premature to make any further remarks about the matter until all the details concerning the microbe and the evidence as to its claims to be regarded as the microbe of influenza are made known.

TYPHOID FEVER AT PORTSMOUTH DOCKYARD.

For some time past there have been a considerable number of cases of typhoid fever occurring in the Royal Naval College in Portsmouth Dockyard. Most, if not all, of those attacked were students, and it is remarked that they all, with one or two exceptions, lived in a particular room. The sanitary condition of the college was the subject of many inquiries, but still the cause of the fever was undiscovered, and fresh cases of typhoid were occurring, until just before Christmas a Commission was appointed by the Admiralty to deal thoroughly with the subject. The Commission consisted of two naval officers, one being Dr. Coppinger, Colonel Seddon, R.E., and Professor R. W. Smith, who was added as a sanitary expert. The result of this inquiry was to find that this particular room mentioned above obtained a plentiful supply of contaminated air from an old brick sewer. This is, therefore, another instance of typhoid fever due to defective drainage arrangements, which only required sufficient careful examination to elucidate its cause. It should be remarked that the town of Portsmouth has been remarkably free from typhoid fever for some time past.

TOWN LIFE AND DISEASE.

The fact that the prevailing epidemic of influenza prevails in towns serves to remind us of the insanitary influences of town life. There are sanitary influences as well; there is shelter from cold winds and tempests often disastrous to the ill-nourished in the country, and food is nearer at hand to the multitude. The prevalence of germs, bad odours, and other self-evident sources of grave disease in cities is well known. It is rather the less constantly recognised unhealthy habits of townsfolk that are mostly at fault when the fairly-fed and well-to-do are smitten with colds and with influenza. Diet is abundant, but taken irregularly. The townsman, as a rule, is not a good breakfast eater, and he dines too late and too heavily. He is much addicted to taking alcohol, tea, or coffee between meals. He is a late riser and goes to bed late, so that a large fraction of his "day" is spent at night in artificial light. He seldom takes enough exercise, for the "constitutional" is intolerable to men of a certain temperament, and others have no time for that form of physical exertion. The hurried race to catch a train or omnibus is not hygienic. He is gregarious, and his natural flocking instinct makes him overlook, both in his pleasures as well as his duties, the fact that he works or plays with his fellow man in ill-ventilated or overcrowded rooms. Above all, he is out of training, as he finds out during the first days of a holiday. Many explorers and fighting men have noted that they catch cold readily in towns after bearing cold and damp with impunity in the country. The cockney tourist, on the other hand, is often astonished to discover how he can bear a wetting or a draught at the seaside or in the fields. All the surroundings of the townsman predispose him to attacks of disease like the present epidemic. He can at least rise early and take exercise, and will soon find that such habits will be to his advantage.

TRAMWAY ACCIDENTS.

Timely attention is called by one of the surgical staff of St. Bartholomew's Hospital to what he deems the appalling number of sufferers by tram accidents brought to the institution with which he is connected, and others of a similar kind, a number out of all proportion to the tramway part of street traffic. The immediate cause of his remonstrance is the death of a child, 4 years old, who was run over by a car and died in two hours. As a preventive of these sad occurrences, it is suggested that the tramway companies should affix in front of the wheels a projecting guard, which would push aside any object in the way until the car could be stopped. In the case of a 'bus or cab, the driver can always manage to swerve the horse should anyone accidentally get in its way, and thus mitigate to some extent the danger; but with a tramcar this is impossible, as it must run straight with its rails. The suggestion is one which the tram companies, and, failing them, the properly constituted authorities, would do well to consider.

DEATH BY ELECTRICITY—JUDICIAL AND ACCIDENTAL.

It will be remembered that a law came into force in the State of New York a year ago directing that the death penalty shall in future be inflicted by electricity. A murderer was shortly afterwards found guilty and sentenced to be put to death by this means. He appealed against the sentence on the ground that the law was unconstitutional, the proposed method of execution being cruel and repugnant to public morals. The State Court rejected the appeal, which was then carried to the Supreme Court of the United States. The Supreme Court has decided that the law is constitutional. It is stated that the main opposition has really come from companies holding patents of electrical apparatus of the kind which it is proposed to use in carrying out the capital sentence. Another death from electricity is reported by telegraphic dispatches from New York this week. A horse touched a post which had accidentally become connected with an electric-light wire; the animal was thrown to the ground but not killed, but a man who ran to its assistance, and also touched the post, was instantly struck dead. The coroner's jury, in the case of the shopman who was killed by an electric light wire coming in contact with a showcase which he was helping to carry, has given a verdict throwing the whole responsibility on the electric light company, and the grand jury has indicted the superintendent of lamps to the company for manslaughter.

AMERICAN LEPERS AND ENGLISH STEAMBOATS.

The Government of the United States have issued special regulations with the view of excluding lepers from that country; and the commander of all vessels entering port will in future be required to produce a certificate from the health officer that there had been no leper on board, or that the leper had been removed bag and baggage to the quarantine station. Medical officers in charge of quarantine stations are directed to detain any leper found on board any vessels, unless such leper shall be on board a vessel returning to the foreign country from which he last sailed. A man named Brennan was recently detained in quarantine at St.

Louis; his friends did not believe the diagnosis, and applied for a writ of habeas corpus returnable before the judge of the circuit court. In consequence, the man was produced in court by the Health Commissioner to the horror of the spectators, half of whom, it is said, rushed from the court. The judge immediately committed the leper to quarantine in the custody of the city. The regulation, quoted above, permitting lepers to be deported from the United States to the countries from which they last sailed, ought to lead the Port Sanitary authorities of this country to keep a sharp look out on homeward transatlantic steamers. It requires no great stretch of the imagination to suppose that American cities may not be indisposed to relieve themselves of the burden of maintaining lepers by taking advantage of the loophole left for them by Mr. Secretary Windom.

SANITATION IN LONDON.

UNDER the above heading there appears in the *Times* of January 21st a long letter from Mr. John Hamer, which contains a good deal of interesting information. But the usefulness of the letter is marred by the writer's mode of referring to local authorities. Thus, speaking of sanitary prosecutions, he says: "These proceedings were in some cases undertaken at the instigation of private persons, in others initiated by the Mansion House Council or by the local authorities." The inference which might easily be drawn from this statement is that the initiative is seldom taken by local authorities for the improvement of habitations by the removal of nuisances injurious to health. As a matter of fact the initiative is taken by these much-abused local authorities in numerous cases every year, and it would have been generous of Mr. Hamer to have said as much when writing about London sanitation. Several of the London local sanitary authorities have done excellent work in the direction of improving the dwellings of the poor. From a number of annual reports before us we select one which relates to a central district—St. Giles's—which was, and is, as much in need of sanitary improvement as any part of London, and whose population largely consists of those degraded classes who misuse every house-appliance that is provided for them. This district is served by a very capable, earnest, and energetic medical officer of health, Mr. Lovett, who appears to have been well supported by his authority in his difficult work. As to the value of Mr. Lovett's work, it should be patent to all. The little slums and alleys of St. Giles's have been so much improved in respect of water supply, drainage, and general cleanliness, that it has been said by a high Government medical official (who was specially well acquainted with the sanitary condition of the district a quarter of a century ago) that he can hardly recognise them as the same places. As a result of this work, which is constantly in progress in this and other metropolitan districts, "typhus fever," which formerly found its home in London, has been almost completely eradicated, while enteric fever has been greatly diminished. Mr. Hamer, in his letter, urges the importance of setting aside party politics in considering the great questions involved in local sanitary administration. We cordially agree with him in this respect.

MEDICAL QUALIFICATIONS.

AT the quarterly meeting of the Governors of the Derby Infirmary, Dr. Murray Lindsay proposed resolutions of which the object was the inclusion of Irish and Scotch qualifications as well as of English qualifications. He pointed out that in a number of recent instances, the rules of the hospitals in adjoining counties had been modified so as to recognise Scotch and Irish qualifications. He mentioned that out of 68 asylums, 38 medical superintendents had Scotch and Irish qualifications. An amendment was moved, in favour of which this resolution was withdrawn, referring the whole question to the present weekly board, and requesting the medical staff and Dr. Murray Lindsay to act with them. This proposal was unanimously carried. It is, we hope, only a step towards the just recognition of suitable Scotch and Irish qualifications as being on a par with those of corresponding institutions in England. There is no doubt that a large number of hospitals still maintain an exclusiveness in the reading of their rules on this subject, which frequently operate very unjustly. The following resolution of the British Medical Association, which was passed at the Annual Meeting at Dublin, after full discussion, may we think be taken to express the general opinion of the profession on this subject, and to represent equitable principles in the matter:—"That the Association is of opinion that the diplomates of the Irish and Scotch Universities and Corporations should possess the same privileges in respect of public appointments that are enjoyed by diplomates of the other divisions of the kingdom."

OPERATION FOR UMBILICAL HERNIA AT BIRTH.

ANOTHER successful case of abdominal section performed six hours after birth in a case of congenital umbilical hernia occurred last year. The operator was Dr. Willis Macdonald, of Albany, New York, and he described the case in the January number of the *American Journal of Obstetrics*. He decided upon operation within a very few hours, as delay is often accompanied by gangrene of the cord and peritonitis. He notes that Dr. Barton operated after thirty-three hours when the cord was already very fœtid and the intestines were covered with lymph; fortunately, the patient recovered. In Dr. Macdonald's case, the walls of the sac were thin and translucent, and the intestine, already congested, could be seen through it. The patient was placed under chloroform, and not operated upon without anæsthetics, as in Dr. Dunlap's remarkable case, where the operation was performed one hour after birth, the infant feeling no shock. Dr. Macdonald excised the sac thoroughly down to the integument, and closed the abdominal wound very thoroughly by means of silk sutures. The article upon this case includes a good table of the 19 recorded cases of abdominal section for umbilical hernia in the newborn. Of these 17 recovered, and 2 died from the effects of the operation; a third was seized with convulsions, which caused death, three weeks after abdominal section. Out of 12 cases treated by compress and bandage 9 died and only 3 recovered. The cause of death is irritation of the exposed intestines and sloughing of the cord, which causes peritonitis and septic poisoning. Since, as above noted, recovery may follow when operation has not been done till those formidable complications have already appeared there can now be no doubt that the proper treatment for congenital umbilical hernia at birth is speedy operation.

THE HIGH DEATH-RATE IN LONDON AND PARIS.

NOTWITHSTANDING the unusually mild temperature which has prevailed in London during the past few weeks, the death-rate in the metropolis during the week ending Saturday, January 18th, showed but a very slight decline from the excessively high rate that prevailed in the preceding week. The annual rate of mortality in London, which had been 20.3, 28.0, and 32.4 per 1,000 during the three previous weeks, was 32.1 during last week. The number of deaths registered was 2,720, which exceeded by as many as 765 the average number in the corresponding periods of the 10 preceding years. The mortality from the principal zymotic diseases was below the average, although the total deaths referred to diseases of the zymotic class (including the 127 fatal cases of influenza) showed an excess. The very high mortality last week was, however, principally due to the excessive fatality of diseases of the respiratory organs. To these diseases no fewer than 1,010 of the 2,720 deaths in London last week were referred, against 467

843, and 1,069 in the three preceding weeks. Of these 1,010 deaths, 630 resulted from bronchitis, exceeding the average by 274, and 281 resulted from pneumonia, or considerably more than double the average. It is worthy of note that of these 281 deaths referred to pneumonia, no less than 155, or more than one-half, were of persons aged between 20 and 60 years, while the average proportion of the deaths from this disease between these ages is about one-fourth. It is more than probable that a large proportion of these deaths was more or less referable to influenza; in some of them the prevailing epidemic was stated as a secondary cause of death. It appears from the latest returns from Paris that the rate of mortality in that city, although showing a decline from the unprecedentedly high rate recorded in the preceding week, was still excessive. The death-rate, which had been 31.2, 53.7, and 61.7 per 1,000 in the three preceding weeks, declined to 47.5 during the week ending Saturday, January 11th. The average rate in the corresponding period of the five previous years did not exceed 25.1 per 1,000; the rate of mortality during last week was, therefore, nearly double the average. The 2,065 deaths registered during the week under notice in Paris included 66 which were directly referred to influenza (against 88 in the previous week) 23 to diphtheria and croup, 17 to typhoid fever, 13 to whooping-cough, 10 to measles, 3 to scarlet fever, and 1 to small-pox. All these diseases, with the exception of influenza, were below the average number in the corresponding weeks of recent years. On the other hand, the mortality from diseases of the respiratory organs was excessive. During the week under notice, no fewer than 755 deaths resulted from those diseases, whereas the average weekly number during the first month of 1889 was only 183; of these 755 deaths, 491 were referred to pneumonia and broncho-pneumonia, against an average of only 109. Of the 2,065 deaths in Paris from all causes, no fewer than 953, or nearly one-half, were of persons aged betweed 20 and 60 years, and 729 were of persons aged upwards of 60 years; these numbers were considerably more than double the average, while the mortality among children and young persons under 20 years of age only slightly exceeded the average.

SPECULATIONS CONCERNING TYPHOID.

WE have received a report of a monthly meeting of the Quarry Bank Local Board, contained in the *Advertiser for Brierley Hill, Stourbridge, etc.* Mr. Standish, Surgeon, of Cradley Heath, reported three cases of typhoid fever at Rose Hill directly to the Board, as there was no medical officer of health to whom he could report. Mr. Patehall, the inspector of nuisances, said he had visited the place, and thought the cases were due to weakness from want of nourishment rather than anything else. It is the duty of an inspector of nuisances to discover and report upon nuisances which are likely to cause typhoid fever and not to indulge in speculations as to the nature of the illness, about which it is not within his province to form an opinion. So far as the report of the meeting, published in the *Advertiser*, shows, the inspector of nuisances does not appear to have made any report on the local conditions of Rose Hill. The report, moreover, does not state that any member of the Board drew attention to this. If the report is correct, the local Board appears to be hardly fitted to be entrusted with the important duties of a sanitary authority, and we hope, not only for the sake of the poor people of the district but also of those who may have occasion to visit it, that the attention of the Staffordshire Council and, if necessary, the Local Government Board, will be at once directed to the localities.

ALLEGED CASE OF OVARIAN PREGNANCY.

THE possibility of ovarian pregnancy is stoutly denied by many authorities, such as Mr. Lawson Tait, whilst others, including Freund, declare that such a variety of ectopic gestation really exists. Freund's evidence rests upon cases where he performed abdominal section; but pregnancy was advanced, and the primary relations of a fœtal sac cannot, under the circumstances, be determined with accuracy. A sac in the midst of a Fallopian tube is visible to the naked eye; we can all see specimens of this condition and believe. In order to believe likewise in ovarian gestation a specimen in the earlier stages, where the primary relation of the fœtal sac to the ovary is evident, must be demonstrated. Such a specimen is, to say the least, very rare in museums. The Russian *Journal of Obstetrics and Gynæcology*, No. 6, 1889, contains a record of an alleged case of ovarian pregnancy. A woman, aged 27, became pregnant in October, 1887, but labour never came on, and in September, 1888, she was seized with severe fever. A suppurating ectopic gestation sac was diagnosed and laid open. The fœtus, which was macerated and had attained the normal size at term, was extracted. Urine and fæces came away from the cavity of the sac. During recovery the patient was seized with neuritis multiplex, and removed to a ward for lunatics, where she died seven weeks after the operation. A necropsy was performed. The left ovary was found to be rather smaller than normal; the left tube stretched, pervious, and not dilated. The fœtal sac was connected with the left ovary, and its outer wall was found to be, in the opinion of Dr. Muratoff, who reported the case, a continuation of the tunica albuginea of the ovary. Dr. Reimann, of Kieff, in commenting on Dr. Muratoff's interpretation of the case, in the *Centralblatt für Gynäkologie*, December 28th, 1889, displays a wholesome scepticism. The sac was probably tubo-ovarian, and had become detached from its tubal connections.

CONVICTION UNDER THE SALE OF HORSEFLESH, ETC., REGULATION ACT, 1889.

AT the Reading Borough Police Court on January 10th, Frederick Miers appeared in answer to a summons which had been granted on the application of Mr. Roberton, inspector of nuisances. The offence charged was under the Sale of Horseflesh, etc., Regulation Act, 1889. The inspector complained that he found on certain premises occupied by the defendant horseflesh deposited there for purposes of sale, or preparation for sale, and intended for human food, such premises being other than a shop, stall, or place over or upon which there was a placard indicating that horseflesh was sold there. The horseflesh found on the premises had been seized and carried away under Section 3 of the Act, and ordered to be destroyed by a justice under Section 5 of the same. The town clerk submitted that an offence under the Act had been committed, and applied for a penalty. He said information came to the medical officer of health that the business conducted by the defendant at his premises, known as the Reading Charcutery, was conducted with secrecy and open to suspicion. Large parcels of horseflesh were being imported from Oxford under false names, and there was reason for believing that the defendant, who received these parcels, used them for human food. The defendant was the occupier of a shed in which the meat was found, and also 36, King's Road, adjoining, which was the Reading Charcutery, where pork, bacon, sausages, German sausages, etc., were sold. A veterinary surgeon, who had examined the meat seized, deposed that it was horseflesh; defendant was present, and acknowledged that it was. The horseflesh was chopped up, and it was not denied was intended for human food. It was, however, alleged that the stuff was never intended for home consumption, but was prepared for exportation to Germany. A Great Western Railway inspector at Oxford said that two hampers were delivered at the Oxford Station addressed to Mr. Strube, 36, King's Road, Reading. They came in the cart of Mr. Hathaway, horse slaughterer, were each secured by a chain and padlock, and marked "preserved meat." An inspector at the Reading Station deposed that two hampers were carried by train from Oxford; they weighed 10 cwt.

1 qr., and were labelled and addressed as stated by the other inspector. A man in the defendant's employ came for them to his premises. The empty hampers were subsequently returned to the station addressed to Mr. Strube, 30, Gas Street, Oxford (Mr. Hathaway's premises). As soon as the two hampers were delivered at the defendant's premises, the medical officer of health and inspector of nuisances were advised, and shortly afterwards the flesh was seized and carried away to be dealt with by a justice. The medical officer of health deposed to seizing the horseflesh on the defendant's premises—it was perfectly fresh. Mr. Besley, who addressed the Bench in defence, said a great mistake had been made by the justice who ordered the meat to be destroyed. It was not denied that it was horseflesh. The facts of the case were an order had been received from Gotha for 10 cwt. of horseflesh; defendant immediately sent the order to Mr. Hathaway, who accordingly sent the meat. It was necessary that it should be dried and preserved before being forwarded, and for this purpose it had come to the defendant's premises. He, counsel, contended that it was the intention of the Act of Parliament merely to apply to the food of the people of the United Kingdom, and not to legislate for the Germans. Mr. Besley further contended that for the purposes of the Act the medical officer and inspector should have been reappointed. The meat had been taken where it was quite unlikely sales would be effected—it was in transit to Germany. There was not a tittle of evidence to show that it had been exposed for sale or intended for food in this country. The Bench retired to deliberate, and on their return the Chairman said there was sufficient evidence for a conviction. They had given careful consideration to the arguments of the learned counsel. In their opinion the horseflesh was not intended for consumption abroad exclusively. They imposed a fine of £5 and £1 15s. costs; in default twenty-one days' hard labour. We are told that the hearing of this case occupied three hours, and that the police court was crowded throughout. The proceedings were certainly of exceptional interest, being, we believe, the first successful prosecution under the Act regulating the sale of horseflesh, which it will be remembered only came into operation on September 29th, 1889. The conviction seems fully warranted by the evidence, and considering that the defendant might have been mulcted in a penalty of £20, the fine actually inflicted cannot be regarded as excessive.

SEA-WATER AND THE NUTRITION OF MARINE ANIMALS.

Drs. Pouchet and Chabry have recently conducted some experiments of great biological interest. They have reared larval germs of sea-urchins in artificial sea-water and in sea-water deprived of all or more or less of its lime, in order to observe the influence of the composition of the water on the development of the larvæ. Normally a distinct skeleton should develop. It was found that when the larvæ were reared in sea-water deprived of about nine-tenths of its lime, not even a rudimentary skeleton was developed. A very trifling diminution in the normal amount of lime, effected by careful precipitation by chemical reagents, was found sufficient to interfere markedly with the growth of the skeleton in the larvæ, hence the medium in which some marine germs of life exist would appear to act as a nutritive agent as well as an atmosphere whence oxygen may be obtained for respiration. The influence of the chemical composition of the water in different seas probably determines many differences in the anatomy of marine animals, but Drs. Pouchet and Chabry admit that this question requires much consideration. How far the embryo in the higher terrestrial forms of life may receive nutrition direct from substances in solution in the liquor amnii as well as through the placental circulation is another question worth solving.

BROMPTON CEMETERY.

Among some of the most important duties which have been transferred to the London County Council is that which relates to disused burial grounds. Early in May, 1889, very soon after the Council came into existence, a Committee of the Council recommended that the Government be requested to close Brompton Cemetery and to transfer it to the Council for maintenance as an open space. But before adopting this recommendation, the Council referred the subject to its Sanitary Committee. This Committee found, on inquiry, that no sufficient case could be established at present to require the closing of the cemetery, but the Committee directed attention to a memorandum issued by the Local Government Board containing recommendations with regard to the management of cemeteries, which have since then been brought under the notice of the Home Secretary, who has been in communication with the First Commissioner of Works thereon. The particular recommendation referred to by the County Council is that a marginal zone within the boundary fence of the cemetery should be reserved free from interments, and we are glad to hear that the Chief Commissioner has given instructions that no future new graves shall be allowed in this marginal zone. In order to convert the cemetery into a recreation ground for the people, a special Act of Parliament would be required and compensation would have to be paid to their owners whose existing rights to fill their graves were stopped. On the other hand, if this cemetery could be converted into a beautiful recreation ground a great boon would be conferred on those of the labouring classes who live in some of the poor parts of Chelsea, Fulham, and Kensington, districts which are becoming more and more shut in by the growth of London. We are informed that the Brompton Cemetery came into the possession of the Government in 1852, having been purchased by the general Board of Health from the company which owned it, and that the present excess of income over expenditure is about £5,550.

ANTISEPTIC INJECTIONS IN OBSTETRIC PRACTICE.

Our knowledge of this most important subject, which cannot fail to interest the great bulk of the profession, is essentially progressive in character. The value or danger of an antiseptic cannot be determined until after patient observation, and room for improvement in innumerable matters of detail is constantly being recognised by patient obstetricians. The majority of the authorities, who spoke during the discussion on Dr. Boxall's paper on Mercurialism in Lying-in Women, read in 1888, before the Obstetrical Society, favoured bichloride of mercury as the best antiseptic, although some were adverse to the routine employment of sublimate injections. At the meeting of the American Gynecological Society in Boston, last September, Dr. Garrigues read an instructive paper on the Use and Abuse of Antiseptic Injections in Obstetric Practice. He had collected twenty-two cases of death from mercurial poisoning in obstetric practice. He admitted that the precise cause of death might be doubtful in some of these instances, but others were "above criticism." Dr. Garrigues thought, therefore, that sublimate should not be used for injections. Of late he has used creolin in a two per cent. emulsion, and was much pleased with it, except in cases where he wished to judge of the interior of the womb by the appearance of the returning fluid. Bichloride was absolutely contra-indicated in anæmia, abortion, kidney disease, and diarrhœa. He disinfects the vagina by injections before delivery, cleansing the vulva separately by rubbing it with cotton soaked in the antiseptic fluid. After delivery the vagina, he states, should not be touched in normal cases, but only protected by the application of an antiseptic occlusion dressing. Vaginal injections were used when the lochia were fœtid, and intrauterine injections given when the

fœtus was macerated. He also laid down the law that whenever it was necessary during labour to enter the uterus, or after labour the vagina, a vaginal or intrauterine injection ought to be given, according to the depth to which the canal had been entered. This rule, however, would hardly be easy or safe to carry out. Dr. Garrigues preferred single-current to double-current tubes, and held that fountain syringes, which should not be suspended more than one or two feet above the uterus, were safer than bulb syringes. The patient, he maintained, ought always to be on her back during an intrauterine injection.

MR. CHAPLIN ON THE MUZZLING ORDER.

Mr Chaplin has "shown his teeth" to the deputation from Kent which attempted to put political pressure on in favour of the propagation of rabies by unmuzzling the dogs of that county. The deputation, of course, urged the old fallacies to show that muzzling was not an effective means of preventing rabies. Mr. Chaplin, in replying to the deputation, said that the powers given by the Privy Council to local authorities in 1886 to apply the muzzling order if they thought fit to all their districts appeared to have been but little used, so that the number of cases of rabies rose to 176 in 1888 and to 339 in 1889. In the course of last year various local authorities and other public bodies, including the Royal Agricultural Society of England, had appealed to the Privy Council to take action in the matter. Moreover, the further examination of the figures for 1889 showed that there had been a large and progressive increase of rabies during the second half of the year 1889 as compared with the first half. There were two main areas in which the majority of the cases had occurred, the one in the south, including Hertfordshire, Essex, Surrey, Kent, Middlesex, and London; and the other, in the north, comprising the West Riding, Lincolnshire, and Cheshire. This was the ground upon which the Rabies Order of 1889 had been limited to certain districts; 189 of the 213 cases of rabies reported to the Board during the last six months of 1889 had occurred in these two areas. A universal muzzling order enforced throughout the country for a period of six months would, he had no doubt, be the most effective measure for stamping out rabies. There were two objections to this course: first, he did not consider it essential to take so extreme a measure; and, secondly, in the present state of public opinion, it would have been impossible to enforce it. It would, for instance, have had to have been applied to Scotland and Wales. Now, as a matter of fact, no case of rabies had been reported since the returns were first received, either from Scotland or from Wales. The same was also true of Cornwall and many parts of the south-west of England. Hounds had been exempted because they were under such careful supervision by their huntsman that any animal affected with rabies could not escape observation. Registration had been pressed upon him (Mr. Chaplin) as a substitution for the measure, and when the muzzling order had successfully curbed the disease he was inclined to think that registration might possibly prove a very desirable and useful substitute.

TRIPLETS, HYDRAMNION, AND ACARDIAC MONSTERS.

Dr. Penney, of Providence, Rhode Island, was called in on August 3rd, 1889, to a woman aged 23, over five months pregnant, already the mother of one child. A "glove-fingered" projection of the bag of waters was detected. Whilst this was being examined a sudden pain ruptured the membranes, and the waters spurted all over the bed and floor, in great quantity and with great force. A footling presentation was detected and the child delivered; it lived about one hour. A smooth, oblong body then presented. Dr. Penney, after careful washing, introduced his hand into the uterus, and feeling the feet, he turned and delivered a second fœtus, which proved to be an acardiac acephalous monster. It was very œdematous, and possessed five lumbar vertebræ, small intestine, large intestine, kidneys, bladder, vulva, pelvis, and deformed lower extremities. On reintroducing his hand into the uterus, a third fœtus was found and delivered, stillborn. The placenta appeared to be common, but was accidentally destroyed before it could be examined. The case is described in the November number of the *American Journal of Obstetrics*. In the same number, Dr. Jaggard describes a case of hydramnion, with twin gestation, one being an acardiac monster. Labour took place at the seventh month. The forceps was needed, and four gallons of liquor amnii escaped. The normal child weighed four and a half pounds, the monster ten pounds. The single placenta was of gigantic size, measuring fourteen inches in diameter. Altogether the weight of the uterine contents could not have been less than from forty-five to fifty pounds. The monster, which, like Dr. Penney's case, is figured in the published report, appears to be of the variety termed by Ahlfeld "acardiacus anceps." A specimen of this variety is preserved in St. George's Hospital (23 A) and figured in the first part of the *Transactions of the Obstetrical Society of London* for 1889. Mr. Woodley Slyman exhibited a similar specimen (now, we understand, in the museum of St. Bartholomew's Hospital) before the Obstetrical Society in October. In Dr. Jaggard's case the legs and deformed arms were present, the head was partly developed, and, as in most acardiacs of this variety, there was an ill-formed heart, the left ventricle being rudimentary. The monster, like the normal twin, was a female. Drs. Penney and Jaggard did well to report these cases, which contain so many matters of high scientific and clinical interest.

SCOTLAND.

There seems further evidence of a diminution in the number of cases of influenza in Edinburgh. Cases of considerable severity are still, however, reported from various medical sources.

Professor Simpson, who has been physician on duty to the Edinburgh Royal Maternity and Simpson Memorial Hospital since November 1st, will be succeeded on February 1st by Dr. Berry Hart.

ROYAL SOCIETY OF EDINBURGH.

At the fourth ordinary meeting of the Royal Society of Edinburgh, Dr. Berry Haycraft gave an Account of some Experiments which Extend our Knowledge of Volitionary Movement, and Explain the Production of the Muscle and Heart Sounds. A special meeting of the Society is to be held on the 27th instant, when a paper is to be read by Professor Calderwood, LL.D., On Evolution and Man's Place in Nature.

UNUSUAL MORTALITY FROM CHEST DISEASE.

The mortality from chest disease in Edinburgh is always comparatively high. But it is very seldom that so high a figure has been recorded as stands in the official returns for the week ending January 18th, during which period diseases of the chest are credited with 39.6 per cent. of the total mortality. Dr. Littlejohn states that during the last twenty-four years the mortality had only once been as high—in 1875—when, in the week ending January 9th, the mortality from diseases of the chest amounted to 38 per cent. In the present year, for the week ending January 4th, the percentage from chest disease was 27.7, and for the week ending January 11th, 33.3. The death-rate for the past year, 1889, further showed a remarkable rise towards the end of the year. In the month of December the death-rate had been 24 per 1,000, a figure much in excess of the usual average.

SCOTTISH MICROSCOPICAL SOCIETY.

THE meetings of this Society continue to be well attended. At the ordinary meeting on January 17th, under the presidency of Sir William Turner, papers were read by Mr. Carlin, M.B., "On the Fate of the Notochord and Development of the Intervertebral Disc in the Sheep, with remarks on the structure of the adult disc in these animals," and by Professor Greenfield "On the Growth of a Species of Penicillium, exhibiting some uncommon features." Mr. G. Purvis, M.B., demonstrated certain peculiar motor and sensory nerve endings discovered in the skate. Mr. Alex. Frazer, M.A., exhibited a new steam steriliser, and explained some improvements in the rocking microtome.

GLASGOW UNIVERSITY GENERAL COUNCIL.

THE register of the General Council for 1890 has been made up in accordance with the statute. It contained at first the names of 4,855 members, of which 29 were struck off because of death, and the list stands now at 4,826. During the year 121 names were removed on account of death, and 203 names were added.

THE DANGERS OF INFECTED MILK.

DR. RUSSELL, medical officer of health of Glasgow, lectured on the subject "Some Relations of the Business of the Dairy Farmer to Public Health" to the members of the Glasgow and West of Scotland Agricultural Discussion Society, on January 15th. Dr. Russell began by explaining how milk, while only one of the many media for the transmission of disease, was the most dangerous, since it was capable of affording nutrition for the propagation of the disease as well as its distribution. He referred to Lister's experiments as proof of the fact that in the milk of the healthy cow there was no inherent putrefactive or fermentative property. Consequently the reproduction of the conditions of Lister's experiments as far as possible in the dairy farm was the guarantee of the public safety—the pure air of the country, the carefully washed teats of the cow, the clean hands of the dairymaid, and the carefully washed dishes. Dr. Russell next spoke of scarlet fever, enteric fever, and tuberculosis in relation to milk. Since 1857, 69 epidemics of enteric fever traceable to milk had been recorded, affecting 3,900 persons. The epidemics of scarlet fever due to milk showed that the existence of a family of young children at a farm implied a constant threatening of possible mischief to the farmer or milk agent, and demanded constant and suspicious circumspection as to health, not only of the actual workers, but of their families; while the epidemics of milk scarlet fever, not traceable to infection of the milk from a human source, led him to the practical conclusion that milk produced by a cow which was not absolutely healthy, constitutionally and locally, should not be used as human food. The slightest disease in any cow should be accepted as a sufficient reason for excluding the animal's milk from the common stock. Dr. Russell referred to the recent American investigations, tending to show that the bacilli of tuberculosis were present and active, in a very large proportion of cases, in the milk of cows affected with tuberculosis, but without discoverable lesion of the udder, and urged upon farmers the duty of diminishing tuberculosis by giving cows increased air space and better ventilated byres, by judicious feeding and milking and scrupulous cleanliness of the byre and the cow itself.

ABERDEEN MEDICO-CHIRURGICAL SOCIETY.

AT a meeting of the Medico-Chirurgical Society, held on January 9th, Professor Smith-Shand, President, in the chair, Dr. McCombie gave notes of an interesting case of anti-parturient rupture of the uterus, with an exhibition of a cast of the uterus. The patient was a woman, aged 40, a multipara; no labour pains were present; there was no history of injury. Sudden collapse took place, and the patient died in a few hours. The necropsy revealed the mature child in the abdominal cavity, with evidences of its having been dead for a few days. Microscopic examination of the margins of the rupture in the uterus showed fatty degeneration. Dr. John Gordon read notes on and exhibited some of the newer hypnotics. He recommended the trial of chloralamide, which he had found useful in cases where insomnia was present without marked pain, especially in nervous and hysterical patients. Dr. Mackenzie Booth gave an exhibition of children with genu valgum after treatment by forcible rectification. The result was highly satisfactory.

IRELAND.

THE Secretary of War has, on the petition of the Royal College of Surgeons in Ireland, admitted to the Medical Staff, as Surgeon Staff-Sergeant Smith, of the Army Hospital Corps, on the usual condition of his passing through the Netley course; the case is altogether peculiar. Mr. Smith joined the Army Hospital Corps when he was a medical student, saw active service abroad, and by steady conduct rose quickly to be Staff-Sergeant. He resolved then to take out his diplomas, in the usual way, while stationed in Dublin. His examinations were unusually good, but when he became registered he had passed the age for the open competition. The Secretary of War has, however, removed the difficulty and has given Mr. Smith the opportunity which he has so well earned.

CORK INTERCEPTING HOSPITAL.

THE Law and Finance Committee of the Corporation of Cork have recommended that the Corporation shall pay a sum of £500 to the Cork Board of Guardians, provided the same be accepted as payment in full of the Corporation's contribution to date towards the erection and maintenance of the Intercepting Hospital in Cork Harbour.

BALLINCOLLIG DISPENSARY.

AT a meeting of the Board of Guardians of the Cork Union last week notice of motion given by Dr. Tanner refusing to pay Dr. A. H. Taylor, J.P., the sum of three guineas for acting as a substitute for Dr. Harding, came before the guardians. Dr. Tanner's objection was that the payment was illegal, Dr. Taylor being an *ex officio* guardian. Dr. Harding explained that, owing to illness, he was obliged to obtain a substitute, and that the nearest doctor (a military surgeon) had refused to act, and that the next nearest was Dr. Taylor, who only accepted the duty in order to oblige him. Mr. Parker, one of the guardians, said the motion of Dr. Tanner's was a straining of the law. The law with regard to guardians never contemplated such a case as that, and it was perfectly clear that Dr. Harding acted quite rightly, and that Dr. Taylor deserved the thanks of the Board for attending to the poor so promptly. A resolution was adopted deeming the explanation satisfactory.

LUNACY AND OTHER APPOINTMENTS IN IRELAND.

WE understand that Dr. Courtney, Superintendent of the District Asylum in Limerick, has been appointed to the position of Inspector of Lunatic Asylums in room of Dr. Hatchell, resigned; and that Dr. George Plunkett O'Farrell, medical member of the Prisons Board, will succeed Dr. Nugent, the senior inspector in the Lunacy Department, who resigns. Dr. Stewart Woodhouse, one of the inspectors under the Local Government Board, succeeds Dr. O'Farrell; and Dr. Stafford, of Boyle, is appointed to the vacancy caused by Dr. Woodhouse's promotion. These appointments are fairly satisfactory all round, looking at them from the standpoint of departmental claims; in other respects they are

admittedly very good. The first inspectorship in the Lunacy Department has been conferred upon a gentleman who has served a long apprenticeship, and who is regarded as one of the three or four best medical superintendents in Ireland. In the case of Dr. O'Farrell, he is changed from one department to another. He was a Local Government Board Inspector, an Inspector of industrial schools, and for a few years he acted as Medical Commissioner on the Prisons Board. He has no special experience in lunacy practice, but he is undoubtedly a most excellent official—courteous, fair, and firm in the carrying out of his duties. Dr. Woodhouse is one of the very ablest of the Local Government Board Medical Inspectors. He is a young man, and his service in the department has been short, but he has done his work with great success, and no one will grudge him his promotion. Dr. Stafford is taken from the Poor-law ranks, and his appointment will be popular. The vacancy caused at Limerick will probably be given to some of the assistants in the service, whose claims we have already strongly urged; or some superintendent might be promoted from a second-class to a first-class appointment such as Limerick is.

THE UNIVERSITY EXTENSION SCHEME IN BELFAST.

The university extension scheme for Belfast was inaugurated on January 21st by a lecture by Professor Tyndall, F.R.S., who addressed an immense audience in the Ulster Hall upon "Our Invisible Friends and Foes." The Mayor of Belfast (Mr. C. C. Connor, M.A.) presided, and was supported by the President of the Queen's College, and many other of the leading gentlemen of the city. Dr. Tyndall, who was in excellent voice, was enthusiastically received, and spoke for over an hour upon the subject of micro-organisms, dealing especially with the torula of fermentation, the bacteria of putrefaction, of suppuration and blood-poisoning, and the organisms present in relapsing fever, splenic fever, chicken cholera, rabies, and tuberculosis. The work of Francesco Redi, Gay Lussac, Schwann, Obermeier, Lister, Cornet, Davaine, Koch, and Pasteur was passed under review and received recognition. The concluding portion of this lecture was devoted mainly to tuberculosis, and the lecturer powerfully urged the contagionist view, and forcibly emphasised the necessity for more thorough precautions than were yet generally observed. A vote of thanks was heartily passed to the lecturer, on the motion of Professor Redfern, seconded by the Rev. R. J. Lynd. The courses of lectures in connection with the university extension scheme begin immediately, and the entries are very large.

SACCHARIN TABLETS.

On January 16th, at the Nottingham Summons Court, the magistrates had before them an information laid by the inspector of nuisances for the borough, charging Boot's Pure Drug Company, limited, with selling a certain drug or a certain article of food, to wit, 12 saccharin tablets, which were not of the nature, substance, and quality of the article demanded.

Evidence of the sale having been given, Dr. Truman, public analyst of the borough, deposed, as the result of his analysis of the tablets, that they contained 75 per cent. of milk sugar, the other ingredients being saccharin and a little carbonate of soda, which was added to make it more soluble. The addition of milk sugar would, in his opinion, have the effect upon diabetic patients of increasing the glucose in the urine; that would increase the disease. In cross-examination, Dr. Truman stated that the saccharin in the tablets was pure, and that half a grain of saccharin—which was as nearly as possible the quantity in each tablet—was the usual and proper dose, and that there was about a grain of milk sugar in each tablet. It was invariably the case that tablets manufactured by the chief makers should contain half a grain of saccharin and a grain or a grain and a half of other matter.

Dr. Boobbyer, medical officer of health, deposed that in his opinion milk sugar would increase the amount of glucose in the urine. He did not think it was necessary that 75 per cent. of other matter should be used to make a tablet. These tablets could be made with gum without any sugar of milk being added.

Cross-examined, Dr. Boobbyer stated that there was a wide difference in the fermenting qualities of milk sugar and ordinary sugar, and that it was worse to give a patient ordinary sugar than milk sugar, and that milk sugar was much less sweet than ordinary sugar.

For the defence, Mr. Stanger accepted what had been admitted by the prosecution, that the latter must prove one of two things, either that the article sold was one of less value from a commercial point of view in consequence of the mixture of foreign ingredients, and that in that sense a fraud was committed on the public, or supposing that it was not of less value in a commercial point of view, and that in that sense there was no fraud, yet it was injurious to the health of a certain class of the public—diabetic patients. As to the first point, he said that it was admitted, without his calling any evidence, that the common practice was to put half a grain of saccharin, and half a grain only, in each tablet—that there was always a foreign ingredient introduced, sometimes consisting of one and sometimes of two grains. The trader who sold a saccharin tablet only guaranteed that it should contain as much saccharin as was ordinarily put into a tablet. The other point raised in the case was that on which Mr. Boot felt very strongly. If the prosecution were successfully maintained, he (Mr. Boot) had been selling to the public an article recommended for diabetic patients as a substitute for sugar, with which was mixed something peculiarly unsuitably for such persons. He believed that the Bench would agree, after hearing the evidence, that if Mr. Boot had done such a thing he had acted in absolute ignorance. He had mixed this sugar of milk in accordance with medical advice supplied to him, supported by men of great eminence. It was partly a chemical question and partly a question of the general practice of medicine. He should call a very eminent chemist to give evidence. Mr. Boot himself and the duly qualified chemists he employed would also be called, together with a number of gentlemen who were perfectly well known to the magistrates as practitioners of large experience in the town. In their opinion this sugar of milk was widely different from ordinary sugar, and might be administered without injury to diabetic patients. They went further, and said that the amount was so trifling in this case that it was absolutely insignificant and inappreciable. He asked the Bench to say that the sugar of milk made the tablets more convenient and helped solubility. If so, it was harmless, and if that opinion was correct, there was an end of the case.

Dr. Otto Hehner, F.C.S., public analyst for Notts and other districts, and lecturer on practical chemistry at the Westminster Hospital, being examined for the defence, said that saccharin was with difficulty soluble in water, and it was therefore very desirable that some substance should be added to make it more easily soluble. It had become the universal practice to add bicarbonate of soda. The purchaser of these tablets got the ordinary dose of saccharin, which was not in any way interfered with or rendered less effective by the addition of another material.

Dr. Brookhouse and Dr. Hatherly, on being examined, gave as their opinion that the admixture of 75 per cent. of milk sugar would be in no way injurious to a diabetic patient.

Mr. Stanger said he had a number of other medical gentlemen present who were prepared to give evidence of a similar character.

The magistrates, however, stated that they were satisfied with the evidence they had before them, and had determined to dismiss the case.

We regret to have to announce the death, after a brief illness, of Dr. L. R. Connor, of Hastings. The deceased took the degrees of M.B. and C.M. in 1873, and that of M.D. at Aberdeen in 1876.

A telegram from Vienna, of January 21st, states that the *Neologos*, of Constantinople, publishes disquieting intelligence about the spread of cholera in Mesopotamia. It states that there have been 3 000 fatal cases at Bussorah.

We regret to have to announce the death, on January 17th, of Richard Clayton, M.R.C.S., L.R.C.P., of Ewbank, Accrington, at the age of 56 years. Dr. Clayton was a prominent figure in East Lancashire, both as a physician and as a public man. The sympathy expressed has been very great.

THE EPIDEMIC OF INFLUENZA.

THE PERCENTAGE OF POPULATION ATTACKED BY INFLUENZA.

THE epidemic of influenza appears to be declining in London, and does not appear to have established itself in many new centres in the provinces during the past week. It is impossible to form any reliable estimate of the proportion of the population which has been attacked, but there can be little doubt that this country has suffered much less severely than Russia, Germany, and France. Whether this is to be attributed to the superior sanitary state of our towns and villages, as Sir Robert Rawlinson supposes, or not it would be premature to decide. Professor Leyden, of Berlin, is reported to have estimated the proportion of the population of that city which suffered from the epidemic at one-third; and in St. Petersburg it was put at two-thirds. In London the proportion must have been much lower than either of these estimates. The average strength of the troops quartered in the Home District is at present 8,131. The outbreak among this body of men commenced on December 30th, and we have ascertained that down to January 17th, at which date the epidemic was rapidly declining, 860 cases of influenza had been admitted for treatment. This is at the rate of 10.57 per cent. We see no reason for believing that a larger percentage of the civil population have suffered.

THE INFLUENZA MORTALITY IN LONDON.

DURING the week ending Saturday, January 18th, there was a further considerable increase in the deaths from influenza in London. The deaths directly referred to this disease, which had been 4 and 67 in the two preceding weeks, further rose to 127 during the week ending on Saturday last. Of these 127 fatal cases, 7 were of infants under 1 year of age, 4 of children aged between 1 and 9 years, 9 of young persons between 5 and 20, 34 of persons between 20 and 40, 46 of persons between 40 and 60, and 27 of persons aged upwards of 60 years. The mortality from diseases of the respiratory organs showed but a very slight decline from that which prevailed in the preceding week, and was nearly double the average.

INFLUENZA AND DENGUE.

THE *Berliner klin. Wochenschr.* has recently published a tabular comparison of influenza and dengue by Dr. Limarakis, of Constantinople, to the following effect. D. stands for dengue, I. for influenza. Localisation: D. hot countries; I. all latitudes. Duration of epidemic: D. 3 to 5 months; I. 1 to 2 months. Extension: D. slow, and from small centres; I. rapid, and over large tracts at a time. Commencement of disease: D. always sudden; I. almost always sudden. Fever: D. always very high; I. not always very high. Nervous system: D. lassitude, pains in the head and limbs; I. the same. Larynx and trachea: D. seldom affected; I. always affected. Dyspnœa: D. never; I. frequent. Gastric symptoms: D. always present, violent, and persistent; I. may be absent altogether. Exanthem: D. always, beginning in face and descending, erythematous, followed by desquamation; I. seldom, irregular. Headache: D. a feeling of pressure from without; I. sharp, internal, often neuralgic. Complications: D. rarely the heart, liver, or kidneys may be affected; I. frequent, chiefly bronchitis and pneumonia. Reconvalescence; D. very slow; I. usually quick. Prognosis: D. always favourable; I. occasionally bad. Lower animals affected: D. dogs and cats; I. horses. As regards Spain, Dr. Sentiñon writes that the epidemic which is rapidly gaining ground there is undoubtedly influenza, and is distinctly different from cases of dengue, which have been well observed in that country. The question—influenza or dengue?—has been raised by medical men, in Paris especially, but authorities incline to the belief that the two diseases have nothing in common.

LOCAL GOVERNMENT BOARD INQUIRY.

A CIRCULAR has been issued by the Medical Department of the Local Government Board to medical officers of health in England and Wales asking for information on the following points:—

"Has any 'influenza,' particularly if characterised by much nervous depression, severe frontal headache, or various muscular pains, shown itself in your district?

"The date of the first occurrence (as far as you know) of such an influenza?

"The date of commencement of any extensive prevalence of such influenza?

"Any opinion you have formed (or that you wish to modify) as to the mode of origin of introduction of the disease; and as to its method of spread.

"Have you observed among domestic animals an unusual complaint; and in what animals, and with what symptoms?

"Illustrations or observations as to the behaviour of any observed influenza, especially as to the intervals of attack in members of households, its dissemination among particular communities, and its incidence on particular localities."

THE CHARACTERS OF THE RASH OBSERVED IN SOME CASES.

DR. CECIL A. P. OSBURNE (Church Stretton, Salop), writes:—Amongst other parts of the country this little town has fallen in for its share of the epidemic now prevalent. In the accounts given of the symptoms of influenza I notice that an eruption has been observed in some cases, but as far as I can make out its characters have not been described. In a few of the cases coming under my care, I have found a very distinct rash appearing principally upon the face and hands, and sometimes on the feet and back as well. It was noticed generally from twenty-four to thirty-six hours after the first symptoms set in, and lasted about two days, when it was followed by slight desquamation. It was decidedly papular in character, and intensely itchy.

DR. F. P. ATKINSON (Surbiton) writes that he believes the epidemic to be simply influenza of a more virulent type than usual. The present epidemic, he adds, has shown itself by three separate sets of symptoms: (1) Ordinary head cold, accompanied with tenderness of the eyeballs and intense headache; (2) severe neuralgic pains in the back and thighs, legs, chest, and arms, accompanied by increase of temperature; (3) bilious vomiting and purging, accompanied with slight neuralgic pains. In one case only have I noticed any rash, and this was like that of measles on the cheeks and wrists, and disappeared the next day after its appearance. In two or three cases there were no other symptoms but pain and tenderness about the eyeballs and high temperature. In most cases there was more or less bilious derangement and a temperature averaging about 101° F.; in some few it has been from 103.5° to 103.8°. The bronchial irritation has appeared to me to be most marked in those exhibiting the greatest neuralgic symptoms. The treatment I have found most effectual has been quinine in 3-grain doses every four hours in those cases with simply a high temperature. Where the neuralgic symptoms have predominated, 3-grain doses of antipyrin in combination with the quinine every four hours have proved very useful; or salicylate of quinine in like doses, either in pill or solution, where the antipyrin was inadmissible. Most cases have required the administration of a little blue pill. The most difficult symptoms to treat have been the subsequent cough and debility; but I think quinine is the most useful for both, combined with a little hydrobromic acid and also a little nux vomica in the case of the latter.

LOCAL OUTBREAKS OF INFLUENZA.

MR. W. J. TOWNSEND BARKER, L.R.C.P.Lond., M.R.C.S., L.S.A. (Churchinford, near Honiton), writes: The following cases may be of use in settling the question as to (1) the transmission of influenza by direct personal infection or contagion; (2) the probable period of incubation.

CASE I.—Mr. ——, aged 47, subject to slight bronchitis and laryngitis, went to Paris on December 18th, 1889. He stayed at a hotel (where there were several cases of *la grippe*) for the night, and left Paris for home on December 19th. He was taken ill on December 22nd, and I saw him the same evening. His symptoms were: shivering, vague pains, pink conjunctivæ, nasal, pharyngeal, laryngeal, and tracheal catarrh, temperature 102°, want of appetite, and much restlessness. He was well enough to get up on December 25th, but fresh catarrh supervened, and his temperature rose again to 103°. Finally he convalesced slowly.

CASE II.—His daughter, aged 17, returned home on December 21st from school, near London. No known previous exposure to infection. Taken ill on January 2nd, 1890, temperature 103.5°; January 3d, 101.5°; January 4th, 101°; January 5th, normal.

CASE III.—A son, aged 7. Taken ill on January 5th, temperature 102.5°; January 6th, 101°; January 7th, 101°; January 8th, 101°; January 9th, 101°; January 10th, normal. A little bronchitis accounted for the persistent pyrexia.

CASE IV.—A daughter, aged $16\frac{1}{2}$, returned from school on December 21st with a bad cold, which had not quite left her when the new symptoms supervened. Taken ill on January 7th, with

temperature 103°; January 8th, 101°; January 9th, 101°; January 10th, normal; slight bronchitis.

CASE V.—A daughter, aged 13. Taken with sickness and vomiting, apparently bilious headache, and *malaise* on January 7th. On January 8th, temperature ran up in six hours from normal to 104°; no headache or pains, only lassitude. Temperature normal next evening.

CASE VI.—A daughter, aged 10. Taken with vomiting and headache, etc., on the 7th; apparently better next day, but on the 9th headache all day, slight wandering pains in limbs; temperature at night 102°; no catarrh; fever lasted twenty-four hours, after which she felt quite well.

CASE VII.—Myself, aged 29. Taken ill on January 11th in the morning with slight nasal and laryngeal catarrh. Temperature at 12 noon 100°; wandering pains in muscles and joints all day, with intense headache. At 7 o'clock in the evening temperature 103°; shivering; cutis anserina during shivering attacks; pulse 125, extremely tense; heart's action very laborious; breathing frequent and slightly gasping, but not difficult. By 10 o'clock my temperature was 104.8°. Began to sweat at 2 o'clock on morning of 12th, and then the arterial tension relaxed, the heart ceased to labour painfully, and the headache disappeared. By 8 o'clock temperature 100°; by 10 o'clock 98.2°; it remained normal all day and afterwards. The remaining catarrh was slight, but I felt very weak and shaky.

REMARKS ON THE ABOVE CASES.—The general symptoms in the first six, speaking generally, consisted in a sudden rise of temperature to 102° or 104°, lasting about twenty-four hours, and followed by a more or less sudden fall, interrupted in one or two by the occurrence of slight bronchitis. In most the catarrhal symptoms were well marked, though they did not exist in Case VI. Headache was usual, also muscular pains. My own case is similar, except that the vascular disturbance was more noticeable. Redness of the eyes was in nearly every case very marked. The only treatment adopted was confinement to bed, with full doses of liq. ammon. acet., with a little pot. nit. and ipecacuanha wine. As soon as they sweated freely, all the cases felt more comfortable, and the temperature went down at once. In my own case the relief was extremely marked. The chief interest of the series lies in the fact that, if this was really epidemic influenza, which a consideration of the history and symptoms hardly permits me to doubt, we can fix approximately the incubation period as varying possibly from four days, the difference between the time of arrival in Paris of Case I and the first day he showed signs of the disease, and three weeks, the interval at which I myself showed the disease after my exposure on December 22nd, when first called in to attend Case I. The other cases, all of which were exposed to infection from Case I at the same time, sickened at various intervals between these extremes. The other members of the household of Case I have only shown uncertain symptoms—for example, catarrh, muscular pains, headache, and prostration without temperature; but my wife was taken on January 14th with slight catarrh, headache, intense backache, and a temperature of only 100°. There can be no question that all the cases arose from infection from Case I, who contracted the disease during his short stay in Paris. There have been no other cases of a similar affection in the neighbourhood, where I am the sole practitioner.

MR. T. D. PATMORE (Medical Officer, Wormwood Scrubbs Convict Prison) writes: Perhaps a few notes of impressions relating to the influenza epidemic as seen here may be of interest. Some seventy cases have up to now been observed, mostly in adult males.

Incubation period one to three days.

Onset and Course of Disease.—Vertigo, often so profound that patients stagger when first complaining, and in three cases strong men have fallen in syncope to the ground as the first sign of malady.

Frontal headache almost universal; post-orbital pains in about one-quarter of the cases.

Tongue almost always diagnostic, being of washleather appearance, and slightly coated with furrowed fur, but no tendency to dryness in simple cases, and not large nor flabby.

Taste quite perverted or lost, generally the former, so that food is refused absolutely during the first twenty-four or thirty-six hours, mainly because of its foreign taste. This taste perversion in its more intense form passes off usually if a brisk purge be administered.

Constipation complete in about 50 per cent. of the cases.

Facial aspect quite peculiar, and with the tongue condition forms an unerring index of disease in about two-thirds of the cases. This aspect is something between the pallor of syncope and the cachexia of some confirmed chronic disease, and is present on the first day of disease. This aspect has appeared to me most diagnostic.

Skin dry at first; tendency to profuse diaphoresis after second day, the odour being sour and pungent, like that observed in rheumatic fever.

Temperature as an average 101.5° F. to 102° F. on first onset, showing remarkable tendency to subsidence after twenty-four or thirty-six hours, when 99° F., or even normal, is at once reached and retained.

Nervous System.—Implication specially shown by the pains in head, eyes, and back of thighs and knees, and also frequently by tremors of the facial muscles during speech.

Lassitude and inertia last during the whole course of complaint. In one instance a lady assured me that the pains in loins and thighs were so acute as to more than equal the pains of her first labour.

Respiratory Organs.—The usual symptom is an irritating bronchial catarrh, with viscid expectoration, the expelling of which is so difficult as to produce great temporary exhaustion. There has been but little tendency for this to run on to bronchitis, save in young children, which latter little patients have the disease as a short sharp attack of digestive derangement, with vomiting, anorexia, and, as above said, some transient bronchitis. Pneumonia has been developed only on two or three occasions out of the seventy cases, and then not severe. Absence of any nasal catarrh or conjunctival injection is noted.

Urinary Organs.—A catarrhal condition noticed in a few cases, with scalding, frequent micturition, and in one instance partial suppression of urine. No jaundice has been observed.

Duration of symptoms has been very uniformly of eight days in simple cases.

Sequelæ.—Bronchial cough, deficient taste, and some tendency to weariness on exertion.

Treatment. — Diaphoretics and calomel early in the case. Quinine, antipyrin, and salicin perhaps lessen the headache somewhat, but neither of those drugs has proved anything like a specific. Opiates, as in chlorodyne, combat the loin and limb pains, but only for the time being. A uniform temperature should be maintained, and one room only inhabited, as slight alterations of air bring on the exhausting cough.

Diet.—The most acceptable during the period of anorexia has been free drinks of lemonade and liberal supply of ripe oranges. Nothing else save calves'-foot jelly and oysters has been really enjoyed, as the taste reaches nothing that is not pungent or acid.

The epidemic here has been, as may be gathered, mild in nature, and, most of the cases being prisoners, have had the advantage, not enjoyed by all free men, of coming under treatment very early.

DR. P. MAURY DEAS (Honorary Secretary of the South-Western Branch of the British Medical Association) writes: I am able to furnish some further particulars as to the incidence of the epidemic in this district. Mr. J. Elliot Square sends the following interesting particulars as to his experience in Plymouth: "As medical officer to the Plymouth Post Office, with 290 persons under my charge, I have had from January 5th to 20th (inclusive) twenty-nine cases of true influenza and many cases of cold, some of which were on the border line of the true epidemic disease. None have caused me anxiety. In a few cases there has been an erythema, especially of chest; most have had redness of the soft and hard palate, but generally without pain in swallowing. In many cases diarrhœa and vomiting have ushered in the attack, with sudden and somewhat prolonged prostration. Severe headache and rachialgia I consider almost pathognomonic; they have almost always been present, with often shivering and coldness. The highest temperature I have noticed is 103°; many cases have had troublesome cough. I have relied on antipyrin, gr. v every hour; then quinine gr. j every two or three hours in most cases; the cough is difficult to subdue. I imagine it to be due to erythema spreading from the palate, having had no instances of congestion or other affection of lungs. In private I have had several, but mild cases. I was hoping the visitation was going to be slight, but have had two new cases in the office to-day." Upwards of forty cases of

true influenza have occurred among the troops in garrison at Plymouth. A large percentage of the troops stationed in Exeter have also been attacked. So far there have been no cases in the Exeter Workhouse, nor in the County or Borough Asylums; but sporadic cases in Exeter and the neighbourhood continue to occur. Dr. Woodman, Medical Officer of Health for the city, "finds that there is an undue proportion of colds, etc., and that there is much depression after attacks." Since my report last week six more cases have occurred among the male attendants at Wonford House, making in all nine out of a total of fifteen. Most of these are convalescent, but a marked tendency to relapse has been observed, and the resulting weakness is out of all proportion to the duration of the malady or the actual symptoms. In cases where cough occurs it is very irritating and persistent. No patient has as yet been attacked; but during the last day or two two of the female attendants have shown symptoms of the malady.

LIVERPOOL.

OUR Correspondent writes: Since my last notice I have not heard of any cases of influenza applying to the Infirmary or to the Northern or Southern Hospitals. Out of some seventy medical out-patients seen on January 20th at the Stanley Hospital about four or five, who had bronchitis, gave a history of a feverish attack a few days before, with symptoms pointing to influenza, and one case was undoubtedly suffering from it. Several cases in private practice are reported, and there is little doubt that the disease is gaining ground.

SHEFFIELD.

WHILST there does not appear to have been any real outbreak of influenza in this town, cases of severe catarrh have been very frequent during the winter. Pneumonia of a bad type is also asserted to have been very prevalent.

GLASGOW.

THE last fortnightly report of Dr. J. B. Russell, the medical officer of health for Glasgow, amply confirms the view expressed in our columns a fortnight ago as to the non-prevalence of epidemic influenza in Glasgow. The report states that, in the week ending December 28th, the death of a male, aged 34, was registered "influenza fever—angina pectoris;" in the week ending January 4th of a female, aged 82, "influenza fever—pneumonia;" in the week ending January 11th of a female, aged 80, "influenza—old age." These were the only references to influenza in the death register. Last year there were five deaths in all ascribed to influenza; in the year preceding two. It was obvious that the disease was chiefly among those who were comparatively well off, while at the general dispensaries only one or two cases had been recognised. Among the police there was a sprinkling, and in private practice a considerable number. It was a thousand pities, according to Dr. Russell, this adjective "Russian" had become the vogue. After comparing the records of previous epidemics with what was being recorded now he could discern nothing which had not been before. Epidemics had different complexions as different symptoms were more or less prominent; but there was nothing more and nothing less "Russian" about the disease now than there had ever been. One of the Glasgow evening papers, the *Evening Citizen*, sent ont some 400 postcards to members of the medical profession in and about Glasgow requesting information as to the number of cases of influenza, the date of appearance, and number of fatalities, and out of between 100 and 200 replies published two or three columns, names and addresses, of course, being omitted. The result was amusing in the extreme. While many replied indicating that the opinion that the influenza, familiarly known in Glasgow, was unusually prevalent, but exhibited nothing more than the ordinary symptoms, others were confronted with the "Russian" type. The *Evening Citizen* may be congratulated on having achieved a magnificent *reductio ad absurdum* of the collective method of investigating disease.

In connection with the annual meeting of the Glasgow and West of Scotland Branch of the British Medical Association Professor W. T. Gairdner gave a brief address on the subject of influenza at the Western Infirmary.

IRELAND.

THE influenza shows signs of diminishing in Dublin. Its mildness has so far been marked, and it has yielded to treatment when that has been undertaken early. But most attempts to ignore its danger have ended in the patients being made worse, and in some cases in death from pneumonia or bronchitis. The death-rate has gone up to 48 per 1,000—a very serious rise. The weather has been very trying. The temperature has ranged from 60° to below freezing in the course of a few days. Fierce tempests have blown over the country, and these meteorological conditions added on to the epidemic have helped to raise the death-rate. It looks, however, as if the influenza had lost much of its virulence.

The influenza is extending in Ulster. There has been a large increase in the number of cases in Belfast, and the Board of Guardians has been compelled to appoint two additional medical officers to assist the existing Poor-law officials to cope with the additional work thrown upon them by the epidemic. There has been a sharp outbreak in the town of Ballymena, where 200 cases are reported. While many of the cases are sufficiently acute, serious complications have not been common, and no fatalities directly attributable to the epidemic have yet been reported, but there has been a very material increase in the general mortality.

PARIS.

OUR Correspondent writes: The public mind was greatly relieved by reading the following lines published in the *Temps* of January 17th: "The public health of Paris improves daily; if the decrease of mortality continues in the same proportion as that recorded during the last few days, the normal average will be attained next week. On January 15th there were 245 deaths; on January 16th, 282; and on January 17th, 209 (150 adults, 59 children)." In the environs of Paris and the French provinces there is also considerable improvement. Marseilles does not share in the general good fortune. The theatres are closed: the Gymnase was shut a month ago; a day or two ago the Variétés closed its doors. At Roquevaire entire families have been seized with influenza at the same time. Dr. Landolt has observed that the prevailing epidemic has in many instances provoked ocular disturbance; towards the end of the attack the patients are liable to conjunctivitis of a special character; the mucous membrane becomes very red and swollen, and there is in some cases copious secretion. In some instances there is œdema of the eyelids, which sometimes leads to suppuration involving the globe of the eye. At the Ophthalmological Society M. Gorecki stated that he had treated ophthalmic cases which were sequelæ of *la grippe*. Two patients—one 50, the other 30—exhibited asthenopia, accompanied by amblyopia. Many of the members of the Society recorded similar cases. M. Valude had treated under the same circumstances herpes of the nose and eyelids, and a case of paralysis of the oculo-motor nerve. M. Chevallereau reported a case of micropsia, and M. Parent one of ophthalmic migraine.

VIENNA.

OUR Correspondent writes:—During the past week the influenza has rapidly decreased; this may, in part, be attributed to the sudden change to spring-like weather. A decrease of the influenza is also announced from Prague, Buda-Pesth, and other Austro-Hungarian towns. At a recent clinical lecture Professor Fuchs brought forward another case of eye disease after influenza. The right eye presented a circular zone of red vesicles, "herpes febrilis." The interesting feature in this case was the fact that the distribution of the vesicles corresponded with the manifestation of certain nerves. The poison of influenza was in this case, he said, probably localised either in the nerves or nerve-tracts. The patient suffered from sleeplessness, severe frontal headache, and "severe feeling of tension," photophobia, a dread of noise, and neuralgia.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

SCOTTISH ASSOCIATION FOR THE MEDICAL EDUCATION OF WOMEN.

THE first general meeting of the Scottish Association for the Education of Women was held in Edinburgh on January 21st, under the presidency of Mr. J. R. Findlay, of Aberlour. There was a large attendance.

The CHAIRMAN, after referring to the very gallant efforts, and at last successful struggles, of Dr. Jex-Blake in the cause, said that the movement had so far succeeded that there were now fifty ladies on the *Medical Register* qualified to practise. But although medical classes for women had been conducted for about four years in Edinburgh, a medical school, founded on a wider basis, was essential. The very influential support which the new movement had received was the best promise for its future success. Already it was a practical success, inasmuch as premises had been secured some time ago, and classes were in progress under competent and qnalified teachers, and fifteen students were in attendance. The fact that fifteen students had come forward at once in that way was a very strong proof of the necessity of such a school.

Dr. CRAIG MACLAGAN read the report of the Provisional Committee, which was as follows:

"On the formation of this Association last October, and the appointment of a Provisional Committee to give effect to its desires, the Committee found its duties divisible into two distinct sections —(1) the formulating of a constitution for the Association, and (2) the management of its school of medicine. The latter has demanded considerable attention. The Committee cannot report all difficulties overcome, but, requesting only fair play for all, it trusts that the students attending the Association's classes will shortly be assured that the instruction necessary for a full curriculum in medicine will be open to them. The Committee has to thank the managers of the Sick Children's Hospital for the liberal manner in which they have responded to its request that they should open the hospital to all female students. Before framing a constitution for the Association, not being desirous of overlapping the work of any society having objects similar to our own, and knowing that a 'National Association for the promotion of the medical education of women' had been formed not many years ago, your Committee made inquiry to what extent it was active. Your Committee has been officially informed that the National Association was dissolved about a year ago, but it has not been informed what were the reasons for this step. The ground being thus cleared, and many persons prominent in academic and other circles having signified their approval of our objects, your Provisional Committee have drafted a constitution which they now lay before you for approval."

Professor GRAINGER STEWART moved: "That the report be approved of, the Committee thanked for their services and discharged." He had always felt very strongly that in this country the privilege of being educated in medicine should be accorded to women.

The motion was seconded by Mr. W. C. SMITH, advocate, who thought it was amazing and disgraceful that in Edinburgh—a centre of European medical education—there should not be a perfectly equipped school of medicine for women.

On the motion of the Rev. Dr. CAMERON LEES, seconded by Mr. T. Cox, the following resolution was adopted: "That the association be duly constituted, under the title of the Scottish Association for the Medical Education of Women; and that the constitution prepared and submitted to this meeting by the Provisional Committee be the constitution of the Association."

The following persons were elected the officers of the Association:—*President:* Mr. J. R. Findlay, of Aberlour. *Vice-Presidents:* Sir Alexander Christison, Bart., and Mrs. Grainger Stewart. Members of the Court of the Association elected by its members for the year 1890: Dr. R. Craig Maclagan, Dr. Allan Grey, Mr. J. Inglis, C.S I., and Mr. J. P. Coldstream, W.S.

A motion was then submitted by the Rev. Mr. ROBERTSON, seconded by Mr. CHARLES CATHCART, F.R.C.S., to the effect that steps be taken to approach the existing medical school, to see if there could not be any arrangement for unity in their work. This was negatived by a majority of 55.

The teachers of the Association classes have appointed as their representatives to the court of the Association Drs. J. Symington and R. W. Philip, and the students have appointed Dr. Geo. Gibson and Mrs. Lowe, George Square.

DISABLING SICKNESS AND SELF-HELP.

THE members of the medical profession are naturally feeling the full influence of the epidemic of influenza in the increased amount of sickness from which they are personally suffering. A considerable number of prominent medical men have been disabled, and we learn that the returns of the Medical Sickness, Annuity, and Life Assurance Society show that the calls upon their fund have risen to more than double the average. In the first week of the current year 17 claims were paid, all of which were for total disablement from medical practice due to influenza; in the second week there were 21 claims, 12 from influenza; and in the third week 22 claims, of which 13 were from influenza; while during the last week 15 further cases from influenza were declared. The epidemic is undoubtedly very widely spread, as these severe cases have occurred in every part of the country—Scotland, Ireland, as well as England. The total amount of claims at present amount to about £100 per week. This call upon the fund is, however, easily met out of current income, which is fully equal even to the demands of extreme emergencies, and will not necessitate any draft upon the sickness resources, which now amount to over £17,000 for that fund alone.

The annual returns of this Society just prepared for Government purposes disclose some interesting and satisfactory figures, of which the following is a summary: During the year the increase of members has been sustained, being a net addition of 83 members after deducting the loss of 6 members by death and 26 from other causes, the total effective membership at the end of the year being 1,013. The disbursements for the year to members temporarily or permanently disabled from practice amount to £2,346, paid to 152 different members on account of a total of 711 weeks' sickness. Thus, out of an average membership of 950, during the year nearly 16 per cent. of the members who entered after careful and rigid examination and in a state of good health have been totally disabled temporarily or permanently from practice by sickness or accident. It may be interesting to note that even this comparatively high rate compares favourably with that prevalent in industrial societies, which at similar ages would be about 22 per cent. Few people probably are aware how large and widespread is the average incidence of sickness even among persons in the full bloom of manhood and under circumstances not unfavourable to healthy living.

These figures will bring home to medical men the risks of sudden sickness and the advantages of making due provision against it in one way or another. In addition to the sickness expenditure, £250 has been paid on account of one death, and some minor disbursements have been made from the benefit funds. Against the expenditure there have been receipts during the year to the benefit fund, including £856 interest on investments, amounting to £1,096, leaving a sum available for purely insurance purposes of £7,499. The amount set aside under the actuarial tables for the cost of management is £1,095, out of which however only £596 has been expended, leaving a surplus of £498, which has been paid over to the general fund of the Society, and will hereafter rank as profit. Thus in lieu of an expenditure of 10 per cent. on the premium income which is allowed by the actuarial tables—and it is the lowest standard of expenditure known to insurance offices—the management has been conducted so economically that the actual expenditure under this head amounts only to 4.5 per cent.

The result is unprecedented in the history of any contemporary insurance office. This is the more remarkable because the work of the Society is very laborious, and involves an immense amount of detail which does not occur in the management of any society which does not undertake sickness risks, from 8 to 16 per cent. of the members being on an average in communication with the office in respect to their claims. The total reserves in the several assurance funds at the end of the year were £33,931, and the accumulated savings resulting from economical management amount to £2,785, giving a total balance in favour of the Society of £36,717, of which £35,158 is invested in the name of the trustees on behalf of the members, negotiations being in progress for the investment of the available surplus. On January 13th the securities were inspected at the bank by the Editor, in company with the treasurer (Mr. Sibley), and one of the trustees (Sir Spencer Wells), and found correct.

ASSOCIATION INTELLIGENCE.

PROCEEDINGS OF THE COUNCIL.

At a meeting of the Council, held at the offices of the Association, 429, Strand, W.C., on Wednesday, January 15th, 1890:

Present.

Dr. T. Bridgwater, President of the Council, in the chair.
Mr. C. G. Wheelhouse, Leeds, President.
Dr. W. F. Wade, Birmingham, President-Elect.
Dr. Holman, Reigate, Treasurer.

Dr. H. Barnes, Carlisle.
Dr. G. B. Barron, Southport.
Dr. J. S. Bristowe, F.R.S., London.
Mr. H. T. Butlin, London.
Surg.-Gen. W. R. Cornish, F.R.C.S., London.
Dr. J. Ward Cousins, Portsmouth.
Mr. T. W. Crosse, Norwich.
Dr. G. W. Crowe, Worcester.
Dr. P. M. Deas, Exeter.
Dr. D. Drummond, Newcastle-on-Tyne.
Mr. George Eastes, M.B., London.
Dr. W. A. Elliston, Ipswich.
Sir B. W. Foster, M.D., M.P., Birmingham.
Dr. J. H. Galton, Upper Norwood.
Dr. Bruce Goff, Bothwell.
Dr. T. W. Grimshaw, Carrickmines.
Mr. J. H. Hemming, Kimbolton.
Professor G. M. Humphry, F.R.S., Cambridge.
Mr. T. V. Jackson, Wolverhampton.
Dr. F. H. Kyngdon, London.
Mr. C. Macnamara, London.
Dr. W. W. Moore, Brighton.
Mr. W. Jones Morris, Portmadoc.
Dr. F. Needham, Gloucester.
Dr. C. Parsons, Dover.
Mr. W. Pearse, St. Tudye.
Mr. S. W. Sibley, London.
Dr. E. M. Skerritt, Bristol.
Mr. Noble Smith, London.
Mr. J. Taylor, Chester.
Dr. G. E. Williamson, Newcastle-on-Tyne.
Mr. A. Winkfield, Oxford.

The President of the Council introduced Dr. Kyngdon, the representative of the Sydney and New South Wales Branch.

The minutes of the last meeting having been printed and circulated amongst the members of the Council, and no objection having been made, were signed as correct.

Read letters of apology for non-attendance from Sir John Banks, of Dublin; Dr. Mackenzie Booth; Dr. Langdon Down; Dr. Glascott; Mr. Jessop; Mr. Evan Jones; Mr. Sympson; Dr. Strange; Mr. Webb; Dr. Alfred Sheen; Dr. De Bartolomé; and Surgeon-General Graves-Irwin.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date, so far as they relate to the finance expenditure and receipts, be received and approved, and the recommendations carried into effect.

The minutes of the Journal and Finance Committee contain the report on the accounts for the quarter ending December 31st, amounting to £6,655 1s. 4d., and report of Auditors, and resolution authorising the Treasurer to make a further investment.

Resolved: That this Council highly approves the idea of a National Institution for the Study of Bacteriology, and in the event of one being established on a basis commensurate with the objects stated in the memorandum of Sir J. Whitehead's Committee, will recommend the next ensuing annual meeting to authorise the Council to apply such sum (not exceeding £300) as may be one-fifth of the expenditure for the then current year.

Resolved: That the minutes of the Premises and Library Committee of the 14th instant be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Premises and Library Committee contain reports of the Librarian for the past year, announcing that the Library now contains 2,000 books, and the report on the electric light, which is now in several rooms of the Association.

Read letter, of which the following is a copy:

11, Queen Anne Street, Cavendish Square, W.,
December 19th, 1889.

To the President of the Council of the British Medical Association.

Dear Sir,—Herewith we beg to send you the enclosed resignations of the British Medical Association.—We are, faithfully yours,

(Signed) W. Meredith.
J. Williams.

The following members of the British Medical Association being of opinion that, notwithstanding repeated remonstrances, the present conduct of the Journal is discreditable to the Association, feel constrained to resign their membership:

Allchin, W. H.
Anderson, J.
Bailey, G. H.
Baker, W. M.
Barwell, R.
Bennett, W. H.
Boulton, P.
Boxall, R.
Brace, W. H.
Bryant, T.
Cahill, J.
Carter, R. B.
Cory, R.
Cumberbatch, A. E.
Dickson, G.
Duffin, A. B.
Duncan, J. M.
Gill, W.
Griffith, W. S. A.
Gunn, R. M.
Haward, J. W.
Heath, C.
Heron, G. A.
Hill, B.
Hollings, E.
Howse, H. G.
Jessop, W. H.
Lane, J. E.
Lang, W.
Langton, J.
Lawrence, H. C.
Lawson, G.
Lewers, A. H. N.
Liveing, E.
Liveing, R.
Maclehose, N. M.
Mahon, G. A. D.
Marsh, H.
Marston, J. A.
Meredith, W. A.
Norton, A. T.
Owen, E.
Owen, E.
Pepper, A. J.
Pick, T. P.
Pitts, B.
Pollard, B.
Poore, G. V.
Potter, J. B.
Powell, R. D.
Ralfe, C. H.
Read, T. L.
Seton, D. E.
Sewill, H.
Silcock, A. Q.
Slater, D. J.
Smith, E.
Smith, T. G.
Stonham, C.
Sturges, O.
Thornton, W. P.
Treves, F.
Turner, G. R.
Venning, E.
Walker, A. D.
Walkley, R.
Webb, F. E.
Whipham, T.
White, W. H.
Williams, J.

*** This list is not identical with that received, certain signatories having written to the President of Council requesting that their names may be withdrawn.

The President of the Council reported that he had replied to this in the words following:—

I beg to acknowledge the receipt of your communication of the 19th December, together with its enclosure; the resignations will be duly noted. The document will be laid before the Council at the next meeting, which will be held on January 15th next.

He also reported that the General Secretary had written to each signatory, acknowledging his resignation.

Resolved: That the resignations be received with regret; that the Council desires to express its further regret that the signatories, in seeking the redress of any supposed grievances, whether in the conduct of the Journal or the business of the Association, have declined to avail themselves of the readiness expressed by the Council to consider any grievances laid before them, either by direct communication or through their duly accredited representatives.

Read letter from Mr. Ernest Hart asking for the appointment of a committee to investigate into the tests for colour blindness.

Resolved: That the Council appoint a Committee consisting of Sir William Bowman, Mr. Jonathan Hutchinson, Mr. Nettleship, Mr. Bickerton, of Liverpool; Dr. Brailey, Mr. Adams Frost, Dr. Edridge-Green, Mr. Macnamara, The President of Council British Medical Association (Dr. Bridgwater), The Treasurer of British Medical Association (Dr. Holman), and Mr. Ernest Hart, to report to the Council on the subject.

Read letter from Dr. Donaldson, of Londonderry, and proposed by-laws for the North-West of Ireland Branch, copies of which are as follows:—

30, Great James Street, Londonderry, November 7th, 1889.

Dear Sir,—The medical men of the North-West of Ireland being desirous of forming a Branch of the British Medical Association, have drawn up the enclosed by-laws. Kindly submit them to the Council for approval.—Yours faithfully,

C. Donaldson, Honorary Secretary.

F. Fowke, Esq., Strand, London.

By-Laws.

1. Members of the British Medical Association residing in the North-West of Ireland District may be admitted to membership by the Council of the Branch.
2. An annual subscription of 2s. 6d., due in advance on January 1st, shall be payable by each member to the treasurer.
3. The management of the Branch shall be conducted by a council consisting of a president, two vice-presidents, an honorary secretary, treasurer, and nine ordinary members of Council.
4. The president shall be elected annually from the members of the Branch, ex-presidents not being eligible for seven years. A country member shall be elected vice-president every third year.
5. All the officers shall be elected by ballot at the annual general meeting in July.
6. The meetings of the Branch shall be held the first Wednesday in each month at 2.30 P.M.
7. The honorary secretary shall call a special general meeting at any time on receiving a requisition signed by at least twelve members; the requisition shall state clearly the objects for which the meeting is called, and no other business shall be transacted thereat.
8. The council shall meet at least twice a year; five to form a quorum.
9. The secretary shall place on the circulars for the ordinary meetings the papers in the order in which he gets notice of them. No paper shall last longer than fifteen minutes to read, and no speaker shall occupy more than ten minutes in the discussion.
10. The annual dinner shall be held after the meeting in January. The dinner ticket shall not exceed 10s. 6d.

Resolved: That the Council of the British Medical Association ereby approve of the proposed by-laws for the new Branch for ondonderry and the North-West of Ireland, and confirm the cognition, and they congratulate their fellow members in that istrict on the completion of the organisation, and trust that the ranch will prove an active centre for the work of the Associaion in the north-west of Ireland.

Read communications from Dr. Savage and Dr. Warner, asking or the appointment of a Committee to investigate into the state f school population and asking for a grant in aid.

Resolved: That the suggested committee be appointed, as fols: Mr. C. G. Wheelhouse, Dr. T. Bridgwater, Dr. Holman, Dr. eedham, Dr. Shuttleworth, Dr. Yellowlees, Dr. D. Hack Tuke, Dr. angdon Down, Dr. Fletcher Beach, Dr. Ireland, Dr. Henry Ashby, r. G. H. Savage, Dr. Francis Warner; but that, in accordance ith the previous resolutions of the Council and the Journal and inance Committee, they be informed that their application must e made to the Scientific Grants Committee.

Read communications from Dr. Tayler, of Anerley, offering a ouse for a home for medical men and their widows.

Resolved: That the generous offer of Dr. W. H. Tayler be deined by the Association, as the Memorandum of Association will ot allow them to take it.

The election of ninety-eight gentlemen, whose names appear on he circular convening the meeting, was then considered.

Resolved: That ninety-six of the ninety-eight be, and they are ereby, elected members of the British Medical Association.

Resolved: That the minutes of the Arrangement Committee for he annual meeting to be held at Birmingham on July 29th, 30th, 1st, and August 1st next, be received and approved, and the recommendations contained therein be carried into effect.

The minutes of the Arrangement Committee contain the arrangements for the annual meeting to be held at Birmingham on July 29th, 30th, 31st, and August 1st next. It was recommended that the scientific business of the meeting be conducted in twelve Sections, and officers were proposed for them.

Resolved: That Sir Walter Foster be requested to give the Address in Medicine.

Resolved: That Mr. Lawson Tait be requested to give the Address in Surgery.

Resolved: That Dr. Broadbent be invited to give the Address in herapeutics.

Resolved: That the minutes of the Branch Organisation Committee of the 14th instant be received and approved, with the ception that the word "requested" be substituted for "required,' and the recommendations contained therein be carried to effect.

The minutes of the Branch Organisation Committee contain recommendations for the appointment of various members of the Association to Honorary Corresponding Secretaries in the various Colonies.

BRANCH MEETINGS TO BE HELD.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be ld on Friday, January 31st, at 3.15 P.M., in the Radcliffe Infirmary. Notice papers to be read and cases shown, etc., should be sent to W. LEWIS MORGAN, norary Secretary, 42, Broad Street, Oxford, on or before January 17th.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held the Board Room of the Belfast Royal Hospital, on Thursday, January 30th, 4 o'clock P.M. Gentlemen proposing to read papers, show cases, etc., will mmunicate as early as convenient with JOHN W. BYERS, M.D., Honorary cretary, Tower Crescent, Belfast.

MALTA AND MEDITERRANEAN BRANCH.

A ordinary meeting of the Branch was held on December 23rd, 89, in the Library of the Station Hospital, Valetta, Deputy spector-General A. B. MESSER, R.N., President, in the chair.

New Members.—After the minutes of the previous meeting were ad, approved, and signed, the admission to the Branch of sixteen embers (two civil, eight military, and six naval) was proposed, conded, and agreed to.

Treatment of Cholera.—The SECRETARY then read, on behalf of . ENGLOTT, who could not attend, a paper on the Vagus-treatment Cholera (Dr. Harkins's method), relating several cases treated ccessfully by the counter irritation method during the last idemic of cholera in Malta.—A discussion ensued in which igade-Surgeon TOMLINSON, M.S., Professor STILON, Brigade-Surgeon O'DWYER, M.S., and the PRESIDENT took part.—The SECRETARY briefly replied.

Triplets.—A second paper by Dr. ENGLOTT was then read on a Case of Triplets, in which the arm of one fœtus and the leg of the other protruded together from the os.

Electricity in Facial Paralysis.—Dr. F. DEBONO read and illustrated, by means of diagrams and electrical apparatus, a paper on the Treatment of Facial Paralysis by means of Electricity.

SPECIAL CORRESPONDENCE.

SHEFFIELD.

Lead Poisoning by the Public Water Supply.

THE Water Committee seem at length to be awakening to the importance of dealing with the lead question; they have decided to call in the services of Mr. Hawksley, the eminent engineer, and of a well-known chemist. The Committee—wisely, it must be allowed—determined that the latter authority should be a gentleman who had not been connected, on one side or the other, in the proceedings in which the influence of the water on lead was a prominent feature, which resulted in the water undertaking passing into the hands of the Corporation. Professor Dewar has been selected, and this gentleman, with Mr. Hawksley and Mr. Eaton, the Committee's engineer, will form a sort of committee or commission, and will take such evidence as may be forthcoming. Dr. Thomson, the medical officer of health; Dr. Sinclair White, the late medical officer of health; and Mr. H. H. Allen, the borough analyst, are particularly requested to give evidence. The two latter gentlemen are known not to be in accord with the views advocated by Mr. Eaton, and, whether or not the Committee are proceeding in the best manner to avail themselves of the knowledge possessed by those gentlemen, it is certainly well that they should have an opportunity of placing their views before the Committee. The good offices of the Medico-Chirurgical Society have also been solicited in the hope that through some of its members information may be forthcoming as to the prevalence of lead poisoning and as to the methods likely to be of service in obviating such occurrences. There can be no doubt that the Society will meet such an appeal with a ready response. Further, it is stated that information will be cordially welcomed from any member of the medical profession, or indeed from any ratepayer. This all sounds well, and inquiry, carefully conducted, should result in some plan to meet satisfactorily the evils complained of

CORRESPONDENCE.

THE MEDICAL DEFENCE UNION AND THE MEMBERS OF THE GENERAL MEDICAL COUNCIL.

SIR,—As I have recently received a copy of a circular from the executive of the Medical Defence Union, I desire to recall to the recollection of my brother members who might by inadvertence express their willingness to join this Union, the recent arguments before the Court of Appeal in the case of Leeson *v.* the General Medical Council. One of the Lords Justices expressed a very strong opinion as to the impropriety of members of the General Medical Council being also members of the Union.—I am, etc.,

A MEMBER OF THE GENERAL MEDICAL COUNCIL.

DR. LAUDER BRUNTON AND THE PARIAH DOG.

SIR,—I am very sorry indeed to spoil a good story, but the quotation in the JOURNAL from the *Pioneer*, although it is in the main true, has got the facts somewhat mixed. Instead of being headed "Medical Heroism," it might perhaps quite as appropriately have been headed "Medical Awkwardness," for, I regret to say, that the assistants showed themselves much more expert than I was in handling dogs. One of them got bitten while administering alcohol to a dog, but this was a much more difficult business than simply lifting a dog into a box into which chloroform was afterwards put, and it was in doing this that I got bitten. Very shortly after the Commission had begun work and before I knew much about the ways of pariah dogs, a particularly evil-looking one was brought to the laboratory early in the morning, a few minutes before the assistants were due. Most of the natives of Hyderabad are amply clothed, much more so than those of Bombay, but the

boy who brought the dog was an exception, and his clothing was so scanty that an ordinary pocket handkerchief would not only have been ample to provide him with a complete suit, but would have left something over for a second. To bring this boy's naked limbs within easy reach of the dog's teeth seemed like deliberately putting a temptation to bite in the animal's way, and so I thought I had better lift him in myself. I accordingly caught him by the neck, but I had not reckoned on the flexibility of his cervical joints, and he managed to twist his head round and catch my hand. He drove one canine deeply into the palm, but most of the other bites were mere scratches. Nevertheless, as one never knows what carrion these animals have been eating, I had the wounds touched with a strong solution of permanganate of potash, and they all healed well. After this I came to the conclusion that I was not an adept in the way of handling pariah dogs, and that I had better leave them to others who were more expert, like my naked friend, who up to the end, notwithstanding his apparently defenceless condition, had not received a scratch. Although as a member of the Pasteur Commission I became thoroughly convinced of the efficacy of his treatment, I was not inoculated by him, but got accidentally inoculated when a member of the Hydrophobia Committee of the British Medical Association about twelve years ago. In making a *post-mortem* examination of a case of hydrophobia a few hours after death I accidentally got a puncture from a spiculum of bone when removing the skull-cap. In removing the brain and salivary glands my hands were smeared with cerebro-spinal fluid and saliva. After discovering the puncture I thought it safer to cauterise it with caustic potash, which burned the place out so thoroughly that the matrix of the nail and the extensor tendon were also destroyed, rendering the last phalanx of the right forefinger almost useless. It was no doubt this accident, along with the fact that I had been a member of the Pasteur Commission, which led the writer in the *Pioneer of India* to think that I had been inoculated by Pasteur. My case is a warning to all to wear indiarubber gloves when making a *post-mortem* examination, and not to meddle with dogs unless they know how to tackle them.—I am, etc., T. LAUDER BRUNTON.

Stratford Place, W.

COVERING THE MEDICAL AID SOCIETY.

SIR,—The result of the action of the General Medical Council in the case of Leeson *v.* Harness must be most satisfactory to the profession. I beg, therefore, to call attention to another example of "covering," as flagrant and immeasurably more injurious to us, both in its immediate and remote effects. There is a so-called Medical Aid Society, which really consists of one or two persons having offices in London or Birmingham and branches all over the kingdom, whose agents collect 1d. per week from each adult and half that amount from each child. The proprietors appoint, also, "a doctor" in each town large enough to pay them, who receives a part of that sum, a house—rent and tax free—and has to enter into a bond for £500 not to practise on his own account therein then or hereafter.

This "society" exists ostensibly for the benefit of the poor—really for that of the proprietors, who receive all its funds—and is made use of by small tradesmen and prosperous mechanics to our great loss and damage. But, unless I have mistaken the meaning of the clause, this is a clear case of "covering."—I am, etc.,

Stourport, January 14th. G. CADOGAN-MASTERMAN, M.D.

OBSTRUCTING JUSTICE.

SIR,—The learned Recorder of Bradford made some remarks, in an appeal case tried before him in that town recently, which deserve serious attention. The Corporation of Bradford issued an order declaring that certain premises used for slaughtering pigs ever since 1860 were "unsuitable," although no complaint had ever been made about the premises to the Corporation. Dr. Tatham, medical officer of health for Manchester, was asked by the solicitor of the owner of the premises (who appealed against the order of the Corporation) to inspect the place, and, if satisfied, to give evidence for the appellant. Dr. Tatham, however, refused. Subsequently Dr. Tatham found himself in the witness-box as a warm supporter of the case for the Corporation of Bradford, and, in reply to counsel, he repeated there his decided opinions on the iniquity of giving evidence against the decrees of a sanitary authority. He met, however, with but little sympathy from the Recorder, who expressed the view that the opinions of Dr. Tatham, if acted on, were calculated to obstruct the administration of justice. It was a question of meting out justice between two parties. If those best able to give evidence in cases like that before the Court all banded themselves together to refuse to tell the truth on behalf of anyone aggrieved by a sanitary authority, and determined only to assist sanitary authorities, then grievous injustice must often be done. The Recorder decided that in the case before him the Corporation were wrong and the appellants right, and allowed the appeal with costs. A still more regrettable incident occurred in this case. One of the ablest medical officers of health in England, Dr. Alfred Hill, of Birmingham, had inspected the premises objected to by the Corporation of Bradford, and had expressed his readiness to go into the witness box and say he thought them quite suitable. Although he went to Bradford under authority, yet, owing to some extraneous influence which intervened, he was prohibited by the Corporation of Birmingham from appearing there against the Corporation of Bradford. The matter was stated before the Recorder, and the strong protest of the counsel for the appellant will, it is to be hoped, reach the ears of those who interfered.—I am, etc., SANITARIAN.

VISITING PHYSICIANS TO LUNATIC ASYLUMS IN IRELAND.

SIR,—So long as the general public were kept informed through the newspapers, by those who are self-interested, that the appointments of visiting physicians are "sinecures" and that they are only "ornamental," it mattered little and could be disregarded; but when the JOURNAL, rightly or wrongly, continues to persist in placing them at a disadvantage, I, as one of the number, feel bound to defend myself before the tribunal of my medical brethren, and show that the post is anything but a sinecure if a man does his duty, and is willing and anxious to co-operate and assist the resident medical superintendent, whose duties are arduous, various, and worrying.

On admission, I examine into the physical and mental side of each case, and, although not laid down in the Privy Council rules, I write down the entire history of each in two large indexed books—one for each sex—and, lest I should omit data, I have thirty-one printed reminders in five columns, as well as the entire opposite leaf left as a blank for noting changes in the case. This occupies a good deal of time, no doubt, but is of immense value, and the vital importance of it cannot be over-estimated both to patients and physician.—I am, etc., WALTER BERNARD,

January 13th. Visiting Physician, Londonderry District Lunatic Asylum.

ENGLISH AND FOREIGN HEALTH RESORTS.

SIR,—In a letter from Dr. Ll. L. B. Williams, of Sidmouth, in the JOURNAL of January 11th I notice a statement which has somewhat surprised me, and which will equally surprise most of the older residents upon the Riviera who may chance to see it. Dr. Williams writes that "even now no one in his senses thinks of drinking water 'raw' whilst upon the Riviera." And, if such a statement is correct, I am afraid that the great majority of our residents and visitors in this place, including myself, are at present unprovided with the supervision demanded by our mental condition.

To speak soberly, I have never, during the fourteen seasons I have spent upon the coast, treated any patient for any ailment resulting from the use of impure water; and the only cause for which I have had to advise resource to "cooking" the water derived from our wells here has been its hardness.

With the other objections urged by Dr. Williams—"fatigue of long journey, expense, etc."—I agree; they are all matters which must be considered when advising patients to go abroad, but the phrase which I have noticed seems to me rather recklessly inclusive.—I am, etc., J. A. GOODCHILD.

Bordighera.

LONDON UNIVERSITY.

SIR,—I should esteem it a favour if you will allow me a short space in the JOURNAL to state that a protest against the proposed changes in the London University has been prepared and is now in course of signature by the graduates and undergraduates at the various medical schools. Anyone wishing for a copy for signature can have one on applying to me.—I am, etc.,

St. Bartholomew's Hospital, E.C. H. J. WARING, B.Sc.

MEDICO-LEGAL AND MEDICO-ETHICAL.

FEE FOR EXAMINING A LUNATIC.

Dr. D. J. Kelly, of Mullingar, recently applied to the Granard Board of Guardians for £2, his fee for examining a lunatic. The guardians objected on the ground that if their dispensary medical officer had examined the patient, he would only have charged £1. They referred the matter to the Local Government Board, who informed them that when two justices gave an order for any sum not exceeding £2, it became obligatory on the guardians to pay. The Board, to avoid costs, have determined to pay to Dr. Kelly the amount claimed for.

CERTIFICATES OF CAUSE OF DEATH, ETC.

Quousque Tandem writes: Thanking you for inserting my remarks on the above subject, I wish to observe as to our certificate only supplying one of the many facts in the eight columns of the register, that the only additional information supplied by the registrar is the name and address of the informant, which entails no responsibility on the person filling up the entry, and which requires no special knowledge nor anything, in fact, but ordinary intelligence. If a fee is earned by the entry, certainly a much larger fee should be insisted on by those who have the interests of the profession at heart for the important information supplied in the original certificate of the cause of death.

*** The registrar's duties in making an entry in his death register are merely clerical, all the facts concerning the deceased person, except the cause of death, being supplied by the legal informant of the death, who is usually a relative of the deceased. It appears undesirable to institute a comparison between the value of the registrar's clerical duties and that of the service rendered by registered medical practitioners in certifying the causes of death of their patients.

INSURANCE COMPANIES' MEDICAL REFEREES.

In response to "C. E. S.'s" remark that "the case was intentionally stated as vaguely and generally as possible to elicit a rule of parallel lines with chap. iii. rule 4, of the *Ethical Code*," we deem it essential to note that unless questions are clearly, succintly, and intelligibly defined it is next to impossible to frame a practical rule to meet hypothetical contingencies such as are shadowed forth in his communications. We must therefore refer him to the new edition of the *Code*, chap. iii. sect. i, rule 4, wherein he will find appended thereto the following: "Note.—The principle herein enunciated should govern all medical referees, whether acting on behalf of railway or accident insurance companies and the like." We may add, in answer to his other query, that "over two miles would not constitute a long distance."

COMBINATION OF M.B. AND CHEMIST.

M.B., C.M. writes: Having a decided objection to keeping a shop, I sublet to a chemist one which I had to take with a dwelling house. I now consult in the shop, and the chemist dispenses my prescriptions. One night recently a patient came in suffering from toothache. The chemist in my presence extracted the tooth and charged sixpence. I do not think this will tend to promote good feeling betwixt us, and I should like to know what position I should assume. No agreement has yet been signed.

Should the chemist, for his own purposes, put a card in his window with the words "teeth carefully extracted, 6d. each," or even "teeth carefully extracted?"

*** We may note that a more ill-advised arrangement than that he would appear to have entered into with the chemist could not, in our opinion, well be. Moreover, to "consult in the shop," to quote his own expression, is highly derogatory to him as a medical practitioner, and cannot fail, in the eye of the public, to more or less associate him with the trade business thereof. Further, to sanction by his presence the extraction of a tooth by the chemist in question—and for such a fee, moreover—was, we need scarcely add, something more than unwise. What, we are tempted to ask, is the profession coming to?

FEES FOR DEATH CERTIFICATES FOR INSURANCE COMPANY.

A fee for a certificate given for insurance purpose is in the case mentioned maintainable, but the amount named might be regarded as high.

The Contagious Diseases Acts in India.—The *Official Gazette of India* publishes a set of draft rules under the Cantonments Act of 1889. The rules, which will be taken into consideration with a view to final sanction at the expiry of two months from the present date, provide for the establishment and maintenance of free hospitals for persons suffering from any infectious or contagious disorder. By Rule 4: "If the medical officer for the time being in charge of a hospital maintained under these rules certifies in writing to the commanding officer of the cantonment that any person is suffering, or is supposed by such medical officer to be suffering, from a (contagious or infectious) disorder, and such person refuses to go to the hospital, or, having gone, leaves it before being pronounced free from the disorder, the cantonment magistrate may order such person to leave the cantonment within twenty-four hours." Should the order be disobeyed the offender, according to the new rules, "shall be punished with a fine which may extend to Rs.53, or with imprisonment which may extend to eight days."

NAVAL AND MILITARY MEDICAL SERVICES.

RETIREMENT AGE OF SURGEONS-GENERAL.

A new Royal Warrant has been issued to provide in certain cases for the retention of Surgeons-General beyond the age laid down for compulsory retirement. The warrant states:—"The appointment of Director-General of the Army Medical Department shall be for seven years, and the retirement of the other officers of the Medical Staff shall be compulsory at the following ages (except that if it should in any particular case be considered that the interests of the public service would be materially advanced by the further retention of a Surgeon-General on the active list, the age for retirement of such Surgeon-General shall be extended to 62):—Surgeon-General and Deputy Surgeon-General, 60 years; Brigade-Surgeon, Surgeon-Major, and Surgeon, 55 years."

THE ORDER OF THE MEDJIDIEH.

According to the *London Gazette* of January 17th, Surgeon Richard Edward Ricketts Morse, M.S., has been decorated with the Medjidieh third class for action at Toski, on the Nile; Surgeon-Major John Godfrey Rogers, M.B., D.S.O., M.S., with the Medjidieh second class, and Surgeon-Major Aylmer Ellis Hayes, D.S.O., M.S., with the Medjidieh third class, for action at Gemaizah.

A REASON FOR MILITARY RANK FOR MEDICAL OFFICERS.

I.V.R.C. writes: The War Minister should consider one reason in favour of granting military rank to medical officers which I have not yet seen stated. It is that, once given, it will go a long way to secure a plentiful supply of candidates in future. Since 1858 the constant checks in supply, followed by taking in large teams of candidates, has been very injurious to the *morale* of the department and fatal in a great degree to its internal discipline. The watchword of "Equality within the Army," if once accepted, would soon stop all such checks and rushes, and secure a full and regular supply, as in the combatant ranks. All internal progress towards efficiency is killed if officers think that they cannot be replaced, and a plentiful supply of candidates is an essential element if progress is to be made. Military rank, by putting an end to a crowd of grievances, would go far to secure this supply.

SYMPATHY BETWEEN THE INDIAN AND BRITISH MEDICAL SERVICES.

Surgeon-Major I. M. S. writes: I was astonished to read the statement in the Journal of December 21st of "Regimental Medical Officer," that members of the Indian Medical Service had but "little sympathy with the agitation for new titles, gold lace, and stars." If by this he means they have no sympathy with the desire for proper military rank and well-defined military titles, I can assure you, as an Indian medical officer of fourteen years' service, pretty equally distributed between the military and civil branches, the facts are quite the contrary. Indian medical officers, whether in civil or military employ, are strongly in sympathy with the Medical Staff on the rank question, and equally with them desire military rank and titles. Believe me, your correspondent represents but a very small body of Indian medical officers on that question. Let me add, the Indian Medical Service, equally with the British, widely recognise their heavy debt of gratitude for your staunch and untiring advocacy of proper military rank and titles for medical officers of Her Majesty's services. I have myself experienced official insult and degradation, from the want of them.

The "vast majority" of the Indian Medical Service are not, as your correspondent asserts, in civil employ; the numbers in that and military employ are nearly equal. One point he states is, however, true beyond doubt, and that is, that union with the Medical Staff as at present constituted is about the last thing desired by the Indian Service.

*** We felt quite certain our correspondent of December 21st, in his contemptuous allusion to the rank question, was the spokesman of a very small body in the Indian service. The more the pity there should be any such, being the outcome, as it must be, of narrow and selfish views. In the vital question of army status, medical officers of every branch of Her Majesty's service stand or fall together. Degradation at home means degradation abroad, that is a certainty; it is certain to extend to civil equally with military employ. Loss of self-respect cannot be long endured in any branch of the public service.

TITLES.

"Medicus" calls attention to the recent gazetting of two Quartermasters, Medical Staff, to the honorary rank of Captain, and asks, Surely, if these officers and army school inspectors are given military rank and titles, are not medical officers entitled to the same? By what other means can their real status in the army be recognised or expressed? Fancy a lady saying to an army doctor, "How do you do, Surgeon-Captain?"

*** The extraordinary anomaly and absurdity of one set of officers having defined military rank and titles, while others in the same corps, and exercising command too, are denied them, has often been pointed out. But it is useless bandying logic with people who in this matter have wholly discarded it.

INDIAN PAY.

M. S. writes: The following may be of interest to gentlemen who contemplate joining the Medical Staff with visions of fat pay at least in India! Army Regulations, India, vol. i, Part I, paragraph 308. "Grade pay and unemployed pay of medical officers and veterinary surgeons are composed of pay proper and Indian allowances." Para. 310. "The pay proper of an officer of the British service is his English pay." Para. 347. "When English pay of officers is issued with Indian allowances it is converted at the rate of 2s. 6d. the rupee."

The latter paragraph means, in other words, that, for every standard value half-crown of my English pay the Indian Government present me with one of their depreciated rupees, worth in the market the sum of one shilling and fourpence halfpenny. Scarcely an honest transaction to say the least of it! Why should officers be thus robbed? The pay of warrant and non-commissioned officers is converted at the rate of exchange. This is fair. Let me tell candidates my experience, that surgeons under six years service are worse off in India than at home, and after six years they are very little better.

THE NAVY.

THE following appointments have been made at the Admiralty:—HAMILTON MEIKLE, Surgeon to the *Indus*, January 14th; JOHN WILSON, M.A., M.D., Staff-Surgeon to the *Vernon*, January 25th; HENRY W. RICKARDS, Surgeon to the *Goldfinch*, February 5th; JOHN H. STENHOUSE, Surgeon to the *Wildfire*, January 18th.

THE MEDICAL STAFF.

SURGEON R. G. THOMPSON, M.D., serving in the Bombay command on general duty in the Bombay district, is transferred to general duty in the Aden district.

Deputy Surgeon-General J. G. FAUGHT has been appointed Principal Medical Officer to the Western District, with headquarters at the Station Hospital, Devonport.

Surgeon-Major W. H. B. CLAPP, M.D., is promoted to be Brigade-Surgeon, ranking as Lieutenant-Colonel, *vice* R. W. Davies, deceased. Dr. Clapp entered the service as Assistant-Surgeon October 1st, 1862; became Surgeon March 1st, 1873; and Surgeon-Major April 28th, 1876. He was engaged in the Egyptian war in 1882, and received the medal and the Khedive's bronze star.

Brigade-Surgeon JOHN DUSTAN died at St. Saviour's, Jersey, on January 12th, aged 51. He entered the service as Assistant-Surgeon March 31st, 1862; became Surgeon March 1st, 1873; Surgeon-Major April 28th, 1876; and Honorary Brigade-Surgeon on retirement April 1st, 1882. He had no war record.

Brigade-Surgeon CHARLES WILLIAM GRIFFITH died at Purfleet, where he was medical officer in charge, on January 15th, after only a few days' illness, at the age of 53. His commissions were dated: Assistant-Surgeon January 12th, 1859; Surgeon March 1st, 1873; Surgeon-Major, April 1st, 1874; and Honorary Brigade-Surgeon on retirement November 10th, 1880. He served throughout the Hazara and Black Mountain campaigns in 1868 in medical charge of a battery of Royal Horse Artillery (medal with clasp).

Surgeon-General JOHNSTON FERGUSON, late Medical Officer of the Southern District, has, after a distinguished career, died at his residence, Southsea, in his fifty-ninth year, and his remains were interred at the Southsea Cemetery on January 16th, with full military honours. The following are the dates of his commissions: Assistant-Surgeon, April, 1853; Surgeon, January, 1862; Surgeon-Major, 1873; Brigade-Surgeon, 1879; Deputy Surgeon-General, 1882; Surgeon-General, November, 1888.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR E. PALMER, Bengal Establishment, Medical Officer 9th Bengal Lancers, is appointed Principal Medical Officer of the Cavalry Camp of Instruction at Muridki, *vice* Brigade-Surgeon J. R. Greenhill, Medical Staff, who has been reported unfit for duty owing to illness.

On being relieved by Surgeon-Major B. Evers, M.D., on return from leave, Surgeon F. J. DRURY, M.B., Officiating Civil Surgeon and Superintendent of the Gaol at Raepore, is transferred to Betual.

Surgeon W. S. P. RICKETTS, Bombay Establishment, on general duty in the Poona District, is directed to officiate in medical charge of the 26th Native Infantry, during the absence of Surgeon-Major K. A. Dalal, M.B., in civil employ.

Surgeon C. T. HUDSON, Bombay Establishment, on general duty Bombay District, is transferred to general duty Aden District.

Surgeon-Major L. R. DAWSON, M.D., Bengal Establishment, Medical Officer 22nd Punjab Infantry, died from pneumonia at Goojerat, where he had been left by his regiment while on the march. His commission was dated March 31st, 1886, he having entered the service twelve years previously.

Surgeon K. H. MISTRI, Bombay Establishment, has been appointed to act as Civil Surgeon of Broach.

Surgeon-Major EDWARD CAMPBELL, late of the Bengal Establishment, and sometime of the Viceroy of India's Body Guard, died in London, suddenly, on January 16th, at the age of 73.

THE VOLUNTEERS.

CAPTAIN G. G. HODGSON is appointed Acting-Surgeon to the 4th Volunteer Battalion King's Liverpool Regiment (late the 15th Lancashire). Captain Hodgson joined the corps as a lieutenant June 6th, 1885, and became Captain February 5th, 1887.

Surgeon G. TOBIN, 1st Volunteer Battalion Loyal North Lancashire Regiment (late the 11th Lancashire), has resigned his commission, which was dated June 21st, 1884.

Mr. DAVID HAMILTON KYLE, M.B., is appointed Acting-Surgeon to the 6th Volunteer Battalion Black Watch (formerly the 1st Fifeshire).

SISTER ROSE GERTRUDE (Miss Amy Fowler) left Liverpool on Saturday last, to enter on her self-imposed mission of superintending the hospital on the leper island of Molokai.

OBITUARY.

GEORGE WYLLIE, L.F.P.S.GLASGOW.

DR. GEORGE WYLLIE, of Craigend, Gourock, died suddenly of heart disease on January 13th. For thirty years he practised in Gourock, and for twenty years previously he had been in practice in Doune, Perthshire. He had been a student of Anderson's College, Glasgow, and received his licence to practise from the Glasgow Faculty of Physicians and Surgeons in 1840. He was medical officer of the burgh of Gourock for twenty-eight years, and in various other capacities rendered useful service to the community, among whom he was held in much esteem. He died in the very midst of his work, at the age of 73.

GEORGE CRAWFORD, M.D., C.M.GLASGOW.

WE have to record the death of Dr. Crawford, of Port Glasgow, which took place on January 4th. Dr. Crawford, who was 55 years of age, began life as a mining engineer. His subsequent adoption of medicine was justified by the results, for as a student he gained distinction, graduating "with commendation," and his success as a practitioner was marked. In Port Glasgow he took his share of public affairs, sitting for three years in the Town Council, during two of which he acted as a magistrate; and he also served on the School and Parochial Boards. About two years ago his health began to give way, and a voyage to America undertaken some months ago failed to benefit him. He was a member of the British Medical Association, and found time to contribute some papers to medical journals.

INDIA AND THE COLONIES.

INDIA.

ANNUAL REPORT OF THE SANITARY COMMISSIONER FOR MADRAS 1888.—In the year under notice cholera again entered on one of its cycles of increasing mortality. The sanitary commissioner reports there was no month in the year when the disease was absent from the Madras Presidency. It attained to its maximum of intensity during the cold weather months; the greatest number of deaths were registered in the months of December and January. 58,677 deaths were registered from the cholera during the year, being 30,318 more than in the preceding year. The commissioner gives a table which clearly shows the cycle in which the disease moves, namely, "that every sixth year is a year of minimum intensity. The years of minimum intensity were 1868, 1874, 1880, and 1886," and the commisioner remarks: "It will be interesting to see if 1892 will also be a year of minimum intensity." The only district in the Presidency in which the disease did not appear was the Nilgiris. It was most severely felt in the district of Tanjore, where 4.3 per 1,000 of the population died from it. Once more the commissioner proclaims the fact, so often told, so often forgot, "that the chief factor in reducing the mortality, not only from cholera, but also other diseases, and notably fevers, which cause many more deaths than cholera does, has been the introduction of cleanliness in villages and towns, and wherever thorough cleanliness prevails the mortality is reduced." Small-pox: The deaths registered from this disease amounted to 21,858. Vaccination was made compulsory in the Madras Municipality on May 15th, 1884; a fall in the mortality was the immediate result. In 1883 the death-rate was 1,457; in 1885 (the year following compulsory vaccination) it was 26, and has since never risen above 36, or 0.08 per 1,000 of population. Fevers: 204,561 persons died from "fever" in 1888, being a decrease of 36,299 for the year as compared with 1887. The commissioner truly observes that although cholera attracts more attention and naturally causes more panic than fevers, yet it ought not to be so much dreaded as fevers, which are a far more prominent cause of excessive mortality than cholera. Bowel complaints are always more mortal in cholera than in ordinary years; 2,772 persons died from this cause. The health of the military during the year was, on the whole, satisfactory,

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ZYMOTIC MORTALITY IN LONDON.

We have constructed a diagram showing the prevalence of the principal zymotic diseases in London during each month of the last quarter of 1889. The fluctuation of each disease during the period under review, and its fatal prevalence as compared with the average of recorded mortality in recent years, can thus be very readily seen.

Small-pox.—Only one death from this disease was recorded during the last three months of 1889, the average number in the corresponding period of the last ten years being 101. This fatal case occurred in Lambeth, and was the only death from small-pox recorded in London during the whole of 1889. The Metropolitan Asylums Hospitals contained no small-pox patients at the end of December last, and only one was admitted during the quarter under notice.

Measles.—The deaths referred to measles were considerably below the average throughout the quarter; the total deaths from this disease did not exceed 323, while the average number was 689, or more than double the number actually recorded. Among the various sanitary areas of the metropolis, the highest proportional fatality of measles occurred in St. Luke's, Whitechapel, Clerkenwell, Stepney, Bethnal Green, and Mile End Old Town.

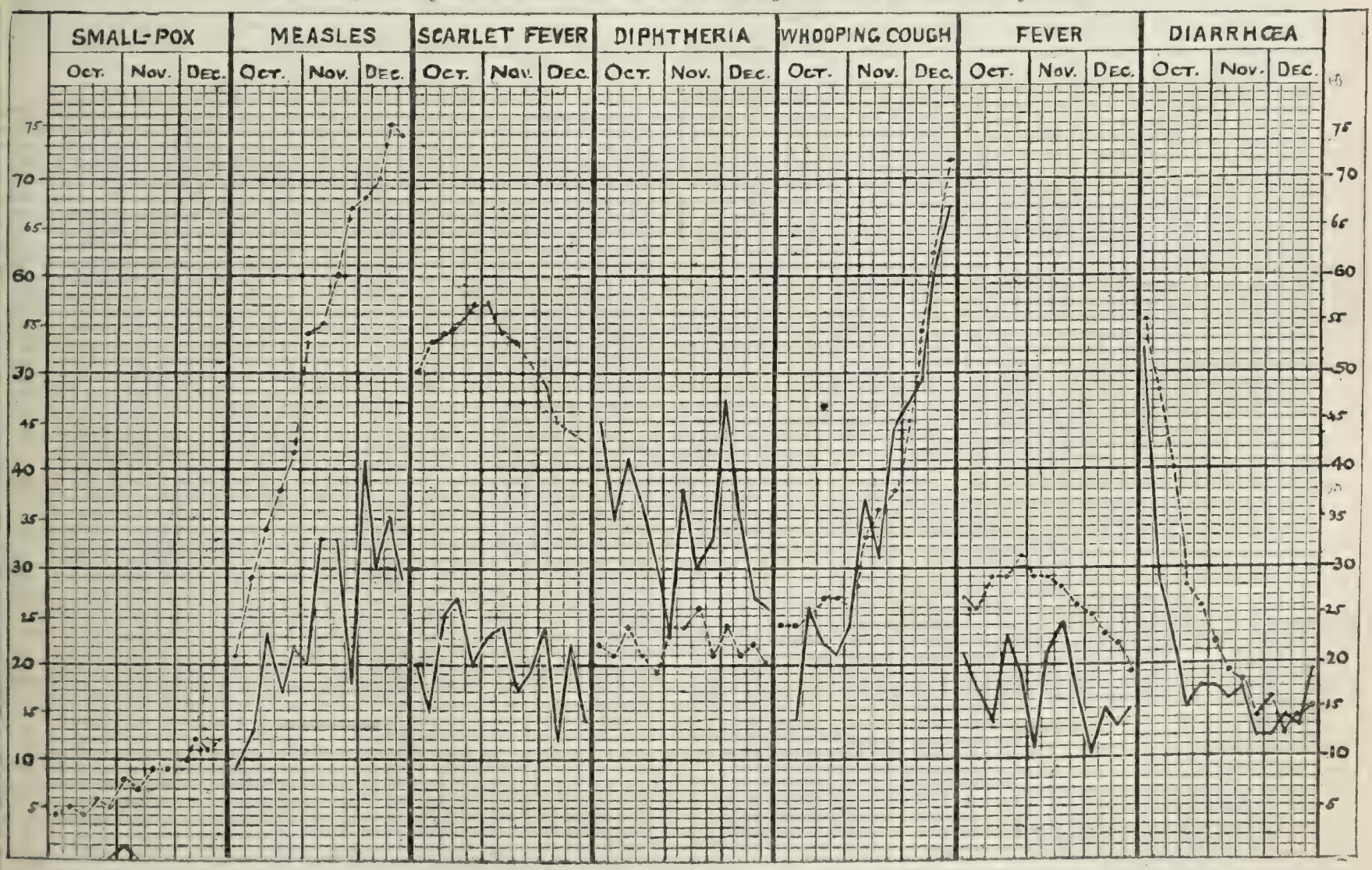
Scarlet Fever.—One of the satisfactory features of the above diagram is the low mortality from scarlet fever. The total deaths referred to this disease during last quarter were only 262; had the average number in the corresponding period of the preceding ten years been recorded, the total deaths would have reached 665; in other words, scarlet fever mortality in London last quarter was more than 60 per cent. below the average. This comparatively low mortality from scarlet fever is especially remarkable, since, judging by the number of patients in the Metropolitan Asylums Hospitals, this disease was certainly prevalent in London. The number of scarlet fever patients in these hospitals and in the London Fever Hospital, which had steadily increased for nearly six months, was no fewer than 1,609 at the end of 1889. The number of cases admitted into these hospitals, which had been 685 and 1,523 in the two preceding quarters, further rose to 2,010 during the last three months of 1889; yet the mortality from this disease was much below the average, indeed, lower than in the last quarter of any year on record, with the single exception of 1885. Among the sanitary districts of London, the highest fatality from scarlet fever occurred in Shoreditch and Mile End Old Town.

Diphtheria.—The fatal prevalence of diphtheria presents a marked contrast to that of scarlet fever, the deaths from the former disease, with one exception, exceeding the average each week throughout the quarter. The fatal cases recorded during the three months were 448, against an average of only 300. During the quarter 275 cases of diphtheria were admitted into the Metropolitan Asylums Hospitals, against 83, 129, and 276 during the three preceding quarters; and 124 patients remained under treatment at the end of the year. Among the various sanitary areas diphtheria was proportionally most prevalent in Stepney, Mile End Old Town, Shoreditch, St. George-in-the-East, and Bethnal Green.

Whooping-Cough.—This disease caused 456 deaths during the quarter, the corrected average number being 493; it was proportionally most fatally prevalent in Fulham, Lambeth, Stepney, and Bethnal Green.

Fever.—Under this heading are included deaths from typhus, typhoid fever, and simple and ill-defined forms of continued fever. "Fever" mortality is usually greater in the last quarter of the year than at any other period; and though the deaths in London

Deaths from Zymotic Diseases in London during the Fourth Quarter of 1889.



Note.—The black lines show the *recorded* numbers of deaths from each disease during each week of the quarter. The dotted lines show the *average* number of deaths in the corresponding week of the preceding ten years, 1879-88, corrected for increase of population.

referred to different forms of fever last quarter showed a marked increase upon those recorded in the preceding or September quarter, they were below the average each week during the last three months of 1889, the total deaths amounting to 219, or about 35 per cent. below the average. In no sanitary district was fever really prevalent during the quarter under notice.

Diarrhœa.—This disease, except during the third quarter of the year, when "summer diarrhœa" is prevalent, calls for little comment. The deaths referred to diarrhœa and dysentery during the three months under notice were 254, and were below the average almost throughout the quarter.

In conclusion it may be stated that during the last quarter of 1889 the deaths from these principal zymotic diseases, taken collectively, were as much as 33 per cent. below the average number in the corresponding periods of the ten preceding years, 1879-88, and that in only one of them, namely, diphtheria, did the mortality exceed this average.

THE COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

On December 14th last, page 1375, we gave a list of sanitary authorities who had adopted the Infectious Disease (Notification) Act, 1889, thereby rendering compulsory the notification of cases of infectious disease in their districts. Since then the Act has been adopted by the following additional authorities.

Urban.—Aberystwith, Abram, Acton, Allerton, Alverstoke, Andover, Barnard Castle, Barnsley, Barrow-in-Furness, Beaconsfield, Beeston, Berwick-upon-Tweed, Bicester, Biddulph, Billinge, Bilston, Bingley, Birkdale, Birmingham, Bishop Stortford, Blackrod, Blaenavon, Bradford (Wilts), Bristol, Bromsgrove, Canterbury, Chelmsford, Chepstow, Chorley, Clayton-le-Moors, Clitheroe, Cuckfield, Dawley, Dawlish, Denbigh, Devizes, Diss, Droitwich, East Barnet, East Cowes, Ebbw Vale, Eton, Fairfield, Featherstone, Fleetwood, Goole, Grasmere, Greetland, Hampton Wick, Hanley, Hanwell, Havant, Haverhill, Hayworth, Hay, Higham Ferrers, Hitchin, Hull, Ilkley, Keswick, King's Lynn, Kington, Kirkham, Knighton, Leamington, Leckhampton, Leek, Leigh, Lewes, Lichfield, Liverpool, Long Eaton, Loughborough, Lydd, Maldon, Milford, Mirfield, Moss-side, Much Woolton, Newbold and Dunston, Newmarket, Newport (Mon.), Normanton, Oldbury, Ossett-cum-Gawthorpe, Pontefract, Prescot, Pwllheli, Ramsgate, Ravensthorpe, Redditch, Reigate, Ross, Rothwell, Rowley Regis, Royton, Rugeley, Ruskington, St. George, St. Mary Church, Sandgate, Sandown, Seaford, Sevenoaks, Shrewsbury, Slough, Smethwick, Southborough, Sowerby Bridge, Soyland, Spennymoor, Stafford, Staines, Stainland, Stamford, Stocksbridge, Stoke-upon-Trent, Stourport, Stratford-on-Avon, Stretford, Sutton-in-Ashfield, Teddington, Tenby, Torrington, Uckfield, Uppermill, Walton-le-Dale, Walton-on-the-Naze, Ware, Warminster, Warwick, Wellington (Somerset), Wells, West Bromwich, Westhoughton, Whitefield, Whitehaven, Wirksworth, Witham, Wotborough, Woodford, Wood Green.

Rural.—Alcester, Atherstone, St. Austell, Barnstaple, Beaminster, Berkhampstead, Bicester, Billericay, Birkenhead, Blaby, Blean, Brampton, Brecknock, Bromsgrove, Bromyard, Buntingford, Camelford, Cardiff, Catherington, Chapel-en-le-Frith, Chelmsford, Chesterfield, Chester-le-Street, Church Stretton, Clitheroe, Crickhowell, Dolgelly, Droitwich, Erpingham, Farnham, Fordingbridge, Freebridge Lynn, Gloucester, Goole, Guildford, Halifax, Hardingstone, Havant, Hereford, Hinckley, Lancaster, Lexden and Winstree, Leyburn, Lodsworth and Clavering, Lunesdale, Luton, Maldon, St. Neots, Newark, Newbury, Newport (Salop), Northampton, North Witchford, Ongar, Ormskirk, Ouseburn, Pershore, Petersfield, Prestwich, Richmond (Yorks), Romney Marsh, Romsey, Ruthin, Saddleworth, Saffron Walden, Sculcoates, Sedbergh, Southwell, Stockton, Stroud, Sudbury, Ticehurst, Todmorden, Towcester, Upton-on-Severn, Wallingford, Warwick, Wellington (Somerset), West Firle, Whitchurch (Hants), Whitchurch (Salop), Wigan, Wimborne and Cranborne, Windsor, Winslow, Wokingham, Worksop, York.

The Act has already been adopted in some 700 sanitary districts (including Birmingham, Hull, Liverpool, Sheffield, Bristol, Cardiff, Coventry, Devonport, Plymouth, Exeter, West Bromwich, and almost all the large towns), and if London, with its 4 000,000 inhabitants and the 59 towns that obtained the powers by local Acts, be included, the system of compulsory notification already applies to upwards of 18,000,000 persons, or more than two-thirds of the total population of England and Wales.

RULES FOR A FEVER HOSPITAL.

A Member asks for a copy of rules suitable for a fever hospital; also for information as to the working of the Notification of Infectious Diseases Act: (1) Is a medical officer of health obliged to visit every case notified to him? (2) Has the operation of the Act proved a check to the spread of disease? (3) What is the probable extra expense in the working of the Act to a town of 15,000 inhabitants?

*** Rules suitable for a fever hospital may be obtained from the authorities of Newcastle-on-Tyne, which has a very perfectly equipped hospital for infectious diseases. (1) No. But when the medical officer of health has information of a dangerous outbreak of infectious disease, it is his duty to visit the spot (*vide* Public Health Act, 1872). He would no doubt consider the occurrence of a case of scarlet fever at a milkshop or dairy "a dangerous outbreak." On the other hand, an ordinary case of scarlet fever would not seem to specially require his attention. (2) This is a debateable question which has been frequently discussed. (3) About £20 per annum; but if measles is included in the list the expenses will probably be about £35. This sum does not, of course, include the extra expense of an additional inspector or clerk, which may be found necessary.

FEES FOR PAROCHIAL MIDWIFERY CASES.

A District Medical Officer says: I received two medical orders from the relieving officer, not marked midwifery or anything denoting the nature of the cases. "On visiting I found they were confinements, and charged them accordingly." The guardians refuse payment, on the ground that the orders were not midwifery orders, and sanctioned as such by them. Are they liable for payment?

*** Our correspondent does not state that he actually attended these patients in labour; if he did so, we consider he can recover in the county court the proper fees for such cases, notwithstanding the omission of the relieving officer to mark the orders as midwifery cases.

POOR-LAW MEDICAL OFFICERS' ABSENCE FROM HOME.

A. T. F. asks whether it is usual for Poor-law medical officers to ask permission, and also to submit *locum tenens* for the approval of the board of guardians, before leaving their districts.

*** Every Poor-law medical officer ought to nominate as soon as possible after appointment a legally qualified practitioner to act for him in case of illness or absence from any cause (some boards of guardians have assumed that this nomination is subject to their confirmation, this is, however, doubtful, as we are not aware that it has ever been so decided); if this is done, and the holder of the appointment has sufficient confidence in his own appointed deputy, we consider he is not called upon to ask permission of the guardians to leave home for a few days; but if his absence were to extend over a fortnight, we think it would be but an act of courtesy to inform them of his intention to leave home. This has, of course, no reference to those medical officers who are engaged to give their whole time to the duties of their office; in such cases, leave of absence should be applied for when required.

TUBERCULOUS MEAT.

In an action recently heard at the Liverpool County Court in which a Sheffield butcher sought to recover from a firm of cattle salesmen the balance of the price of a cow he had purchased from them, and which, it was alleged, was so infected with tuberculosis, that it had to be slaughtered and destroyed, Judge Collier, in finding a verdict for the defendants, said the evidence did not show that they had any definite knowledge, at the time of the sale, that the cow was intended for human food. He was of opinion that if a person sold a commodity for a particular purpose, he must be understood to warrant it as reasonably fit and proper for such purpose, but this was not applicable to living animals, and it never had been held to be so applicable so far as his knowledge went.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 6,073 births and 5,039 deaths were registered during the week ending Saturday, January 18th. The annual rate of mortality in these towns, which had increased from 21.9 to 28.1 per 1,000 in the three preceding weeks, declined again to 27.0 during the week under notice. The rates in the several towns ranged from 14.9 in Nottingham and in Oldham, 15.6 in Brighton, and 17.2 in Leicester to 27.2 in Newcastle-upon-Tyne, 27.4 in Birmingham, 28.4 in Manchester, and 32.1 in London. In the twenty-seven provincial towns the mean death-rate was only 22.8 per 1,000, and was as much as 9.3 below the rate recorded in London, which was as high as 32.1 per 1,000. This high death-rate in London was principally due to the excessive fatality of diseases of the respiratory organs and of influenza; to the latter disease 127 deaths were referred, against 4 and 67 in the two preceding weeks. The 5,039 deaths registered during the week under notice in the twenty-eight towns included 381 which were referred to the principal zymotic diseases, against 423 and 396 in the two preceding weeks; of these, 157 resulted from whooping-cough, 61 from scarlet fever, 60 from measles, 40 from diphtheria, 37 from "fever" (principally enteric), 26 from diarrhœa, and not one from small-pox. These 381 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic death-rate was equal to 2.3, while it averaged 1.9 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Halifax, 0.2 in Nottingham, and 0.3 in Leicester to 2.7 in Liverpool and in Bolton, 2.8 in Salford, 3.0 in Manchester, and 4.7 in Bristol. Measles showed the highest proportional fatality in Bradford, Norwich, and Birmingham; scarlet fever in Manchester; and whooping-cough in Derby, London, Wolverhampton, Bolton, Portsmouth, and Bristol. The 40 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 22 in London, 3 in Liverpool, 3 in Manchester, 2 in Norwich 2 in Leeds, and 2 in Sheffield. No fatal case of small-pox was recorded during the week, either in London or in any of the twenty-seven provincial towns; and only one small-pox patient was under treatment in the Metropolitan Asylums Hospitals on Saturday, January 18th. These hospitals contained 1,332 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,434 in the three preceding weeks; 72 cases were admitted during the week, against 115 and 65 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 11.9 per 1,000, and was nearly double the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, January 18th, 845 births and 705 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had increased from 24.6 to 29.0 per 1,000 in the three preceding weeks, declined again to 27.2 during the week under notice, but slightly exceeded the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Leith and Paisley, and the highest in Dundee and Edinburgh. The 705 deaths in these towns during the week under notice included 86 which were referred to the principal zymotic diseases, equal to an annual rate of 3.3 per 1,000, which exceeded by 1.3 the mean zymotic death-rate during the same period in

the twenty-eight large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Glasgow, Leith, and Edinburgh. The 277 deaths registered during the week under notice in Glasgow included 16 from whooping-cough and 14 from measles. Seventeen fatal cases of measles, 7 of whooping-cough, and 4 of diphtheria were recorded in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 8.9 per 1,000, against 11.9 in London.

HEALTH OF IRISH TOWNS.

In the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, January 18th, were equal to an annual rate of 39.2 per 1,000. The lowest rates were recorded in Dundalk and Kilkenny, and the highest in Dublin and Drogheda. The death-rate from the principal zymotic diseases averaged 5.1 per 1,000. The 325 deaths registered in Dublin during the week under notice were equal to an annual rate of 48.0 per 1,000 (against 24.5, 34.9, and 44.2 in the three preceding weeks), the rate for the same period being 32.1 in London and 34.2 in Edinburgh. These 325 deaths in Dublin included 17 which resulted from the principal zymotic diseases (equal to an annual rate of 2.5 per 1,000), of which 6 were referred to different forms of "fever," 5 to whooping-cough, and 2 to diphtheria.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE ABUSE OF THE MANCHESTER PROVIDENT DISPENSARIES.

DR. ROBERT R. RENTOUL writes: As considerable discussion has taken place as to how the "wage limit" rule was removed, and as no satisfactory answer has yet been given, I wish to state that originally the rule for admission to the above was: "The members shall be artisans and others in receipt of weekly wages, whose average family earnings do not exceed 35s. per week, and who are not in receipt of Poor-law relief." (Extract from Fourth Annual Report, 1878). On January 19th, 1882, the above dispensaries, with the Manchester Medico-Ethical Society, formed a joint committee, and recommended the adoption of the following: "It is the unanimous feeling of the committee that a 'wage limit' is not satisfactory, and must lead to suspicion and jealousy among the medical men living in the neighbourhood of the dispensaries, while the inquisitorial investigation of their circumstances will naturally be resented by the working classes. Your committee, therefore, think that the 'wage limit' should be done away with, and that a sufficient check against the admission of those above the class of the really poor will be provided in part by making the admissions subject to the approval of the Managing Committee, one of whose functions should be to decide on the admission and removal of the members; and further, by reference direct to the District Provident Society by medical officers and others of such cases as, in their opinion, ought not to have been admitted." This was adopted at the adjourned annual general meeting of the dispensaries, held in April, 1882. It is sincerely to be hoped that the Medico-Ethical Society will soon correct this terrible blunder. The fact is that every person who sues for admission into the provident dispensaries should have their social circumstances inquired into by the inspectors of the Charity Organisation Society, and just as the hospital patients are looked after. What is the good of asking the doctors, or a person paid a commission on the number of members secured, to examine into the social circumstances of the applicants? A provident dispensary should not be worked as if it were a burial club.

The Manchester Provident Dispensaries should (*a*) fix the wage limit; (*b*) secure the services of the Charity Organisation Society in approving of applicants for membership; (*c*) have a cash fee department, so as to take ineligible cases off the hospital at once; (*d*) exclude the rule referring to midwives; (*e*) refuse to allow provident dispensary patients to be shoved on to the hospitals when the dispensary doctor is tired of them; (*f*) and exclude the rule which says that no matter how large a family, not more than twopence per week shall be charged for them. Really, if the Manchester business men wish to pose as philanthropists, they should do so in the right way, and not by passing rules which benefit their workers, save their own pockets, and throw all the hard work on the medical practitioners. It is no new thing in Liverpool for a "philanthropist" to give £1,000 to a charity, and then, on the following Monday, reduce the wages! However, people are seeing through such charity tricks. The sooner the medical staff at Manchester publicly assert their self-respect and set to bring matters right, the sooner will they free themselves from ridicule and cease to be the laughing stock of business men, who only trade on their want of harmony and unbusinesslike actions.

The comical feature of the above resolution is the reference to the "suspicion and jealousy of medical men." This is, no doubt, a good string to play upon, as, with such kept up, little good will be accomplished. The "inquisitorial investigation" has been a good bogey for many years, but is now worn out, as it is well known that the working classes fix their rate of wages by unions, and arrange for advance of wages according to the price fluctuating. The tax authorities also, by "inquisitorial investigation," fix the tax on house property, poor-rate, income tax, and all such. Surely they might let the "inquisitorial investigation" scare die.

HOSPITAL REFORM: THE EXTRAVAGANT EXPENDITURE.

DR. HUGH WOODS writes: We still seem to have agreed upon no definite plan for inducing the hospitals to carry out the necessary reforms. It seems to me that one of the first steps should consist in establishing a permanent committee of the Association ("Committee of Public Medical Service"), which should devote itself to the task of bringing about suitable regulation of all charitable medical relief. It may be said that such committee can have no power to bring about reforms in the management of the hospitals; but, although perhaps it cannot do so directly, still indirectly it might have very great influence. Moreover, I think that we must try to induce Parliament to exert its authority to remedy evils which, in the highest degree, concern the public welfare. At all events we must bring the pressure of public opinion to bear on the hospitals. The public can bring the hospitals to their knees by stopping supplies. What we have to do is to show the facts of the case to the public. In several letters to the *Echo*, and in a letter to the *Times* of December 30th, I have proved that there is enormous wastefulness in the expenditure of the hospitals, and no attempt has been made to refute my charges. While we complain that vast numbers of well-to-do people are receiving medical relief for nothing, the public bear it with admirable resignation; but when we show that hundreds of thousands of pounds are being wasted each year, public interest is awakened, and rightly so. Contributions to the hospitals will of course fall off until reforms are carried out, therefore the sooner this is done the better. The hospitals ought to remember that honesty is the best policy. When the hospitals expend their funds wisely and economically, in relieving the sick and needy, they will be heartily supported. In the meantime it is our duty, on behalf of the sick and needy, to express the strongest condemnation of hospital mismanagement, and to attack it publicly and persistently.

REPORTS ON OUT-PATIENT HOSPITAL ADMINISTRATION (1871).

As the Committee appointed by the Council of the Association to report upon the resolutions brought up for discussion at the Leeds meeting is shortly to meet; it will be interesting to reprint here the resolutions adopted by the Association in 1871:—

1. "That this meeting is of opinion that there exists a great and increasing abuse of outdoor relief at the various hospitals and dispensaries of the metropolis which urgently requires a remedy."

2. "That in the opinion of this meeting the evils inseparable from the system of gratuitous medical relief administered at the outdoor departments of hospitals and in free dispensaries can be in a great measure met by the establishment, on a large scale, of provident dispensaries, not only in the metropolis, but throughout the kingdom; and by improved administration of Poor-law medical relief."

The subcommittee appointed to inquire into the working of general hospitals found that from three-fifths to nine-tenths of the out-patients consisted of trivial cases, these wasting the time of the hospital staff. It recommended that those making above 20s. a week should be referred to a provident dispensary; also "that the system of admission by governors' and subscribers' letters is radically wrong as regards out-patients, and ought to be abolished." "The subcommittee believe that many masters and employers of labour contribute to hospitals with the object of providing medical assistance for their servants and workmen at a cheap rate." The restriction of giving medicines to out-patients was also recommended, and the suggestion was made that none of the out-patient staff work for more than three hours consecutively. Patients were not to be seen at a greater rate than twenty-five per hour. The practice of receiving small payments for medicine "appear to the Committee to be equally unsound." As it is impossible to dissociate the ideas of payment and right, the remuneration of the out-patient staff was also recommended

If the above features are carefully noticed the present Committee will find their work lightened. Unfortunately, the Com-

mittee of 1871 seems to have ceased its work after having passed the resolutions, and not to have drawn up any practical schemes for checking hospital abuse, and for providing the working classes with efficient medical treatment.

There is a very general opinion that the Poor-law Medical Service, especially their dispensaries, stand urgently in need of reform. If the present Committee bring the suggestions of their predecessors to a practical and useful conclusion, all the members of the Association must feel that a heavy debt of gratitude is due to them for their labours.

DUBLIN HOSPITALS.

A MEETING was recently held in Jervis Street Hospital for the purpose of raising funds to clear off a heavy debt. His Grace Archbishop Walsh made a speech, in which he stated that the committee owed £18,000. They had built a new hospital which cost £59,000. They had counted on receiving £18,000, which had been left to hospital purposes in Dublin by a Catholic testator. There were three Catholic trustees, Cardinal Cullen and two others, and one Protestant. The Cardinal died, his co-religionist trustees resigned the trust, and the Protestant remained. He had handed over the money to a hospital, the Meath, which only once within forty years had appointed a Catholic physician or surgeon to its staff. Referring to the Hospitals Board Bill, he laid down certain conditions which should be fulfilled before any hospital could share in the distribution. First, an open door for the admission for the sick poor of the city, irrespective of their religious creed. Secondly, good medical and surgical treatment for those who are admitted to the hospital. Thirdly, skilful and kind hearted nursing and hospital treatment generally. Fourthly, untrammelled freedom for the administration to the various patients of the sacraments or rites of the religion to which they belong. Fifthly, adequate provision for the use of the hospital as a place of clinical instruction. He had never objected to the granting of aid by Parliament to those now favoured hospitals. Getting parliamentary grants was one thing, getting a monopoly of parliamentary grants was something very different. He protested against any reduction of the total sum now given, namely, £16,000 a year, and he maintained that all compensation and pensions should be provided by the Treasury, without any deduction from the grant for such purposes.

It appears from the foregoing that the Jervis Street Hospital is now suffering from a severe load of debt; but the story as told shows the unwisdom of hospital committees as well as of individuals forgetting the homely proverb regarding counting chickens. The bequest to which allusion is made was at all events devoted to a legitimate purpose, the healing of the sick, irrespective of creed. The remaining trustee had a delicate duty to discharge, and he probably thought he did best when he gave the money to what is the old County Infirmary of Dublin. The hope that the Treasury will agree to give the full £16,000 a year to Dublin under the new Bill is not likely to be realised. The promoters of the Bill, it is known, were ready to accept the reduced sum in consideration of the greater security which would be given by a formal Act of Parliament, instead of the present annual vote. It was upon such terms that the Treasury agreed to bring in the measure at all. The claim for the full sum is, however, likely to be beneficial, because it may put a stop to changes which are mischievous and unnecessary.

GLASGOW ROYAL LUNATIC ASYLUM, GARTNAVEL.

THE annual report of this institution states that at the beginning of the year the asylum contained 480 patients, and that the year ended with the same number. Of those present at the beginning, 126 were discharged, 56 of them recovered, and 26 had died, while 152 new patients were admitted. Of the total, 306 were private patients, 138 of whom paid £40 a year or under, and 174 were chargeable to parishes. The number of private patients was 10 greater than last year, and the number from parishes 25 less. At present the four Lanarkshire district lunacy boards are bound to contract with the directors of Gartnavel Asylum for a portion of their accommodation. But the various boards would prefer to provide full accommodation for all their lunatics, and the asylum directors have, with the consent of the Commissioners, resolved to relieve the district boards of this obligation, so that gradually parish patients will cease to be found at Gartnavel. The accommodation thus at the disposal of the directors it is intended to utilise for the benefit of the less affluent members of the community, who still desire to be independent of rates or charity by receiving private patients at the lowest possible rates of board. This step will undoubtedly greatly increase the usefulness of an already admirably conducted institution.

THE ROYAL INFIRMARY OF EDINBURGH: ANNUAL REPORT.

THE annual report of the Royal Infirmary of Edinburgh has just been issued. It shows that during the year ending October 1st, 1889, 8,606 patients had been treated at the hospital. Of these 4,866 were dismissed cured, 1,932 relieved, 658 on other grounds, and 552 died in hospital, leaving 598 patients in the infirmary on October 1st last. Of the 8,008 cases whose treatment was concluded 3,666 were medical and 4,342 surgical. The number of children treated during the year averaged about 60, most of whom were treated in the surgical wards. The average daily number of patients in the hospital was 634, and the average stay in hospital was 26.8 days. Of the 8,008 completed cases 3,820 were from Edinburgh, 948 from Leith, and 3,240 from the country. The percentage of deaths to the whole of the ordinary medical and surgical cases treated was 6.4, or, deducting deaths which occurred within twenty-four hours after admission (cases of severe injury or of otherwise hopeless nature), 4.9. The attendance of out-patients at the waiting-rooms of the different departments—medical, surgical, and special—showed a daily average of 220.

The infirmary had received legacies and donations of £100 and upwards, amounting to £30,543 12s. 11d. This large sum had enabled the managers to reduce the building debt by £12,072 9s. 6d. The ordinary income for the year amounted to £30,507 15s. 4d., being an increase of £422 2s. 3d. over the previous year. There had been a decrease of £329 16s. in receipt from hospital tickets. There was a pronounced increase in the ordinary contributions to the infirmary, alike from churches, public works, and private persons or firms. Special efforts had been made on behalf of the infirmary in distant parts of the country—notably in Forfarshire—while, on the other hand, some parts of the country, which sent many patients, contributed little or nothing. The ordinary expenditure for the past year had been £35,917 9s. 11d., being an excess of £1,620 5s. 11d. over the preceding year. The average outlay per bed was £20 5s. 4½d.

The report further shows the efficient condition of the nursing department. The training school attached to it had continued to gain in popularity and usefulness, as evidenced by the fact that of 68 trained nurses on the staff on October 1st, 1888, 22 had left within the year. During the past year the number of applicants desirous of joining the training school had exceeded that of any previous year since its establishment.

ROYAL VICTORIA HOSPITAL.

THE Royal Victoria Hospital, Bournemouth, the opening of which by H.R.H. the Prince of Wales, on Thursday, January 16th, we have already announced, has been erected at a cost of £8,000, in honour of the Queen's Jubilee. It is built in the Italian Renaissance style, and affords at present accommodation for 25 in-patients, but the administrative portion in the central block has been planned so as to provide for the future extension of the building.

On the ground floor are spacious halls, and corridors to the east and west wings. The former is occupied by the men's surgical ward, from which open out in the one angle turret a store and scullery, and in the other are a lavatory, bath room, and offices. This arrangement has been kept up throughout the four large wards. The west wing on the ground floor is entirely occupied by the dispensing department, except for a small mortuary approached from out of doors only. The main block ground floor contains suites of rooms for the occupation of the house-surgeon and others, the matron's store room, porter's room, lavatories, and offices, a ward for the separation of infectious cases, and an operating theatre The first floor, which is approached by a wide stone staircase, contains seven wards, one for six beds, one for four beds, and others for two each. The wards are paved with a fireproof floor, in which wood blocks (oak and teak) are laid. The main block is carried to a third storey, and is occupied by a kitchen, scullery, larder, stores, bath room, and six bed rooms. There are lifts from basement to the second storey, and speaking tubes from the ground and chamber floors to the kitchen. The wards and entrance also communicate with the second floor by means of electric bells. Messrs. Creeke and Gifford are the architects.

The Prince of Wales on the occasion of the opening, acceded to a request that two of the wards should be named Albert Edward and Alexandra.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

PROFESSOR MACALISTER has been appointed a member of the Museums and Lecture-rooms Syndicate.

At the Congregation on Thursday, January 16th, the following degrees were conferred:

M.C.—R. Lawford Knaggs, M.A., Caius.

M.B.—G. Melmoth Scott, B.A., Peterhouse (Thesis: An Analysis of 100 Cases of Gout).

B.C.—E. A. Wadeson, St. John's, and G. Melmoth Scott, Peterhouse.

LONDON.

A MEETING of Convocation was held on Tuesday last at the University Building, at which Dr. F. J. Wood, Chairman, presided. The Chairman informed the meeting that the Chancellor of the Exchequer had invited a conference with certain members of the University and of the Senate respecting the conversion of the annual vote for the University into a Government grant. He further stated that the scheme for the reconstitution of the University which had been drawn up by the Senate had been submitted to University College and King's College. Those colleges had not yet decided upon their answers, but had requested a conference, which would shortly be held. Upon the proposition of Dr. M. Baines and Mr. Nesbitt it was unanimously resolved to draw the attention of the Senate to the request made by Convocation in 1887 that the Senate would select an appropriate motto for the University.

Two resolutions by Mr. Spratling, one seconded by Dr. M. Baines, the other by Mr. Watson, respecting the retirement scheme of members of the Senate elected by Convocation, and respecting the recommendation of the Senate that Bachelors of Medicine should receive the M.D. degree, were both opposed by Sir P. Magnus, on the ground that, in the absence of the draft scheme for the reconstitution of the University, they were premature, and they were both lost.

Dr. W. J. Collins proposed a resolution requesting the Clerk of Convocation to communicate to members of Convocation the scheme prepared by the Senate for the reconstitution of the University; this was carried unanimously.

Mr. T. Tyler and Mr. W. T. Lynn respectively proposed and seconded the following resolution:—

"That the proposal of the University for London Commission that, under a new charter for this University, special powers and privileges should be conferred on certain institutions in or near London is incompatible with the fair and just treatment of the provincial colleges, and that the acceptance of this proposal would be detrimental alike to the interests of the provincial colleges and to those of the University itself."

Mr. Tyler, in proposing the resolution, said that the proposal of a university for London in London was an absurdity, and its effect would be to place the university in the hands of King's and University Colleges, which sent up comparatively very few students to the University.

The resolution was opposed by Sir P. Magnus, but was adopted, after which the house adjourned on the motion of Dr. Robert Barnes.

MEDICAL NEWS.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination in Anatomy and Physiology at a meeting of the Board of Examiners on January 15th, namely:

J. L. Sawers and J. Mostertz, students of University College; S. A. E. Griffiths, S. B. Hulke, and H. J. E. H. Williams, of Middlesex Hospital; E. L. Adams, of Guy's Hospital; J. N. d'Esterre, of St. Mary's Hospital; C. Seal and P. H. Liddle, of Melbourne University and Mr. Cooke's School of Anatomy and Physiology.

Passed in Anatomy only.

F. P. Bush and J. O. Williams, of Guy's Hospital; A. L. Saunders, of St. Bartholomew's Hospital; A. W. C. Lindsay, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; R. S. Berry and B. Cooper, of St. George's Hospital; G. F. Prance, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology.

Passed in Physiology only.

A. Marshall, of St. Thomas's Hospital; J. L. Mackenzie and F. C. Sutherland, of St. Bartholomew's Hospital; F. Wall, of Ceylon, and L. E. Owen, of University College.

Passed in Anatomy and Physiology on January 16th.

C. F. Gross, of King's College; R. V. Gilmour, R. H. Hemsted, C. A. Lane, and H. A. McCleland, of St. Mary's Hospital; C. H. Auty, W. A. Dow, E. H. Drew, and T. H. Foulkes, of St. Bartholomew's Hospital; T. W. Bailey, of Westminster Hospital; and E. Hill, of Middlesex Hospital.

Passed in Anatomy only.

G. E. Clarkson, E. E. Elliott, C. G. Mathews, and J. D. Rawlings, of St. Bartholomew's Hospital; C. M. S. Farnum, of King's College and Mr. Cooke's School of Anatomy and Physiology; W. B. Winckworth, of Westminster Hospital; B. A. Castellote, of Middlesex Hospital; T. S. Robson, of Guy's Hospital; B. S. Jones, of St. Thomas's Hospital; R. L. Romer, of St. George's Hospital and Mr. Cooke's School of Anatomy and Physiology; J. P. Grieves, of St. Mary's Hospital; W. A. Stephenson, of Charing Cross Hospital; and W. E. Baker, of London Hospital and St. George's Hospital.

Passed in Physiology only.

E. L. Davey and B. W. N. Gowring, of St. Bartholomew's Hospital; W. A. Powell, of Charing Cross Hospital; S. H. Birt and S. P. Hopewell, of London Hospital; F. N. Roth, of St. Mary's Hospital; T. S. Jackson, of Guy's Hospital; and H. G. Beville, of St. George's Hospital and Mr. Cooke's School of Anatomy and Physiology.

Passed in Physiology only on January 17th.

A. Fadelle and H. B. Wilmot, of King's College; J. B. Byles and J. C. R. Curtis, of University College; A. R. Walters, of Cambridge and London Hospital; H. C. Will, of London Hospital; V. B. Japson, A. G. Tribe, E. Y. Watson, and G. C. W. Williams, of St. Thomas's Hospital; C. A. N. Knox, of Dublin and St. Thomas's Hospital; A. Reeves and H. J. L. Wales, of Guy's Hospital; S. B. Axford, of Charing Cross Hospital; and R. D. Moore, of St. Mary' Hospital.

ACCIDENTAL POISONING.—The infant son of Mr. D. F. Baynes Cotes, of Teddington, was poisoned recently by being given liquor strychniæ in mistake for castor-oil, by the servant, who mistook the one bottle for the other.

AT the Court of Common Council, on January 20th, it was resolved, at the instance of the Port Sanitary Authority, to adopt the provisions of the Infectious Diseases (Notification) Act, 1889, in the Port of London, from March 1st next.

DONATION.—Mr. Whitley, M.P., has forwarded to the secretary of the Stanley Hospital, Liverpool, a cheque for £1,000 from the Roger Lyon Jones Fund for the endowment fund of the hospital.

WE regret to announce the death of Dr. L. H. Sayre, son and assistant of Dr. Lewis A. Sayre, of New York. Dr. L. H. Sayre returned home late on the night of January 2nd from visiting a distant patient, and was found dead in a chair in his office next morning.

AT the meeting of the London County Council, held on January 21st, the Housing of the Working Classes Committee was authorised to enforce, so far as the Council was able, all sanitary and cognate Acts in regard to any area being dealt with under the Housing Acts.

THE will of Protheroe Smith, M.D., late of 42, Park Street, Grosvenor Square, was proved on December 30th, the value of the personal estate amounting to upwards of £49,000. The testator gives £500 to the Hospital for Women, and the residue of his real and personal estate is divided among his four children in equal shares.

PHOSPHORUS IN RICKETS.—In a paper recently read before the New York Academy of Medicine, Dr. H. W. Berg recommended the following method of prescribing phosphorus to rickety children:—℞ Phosphori, gr.j.; alcohol absolut., ♏ cccl.; spt. menth. pip., ♏ x.; glycerini, ℥ ij. M. et Sig. Six minims three times a day to be increased one drop weekly until ten drops are given.

BEQUESTS.—Under the will of the Rev. Henry G. Watkins, Potter's Bar, Middlesex, the following sums have been bequeathed to medical charities:—£100 to the City of London Truss Society; £50 each to the Samaritan Societies in connection with St. Bartholomew's Hospital and St. Thomas's Hospital; £100 to the Potter's Bar Cottage Hospital.

MR. TERENCE MCGRATH, L.K.Q.C.P.I. and L.M., of Regent Street, Lambeth Walk, expired suddenly in the casualty room at St. Thomas's Hospital, on January 14th. The deceased had for a few days previously suffered from an attack of pneumonia and was attending the hospital with the object of being admitted as an in-patient, when he died.

THE eleventh annnal dinner of the past and present students of the Leeds School of Medicine will be held at the Great Northern Hotel, on Friday, January 31st, at 6.30 o'clock. President—Edward Atkinson, Esq., F.L.S, Surgeon to the Leeds General Infirmary. The hon. secretaries are Messrs. E. B. Collings and Charles Forsyth.

PRINCE ALBERT VICTOR, during his recent visit to Lucknow, opened a new female hospital in connection with the Dufferin Fund; and at Calcutta laid the foundation stone of the new water and drainage works, which owes its inception in a great measure to the liberal subscriptions of several native chiefs, and which is intended to convert the dirtiest and most unhealthy city in India into one of the most salubrious.

TESTIMONIAL.—Mr. John Pickering Bates, M.R.C.S., received from a numerous company of friends, assembled in the Town Hall, North Shields, last week, a farewell recognition of the services he had rendered during his 35 years residence' in the borough of Tynemouth. He had shown much public spirit in connection with the social and intellectual welfare of the borough. The presentation took the form of a handsome solid silver tray.

NURSING IN AMERICA.—Great progress is being made in America in the education of nurses for the sick. We chronicled recently the foundation of a school for the training of male nurses, and we learn from the *Boston Medical and Surgical Journal* that a training school for nurses for children has just been established in New York; a six months' course of training in the care of children, including the elements of hygiene, will be given. The training school for female nurses, attached to the Post Graduate Medical School of New York, which is able to receive 50 pupils, received last year 265 applications for admission.

PHYSICAL CULTURE.—A conference on physical culture was recently held at Boston, under the presidency of Professor William T. Harris, United States Commissioner of Education. The merits of the various systems, the Swedish, the German, and the American, were explained by several teachers, and their peculiarities illustrated by demonstrations. A short article in a recent issue of the *Boston Medical Surgical Journal* sketches the growth of interest in America in physical education as a part of college education. In Johns Hopkins University it already has a recognised place in the curriculum, and a professorship of hygiene and physical culture has just been endowed at the Pennsylvania College, at Gettysburg, with the sum of 25,000 dollars in memory of Dr. Charles H. Graff, by his parents.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS.—At a meeting of this association, held on January 15th, at Leeds, Dr. J. Mitchell Wilson presiding, the following officers for the ensuing year were appointed:—*President:* Dr. J. Spottiswoode Cameron, Leeds. *Vice Presidents:* Dr. A. Roberts (Keighley); Dr. Wade (Wakefield); Dr. North (York); Dr. Britton (Harrogate); and Dr. Mitchell Wilson (Doncaster). *Committee:* Messrs. Mason; Burnan; E. G. Ramson; G. Buncle; W. S. Wade; W. S. Mackenzie; G. Herbert; F. E. Atkinson; T. Thomson; T. Smailes, and W. H. P. Ramsden. *Hon. Secretary and Treasurer:* Dr. MacLintock (Bradford). Dr. G. Herbert (Whitby) read a paper on "Lead Poisoning." After discussion it was resolved to urge the Local Government Board to make a thorough inquiry into the whole question.

EDUCATION AND REGISTRATION OF PLUMBERS.—An examination of candidates for certificates of registration, under the auspices of the local district council, took place on Saturday, January 18th, at the Merchant Venturers' School, Bristol. The Worshipful Company of Plumbers were represented by Mr. W. Titmas, master plumber, and Mr. L. F. Gilbert, representative of the Plumbers' Operatives' Society of Great Britain and Ireland; and among the local examiners were Dr. D. S. Davies, medical officer of health; Mr. T. S. Pope, architect; and representatives of the local operatives' society. Candidates attended from Bristol, Bath, Crewkerne, Gloucester, and other places, and were examined in the theory and practice of plumbing, the theoretical questions being such as to test their knowledge of sanitary matters, besides other branches of the craft; but the work done in both sections was of such a character that only 20 per cent. passed, thus showing the necessity for plumbers receiving a more thorough theoretical and practical training.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—At the annual general meeting held January 13th, the following were elected officers for 1890:—*President:* Felix Weiss. *Vice-Presidents: (Resident):* Fredk. Canton; James Stocken; David Hepburn. *(Non-resident):* J. C. Wheeler (Southsea); W. B. Macleod (Edinburgh); J. H. Redman (Brighton). *Councillors (Resident):* R. H. Woodhouse; L. Matheson; W. Scott Thomson; C. S. Tomes, F.R.S.; Willoughby Weiss; W. H. Woodruff; C. J. Boyd Wallis; W. Hern; F. Newland-Pedley. *(Non-resident):* J. C. Parson (Clifton); R. T. Stack (Dublin); F. J. Vanderpant (Kingston-on-Thames); M. de C. Dickinson (St. Leonard's-on-Sea); A. A. de Lessert (Aberdeen); Alex. Fothergill (Darlington); W. B. Bacon (Tunbridge Wells); Mordaunt Stevens (Paris). *Treasurer:* H. B. Mason (Exeter); Mordaunt Stevens (Paris). *Librarian:* Ashley Gibbings. *Curator:* Thos. Arnold Rogers. *Editor of Transactions:* Walter Coffin. *Honorary Secretaries:* E. G. Betts (Council); J. Ackery (Society); W. A. Maggs (for foreign correspondence).

THE annual meeting of the Harveian Society was held on January 16th at the Stafford Rooms. The retiring president, Dr. Buzzard, delivered an address upon Vertigo of Bulbar Origin. Votes of thanks to the officers of the past year were carried, and the following were elected for the ensuing year. *President:* *Mr. Thomas Bryant. *Vice-Presidents:* F. H. Champneys, M.B.; *J. Ernest Lane, *Stephen Mackenzie, M.D.; R. S. Mair, M.D. *Treasurer:* G. P. Field. *Honorary Secretaries:* Robert Maguire, M.D., and *D'Arcy Power. *Council:* *Thomas Buzzard, M.D.; J. H. Drew, J. Hughlings Jackson, M.D., F.R.S.; *W. H. A. Jacobson, M.Ch.; M. Handfield-Jones, M.D.; David Lees, M.D.; *C. P. Lockwood, G. Everitt-Norton, *Herbert William Page, M.C.; *Sidney Phillips, M.D.; William Sedgwick and Frederick Treves. After the meeting a highly successful *conversazione* was held, at which various exhibits were shown, and songs, recitations, and musical performances were contributed by Dr. Evershed, Mr Ernest Lane, Herr Brousil, and others.

THE HOWARD CENTENARY.—The hundredth anniversary of the death of John Howard, the prison reformer and philanthropist, was quietly celebrated on January 20th, at Bedford, where he spent much of his time, and where, in commemoration of the event, it is proposed by an influential committee to erect a statue in bronze to his memory. John Howard's experience of gaols in France as a prisoner of war left on his mind a deep impression of their frightful insanitary condition and the shocking inhumanties perpetrated in them; and his insight into the gaols of our own country in his position of high sheriff caused him to feel still more strongly the urgent need of reform. To the investigation and remedy of the then existing vile prison system he devoted his life, and it was only by the public disclosure of the horrible and disgusting scenes of which he had been so often an eye-witness that he was able to awake the conscience and sympathy of the civilised world. Towards the cost of the statue, which it is thought will not be less than £3,000, subscriptions are invited. The honorary secretaries are the Rev. E. J. Hillier, vicar of Cardington, and the Rev. W. P. Irving, of Howard Chapel, Bedford.

GLYCERITE OF CALF PEPSIN.—Dr. Frank Woodbury advocates the use of a solution of calf pepsin in glycerine, to which he gives the name of glycerite of calf pepsin, as an adjunct to a milk diet for those who are unable to digest the casein of cow's milk, and he claims that calf pepsin is a more suitable and natural preparation to be used for such a purpose than that obtained from the hog. The process of manufacture is as follows: The stomachs of healthy young calves are washed clean with running water, the mucous membrane is dissected off, crushed and treated with glycerine and slightly acidulated water, in which it remains until the pepsin is all extracted, the solution is then filtered carefully, and to it is added a small proportion of the acid phosphate of lime, to insure a faintly acid reaction in the finished product. A drachm of this solution readily acts upon a pint of milk. In the case of infants he recommends that from ten to twenty drops of the pepsin solution shall be given fifteen or twenty minutes after feeding; in adults from one half to one drachm is added to the milk before it is swallowed. Junket made with the glycerite of pepsin from either boiled or unboiled milk is a delicate and easily digested form of nourishment for the sick.

A CASE OF PARADOXICAL PUPIL-REACTION.—At a recent meeting of the Gesellschaft der Charité-Aerzte, Herr Henoch brought forward a patient with a peculiar anomaly of the left eye, which had previously been operated upon; namely, dilatation of the pupil on exposure to light, and contraction in the dark. The same dilatation of the left eye occurred when the right eye was illuminated, and the same contraction when the right eye was then darkened. The patient was a man who was admitted in 1888 into the new Charité Hospital on account of some syphilitic plastic iritis. There was much exudation into the anterior chamber, the tension of the eye reached a high degree, the pupil being quite closed, so that permanent blindness from secondary glaucoma was feared, and iridectomy was necessitated. Severe hæmorrhage resulted on incision, and the operator introduced the iris forceps

but could not be certain about what was exactly done, the parts being hid from view. By next morning, absorption was rapidly proceeding, and a very satisfactory coloboma had arisen. The case went on very favourably, and the patient was dismissed with a visual acuity of $\frac{6}{8}$. Next year he attended again with tertiary symptoms, when the above phenomenon was observed. The simple explanation is that by the operation the sphincter iridis was completely cut through inferiorly. The sphincter contracts together as usual when illuminated, but this now causes a wide gap inferiorly, having the appearance of pupillary dilatation.

MEDICAL VACANCIES.

The following Vacancies are announced:

BELGRAVE HOSPITAL FOR CHILDREN, 79, Gloucester Street, Pimlico, S.W.—House-Surgeon. Board, etc. Applications by January 25th to the Honorary Secretary.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—Honorary Surgeon in Ordinary, a Fellow or Member of one of the Royal Colleges of Surgeons of Great Britain and Ireland. Election, Friday, February 7th.

BRISTOL HOSPITAL FOR SICK CHILDREN AND WOMEN.—House-Surgeon. Salary, £100 per annum, with rooms and attendance. Applications by February 3rd addressed to the President and Committee.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary. Salary, £80, advancing £10 per annum to £100, with board, furnished apartments, etc. Applications by January 28th to Mr. G. Fell, Solicitor, Aylesbury.

CHELSEA HOSPITAL FOR WOMEN.—Anæsthetist. Applications by January 27th to A. C. Davis, Acting Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board, residence, etc. Appointment for six months from April 1st, 1890. Applications by February 13th to the Secretary, 24, Finsbury Circus, E.C.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Residence, board, etc. Applications by February 1st to House Governor.

GENERAL INFIRMARY, Leeds.—Resident Medical Officer and Pathologist. Salary, £100 per annum, with board, residence, etc. Applications by February 3rd to Mr. W. H. Brown, 19, Queen Street, Leeds.

HOLBORN UNION.—Medical Officer for No. 2 District, Holborn Division. Salary, £105 per annum. Applications before 4 A.M. on January 28th to Union Officer, Clerkenwell Road.

HULME DISPENSARY, Manchester. Honorary Surgeon. Applications by January 31st to Dr. Collins, Honorary Secretary, Medical Committee,

KIRKBY MOORSIDE UNION.—District Medical Officer. Salary, £46 per annum. Medical Officer for the Workhouse. Salary, £11 per annum. Public Vaccinator. Applications by January 28th.

LIVERPOOL STANLEY HOSPITAL.—Junior House-Surgeon. Salary, £70, with board, etc. Applications by January 30th to J. E. Bennett.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.—Honorary Aural Surgeon. Applications by January 31st to Mr. H. Teague, Secretary, 38, Barton Arcade, Manchester.

METROPOLITAN HOSPITAL, Kingsland Road, E.—Assistant Physician. Applications by February 1st to Mr. C. H. Byers, Secretary.

NORTH BRIERLEY UNION.—Medical Officer and Public Vaccinator for No. 2 District. Salary, £20 per annum, and midwifery and surgical operation and vaccination fees. Applications by January 28th.

NORTH STAFFORDSHIRE INFIRMARY, Hartshill, Stoke-upon-Trent.—Resident Assistant House-Surgeon. Board and lodging. Applications by January 28th to the Secretary.

OLRIG AND DUNNET.—Medical Officer for these parishes. Emoluments and parochial appointments about £300. Applications endorsed "Doctor's Committee" by January 30th, to Inspector of Poor, Olrig, Castletown-by-Thurso.

PARISH OF THE UNITED PARISHES OF WHITTLESEY.—District Medical Officer and Public Vaccinator. Salary as District Medical Officer £70 per annum, with usual extra fees. Fees for vaccination and revaccination 3s. and 2s. per case respectively. Applications not later than January 25th, endorsed "Applications for Medical Officer," to John Peed, clerk, Whittlesey, near Peterborough.

PLYMOUTH PUBLIC DISPENSARY.—Second Honorary Physician. Applications by February 17th.

ST. MARY'S HOSPITAL, W.—Qualified Assistant in the Electro-Therapeutic Department. Applications by January 30th to Mr. Thomas Ryan, Secretary.

SOWERBY BRIDGE LOCAL BOARD OF HEALTH.—Medical Officer of Health. Salary, £30 per annum. Applications not later than January 29th to the Chairman of the Sanitary Committee, Mr. J. Smith.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, etc., 73, Welbeck Street, W.—Dental Surgeon. Applications to the Secretary.

WESTMINSTER GENERAL DISPENSARY. Honorary Physician. Applications by February 8th.

MEDICAL APPOINTMENTS.

ADAMS, Matthew A., F.R.C.S.Eng., L.S.A., etc., reappointed Medical Officer of Health and Public Vaccinator to the borough of Maidstone.

BARBER, G. J. C., M.R.C.S., L.R.C.P., L.S.A., appointed Assistant House-Surgeon to the General Hospital, Birmingham, *vice* S. Meklin, M.R.C.S., L.R.C.P.

CLARKE, Arthur, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Street Urban Sanitary Authority.

CROOK, Arthur, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the 4th District Norwich Union, *vice* D. S. Penrice, M.R.C.S.Eng., L.S.A., resigned.

EARLE, Walter G., M.R.C.S.Eng., L.S.A., Prelim.Sci., M.B.Lond., appointed Medical Officer for the East District, Bingham Union, *vice* G. H. Monk, M.R.C.S., L.S.A., resigned.

EDWARDS, Frank, L.R.C.P.Edin. and L.M., L.F.P.S., etc, appointed Medical Officer for the Duxford District, Linton Union, *vice* F. Prince, M.R.C.S., L.S.A., resigned.

GRAVELY, Harry, M.R.C.S.Eng., L.S.A., appointedMedical Officer to No. 1 District, Steyning Union.

GRESSWELL, D. Astley, M.B., M.R.C.S.Eng., B.A.Oxon., appointed Chief of the New Health Department for the Colony of Victoria.

HILLYER, W. Henry, M.R.C.S., L.R.C.P., appointed Medical Officer of No. 6 District, St. Neots Union.

HOBBS, Thomas H. H., of St. Thomas's Hospital, appointed Dispenser to the Strand Union Workhouse, Upper Edmonton.

HOLMES, F. D., L.R.C.P.Edin., F.R.C.S.Edin., L.F.P.S.Glas., appointed Deputy Medical Officer for the Duffield District, Belper Union, for six months.

IRONSIDE, James, M.B.Aberd. and C.M., reappointed Parochial Medical Officer and Public Vaccinator, Laurencekirk, Kincardineshire.

JACKSON, W., M.D., L.R.C.P.Edin., D.P.H.Camb., appointed Honorary Physician to the Victoria Hospital, Burnley.

JAMIESON, Hugh, M.B.Edin. and C.M., appointed Resident Medical Officer of the British Hospital, Buenos Ayres.

JOHNSTONE, John McC., M.B., C.M.Glas., appointed Assistant Medical Officer Govan Poorhouse and Asylum, *vice* W. G. Pretsell, M,B., C.M., resigned.

LANG, G., M.R.C.S.Eng., appointed Assistant Medical Superintendent of St. Pancras Infirmary.

MCDONOUGH, J., L.K.Q.C.P.I., L.R.C.S.I., and L.M., appointed Visiting and Consulting Physician to the Killarney District Lunatic Asylum.

MACLENNAN, William, M.B., C.M., Assistant to the Professor of Materia Medica and Therapeutics in the Glasgow University, appointed Public Vaccinator at the Glasgow Western Infirmary, *vice* D. C. McVail, M.B., retired.

MILNE, T., M.D., C.M., reappointed Medical Officer of Health to the Accrington Borough.

MITCHELL, C. J. C., M.D.Brux., M.R.C.S., L.S.A., appointed Medical Officer for Districts 5 and 6, Birmingham.

MOTHERSOLE, R. D., M.B., B.S.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Liverpool Northern Hospital, *vice* A, M. Burford, M.R.C.S., L.R.C.P., resigned.

O'FARRELL, G. Plunkett, M.D. T.C.D., M.R.C.S.Eng., of the General Prisons Board, Dublin, appointed by the Lord Lieutenant of Ireland Commissioner of Control in Lunacy, *vice* Dr. Hatchell.

PEGLER, L. H., M.D.Edin., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the Shirland District, Chesterfield Union.

PERCIVAL, J. M., M.R.C.S.Eng., L.S.A., appointed Medical Officer of Health for the city of Chichester.

PLATT, J. E., M.B.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Ashton-under-Lyme District Infirmary, *vice* J. W. Talent, M.B., C.M., resigned.

RAVERTY, James, L.R.C.S.Ed., appointed Medical Officer to the Bray and Rathmichael Dispensary, Rathdown Union.

RYMER, James F., M.R.C.S., L.D.S., of Maidstone, appointed Honorary Dental Surgeon to the West Kent General Hospital.

SKRIMSHIRE, F. W., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Morpeth Urban Sanitary Authority.

SOUTHEY, Albert J., M.R.C.S.Eng., L.S.A., reappointed Medical Officer to the Colnbrook District, Eton Union.

STEER, Adam Wm. Thorburn, M.R.C.S., M.R.C.P., L.S.A., appointed Medical Officer to Penzance Union Workhouse, Madron; and Medical Officer and Public Vaccinator to No. 1 District, Penzance Union.

TAYLOR, L. A., M.R.C.S.Eng., L.R.C.P.Edin., D.P.H.Lond., appointed Medical Officer and Public Vaccinator for Brierley Hill District of Stourbridge Union, *vice* G. Ashmead, M.R.C.P., L.R.C.S.Edin., deceased.

TURNER, E. O., M.B.Lond., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant House-Surgeon to the Liverpool Northern Hospital, *vice* F. Liddell, M.B., C.M.Edin., resigned.

WATSON, W. I., M.B.Lond., M.R.C.S.Eng., appointed Temporary Medical Officer to the Northern District, Brighton Union, *vice* J. H. Ross, deceased.

WOODHOUSE, Stewart, M.D., F.R.C.S.Irel., M.K.Q.C.P.Irel., appointed to succeed Dr. O'Farrell on the General Prisons Board, Dublin.

RASTRICK (Population, 9,592).—*More Air-Space and Ventilation Needed in Dwellings.*—There was a notable decrease in the death-rate of this district for 1888, the rate having fallen from 19.7 per 1,000 in 1887 to 16.5 in 1888. This is the lowest rate that has ever been recorded for Rastrick. The other rates were equally favourable. Dr. Bond attributes much of this improvement to climatic conditions, November and December being especially very mild, and the whole year being marked by evenness of temperature. Scarlatina was somewhat prevalent, as was also whooping-cough; but measles was almost absent. Chest diseases are the most frequent causes of death, nearly one-third of the total mortality being attributable to them. These diseases must always be important factors in the causation of death, where people are exposed to constant inhalation of irritating material when at work; but there is no doubt they could be lessened by more air-space in houses, through ventilation, and purer subsoil air.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Dr. Barlow: On Infantile Paralysis.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Clinical evening. Cases:—Dr. Theodore Williams: Case of Tubercular Basic Cavity. Mr. Watson Cheyne: Case of Operation for Undescended Testicle. Dr. Herschell: Case of Thomsen's Disease. Dr. Hale White: Case of Thomsen's Disease. Mr. Hurry Fenwick: Case of Complete Epispadias. Mr. Pye: Case of Removal of Internal Semilunar Cartilage for Derangement of Knee. Dr. Angel Money: (1) Case of Heart Disease with Nervous Symptoms. (2) Case of Instrumental Indentation of Frontal Bone.

TUESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Herpetology.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—(Agenda not received.)

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Kingston Fowler: On the Diagnosis of Valvular Disease of the Heart. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. W. Lang: Ophthalmoscopic Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Dr. Ormerod: On Electrical Testing. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Barlow: On Infantile Paralysis.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Patients and card specimens at 8 P.M. Mr. Treacher Collins: On Glaucoma after Extraction of Cataract. Dr. Berry (Edinburgh): (1) Demonstration of a new Stereoscopic Phenomenon, and the possible Clinical Uses to which it might be put. (2) Note on a Purulent Choroiditis occurring Months after a Successful Cataract Extraction. (3) Note on the Immediate and Remote Effects of Tenotomy on the Lateral Movements of the Eye. (4) Note on the Simplest Means of Determining the True Relation between Accommodation and Convergence. Card Specimens:—Dr. Edridge-Green: Colour Tests. Mr. Lang: Retinitis Pigmentosa (early stage). Mr. Stanford Morton: Case of Alexia. Dr. Collins: Retinitis Albuminurica. Mr. Lindsay Johnson: Congenital Corneal Growth. Mr. Browning: Associated Movements of the Upper Eyelids with the Internal Recti.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Kingston Fowler: On the Diagnosis of Valvular Disease of the Heart.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: On Acne; its different Forms.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement. The first post on Thursday mornings is the latest by which advertisements can be received.

BIRTHS.

JONES.—On January 15th, at Llanfairtalhaiarn, Denbighshire, the wife of I. Owen Jones, M.B., of a son.

RECKITT.—On Jan. 15th, at Boston, Lincolnshire, the wife of Ed. B. Reckitt, L.R C.P.Edin., of a son.

SCHOLEFIELD.—January 19th, at 253, Lytham Road, South Shore, Blackpool, the wife of G. E. Scholefield, M.D., of a son.

WEBBER.—On January 22nd, at 8, Kensington Crescent, W., the wife of William Littleton Webber, F.R.C.S., of a son.

MARRIAGE.

BORROWMAN—MACKINTOSH.—At St. Andrew's Church, Colombo, on the 25th November, by the Rev. J. Burnet, military chaplain, Philip Grierson Borrowman, M.B.Edin., son of the Rev. Patrick Borrowman, Glencairn, to Elizabeth Gordon Mackintosh, daughter of the late Rev. Charles Calder Mackintosh, D.D., of Tain and Dunoon.

MACALISTER—CARTER.—At Prince's Gate Baptist Chapel, Liverpool, by the Reverends Robert Lewis and D. P. McPherson, B.D., Charles J. Macalister, M.B., C.M., of Liverpool, to Anna Frances Sandwith Carter, elder daughter of William Carter, M.D., also of Liverpool.

DEATHS.

BAYLIFFE.—On the 8th January, at Bournemouth, Alworth Merewether Bayliffe, M.R.C.S., L.S.A., late of Brent Knoll, Somerset, aged 45.

GREEN.—On New Year's Day, at Bordighera, after a protracted illness, borne with great patience and resignation, Thos. Beaufoy Green, eldest son of the late Thomas Green, M.B.Lond., of Kendal.

A TELEGRAM from Alexandria, under date of January 22nd, states that Surgeon Parke, the medical officer of Mr. H. M. Stanley's expedition, has arrived there, and has been warmly welcomed by numerous friends.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Operation Days.*—M. Th. F., 1.30; Tu. W. S., 2.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F. 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C , London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

ENQUIRER writes: A gentleman, fully 80 years of age, and who enjoys fair health, except that his circulation is rather weak and his legs a little œdematous in consequence, has been troubled with pain in his heels and great toes for four months. This pain comes on only at night, and friction is the only thing which gives relief. Can any of your readers offer any suggestions as to the treatment of this case, which has hitherto defied all kinds of treatment, constitutional as well as local?

CLUB PRACTICE.

A MEMBER asks for information on the following points: Is it worth while to retain clubs and dispense for them through a chemist (town members only)? If so, what would be fair terms to offer to a chemist for supplying medicines—club members pay 5s. per head per annum—whether on the basis of so much for each prescription dispensed, or on that of a certain percentage of club members' payments?

ANSWERS.

ALPHA.—Dr. Wooldridge's views on the coagulation question are to be found in the *Journal of Physiology*, vol. x, p. 329. The price of this journal is 21s. per volume.

THE INFECTIVITY OF MUMPS.

A MEMBER writes: A. has the mumps. B.C. represents the family with whom A. is living (ten in number), all of whom have had mumps a considerable time ago. C.D. represents a family of young people none of whom have had the disease, and who are about to return to large schools.

Is there any danger to C.D. if they receive the visits of the members of the family of B.C. at their own house, or associate with them at the homes of mutual friends?

*** The incubation period of mumps is from eight days to three weeks, and it is communicable for at least three weeks from the first onset.

It is conceivable that the disease might be conveyed from a patient suffering from the disease to children in another house, the carrier being himself free from the malady.

PURCHASE OF PRACTICE.

TWO YEARS' SUBSCRIBER asks: 1. How do they sell a practice? 2. What is the customary allowance for outstanding debts?

*** 1. The numerous contingencies governing the value of practice render it impossible to make a rule; this question should be submitted to an expert.

2. We are informed by Messrs. Orridge and Co., to whom we have applied for information on this point, that the value of outstanding debts must be governed by the class of debtor, length of credit taken, and proportion of doubtful and bad debts, and like the former question cannot be reduced to a rule.

W. H. H. (Wakefield) asks for information as to the terms of "bond not to practice," in use between principal and qualified assistant.

*** Our correspondent would on application to a respectable agent, obtain the customary agreement which is designed to meet all the points as to which he requires protection.

TREATMENT OF CORYZA.

J. C. writes: For coryza in all stages I can strongly recommend the inhalation of equal parts of liq. ammon. fort. et acid carbol. liq. (1-40). I believe this is something like the composition of the patent medicine "alkaram."

NOTES, LETTERS, ETC.

THE PRACTICAL ELEMENT IN MEDICAL EDUCATION.

R. THOS. LAFFAN (Cashel) writes; Permit me to suggest that the Privy Council should be memorialised to coerce the Medical Council, under the provisions of the last Medical Act, to carry out their own promises to extend the facilities for the practical training of medical students.

A WELCOME EXPLANATION.

A MIDDLESBROUGH PRACTITIONER writes: In the JOURNAL of January 4th your Sheffield Correspondent says: "At one meeting 'Sequah' said that a surgeon at Middlesbrough was so impressed with the oil that he had thrown up his practice, entered the firm of Sequah and Co., Limited, and was selling the Oil and Prairie Flower at a rapid rate at Kilmarnock. The statement, if verified, seems to deserve attention."

Permit me, for the honour of the profession at large, and the Middlesbrough members of it in particular, to inform your readers that the person referred to by "Sequah" is an unqualified man we can well spare, and who practised here as "Homœpathic Physician, not registered." (The orthography of the first word was the gentleman's own.) The statement at Sheffield is another of Sequah's "facts."

A GUARDED CAPILLARY TROCAR.

MR. ALEX. G. R. FOULERTON (St. Bartholomew's Hospital, Chatham) writes: Brigade-Surgeon Hodder, writing to the JOURNAL of January 18th with respect to his "guarded aspiratory and exploratory needle," and my own "guarded capillary trocar for suprapubic puncture of the bladder," points out that he was first in the field with the former instrument, which was apparently patented some years back. In the first place I trust that Brigade-Surgeon Hodder will believe that I am quite innocent of any intentional attempt to rob him of any of the credit due to his invention. It so happens that I have never seen the instrument in question, nor had I ever read any description of it before Brigade-Surgeon Hodder called my attention to the matter. On referring now to the illustration of the "guarded needle," it seems to me that it differs considerably in general form, method of guarding, and mode of use from my "capillary trocar." The difference may best be expressed by saying that the former is a guarded aspirating needle, the latter a guarded and otherwise modified Southey's capillary trocar, the guarding being, as I have said, quite different in each case.

ORMSBY'S SURGICAL OPERATION CHART.

MR. L. H. ORMSBY, F.R.C.S. (Surgeon to the Meath Hospital and Co. Dublin Infirmary), writes: I recently paid a visit to the Birmingham hospitals, and when going through the Queen's Hospital I was shown the operating theatre, where the Surgical Operation Chart, arranged and tabulated by me for the use of house-surgeons, junior practitioners, and surgical dressers, and published by Baillière, Tindall, and Cox, London, and Fannin and Co., Dublin, was hanging up in the operating room. But to my surprise I saw that my name had been carefully removed from the top of the chart, as if to make it appear that the idea of this useful compendium had originated in that institution. I scarcely believe such an act can have the approval of the authorities or staff of the Queen's Hospital, Birmingham, the characteristic of the Saxon being a love of fair play, inconsistent with the appropriation of the credit due to the labours of a fellow-worker in the field of surgical science, even though that fellow-worker be an Irishman.

RE DR. FREDERICK MOON: AN APPEAL.

THE following subscriptions have been received during the past week, namely:—

	£	s.	d.
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	27	4	6
Subscription previously announced	74	4	6
	100	9	0

PETER HORROCKS, M.D., Hon. Treasurer, 26, St. Thomas's Street, E.C.

CHLORINE SOLUTION.

DR. FRANCIS E. CLARK, M.K.Q.C.P. (Boyle) writes: Adverting to the note of Mr. Alexander D'Evelyn, B.A., M.B., on this subject, I desire to say that some years ago I used a solution similar to that described by him in an epidemic of scarlatina, and in several cases of diphtheria, with a like happy and successful result; but I gave it internally in a somewhat more diluted form, while at the same time using it locally as a gargle in a solution as strongly saturated with chlorine as I could acquire. I never saw any agent have so powerful an effect in the throats of diphtheria and malignant scarlatina. Chlorine seems directly antagonistic to these poisons, and according to my experience—and that a pretty large one some years since—it should be plentifully and frequently exhibited both locally and internally, while at the same time being employed (both chlor. calc. and free chlorine) as a disinfectant.

AMERICAN DEGREES AND GENERAL CULTURE.

M.D. writes: The following conversation once really took place between an English physician who was asked in the United States of America to meet the ordinary attendant:—Case, cancer of pylorus. American Practitioner: "Well, what do you think?" English Physician: "I think the prognosis extremely grave." "Bah! I don't think it a case of prognosis at all." Now it may be urged that I have put "of" for "for," and that the statement was "a case for prognosis." But unfortunately the American practitioner went on to state that it had none of the symptoms "of prognosis," and gave quite a little oral article as to this hitherto unknown disease.

FOREIGN BODY IN THE AIR PASSAGES.

MR. FREDERICK SLEEP, L.D.S. (Plymouth) writes: A patient for whom I had made some artificial teeth, whilst partaking of a dinner of rabbit-pie six months ago, swallowed a bone during a fit of laughter. The convulsive struggle and subsequent quietude described made me suspect strongly that the body had passed into the trachea, and I advised her to consult forthwith a well-known surgeon. The next day I was told she had coughed it out through the nares.

On seeing her, however, a month after the accident, I was struck with the valvular, stridulous breathing and brassy phonation, and on further inquiry I found there was a persistent soreness at the top of the left lung, pain on stooping, and partial aphonia in the mornings. Feeling convinced that all the bone was not ejected, I tried again to get her to accompany me to the surgeon; but persuasion was futile. So the case dragged on, and all the nostrums took their turn in a trial, until, at the expiration of five months and a fortnight, she coughed up a complete vertebra of a rabbit, measuring at its largest diameter three-quarters of an inch.

Perhaps, next to a carious jagged tooth with a suppurating pulp, or a fish-hook, no worse object could possibly have entered the rima, and it seems remarkable, on viewing the needle-like spinous process, that critical inflammatory symptoms had not supervened during its presence or spasm during its attempted exit. Immediate relief from the severe symptoms was the result, and she was once more able to sleep with comfort on her left side. It is noteworthy that the patient possesses a very vaulted palate, and I have thought it possible that a suddenly violent inspiration in such deformities might cause a foreign body to be "focussed" by the rebounding air just into the inrushing maëlstrom that surrounds the temporarily paralysed laryngeal muscles.

The Climate of Bexhill-on-Sea.

Dr. Edward H. Ryan-Tenison, F.R.Met.Soc. (Bexhill-on-Sea) writes: I beg to enclose the following data concerning my meteorological work at Bexhill-on-Sea during the year 1889. Most of the work is from personal observation, but the results are, on the whole, sufficiently accurate to make me feel that this younger member of the English seaside health resorts has a right to rank high. The days on which rain fell are by no means all of them rainy all day. The average rainfall for the past eleven years has been but 28 inches per annum. The prevailing wind resultant is S.W. to N.E.; the S.W. is usually present in the form of strong sea breeze, but the N.E. is seldom more than a pleasant land breeze.

	Hours of Sunshine from Personal Observation.	Mean Temperature.	Number of days on which any Rain Fell.		Prevailing Winds.	
January	64 7/10	40°	14		W. 13	E. 14
February	77 5/10	39.5°	23	(snow on 12)	W. 15	E. 11
March	116	40.5°	17	(snow on 3)	W. 15	E. 12
April	152	45°	21		W. 12	E. 9
May	242	55°	11		W. 6	E. 7
June	292 7/10	61°	5		W. 11	E. 12
July	249 2/10	61°	16		W. 21	E. 6
August	245 7/10	59.5°	16		W. 25	E. 3
September	230 1/10	55.5°	6		W. 16	E. 10
October	139	50°	24		W. 27	E. 3
November	84 6/10	44°	3		W. 8	E. 8
December	86 3/10	38 5°	14		W. 17	E. 9
Total	1,979 9/10	Mean 49.125°	Tots. 170		W.186	E.104

Patients' Statements.

Every practitioner knows how frequently patients and their friends, owing to a want of acquaintance with medical terms, entirely misrepresent the opinions expressed by their medical advisers. A ludicrous instance is given by a correspondent of the *Boston Medical and Surgical Journal*. A young woman applied for treatment on account of defective vision. After an examination, she was told that she was suffering from retinal separation in the right eye. The report spread by her friends, however, was that "the doctors have all concluded that the matter with Sophia's eye is a suppuration of the lining of her rectum."

Such a blunder is so extremely absurd that it could do no harm, but very often the misrepresentation is less gross, and we suspect that in many cases practitioners have suffered in reputation both with the public and the profession. The greatest caution ought invariably to be exercised in accepting the statements of patients as to the opinions expressed by their previous advisers.

Erratum.—In Dr. A. D. Keith's letter on "The Forceps: a Death-Trap," in the Journal of January 18th, second line, for "describes" read "desiderates."

COMMUNICATIONS, LETTERS, etc., have been received from:

Messrs. Rayner and Cassell, London; Dr. J. M. Wilson, Doncaster; Dr. P. Boobbyer, Nottingham; Dr. Willoughby, London; Mr. Goodchild, Bordighera; Dr. C. W. Suckling, Birmingham; Dr. H. A. Lediard, Carlisle; Dr. Wm. Strange, Worcester; Mr. J. T. Elliott, Smithborough; Dr. J. Lindsay Stevens, Glasgow; Nemo; Dr. Vacher, Birkenhead; Mr. J. Philipson, Newcastle-on-Tyne; Messrs. Orridge and Co., London; Mr. W. J. T. Barker, Churchinford; Mr. J. E. Square, Plymouth; Mr. S. Johnson, Nottingham; Dr. Symes Thompson, London; Mr. H. de Styrap, Coatham-on-the-Sea; Dr. Ward Cousins, Southsea; Mr. N. Stevenson, London; The Secretary of the Sheffield Medico-Chirurgical Society; Surgeon-Major T. Holmested, Eastbourne; A Member; Mr. J. A. Erskine-Stuart, Dewsbury; Messrs. Burroughs, Wellcome, and Co., London; Dr. Churchward, South Norwood; Mr. E. A. Tice, London; Mr. C. E. Paget, Salford; Mr. W. W. Pike, Curragh; Mr. Adams Frost, London; Mr. F. Fox, London; M.D.; Dr. Railton, Manchester; Dr. R. T. Smith, London; Mr. J. B. Anderson, London; Cambridge Undergraduate; Dr. L. H. Ormsby, Dublin; Mr. R. H. Baxter, Bristol; Dr. J. McNaught, Newchurch; A. D. Hughes, M.B., Shillong, Assam; Mr. E. H. Ryan-Tenison, Bexhill-on-Sea; S. J. R.; Dr. A. D. Keith, Aboyne; Mr. H. Horton, Bath; W. Milligan, M.B., Manchester; Mr. J. Armitage, Emu Bay, Tasmania; Mr. A. G. R. Foulerton, Chatham; Mr. T. D. Patmore, Wormwood Scrubbs; Dr. T. Laffan, Cashel; Dr. R. H. Mathews, Sheffield; Mr. G. E. J. Greene, Ferns; Dr. E. Seaton, London; Mr. St. V. Mercier London; Dr. W. Jackson, Burnley; Our Birmingham Correspondent; Mr. G. Eastes, London; Dr. A. R. Urquhart, Perth; Dr. Abercrombie, London; The Secretary of the Glasgow and West of Scotland Branch, Glasgow; Dr. S. Davies, Woolwich; Mr. H. W. Macalister, Oldham; Mr. A. Carter, London; Dr. Halliburton, London; Mr. L. W. Pead, Dulwich; Mr. P. Mulvany, Gosport; Our Oxford Correspondent; Mr. A. Jackson, Sheffield; Dr. J. Brown, Bacup; Dr. E. G. Barnes, Eye; Dr. W. G. V. Lush, Weymouth; M.; Dr. H. H. Phillips, Reading; Mr. W. Corbin Finch, Salisbury; Mr. W. H. Hillyer, Buckden; Dr. A. H. Griffith, Manchester; Diddled; Dr. P. Horrocks, London; Mr. E. East, London; Mr. J. Coombs, Bedford; Dr. J. E. Guntz, Wiesbaden; Our Liverpool Correspondent; The Secretary of the Chelsea Hospital for Women, London; Mr. H. K. Lewis, London; Dr. J. H. Garrett, Stoke Newington; Mr. W. Falk, London; Mr. Plimsoll; Mr. C. Fowler, Edinburgh; Mr. H. Smith, Northampton; Mr. Blackett, London; Dr. W. Brown, Stapleton; Dr. B. N. Dalton, South Norwood; Dr. J. Inglis Parsons, London; Dr. R. C. Chicken, Nottingham; Dr. Wm. Marcet, London; Mr. S. Phillips, London; Dr. O. Wood, London; Mr. J. M. Scott, Denny; Dr. W. C. Wicks, Newcastle-on-Tyne; Mr. J. Macdonald, Carlisle; Mr. J. Bark, Bootle; Dr. E. D. Tomlinson, Upper Tooting; Our Dublin Correspondent; Dr. J. Roche, Kingstown; Mr. A. Q. Silcock, London; Mr. W. A. Lane, London; Mr. G. J. C. Barber, Birmingham; Our Sheffield Correspondent; Dr. G. S. Woodhead, Edinburgh; Mr. A. E. Barrett, London; Messrs. Street and Co., London; Dr. F. P. Atkinson, Surbiton; Dr. A. Robertson, Glasgow; Mr. C. A. P. Osburne, Church Stretton; Messrs. Entwisle and Kenyon, Accrington; Mr. H. A. Shera, Harrogate; Mr. C. Forsyth, Leeds; Enquirer; W. L. Winterbotham, M.B., Bridgwater; Dr. Woodhouse, Putney; Dr. J. G. McKendrick, Glasgow; Mr. W. Robertson, Newcastle-on-Tyne; Our Paris Correspondent; Dr. G. Revington, Manchester; Dr. Kast, Hamburg; Mr. H. J. Waring, London; Mr. J. M. Farquharson, Edinburgh; Messrs. Sinclair, Tweedie, and Co., London; Nasal Catarrh; Mr. J. L. Green, Salisbury; Dr. B. H. Mumby, Portsmouth; Dr. Balding, Royston; Mr. A. Maude, Westerham; Dr. Lauder Brunton, London; Dr. J. L. Steven, Glasgow; Dr. Maguire, London; Mr. F. Smith, Dublin; Dr. T. Crowther, Luddenden; Dr. T. L. Laxton, Bridgwater; Dr. E. J. Edwardes, London; Dr. Cranstoun Charles, London; Rev. C. H. M. Wake, London; A Member; Irish Surgeon; Dr. A. Edington, Edinburgh; Dr. E. Hirschfeld, Berlin; Persevere, etc.

BOOKS, etc., RECEIVED.

Outlines of the History of Medicine and the Medical Profession. By Joh. Hermann Baas, M.D. Translated, and, in conjunction with the author, revised and enlarged, by H. E. Handerson, M.A., M.D. New York: J. H. Vail and Co. 1889.

Faith Cures: their History and Mystery. By Aurelius J. L. Gliddon. London: "Christian Commonwealth" Publishing Co. 1890.

Étude sur la Syphilis et son Traitement. Par le Dr. Simon Smirnoff. Paris: G. Masson.

Original Contributions to Ophthalmic Surgery. By J. R. Wolfe, M.D., F.R.C.S.E. London: J. and A. Churchill. 1890.

Cancer of the Rectum. By Harrison Cripps, F.R.C.S. London: J. and A. Churchill. 1890.

Sewer Ventilation and Sewage Treatment. By R. Harris Reeves. London: Sinclair, Tweedie, and Co. 1890.

Casuistique et Diagnostic Photographique des Maladies de la Peau. Par le Dr. D. Van Haren Noman. Part I. London: Henry Renshaw. 1890.

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A DISCUSSION
ON
CORPOREAL ENDOMETRITIS:
ITS FREQUENCY, DIAGNOSIS, AND TREATMENT.

In the Section of Obstetrics at the Annual Meeting of the British Medical Association at Leeds, August, 1889.

INTRODUCED BY G. ERNEST HERMAN, M.B., F.R.C.P.

ENDOMETRITIS of the body of the uterus seems to me a subject very fit for discussion at a representative meeting such as this, because it is a disease about which we know comparatively little, and, therefore, one which needs discussion, and concerning which the student and practitioner find apparently conflicting statements in the works to which they are accustomed to refer. Some authors speak of it as common, others think it so rare that they omit it altogether. The explanation of this apparent conflict of opinion is this: that some authors refuse to admit the existence of endometritis of the body of the uterus unless the diagnosis is more than an inference, is supported by some sort of demonstration that inflammation is present, and that the lining membrane of the body of the uterus is its seat. Others, looking at the fact that in many minor maladies, (and not in those of the uterus only,) no demonstration of their existence or nature is ever attainable, and that in cases of corporeal endometritis which end in recovery the nature of the morbid changes never can be demonstrated by any means at present known to us, are satisfied with a diagnosis based only on inference from the signs and symptoms. In practice we must often act on a diagnosis based only on inference. Still a diagnosis based only on inference does not compel assent, but rather invites scepticism.

What anatomical evidence ought we to require as proof of endometritis? We may accept the fact of its existence if we find products of inflammation—in a word pus—discharged from the body of the uterus. But the secretion of the body of the uterus comes to us through the cervical canal, and mixed with the secretions from that mucous membrane; and although attempts have been made to get the secretion of the body of the uterus separately from that of the cervix, there is no way in which that can be done without an amount of discomfort and risk to the patient quite incommensurate with any practical good that can at present result from doing so. And pus in the cavity of the body of the uterus is not of necessity therein produced. Pus in the tubes may escape into the uterus. Still, if we find a purulent discharge seen to come from the uterus, not merely clinging about the os uteri, or filling the cervical canal, but, after the cervix has been cleaned, distinctly flowing down into the lower and visible part of the cervical canal from the part of the canal which we cannot see; and we find no evidence of disease either of the cervix or of the Fallopian tubes to account for the presence of the pus; then it is a reasonable inference that it is the body of the uterus which supplies the pus.

But in the absence of pus, what evidence of endometritis can we get? The answer which naturally suggests itself is, evidence of inflammatory change in the mucous membrane. In any other mucous membrane, we should look for evidence of abnormal vascularity, and of exudation and multiplication of leucocytes in the tissue. But in the case of the lining membrane of the uterus, monthly changes take place in it; it is shed wholly or partly every month; before its menstrual separation, vascularity, unusual at other times, is a normal condition, and at this time infiltration with round cells, very like what in other parts is called granulation tissue, is present, at least in many places, in the endometrium. The monthly cycle of changes has not yet been described in a manner which commands universal assent; but as to the vascularity and the presence of large groups of round cells in many parts of the endometrium in women about to menstruate, who are free from any evidence of disease, the observations of Kundrat,[1] Williams,[2] and Wyder,[3] differing as they do about other features of the menstrual changes, are in accord. Neither vascularity nor infiltration of the endometrium with round cells is therefore evidence of endometritis.[4] It is impossible to anatomically recognise the slighter kinds of suspected endometritis until we know accurately the state of the endometrium at each stage of the menstrual cycle; and this knowledge we at present have not got. The fact that with the curette a little bit of membrane can be withdrawn, having the appearance under the microscope of what in other parts we should call very vascular granulation tissue, is no evidence of an abnormal condition within the uterus. We need also to know, but we do not, what alterations there are that depend upon age.

One disease, well known and usually described under the name of endometritis, namely, fungous endometritis, some authors refuse to admit under that designation, because the morbid changes are rather those of a new growth than of an inflammation. Multiplication of gland tissue certainly, one would think, should be regarded as growth rather than inflammation.

It is not possible, in the time limitations of this discussion, to enter upon all the questions that suggest themselves in connection with endometritis; and I think that it will be most useful to restrict ourselves to the clinical and practical aspects of the subject. I do not propose, therefore, to discuss the histology of endometritis, nor those forms of endometritis which are represented in literature by isolated cases only. Changes in the endometrium are met with along with chronic metritis; but they are also found without any of the symptoms of chronic metritis. I speak only of these latter cases, regarding cases of chronic metritis with endometritis as examples of a combination of morbid conditions which do not convey instruction as to the clinical history of endometritis. In fibroids, again, besides the changes in the shape and size of the uterine cavity, the structure of the endometrium is altered in a way very like endometritis. This I shall not speak of.

An atrophic endometritis has been described, but I am not satisfied that the changes described under this name are anything more than changes due to age or imperfect formation of decidua from other causes. I have seen cases of hæmorrhage, without apparent cause, in which nothing could be scraped from the interior of the uterus; but I have been content to look on these as cases in which the diagnosis was incomplete—the cause of the hæmorrhage not ascertained. I have had no facts before me in such cases to lead to the view that the hæmorrhage was the result of an inflammatory process.

There are forms of endometritis associated with pregnancy, such as decidual endometritis and puerperal endometritis; but the limited time allotted to me, and the still more limited time to which subsequent speakers are of necessity restricted, forbid me to go beyond the more common kinds. Therefore I pass by the pregnant and puerperal forms. I pass by also the purulent endometritis sometimes seen after the menopause, and confine myself to uncomplicated corporeal endometritis occurring independent of pregnancy, and during menstrual life. I shall briefly describe the comparatively well known and common forms of corporeal endometritis; and point out where our knowledge seems to me to be most deficient, and how the interchange of experience may help to enlarge that knowledge.

1. *Fungous Endometritis.*—This is not a common disease, but its characters are well marked, and it has been much studied. It occurs in two forms: these two forms were, so far as I know, first clinically described by Routh,[5] although the description subsequently given by Olshausen,[6] and usually quoted, is more complete. These two forms are the hyperplastic and the polypoid. In the first there is general thickening, softening, and loosening of the endometrium; in the second there are distinct polypoid growths. The uterus is bimanually found slightly enlarged, and when the cervix is dilated, the cavity of the body is found slightly expanded. The symptoms are hæmorrhage, with pink or watery discharge in the intervals of hæmorrhage. The treatment which is usually successful is to scrape away the diseased mucous membrane with the curette, and then apply a caustic. Some practitioners use the curette, and not the caustic, some the caustic

[1] Stricker's *Med. Jahrbuch.*, 1873, S. 140.

[2] *Obst. Journal*, Vol. ii.

[3] *Arch. für Gyn.*, Band xiii.

[4] Wyder says: "All authors agree in describing the mucosa uteri during menstruation as in a condition of acute catarrh."

[5] *Obst. Trans.*, Vol. ii.

[6] *Arch. für Gyn.*, Band viii.

and not the curette. Cure often follows (I think usually) either method, but we have no exact data that I know of on which to base a preference for either of these methods of treatment. My own impression is that to do both is the most sure; while in the polypoid form the curette is the more essential. If caustic be used, it matters very little what the caustic is; whether nitric acid, perchloride or sulphate of iron, the actual cautery, or strong carbolic acid. Some use a sharp spoon, others a blunt curette; my own preference is strong for a blunt instrument. There is now abundant evidence that after this treatment complete recovery may follow, and that subsequent fertility is not interfered with.[7] According to Sinéty,[8] the uterine granulations or fungosities may be of three kinds, and the symptoms vary with the kind. They may consist of an overgrowth of gland tissue, and in that case the discharge will be abundant and mucous; or they may be formed of granulation tissue, and then the discharge will be purulent; or they may be composed almost entirely of vessels, a form in which the discharge is hæmorrhagic. This author does not say on what number of cases he bases these beautifully simple generalisations, nor does he tell the reader how he has separated the discharge from the body of the uterus from other secretions with which it may be mixed. I confess I do not think that this classification helps in actual practice.

Polypoid growths are more commonly, though not exclusively, met with in those cases in which the symptoms date from delivery or abortion. I have met with them in the unmarried, without any history pointing to previous pregnancy, but such cases are the exception. Treatment is more uniformly successful in the cases which date from a pregnancy, more uniformly successful in the cases in which there are localised outgrowths than in those in which there are not.

Brennecke[9] has sought to show that the hyperplastic form, that is the form attended with diffuse thickening and softening, but not distinct growths, is dependent upon ovarian influence. He bases this view on the facts that in many of his cases the first deviation from the normal was that menstruation became irregular. He regards the disease as a pure hyperplasia of the mucosa, a result of chronic hyperæmia produced as a reflex effect of abnormal ovulation. He describes a uterine form and an ovarian form, the chief practical difference being the greater ease of curing the uterine form, and its less liability to relapse. The uterine form seems very like what others have described as the polypoid form.

We want records of experience as to the circumstances of origin of the hyperplastic form. I have met with it in a virgin of 25, and I have met with it in older women who presented histories of menstrual irregularities like those of the cases described by Brennecke. But mere menstrual irregularity is not, to my mind, any evidence of ovarian disease; and to put down menstrual irregularity to a reflex influence from the ovary does not in the least help us, unless we know something about the state of the ovary that sets up the reflex influence. On this point, although I think Brennecke has done useful work in calling attention to the frequency of menstrual irregularities as part of the early clinical history of the disease, yet I do not think his work carries us further than this fact. The frequency of relapse points to some cause other than in the uterus. I have seen cases in which, after treatment, symptoms have recurred, but further treatment has been declined, but the patient has ultimately got well. From this I infer that spontaneous cure is possible. We want information also as to the relation of these cases of endometritis to cancer. Everyone knows that there are cases in which, after the uterus has been scraped and hæmorrhage arrested, the disease returns, and the patient ultimately dies of indubitably malignant disease. In most cases of this kind, the explanation that naturally suggests itself is that the original diagnosis was mistaken, and that had the bits removed been examined by a competent histologist, the cancerous nature of the disease would have been recognised from the first. But opinions have been expressed by very competent judges as to the occasional development of malignant disease out of changes which at first had no such character. Instances of this in other parts of the body will occur to everyone. It is rational to expect that it might happen in the body of the uterus, but I know of no satisfactory evidence on the point; and a record of cases illustrating this would be most instructive. This form has no tendency to spread to the Fallopian tube.

The next form of corporeal endometritis to which I would ask a little attention is one about which we know scarcely anything beyond that it exists, and is very important. We know of its existence by inference only, but nothing about its morbid anatomy or its symptoms. I refer to gonorrhœal endometritis. We know that gonorrhœal inflammation starts in the vagina, then affects the cervix, and, later on, the Fallopian tubes; and it is an irresistible inference that the affection of the tubes must have arisen by continuity, and that, therefore, corporeal endometritis must have been present at some stage in the history of the case; that it probably follows the affection of the cervix and precedes that of the tubes, and that, if we could ascertain its presence, we might foretell the imminence of tubal inflammation. Had we this knowledge, it might lead to the discovery and adoption of measures for preventing extension to the tubes; but at present we know nothing, so far as I am aware, either of the morbid anatomy or the symptoms of this form of endometritis. I believe it does not commonly cause hæmorrhage. Such discharge as the body of the uterus, when infected by gonorrhœa, pours out, comes to us mixed with secretions from the cervix and vagina, and therefore cannot be readily, if at all, identified. On this point we urgently want more knowledge, and those who have charge of hospitals in which many cases of gonorrhœa in women are admitted have it in their power to give us more help in this direction than can those who do not see the cases till the tubal disease, by its persistence, drives the patient to seek the advice of a specialist.

There is a form of corporeal endometritis which is more often seen on the *post-mortem* table than recognised clinically, but which, there is reason to suppose, is more important than is generally thought. I allude to the endometritis which sometimes—I know of no statistics to show how often—occurs in the course of the specific fevers, typhoid, typhus, measles, etc. In the acute stage the symptoms caused by this endometritis are so slight in comparison with those of the grave diseases they complicate, that they seldom incur the danger of undue attention. But *post-mortem* research leaves no doubt of the existence of this form of endometritis, and it has long been known that these acute diseases are occasionally followed by amenorrhœa, menorrhagia, dysmenorrhœa, sterility. More recently abortion and placenta prævia have been traced back to an attack of acute febrile disease. Our knowledge of this connection is at present only conjectural: that endometritis resulting from febrile disease may prevent the ovum from getting embedded in the proper place *in utero* is a hypothesis at present, invoked to explain a few cases, which may be merely instances of coincidence. But it is an eminently reasonable hypothesis—far more so, I think, than the more generally accepted theory of the mechanical effect of enlargement of the uterine cavity.

I think these after-effects of acute diseases deserve more attention than they have received. General practitioners are better able to help us here than anyone else. A series of cases of typhoid, scarlet fever, etc., occurring in women during the reproductive period, and showing the after-history as to menstruation, fertility, complications of pregnancy, or symptoms of uterine disease during the two or three years following the disease, would be of eminent utility, and I could wish that the Collective Investigation Committee would use their machinery for an inquiry of this kind. I would respectfully ask members to relate what experience they have had of these after-results of acute disease.

I have read descriptions of acute endometritis as a disease attended with high fever and much pain. There can be no doubt that peritonitis following delivery or operations on the uterus sometimes commences as endometritis, and quickly extends to the tubes and peritoneum. But in these cases the endometritis is merely an initial stage, which is quickly passed over, and by the time that high fever and much pain have developed I should be of opinion that this stage has been passed, that something more than endometritis is present.

I have hitherto spoken of cases in which there can be no question of the existence of disease of the lining membrane of the uterus. I come now to the cases which most perplex the student and commencing practitioner: those in which the diagnosis rests on inference only, and is not verified by inspection or examination of the part supposed to be diseased or the secretion which comes from it.

There are cases in which, after exposure to causes of such

[7] See Heinricius, *Arch. für Gyn.*, Band xxvii, S. 225, for a collection of evidence.
[8] *Manuel Pratique de Gynecologie*, 1879, p. 332.
[9] *Arch. für Gyn.*, Band xx, S. 456.

kind as we know to be capable, when acting upon other parts, of setting up congestion and inflammation in them, the uterine functions become disordered; the patient suffers from slight pain, from hæmorrhage, and from discharge in the intervals of hæmorrhage. Such symptoms follow, for instance, irritation of the uterus with an intrauterine pessary, excessive functional activity such as sometimes follows marriage, excessive fatigue, etc. Mere hæmorrhage is not evidence of endometritis, for metrostaxis may occur, like epistaxis, without discoverable disease of the mucous membrane. But when we have recurrent hæmorrhage, persistent pain, and persistent leucorrhœa, I think the inference is a justifiable one, that there is a persistent change which is causing the symptoms. When we take into consideration the mode in which the symptoms have been produced, and their course, the inference that the change is an inflammatory one is in harmony with the facts. The one great feature which all inflammatory changes have in common is that when the cause is removed they tend to recovery. And in these cases, when the patient is kept at rest, the irritating instrument removed, or the mode of life under which the disease has developed altered, the symptoms diminish and disappear. The endometritis is here part of a general congestion of the pelvic organs.

I know of no evidence that this kind of endometritis ever leads to the production of fungous endometritis or malignant disease. I believe that its tendency, if left untreated, is for the inflammation to spread to the tubes, and thence to the peritoneum. Chronic endometritis has been described as a very intractable disease, one which lasts over years, and producing slight local trouble, yet causes numerous reflex nervous symptoms. These cases I have no acquaintance with. In the analysis of cases of this kind the most difficult part of the problem is to distinguish between the symptoms proper to the disease and those proper to the patient. Any slight disease occurring in a weakly woman of neurotic temperament will produce reflex nervous symptoms. I know nothing of indirect symptoms of endometritis, except those due to anæmia. Those forms which cause much hæmorrhage weaken the patient, and so may produce indirect symptoms. The difficulty of curing these cases is not that of curing the disease, but of curing the patient. Endometritis is generally an easily curable disease, and when uncomplicated is attended with but little pain.

It is often stated that there are chronic forms of endometritis due to struma and syphilis. These statements, so far as I can gather, are purely theoretical. No evidence has ever been brought forward to show that endometritis or any other disease of the endometrium is any commoner in patients who have had syphilis than in those who have not; nor has any definite statement ever been made as to what are the special characteristics, if there be any, of the endometritis due to syphilis or to struma. Tubercular endometritis of course occurs, but is such a pathological curiosity that I have nothing to say about it. Endometritis has been described as due to obstruction (not closure) of the cervical canal. I know no evidence of this. Endometritis secondary to atresia I do not discuss here.

I have indicated the treatment in speaking of the different forms. In fungous endometritis I think it will be generally admitted that local treatment is the only thing that will do good. We know nothing about the treatment of gonorrhœal endometritis, because we have not yet succeeded in diagnosing it. In endometritis from slight causes the main point is to alter the conditions which have set up the disease, and to use remedies which diminish congestion of the pelvic organs, namely, recumbency, laxatives, the local use of glycerine, either in the shape of tampons or pessaries, and the hot douche. If this treatment be used early, the symptoms quickly disappear; and if the patient avoid the cause which has led to it, the symptoms will not return. In these slight and recent cases, active intrauterine treatment is injurious rather than beneficial. If the case be more chronic, and simple treatment fail, then the use of the curette or a strong application to the endometrium seems to me much preferable to the use of so-called alteratives, either in the form of intrauterine irrigation, which I confess I have not had the courage to try, or ointments, which I have tried, and been disappointed with. The introduction of remedies on cotton wool wrapped round a probe, which is a most scientific and effectual method of treating cervical endometritis, seems to me, if I may be pardoned for saying so, illusory as applied to corporeal endometritis, because in the passage through the cervical canal the medicament gets wiped off, and the probe coated instead with a layer of cervical mucus.

I have said nothing about membranous dysmenorrhœa, for that is a disease having characters of its own; and it does not seem to me yet established that this disease should be regarded as a form of endometritis.

Dr. Byers (Belfast) said that what most struck him in Dr. Herman's paper was its suggestiveness. In reference to the treatment by caustics or the curette, he preferred the latter method, using the sharp instrument, followed by the local application of iodine, strict antiseptic precautions being always employed. The advantages of curetting were that it enabled the surgeon to do in one sitting what might require several applications of caustics; allowed the removal of the diseased membrane at once; and could be used without previous dilatation beyond what was usually present in these cases. As to the gonorrhœal variety, he thought it occurred often in nulliparous women who were sterile, and here the history was of moment. He thought the application of remedies to the body of the uterus by probes was of little use, the caustics being rubbed off on the cervix, and never reaching the part affected. He believed that cases of corporeal endometritis had a direct bearing on obstetric practice, often causing sterility and abortion.—Dr. C. H. F. Routh thought it easy to get at the upper part of the uterus with Simpson's instrument for applying powdered caustic to the lining cavity. This he had often done. Pure pus and other inflammatory products might thus be obtained for microscopic investigation. In regard to gonorrhœal inflammation leading to endometritis and pyosalpinx, etc., he thought not only gonorrhœa but simple vaginitis in a pure virgin might induce it. The mistake of diagnosis arose from the belief that the presence of urethritis was coexistent. But urethritis might and did exist sometimes with simple vaginitis, but whenever present it was the fact that if examination was made of ovaries and tubes, these could be found inflamed and swollen. The urethritis was coexistent and so far pathognomonic. He also stated as to cases of vaginitis following exanthemata, that in many such cases which he had watched there had followed sterility or chronic endometritis. There were cases also in which no local application or curette could cure. He instanced two such cases. But injections were not dangerous; even strong ones could not do harm if the uterus was previously dilated so as to allow escape of fluid injected. He however differed from Dr. Herman as to the great difficulty of diagnosis in chronic cases, if the nervous distribution were borne in mind. In most of these cases the fundus was affected, which being supplied by nerves from the renal plexus and ovary were most likely to produce the reflex symptoms mentioned as difficult to differentiate.—Dr. Graily Hewitt said that the subject of "fundal endometritis" embraced a consideration of fundamental uterine pathology. The causes of congestion of the uterus had to be regarded. The most common causes were associated overfulness of the mucous membrane recurring month by month, general systemic feebleness of circulation and, locally, sluggishness of uterine circulation, due to displacement and flexion of the organ. The latter condition, though not essential, was very frequent. The presence of discharge from the interior of the uterus might have two sources, the uterus itself or the Fallopian tubes. The recently acquired knowledge as to the greater frequency of Fallopian accumulations added to the difficulty of diagnosis of the source of the discharge. The discharge as a rule closely followed the menstrual period, and resulted often from slow oozing of secretion, a sort of continuation of menstruation, which gradually passed off, leaving the patient free perhaps for a few days. He believed the best treatment for these cases was to establish free drainage of the uterus. This principle agreed with the one advocated by Dr. Routh of dilating previous to internal uterine medication. His view was that the value of intrauterine treatment, which he considered necessary in some few cases, depended largely on the incidental dilatation, whereby drainage was established. The cases of polypoidal or fungoid endometritis required separate consideration. He related a case where a young lady was affected with severe metrorrhagia and discharge, and fungoid growths were felt at the internal os; the uterus was very large, anteflexed, and the seat of great pain; malignant disease had been diagnosticated. As a preliminary to removal of the growth, vaginal douches and rest in bed, and elevation of the uterus were employed. On proceeding to operate it was found that the fungoid condition had disappeared, showing the condition was one of simple congestive hypertrophy of the mucous membrane. The result was perfectly satisfactory. This was perhaps an extreme case, but he regarded it as very typical.—

Mr. PRIDGIN TEALE considered that the increasing attention that was being given to affections of the interior of the uterus was being productive of great benefit to women suffering from uterine affections. This treatment implied as a necessary step dilatation of the cervix and os internum, and this dilatation he believed to be of itself a great, even in some cases the chief, factor in giving relief. Further, the fact that such dilatation could be done at one sitting, under anæsthetics, and without any previous use of dangerous tents, rendered it possible to examine and relieve many cases which formerly would have continued to suffer for years, imperfectly relieved by other methods.—Dr. ROBERT BELL considered that endometritis was not a rare disease. With regard to the diagnosis, he considered there was not much difficulty. In fact, it might almost be diagnosed by the subjective symptoms alone. For example, if a patient complained of a bearing down sensation, accompanied by pain and a burning sensation in the pelvis, acute suffering over the sacrum, dysmenorrhœa, a copious purulent or muco-purulent discharge, and an irritable condition of the bladder and bowel, and also suffered from lowness of spirits, irritability of temper, disturbed sleep, on a vaginal examination the uterus would be ascertained to be hyperplasic and flabby, while from the os a copious purulent or muco-purulent discharge would be seen to exude. In addition, there might be exaggeration of pain in the pelvis at the menstrual period; in consequence of this aggravated congestion, there was coagulation of the blood occurring at the moment of its exudation which necessitated the clots being expelled by uterine contractions. The inflammatory condition might be so acute that coagulation actually took place within the lining membrane itself, and thus there would be, if not absolute absence, yet paucity of discharge, and from the same cause there might be an absence of catarrhal discharge also. He held that salpingitis never occurred without a prior endometritis having existed, and that the inflamed condition of the tubes was due to the inflammation having spread by continuity of tissue. In treatment, the first object must be to dilate the os internum, then to swab out the uterine canal, and apply freely some form of stimulating antiseptic (iodised phenol).—Dr. MORE MADDEN (Dublin) believed that endometritis was probably the most frequent of the diseases met with in gynæcological practice. He desired to point out the facility with which it might be cured. The essential points of that treatment were the following: First, the uterine cavity was made accessible by rapid dilatation of the cervical canal with his own form of dilator. Secondly, the disease of the endo-uterine membrane was thoroughly curetted. Thirdly, the denuded surface was brushed over with iodised phenol. Fourthly, the generally hypertrophied uterus was supported by a properly fitting Hodge's pessary, so as to take off the weight and lessen the congestion of the diseased organ. Fifthly, the patient's general health was carefully attended to by appropriate constitutional treatment in every case.—Dr. BRAITHWAITE divided the treatment under the following heads: 1. Position of patient for examination. Dr. Braithwaite considered Mr. Teale's plan of putting an unmarried girl into the lithotomy position unnecessary; but it was proper in some cases of aggravated endometritis in married women. 2. Dilatation to an excessive amount was not necessary. The 16 of Hegar mentioned was quite beyond what was required in unmarried women. At the Leeds Infirmary he used Duke's stem to produce free drainage. 3. Curetting should not, as a rule, be used, because the hæmorrhage interfered with the application of caustics at the same sitting. 4. As to caustics, besides the carbolic, so generally found advantageous, he used iodine, iodide of potassium, and spirits of wine, equal parts, whenever the uterine cavity was enlarged as well as diseased.—Dr. M. HANDFIELD-JONES called attention to the various stages of the disease and the importance of recognising these in reference to treatment. In the early weeks of endometritis hæmorrhage (either menorrhagia or metrorrhagia) was a prominent symptom, and, on vaginal examination, the uterus was found large, soft, and tender. At this stage rest, leeching, and hot douches probably sufficed to effect a cure. In the majority of cases, however, the disease had advanced to a chronic stage before the patients came under treatment. In these patients nothing did any good but dilating the cervix, and following this up by scraping with the dull wire curette, and then rubbing iodised phenol thoroughly into the bared tissue. In cases where there was a well-marked history of gonorrhœa, it was well to pass rod-shaped suppositories of iodoform into the uterine cavity at intervals of two or three days after the dilatation. Three or four applications of these suppositories generally proved sufficient.—Dr. DUKE had always considered that the essential point in the treatment of endometritis was the securing of free drainage for the secretions by dilatation. In nulliparæ the cervical canal was generally constricted at the inner os. In these cases he recommended the division of the cervix and constricted inner os, thus giving free exit to the discharge. In pluriparæ with lacerated cervix, endometritis often existed with copious discharge, and it might be thought that there must be plenty of exit for discharge, but the inner os would be found closed or rather constricted. It was essential to preserve the patency of the canal in all cases. The spiral wire stem, by straightening the uterus and keeping the parts patulous after the operation of rapid dilatation, prevented the subsequent contraction so certain to follow, just as in similar cases of stricture of the urethra after a similar operation.—Dr. WALKER (Pollokshaws) desired to approach this discussion from the point of view of the general practitioner. Among the various causes stated to produce endometritis, sufficient importance had not been attached to uterine displacement. Uterine displacement was often the first of a series of changes, as congestion and enlargement of the body of the uterus, with intrauterine discharge. In many of these cases, if the displacement was rectified and general treatment was adopted when requisite, recovery ensued without further interference. He thought too much importance was attached to uterine symptoms in females of a peculiar nervous temperament. Treatment of the general nervous condition was, as a rule, the most successful in cases of this nature.—Dr. M. CAMERON thought that the advice to resort to rapid dilatation of the uterine canal should be received with caution, for, whilst this procedure might be carried out freely in many, cases were met with in which rapid dilatation set up very extensive inflammation, which might be so severe that a patient who was formerly able to attend to her household duties was confined to bed for six or seven weeks. As regards the use of an instrument to scrape out any membranes or growths, he preferred a blunt one for general use, although there were cases where the sharp one was preferable. In several cases he had used a wire brush resembling the hair brush used for cleaning a feeding-bottle tube, whilst for medication he had found equal parts of carbolic acid and rectified spirits of wine very beneficial.—Dr. HORROCKS said that whilst it was easy to diagnose some cases of corporeal endometritis, there were others in which it was very difficult. Practically he divided cases into acute and chronic, but he considered that the causes of each of these were multiple. Thus tubercle produced a form of endometritis which was chronic, but which was quite a different disease from that which had been discussed by most of the speakers. He mentioned a case that he had diagnosed as follicular endometritis, and which was afterwards considered by another gentleman as a case of sarcoma, in consequence of which he removed the whole uterus, and this was examined at the College of Surgeons of England, and pronounced to be tubercular endometritis. He mentioned also another case in which microscopic sections of the uterine mucous membrane were exhibited at a Society where considerable differences of opinion were expressed. Whilst agreeing with Dr. Herman in the causes he had enumerated, Dr. Horrocks thought that alcohol was a cause in some instances in which the patient was generally over 40 years of age, and in which hæmorrhages were a prominent symptom. But he thought that the real ultimate cause in these cases was a germ of some kind. The tendency of modern research was to show that chronic inflammatory processes were always due to the presence of some germ or other. If this were the case, this germ must have a life history—a birth, growth, development, reproduction and death. Now assuming the presence of this germ, one could readily understand why the treatment was so successful, and why different methods of treatment were successful, and why more energetic remedes up to a certain degree were more successful than milder means. But even though this germ had not been seen much less its life history worked out, treatment could be adopted with the object of ridding the mucous membrane of the irritating cause. To illustrate this, he mentioned the treatment of thread worms by rectal injection daily in succession until not only all the parents, but every seed as it came to life had been destroyed; in this way a permanent cure could be effected. Whereas if one injection was made, it killed all the parent worms, and did good for a time, but more worms were seen as the ova developed. Acting on this hypothesis, he had treated patients by several applications repeated at short intervals, in order to destroy any developing germs. Finally, he pointed out that surgical procedure was limited; that it was not justifiable, for instance, to excise the rec

tum to cure threadworms, nor was it justifiable to cut the cervix in order to reach the interior of the cavity of the fundus uteri, more especially when they had amply sufficient means for dilating the uterus to enable one to get at the disease.—Dr. HERMAN, in reply, said that the discussion had shown what great differences of opinion existed as to the frequency of corporeal endometritis. He thought the divergence of view depended on the amount of evidence which satisfied different persons as to the existence of corporeal endometritis. There were some who seemed to think that any patient with slightly increased menstrual flow and a little leucorrhœa, and in whom nothing could be found to account for it, had corporeal endometritis. If that were sufficient evidence, then endometritis was common. It was matter of opinion, and he did not say that this view was unreasonable; but he did not accept it, and was quite sure that cases requiring the curette and caustic were not common. Some other cases had been described, in which he should absolutely dissent from the diagnosis, namely, cases in which there was "intense agony." If he saw such a case, he should feel sure there was something else than endometritis. Again, if there was amenorrhœa and no discharge, he should think the diagnosis of endometritis was negatived. Dr. Murdoch Cameron's suggestion to use a rifle brush was a practical one. Dr. Doléris, of Paris, had introduced such an instrument, which he called an "*écouvillon*." He (Dr. Herman) had not yet used it. He could not follow Dr. Duke in advising the use of an intrauterine stem. He (Dr. Herman) should think it a most efficient means of exciting and keeping up endometritis. He was sorry that he could not follow so esteemed a leader as Dr. Graily Hewitt in his estimate of the effects of uterine displacement in causing endometritis, excepting as to backward displacements, a small minority of which he thought did do so. In such cases, all that was wanted was to support the uterus, and then the endometritis would spontaneously get well. He did not assert that febrile diseases in infancy led to uterine disease in the adult; but the occurrence of endometritis in the adult in the course of febrile disease he thought could not now be questioned. The discharges which had been referred to as occurring in children he thought due to vulvitis, not endometritis. He agreed with what had fallen from Dr. Walker as to the mischief of over-estimating the influence of uterine disease in the production of nervous symptoms. He agreed also with Dr. Horrocks as to the probable effect of alcohol in causing endometritis, but he had no evidence of it to bring forward.

CLINICAL REMARKS

ON A CASE OF

ABSCESS IN THE LEFT TEMPORO-SPHENOIDAL LOBE FOLLOWING SUPPURATION IN THE MIDDLE EAR.

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ON the morning of September 11th, 1889, I was asked by Dr. Wood, of Enfield, to see a case of old-standing disease of the ear in which acute symptoms had developed a few days previously, and, as the symptoms seemed to point to abscess in the brain, we had the patient removed to King's College Hospital without delay.

The patient was a male, aged 26, a coal porter by trade, who had suffered from a chronic suppurative discharge from the left ear for seven or eight years. The patient had been a healthy man, temperate in his habits and in constant employment. There was no phthisical family history. No clear history could be obtained of the commencement of the ear trouble, but he attributed it to the fact that when at work he always wore a leather arrangement on his head the buckle of which pressed on and hurt his left ear. He had on two previous occasions had severe attacks of pain in the left temporal region which laid him up on each occasion for about a fortnight; one of these attacks occurred three and a half years ago and the other last spring, but beyond the fact that he had very severe pain in the left ear and temporal region, and that on the last occasion there was some swelling in the neck, he could tell nothing definite. Both attacks passed off without any special local treatment and left him apparently quite well with the exception of the persistent and foul-smelling discharge from his ear.

On the evening of September 7th, 1889, that is, four days before his admission into the hospital, intense pain began in the left temporal region apparently without any definite cause. On the following day, September 8th, he had two rigors. On September 9th he vomited twice, and on September 10th his friends say that he had a fit, though it was impossible to extract from them any intelligible description of it, and the patient himself was not aware of having had one. There certainly were no convulsions. His bowels had been constipated.

The patient's condition on September 11th, was as follows:—He complains of severe and constant pain of a dull aching character which he refers to a small area in the left temporal fossa a little above the zygoma; a circle about an inch and a half in diameter would cover the area of pain. He feels ill, has no desire to leave his bed, and if he gets up he feels giddy. He can see quite well and is perfectly rational, his speech is not slow. Pupils equal and react equally to light; no optic neuritis. No paralysis of ocular or other muscles. Tympanic membrane destroyed and polypi springing from its posterior attachment; sound conducted through the bone is referred to the left ear. With watch, on right side hearing distance considerable, on the left faintly on pressure. The painful area in the temporal region is also tender to pressure; there is no swelling or tenderness over the mastoid region or along the jugular vein. Temperature on admission 99°. Pulse 56. Tongue brown and somewhat dry; lungs, heart, and urine normal; bowels constipated; patient not emaciated.

I had a very strong suspicion that the condition of the patient was due to commencing abscess formation in the temporo-sphenoidal lobe, but as the actual symptoms which warranted such a diagnosis were very slight and as there was a profuse fœtid discharge from the ear which would render it a difficult matter to keep the trephine wound aseptic, I determined, on carefully thinking over the case, to delay operation till we saw what course the case followed. Purgatives were ordered and the ear was to be frequently syringed out with boracic lotion.

September 12th. Patient has slept fairly well, but his symptoms remain on the whole unaltered. He thinks the pain is somewhat less and he feels brighter. Dr. Pritchard kindly saw the case with me to-day and removed a polypus, and ordered a blister behind the ear and leeches in front. Temperature, morning 99.6°, evening 98.2°. Pulse 56.

On September 13th and 14th, the patient remained in much the same general condition, but on the 14th he told us that the pain had shifted from the temporal to the occipital region and was more diffuse, but that on the whole he felt rather better. The pulse was still 56 and the temperature normal.

I had to go out of town till the 16th, and consequently did not see the patient again till that day when I received the following report from my house-surgeon. The patient passed a fairly good day on Saturday, the 14th, till the evening. On taking the temperature at 6 p.m. it was found to be 101° (the highest temperature previously was 99.6° on the 12th), and at 7.30 it was 101.8°. At 8.20 he suddenly commenced rolling about and moaning as if in intense pain; he said the pain was all over his head. At 8.30 he began to be delirious. Antipyrin was given and he was quieter till 11 p.m., when he became quite delirious, trying to get out of bed, saying he was going home, and moaning. He remained in this condition all night, dozing however, at short intervals. He vomited twelve ounces of fluid at 12.30 A.M. (the first time he had vomited since admission) During the night there was also twitching of the left eyebrow and left angle of the mouth. Pupils equal, not dilated and react to light; face flushed; tongue furred; mouth and lips dry. On September 15th, pulse was 56 and the temperature remained about 100.4° all day, falling however to 99° at midnight. Bowels emptied by enema and bromide of potassium given at intervals. Patient was more delirious but took two pints of milk, two eggs, and Brand's essence during the day, and in addition a zyminised nutrient suppository was administered. During the early morning of September 16th, he continued in much the same condition, constantly trying to get out of bed and very noisy. Face twitched more than on the previous day. In the morning the pulse was 52, feeble and

irregular, and the temperature 100.6°. There was retention of urine. During the forenoon he became somewhat quieter.

When I saw the patient in the afternoon, I found him quiet, unconscious, and muttering. Pulse about 50, very feeble. Temperature 101.2°. About a quarter of an hour before I came into the ward, a severe rigor had begun and it was still going on when I saw him. The patient was at once taken into the theatre and chloroform administered. When the patient was fully under the influence of the anæsthetic, it was seen that while the right pupil became contracted the left remained in a state of medium dilatation. The scalp being shaved and thoroughly disinfected, I trephined the patient, using a one-inch trephine, at the point mentioned by Mr. Barker, viz., an inch and a quarter behind the centre of the auditory meatus, and the same distance above the base line. On removing the circle of bone, the dura mater at once bulged into the opening, and no cerebral pulsation could be felt. The bone and dura mater were healthy. On dividing the dura mater the brain bulged out, the surface being smooth though congested. There was no meningitis. I then passed a hollow needle into the brain, directing it inwards and slightly forwards, and I had not pushed it in more than half-an-inch when there was a spurt of thin, intensely fœtid pus through it and by the side of it. The opening was then carefully enlarged by a sharp spoon, the contents of the abscess evacuated, and some degenerated brain substance scraped out. The cavity extended inwards and somewhat forwards. A piece of a silver catheter rather more than two inches in length and with a slight forward curve was inserted, the rest of the wound stitched and antiseptic dressings applied. The pus was not collected, but measured probably about half an ounce, was thin and of an intensely fœtid or rather fæcal odour; I have never, I think, smelt anything so foul.

After the operation the patient remained fairly quiet till 8.30, when he became restless and was sick. The dressing was changed at 10 P.M. (I thought it advisable to change the dressings twice daily on account of the close proximity of putrid ear discharge), and as I found the catheter blocked with brain *débris*, I substituted for it a medium-sized rubber tracheotomy tube, a small piece being cut off its length, and a couple of holes at two places to permit drainage. As the patient could not be fed by the mouth, zyminised suppositories, alternating with nutrient enemata, were administered. Temperature 99.2°; pulse 65.

September 17th. Patient has passed a restless night and was very noisy in the early part, but quieted down after three-drachm doses of succus conii. In the morning he drank some milk himself, but he could not be said to be conscious. The temperature rose at 5 A.M. to 101°, but had fallen at 9 A.M. to normal; it rose again in the afternoon till it reached 102.2° at 7 P.M. when it began to fall again. The pulse averaged about 82 during the day. Bowels moved by enema. Nutrient suppositories and succus conii continued. Has still retention. There has been no twitching of the face since the operation.

September 18th. Patient has passed a very restless night and has been very noisy. Left side of face twitched a little, but not nearly so much as before the operation. He does not seem to understand what is said to him. Passed water in bed during the night. Not much discharge from the wound, but what there is has still a fæcal odour; wound looking well. Pulse in the morning 84. The temperature fell at 9 A.M. to 98.8°, but towards the evening it began to rise again, and at 7.30 was 101°. At 9 P.M. patient had a severe rigor lasting twenty minutes, and at 9.20 the temperature was 104°. At midnight he was raving wildly and was very restless. Twenty grains of quinine were given at 9.30. He passed urine himself during the day.

September 19th. About three o'clock in the morning patient became quieter and has passed a better night. He seemed more conscious this morning; he told the time by a watch after several attempts. The temperature steadily fell shortly after the rigor yesterday evening and was normal at 11.30 A.M. (pulse 80); but it soon began to rise again, and at 4.20 P.M. patient had another rigor lasting half an hour. At 5.40 P.M. the temperature was 103.4°. Bowels cleared out by a glycerine enema. Takes food readily. Quinine and bromide of potassium continued. Has had no twitching. The wound is looking well, but the house-surgeon in changing the dressing last evening applied a quantity of moist alembroth guaze next the skin, and the whole skin as far as the dressing extended is red and œdematous and painful to the touch, and at the most dependent part of the dressing (posteriorly) the skin is blistered.

September 20th. The temperature at 11.45 A.M. had fallen to 98.8°; pulse 80. Was restless and noisy in the early part of the night, but has been quieter since 4 A.M. There has been no twitching of the face. Much more conscious to-day. Takes notice of what is going on in the ward. Speaks very slowly and when asked a question replies correctly as regards the first two or three words and then apparently forgets what he was going to say and talks nonsense; asked to write his name, he puts down the first two or three letters correctly and then a number of letters at random. Skin very œdematous and painful under the dressings and several raw places towards the edges. Is now taking quinine and sulpho-carbolate of soda, also bromide of potassium. Feeds himself fairly well by the mouth, but the zyminised suppositories are still continued every four hours. At 7.10 P.M. he had another rigor lasting seven minutes, and at 9 P.M. the temperature was 102.4°. Pulse averaged 88.

September 21st. Has had a much quieter night, and has slept very well. Temperature at 2.30 was 98.20. Pulse 80. There is apparent improvement in attention and consciousness as compared with the previous day. At 2·35 a rigor began, lasting twenty-five minutes and at 3 P.M. the temperature was 101.40. The eyes were examined for the first time since he became delirious. There was no optic neuritis and there has been none. The margin of the right disc is well defined; that of the left is not quite so clear.

September 22nd. Told the time by the clock at 6 A.M. Became more restless at 10 A.M. and is not looking so well. Tongue dry. Twitching of left eyebrow and left angle of the mouth. Pulse 90 to 96, weak, dicrotic, and slightly irregular. Not much discharge; rubber drainage tube substituted for the tracheotomy tube. The rest of the wound had healed. Still a good deal of œdema and tenderness over the left side of the head. Dr. Dalton examined the patient to-day but found no evidence of pyæmia. The lung sounds are normal; no cough; no joint affections; heart sounds normal; no jaundice or tenderness over liver. No strabismus; no cranial nerve paralysis. Patient was less conscious throughout the day. and was a good deal excited after a visit from his wife. The temperature rose at 2 p.m. to 101.4°, but had fallen to 98° at 8 p.m, No rigor.

September 23rd. Patient has had a quieter night and has slept a good deal. There has been no twitching of the face. The temperature, which at midnight was 98.2°, steadily fell, till at 11.15 A.M. the mercury did not rise in the thermometer. The patient at that time was very collapsed and the pulse very feeble and irregular, 97. Brandy was given every half hour and the temperature soon rose, but remained subnormal (at 97° or a little over) all day. There was more discharge from the ear to-day but very little from the wound. Right hemiopia was found by Dr. Ferrier. Patient could not be said to be conscious. Tongue dry.

September 24th. Was restless during the night. No twitching. In the morning he answered less rationally and appeared more drowsy. As the day went on he became more unconscious and very restless, his chief action being kneeling in bed and burying his face in the pillow; he also always lay on the right side. Lungs and heart normal. Pulse very feeble, about 80. Temperature averaged 97.8° during the day. At 5 p.m., after consultation with Dr. Pritchard, I gave the patient chloroform and passed a hollow needle into the brain in various directions in search of pus, but failed to find any. I then opened up the mastoid cells, but there was no accumulation of pus in them. After the operation he remained in much the same condition. He could open both eyes widely. The temperature still remained at or below 98°.

September 25th. Very restless night, getting up in bed and pushing the clothes off but not noisy. Only slept two hours and three quarters during the night. When at rest always lay on the right side. Quite unconscious and irritable when touched. The left eyelid has only been half raised since 3 A.M. Pupils equal and react to light. No squinting. No facial paralysis. Pulse very feeble and compressible, 84 to 94. Temperature up till 2 P.M. was at or just below normal, but afterwards rose and was at 6 P.M. 101°. It soon fell and at 9 P.M. was 99°.

September 26th. Very restless during the night, tossing and turning, but he made no sound at all. Passed water in bed three times. No cough. Pulse about the same as yesterday. Quite unconscious. Tongue coated and dry. Partial ptosis on left side as yesterday. Pupils equal and react to light. No facial paralysis. Since early in the morning he has not moved the right arm or leg. Patellar and plantar reflexes very active on both sides. Wound seems all right, very little discharge. Œdema of scalp still present, but decreasing. Temperature rose at 5.30 P.M. to 101.2°. Pulse 84 to 96. No paralysis of sensation.

September 27th. Slept better and moved his right arm and leg frequently during the night. Seemed somewhat brighter to-day. After being washed in the morning sat up and looked round the ward. Passed a better day and took food better. Ptosis less marked. Pulse 92 to 96. In the early morning the temperature was normal but rose about noon to 101° and continued about that height till 9 P.M., when it began to fall and at midnight it was 99°.

September 28th. Very restless night. Moved right leg frequently during the night, and put right arm over his head once. Has slept better. Ptosis has disappeared. Has not spoken but has moaned a little. Very little discharge; drainage tube shortened. Temperature subnormal almost all day, being 97° in the morning and only once rising to normal. Pulse 70 to 92.

September 29th. Slept better and takes nourishment well, noisy during the night. Still not conscious. Moved right hand and arm frequently. Retention of urine. Not much discharge, but on moving the drainage tube which went into the brain several drops of pus escaped by the side of it but whence it came could not be ascertained. Eyes examined by the ophthalmoscope. Left disc very suspicious, looks like commencing neuritis, right also somewhat suspicious on the nasal side. Temperature averaged about 97.8°. Pulse 80 to 96. Bowels cleared out by glycerine enema.

September 30th. Passed a better night. Taking nourishment well. Passed water himself and asked when he wanted to. Mr. McHardy saw the patient and gave the following report: "There is definite effusion about edges of the left optic disc and a suspicion of the same on the right side, but of this disc the patient allows no steady view." Much more sensible; knew his wife. Right hemiopia marked. No alteration in sensation. Dr. Ferrier saw the patient to-day and advised cold to the head, and Leiter's tubes and afterwards an icebag were applied but they did not work well, as the patient pushed them off. Discharge from the wound still slight and no more pus. The highest temperature was 99.6°, the average about normal. Pulse 84 to 90.

October 1st. Fair night. Slept well. More sensible to-day. Wet bed once during the night. Temperature averaged normal. Pulse 80 to 90.

October 2nd. Slept very well. More sensible but still gets up on his hands and knees a good deal. Takes nourishment well. Bed wet once during the night; at other times he asked. Average temperature normal. On changing the dressings it was found that the drainage tube had been pushed out. Sinus forceps were passed into the brain inwards and slightly backwards for about one inch, and on expanding the blades from one to two drachms of thin pus came away; the pus had no foul smell. A drainage tube about two inches in length was introduced into the cavity.

October 3rd. Slept well; only once tried to get up on his hands and knees and only wet his bed once. Has had some cough. Seen by Dr. Ferrier. Word deafness. When told to put out his tongue he did so, but when asked to put his hand over his eye he either did not do anything or put out his tongue. Tactile sensibility unimpaired. Right hemiopia still persists. Left optic disc shows increased vascularity about the edges; this is less marked on the right side. Temperature normal. (I may say that from this date the temperature ranged between 97° and normal, and, therefore, I need not again refer to it).

October 4th. Fair night; cough very troublesome during the night; not so restless. More sensible to-day; said "Good morning," and when asked replied that he felt pretty well; when told to put his hand over his eyes he did so at once. No dulness over the lungs. Very little discharge.

October 5th. Fair night; cough still troublesome. More sensible. Read a few words from a newspaper. Speaks very slowly. Talkative, but talks a good deal of nonsense.

October 6th. Progressing favourably. More rational. Still some right hemiopia, but much less marked. Hand grasp on both sides good: right a little weaker. Limbs equally strong.

From this date patient made steady progress, gaining in intelligence daily. On October 12th, the tube which passed into the mastoid cells was left out. On October 14th, the drainage tube in the brain was shortened; the hemiopia was much less marked; he could now converse fairly intelligently, his speech being still slow; he sits up in bed most of the day. The tube was again shortened on the 17th, and on the 21st he was allowed to get up for the first time. His conversation was then much more coherent. The discharge from his ear was less. (I may say that since the operation his left ear had been syringed out several times daily with 1 to 2000 sublimate solution, and a ten per cent. emulsion of iodoform in glycerine injected.)

On October 25th, the drainage tube leading into the brain was left out; there was no hemiopia and the optic discs were improving; his mental condition was steadily improving. On November 3rd, the wounds were nearly healed and were dressed with a small piece of carbolic gauze, fixed on with collodion. On November 18th, both wounds (brain and mastoid cells) were found healed.

On November 28th he was transferred to Dr. Pritchard's care for the treatment of his ear trouble. The note at that date is as follows: "The patient is now quite rational in his conversation and takes an interest in everything around him. His speech is still somewhat slow, and a moment or two elapses before he replies to a question. His memory is also improving; he says that ten days ago when he read the morning paper he forgot almost immediately what he had read, but he now finds that he remembers a good deal, and his memory improves every day. There is still a good deal of discharge from the ear, and polypi are still present."

Dr. Pritchard made the following note yesterday. "$\frac{\text{R fairly normal.}}{\text{L. not on P.}}$ Tuning fork on nose referred to left side; $\frac{\text{R}}{\text{L}}$ T. F. (mastoid) $\frac{3''+}{4''+}$." His appetite is good and he feels quite well. Four days ago Mr. McHardy examined his eyes and made the following note: "Discs clearly seen. No present optic neuritis. Some pigmentation around disc edges. Retinal vessels vary rather suddenly in focus at disc edges as if in consequence of former displacement by neuritic swelling."

I do not propose to-night to discuss the general subject of abscess of the brain after ear disease, but there are some points in this case to which I should like to refer shortly. The following seem to me to be the main stages in the case, which are of interest from a surgical point of view. The general absence of symptoms for three days after admission, the supervention of delirium and twitching of the face, the operation, the gradual improvement in the general condition of the patient for five days after the operation with the exception of the rigors, the occurrence of the rigors, the subsequent relapse of the patient and the marked depression of the temperature, the temporary paralysis of the levator palpebræ and of the arm and leg, the recognition of the word deafness and hemiopia and the neuritis, the escape of a little pus and the subsequent improvement and the discovery of the second collection with the steady convalescence afterwards.

The first question is: Ought I to have trephined the patient at once when he was admitted? When I first saw him my suspicion of abscess in the temporo-sphenoidal lobe was so strong that my first impulse was to trephine at once, and, as the sequel showed, I should thereby have probably saved the patient from his subsequent severe illness and his imminent risk; it does not, however, necessarily follow that because this was the sequel the symptoms were, therefore, sufficient to justify immediate operation. The symptoms which pointed to abscess were negative rather than positive; the history of the attack indicating some acute process, the entire absence of tenderness about the mastoid or any apparent external cause for the symptoms, the normal temperature and possibly rather slower pulse, and the positive sign of pain in a region previously remarked in several cases as being the seat of pain in temporo-sphenoidal abscess, led to the suspicion. I doubted if these symptoms were sufficient to warrant trephining without allowing a reasonable time to elapse to watch the progress of the case; it is pretty certain that had there been no discharge from the ear temporo-sphenoidal abscess would hardly have been suspected. The patient also stated that on the two previous occasions the symptoms had been somewhat similar. What mainly deterred me, however, from immediate operation was the presence of the profuse septic discharge from the ear which had soaked into the scalp on that side, and the consequent fear that I might not be able to keep the wound I made aseptic, and I felt that I ought to have pretty definite grounds for my diagnosis before subjecting the patient to that risk. I thought it wiser, therefore, to wait, making up my mind to operate as soon as any further sign appeared indicating intracranial disease. As a matter of fact, the subsequent elevation of temperature, delirium, and twitching of the face did not materially add to the signs of temporo-sphenoidal abscess; on the contrary they rather indicated meningitis, but they furnished the evidence of intracranial disease for which I was waiting, and therefore, the

first place where I looked for the pus was in the temporo-sphenoidal lobe. The subsequent progress of the wound showed that I had over-estimated the danger of sepsis from contamination from the ear. It has been a constant source of regret to me that I was out of town on the Saturday evening when the symptoms supervened and therefore could not operate at once. It is also a source of regret to me that the case occurred during the holiday season, when all the physicians, except one, were away, and the message which I sent asking him to see the case never reached him; I was, therefore, left to my own unaided resources. The question which is of chief importance in these cases, and that on which I hope we shall have the opinion of some of the Fellows present is, What is the minimum of symptoms which justifies exploratory trephining?

One word also as to the position of the trephine opening, a point about which there has been a good deal of controversy. It seems to me that it is not possible to indicate one point which will suit all cases. In this particular instance I selected the position indicated by Mr. Barker, because, from the entire absence of symptoms localising the abscess, I concluded that it was most probably situated about the middle of the temporo-sphenoidal lobe.

The cause of the rigors is not by any means clear. I naturally at first concluded that pyæmia had set in, but the further progress of the case negatived this view. There was no evidence at any time of thrombosis of the lateral sinus. The diagnosis was made still more perplexing by the swelling of the scalp which followed the application of the alembroth gauze, and to some who saw the case this swelling seemed to indicate a suppurative periostitis or osteomyelitis extending from the trephine hole. This was a view which I could not, however, accept, for the swelling of the scalp was coextensive with the dressing from the first, that is, occupied about half the scalp, while I should have expected an osteomyelitis to be limited to the temporal bone; and further the dermatitis which was evidently present exactly resembled what one had previously seen from the action of sal alembroth on the skin in other parts of the body.

The meaning of the temporary paralysis is also obscure. At first it seemed to point to a purulent leptomeningitis, but the ultimate recovery of the patient seems to preclude that view, and I presume it must have been due to some temporary congestion of the cortex of the brain, probably in connection with the formation of the second collection of pus, or possibly the result of probing the brain with the view of finding pus.

Lastly we have to note the formation of a second collection of pus, which might either have been reaccumulation in some diverticulum of the original abscess, which was not perfectly drained, or an entirely fresh formation in the neighbourhood of the original collection. I am inclined to take the latter view, because the second abscess was situated distinctly further back and higher up than the first, and it seems to me that the rigors, relapse, and other symptoms which afterwards developed were mainly connected with the formation of this second abscess. In connection with the opening of this second abscess there is one practical point to which I think it is worth while to call attention. I searched the situation of the abscess a few days before it was opened with a hollow needle and failed to find pus; a few days later I introduced sinus forceps and on expanding the blades, pus at once welled out. Now I have found on several occasions, and also in this case, that when a hollow needle is passed through healthy brain tissue it at once becomes filled with a plug of brain material, and even though it enters a collection of fluid, unless that fluid is under high tension, this plug is not forced out, and the fluid may remain undetected. On the other hand by using fine sinus forceps much less injury is done to the brain and, by expanding the blades from time to time, if fluid is reached it will certainly appear at the surface. I venture therefore to recommend the use of long sinus forceps in place of hollow needles when one wishes to search for collections of fluid in the brain.

Dr. Alexander Macgregor, Assistant Physician to the Aberdeen Hospital for Sick Children, has commenced the publication of a series of demonstrations in clinical medicine. They are intended for students attending his *clinique*, and are given to them gratis. Their issue is promised at regular intervals. The first is a demonstration of a case of hemiplegia, with illustrated diagrams and clinical commentary. There appears to be a general desire among students that teachers might publish more fully in this form.

REPORT OF AN EPIDEMIC OF INFLUENZA (140 CASES) OCCURRING AT THE ROYAL ASYLUM, MORNINGSIDE, EDINBURGH.

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AND
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Assistant Physicians.

We here record, with the permission of Dr. Clouston, our experiences of a severe outbreak of influenza, occurring in this asylum. As assistant-physicians in an asylum we have had the advantage of seeing our cases from the very commencement of the attacks, and of following them to the end. Our observations have also been made on a population of both sexes, and of known numbers.

	Male.	Female.	Total.
Patients	407	410	817
Officials	71	104	175
Total	478	514	992

Commencement of Outbreak.—During the second and third weeks of December, scattered cases of illness, which we did not at the time differentiate from ordinary colds, occurred; but during the fourth week of the month we became certain that the epidemic was amongst us, by the daily invasion, by the numbers attacked, and the nature of the symptoms. By the end of the first week of January there had been about fifty cases, and during the second week about sixty more were added to the list. Since then the cases have been fewer in number, and at the present time (January 24th) we have only two or three cases, excluding those still suffering from sequelæ.

General Summary of Symptoms.—The symptoms have been extremely various and numerous, but we have noted the following as the principal ones. The symptoms which almost always occurred were frontal headache and bodily pains. The headache was sometimes very severe, and was accompanied by giddiness. It almost invariably passed away in twenty-four hours. The pain most complained of was in the lumbar region, resembling lumbago, but this was usually accompanied by neuralgic or muscular pains in many other parts, especially in the legs. These pains were much more persistent than the headache, and occasionally remained during convalescence. A slight respiratory catarrh usually accompanied these symptoms. There was a dry cough, with a tough scanty sputum, and there was coryza with suffusion of the eyes. The "running" from the eyes and nose, though often present, was not very prominent in our cases, nor was sneezing a marked symptom. The temperature was an important guide, and at the beginning of well marked cases was almost always above 100°. The attack was marked by suddenness of onset and a few hours before the headache and rise of temperature occurred the patient appeared and felt in his usual health. A slight rigor or a feeling of chilliness usually ushered in the attack. After a duration of about three days, during which time the symptoms gradually disappeared, the temperature fell to the normal. The convalescence was slow, and was marked in almost all cases by extreme weakness.

Having given an outline of the disease, we will now describe in detail the various symptoms.

Analysis of Particular Symptoms.

Cerebral Symptoms.—The frontal headache has already been mentioned as being the most constant, and it was also the symptom most complained of. Along with this there was always a disagreeable feeling described as giddiness, lightheadedness, or swimming in the head. The highest nervous functions were affected. There was generally considerable mental depression, and a complete "giving in" to the disease without desire or ability to resist, the patient at once taking to his bed. There was also amongst the sane a want of attention and concentration of thought, so that reading and discharge of business was rendered impossible. This often persisted for a day or two after recovery. The sleep, especially during the first night of the disorder, was disturbed by disagreeable dreams, and in four of our cases delirium occurred. Most cases complained of sleeplessness, and in four cases there was persistent insomnia neces-

sitating the use of hypnotics. In cases of delusional insanity, especially of the suspicious variety, the mental symptoms were aggravated.

Neuro-muscular Symptoms.—Pain in the lumbar region has been mentioned amongst the constant symptoms, and was nearly as distressing to the patient as the frontal headache. Pains of a similar character might exist in any region of the body, the patients often saying that they felt as if they "had been beaten" all over. Next in frequency to the back, the calves of the legs and the thighs were most affected by the pains, and in one case (a female nurse) this symptom was so severe as to induce a hysterical condition. Usually there was no increase of pain on pressure. There was often a deep-seated aching of the bones of the extremities, and only very seldom were the pains localised at the joints. The pains were often of a purely neuralgic character, rarely localised to one spot, and generally of a darting and shooting character in the limbs. Intercostal neuralgia was complained of, and also aching pains in the eyeballs, increased on pressure. The feeling of water being poured down the back, as well as flushings of heat, were frequently noted, and these symptoms often persisted during convalescence. During the attack there was a feeling of muscular weakness, in many cases amounting to prostration, and in six cases there was fainting. During convalescence there was almost invariably great weakness complained of for two or three days, so that fainting has also occurred at this period. This muscular weakness we consider a most important symptom of the ailment. It was alluded to without suggestion by almost all the patients, and by statistics we found it to be the most frequent symptom. After the attack the handwriting was shaky and deteriorated and the gait occasionally unsteady, even when marked weakness had disappeared. The convalescing patient was quite unfit for either mental or bodily work. Marked rigors were rare, but in the large majority of cases slight ones occurred. Patients seldom referred to them unless directly questioned on the subject.

Alimentary Symptoms.—The appetite was always impaired, and in many cases there was loathing of food and nausea. Vomiting was frequent as an initial symptom, and in some cases continued for a day or two, and caused great exhaustion. Constipation often occurred, while in a smaller number of cases there was diarrhœa, in two cases with blood in the stools. The diarrhœa was hardly ever an initial symptom; it was sometimes preceded by constipation, and was readily set up by laxatives. Flatulence was a common symptom, and was accompanied by severe "colicky" pains. In some cases there was pain and tenderness on pressure in the region of the liver. The tongue was very slightly furred in the majority of cases, but in those with severe abdominal symptoms there was a thick creamy fur.

Respiratory Symptoms.—The symptom of cold in the head was frequently, but certainly not invariably, present. If there was a discharge it was slight, watery, and only of a few hours' duration, although it might recur. Sneezing was rare. The conjunctivæ were suffused in many cases, and there was often slight lachrymation. In those cases in which the above symptoms were well marked, there was swelling of the nose, accompanied by a redness and swollen appearance of the eyelids. Epistaxis occurred in two cases. Slight transitory hoarseness and sore throat were often complained of, and on examination only congestion of the pharynx and tonsils was observed. Over three-fourths of the cases complained of a dry cough; it was occasionally troublesome, and generally persisted well on in convalescence. The sputum was scanty, tough, and difficult to get up, and was not present during the first day or two. Pain in the chest, as in bronchitis, was sometimes complained of. Examination of these cases always revealed sparse dry *râles*, and in some cases moist *râles*, at the bases. Several of these cases passed into acute bronchitis, pleurisy, and pneumonia, and all the fatal cases were due to chest complications.

Circulatory Symptoms.—During the fever the pulse was of course quickened, and during convalescence it was soft, small, and weak, but we observed nothing else of special value regarding it. As regards the condition of the heart, a most serious and not infrequent complication was dry pericarditis. The skin was usually congested, and over the face and trunk, more especially, there was a reddish flush when the temperature was high. The face had occasionally a dusky congested look. No decided eruption was noticed, but in three cases there was herpes labialis. The patients complained greatly of waves of heat and cold passing over the body, accompanied by periodic copious perspirations. This latter symptom was much more marked than in ordinary febrile states, and indeed persisted after the temperature reached the normal.

Urinary Symptoms.—Observations on the urine under the circumstances were necessarily imperfect, but in two cases there was acute catarrhal nephritis.

The *Temperature* was an important guide, and was always above 100° in a typical case. When there were no complications it was always higher the first evening than subsequently, and throughout the attack the evening was almost invariably higher than the morning temperature. Unless there were complications we found the temperature fell gradually, with evening remissions, till it reached the normal. In four cases without any apparent complication it was above 104° at first; in fifteen cases, or about 10 per cent., it was above 103°, but, in the vast majority of cases, the temperature at its highest was between 100° and 102°.

The *duration* of typical cases, judging by the temperature, was from two to five days, and on an average about three and a half days. The symptoms are almost invariably much abated after the first day, although, like the temperature, there is an aggravation in the evenings. We must here mention that we have had somewhat numerous cases, showing some of the symptoms of influenza in a mild form, such as coryza, headaches, or pains and aches. In these cases the temperature might be a few points above normal, but the symptoms passed off in a day or so, and the patients did not require to go to bed. These cases are not included in our statistics.

During *convalescence* the patients felt well whilst in bed, and were very anxious to rise, but on getting up discovered that they were exceedingly weak and giddy. When they attempted to go about and do work they found themselves by evening completely exhausted. They still remained subject to shiverings, flushings, and perspirations, and there was a liability to relapse.

Sequelæ.—The rheumatic pains in some parts of the body might last for some days or a week. Several cases complained of sore throat, and the majority had a slight cough for a week after the attack. Anæmia to a greater or lesser extent was always present, and although all lost weight during the illness, some, especially those with abdominal symptoms, became much reduced and very weak. The appetite remained very poor.

Relapses.—So far we have had 13 relapses, 9 being males, and 4 females. In other words, of the 140 attacked, 9.2 per cent. have relapsed (12.3 per cent. males, and 5.9 per cent. females). As a general rule the second attack was more serious than the first, and headache and fever always recurred. The majority of cases had a severe pulmonary attack (bronchitis or pleurisy), and in nearly a half diarrhœa occurred. In all relapsed cases there was some distinct exposure to cold air, usually by going out of doors too soon, and in no case did a relapse occur so long as the patient was in bed or strictly confined to a heated room. The period elapsing between the exposure and the symptoms of the second attack was very short; in 4 of the 13 cases the relapse occurred the day after going out of doors, and in 3 others it occurred within 24 hours of leaving the heated sick room for the purpose of going to the water-closet, where ventilation is active. Our opinion of the period of incubation of the first attack is that it is very brief, and that its duration is within 24 hours, though we have few definite observations on this point.

Complications.—The most frequent complication, and one which occurred in all the fatal cases, was a species of pneumonia. It occurred in 14 cases, 13 males and 1 female, of which 10 males have died, and one more male is likely to succumb. It attacks both bases as a rule, and is accompanied by a high temperature, always above 104°, in three cases 106°, and in one case 108° previous to death. It must be remembered, however, that some of these were cases of general paralysis of the insane, in which the temperature might rise from nervous causes. The pneumonia was not of the pure croupous variety; bronchitis always preceded it, and it seemed to be rather a spread of the inflammatory process to the terminal tubules of the bronchi, and finally to the alveoli. The condensation was gradual, and the respiratory accompaniments were always crepitations of the median coarse variety, with a few dry *râles*. The sputum, though fibrinous, was frothy, and, though occasionally streaked with blood, was never rusty-coloured. Bronchitis, though not so serious a complication, was a more common one, and frequently required active treatment. Pleurisy, always the dry form, occurred in several cases, sometimes singly, but generally accompanying the pneumonia. Pericarditis was discovered in 5 of the 10 fatal cases, and in one other case. In 2 there has been acute catarrhal nephritis, and in 2 others subacute rheumatism.

Deaths.—There have been 10 deaths, all male patients. The main cause of death in all these cases has been the pneumonic condition, assisted greatly, however, by the very weak general health of the patients attacked. All of the 10 cases were insane patients, and of these 6 were suffering from general paralysis and were in the third stage, 3 were over 70 years of age, and the other was an alcoholic case with very serious organic disease of the heart. It is obvious that no reliable conclusions can be drawn from these numbers which would be of use in general practice, but we give the percentage of deaths to the affected: 7.1 per cent. of the total number affected died; 13.6 per cent. of the males attacked died; and 19.6 per cent. of the insane males attacked died. No female patients, nor any official, male or female, died.

We here append a table of the symptoms in 70 unselected cases (38 males, 32 females), in which accurate observations were made, with the percentage of their frequency:

Great weakness after attack	92.8 per cent.
Frontal headache	88.6 „
Pain in the limbs, etc.	84.3 „
Giddiness	81.4 „
Loss of appetite	78.6 „
Pain in the lumbar region	77.1 „
Coryza	77.1 „
Slight bronchitis	77.1 „
Suffusion of eyes	71.4 „
Rigor	71.4 „
Nausea	62.9 „
Unpleasant dreams, "wandering" ...	58.6 „
Flatulence	40.0 „
Vomiting	38 6 „
Constipation	37.1 „
Diarrhœa	25.7 „

Having described the symptoms of the disease, we will now record some general facts. Out of a population of 992 persons, 140 were attacked, a percentage of 14.1, and of these 73 were males and 67 were females. Compared with the total number of males and females in the asylum, the percentages are 15.2 per cent. males and 13 per cent. females. It is thus seen that the males were slightly more subject to the disease than the females. The type of the disease was more severe among the males than the females, and this observation is strengthened by the following facts. Out of 13 relapses, 9 were males; out of 14 cases complicated with pneumonia, 13 were males; and of the 10 deaths, all were males. We suggest that this preference for the male is greatly due to the fact that the men are more in the open air, where we believe the disease is contracted. As a fact supporting this statement we find that the officials, amongst whom, moreover, the standard of health is high, were attacked in far greater proportion than the patients, the former of course having greater facilities of going about outside. Of the 175 officials 28.4 per cent. have suffered (30.9 males and 25.9 females), whilst of the 817 patients only 11.1 have been attacked (12.5 males and 9.7 females). The first persons attacked, moreover, were those who were most in the open air, the majority of them being officials, and of the patients attacked the majority were those who were much outside. Of the percentages attacked in the different wards the largest numbers on the male and female sides of the asylum were in the convalescent wards, where the "open door system" is adopted and the patients are at liberty to walk in the grounds. It has already been stated that relapses only occurred after exposure to outside air.

Contagion.—We can express no very definite opinion as regards the contagiousness of the disease; if however contagiousness exists, it only does so to a very slight degree. As pointing to contagion, we may state that it attacked four officials in the female hospital one after the other (three sleeping in one room), before the disease had appeared elsewhere in the house. On the other hand, we have to state that excepting the female hospital, the disease appeared practically simultaneously in every ward of the house, and it did not tend to spread more in one ward than another, to any remarkable extent, as the following table shows. The following percentages being derived from small numbers (45 being the average in a ward), considerable latitude must be given for fallacies due to accidental circumstances.

Percentages of Patients Attacked in the Different Wards.

Number of Ward	1	2	3	4	5	6	7	8
Male	19.0	11.4	22.4	7.8	21.7	25.9	4.5	16.7
Female	11.6	12.5	1.8	8.6	13.7	16.7	14.9	

We have also to state that the affected cases were congregated together and isolated as much as possible from the healthy patients, and on the male side, of the seven officials devoted to the sick, only one took the disease. The days during which most patients were attacked were the 2nd to the 5th of January.

Our opinion of the disease is that it is certainly not a common cold, and we believe it to be a specific fever, having a definite course and duration, and affecting the whole organism. The nervous, muscular, respiratory, and alimentary systems are all affected, and, as in other fevers, this disease always leaves its victims debilitated. It is thus distinct from ordinary respiratory catarrhs; and, indeed, in 22.9 per cent. of the cases there was no catarrh of the nasal or bronchial membranes.

In no case was there only a single system affected; we have found that the neuro-muscular system, under which we include headache, neuralgic and muscular pains, was affected in 97.1 per cent. of the cases; that the respiratory system, under which we include symptoms referred to the conjunctival, nasal, and bronchial membranes, was affected in 77.1 per cent. of the cases, and that the alimentary system, under which we include only vomiting or diarrhœa, was affected in 55.7 per cent. of the cases. It is thus seen that any sharp division of this disease into the neuro-muscular, respiratory, and alimentary varieties is artificial and by no means accurate. At the same time, it is convenient from the clinical point of view to describe the varieties of the disease by the system which is most prominently involved.

Treatment.—When once it was evident that the disease was epidemic we reserved separate wards for its treatment, and whenever an individual was attacked, he or she was removed to these wards and kept in bed. The diet was light, mainly consisting of milk, many cases being able to take only milk and potash water. As regards the medicinal treatment, none of the drugs which we used affected in any noticeable degree the symptoms or course of the disease. For the high temperature we used antipyretics, and of these we preferred to use antipyrin in 10-grain doses in those cases in which headache was the most prominent symptom. When pain in the back or other rheumatic pains were greatly complained of we used salicylate of soda in 10-grain doses; we found however that it increased the nausea, and it was also objectionable from its reputed depressing effects. Quinine however in 10-grain doses was more used than either of the above remedies. For the pain in the back, if severe, we applied a mustard leaf, with relief in almost all cases. For the cure of constipation we adopted the use of soap and water enemata, having discovered by experience, that diarrhœa was readily set up by the mildest laxatives. For the bronchitis accompanied by tough sputum we prescribed: ℞ Sp. ammon. aromat. ℥j; liq. ammon. acetat. ad ℥vj. Sig. A tablespoonful in water every three or four hours. For insomnia, sulphonal 30 grs, or paraldehyde, was prescribed, and the latter made up as follows: ℞ Paraldehyde ℥j to ℥ij; tr. quillaiæ ℥ss; aq. cinnamomi ad ℥ij. Sig. The draught to be taken in water. During convalescence we prescribed Easton's or Parrish's syrup, quinine tonics, maltine, claret, port, stout, and bitter ale, according to circumstances, at the same time increasing the dietary. The complications were treated according to the ordinary methods. In conclusion we would strongly impress upon all attacked the urgent necessity of going to bed at once, and of staying there for three days after the temperature is normal.

We would here point out that our population is entirely an adult one, with many aged people, and as the general health is decidedly below the average, an epidemic such as this is a much more serious matter to us than to the general public.

EPPING RURAL (Population, 21,725).—*Prevalence of Whooping-cough: Absence of Typhoid and Diphtheria in Epidemic Form.*—Reporting on the health of this district during 1888, Dr. Trevor Fowler states that a material increase in the zymotic death-rate was almost entirely caused by whooping-cough, the record of deaths from this cause being the highest of the past ten years. No less than 20 out of 43 deaths attributed to zymotic diseases were from whooping-cough, and as death in these cases was almost invariably the result of exposure or other bad management, it is evident that the power to arrest such high mortality rests more with the people themselves than with the sanitary authority. Measles and scarlatina were also somewhat prevalent, but the character of the outbreaks was mild, and there were not many deaths. The district has been conspicuously free from typhoid and other allied fevers for the past five years, which is a very encouraging fact, and there has also been a total absence of diphtheria in epidemic form during both 1887 and 1888. The general death-rate was 15.5 per 1,000, and the zymotic rate 1.8.

ABSCESS OF THE CEREBELLUM, FOLLOWING CHRONIC OTITIS MEDIA: TREPHINING: DEATH.

By W. MILLIGAN, M.B.,
Honorary Assistant-Surgeon to the Manchester Ear Institution,
AND
A. W. HARE, M.B., F.R.C.S.E.,
Honorary Surgeon to the Ancoats Hospital, Manchester; Professor of Surgery in the Owens College.

E. H., aged 14, had suffered for six years from suppurative catarrh of both tympanic cavities, following on an attack of scarlet fever. During the greater part of this period there had been intermittent discharge from both ears. He was very subject to catarrhal attacks, and at those times the discharge from the ear was always profuse, fœtid, and attended with considerable pain. For the last eighteen months, however, the left ear had remained dry. On November 15th the patient presented himself at the Ear Institution, complaining of severe pain in the head. A week previously, the discharge from the right ear had suddenly stopped, and from that time severe pain had set in. On examination, the pain was found to be present all over the right side of the head, but was more especially located over the right coronal suture. Slight percussion at this point produced the greatest agony. The boy's face wore an expression of great anxiety. He had had very little sleep for a week, although there was a constant feeling of great drowsiness. The pulse was 80, feeble, and at times intermittent; the skin cold and clammy. There was complete anorexia and an intense feeling of nausea, but no actual vomiting. On making the patient stand with closed eyes, there was a slight tendency to fall forwards. Patellar tendon reflexes diminished. No facial paralysis; but paresis was present in the soft palate and uvula on the right side. The pupils were equal and reacted to light, although sluggishly. On the right side distinct optic neuritis was present; on the left a slight blurring of the disc.

After a consultation between us, the patient was at once admitted to the Ancoats Hospital for further observation, or, if need were, for operative interference; as we believed we had before us a case of intracranial suppuration.

After his admission to the hospital the patient gradually became worse; the pain, sleeplessness, and anorexia continued, and at intervals retching and vomiting occurred. In the intervals the patient took small quantities of milk and soda-water, peptonised gruel, and beef essence; but his strength diminished rapidly, and the torpor increased; such sleep as he obtained was disturbed and delirious. Sixty hours after his admission the patient was obviously much worse and in a condition of serious danger. The temperature was subnormal, and the pulse weak and markedly intermittent. At a consultation with Dr. H. R. Hutton, Honorary Physician to the Ancoats Hospital, it was concluded that the symptoms pointed to the existence of an abscess, and that something must be done for its relief.

In the absence of distinctly localising symptoms it was decided to trephine at a point whence both the temporo-sphenoidal lobe and the cerebellum may be reached. Accordingly, the patient having been anæsthetised, the skull was exposed on the right side and the trephine applied immediately above and posterior to the external auditory meatus. On exposure the dura appeared normal. It was incised low down near its reflexion on the floor of the skull, and the upper surface of the petrous bone and roof of the tympanum were carefully examined. They were perfectly smooth and normal. The temporo-sphenoidal lobe was then explored with a hollow needle, but no abscess was found. An exceedingly fine hollow needle was then thrust through the tentorium from above downwards into the right lobe of the cerebellum. On withdrawal, its contents were placed under the microscope, and revealed the presence of pus cells and *débris*. Owing to the circumscribed space at command and the immediate vicinity of the lateral sinus it was not deemed advisable to open and drain the abscess through the tentorium. Accordingly the wound was closed, after careful suture of the dura mater and the planting of spicules of bone on its outer surface. A catgut drain was introduced and the scalp sutured in position, and an antiseptic dressing applied. The trephine was now reapplied over the cerebellum, below the line of the lateral sinus. On exposure the dura appeared normal. It was incised, and the surface of the cerebellum came into view. Its appearance was normal, but it bulged into the wound, and did not pulsate under the finger. The aspirating needle was pushed upwards and inwards through the substance of the right cerebellar lobe, and when it had traversed two inches of this tissue there was a sudden gush of intensely fœtid pus through the needle. In all from two to three drachms of pus escaped. As the needle was removed a pair of Lister's sinus forceps was introduced closed, and by gently opening the blades a channel was made, through which a small drainage tube was inserted into the abscess cavity. The tube was secured externally to the scalp, and the scalp flap restored to position, leaving the aperture for the drainage tube free. The whole of the procedures were carried on under the spray, with full antiseptic precautions. On awaking from the anæsthesia the patient was found to be free from pain and much less torpid than before. There was no vomiting; he took small quantities of nourishment at frequent intervals, and slept at intervals quietly and naturally. For nineteen hours after the operation his condition remained satisfactory. Then it was noticed that a rapid change was occurring, chiefly affecting the breathing, which assumed an irregular character resembling Cheyne-Stokes respiration. The temperature, which had been normal since the operation, began to run up, and within three hours the patient died, death occurring ultimately very suddenly, being apparently due to interference with the respiratory centres.

Post-mortem Examination Fifteen Hours after Death.—The membranes and surface of the brain were found to be healthy. No caries of the petrous bone was present. There was no evidence of sinus phlebitis. Cerebral lobes firm and healthy. Sections of the cerebrum showed a natural appearance throughout, and in the right temporo-sphenoidal lobe, which was examined with special care, no trace of the exploratory needle could be discovered. On making sections of the cerebellum, the abscess cavity was found empty and collapsed, with the end of the drainage tube lying in it. The cavity was about the size of a small walnut, and was situated towards the middle of the right lobe, in its anterior and upper part. It was lined by a distinct limiting membrane, suggesting that the abscess was of old standing. The pons and medulla, with the remainder of the cerebellum, were apparently perfectly healthy. The *post-mortem* examination was limited to the head.

Remarks.—It has been said that if the tympanic cavity be the original seat of the disease, and a secondary abscess be suspected, the latter will be found in the cerebrum; if the mastoid cells, then in the cerebellum; and if the internal ear, then in the pons. This statement is not, however, borne out by the facts of recorded cases. At present the localisation of an intracranial abscess following aural disease cannot be effected with any degree of certainty. If the roots of particular cranial nerves be implicated, the diagnosis may pass from suposition to more of a probability; but it must be borne in mind that mere pressure from an abscess or the extension of meningeal irritation may cause the same nervous symptoms, pointing to localisation, though the abscess itself may be at a distant part of the brain. It is often, as in the present case, exceedingly difficult to state with any degree of certainty whether the abscess be cerebral or cerebellar. We are inclined to believe from recent experiences that the usually accepted preponderance in the frequency of cerebral abscesses (6 to 1) will be found to exaggerate the true relative frequency of abscess above and below the tentorium respectively. The question of the path taken by the infective process is a matter of great interest. In many cases where the tympanic cavity is the seat of the disease the abscess is found in the temporo-sphenoidal lobe, no doubt from the direct continuity of tissue. In other cases caries of the petrous bone with thrombosis of the lateral sinus is found, producing a distinct path of infection from the primary source to the secondary seat of the process. In other cases pus has been found to travel along the sheath of the seventh nerve. In still others no obvious path of infection can be found. In the present case this was so, and one has to fall back for an explanation upon the supposition that the small venous and lymphatic channels between the middle ear, the subarachnoid fluid, and the perivascular lymphatic spaces of the cortex are the paths by which the infective process travels. The frequency with which cerebral and cerebellar abscesses follow aural disease points to the great importance of checking the primary disease, and, by various remedies, of attempting to render the tympanic mucous membrane healthy. In all cases—with the exception of two or three acute cases—the abscess follows very chronic affections of the ear. In many such little or no treatment has been attempted, but in others the most persistent and regular treat-

ment fails in attaining its object. In such cases we would strongly urge that the mastoid cells should be trephined, and all caseous matter (which will probably be found) cleared out, and a thorough drainage of the tympanum established. By this method the presence of matter likely to form a focus of secondary infection would be avoided, a return to the local condition of health made possible, and the chances of subsequent intracranial suppuration considerably reduced.

CLINICAL REMARKS ON A CASE OF MALIGNANT OR PERNICIOUS ANÆMIA IN WHICH A CONDITION OF CHRONIC GENERAL OSTEOMYELITIS WAS FOUND AFTER DEATH.

By THOMAS H. KNOTT,
Fleet Surgeon, Royal Navy.
[Communicated by the Director-General of the Medical Department, Royal Navy.]

H. W. C., aged 24, able seaman, of fair general physique, came on the sick list February 16th, complaining of slight and ill-defined pains about his chest, epigastrium, and loins. He said he had been in failing health for three or four weeks; he had lost flesh, and was easily fatigued. On referring to his medical history sheet I find he had pleurisy in 1881, remittent fever in the East Indies in 1884, and an attack of purpura with dyspepsia in 1886.

After careful examination by myself and my colleague, Surgeon A. W. May, we could find nothing wrong. He had a clean tongue, fair appetite, and normal temperature, and all the bodily functions appeared to be regularly performed; his urine was acid and slightly phosphatic. As he looked anxious and ill, he was placed in bed for observation on a restricted diet.

There was, on the following day, considerable tenderness in the epigastric and hepatic regions; the liver was not enlarged, and no tumour could be detected; the respiratory murmur was weak on the right side; the sternal half of the right clavicle was much thickened; this he attributed to a fall from a horse three years previously; heart sounds normal.

Three days after admission he began to lose appetite, and vomit after food; he complained of much lumbar pain, and when he coughed or drew a deep inspiration, the pains in his chest and back were much increased. The epigastric and hepatic regions, if anything, became more tender; there was no sign of jaundice.

Four days later he began to vomit almost incessantly; the vomited matters consisted of liquid, having a bitter taste, and of the colour of yolk of egg. After three days the bilious vomit became of a green colour. He was rapidly losing flesh; bowels became obstinately confined; tongue thickly coated and whitish; no rise in temperature, and no localised tenderness in any of the bones.

At the end of ten days he was sent to the General Hospital at Auckland, as we were about to proceed to sea. In hospital he steadily lost ground, and became very weak and thin. There was much tenderness about the chest walls, and for two or three days some slight swelling was noticed over the sternum, but this disappeared entirely. He then had several attacks of epistaxis, and when I saw him, three weeks after admission to hospital, he looked like a man dying of pernicious anæmia. The bowels were very much constipated; he could take little or no food, as everything he tried to take caused disgust and nausea. His temperature one night was 100° F., otherwise it had been normal or subnormal throughout. He died of exhaustion on the forty-fourth day.

Necropsy Eighteen Hours after Death.—Body extremely emaciated, skin of a white waxy colour. Abdomen: organs extremely pale and bloodless; all the fat had been absorbed; intestines contained small scybalous fæces throughout; liver small, structure healthy; kidneys and adrenals extremely pale but normal in structure. Stomach: a hard thickened patch was felt near the pylorus; the glands in the lesser curvature were of quite cartilaginous hardness, varying from a pea to a horse-bean in size; pancreas and spleen healthy. On opening the stomach, the hard spot near the pylorus was found to be the cicatrix of an old ulcer, the size of a crown piece; the base was quite hard, resembling the glands at the lesser curvature. The blood vessels were healthy, but contained only pink serum. Chest: when the soft parts were turned back the periosteum and cartilages looked normal, but on dividing the ribs many of them were quite soft; the cancellous tissue had broken down, and was replaced by a pink creamy matter. The sternum was in the same condition, as were also the clavicles and femora, the periosteum being in all healthy. Lungs bloodless, structure healthy, old pleuritic adhesions about right apex. Heart and large vessels normal, but contained only serum.

This was a most puzzling case. During life he had been examined by all the medical staff, none of whom could form a satisfactory diagnosis. The extensive bone disease was not suspected, and might have been easily overlooked had not one of the ribs been unintentionally divided at a bony part whilst dividing the costal cartilages to remove the sternum; this led to the discovery of the general osteomyelitis, of which there was no indication until the bones were divided. My own idea of the case is that the chronic osteomyelitis was the initial disease, and that the anæmia was a direct result of the bone disease. If this view be the correct one, it would strengthen the theory that the red corpuscles of the blood are formed originally, or are in some way matured, in the marrow and cancellous tissue of bones.

CASE OF POPLITEAL ANEURYSM: LIGATURE OF FEMORAL ARTERY.

By Fleet-Surgeon J. N. STONE, R.N.
[Communicated by the Director-General of the Medical Department, Royal Navy.]

W. L., aged 33, A.B. of H.M.S. *Téméraire*, Mediterranean Station, while at sail drill aloft, on August 20th last, slipped in the rigging and immediately felt something give way behind the left knee. He reported himself to the medical officer on the following day, when a pulsating tumour was discovered in the popliteal space. Patient was sent to England for treatment, bed, bandages, and elevation of the limb being employed provisionally.

On arrival at Plymouth Hospital on September 18th he was found to have a pulsating tumour three inches long filling up the left popliteal space; a distinct *bruit* was present. Digital pressure over femoral by a succession of volunteers was employed for twenty-four hours continuously, Signoroni's tourniquet being then substituted for a couple of hours, when digital pressure was again resorted to for a further period of twenty hours. This was well borne, but considerable œdema of leg and thigh resulted with but little diminution of pulsation. All pressure was for the present discarded. On the subsidence of œdema the tourniquet was again employed for several days with negative result.

Having regard to the size of the tumour and the presence of a loud rough *bruit*, treatment by Esmarch's bandage was not considered advisable, and it was accordingly decided to ligature the femoral. This was done antiseptically on October 8th, the vessel being deligated at Scarpa's angle. Kangaroo tendon was used, a small drainage tube entered, and the incision closed by three carbolised gut sutures, the whole dressed antiseptically. The limb was wrapped in cotton wadding and warmth applied to the foot.

October 9th. Temperature 98.4°; pulse 80. Very slight pain in shin; temperature of foot normal. 8 P.M., temperature 99.8°.

October 10th. Temperature 98.4°; pulse 76. Very little uneasiness in leg.

October 11th. Temperature 98.4°; pulse normal. Quite comfortable; no pulsation in tumour since operation; no œdema of leg or foot; sensation unimpaired.

October 18th. Removed dressing for first time, ten days having elapsed; wound appears to have absolutely healed by first intention, ligature and sutures being absorbed, and drainage tube, which was thrown out, found dry in dressings. Tumour in popliteal space quite solidified and about half original size.

November 6th. Has continued without an untoward sign or symptom. Amount of daily exercise gradually increased. Tumour quite solidified and reduced to about one-sixth of original size. Use of limb seems perfect. Discharged to duty.

The main interest connected with this case appears to turn on the fact that the somewhat protracted course of pressure, digital and instrumental, prior to ligature, so far from exercising any untoward effect on the subsequent operation, appears to have had a

favourable influence in initiating collateral circulation before actual deligation was done—an inference which the total absence of œdema, together with the very trifling amount of pain or inconvenience experienced after ligature, seemed to justify.

Closure of the wound by first intention and the total disappearance of ligature and sutures may also be worthy of note.

ON THE ANTISEPTIC AFTER-TREATMENT OF VACCINATION.

By JOHN BARK, M.R.C.S.Eng.,
Honorary Surgeon, Stanley Hospital and Hospital for Diseases of the Throat, Liverpool; Public Vaccinator, West Derby Union.

During some five years' experience in a large public vaccination district, with a mixed population of over 100,000, and a yearly average of over 2,000 primary vaccinations, I have noticed that the most common mischief one has to dread is the occasional occurrence of erysipelas, which, of course, as in the case of any ordinary wound, may, under conditions favourable for its development, end fatally through septic absorption.

It is a noteworthy coincidence that all the cases that have come under my observation have been in children in whom cleanliness was almost entirely neglected, or who were living in houses where the hygienic surroundings were bad. There is no doubt that all attacks of blood-poisoning which follow vaccination are due to one or other of these causes, and that they are not the direct result of the operation, as anti-vaccinationists so confidently and unjustifiably assert.

In my practice as surgeon to a general hospital, having been for many years profoundly convinced of the value of antiseptic treatment in surgical affections, I have long felt that the same principle might be employed with advantage to prevent the incidence of erysipelas or blood-poisoning after vaccination. Acting on this idea, I have for over a year employed an antiseptic pad for the protection of the vaccinated arms of infants, applying it after the opening of the vesicle on the eighth day, before which date (in my experience) septic absorption does not take place.

The pad is composed either of boracic or eucalyptus absorbent cotton wool, or of Hartmann's perchloride wood wool wadding (the latter being the most absorbent, and therefore answering best), and covered at the back and edges by antiseptic gauze, and is applied in the manner shown in the woodcut.



Note.—The pad has been represented in the woodcut very much too large.

B and C are two straps of soft half-inch tape, which fasten the pad to the arm; while A A is a similar tape, which passes from its upper border to the opposite axilla, and prevents the pad from slipping down. The mother must be warned not to disturb this arrangement for at least six days. I have tried this protective dressing in about 100 cases, some of them specially selected on account of their large inflammatory areola, and have found that on removal of the pad on the sixth or seventh day after its application the inflammatory infiltration has entirely disappeared, and in most cases a firm, hard scab has already replaced the vesicles, so that the arm can safely be left uncovered.

The following are the advantages claimed for this form of protector:

1. It protects the arm from external violence.
2. It absorbs all discharge.
3. Most important of all, it reduces the risk of septic absorption.
4. It cannot be used a second time like ordinary shields, which it is too often the dangerous practice to use again and again.
5. Lastly, and not its least advantage, is its extreme cheapness.

As the result of the practical experience gained in this matter, my conviction is that this antiseptic absorbent covering effectually minimises the risks of erysipelas and blood-poisoning, those *bêtes noires* of all vaccinators, and is well worthy of a thorough trial.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.,

TRANSIENT RECURRENT ATTACKS OF LATERAL HEMIANOPSIA.

A. B., a well-nourished and healthy-looking man, aged 65, stated that when 20 years of age he had his first attack. At that time he was working as a miner underground, and having finished his work had just returned home, when he noticed that he could only see half or part of anything he fixed his eyes upon; thus in looking at two objects placed side by side, only one was visible, or on looking at a bystander only the left half of his face could be seen. At the same time, an indescribable anxiety seized him, quite out of proportion to his concern at losing half his field of vision, and at the same time he felt a fulness at the epigastrium, as though, to use his words, he "had wind in his stomach." This having lasted a few minutes, there commenced a sort of vibratory movement over that part of his sight which was obscured of vision. This he described as appearing like rapidly passing the hand, with fingers outspread, backwards and forwards close by the side of the eye. This vibratory phenomenon gradually increased in intensity, and then gradually faded, and at the same time seemed to clear off the field of obscured sight, till in about fifteen minutes sight was again restored to its normal condition. He says that he had a slight headache afterwards, but nothing of importance.

Now the attack above described he says he has had at pretty regular intervals during the last forty-five years, though he says they are not so intense of late years as in earlier life. The intervals between the attacks vary, sometimes one every few days, at others every few months; he states also that the attacks vary in intensity, sometimes lasting about an hour, and sometimes only a few minutes. There is no history of any nervous complaint, as epilepsy or asthma (if this is a nervous affection), and no history of phthisis. During the last nine months he has lost the sight of his left eye from acute glaucoma, as he describes it. At the present time the right eye is perfectly sound.

Now this sort of attack has been described to me by another, who is quite independent of the gentleman spoken of above. This latter says his was first produced by a severe mental effort when a student, the onset being characterised by great irritability of temper and great inaptitude for reading, the attack in the two cases being exactly similar. In the latter case, after his first attack he had no more for four years, when they returned again at intervals of a few days. He now says that he has had none for some months.

Jos. Wm. Gill, L.R.C.P.Lond., M.R.C.S.Eng.
Looe, Cornwall.

RIGIDITY OF OS UTERI: INCISIONS: RECOVERY.

On December 5th, 8 P.M., I attended A. L., primipara, aged 30, married two years, good medical history.

Pains were strong and frequent, the nurse stated the waters had broken on December 3rd, and that the pains had left till now. The os was dilated to the size of half-a-crown, the parts moist. After waiting two hours without any change I left.

December 6th, 7 A.M., dilatation had increased, but pains slight and few; 8 P.M. pains returned, and I gave antimonial wine every half hour till nauseated, then administered chloroform, but without result.

December 7th, 10 A.M. As the pains were strong and the parts hot and dry, I decided to terminate the labour by incising the os, and consulted my partner Mr. F. Bennett, who agreed that it was absolutely necessary, and kindly rendered valuable assistance.

I first applied the forceps to steady the uterus, then made incisions anteriorly and posteriorly to the extent of about half an inch;

the child's head was now forced through before I could make more. The rest was natural, the uterus contracting well. The child was dead. After-treatment consisted merely of careful diet and syringing every four hours with Condy's fluid. Temperature remained normal, the patient making an uninterrupted recovery, being up on the tenth day, and now perfectly well.

Though there is no claim to originality of treatment, the rarity of such a marked case I thought might warrant my presuming upon your valuable space.

Linton, Cambs. FRANK S. WATSON, M.R.C.S. and L.S.A.

SCARLET FEVER AND THE PUERPERAL CONDITION.

THE question whether puerperal women are more susceptible than others to contract and suffer severely from scarlet fever is one of the greatest interest and importance.

During the last four weeks I have met with two cases bearing on the subject; in one house there was scarlet fever, some of the children being laid up and others convalescent at the time. The mother, the wife of a working man, living in a healthy rural district, was confined in the midst of this fever, and made a good recovery without contracting the disease.

In the other case, also in a healthy country district, and where the only source of infection which could be suggested was so remote that one would have scarcely anticipated its action, the puerpera contracted the infection and suffered somewhat severely, but eventually recovered, and is now convalescent. That the disease she suffered from was scarlet fever is evident from the fact that three other inmates of the house have subsequently suffered. The interesting point connected with the case is that the mother was of a higher social status than the previous case, and recently had considerable domestic trouble, and for months had looked forward to her confinement with dread and great anxiety.

The above cases appear to me to strikingly bear out the remarks of Dr. Thursfield in the JOURNAL of January 11th.

Dolgelly, N. Wales. W. WILLIAMS, M.A., M.B. (Oxon.).

IT has been generally accepted that puerperal women are specially liable to contract scarlet fever. Some would go so far as to forbid the medical man from attending a confinement if he had scarlet fever cases under his care at the same time. The risk to the puerpera is much exaggerated. In my twelve years' experience as medical officer of health, in which I have had to investigate outbreaks of scarlet fever, I have never known a puerpera to contract the disease from her medical attendant. When the puerpera has been nursed in the same room where the scarlet fever patient has been, not a single case of either the puerpera or her infant has come under my observation. It is only a few weeks ago that I had a case where the puerpera nursed the patient. It has occurred to me that the puerpera and infant enjoy an immunity from the contagion of scarlet fever which others do not. In practice it is well to take all precautions to protect the patient, but there exist morbid fears on this question which the experience of many men engaged in large practices do not confirm. My opinion and experience confirm Dr. Thursfield's.

Bacup. JNO. BROWN, M.D., D.S.SCI.

A CASE OF TRAUMATIC INJURY TO LABYRINTH OF RIGHT EAR, SUCCESSFULLY TREATED WITH INJECTIONS OF PILOCARPINE.

ON October 28th, 1889, Sapper W. O., Royal Engineers, was admitted to hospital, a loaded baggage wagon having passed over his head on the left side. He was unconscious for twenty minutes, he had hæmorrhage from both ears, no serous exudation; he had perforation of the right membrana tympani, several lacerated wounds of both sides of head, which quickly healed under treatment. On October 31st, he was noticed to be deaf on the right side. Treatment by hypodermic injections of one-tenth grain of pilocarpine was commenced on November 14th, when watch was not heard at external meatus; treatment omitted for two days on November 20th. On November 27th, note says that the membrana tympani looks healthier and not congested as before; perforation healed; cone of light well defined, tinnitus at times distressing; he is much pleased with improvement in hearing. On November 30th, singing in ears continuous, but throbbing nearly gone, does not hear watch through temporal bones, faintly over mastoid process, but hears watch at external meatus. On December 5th, he could hear watch at three inches and half from meatus. Potass. bromide grain x., t.d.s., improved the throbbing. On December 8th he could hear watch six inches from meatus. On December 17th, he was discharged, stating that he could hear as well with right as left ear. After each injection, the patient was kept in bed for two hours; the heart was not much affected, but salivation, sweating, and some looseness of the bowels was produced. One-eighth grain was latterly injected, which caused free sweating, which latter effect was noticeably followed by improvement in hearing. No weakness, palpitation, or giddiness was at any time produced.

E. J. ERSKINE RISK, Surgeon A.M. Staff (M.R.C.S., L.R.C.P.).

Station Hospital, Gravesend.

FIRST PREGNANCY LATE IN LIFE.

THE interesting communication in a recent number of the JOURNAL recalled to my mind two somewhat similar cases, which occurred when I was in practice near Sandringham several years ago.

One I attended personally. This patient asked my advice as to a swelling in her body, and on examination I told her she was pregnant. She replied that that could not be the case for she had been married nineteen years, had never had a child, and that she was turned forty-seven years of age. Time, however, proved that I was right, and at the full term she was delivered of a female child. I had to use forceps on account of uterine inertia, but in other respects everything was perfectly normal, and mother and child did well.

In the other case the mother was of the same age or thereabouts, and had passed a childless married life of twenty years. She was attended by Dr. Gentles, now of Derby, who was at that time assisting me. In that case also mother and child did well.

Holland Park, W. ALFRED E. BARRETT.

INCUBATION OF MEASLES.

IN a young ladies' school with thirty-five resident scholars, a case of measles occurred; the girl was at once removed to a cottage in rear of the dwelling house, complete isolation secured, a nurse put in charge, and all communication cut off. In twelve days the patient and nurse were sent away, and the cottage and everything in it thoroughly disinfected. Exactly fourteen days after this girl showed the disease, a second case occurred; fourteen days after that a third, fourteen days after that a fourth, and fourteen days after that a fifth. Nos. 1, 2, 3, and 5 belonged to different classes, and slept in different rooms; Nos. 1 and 4 were sisters, and slept together; but No. 4 showed the disease eight weeks after her sister. Each case as soon as it declared itself was removed to the hospital. The outbreak in the first instance was supposed to have been caused by infection when away from school, but that is by no means certain, as measles was prevalent in the district. Comment on these clinical records is needless.

Harrogate. JAMES A. MYRTLE, M.D.

ON COLOUR BLINDNESS.

IN neither of the papers on colour blindness in the JOURNAL is reference made to yellow blind persons; cases of red blindness and of green blindness are alone mentioned. Professor Clerk Maxwell discovered that the blindness of the *foramen centrale* to blue light, which was strongly marked in his own dark eyes, was either altogether absent or present in a very low degree in a lady of fair complexion. Professor Garnett quotes cases of blue and violet blindness, to whom bright yellow appears as white. Professor F. Holmgren, of Upsala, gives details of violet blindness; in the case of each, only one eye was really colour blind, the vision of the fellow eye being normal. This peculiarity enabled the observer to compare the experience of colours gained through one eye with that gained by the other, and thence to state in the language of those possessing normal vision how colours really appear to the colour blind.

I knew a case of a similar description. A person, skilled in the use of the telescope, carefully watched the progress of spots across the sun's disc during the summer of 1870, protecting the right eye by darkened eyepieces, closing the left eye; occasionally, however, these would become displaced, when the eye used would be exposed to full sunlight, though only instantaneously each time; the final result was that the right eye became yellow blind, strictly speaking, blind to amber coloured rays. Thus to this eye a glass filled with a dilute solution of tincture of iodine in water appears colourless, and buttercups in a lawn in full sunshine are scarcely perceived.

Mixtures of colours which appear to make perfect matches by one kind of light are far from matching one another when viewed by a different light. The yellowing effect of gaslight tells more on the white than on combined colours. The colour blind generally class all tints as yellows or blues. According to Maxwell their sensations correspond to green and blue; but the reason why they regard yellow as brighter than green lies in the fact that although to the normal eye the sensation of yellow is a combination of the sensations of red and green, yet yellows are so much brighter than greens that light from them generally excites the green sensation more powerfully than from green objects themselves, and hence yellows are more conspicuous than greens to the colour blind, but only in virtue of the green they contain. To enable colour blind persons to distinguish between red and green, Maxwell constructed a pair of spectacles, one eyeglass of which was red and the other green, so that the object appeared differently to the two eyes; with them objects had a metallic lustre. To the colour blind a red object would appear brighter when seen through the red glass, while a green object would appear brighter through the green glass.

A colour blind or dichromic person, in speaking of red, green, orange, and brown, refers to different degrees of brightness or purity of a single colour, and not to different colours.

Guided by the fundamental laws of colours and of their combinations, taking especial care to avoid all *names* of colour tests, when an examination of eyes is made, all test objects to be referred to by number or form only, and by checking the first results by contrasts observed with typical greys and the complementary colours we shall establish an effective system of testing for colour blindness.

J. LARDNER GREEN, M.R.C.S.

Salisbury.

REPORTS

ON

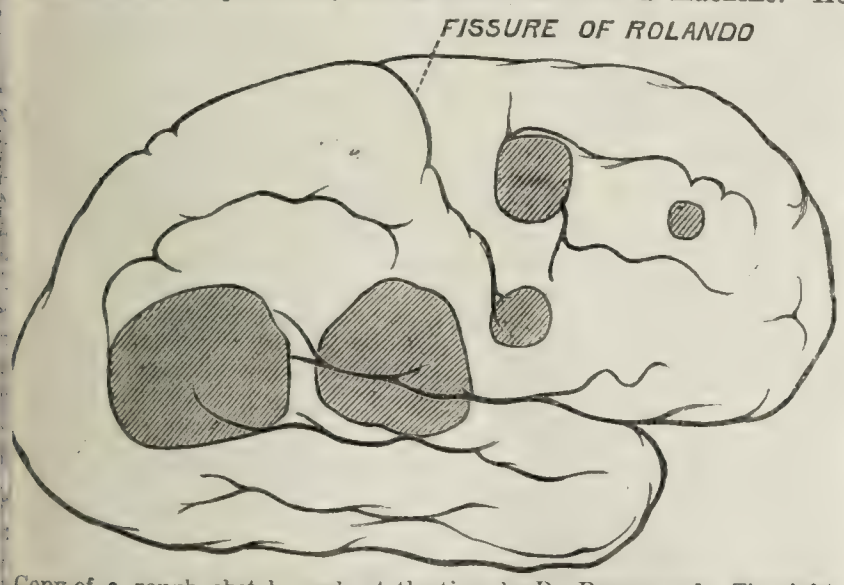
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

A CASE OF CEREBRAL ABSCESS LOCALISED AND OPENED.

(By G. E. WILLIAMSON, M.A., F.R.C.S., Surgeon and Ophthalmic Surgeon to the Infirmary.)

A RIVETTER'S apprentice, aged 15, presented himself at the Eye Department on May 20th, complaining of dimness of vision and headache. It appeared that six months previously he was struck on the forehead by a rivet, which flew out from a machine. He



Copy of a rough sketch made at the time by Dr. Drummond. The right side of the brain, outer surface. The five shaded circles represent the abscesses, the one opened is at the lower end of the fissure of Rolando.

did not lose consciousness, nor was there much bleeding. The wound healed, but not feeling well he kept his bed for some time. The rest of the history was difficult to obtain, and was unreliable, but he said that when he got up he had lost the use of his left leg and arm. After some time he regained the use of the limbs, the left arm remaining weaker than the right. Since the accident he has been subject to fits; he says that they begin at the left side of the mouth, and go on to the left arm; he adds that he never loses consciousness nor the power of speech, and he can tell when a fit is coming on by a sensation at the left side of the mouth. He suffered from severe frontal headache, vomited from time to time, and there was acute double optic neuritis. In the centre of the forehead there was a vertical scar three-quarters of an inch long. He was admitted into the infirmary, and two days afterwards (May 23rd) he called to the nurse that he was about to have a fit. It consisted of a strong twitching at the left angle of the mouth, with spasmodic closure of the eyelids on both sides, particularly the left; the hands and other parts were unaffected, and there was no loss of consciousness. Up to this time he had been bright and intelligent, but from the day of the fit he became progressively worse, complained much of headache, and lost his interest in things about him. The left angle of the mouth became more sensitive, the least touch on any part of the face, or even a threatened touch, causing a slight contraction. No further fits occurred, but the headache became intense, and his expression heavy and pained. The left elbow was semi-flexed, and somewhat rigid, and he cried out with pain when it was straightened. Percussion was now painful over the surface area of the brain corresponding to the left side of the face. On June 1st, he was stupid and heavy, much more so than on the previous day; the skin was hypersensitive everywhere, and he cried out when he was touched. Both eyes were turned to the right; the pupils were equal, of medium size, and responded to light. He passed water in bed, answered slowly when spoken to, and the left angle of the mouth twitched on the least touch. When the face was drawn with pain there was distinct weakness on the left side. His general condition being now much worse and critical, it was decided to trephine at once. The skull was carefully measured, and the point aimed at was the face centre on the right side. After making a semilunar incision a one-inch trephine was applied, the dura mater was incised, and the brain presented, the surface looking normal. A hollow needle connected to a syringe was pushed straight into the brain, and when it penetrated half an inch pus entered the glass barrel. A vertical cut was made into the convolution, and the interior of a small abscess cavity bulged into the trephine hole; it was scraped out with a spoon. As the symptoms had seemed to promise a larger lesion, the needle was systematically passed upwards, downwards, forwards, backwards, and lastly, inwards, to a distance of about two inches in each direction, but without result. A small spoon run round the interior of the cavity met a resisting membrane, and did not sink into soft brain substance unless forced. A drainage tube was introduced, and the flap sutured. The strictest antiseptic measures were employed, and although the head had to be shaved and cleansed only a quarter of an hour before the operation, asepsis was maintained throughout. No special movements were observed during the operation. Morphine was not injected, and there was no trouble from hæmorrhage.

Eight hours after the operation he was conscious, more ready to respond to questions, the eyes did not deviate, but he could not count fingers. The sensitiveness of the skin was gone, the rigidity of the left arm had almost disappeared, there was no spasm at the angle of the mouth, and the tongue was protruded much more readily. The pulse was about 100 to the minute, and irregular in the sense that three or four quick beats were followed by as many slow ones; no intermissions. He vomited, probably from the chloroform. Instead of passing water in bed he now called for the urinal.

Two days after the operation he was much brighter and said he had no headache. The left arm or any other part could be freely moved (passive motion) without causing pain; he slept soundly for a few hours at night. During the next few days he continued bright, free from headache, and asked to be removed to the general ward. With difficulty he could sometimes put his left hand to his face, but an occasional twitch was seen at the left side of the mouth. He could draw up the left leg readily, but not so precisely as the right. The pulse no longer varied its beat. The dressings were changed the day after the operation, and again four days later; the wound was then healed, except at the drainage orifice. No pus escaped at any time after the operation. At the end of a week he was still bright and comfortable, talked freely, but could not put his left hand to his face. He could not see a hand when held up, nor distinguish the brilliant colours of a striped jacket. The flap looked bulged over the trephine hole,

and felt soft, but there was no fluctuation and nothing could be pressed out.

From this time he became gradually worse. The headache returned, the stupor increased, the left arm became more rigid, he passed urine in bed, and there was some return of the twitching of the mouth. Sight was lost, as no object, however conspicuous or brilliant, was either recognised or looked at.

Nine days after the operation he was almost comatose. An exploring needle was passed through the trephine hole deeply into the brain, but without result. The coma increased, and he died on the eleventh day.

The following is Dr. Drummond's report of *post-mortem* examition on June 12th, 1889:

The body is fairly well nourished, rigor mortis is present. The pupils are moderately dilated and equal. The scalp bulges in the parietal region above the right ear, where there is a crescentic flap resulting from the operation of trephining. The bone round the trephine opening is covered with granulations, and the brain matter stood out prominently. In the centre of the forehead, an inch and a half above the root of the nose, is a depressed old scar; corresponding to this, the inner surface of the frontal bone presented a little cavity, out of which fell a small piece of necrosed bone, measuring $\frac{1}{2}$ inch in length, $\frac{1}{4}$ inch in breadth, and $\frac{1}{8}$ inch in thickness; there was no pus at this point, and no sign of recent inflammation.

The brain was removed with considerable difficulty, owing to the adhesions formed between the dura mater and the bone, and the pia with the dura. These adhesions extended over a considerable area of the right hemisphere, but were most noticeable in the neigbourhood of the fissure of Rolando, especially towards its lower extremity. The portion of brain matter that protruded through the trephine opening was found to be the everted abscess cavity, which was entirely devoid of pus. The convolutions of the right hemisphere were flattened. The membranes were pale, and showed no trace of recent inflammation.

Five abscess cavities were discovered: No. 1 in the lower part of the ascending frontal convolution (opened at the operation and empty), the size of a peach stone. No. 2, about an inch higher up and a little in front, in the posterior part of the middle frontal convolution, about the size of a walnut. This was very superficial, having but a thin layer of cortex between it and the adherent dura mater; its wall was soft, and resembled a piece of wash-leather. It contained thick greenish-yellow pus. No. 3, in the supramarginal gyrus, passing downwards and forwards in the first temporo-sphenoidal convolution and lower part of the ascending parietal, about the size of a large greengage plum, the walls and contents similar to those of No. 2. No. 4, the largest, was in the angular gyrus and posterior part of first temporo-sphenoidal, the size of a tangerine orange. The walls were not quite so thick, but distinct. No. 5 a mere focus of pus in the middle of the second frontal convolution.

There was no effusion into the ventricles; the brain substance of the right hemisphere was very soft, that of the left was fairly normal. The remainder of the body was not examined.

REMARKS.—Before operating I had to decide whether to explore at the seat of injury on the forehead, or to cut down upon the face centre of the motor area. There were no symptoms pointing to a brain or bone lesion in the former position; and as regards the latter, the headache, vomiting and double optic neuritis proved that there was an intracranial lesion, the local spasm indicated its position. These symptoms were therefore relied on, although from the nature of the accident—a rivet striking the forehead—it was clear that no other part of the head had been directly injured. The result was that the position of one of the abscesses was accurately diagnosed. Dr. Gowers, in his *Diseases of the Nervous System*, gives cases of injury to the forehead in which trephining was done at the seat of injury and pus let out. He adds: "I am aware of no case in which the indications of cerebral localisation have alone guided the operator successfully. The most they have done is to corroborate the indications of local injury." The arm centre should have been more fully explored, as the rigidity of the elbow indicated that it was involved. Another, but perhaps more obscure symptom, might have led to the exploration of the centre for vision, namely, the total loss of sight which came on during the last few days of the lad's life. It was then recognised that the optic neuritis would not account for this. The hollow needle must have been pushed into some of the abscesses at the time of the trephining, unless it is supposed that they formed subsequently, but from the nature of the wall of the abscesses I do not think this was the case. The needle was of good size, but it probably became blocked by bits of softened brain matter. My friend Dr. Drummond suggested that for exploration of the brain, trephining is a very severe operation, and he asked me if I could drill a hole through the skull and so introduce an exploring needle. I found an American drill, which was tried *post-mortem* and answered well; it carried all the bone dust away in its grooved stem. I regret to say that Dr. Drummond has been anticipated by an American surgeon, who described the method a few months ago. The great improvement in the lad's condition after the operation I take to be due partly to the emptying of the small abscess, partly to the relief of intracranial pressure, and the absence of meningitis to asepsis. It is interesting to note that at the seat of injury there was no disease of the brain, although a piece of dead bone was lying in contact with the dura mater. At the same time I have no doubt that it furnished the focus from which the abscesses were started.

CARDIFF INFIRMARY.

TWO CASES OF TREPHINING.

(Under the care of Dr. SHEEN, Surgeon to the Infirmary.)

[Notes by Mr. JOHN THOMAS, House-Surgeon.]

CASE I.—E. T., boy, aged 12, admitted on June 7th, 1889, with the following history:

On April 4th, nine weeks previous to admission, he was struck by a stone on the forehead just to the left of the middle line, and three inches above the root of the nose. The wound bled profusely, but the patient did not become unconscious. He went to school the next day. During the next few days he became drowsy, and, on the fifth day after the accident, was slightly amnesic, and again confined to bed. He then improved for a fortnight, and the amnesia passed away. When he had got slightly better, he went out again, contrary to instructions given, and it was soon noticed that his right leg was weak, and within a few days (three weeks ago) he became hemiplegic. His condition remained the same up to two days ago, except that he had been getting weaker. Three weeks ago some small pieces of bone were removed from the site of the injury. Two days ago he fainted whilst being washed, and became very drowsy.

On admission he had right-sided hemiplegia, and was unconscious, and continued so.

June 11th. More conscious. Answers questions slowly. Moves right arm slowly; grasp of hand feeble. Passes urine in bed, but not motions. Movement of right leg feeble; drawn away slowly on pinching toes. Is quite blind; does not perceive the light from the ophthalmoscopic mirror. Has well-marked double optic neuritis; no hæmorrhages. Pupils dilated, equal, do not react to light. Slight drooping of left upper eyelid. Can close the lids normally. The movements of left eyeball are imperfect. From visual axis of left eyeball movement inwards is good, outwards abolished, downwards fairly good, upwards extremely slight. Right eyeball movements normal. Right orbicularis palpebrarum is partly paralysed, as well as the corrugator supercilii. Hearing is partly paralysed, as well as the corrugator supercilii. Hearing fairly good, but subnormal on both sides. Recognises his friends immediately by their voices. Tongue coated with white fur; cannot be protruded beyond teeth. Taste fairly good. Sensation to pain fairly good on both sides of body, limbs and face. Tactile sensation universally present, but much blunted. Knee-jerk absent. Breathing quiet and shallow. Pulse 66.

June 18th. Patient asked for the urine bottle, and used it for the first time. The right lower limb is paralysed. The right upper limb is paralysed, except that patient can flex the fingers and adduct the arm slightly. Extensors of fingers paralysed. Patient complains of tenderness when the front part of the skull is percussed on either side. There is œdema of the forehead.

June 20th. Patient had a right-sided convulsion, lasting about three minutes. This was repeated on the 23rd, and lasted five minutes. Both sides were affected, but the sequence of events was not carefully watched.

The case was diagnosed as a probable abscess in the area of the arm and leg centre. A consultation of the staff was held on the 23rd. The skull was trephined in two places. In the first instance a little to the outside of the original wound by a one inch trephine. A semilunar scalp flap was turned back in each case. The original wound was examined; there was deficiency of the outer table, and a small opening into the longitudinal sinus, which bled somewhat profusely. The moment the dura mater

was incised by a crucial incision, healthy brain protruded quickly and pulsated strongly. A grooved needle was plunged into the brain in different directions, with a negative result; then an aspirating cannula was pushed backwards and deeply into the brain substance towards the motor area, and on withdrawing it it was found to contain a few drops of pus. The protruding brain substance was cut off, and the wound closed. The second trephining, with the same trephine, was made over the middle of the fissure of Rolando. This fissure was localised and marked according to the rules of Lucas-Championnière, Thane, and Macewen. On incision of the dura mater healthy brain protruded. After some difficulty pus was eventually found by plunging a scalpel deep down into the brain substance, and twisting it slightly on its own axis. Ten drachms came away. A large drainage tube was inserted, the parts brought together, dusted with iodoform, and dressed with dry boric lint, salicylic wool, and gauze bandage. The patient was under chloroform two hours and a half, and the operation was preceded by a hypodermic injection of one-sixth of a grain of morphine. The strictest antiseptic precautions (no spray) were carried out.

During the afternoon the patient was very low, and had three enemata of beef-tea, one containing half an ounce of brandy. Pulse, 132 to 160, very feeble; respirations, 8 to 10; temp. 99° to 100° F.; dressing thorough at 9 P.M. and packed; wounds dressed at 11.40 P.M. Some accumulation of pus and blood. Up to midnight took 5 ounces of milk.

24th. Temperature 101°; pulse 130, feeble; respiration 17 to 20. Ptosis of left eye has disappeared; 4½ ounces of milk taken during night; catheter passed and 7 ounces of urine drawn off; feels thirsty, and at times puts his left hand to his left temple and complains of pain. Midnight: Patient restless, and crying at times; head dressed—a good deal of discharge; 12 ounces of milk taken since morning. Pulse 124; respiration, 19; temperature 99.4°.

25th (third day). Quiet night; slept about three hours, and for the first time has moved on to his left side. Took seven ounces of milk during the night. Seems slightly better. Speaks slowly and monosyllabically as "Give—me—some—milk." "Yes; no; all—right." Passed urine voluntarily after asking for the bottle. Midnight. Patient slept several hours during the day. Bowels moved at 2.30 P.M., and patient used bed pan. Thirty ounces of milk taken since morning. Does not protrude tongue beyond teeth. Wounds dressed; good deal of discharge. Pulse 110, respiration 19, temperature 99.4.°

26th (fourth day). Passed urine in bottle in night. 9.30 A.M. Passed urine and motion in bed; did not ask for bottle.

27th. Restless during the night, and passed urine and motion in bed. Complains of pain in the right arm. Head dressed and abscess cavity washed out through drainage tube with carbolic lotion 1 to 40. Evening. Has slept comfortably for several short periods during day. Passed urine voluntarily into bottle.

28th (sixth day). Seems better. Tongue clean, is protruded beyond teeth, and deviated to the right side. Has regained some control over triceps in upper right limb and flexors of thigh. Pupils equal, and patient moves his left eye upwards; in short, the movements of the left eyeball are in harmony with the right, except as to abduction of eyeball. The third nerve seems to have regained its function. Pupils contract with convergence of eyes. 8.30 P.M. Head dressed and abscess cavity washed out as before. Passes urine voluntarily. 8 P.M. Twenty-four ounces of milk and some bread and butter taken during the day. His vocabulary of words is increasing. Optic discs not so prominent.

From this time his temperature, which had previously been normal, began to vary between 98° and 101° to 102°, large hernia cerebri formed, there scarcely seemed to be sufficient outlet for the profuse discharge. He gradually lost ground, getting much thinner, and died exhausted on August 15th, more than three weeks after the operation.

Post-mortem Examination.—Body very emaciated. All the abdominal and thoracic organs healthy. Two wounds in the left side of the skull resulting from the operation, had large hernia cerebri. There was a tube in the aperture over the motor area which went into the left lateral ventricle. On removing the skull cap there was no evidence of meningitis, the wounds in the skull and dura mater being surrounded on the inner side by organised lymph, and completely shutting off the subdural space from the aperture for exit of pus from the interior of the brain. At the base of the brain there was a small amount of greenish-yellow pus enclosed in the subarachnoid space, and specially marked in the interpeduncular space, and in front of the fourth ventricle and upper part of the spinal cord.

On cutting into the brain, the left hemisphere was found to be a mere shell of brain substance in its anterior two-thirds, and its lateral ventricle, practically a large abscess cavity, containing much thick sticky pus. There was no defined pyogenic membrane; the brain substance was soft and diffluent. The right hemisphere showed no signs of disease, but its lateral ventricle contained a small amount of pus which had found its way from the left ventricle. There was recent inflammation of its ependyma. The middle of the fissure of Rolando had been accurately cut into at the operation, and the hole for the tube lay in its centre.

CASE II. *Brachial Monospasm, with Jacksonian Epilepsy.*—J. B., male, married, aged 39, admitted under Dr. Taylor's care on July 3rd, 1888, and transferred to Dr. Sheen's care in June, 1889, with the following history: Was quite well until the second or third week in May, 1888, when he had a fit one morning soon after getting up, which was repeated many times prior to his admission. The fit always began in the left thumb and index finger, passing up the left arm, and was often, but not always, accompanied by loss of consciousness. He passed urine two or three times whilst in a fit. He had frontal headache, no vomiting, no tenderness of scalp, pulse 50; as many as three fits a day at times.

On July 6th, 1888, he had a fit which lasted about eight minutes. The mouth was drawn up to the left, the left fingers and forearm were flexed, the arm drawn up over the head, and the eye turned to the left. There was no loss of consciousness. The patient had endeavoured to stop the fits by squeezing the arm, but had only succeeded twice. The fundus oculi was normal except the lower margin of the right disc, which was rather swollen; vessels moderately distended; discs normal in colour. No specific history. He was put on pot. iod. gr. v. and pot. bromid. gr. xv. t.d., and had a fit daily till July 31st, when the doses were increased to pot. iod. gr. x and pot. bromid. ℥j t.d. There was no recurrence of fits till August 18th, when he had an attack of emotional excitement of swearing, followed by crying, and the patient subsequently remembered nothing of the attack.

The left hand has been in a state of clonic spasm since his admission, and its power is less than half that of the right as tested by the dynamometer.

August 23rd. Since the 20th the patient has been wandering at times, and subject to auditory hallucinations. He was put on pot. iod. gr. v., liq. hydrarg. perchlor. ℥j t.d.

September 10th. Fits daily, varying in number from one to three or four. The course of events is as follows: the spasms, which are very rapid, begin in the left thumb and index finger, then the forearm and arm become affected, the left fingers, wrist, and elbow being flexed, and the arm drawn up over the head; then the face is drawn to the left, the eyes turned to the left, and the head turned to the right side, the left lower limb being at the same time convulsed. Then the right side becomes affected, but the sequence of events is not quite so clear, the spasms being universal. Dynamometer: left 28°, right 75°.

September 28th. Temperature went up to 102.8° in the evening.

October 3rd. Patient had a fit whilst the house-surgeon was in the ward. The spasms were very strong in the arm before the onset of the fit, the arm being abducted and the forearm pronated simultaneously. It lasted fifteen seconds, and there was no loss of consciousness. The fit at first affected the left side, extending from the arm to the face, affecting all the muscles, including the occipito-frontalis, tongue, and diaphragm in a tonic spasm. The left thigh and leg were extended whilst the right were flexed. The patient knew the fit was coming on by the exaggerated movements.

October 12th. Fits very numerous last night and to-day. No loss of consciousness. Movements very violent; 64 in a minute this morning. Muscles affected in the arm are chiefly the biceps, deltoid, and trapezius.

October 15th. The left lower lid droops slightly, the corneal margin being further from the lid than its fellow when looking into space, which gives an appearance of protrusion of the eyeball. Patient walks well. Knee-jerk equal on both sides, and slightly exaggerated. Slight ankle clonus.

From this time onward till July 3rd, 1889, he had varied medicinal treatment, mostly large doses of pot. iod. for weeks together, but without any permanent benefit, and as the symptoms pointed to localised mischief in the brain, it was suggested that trephining might possibly relieve him.

July 4th, 1889. The head having been, two days before, shaved, thoroughly washed with soap and water, then with ether, and covered with pads of carbolic lotion, a hypodermic injection of one-fourth of a grain of morphine was administered, and chloroform given by the house-surgeon, Mr. Thomas. After reflecting a semilunar flap of scalp and pericranium, the skull was trephined by a one inch trephine a little in advance of the middle third of the fissure of Rolando on the right side. After exposing the brain, nothing abnormal was seen, but the sensation to touch was very elastic. A scalpel was plunged into the brain in various directions, but nothing discovered. The dura mater was then replaced, skeins of catgut for drainage put under skin flap, and flap stitched with carbolised silk sutures. The same dressings as in the previous case. Operation lasted one hour and a quarter.

July 5th. Head dressed, and catgut drainage removed. Wound healthy. The wound subsequently healed by first intention. He had only one attack of spasms and fit to July 11th, during which time he expressed himself as feeling better. Afterwards the fits recurred as bad as ever, and he was removed to the workhouse hospital on August 1st, and subsequently to the asylum as an insane patient. I regret that a much larger trephine was not used, so that the brain could have been better explored.

Dr. Pringle, medical superintendent, has kindly furnished me with the following notes of his condition since his admission to the County Asylum, Bridgend:

On admission, September 12th, 1889, mildly excited, restless, and incoherent; had auditory hallucinations. He did not realise his position. Knee-jerk exaggerated much, and ankle clonus was present. Superficial reflexes active.

Since admission his mental condition has varied but little; he is much lost and confused, mistakes the identity of persons; says this is Bridgend Infirmary, but not the asylum; memory is defective, cannot correctly name the day of the week, says this is 1888, and November 31st. He says he hears his mother speaking to him from under the floor; the voice seems to come through a tube.

November 9th, 1889. At present his superficial reflexes are in abeyance: knee-jerk is much exaggerated, especially the left (the merest touch elicits it); ankle clonus is in abeyance; sense of painful impressions much blunted in both arms and left leg; he just feels a pin passed through the skin. It is difficult to test localisation, owing to the mental condition. The knee-jerk varies much from time to time, as does also the condition of the left leg. The jerk is often normal: at these times there is no clonus, and there is slight rigidity of the limb; at other times there is slight clonic spasm, and at other times the limb is quiescent. The left arm is more or less in a state of clonic spasm, with partial flexion of the fingers, more or less complete flexion at wrist and elbow, and pronation of the arm. The fits vary in severity, are sometimes preceded by a scream, and sometimes patient falls helplessly upon the floor. The arm is not raised above the head. The fit begins in left arm, and soon becomes general, and patient is unconscious. A fit lasts from three to five minutes.

September 26th. ℞ Potass. brom. gr. xx ter in die. The bromide is the only special treatment he has been having, and he has taken it regularly.

September. Height, 5 ft. 5½ in.; weight, 8 st. 13 lbs. October, 9 st. 8 lbs.; November, 10 st. 1 lb.

Tracing of jerk is about 150 per minute. The fundus of the eye appears normal.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 28TH, 1890.

Sir E. H. SIEVEKING, M.D., President, in the Chair.

The Mechanism of Suspension in Locomotor Ataxy.—The discussion on Dr. James Cagney's paper on this subject, which was adjourned at the meeting of January 14th, was opened by Mr. OGILVIE, who stated that he had performed many suspensions during the last year. He found that during suspension the cord was relaxed in the dorsal region, and he thought that the proper explanation was that the relaxation of the cord allowed the bundles of fibres to separate slightly, and that in this manner some adhesions were broken down; further, that this relaxation removed some impediment to the circulation, and so favoured the absorption of any adhesions between the bundles of fibres. He agreed that the method was useless in the treatment of the ataxic state, but claimed that some of his patients who were obliged to take morphine before the suspensions, were afterwards able to exist without it. He did not offer any explanation of this fact.—Dr. FLETCHER LITTLE objected to Dr. Cagney's statement that suspension from the chin and occiput was dangerous. In his opinion, there was no danger if the experiment was properly conducted. Charcot had insisted that two-thirds of the weight must be suspended from the armpits, and only one-third from the head. If these directions were carried out, and the weight of the body was very gradually permitted to fall on the head, there was little danger. If locomotor ataxy was a disease affecting the cerebro-spinal system generally, then extension from the armpits was insufficient to produce a beneficial result.—Mr. ROUGHTON asked on what grounds the column was said to be elongated during suspension. He did not believe that that statement was correct. He described the sensations he experienced when suspended, and asserted that if he were a subject with tabes dorsalis he should prefer to continue ataxic rather than be treated by the suspension method.—Dr. CAGNEY urged that if the cord were benefited by stretching, it was not benefited by relaxation, and *vice versâ*. If the symptoms were relieved at all it was by relaxation in the dorsal region, and he agreed with the explanation which Mr. Ogilvie had given of the phenomena. He contended that it was absolutely impossible to stretch the cord in the dorsal region, and no considerable stretching or relaxation was possible in the cervical region. He insisted that the attempt to do so was unpleasant as well as useless. He referred to a paper read at the Medical Congress at Padua in 1889, detailing some immediate fatal issues to the treatment. Professor Horsley showed some years back that it was not possible to stretch the spinal cord during life by any manipulation. He allowed that the danger and inconvenience might with care be reduced to a minimum. It must be remembered that Charcot declined to state that elongation of the cord would be beneficial to ataxic patients, though it was obvious, if his directions were followed, that this was the object aimed at. If any benefit ensued he urged that it was from relaxation and not from stretching of the cord. On the causation of the improvement Charcot and De Watteville were purposely silent.

A Case of Hernia of the Cæcum, entirely wanting in a Peritoneal Sac, in which Strangulation at the Internal Abdominal Ring co-existed with an Intussusception through the Ileo-Cæcal Valve.—Mr. WILLIAM H. BENNETT described this case. A labourer, aged 52, was admitted into St. George's Hospital on October 26th with symptoms of strangulation in a previously reducible, and apparently old standing, scrotal hernia. Twenty-four hours before admission he felt some burning pain in the scrotum, and found the hernia down, although none of the ordinary sensations warning him of a sudden descent of gut had been experienced. The rupture slowly increased in size, and all attempts at reduction failed. When the man was seen by the author, six hours after admission, a pyriform swelling, as large as two closed fists, occupied the right side of the scrotum, and was clearly a strangulated hernia. Upon performing herniotomy, an oval fluctuating tumour was exposed, which had not the appearance of peritoneum, and which was suspected to be gut, although no peritoneal sac had been seen. As the hernia was absolutely irreducible, in spite of very free division of the constricting soft parts, and as a hard mass of doubtful nature was perceptible inside the tumour, the latter was opened, upon which a large quantity of perfectly clear fluid escaped, such as often comes from a hernial sac. The structure opened was the cæcum, and projecting into it through the ileo-cæcal valve was an invaginated piece of gut three inches long. The cæcum was entirely free from peritoneal covering, but behind it, adherent to the testicle, was a piece of omentum lying in a peritoneal sac, which had presumably also contained the reducible hernia described by the patient. All attempts to reduce either the intussusception or the hernia having failed, and as the critical condition of the patient negatived the propriety of abdominal section, a temporary artificial anus was made with a view to future proceedings for the restoration of the normal state of the parts. The patient did not rally sufficiently for further treatment, and died of asthenia on October 29th. The case was described in detail, and the following points were briefly discussed:—1, the extreme rareness of extra-peritoneal hernia of the cæcum; 2, the small percentage of cases of strangulated hernia of all kinds in which the cæcum was found in the sac; 3, the relation of the intussusception to the production of the hernia, and *vice versâ*; 4, the

escape of clear watery fluid from the bowel when opened. The co-existence of two such conditions as extra-peritoneal hernia of the cæcum and ileo-colic intussusception appeared to the author to be unique amongst recorded cases.—Mr. TREVES expressed his pleasure on hearing the case related, and stated that, as far as he knew, it was unique. There still existed in many textbooks the statement that "a hernia of the cæcum had no sac." He had traced it back through Chelius, and ultimately found that Scarpa was responsible for its origin, and quoted a case reported by Arnot in 1792, in which the whole cæcum was cut away when found herniated; the patient, a man of 60, recovering with an artificial anus. He had collected 15 cases of hernia of the cæcum, in 13 of which there was a complete sac, and in 2 so little sac as almost to justify the statement that there was none. He mentioned a specimen in St. Bartholomew's Hospital museum, which was described in the catalogue at great length as one of hernia of the cæcum without a sac; he obtained permission to examine it, and found that there was no cæcum, but that the hernia was of the sigmoid flexure, and that there was a complete sac. This specimen was responsible for a good deal of the erroneous teaching which formerly took place. He questioned whether Mr. Bennett was right in describing the case as strangulated. These cæcal herniæ were often incarcerated and inflamed. Moreover, the patient walked into the hospital, an unusual proceeding in a patient with a strangulated rupture, though not uncommon with an incarcerated hernia. The association of the intussusception with the hernia was interesting, but it must be borne in mind that this condition followed all sorts of tumultuous movements of the bowels. The presence of the clear watery fluid was explained by the acuteness of the ileo-colic form of intussusception, and was due to early œdema of the convex side of the intussusceptum, so that fluid would escape directly the bowel wall was incised. He referred to the frequency with which a hernia of the cæcum was associated with hernia of the small bowel, there being two sacs, and mentioned a case under his care of left labial hernia, which contained the cæcum. In this case there was a circular dimple in the skin over the hernia, similar to that seen so often over a spina bifida, to which the cæcum was attached, and which could not be separated from it; he accordingly cut out a circular piece of skin and reduced it with the bowel into the abdomen.—Mr. HULKE referred to the popular belief that a herniated cæcum had no sac, and allowed that cases with this condition were rarely met with. He detailed a case in which he tried to perform a radical cure on a large scrotal hernia in a young boy; the cæcum was found, and, on tracing up the gut, he came on the ascending colon, which had a sac; there was no sac to the cæcum, and he supposed that in the descent of the cæcum the peritoneum had been stripped off it. He found that the ascending colon was fixed close to the internal ring, and that to reduce the cæcum would kink the gut, so that he left the gut in the scrotum.—Mr. BARWELL commented on the frequency with which intussusception and hernia were associated.—Mr. BENNETT, in reply, insisted that the hernia was strangulated, not so much from the actual symptoms, though the man had been vomiting for twelve hours, as from the fact that after opening the cæcum he could not pass his finger up the colon, on account of the constriction. The fact of the man being able to walk into the hospital did not negative strangulation; for he had recently operated on a man who walked in who had fæces in the sac of a strangulated hernia; the rent was sewn up with a Lembert's suture, and the man recovered. He accepted Mr. Treves's account of the origin of the watery fluid.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 24TH, 1890.

ALFRED WILLETT, F.R.C.S., Vice-President, in the Chair.

Two Rare Cases of Sacculated Vesical Calculi in the Male successfully removed by Suprapubic Lithotomy.—Mr. BUCKSTON BROWNE said that during the past year he had operated upon fifty-one individuals for stone in the bladder, that in eight he had been obliged to perform lithotomy, and that all the lithotomy cases illustrated the advantages of the suprapubic method, especially the two cases which he proceeded to describe. Case I. A collection of small stones in a sac on the floor of the bladder, the neck of the sac being too small to admit a lithotrite. A gentleman, aged 68, seen with Dr. Hardy, of Bournemouth, and Dr. Gimson, of Witham, who were both present at the operation subsequently performed. The patient passed all his urine by catheter. The calls to use the instrument were most urgent, and during the night the catheter was passed every two hours. Sitting down caused great pain. There was much muco-pus in the urine. On sounding the bladder, stone was found. Lithotrity was performed on February 8th, and several calculi were removed, consisting of uric acid centres with considerable phosphatic incrustation. The urine became almost translucent, and was soon held for six to seven hours. The patient went home in less than three weeks. During March he remained in good order. Towards the end of April the old pain, on sitting down, came on again, and riding in a cab caused uneasiness. On April 27th, under an anæsthetic, three facetted calculi were washed out by means of a No. 16 (English) tube and aspirator; a fourth stone was too large to come through, and had to be crushed before being washed out. On sounding with a small (No. 6) sound, the instrument at first failed to find anything of a calculous character, when suddenly the reversed beak clipped into a little place on the floor of the bladder, and to the patient's left, which felt like a bag of small shingle. The sound could again and again be put into this place, but a prolonged attempt to get in the beak of a lithotrite was unsuccessful, and the most persevering attempts with tube and aspirator failed to dislodge or wash out a single calculus. At last, as the patient had not consented to the use of the knife, the operation had to be abandoned. The removal of the free calculi was followed by relief, but the patient returned in a month with the old pains. On June 1st the bladder was opened above the pubes. A stone as big as a horse-bean was found in the bladder and removed. Trabeculæ crossed the bladder walls in all directions, and many orifices to distinct sacs were felt, but the finger could feel no more stone. A small sound was then passed in through the wound, and its point soon passed into a sac on the floor of the bladder and to the patient's left, and a mass of small stones was distinctly felt there. The sound was followed down by the left forefinger, its tip barely reached the orifice of the sac, and it could not be passed in until the rectal plug was removed and firm pressure upwards made by the right forefinger passed into the rectum. In pressing the tip of the left forefinger into the sac the orifice was evidently and necessarily lacerated, and bright blood began to flow. One by one with the left forefinger nail each calculus was evacuated from the sac into the general cavity of the bladder, and then removed by finger and scoop; this difficult proceeding occupied an hour. The suprapubic wound was healed in two weeks, and the patient left town a month after the operation able to hold urine $7\frac{1}{2}$ hours, and he had since remained perfectly well. Possibly the calculi were impacted within the orifice of the left ureter, but the author was more inclined to think from there being no history of renal colic that a vesical sac just below and in front of the orifice of the left ureter offered itself as a convenient receptacle for calculi as they came down through that tube, and that occasionally a stone would work out of the sac into the bladder cavity and cause vesical symptoms. Case II. Two large calculi in a vesical sac, forming an inguinal tumour, which had been treated as an ordinary hernia in a gentleman, aged 74, seen with Dr. W. J. Harris. There was a long history of troublesome prostatic retention of urine, beginning with complete retention, and only relieved after long delay and difficulty. All urine was passed by catheter every four hours. The most marked symptom was violent vesical spasm both before and after catheterisation. He had been sounded twice by an accomplished surgeon in the country. The first time it was thought a stone was struck, but no calculus was found at the second examination. He could not bear carriage exercise, and existence was only rendered tolerable by the free use of morphine and belladonna. For some years a truss had been worn for a right inguinal protrusion. On sounding, a stone was found in the cavity of the bladder, and arrangements were made for the performance of lithotrity. The urethra measured $10\frac{1}{2}$ inches, and, owing to the great size of the prostate, difficulty was anticipated, and instruments for lithotomy were taken. On June 17th, ether was administered. Three large stones were found lying behind an enormously enlarged prostatic middle lobe. These were crushed, but much of the *débris* seemed to escape the lithotrites and evacuating tubes, and a sound was passed to make a careful exploration. Much broken stone was felt in a deep post-prostatic pouch, but the sound, which fortunately was long, measuring 11 inches, passed upwards, and to the patient's right, into what had been considered to be an ordinary inguinal hernia, and there detected two large stones. When the hand was placed upon the groin, the calculi and end of the sound could be perfectly well defined,

grating one against the other. The case was evidently quite unsuited for lithotrity, and without moving the patient from the bed the bladder was opened above the pubes, and the post-prostatic pouch, bladder cavity, and large vesical inguinal sac cleared of their calculous contents by means of scoop and free warm water irrigation. The *débris* from the bladder weighed 9 drachms, and the two facetted calculi from the sac weighed respectively 2½ drachms and 1 drachm; they were of uric acid. In three weeks the wound was healed. The patient had since been remarkably well and comfortable, and during the summer often swam in the open sea. Mr. Buckston Browne said he brought these cases forward to illustrate some of the difficulties both in the diagnosis and treatment of stone in the bladder, and also the facilities offered by the suprapubic operation. He could not conceive how the first one could have been saved by any other means, and although the second case might have been treated by lateral lithotomy, he thought that proceeding would have been highly dangerous, both from the necessary tediousness of the operation, and the free bleeding, which must have continued until all the stones had been extracted.—Mr. GODLEE inquired how the sacculus came to lie in the inguinal canal, and how Mr. Browne had dealt with the canal? He mentioned a case in which the lower end of the ureter was filled with small calculi.—Mr. BUTLIN mentioned the case of a patient with stone in the bladder, always to be felt with a sound, but never, except once, caught with a lithotrite. At the *post-mortem* examination there was found a sacculus in the wall of the bladder, with very thin walls. The lithotrite had at last caught the stone in the sacculus, causing the thin wall to rupture, and death therefrom in twenty-four hours. If lithotomy had been done, that patient's life would probably have been saved.—Mr. B. PITTS described the case of a child who had two calculi, one of which was fixed. Soon afterwards suprapubic lithotomy was done, when one stone only was found. The patient was again examined by the rectum, and a calculus was found in the ureter. This was picked out with a needle through the suprapubic wound, until at last, after three quarters of an hour of working at it, a probe was passed behind it, and thence it was evacuated. The patient made a good recovery. The case exemplified the value in children's cases of making a rectal examination.—Mr. BRUCE CLARKE had two questions to put, one as to the origin of these stones. He was not quite certain they were not originally formed in the prostate, some of them finding their way through to the floor of the bladder, and there becoming encysted. He had once had a case similar to that of Mr. B. Browne. As to the removal by a suprapubic operation, it was the only kind of operation suited to such a case. In such a case he had twice done the suprapubic operation, and had besides this crushed also three calculi in the bladder in addition. On the second occasion of opening the bladder, he had cut through the peritoneum. He, therefore, at once stitched it to the external wound, and opened the bladder some three days afterwards.—Mr. HOWARD MARSH thought these cases strongly favoured the suprapubic operation. He had, in fact, come to the conclusion that in almost every case the suprapubic operation was the best to perform. It had now almost superseded the lateral operation. As to the case of an inguinal hernia containing a stone in the bladder, he had once opened a hernia and found it to contain the gall bladder.—Surgeon-Major BARKER said that he had done over fifty cases of the lateral operation in children with only one death. His experience was altogether in favour of the lateral operation. Perhaps in Mr. Browne's case the sacculus continued to reside in the hernia.—Mr. A. E. J. BARKER had attended a child with a large stone, composed of urates at the centre, covered only by a phosphatic coating. The bladder was washed with warm water and a drainage tube inserted; but the wound was not healed yet. Eventually an abscess formed just over the pubes, which had been opened. The cases were unsuitable for the operation in which the bladder had to be drained, as a state of foulness in the interior of the bladder itself existed. The phosphatic material in such a case prevented the early healing of the wound. Possibly, with a lateral operation the drainage of the bladder would have been more nearly realised.—Mr. B. BROWNE, in reply, said that the protrusion in the groin only occurred when the patient stood up, and went away when he lay down, all of which showed that the vesical tumour was reducible. He still wore a truss. As to Mr. Butlin's case, he believed the sac walls, when the sac was in the base of the bladder, were often very thin. As Mr. Pitts's case showed, a rectal examination ought always to be performed, as it frequently gave most valuable information. As to Mr. Bruce Clarke's case, he thought that a surgeon often performing suprapubic lithotomy must occasionally open the peritoneum. He had twice done so in his own operations. He quite agreed with Mr. Howard Marsh as to the ordinary advantage of the suprapubic method for lithotomy except in cases of prostatic abscess or extravasation of urine. He himself (the speaker) was thankful to the surgeons who had again brought it into daily practice. As to Mr. Barker's case, he had sometimes drained the bladder by a small catheter. He never put a stitch in the bladder, only in the abdominal wall. He believed Mr. Barker would have had as much trouble in his case if the operation had been that by the lateral method. He looked upon its non-healing as simply accidental.

Calculus Impacted in the Ureter: Removed by Operation.—Mr. G. TWYNAM sent a report of the case, which was read by Mr. GODLEE. A child, aged 8, an out-patient at the Prince Alfred Hospital, Sydney, was admitted in May, 1888. He had had pain in the abdomen and hæmaturia at irregular intervals for sixteen months. He had been sounded, but no stone was found. The urine was sometimes clear, sometimes contained a large amount of blood and large mucous casts, but no trace of bilharzia or shreds of tumour. In June, 1888, he vomited a round worm, and after this he was free from hæmaturia for a month, but it recurred at the end of July. The pain was felt over the pubes and at the tip of the penis after micturition. The temperature varied from 97° to 100°, being subnormal when the blood was present. In December he complained of pain at the umbilicus and in the left loin. At this time he was not in the hospital, but was readmitted in January, 1889, with a temperature of 104°, pus and mucus being present in the urine. There was distinct tenderness, but no pulse in the left flank, and the patient leaned over to the left side. The temperature remained high. On February 6th an exploratory incision in the left linea semilunaris was made, and the left kidney and ureter were examined, but no stone was found; a small calculus was detected in the right ureter two inches from the bladder, and when pressed down could be felt by the finger in the rectum. The wound was closed and healed well. The temperature remained normal till February 23rd, when it rose to 106°. He had an attack of convulsions three days after the operation, and was unconscious for some days afterwards. On February 27th an operation was undertaken for removal of the stone through an incision similar to that used for tying the common iliac artery. Some difficulty was found in isolating the ureter, but it was ultimately accomplished, and the stone was extracted with forceps through a small incision. It weighed 6 grains, and was just the size of a No. 12 catheter. The wound in the ureter was stitched with fine silk by means of a fine eye needle, and this was very difficult to accomplish. A drainage tube was introduced to the bottom of the cavity, and the wound was dressed with salicylic wool. Urine, however, soaked freely from the wound for three days, so that the dressings had to be frequently changed. Some suppuration occurred necessitating the removal of the stitches with which the wound had been closed, and there was some rise in temperature, lasting for a few days. On the fifth day the urine ceased to flow from the wound, which then rapidly healed, and the boy made a perfect recovery. The striking points about this case were: (1) the difficulty in diagnosis, owing to the fact that a stone in the bottom of the right ureter caused pain in the region of the left kidney; (2) in the novel method of removal of a stone situated so low down in the ureter.—Mr. GODLEE said there were two points of interest in the paper, one that with a stone in the right ureter the pain was on the left side of the abdomen, and he would ask whether it was more common to have left-sided pain with right-sided calculus, or right-sided pain with a calculus on the left side. The second point of interest was the following: How was a stone in the ureter to be removed? After incising a kidney it was possible to pass a forceps or probe down in the ureter to the front of the iliac artery, and feel the pulsations of the artery communicated to the finger by the probe; but the part of the ureter between the bladder and the brim of the pelvis had hitherto seemed to be a part not to be reached by the surgeon.—The CHAIRMAN thought the special thanks of the meeting were due to Mr. Twynam for his very valuable paper. The operation suggested by that gentleman for the purpose of reaching this part of the ureter had not hitherto been done.—Mr. B. PITTS had made experiments respecting the dilatation of the ureters. He had found they were easily got at, and could be diverted without trouble in the way described in the paper.—Mr. HOWARD MARSH said that Mr. T. Smith some years ago diverted the ureters into the rectum, in a case of ectopia vesicæ. One ureter was passed into

the rectum, and broke away again; the other, however, was retained there. The kidney was diseased in which the ureter had not been diverted; and the other kidney became inflamed, probably from diversion of the intestinal gases up into the kidney, so that the child died.—Mr. BLACK had suggested that the flow of urine from either kidney might be temporarily stopped, for diagnostic purposes, by passing Mr. Davy's lever in the rectum to the point at which the ureter crosses the iliac artery.—Mr. J. CROFT inquired how the wound was sutured. If the suture were made through the muscular wall of the ureter there was great probability of quick union; whereas if the mucous membrane were included in the suture healing would be delayed. He inquired whether the suturing included the mucous membrane as well as the muscular coat.—Mr. GOULD said that as far as he knew it was the only case on record of the ureter being sutured. As to the pain from one kidney being referred to the other side, he thought this occurrence was the cause why many cases of lumbar exploration had ended in disappointment. In more than half of such explorations no stone had been found. He had seen cases of fragments of stone being removed from one kidney without there being any very marked pain accompanying it. He thought the abdominal operation was generally preferable. — Mr. BRUCE CLARKE said that a patient might have a uric acid diathesis, and the uric acid quite mislead one, passing down from the healthy kidney and giving pain, whilst the large calculus on the other side might give very little pain. He quite agreed that with doubtful cases the abdominal operation was preferable, inasmuch as it would allow both kidneys to be examined.—Mr. GODLEE, in reply, said that of course the mucous membrane must be turned in. He did not attach importance to suturing the ureter, nor did he consider it a procedure likely to prove of value, since longitudinal incisions always healed. If the ureter were torn across it never healed.

Excision of the Head of the Femur and Erasion of the Hip-joint, with immediate and permanent Closure of the Wound.—Mr. LOCKWOOD showed a boy, aged 6, upon whom he had performed the operation of excision of the head of the femur, with erasion of the hip-joint, with immediate and permanent closure of the wound. The operation was performed during a comparatively early stage of suppurating synovitis of the hip-joint, and upon a patient who had been treated for three months with rest and extensions, followed by relapse. The usual symptoms were present, and there was half an inch of real shortening. The inguinal and iliac lymphatic glands were enlarged and tender. The hip-joint was opened by the anterior incision, and a quantity of turbid fluid evacuated. The head of the femur was found partially displaced from the acetabulum, and the epiphysial line rough. The head of the femur was sawn off and removed; the acetabulum was erased with a sharp spoon, irrigated with perchloride of mercury lotion, thoroughly rubbed with iodoform, and closed with sterilised silk sutures, and an alembroth dressing applied, and pressure made with a rubber bandage. The operation was performed on March 13th, and the dressing and sutures were removed on April 1st, when the wound was healed. The day after the operation the temperature was 100° F., with a good deal of vomiting, but otherwise there was nothing to record. The child had now a freely movable hip, and walked with great ease and without pain. There was not more than half an inch of shortening. The result of this case was attributed to the early date of the operation, to the use of the anterior incision, and to the fact that the operation was aseptic, as proved by cultures made when the dressing was removed. Tubercle bacilli were looked for but not found. Although Mr. Lockwood considered excisions of joints by no means to be commended, yet in the present case he was in favour of early aseptic operation in suppurating synovitis of the hip.—Mr. CROFT had not done the operation in this particular way. As to the pathology, was it a case of tubercular disease or not; or was it one of suppurative synovitis? If the fluid which exuded at the operation was puriform, that fact should be stated, and be made quite clear. In cases of the kind one generally found turbid serum, rarely puriform fluid. If there was tubercular disease of the joint, excision was done to prevent auto-inoculation; but with simply suppurative synovitis, without tubercular disease, there was not the same reason for excision. He did not believe it was better to get an ankylosed than a movable joint. With the former, a patient might be able to walk better, but a patient had to sit, and do other things besides walking.—Mr. BARTON asked what was the condition of the head of the femur and of the acetabulum.—Mr. HOWARD MARSH thought that this case, with others lately shown, indicated that a great advance in the treatment of these cases had lately occurred.—Mr. BARKER said that since December he had five times done an anterior excision. In one case there was true suppuration at the joint. The patient did well, but had a slight sinus remaining. All the other four cases had healed by primary union, and had remained well up to the present time.—Mr. LOCKWOOD, in reply, said that as to the tubercular origin or not of the disease, without evidence of the tubercle bacilli being found in the joint, and without specific cultures, he would hesitate to say, in any case, that it was of tubercular origin. The acetabulum was smooth at the operation; but the head of the femur was rough, and eroded around the line of the epiphysis.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 27TH, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

CLINICAL EVENING.

Case of Basic Tubercular Cavity.—The PRESIDENT exhibited a case of basic tubercular cavity in a man aged 31, who, twelve years previously, was the subject of left-sided pleurisy, and had had winter cough ever since. Considerable hæmoptysis occurred five months ago, and was repeated later, but the usual symptoms of phthisis were absent till about two months ago, when, on admission to the Brompton Hospital, a well-marked cavity was detected at the base of the left lung, and the sputum was found to contain tubercle bacilli. There had also been considerable pyrexia, and the apices of both lungs presented the physical signs of tuberculisation. He remarked that primary basic phthisis was exceedingly rare, and when it occurred was generally the result of the usually active movement and free ventilation of the lower lobe being interfered with by pleuritic adhesions, as in the present case, thus placing it under conditions similar to those of the upper lobe, the usual seat of tubercle.—Dr. SAVILL asked on what signs Dr. Williams relied to establish the existence of a cavity.—Dr. FLETCHER LITTLE asked whether Dr. Williams had noticed any tendency to tuberculosis of the bases in women who laced with undue tightness.—The PRESIDENT, in reply, said he depended upon the sound he obtained on coughing. Pectoriloquy was valuable evidence but less reliable. He had not remarked any tendency to disease of the bases in women who laced tightly, which immunity he attributed to the fact that lacing did not prevent inflation of the bases by means of the diaphragm.

Operation for partially-descended Testicle.—Mr. WATSON CHEYNE showed a lad, aged 12, whose testicles on both sides were originally contained in the inguinal canals. The first (on the right) he liberated and sutured to the bottom of the scrotum, but, as was usual, contraction of the cord took place, and the testicle was pulled up near the external ring. It occurred to him to adopt a modified procedure with the other, ten months later, passing a stitch through the cord just above the testicle, carried out through a hole at the bottom of the scrotum, and tied to a projecting bar on a wire frame fixed in the perineum. In this way constant traction was kept upon the cord in order to bring about a stretching. The stitch was removed on the eleventh day, and the result was highly satisfactory.—Mr. CLUTTON asked whether the testicle had been turned upside down.—Mr. WALTER PYE suggested that the good result after the second operation might be due to the tendency of the left testicle to sink lower in the scrotum. He asked whether it was thought that the operation would confer any utility on the testicles.—Mr. BUCKSTON BROWNE asked if there was any pain after the second operation.—Mr. CHEYNE, in reply, said that he did not turn the testicle upside down; he thought that it was better for the testicles to be in the scrotum for many reasons. The pain after the operation was very slight.

Cases of Thomsen's Disease.—Dr. HALE WHITE showed a lad, aged 19, afflicted with this disease, which began when a child. His father, one sister, and two cousins were also affected. Patient had the characteristic stiffness of voluntary movement, and with the fingers, for instance, when contracted, they could not be extended for about eight seconds. The second time, the immobility after flexion was four seconds, and it got gradually less after each effort. This peculiarity involved all the voluntary movements of the body but the muscles of the eyes and larynx. The interossei were not implicated, nor were the acts of defæcation, micturition, or respiration. On mechanical stimulation of either motor nerves or muscles the muscles contracted more readily than normal; the contraction and the relaxation were slower than usual. Electrical

reactions generally normal, but A.C.C. was in some muscles easier to obtain than K.C.C. He handed round myographic tracings and sections of muscles, the latter showing the muscular fibre to be hypertrophied, and the striæ indistinct.—Dr. GEORGE HERSCHELL showed two brothers, aged 28 and 18 respectively, suffering from myotonia congenita. They belonged to a family of ten children, of which number five had been similarly affected. No family history of note, beyond a rheumatic tendency. All the sufferers exhibited the ordinary signs of the disease. The first movement of the muscle after long repose was exaggerated, and a condition of tonic rigidity remained for nearly a minute after the voluntary stimulus was withdrawn. The muscular rigidity was produced by any sudden movement, particulary in climbing and walking upstairs. The arms and legs were chiefly affected, the jaws very slightly and occasionally, if at all. The patellar tendon reflex was normal after the stiffness caused by the first movement of the leg had passed off. The affection commenced as a child. He criticised Erb's statements respecting the electrical reactions obtainable, which he said were not correct.—The PRESIDENT, Dr. MONEY, and Dr. BREVOR remarked upon the rarity of the affection, and Dr. HADDEN mentioned a somewhat similar case in an adult brought before the Neurological Society.—Dr. HALE WHITE having replied, Dr. HERSCHELL, in a reply to a question, said that not more than fifteen families had been recorded as suffering from the disease.

Two Cases of Complete Epispadias.—Mr. HURRY FENWICK showed two cases of complete epispadias in the adult to illustrate two grades in the severity of the deformity.

Successful Removal of Internal Semilunar Cartilage of Knee-joint.—Mr. WALTER PYE showed a young man, aged 24, who met with an accident to the left knee-joint, after which he was subject to violent attacks of pain. As this tended to become permanent the joint was opened, and as it was found impossible to suture the left internal semilunar cartilage, which was obviously displaced, he removed it, and the case did remarkably well, both flexion and extension being simply perfect.—Mr. ALLINGHAM congratulated Mr. Pye on the result achieved, and advised that in such operations the synovial membrane should be treated like the peritoneum in abdominal operations and included in the sutures. He had collected records of twenty-three cases, in eleven of which all or part of the cartilage was removed, in the remainder the cartilage had been sutured to the head of the tibia.

Case of Heart Disease with Nervous Symptoms.—Dr. ANGEL MONEY showed a man, a painter, aged 50, suffering from double aortic disease, atheromatous arteries, high arterial tension, staggering gait, amblyopia, incipient optic nerve atrophy, increased knee-jerks, right ankle clonus. He suggested that the symptoms might be secondary to the arterial condition, due to the united action of lead and alcohol.

Instrumental Indentation of Frontal Bone.—Dr. MONEY also showed an infant with a curious depression in the left parietal region, as to the precise cause of which some doubt existed.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 4TH.

FANCOURT BARNES, M.D., Vice-President, in the Chair.

Ectopic Gestation.—The discussion on Mr. Lawson Tait's paper was continued by Dr. EDIS.—Dr. BARNES said cases ought not to be classed as ectopic gestation unless the membrane or ovum was found. He was convinced the placenta might, and did, change its site, and the villi of the chorion did, under certain circumstances, graft on afresh. He thought abdominal gestation always arose from rupture of a tube.—Dr. BANTOCK thought the term "hæmatocele" had led to much confusion, and he suggested it should be limited to extra-peritoneal effusions of blood. As to the alleged transplantation of the placenta, he did not believe it separated from its connections altogether, and then became attached again and grew, but rather spread by implanting new roots.—After some remarks by Dr. O'CALLAGHAN, Mr. LAWSON TAIT replied.

Insanity Cured by a Pessary.—In the discussion on Dr. Benington's paper on a case of insanity cured by a pessary, Dr. BARNES mentioned an instance of a woman who was in an asylum four years without improvement. At the request of the principal he examined and found acute retroflexion, the treatment of which led to rapid and permanent cure. If a systematic examination of the genital organs were made in insane females, much avoidable suffering would be prevented.

Sloughing of Bladder Wall.—Dr. HAULTAIN, of Edinburgh, read a paper based on two cases of sloughing of the bladder wall. In both there was incarcerated retroposition of the gravid uterus with retention of urine, which lasted over a month, and an enormous distension of the bladder. In one case the patient died of exhaustion before the uterus could be replaced, and twelve hours after the withdrawal of 110 ounces of porter-coloured offensive urine. In the other, after drawing off 100 ounces of urine, the uterus was replaced, and abortion took place the following day. The patient eventually made a good recovery. Dr. Haultain presented an elaborate compilation of cases. Two of his conclusions were—that the lesion had in all cases followed prolonged retention of urine or labour; that the lesion was due to pressure on the base and neck of the bladder, the veins being compressed in cases of retention, while the arteries were specially implicated in cases following labour.—Dr. FENTON made some remarks.

Exhibit.—Dr. AUVARD (Paris) exhibited a new instrument for crushing the fœtal head, which combined the advantages of the cephalotribe and cranioclast.

ANNUAL MEETING.

WEDNESDAY, JANUARY 8TH, 1890.

A. V. MACAN, M.B., President, in the Chair.

Specimens, etc.—Dr. HEYWOOD SMITH showed an Instrument, made by Messrs. Meyer and Meltzer, which combined the advantages of the duck-bill and the bivalve speculum.—The PRESIDENT showed a Uterus with small fibroid outgrowths, removed for severe menorrhagia in a single woman, aged 39. She died on the seventh day of peritonitis. The President also showed a large fibro-sarcomatous Tumour of the Ovary. The patient was single, aged 28, and suffered much pain. More than six months had elapsed since the operation, and she was quite well.—Remarks were made by Dr. BANTOCK, Dr. ROUTH, Dr. HEYWOOD SMITH, and Dr. BAGOT.

Dermoid Cyst of Both Ovaries.—Dr. BANTOCK related the case of a woman, aged 34, admitted in December with a large abdominal tumour. On removing this, which proved to be a dermoid, another was found of the same character on the other side. The uterus was enlarged to the size of a two to three months' pregnancy. The patient had not aborted, and was doing well. The case was interesting in the fact of pregnancy arising in association with so disorganised ovaries. The tumour weighed 4 lbs. The tubes were perfectly healthy.—Dr. BARNES and the PRESIDENT made some observations.

Ruptured Ovarian Cyst.—Dr. R. T. SMITH showed a specimen taken from a woman, aged 26. Dr. Smith operated. About a pint of fluid escaped on opening the abdomen, and there was marked peritonitis. The patient made a good recovery.—Dr. BANTOCK, Dr. B. FENWICK, Dr. BAGOT, and the PRESIDENT discussed the case.

President's Address.—The PRESIDENT then delivered his address, taking for his subject "Vaginal Extirpation of the Uterus."—On the motion of Dr. BARNES, a vote of thanks was agreed to by acclamation.

Financial Report.—The TREASURER (Dr. BANTOCK) read the annual report, which showed the Society to be in a prosperous financial position, and an increase in the number of new Fellows during the year.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

FRIDAY, JANUARY 10TH, 1890.

E. H. BENNETT, M.D., President, in the Chair.

Case of Injury to the Liver.—Dr. BERNARD submitted a case of injury to the liver from a crushing blow inflicted by a laden cart. There were two contusions of the upper surface and an extensive laceration of the Spigelian lobe. Before death the temperature had been high, and the urine contained sugar. The patient lived forty-two hours and a half.—The PRESIDENT mentioned a somewhat similar case. The patient lived for about five days, and then sank from inflammation of the brain.

The Pathology of Empyema.—Dr. H. T. BEWLEY read a paper on the pathology of empyema. He stated that this disease is due to the entrance of pus-producing micro-organisms into the pleural sac; that these organisms belong to several varieties, and reach the pleural sac by different routes. Basing his classification on pathological grounds he distinguished five varieties of empyema: 1. When ordinary pyogenic micrococci made their way into the pleural sac through an opening in the chest wall (perforating wound or septic puncture), or from the lung by the bursting of a

pulmonary abscess or gangrene into the pleural cavity. 2. Some cases occur in connection with croupous pneumonia, and are caused by pneumococci. 3. Some cases occurring in persons afflicted with phthisis are tubercular. 4. Under various circumstances pyogenic micrococci are able to enter and live for some time in the tissues of the human body without doing any harm. If, however, any part of the body is sufficiently injured by inflammation or in any other way, the micrococci become able to multiply in this weakened spot, and produce suppuration. In this way we must explain the conversion of serous into purulent effusions when no lesion of the chest wall or of the pulmonary pleura exists. 5. Some cases are a part of a general pyæmia.—The PRESIDENT remarked, with reference to Koch's experimental production of osteomyelitis by feeding animals on putrescent matter, that nearly twenty years ago his late colleague, Sir Edward Sinclair, said to him: "If you want to produce puerperal fever in a recently-delivered patient your surest way of doing so is to let her eat game."—After some remarks by Dr. M'WEENY, Mr. DOYLE, Dr. GRAVES, and Dr. MYLES, Dr. BEWLEY replied.

Micro-organisms.—Dr. M'WEENY exhibited Cultivations and Preparations of various Micro-organisms, and Dr. PATTESON made a few remarks.

CORK MEDICAL AND SURGICAL SOCIETY.

WEDNESDAY, JANUARY 8TH, 1890.

FRANCIS W. GREENE, M.B., B.A.T.C.D., President, in the Chair.

Specimens.—Dr. COTTER exhibited a specimen of Cancer of Pylorus, perfectly occluding the passage into the duodenum, and involving a considerable portion of the stomach.—Dr. W. ASHLEY CUMMINS (for Dr. PEARSON) showed a specimen of Tænia Solium, with head attached.

Stricture of Œsophagus treated by Gastrostomy.—Dr. ASHLEY CUMMINS read notes and exhibited naked eye and microscopic specimens of a case of malignant stricture of the œsophagus. The patient, aged 62, suffered from cough, weakness, anæmia, and great emaciation. All food taken was immediately regurgitated, whether solid or liquid. Even the smallest bougie failed to pass the stricture. Feebleness in the respiratory sounds, with dulness over the upper part of sternum, was observed. The pulse was regular, but weak. As the man was rapidly sinking, rectal alimentation having been used vainly, to prolong life gastrostomy was performed by an incision 3 inches in length, parallel to the seventh, eighth, and ninth ribs, an inch from the left costal margin. The peritoneum was stitched to the sides of the wound, the stomach drawn forward and fixed by sutures passing through the serous and muscular coats to the peritoneum at the sides of the incision, the angles of which were closed by sutures. The patient was fed by means of an aspirating needle, two ounces of beef-tea being injected into the stomach. The wound was dressed with iodoform and iodoform wool. Rectal alimentations were also continued. Next day he was again fed by the aspirating needle, milk, brandy, and beef-tea being given. Next morning an incision was made into the stomach, and an india-rubber drainage tube inserted, through which the patient was fed every two hours with milk and brandy. He gradually sank and died fifty-two hours after operation. The growth involved the bases of both lungs, the lower third of the œsophagus, and the upper part of the cardiac end of the stomach (the mediastinal glands also being infected), and presented all the characters of scirrhous cancer.

Fever.—Dr. W. JACKSON CUMMINS read a paper on fever, the discussion on which was postponed.

BOMBAY BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, DECEMBER 12TH 1889.

Surgeon-General PINKERTON, in the Chair.

Demonstrations.—Surgeon-Major HATCH showed a patient on whom he performed Colotomy for an impassable stricture of the rectum. Dr. Hatch also showed a patient suffering from an extensive Ulcerating Mass on the Face, which had destroyed the nose and upper lip, extended up to the lower margin of the orbit, and encroached on the palate. Owing to the patient talking a language not understood by anyone, his history was not known, but it was understood to be of two years' duration.—Veterinary Surgeon STEEL showed the Blood Organisms found in Surra, which had broken out amongst the tramway horses in Bombay. Specimens were taken from a sick horse, and also from a monkey and dog inoculated five days previously; the organisms were numerous and active in the blood of the inoculated animals, and apparently of the same character.—Surgeon COLLIE showed specimens of the Filaria Sanguinis Hominis found in the blood and urine of a patient who had suffered intermittently from chyluria since he was 8 years of age; the patient is now 23. The chyluria appeared at intervals of a few months, or one, two, or even five years, no assignable cause being known for the attacks. The patient was at present suffering from one of these attacks, and enjoyed good general health. Cases of Herpes Frontalis and Trophic Changes in the Hands and Feet in the initial stages of locomotor ataxy were also shown by Surgeon Collie.

Perineal Fistula.—Surgeon FAULKNER, Agency Surgeon, Ulwur, contributed notes on the following case: A patient who had had his penis amputated eight years previously, came to hospital passing his urine through a tortuous sinus in the perineum. The pain was so great, and symptoms of cystitis having developed, it was decided to give a free exit to the urine. The perineum was so distorted by cicatrices that it was decided to form, if possible, a permanent recto-vesical fistula. Seven days after the operation it was found that the urine again passed by the perineal fistula, and as the patient complained of the cannula in the rectum this was removed. Four days later the exploratory incision in the perineum had almost closed, and the patient had reverted to his condition prior to admission, to which retention was superadded. A mesial cystotomy was then performed, the bladder being found by the aid of a small director. A catheter was introduced, and a direct fistula into the bladder established, the case doing well subsequently.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 3RD, 1890.

H. CAMPBELL POPE, M.D., President, in the Chair.

Treatment of Strumous Glands.—Mr. BERTRAM THORNTON (Margate) read a paper on operative *versus* therapeutic treatment of strumous glands. The records of the last fifty years at the Royal Sea Bathing Infirmary, Margate, testified to the unsatisfactory and tedious methods of treatment prevailing up to within the last few years. An operative experience of about 100 cases led him to urge the excision of every enlarged gland or part of a gland after a reasonable period (say six or eight months) of constitutional treatment and change of air to the seaside. Modified operations, such as scooping, aspiration, small punctures with drainage, were nearly always unsatisfactory. He had had no death or serious complication to record, and the vast majority of cases had healed rapidly.—Remarks were made by the PRESIDENT, Mr. EDWARDS, Dr. ALDERSON, Mr. KEETLEY, Mr. LLOYD, and Dr. ECCLES, and Mr. THORNTON replied.

Amputation at Ankle-joint.—Mr. KEETLEY described with diagrams a mode of amputating at the ankle-joint for intractable circular ulcer of the leg, in which the skin and deeper soft tissues of the dorsum of the foot were transferred to the back of the leg, as well as the sole of the foot to the shin (as in the case published by him in November, 1885).

Specimens.—Mr. PERCY DUNN showed a pathological specimen of a Perforating Wound of the Heart caused by a fractured rib; also an enlarged Lateral Lobe of the Prostate, with ulceration.—Dr. CLEMOW showed the Meninges of a Brain, with intermeningeal hæmorrhage.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, JANUARY 16TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Cases.—Mr. SNELL showed a man, aged 57, who had been under observation for several months on account of Diffused Hæmorrhages in the Right Retina. Recently a number of purpuric spots had appeared on the extensor aspects of the forearms, particularly the left. The mucous membranes were slightly paler than natural; the gums were not spongy. The urine was slightly albuminous, and there was hypertrophy of the left ventricle. Mr. Snell remarked on the association of the purpuric spots with hæmorrhages in the retina, and said that, although the patient was undoubtedly the subject of kidney disease, there had never been present in the retina any of the white patches characteristic of albuminuric retinitis, and moreover, it was confined to the right eye.—Dr. DYSON showed a case of Right Hemiplegia with Descending Degeneration of the Lateral Columns of the Cord. The

patient was a plumber, and was seized two years before while at breakfast. He never lost consciousness, but lost the use of the right arm, right leg, and part of the right side of the face. Some aphasia supervened. His condition, when shown, was that of late rigidity of the right arm, and spastic contraction in the right leg. The patellar reflex and ankle clonus were immensely exaggerated. There was no history of syphilis, but there was one of lead colic, and there was a blue line on the gums when he was admitted into the infirmary. He had been very intemperate for some years prior to his seizure.—Mr. ATKIN showed a case of Unilateral Ulceration of the Neck. The patient was a woman, aged 75, with a history of an attack of paralysis some years before. The ulceration was confined to the left side of the neck, to the area supplied by the superficial cervical plexus. It was accompanied by great pain, and was very chronic in its nature, having lasted with but little change for over eighteen months. The question arose as to whether it was a case of senile scrofula, a probability heightened by the fact that some enlarged glands were discernible in the posterior triangle of the neck, but the absence of any scrofulous manifestations elsewhere and the marked corymbose arrangement of the ulcers suggested some degeneration of the skin due to loss of trophic influence. Exploration and scraping of the ulcers had been declined by the patient.—Mr. R. J. PYE SMITH showed a Salivary Calculus, which he had removed from the left Wharton's duct of a lady, aged 36, in whom it had caused the usual symptoms of obstruction.

Specimens.—Mr. T. ROBINSON showed a specimen of Carcinoma of the Ascending Colon, from a patient who had died in the infirmary under the care of Dr. Dyson. The patient, a man aged 47, had complained of pain in the right lumbar region of six months' duration, with constipation, but no melæna. The pain was not increased by food, and there was no vomiting. There was rapid emaciation. The abdominal muscles were tense, and there was some tenderness over a large orange-shaped tumour situated about midway between the anterior superior spine of the ilium and the ribs. The patient died of exhaustion. *Post mortem*, a tumour about the size of a large orange was found, involving nearly the whole of the ascending colon, from close to the ileo-cæcal valve to the hepatic flexure, where it extended into the liver. The growth involved the whole circumference of the bowel, and was about 2 inches in thickness, though there was a complete passage through it. There were no secondary deposits or enlarged glands found.

Epidemic Influenza.—Dr. SIDNEY ROBERTS read a paper on epidemic influenza, in which after giving a general survey of the literature on the subject up to the present time, he described the symptoms of the disease as it had occurred recently in his own person. The most marked features in his case were the suddenness of the attack, the fever, the temperature reaching 102.8°, great prostration, pain in the back and head, especially in the eyeballs, vomiting, diarrhœa, and bronchitis. The illness lasted four days, but a relapse occurred on the sixth day, marked by rise of temperature and bronchitis. Dr. Roberts thought the disease an infective one, due probably to a specific microbe, but said they must wait until bacteriologists had more thoroughly investigated the subject. As to whether the disease was contagious or miasmatic, further investigation was needed. The frequency of the concurrence of "pink eye" amongst horses and influenza in man, he thought, seemed to point to an etiological or even pathological connection between them.—Dr. PORTER, Mr. R. J. PYE SMITH, Dr. GWYNNE, and Dr. THEODORE THOMSON, took part in the discussion.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, JANUARY 15TH, 1890.

J. DIXON MANN, M.D., M.R.C.P., President, in the Chair.

Disease of the Breast in the Male.—Mr. WM. THORBURN showed two specimens. The first was a tumour which he had removed from the right breast of a boy aged 11. The growth had been noticed twelve months previously, and was then the size of a hazel nut, but when first seen it was as large as a small orange, and of the shape and consistency of the ordinary female breast. Some pain was felt in the region of the growth and down the arm. No fluid could be pressed out of the nipple. No cause could be found except that the boy leaned against the breast while writing. There were no signs of inflammation. The testes and penis were normal, and the face by no means effeminate. On removal, the mass was found to consist of fibrous tissue with a few ducts lined by a columnar epithelium, and almost devoid of lumen. The second case was a scirrhus of typical structure removed in 1886 by Mr. F. A. Heath from the left breast of a man aged 55. The growth, which was about double the size of a walnut, had been noticed for twelve months, and the axillary glands were not supposed to be affected. No cause for its appearance could be assigned.

Pal's Method of Staining Nerve Tissue.—Dr. WILLIAMSON exhibited a number of sections of the spinal cord and peripheral nerves stained according to different methods. Pal's method was described. The sections were placed in Weigert's hæmatoxylin twenty-four hours; then washed in water, placed in ¼ per cent. solution of potassium permanganate for twenty to thirty seconds, washed in water, placed in Pal's solution (oxalic acid 1, sulphite of potash 1, water 200) for a few seconds. The sections were again washed, stained with alum carmine, washed, passed through absolute alcohol, creasote, and mounted in Canada balsam. The nerve cells were stained red[1] and the nerve fibres blue-black.

Epithelioma of Colon.—Dr. DRESCHFELD related the following case, which he saw with Dr. Frakes, of Didsbury: A gentleman, aged 64, had suffered from persistent and profuse diarrhœa for upwards of seven years. The diarrhœa commenced shortly after his return from a pleasure trip to America, where he had spent several months without suffering from any symptoms of dysentery. The diarrhœa was not associated with tenesmus. He had often more than twenty stools in the day; the evacuations were pale, very fœtid, and never contained blood. The diarrhœa withstood all treatment. Beyond the great inconvenience, the health of the patient suffered but little for a long time, his appetite remained good, and he was able to take large quantities of food. Latterly he lost flesh, and complained of pain in the right hypochondriac region. A fortnight before death, symptoms of intestinal obstruction showed themselves, the diarrhœa ceased, persistent vomiting of mucus and bile came on, which a few hours before death became stercoraceous. At the *post-mortem* examination the cæcum and ascending colon were enormously distended, and the mucous surface the seat of numerous superficial ulcerations, with clean cut edges, showing no diphtheritic deposit, no thickening of their borders, and a smooth floor; the walls of the affected bowel showed but slight thickening. The ulcerations extended to the hepatic flexure of the colon, where they abutted against a new growth, which was about 3 inches in length, passed circularly round the short axis of the transverse colon, was soft and gelatinous in consistency, and had caused marked obstruction to the lumen of the large bowel. The rest of the large bowel showed no ulcerations, but was covered by a thick gelatinous mucus, and had its walls thickened. The other organs were unaffected. Microscopic examination of the ulcers showed cell infiltration of the subglandular and submucous layers; the muscular and serous coats were not much affected. The borders of the ulcers showed atrophy of the glands, and in some places mucous degeneration of the gland cells. The tumour proved to be a cylinder epithelioma, which had undergone mucous degeneration. The crypts of Lieberkühn in the neighbourhood of the tumour showed proliferation, dilatation of their lumina, and mucous degeneration of their epithelial cells. In and around the ulcers numerous micrococci were found amongst the exudation cells. The case, looked at as one of chronic catarrhal dysentery, presented many abnormal and rare features; to wit, the absence of blood in the stools, of tenesmus, and of thickening and stiffening of the affected bowels, the limited extent of the affection, and the presence of the cancerous mass, which was evidently of much more recent date than the catarrhal affection, and probably resulted from the hypertrophied and proliferated Lieberkühn's glands at the border of the ulcerated tract.

[1] Further details given in Obersteiner's *Nervöse Centralorgane.*

ST. JOHN AMBULANCE ASSOCIATION.—By permission of the Dean and Chapter, the St. John Ambulance Association has opened an ambulance station under the west portico of St. Paul's Cathedral. The expense of fitting up this station, including a two-wheeled litter, has been defrayed by Mr. Edwin Freshfield, LL.D. A qualified attendant will be on duty every day except Sunday, from 9 A.M. until 6 P.M., provided with first-aid appliances and means of transport for conveying injured persons to hospitals or their homes. This Association is establishing by degrees a network of small ambulance stations throughout the metropolis, which cannot fail to be of great public utility.

REVIEWS AND NOTICES.

PATHOLOGICAL ANATOMY OF DISEASES. By NORMAN MOORE, M.D., Assistant Physician and Lecturer on Pathological Anatomy to St. Bartholomew's Hospital. London: J. and A. Churchill. 1889.

DR. NORMAN MOORE'S unpretending but thoroughly genuine little book deserves to be widely used and studied. It is an attempt to describe or at least to indicate the appearances of morbid structures as seen in the *post-mortem* room after death from the principal diseases likely to be met with in practice. When we say that it is based almost exclusively on the author's own very large experience, we indicate its special merit and also its unavoidable limitations. It is, fortunately, not one of those extremely condensed manuals, which present accredited doctrines in the form of a highly digested pulp, intended to be absorbed, though not assimilated, with the minimum of effort on the part of the student, and reproduced in the same form for the satisfaction of examiners. Of such there is an abundant supply, though not more, it would seem, than in the present state of medical education there is a demand for. The present work is not one of that class. The information which it conveys is mostly in the form of direct observations, and though sometimes, it must be confessed, not so thorough in matter or graceful in form as might have been expected from an author of such sound literary accomplishment, will call forth some intellectual activity on the part of the student to make a proper use of it. Some unusual cases are related with clinical as well as pathological details, and these, with the statistics of new growths which are interspersed, have an interest for advanced pathologists as well as for students.

As an example of the author's method of treating the subject, we till take the chapter on Diseases of the Respiratory System, which is, relatively to its importance, one of the shortest. A list of diseases chiefly based upon the nomenclature of the College of Physicians is first given, and the morbid changes corresponding to each head are then enumerated. Croup, for instance, is defined as a clinical term, the symptoms of which may depend upon one of three pathological conditions, laryngismus stridulus, diphtheria of the larynx, or acute catarrhal inflammation. The morbid changes of the larynx are then briefly described or enumerated. Five morbid conditions of the bronchi are enumerated: catarrhal and plastic bronchitis, ulceration, bronchiectasis, and the presence of blood in the bronchial tubes, short descriptions being given of each. The morbid conditions of the lung are next discussed, emphysema, with the concomitant changes of other organs of the body, being well described. It is a sign of the compression with which the subject is treated that passive congestion of the lung is mentioned, without any description being given of the appearances. Pneumonia and tuberculosis of the lung are pretty fully described, and some space is devoted to new growths, of which the author describes two kinds as occurring primarily in the lung. Since, however, his primary carcinoma is described as originating in the glandular crypts of the bronchi, and primary sarcoma as starting from the connective tissue at the root of the lung, it does not appear that the author differs essentially from those who doubt the occurrence of primary new growth of the pulmonary tissue. An interesting table is given of the distribution of secondary growths in eleven cases of these primary new growths. The morbid conditions of the pleura are very briefly noticed. It is noteworthy that empyema is alluded to without being defined, and it is not quite clear why air in the pleura is mentioned separately from pneumothorax.

Now it is clear from this short analysis that such a chapter, if it is to be of much use to the student, must be read in connection with *post-mortem* examinations; but we are far from imputing this as a fault. On the contrary, it is a great merit in a work of this kind that it discourages "getting up" the subject at home away from the objects described and sends the student to verify its statements by actual inspection. On similar grounds, a very stimulating and original teacher of anatomy, now dead, insisted on his men using *Ward's Osteology*, and no other book on the bones, because he was sure no one would read it without having the bones before him. Only, if this be regarded as a *post-mortem* handbook, we may suggest one or two points in which we think it might be improved. More weight might with advantage have been laid upon *post-mortem* diagnosis. As an instance, attention might have been drawn to the physical differences between atelectasis, carnified lung from pressure, hepatisation, and other conditions of consolidation of the lungs. Such comparisons stimulate and encourage observation, without becoming a substitute for it. As a whole, however, the book may perhaps be rather open to the criticism of trying to compress too much into a limited space. One of the most valuable parts of the book is the account of the morbid appearances of all the organs in general febrile diseases, and the changes of other parts accompanying those of special organs. There is hardly any pathological subject of which students more often display ignorance than the condition of the whole body after death from various diseases.

The chapter on Poisons contains some good observations, but one is a little surprised to find arsenic dismissed in two lines. There is an interesting case of sulphuric acid poisoning, as to which however it might have been pointed out that the changes though diagnostic were not really pathological, since the poison had, according to the history, only two hours to act on the living body, but 26 hours on the dead tissues, which accordingly were altered in an extraordinary manner by the powerful acid.

Not much can be said in praise of the illustrations, which are evidently executed by one of the modern facsimile processes, and probably do great injustice to the original drawings. Those of the heart are the best, but illustrations such as fig. 7, fig. 37, and fig. 67 cannot be said to convey very much information; at all events, hardly enough to make it worth while to repeat them two or even three times.

We observe that this book bears on its cover the title "Medical Pathology," which, as we understand pathology, is not quite borne out by the contents. On the title page it is rightly and suitably named, the "Pathological Anatomy of Diseases." As such, we can cordially recommend it.

APPLIED ANATOMY, SURGICAL, MEDICAL, AND OPERATIVE. By J. MCLACHLAN, M.D. Third Edition, 2 volumes. Edinburgh: E. and S. Livingstone. 1889. 238 Figures.

OF late there has sprung up a demand for books of this class. They are in reality brief epitomes of surgery, and are often more pathological than their titles would lead one to suppose. This is to some extent the case with this work. The first volume treats of aneurysms and the ligature of arteries, of amputations, dislocations, excision of bones, the eye, and the ear; the second volume treats of the regions of the body in order, mentioning their anatomy and diseases, and the remedies of the latter, and ends with gynæcological operations, the origin and insertion of muscles, and the terms used in eye surgery. Each part is liberally illustrated with diagrams, and the print is large and clear, with heavy type headings to the paragraphs. In his preface the author expresses the hope that the time is not far distant when every medical student will use some such book as his before leaving the dissecting room. We agree with the spirit of this remark, but feel sure that the second year's student would be embarrassed by the amount of detail given in this work. However, we think that it is a grave fault in our anatomical textbooks to omit topographical anatomy and surface markings, and can safely say that a great deal of exact and useful anatomy of that sort could be readily and easily learnt from this work. A glance at the author's method of treating any particular artery shows this. For instance, in the case of the femoral arteries the origin, extent, course and relations are given, and afterwards the operation of ligature. Under this heading we note that Bell's advice to clear the vessel with scalpel and dissecting forceps is given, blunt instruments being deemed inadmissible. Without doubt the French method of clearing the artery with a director has been much abused, but nevertheless, it is questionable whether the use of that instrument should be forbidden. There is a happy medium betwixt the two extremes, which, probably, affords the greatest safety. In treating the complications which ensue after ligature of the superficial femoral, advice is given which will hardly meet with the approval of most surgeons. It is boldly said that "if gangrene occurs, amputate through the lower third of the thigh." We sincerely trust this advice will not be followed. Many experienced surgeons must be able to call to mind cases in which the gangrene which has followed ligature has been confined to a single toe, to a patch on the dorsum of the foot, to a patch on the inside of the thigh. Had these limbs been amputated as our author directs surgery would hardly have been vindicated. It is true that the advice given is supported with the authority of Spence, and we note that throughout the whole book more reliance seems to be

placed upon the *argumentum ad verecundiam* than upon the author's own experience. In giving the treatment of secondary hæmorrhage after ligature in continuity, whilst the graduated compress is very properly recommended, pressure along the course of the artery is unaccountably omitted. Also, we were under the impression that ligature of the external iliac could hardly be accounted one of the alternative resources for the treatment of secondary hæmorrhage, so fatal has it always been from gangrene.

The chapter on amputation is clear and all the advantages and disadvantages of the various methods are lucidly set forth, and much sound advice is given. Here again, we find dogmatic rules laid down. The advice that "the total amount of flap length should be equal to one and a half times the diameter of the limb, at the point where the bone is sawn," requires, we think, some qualification. This allowance, for example, may be too little in a strong and healthy child, who has to undergo primary amputation for injury, and too much in aged and debilitated subjects with wasted limbs. In truth, students want to be taught to think for themselves in surgery, and dogmatic rules are often harmful. Each amputation should be taken on its merits. Nor is it advisable never to have muscle in the flap; on the contrary, it is sometimes advantageous to keep some in the flap, as a covering for the bone when the limb is much emaciated. However, when the attempt is made to compress such a large subject as surgery into such a small space as these two volumes there can be little room left for qualifications, and this, we take it, is a fault inseparable from such manuals and handbooks as these. The things we have mentioned are small detractions from an otherwise excellent chapter, which is followed by a very good account of excisions, in which the more recent advances are clearly given; and the same may be said of dislocations, osteotomies, and the abdominal operations. We are, however, inclined to except from this statement a part at least of the teaching on the subject of hernia. Although operations for the radical cure of that disease are described, no directions are given for the proper discrimination of suitable cases. It is now beginning to be understood that such a preliminary is essential to the cure of the disease. Also the advice which is given for the treatment of strangulated hernia does not, we think, direct the attention with enough emphasis to the condition of the strangulated parts. More harm has been done in these cases by the injudicious use of ice and taxis than by early operation. Some of the varieties of hernia given are also open to question. Is it certain that there is such a thing as the "encysted hernia of Cooper?" Next, is the tunica vaginalis always shut off from the abdomen in "infantile hernia?" These, however, are not very important points, and we feel that we can recommend this as a correct and clear textbook.

CYCLOPÆDIA OF THE DISEASES OF CHILDREN, MEDICAL AND SURGICAL. The articles written specially for the work by American, British, and Canadian Authors. Edited by JOHN M. KEATING. Vols. i and ii. Illustrated. Philadelphia: J. B. Lippincott and Co. Edinburgh and London: Young J. Pentland. 1889.

THE issue of the two first volumes of this most recent product of the system of co-operation in medical literature affords an opportunity of framing a general opinion as to the standard which the completed work is likely to attain. We may first, in order to gain an idea of the general scope of the undertaking, quote from the preface the plan which the editor set before himself; it was to produce a collection of monographs arranged in the form of a systematic treatise, and devoted to the consideration of the anatomy, physiology, medicine, surgery and hygiene of infancy, childhood, puberty, and adolescence. The scheme is wide enough to embrace the whole field of pediatrics, the volumes are big, and well, even sumptuously, got up. As to the matter, it as a rule attains a high clinical level; if some of the articles err by reason of prolixity, others are models of clear and succinct exposition. As an instance of the fault above mentioned, the article on Enteric Fever may be taken; it occupies 56 pages, it contains series of notes on bacteriology, and a discussion of the etiology of enteric fever, an elaborate description of the morbid anatomy, "based upon the well-recognised lesions of adult life taken as a type," and a very detailed description of the symptoms, not omitting *taches bleuâtres*, which, as the writer admits, "do not occur in children." The editor in his preface makes a kind of apology for articles of this kind, stating that there are two ways of writing monographs on diseases of children; he might have added that there are two ways of doing anything—the right way and the wrong way. Not that a lengthy article is necessarily out of place; on the contrary, Dr. J. Lewis Smith's monograph on Diphtheria extends to nearly 100 pages, but it is not at all too long. Dr. Smith treats his subject in a masterly way; the pathology is judiciously discussed, the symptoms, complications, and results are well described, and the various therapeutic methods detailed at length; indeed, the only fault to be found is that the reader would have preferred to have had a rather more decided expression of Dr. Smith's own estimate of the value of the various drugs. He gives a warning against the indiscriminate prescription of chlorate of potassium, even recommending that its use in diphtheria should be entirely abandoned; if employed, not more than ℥ss should be given to a child of 5, in the twenty-four hours.

A carefully-prepared and copiously-illustrated article on the Anatomy of Children is contributed by Dr. George McClellan, and Dr. Angel Money writes a few suggestive pages on the Physiology of Infancy, a department in which, as he justly says, very much yet remains to be done. An article on Joined Twins, by Dr. W. W. Jaggard, of Chicago, affords a sufficient introduction to a study of teratology, and very properly finds a place in the earliest volume of the *Cyclopædia;* this article is systematically illustrated by twenty-four drawings, an example of nearly every described variety being given. In a work of the scope of this one, the best method of feeding infants ought to come in for special attention; we are glad, therefore, to be able to say that the article from the pen of Dr. T. M. Rotch is well worthy of the occasion. It may be read with pleasure and instruction from beginning to end; it is written in a scientific spirit, but is at the same time thoroughly practical; it contains numerous original analyses by Dr. C. Harrington, of Harvard, and appears to be in every respect well abreast of the present state of knowledge. Dr. Rotch recommends the sterilisation of milk for infants' use, a precaution which has not yet received in this country the attention which it deserves. The plan he recommends is simple, and in his hands has proved efficacious; it would not satisfy a bacteriologist, but it must be remembered that the physician advising on the feeding of infants has to solve a problem which differs in certain material particulars from that which is submitted to the bacteriologist. Not least of these is the fact that, as a rule, it is not necessary to attempt to keep cow's milk for more than at most twenty-four hours; if, under special circumstances, this period has to be exceeded, the method of repeated sterilisations in ordinary use in the bacteriological laboratory ought to be followed. Whether even so the practical method recommended by Dr. Rotch would ensure the destruction of the bacteria of the specific fevers has not been proved; it would afford a far greater protection than merely boiling, as generally recommended, while at the same time it has this further advantage, that the process of sterilisation does not impart to the milk to the same extent the peculiar boiled flavour.

In the second volume several most important articles are by English physicians. Thus, Rickets is treated by Dr. Thomas Barlow, than whom it would have been difficult to find a more competent exponent; the same writer contributes a short note on Scurvy. Dr. Judson S. Bury, of Manchester, has written a very well-considered article on Cretinism. Dr. Henry Ashby deals with the subject of Scrofulosis in a carefully-reasoned article, in which he bases his arguments mainly on clinical observations. In this section of the work also there is an article on the Urinary Diathesis by the late Dr. J. Milner Fothergill, the greater part of which is occupied by an exposition of the author's well-known views. In the section on the Circulatory System we also find several important articles by English writers; Dr. W. B. Cheadle deals with Acute Endocarditis; Dr. A. E. Sansom with Valvular Disease; and Dr. J. Mitchell Bruce with Myocarditis, Hypertrophy, and Aneurysm. Dr. William Osler, of Johns Hopkins University, contributes a valuable article on Congenital Affections of the Heart; and Dr. Rotch, of Boston, a most excellent short essay on Pericarditis.

It would be impossible to mention all the articles in these volumes; a mere enumeration of titles and authors would occupy several columns. We may, however, mention that in the section on diseases of the skin we notice the names of such competent writers as Drs. L. Duncan Bulkley, J. Nevins Hyde, Van Harlingen, and Stelwagon. An unusual amount of space is given to diseases of the nose, pharynx, and larynx. Among the articles in this section we have only space to mention remarkably complete essays on Diseases of the Pharynx, by Drs. Fletcher Ingalls and

Harrison Allen; a short but adequate article on Intubation of the Larynx, by Dr. W. P. Northrup; and a fuller essay on Tracheotomy, by Dr. H. R. Wharten.

Concerning the many articles which are here passed over, it will suffice to say that, while some are excellent and others are indifferent, the majority attain a fair average standard of merit, without, however, passing the bounds which divide writing from book-making. On the whole, however, the *Cyclopædia* promises to become a standard work, and reflects honour not only on the judgment and industry of the editor, but on the enterprise of the publishers.

THE STUDENT'S SURGERY: A MULTUM IN PARVO. By FREDERICK JAMES GANT, F.R.C.S. London: Baillière, Tindall, and Cox. 1890.

THIS is a rival to the smaller *vade mecums* which have now happily been supplanted by larger and fuller textbooks, and it differs from the *vade mecum* in not being a mere compilation, but a summary of the views of a careful surgeon of large experience. We recognise the advantage of such a work over a mere compend, and look at it from the student's point of view. It is a necessity for him to have matters clearly explained, and to know what an examiner may expect him to know of the pathology, causes, symptoms, and the principles of treatment. He should also be induced by the teaching of his book, as well as by his practical ward teacher, to observe for himself and recognise what he sees.

In the present work there is much that pleases us as a student's first book; but, on the other hand, we find many omissions and blemishes which appear to be serious. It is perhaps needless to say that it is essentially a condensed edition of the author's larger work on surgery, and is marked by a judicious clearness of arrangement and enunciation of principle as regards treatment which will prove useful to the learner. In this respect it is all that can be desired; and, in the way in which instruction is given, it is generally well and pleasantly done.

It is unreasonable to expect too much in a student's guide-book, but we think the reader would be expected to know more about certain subjects than the author gives, and we are obliged to consider that the information is not up to date in many particulars, and sometimes only one surgeon's experience or treatment is given when others of equal importance are now more often accepted. In brain surgery, only Lucas-Championnière and Fox are quoted; in hydrophobia, only a passing reference is made to Pasteur's researches, and no explanation is given of the possible or probable mode of action of the active principle of the disease, or of the method now adopted to combat it; under hospital gangrene no allusion is made to Hutchinson's views of its origin, and in syphilis we find no reference to the possible relationship of the two forms of primary sore as mentioned by that writer; the account of nerve stretching shows no attempt to explain its mode of action, and the remarks on nerve suture and repair are not up to our present knowledge of the subject; the treatment for ruptured viscus without abdominal wound would not satisfy modern surgeons, and in the case of ruptured intestine the student should know of the recent observations of Dr. Senn; litholapaxy is not mentioned by name, and the author's views of hypogastric cystotomy are not in accord with those of most surgeons, while no mention is made of the uses of electric illumination of the bladder; for the radical cure of hernia only Mitchell Banks's method is described, and the more recent plans of Macewen and Barker are not referred to; in the remarks on ruptured bladder the student is not informed about the possibility of having to open the abdomen for the purpose of searching for and closing the rupture; and in prostatic hypertrophy and tumour no mention is made of the operation by opening the bladder by the suprapubic method, and thus getting at the disease.

These are to us serious flaws in the work, and there is another of equal importance in the absence of any index, for the table of contents is but a poor substitute in a work of over eight hundred pages. Though we have felt it our duty to call attention to these faults and failures to keep up with the advances of modern surgery, we recognise that the book will serve its purpose in teaching the student to observe for himself, and to follow broad principles in treatment.

THE CAUSES AND TREATMENT OF ABORTION. By ROBERT REID RENTOUL, M.D. Edinburgh and London: Young, J. Pentland, 1889.

THIS work, which the author tells us in his preface is "in the main an extension of an essay on the Causes and Treatment of Abortion, which obtained the prize offered by Dr. Ward Cousins in 1886" shows much laborious research into the literature of the subject, and is very valuable from its completeness in this respect. The chapters on the complications of abortion, and the treatment of abortion will be found of great practical value as a guide to the practitioner in his diagnosis and treatment; so also that on criminal abortion, which is replete with medico-legal information. And here we wish we could stop in our criticism, but we feel bound to add that there are portions of the book which are open objection. For instance, at page 16—"For a considerable time there has been a strong feeling that many of the medical profession have not a due and proper regard for fœtal life." There are black sheep in every flock, but we trust that this does not apply to "many" of the medical profession. A little further on, at page 18, Dr. RENTOUL writes "To be an upright and honourable medical man is a difficult task, but the ideal is not so high that it is out of ordinary reach." Again at page 206, "Do members of the medical profession act truly and conscientiously with their patients? I fear we all do not. Many who come look for the physician's half sympathetic laugh, or jocose remark." This is the introduction to an anecdote of a kind that we should be sorry to quote. We trust that in the next edition Dr. Rentoul will recognise the importance of withdrawing from his book an anecdote so unedifying. There are also many verbal errors which require correction—for instance *valvo*-vaginal, *a* multiparæ, M*oo*re-Madden, the number of *gumma*, *oo*phar-itis. *Pleural* pregnancies are more than once spoken of—so also chlor*ide* of potash. At page 154 it is difficult to understand the meaning of "the fœtal and umbilical *souffle* may be absent." At page 163 we are told, "In all doubtful cases the stethoscope should be used, so as to decide whether the position of the pain and the region of placental insertion correspond." We thought that the idea of the uterine *souffle* denoting the region of placental insertion was a thing of the past. At page 73 the question whether operations should be performed during pregnancy is discussed, and the author is of opinion that in a healthy woman the surgeon need not hesitate to operate, "with this qualification however, that the operation be not on the sexual organs." We would remind the author that frequently ovariotomy, perineorraphy, and operations for the removal of the vaginal portion of the uterus for carcinoma have been performed during pregnancy without the occurrence of abortion.

We fully agree with Dr. Rentoul as to the evil wrought by employing so frequently, unnecessarily, and recklessly the uterine sound. It should never be used except to determine something of importance which cannot be ascertained without it. At the same time we do not believe that "Women at present go from one hospital to another every month, so that one of the staff may examine their wombs" with the hope that by this means abortion may result. An isolated case of the kind may have occurred, but the idea that it is a common practice is incredible.

LEHRBUCH DER ALLGEMEINEN UND SPECIELLEN PATHOLOGISCHEN ANATOMIE. Von Dr. ERNST ZIEGLER. Sechste Auflage. Erster Band. Allgemeine Pathologische Anatomie und Pathogenese. Jena. 1889. (Textbook of General and Special Pathological Anatomy. By Dr. Ernst Ziegler. Sixth Edition. Vol. I. General Pathological Anatomy and Pathogenesis.)

A TEXTBOOK which, like Professor ZIEGLER'S, has gained a standard position and reached a sixth edition, scarcely needs any detailed notice. The rapid hypertrophy of its successive editions is undoubted evidence of the activity of pathological research, but is, at the same time, a little alarming to possessors of the work in its earlier stages of development. The present edition is a great advance even upon the fifth, which was itself an almost complete transformation. This massive volume contains probably twice as much matter as the corresponding part of the first edition, while the number of figures has grown from 116 to 343. Of the figures a word must be said, since they show the remarkable improvements which have been introduced of late years into this branch of book illustration. Facsimile processes are evidently largely used for the reproduction of the original drawings or photographs, and form a very perfect substitute for the older and more laborious

method of fine wood-cutting. Many figures are also printed in colours after the style with which Woodhead's *Pathology* first made us familiar. As regards the subjects chosen for illustration, it is also an excellent feature that they are no longer so much confined to histological details, but some represent the broader features of disease as seen not only in anatomical preparations, but in living specimens. The large size of the page also permits of their being presented on a liberal scale of magnitude.

The chief novelties which distinguish this edition are as follows: The chapter on bacteria and other parasites has been to a large extent recast in the light of the most recent researches. The description of infective granulomata and other specific diseases is now given chiefly under this head, as indeed was the case in the fifth edition, The chapter on inflammatory growth is also a good deal altered. We gather that Ziegler does not give up his well known views as to the function of migratory cells in tissue formation, but thinks it more probable that such cells are derived from proliferating tissue cells of the neighbourhood than that they are leucocytes derived from the blood. The section on malformations is enlarged and made more complete by the transference to this part of certain chapters from the special part of the book. There is also a short section on general or somatic death prefixed to the chapter on necrosis.

The bibliography is made more complete and brought up to date, while it is more conveniently arranged at the end of each section and printed in a clearer form. There are also numerous smaller additions and improvements in various parts of the work.

In conclusion, we can only say that the elaborate pains which Professor Ziegler has bestowed on revising and perfecting his work cannot but maintain and increase the high reputation which it already enjoys.

NOTES ON BOOKS.

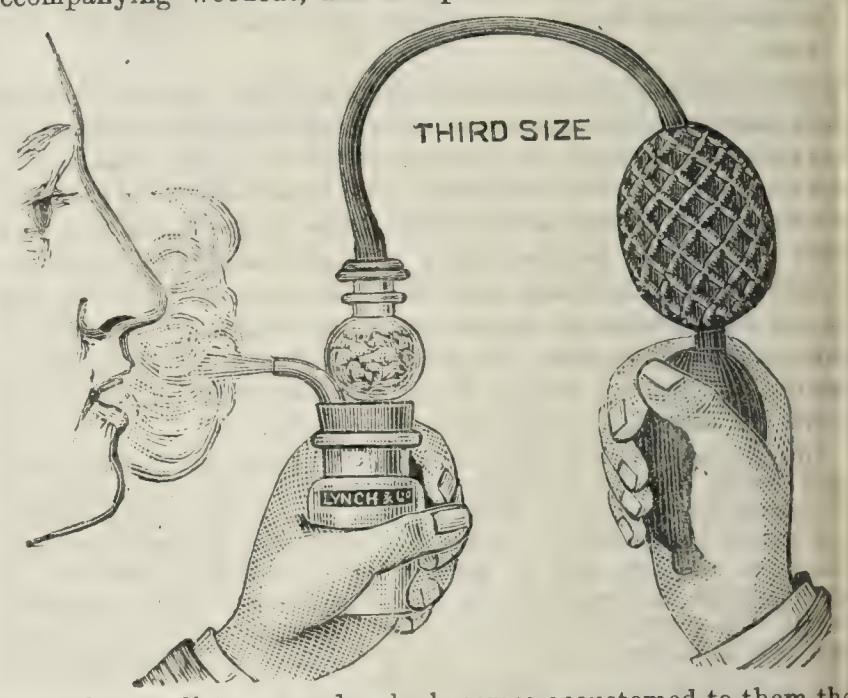
Diary for 1890 of the Sanitary Record and the London Medical Recorder. (London: W. H. Allen and Co.)—Health officers and sanitary inspectors will find this annual very useful and suited to their wants. In addition to the ordinary *Diary*, in which a space is provided for each day's appointments and doings, and in which are briefly indicated day by day the more important recurring duties of local officials, there is a large quantity of information on sanitary subjects. There is a summary of the eighteen enactments of the parliamentary session of 1889 which have reference to public health and local government subjects, including a full account of the Infectious Disease (Notification) Act. A useful summary of the numerous Acts of Parliament affecting sanitary interests is also given, whilst there are articles setting out the statute law as to infectious diseases, powers of sanitary officers, nuisances, tenement houses, unwholesome meat, dwellings of the poor, etc. There are suggestions for medical officers of health and for sanitary inspectors, for vaccinators, and for ordinary householders; whilst the postal regulations, and other constantly needed facts are not omitted. The present is the eighth year of publication of this useful volume.

Ether as an Anæsthetic. By ISAIAH DE ZOUCHE, M.D.Q.U.I., Lecturer on Diseases of Children in the University of Otago. (Dunedin. J. Wilkie and Co.)—The writer emphasises the merits of ether over chloroform. His experience of the latter has led him to regard it as dangerous, whether given in large or small quantities, in that it kills alike by paralysing the respiratory centres and by causing heart failure; and further, since the dangers it occasions cannot be foreseen, for "chloroform has destroyed life in the most healthy subjects" (Pollock), nor can they in the largest percentage of cases be remedied. Dr. De Zouche then describes his method of etherisation and gives cases. He insists, and in so doing is not in accord with English views that chloroform produces narcosis more rapidly than ether. We regard five to eight minutes as the safe time to occupy in producing chloroform sleep, while two minutes suffices for ether. Ten minutes, or twenty-five which Dr. De Zouche records as examples of his cases, are very long periods for etherisation with Clover's inhaler. We must again join issue with him when he insists upon maintaining stertor throughout etherisation. The pamphlet, although not quite up to date, gives a sensible epitome of the subject.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CHLORIDE OF AMMONIUM SPRAY.

WE have received from Messrs. Lynch and Co., 192, Aldersgate Street, London, E.C., a new form of chloride of ammonium spray, for which the following advantages are claimed. 1. The fumes are ejected by means of a pair of bellows, as shown in the accompanying woodcut, and the patient can start inhaling the



fumes from a distance, and as he becomes accustomed to them the apparatus can be brought up close to the month, thus avoiding coughing, which is liable when first starting with a strong fume. 2. It can be inhaled through the nostrils.

INHALERS.

THE great relief which has been found to be derived from the inhalation of menthol vapour in the early stages of influenza, and which some people think is capable of warding off as well as of relieving, has led to the popularisation of some very simple and cheap forms of inhaler. Among the most useful and economical is one which has been sent us by Mr. Martindale, of New Cavendish Street, and which he calls the "Ozonic Inhaler." It is a small, gourd-shaped bottle of stout green glass, open at either end, and filled with fine shavings, on to which can be poured a few drops either of solution of menthol or of other volatile substances used to relieve influenza or catarrhal and nasal affections. For using menthol for this inhaler, it is convenient to dissolve it in spirits of camphor, one part to three. This form of inhaler is often found useful in hay fever also, and in many forms of nasal and pharyngeal irritation. A variety of essential oils can be used for inhalation, such as those of eucalyptus, pine leaf, cubeb, or other liquids, such as creasote, carbolic acid, pure terebene, and nitrite of amyl.

The menthol inhaler of Mottershead and Co., Manchester, is also a very convenient and simple apparatus, which consists of a tube of stout glass of suitable shape, open at either end; menthol is fused on to the inside of the glass tube, instead of being in loose crystals, which are liable to block up or fall out. The air can be drawn through with great ease, and comes saturated with menthol vapour, but less markedly so than where the menthol is dissolved. Mottershead's tubes are sold at 6d. and 1s. each, so that they come within the reach of all, and they are very permanent. We have to thank the influenza epidemic for popularising two very useful and simple little forms of nasal or aural inhalers of medicated vapours; the contrivances will probably greatly aid the introduction of a method of treatment which has been insufficiently tested, on account of the somewhat cumbrous nature of the inhalers hitherto in use.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 1ST, 1890.

THE BACTERIOLOGY OF INFLUENZA.

WE have now before us the original preliminary communication[1] by Dr. Maximilian Jolles, the reputed discoverer of the microbe of influenza, and well might we exclaim: "Parturiunt montes, nascitur ridiculus mus!" After all, the dust raised about the discovery of the microbe of influenza vanishes into air on perusing the statements made by the discoverer himself.

Dr. Maximilian Jolles is the coproprietor of a private "chemico-microscopic laboratory," evidently devoted to the examination, chemical and microscopic, of sputa, urine, etc., sent for the purpose of diagnosis by medical men. The work on influenza was, therefore, not carried out in the Vienna Bacteriological Institute, and was not superintended by Professor Weichselbaum. In justice to Dr. Jolles, it ought to be stated, however, that he himself protests against being forced, by the untimely and exaggerated accounts given by the daily papers, to publish a preliminary abstract of his observations, these being as yet far from concluded, and therefore not allowing any definite conclusion to be drawn from them.

In examining sputa from patients who had previously suffered from influenza, he was repeatedly struck by the presence of numerous capsulated cocci, resembling Friedländer's so-called pneumonia bacillus. Although aware that other reliable observers had demonstrated the presence of this microbe in normal sputum and in various normal fluids, yet Dr. Jolles insists on the fact that in the specimens of sputa sent to him the bacillus of Friedländer was present in considerable numbers, though he also adds that other bacteria —bacilli, pus cocci, and streptococci—could be demonstrated.

By culture on gelatine Dr. Jolles isolated the capsulated microbes, and ascertained that, both as regards the manner in which they stain with different dyes and as to their cultural characters, they resemble Friedländer's microbe. He found the same capsulated cocci in the urine of a patient suffering from acute purulent cystitis, and also on one occasion on which Vienna drinking water was subjected to bacteriological examination he found in it also, besides various other species of bacteria, this particular species of capsulated coccus. Lastly, two rabbits were inoculated with the cultures; one of them showed no result, the other died on the fifth day from septicæmia.

[1] *Wiener medizin. Blätter*, No. 4, xiii.

These are all the facts observed by Dr. Jolles, and it must be clear that of the discovery of the microbe of influenza there is really very little evidence, if any. In the first place, the assumption made by Dr. Jolles that Friedländer's bacillus has a causal relation to pneumonia has been, as far as croupous pneumonia is concerned (and it is for this pneumonia that its etiological importance had been asserted by Friedländer and others) abundantly disproved, since this microbe is present in various conditions in no way related to pneumonia, for example, normal sputum, the normal fluid of the mouth, etc.

In the second place, Dr. Jolles's argument that because in some cases of influenza one kind or another of pneumonia supervenes on the primary attack, one of the species of microbes present in the sputum of such pneumonia might be, and probably is, the microbe of influenza, is faulty in logic as well as in fact. We have already pointed out in the last number of this JOURNAL that the pneumonia following some cases of influenza is not of a uniform character, and is evidently a secondary complication, and therefore the microbe, even if proved to be the cause of this pneumonia, need not necessarily be the organism of the primary disease, that is, of the influenza. The demonstration of the microbe in a sufficient number of cases of influenza during the early stages of the disease must be the very first and preliminary step. This, however, has not been taken.

To all those interested in the discovery of the nature and causes of epidemic diseases—and none can and ought to be more so than the general public—the publication of incorrect, misleading, and exaggerated accounts, such as were telegraphed on the subject of the discovery of the microbe of influenza from Vienna, and appeared in Vienna, London, and elsewhere, must always remain a regrettable incident.

THE EDUCATION OF DEAF-MUTES.

A CONTEST of opinion has long been carried on as to the relative value of the systems used in teaching and training the dumb. Some are for teaching by signs, while other authorities advocate the sole employment of the oral method, without the use of arbitrary signs, which are not used by persons who speak; a third party would combine the two methods, while preferring the oral method when possible. This discussion, as so many others concerning education, has, to a large extent, been based upon the personal experience of teachers, and partly upon the experience of deaf-mutes themselves; but most writers have failed to detail the kind of children taught by them. It is not enough to describe a child as a deaf-mute, and then proceed to indicate the methods employed in training him. Mutes may present as many varieties of natural mental faculty as those found among other children. We have seen children born deaf who otherwise presented well-made bodies, and showed signs of good intellectual capacity; in other cases it is not so. The beneficial effects of any educational system must, in all cases, be judged in relation to the kind of child trained upon it. Probably various methods are needed in different cases. To form a careful judgment of the relative success of teachers, details must be given showing the perfect development, or otherwise, of the pupils. The physical condition of deaf-mutes varies much, and probably the percentage of ill-developed children varies much in different institutions,

according to the mode of admission. Among a group of 51 deaf-mutes examined—31 boys, 20 girls—and reported on by a Committee of the British Medical Association, the following results were obtained :—

	Boys.	Girls.
Signs of nervousness, nerve weakness, or defect in	15	6
Signs of low nutrition in	5	4
Mental dulness was reported by teachers in	4	2
Cranial abnormalities in	14	4
Eye defects in	2	3
In 7 cases the form of palate was of defective type	—	—

The coexistence of these conditions is detailed in the report of the Committee published in the JOURNAL of July 27th.

These facts, as far as so limited a number of observations goes, serve to point out that deaf-mutes admitted to an institution for training must not be judged as a group, but each case must be taken on its own merits in estimating the value of educational work undertaken for their improvement. To form a scientific judgment of the relative value of rival systems of training deaf-mutes, a body of some 500 children should be examined as to their development and brain condition. The master's report as to methods of training, and its success, should then be appended to the report of each pupil. Thus some satisfactory judgment might be formed upon this very important question. It is to be regretted that this kind of work was not undertaken by the Royal Commission on the Deaf and Dumb.

The "oral method" of training deaf-mutes to speak is sometimes spoken of as being new; sometimes as the German method. The educational means now practised are doubtless greatly in advance of those formerly employed, still the attempt to teach deaf-mutes to speak is not entirely modern. John Bulwer, a physician, commonly called the Chirosopher, wrote his *Chirologia, or the Natural Language of the Hand, etc.*, in 1644, as an illustrated manual of the sign method of teaching the dumb. In 1648 he published "Philocophus; or The Deafe and Dumbe Man's Friend, Exhibiting the Philosophical verity of that subtile Art, which may inable one with an *observant* Eie, to *Heare* what any man speaks by the moving of his lips. Upon the Same Ground, with the advantage of an Historicall Exemplification, apparently proving, That a Man borne Deafe and Dumbe, may be taught to *Heare* the sound of *words* with his *Eie*, and thence learne to speake with his Tongue."

In this volume, as well as in John Bulwer's other works, evidence may be found of much thought and observation concerning the philosophy and physiology of speech.

CONFUSIONAL INSANITY.

UNDER this name, Dr. H. C. Wood, Clinical Professor of Nervous Diseases in the University of Pennsylvania, has ably described a large class of well-recognised symptoms in a paper read before the College of Physicians of Philadelphia on November 6th, 1889.[1] Most alienists are more or less familiar with insanity following acute disease, but Dr. Wood's experience leads him to think that the general practitioner very frequently fails to comprehend the situation of patients who are the subjects of it. As such cases generally fall into the hands of the family doctor, there can be no question as to the importance of his being able at once to diagnose and treat them. Perhaps there are few maladies which the general practitioner is so competent to treat, and at the same time concerning which he is usually so ill informed as the particular form of mental trouble so well described by the author. Here is no operation requiring a nice dexterity only to be acquired after long and constant practice; no mysterious disorder demanding the expert diagnosis of the specialist, but the clearly marked symptoms which, taken in conjunction with the previous history, can scarcely be mistaken by the educated and thoughtful physician who is accustomed to look on the mind and body of man as a sacred whole which is indivisible. It is lamentable that a highly educated body of men trained to perform the gravest operations, and to stand without fear at the bedside of patients suffering from the most terrible forms of disease, which they are usually highly competent to treat, should temporise and dally with the hesitancy born of ignorance when they find themselves confronted by a case of incipient insanity, perfectly amenable to treatment, such as Dr. Wood has described. Yet in any other branch of his profession this hesitancy would not be found. To what, then, are we to attribute its presence in face of this class of cases? Simply to the fact that mental physiology and psychology have no place in the ordinary pass curriculum of the family doctor. He may take his M.R.C.S. and his L.R.C.P., and not know that man has anything more than an anatomical and a physiological apparatus to be kept in such repair as may enable the machine to do its work with as little friction as possible. Mind-sickness, mind-balance, mind-health, each mind its own place, of which it possesses its own method, and which is a kingdom to the regal man; of all these things examiners have nothing to say; of the cortex, the corpus striatum, much; of the soul—that is the poet's business.

Perhaps now that another year is to be added to the medical course, the general practitioner may in time be expected to know something of the symptoms which now he fails to comprehend, as Dr. Wood says. But this is a digression caused by the author's expression of regret at this form of ignorance; our chief object is to lay before our readers the very admirable opinions of the writer upon that kind of insanity which is frequently found after acute surgical or medical affections. He considers that "there is a tendency in writers on insanity to recognise as distinct diseases several varieties of mental disorder, which should be viewed simply as symptom groups," and believes "that although insanity following acute disease varies greatly in its symptomatology, in almost all of the cases there is one common fundamental brain condition, and that this bears no specific relation to the disease which has produced it; but may be the outcome of an altered nutrition, produced by an exanthematous disease like typhoid fever, or by a diathetic disorder like rheumatism, by an accidental traumatism, or by a surgical operation." Childbirth, traumatism, surgical injuries, fevers, etc., which are followed by insane outbreaks, have one influence in common—they all tend to exhaust or impair the nutrition of the nerve centres. Want of food with anxiety is capable of causing exactly similar symptoms. Their general scope embraces mental confusion and a mixture of excitement and mental power. Happily the cases nearly always end in complete recovery where there is no organic disease. What Krafft-Ebing

[1] *Philadelphia University Medical Magazine* for December.

terms "Wahnsinn," and English and American writers recognise as "delusional stupor," "mania hallucinatoria," "confusional insanity," are disorders in which there is active delirium, associated with abundant hallucinations present in every sense region, and with a great weakness of the whole nervous system almost amounting to imbecility, a tendency to stupor, loss of muscular power, and failure of nerve tone in every portion of the body. Dr. Wood thinks these symptoms are well described by the term "confusional insanity," After long exposure to starvation—as in shipwreck—there is usually some history of failing mental power, accompanied by increasing activity of the imagination. The lives of hermits, saints, and ascetics, and of nuns and monks, even at the present day, are full of instances where fasting and mortification, unduly prolonged, have given rise to hallucinations at first recognised by the sufferer to be false, but which at last become living realities. Confusional insanity, as might be expected, frequently follows typhoid fever, and probably constitutes the bulk of the cases commonly named puerperal mania. It may follow ovariotomy, perineorrhaphy, and the removal of the breast for cancer. Emotional strain may cause it. Almost invariably when the disease is fully developed we find a feeble circulation, coldness of the extremities, general muscular relaxation, and failure of the digestive power. The temperature may be normal, but in severe cases there is usually a low temperature or a very distinct febrile reaction, especially in puerperal cases. Dr. Wood's cases have exhibited a peculiar quietude or apathy, an ever-growing stupor, deepening into a complete, persistent loss of consciousness. The most characteristic manifestation of the disease is the peculiar mental confusion; the patient is unable to talk coherently, and persistently words drop out of his sentences which are uttered imperfectly because the mind is unable to get the right word; consecutive trains of thought cannot be followed. The patient's conversation is a jumble of half sentences, a mixture of clauses and words. The weakened judgment fails to distinguish between the claims of subjective and objective emotions; realities and imagination are intermingled in a hopeless chaos; memory is profoundly affected, and familiar sights are forgotten. The delirium usually lacks aggressiveness, yet any form of mania may be counterfeited. A foundation of fear associated with tremulousness is so frequently present as to lead Dr. Wood to think that delirium tremens is only a variety of confusional insanity. The prognosis is favourable. Krafft-Ebing states that 70 per cent. of his cases have recovered, and though some of Dr. Wood's cases have arrived at absolute imbecility, complete recovery almost invariably occurred, provided there were no pre-existing organic bodily lesions, such as degenerated arteries or unsound kidneys. Though the appetite is usually *nil*, the digestive powers are good and forced feeding well borne. Rest, massage, and exercise must be applied in every case. Active exercise should be discouraged till convalescence begins. When the bodily strength returns, while the mental power languishes, removal from home surroundings with the encouragement of moderate outdoor exercise is followed by the happiest results.

Iron, strychnine, and phosphorus as tonics, and hypnotics or quietants in the shape of opium, hyoscine, chloral, or sulphonal should be tried. Bromides, it should never be forgotten, are powerful depressants, not merely to the functional but also to the nutritive activity of the nerve cells; and Dr. Wood assures us that he has often seen very distinct injury done by their free use in confusional insanity. He recommends the hot pack as a calmative, and free blistering of the scalp in active delirium. All these aids to diagnosis and treatment should be exceedingly useful in leading practitioners to understand and minister to minds diseased with every prospect of ultimate benefit.

In order to facilitate the arrangements for the funeral of Sir William Gull, at Thorpe-le-Soken, on Monday next, friends who propose to attend are requested to communicate with Mr. Gull, or with Dr. Acland, 7, Brook Street, not later than to-day (Saturday).

A deep shadow of gloom has been cast over St. George's Hospital by the death there, on January 25th, of Mr. B. V. Sortain, M.B.(Cantab.), one of the most brilliant students, of whom, in our next issue, we hope to publish a short obituary notice.

We are authoritatively informed that, despite all rumours to the contrary, the plaintiffs in the Chancery action, "Steele and Others *v.* Savory and Others," have no intention of abandoning their suit, which is now passing through the necessary preliminary stages.

We understand that Dr. G. Sims Woodhead, of Edinburgh, has been unanimously recommended by the joint Committee of the Royal Colleges of Physicians and Surgeons for appointment as superintendent of the laboratories in the new building on the Embankment. There were fifteen candidates, five of whom were considered especially fitted for the appointment by their high qualifications and experience. Dr. Sims Woodhead, however, was unanimously recommended. Dr. Woodhead holds at present a like appointment in the laboratory of the Royal College of Physicians, Edinburgh, and his services there have been of a most excellent character, while much of his work is already well known to our readers.

THE GENERAL MEDICAL COUNCIL.

The next meeting of the Executive Committee of the General Medical Council will be held on Monday, February 24th. The chief business will probably be as to the regulations for sanitary diplomas and the consideration of special applications for exemption.

MILK ADULTERATION.

A case under the Food and Drugs Act, which had been stated by the Dalston police magistrate on the appeal of the Inspector for Islington, has just been decided by Mr. Justice Grantham and Mr. Justice Charles. The Public Analyst had certified a sample of milk to have had 28 per cent. of the original fat abstracted, and the case raised the question whether, in order that a vendor may be convicted under the 9th Section of the Act of 1875, it is necessary for the prosecutor to prove guilty knowledge on the part of the vendor. Section 9th contains the following: "No person shall, with the intent that the same may be sold in its altered state, without notice, abstract from an article of food any part of it so as to affect injuriously its quality, substance, or nature, and no person shall sell any article so altered without making disclosure of the alteration," etc. The magistrate had held that as the 9th Section contemplated disclosure by the seller of the alteration of any article, it was necessary to prove knowledge of the alteration

and in the absence of such proof had dismissed the summons. Unless we are much mistaken, this matter has practically been settled before, and more than once; but in view of the somewhat extraordinary manner in which the anti-adulteration Acts are administered in courts of law, it will probably do no harm to have it settled again, specifically upon the lines of this case. The appeal was allowed, a result which must have been obvious from the first. Had it not been allowed, an absurd anomaly would have been sanctioned—namely, that in order that a vendor of adulterated milk may be convicted, it is necessary to prove guilty knowledge on his part, if the adulteration has consisted in the abstraction of fat, but unnecessary if it has consisted in the admixture of water. This is due to the fact that a vendor who has watered his milk must be summoned under the 6th Section of the principal Act, whereas one who has abstracted fat from it must be summoned under the 9th, in which occur the unfortunate phrases "with intent" and "disclosure of the alteration."

INFLUENZA MORTALITY IN LONDON.

THERE was a marked decline in the number of deaths referred to influenza in London during last week. The deaths directly referred to this disease, which had been 4, 67, and 127 in the three preceding weeks, declined to 105 during the week ending Saturday last; 8 belonged to Paddington, 7 to St. George Hanover Square, 6 to Marylebone, 6 to St. Pancras, 5 to Hackney, 5 to Bethnal Green, 8 to Lambeth, and 9 to Wandsworth sanitary areas. Of the 105 fatal cases of influenza registered last week in London, 8 were of children under 5 years of age, 3 of young persons between 5 and 20 years, 30 of persons between 20 and 40 years, 40 of persons between 40 and 60 years, and 24 of persons aged upwards of 60 years. The death-rate from diseases of the respiratory organs in London during the week under notice also showed a very marked decline from the remarkably high rates recorded in recent weeks, although it considerably exceeded the average rate in the corresponding periods of the ten preceding years.

ANUS SUBURETHRALIS.

DR. ZIEGENSPECK, of Munich, described a case of this rare malformation in a recent number of the *Archiv für Gynäkologie*. The anal orifice was absent in a newborn child, and the lower end of the rectum ran along under the integuments of the perineum and scrotum to open by a narrow orifice close under the root of the penis. As there was evidently obstruction of the bowel, Professor Schultze excised the skin of the end of the rectum, sewing its mucous membrane to the edges of the wound. The anus so formed acted very well, as observation of the case for several years has proved. The explanation of the malformation seems simple, according to Dr. Ziegenspeck. The anal tubercles, described by Reichel, coalesce with the rectum, and draw forward the thin bridge of skin which covers and unites them; as no anal orifice can form, the rectum becomes dilated and pushes forwards beyond the anterior union of the genital cleft, opening close under the urethra. Thus suburethral anus is an extreme form of the scrotal and perineal varieties.

SANITARY SUPERVISION OF SCHOOLS.

A PAPER on the necessity for sanitary supervision of schools, by Dr. George H. Rohé, of Baltimore, has been published in the *Journal of the American Medical Association* of December 28th, 1889. It contains an excellent summary of the subject. As a remedy for the evils admitted to exist Dr. Rohé proposes the appointment by the Board of School Commissioners of special officers to act as "Sanitary Supervisors of Schools." It would be the duty of these officers to secure the proper construction, ventilation, heating, lighting, and furnishing of school buildings, and to concert with municipal authorities, teachers, and parents means of preventing the spread of contagious and infectious diseases. His duties would also include a medical examination of children on admission, and a general supervision of their health while pupils, directing attention especially to the prevention of overpressure and the removal of the causes of short-sightedness, such as improperly-designed desks, badly-printed school books, and insufficient illumination. He would also test the vision of all children once a year, and would give instruction to the teachers upon the principles and practice of school hygiene. A committee has been appointed by the American Medical Association to report on the advisability of securing legislation in this direction. The work of this committee will be in some directions parallel with that undertaken by the committee appointed by the Psychological Section of the British Medical Association at the Glasgow meeting, and since reappointed by the Council of the Association. The necessity for investigations into the physical condition and well-being of school children is now becoming generally recognised, and it is clear that, if the present movement, which is making itself felt on both sides of the Atlantic, is to have any practical outcome, it must be by School Boards calling in the assistance of medical advisers.

IS THE GASTRIC JUICE A GERMICIDE?

DRS. STRAUS and Wurtz have conducted a series of experiments in order to ascertain the action of the gastric juice on the bacilli of tubercle, charbon, typhoid, and cholera morbus. The juice from man, dogs, and sheep was selected for the experiments. It was found that digestion for a few hours at a temperature of 100° F. destroyed all the germs. The bacillus anthracis was killed in half an hour, the bacillus of typhoid and cholera in under three hours, whilst the bacillus of tubercle bore digestion for six hours, under which time it was still capable of provoking general tubercular infection. Even when digested for from eight to twelve hours the bacillus was still capable of producing a local tubercular abscess, not followed by general infection. Over twelve hours' digestion destroyed it completely. The germicide influence of gastric juice appears to be due to its acid contents, as it was found that hydrochloric acid alone, dissolved in water in the same proportion as it is in gastric juice, proved as active a destroyer of the bacilli. The pepsin appears to have no influence on the germs. MM. Straus and Wurtz, who publish their researches in *Archives de Médecine Expérimentale*, wisely remind their readers that the germs, when protected by animal and vegetable tissues and introduced into the stomach in ordinary nutrition, are not exposed to so direct and prolonged action of the acid constituents of gastric juice as in these experiments.

OUT-PATIENTS AT LUNATIC ASYLUMS.

WE recently drew attention to the scheme presented to the West Riding County Council by the General Asylums Committee for providing advice and medicine for out-patients. Alderman Stanhope, the Chairman of the Asylums Committee, explained that the scheme would be tentative, and when they saw how it worked and the number of patients who presented themselves, the subject would be brought forward again. It will be a difficult matter to make arrangements such as will not "interfere with the ordinary duties of the staff or to cause any expense to the institution." From the report of the proceedings of the County Council we gather that the central department of the Wakefield Asylum is already cramped for proper accommodation; that the committee require a room in which to hold their meetings; the domestic servants additional bedrooms; and the medical staff further accommodation. The cost of these alterations alone is estimated at £3,200. A much more serious matter connected with asylum finance which will require to be faced in the near

future is the fact that, whereas for several years there has been an average increase of about 90 lunatics in the West Riding each year, during the last year it reached the large figure of 235, and, as one of the County Councillors remarked, "if the increase went on at this rate in the West Riding, the cost of providing asylum accommodation for such increase would be nearly £60,000 per annum."

LECTURES AT THE ROYAL COLLEGES.

THE lectures at the Royal College of Surgeons commence on February 10th, when Mr. Bland Sutton will deliver the first of three Erasmus Wilson Lectures on Morphology in relation to Pathology. At the Royal College of Physicians the Milroy Lectures by Dr. Arthur Ransome, F.R.S., on the Etiology and Prevention of Phthisis begin on February 25th. The Goulstonian Lectures by Dr. G. N. Pitt on Cerebral Lesions begin on March 11th; and the Lumleian by Dr. Hughlings Jackson, F.R.S., on Convulsive Seizures on March 20th.

OBSTETRICAL SOCIETY OF LONDON.

WE have been informed by the Honorary Secretaries of this Society that the annual meeting will be held on Wednesday February 5th, at 8 P.M., in the Society's library, 54, Berners Street. Circumstances have prevented the Obstetrical Society from migrating to its new quarters. It was the last to hold a meeting in the well-known rooms at No. 53, where for a few weeks longer the Royal Medical and Chirurgical Society kept its library open. It will be the last to leave Berners Street, that thoroughfare so long famous for its medical societies.

SANITARY SCIENCE AT THE PARIS EXHIBITION.

AT the Mansion House on January 25th, the French Ambassador, on behalf of the President of the French Republic, invested with the Cross of the Legion of Honour Sir Douglas Galton and Mr. Ernest Hart, for services rendered to the Section of Sanitary Science at the recent International Exhibition in France. At a subsequent banquet, Sir Polydore de Keyser entertained the members of the British committees and jurymen of the various sections, among whom were Professor Ray Lankester, Mr. Seymour Haden, and Dr. Louis Parkes, the energetic and able Honorary Secretary of the Public Health and Social Science Committee, whose name should certainly, in our opinion, have been included in the list of those whose work claimed honourable recognition.

STUDENTS AT THE FEVER HOSPITALS.

AT the last comitia of the College of Physicians the following regulations regarding the attendance of students at the fever hospitals were, upon the recommendation of the Committee, adopted: 1. No student shall be admitted to study at the fever hospitals, except when authorised by the medical school to which he belongs. 2. The student, when so authorised, shall attend at the office of the Metropolitan Asylums Board, bringing with him evidence of such authorisation, and at the same time specifying which of the fever hospitals he wishes to attend. 3. The Metropolitan Asylums Board shall then furnish him a card, stating the hospital to which he is attached and the times at which he shall attend. 4. A register shall be kept at each fever hospital, in which shall be entered the name of the student and the times which he has attended. 5. At the end of the prescribed time of study the student shall receive a certificate showing that he has satisfactorily completed the course. 6. Such certificate shall be given by the Metropolitan Asylums Board after being signed by the medical superintendent of the hospital at which the student has attended. It is ordered that the student shall not be allowed to attend this course till he has reached his third year, and has held the offices of clinical clerk and dresser at his own hospital; the minimum duration of the course is to be two months. The report also detailed the arrangements made to prevent the students from carrying infection away.

A SIRENIFORM TWIN.

As the history of a well-dissected monstrosity is always of interest, we will briefly mention an interesting case described by Dr. Schwing, of Prague, in the *Centralblatt für Gynäkologie*, No. 28. He delivered a woman, who had already borne eight children, of a healthy living male child. Another fœtus could be felt in the uterus; this was delivered by turning and extraction. It weighed less than 7 lbs., and only made ten inspirations. The upper part of the body was well-formed, the lower extremities were united down to the heels, and the feet fairly well-developed, and not curved forward as in most sireniform fœtuses. The outer genitalia were entirely absent, and the anal orifice was only indicated by a shallow depression. Professor Janossik dissected the monster. The thoracic viscera were normal; the liver was very large. The alimentary canal had the relations generally observed in a normal seven months' child. The cæcum lay at the level of the right kidney. The lowest part of the large intestine was full of meconium, and bulged like a diverticulum. The spleen was three-lobed. On the left side was an accessory kidney lying over the left genital gland, quite separate from the main kidney. The ureters were present but atrophied above; on the left side the ureter could be traced to the accessory kidney, where it divided into three branches. The ureters joined the vasa deferentia and united, running into the rectum. The genital glands proved, on microscopic examination, to be testicles. They were imperfectly developed, and the right had just reached the entrance of the inguinal canal. There was only one umbilical artery, traced to the left common iliac of the fœtus.

POISONING BY WATER GAS.

DR. STEVENSON'S report on the two fatal cases of poisoning by water gas at Leeds has recently been published. He found that the viscera and blood remained long free from putrefaction, and that the blood retained for nearly a month the rosy hue observed at the *post-mortem* examination. The quantity of gas in the blood was estimated by an examination of that in the right auricle in one case, and was found to be equivalent to 0.03 per cent. by weight. Blood pigment charged with carbonic oxide was found in the urine and contents of the stomach in both cases, and in the fluid taken from the pericardium in one case, and from the pleura in the other. Carbonic oxide is, as Dr. Stevenson says, a deadly gas; its effects are insidious, because it is colourless, destitute of odour, and does not irritate the air passages, but rather acts as a narcotic, so that it may be breathed without any alarm being excited in the victim. One of the effects is to cause a loss of the power of movement and even of desire to make any exertion; it kills by a special kind of suffocation even when present in very small quantity. The carbonic oxide combines with the hæmoglobin, forming a fixed compound incapable of taking up oxygen from the air. The result, therefore, of breathing this gas is that the hæmoglobin is gradually converted into a useless substance incapable of carrying oxygen from the lungs to the tissues, and these in the end become as effectually deprived of oxygen as if the air passages were blocked up. Under such circumstances, removal into fresh air and the usual restorative measures for suffocation by gases are of no avail. He concludes that it is manifest that the want of odour, absence of irritating effect, the soothing or narcotising influence which it exerts, and the property of the hæmoglobin of the blood to pick out, as it were, minute quantities of carbonic oxide from the atmosphere in preference to oxygen, and the consequent rendering of the hæmoglobin incompetent to act as a carrier of oxygen from the

lungs to the tissues, all combine to render carbonic oxide an insidiously deadly gas. One-tenth per cent. of carbonic oxide gas in an atmosphere is dangerous.

THE LATE MR. ALEXANDER SHAW.

THE death of Mr. Alexander Shaw, consulting surgeon to the Middlesex Hospital, carries the mind back to the past generation. Mr. Shaw was the sole surviving member of the original staff of the Middlesex Hospital Medical School. He was the brother-in-law of Sir Charles Bell, the great physiologist and anatomist, and assisted him in some of his classical experiments in determining the functions of the nerves. He was himself no mean contributor to surgical literature, especially in the important treatise which he contributed to Holmes's *System of Surgery*, on Rickets. He was for many years closely connected with the Royal Medical and Chirurgical Society, in which he filled several honorary offices, and contributed much to its early success by his constant attention to its interests. He was a calm, quiet, coolheaded and courteous person of obliging disposition, and although reserved in manner, was ever ready to render services to his colleagues or his juniors. His cool judgment carried him successfully through controversial incidents. Distinctly of a conservative temperament, he was not indisposed to study innovations in surgery and pathology, and remained to the last well informed in progressive opinions. Owing to an attack of paralysis some fifteen years ago he had ceased to take an active part in medical or social functions, but his memory will survive in the history of the hospital and medical school to which, during a long series of years, he rendered solid service.

RECENT CHOLERA IN MESOPOTAMIA AND PERSIA.

THE accounts of the cholera epidemic which prevailed disastrously in various parts of Mesopotamia and Persia during last summer and autumn illustrate once more the futility of "land quarantine" in arresting the extension of this disease. It is not clear when cholera first made its appearance in the locality, but it broke out in Nazrieh, in Lower Mesopotamia, towards the end of July, having, it is supposed, been introduced from Persia. During the first week of August it caused some 150 deaths in Nazrieh. Shattra was affected about the same time, and the disease soon reached Bassorah. Notwithstanding the teachings of every previous cholera epidemic, stringent quarantine restrictions were at once put in force, with the view of protecting Baghdad, and preventing the spread of the disease along the course of the Euphrates and Tigris. The mails also were fumigated in a somewhat antiquated and probably utterly ineffectual fashion, each letter being stabbed in order to facilitate the entrance of the disinfecting perfume to its contents, and parcels which could not be so treated being impounded. But this quarantine proved to be worse than useless. The panic which at once set in, the customs and habits of the people, the unscrupulousness of the officials, all combined to render it ineffectual. The disease spread along the valley of the Euphrates, and made its appearance in Baghdad about August 16th. Once there the filth and bad sanitary arrangements of the town formed a congenial medium for its propagation. There are no reliable death-returns, but officially it was admitted that during the last week of August 290 deaths from cholera occurred in Baghdad alone. The inhabitants fled from the city, and in many cases took the infection with them. It is a curious commentary on the impotence of the quarantine arrangements that as the disease attacked fresh places farther northward, so the sanitary cordons, through which it had already broken, were also extended to embrace the newly infected areas. Baghdad, Bassorah, Nazrieh, Shattra, Kadhemain, Kerbala, Ichihala, Kerkeek were most severely scourged, whilst the disease reached northward as far as Ramadi on the Euphrates to Altun Kenpui and Orbela. In September the epidemic began to diminish in Lower Mesopotamia, but cases were occurring in Upper Mesopotamian villages as late as December. In Persia cholera was present in Bushire, on the Persian Gulf, early in August (suspicious illness having occurred there much earlier), and it appeared in Mohammerah and other towns towards the end of that month. During September and October, Kermandshah, Hamadan, Malaiyeh, Shuster, Kom, and Bebekam suffered severely, and it was only with the advent of the cold weather that the epidemic abated. At the commencement of the epidemic a Sanitary Council was appointed at Teheran, consisting of the several European physicians attached to the various legations and several Persian representatives, to advise on the steps to be taken. It is to be hoped that this Council has exerted its influence for good in promoting cleanliness and rudimentary sanitation in the towns and villages. Otherwise the country will always be exposed to outbursts of cholera and other filth diseases. The present custom seems to be for the residents of a town, on the outbreak of cholera, to fly from the disease and their filth until such time as the abatement of the epidemic tempts them to return to their homes and continue in their former unwholesome ways of living. It is satisfactory to find that, notwithstanding the fact that Teheran escaped the recent epidemic, the Shah has authorised a medical commission to thoroughly inspect the condition of the city, and report upon its needs. There is room for much improvement.

LIABILITY FOR INJURIOUS PATENT MEDICINES.

A DECISION which may be important has recently been given by the Supreme Court of Georgia as to the liability of the proprietor of a patent medicine (so-called) for injury produced by its use. According to the report in the *Boston Medical and Surgical Journal*, the Court held that as the proprietor of such a preparation intended its composition to be secret, and expected to derive a profit from such secrecy, he was liable for all injuries by anyone who takes his preparation in such quantities as may be directed by him. The Court, it would seem, held that the old adage *caveat emptor* did not apply. It is not, the judgment runs, "the duty of a person using the medicine to ascertain what poisonous drugs it may contain. He has a right to rely upon the statement of the proprietor, printed and published to the world; and if thus relying he takes the medicine and is injured on account of some concealed drug of which he is unaware, the proprietor is not free from fault, and is liable for the injury thereby sustained." The druggist selling the preparation was held not to be responsible.

THE CLASSIFICATION OF FEEBLE CHILDREN IN SCHOOL.

A CONFERENCE was held last week at the Owens College, Manchester, under the presidency of Professor Wilkins to consider the position of feeble and dull-brained children from the point of view of educational requirements; the meeting was well attended. Dr. Francis Warner opened the discussion, and, premising that diagnosis must go before treatment, explained the methods used by him in reporting on the physical condition of the children Mr. Scott-Coward, chief inspector for the district, said he had long desired that there should be a sanitary inspection of school buildings, and now he hoped that some kind of scientific inspection of school children, as to their physical condition, might relieve teacher and inspector alike of the responsibility of saying whether a child should be examined or exempted. Mr. Herbert Birley, chairman of the School Board, had obtained some returns from teachers in the Manchester schools as to their opinion of the condition of the children. Of the 32,114 children on their books there were said to be, in delicate health, 1,177, or

3.5 per cent.; obviously dull, 1,515, or 4.71 per cent.; with defective intellect, 188, or 0.58 per cent.; physically disabled, 165, or 0.51 per cent.; with defective eyesight, 1,077, or 3.35 per cent.; deaf or dumb, 93, or 3.30 per cent.; blind, 5, or 0.01 per cent.; total 4,225. The opinion that children whose feebleness or mental dulness prevents regular attendance or average progress should be received into auxiliary classes was generally supported. In this and other conferences with school teachers it is noteworthy that much is said about "exemption from examination" and much less about "exemption from school attendance." Examination may or may not be harmful to the child, but exemption from school attendance during long periods of time, except of course in cases of organic disease, is sure to be followed by intellectual degeneration. There appears to be a growing opinion that we need further scientific investigations as to the condition of the child population, the conditions found in London and in Manchester appeared, to those visiting the schools, to differ much in some important particulars.

RECENT SIGNATURES TO MEDICAL DECLARATIONS ON ALCOHOL.

THREE leading declarations on the subject of intoxicants have been published, with the signatures of many leading members of the medical profession. The first of these was issued in 1839, and was to the effect that intoxicating liquors were unnecessary in health in any quantity, while excessive quantities were injurious. This was signed by, among others, Sir Benjamin Brodie, Sir James Clarke, and Dr. Marshall Hall. The second declaration appeared in 1847, and was mainly to the effect that perfect health was compatible with abstinence from all intoxicants, which might safely be discontinued at once or gradually, and that universal abstinence would conduce to the health, prosperity, morality, and happiness of the human race. Sir John Forbes, Sir Risdon Bennett, Sir J. McGregor, Sir B. Brodie, and 2,000 other well-known physicians and surgeons appended their names. The third declaration appeared in 1871, Mr. Ernest Hart and Dr. Parkes having initiated it; it was designed to call attention to the inconsiderate prescription of large quantities of alcoholic drinks in disease as a grave danger, and to suggest a careful prescription, as in the case of any powerful drug, for the occasion only. This was largely and influentially signed by consulting and hospital physicians and surgeons. Within the last year and a half the British Medical Temperance Association has secured 622 additional signatures. Of this number no fewer than 561 have been affixed to all three manifestoes; among the names appended to the last document are those of Professor McKendrick, and Sir George Macleod, of Glasgow, Professor Simpson, of Edinburgh, Sir Henry Pitman, and Dr. W. S. Playfair. Among the signatories to one or other of the declarations have also been Dr. Bristowe, Dr. Matthews Duncan, Sir George Paget, and Dr. Bridges (of the Local Government Board). Such a body of testimony from the medical profession is the best answer to the aspersion so frequently indulged in by irresponsible agitators that medical men are generally opposed to the temperance reformation. This great and growing movement has no truer friends than the many within the ranks of the medical profession.

SCOTLAND.

DR. W. IRELAND, in his candidature for a seat on the County Council as a representative of the Landward portion of the parish of Prestonpans, carries with him our best wishes for his success. Both by position and qualification, Dr. Ireland is especially fitted for dealing with the many public health questions, upon which the County Council will have from time to time to decide. As an experienced physician his counsel and direction would be of the greatest possible value in the consideration of all questions bearing on the prevention and suppression of disease.

ABERDEEN: THE GIFFORD LECTURES.

THE last of the present course of Gifford lectures was delivered in the hall of Marischal College by Mr. Edward B. Tylor on January 22nd. The lecturer dealt with the doctrine of the Supreme Deity, and endeavoured to answer the question, At what stage in the history of religious culture did the doctrine appear? The muster of students at these lectures has been very large, some days as many as 400 being present, while the attendance of the general public has kept up to the end of the course. These lectures have stimulated, in no ordinary degree, an interest in anthropology, which the charming personality of the lecturer, with his unadorned simplicity, has still further developed.

IRELAND.

DR. WM. MOORE has been appointed High Sheriff for Antrim County for 1890.

LAST week Miss Edith Ellen Ward, L.R.C.P.Edin. and L.R.C.S. Edin., passed the primary examination for the Fellowship of the Royal College of Surgeons in Ireland, under the new scheme.

THE annual meeting of the Belfast Hospital for Consumption and Chest Diseases, was held on January 23rd, the Mayor of Belfast in the chair. The report showed that 877 new cases had been treated at the dispensary during the year, being an increase of 68 on the previous year.

ROYAL UNIVERSITY.

ANOTHER vacancy on the Senate has been created by the death of the Rev. Professor Witherow, of Magee College, Londonderry. This makes the third existing death vacancy, a fourth having been filled a couple of weeks ago by the appointment of Lord Chief Baron Palles.

EXAMINERSHIPS IN THE ROYAL UNIVERSITY.

A NUMBER of examinerships in medicine will be filled up at the meeting of the Senate of the Royal University next week. This is necessitated by the decision come to a few years ago, that medical examiners other than Fellows should only be elected for four successive years. Last year the examiner in each of the subjects—midwifery, materia medica, and medical jurisprudence—was dropped, and a new one elected. This year the remaining examiners in the subjects named retire, and will be succeeded by the gentlemen who may be selected next week.

CONVOCATION OF THE ROYAL UNIVERSITY.

A MEETING of Convocation was held on January 22nd, under the presidency of Lord Emly, Vice-Chancellor. The principal business was the election of a graduate to the seat on the Senate vacant by the expiration of the term for which Professor O'Sullivan, M.D., of Cork, was appointed. Dr. O'Sullivan offered himself for re-election, and there being no opposition he was formally declared elected. The report of the annual committee urged the opening of the museums, and claimed on behalf of the graduates that the Fellowships should be thrown open to competition as originally provided. Convocation also asked the Senate to give the graduates an opportunity of expressing their opinion upon any Bill which might be introduced dealing with university education in Ireland.

SIR WILLIAM GULL.

ALTHOUGH the severity of the cerebral affection which prostrated Sir William Gull two years since had withdrawn him from active professional life, and presaged only too surely a not distant termination to his brilliant career, the news of his sudden demise, the fatal sequel of a recurrent attack, will bring to many the shock of a severe and unexpected bereavement. The fame of a great intellect and the influence of a great personality leave a sense of present radiance long after the clouds have gathered behind which they are veiled; and the sudden descent below the horizon of our vision is not the less felt because the darkness was seen to be gathering before the sunset. No one can doubt that Sir William Gull was a great intellectual power and exercised an influence over the therapeutical and clinical opinions of his generation far beyond anything that can be directly traced either to any one discovery or to any isolated dictum or document of which the authorship can be ascribed to him. His intellectual capacity was beyond that of many of his great contemporaries, of whom it may be fairly said that their attainments as investigators, their equipment in scientific acquirement and collateral learning, their insight into differential detail, or their imaginative and constructive power, more than equalled his own. He was, perhaps, neither so constructive a clinician nor so learned a pathologist, so patient an investigator nor so brilliant a theorist, as others who could be named among the few of the British compeers who belong to his generation, who are still among us, and whose names will rise before the mind's eye when we are mentally measuring the intellectual calibre of the greatest of our generation of physicians and surgeons. He has left the work of his impressive thought on the medicine of our day, and has moulded the shape of our theories, conclusions, and practice to an extent which can only be measured by a wide survey and a subtle insight into the changes which, during the last forty years, have altered the whole character of our medical faith. These have destroyed the positive and dogmatic method of empiric drugging, and have made the study of causation in disease, the observation of its natural history, and the search for principles and evidence of the natural evolution of phenomena, normal and pathological, to serve as the basis of a new medical philosophy and of a practice which is reticent and observant; one which does not cover ignorance by boisterous meddling or by hitting hard at the disease, even in the dark, and on the chance of hitting the man rather than the malady.

Sir William Gull was from the first a close and conscientious student of detail, and infinitely painstaking over his cases to the last, but he was not given to intellectual self-deception, and his clinical studies and successes in practice, far from making him at any time satisfied with the existing powers and methods of medicine, bred a philosophic scepticism which refused to confound sequence in time with causation in fact, and enabled him to rise as a philosopher superior to the vanities of a practitioner. One of his most noted answers to an eminent and justly esteemed colleague, who suggested that a recent prescription had had a happy effect in checking the course of the malady in a patient under consultation, was: "Medicines act best when there is a tendency to get well." On a well-known public occasion he did not hesitate to say, in the course of discussion, that "He knew of no remedy for pneumonia, and the best method of treatment was to send the patient to a warm bed." The striking and epigrammatic language in which he was wont to couch his everyday thoughts were apt to be exaggerated by those who reported them, and misconstrued by some who were not able to interpret by the light of their own more positive minds the philosophic doubts of a great master. He was the antithesis of so great a teacher as Todd, and will have left the impress of a far more enduring and fruitful touch on the science and art of medicine. He refused to yield to the temptation of drugging; and was a typical physician as opposed to the typical apothecary. Three brilliant orations—masterpieces of philosophic thought and striking eloquence—testify to the depth and the width of his views: each made a lasting impression, and remain monuments of his powerful thinking and felicitous expression. They are his Harveian Oration to the College of Physicians, his address in Medicine to the British Medical Association, and his address as President of the Clinical Society, 1872.

In the Harveian Oration he dwelt upon the central position occupied by medicine among the branches of knowledge open to man, and discussed the essential relations between life and the other forces presented to us by Nature. He expressed the conviction that every manifestation in life may yet be found to be an exhibition of powers and laws universally operative, and pointed out that physical science, by translating the barren formula of cause and effect into suppression and reappearance, has contravened the whole tenour of the hypothesis of a separate vital force independent of the ordinary forces of Nature, and having no essential relation to them. Hence he deduced the duty of investigating biological phenomena as a basis of the knowledge of the causation and course of disease, and treated the investigation of the means of preventing diseases as a more promising investigation than the search for specifics. Foreseeing already the vast importance of the germ theory of disease, he referred to earlier investigations, such as those of the Cholera Committee of the College of Physicians in 1849, which had failed to identify any specific germs, and lamented that no new fact respecting the propagation of contagious disease

had been then (1870) revealed by the recent investigations on dust. The fruitful results which have since followed on the labours of Pasteur, Lister, Koch, and the whole army of modern bacteriologists testify to the wise and philosophic insight and to the bright wisdom with which he pointed out the path on which medicine has continued to advance and knowledge to grow. The key to the power which he exercised in destroying drugging and active medication as the living principle of successful medical practice will be found even yet more clearly held up in the address which he delivered before the British Medical Association in 1868.[1]

In this address he laid great stress on those methods of investigation of the patient which we are gradually coming to think indispensable, but which were once far less considered. He pointed out that our attention should be directed not only to the individual man, but to "the stock from whence he may have sprung, the circumstances of his birth, the time he may have lived, the diseases he may have undergone, the habits he may have acquired"—all these subjects were "to be brought into the focus of thought at the bedside, and made to clear up the problem of disease." Medicine, he insisted, was no narrow specialism. "We have to dissect nature, which, for practice, is better than to abstract it," a Baconian principle on which he never failed to act. "Yet not the individual alone must be isolated for the purposes of clinical study; we have further to inquire into the life of his several organs and tissues. Each have their own life, and correlative with it their own tendency to disease, and their specific power and mode of repair."...."In every part we recognise certain proclivities to morbid action; and the purpose of our study is to trace these tendencies to their source on the one hand, and to their effects on the other." On this basis he built up a connected theory of the methods of investigation, study, and treatment of disease, which has a large part in the modern conception of medicine which we are all more or less consciously now accepting, and which is nowhere and never has been better stated than in that memorable oration. His therapeutical views were defined in a pregnant sentence: "The strength of modern therapeutics," he said, "lies in the clearer perception than formerly of the great truth that diseases are but perverted life processes, and have for their natural history, not only a beginning, but equally a period of culmination and decline."

He did not minimise either the achievements, powers, or the duties of medicine, and, while sometimes accused by those who failed to appreciate the full value of his noble scepticism and far-seeing methods of study of something like despondency and despair of medicine, he felt, on the other hand, the highest hope in his science and the deepest pride in his art. "There is," he says, "probably no human work which daily confers greater good upon society than does ours; and when we consider that from the ranks of our profession the chief cultivators of modern sciences have sprung, whether we speak of botany, comparative anatomy, chemistry, physiology, biology, hygiene, or social science, we may feel some justifiable pride, and be encouraged, in spite of all failures, to go on, assured that our future must be one of ever-increasing usefulness and honour."

[1] JOURNAL, 1868, ii, p. 131.

BIOGRAPHICAL NOTE.

William Withey Gull was the youngest son of Mr. John Gull, of Thorpe-le-Soken, Essex, and was born on December 31st, 1816; he was, therefore, in his 74th year at his decease. His father died when he was 10 years old, and his mother's means being small, as the family was large, young Gull was educated at a small village school; but he has often said his real education was given him by his mother, a woman of great intellectual power and keen insight. She instilled into her children the great principle of doing well whatever they undertook. One of Sir William's favourite quotations in early life was:—

If I was a tailor,
I'd make it my pride
The best of all tailors to be;
If I was a tinker,
No tinker beside
Should mend an old kettle like me.

and, later on, he often quoted the more classical words:—

If thou do'st purpose aught within thy power,
Be sure thou do it, though it be but small.

Later, he became usher to a small country school, where he began for himself that study of science which bore such good fruit in after years. From very early days, the study of medicine had been his ambition. At the age of 18 (?) he came to London and entered as a student at Guy's Hospital, where he attracted the attention of Mr. Benjamin Harrison, who was for some fifty years the renowned treasurer of Guy's Hospital—the treasurer under whose auspices that medical school first attained its high rank. "If you help yourself, I shall be able to help you," was Mr. Harrison's wise saying to young Gull; and through his life he continued one of his firmest friends. This good advice given him by the treasurer was so well acted upon, that Gull obtained in his second year several prizes, and was soon fairly started upon the career that led afterwards to such great distinction. He graduated M.B. at the University of London, in 1841, obtaining Honours in Physiology and Comparative Anatomy, in Surgery, and in Medicine; in the latter subject being beaten by Dr. C. Brodie Sewell, who obtained the Scholarship; by Dr. D. J. D. Francis, and by Dr. E. A. Parkes.

In 1846, when Dr. Gull, Dr. Parkes, and others ob-

tained the M.D. degree, the gold medal for the best commentary on a case in medicine was awarded to Dr. Gull. In 1848, he was elected a Fellow of the Royal College of Physicians, London. His first lectureship at Guy's Hospital (1843) was that on Natural Philosophy, which he retained for five or six years; he was at that time also acting as tutor in the medical school. Up to the year 1845, there was only one lectureship for anatomy and physiology, but before the session 1846-47 these subjects had been divided, Mr. Cock and Mr. Hilton continuing to lecture on anatomy, and Dr. Gull being the first person appointed to lecture on physiology and comparative anatomy. This post he held until 1856, when he was succeeded by Dr. Pavy.

In 1847, Dr. Gull was living close to the hospital in King Street. In those days the present clinical wards (Miriam and John) were set apart for the treatment of twenty female lunatics who were to become life patients, and the present "Guy's Park" was separated from the rest of the hospital grounds by a high wall, that the lunatics might take their exercise therein. It was enacted by Parliament in 1843 that every lunatic asylum must have a medical superintendent, and at Guy's this post was assigned to Dr. Gull, together with medical charge of the hospital patients in the absence of the rest of the staff, and with a house in King Street, Borough, which he came to occupy. Shortly he moved to a better residence in St. Thomas's Street, which, since his time, has been occupied by the chaplain to the hospital. Dr. Gull afterwards for years resided in Finsbury Square, and in about 1862 came to Brook Street, to the house in which he died on Wednesday last. Dr. Gull's labours amongst the lunatics soon brought him into close connection with Dr. Conolly, at Hanwell Asylum; and, profiting by the latter's experience in the "non-restraint" treatment, Dr. Gull was soon able to send many of the lunatic patients to their own homes. After a time no further lunatics were received, and the wards were converted to their present use.

In 1847 he was appointed Fullerian Professor of Physiology at the Royal Institution of Great Britain, and lectured, amongst other things, on Generation. The lectures were very successful, a proof of no mean skill, the lectures being on such a subject before a public audience. He held that post until 1849, and during this time commenced his friendship with Michael Faraday, who was then Fullerian Professor of Chemistry. In 1851 he was appointed Assistant-Physician to Guy's, it being decided by the "powers that were" to have four Assistant-Physicians and to offer him the vacant post. Whilst still Assistant-Physician, he became Lecturer on Medicine, in conjunction with Dr. Owen Rees, in 1856, and retained the appointment until the calls of his ever increasing private practice compelled him to resign it in 1865. For many years before 1862 he had charge of the skin department. He was appointed full Physician to Guy's in 1858, on the death of Dr. H. M. Hughes, and retained the office for nearly twenty years, retiring in 1867.

In 1848, while still a resident official at Guy's Hospital, Sir William married a daughter of Colonel Lacy, of Carlisle. Lady Gull and a son and daughter survive him. The son, Mr. William Cameron Gull, who inherits the title, is a barrister, and the daughter is married to Dr. Acland, son of Sir Henry Acland.

It was during this part of his career (1858 to 1867) that his great talent as a teacher of clinical medicine showed itself, and those of the students who had the good fortune to be his clinical clerks will not easily forget the great pleasure which they experienced when he was unravelling with them a case of doubtful diagnosis in the wards, or was lecturing on some case of which they had, with him, been watching the course. He had, as had also his friend Mr. Aston Key, the special faculty of seeming to devote himself entirely to his patient's interest, so that each one of those who consulted him was impressed with the thought that Dr. Gull's undivided attention was given to his case. In this, as well as in his expressive but kind manner, and in the complete confidence in his great talent which a few words from him were quite sufficient to engender, lay the secret of his large success as a clinical physician. For many years his rooms were crowded with fashionable patients, and more would have flocked to him had he not restricted himself to the seeing of only a certain number daily, to each of whom he gave full time for a thorough consultation. His most famous patient was the Prince of Wales, in 1871, when he was suffering from typhoid fever at Sandringham. Dr. Gull remained with Sir William Jenner in constant attendance on His Royal Highness for some five or six weeks, and was unremitting in his superintendence of the nursing arrangements at all hours of the day and night during the time when the life of the Prince seemed trembling in the balance. The physicians had the good fortune to see their patient restored to health; and the reward of Dr. Gull was the conferring of a baronetcy upon him by the Queen on January 20th, 1872. Other honours quickly followed. Sir William Gull was, also in 1872, appointed one of Her Majesty's Physicians Extraordinary; and from 1871 to 1883 he was one of the six Crown members of the General Medical Council. In 1868 the degree of D.C.L.Oxon. was conferred upon him; in 1869 he was elected F.R.S.; and in 1871 he was appointed Consulting Physician to Guy's Hospital. At the Royal College of Physicians he was a Censor in 1859, 1860, and again in 1872; Goulstonian Lecturer in 1849, when he chose as the subject of his discourse "Paralysis;" Councillor in 1862, 1863, 1869, 1871, and 1872; and Harveian Orator in 1870. He was the

first medical graduate nominated on the Senate of the University of London by the Crown, a post that he retained for upwards of twenty years—until last year, when, owing to his failing health, he resigned it. He was President of the Clinical Society in 1871-72.

Medical Writings.

Sir William Gull never published a book; all his writings were in the form of papers or lectures at societies. One of his early publications, by which he was well known, were his papers on "Abscess of the Brain," in *Guy's Hospital Reports*. He also wrote the article on this subject in *Holmes's System of Surgery*. One great point he made was to show the extreme rarity of abscess of the brain, except as a secondary occurrence, contending that it was always secondary to lesions of the bone, or pyæmia. He published also in the *Guy's Hospital Reports* important papers on "Paraplegia and Diseases of the Spinal Cord," especially those on the early cases of Tabes Dorsalis, which he called "partial cerebral paraplegia" quite early, before it was really recognised. He was engaged in a controversy with Dr. Brown-Séquard on the subject of paraplegia. Dr. Brown-Séquard brought forward the doctrine that sometimes paraplegia was reflex without any affection of the cord, and Gull maintained that in all these cases there was to be found some change in the cord, if it was properly looked for; that it was not a mere reflex. First there would be an affection of the bladder or some distant part, then myelitis and affection of the cord, and from that paraplegia. This is generally accepted now both in England and abroad. Dr. Gull and Dr. Addison published together, under the title of "Vitiligoidea," the first paper on what is now known as "Xanthelasma,"[2] which is of value at the present day. He wrote a paper on "Intermittent Hæmatinuria," following a paper by Drs. Harley and Dickinson on the same subject in 1866. More important than this, however, were the well-known papers on "Rheumatic Fever," by Gull and Sutton (who was working with him at Guy's Hospital at the time), which appeared in the *Guy's Hospital Reports* of 1865. There were also the further important papers which, in conjunction with Dr. Sutton, he published on what he denominated "Arterio-capillary Fibrosis," which excited a good deal of controversy. He was the first to describe what he termed the "cretinoid condition occurring in adults"—a disease which has since been known by the name of "Myxœdema."[3]

For many years Sir W. Gull was a voluminous writer. A large number of his papers, which were chiefly on subjects in clinical medicine, appeared in the *Guy's Hospital Reports*, and of these the following are the chief. His first publication was written in conjunction with Dr. Addison, in 1850, "On a Certain Affection of the Skin—Vitiligoidea: *a*, Plana; *b*, Tuberosa." In 1852 he wrote a "Report on the Value of Electricity as a Remedial Agent," and gave an account of a "parthenogenetic tumour attached....to the heart of a sheep." In 1855 (Series III, vol. i) he published a paper on the "Treatment of Tænia by Oil of Male Fern," another on a "Case of Occlusion of Carotid and Innominate Arteries," and a third on "Fatty Stools in Mesenteric Disease." In vol. ii (1856) he gave details of "Cases of Paraplegia," and a paper on "Pityriasis Versicolor." In vol. iii (1857) were papers on "Abscess of the Brain," and a "Case of Obstruction of the Abdominal Aorta." In vol. v (1859) were four papers on (1) "Aneurysm of the Cerebral Arteries," (2) "Retroversion of the Aortic Valves," (3) "Pneumonia from Implication of the Pneumogastric Nerve," and (4) "Factitious Urticaria." In vol. vii (1861) he wrote on "Urinary Paraplegia," and in the next volume on "A Case of Progressive Muscular Atrophy." In vol. xii (1866) Sir W. Gull published "A Case of Intermittent Hæmatinuria," and in both vols. xi and xii (in conjunction with Dr. H. G. Sutton) were reports of "Cases of Rheumatic Fever Treated by Mint Water." In 1884 (vol. xxvii) was a report of "A Case of Probable Thrombosis of the Superior Mesenteric Vein and Renal Veins, Detachment of Several Valvulæ Conniventes of Jejunum; Recovery," and a second paper on "A Case of Typhoid Fever, Fatal on the Seventy-sixth Day, with Hæmorrhage due to Recent Typhous Ulceration in the Ileum." Sir William Gull also drew up, in conjunction with the late Dr. William Baly, for the Royal College of Physicians, in 1854, "A Report on Epidemic Cholera." He wrote the articles on "Hypochondriasis" and "Abscess of the Brain" in Reynolds's *System of Medicine*. He delivered the Hunterian Oration before the Hunterian Society in February, 1861; and the Address in Medicine "On Clinical Observation in Relation to Medicine in Modern Times," at the annual meeting of the British Medical Association at Oxford in 1868. He read papers on "Arterio-capillary Fibrosis," in conjunction with Dr. Sutton, before the Royal Medical and Chirurgical Society in 1872;[4] on "Anorexia Nervosa," and "On a Cretinoid State," before the Clinical Society in 1873.[5]

His Public Work.

In administrative and public bodies Sir William Gull's position and public spirit enabled him to take an important share. On the Senate of the University of London—to which he was the first medical graduate who received a nomination—his was a weighty and influential voice; and in advancing the scientific interests of the profession he was potent and earnest. The Brown Institute owes its present shape largely to him and Sir James Paget, following the active lead of Dr.

[2] *Guy's Hospital Reports*, 1850 and 1852.
[3] *Clinical Transactions*, 1873.
[4] *Med.-Chir. Trans.*, vol. lv.
[5] *Trans. Clin. Soc.*, vol. vii.

Quain, in the face of a most stern opposition. On the Council of the Royal Society he was a *persona grata* who represented medicine with wisdom and persuasive force. On the General Medical Council he was prominent, without ever making a decided mark; his presence added dignity, and his discourse lent grace to the proceedings; but in administrative questions he did not lend himself to the mastery of details as he did in all his clinical work. In debate he was impetuous, sometimes emotional, and prone to masterful generalisations, which did not always fit in with the character of the discussion or the humour of his hearers. His objects were always to raise the standard of education, to magnify the office of the physician, and to abolish the power of associations such as the Apothecaries' Society, of which he hardly appreciated the usefulness in departments of professional life and phases of social evolution with which he was inadequately acquainted. In the vivisection controversy, he rendered signal service. His evidence before the Royal Commission, published in its Blue Book, is a storehouse of important facts and cogent arguments as to the value of physiological experiment in the discovery of new knowledge, and of the right and duty incumbent on physiologists and physicians to carry out such investigations in the interest of mankind. To inform public opinion, and to throw the weight of his great name into the scales, which were then heavily depressed by prejudice and party spirit of fanatical zoophilists, he entered, much against his custom, the lists of public controversy in the *Nineteenth Century*:—

"Yearly in this country," he says, "more than twenty thousand persons, children and others—mostly children—die of scarlet fever; and nearly twenty thousand more of typhoid fever; and one of thechief causes of this mortality is the high temperature of the blood, which results from the disturbance due to the fever process. No wonder, therefore, that physiologists and physicians have anxiously and laboriously occupied themselves in investigating that mechanism of the living body which in health maintains so constant a temperature under varying circumstances, both internal and external, and which becomes so easily and fatally deranged in disease.....The febrile state must have arrested attention from the infancy of man. The mothers of a palæolithic age must have watched their children consumed to death in it, as do the mothers of to-day. The name of this fiery state is as old as literature .....This fiery furnace, with its uncounted millions of victims, science hopes to close."

"There is no doubt that physiological experiments are useful, useful for animals as well as for man. They are therefore justifiable.....Nothing is so cruel as ignorance. For how many centuries had human sufferers to bear pain which is now preventable by better knowledge? How many thousands festered to death in small-pox before the discovery of vaccination? How many are now dying of tubercle and scrofula whom a better knowledge of their conditions might rescue? Yet the pursuit of this knowledge is hindered in England by the outcry of cruelty—the cruelty being no more than the inoculation of some of the lower animals with tubercular and scrofulous matter, in order to study the course of the disease and the modes of prevention. The cruelty obviously lies, not in performing these experiments, but in the hindering of progressive knowledge."

Public Administrative Work.

Sir William Gull rendered once more a conspicuous public service in his evidence before the Lords' Committee on Intemperance. His energetic denunciation of the popular fallacy that the habitual use of alcohol is a necessary supplement to hard physical or mental work, his conspicuously epigrammatic statement of his personal preference for the grape and the raisin, and the extent to which his own experience confirmed the objection to the habitual use of alcohol, all served greatly to impress upon the public conscience the inutility, as well as the mischiefs, of alcohol as a customary beverage. Sir William Gull took an enlightened interest in the work of the Charity Organisation Society, and his address at one of its public meetings was much quoted and had a valuable effect.

Clinical Work.

Sir William was indefatigable in his attention to his work at the hospital, and he was in the habit of visiting it at all sorts of hours, sometimes late in the evening. He was a very good lecturer. In 1874 he gave the introductory lecture at Guy's. So great was the crowd which assembled to hear him that the anatomical theatre would not hold them. The audience adjourned to the ballroom of the Bridge House Hotel. It was, indeed, a strange sight to see the medical students rushing as fast as they could through the Borough to secure a good place at the hotel. This lecture, like all others delivered by Gull, was incisive and straight to the point. Gull's capacity for clinical teaching was extraordinary; he was, in fact, one of the best teachers who ever taught at the bedside He was careful in details but took a wide grasp of his subject, and always seized on the most salient point of the case. Many instances will recur to those who knew him in which Gull has during life made a great point of symptoms which seemed trivial, but the *post-mortem* examination has shown him to be right. His powers of diagnosis and prognosis were of the highest kind. He had a curious fascination over his patients. They always, whether hospital or private patients, believed implicitly in him, and thought his opinion final. He is said to have said that for the first few years his practice increased in geometrical progression. He began to practise at 8, Finsbury Square, and while there did a large practice; and when he moved to the West End his practice at the height of his fame was probably larger than that of any other physician at any period. He never lost any opportunity to cure his patient. A doctor sent him a lady, an habitual opium eater. She was shown into Gull's room. He at once said to her, "Madam, before you say anything to me, let me tell you you must give up the opium I see you take." She was so impressed by Gull's power of divination that she gave it up at once. His memory was

wonderful; he rarely forgot a face he had once seen, and would remember the details of cases which he had only seen once many years before. He had a way of convincing the patient that every detail of the treatment was equally important, and this led largely to his success in treatment. A curious charm about him was that he had the happy faculty of always taking an interest in the person to whom he was talking, and he rarely appeared to be in a hurry to bring the conversation to an end. You always felt you were talking with a genius. Gull was fond of things outside his profession; he took a special interest in botany, and later in life in philosophical studies. He used to meet Mill, Huxley, and Cardinal Manning, and he was the means of bringing Hinton to Guy's.

Personal Estimates.

To complete the view of the character and capacities of any man of distinguished eminence, it is necessary to know how he was estimated by those of similar capacity, and who had frequent contact with him. The following notes are written by one of the kindliest and most accomplished of his contemporaries who was a keen observer and had abundant opportunity of appreciating his powers and noting those inevitable flaws which are inseparable from every strong character, and which must not be altogether omitted if the biography is to represent the man:—

Sir W. Gull will ever be remembered as one of the foremost men of mark of his time. When he was in active practice there was no one in the country who had a deeper knowledge of his profession, or whose opinion in a difficult case could be surpassed. This was due to an extensive acquaintance with every subject in medicine, for he had been a most indefatigable worker during many years of his early life at the hospital, and was due also to his wonderful acumen, which often led him in the right path of diagnosis where others had wandered afar. With these two qualifications he must have taken a foremost position in his profession, but over and above these he had a natural characteristic which only a few possess, and which ensured him success; this was the personal power or influence which he could exert over his fellow creatures. This belonged to his nature, and was quite independent of his professional surroundings. At his own dinner table he would command the attention of the whole company by some clever saying. All Gull's good sayings were remembered, showing the power which he possessed; and we have heard a young lady declare that when he was on a professional visit to her house, the conversation with Sir W. Gull was the most striking event in her life. It was so with the pupils, who eagerly followed all his words, and were much impressed with his sayings. But lately we heard an old pupil descant on his beautiful lectures, and his remembrance of those on fever. On being asked for particulars, he said his memory failed him, but he would come to London any day to hear Gull reiterate the words, "Now, typhoid, gentlemen." Even with his colleagues his power was great. We remember an instance where at a meeting a proposition by Gull was on the agenda. He was not present, and the subject was negatived. As we were about leaving he entered the room, apologised for being absent, discussed his question, and made us all vote in its favour. With his patients this influence was unbounded; many went to see him to have a talk for whom he never prescribed; when once they had seen him they remained steadfast, and seldom repaired elsewhere. It is well known that all popular doctors have possessed this personal influence, and very often without any pretence to medical knowledge. But Gull had all the characteristics which make a man popular, and at the same time these were based on a true and comprehensive acquaintance with all branches of his science.

Sir W. Gull was much amused one day on going down St. Thomas's Street at being accosted as the Rev. Mr. Spurgeon, and it is well known that his resemblance to Napoleon the First was very remarkable. It is noteworthy that these two men had in their several spheres a very marked power over their fellows. This natural gift strengthened with years, but whether further cultivated has always been a matter of opinion; as a matter of fact, it was the cause of all the professional troubles which fell to Gull's lot. Whether intentional or not, the superiority which made itself felt by patients and appreciated by them was not altogether genial to his professional brethren, or, at least, by those who were on an equal footing with him. It was not perceived by general practitioners who liked Gull, or by junior men, but to others it was irritating. Without the slightest intention of annoying, he would, by thinking of himself, forget that others also possessed an *amour propre*, and so some most trivial acts or words would lead to distressing results. In a well-known case, which for some time occupied the minds of the profession, Sir W. Gull laid much stress on his own discernment, forgetting to associate his colleague with the diagnosis, and yet no one was more distressed than Gull himself to think it could be supposed that he had any enmity towards his friend, saying there was nothing he would not do to serve him. It was certainly a misfortune that Gull could not see that some little speech, somewhat egoistic, had the appearance of placing another in an inferior light. These little things, trivial in themselves, brought upon him the few professional troubles which he had in his otherwise successful career, for Gull, as was well known, was a sympathetic and kind-hearted man, always ready to do a kindness to others. His force of character might be exemplified by many stories.

In practice many tales are told of his powers of dis-

cernment, especially in distinguishing real disease from the troubles of nervous and hysterical people; for example, a lady, Mrs. A., was often under his care for ailments which he told her belonged to her nature, and were not real diseases. On one occasion, when in the country, she was so ill that she had all the doctors in her neighbourhood to see her, who finally sent for Gull to unravel her case. His diagnosis was: "Nothing the matter with her, but at the present time she is Mrs. A. multiplied by four." His dealing with this class of patients was very excellent, and he gained the confidence of one hypochondriac where no other physician could succeed. The patient, like all of his class, wanted much sympathy for his numerous ailments, and yet would have equally disliked to have been told that he was really ill. The patient went to Gull, and afterwards informed us that Gull told him "he was a healthy man out of health." He wanted to know why doctors could not have told him that before. Our only answer could be that we were not clever enough.

Gull did not believe much in medicine, but his treatment was good, shrewd, and judicious. An old lady with osteoarthritis had consulted many doctors, who had all tried their best with iodides and salines, when she went to Gull, saying she could not take their medicines. He saw the case was beyond the reach of any remedies, and ordered her some tincture of cardamums in water. She declared it was the best medicine she had taken, and kept to him. His treatment was scientific, and his success legitimate. In the last case we met him his superior judgment was manifest. A gentleman with weak heart was brought home collapsed and apparently dying. He lay in bed cold, pulseless, and livid. Restoratives were given, with amyl and remedies to rouse the heart, but with no effect. Gull said he should like to bleed, but all not being agreed, he wrote a prescription of magnesia mixture, saying that purging might assist in getting rid of some of the stagnant blood. This was done, and in a few hours the patient had rallied.

A large space might be taken exemplifying Gull's great natural powers, his extensive knowledge of his profession, his wonderful acumen, his judgment, and that remarkable ascendency he had over his fellow-creatures, and which was the keystone to his popularity and professional success. To this must be added how this power sometimes betrayed him and led to foibles which few great men have not, in some measure, possessed.

Sir William Gull inspired those who came into close contact with him with feelings of strong regard and affection. One of the ablest of his medical friends who knew him intimately favours us with the following note of his personal impressions:

"My feelings of reverence and gratitude toward Sir William Gull as a man make it indeed difficult for me at this moment to set forth my thoughts about him in any effective form. Perhaps the first point which forces itself upon me in my recollections of him is the extreme generosity of his nature. In consultation with younger men it seemed to be always his aim to put them at their ease by inquiring about their work and aims, and by asking them to teach him. There was no false humility in this. Having high aims of his own with regard to the advancement of medical science, he proceeded to inculcate upon those into whose minds he had dived the necessity of having high aims also, of being patient seekers after truth, of doing their best to advance the sum of human knowledge, and of being in all ways conscious maintainers of the dignity of their profession. This generosity pervaded his life, and made him abundantly helpful to many a young man, not merely in the way of sympathy, but often in practical form. It is quite true that on one or two memorable occasions he was held by many to have behaved otherwise than generously in consultations, but it always appeared to me that in those instances he acted on generous impulses which carried him beyond some of the restraints which would have bound ordinary men. But he certainly was not an ordinary man. In intellect, in insight, and in power of judging he appeared to me to tower above his compeers, so that he uttered many a saying which was ill understood at the moment, perhaps therefore resented, but which, after pondering, would be found to be essentially true and generally tinged with fun or humour. Relishing humour and subtle jokes, he was entirely ready to enjoy the slightest joke against himself. Indeed, he appeared to take a certain pleasure in laying himself open to them. As a physician, it is hardly necessary to say that his care in the investigation of cases was unbounded. Seated by the sick bed, he abandoned himself to observation and thought, careless of the flight of time. And then came the application of his judgment. He appeared to me to have a unique faculty of determining the proportionate value of symptoms, and of fitting these, if I may use the expression, into the substance of the man he was treating. The very breadth of his estimations made his therapeutics comparatively simple; certainly as regarded the administration of drugs. The first thing that he set himself to do was to find out what was the matter with his patient. This was so thoroughly done, and the result so clearly and impressively stated, that it often seemed to me that the patient felt so safe in his hands as to be already half way toward recovery. Not that he was neglectful of treatment. On the contrary, he was often energetic in treatment, where circumstances called for it, but he never gave a strong or sudden turn of the helm when his touch told him that a lighter pressure would suffice. Having carefully studied the natural history of disease and the reactions of men, he was careful to recognise

how much in any case was the inevitable result of the course of the particular illness or of the personality of the sufferer, to avoid sternly all interference which might be useless, and while doing his utmost to remove all evil influences, to guide the patient as safely as might be through the dangers which beset him; so that sick men under his charge seemed to feel themselves in the grasp of a subtle helpfulness, and resigned themselves with absolute trust to its dictation. It was a noteworthy point in his way of dealing with things that a consultation being over he would straightway converse upon some subject which had occupied his thoughts—sometimes a scientific generalisation, sometimes a passage from Shakespeare, or from Goethe, or from Schiller, sometimes a question in medicine or in medical ethics. No one listening to the utterances—full of deep thought and adorned with epigram and illustration — without being impelled himself to better thinking and nobler intent.

The Fatal Illness.

The commencement of Sir William Gull's illness was in October, 1887. He had written from Scotland to a medical friend shortly before that he was remarkably well, but within a few hours of the receipt of this letter Dr. Hood was telegraphed for. Sir William Gull had been out driving, and was suddenly seized with giddiness. He had, to a certain extent, slight paralysis in the right side, with difficulty of expressing himself. After some weeks he returned to London. During the following twelve months he was fairly well, with the exception of one or two convulsive attacks accompanied with unconsciousness, but no paralysis. Two months ago, when in London, he was one morning slightly confused, and his face was drawn. This passed off within a few hours. Since that time he has been generally feeling weak and depressed. On Monday, at 9.30, while at breakfast, he suddenly lost speech, though perfectly conscious; unconsciousness rapidly supervened, deepened into coma, and he gradually passed away, there being evidently complete paralysis of the left side.

He did not practise since his first attack in October, 1887, and has spent his time between Brook Street and his country house.

Dr. Herman Weber, Dr. Acland, and Dr. Hood attended him throughout his illness.

The funeral will take place on Monday next at Thorpe-le-Soken, near Colchester, where Sir William's father and brother are buried. The body will be removed to Thorpe without ceremony, but a train will leave Liverpool Street Station at 10 A.M., and friends who desire to attend the funeral ceremony, at Thorpe, are requested to communicate their intention to Mr. Gull, or to Dr. Acland, 7, Brook Street, not later than Saturday.

ROYAL COLLEGE OF PHYSICIANS.

At an ordinary Comitia of the Fellows held on Thursday, January 30th, at 5 P.M., Sir Andrew Clark, Bart., F.R.S., President, in the chair:

The President announced, in feeling terms, the death of Sir William Gull. It was unanimously decided that the President should convey to the family of the deceased Fellow the condolence and sympathy of the College on their bereavement. It was further resolved that one of the Censors and the Registrar be deputed to represent the College at the funeral.

The Treasurer announced that a portrait of the late Dr. Charles Lewis Meryon had been presented to the College, which was gratefully accepted.

On the motion of the President it was agreed *nem. con.* that in future the College do not sit after 7 P.M.

The following gentlemen were admitted Members: W. J. Gow, M.D.Lond.; Edmund Hobhouse, M.B.Oxon.; W. Wood, M.B.Oxon.; W. B. Ransom, M.D.Lond.

Licences were granted to 123 gentlemen, 98 of whom presented themselves under the Regulations of the Examining Board.

A communication from the Foreign Office on Leprosy at the Cape was referred to the Leprosy Committee; a second communication from the Foreign Office respecting the limitation of medical practitioners in Monaco was received; and a further communication from the Foreign Office enclosing a copy of the *Dutch Pharmacopœia*.

A communication was received from the Admiralty announcing that there would be ten vacancies for surgeons in the Royal Navy at the next examination.

A communication was received from the Charity Commissioners, and also one from Dr. Hack Tuke, requesting that a plaster cast might be taken of the bust of Dr. Conolly, to be placed in the Medical School at Sydney; this was referred to the Treasurer.

Communications were received from Mr. Trimmer (1) relating to the new scheme of the Senate of the University of London, stating that the Committee appointed by the College of Surgeons to consider it did not approve of the scheme, but were anxious to confer with the Committee of the College of Physicians on the subject. After some discussion it was resolved that the Committee now considering the matter should report to the College before conferring with the College of Surgeons Committee; (2) a resolution of the College of Surgeons on the opinion of the Attorney-General with reference to the action of the General Medical Council in the matter of diplomas in State Medicine, to the effect that Mr. Hutchinson, Sir Wm. Savory, and Mr. J. W. Hulke had been appointed a Committee to confer with representatives of the College of Physicians on the matter. The Registrar read the opinion of the Attorney-General, which was to the effect that the General Medical Council had not the power to make the proposed regulations respecting the curriculum for the diploma in Public Health, and after some discussion Drs. Ord, Liveing, and Norman Moore were deputed to meet the above-named representatives of the College of Surgeons on the subject.

Dr. J. H. Bridge, Dr. S. J. Gee, Dr. Thomas Buzzard, and Dr. J. F. Payne were elected on the Council of the College.

The opinions of the Attorney-General on a proposed new by-law having been read, Dr. Allchin proposed for the second time the by-law in question, to the effect that no Fellow, Member, or Licentiate be permitted to resign his diploma or licence without giving notice to the Registrar in writing, and that no such person shall be considered to have resigned until his resignation has been accepted by the College.

A list of books presented to the College was laid on the table, and the thanks of the College returned to the various donors.

A report was received from the Fever Hospital Committee and unanimously adopted, and the thanks of the College were accorded to the Committee for their valuable services; they were requested to continue to serve as a Committee.

A report from the Council was received relating: 1. To the diploma of Public Health, and recommending the College to accept the regulations proposed by the General Medical Council; the consideration of this was deferred until after the report of the Subcommittee above referred to should be before the College. 2. Recommending a new by-law. 3. Regarding English practitioners abroad. It was stated that the Council had been in communication with many gentlemen prac-

tising abroad. The Council pointed out that any foreign medical man could practise in this country, his only disabilities being that he could not be registered, could not sign death certificates, or hold certain public appointments, and could not sue for fees; it was further pointed out that a doctor of medicine in France could enter for the first examination for the licence of the College without any restriction, and that under the new Act, when reciprocity was granted by any foreign country, a medical man qualified in such country would be able to be placed on our *Register* here without undergoing any examination in this country. This part of the report was adopted unanimously, and it was ordered that it should be printed, and a copy sent to the Foreign Office.

The quarterly report of the Finance Committee was received and adopted, with the addition that the stipend of the College Librarian, Dr. Munk, should be increased by fifty guineas.

The annual report of the Examiners for the Licence was received and adopted; during the year 469 licences were granted.

A report was received from the Laboratories Committee respecting the duties of the director of the new laboratory, and recommending the appointment of Dr. Sims Woodhead to the office. The report was unanimously adopted.

Certain alterations in the by-laws were then agreed to, mostly relating to the now abandoned office of Vice-President, and in their stead it was resolved for the first time to enact the following by-law: In all cases of the unavoidable absence of the President, or of his inability to act, he shall appoint a Fellow of the College who has been a Censor to act for him as President for all purposes of routine business and on all matters of form.

ASSOCIATION INTELLIGENCE.

BRANCH MEETINGS TO BE HELD.

WEST SOMERSET BRANCH.—A clinical meeting will be held at the Taunton and Somerset Hospital on Thursday, February 13th, at 3 P.M. Members wishing to show cases or specimens are requested to forward the titles thereof to Mr. Cosens not later than February 8th, when a circular will be sent to each member giving notice of the meeting and of the subjects to be brought forward. —W. BURROUGH COSENS, Assistant Secretary, Taunton.

YORKSHIRE BRANCH.—The next meeting of this Branch will be held at the Hospital, Rotherham, on Wednesday, February 26th, at 3 P.M. Members intending to read papers are requested to communicate with the Secretary before February 14th.—ARTHUR JACKSON, Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, N.E., on Thursday, February 20th, at 8.30 P.M. The evening will be devoted to a demonstration by Dr. Hadden of patients suffering from various forms of nervous disease. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, N.E.

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the session was held at the Grand Pump Room Hotel, Bath, on Thursday evening, January 16th, R. S. FOWLER, F.R.C.S., in the chair. There were also present twenty-two members and one visitor.

New Members.—The following gentlemen were elected members of the Association and the Branch: W. H. Stevens, M.R.C.S., L.R.C.P., of Bristol; J. Wilton, M.D., Batheaston; H. Appleton, M.D., Sneyd Park; C. A. Griffiths, M.R.C.S., L.R.C.P., Bristol; G. F. Bergin, M.R.C.S., L.R.C.P.

Communications.—Mr. H. W. FREEMAN described A New Method of Treatment in Intracapsular Fracture of the Hip-Joint, and exhibited a successful case treated accordingly.—Mr. G. S. POLLARD read Notes of a Case of Inguinal Hernia with Internal Obstruction. Mr. GREEN mentioned a case bearing on the subject. Dr. GOODRIDGE, Mr. PAGAN LOWE, and Dr. HARDYMAN, also took part in the discussion.—Mr. T. D. RANSFORD brought forward A Case of Concealed Accidental Hæmorrhage. Drs. AUST LAWRENCE, J. G. SWAYNE, and G. HARDYMAN spoke on the subject.—Dr. H. F. A. GOODRIDGE read Notes of a Case of Gastro-Colic Fistula, and showed the pathological specimens of the case.

PERTHSHIRE BRANCH.

AN ordinary meeting of this Branch was held on Friday, January 3rd, in the Rooms of the Society of Natural Science.

Election of President.—Dr. MCNAUGHTON intimated his inability to accept the office of President, in consequence of the restrictions placed upon him by the Commissioners of Prisons for Scotland. Dr. F. R. Wilson, A.M.D., was elected to the President's chair, and instructions were given to the Secretary to confer with Dr. McNaughton in reference to the causes which led to his resignation.

Medical Officers of Health.—The resolution of the annual general meeting as to the tenure of appointments by medical officers of health was unanimously approved of.

Annual Dinner.—The Secretary was instructed to arrange for the annual dinner of the Branch on the first Friday of February.

Paper.—Dr. TROTTER read a paper entitled Suggestions intended to Improve the Relations between the Perth Infirmary and the Medical Profession of the District. The Secretary was instructed to have a summary printed for the consideration of the Branch at next meeting.

JAMAICA BRANCH.

A GENERAL meeting of this Branch was held on October 16th, 1889, at the Public Library, Kingston, the PRESIDENT in the chair. Present:—Messrs. F. H. Saunders (President), G. Cooke, Henderson, Da Costa, L. M. Clarke, and Turton.—The minutes of the last meeting (of July 31st) was read and confirmed, and signed by the President.

Notices of Motion.—The PRESIDENT gave notice that at the next meeting (November 27th) he would propose the formation of a Medical Benevolent Society.—Mr. G. COOKE gave notice that at the next meeting he would propose the formation of a Pathological Museum.

A letter of reply was read from Mr. T. F. Clarke to the letter of condolence of the Branch with the family of their late colleague Dr. Thomas Clarke.

Papers.—The Hon. J. C. PHILLIPPO's paper on "The Arrest and Cure of Leprosy by the use of the Gurjun and Chaulmoogra Oils" was postponed.—A paper on "Three Cases of Fracture of the Upper Extremity," by Mr. F. H. Sinclair, was read by the SECRETARY. One was that of a man about 30, who for the last four years had suffered from "pains in all his bones." Last Christmas he fractured his left humerus in pulling a yam-stick out of the ground. It united readily. The present fracture was a simple transverse one of his right humerus at the junction of the lower and middle thirds. It was done, according to the patient, in throwing a stone. He threw the stone with very little force, but before it left his hand, and during the forward movement of his hand, he heard his arm "snap," and it fell to his side. There is no history of syphilis, and patient appeared healty. The second case was that of a mulatto woman about 30 years of age, who in trying to break a dried branch off a logwood tree with her left hand slipped, and caught at the branch with her right hand in order to save herself from falling; as she did so she heard her arm snap. She had never had syphilis. The point of interest in both of these cases was the ease with which the bones broke. A third case, showing the elasticity of the bones in early life, was related.—The cases were discussed by Mr. G. COOKE, Dr. HENDERSON, and the PRESIDENT.—A paper on a Case of Thoracic Aneurysm in which the Common Carotid was Tied was read by Mr. G. COOKE. After relating the case in detail, he propounded the following questions:—1. Is the tying of the common carotid and subclavian in its first stage justifiable? 2. If so, is it best to tie them consecutively or at the same time?—An interesting discussion followed, in which Dr. HENDERSON, Mr. COOKE, and other members took part.

NEW SOUTH WALES BRANCH.

THE New South Wales Branch held its eighty-seventh general meeting in the Royal Society's Room, Sydney, on Friday, December 6th, 1889, Dr. FIASCHI (President) in the chair. Present: Drs. Foreman, Crago, Worrall, Hankins, Milford, Quaife, G. A. Marshall, Wm. Chisholm, Bowker, Fisher, Rennie, Breneman, de Lambert, Hodgson, Scot Skirving, Parker, Brady, Williams, Shewen, and West. The minutes of the previous meeting were read and confirmed.

Papers, etc.—Dr. J. FOREMAN read some notes on a case of Extra-uterine Pregnancy, with Rupture of the Tube; and also exhibited a specimen. A discussion ensued, in which Drs. WORRALL, MILFORD, FIASCHI, and Mr. G. T. HANKINS took part.—Dr. BRADY exhibited some Instruments used in Operative Treatment of Dis-

eases of the Nose and Throat, and explained their use.—Dr. MILFORD read some notes on an example of the Pathological Effects of Arsenic Poisoning. Drs. RENNIE, CRAGO, and SCOT SKIRVING discussed this paper.—Dr. BOWKER read some notes on a case of Facial Carbuncle (?).

Medical Ethics.—Dr. HODGSON moved: 1. "That a committee be appointed to explain to newly arrived medical men, who intend practising in New South Wales, the laws and ethics regulating medical conduct in this colony." 2. "That such committee seek the assistance and co-operation of any delegates commissioned for the same object by the sister medical assembly in Sydney."—Dr. SCOT SKIRVING moved as an amendment: "That as each newly arrived medical man presents his diplomas for registration before the Medical Board a copy of the agreement between medical men and the friendly societies be placed in his hand, and he be asked to abide by it as far as the circumstances of the locality in which he settles will admit." The amendment was carried.

SPECIAL CORRESPONDENCE.

PARIS.

The Academy of Medicine and the Biological Society on the Contagious Character of Phthisis.—MM. Woodhead and Cartwright Wood at the Académie des Sciences.—Saturnine Intoxication.—Sambucus Niger.—Typhoid Fever Statistics.—The Nervous System in Paralytic Rabies.—A Manual of Microbiology.—General News.

THE discussion at the Academy of Medicine on the prophylaxis of tuberculosis still continues, some asserting the contagious nature of this disease, others expressing their doubts on the subject. MM. Malassez and Vignal, referring to the discussion at the Academy of Medicine, reminded the Biological Society at its last meeting that Villemin had demonstrated the pathogenic properties of the sputa of tuberculous patients, and that Tappeiner had rendered dogs tuberculous by making them inhale dried tuberculous sputa. One detail remained to be investigated, whether tuberculous sputa, under the usual conditions, that is to say, spat on to the ground or floor, then dried up, triturated by the feet of passers-by, moistened by rain or watering the floor or ground, becoming again desiccated, triturated, and moistened, retain their virulence. In 1883—just one year after Koch demonstrated that in most instances the tuberculous infectious agent is the bacillus, which is now known as Koch's bacillus—MM. Malassez and Vignal proved that in the sputa of a tuberculous patient, treated like sputa deposited on the ground, the bacilli are not attacked, and that they retain their pathogenic properties. M. Malassez concluded by saying that tuberculous sputum deposited on the ground is undoubtedly a source of danger, and more especially for those who may be in a state of receptivity and are surrounded by phthisical patients.

M. Chauveau read before the Académie des Sciences a note by MM. Woodhead and Cartwright Wood on the action of pyocyanic fluids on the development of charbon. In the case of a number of diseases, the introduction of the sterile products of the specific organism has protected a patient from the action of the virulent organism. But it has also been found that if in charbon, for instance, certain indifferent organisms were introduced with the charbon bacillus, the affection did not develop with its usual rapidity, and that many subjects survived it. The authors made some interesting experiments to determine the manner of action of these indifferent organisms. On November 5th a cultivation, ten days old, of the bacillus pyocyaneus was rendered sterile and preserved in ice; a small quantity was taken when required and heated to the temperature of the body. Charbon virus obtained from cultivations, inoculated into a rabbit's ear, killed the animal in three days. From 2 to 4 cubic centimètres of the sterile pyocyanic cultivations were introduced into the subcutaneous tissue of the abdomen of three other rabbits twice a day during five days. During this period they manifested no morbid symptoms; one survived seven days, another nine days, the third is still alive. On November 15th two rabbits were inoculated with a charbon cultivation made on agar-agar, which had killed an animal in three days; 3 cubic centimètres of the sterile pyocyanic cultivation were introduced at the same time. The inoculation was repeated once a day during a week. The animals were alive and well three weeks later. These facts would show that the products of indifferent organisms which confer immunity against charbon do not require the presence of the living organism to exercise their action. Pawlowsky and Bouchard observed that animals who had been affected with the disease in these conditions succumbed to a second attack. Pawlowsky supposed that the phagocytes, in devouring the saprophytes acquired a more marked action on the pathogenic organism; but this hypothesis is contradicted by the fact that the same effect may be obtained by the products. In certain diseases in which a first attack does not prevent a second, the cessation of the affection must be attributed to a reaction on the part of the organism. Unless in exceptional cases—rabies, for instance—the physician's aim should be to combat the specific poison by provoking the reaction of the tissues. This may be done by means of different remedies—such as quinine—without employing microbe products. The medicines do not act directly on the microbes. They merely combat the action of the poison, or stimulate certain tissues and increase functional activity.

MM. Binet and J. L. Prévost have made researches concerning saturnine intoxication, and have come to the following conclusions; Lead injections into the stomach, and the daily mixture of ceruse with the food and drink, are followed by gradual wasting, anæmia, slight albuminuria, and nervous phenomena (paralysis, aphonia, loss of reflex power, anæsthesia). The kidneys are deteriorated. Occasionally there is fatty degeneration of the liver, pericarditis, and granulo-fatty degeneration of the myocardium. Lesions of the segmentary, peri-axile type, described by Gombaut, are found in the nerves. Lead accumulates principally in the kidneys and bones; it is eliminated mostly by the bile; it is found months after the intoxication has ceased in the kidneys and bones. MM. Binet and Prévost treated animals that had suffered from prolonged saturnine intoxication with potassium iodide and salts of ammonia, but the necropsy revealed a large quantity of lead in the kidneys.

M. G. Lemoine, of Lille, has studied the *Sambucus niger*, and states that the second white, thin bark, which covers the wood directly, is the one which possesses diuretic properties. He boils a handful of this bark fresh, in a quart of water. A quart or a quart and a half of this decoction administered daily acts as a most effectual diuretic in ascites and anasarca, consecutive to diseases of the kidney and heart. In three or four days it increases the urine considerably. Elder also acts upon the intestine, producing four to six liquid stools a day. M. Lemoine considers that elder owes its properties to an action on the renal epithelium. MM. Combemale and Dubiquet's experiments confirm M. Lemoine's statements. They showed that polyuria was produced with 4 grammes to a kilog. of the animal, of the decoction made with the second bark of elder. When the bark is employed whole, 9 to 10 grammes per kilogramme are required for the same purpose.

Dr. Schneider furnishes the following statistics concerning typhoid fever among the troops garrisoned in Paris in 1889:—In the 119th Regiment 2 cases were recorded in July and 1 in August. From the 13th August to the 2nd September Seine water was substituted for spring water. In September 21 cases were reported in this regiment. In the 31st Regiment there was no instance of typhoid fever during May and June. In July and August 15 cases occurred. The regiment had been supplied with Seine water from June 14th to July 3rd. In October the total number of cases of typhoid fever for all the troops garrisoned in Paris was 10. From October 31st to November 5th Seine water was distributed all over the city. Seventy-five cases of typhoid fever were reported among the Paris troops from November 22nd to December 12th.

M. Ferré has made investigations in order to determine the state of the nervous system during the paralytic period of rabies. The sciatic nerves, stimulated by interrupted currents of moderate intensity, preserved their power of transmission. After section, the stimulation of the peripheral end determined movements in the posterior member; the stimulation of the central end proved that the animal had not lost its sensibility. Reflex transmission was preserved. The motor zones of the cerebral cortex of eight rabbits, of which the brain had remain intact after inoculation by trephining, were stimulated. The cortical zones preserved their power, but in the final stages, when the animal's temperature was 30°, 28°, 27°, the intensity of the current had to be increased in order to obtain the corresponding movements. From these facts it appears that the nervous apparatus of cortical medulla y and peripheral transmission remains intact during paralytic rabies.

Reduced temperature is not the determining cause of this state of paresis.

M. Dubief's *Practical Manual of Microbiology* is a most useful guide for the application of the technical knowledge of microbiology. The first part of the work is devoted to studying the various fermentations and the different kinds of bacteria. The technical study of microbes occupies the most important part, and comprehends the method of preparing the different cultivation mediums, and of rendering their mediums sterile. The text is accompanied by numerous plates.

The *Progrès Médical* strongly urges the necessity of employing electricity in the Paris hospitals, not merely for lighting but for various purposes, as in the case of different electric surgical apparatus—galvano-cautery, electric lamps, speculums, etc. The Salpêtrière and Bicêtre, which contain upwards of 3,000 inmates, are still lighted by gas, and yet Paris now possesses electric stations capable of furnishing unlimited supplies of electricity. In the case of projected hospitals, it will be easy to have electricity on the spot. The *Progrès Médical* suggests that every hospital in Paris should be provided with an experienced electrician.

The Municipal Health Office at Nice, which has been established two years, is one of the most efficient and complete institutions of the kind. Besides exercising the ordinary functions of such an establishment, it possesses a disinfecting stove (which is placed at the disposal of the public), meteorological apparatus, a municipal laboratory of analysis, and of bacteriology. The rate of mortality has considerably diminished since the office was established. Nice, which took the second place among 103 French towns for its death-rate, now occupies the twenty-fifth. No deaths from small-pox are recorded among the school population, which formerly contributed 71 per cent. of the deaths from this disease. This is due to efficient system of re-vaccination.

The Municipal Council of Paris has requested the Administration to reserve portions of the south and east cemeteries of the city for the construction of collective monuments, to receive the ashes of cremated bodies.

VIENNA.

Etiology of Influenza.—Official Report on the Epidemic.

THE *Wiener medizinische Blätter* of January 23rd publishes a "preliminary communication" on the etiology of influenza, by Dr. Maximilian Jolles, of Vienna. After protesting against the undesirable publicity which his investigations, which are still incomplete, have obtained in the political press, he goes on to say that, while making bacteriological examinations of the sputa of patients suffering from the prevailing epidemic, he was repeatedly struck by the fact that in the cover glass specimens there were exceedingly numerous "capsule cocci," closely resembling Friedländer's bacilli of pneumonia. On December 27th he received from Dr. Hanc, of Vienna, the urine of a patient for examination, the analysis of which gave the following results: Alkaline urine of diminished specific gravity (1017); chlorides diminished (3.834 grammes in a litre); small quantity of albumen and pus; triple phosphates; urate of ammonia; numerous leucocytes; mucous threads; prostatic corpuscles; numerous basement epithelial scales from the bladder, the neck of the bladder, the posterior and former parts of the urethra. These conditions seemed to prove that the case was one of acute purulent cystitis. Dr. Hanc, however, asserted that there was no symptom pointing to a local affection of the bladder except high fever, which had come on suddenly, and a large amount of pus in the urine. On the second day Dr. Jolles received the urine of the same patient, in three portions; examination of it gave the same results, but as there was a family history of tuberculosis, Dr. Jolles made "cover glass specimens" of the sediment of the urine, which he stained according to the method of Gabbet-Ernst. There were no tubercle bacilli, but there were capsule cocci, which were quite analogous to those detected in the sputa. The same conditions were found in cover glass specimens which had been stained with the usual aqueous aniline colours. Since then cover glass preparations were made of the sediment of urine in all cases of influenza, and the capsule cocci were found in the vast majority of them, though not in all. These observations led Dr. Jolles to suppose that the micro-organism discovered probably stood in an etiological relation to influenza, especially as capsule cocci have not before been detected in the urine. He made plate cultures of several specimens of sputum and urine, and as early as the fourth day he found colonies closely resembling those described by Friedländer. They appeared as round, sharply limited, yellow, granular discs; over the surface they had the appearance of semi-globular buttons resembling porcelain. Control cultures showed the characteristic nail form, but on a comparison with Friedländer's cocci cultures, the "knob" of the nail appeared to be less glistening and more granular. The behaviour of these micro-organisms to aniline colours was the same as that of Friedländer's bacillus. By means of aqueous aniline colours, Dr. Jolles obtained from the pure cultures short and thick little rods (bacilli) with round ends, which lay in couples beside each other, and touched each other with their narrow ends (without capsules). When treated after the method of Gram, the micro-organisms became discoloured. In making a bacteriological examination of the Vienna Hochquell water (aqueduct water which supplies Vienna, and comes from the Alps) on December 26th, Dr. Jolles found numerous saprophytic bacteria (228 in one cubic centimètre) which in part liquified gelatine, and in part failed to do so, and also numerous similar nail colonies which, observed with the microscope, proved to be diplococci, which were surrounded by a bright halo. The time has been too short to allow of satisfactory experiments on animals. A rabbit, in which a pure culture of one of the above-mentioned sputa was injected subcutaneously, remained quite well, and a second died of septicæmia, on the fifth day. It should, however, be borne in mind that these animals are refractory to Friedländer's bacillus.

At the last monthly meeting of the Vienna Stadtphysikat, the Stadtphysicus, Dr. Kammerer, gave a full report on the sanitary conditions of Vienna during December last. From this report it is clear that in spite of the great mortality during the month of December, the total number of deaths in 1889 was far below that of other years. The Physikat (sanitary board) estimated the percentage of diseases of the Vienna population during the epidemic at from 30 to 40 per cent., without taking into account slight cases which had not come under medical observation. The number of deaths during December amounted to 2,273, whereas the average number for December 1879-88 was only 1,674 deaths. The increase of the number of deaths was particularly due to inflammatory affections of the respiratory organs. The official physicians also sent in reports. Opinions were divided as to the contagiousness of the disease. The complications mostly observed were the following: neuralgia, otitis media, menorrhagia, and hæmorrhages from the stomach and the lungs. Among the nurses of the "Foundling Hospital," an erythematous skin affection was observed.

A lecture by Professor Weichselbaum on the micro-organism of influenza is expected for the meeting of the Imperial Royal Society of Physicians of Vienna to-day (Friday, January 31st).

BIRMINGHAM.

The Children's Hospital.—Balls at Hospitals.—The Influenza.—The Skin and Lock Hospital.

THE annual meeting of the Birmingham Children's Hospital was held on Monday, and a fairly satisfactory report was produced, a deficiency of less than £20 being the result of the year's working. Like all the other hospitals in the city, the Children's has shown, and still shows, a falling subscription list, which has fortunately, to a great extent, been met by an increased contribution from the Hospital Saturday Fund. The number of patients treated during the year was much the same as the preceding one, the in-patients numbering 654, and the out-patients 12,700. Considerable expenditure has been incurred by structural alterations, amongst which a thorough overhauling of the sanitary arrangements was included. Amongst the pleasant incidents of the year it is worth mentioning that the proceeds of an entertainment, generously given by Mr. and Mrs. Kendal, were handed over to the treasurer, the amount being £277.

At an inquest held in Birmingham some days ago, the coroner made some very sweeping remarks when holding an inquiry on a patient who had died in the Queen's Hospital. The boy was admitted into the hospital suffering from an injury to the abdomen. An exploratory operation was performed, and *post mortem* it was found that there had been extensive laceration of the liver. The admission was made on the evening of the nurses' annual ball, and it was alleged that owing to this fact the patient had been grossly neglected by house-surgeon and nurses alike. Subsequent investigation by the committee of the hospital completely contradicted this and exonerated the officials. It is a source of

atisfaction that this was possible; at the same time, it is felt by considerable section of the public that a ball in a hospital is n incongruity, and we think the Queen's Hospital might with dvantage drop this form of entertainment, as has already been one by other institutions.

The influenza still exists, and has extended considerably since ny communication of a fortnight ago. It does not, however, ppear to have reached the severity which it attained in London r on the Continent, either with regard to the numbers attacked r to the fatality. Temperatures of 102° and 103° have been airly common; very few cases appear to reach to a temperature f 104°, and rarely has a rash existed. In very exceptional cases lelirium has been present.

Dr. Leslie Phillips was, on January 27th, elected to the vacancy n the staff of the Skin and Lock Hospital. It appeared for some ime as though there would be no candidate for this appointment, he reason being the objections which are taken to seeing out-patients in the evening, a practice which has recently been introduced, and to which considerable dislike has been expressed. Had t not been for this innovation there would have been several ther candidates, any of whom might have been very suitable for he post, and some of whom applied for a former vacancy.

MANCHESTER.

Children's Hospital, Pendlebury.—Burnley Hospital.—Manchester Aberdeen University Club.—National Association of Sanitary Inspectors.—St. Mary's Hospital and the Royal Infirmary.

THE annual meeting of the friends and subscribers of the Children's Hospital, Pendlebury, was held last week. The medical report tated that the total number of new patients admitted to the lispensary during the year 1889 amounted to 10,846, being 378 nore than in the year 1888. Of this number 924 were sent up to he hospital, 1,305 were made home patients; the number of leaths amounted to 252. The mortality of the patients admitted mounted to 2.3 per cent. An analysis of the ages of the 252 fatal ases showed the large percentage of the deaths to be those of young children under two years of age. Of the 252, 211, or 84.4 per cent., were under two years of age; 30, or 12 per cent., were over two and under five years of age: while 9, or 3.6 per cent., were above five years of age. The medical staff again felt bound o record their experience of the old subject of infant assurance, believing that in so doing they might assist in calling attention to he subject. Out of the 252 children whose deaths took place, 84 had been insured, though at the time of death only 162 were in benefit." The average amount received by the friends for ach child was £3 4s. 7¾d.—a total sum of £523 13s. They could ot but feel that the influence of the worst form of "death clubs" vas wholly bad, and they trusted that further restrictive legislaion would be enacted. Their remarks principally applied to hose clubs which insured infants a f w hours old, and which disgraced themselves by giving a porti n of the "benefit" money in drink.

It is proposed to endow a children's ward at the Victoria Hospital for Burnley and the district. Sir J. H. Thursby has contributed £200, and Mr. J. H. Balfour £100.

The annual dinner of the Manchester and Aberdeen University Club was held on January 24th in Manchester, Dr. Alex. Thomson, he President, in the chair. There was a large gathering of the raduates—especially medical graduates of the northern Uniersity.

The first annual dinner of the National Association of Sanitary nspectors (Manchester centre) was held last week in this city. Dr. Tatham contrasted the position of sanitary inspectors in 1875 —when the first really effective Public Health Act became law—with the position, status, and importance of sanitary inspectors at he present time. The President, the Right Hon. J. T. Hibbert, poke of the enormous advantages to the community of recent anitary legislation, and he pointed out that during the last ecade half a million deaths had been prevented, while the enorcement of sanitary regulations had prevented an enormous mount of sickness amongst the working classes; and he regarded he Association as the best friend of the working classes.

Some time ago reference was made in the JOURNAL to the proposed use of part of the Infirmary land for the new St. Mary's ospital. The Infirmary Committee has carefully considered the quest, suggesting that a portion of the Infirmary land facing ortland Street should be conveyed to the authorities of St. Mary's Hospital, and have come to the conclusion that they cannot accede thereto, as the Infirmary property can only be legally used for infirmary purposes.

LIVERPOOL.

Annual Meeting of the Medical Institution.—Dr. Taylor's Report on the Abattoir.—Endowment Fund of the Stanley Hospital.

AT the annual meeting of the Medical Institution, Mr. Mitchell Banks, Senior Surgeon to the Royal Infirmary, was elected President. The office of general secretary to the ordinary meetings was made tenable for two years instead of three, as hitherto. Mr. John Cameron received the congratulations of the Society on attaining his jubilee year of membership.

Dr. Stopford Taylor has issued his report on the city abattoir. He discusses the plans proposed for the extension of the abattoir, the pig slaughterhouse, and other cognate premises, and declares that they are not in accordance with sanitary regulations, and perpetuate the evils of the present buildings. He asserts that the only means of ventilation will be by openings into the public street, and the effluvia will escape into adjoining thoroughfares. He considers the situation of the market is most objectionable, having direct communication with the slaughterhouses, instead of being completely cut off and separated from the common atmosphere of the slaughterhouses and lairs. The medical officer then speaks in detail of the plans, and goes on to condemn the nuisance created by the sale of hides, skins, and fat, which, piled up in heaps to await the sale days, emit a dreadful stench when opened out, the offensive liquor running down the channels into the drains. In conclusion, Dr. Taylor says: "However injurious the slaughterhouses may be when situated in cities and towns (and of this there can be no doubt), yet the various trades connected therewith and dependent upon them are still more injurious; and notwithstanding the most careful supervision they always will be offensive and a nuisance to the inhabitants of the district in which they are situated. In the application of the Abattoir Company for a renewal of their lease, all these various trades are quietly ignored, though some of them are the property of the company or members of that body; and there is no doubt that applications would be made for the renewal of the leases of these different premises if that for the abattoir was granted." It is thus apparent that the medical officer of health holds the opinion put forward in one of my former letters, that the lease to the Abattoir Company ought not to be renewed.

The trustees of the Lyon Jones Fund have assigned £1,000 to the endowment fund of the Stanley Hospital.

CORRESPONDENCE.

THE RELATIONS OF THE GRADUATES AND CONVOCATION OF THE UNIVERSITY OF LONDON TO THE PROPOSED REFORM OF THE UNIVERSITY.

SIR,—It may be taken for granted that the constituent body of the University must make up its mind to one of two things. It must either accept such a reform of the present constitution, charter, and working of the so-called University of London, or it must make way for a new, independent, and more liberal university. "The Royal Commissioners appointed to inquire whether any, and what kind of, powers is, or are, required for the advancement of higher education in London," after hearing evidence and bringing keen intelligence and the highest judicial faculty to the task, have summed up the case in a decision which cannot be contested.

If anything could add weight to arguments the bare statement of which carries conviction, it would be the names of the Commissioners. Where could we find men of higher authority than Selborne, J. T. Ball, James Hannen, William Thomson, G. G. Stokes, and J. E. C. Welldon? They examine the question from a perfectly unbiassed standpoint, simply seeking what is best for the public interest.

And what have we on the other side? The protest of men justly, no doubt, proud of their degrees, who feel or think that "their privileges would be infringed" if the reforms pointed out by the Commission, formulated by the Senate of the University, and emphatically called for by the great teaching bodies of the metropolis, were adopted. To put the case plainly before the non-

contents, it is well to cite the concluding clause of the Commissioners' report.

"We, therefore, humbly recommend to your Majesty that a reasonable time should be allowed to the Senate and Convocation of the University of London to consider whether they will apply to your Majesty for a new charter, extending the functions and duties of their University to teaching; associating with it teaching colleges and institutions; remodelling the constitution of its Senate; establishing as electoral bodies the teachers of its constituent and associated colleges and institutions in the several faculties of arts, science, laws, and medicine; establishing boards of studies; and otherwise granting new powers to the University, in accordance with the suggestions contained in this our report. *In the event of their applying for and obtaining such a new charter, we recommend that no other university be now established in London*, and that the prayer of University College and King's College be not granted." Surely this is significant enough.

It is a matter of vital and pressing interest to the public that the greatest clinical schools of medicine in the world, working in the great centres of scientific activity and educational facilities, producing practitioners in no way inferior to the graduates of any university in the kingdom or elsewhere, should be enabled to hold out to their pupils the prospect of academical recognition from a metropolitan university.

No one will deny—I myself owe it too much to deny it—that the University of London has done excellent work in stimulating general and medical education. But the time has fully come when it is well to recognise the fact that adherence to the scheme—itself a temporising compromise—of its foundation is now clogging the progress of education and inflicting grave injury upon students and aspirants to professional advancement.

It is strange that cosmopolitan London should stand alone in a position of academical inferiority and incapacity. Strange, surely, that its students should be compelled to seek in provincial towns and abroad for degrees to testify to knowledge acquired in London. Can it be expected that such an anomaly will long be tolerated? Why should London be in an inferior position in this respect to Paris? Speaking from precise and ample knowledge, I am prepared to maintain that the degree of M.D. of Paris is at least equal to that of London. Yet Paris supplies the academical wants, not alone of Paris but of France. So true is this, that recently the University of Paris has been made the University of France. What prevents London from supplying the academical wants, at least, of the disciples of medicine of London and of England? Speaking again from precise knowledge, I affirm that the great bulk of men who pass the examinations of the two London Colleges are as good in general, as well as in professional, accomplishments as the bulk of graduates of London or Paris.

I fear it must be admitted that the obstacle must be sought in the jealousy of a few, a very few, men, who seem to be possessed with the idea that they carry the stamp of superiority, which will endure through life, by virtue of their degrees alone; and that they would be dragged down from their high estate if others were admitted to graduate on less harassing conditions. It is well to remember that a degree, apart from certain academical privileges—such as talking in convocation and voting for a member of Parliament—is simply a start in a career, and that real distinction is only acquired by subsequent honourable work. The opposition will hardly come from men who, acting in this spirit, have thus justified their degrees. And I venture to hope that all graduates will hesitate before signing the memorial which has been drawn up for presentation to the Senate.

Upon some other points connected with this movement I propose to trouble you in a future communication.—I am, etc.,

Harley Street. ROBERT BARNES.

P.S.—It is also wise to reflect that University Parliamentary representation is open to assault; and that the best way to defend it is to strengthen its constituency, individually and collectively, by proving to the world that it is truly representative of liberal and progressive culture. How long would the present university hold its own if another metropolitan university were created?

SIR,—With regard to Mr. Waring's letter of January 25th, may I be allowed to say that it seems to me that, in order to defeat the attempt to introduce the proposed changes in London University, a far more determined and organised resistance will have to be made than can be done by mere petitioning?

It is strange that such a scheme should be allowed to pass when the large mass of London graduates are unmistakably opposed to it. It is time, indeed, to ask to whom are we entrusting our best interests, and whether the rank and file of London University should not have a voice in managing affairs which so intimately concern them. At present there is no organ—there is no means by which we can make ourselves heard with effect. Under these circumstances, how can we successfully resist these innovations? The helplessness of Convocation is a byword. It is a mere waste of time and money to attend its meetings when such a question as this is before us. The only way is for some of our influential graduates in London to take the matter up in good earnest, and put themselves in communication with provincial graduates. In this way we could contrive by meetings and protests to offer such a resistance as would make it impossible to depreciate our degrees, the excellence of which has been perhaps, with most of us, the only reason for obtaining them. If by helping to call attention to this ill-conditioned scheme for despoiling our medical degrees I could succeed in swelling the resistance against it, I should feel myself more than fortunate.—I am, etc.,

January 28th. M.D.LOND., B.SC.

THE SURGICAL ASPECT OF HEPATIC ABSCESS.

SIR,—I am encouraged by Mr. Rickman Godlee's lectures on hepatic abscess, lately reported in the JOURNAL, to ask a practical question which is not there touched upon. In the case of a man spitting up a large hepatic abscess, and doing so ineffectively, what is the proper course of procedure? I am aware that many small, and perhaps some large, abscesses do end favourably in this way, unaided by surgery, but I have in my mind three cases, all occurring at the same time in the wards of a large Indian hospital. One died from exhaustion after months of suffering, and the necropsy revealed, what was expected, a large abscess communicating freely with the lung. The abscess had not pointed externally, but could have been reached from without. The second for three months spat up daily more than half a pint of grumous pus, and for most of the time kept in wonderfully good general health, but at length failed rapidly, and was sent to the hills, where, when I last heard of him, he was dying. I several times reached pus in this case with my diagnosing syringe at about two inches from the surface. The third, in every respect analogous to the above, was invalided home, and died *en route*, choked by the enormous quantity of foul stuff that he had not the strength to expectorate. In this case I, in consultation, advised a free opening as a means of relief, my syringe reaching the abscess at less than an inch from the surface. This was, however, considered inadvisable.

I take it for granted that my experience is that of other men, and I ask why should these cases, when Nature has done her best and failed, not be allowed the same chances as an ordinary hepatic abscess? Granted that there is no pointing—the syringe tells us where to find the pus; that there are no adhesions, Mr. Godlee shows that they are not necessary; that the abscess is often (not always) deeply seated, the bleeding can be stopped by pressure round the tube; that the abscess is exposed to septic influences from the lungs—is this a fatal objection in the kindred operation for lung abscess?—I am, etc.,

Alderney, January 24th. F. P. NICHOLS, B.A., M.A.Cantab., Surgeon Medical Staff.

CLINICAL TEACHING IN DUBLIN.

SIR,—I think that the two gentlemen who took up arms against me in the JOURNAL of January 18th have not done much for the cause they wished to defend. They only try to show that notes of cases are kept in five of the eleven Dublin hospitals. I may give my experience of the way notes were kept at one of the hospitals Mr. Johnston mentions, namely, at the Rotunda. When I was a student at the Rotunda the notes were taken by the clinical assistant. They were entered on a card about 10 inches long by 5 inches broad. Under head of symptoms came: "complains of so-and-so." Then some lines under head of menstrual history, and finally some remarks on condition of pelvic organs. There was absolutely no detailed history of duration, or mode of onset, of illness, no account of previous illnesses, no family history, no notes of condition of other organs, no record of urine, no record of progress of the case. No history that I ever saw at the Rotunda consisted of more than a dozen lines. There was really hardly room for more on the forms provided.

I have never seen any notes in the surgical wards at the Meath Hospital, nor do I believe that they exist. Nor have I ever seen any notes hanging up in the wards at Steevens's, Bagot Street, Adelaide, or Mercer's. I am quite ready to believe that notes are taken and properly kept at Dun's and the Richmond Hospitals, but am curious to know how long this excellent custom has been in vogue there.

Mr. Bell tells us that many students availed themselves of the opportunity afforded them at Sir Patrick Dun's Hospital to take notes of the cases, which means, I take it, that many of the more lazy students took no notes at all.

As another instance of the way clinical teaching is carried on in Dublin, one may refer to the out-patient departments. There are no out-patient books or sheets on which diagnosis, symptoms, treatment, etc., are written, as in England. The Dublin out-patient is seen, prescribed for, and goes away. He may attend, perhaps, for six months, but no one knows anything about him, as to what his original symptoms were, what treatment he has had, what alteration has taken place in the physical signs, etc., simply because it is nowhere recorded. It thus comes about the whole out-patient material in Dublin is absolutely wasted and thrown away as regards clinical observation.

I am sure that most Irishmen will agree with me that many of the Dublin hospitals are sadly in need of reform in many ways.—I am, etc.,

IRISH SURGEON.

HOME FOR MEDICAL MEN AND THEIR WIDOWS.

SIR,—In the report of the proceedings of the Council of the Association on January 15th, mention is made of the offer of a house for the above purpose as coming from myself; this is not so. I stated in my note to the President that a patient was the owner of the property, and that he was willing to grant a twenty-one years' lease at a peppercorn rent of 5s. per annum, with the prospect of absolute gift of the freehold, if funds could be procured for furnishing and working it, the inmates paying 10s. per week.

The property, which was formerly a college, is on the south coast, and could accommodate from twenty to thirty persons.—I am, etc.,

W. H. TAYLER, M.D.

Tudor House, Anerley, S.E., January 27th.

SANITARY EXPERTS AND THE CHARGE OF OBSTRUCTING JUSTICE.

SIR,—The attack of your correspondent "Sanitarian" upon Mr. Tatham, of Manchester, calls for some notice at the hands of some of those who know the whole circumstances of the case. There was no refusal on the part of Dr. Tatham to tell the truth, as your correspondent's letter seems to insinuate. Dr. Tatham, the paid officer of the Manchester Corporation, when applied to by the solicitor to the owner of a slaughterhouse, ordered by the Bradford Corporation, on public health grounds, to be closed, and, when shown a plan of the premises, declined—and as I think very properly declined—to leave his own domain in order, for the sake of ostensibly protecting vested interests, to obstruct and if possible disparage the action of a junior colleague trying to do his duty to the public in a neighbouring town. Of course it is quite true that, had Dr. Tatham accepted the retainer of the appellant and gone on his behalf to inspect the premises at Bradford, it is, I say, quite true, as the learned Recorder remarked, that Mr. Tatham's evidence would have been exactly the same if he had been called; but would the appellant, in the interests of justice, ever have called him?

Regret it as we may, expert evidence will still be chosen by litigants, not to further the ends of justice but to win their case, and when a man in Dr. Tatham's position and of his known sanitary attainments is shown a plan of certain premises and asked to see them in order that he may give evidence against the action of a sanitary authority intent upon securing the health of their district, it seems to me the most natural thing in the world that he should with all speed request the tempter to take a back seat.—I am, etc.,

J. SPOTTISWOODE CAMERON.

Leeds, January 28th.

SIR,—Under the heading of "Obstructing Justice" a letter appears in the JOURNAL of January 25th referring to certain incidents in an important appeal case which was tried a few weeks ago before Mr. Gainsford Bruce, the Recorder for Bradford. I venture to dispute the claim of your correspondent to the name "Sanitarian," for the verdict of which he approves is an undoubted blow to sanitary progress, not only in this town but in all others where the private slaughterhouse evil exists.

On that part of the letter dealing with Dr. Tatham I offer no comment.

The reference to Dr. Hill, however, contains certain statements which must not be allowed to pass unnoticed; and, in order to give a clear understanding of the case, I ask your permission to lay before you a short *résumé* of the facts.

Some few months ago the chief sanitary inspector reminded me that some of the licences to private slaughterhouses required renewal. As I had previously visited all the slaughterhouses, and had come to the conclusion that certain of them, at any rate, ought to be closed, I brought the matter before the Sanitary Committee. Ultimately a subcommittee was appointed to visit and report upon these. This subcommittee consisted of seven or eight gentlemen, several of whom have a practical knowledge of the trade, and they unanimously decided to recommend the revocation of the licence to the slaughterhouse in question. Against this decision the occupier appealed (under a local Act) to Quarter Sessions.

The appellant is one of the largest pork butchers in the town, killing on an average something like thirty pigs per week, and, as was stated in Court and not denied, occasionally sixty pigs per week. He is the only pork butcher who has a private slaughterhouse, all the others killing at our public *abattoirs*, of which we have two, both of modern construction. In addition to the slaughtering, he carries on in the same premises the operations of gut cleaning, meat boiling, sausage making, ham and bacon curing, and the making of pork pies.

The borough surveyor, in his evidence, described the premises as situated in a kind of well, and as being in one of the most populous parts of the borough.

The yard is completely enclosed by buildings tenanted for the most part by working people and small shopkeepers. The slaughterhouse yard is 60 feet by 24 feet, and on this are placed a stable for two horses, three pig lairs, in which on two occasions at least thirteen pigs were seen, two closets with ashpit, a store-room with hayloft, and an open dungheap a little over 3 feet deep. Facing the slaughterhouse, and distant from it 40 feet, is a row of back to back houses, the occupants of which breathe the air from this enclosed space. From the pig lairs and dungheap these houses are distant from 18 to 19 feet. On the other side of the slaughterhouse is a row of houses, distant 36 feet.

In this confined space all the offensive operations already mentioned are carried on, and yet we have the ex-President of the Society of Medical Officers of Health prepared to go into the witness-box and say that in his opinion the premises are well adapted for the purposes for which they are used! The medical officer of health for Holborn actually described the premises and situation as admirable.

And now, Sir, turning to another aspect of the case, I fancy I have some reason to complain of Dr. Hill's attitude towards myself as the medical officer of health for Bradford. He comes all the way from Birmingham to Bradford, inspects this slaughterhouse, gives no intimation to me of his intention to oppose me, does not even leave his card, although my office is in the same building as the court in which the case was heard. On two occasions, as I afterwards know, he has opportunities of addressing me, but carefully abstains. All this is in marked contrast to the conduct of Dr. Gibbon, who, though equally unknown to me, had the courtesy to call upon me and tell me frankly that he intended to oppose the corporation. Under other circumstances I should have felt honoured by a visit from the ex-President of our Society. It was painfully evident that he was ashamed—as he had reason to be—of the part which he was induced to play in this affair.

As it happened, the case was adjourned for a week, and Dr. Hill was not called. Accidentally, however, I had learned he was to appear as a witness, and it naturally occurred to me to find out what Dr. Hill had written about the subject in his annual reports. I could only find two of these reports. Wishing to have some of his other reports, I mentioned the matter to the town clerk, who at once wrote to the Birmingham corporation, asking the favour of a copy of any report their medical officer had made upon slaughterhouses, and, in order to take no unfair advantage of Dr. Hill, stated openly our object in endeavouring to obtain them.

To my surprise Dr. Hill did not appear at the reopening of the proceedings, but instead there was sprung upon us Dr. Bostock Hill, who posed as the deputy medical officer of health for Birmingham, and gave evidence in favour of the appellant. He also, although holding the same office in the Midland Branch of the Society of Medical Officers of Health that I do in the Yorkshire Branch, was careful not to disclose his identity until his appearance in the witness box. He saw the premises for the first time on Saturday, when, of course, all was in apple-pie order, and gave his evidence the same day. I will say no more about him except that in cross examination he practically justified the action of the Bradford corporation.

My letter is already a long one, but I cannot refrain from pointing out that in this trial I had the active support of the responsible health officers for two of the most important towns in the North of England—namely, Drs. Tatham and Cameron, and that arrayed against us we had the ex-medical officer of health for Bradford and Leeds and Drs. Hill and Gibbon. It is instructive to note that these witnesses appeared on behalf of the butchers in the well-known Glasgow meat case.

Of all the "regrettable" incidents of this case—and there were many—the most regrettable by far was the decision of the Recorder.—I am, etc., JAS. MACLINTOCK, M.D., B.Sc.,
Medical Officer of Health, Bradford.

THE MEDICAL DEFENCE UNION AND THE MEMBERS OF THE GENERAL MEDICAL COUNCIL.

SIR,—May we say that no member of the General Medical Council is a member of the Medical Defence Union?—We are, etc.,
LESLIE PHILLIPS,
A. G. BATEMAN,
Honorary Secretaries, Medical Defence Union.

SALFORD INFECTIOUS HOSPITAL.

SIR,—I notice on page 153 of the JOURNAL for January 18th that your Manchester correspondent says that Salford is about to build a new hospital, consisting of three spacious pavilions with 144 beds.

Besides the pavilions are two isolation blocks to accommodate twenty patients each, making in all a total of 184 patients. The estimated expenditure being, with furniture, about £50,000, it seems only right that I should draw attention to the larger number of patients being provided for, as persons may be making an erroneous calculation of the actual cost per bed if the statement referred to be not corrected.—I am, etc.,
Salford. CHARLES E. PAGET, Medical Officer of Health.

ON THE CENTRAL MOTOR INNERVATION OF THE LARYNX.

WE have received a further communication from Professor H. Krause, of Berlin, with reference to the reply by Dr. Semon and Mr. Victor Horsley published in the JOURNAL of January 25th, p. 176. He points out that a full account of his researches was published in the *Archiv für Physiologie*. With regard to the experiments of Dr. Ferrier, he writes:—

"On referring to the passage quoted by them [Dr. Semon and Mr. Horsley] from the first edition of his work *On the Functions of the Brain* (1876, p. 150)..... And, again, referring to the second edition of the same work (p. 251 and 252), where the convolutions are distinctly named: We see clearly and without any doubt that Ferrier localises the centre for vocalisation or speech on the anterior 'conjoint extremities of the third and fourth external convolutions' (that is, area 9 in his diagram). However, the centre as found by myself is situated anteriorly in the first convolution."

With reference to Dr. Duret's experiments, he writes:

"The same is true in regard to Duret, who, in two dogs, extirpated the area as given by Ferrier, and observed that the animals had lost the ability and power of barking, but that they could yet whine and growl..... All these experiments which—in Ferrier's case certainly, in Duret's probably—affected the area for the tongue and mouth can have no reference to the movements of and in the larynx. These latter are brought about by stimulation of the cortical area as determined by experiments. Hence the former experiments by Ferrier and Duret were not mentioned by myself."

NAVAL AND MILITARY MEDICAL SERVICES.

THE PROFESSION AND THE MEDICAL STAFF.

F.R.C.P. writes: There is an easy method by which the profession could assist their army brethren in their struggle for justice. Let every local Branch of the Association, as well as every medical society in the kingdom, address in their corporate capacity the members of Parliament for their town or district, urging the claims of army medical officers to be formed into an autonomous corps, with intelligible military titles and defined army rank. Parliamentary pressure is the only effective weapon for the redress of grievances in these democratic days.

VARICOSE VEINS.

VERITAS wants to know whether "varicosity of the short saphena vein" would debar from passing for the Army Medical Department?

*** As we lately remarked when questioned on the subject of varicocele, all such disabilities turn upon the question of degree. We believe, in recruiting, even a small varix in a position where the saddle or stirrup leather would press unfits a recruit for mounted, although not necessarily for dismounted, duties. Our correspondent should consult an experienced military medical officer.

THE RANK CONTROVERSY.

MEDICAL STAFF writes: As an old officer who many years ago urged upon the Director-General the necessity for definite army rank and titles for medical officers, and as one who lately was willing to accept the compound title, I now am quite of opinion that regular military titles in a Royal medical corps is the only solution of the rank controversy. I have urged this upon our local member of Parliament, with whom I sit on the bench as a magistrate. The ventilation of the matter in your columns is moulding public opinion, but it may require the catastrophe of a war to compel action. Meanwhile, if subscriptions to a defence fund are wanted, I am willing to subscribe and to lend a hand. The development of the whole business has been hastened in a most remarkable manner by the publicity you have given to it, and by your advice and views.

*** We are very glad to hear it.

THE LATE SURGEON-GENERAL JOHNSTON FERGUSON.

ONE OF VERY MANY writes: I trust you will spare a few lines to one who wishes to record the respect due to the memory of Surgeon-General Johnston Ferguson, who recently died at Southsea. He was one of the senior officers of the medical staff who particularly won the love as well as the respect of his juniors. It is a remarkable proof of his individual worth that a man so much liked and esteemed should rise to the highest rank in our service, an anomaly at a time when worry and want of consideration appear to be the standards of efficiency. It was possible for Dr. Ferguson to administer a division with satisfaction to the War Office and yet without permitting his juniors to feel harassed or neglected. No higher praise can be accorded him.

Surgeons who have had the fortune to serve under him will always recall his uniform kindness. We admired his professional knowledge, we respected our chief, and we were as glad of his company at all times as if he had been in our own rank. He sympathised with young officers, and he liked their society. In our turn we avoided giving him trouble in our work for his own sake. I am honestly and truly sorry for his loss; and it may be some comfort to his family to remember that he was so universally loved and regretted.

THE NAVY.

THE Greenwich Hospital pension of £50 a year for fleet and staff surgeons vacant by the death of Fleet-Surgeon JOHN MOODY, has been awarded to Deputy Inspector-General SAMUEL CLIFT.

The following appointments have been made at the Admiralty:—ALEXANDER WILSON, Fleet-Surgeon to the *Triumph*, February 4th; WILLIAM PROWSE to be Surgeon and Agent at Port Isaac, February 5th; M. A. HARTE, Staff-Surgeon to the *Triumph*, undated; M. O'BRIEN, Surgeon to the *Triumph*, February 4th; W. A. WHITELEGGE, Surgeon to the *Alecto*, January 25th; E. P. MOURILYAN, Surgeon to the *Northampton*, January 25th.

Surgeon HENRY JAMES GORDON died suddenly on December 15th last, at the Mountain Hospital, Isle of Ascension, South Atlantic, aged 31. His commission was dated February 11th, 1884.

THE MEDICAL STAFF.

DEPUTY SURGEON-GENERAL GEORGE MOULAS SLAUGHTER is promoted to be Surgeon-General, ranking as Major-General, *vice* J. Ferguson, deceased. He entered the service as Assistant-Surgeon, December 13th, 1854; became Surgeon, August 7th, 1867; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, November 27th, 1879; and Deputy Surgeon-General, April 16th, 1884. He served with the 7th Hussars in the Indian campaign from February, 1858, to March 1859, and was present at the affair of Meengunge, siege and capture of Lucknow, affairs of Barree and Siree, action of Nawabgunge, occupation of Fyzabad, passage of the Goomtee at Sultanpore, throughout the Byswarra campaign, including the affairs of Kandoo Nuddee, Paleegat, and Hyderghur, pursuit of Benhi Madho's force to the Goomtee; also the Trans-Gogra campaign, including the affair near Churda and pursuit, taking the Fort of Meejeedia, attack on Bankee with pursuit to the Raptee, advance into Nepaul, and affair at Sitkagha (medal with clasp).

Brigade-Surgeon ALEXANDER ALLAN, M.D., is promoted to be Deputy Surgeon-General, ranking as Colonel, *vice* G. M. Slaughter. His previous commissions are thus dated: Assistant-Surgeon, January 12th, 1859; Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1874; and Brigade-Surgeon, April 18th 1885. He served in the campaign in the Eastern Soudan in 1885, and has the Egyptian medal with clasp and the Khedive's bronze star.

Surgeon-Major WILLIAM KEIR, M.D., is promoted to be Brigade-Surgeon ranking as Lieutenant-Colonel, *vice* A. Allan, M.D. Entering as Assistant-Surgeon, September 30th, 1864, he became Surgeon, March 1st, 1873, and Surgeon-Major, September 30th, 1876. He was in the war with the Boers in 1881.

Surgeons C. L. WALSH and F. S. HEUSTON, who are serving in the Benga

mmand, have leave to England for six months, the former on medical cer-icate, the latter on private affairs.

Surgeons A. E. J. CROLY and C. G. D. MOSSE are brought on the strength of e British forces in the Bombay command from January 2nd, the date of their rival at Bombay.

The Commander-in-Chief has selected Deputy Surgeon-General R. LEWER, w Principal Medical Officer of the South-Eastern District at Dover, for incipal Medical Officer of the Home District in London, in place of Surgeon-eneral G. M. Slaughter, who has been transferred to the headquarters of the uthern District at Portsmouth.

INDIAN MEDICAL SERVICE.

RGEON W. R. CLARK, Bengal Establishment, is transferred from the officiat-g medical charge of the 17th Native Cavalry to the officiating medical charge the 30th Punjab Infantry, *vice* Surgeon F. C. Clarkson.

Surgeon E. A. W. HALL, M.B., Bengal Establishment, is transferred from the iciating medical charge of the 13th Native Infantry to the officiating medi-l charge of the 44th Goorkha Light Infantry, *vice* Surgeon-Major A. B. rahan.

Surgeon F. G. PECK, Bengal Establishment, is appointed Honorary Surgeon the Behar Light Horse, *vice* Dr. R. Macleod, resigned.

The retirement of Brigade-Surgeon E. H. R. LANGLEY, of the Bombay Estab-hment, and which was announced some time since in this JOURNAL, has re-ved the approval of the Queen.

The Queen has also approved of the retirement of Deputy Surgeon-General W. SUTHERLAND, Bengal Establishment, and which was dated December th, 1888, being post-dated to February 5th, 1889.

YEOMANRY CAVALRY.

RGEON W. WICKHAM, of the Royal Gloucestershire Hussars, is granted the norary rank of Surgeon-Major.

THE VOLUNTEERS.

IGADE SURGEON-MAJOR J. N. DEAN, 4th Volunteer Battalion Manchester giment (late the 3rd Manchester), has resigned his commission, dated August , 1861, ranking as Lieutenant-Colonel.

MEDICO-LEGAL AND MEDICO-ETHICAL.

M. H. should write to the editor of the paper to which he refers on the ubject of the advertisement in question, and ask for an explanation.

A.L.—The fee for making *post-mortem* examination and attending to give vidence at inquest is £2 2s. The coroner is therefore right.

PARTNERSHIPS AND THE OFFICE OF MEDICAL OFFICER OF HEALTH.

QUETTE writes: A. is appointed medical officer of health. Later he takes a nior partner, B., two years after which A. leaves the town. The vacancy is lvertised by the local board. Is it a breach of professional etiquette for C., ho is a senior practitioner and longer resident in the town, or for any other rgeon, to become a candidate, or should such a public appointment always e handed on by one partner to another?

*** No public appointment can be handed on from one partner to another. ssuming that when A. left the town he still nominally held the appoint-ent, B. doing the work, and that the appointment (being only for a period) as now lapsed, if this is so, it is of course open to any person duly qualified apply. On the other hand, if B. was duly appointed two years ago, and e authority is advertising simply to comply with the requirements of the ocal Government Board, then we think the election should not be contested.

CLUBS.

sks for an opinion on the following case: A. and B. are friends, and in practice x miles apart. A. for some years has been medical adviser to a club formed an intermediate town C. B. opens a surgery at C., A. not having one ere, whereupon A. is informed by the secretary of the club that his services e no longer required, as the members find it more convenient to employ B., ho has a local surgery. 1. Can A. compel notice from the club, or in lieu a arter's salary? 2. Is B. justified in offering his services? 3. Or in accept-g the offer (if made by the club in the first instance)? 4. What relations ould in future exist between A. and B.

*** 1. Being uninformed as to the rules and conditions under which "A." cepted the appointment of medical officer to the club in question, we are t in a position to specifically answer his first question. That he is equit-ly entitled to receive notice, or its money equivalent, and that the latter ould be determined by the period of payment of the stipend, be it quarterly, lf-yearly, or annually, there can, we think, be little doubt, nor should we rsonally hesitate to seek its enforcement. 2. In the absence of any declared cancy, "B." would not, medico-ethically, be justified in offering his ser-es; and, moreover (3), in accepting the appointment under the stated cir-nces, he would fail in his moral duty of doing unto others as he would sh to be done by. 4. With regard to the future relations that should exist tween "A." and "B.," we would advise the former, ere arriving at a definite nclusion thereon, to address a courteously worded note to the latter on the bject, and solicit an explanation, and be guided by his reply; to which we y add, that if it be unsatisfactory, we should not individually care to ain his name on our list of assumed friends.

"THE LITERARY SHRINES OF YORKSHIRE."

IN responding to "J. A. E. S.'s" solicitation for our candid opinion on the circular submitted concerning his forthcoming work on *The Literary Shrines of Yorkshire*, we may observe that "the plan of bringing out literary work by subscription" is an ordinary and legitimate one, equally open to himself as to others; and the only objection we recognise to the adopted "form of order," is the superfluous addition of "surgeon," etc., on his printed address, to which, as this relates to a work of pure literature addressed to the general public, some may perhaps, and not inconsistently, take exception, as tending, more or less directly, to court publicity, and thereby practice, through the medium of a circular, and thereby contravene a well established ethical rule.

CONSULTATIONS WITH HOMŒOPATHS.

A MEMBER B.M.A., asks for an opinion on the following case: A. is a consulting physician, and visits in consultation with B., who is a homœopathic practitioner. Is C., a general practitioner, justified in refusing to meet A.?

*** The most authoritative answer that we can render to "A Member's" question will be found in the following quotation on "The Duties of Practitioners in Consultations," extracted from the new edition of the *Code of Medical Ethics*, Chapter II, Section 4, Rule 1, page 53: "No one can be considered a regular practitioner or a fit associate in consultation whose practice is based on an exclusive dogma, such as homœopathy, *et hoc genus omne* (unqualified assistants included); indeed, for legitimate or orthodox practitioners to meet a professor of homœopathy in consultation is a dishonest and degrading act—dishonest because he lends his countenance to that which he knows to be a dangerous fallacy, and degrading inasmuch as he has neither the manly professional honesty to resist the temptation of a possibly liberal fee, nor the moral courage to discountenance the capricious vagaries of some wealthy, or, maybe, titled patient." The question of "Consultation with Homœopaths" is, we may add, more fully discussed therein on pages 53, 54, and 55, to which we would refer our correspondent.

OBITUARY.

JAMES EDWARD ADAMS, F.R.C.S.

JAMES EDWARD ADAMS, the second son of the late well-known surgeon, John Adams, was born at St. Helen's Place, Bishopsgate, in 1845. He was educated at Merchant Taylors' School, and early manifested an intention to enter the medical profession, and, as a matter of course, entered at the London Hospital, where his father was one of the most popular members of the staff. As a student he was distinguished by two characteristics, his fine development and love of manly sports, and by the practical rather than the literary bent of his tastes. He threw the whole of his energy into whatever he did. He took the Membership of the Royal College of Surgeons in 1865, and was immediately afterwards appointed Demonstrator of Anatomy and House-Surgeon. In the former office he displayed a decided capacity for teaching, and in the latter gave promise of marked surgical abilities. He was appointed Assistant Surgeon to the London Hospital in 1868, and took the Fellowship of the College in 1869. He had early taken a great interest in ophthalmology, and held for many years the post of Clinical Assistant; later he was appointed Assistant Surgeon, and eventually Surgeon to the Royal Ophthalmic Hospital, Moorfields. Mr. Adams was also for many years Ophthalmic Surgeon to the London Hospital. He was one of a small band of active workers who used to meet in the evenings at Moorfields for the discussion of ophthalmic subjects. These meetings proved to be the nucleus of the now flourishing Ophthalmological Scciety, of which he was thus in a sense one of the founders and always an active member. He had a most sound and accurate knowledge of diseases of the eye.

In 1879 Mr. Adams was appointed full Surgeon to the London Hospital. He also held the honorary offices of Consulting Surgeon to the Eastern Dispensary and to the Merchant Seamen's Orphan Asylum, Wanstead. It was, however, at the London Hospital that his main work was done. Here, whether in the out-patient department, the ophthalmic department, the wards, or the operating theatre, he devoted himself with untiring energy to the work that came to his hands, displaying a remarkable facility in imparting his knowledge to others, whilst at the same time he was constantly increasing his own knowledge and skill. Mr. Adams was essentially a clinical surgeon, of large and well-used experience and sound judgment. He was a brilliant operator, but was in no sense a rash one. He was equally dexterous in the capital operations and in the delicate operations on the eye. No doubt the manipulative dexterity and nicety required in the latter gave to all his operative work a finish which many bold operators lack. It will be readily understood that his success as a teacher, and his skill as an operator, made him a favorite with

the students. His popularity was still further increased by his liking for, and participation in, all manly exercises. The soundness of judgment which characterised him as a surgeon he carried into all the affairs of life, and this, with independence of character and rectitude of conduct, made him at the same time the trusted adviser of his colleagues as well as the student's friend.

One small piece of evidence may be fittingly adduced, illustrating his strength and courage, which is probably unique in the annals of surgery. In 1876, after consultation with his surgical colleagues, he performed amputation at the hip-joint, on a lad emaciated by bone disease and suppuration, and suffering from lardaceous disease of the viscera. The amputation was performed by a rapid and clean sweep of the knife, and he proceeded to pick up and ligature the vessels. Though but little blood was lost, the pulse became exceedingly feeble, and the patient showed signs of syncope. Mr. Adams decided to transfuse blood from himself into the patient he was operating on. Advantage was taken of the presence of Dr. Roussel and his apparatus. Mr. Adams exposed his left arm, the apparatus was adjusted, and in a few minutes blood flowed from the arm of the operator into a vein in the stump of the patient. Mr. Adams then had his arm bound up and completed the operation. Unfortunately, the courage and self-sacrifice of the surgeon were not rewarded by the recovery of the patient.

In 1881 Mr. Adams succeeded Mr. Couper as Lecturer on Surgery, which chair he held for three years.

Mr. Adams enjoyed a very considerable private practice, and had reached that point which promised it would become an exceptionally large and good one.

When approaching the zenith of his career, with such promise of a brilliant, successful, and useful future, he rapidly lost the sight of one eye from atrophy of the optic nerve. He continued his work for awhile, but soon failure of the other eye followed, and recognising the inevitable progress of his malady, to the great regret of his colleagues, he decided to resign his hospital appointments, and abandon the active exercise of his profession. His retirement was made the occasion of a testimonial, to which his colleagues at the London and Moorfields Hospitals and the past and then present students of the London Hospital widely contributed. It will be a satisfaction to those who joined in this testimonial to know that the forms which the gift took proved of great pleasure and use to him in his retirement.

How heroically he bore his terrible affliction is known to many. What this meant at his time of life, to one of his active habits and practical occupations, few can probably realise.

> Sterben ist Nichts, doch leben und nicht sehen
> Das ist ein Unglück.

He did not hide himself from the world, but went about amongst his friends, attended the annual gatherings at the hospital, displayed a cheerful resignation to his fate, maintained his interest in all professional matters and in the welfare of the medical school of which he had been such an active member, whilst he sought new interests suitable to his altered condition. He took a small place in Hampshire, at Grateley, near Andover, where he died, and passed his time between there and a cottage which he already had at St. Margarets, near Dover. He took long walks and drives, and interested himself in local matters. He quickly learnt Braille's system for the blind, and one or two of his friends contributed to the mitigation of his retirement by translating some of the works of the classical and modern writers into this language for his use.

Though he apparently bore his affliction so resignedly, there can be no doubt the effort cost him dear, and rendered the close of his life unhappy. No actual signs of disease of his central nervous system developed, but about a year ago his general health failed. He rallied for a time, but did not regain his former cheerfulness. Signs of failure of health again manifested themselves recently, and he went to Folkestone for a few weeks. He returned apparently benefited by the change, but on January 23rd he was attacked without warning by a convulsive seizure, followed by others. He at once became comatose, and did not regain consciousness, passing away quietly on Sunday morning, January 26th.

Mr. Adams married in 1880, but had no family. He leaves a sorrowing wife, who has been his most devoted and self-sacrificing companion and nurse. This notice cannot more fittingly close than by quoting the words of one of the most eminent of his sorrowing colleagues in a letter to the writer:—"He was a high as well as an able man, and lived his life of enforced retirement with exemplary courage and dignity. Death is not, I agree, the worst thing in the world, but in the instance of our friend it has taken away from us, and from others, the chance of seeing how a man in his circumstances should live."

THOMAS THOMPSON PYLE, M.D., L.M., M.R.C.S., L.S.A., J.P.

MUCH regret is felt in Sunderland at the death of Dr. Pyle, who died in London on January 20th. He spent the greater part of his professional life in Sunderland, winning the respect of all classes by the kindliness and geniality of his disposition and his recognised abilities as a medical man. About four years ago, in consequence of a severe illness while on a visit to his brother-in-law in Yorkshire, from which he never fully recovered, Dr. Pyle retired from the practice of his profession.

His father was a surgeon in extensive practice at Earsdon, Northumberland, where the deceased was born in 1837. Dr. Pyle's abilities were early shown. After leaving school he matriculated at Durham University at the age of 17, and three years later obtained the degree of Licentiate of Medicine before he had attained his majority. He became a Member of the Royal College of Surgeons, and took the diploma of L.S.A. in 1857. In 1859 he took the degree of M.B., and in 1861 that of M.D.

Dr. Pyle commenced practice in Sunderland in 1860, quickly taking a leading position. Five years later he was elected physician to the Sunderland Infirmary, an office which he held for many years. He will long be remembered for the great part he took in establishing the Children's Hospital, which has since been affiliated with the infirmary. The deceased gentleman was elected a member of the Sunderland Town Council in 1867, an office he held for five years. He was subsequently appointed to the Commission of the Peace.

In 1872 he was elected the representative of the University of Durham in the General Council of Medical Education and Registration of the United Kingdom. The next year he was re-elected and continued to hold that position until 1887. The deceased gentleman was also a member of the Senate of the University of Durham, a Fellow of the Medical Society of London, and a member of the British Medical Association. He was a frequent contributor to our columns, and was an authority on European resorts for invalids. The deceased gentleman married, in 1862 Miss Elliot, the eldest daughter of Sir George Elliot, Bart., M.P. who survives him, with two sons and one daughter.

JAMES MORTON, M.D. (ST. ANDREWS), L.R.C.S.E., F.F.P.S.GLAS.

DR. JAMES MORTON, of Glasgow, who died so suddenly on 31st December last, was a native of Ochiltree, Ayrshire, where he was born on 12th December, 1819. He received his school education partly in Ochiltree and partly in Ayr, in the latter place being awarded a silver medal for Greek at Ayr Academy. Previous to commencing his medical studies Dr. Morton followed, for a few years, the occupation of a school teacher at various places in Ayrshire, among his private pupils being, for a time we believe, the Rev. Dr. A. K. H. Boyd, now of St. Andrews. About 1840 Dr. Morton removed to Glasgow, and began the study of medicine at the Andersonian University (now known as Anderson's College) where he had a distinguished career as a student. In 1844 he became a Licentiate of the Royal College of Surgeons, Edinburgh, and in the following year he graduated M.D. at St. Andrews. Dr. Morton early acquired a large practice in Glasgow, and up to the time of his death continued to be one of the leading practitioners there. In 1851 Dr. Morton was admitted a Fellow of the Faculty of Physicians and Surgeons of Glasgow, and in 1855 he became Professor of Materia Medica in the Andersonian, a position which he held till 1888, when he resigned. For many years he was surgeon in the Glasgow Royal Infirmary, and more lately he was for a considerable period a manager of that institution. In 18[illegible] he was elected President of the Faculty of Physicians and Surgeons of Glasgow, an office which he only resigned three months previous to his death after the usual tenure of three years, being preceded in office by the late Dr. Fergus and succeeded by Dr. Perry. In 1888, on the occasion of the visit of the British Medical Association to Glasgow, the University of Glasgow conferred on him, among other eminent medical gentlemen, the honorary degree of LL.D. Among other offices which Dr. Morton filled at various times were those of President of the West of Scotland Branch

the British Medical Association, President of the Medico-Chirurgical Society of Glasgow, and President of the Glasgow Ayrshire Society, and he was also a member of the Glasgow Philosophical Society. For more than forty years he was medical officer of the Western Friendly Society, Glasgow. In medical literature Dr. Morton is chiefly known from his successful method of treatment of spina bifida. A second edition of his work on this subject was published in 1887 by Messrs. J. and A. Churchill. In July, 1889, it was discovered that Dr. Morton was suffering from aneurysm of the aorta of considerable previous standing, but notwithstanding his knowledge of this fact he continued courageously to fulfil his professional engagements so far as his illness would allow him, and when overtaken by death on the last day of 1889 he was in the act of accomplishing a round of professional visits. The deceased gentleman was twice married, and is survived by a widow and by a numerous family of his first marriage.

RICHARD CLAYTON, L.R.C.P., M.R.C.S., J.P.

MR. CLAYTON, of Accrington, whose death we recorded last week, early in life acted for a time as assistant to a chemist and druggist. On deciding to enter the medical profession, he was placed under Dr. Kennedy Gill. Mr. Clayton subsequently proceeded to Glasgow, where he entered at Anderson University in 1855, and qualified in 1858. In the same year he took the diploma of M.R.C.S.Eng., and in 1868 that of L.R.C.P. He first practised at Habden, and then at Oswaldtwistle, where he succeeded his cousin Dr. Haworth. Eventually he succeeded to the practice of Dr. Dickson, of Accrington, where he resided until a few years since, acquiring a large and lucrative practice. He held several local medical appointments; he was certifying surgeon under the Factory Acts, and medical officer of health and public vaccinator for the Accrington District of the Haslingden Union. His connection with the corporation of his native town (Accrington) dates from 1878, when he first entered the Council, and was returned unopposed. As proofs of his popularity at this early period, it may be mentioned that he was shortly afterwards appointed chairman of the Health Committee, an office which he held uninterruptedly from that time with credit to himself, and was elevated to the aldermanic bench in 1882, being unanimously re-elected at the expiration of his term of office. Alderman Clayton was conspicuous for his warm and energetic advocacy of the pail system as opposed to the water carriage system of sewage. To the efforts of Mr. Clayton are largely due many important improvements in the sanitary condition of Accrington, and the town has lost in him a highly efficient public servant. Mr. Clayton took a deep interest in the formation of the Artillery Volunteer Corps at Church, to which he was for many years surgeon, and at the time of his decease honorary surgeon. His genial and social nature drew around him many friends, by whom his presence will be greatly missed. His funeral took the form rather of a public ceremony, and was of an imposing character, being attended by the borough police force, members of the Town Council, corporation officials, and borough magistrates, including the mayor.

PROFESSOR GULIA.

WE have to record the death of Dr. Gavino Gulia, M.D.Malta, Professor of Natural History, Hygiene, and Forensic Medicine in the Royal University of Malta, which took place at Marsoscala, near Rabbar Village, on December 25th, 1889, from septicæmia. He had been invited to represent the Royal University of Malta at the Congress of Natural History held during the International Exhibition, and returned from Paris full of health. Apart from his eminence in his own profession, he was endowed with literary ability of a high order; he was a well read and well informed man generally, as his addresses, papers, and private conversation fully showed. His numerous friends will long remember the endearing qualities of his character, and regret the early termination of his career.

FRED. W. GISBORNE MORGAN, M.B., C.M.

In recording the death, at the early age of 24, of Dr. Fred Morgan, late dispensary surgeon to the Bradford Infirmary, we add another name to the long list of hospital residents who have died in the midst of their work.

Dr. Morgan was a native of Ceylon, who studied at Edinburgh University, where he graduated M.B., C.M., in 1888. His illness was an acute septic fever of obscure origin, and of a fortnight's duration, the prominent feature being pericarditis. He had previously got, as so many hospital residents do, considerably run down in health, owing to the arduous nature of his duties.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ANTISEPTIC VENTILATION OF HOSPITALS AND SANATORIUMS.

WE have had an opportunity of inspecting this system at work on the business premises of Messrs. Burroughs, Wellcome, and Co. The ventilation is carried on by the propulsion method, the motor used being a Sturtevant blower, situated in the basement of the building, actuated by a small steam engine. The air is drawn through a shaft into a sheet iron box, where it is heated by passing over tubes containing waste steam from the engine. The degree of heat can be regulated by the admission of a greater or less volume of steam into the coils or tubes. After leaving the heating box the air is propelled by the blower into a shaft, where it is filtered by passing through linen cloths. The main shaft subdivides into branch shafts which conduct the warm fresh air into every room of the building. The volatile antiseptic is introduced into the branch shafts by means of a mechanical dropper, which causes the antiseptic liquid to drop continuously and regularly upon a sponge or other distributing material placed in the shaft before it opens into the room. Pinol (pumiline) and eucalyptol are the substances chiefly used. They are readily volatilised on the sponges by the warm current of air, and the vaporised essences are distributed through the rooms with the entering air, to which they give a fragrant and pleasant perfume.

The propulsion system of ventilation has some advantages over the extraction system for hospitals and public buildings, as the air can be warmed, cooled, or filtered at one spot, and the amount introduced can be easily regulated according to the varying requirements of the establishment. For factories or other places where much dust is produced the extraction system is the best, as the floating particles in the air are carried away as soon as produced. As regards the use of antiseptics in the propulsion system, they are obviously likely to prove of much value for *post-mortem* and dissecting rooms, for crowded out-patient waiting rooms or other places where foul odours are given off from the nature of the work carried on, or from the assemblage of a large number of dirty people. Whether the volatilised perfumes are sufficiently concentrated to exert any antiseptic or disinfectant influence on the air of the rooms with which they become mingled must remain a doubtful point. The system is advocated for use in the surgical and erysipelas wards of hospitals, in fever hospitals, and in consumption wards for these reasons. But with the exception of consumption wards, where the vaporised pinol might very possibly exert a soothing effect upon the lungs of the patients in the direction of relieving cough, there is no evidence that would lead us to believe that the introduction of these essences would increase the beneficial effects resulting from the introduction of pure warm air in abundant quantity. The system is, at any rate, worthy of trial, as the cost of the introduction of the antiseptics would be a comparative trifle compared with the cost of the installation of a system of ventilation by propulsion. There are few, if any, hospitals in the United Kingdom ventilated by the propulsion method, but we believe it is being largely introduced into the hospitals of the United States, where it is giving the very best results. The rotatory fans now made are very perfect appliances, as compared with the apparatus in use in past years, and they are capable of doing a vast amount of work in the propulsion of large volumes of air at a low rate of speed, an essential point in the ventilation of buildings, at a very small consumption of power.

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE AND HOSPITAL ACCOMMODATION.

DR. SPOTTISWOODE CAMERON, medical officer of health for Leeds, recently issued to the members of the Sanitary Committee of the Leeds corporation copies of an interesting report on the subject of the notification of disease and hospital accommodation. For the purpose of the report, Dr. Cameron made inquiries of the medical

officers of health of the towns in which notification is already compulsory as to whether they have also found that the adoption of such powers has necessitated increased hospital accommodation. Replies were received from forty-five towns:

To the question, "Had you any hospital for infectious diseases at the time you obtained your powers for compulsory notification?" thirty of the total forty-four who answered queries at all replied "Yes," fourteen "No," and seven made qualifying remarks. The second question was: "If not, have you since found any need for such a hospital?" Of the fourteen who replied to the former query in the negative, all answered that they had found need of such a hospital, and two others who were in lodgings, so to speak, as to hospital accommodation, using beds in a general hospital for infectious cases, replied to the same effect. There were no negative answers to this question. The third question, "Have you since established such a hospital?" was also intended for those who had replied "No" to the first, and had been answered in the affirmative by ten, and in the negative by six. Blackburn was borrowing money to build one, Sunderland was just furnishing one, and of the six towns who had not yet established a hospital, the medical officer of Nelson had recommended his board to erect one. It was evident from these answers that a demand for hospital accommodation was felt where notification was enforced. To the fourth question, "If you had already such a hospital, have you had occasion to send in a larger number of cases since you obtained notification powers?" Twenty-three towns replied that they had had to send in a larger number of patients since they obtained notification. The answer of Birkenhead, that the hospital there was never large enough, was also practically an affirmative. Chester "Can't say." Five towns had replied "No" to this question; these were Leek, with a population in 1881 of 12,863, and a "voluntary" system of notification; Llanelly, with a population of 19,760 in 1881 and an unused hospital; Ripon, with 7,390; Stafford, with 19,977; and Torquay, with 24,767. Leek had just adopted the Compulsory Act, and had yet to make the experiment as to the need of increased accommodation. The fifth question, "Would the hospital which you had when you obtained your notification powers still be sufficient for the isolation purposes of your town?" had been answered in the negative, or to a negative effect, by twenty-one towns. The following towns seem to rejoice in a sufficiency of hospital accommodation for their present requirements: Leek, already mentioned as having just adopted the Act; Llanelly; Preston, where no attempt seemed to have been seriously made to grapple by isolation with scarlet fever, but where a temporary hospital had to be put up during the recent small-pox epidemic; Ripon, Stafford, and Torquay; Wakefield, 30,573; and Weymouth, 13,715. Perhaps the sixth question was most important of all: "Do you consider Dr. Thorne Thorne's suggestion of one bed per 1,000 of the population too large a provision for infectious disease in a large manufacturing town?" and it had been answered in the negative, or to that effect, by thirty towns out of the forty-two who have replied to that question. Two had given no definite reply to this question, and nine consider Dr. Thorne Thorne's estimate too large; it would be noted, however, that the towns which replied in the affirmative were not, with one or two exceptions, "large manufacturing towns." Mr. Vacher, of Birkenhead, whose opinion always carried weight, though complaining of want of accommodation, would be content with less than one bed per 1,000, but he had not to deal with so large an operative class as they had in Leeds. Burnley, a busy populous place of 26,011 inhabitants in 1881, was still content with a "cottage hospital." Dr. Tatham, of Manchester, answered the sixth query in the negative. Sunderland seems still to be "educating" people up to hospitals. The good record of the Leeds House of Recovery should have already done something in that way for that town. Weymouth (13,715), which had already enlarged its hospital, still considered Dr. Thorne's estimate too high.

THE DEATH-RATE IN LONDON AND PARIS.

THE high death-rate which has recently prevailed in both London and Paris now shows a marked decline. The annual rate of mortality in London, which had been 28.0, 32.4, and 32.1 per 1,000 in the three preceding weeks, further declined to 26.3 during the week ending Saturday, January 25th. During the first four weeks of the current quarter the death-rate has averaged 29.7 per 1,000, while in the corresponding periods of the ten preceding years, 1880-89, it did exceed 23.1. The deaths registered were 2,227, which exceeded by 260 the average number in the corresponding week of the preceding ten years. The mortality from the principal zymotic diseases was considerably below the average, the mortality from diphtheria (to which 22 deaths were referred) alone showing a slight excess. The fatal cases of influenza were 105, against 4, 67, and 127 in the three preceding weeks The mortality from diseases of the respiratory organs showed a marked decline from that recorded in the two preceding weeks, although it still exceeded the average. To these diseases 736 deaths were referred in London during last week, against 1,069 and 1,010 in the two preceding weeks. Of these 736 deaths, 468 resulted from bronchitis, exceeding the average by 95, and 193 resulted from pneumonia, showing an excess of 75. Doubtlessly many of these deaths were more or less referable to influenza. From the latest returns from Paris it appears that the rate of mortality in that city, which had been 53.7, 61.7, and 47.5 per 1,000 in the three preceding weeks, further declined to 34.0 during the week ending Saturday, January 25th, which exceeded by 7.7 per 1,000 the mean rate in the corresponding weeks of the five preceding years. The 1,493 deaths registered during the week under notice in Paris included 38 from influenza (against 88 and 66 in the two previous weeks), 20 from diphtheria and croup, 16 from whooping-cough, 12 from typhoid fever, and 10 from measles. With the exception of influenza and whooping-cough, the deaths from these diseases were considerably below the average number in the corresponding periods of recent years. The marked decline in the total number of deaths in Paris was, however, principally due to the greatly reduced mortality from diseases of the respiratory organs. The fatal cases of bronchitis and pneumonia, which had been 757 in the preceding week, declined to 427 during the week under notice.

VACANCY OF DISTRICT POOR-LAW MEDICAL OFFICER.

CROSS writes to ask whether, in the event of a vacancy caused by the resignation of a district medical officer, the guardians are compelled to give notice of such by advertisement in a newspaper, or whether they are empowered to elect without giving any public notice.

*** It is not necessary to advertise the vacancy in a newspaper if notice of the intention of the guardians to proceed to the election on a certain day, or to take into consideration the subject of the vacancy, is given at one of the two preceding meetings of the board.

ARE NURSES IN A HOSPITAL FOR INFECTIOUS DISEASES ENTITLED TO MEDICAL ATTENDANCE AS PAUPERS?

INSCIUS writes to say that in the JOURNAL of January 11th we have missed the point in answering his inquiry. It is easy to do this in attempting to answer a question only very imperfectly stated. "Inscius" speaks of the medical attendant of the sanitary authority who was also union medical officer. Does he mean workhouse medical officer or district medical officer, or both? He omits to inform us on what terms he is engaged by the sanitary authority to attend the cases in the hospital for infectious diseases, and he also omits to state whether the nurse, when taken ill, was attacked by infectious disease or not. The question put by "Inscius" would have been a very difficult one to answer if all this information had been given. Without it we cannot venture any further opinion beyond remarking that it is very exceptional for the medical officer of a hospital to raise the question of payment for attendance on a nurse of the institution when taken ill in the performance of her duty.

ENLARGEMENT OP PORTSMOUTH INFECTIOUS HOSPITAL.

THE Portsmouth Corporation have unanimously adopted the recommendation of the Sanitary Committee to apply to the Local Government Board for permission to borrow £1,200 for the purpose of erecting a new wing to the Infectious Diseases Hospital at Milton.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, January 25th, 5,580 births and 4,514 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 28.1 and 27.0 per 1,000 in the two preceding weeks, further declined to 24.2 during the week under notice. The rates in the several towns ranged from 15.0 in Derby, 15.9 in Norwich, 16.8 in Nottingham, and 17.7 in Huddersfield to 27.1 in Leeds and in Hull, 27.2 in Bristol, and 27.8 in Preston. In the twenty-seven provincial towns the mean death-rate was 22.5 per 1,000, and was 3.8 below the rate recorded in London, which was 26.3 per 1,000. The comparatively high death-rate in London was principally due to the fatality of diseases of the respiratory organs and of influenza; to the latter disease 105 deaths were referred during the week under notice, against 4, 67, and 127 in the three preceding weeks. The 4,514 deaths registered during the week under notice in the twenty-eight towns included 145 which resulted from whooping-cough, 50 from measles, 46 from scarlet fever, 45 from diphtheria, 37 from diarrhœa, 31 from "fever" (principally enteric), and not one from small-pox; in all, 354 deaths were referred to these principal zymotic diseases, against numbers declining from 423 to 381 in the three preceding weeks. These 354 deaths were equal to an annual rate of 1.9 per 1,000; in London the zymotic death-rate was 1.9, and corresponded with the mean rate in the twenty-seven provincial towns, among which the zymotic death-rate ranged from 0.0 in Sunderland, 0.3 in Leicester, and 0.5 in Norwich and in Birkenhead to 3.3 in Sheffield, 4.0 in Bristol, and 4.1 in Bolton. Measles caused the highest proportional fatality in Liverpool and Wolverhampton; scarlet fever in Manchester; and whooping-cough in London, Hull, Bristol and Bolton. The 45 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 22 in London, 4 in Manchester, 4 in Salford, 3 in Sheffield, 2 in Birmingham, and 2 in Newcastle-upon-Tyne. No fatal case of small-pox was registered during the week, either in London or in any of the provincial towns; and only one small-pox patient was under treatment in the Metropolitan Asylums' Hospitals on Saturday, January 25th. These hospitals contained 1,318 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,332 in the four preceding weeks; 84 cases were admitted during the week, against 65 and 72 in the two previous weeks. The death-rate from diseases of the respiratory organs in London, which had been 12.6 and 11.9 per 1,000 in the two preceding weeks, further declined to 8.7 during the week under notice, but considerably exceeded the average.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, 863 births and 683 deaths were registered during the week ending Saturday, January 25th. The annual rate of mortality in these towns, which had been 29.0 and 27.2 per 1,000 in the two preceding weeks, further declined to 26.4 during the week under notice, but exceeded by 2.2 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Paisley and Greenock, and the highest in Aberdeen and Dundee. The 683 deaths in these towns during the week under notice included 9 which were referred to the principal zymotic diseases, equal to an annual rate of 3.5 per 1,000, which exceeded by 1.1 the mean zymotic death-rate during the same period in the large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Edinburgh and Leith. The 260 deaths registered during the week in Glasgow included 7 from measles, 7 from whooping-cough, 5 from "fever," and 2 from diphtheria. In Edinburgh, 13 fatal cases of measles, 5 of whooping-cough, and 4 of dip-

heria were recorded, and 5 deaths from scarlet fever occurred in Leith. The death-rate from diseases of the respiratory organs in these towns during the week under notice was equal to 7.0 per 1,000, against 8.7 in London.

HEALTH OF IRISH TOWNS.

DURING the week ending Saturday, January 25th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 39.6 per 1,000. The lowest rates were recorded in Drogheda and Wexford, and the highest in Dublin and Londonderry. The death-rate from the principal zymotic diseases averaged 5.2 per 1,000. As many as 330 deaths were registered in Dublin during the week under notice, equal to a death-rate of 48.8 per 1,000 (against 44.9, 44.2, and 48.0 in the three preceding weeks), the rate for the same period being 26.3 in London and 24.6 in Edinburgh. These 330 deaths included 24 which were referred to the principal zymotic diseases (equal to an annual rate of 3.5 per 1,000), of which 10 resulted from whooping-cough, 8 from different forms of "fever," and 5 from measles.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITAL REFORM IN BERLIN.

MR. WALTER K. SIBLEY, writes: At a time when so much discussion is taking place in our various medical journals with regard to hospital reform, and especially the abuse of these public charitable institutions by a large number of people well able to pay a private medical man, it may be of interest briefly to summarise the state of affairs at present prevailing in Berlin as regards the principles of hospital support and the payment by patients. For the following notes of the subject I am largely indebted to my friend, Dr. Claude Du Bois Reymond. Until recently there existed innumerable private societies for health insurance, and the present scheme attempts to reorganise and centralise some of these.

The "Kranken-kassen-gesetz" (sick funds law) was passed a few years ago. This is an attempt to legalise and regulate some of the existing private and voluntary institutions of the nature of insurance companies or clubs. Many of these were often merely traditional arrangements, confined sometimes to single branches of handicrafts or professions, and sometimes to various societies of workmen, often founded on democratic principles by the labourers themselves or by the employers. These were essentially of two kinds, the one embracing any number of men of very different occupations, spreading sometimes over many towns, or even over the whole country; the other mostly restricted to the working men of a single factory or firm. The present law adds certain conditions and regulations to the statutory plans and administrative principles of these societies, at the same time forbidding the reception of new members into any existing societies which refuse to subject themselves to these regulations, and thus leaving these to die out.

The law of Germany as it now stands is briefly as follows: Every man, woman, or child employed in profession, trade, or common labour—in short, everyone who is not in an independent position or belonging to one of the higher professions—must subscribe to one of the insurance funds above mentioned. Each one then receives a small book containing the statutes and a number of printed forms for his contributions. These are, of course, proportional to his wages, and range generally from 0.15 to 0.50 marks (1½d. to 6d.) weekly. After the lapse of a few weeks he is entitled to the benefits of the insurance. Every week a receipt is added to the book. The employer generally retains the insurance money on pay day, keeps the books, and in most cases contributes an equal amount from his gains. In the case of illness the patient is examined by a "Kassenarzt" (club doctor), and, if necessary, sent to a hospital, or, if only a mild case, is invalided from work for a few days.

In either case, after the third day the patient may draw from the sick fund a daily allowance of from 1.75 marks to about 5 marks (1s. 9d. to 5s.), the law being that the sum must not exceed half the individual's usual wages. If the patient be in a hospital, this money goes to pay his expenses while there, 1.50 marks (1s. 6d.) being the usual minimum per day. Thus, generally there will be a small surplus; this, if the patient has a family, goes to the wife during his stay in hospital. He is assumed not to have a wife and family if he is only earning very low wages, which leave no surplus from hospital expenses. In the case of death, a sum of from 60 to 100 marks (£3 to £5) is handed over to the nearest relative.

The liability of the sick fund to pay these expenses generally extends to one year. If, at the termination of that period, the patient is unable to resume work, he is made a pauper, and, if without means of support, falls to the charge of the "Armen-direction" (poor guardians) of Berlin, or of his parish or community, unless he be "heimathsberechtigt" in the place where he works. This is a charitable institution worked by the town government and supported by the tax-paying citizens. To a certain extent it is also supported by the charitable contributions of rich people and by bequests, but these are both very exceptional in Germany. The working expenses of this institution are very little, as all the higher posts are honorary.

The amount paid by the "Armen-direction" for a pauper is considered as a debt incurred by him, and he is made to understand that in the event of an improvement in his position at any time he will be called upon to refund these expenses. They continue to pay the hospital expenses or a small pension as long as necessary, or, if the case be incurable, provide a place for the patient in a hospital for incurables. Moreover, there are in most of the hospitals a number of "Freistellen" (free beds) founded and maintained by private or royal charity, and these are under the administration of the "Armen-direction," so that a certain number of pauper patients can be placed by them in a hospital free of expense. In most hospitals the arrangement is that they have the right of occupying beds on so many days of the year, and thus are not limited to the number of beds at any given moment in use, but have the right of so many "Pflegetagen" (nursing days), as their expression is.

At present the whole system is in an unsettled and transitory state, and will apparently remain so for some years, until the struggle for existence shall have eliminated some of the innumerable societies.

These changes are probably for the better in the end, though at present much discomfort and discontent exist, especially among the medical men, who, if not now salaried by the societies, are greatly embarrassed by the loss of their lower class patients. As it happens, but few men are salaried, and these are greatly overworked and underpaid. Immense sums of money are being stored up and invested to serve as future capital, the idea being that in some not far distant period the whole will be self-supporting, and the working man's contribution will be reduced to a nominal amount. So the German doctors' outcry now is, "We are being bled to feed the population of the twentieth century."

HOSPITALS AND THE WORKING CLASSES.

MR. A. E. CHESSHIRE, Honorary Surgeon, Wolverhampton Eye Infirmary, writes: In view of the very serious step that is now being taken in London with regard to the partial maintenance of the hospitals by the contributions of the working men, may I ask your kind insertion of this and the enclosed letter in the JOURNAL, the latter showing the view taken by the working classes in the provinces when their contributions—levied by compulsory weekly collections—form a large proportion of the incomes of medical charities? This letter is a strong confirmation of the position taken by the working men of other towns, as shown by the extract from the *Devon and Exeter Gazette*, published in the JOURNAL of January 4th; and the writer is the manager of one of the largest works in this town, who has induced the men under him to withhold their annual contributions because his wife was refused treatment at the Eye Infirmary.

Copy of Letter to the Secretary of the Wolverhampton Eye Infirmary, November 26th, 1889.

Jones Brothers, Ablow Street.

DEAR SIR,—At a meeting of the workmen of the above works, called for the purpose of debating that part of your manifesto which you have thought fit to print in red ink, showing that you knew what you were saying, and wished the reader to know also, after a debate, which lasted nearly an hour, it was decided that I should write to the Committee of the Eye Infirmary, giving, as well as I was able, the feeling of the working men on the subject. That feeling, I may say on the one hand, was good will to the infirmary—no one would wish to injure it in the least, but to help it forward as well as we can, and hoping for it a very successful future, for we look at it as one of the ornaments of our town and glories of our land. But there is that expression which is brought into such prominence, "a charitable institution," and everyone who goes there is an "object of charity." We wish to say that we have laboured under a wrong impression. We thought that when we presented the notes which we had paid for that we were giving value for value received, and were not objects of charity, and to refuse to treat a case because the person was well dressed was not just. Well, we wish to know if something can't be done in the matter, and if not, why? If the notes are worth more than you charge, raise them to their commercial value; we would sooner pay more than be treated as paupers or objects of charity. You admit that the working men raised nearly £500; then for the hospital the working men gave more than £2,700, and this year there will be more still, and it is rather hard to be called "objects of charity," when asking for the help you need, with the possibility of a searching examination and a final refusal. We

venture to predict that the time will come when you will feel the necessity of modifying the paragraph in red.—In behalf of the workpeople of Jones Brothers, THOMAS MORETON, Secretary.

THE PROPOSED PUBLIC MEDICAL SERVICE.

AT a meeting of the Perthshire Branch, held at Perth on January 3rd, 1890, Dr. Rentoul's resolutions were submitted and considered. Dr. Trotter moved: "That these resolutions are unsuitable to the circumstances of this District," and the motion was agreed to *nem. con.*

MEDICAL NEWS.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.—The quarterly examinations in Edinburgh for the Triple Qualification took place in January, with the following results:

First Examination.—Of 45 candidates, the following 26 passed: E. J. Gilleran, Roscommon; M. J. Rees, South Wales; J. Hastings, Preston; J. Rutherford, Kirkmichael; J. F. Stevenson, Glasgow; W. C. E. Donoghue, Dublin; R. A. Mate, Shropshire; J. A. Blayney, Haslingden; S. Basham, South Shields; C. A. Dall, Preston; W. A. Gosford, Hampshire; M. R. Carter, Castleford; C. S. Dudgeon, Longford; Louisa Charlotte Nash, Bombay; J. Fox, Co. Tyrone; J. H. Wilson, Devonshire; T. M. Donovan, Co. Cork; A. L. Chignell, Wingham, Kent; H. DeC. O'Neal, Barbadoes; P. Doran, Freshford; W. Beatt, Cavan; A. C. Arthur, Neilston; J. D. Liston, Co. Limerick; Elsie Maud Inglis, India; E. J. Cummins, Tipperary; and J. R. Crease, South Shields.

Second Examination.—Of 64 candidates, the following 31 passed: C. H. Macdonald, Inverness; J. C. Ferguson, Tarbert; F. P. Drury, Hull; H. A. Smith, Cape Colony; Beatrice Emma Shaw, Ashton-under-Lyne; Susanna Rickman Beck, Dorking, Surrey; J. M'Cullough, Co. Down; Martha Georgina Isabella Cadel, Carriden; S. B. Haynes, Douglas; M. J. Rees, South Wales; B. F. Powell, Madras; W. W. Paterson, Inveresk; J. J. Brennan, Kilkenny; W. H. Knight, Laceby Rectory; R. A. Bull, Cork; M. Murchison, Skye; W. Daunt, Dublin; W. Thomas, Anglesea; J. Wilson, Newry; M. Cahill, Cork; H. Walley, Bradford; C. F. Weeks, Hull; A. W. Spinks, Bradford; P. M. Dwyer, Essex; M. J. Hickie, Co. Cork; J. Ryan, Limerick; F. E. Williams, Cheshire; E. G. Rice, Co. Cork; O. Gilmore, Co. Down; G. T. Kingston, Co. Cork; and A. J. MacDonald, South Australia.

Final Examination.—Of 89 candidates, the following 45 passed and were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P. and S.G.: J. S. Cluff, Cookstown; R. H. Beardsley, Grange-over-Sands; L. L. James, London; J. Stobo, Bothwell; D. Doolan, Melbourne; G. G. Stuart, Dunfermline; J. Hurley, Enniskean, Co. Cork; D. J. Macaulay, Inverness-shire; F. H. Lazenby, Northumberland; F. Hall. Bury, Lancashire; M. L. MacKintosh, Sussex; J. Kerr, Largs; W. J. H. Cumming, Kent; J. A. Fox, Cornwall; W. P. Ryall, Isle of Wight; A. E. Wynne, Stafford; A. C. Burrows, Waterford; Stella Mary Taylor, Melbourne; C. H. Sykes, Yorkshire; M. Sinnetamby, Ceylon; A. H. Dubourg, London; C. Jones, Bangalore; W. R. Main, Lasswade; Louisa Rosa Cooke, Huddersfield; J. H. S. Grant, Dunfermline; S. H. Davies, Staffordshire; H. C. Evison, Milnthorpe; H. Shaw, Enniscorthy; J. A. Jones, Merionethshire; R. S. Jaques, Scarborough; J. R. Lloyd-Jones, Barrow-in-Furness; W. V. Sinclair, Sandgate; R. T. Fallon, Westminster; J. Smith, Montrose; A. K. Melville, Wemyss, Fifeshire; G. M. Grieve. Dundee; W. E. Leembruggen, Ceylon; A. J. Davies, South Australia; M. A. Bamby, Bangalore, India; J. F. Curry, Glin, Co. Limerick; D. F. Todd, Belfast; T. Davies, Victoria; A. Watson, Crooks, Gippsland, Victoria; J. K. Troup, Ballaarat, Victoria; and W. R. M'Master, Omagh, Co. Tyrone.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—Fellowship Examinations.—The following gentlemen, having passed the necessary examination, have been admitted by the President (Dr. Meldon) Fellows of the College:

J. Cashin, L.R.C.S.I., 1878; and F. M. Harricks, L.R.C.S.I. 1870, L.K.Q.C.P.I. 1871.

The following candidates have passed the primary part of Examination for the Fellowship:

R. R. Leeper, L.R.C.S.I. 1884, L.K.Q.C.P.I. 1886; and Miss Edith Ellen Ward, L.R.C.S.Edin. 1889, L.R.C.P.Edin. 1889, L.F.P.S.Glas. 1889.

The following gentleman, having passed the necessary examination, has been granted the Diploma in Public Health:

W. Kiddle, M.B., B.Ch.Univ.Dub. 1884, Surgeon Medical Staff.

SOCIETY OF APOTHECARIES OF LONDON.—At the examination in Arts qualifying for registration as medical student, held at the hall of the Society on December 6th and 7th last, there were 168 candidates, of which number 110 passed—namely, 2 in the first class, 18 in the second class, and 90 in some subjects but not in all. The next examination will be held on March 7th and 8th.

The following candidates having passed the Qualifying Examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and were admitted as Licentiates in January, 1890:

On the 9th:

Gwyn, Howard Weston, London Hospital.
Hinde, Sidney Langford, St. Bartholomew's Hospital.

On the 16th:

Walsh, Leslie Herbert, King's College Hospital.
Baumler, Anna Magdalena Maximiliana, Zurich and Paris.

THE will of the late Mr. Thomas Willmer Peacock, J.P., surgeon of Glenridge, Virginia Water, who died on December 5th, shows a personal estate of the value of upwards of £44,000.

HER ROYAL HIGHNESS THE DUCHESS OF ALBANY has accepted the presidency of the Hammersmith centre of the St. John Ambulance Association.

BEQUEST.—Miss Elizabeth Twining, of Twickenham, bequeathed by her will £2,000 to the endowment fund of the St. John's Hospital at Twickenham.

A PENSIONED coast-guard officer named Barber and his wife, residing at Queenstown, have died from what is thought to be the effects of poisoning through eating tinned meat.

A NEW wing, erected at a cost of about £40,000, has been added by the Corporation to the Nottingham Borough Lunatic Asylum, Mapperley Hill. It will provide accommodation for some 280 patients, the total accommodation now being about 600.

MR. DAVID HOADLEY GABB, M.R.C.S.Eng., L.S.A., died on January 27th, at the age of 68. The deceased gentleman had practised in Hastings for close upon half a century, and was in harness until about a month ago, when he was attacked by an illness which proved fatal.

INTELLIGENCE received at Askabad from Persia states that in the month of November last, in the province of Khorasan, nearly 3,000 persons died from some abdominal disorder, the deaths in Meshed itself numbering about 100 daily. Later, however, the mortality diminished. The exact nature of the disease, it is reported, has not been ascertained.

PROFESSOR LAWSON TAIT will deliver an address to the Southampton Medical Society on Tuesday, February 4th, at 8 P.M., on "The Surgical Aspect of Impacted Labour;" and to the Cardiff Medical Society on Wednesday, February 5th, at 3 P.M., on "The Indications for Abdominal Section, with the Details of its Performance."

MEALS FOR SCHOOL-CHILDREN.—With a view to obtain the best information as to the methods and regulations under which meals are given, either by the State or by voluntary agencies, to necessitous children in large centres of population in Austria, Belgium, France, Germany, Switzerland, and the United States of America, Sir Henry Peek has offered prizes of £60, £40, and £20 respectively for the three best essays giving reliable information on the subject. The judges appointed are Sir Richard Temple, Dr. Gladstone, and Mr. William Bousfield. The essays may be written in either English, French, or German.

SURGEON PARKE.—A *Times* correspondent, in the report of an interview with Mr. H. M. Stanley, at Suez, thus refers to Surgeon Parke:—Dr. Parke, another old friend of all Anglo-Egyptians, was then still clothed in the white drills in which he had crossed Africa. Pulled down by recent fever, his colour just returning with the sea voyage, he looked younger than when he started, and it seemed incredible that he should be the man to whose unceasing work and skill Mr. Stanley bears such willing testimony. By one trait he will be recognised, however, by all who have ever met him. "He spoke to every woman in the interior of Africa with the same gentleness and courtesy as he would to a lady in a drawing-room at home," said Mr. Stanley.

THE PRICE OF QUININE.—Last June the price of quinine was lower than was ever known before; sulphate of quinine, which, in 1880, was selling wholesale at eleven shillings the ounce, was sold in June, 1889, for elevenpence the ounce. This great fall was mainly due to over-production. Ceylon, for instance, exported three million pounds of bark in 1881, and fifteen million pounds in 1885; Java exported less than half a million Amsterdam pounds in 1882, and nearly four millions and a half in 1888. Since 1886 the exports from Ceylon have considerably decreased, and will become still smaller, for cinchona plantations are being given up. The exports from Java, however, are increasing, and the Java bark contains twice as much quinine as the Ceylon; exports from India (Malabar coast) have increased considerably, so that there is no probability of quinine going back to the famine price of a decade ago. It is now selling wholesale at one shilling and fourpence, which is

bout the same as it fetched in January, 1889. The increased demand, caused by the prevalence of dengue in Turkey and of influenza in Europe, has not had much effect on the price, probably because speculators in London still hold enormous quantities.

THE NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.—The adjourned meeting, to complete the arrangements for the foundation of this Society, was held at the Queen's Hotel, Manchester, on January 17th. Dr. Wallace (Liverpool) occupied the chair. After adopting the constitution and rules prepared by a provisional committee, the meeting proceeded to elect office-bearers for the first year. Dr. Wallace was elected President, and Dr. Lloyd Roberts (Manchester), Dr. McGowan (Oldham), Dr. Burton and Mr. William Alexander (Liverpool), Dr. Braithwaite and Mr. C. J. Wright (Leeds), Vice-Presidents. Dr. William Walter (Manchester) was appointed Treasurer, Dr. Sinclair (Manchester) General Secretary, and Dr. Donald, Dr. H. Briggs, and Mr. Sydney Rumboll, Local Secretary for Manchester, Liverpool, and Leeds respectively. In addition to these, a Council of twenty-four members was formed, comprising eight representatives of each centre, namely:—For Manchester: Dr. Samuel Buckly, Dr. John Scott, Dr. William Lauder, Dr. Nestfield, Mr. J. H. Martin (Blackburn), Dr. Milne (Accrington), Dr. Roberts (Oldham), and Dr. Starkey Smith (Warrington). For Liverpool: Dr. J. Armstrong, T. B. Grimsdale, and William McFie Campbell (Liverpool), T. S. Lloyd and Hugh Miller (Birkenhead), Dr. Moore (Preston), Dr. Baron (Southport), and Dr. Alexander Hamilton (Chester). For Leeds: Mr. Mayo Robson, Dr. Hellier, and Mr. Edmond Robinson (Leeds), Dr. Hime (Bradford), Dr. Johnstone (Ilkley), Dr. Arthur Jackson (Sheffield), and Mr. J. F. Horne (Barnsley). It was announced that the first meeting would be held at Manchester on the third Friday in February, when Dr. Wallace would read a paper on the Etiology, Prognosis, and Treatment of Localised Peritonitis.

LECTURES AT THE SANITARY INSTITUTE.—The following list of lectures, to be given at 8 P.M. on the following dates, has been arranged by the Sanitary Institute of Great Britain for the special instruction of those desirous of obtaining a knowledge of the duties of sanitary officers:—1890. February 18th: 1. Introductory Lecture: Practical Considerations for Sanitary Officers (Mr. E. C. Robins, F.S.A., F.R.I.B.A.). February 21st: 2. Water Supply, Drinking Water, Pollution of Water (Dr. Louis Parkes, D.P.H. Lond.). February 25th: 3. Drainage and Construction (Professor H. Robinson, M.Inst.C.E.). February 28th: 4. Ventilation, Measurement of Cubic Space, etc. (Sir Douglas Galton, K.C.B., F.R.S.). March 4th: 5. Sanitary Appliances (Professor W. H. Corfield, M.A., M.D.Oxon.). March 7th: 6. Scavenging, Disposal of Refuse and Sewage (Mr. Charles Jones, Assoc.M.Inst.C.E.). March 11th: 7. Food (including Milk), Sale of Food and Drugs Act (Mr. Charles E. Cassal, F.C.S., F.I.C.). March 14th: 8. Infectious Diseases and Methods of Disinfection (Mr. Shirley F. Murphy, M.R.C.S., M.O.H. for the County of London). March 18th: 9. General Powers and Duties of Inspectors of Nuisances; Method of Inspection and, March 21st: 10. Nature of Nuisances, including Nuisances the Abatement of which is difficult (Mr. F. F. J. Sykes, M.B., B.Sc., D.P.H., M.O.H. for St. Pancras). March 25th: 11. Diseases of Animals in Relation to Meat Supply. March 28th: 12. Sanitary Law: General Enactments, Public Health Act, 1875, Model By-laws. April 1st: 13. Sanitary Laws and Regulations Governing the Metropolis (Mr. A. Wynter Blyth, M.O.H. for St. Marylebone). A fee of 6s. for the course will be charged to cover expenses, and students attending the course will be granted free admission to the museum and library during February and March.

MEDICAL VACANCIES.

The following Vacancies are announced:

BRADFORD INFIRMARY AND DISPENSARY.—Dispensary Surgeon. Salary, £100 per annum, with board. Applications by February 5th to the Secretary.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—Honorary Surgeon in Ordinary, a Fellow or Member of one of the Royal Colleges of Surgeons of Great Britain and Ireland. Election, Friday, February 7th.

BRISTOL HOSPITAL FOR SICK CHILDREN AND WOMEN.—House-Surgeon. Salary, £100 per annum, with rooms and attendance. Applications by February 3rd addressed to the President and Committee.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board, residence, etc. Appointment for six months from April 1st, 1890. Applications by February 13th to the Secretary, 24, Finsbury Circus, E.C.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Residence, board, etc. Applications by February 1st to House Governor.

GENERAL INFIRMARY, Leeds.—Resident Medical Officer and Pathologist. Salary, £100 per annum, with board, residence, etc. Applications by February 3rd to Mr. W. H. Brown, 19, Queen Street, Leeds.

GOUROCK DISTRICT.—Parochial Medical Officer. Salary, £25 per annum.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—House-Surgeon. Salary, £60 per annum, with board and lodging. Applications by February 11th to W. T. Grant, Secretary.

METROPOLITAN HOSPITAL, Kingsland Road, E.—Assistant Physician. Applications by February 1st to Mr. C. H. Byers, Secretary.

PLYMOUTH PUBLIC DISPENSARY.—Second Honorary Physician. Applications by February 17th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Junior House-Surgeon. Applications by February 8th to the Secretary.

ST. MARK'S HOSPITAL FOR FISTULA, Etc., City Road, E.C.—House-Surgeon. Salary, £50, with board and residence. Applications by February 8th to the Secretary.

SALFORD UNION.—Assistant Medical Officer. Salary, £140 per annum, with furnished apartments at the Infirmary. Applications, endorsed "Assistant Medical Officer," to be sent in by February 11th.

SCHOOL BOARD FOR LONDON.—Medical Officer. Salary, £400 per annum. Applications by February 10th, on forms to be obtained from the Clerk of the Board, Victoria Embankment, W.C.

SWANAGE URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £21 per annum. Applications to the Clerk by February 7th; appointment to be made on February 18th.

WEST END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, etc., 73, Welbeck Street, W.—Dental Surgeon. Applications to the Secretary.

WESTMINSTER GENERAL DISPENSARY. Honorary Physician. Applications by February 8th.

WIVELISCOMBE URBAN SANITARY DISTRICT.—Medical Officer of Health. Applications to the Clerk by February 3rd. Salary, £10 per annum.

MEDICAL APPOINTMENTS.

BARBER, Sidney, L.R.C.P.Lond., M.R.C.S.Eng., appointed Resident House-Surgeon to the Beckett Hospital and Dispensary, Barnsley.

BROCKWAY, Archibald Birt, M.R.C.S., L.R.C.P., appointed Surgeon to the Hospital, Muttaburra, Queensland.

CONNOR, William G., L.K.Q.C.P.Irel., L.M., L.R.C.S.I., appointed Medical Officer for the Bedfield District, Hoxne Union.

COURTENAY, E. Maziere, M.B., M.Ch., Medical Superintendent District Lunatic Asylum, Limerick, appointed Inspector of Lunatic Asylums, *vice* Dr. Hatchell.

DRYLAND, J. W., M.R.C.S., L.M., L.S.A., reappointed Medical Officer of Health to the Kettering Urban Sanitary District.

DUNNE, Dr., appointed Medical Officer to the Castletown Dispensary.

ELLIS, Hyacinth D'Arcy, M.R.C.S., L.R.C.P., appointed Medical Officer of Health to the Brierley Hill Urban Sanitary Authority, *vice* G. Ashmead, deceased.

FOWLER, Thomas Webb, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., reappointed Medical Officer for the First District of the Coventry Union.

FOX, Herbert, F.R.C.S., L.R.C.P., appointed Medical Officer to the Stainland District of the Stainland-with-Old-Lindley Union.

GABE, John Rees, M.D.Brux., M.R.C.S., L.S.A., reappointed Medical Officer and Public Vaccinator, 3rd District Holborn Union.

GRANGE, F., M.R.C.S., L.R.C.P., appointed Junior House-Surgeon to the Blackburn and East Lancashire Infirmary, *vice* R. J. Stephens, M.R.C.S., L.S.A., resigned.

GRAY, W. G., M.R.C.S.Eng., L.R.C.P.Edin., etc., appointed Medical Officer of Health to the Holsworthy Rural Sanitary Authority, and Medical Officer and Public Vaccinator to No. 4 and No. 5 Districts of the Holsworthy Union, *vice* T. L. Ash, L.R.C.P.Ed., resigned.

HORSFALL, Thomas, M.R.C.S.Eng., L.S.A., appointed Medical Officer for the Bedale District, Leyburn Union.

MATHESON, F., M.B.Edin., appointed Medical Officer to the Eastern District of the Westminster Union.

MILBURN, F. Le Fevre, M.R.C.S., L.S.A., reappointed Medical Officer to the 4th District, Holborn Union.

MOGG, J. H., L.R.C.P., L.R.C.S.Edin., etc., appointed Medical Officer and Public Vaccinator to the Feckenham District, Alcester Union, *vice* J. R. Nunn, deceased.

MURRAY, R. W., L.R.C.P., F.R.C.S.Eng., appointed Assistant Medical Officer to the Liverpool Infirmary for Children, *vice* N. P. Marsh.

OATES, John Harrison, M.R.C.S.Eng., L.R.C.P.Ed., appointed Medical Officer to the 10th District, Dewsbury Union.

O'BRYEN, James J., M.D., L.R.C.P., L.R.C.S., L.A.H., L.M., appointed Medical Officer to the Sydenham Dispensary, *vice* J. Law, M.D., C.M., resigned.

OSBORNE, Frank, M.R.C.S.Eng., L.S.A.Lond., appointed Resident Clinical Assistant to the Paddington Infirmary.

PATTERSON, Arthur Edward, M.B., appointed Clinical Assistant to the Derby Borough Asylum.

PHILLIPS, F. Leslie, M.D., M.R.C.S., appointed additional Medical Officer to the Birmingham and Midland Skin and Lock Hospital.

ROBINSON, Thomas H., M.B.Edin., C.M., appointed Medical Officer for the Wendron Subdistrict of Helston Union.

SAUNDERS, Alfred M., M.A., M.B., C.M., D.P.H., appointed Medical Officer to the Parochial Board of Birsay and Harray.

SNADDEN, James, M.B.Edin. and C.M., appointed Medical Officer to the Thorncliffe Iron Works and Collieries' Sick and Accident Fund.

STAFFORD, Thos. Joseph, L.K.Q.C.P.I., L.R.C.S.I., L.M., appointed to succeed Dr. Woodhouse as an Inspector of the Local Government Board.

STEVENS, Percy Richard, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the Benenden District, Cranbrook Union.

VERNON, William, L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the Saxstead District, Hoxne Union.

WRIGHT, Rowland Hill, M.D., M.S.Edin., appointed Medical Officer of the No. 4 (Cheswardine) District of the Drayton Union.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. E. Owen: The Lettsomian Lectures on Subjects in Connection with the Surgery of Infancy and Childhood. Lecture III.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Mr. J. H. Morgan: On Beginnings of Joint Disease in Children.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Inaugural address by President, Mr. Felix Weiss. Mr. George Cunningham: On an International System of Dental Notation. Mr. W. Mitchell: On Clinics and their Effects on Dental Societies. Mr. William Hern: On a Case of Buried Molar in Lower Jaw.

TUESDAY.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Dr. Delépine: *Sable Intestinal.* Mr. Lockwood: Retroperitoneal Hernia. Mr. D'Arcy Power: (1) Ruptured Spleen; (2) Repair of Ruptured Kidney. Mr. Solly: Myxofibroma of Pelvis. Mr. Shattock: Malformation of Generative Organs in Fœtus, with Specimens of the (?) Male Hymen. Dr. Little: Lower Spleen from an Infant. Mr. Robinson: Epithelioma of Lower Eyelid. Dr. Wethered: Cancer of the Pancreas. Card Specimens:—Mr. Robinson; (1) Lupus Verrucosus; (2) Duct Carcinoma of Male Nipple.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Malignant Diseases of the Skin.

WEDNESDAY.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Dr. Carter and others. Dr. Amand Routh: Urethral Diverticula. Annual Meeting: Election of officers and Council. The President (Dr. Galabin) will deliver the annual address.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Kingston Fowler: On the Diagnosis of Valvular Disease of the Heart. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Q. Silcock: On Ophthalmoscopic Cases.

THURSDAY.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Dr. J. F. Goodhart: On Albuminuria: a Digest of Peripatetic Cases.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Dr. Buzzard: On the Significance and Value of Tendon Reflex. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Mr. J. H. Morgan: On Beginnings of Joint Disease in Children.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Kingston Fowler: On the Diagnosis of Valvular Disease of the Heart.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: On Seborrhœa and Allied Affections.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement. The first post on Thursday mornings is the latest by which advertisements can be received.

BIRTH.

KIDD.—January 19th, at Carlton House, Enniskillen, the wife of Leonard Kidd, M.D., of a daughter.

MARRIAGES.

MACKNESS—RAIMES.—At Acaster Malbis, on January 23rd, by the Rev. G. Mackness, D.D., father of the bridegroom, assisted by the Rev. R. Blakeney, vicar of the parish, George Owen Carr Mackness, M.D., Broughty Ferry, to Bertha, daughter of John Raimes, Southmoor House, Acaster Malbis, York.

MACPHERSON—WALLACE.—At 66, Northumberland Street, Edinburgh, on January 15th, by the Rev. Arthur Gordon, M.A., St. Andrew's Church, John Macpherson, M.B., Medical Superintendent Stirling District Asylum, Larbert, to Rachel Annie, younger daughter of the late David Wallace, Balgrummo, Leven Fife.

DEATHS.

GABB.—On January 27th, at 18, Wellington Square, Hastings, David Hoadley Gabb, M.R.C.S., aged 68.

GAWITH.—On December 28th, 1889, at 222, Harrow Road, Paddington, James Jackson Gawith, M.R.C.S., L.S.A., aged 39, deeply regretted.

MORGAN.—On January 24th, at the Bradford Infirmary, Frederick William Gisborne Morgan, M.B., C.M.Edin., late Dispensary Surgeon to the Institution, aged 24.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Operation Days.*—M. Th. F., 1.30; Tu. W. S., 2.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

OMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

OMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

r order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

UTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

ORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

ORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

ANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

UBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

IND asks for information as to institutions for the blind where cases can be eceived without payment.

TREATMENT OF CYSTITIS.

R. B. K. asks for advice in the treatment of cystitis in a young woman. nf. buchu., tinc. hyoscami, liq. potass., and syringing bladder with sol. boracic cid, sitz baths, etc., have been tried, but with no relief.

BOOKS ON BACTERIOLOGY AND CHEMISTRY.

MEMBER asks to be recommended a good but not voluminous work on bacteriology, containing descriptions for cultivation, staining, etc.; also a small work on physiological chemistry for the detection and separation of physiological substances.

*** Klein's *Micro-organisms and Disease*. Third edition. Macmillan and Co. alfe's *Clinical Chemistry*. Cassell and Company.

ANSWERS.

W. J. might with advantage communicate with the medical superintendent f Earlswood Asylum, Redhill.

. W. WATSON PIKE.—The *Transactions* were printed by Kelly and Walsh, imited, of Hong Kong. No publisher's name is given, nor is the price ientioned.

KERR.—Particulars as to diplomas in Public Health were published in the tudents' number of the BRITISH MEDICAL JOURNAL.

"THE COCKADE."

MY MEDICAL RESERVE.—There is no question of law or legality involved; is regulated by custom. If any cockade be used in the case described, it ould be a circular one without a cockscomb.

IODATE OF CALCIUM.

TAB.—A report by Dr. E. Klein, F.R.S., "On Iodate of Calcium as a Disinctant," will be found in the *Report of the Medical Officer for 1887*, published s a supplement to the *Seventeenth Annual Report of the Local Government oard, 1887-88*. Dr. Klein found that doses of 1 to 2 grains administered adults several times daily for several successive days produced no physiogical effect, except that presence of iodide was demonstrable in the saliva. e found that its antiseptic properties were considerable—far inferior to rchloride of mercury, but greatly superior to carbolic acid. Perchloride of ercury present in the proportion of 1 : 40,000 prevents the growth of, and 5,000 kills, the pathogenic organisms used as tests. The iodate of calcium gins to exercise some restraining power when in the proportion of 1 : 6,000, t it does not kill even when in the proportion of 1 : 500. The salt was ought under Dr. Klein's notice by Mr. Weaver.

TEXTBOOKS OF PHYSIOLOGY.

. M.—The textbooks in use for the physiology examinations of the M.B. ndon are Foster's *Physiology*, Landois and Stirling's *Physiology*, or McKenck's *Physiology*. The two last-named give fuller details than Foster's textok, and, moreover, are complete. The last edition of Foster is still unished. Landois and Stirling and McKendrick both give a good account of . Ferrier's researches. Dr. Ferrier's book on the *Functions of the Brain* ght be also consulted.

MEMBERSHIP OF THE ROYAL COLLEGE OF PHYSICIANS.

URENS.—1. The diploma named does not preclude a man from prac.ng surgery. 2. Bristowe's *Medicine*, Parkes's *Hygiene*, Bucknill and Tuke's *ychological Medicine* or Savage's *Insanity*. Celsus is the favourite Latin hor. We believe that nothing would be gained by taking up more than optional language. We cannot say which is the favourite Greek or nch author.

NOTES, LETTERS, ETC.

ERRATA.—In Dr. Cadogan-Masterman's letter for Leeson *v.* Harness read "Leeson *re* Harness." In the eighth line, after adult insert "members of the Society."—In the report of the proceedings of the Scottish Microscopical Society, JOURNAL, page 200, line 3, for "Carlin" read "Carlier."

THE CLIMATE OF BEXHILL-ON-SEA.

DR. EDWARD H. RYAN-TENISON (Bexhill-on-Sea) writes: Will you kindly make the following *addenda et corrigenda* to my note on the above subject? In November, one day on which snow fell. In December, two days on which snow fell.

THE YEAR-BOOK OF TREATMENT FOR 1890.

DR. JAMES F. GOODHART (London) writes: Will you allow me to point out an error in the section "Medical Diseases of Children," for which I am responsible? On page 121, lines 3 and 4, "tablespoonful" should read "teaspoonful."

THE "LONDON MEDICAL RECORDER."

MESSRS. W. H. ALLEN AND CO. (London) write: A statement has appeared to the effect that the *London Medical Recorder* will not again be published. This statement is entirely without foundation, and we should esteem it a great favour if you could find space to deny it in your forthcoming number.

DEGREES FOR PROVINCIAL AND LONDON STUDENTS.

CAMBRIDGE UNDERGRADUATE writes: The British public like their medical man to be M.D.; any man who does not possess these magic letters after his name is classed among the inferior members of the profession. As there are so many M.D. degrees, and so many licences, it is time that the State instituted a compulsory examination, and granted the degrees of A. Doctor of Medicine, M.D.; B. Master in Surgery, M.S.; C. Master in the Art of Obstetrics, M.A.O.; D. Doctor of Sanitary Science, D.S.Sc., to every man, provided he is a duly registered and qualified practitioner. The examination might or should be of equal severity, and held at the same time in London, Dublin, and Edinburgh. This would allow any man to pursue his studies at whatever school or schools he liked, and to take whatever diplomas or degrees he chose.

THE CONTAGIOUSNESS OF LEPROSY.

DR. CHARLES R. DRYSDALE writes: The result of the experiment made by Dr. Arning on the unfortunate condemned criminal at Honolulu ought to go far to settle the question of the contagiousness of leprosy. The patient was inoculated, it seems, in September, 1884, in the left forearm, with some "tubercle" from a leper. In 1887 the man was found to be unmistakably leprous, and he is now reported to be dying of this fatal disease. I trust that this case may tend to make the profession definitively abandon all weak hypotheses as to the causation of this bacillary disease, which attribute it to fish diet, etc. The real truth about leprosy is that it is always spread by contagion or by hereditary transmission, just as syphilis is always spread in these manners. And as everyone admits that leprosy, although sometimes a very chronic disease, is invariably fatal, it is time that the profession and the authorities made up their mind on the question how to prevent the contamination of healthy persons by lepers. This can doubtless be done by segregation and by a few simple hygienic precepts, such as those which protect the nurses and physicians in syphilitic hospitals, or in hospitals for consumption. But, I repeat, the essential point is that we should at once and for ever abandon the vain idea that leprosy is ever originated by soil, climate, or diet.

I saw two cases of leprosy at the Hôpital Saint Louis last summer, and was told by Dr. Ernest Besnier that he had some eight or ten private patients with leprosy at Paris at that date.

RE DR. FREDERICK MOON: AN APPEAL.

THE following subscriptions have been received during the past week, namely:—

	£	s.	d.
Arthur E. Durham, F.R.C.S.	5	5	0
William Travers, M.D.	2	2	0
W. Morrant Baker, F.R.C.S.	2	2	0
J. R. Fothergill, M.D.	1	1	0
T. Browne O'Connor, Esq.	1	1	0
	11	11	0
Subscriptions previously announced	100	9	0
	112	0	0

PETER HORROCKS, M.D., Hon. Treasurer, 26, St. Thomas's Street, S.E.

SWEEPING WITHOUT DUST.

AT a time when we are all pretty well convinced that one of the aids to preserving health is to prevent the scattering of dust and dirt into the air, loaded, as it is apt to be, with organic particles of dubious origin, the little invention known as the Ewbank Carpet Sweeper has an obvious value. In the ordinary methods of sweeping a room a great deal of the accumulated surface dust is dispersed into the air to be inhaled, or slowly to settle again on walls and furniture till it is removed by dusting or by currents of air. The Ewbank carpet sweeper collects all the dust into the annexed trays as it is rolled over the floor. It has the advantage of being noiseless and used with little muscular effort, and is distinctly useful in the sick room as well as efficient. It is solid, simple, and is very light in use. This substitution for the time-honoured broom will be a distinct improvement from many points of view, The manufacturers are Messrs. Entwisle and Kenyon, Ewbank Works-Accrington.

A CASE OF LARGE HYDRENCEPHALOCELE.

DR. G. F. INGLOTT, D.M.O. (Malta) writes: On December 2nd, 1889, my friend, Dr. Cannataci, district medical officer of Zeitun, Malta, called me to witness a large congenital hernial tumour of the brain in a newly-born child. We made a careful examination of the tumour, and it was diagnosed as a case of hydrencephalocele. As to treatment, there was no question the infant could not live long. The particulars of the case were: 1. The size of the whole tumour was as twice the child's head, and was situated at the middle part of the occipital bone. 2. The mass was soft, round in shape, and bluish in colour. 3. On compressing the tumour from the right to the left side strabismus followed at once in the left eye, and on being compressed from the left to the right eclamptic convulsions followed immediately. The child, after a few days, died. On examining the tumour it was found to contain a portion of the brain, covered with its membranes, amidst a quantity of blood and ventricular fluid. The protrusion had passed through a congenital opening in the occipital bone. The frontal bone was rudimentary.

American Degrees and General Culture.

Mr. A. C. Bridges, M.R.C.S. (Brighton) writes: *Apropos* of the conversation given by "M.D." under this heading in the Journal of January 25th, when travelling in the United States in the latter part of 1887, between Chicago and Southern California, I had for some days a fellow passenger, who informed me that the practice of medicine had been "his business this two-and-twenty year," that he "held a degree and a State certificate," and was "located down at ——," through which I should pass on my way to the Far West. He buttonholed me on several occasions to expatiate on the greatness of his country, the claims of New York to be considered the most remarkable city in the world, and the most surprising smartness with which his countrymen were getting ahead of Europe in matters medical. His own medical knowledge, however, was somewhat crude, and his account of a *post-mortem* examination he had recently made on a typhoid fever case gave me some amusement. After dilating for some time on the extraordinary conditions in which he had found the brain, heart, and lungs, he seemed to stop, so I asked, "What did you find in the intestines?" His answer was, "Oh, wal, I guess I didn't go down so far as that."

Lord Palmerston on Influenza.

The following account by Lord Palmerston of his own sufferings from influenza in 1833 will be read with interest just now:—

"To the Hon. Wm. Temple, Naples.—Stanhope Street, April 19th, 1833.—My dear William,—I am concerned to inform you that the whole of the Temple family, with all its connections, have been suffering more or less under the prevailing epidemic; but I, by right of primogeniture, have had a larger portion than the rest. F., E., and myself are all, for the present, confined to our respective houses. My attack began a fortnight ago, and consisted of inflammation on the chest and a violent attack of bile. The first, which was indicated by fever and pain across the chest, yielded immediately to a blister, but left an irritation in the trachea, with cough, which I have only just got quit of. The effect of this sort of attack is great prostration of strength, which requires every three or four hours sago or gruel; and when Dr. Granville, who attended me, found the fever was gone, and that there were no symptoms of inflammation left, he gave me quinine, and ordered me to eat lamb and drink sherry. I mention these details in case the epidemic should travel to Naples, either from Constantinople or London, at both of which capitals it seems to be very rife, that you may know the successful mode of treating it. As soon as any pain is felt on the chest a blister is the specific. What I suffered most from was the obstinate bile, for which I was obliged to take more calomel than I have swallowed for years. However, I am now so nearly well that I am only waiting for a little finer weather to go out again..... It is astonishing how general this disorder has been, with more or less severity according to accident. With F., and E., and S. and his girls, and with G. B., it has only been a violent cold, but without inflammation. I wrote to the King last Wednesday to excuse myself from the levée. P.S.—Dr. Granville makes the most delightful barley water for a cold, with an infusion of lemon juice and an ounce of gum arabic to a pint, and some sugar. It is better than any lozenges. Lady Minto is out of danger, but has been most alarmingly ill."

(*Letter of April 23rd.*)

"I can give you better accounts of us all, as we are all nearly well again."

(*Letter of May 7th.*)

"Though I asked Thompson to put off his motion on Friday last, because my whistle was not then quite in tune for a long debate, yet I am now quite well again in every respect, and F. and S. are also almost well, though still some little cough. It is marvellous how many people have had this influenza."

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REMARKS
ON
)ME POINTS IN THE PATHOLOGY OF THE PARALYSES WHICH OCCUR DURING THE FIRST TWO YEARS OF LIFE.[1]

By HENRY ASHBY, M.D., M.R.C.P.,
Physician to the General Hospital for Sick Children, Manchester.

is hardly necessary for me to remark that the paralyses arising ring the first two years of life form a very wide field for cussion, far too wide indeed to attempt to cover during the ne allotted to the introducer of the subject. All that I can pe to do to-day is to discuss some of the points which are the st interesting and perhaps least best known in connection with etiology and pathology of the lesions of the nervous system ich occur during early life.

During the last few years much progress has been made in ferentiating and classifying these palsies, and we no longer lude under the name of "infantile paralysis," lesions which ve little in common except that they occur during the first two three years of life. But notwithstanding this progress towards learer knowledge, there is yet much to be learnt of their patho-y, and more observations are required; especially do we re-re more *post-mortem* examinations made during the acute ges.

That there should be strongly marked lines of difference be-een the lesions encountered in the adult brain and in the ant is only what we should naturally expect. In the former, en middle life is well past, we find evidences of retrograde cesses which tend to weaken or damage the walls of the eries, and moreover we have cardiac and kidney lesions which d to increase the tension of blood in the vessels and lead to ebral hæmorrhage. The infant brain has the advantages which immunity from degenerative changes consequent on wear and r bring, and the disadvantages of immaturity, for the vessels he pia mater are exceedingly delicate, and readily allow of ing through their walls, while the brain substance is wanting firmness and easily damaged. Moreover, damage to a brain yet partially developed is likely to effect greater mischief in long run by interfering with growth, than the same damage an already well-developed brain. These differences are certain influence the lesions which occur. In the infant we have aingeal hæmorrhage, meningeal inflammation both of brain . cord, and inflammation of the most vascular spots in the nal cord; while we miss the large cerebral hæmorrhages, and various forms of softening so commonly occurring in the brain he adult towards the decline of life.

For the sake of clearness we may class the principal forms of alysis occurring during the first two years of life under the owing heads:

. Intrauterine lesions (meningo-encephalitis).
. Meningeal hæmorrhage.
. Syphilitic arteritis and softening.
. Acute cerebral paralysis (encephalitis and embolism, etc.).
Acute spinal paralysis (anterior poliomyelitis.
Peripheral paralysis.

Intrauterine Lesions.—In connection with these it is inte-ing to note what severe lesions may occur to the fœtus, and in spite of this, it may continue to live and be born at term. ammation of the meninges of the brain or peritonitis may place, and, instead of quickly proving fatal, as we should rally expect, the fœtus survives, and a hydrocephalus ndary to the meningitis, or a sclerosis of the brain, or trisation and constriction of the bowels is the result. The ivenous condition of the fœtal blood is not favourable to acute inflammations; moreover, the fœtus is under much more favourable conditions for recovery from disease than in the infant after birth. The results of meningeal inflammation we see in the brains of idiotic children which show atrophy, sclerosis, or chronic hydrocephalus.

2. *Meningeal Hæmorrhage* occurs under a variety of circumstances during early life, but the invariable immediate cause is asphyxia. Let an infant pass into an asphyxiated condition, and an effusion of blood from the meningeal vessels is extremely likely to occur; the delicate vessels are readily ruptured or allow of oozing when they are distended with venous blood. The amount of bleeding varies; it may be only slight—perhaps only amounting to a few minute extravasations—or, on the other hand, the whole surface of the brain may be covered with blood. The most extensive meningeal hæmorrhages I have seen were in two newly-born infants, who had apparently been suffocated by throttling shortly after birth by forcibly compressing the larynx between the fingers and thumb—at least, the bruise marks on the neck suggested this. In both these cases there was a large extravasation of blood, both over the convex surface and also at the base of the brain. In another case in which there was extensive meningeal hæmorrhage complete birth had been delayed for more than an hour after the head was born, in consequence of the child's abdominal cavity being distended with fluid and preventing its passage through the pelvis. Doubtlesss the commonest cause of asphyxia—hæmorrhage—is a prolonged and difficult labour, during which the child becomes asphyxiated, the hæmorrhage taking place during the act of birth. That this is common enough I have had abundant opportunities of verifying *post mortem* in infants dying shortly after birth, where the mother has been atttended by neighbours or ill-educated midwives. Meningeal hæmorrhage, as is well known, may take place during attacks of whooping-cough or during severe attacks of vomiting. There is no doubt also that it may occur during convulsions; the proof, however, is necessarily difficult, because at the *post-mortem* examination it may be impossible to say whether the meningeal hæmorrhage present is due to the convulsions or the latter are due to the irritation caused by the effusion of blood. In one case of mine, where the infant—10 weeks old—had been badly fed and suffered from convulsions, and who finally died in an attack, there were found *post mortem* minute hæmorrhages on the surface of the lungs; the brain was watery, the veins turgid, and several hæmorrhages had occurred beneath the pia mater, on the convex surface. Here there could be little doubt that the asphyxia produced by the respiratory spasm had given rise to the meningeal bleeding.

What is the effect of an extensive surface hæmorrhage on the surface of the brain if the infant continue to live? The bleeding, it must be remembered, is usually bilateral, and is most commonly found involving the parietal region, and running along the Sylvian fissures. The blood clot which forms separates the pia mater from the surface of the convolutions, tearing through the vessels which pass from the pia to the grey substance, and necessarily resulting in damage to the nerve centres. The result is certain to be that the nutrition of the nerve centres is interfered with; they fail to develop as they should, and more or less degeneration of the motor path as it passes through the brain and cord takes place.

In the large majority of cases in which "birth palsies" are present there is a history of a difficult labour, or, at any rate, the infant was born "blue," and there was more or less difficulty in bringing it round, the cyanosis remaining perhaps for some hours after birth. The causes of asphyxia are of course various; there can be little doubt, however, that there is an immediate connexion between asphyxia and hæmorrhage from the pia mater, which damages the parietal regions of the brain, and gives rise to the well known spastic paralysis (either paraplegic or hemiplegic) of infancy.

It is curious to note that in the vast majority of cases no symptoms pointing to a surface lesion are present at first; there is no paresis of the extremities, and frequently no convulsions; in fact, an extensive meningeal hæmorrhage may be present without any definite symptoms. In some cases facial and other paralyses have been noted, especially when extensive brain damage has been done or nerves have been compressed after leaving the brain. This is in harmony with what we know with regard to the undeveloped state of the cortical centres at birth; the infant's movements are almost entirely reflex, the lower grade centres are the only centres functionally active, and it is only as the child ought

[1519]

[1] ad in the Section of Diseases of Children at the Annual Meeting of the British Medical Association, held in Leeds.

to be developing, learning to stand or walk, that the mother notices some backwardness in the use of its limbs, and some waywardness in its mental attainments. In some cases, at least as early as the third or fourth month, a rigidity may be noticed about the tendo Achillis, and an exaggerated tendon reflex.

Post-mortem examinations made on children who have suffered for years from "spastic paralysis," the result of a birth hæmorrhage, show atrophy of the parietal regions of the cortex, and indeed, in the worst cases, the shape of the head shows a deficiency in the parietal regions.

Syphilis.—Syphilitic disease of the brain cannot be said to be at all common in connection with hereditary syphilis occurring during the first few months of life. When it does occur it usually assumes the form of arteritis, with more or less softening of the brain and a consequent paralysis. A chronic meningitis with hydrocephalus may occur. The prominent symptoms in such cases consist in convulsions with marked stiffening of the limbs and retraction of the head, and, later, more or less rigidity and spastic condition of the extremities. As an instance of syphilitic brain disease in a young child I may relate the following: The infant was first seen at three months old, when suffering from coryza and a well-marked rash. A month later the epiphyses of the lower end of the tibia and fibula, and also the radius and ulna, were swollen and tender. When eight months old it began to suffer from convulsions, mostly left-sided at the commencement of the attack, but afterwards becoming more general. In the course of a few months the left arm and leg became drawn up and more or less rigid, the elbow was bent, the arm pronated, and the fingers flexed; later still, the right arm and leg were more or less affected in a similar way. This condition lasted till death, which took place when the child was fourteen months old. At the *post-mortem* examination arteritis, affecting the small arteries of the pia, was present, accompanied by superficial softening of the grey substance.

Acute Cerebral Paralysis, usually taking the form of hemiplegia, and depending upon various pathological conditions, is apt to come on suddenly during the first year or two of life. Considerable controversy has taken place with regard to the cause of this condition, but without doubt an infantile hemiplegia may be caused by a variety of lesions. Thus the softening accompanying tubercular meningitis, meningeal hæmorrhage, and embolism of the middle cerebral artery rank as causes.

In the majority of cases which occur during the first two years of life, there is some acute febrile disease present, usually also convulsions, and then suddenly, to the surprise of the attendants, the child is found to be hemiplegic. Such at least is the history we usually obtain, for careful observations of the primary illness are not numerous, and we have usually to depend upon the memory of the patients' friends when we want information on this point. The cause of this primary illness is often uncertain; it is attributed by friends not infrequently to "teething," to "brain fever;" in some cases measles or pneumonia, or both, are present; there is often hyperpyrexia; in a case which came under my notice, measles and pneumonia were present; the temperature was 107°; severe convulsions occurred, and hemiplegia followed in a few hours. How far in these cases the high fever is responsible for the mischief it is not possible at present to say. Then convulsions are almost certainly present, and are prolonged and severe; they are mostly unilateral, beginning in the side which is afterwards paralysed, but usually becoming general. Drowsiness, and at times coma, are present; these may be of short duration, or the child may lay in a semicomatose condition for weeks or more. It is a very significant fact that similar attacks occur, being accompanied by convulsions, fever, and coma; no paralysis follows, but the child shows a loss of intelligence or backwardness which dates from the period of the attack, or it may become idiotic. There seems to be little doubt that in these cases damage has been done to the brain, but the motor centres have escaped. Again, in other instances there is an attack of so-called "brain fever;" the child recovers, but from that date it is completely deaf. Some damage has evidently been sustained to the auditory centres, or a double labyrinthine inflammation has occurred. What is the lesion present in these cases? Observations made many years after the paralysis has occurred in the majority of cases clearly shows that more or less brain damage has been sustained to the cortex in the neighbourhood of the fissure of Rolando, and that, as a result, there has been a cicatrisation or sclerosis at the seat of the old injury.

Has this been the result of an embolism of the middle cerebral, a local encephalitis, thrombosis? If not, what has been the nature of the lesion? Embolism of the middle cerebral and a secondary softening has undoubtedly recurred in some cases, and in other cases possibly a thrombus has formed in the artery leading to a like result. This was the case in one of my own patients, a boy of a year old, who was suffering from cyanosis due to a contracted pulmonary artery. Embolism also occurs, especially in older children suffering from endocarditis, and in some of the recorded cases this has occurred secondary to endocarditis not infrequently present in scarlatinal nephritis.

On the other hand, the theory of embolism or obstruction of the middle cerebral does not explain some of the cases which have occurred, and in which *post-mortem* examinations have been obtained some years afterwards. In some of these the lesions have been confined to the convolutions bordering on the fissure of Rolando, and the lesion has extended no great depth into the brain substance. In another the superior parietal lobule only; in others the gyrus fornicatus or occipital lobe has been affected (Osler). If embolism had been the cause we must assume that some of the branches of the middle cerebral have been obstructed by a clot; and, while this is perfectly possible, it is improbable.

It has been suggested by Strümpell that an inflammation of the grey matter of the cortex, a polioencephalitis analogous to an anterior poliomyelitis takes place. This theory is certainly most suggestive, and it may reasonably be supposed that patches of inflammation may occur on the surface giving rise to coma, hyperpyrexia, convulsions, and paralysis. Hardly anything, however, is known of such a condition *post mortem;* and the only case that I know of which at all supports this theory is one recorded by Henoch. In this case a boy, aged 3 years, was suddenly seized with convulsions accompanied by fever, which ended fatally. At the *post-mortem* examination there were patches of meningitis on the parietal regions on both sides, and hæmorrhagic infiltrations were found in the grey substance. More evidence, however, is required before we can accept Strümpell's theory as explaining these cases of hemiplegia. Still I am by no means inclined to deny the possibility of a convex meningo-encephalitis occurring and giving rise to the symptoms described.

Can we regard convulsions as playing an important part in the production of these brain lesions? It is a remarkable fact that almost universally the paralytic attack is preceded by a series of prolonged and severe convulsions. It not infrequently happens that a child has an attack of convulsions, perhaps more marked on one side, from which it perfectly recovers; later on it is again seized with convulsions of the same side, followed by paralysis. It is well known that after severe and repeated epileptiform attacks a hemiparesis follows, affecting the side which has been most convulsed. The paresis lasts a variable time, from a few days to a few months. In some cases the paralysis is almost complete, but, as a rule, recovery quickly takes place. The cause of this temporary paresis is uncertain; possibly it may be due to an exhaustion of the nervous centres, or to some organic lesion, such as a punctiform hæmorrhage from ruptured capillaries. That convulsions, if severe, do give rise to meningeal hæmorrhage there is undoubted *post-mortem* evidence to show. In a remarkable case recorded by A. Money convulsions were apparently the cause of thrombosis of the cerebral veins and punctiform into the cortex. We are so much in ignorance of the nature and cause of convulsions that it would be rash to speculate too much, and when we find a lesion present after death it may be by no means easy to say whether it is the cause or consequence of the convulsions. Still, there cannot be a doubt that during a convulsion the cerebral veins are distended in consequence of the respiratory spasm, and a capillary hæmorrhage may readily result. Moreover, the nerve discharge is almost certain to be associated either before or after by disturbed circulation. We must bear in mind, however, that cases of hemiplegia following hemi-convulsions have occurred in uræmia, and, at the necropsy, no lesion has been found (Dunin, Cassel). One practical point, it is well to remember, is that in many of these cases hyperpyrexia is present. It is exceedingly probable that the severe convulsions may be due to this cause, hence the necessity of combatting it with all the means in our power.

Acute Atrophic Paralysis.—It is worthy of notice that in the typical initial attack. the symptoms closely resemble those of the acute form of cerebral paralysis already described. There is often the same association with other diseases, as pneumonia, measles, diarrhœa; there is usually feverishness, perhaps drowsiness, coma, and convulsions, and the discovery comes as a surprise to the

riends and attendants that one or more of the limbs are limp and owerless. It is also interesting to find that a child may suffer rom a similar attack and get well again without any paralysis aking place; then a few weeks later perhaps he is seized again ith similar symptoms, which this time are followed by para- sis. In some cases reported the primary attack has been slight r indeed absent; in cases in which the lesion has not been exten- ve it is easy to understand the symptoms may not be marked nd be readily forgotten or overlooked by the friends. With re- ard to the actual lesion, it is perfectly clear that there is an cute inflammatory lesion involving the anterior horns and more or ss of the grey matter of the cord, more especially the lumbar nd cervical enlargements. There is an inflammatory engorge- ent of the arteries which pass from the anterior spinal arteries the cord to the anterior horns, accompanied by exudation of quor sanguinis into the nerve substance, and apparently also in me instances by actual rupture of the capillaries and conse- ent minute hæmorrhages. The evidence points in the more vere cases at least to an engorgement of the cord, the most vas- lar parts, namely, the anterior horns being the spots where the reatest damage occurs; part of the damage done to the nervous echanism is recoverable as time goes on by absorption of the fused inflammatory material, and part of the damage is irre- ievable, on account of the breach made, so to speak, in the grey atter of the cord. That the anterior horns which contain such portant groups of nerve cells, and consequently are exceedingly uscular, should bear the brunt of the damage is not surprising, ill there is evidence to show that the rest of the cord does not ntirely escape, for in one of my own cases there was some loss of nsation during life, and distinct evidence of slight inflammatory sion of the vessels supplying the rest of the cord. It is import- nt to bear in mind that evidences of inflammatory action the shape of gorged vessels surrounded by leucocytes may found six weeks or two months after the onset of the paralysis, is would point to the inflammatory action being subacute, the flammatory stage lasting long after the symptoms of the pri- ary attack have passed away. This must be remembered in any ne of treatment we adopt.

Peripheral Paralyses.—Of these it is not necessary for me to eak at any length; as far as we know, they do not play an im- rtant part in the paralyses of early life. Injury to the brachial rds is apt to take place during labour by traction on the arm by unskilled attendant, and a troublesome paralysis result. In ngenital syphilis we occasionally see a peripheral paralysis due some nerve lesion, though it need not be said we must be care- l not to confuse the inability to use a limb in consequence of iphysitis or periostitis with paralysis. In rickets periosteal nderness and muscular weakness give rise to paresis, though en here we are still uncertain if the muscular weakness may t deserve the name of a paresis due to a nerve lesion or the fects of a poison. Of diphtheritic paralysis, and similar para- ses due to the effect of toxic matters in the blood, it is unneces- ry for me to speak.

WO CASES OF CONGENITAL AND INFANTILE CEREBRAL PALSY.[1]

By E. MANSEL SYMPSON, M.B.Cantab.,
Lincoln.

IE patient, H. E., aged 19, was the third child of his mother, ho states that she had a long and hard labour with him, but at no instruments were used. Ever since birth he has been lsied on his right side, the right leg getting fairly strong and eful, while the right arm has always been a good deal weaker an the left. About three years ago he had a sharp attack of eumatic fever, with probably some dilatation of the heart, for ere was then a mitral murmur, which I am glad to say has now nished. For several years he has been subject to sick head- hes, scarcely worthy, perhaps, to be dignified with the title of igraine, though the attacks were paroxysmal, of very severe adache, with vomiting, cold extremities, but with no affection sight. Also about three years ago, while bathing directly ter breakfast, he was suddenly seized with a fit of struggling, mited freely, and was unconscious for some time. The next fit took place eighteen months afterwards, the last about four months ago; there have been about five fits altogether. There is no aura or warning; he is unconscious for from three to five minutes, in apparently clonic general spasms, eyes turned upwards and rolling, face purple, no involuntary evacuations, petechiæ on face, and on several occasions he has injured himself severely.

Present Condition.—The head is obviously larger on the right side; from the vertex to the top of the left ear is more than half an inch smaller than from the vertex to the right ear; eye movements normal; heart slightly hypertrophied.

Right forearm an inch and a quarter smaller in circumference and half an inch shorter than the left. Its muscles react well to faradism. The chief wasting or want of development seem to have taken place in those arising from the inner condyle of the humerus. The interossei are very poor. The forearm is generally somewhat flexed on the elbow, the hand flexed on the wrist, the fingers overextended; supinator, biceps, and triceps reflexes are easily obtainable; the hand and arm are colder than on the left side, while the skin of the hand is markedly smooth and almost glossy; sensation seems unimpaired; grasp, though considerably weaker than that of the left hand, is fair, but he can do nothing demanding delicate touch or manœuvring.

Right leg is also half an inch shorter and three-quarters of an inch smaller than the left; knee-jerk and ankle clonus are evident; he walks with a slight limp.

The treatment latterly has been, of course, only directed to these epileptoid fits and the attacks of sick headache. I began with potassium bromide, 20 grains twice a day, afterwards small doses of tinctura belladonnæ and tinctura digitalis; finally, he is now taking potassium bromide and tinctura digitalis. For four months he has had no fit of any kind, and he has improved in every way, probably from their absence. For the sick headache I have found nothing so satisfactory in this, as in other cases, as the effervescing citrate of caffeine.

Three or four years ago he saw Sir James Paget on account of hemiplegia. Massage and galvanism were recommended, with the result that, as I have stated, the muscles are in very fair condition. The diagnosis is, I think, clear; it is a case of congenital cerebral spastic palsy, the birth palsy of Gowers, with epileptoid convulsions coming on rather late in puberty. I called it congenital because apparently it dates from birth, and cerebral because the difference of the two sides of the head, the spastic hemiplegia, the electric reaction of the muscles, and the later developed epileptoid convulsions leave me no room to doubt that the brain is responsible for his condition. I also, for the same reasons, feel pretty sure that the locality of the lesion is in the cortex cerebri, covering the leg and arm centres on the left side, and that lesion now is almost certainly a localised atrophy, the cause of that atrophy being, as Dr. Gowers says on this subject, meningeal hæmorrhage, which occurred probably during parturition. The association of those migraine-like attacks with epileptoid fits is suggestive of the near alliance mentioned by Dr. Hilton Fagge and others between migraine and epilepsy proper.

The second case I am bringing before you is that of a girl, aged 13, suffering from infantile cerebral palsy, and I am much indebted to the kindness of Mr. A. L. Peacock, of Lincoln, for an opportunity of seeing her and making notes of her condition. She seems to have been a fairly healthy child till she was $3\frac{1}{2}$ years old; then, in close connection with an attack of measles—the mother's memory was rather shaky as to the exact relation in time of the two—she was seized with aphasia and right hemiplegia. Since then her speech has never been quite perfect.

Present Condition.—She is an intelligent child; head well shaped and equal on both sides; eye movements normal; sight excellent. Her right arm and leg are much weaker, and the right leg is half an inch less in circumference than on the left side. The right foot is always colder than the left. No deep reflexes are to be gained in right arm or leg, though the left knee-jerk is very obvious. There is no spastic condition of muscles of the palsied limbs. No affection of sensation was evident; micturition and defæcation were quite natural.

In this case again I think that the hemiplegia, with no great atrophy or ill development of muscles, accompanied by aphasia at its first onset, points indisputably to the lesion being cerebral. The association with measles, as occurred in seven of Dr. Gowers's, four of Dr. Abercrombie's, and four also of Dr. Osler's, forms a starting point for several diverse explanations. It is almost

[1] Read in the Section of Diseases of Children at the Annual Meeting of the British Medical Association held in Leeds.

exactly on all fours with Case No. XCVII in Dr. Osler's admirable little work on *The Cerebral Palsies of Children*. Polioencephalitis, cortical venous thrombosis, embolism, meningeal hæmorrhage, capillary hæmorrhage, are all rivals in the field. Elsewhere I have given a few reasons for thinking that all spastic palsies in children are the result of a cortical lesion produced by meningeal hæmorrhage; and I find, on the authority of Nothnagel[2] that, in thrombosis of cerebral veins, it is not uncommon for rupture of the vessels to occur, causing hæmorrhage into the meninges.

In infantile cerebral palsy the rule is that there be some degree of spasm of the palsied muscles; here, as in three cases of Dr. Osler's, there was none. Whether this depends on a different locality of the lesion, or upon the more perfect recovery of the once damaged brain cells, I do not know. In this case, as in No. IV of mine,[3] the right great toe was kept turned upwards and backwards. According to D'Espine, this is due to the unbalanced action of the extensor proprius, the plantar arch falling through the paralysis of the peroneus longus; and I have since noticed the same in apparently a genuine case of Erb's primary spastic paraplegia in both toes. In both these cases, and in No. IV above mentioned, the affected limbs were colder than the sound ones, and the same is noted by Dr. Osler in his cases LXVII and LXX. This is not nearly so marked as in acute anterior poliomyelitis. It simply follows, I suppose, from their being old cases of hemiplegia, as Dr. E. L. Fox points out, that the palsied limb appears colder than the other. Whether this be due to chronic irritation of the cortical centres (of Eulenberg and Landois), which, according to these observers, influence the vascular state of the limbs, to the palsied muscles needing less blood, or to the muscles manufacturing a less amount of heat, is beyond my present purpose to discuss.

HEMIPLEGIA ACCOMPANIED BY LOSS OF SPEECH IN CHILDREN.[1]

By THOMAS OLIVER, M.A., M.D., M.R.C.P.,
Physician to the Royal Infirmary, Newcastle-on-Tyne, and Professor of Physiology in the University of Durham.

APHASIA is always an attractive subject, particularly in children. The diseased condition which gives rise to it occurs in them at a time when development is incomplete; when organisation of certain parts of the brain is taking place, and upon whose healthy functional activity depends the power the individual has of giving expression to intelligent thought.

On August 6th, 1888, I was asked to see in consultation O. H., a pale-faced delicate child of $2\frac{1}{2}$ years of age. She was a twin, and the more delicate of the two, owing to her having suffered from recurrent attacks of cold. Her father and mother are healthy, and there is no history of tubercular disease in the family.

The child had been apparently quite well until three weeks before I saw her. She had caught cold; this was followed by bronchitis. The bronchitis had passed away, and she had made, it was thought, a satisfactory recovery. She had got again into the habit of walking about the house when, one day—five or six before I saw her—she was found lying helpless on the scullery floor. Lifted by her mother, and placed upon her feet, she at once fell, and it was then only too apparent that this complete inability to stand was due to paralysis of the right side of the body. She had lost, too, her power of speaking. These symptoms continued. Within the next few days tremor of the right hand developed, which gradually passed into strong convulsive movements, affecting both sides of the face and the body generally. During the week previous to my seeing her she had not spoken; she simply expressed her wishes by pointing with her left hand. The right arm by this time was passing into a state of extreme rigidity with spasm; it had been carried back behind the trunk, was directed outwards, whilst the hand was twisted round and bent upon the wrist. The right leg was held out in a state of extension and rigidity; the big toe all the while bent and pointing upwards. Though the arm and leg were in a condition of rigidity and spasm—almost permanent—yet from time to time the spasms relaxed. Particularly was this the case so far as the fingers and the knee and ankle on the right side were concerned. From a condition of relaxation the limbs would at once pass suddenly into a state of spasm, the act being evidently accompanied by a great amount of pain. There was complete absence of the knee-jerk on either side; the plantar reflex was slightly exaggerated. The pupils were equal. Temperature was normal; it had never risen. Vomiting had been present prior to the seizure, but none since. Headache, if ever present, had never been complained of. Pulse 106. Tongue moist; clean. All over the chest numerous small rhonchi were heard. Heart was healthy. We diagnosed meningitis, affecting principally the motor areas of the left side of brain. On August 31st the child died, never having regained speech or the use of the right arm and leg.

At the *post-mortem* examination considerable difficulty was experienced in removing the calvarium, owing to strong adhesions existing between it and the dura mater. This membrane was found to be thickened, and where it was adherent dense bands of fibrous tissue were seen radiating outwards from either border of the longitudinal sinus. The walls of this sinus were thickened, and a large, firm, dark clot occupied its interior. The vertex of the brain was bright and glistening. A clear gelatinous fluid occupied the subarachnoid space, particularly in the upper part of the so-called motor areas on the right side of the brain and over the whole of the motor area on the left side, where it was most marked over the third anterior inferior frontal convolution. On careful examination it was noticed that this effusion pressed chiefly upon the lower half of the left ascending frontal convolution and the whole of the third anterior inferior frontal convolution. The convolutions, taken as a whole, were softened. At the base of the brain the vessels were healthy, as were also those traced deeply into the fissure of Sylvius. The white substance of the right half of the cerebrum was found on section to be quite firm and healthy to the touch; that on the left was softer and showed many more and much larger puncta hæmorrhagica. The substance of the convolutions of the left motor areas was extremely soft. About 3 or 4 drachms of bloody serum occupied the left lateral ventricle. The left internal capsule was extremely soft compared to the right. The rest of the brain was healthy.

A vertical meningitis, followed by effusion, pressing upon and irritating chiefly the left motor areas and Broca's lobe is, in a word, the pathological condition that existed, the doubtful cause of which was an injury received by the child some months previously to her death.

That the meningitis stood in a causal relationship to the loss of speech in this case there cannot be the least doubt, and it is a good illustration of "irritative inhibition" of the speech centre the function of which was just as completely destroyed as that of the motor areas, evidence of which was seen in the paralysis of the right arm and leg. Had the child's life been spared, the right arm and leg would have remained paralysed, and their growth would have been retarded, and the lesion would have been regarded as a polioencephalitis. Speech might have been regained through development of the right side of the brain, and the assumption by it of the word-making function. This case is interesting as showing at what an early age "duality of brain" was completely established, the association of right-handedness with left cerebration, and the developmental interaction of these two as regards the function of speech.

2. *Left-sided Convulsions, followed by Hemiplegia and Aphasia in a Child aged $5\frac{1}{2}$ Years.*—This little patient I saw in consultation with Dr. Russell, of Heaton, to whom I am indebted for the notes of the case. He first saw the child on August 9th. Until the middle of the preceding month her health had been good; she now began to lose her appetite, and became extremely irritable in her temper, was feverish at night and her memory and speech became gradually affected. She was no longer able to walk, staggered much and fell frequently. There was a history given of a fall down stairs a year previously, and of the patient having been rendered unconscious for one day, and at the present time the cicatrix of this bruise is seen over the upper part of the left frontal bone.

On the day previous to that on which Dr. Russell saw her she was very noisy; during the night she had slept badly and was delirious. In the morning severe convulsions set in. The patient, who was a well developed child, was found convulsed, generally and in a severe manner, but the convulsions were much more severe on the left than right side of the body. There was strabismus, also twitching of the muscles of the face, dilated and unequal pupils, the left being the smaller; neither of them responded to light; pulse 52, and irregular; heart healthy; a few mucous *râle*

[2] Ziemssen, xii, 13.
[3] *Practitioner*, February, 1889.
[1] Read in the Section of Diseases of Children at the Annual Meeting of the British Medical Association held in Leeds.

over base of each lung posteriorly; temperature 98.2°; head was shaved, ice applied: calomel and jalap, and bromide of potassium administered. In the evening she was quieter; pulse 80; temperature 98.2.

August 10th. Convulsions all but ceased; pulse 90; temperature, 99.4°.

August 11th. Passed a good night; has taken liquid nourishment; convulsions entirely ceased; left arm and leg are noticed to be powerless; pulse 84; respirations 42; temperature 98.8°. Urine and fæces have been passed involuntarily for the last three days.

August 12th. Is still improving, although consciousness has not quite returned. Since the commencement of this illness, she has been speechless until to-day. She now attempted talking, but her speech consisted in a frequent reiteration of the word "cake," a word incessantly repeated all the time she was awake.

August 14th. Is more conscious. The word "cake" is repeated incessantly either as the answer to a question or when left unheeded. She understands, however, what is said to her.

August 16th. Improving. Called her sister by name once, and thereafter fell into her habit of repeating the word "cake."

August 18th. Vocabulary is increasing; used the word "mother" to-day.

August 24th. The word "cake" is no longer repeated; can talk fairly well now, but is very irritable, and drags the left leg in walking. Pot. iodi. and mercurial inunction to head.

September 19th. Patient is now almost well, save for a degree of paralysis of left side. Memory is good, and she now talks well.

In another month the hemiplegia had entirely disappeared; patient made a good recovery.

Both of these cases have many points of interest. In the first, we notice a very extensive lesion of the membranes, followed by a highly-developed right-sided spastic hemiplegia; and in the second, the occurrence of left-sided hemiplegia with aphasia in a child not left-handed, and the almost continuous repetition of the word "cake." We could obtain no proof that this was the last word uttered by the child before the onset of her illness. And then there is the relationship of left-sided hemiplegia with aphasia. The child had not yet learned to write, and consequently it might be said there had not occurred that incitement to the organisation of the faculty of speech in one hemisphere more than the other. Some have raised the question as to whether, in young children, organisation of speech is not always bilateral, and whether its full development and subsequent localisation in one side of the brain are not determined by the use of the hand in writing. The notes of my first case show, at any rate, that speech can be lost by a lesion, chiefly one-sided, and that, too, before the art of writing is learnt.

THE PARALYSES OF CHILDHOOD.[1]

By WILLIAM SQUIRE, M.D., F.R.C.P.,
London.

Cerebral disease in the first two years of life is less frequent than is generally supposed. It is rare to meet with hemiplegic symptoms at that age; unequal action of facial or ocular muscles results more from disturbances of reflex function or of local nutrition, while convulsive attacks are the result either of spinal irritation or of cerebral anæmia, or of both, and are at this age seldom indicative of mischief in the brain; even coma and the slighter degrees of unconsciousness may persist for hours without the coexistence of cerebral pressure, and the fear of a tubercular meningitis that accompanies these symptoms is mostly groundless, for tubercle hardly occurs here so soon, and sometimes the means adopted to ward off a visionary evil of this kind intensifies the morbid condition really existing. The brain is relatively quiescent during this period of development, while the spinal system is most active, and the more readily becomes the seat of organic lesion, specially of the one resulting in a poliomyelitis of the anterior cornua, known as infantile paralysis. It is true that a poliomyelitis at any part of the brain or spinal cord may occur after many of the acute diseases in later childhood, and when of limited extent may cause a similarly sudden and permanent paralysis. This sometimes happens after diphtheria, but that it is not a frequent accident, and certainly not the one usually associated with diphtheritic paralysis, is shown by the varying group of muscles affected by this kind of paresis, and by its tendency to recovery; moreover, the degenerative changes, both of nerve and muscle, so frequently associated with these local paralyses explain their pathology, and I have only to add that, in my experience, they are less frequent and of less duration in the first two years of life than afterwards. In both, after the first symptoms are over, electric stimulation, friction, and tonics, such as strychnine, are useful; while in infantile paralysis the early and careful adjustment of mechanical compensations and methods of assistance is imperative.

Only one case of spastic paraplegia has come under my notice; it serves to increase the preponderance of spinal disease in the causation of paralysis in infants. The onset was sudden, and convulsions marked the early stages of the disease. From those symptoms, beginning the day after birth in a well-developed first-born boy, a spinal hæmorrhage was assumed as the cause. At first the legs were only extended as convulsive seizures occurred, with some opisthotonos. Afterwards the thighs were held in a line with the body, and any attempt at flexion brought on a convulsive seizure. The legs were steadied with bandages and cotton-wool; bromide of potassium and chloral hydrate were given by enemata, and chloroform inhaled. When at rest the child could take the breast. After a time the legs could be moved a little without exciting spasm, but they continued rigidly extended, and were not moved voluntarily. The first teeth appeared without trouble, and then, after forcible flexion of the leg and thigh under chloroform, gradual improvement was brought about without division of tendons. Some power over the sphincters was gained, but the power of walking was still imperfect when I last heard of the child's progress.

My four cases of infantile palsy, two boys and two girls, are taken from well-to-do families (all classes are equally liable), the notes at hand being more complete than in some other cases. One of them occurred to a boy under 2 years old; before I knew the pathological lesion to be a poliomyelitis of the anterior cornua of the spinal cord, the attack was considered as one of acute cerebral congestion, and at first the loss of power was looked upon as hemiplegia. Most of the left side was affected, but soon power of movement was restored in the leg and hand; only the deltoid remained palsied. In all cases the attack was sudden; only one had any convulsive seizure at the outset. One, a weakly girl, was seized with vomiting; but this soon ceased, and there was very little fever. A double tooth on the left side was supposed to be concerned on very slight grounds; the gum was lanced, but the tooth was slow in appearing. The paralysis affected the right leg and hip at first, preventing the child sitting up. Eventually only the tibialis anticus and peronei were left useless; the foot dropped, the limb was always colder than the other, and its growth checked. Mechanical aids after division of the tendo Achillis, a raised shoe, and crutches were adopted; the latter are used now with much facility and even elegance.

Another case similar to this occurred with febrile symptoms to a healthy girl who manages very well with a high shoe; here the helpless leg soon explained the nature of the illness, as she had previously been able to stand and walk: warmth and friction to the limb, with various means of artificial support and movement, kept up a fair balance of muscular power; the constant current seemed to stimulate the cutaneous circulation after other electric stimulus was discontinued.

The fourth case was that of a delicate boy a year old with sudden nervous symptoms, twitchings of the facial and ocular muscles, but no squint, no vomiting nor obstinate constipation; as the attack passed off one arm hung flaccid to the side, eventually only the deltoid remained palsied. Warm covering, friction, support and movement of the arm and shoulder muscles were constantly attended to in this as in the first case, and here electricity was long used as one way of exercising the surrounding muscles. Both the boys became adepts at raising the arm, and then all kinds of gymnastic evolutions were possible. No deformity resulted in either of these two cases. Three of these cases occurred in hot weather towards the end of summer; in all the febrile attacks (as in pneumonia) preceded the local lesion which was in neither case at all proportionate to the severity of the seizure; nor did age, within the narrow limits of two years, influence either the one or the other; no special fever is concerned, for we have a similar lesion after various fevers, though not confined to the anterior cornua of the cervical and lumbar portions of the cord as in these

[1] Read in the Section of Diseases of Children at the Annual Meeting of the British Medical Association held in Leeds.

cases. Teething can only be indirectly concerned, and then as part of the developmental changes of early childhood, for attacks occur when the first dentition is over. Hot weather is not a direct cause, for though young children suffer much from various nervous diseases in hot climates, they are not specially liable to this one. The only hereditary tendency traceable in my cases is towards the arthritic; one or two of them may be neurotic, only one case, the first, developed a subsequent tuberculosis; all were absolutely free from other latent hereditary taint.

Thus two forms of spinal paralysis occur in infancy, the one, more accidental and infinitely rarer than the other, requires rest, sedatives, and delay in the use of mechanical means; the other demands mechanical aid from the earliest period to guard against associated deformities that would otherwise follow, and in this respect differs from diphtheritic paralysis, which may be expected to amend if immediate dangers be guarded against; in both local stimulation is required, and the employment of tonics, including the use of strychnine, is advantageous. Excepting the rarer instances where diphtheria leads to lesion of the nerve centre, diphtheritic paralysis is associated with a local degeneration of the small fibres only of nerve and muscle, leaving no permanent disability or deformity of the bodily frame and limbs; but in the anterior poliomyelitis of childhood an entire muscle or group of muscles is cut off from its centre of innervation, and degenerative changes that are irremediable follow, inducing collateral effects, often of the most serious consequence, many of which could be remedied or averted by timely care and treatment.

THE CAUSES OF LARYNGISMUS IN YOUNG CHILDREN, WITH SPECIAL REFERENCE TO ITS PRODUCTION BY ELONGATION OF THE UVULA.[1]

By ALFRED MANTLE, M.D.,
Durham.

THE condition of laryngismus in the young is alarming both to the friends of the patient and also to the medical man. I am not now, however, going to speak of that form of laryngeal spasm in which stridor is a marked feature, and which is in my experience by no means common, but of another form, not so much characterised by stridulous breathing as by a distinct catch in the breath, bringing respiration temporarily to a standstill. I cannot do better than give an example of the class of cases of which I speak.

An infant which may be a few weeks or months old is observed suddenly to awake out of its sleep and struggle for breath. The facial muscles may show some slight convulsive disturbance, and in some the face and lips are livid, while in others they are very pale. The mother tells you she thought her child was suffocating, but that eventually it recovered its breath, sometimes, it is said, with a more or less crowing inspiration, but frequently, in the simplest form of the disease, merely a disturbance of the natural rhythm of respiration is noticeable. These attacks are said to occur many times during the day and night, and to come on without any disturbance whatever, but the excitement of laughter or crying or the effort of sucking sometimes provoke the seizures. They are common when the child first wakes in the morning.

Laryngismus is met with in the newly-born infant, but is most common during the first half year, and must be the disease which Bouchut, in his memoir on Croup, speaks of when he says, "croup is observed in newborn children and in children at the breast." Thus far, we have a spasm confined to the laryngeal muscles only; but experience teaches that, however slight this may be, if it continue day after day and week after week, other muscles will sooner or later become involved. The flexors and adductors of the hands and feet first show signs of irritation, producing carpo-pedal contractions, or that condition now known as tetany; but should the laryngismal attacks become more urgent, a condition of general eclampsia will soon follow. To put it in Dr. Cheadle's words, "Laryngismus, tetany, and general convulsions are the positive, comparative, and superlative of the convulsive state in children."[2] Of course it is to be understood that Dr. Cheadle here speaks of convulsions produced by laryngeal obstruction.

What are the causes of this form of laryngeal spasm? There is no doubt that rachitis predisposes to such attacks, and it has been said by some that rickets is always present; but we know this not to be the case. The frequency of a rickety condition, however, led some to believe that the attacks were produced by pressure on the head when the child lay on its back, through the cranial bones being in a condition of defective ossification.

A much more likely cause, as Dr. Hughlings Jackson has pointed out, may exist in the weakened and deformed chest wall of rickety children interfering with the proper and complete aëration of the blood, for we believe that increased venosity tends to continual excitement and irritation of the respiratory centres.

Anæmia, on the other hand, may be said to favour the condition, for we sometimes see these attacks during the exhaustion consequent on diarrhœa and vomiting, and when the body is ill-nourished and emaciated by defective diet in hand-fed children.

Another cause, described by Dr. Goodhart in his book on the *Diseases of Children*, is found in the epiglottis, for he states that Dr. Lees found in one of these cases the epiglottis excessively recurved in its vertical axis, as if it had been bent in half down the middle, and that thus the ary-epiglottic folds were brought almost into apposition, and a mere chink was left between them. Dr. Goodhart says that more or less of this recurvation is a common thing in infancy and early childhood, and may explain some of the cases of laryngismus which would otherwise be swept into the net of convulsive laryngismus on account of the coexistence of a very moderate rachitis. "These symptoms," says Dr. Goodhart, "gradually pass off as the child gets older, and are little relieved by treatment." Such a cause is, no doubt, very difficult to diagnose.

Then, again, we have a similar train of symptoms produced reflexly by enlarged bronchial glands irritating branches of the vagi. *Post mortem* this has been proved to be the case, but it only accounts for a very few cases of laryngismus, whilst enlargement of the thymus gland, which has also been assigned as a cause, will account for still fewer.

I wish to draw your attention to yet another cause which experience has taught me occasionally exists. Almost the first case of laryngismus I had under observation was a very anxious one. Three or four years ago I was asked to see a child 8 weeks old, decidedly rickety, and from the description given by the mother, I concluded that the child was suffering from laryngismus.

I was fortunate enough, a few days afterwards, to witness one of the attacks complained of. The child, while being nursed on its mother's knee, and I being about to examine it, suddenly stopped breathing; the eyes were fixed and directed upwards, the conjunctivæ were insensible to touch; there was lividity of the lips and face. A struggle for breath took place, followed by a shrill inspiratory sound, the attack then suddenly ending with the child crying. These attacks would come on many times, both by day and by night, the mother stating that she had always to raise the child to prevent it suffocating.

I treated the case as one of laryngismus due to rachitis, but with no good result.

On making an examination of the throat on one occasion I was much struck with the thickened and elongated condition of the uvula. The tonsils, as would be expected, were not more than visible at that age, but the uvula and palatal folds were much congested and thickened, with a viscid secretion about the parts. After applying astringents locally and administering bromides internally without any benefit, I urged upon the parents the necessity of excising the uvula, but could not obtain their consent. They consulted another medical man, but the child's condition grew worse, the attacks were more frequent and urgent, carpo-pedal contractions and general convulsions were produced, and a certain amount of exophthalmia was noticeable. I was now asked to operate. I removed the uvula, and, with the exception of one slight attack on the same evening, no further spasm took place, and the child is now a strong healthy boy.

Here was a case where a child suffered these attacks for four months, the cause evidently having been irritation by an elongated uvula in a rickety child, producing spasm of the larynx, and eventually general convulsions.

Dr. Gay, late clinical assistant at the Great Ormond Street Hospital for Children, related to me a similar case in which a very elongated uvula was noticed in a case of laryngismus. The case was sent to the surgeon to ask the advisability of removing it.

[1] Read in the Section of Diseases of Children at the Annual Meeting of the British Medical Association, held in Leeds.

[2] "Pathology and Treatment of Laryngismus, Tetany, and Convulsions," *Lancet*, vol. i, page 919, 1887.

The operation was not done; tetany and general convulsions even ually developed, and the child died unrelieved. I have noticed a emark by Dr. Sidney Ringer, in his *Handbook of Therapeutics*, which is the only reference I can find to the palate as a cause of aryngismus. He says:[3] "It may be useful here to advert to a condition not uncommon in infants. An infant in poor health frequently wakes up at night from 'a catch in the breath.' From ome unexplained reason, it cannot for a time get its breath, and wakes up with a loud snore. This condition is altogether diffe- ent from that of laryngismus stridulus, and the fault appears to ie in the soft palate, not in the larynx; moreover, it is not due to nlarged tonsils, as this 'catch in the breath' occurs in children of ender age, long before the morbid condition of the tonsils takes place."

I must say that I have not since seen any case with such an mount of elongation and thickening of the uvula, although, having xamined a considerable number of cases, I have nearly always ound the soft palate considerably congested, and I would strongly rge everyone to examine the fauces in all cases of laryngismus. t is just possible that the treatment which I have adopted in very case since, that of cold sponging, so strongly advocated by)r. Ringer, has been the means of preventing such an aggravated ondition developing, and I can strongly endorse what Dr. Ringer ays of its good effects. An important part of the treatment, owever, is diet and fresh air. Most of these children are hand- ed and breathing bad air; they get not only too much starchy ood, but also a deficiency of albuminates and fats.

The hygienic surroundings are usually bad. It is a condition uch more common in the early part of the year than at any ther time (Dr. Gee says from January to the end of June), and ore common among boys than girls. Several cases may occur n a family, the same causes operating in each case. The majority f such cases get well if the right treatment is adopted in time, ut I would strongly advise an examination of the throat as a natter of routine in all cases of laryngismus, for occasionally the ause will be found there, and if so may easily be removed.

NOTE ON A POSSIBLE MEANS OF ARRESTING THE PROGRESS OF MYXŒDEMA, CACHEXIA STRUMIPRIVA, AND ALLIED DISEASES.

By VICTOR HORSLEY, B.S., F.R.S., F.R.C.S.,

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t is believed, probably, by most practitioners and pathologists of he present day, that the diseases known as myxœdema, cretin- m, cachexia strumipriva are the result of want of function of the hyroid gland. This position, at any rate, is that which received ost support from the committee appointed by the Clinical Society nder the chairmanship of Dr. Ord to inquire into the subject, and has been endorsed by everyone who has paid personal attention the point with the exception of Professor H. Munk and Dr. robnik. For the purposes of this brief note I shall assume hat the view of the majority is correct.

Quite recently a very valuable paper has been written on the rominent early symptom which follows total ablation of the e thyroid, namely, tetany, by Dr. Anton von Eiselsberg, Assist- nt in Professor Billroth's Clinic. In this monograph (entitled *eber Tetanie im Auschlusse an Kropf-operationen*, Wien, 1890), r. Von Eiselsberg, after a masterly examination of this dangerous henomenon, gives the records of an elaborate and careful series experiments upon cats, from which he confirms the opinion ferred to above in the fullest manner, and adds many exact re- lts to the literature of the subject. I particularly wish, how- er, to draw attention to the cases in which he repeated and ex- nded Professor Schiff's fundamentally important observation on e effects of transplantation of the gland into the peritoneal vity, etc.

In 1886, I referred in this JOURNAL[1] to Professor Schiff's oneering investigations. That observer found that in dogs hyroidectomy loses its danger, and an essential amount of its fect, if one previously introduces and fixes in the abdominal cavity other thyroid glands from an animal of the same species."[2]

Dr. von Eiselsberg, pp. 23, 24, 25, describes a number of similar experiments in the following manner: In nine animals extirpation of one (the left) thyroid gland was performed, the lobe kept warm in normal saline solution, and quickly transplanted either into a fold of mesentery or into the subperitoneal tissue. At dates varying up to three weeks the other half was removed from the neck. Of the nine animals eight died of typical symptoms of loss of the thyroid. *Post-mortem* examination showed in these eight fatal cases that the transplanted gland had not healed *in situ* or was degenerated. The ninth animal, however, survived, and increased in weight. It was killed, and a *post-mortem* examination revealed the fact that the gland transplanted into the peritoneal cavity had organised, was vascularised, and in no way degenerated. In four more cases the transplanted gland was placed between the fascia and the peritoneum. Of these, in three cases the transplantation failed, owing to the necrosis of the graft, and of course the animals succumbed. In the fourth case, however, the animal was perfectly well (and had grown) three months and a half after the extirpation. It was killed, and, on *post-mortem* examination, the gland was found in functional activity in the abdominal wall, highly vascularised, etc.

These results show conclusively that the transplanted gland, if it can be got to live after the grafting, will, in its new situation, provide for the needs of the body as well as if it were in the neck, and consequently saves the life of the animal. It seems to me that these observations of Professor Schiff, and of Dr. von Eiselsberg, are of especial value, as they suggest to my mind that possibly the diseases mentioned before, namely, myxœdema, etc., may be treated with success by transplanting thyroid tissue into the patient. In the first place these diseases are hopelessly incurable with present remedies, and consequently anything possibly remedial not endangering life is justifiable. The transplantation of a thyroid gland from one of the lower animals into the peritoneal cavity, or into the subcutaneous tissue might be followed by the successful growth of the grafted gland, and so bring about the arrest of the disease process by reason of the restoration of the lost function. Performed under strict aseptic conditions the operation would be without risk or practically inconvenience.

A far more difficult question is that involved in Professor Schiff's dictum, and which experiment will solve, namely, What kind of gland would be best for the purpose? Doubtless one from an anthropoid ape; but the infrequency of opportunity and very considerable expense would afford some obstacles (not, however, insurmountable by any means) to this proposal.

I have elsewhere shown that the thyroid gland of the sheep very closely resembles in anatomical characteristics that of man, and further that the sheep, of all animals as yet experimentally investigated in the present question, resembles man most in the duration and character of its symptoms after thyroidectomy. I would propose, therefore, when opportunity offers, to try transplanting a portion of the thyroid gland from the sheep. By a portion, I mean that possibly the grafting of one lobe or even half, would be more successful than an attempt to transfer the whole gland; and moreover, if the operation were successful, no doubt the imbedded piece would hypertrophy to meet the requirements of compensation.

A point of practical difficulty would arise when one attempted to gauge the success of the operation, although doubtless the development of the grafted gland, or the reverse, its atrophy, might to some extent be estimated by palpation. The real plan, however, would obviously be that of watching the symptoms very closely, and if no improvement resulted at the end of two or three months, the operation should be repeated.

From experimental evidence, I would venture to suggest that the progress of the anæmia would be the best indication of relief. I may perhaps be allowed to take this opportunity of correcting ideas which have been attributed to me concerning the relation of the thyroid gland to so-called blood formation, and for which I have been in consequence adversely criticised.

Attention undoubtedly in the past has been too much given to the origin of the corpuscular elements of the blood as easier of observation than the source of the components of the plasma; and, indeed, the expression hæmapoiesis, or blood formation, has provisionally been limited to speaking of the corpuscles.

In 1885, I pointed out that marked anæmia followed loss of the thyroid gland, and that this anæmia included a fall in the number

[3] *Handbook of Therapeutics*, 11th edition, p. 70.
[1] Brown Lectures, 1885.
[2] Transl., p. 440, *Revue Médicale de la Suisse Romande*, 1884.

of red corpuscles. I drew attention, however, at the time to the probability that the thyroid gland in some measure acted on effete products in the plasma, and that, in the absence of such action, the anæmia might in part be secondary. It may be reasonably urged that this is not logically the question of "blood formation," and in one sense it is not, but in another and broader one it is.

We run, it seems to me, a danger of narrowing our views if, while yet aware of the constantly-changing metabolic processes which the blood not only subserves but participates in, we look to one set of organs—so-called "blood-forming"—for production of such a highly complex and ever-changing fluid tissue. It is always difficult for an incomplete experience to generalise without becoming vague, and I am thoroughly conscious that what I wish to express may not be evident to my readers. Perhaps it will be clearer if I add that, from the standpoint now advocated, the blood plasma not only, of course, is reinforced by digestive products absorbed through the alimentary system, but that, while giving up components on the one hand, it is added to and altered on the other by practically every tissue it passes through, by some more, by some less. We have only to consider closely the phenomenon of secretion to recognise the probable truth of this.

Among the tissues which more especially influence the blood plasma, I would, as in 1885, put the thyroid gland among the first, and I believe it operates more especially on the precursors or relatives of the mucinoid bodies. In this sense it seems to me to deserve the epithet of "blood forming." Failing to do its duty, clearly the gravest disorganisation of the blood as a whole—for of course the corpuscles are not independent of the character of the plasma bathing them—would result. Hence the anæmia.

I would now refer back again to the corpuscles. I do not yet see reason to doubt my former conclusions, namely, that the embryonic tissue in the gland is truly hæmacytopoietic, and the grounds for those conclusions need not be repeated here; but of course they have yet to be further tested by further research, and substantiated or rejected as the case may be.

Finally, since the common term "blood forming," however much one may object to it, is not likely to fall into disuse, I may remark that, if we temporarily adopt with a protest the terminology usually conveyed by it, the views above expressed embody its meaning in suggesting that the thyroid "forms" both plasma and corpuscles, and that in addition the latter suffer if the plasma becomes abnormal by failure of the proper function of the gland.

ON TWO CASES OF POISONING BY ANILIDES (EXALGINE AND ANTIFEBRIN).[1]

By T. JESSOPP BOKENHAM, M.R.C.S., L.R.C.P., L.S.A.,
AND
E. LLOYD JONES, M.B., B.C.(Camb.).

Considering the large number of artificial drugs which have recently come into general use, and the imperfect state of our knowledge as regards their exact physiological action, it is somewhat surprising that more mishaps have not occurred as a consequence of their use. Although acetanilide (antifebrin), antipyrin, and similar drugs are very largely prescribed, and are even used by patients on their own responsibility, yet there seems, judging from the English journals, to have been a considerable immunity from alarming toxic effects. This being the case, we feel that no apology is needed for recording the two following cases.

Case I.—M. L., a girl, aged 24 years, had myelitis, with great pain in the back and limbs. There was no elevation of temperature. On June 3rd it was decided to give exalgin (methylacetanilide) with a view of relieving the pain. From this date until June 8th the drug was given in doses of gr. ij ter die. The dose was then doubled, but as even this amount failed to give relief it was further increased on June 10th to gr. vj ter die, and continued until June 17th, when symptoms of poisoning first set in. At 10.30 A.M. on the 17th the lips and cheeks were noticed to be blue, the pulse was small and compressible, but not rapid, temperature being normal. Though there were no very urgent symptoms the drug was discontinued, and brandy ℥ij was ordered every hour. The patient stated that the medicine made her feel "sick and giddy," that her sight was indistinct, and that there was a feeling of weight at the epigastrium. At 3.30 P.M. a few inhalations of amyl nitrite were given; this considerably emphasised the blueness, and caused marked dilatation of the vessels. It was thus evident that the whole of the circulating blood was profoundly changed. The cyanosis continued to increase, and at 3.45 P.M. the patient vomited, after which it became still more marked. At 4.10 P.M. her nails, lips, and cheeks were deeply cyanosed; frothy saliva was escaping from her mouth; she was delirous, and appeared to recognise no one. Her feet were not blue nor cold. Temperature 99.8° F.; pulse 144, very small, regular, compressible. The amount of stimulant was increased, and liq. strychninæ ♏ij given hypodermically, a mixture containing tinct. digitalis ♏x being also given by the mouth. She began to improve, and at 9 P.M. her condition, save for slight cyanosis, was fairly normal. She slept well at night, and had no further untoward symptom.

As regards this patient's previous condition it should be stated that her bowels had been opened only by purgatives and had not acted on June 14th, 15th, or 16th. She had not menstruated for some months.

Case II.—K. B., a lady, aged 43, very subject to migraine, was seized with a severe attack shortly after rising on June 5th. She had been for some months much relieved by antipyrin on these occasions, but latterly this had failed; acetanilide, however, in doses of 5 grammes, had generally been successful in relieving the pain.

A short time before this date, thinking that the introduction of a bromide atom into the molecule would render acetanilide more powerful as an analgesic, one of us had obtained a specimen of monobromacetanilide from Schuchardt, of Görlitz. Having used this body with personal benefit, the patient was given two powders (0.25 gramme in each) to use for the next migraine. At 10.30 A.M. the patient took one of these powders, and, getting no relief, at 11 A.M. took a second. At about this time she noticed her lips were rather blue, but laid no stress on it. Finding the headache no better, at 11.30 she, of her own accord, took 0.5 gramme of acetanilide, and repeated this dose at 12.15 and 1 P.M.; headache not relieved. She had a good appetite for lunch, but it was noticed that she was very cyanosed, and she confessed to feeling "almost intoxicated, and very giddy." She took some whisky and lay down, but the headache became worse. At about 3 P.M. her clothes "felt tight, and the pressure almost suffocating." She tried to undress, but was seized with pain in the left shoulder starting from the cardiac region, and extending to the tips of the fingers. She was quite unable to call anyone to help her, and lost consciousness. When found soon after, however, she was conscious again, feeling only giddy; the headache persisted, and the pain in the arm returned with every attempt at movement.

At 5 P.M. her condition was as follows: The pulse was 108 and easily extinguished; the respirations 24, somewhat shallow; the temperature was 99° F.; heart's action feeble, and a mitral systolic murmur at apex; mental condition perfectly normal; arm still painful on movement, and a tendency to close the eyes unless speaking. On being questioned as regards this closure of the eyes she answered that it was only because it "wasn't worth while keeping them open"—not because she was drowsy. She felt hungry and thirsty, and took some tea with bread and butter. The cyanosis was said to be less intense than in the afternoon.

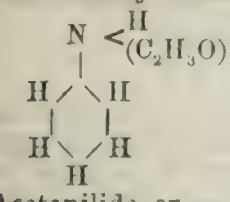
At 7 P.M., the heart being very weak, nitro-glycerine $\frac{1}{100}$ grain was given. Great dilatation of vessels was produced, with increase of cyanosis. The heart sounds were feeble; there was no murmur. Alcohol, strychnine, and digitalis were now given at frequent intervals, and the cyanosis diminished.

At 11 P.M. the temperature was 100.2° F.; pulse 120, soft; respirations 28. Faintness was induced by the least movement, and pain in the shoulder and arm was still present; headache no better; cyanosis much less. Next morning, at 11, the temperature was 99.4° F.; the patient had not slept during the night, but the cyanosis was almost gone, the headache was better, and the pulse stronger; hands distinctly puffy. A stimulant treatment was adopted through the day, and in the evening the patient was practically well. Urine was watched for albumen and blood residues, but none was found. No very marked anæmia followed the attack. It is to be noticed, also, that this patient became ill on the third day of normal menstruation. Bowels were perfectly normal throughout.

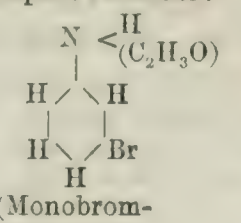
Remarks by Mr. Bokenham.—The drugs used in these two cases, together with the symptoms produced, were much alike

[1] Read in the Section of Pharmacology and Therapeutics at the Annual Meeting of the British Medical Association, held in Leeds.

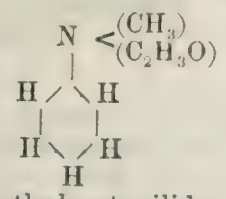
The connection between the drugs will be clearly appreciated from a study of their graphic formulæ:



(Acetanilide, or "antifebrin.")



(Monobrom-acetanilide.)



(Methylacetanilide, or "exalgine.")

In each case the carbon atoms of the benzene ring have been omitted for the sake of clearness.

The condition of the blood in these cases reminded me of a similar condition produced in animals by Dr. Lauder Brunton and myself by the administration of nitrites, hydroxylamine, and some other nitrogenous bodies. In these the blood was found to contain much methæmoglobin, and in many cases to coagulate with a well-marked buffy coat. The heart, too, was much weakened, and it would seem that in all these cases the enfeeblement was due to the blood acting as but a poor nutrient medium to the heart substance. It is strange that there should not have been (in the second case) any marked affection of the mental condition.

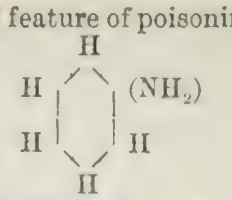
As regards the condition of the patients which led to the change in the blood, it is very difficult to obtain any clue. In the first case, the antecedent constipation may have led to an accumulation of exalgine in the body sufficient to produce toxic effects. As, however, the drug is excreted for the most part by the urinary organs, and as these were unaffected, it is difficult to admit of this as being the true explanation. It is not possible that any such cause could have been at work in the second case, as the symptoms seem to have commenced soon after the first dose, which was a very small one. If the whole result is to be attributed to the bromine atom, in the case of the monobrom-acetanilide, there remains still to be explained the fact that no cyanosis followed its use by myself. The most attractive theory is that the toxic symptoms in each case were due to an unusual decomposition of the drug in the body; and, in the second case, it is very possible that menstruation may have been the means whereby some new substance accumulated in the blood, which reacted on the drug; or, to put the matter in another way, the accumulation of a substance (possibly of the nature of an albumose) in the body may have caused: (1) the menstruation; (2) the headache; (3) the unusual action of the drug. Mr. Jones has been unable to obtain exact evidence as to the time at which the menstrual nisus should have appeared in his patient. It is, of course, possible, though highly theoretical, that in her, too, the conditions which produce menstruation were present, but were prevented from acting in the ordinary way by her physical condition. It will not do, however, to press this point further than to bear it in mind as a possible cause of some cases of poisoning. Unfortunately, the condition of patients is not mentioned in other recorded cases. Popular beliefs, which are well known, as to the condition of a woman at the catamenial period, such as the inadvisability of her entering a dairy or touching fresh meat, etc., may have, after all, some foundation in fact.

Acetanilide had once an unexpected, though not alarming, effect on myself. During an attack of typhoid fever last year I was given large doses of acetanilide with the usual fall of temperature; one day, however, the drug failed to lower temperature, and the urine passed during that day was noticed, after standing for some hours, to have become dark chocolate coloured. This never occurred on any other occasion, and I certainly did not suffer from cyanosis. Here, too, it seems that the drug was decomposed in an unusual way.

In conclusion, it may be useful to state briefly the results obtained by experiments on animals. As regards acetanilide, Lépine produced in dogs trembling, "apathy," weakness, and fall of temperature, with loss of excitability of peripheral nerves. The arterial blood became, in some cases, of a dirty brown colour, loaded with methæmoglobin; the corpuscles were said, however, to be unaltered either in number or shape, and the serum was not tinged. Analysis of the gases of the blood showed great deficiency in oxygen. Large doses depressed the heart's action.[2]

As regards "exalgine," Binet[3], working with methylacetanilide, has observed in cats and rabbits similar changes in the blood, with much salivation.

Cyanosis is also a marked feature of poisoning by aniline: the base



from which all these bodies are derived.

[2] Hæmoglobinuria has been recorded, however, as a symptom of acetanilide poisoning in human beings.

[3] *Rev. méd. de la Suisse Romande*, April—May, 1889.

CASE OF HEPATIC ABSCESS, SECONDARY TO SEVERE PELVIC PERITONITIS FOLLOWING UPON SALPINGITIS, WITHOUT DEFINITE SYMPTOMS DURING LIFE.[1]

By JOHN LINDSAY STEVEN, M.D., F.F.P.S.G.(Exam.),
Assistant-Physician and Pathologist Glasgow Royal Infirmary; Lecturer on Pathology St. Mungo's College; Extra-Physician Royal Hospital for Sick Children, Glasgow.

This case is one of great interest from many points of view; and although I cannot enter into detail with regard to the clinical aspects, yet, from the purely pathological standpoint, many most interesting considerations arise. Not the least interesting of these is the fact that a patient should be the subject of such exceedingly severe inflammatory changes in vital parts without their giving rise to symptoms which would at once direct attention to the organs mainly involved. Yet so it was in the present case; the patient from first to last made no complaint referable to the pelvic organs. The cause of the pelvic peritonitis is also another interesting problem which arises out of a consideration of the facts met with in the case, and the relationship of the hepatic suppuration to the pelvic inflammation is well demonstrated.

I shall first of all give an account of the *post-mortem* examination, and then make one or two remarks with regard to the bearing of the different facts in the case. The patient was a domestic servant, aged 18, unmarried. The case during life was regarded as one mainly of phthisis pulmonalis, the patient having been admitted complaining of pain in the back and belly, and with a history of pleurisy of the left side on two occasions. There was no spit, but little cough, and a very distinct hectic temperature. No signs of disease could be detected in the apices, but there was marked dulness at the left back. The menstruation was regular, but latterly scanty and at times delayed. There was slight albuminuria, probably due to menstrual blood. There was no diarrhœa. There was no family history of tubercle.

Post-mortem Summary,—Pelvic peritonitis, with uterine catarrh and salpingitis; secondary pyæmic abscesses of liver and spleen; old pleurisy of left side, with fibrous condensation of left pulmonary base; double vagina—one rudimentary.

External Appearances.—A fairly well-nourished body. On opening the peritoneal cavity, it is found that the left lobe of the liver is adherent to the anterior abdominal wall, and that thick yellow pus issues from beneath the ensiform cartilage. The intestines are considerably distended; the pericardium contains several ounces of clear serous fluid; and the lungs, except at the extreme base on the left side, are quite non-adherent.

Chest.—The heart weighs 9 ounces, and, with the exception of some paleness and flabbiness of its muscular tissue, presents nothing abnormal. The right lung presents quite healthy characters. The left lung is very firmly adherent at the base, and its tissue in the lower lobe has undergone a fibrous transformation; elsewhere its tissue is healthy.

Abdomen.—The diaphragm is generally adherent to the liver and to the enlarged spleen, so that it is necessary to remove liver, spleen, and stomach *en masse*. The adhesions between liver and diaphragm are not very firm. On section of the liver it is found to be the seat of very numerous, large, ragged, abscess cavities containing a mixture of bile and pus. It weighs 70 ounces. One or two small abscesses are also seen in the spleen, which is more firmly adherent to the diaphragm than the liver is, and weighs 11½ ounces. The mucous membrane of the stomach is quite healthy, and the hepatic papilla is normal and pervious. The

[1] Read at the Glasgow Medico-Chirurgical Society.

kidneys are somewhat enlarged and soft, and weigh respectively 6¾ and 6½ ounces. The lower margin of the great omentum, which is spread out over the distended bowels, is bound down to the brim of the pelvis, and, on separating the adhesions to the pelvic brim, pus escapes. The whole cavity of the pelvis, namely, Douglas's pouch and that between the uterus and bladder, is the site of an intense purulent peritonitis, the pus being confined in loculi formed by adhesions. The aspect is not at all that of a tubercular peritonitis. The pelvic organs are removed *en masse*. The rectum and urinary bladder are found to be quite healthy. The os uteri shows a catarrh of the mucous membrane, and a similar catarrh is observed at the fundus uteri. Both Fallopian tubes are slightly distended, containing a small quantity of puriform fluid, and their fimbriated extremities are bound down in the peritoneal adhesions. The greatest formation of pus has taken place immediately around the uterus, and all the facts of the case point to a pelvic purulent peritonitis set up by extension from below, the hepatic and splenic conditions being secondary to the pelvic.

In the mesentery there was found a gland, the size of a hazelnut, filled with pultaceous semi-calcareous material. The following additional note as to the condition of the generative organs is supplied by my colleague, Dr. James K. Kelly. "At the right side of the orifice of the vagina, close to the edge of the hymen, is an opening bounded by a thin edge of mucous membrane, about half an inch in length from before backwards, which can be followed up in the side wall of the vagina for about an inch and a half, where it seems to end in a *cul-de-sac*. The fimbriated end of the left Fallopian tube is greatly dilated and cystlike, and the abdominal orifice is wide, while the fimbriæ themselves seem normal."

REMARKS.—As I have already observed, perhaps the most striking feature in this case is that the exceedingly coarse organic lesions, which I have just described, should have been more or less latent throughout, that is, that they should have gone on to a fatal issue without calling forth symptoms sufficiently definite to direct attention to the chief seat of disease, for I understand that from first to last the state of matters in the abdomen was not suspected. The pleurisy was detected at once, and treated throughout, but nothing occurred to throw suspicion upon the abdomen or pelvis. In the month of September last, while in temporary charge of wards in the Royal Infirmary, the patient was under my care for two or three days, and at that time, with the exception of pleurisy, nothing else was made out. Although she was under observation from this time until the time of her death some weeks afterwards, nothing occurred to direct attention to the abdomen.

The next circumstance which demands a little attention is the causation of the exceedingly severe suppurative pelvic peritonitis in an unmarried female. In this connection the condition of the Fallopian tubes is, of course, most important, and I think there can be very little doubt that the peritonitis originated in connection with them. It is more difficult, however, to be sure of the cause of the salpingitis, and there is no clinical history to point the way, One very common cause of severe pelvic inflammation of this kind is undoubtedly gonorrhœa, and it is possible, though we cannot tell, that this may have been the starting point of the patient's troubles.

There can be little doubt that the abscesses of the liver had been directly set up by absorption of septic matter from the pelvis, and that we had to deal with a pyæmia limited to the portal circulation. It is, perhaps, a little difficult to account for the splenic abscesses in this way, but there was so much matting of the parts all around the liver and spleen, that I am not surprised that one or two small suppurations occurred in the latter organ. General pyæmia is, I think, excluded, because no suppurations were found in any other part of the body, and the pleuritic condition at the base of the left lung was not pyæmic.

The only other circumstance calling for remark is the anatomical peculiarity present in the generative organs in the shape of a rudimentary vagina. I examined Dr. Kelly's careful dissection of the parts, and I had no difficulty in agreeing with him that we had to deal with a case of double vagina, one being in a rudimentary condition. This, of course, was of morphological rather than pathological interest.

IT is proposed to hold a French Colonial Medical Congress in the spring of the present year. The meeting will probably take place at Marseilles.

HISTORY AND USES OF THE PROTECTED SURGICAL ELECTRIC LAMP.

BY N. STEVENSON, M.R.C.S., L.D.S.

IN 1883 I designed an electric light for dental work. The lamp was made expressly for me by the Swan Electric Light Company. It was fitted into an ivory socket firmly screwed to a metal tube like a No. 8 catheter, and covered with a glass shade, so as to allow sufficient air space, to prevent contact at any point between the two. The tube passed through a suitable wooden handle, and being open at each end, allowed the air to circulate freely. It was described at the time in the medical journals, and exhibited at the Pathological and Odontological Societies of London and Edinburgh, but the difficulty in getting the lamps and unsatisfactory working of the batteries made me abandon the use of it; now, however, that better lamps can be easily obtained and that the batteries are immensely superior to the old ones, I have taken to use them again and adapted them to other surgical purposes besides my own.

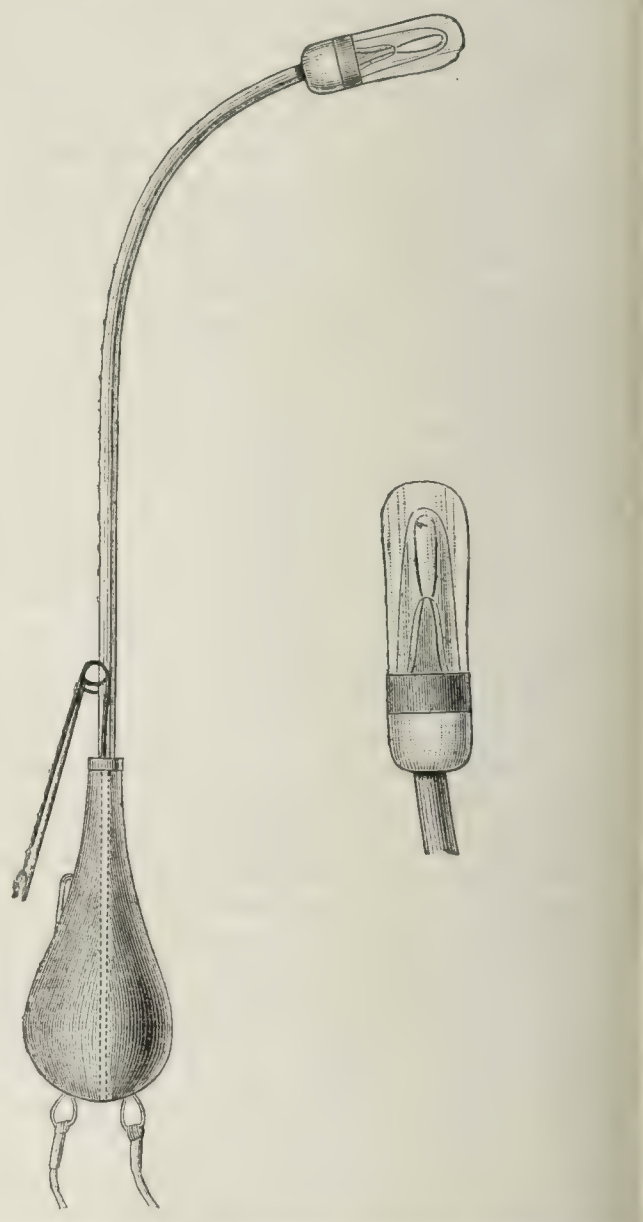


Fig. 1.—Diagram, half size, of lamp for ordinary purposes, showing the lamp full size.

Fig. 1. I find this lamp useful for any kind of examination where light is required without undue heat. It may be used in contact with any part of the body, if it is not kept lighted too long; for this reason I prefer to let the patient control it if possible, for then it can be lit at pleasure, and confidence is established. It is valuable in most operations of dental surgery, but especially so in preparing difficult cavities for fillings, or for working out nerve canals and in detecting exposure of the pulp. In cases of closure of the jaws from spasm or other cause, it gives enough light through a gap in the teeth to enable one to see perfectly the whole cavity of the mouth. It may be put into one nostril to examine the other by lighting it up through the septum,

It is useful also (with a slight alteration in the bend of the stem) for gynæcology, and in abdominal surgery specially valuable.

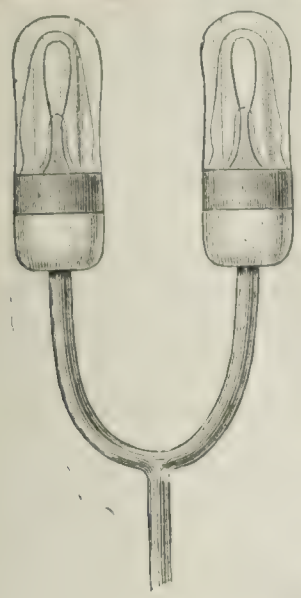


Fig. 2.

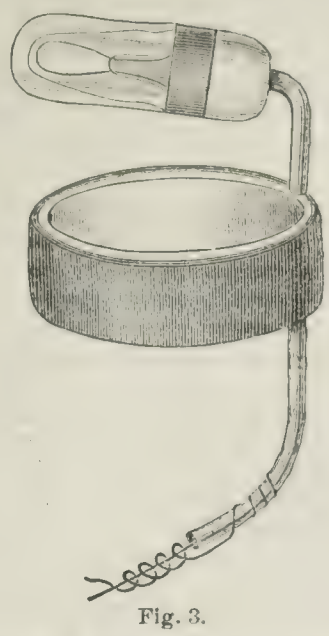


Fig. 3.

Fig. 2.—Five-volt lamps for lighting the bones of the face, either by mouth or nostrils.

Fig. 3.—For dental operations. Both full size.

Fig. 3 is another application chiefly useful for scaling long teeth sloping inwards. The lamp is fixed by the air tube to a flat silver ring, which is surrounded with gutta-percha, so that it may be conveniently held in position by passing the forefinger through it. Whilst the lamp lights the whole floor of the mouth, it also keeps the tongue out of the way, and the ring prevents the mouth from closing and protects the finger from the teeth.

I fitted another into the tongue plate of Mr. Smith's gag for cleft palate operations; with this the surgeon gets a perfect light, and is relieved from the nuisance of having constantly to dodge his own shadows; this, indeed, is one of the chief advantages in all these lights. The necessary air tube here is carried in a groove in one side of the lower limb of the gag, and emerges into the open air near the hinge. The operator regulates both these instruments by pressing with his foot or knee a specially arranged switch for the purpose. If a constant light is wanted for a long operation, air would have to be forced through one tube and out at another by means of a similar arrangement to that used for diffusing spray, but although this would be less complicated than the hydraulic plan, it is quite unnecessary for ordinary purposes.

Dr. Felix Semon suggested that I should try the experiment first employed by the late Professor Heryng to diagnose empyema of the antrum. He used a five-volt lamp fixed to a tongue depressor, and in a perfectly dark room, lighted the bones of the face from the mouth. I have repeated this with two five-volt protected lamps (Fig. 2) on one stem, and have further modified it by introducing them into the nostrils. The bright red in the facial cavities and the lurid glare of the soft tissues gives the face a ghastly aspect, the practical value of which is that if either antrum is diseased or filled with pus, it will be less luminous than the other, and the abnormal condition will be detected. Of course, a naked lamp cannot be used in the nostrils, as the heat would be unbearable.

I cannot estimate the practical value to others of these instruments, but I think there must be many who will find them as I do of great service. I have myself made or mounted all those I have referred to, and if anyone wishes to do the same, I may as well mention that the lamps are from the Edison and Swan Electric Light Company, and are called five-volt pencil-shaped micros. In mounting the most important points are to have the lamps without other attachment than the conducting wires, and to hermetically seal the glass cover to the socket. Those who do not care to make them can obtain them with the batteries from Mr. Schall, Wigmore Street. The carbons are so delicate that the instruments must be handled with great care; a drop of three inches on anything hard will probably break them. I always try to place them gently on something soft, like blotting paper or velvet.

THE Mextorough Montagu Cottage Hospital was opened on January 30th.

THE PROPAGATION OF LEPROSY.

BY ERNEST F. NEVE, M.D., F.R.C.S.E.,
Surgeon to the Kashmir Mission Hospital.

IT is well known that (1) heredity is one of the means of propagation of leprosy. This is, however, a less potent factor than might be supposed. Out of twenty-two cases in which I made careful inquiry there was no hereditary history in fifteen.[1] (2) Direct inoculation has been almost, if not quite, proved to be a possible source, as in Arning's case.[2] It appears improbable that it is a frequent origin. (3) A considerable number of cases have been recorded[3] in which there are reasons to suppose that the disease has been communicated by a leper to a previously healthy person. I have quite recently heard of a case in this country in which a healthy woman who had lived with a leper became leprous after the death of the latter. Such propagation may be due to vaccination with contaminated lymph, or to contagion from clothes and eating vessels, or even to aërial transmission. (4) There has been for many years a popular impression[4] that the eating of fish, especially when salted, is a specific cause of leprosy. This view has been adopted by a well-known surgeon,[5] whose eminence appears to me the strongest argument in favour of the theory; for the facts adduced in support are of slender proportions, and the theory has been repeatedly challenged.

That there is nothing intrinsically improbable in the transmission of bacilli by means of fish may be readily admitted. It has been recently pointed out by Edington[6] that dried salt fish contains organisms of putrefaction to a considerable extent. It is quite probable that the leprous bacillus might find a suitable nidus in fish; but the previous contact of leprosy virus with that fish would, I imagine, be a *sine quâ non*. And, if so, then fish is in no sense a cause of leprosy, but may be relegated to a minor place as a possible medium of cultivation. Thus, as we might expect, leprosy is common in districts in which fish is never eaten; and, conversely, it often does not exist where fish is eaten in large quantity. In this country the fishermen and boatmen are almost the only important classes of the community free from leprous taint.

It is probable that (5) many nutrient substances, if exposed to leprous contamination, may become sources of danger. Forster[7] has shown that various bacilli may retain their vitality in salt meat. Again, milk is especially liable to different forms of infection.

In Kashmir, leprosy exists to a considerable extent amongst herdsmen, many of whom never eat fish, but all of whom consume largely milk and milk products. One adult may eat from six to twelve pounds of curds in twenty-four hours; putrid buttermilk is considered a delicacy. It is easy to see that a leprous milkman might spread infection; and in this connection I would point out that Europeans, who drink unboiled milk, if they chance to live in or visit a district where leprosy is endemic, might contract the disease in this way; in fact, this may be the explanation of various recorded cases. Probably, however, some predisposition is required.

6. In this country, the distribution of leprosy corresponds to the mountain slopes and valleys of the trap or sedimentary series, and to a less extent to the plateaux of the pleistocene. On the flat, alluvial floor of the main valley leprosy is by no means common. I question, however, whether the geological formation exercises any influence on the propagation of the disease except in so far that leprosy tends to become endemic in certain valleys and tracts shut in by natural mountain barriers.

We know that a pathologist engaged in constant *post-mortem* work enjoys a freedom from accidental blood poisoning not shared by those fresh to the work. The surgeon who frequently attends cases of infectious disease appears to become similarly protected. Does living in contact with leprosy ever produce a like immunity?

The prolonged incubation period of leprosy, often of several years' duration, interferes with the solution of this question; it also renders—in connection with the question of contagion—the tracing of the original source of infection difficult, if not impossible.

1 *Lancet*, ii, 1889, p. 900.
2 JOURNAL, ii, 1888, p. 1171.
3 *Vide* (*int. al.*) JOURNAL, i, 1887, p. 1269; ii, 1887, pp. 335, 799, 1119, 1055; i, 1888, pp. 112, 1372.
4 JOURNAL, ii, 1889, p. 167.
5 JOURNAL, i, 1889, p. 1449.
6 JOURNAL, ii, 1889, p. 997.
7 JOURNAL, ii, 1889, p. 938.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.,

TEMPORARY CYCLOPLEGIA AFTER HEAD INJURY.

A CASE of head injury has recently come under my notice, which is of considerable interest from the peculiar group of eye symptoms which temporarily manifested themselves. Cycloplegia or paralysis of the ciliary muscle, involving complete loss of accommodation, is a condition occasionally met with combined with iridoplegia or paralysis of the iris, as in the ophthalmoplegia interna of Hutchinson, which is generally of specific origin. Double cycloplegia, however, without paralysis of the iris, is a very much rarer occurrence, and this condition is especially rare and interesting as the result of an injury to the head, as seen in the following case.

The patient, C. R., aged 17, first came under my notice on September 20th, suffering from a severe head injury, caused by falling down a ship's hold. He had two large scalp wounds, one over the right parietal bone and the other behind, just over the occipital protuberance. There was no fracture of the skull, and no focal symptoms of compression manifested themselves during the first two weeks, although he was closely watched. During the first week he lay in a semi-comatose condition. He could be roused by shouting to him and shaking him; would answer a question indistinctly and then relapse into his semi-comatose condition. There were no symptoms of paralysis. The pupils and eye movements were normal. At intervals he was violent, shouting and trying to get out of bed. During the second week he was more easily roused, answered questions more intelligently, and was much quieter, but complained greatly of pain in the head. During the third week consciousness was completely restored, but he was very irritable and easily excited.

On October 6th, sixteen days after the original injury, I first observed a slight internal squint of the left eye, and on examination I found the left external rectus was considerably impaired in power. I did not see the case for the four following days, being away from home. On my return on October 11th I found a very marked internal squint of the left eye, and the patient also complained for the first time that he could not see anything close at hand distinctly. On examination I found complete paralysis of the left external rectus. Both pupils were widely dilated, but contracted actively on exposure to light. There was no contraction, however, on convergence and in the effort at accommodation. With right and left eyes he could only read at the ordinary reading distance the largest of Jaeger's test types, No. 20, and that with difficulty. The distant vision, however, of both eyes was normal, as tested with Snellen's distance test types. With a + 6 D spherical lens he could read easily at the ordinary reading distance with either eye the smallest of Jaeger's type tests, No. 1 brilliant. This conclusively proved that the defectiveness of near vision was entirely due to loss of accommodative power, as near vision was at once rendered normally acute on artifically representing the change produced in the refractive power of the eye by the accommodative effort by means of a suitable convex lens placed before the eye. The fundus of both eyes was normal on ophthalmoscopic examination. In other respects he felt perfectly well. I found, however, that he could not walk along a straight line, and could not stand with his feet close together without support. Both knee-jerks were greatly exaggerated; front tap contractions present on both legs; cutaneous reflexes normal. It was remarkable to observe the gradual recovery of the accommodative power. On October 13th he could read at the ordinary reading distance without a lens Jaeger No. 16; on October 16th Jaeger No. 8; and on October 19th accommodation was completely regained, and he could read Jaeger No. 1 brilliant. The internal squint of the left eye gradually disappeared, but the left external rectus did not completely recover its power until about ten days after the complete disappearance of the cycloplegia. At this time, October 28th, he could walk quite steadily, but felt a little giddy occasionally. All the reflexes were normal. I saw the patient a month afterwards. His near and distant vision were normal, and he had remained free from all other symptoms.

This case presents a twofold interest: (1) from the very late appearance of the focal symptoms and their rapid disappearance, and (2) from the extreme rarity of recorded cases of paralysis of the ciliary muscles without accompanying paralysis of the iris as a result of injury to the head. This double clycloplegia was most probably due to nuclear mischief, which would explain the escape of the iris and the other ocular muscles supplied by the third nerve.

JAMES HINSHELWOOD, M.A., M.D.
Glasgow.

SCARLET FEVER AND THE PUERPERAL CONDITION.

IN the JOURNAL of January 11th, Dr. Thursfield discusses the question of the incidence of scarlet fever in the puerperal condition. From an obstetrical point of view, I think it would have been interesting, and would have enhanced the value of Dr. Thursfield's communication, if he had given further particulars of these cases.

There can be little doubt that the liability on the part of puerperal women to contract scarlet fever, or to be affected by other contagia, is greatest during the first three or four days after delivery—that is, prior to the healing of the lacerations and contusions which may have occurred, and whilst the mucous surfaces are comparatively large and most absorptive of infectious matter. Yet Dr. Thursfield seems to imply that women in this condition are as little liable to contract scarlet fever as those in the more normal condition of health.

In my own practice I can only remember three cases of confinement or miscarriage occurring in a house where scarlet fever has at the same time existed. All three cases developed the disease and one died.

I give below the main particulars of a case of scarlet fever which occurred in my practice four months ago:

Mrs. P. was confined of her third child on the morning of September 25th. A rupture of the skin of the perineum, extending up to the edge of the anus, occurred. On the morning of September 26th her temperature was normal, and she appeared to be doing well. In the middle of the following night she was found in an excited condition, with an abnormally high temperature. On September 27th her temperature was 105°, the rash out thick and bright all over her body and limbs, and the tongue thickly coated with whitish fur. On September 28th the fur was peeling off the the tongue in patches, and her temperature was a degree lower. On this day there was considerable pain and tenderness of the abdomen. The discharges were thin and abundant, and were kept sweet throughout by washing out the vagina at first with warm carbolic acid lotion, and later with Sanitas in warm water. On September 29th another practitioner saw her in consultation. The peeling of the tongue was now completed, the throat symptoms were not urgent, the tenderness over the uterus was less, the rash of a duller colour, and the temperature about 103°. The treatment had previously consisted of milk and milk and soda water, and a simple diaphoretic of acetate of ammonia and spirit of nitrous ether; but, at the suggestion of the consultant, this was replaced by salicylate of soda. After the third ten-grain dose an acute delirium supervened, which lasted during the night of September 29th-30th and part of September 30th, when it was impossible to administer anything by the mouth, Two half-grain morphine suppositories were placed in the bowel and produced a sound sleep, from which the patient awoke free of delirium. From this point defervescence was gradual, but continuous. There was slight albuminuria during the last fortnight she was under my treatment. There was a copious desquamation, which was not complete on October 19th, when she was removed in an ambulance to the Convalescent Home for Scarlet Fever at Stanmore. She ultimately made a good recovery.

The woman who had been engaged to nurse the case in the first instance expressed a desire to leave as soon as the scarlet fever was diagnosed. It was discovered at a later date that several children were down with scarlet fever in the house in which she lodged, and with these she had been in close contact immediately previous to attending the confinement of Mrs. P.

Stoke Newington. J. H. GARRETT, M.D., D.P.H.

UNIVERSITY OF ZÜRICH.—The total number of students at Zürich this winter semester is 501, of whom 168 are foreigners. The number of female students is 73; of these, 54 belong to the medical faculty.

A CASE OF ICTERUS GRAVIS IN A CHILD.

K. W., aged 2 years and 7 months, first seen October 27th; had en been jaundiced for a week. Present condition: tongue ghtly furred; pulse 70, regular; jaundice of moderate intensity; mplete absence of bile in the motions; urine deeply loaded with e pigment; no enlargement or tenderness of the liver. Was lered to be kept warm, and a mixture containing ten grains of osphate of soda was prescribed three times a day. November 1. His condition much the same; sinapisms and fomentations to used over the liver in addition to previous treatment. November h, 3 P.M. Two slight attacks of epistaxis this morning; pulse irregular; jaundice unaltered; the child, though ordinarily od tempered, in a highly irritable state, probable xanthopsy, e child refusing his milk on the ground that it was mustard. 30 P.M. Consultation with Dr. Graham, of Wynyard. In the erval there had been two further attacks of epistaxis, the blood ng swallowed and vomited; otherwise no change. The ques- n of icterus gravis was raised and dismissed on the ground of e extreme rarity of the disease in children, and of the slight ture of the indications. The phosphate of soda to be continued, addition hyd. c. cret., 1-6th gr. every two hours; tr. hamamelis r to ℥x p. r. n., wet pack every four hours. November 11th. ssed a restless night, with fits of screaming in the morning; longer speaks, but makes signs for what he wants; pulse 84, egular; no apparent diminution or enlargement of the area of patic dulness; no tenderness over the liver; the motions for the t time contained bile. 7 P.M. Had slept most of the day; no ther epistaxis; condition otherwise unchanged. November h. From 12.30 A.M. to 4.30 A.M. I was with him; his sleep was oken, but on moistening his lips with water and milk he became ain quiet, and appeared better than he had done for the previous days; skin cool; pulse 82, irregular. 9 A.M. Temperature 104.6°; se 124, good volume, but irregular both in force and frequency; conscious; convulsions, principally of the right side; no squint; s put in a wet pack, which reduced the temperature, but con- ousness was never recovered, and he died at 12.30 P.M.; just ore death a small quantity of dark, grumous blood was nited.

Though this history is deficient in some important particulars, ably that the urine was not examined for leucin and tyrosin, l that a *post-mortem* examination was not obtained, yet I have atured to record it, partly on account of the rarity of the dis- e in young children, partly to emphasise once more the danger giving too favourable a prognosis even in a case of apparently ple catarrhal jaundice. The onset of the final symptoms was sudden that it suggested cerebral hæmorrhage to me; but I am aware that this has been recorded as a cause of death in cases icterus gravis.

J. ARMITAGE, M.B.Oxon.

Emu Bay, Tasmania.

CHLOROFORM *VERSUS* ETHER.

RGEONS cannot be content to leave the claims of these anæs- tics to physiologists or professional anæsthetists. Some of us e been for many years in the habit of superintending the ministration of one or other of these drugs to hundreds of cases annum. We may leave it to the anæsthetist to observe and ort the minuter details of their action, but as to their action he gross, or their fatality, we are quite competent to form our n views, and to speak for ourselves. The appeal is to clinical erience, and I trust apparent egotism will be pardoned. Dur- a medical career of twelve years, dating from the time when egan attending the operations at the Edinburgh Royal Infirm- , I have never seen a case of death from chloroform.

uring the last eight years at the Kashmir Mission Hospital, vards of 11,000 operations have been performed. In over 3,000 s chloroform has beeu administered in my presence; not a gle fatal case has occurred. The cases in which serious danger threatened might be counted on the fingers of one hand. e of these cases were due to any heart affection; it was a stion of arrested respiration. Once the patency of the respira- tract was secured, and a few artificial respiratory move- nts were performed, all danger passed away. Promptitude is essary, but it is not a quality in which surgeons are deficient. s to general surgeons not to anæsthetists that we are indebted the knowledge how to meet the danger.

s far as the inhabitants of Central Asia and North India are erned, chloroform may be regarded as a perfect anæsthetic. e, the beer drinking Tibetans occasionally struggle before suc- cumbing to its influence, but of other races—Yarkandis, Hillmen, Pathans, Dards, Kashmiris, etc.—it may be said that to 99 per cent. chloroform may be given deeply and its administration pro- longed without a drawback—no cardiac weakness, no bronchial irritation, very rarely signs of an overdose. That no powerful anæsthetic is free from risk is a truism. My old teacher, Pro- fessor Chiene, used to say that it was like a fast train passing many stations without stopping, and halting or fluctuating be- tween the signal point of semi-conscious reflexes and the terminus of cessation of vital reflexes, namely, respiratory stoppage, arrest of heart action, death. Let every driver beware of the pace, watch the signals, and he will be safe. Such is the theory I learnt; such is my experience, others with wider experience say the same. Opposite theories cannot falsify extensive experience, even of individuals.

ARTHUR NEVE, F.R.C.S.Ed,
Surgeon to Kashmir Mission Hospital.

THE ARTIFICIAL VITREOUS BODY.[1]

THE method of dealing with lost eyes, by abscising the cornea with a narrow rim of sclerotic, clearing out the contents of the globe, and inserting a hollow glass sphere, has now been before the profession for nearly three years, and has been put upon its trial by a fair number of medical men. For the method of pro- cedure and a great many useful hints I would refer my readers to the communications of the author of the operation, Dr. Mules, in vol. v, *Trans. Ophth. Soc.*, and in the JOURNAL of December, 1885, and June, 1887. What we want now is evidence in regard to the condition of these eyes after an interval of, say, two years since the operation, and it is for the furtherance of this object I desire to make this communication.

I have personally inspected as many of my earlier cases as I could trace, and show to-day three which have been done over two years. My first case, done nearly three years ago, writes to say his eye keeps perfectly well, but he is unable to present him- self. This patient was shown by Dr. Mules at the Ophthalmo- logical Society in 1885. Up to the end of 1886 I find I have per- formed the operation eleven times, and in only two of these has the glass sphere come out, but I must confess that one of these was considered a very satisfactory example of the completed operation, and was shown to the staff of the Liverpool Eye and Ear Hospital. In the case of the other, the globe escaped a few days after the operation, and has no bearing on the permanence of the operation. I believe the fate of the operation will depend in a great measure upon the permanence of the result, and I hope that others will look up their earlier cases, and record their expe- rience in regard to this point. I think there can be no doubt that these cases I show are cosmetically a very great advance upon enucleation, or even simple evisceration, and entirely agree with Dr. Mules that the insertion of the glass sphere in nowise increases or diminishes the pain after evisceration.

In regard to the reaction, it is no doubt occasionally alarming, and always rather severe, nor have I observed that the introduc- tion of a drain of horsehair or other material has done anything towards mitigating this. As regards the performance of the operation itself, it ought to be done rapidly, and with as little vio- lence as possible; the inside of the sclerotic should be very gently cleaned, and the glass sphere introduced as soon as this is done, without waiting for the bleeding to stop, and the wound should be firmly closed with thick silk sutures passed through both con- junctiva and sclerotic. "Thin catgut" is, in my opinion, quite unsuitable for this purpose, as it gives way too soon, and Dr. Mules also now prefers thick silk. I now complete the entire operation in ten minutes, and I have done it in eight minutes.

A. HILL GRIFFITH, M.D.,
Surgeon, Royal Eye Hospital, Manchester.

A CASE OF DIABETES BENEFITED BY PHOSPHORUS: CONTINUATION.

IN the JOURNAL of November 30th I gave the account of a case which seemed to me to show that phosphorus is capable of con- trolling diabetes in a marked degree. The patient had suffered from diabetes for the past five years; from eczema for the past two years; and from an extensive eruption of boils for the past five months. He commenced treatment by phosphorus on Novem- ber 1st, taking on the average one-tenth of a grain of phosphorus

[1] Read before the Lancashire and Cheshire Branch of the British Medical Asso- ciation.

until November 23rd, by which time his eczema and his boils had almost completely disappeared and his diabetes had become vastly improved.

On November 24th his dose of phosphorus was doubled, and from that date he continued with the double dose for a few days. The effect which this doubling of the dose of phosphorus exerted on his diabetes will serve to illustrate more clearly the effect of phosphorus on this disease.

On November 23rd his urine had a specific gravity of 1033, and contained 27.3 grains of sugar in the fluid ounce. The twenty-four hours' urine amounted to 66 fluid ounces; the twenty-four hours' sugar to 1,801 grains.

On November 28th his urine had a specific gravity of 1020, and contained 6.5 grains of sugar in the fluid ounce. The twenty-four hours' urine measured 58½ fluid ounces; the twenty-four hours' sugar was 380.25 grains.

Throughout this period the patient was taking a sufficient quantity of bread to satisfy him completely, namely, the same quantity of bread that he had now for several months been accustomed to take.

On November 29th the patient stated that the quenching of his thirst for the past few days was beyond what he could have dreamed. He observed as to his treatment by the "perles" that they seemed from the very time when he first commenced to take them to quench his thirst. This he says is the great improvement, and he feels much contented with this, namely, that his thirst has gone.

Already, on November 27th, he had remarked to me that the craving desire for drink seems to have left him entirely, for he has now no desire for drinking between meals either by day or by night. He says that he has never, during the past five years, been anything like so well as he is now, either as regards the thirst or as regards his general feeling.

Weymouth Street, W. BALMANNO SQUIRE, M.B.Lond.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BIRKENHEAD BOROUGH HOSPITAL.

GASTRO-ENTEROSTOMY WITH SENN'S APPROXIMATION PLATES.

(Under the care of GEO. S. STANSFIELD, M.R.C.S.)

THE extreme value of Professor Senn's bone plates and Mr. Jessett's experiments therewith, receiving apparently their first confirmation in the human subject in Mr. Clarke's case, recorded in the JOURNAL of November 16th, 1889, warrants my submitting the following case to the profession.

W. G., aged 53, a labourer, applied for treatment on December 4th, 1889. He complained of pain, which was almost constant, but was always aggravated by any food, whether solid or fluid. He did not locate the pain in any particular small spot, but drew his hand across the epigastrium, saying "Just across here." He rarely vomited; latterly he had been afraid to eat, and as a result was extremely emaciated. If importance is attached to cachexia, he had certainly the cachexia of cancer. He had consulted many doctors, among whom there existed a considerable diversity of opinion as to his malady. He had been ill many months, and as his life was perfectly miserable, he was willing to submit to any operation that promised relief. Upon examination a tumour could be indistinctly felt a little above and to the right of the umbilicus.

On December 16th he was placed under chloroform, and an incision about three inches long made in the middle line downwards from the ensiform cartilage. Pushing aside the colon, a hard mass was found in the upper part of the right lumbar region, somewhat globular, and about four inches in diameter. The incision was lengthened by another inch, so that a better examination might be made. The third part of the duodenum was the portion implicated; the adhesions were so extensive as to preclude removal.

On the hypothesis that the pain was caused, or intensified, by the food having to force its way through an almost closed canal, it seemed to me that a communication between the stomach and jejunum would give a large amount of relief. Such a communication was therefore made exactly in the way described by Mr. Clarke, excepting that I had no occasion to use Lembert sutures, beyond one in the stomach, having accidentally made its incision a little too large. Deep and superficial sutures of chromicised catgut closed the parietal wound. There was no bleeding of any consequence, and no antiseptics were used.

The operation was completed in half an hour; towards the close the patient was very collapsed. Ether was given hypodermically, and he was not moved to his bed for two hours.

Beef-tea enemata, with liq. morphiæ, gtt. xx, were given every three hours. He vomited four times, and was greatly distressed by hiccough. At the end of twenty-four hours the morphine was stopped. His progress was uninterrupted.

On the fourth day after operation he was allowed beef-tea by the mouth. On the sixth day he had a little bread and milk, for which he had a great desire. On the tenth day the wound was examined for the first time, and was found completely healed by first intention. On the twenty-fourth day he got up. On the thirty-third day he was weighed, and found two pounds heavier than on the day of operation. The temperature never rose above the normal line, and the bone plates were never seen again. He is now free from pain, and eats food heartily.

It may be asked, Why was not the first portion of the duodenum joined to the jejunum, instead of opening the stomach, seeing that the pylorus was perfect? Simply because the coil of jejunum used and the stomach came into proximity much more easily, and therefore avoided dragging, and in view of the patient's vomiting and hiccough in the first twenty-four hours, I attribute no small measure of his recovery to the freedom from dragging which existed.

I do not apprehend any trouble from the bile and pancreatic fluid, feeling confident that when the duodenum becomes completely closed, regurgitation into the stomach, and thence by the new passage, will not be troublesome.

I am indebted to Dr. L. McWhannell, senior house-surgeon, for careful notes from which the above is condensed.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 4TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

The Late Sir W. Gull.—The proceedings were opened by the PRESIDENT delivering a tribute to the late Sir William Gull in the following words:—I must ask this Society to pay a brief tribute of regret for the recent loss of one of our oldest and one of our most distinguished members. Few words will be needed where so many have been spoken, but few though they be, it is right that the especial regret of this Society should be expressed. Sir William Gull was a great physician and a great genius; he was pre-eminently a great pathologist. It is true that this Society was not his habitual resort; indeed, in his later life his enormous practice made it impossible for him habitually to resort to any society, but he occasionally took part in our discussions, notably in those which had been arranged upon cancer and syphilis. Together with Dr. Sutton, he contributed one paper to our *Transactions*, one of great labour and detail, on the Spinal Cord in Arterio-Capillary Fibrosis. The best of his pathological work was elsewhere, but none the less to be appreciated. In proof of its quality, I need only instance his papers on Abscess of the Brain and on Reflex Paraplegia. In his later work, that on Arterio-Capillary Fibrosis, he had a coadjutor. Besides this, Sir William Gull was the author of many other papers, all of value, bearing on pathological questions; and, indeed, it always seemed to me that his pathological knowledge was the largest element in his deserved success. I was for many years often brought into contact with him, and often had occasion to admire the self-denying way in which he pursued his cases to their pathological issues. At the height of his practice he never hesitated to put aside the living for the dead, and I say deliberately that I never met a physician in the *post-mortem* room whose diagnosis was so well borne out by what was found. This is not the place to discuss his powers, great as they were, otherwise than as a pathologist. In this respect we must lament the loss of one who deserved a place second to none in this Society.—Dr. SAMUEL WEST proposed that a letter

condolence should be sent to Lady Gull. This was seconded by . SIDNEY COUPLAND, and carried unanimously.

Sable Intestinal.—Dr. DELÉPINE gave an account of, and owed the following specimens. The first specimen shown came m a lady aged 70, who was hysterical and had suffered from stinate constipation for a long time. Her motions had at last umed the form of rabbit droppings. Dr. Dickinson after exaning the specimen and finding it almost entirely composed of llulose, handed it over to the author. On chemical examination, particles were found to be composed almost entirely of cellulose, d of a small amount of oxalate of lime, phosphates, and carbote of calcium. On microscopical examination they showed disctly the structure of the gritty particles found so commonly in oking pears, *plus* a few crystals of oxalate of lime and indisctly crystalline particles, some of which were soluble in acids, d others were insoluble in the strongest acids, and were evitly siliceous. These small concretions were therefore comsed of lignified vegetable cells which, owing to a rather proged stay in the intestine, had become slightly incrusted with careous salts, which had also entangled other particles probably roduced with the food. On these results becoming communied to Dr. Barker, the regular attendant of the lady, he swered: "It is quite true that the patient for the last few eks has been taking one or two baked pears almost every day; t hard, dry, juiceless sort of pear." So that the nature of the ticles was confirmed entirely. The specimen was therefore a d instance of what Laboulbène has described under the name *sable intestinal.* The vegetable cells forming the basis of this d are, as everybody is aware, constantly found in the fæces, as ll as seeds and other indigestible products; it is, however, only when owing to constipation or obstruction these igestible products remain for a long time in the intese and become coated with calcareous salts, and form basis of small or large intestinal concretions. The ond specimen was of the same nature, and the author had cted it from several other cases because it illustrated the reblance of effect between simple constipation and obstruction the bowel due to organic structure of some sort. He was inted for this specimen also to the President. It presented in most every respect the characters of which the author had eady described in the first specimen, the only difference being t instead of sclerenchymatous tissue forming the basis of the cretions as in the other case, fig seeds were found in this case. re was also but little calcareous matter connected with them, specimen being chiefly interesting on account of the fact that inquiry it was found that the patient had partaken of figs ny days before evacuating their seeds, so that they had rened for some time in the intestine, and had accumulated so as e expelled in rather large numbers at the same time. Both es showed well how retention of fæcal matters, whether due to stipation or to obstruction, favoured the formation of entero- or intestinal concretions. In connection with these two es he brought forward two other cases which were quite logous, although not falling under the head of *sable intestinal.* first of these cases showed how these undigested particles ht become of great diagnostic value. Dr. Hughes B. Davies had under his care a patient with bladder symptoms suggestthe presence of a stone or of a tumour. He therefore sulted a well-known specialist, who after endoscopic examinasaid that the patient was suffering from tumour of the one of the bladder. Dr. Davies, in order to ascertain the ct nature of this tumour, collected some suspicious masses ch the patient had passed *per urethram*, and brought them to him for examination. After proper treatment he was able eparate from the mucus in which they were imbedded several y particles, which looked like coarse bran; and, on microical examination, these were found to have the structure of the r coats of barley grains. Dr. Delépine asked Dr. Davies to make e sure that the patient had passed this *débris per urethram*, f that were the case his patient was suffering from rectocal fistula. Dr. Davies answered: "My patient has been ing other and similar masses *per urethram*, whilst part of his y diet consists of whole-meal bread." The last case was to which Mr. Knowsley Thornton had already alluded at beginning of the session. A patient had been treated for stone with large doses of olive oil. After a time he uated a large number of rounded bodies, which were supposed e gall stones. Mr. Thornton, not falling in with this view, some of these concretions to Dr. Lauder Brunton, who, after satisfying himself as to their not being gall stones, handed them over to Dr. Delépine for examination. These concretions were about forty in number, irregularly rounded in shape; some almost spherical. The largest measured 16 millimètres (0.5 inches) in diameter; the others were, generally speaking, smaller. They were of a pale yellowish-green colour, and had a rancid butyric smell. The surface of the large one was pretty smooth, but slightly granular and soft looking. The smaller concretions were much more uneven, and looked very much like frozen oil. The large concretions were just hard enough to be cut with a sharp knife, and presented a smooth surface. This surface was clotted all over with small whitish, rounded spots, which contrasted with the green ground substance of the mass. On chemical examination, some reactions, which were supposed to be typical of olive oil, were obtained, whilst no indication of the presence of bile pigment or cholesterine could be obtained. A number of the small whitish nodules referred to above were examined microscopically; they were in great part composed of tufts of curved acicular crystals, and in the centre of each some particles of undigested food, such as muscular fibres, starch granules, vegetable hairs, spiral vessels, etc., were found. It was therefore evident that the concretion had been formed in the intestine and not in the gall bladder.—Dr. SIDNEY MARTIN referred to a case which had come under his notice of great wasting, probably due to functional disease of the pancreas, in which the fæces contained collections of crystals of the fatty acids. He at first thought that they were lime soaps, but had found them soluble in ether; but, after hearing Dr. Delépine's paper, suspected that they probably consisted of crystals of stearic and butyric acids.—The PRESIDENT gave some clinical details with reference to Dr. Delépine's second specimen. The case had been one of chronic obstruction of the sigmoid flexure, and the figs were eaten about three weeks before the peculiar appearances of the fæces which were referred to had been noticed.

Retroperitoneal Hernia.—Mr. LOCKWOOD showed a case of retroperitoneal hernia of the vermiform appendix. He said that in some of those cases in which operators had failed to find the appendix, it might have been hidden in a pouch behind the cæcum. It was questionable whether it was ever absent, except as the result of disease. The hernia he showed was not particularly rare; within a year he had found two complete and one partial case. The appendix might permeate into either the subcæcal fossa or into the ileo-cæcal fossæ. The two specimens shown belonged to the former class, but the other had been met with. The causation was either developmental or pathological. The subcæcal fossa was formed during the descent of the colon, and in one case the appendix had probably become immured in it during its formation. In the other case there was, in addition to the hernia of the appendix, a very large right inguinal hernia, and it was probable that the displacement of the iliac peritoneum which had accompanied the formation of its sac had taken a part in the causation of the hernia. Retroperitoneal hernia of the vermiform appendix seemed, according to authors, sometimes to become strangulated. The morbid anatomy was very simple. When the cæcum was raised a small aperture was found beneath it leading into a large peritoneal pouch behind the ascending colon. The appendix lay within this pouch, either free or attached by a mesentery.—Mr. DUNN had seen several cases of retroperitoneal herniæ in the dissecting room at Guy's Hospital, and thought Mr. Lockwood's paper was one of considerable importance.

Repair after Rupture of the Spleen and Kidney.—Mr. D'ARCY POWER read a paper on cases illustrative of the above. The first specimen was the left kidney taken from the body of a man, aged 27, who was originally admitted into St. Bartholomew's Hospital for numerous injuries from falling off a scaffold. Death occurred eighteen days after the accident. Whilst in the hospital he had never complained of abdominal pain. On the day after the accident a little blood was found in the urine, and also on the succeeding days. Afterwards it became free from blood and from albumen. The kidney showed a rupture an inch and a half in length, and extended from the hilus into the cortex. The second specimen was a spleen taken from the body of a woman, aged 42, who had fallen from a window, a distance of thirty feet. Death occurred ten weeks after the accident. At the necropsy, the spleen was found to have been torn upon its anterior and external surfaces. The rent had passed quite through the organ, and had involved the capsule, and was found to have been closed by a firm white scar. The interest of these cases consisted in the small quantity of hæmorrhage which had occurred from such large lacerations. This the author considered to be probably due to the

fact that there was very little room for a large quantity of blood to be extravasated into, and so the hæmorrhage could only have proceeded slowly into the abdominal cavity, and clotting soon formed, and that the hæmorrhage only occurred from veins or arterioles, and never from arteries of any size. If such an artery were ruptured, fatal hæmorrhage infallibly occurred. The specimens also showed how readily repair in these organs could take place, and how considerable lacerations of these organs might be accompanied by only very slight symptoms.—The PRESIDENT referred to a case of ruptured kidney which had been brought before the Society by Mr. Timothy Holmes, and recorded in one of the earlier numbers of the *Transactions* of the Society. The patient was originally admitted into hospital after an accident, and for some time his urine was bloody and his abdomen much swollen. He recovered, however, from the effects of the accident, but some years later died of chronic Bright's disease, and the damaged kidney was then found to have been torn almost right across, and there were remains of a considerable quantity of extravasated blood surrounding it outside the capsule.—Dr. ANGEL MONEY called attention to the fact that the kidney might be ruptured by disease without traumatism, and quoted a case mentioned in the President's work on *Diseases of the Kidneys*, in which such a medical accident had occurred to a jockey at Newmarket who suffered from acute Bright's disease, and in whom after death the kidneys had been found much swollen and their capsules ruptured.—Mr. SOLLY mentioned the case of a man who was run over, and after the accident was admitted into St. Thomas's Hospital. Hydronephrosis followed, and the tumour was repeatedly aspirated. Later on the kidney was cut down upon, and a deep scar was found across it. The pelvis of the kidney was also found to be much dilated, and to partially envelope the kidney. The man lived for more than a year after the accident, and was ultimately lost sight of.—The PRESIDENT gave further clinical and pathological details of the case to which Dr. Money had referred. The patients had suffered from an attack of acute nephritis; the urine was very full of blood and casts. He had suffered such intense pain as to give rise to the suspicion that he had a stone in each kidney. After death the kidneys were seen to be much enlarged, and of a chocolate colour. The capsules had burst, and there had been considerable extravasation of blood into the surrounding tissues. This was the only case of the kind that he had ever met with.—Mr. D'ARCY POWER replied.

Myxofibroma of (?) Pelvis or Uterus.—Mr. SOLLY exhibited pecimens of large fibromata, containing irregular cavities, due to myxomatous degeneration during life. They had been diagnosed as ovarian tumours, of which they gave all the usual signs. At the operations, however, one appeared to spring from the pelvis between the uterus and bladder, and the other from the anterior surface of the uterus. The pathology of the formation of so-called cysts in fibromata and myofibromata was briefly discussed, myxomatous change being the commonest condition, although cases of cysts due to hæmorrhage and to lymphatic obstruction had been described. An epithelial lining to the cysts had been found in a few cases, but only in submucous uterine myofibromata, evidently due to uterine glands involved in the growth.—Mr. BLAND SUTTON said that sufficient attention had not, up to the present, been paid to these tumours. They originated in fibrous tissue in three positions: (1) From the round ligament; (2) from the ligament of the ovary; (3) from the broad ligament. They consisted of unstriped muscular tissue, grew rapidly, and the cells of which they were composed were liable to undergo myxomatous degeneration. There was one clinical point of much importance in connection with them, namely, the presence of ascitic fluid, which, when met with during operation, might suggest that the tumour was of malignant nature. This, however, was not the case.

Malformation of Generative Organs in Fœtus.—Mr. SHATTOCK showed a specimen of a female fœtus which presented arrested development of the generative organs. The rectum and anus were normal. The clitoris and its prepuce were unnaturally large, the former being grooved on its inferior aspect, and when traced backwards led to a small aperture in the perineum. This was the urethral aperture, which above was surrounded by a full-sized and perfectly normal prostate. The bladder, uterus, and ovaries were well formed. Below the uterus was a vagina which passed through the posterior portion of the prostate and opened into the urethra, being narrowed at its lower end. The specimen was of interest, because it threw some light on a question relating to the hymen and to the vesicula prostatica of the male. It bore out Leuchart's view that the vesicula prostatica represented both the uterus and vagina, and it also demonstrated that the orifice of the hymen might be regarded as the narrowed aperture by which the vagina communicated with the urino-genital sinus. If this were the case the analogue of the hymen in the adult male should be found at the spot where the prostatic vesicle opened into the urethra, and he showed specimens which demonstrated a considerable narrowing at this spot. He submitted that the view which Mr. Bland Sutton brought forward last year at the College of Surgeons, that the hymen was the remains of the septum between the proctodœum and the vagina was untenable, and showed a series of diagrams to illustrate his contention.—Mr. BLAND SUTTON thought that there was much to be said for Mr. Shattock's view of the condition, but was not prepared to give up his own view without further consideration. He asked Mr. Shattock if he had found anything in the cloacal opening which could have been derived from the proctodœum.—Mr. SHATTOCK said the under surface of the clitoris was grooved without any indication of a hymen being present.

Large Spleen from an Infant.—Dr. FLETCHER LITTLE showed an enormous spleen from the body of a child 11½ months old. When the child was 5½ months old the mother said she had noticed a swelling in one groin, but otherwise there had never been any suspicion of enlarged lymphatic glands. There was no history of rickets, congenital syphilis, or of malaria. He asked the members of the Society whether they would agree that the case was one of leukæmia. It had been impossible to examine the blood during life. He said that he hoped to bring microscopical sections before the Society on a future occasion.—Dr. PERRY maintained that the proposition, which Professor Hamilton had advanced in his recent work on pathology, that the Malpighian corpuscles could not be found in leukæmic spleens did not always hold good. With reference to the present specimen the absence of capsulitis was against the condition of the spleen being leukæmic.—Mr. BOWLBY said that the appearances of the spleen were certainly against the condition being a leukæmic one. It had no irregularities of capsule, the colour was not that of a leukæmic spleen, nor were there any leukæmic masses in it.

Epithelioma of Lower Eyelid (? Crateriform Ulcer).—Mr. H. BETHAM ROBINSON brought forward this specimen, which was removed from a healthy man, aged 72. The small lump had been growing slowly for twelve months, without any pain. It did not appear to have started on the site of a mole or wart. The tumour was small and firm, reaching almost to the free edge of the lid. It was somewhat circular, about the size of a sixpence, and its surface was convex, its centre being quite a quarter of an inch above the surrounding skin. It was reddened and granular over the part of its surface which was not covered by dried exudations, and its edge was well defined except on the inner side, where there was a slight tendency to undermining. There was no induration. It was freely movable on deep tissues, and there was no enlargement of glands. Microscopically it showed an epithelioma of the squamous type, in the midst of which were large masses of granulation tissue. The epithelium was of the type met with in the deeper layers of the skin, showing large numbers of "prickle cells" with columnar cells next the masses of granulation tissue. There were very few "birds' nests," and these were ill defined, showing no corneous centres. There were several hair follicles, sebaceous and sudoriparous glands at the edge of the growth. At one spot there was extensive proliferation of the inner root sheath of a hair follicle. The growth seemed to agree with, and to be an early stage of, the "crateriform ulcer," described by Mr. Hutchinson. From the marked histological differences from ordinary skin epitheliomata it appeared to suggest that the growth might have started from some skin appendage, such as a sebaceous gland or hair follicle. An origin from the former seemed excluded, as it would be expected to take on the form of a glandular carcinoma, but whether arising from the latter or not it would be difficult to say. One point in the specimen suggested such a derivation, namely, the marked proliferation of cells in connection with the inner root sheath of a hair follicle, but it was possible that this was only due to involvement of the hair follicle from without.—Mr. HUTCHINSON, jun., thought Mr. Robinson's specimen was most likely a case of crateriform ulcer, notwithstanding the absence of nests, which had been very abundant in his father's specimen. The specimen was then referred to the Morbid Growths Committee.

Primary Carcinoma of the Pancreas.—Dr. FRANK J. WETHER showed a specimen from, and gave the history of, the following

case. The patient from which the specimen was taken was a warehouseman, aged 54, who was for some time under the care of Dr. Sidney Martin as an out-patient at the Victoria Park Chest Hospital, and was afterwards admitted as an in-patient under Dr. Eustace Smith. The patient had been wasting for eighteen months. He suffered constant pain in the epigastrium, which was increased after food and relieved by vomiting. The vomit consisted of food matters only until ten days before death, when it was black, and described by the patient as small in amount, and like coffee. On examination of the abdomen there was deep-seated tenderness in the epigastrium, but no tumour could be felt. At the *post-mortem* examination a tumour, about the size of a tennis ball, was found occupying the head and part of the body of the pancreas. The tumour was only adherent to the posterior wall of the stomach; it was lobulated on section, white in colour, and showed no hæmorrhagic points. In the anterior wall of the stomach, corresponding to the region of adhesion, was an oblong ulcer, about three inches long by one wide, the edges of which were only slightly thickened, and the floor formed by thickened connective tissue. All the other organs were healthy; the bile duct was patent, and there were no secondary deposits. The case was interesting in many ways. Affections of the pancreas were, as was well known, extremely difficult to diagnose. The continuous wasting, deep seated pain, and absence of hæmatemesis would, however, suggest that the pancreas was the organ chiefly affected. Jaundice, which was generally present in malignant disease of the pancreas, was absent in this case. Apart from the rarity of primary malignant disease of the pancreas generally, encephaloid cancer is extremely seldom met with. The head of the pancreas was the part most attacked. It was unusual that the parts around should be entirely unaffected, and the bile duct remained patent. Secondary deposits were stated by most authors to be almost invariably present, especially in the liver, but in this case none could be found.—The PRESIDENT asked Dr. Wethered if he could furnish some more details about the ulcer of the stomach which was present.—Dr. WETHERED mentioned the relations of the ulcer to the pancreas, to which it was adherent.—Dr. SIDNEY MARTIN showed, in connection with Dr. Wethered's case, a specimen of Primary Sarcoma of the Pancreas.—After a few words from Dr. FLETCHER LITTLE, the specimen was referred to the Morbid Growths Committee.

Card Specimens.—Mr. ROBINSON: 1. Lupus Verrucosus; 2. Duct Carcinoma of Male Nipple.—Mr. SHATTOCK: Long Vermiform Appendix.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 3RD, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

Selected Subjects in the Surgery of Infancy and Childhood.—Mr. EDMUND OWEN delivered the third and last Lettsomian Lecture, commencing with the operative treatment of the congenital form of wry-neck. He alluded to the risk of wounding some large vein, which was inseparable from subcutaneous tenotomy of the sterno-mastoid muscle, of which he mentioned an instance within his own experience. Since then he had relinquished this method of operating in the dark, and had adopted the alternative plan of dividing the muscle through an open wound. The results of this plan had been fully as successful, and the uncertainty of the other method was avoided. He said that subcutaneous tenotomy was an anachronism in these Listerian days, and he mentioned an instance in which it would have been impossible to have operated by the subcutaneous method without transfixing the internal jugular vein, though by the open method this was easily avoided. The lecturer then passed on to discuss the question of the treatment of vesical calculus in children. He observed that it might have been thought that finality had been reached when lateral lithotomy was brought to its present pitch of perfection, but he pointed out that under certain circumstances the operation presented difficulties and dangers it was impossible to provide against. He discussed Cheselden's statistics in the matter of lateral lithotomy, according to which this distinguished operator lost no more then three in 105 operations performed on boys under 10 years of age, but he added that his admiration for the operator was not equalled by his confidence in him as a statistician. He then took up the question raised by Sir Henry Thompson, as to what is a stone in the bladder. He first narrated two cases of what were often called "calculoid" disease, cases in which the stones were of small size and very apt to escape recognition by the sound, but he expressed the opinion that every concretion of a calculous character ought to be called a stone. He paid a passing tribute to the assistance which surgeons had received at the hands of Weiss, whose name for seventy years had been honourably connected with the treatment of vesical calculus. He considered that the suprapubic operation was not the proper operation for the general run of calculous children, though it was at present the fashionable operation. He observed that it was unfair to submit the patient to the suprapubic operation, simply because the surgeon did not happen to possess Bigelow's instrument, lithotrity being in many instances preferable. When the lithotrite could not be introduced, even after the meatus had been incised, and when the stone was not very large, as well as in those cases in which the stone, though not too large, was too hard to be dealt with by means of the lithotrite, lateral lithotomy was, he said, the appropriate method of treatment; with larger stones the high operation as modified by Garson and Peterson should be undertaken. Under these rules most children under 2 years of age would be treated after Bigelow's method, infants and a few grown children by lateral lithotomy, and in a few rare cases the suprapubic operation would be found necessary. In reference to the treatment of enuresis, he said he had found the internal administration of atropine to give good results. Passing on to the consideration of rupture in children, he urged that it should be regarded as a sign or symptom, rather than as a pathological entity, it being generally only a sign of arrested development in connection with the obliteration of the funicular process of the peritoneum. He dwelled upon the general precautions to be taken to prevent the increase of the rupture from violent expiratory efforts, etc., and advocated the employment of a skein of wool, so arranged as to afford support to the weakened side, in preference to any form of truss which, he said, was illsuited for children. Should the skein of wool prove insufficient, then a properly fitted truss would be necessary, but special care was incumbent in order to avoid undue chafing. He pointed out that most children lost the defect during the first year, though in others the cure might be delayed until puberty. He alluded to the causes of occasional erroneous diagnosis, and then passed on to consider the cases in which no truss could be relied upon to effect a cure. In these cases the duty of the surgeon was to bring about a cure, even if an operation had to be undertaken for the purpose. He held that the risks to which such a rupture would expose the patient in after life fully justified surgical intervention, though some judgment was desirable in the selection of cases for operation. He then described the steps of the operation, insisting upon the advisability of making assurance doubly sure by lacing up the lower end of the inguinal canal, especially the external abdominal ring with one or two strong sutures. He classed the subcutaneous methods of Wood, Wutzer, and Spanton as empirical compared with the open plan of dealing with the defect, and he characterised the treatment by injection as incomplete and unsatisfactory. Alluding to the imprisonment of the testis within the abdomen, which was usually the result of any adhesion between that organ and the gut, he comforted himself with the reflection that such testicles were ordinarily undeveloped and of little utility. He concluded by saying that there were no cases of congenital reducible hernia in which he operated more readily than when there was an imperfectly developed testicle, for these cases were well suited for treatment, and almost invariably completely successful.—On the conclusion of the lecture, Sir J. CRICHTON BROWNE proposed a vote of thanks to the Lecturer, this was seconded by Mr. BERNARD PITTS and carried.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JANUARY 30TH, 1890.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Glaucoma after Extraction of Cataract.—Mr. TREACHER COLLINS read this paper, in which he described the conditions found in ten eyeballs excised after sight had been destroyed, and which he had examined microscopically. In nine cases the cataract was the ordinary senile form; in one case it was of traumatic origin. Five of the patients had undergone successful operation for cataract in the fellow eye. In one case iridectomy was performed previously, in nine cases at the time of removal of the cataract. The interval which elapsed between the extraction and the onset of the glaucoma varied from three to twenty-one months. In three cases the increase of tension came on simul-

taneously with iritis and keratitis punctata, and in these patients the second eye became affected with sympathetic ophthalmitis. In nine of the eyes there was adhesion of the lens capsule to the extraction scar; in the remaining one, in which the lens had been removed in its capsule, the hyaloid was adherent to the corneal cicatrix. In all the specimens the angle of the anterior chamber in the part corresponding to the coloboma of the iridectomy was blocked, either by adhesion of the root of the iris, which had been left, or by the tips of the ciliary processes, dragged forwards by entangled lens capsule. After enumeration and discussion of the various causes to which glaucoma after extraction might be ascribed, Mr. Collins said he thought, from the study of these cases, that the adhesion of the lens capsule to the corneal cicatrix strongly predisposed the eye to an attack of glaucoma; in some cases this adhesion, combined with an entanglement of iris, was ufficient to set up glaucoma; in others some additional irritation was necessary, such as resulted from a discission operation. The treatment of these cases was, in his experience, very unsatisfactory. In only one had he seen the glaucoma permanently relieved by operation; in that case iridectomy and capsulotomy were performed after paracentesis of the anterior chamber had failed to relieve tension. Mr. Collins exhibited macroscopic specimens of the eyeballs, and showed some excellent magic lantern slides made from photographs of microscopic sections.—Mr. CRITCHETT said the needle for discission of the capsule after cataract extraction should be graduated, so as not to allow the escape of aqueous humour. Many eyes were undoubedly lost after cataract extraction, but that they should be destroyed by glaucoma was to him surprising, seeing that such cases should be under the direct observation of the operator, so that the condition ought to be at once relieved.—Mr. PRIESTLEY SMITH said that Mr. Collins's paper was of much value, as it supplied accurate anatomical information on the subject with which it dealt. He regarded these cases as belonging to the category of secondary glaucoma. In primary glaucoma he was accustomed to regard the lens as taking a very prominent part, but the occurrence of the condition in the absence of a lens was against that view. He alluded to one class of cases not included in this series—namely, glaucoma after successful needling operations, in which there was a clear central pupil with no visible adhesions, yet *iris bombé* occurred, no doubt on account of adhesions between the lens capsule and the iris. In cases such as Mr. Collins described, sclerotomy was effectual if care was taken to divide the septum between the vitreous and aqueous chambers. In a case where sclerotomy was succeeded by but slight escape of fluid, a second incision, dividing this septum, was followed by a gush of fluid, and complete relief of tension. He would like to know if any case of glaucoma was known after a satisfactory extraction. In the case of a medical man, upwards of 80, an absolutely straightforward operation, followed by a contusion of the eye, resulted in great pain with increase of tension at night—probably due to swelling of the vitreous. An incision was made in the membrane across the centre of the pupil; there was slight return of the glaucoma, but the eye subsequently recovered perfect vision.—Dr. HILL GRIFFITH (Manchester) cited four cases in which glaucoma came on after extraction of the lens. In one, high tension followed the removal of an opaque lens; in another, after an ordinary extraction in which much cortex remained; a third was followed by iritis; and in the fourth, acute glaucoma with haziness of the cornea, the condition seemed to be instantly relieved by free discission. The tension, however, returned twice; but, after sclerotomy and then iridectomy, there was fair sight. For the most part glaucoma followed some complication; it had been more than usually disastrous of late after interference with immature cataracts. He thought the escape of vitreous might be the cause of glaucoma, by mixing with the softened cortex and forming a paste round the margin of the anterior chamber.—Mr. MACKINLAY thought the present observations were much in favour of preliminary iridectomy. This step was well under control, whereas other parts of the extraction operation were not so. The excision of the iris should be clean, and to the base; afterwards, a corneal section was of less moment.—Mr. SILCOCK had known glaucoma after removal of an immature cataract cured by iridectomy. In one case, where the capsule was entangled, the removal of a further portion of iris by a second operation was successful.—Mr. COLLINS, in reply, admitted the correctness of Mr. Critchett's remarks about the needles. The stout cylindrical needles were thought to cut better and to enter particularly well, but they permitted the escape of the vitreous, and had been discarded at Moorfields. In two cases where sclerotomy had failed to relieve glaucoma, the incision had not been peripheral enough, and the ciliary processes blocked the iris angle. In answer to Mr. Priestley Smith's question with reference to glaucoma after satisfactory extraction, Mr. Collins said that it was very difficult to see entangled capsule, and still more so to detect entangled hyaloid of vitreous. Such accidents might explain the occurrence of glaucoma after apparently satisfactory extraction. The success following division of the septum between the aqueous and vitreous chambers, before alluded to, was consistent with this view.

Card Specimens.—The following living and card specimens were shown: Dr. EDRIDGE-GREEN: Tests for Colour Blindness.—Mr. LEDIARD (Carlisle): Colour-testing Apparatus.—Mr. STANFORD MORTON: A Case of Alexia with Right Homonymous Hemianopsia. —Dr. J. W. COLLINS: Retinitis Albuminurica.—Mr. LINDSAY JOHNSON: Congenital Corneal Growth.—Mr. BROWNING: Associated Movements of the Upper Eyelids with the Internal Recti.—Mr. TATHAM THOMPSON: Cystic Detachment of Retina.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JANUARY 22ND, 1890.

C. H. F. ROUTH, M.D., in the Chair.

Cancer of the Uterus.—Mr. BOWREMAN JESSETT read a paper on the surgical treatment of cancer of the uterus. The conclusions laid down were as follows: 1. That carcinoma, when attacking the vaginal portion of the uterus, was best treated by amputation of the cervix, and that this operation should be performed with scissors in preference to the *écraseur* or cautery. 2. That caustics in this or any other form of the disease were unreliable, and indeed in many cases harmful. 3. That cancer of the cervical portion of the canal should be removed by cutting away a conical portion of the uterus beyond the disease; but if, on removing this, the growth was found to extend higher, then total extirpation of the uterus by the vagina should be practised. That removal of the cervix by the *écraseur* in this form of the disease was inadmissible. 4. When the body of the uterus is the seat of the disease, if recognised early enough, extirpation of the entire uterus should be practised; in the more advanced stages much might be done by adopting palliative measures. 5. No drugs administered internally had any effect whatever in arresting the disease.—Drs. EDIS, HEYWOOD SMITH, and TRAVERS commenced the discussion on this paper, which was adjourned to the next meeting.

President's Address.—The PRESIDENT delivered his inaugural address, reviewing the history and progress of gynæcology as a speciality. and the difficulties its pioneers had encountered and overcome.

HUNTERIAN SOCIETY.

WEDNESDAY, DECEMBER 11TH, 1889.

R. CLEMENT LUCAS, B.S., F.R.C.S., President, in the Chair.

PATHOLOGICAL EVENING.

Papilloma of Uvula.—Dr. WALTER FOWLER showed a uvula which was entirely covered by a papillomatous growth. It was removed from a young woman, and had given rise to no symptoms. He remarked that although papillomata were not uncommon as small growths situated on the tip and sides of the uvula, the one he showed was sufficiently curious to merit attention, as the whole of the uvula was replaced by a papillomatous growth.

Sarcoma of Foot.—Mr. RIVINGTON showed a specimen of sarcoma of foot. W. H. G., aged 16, twelve weeks before admission into the London Hospital, noticed a slight swelling above the third toe of the left foot. He first noticed it after running, but he had not sustained any kind of injury. When he came under observation there was a large globular swelling occupying the front of the foot apparently situated both above and below the metatarsal bones. The swelling on the dorsum was about the size of a large orange, firm and smooth. Syme's amputation was performed on November 27th. The patient took the anæsthetic (ether) very badly. An antero-posterior section of the foot showed that the growth was mainly situated on the inferior aspect of the metatarsal bones, and sprang apparently from the periosteum of these bones, especially the second and third. It was firm and fibrous.

Exostosis of Tibia.—Mr. RIVINGTON showed a specimen of exostosis of the left tibia. J. D., aged 15, was admitted into the

London Hospital for a tumour situated about 2 inches below the left knee-joint, and connected with the inner aspect of the left tibia. It was about the size of a walnut, and seemed to be sessile. On removal, however, on November 27th, it proved to be pedunculated. It was lying along the tibia, and was attached to the head of the bone. The body of the exostosis was covered with a layer of cartilage. The patient had noticed the growth for four years.

Malformed Uterus.—Mr. OPENSHAW showed a specimen of malformed uterus. There was a bifid condition of the uterus and a complete septum to the vagina. The rectum opened by an aperture in the posterior wall of the vagina. Urine and fæces escaped by the cloaca. Two children had been born. Pregnancy occurred in the right uterus. Mr. Openshaw also showed another specimen of bifid uterus and vagina. This woman also had borne two children.

Sarcoma of Lung.—Dr. DAVIES showed a specimen of sarcoma of the lung from a lad, aged 18. The growth was primary in the lung, and round-celled in structure. There were also growths in the pericardium and in front of spine.

Sarcoma of Kidney.—Dr. DAVIES also showed a specimen of sarcoma of the left kidney from a patient, aged 37. There were secondary growths in right kidney, right lung, and papillary muscles of the heart. The fourth rib was destroyed by the growth in the right mammary region.

Necrosis of Atlas.—Mr. BIDWELL showed a specimen of acute necrosis of atlas from a child aged 7 years, under the care of the Resident in the Evelina Hospital. The posterior arch of the atlas was entirely denuded of periosteum, and lying at the bottom of an abscess cavity just above this bone was a perforation into the dura mater about the size of a goose-quill. The child, when admitted, was suffering from pediculi capitis, with an abscess in the nape of the neck, and pyrexia. There were no signs of spinal disease. Four days later there was a patch of pneumonia at the base of the right lung; soon after this the abscess was opened and two ounces of healthy pus evacuated. The temperature remained high. After two days there was an abscess over the great trochanter. The child complained of headache, but was quite conscious. During the dressing a large amount of clear fluid was pumped out of the drainage tube synchronously with the pulse. This fluid contained chlorides and albumen. The next day the watery discharge from the wound continued, and the child had a tonic convulsion of the trunk and limbs, followed by unconsciousness. He became worse, and after suffering from frequent vomiting died eight days after the abscess was opened. He did not complain of pain in his head and neck till the day of his death. *Post mortem*, pyæmic abscesses were found in the lungs. There was pus in the spinal canal and at the base of brain and in the posterior horn of the left lateral ventricle.

Pyæmic Abscess of Sternum.—Mr. BIDWELL also showed a specimen of pyæmic abscess of sternum. The sac was the size of a large walnut, the whole of the upper two-thirds of the gladiolus and lower part of the manubrium were absent. Free in the cavity were three small ossicles, one the size of a shot, the other disc-shaped. The anterior ends of the upper five ribs on each side were also free in the cavity, the cartilages having disappeared. There were two openings into the sac, one above leading into the left sterno-clavicular joint, which was disorganised, the other opening into the anterior mediastinum, this being simply a small pocket from the abscess. The abscess wall was thick and lined with granulations. The child was 4 weeks old, and was under the care of the President in the Evelina Hospital. The umbilical cicatrix was soundly healed. The swelling had been notice fourteen days before admission; it had been enlarged, and the child had had attacks of dyspnœa. The swelling did not pulsate, but could be partly reduced into the thoracic cavity. It was aspirated, and an ounce of foul pus evacuated. This was followed by urgent dyspnœa, and a deep depression in the site of the sternum. Next day there was discharge from the puncture made by the aspirator, and the child died four days later. On *post-mortem* examination the umbilical vein was found dilated and filled with pus; its prolongation to the left lobe of liver was also full of pus, but this was shut off from the vena cava by a thin membrane. There was an isolated pyæmic abscess in the right lobe of the liver, but none in any other organ. Both pleuræ and pericardium were adherent to the abscess sac. The abscess started in the sterno-clavicular joint, and was pyæmic.

Cancer of Sigmoid Flexure—Mr. JOHN POLAND showed a specimen of cancer of the sigmoid flexure, removed after death from a man, aged 46, who had suffered from chronic intestinal obstruction for nine months. Three weeks before admission the symptoms became more acute, and obstruction to the passage of fæces complete. Obstruction at the hepatic flexure had been diagnosed at this time, and right lumbar colotomy recommended. Surgical operation was refused by the patient, with the result that he was admitted in a moribund condition, with symptoms of acute peritonitis, and died within forty-eight hours. A *post-mortem* examination showed acute peritonitis, more intense in the right iliac region, where the intestines were matted together and to the abdominal wall, bladder, and liver. There were several ulcers in the cæcum, two of large size, one of which had perforated the bowel. A few smaller ulcers were found in the transverse colon. The whole of the large intestine was enormously distended and hypertrophied. The cancerous growth, less than a quarter of an inch in thickness, was situated in the last turn of the sigmoid flexure, three inches and a quarter above the rectum, and not more than one inch in extent. The calibre of the gut was almost obliterated, admitting only a good sized goose quill, and externally it appeared as though a string had been tightly drawn round the bowel. Microscopically the growth at its edge showed the usual structure of a cylindrical carcinoma; towards the centre and base of the ulcer there was much cicatricial tissue. There were no enlarged glands.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

FRIDAY, DECEMBER 20TH, 1889.

S. R. MASON, M.B., F.R.C.S., President, in the Chair.

Exhibitions.—The PRESIDENT exhibited a Small Ovarian Cyst.—Dr. MACAN exhibited a Specimen of Cancer of the Ovary, removed from a woman, aged 41 years.—The PRESIDENT exhibited a Large Fatty Tumour, removed from the ischio-rectal fossa of a woman, aged 25.—Dr. O'CALLAGHAN exhibited a papillomatous cyst.

Complete Prolapse of the Cervical Zone of the Uterus preceding Labour at Full Term.—Dr. F. KIDD read the notes of two cases. He classified prolapse of the cervix at full term into: 1. Those cases in which the congested cervix descended without true hypertrophy. 2. Those in which true hypertrophy had occurred. 3. Those in which, the os being rigid, the cervical zone was dragged down by the advancing head without any congestion. 4. Those rare cases in which pregnancy had been known to take place in a completely prolapsed uterus and go on to full term. The predisposing causes were almost always some or all of the following, namely, weak ligaments, unusually large and wide pelvis, rupture of the perineum in previous labour, relaxed vaginal walls, with rectocele, cystocele, or both combined, and rigid os. In all cases an endeavour should be made to return the prolapsed portion. If that were not feasible, the practitioner should dilate the canal with hydrostatic dilators, manual dilatation, or by incision, and deliver by forceps or cephalotripsy, supporting the perineum and vulva well, lest the lower segment should be drawn through.—Dr. MACAN said there was a certain amount of confusion as to what was meant by "prolapse of the cervical zone." Where prolapse occurred in the earlier months of pregnancy, the treatment was replacement and retention in the proper position. When there was hypertrophy of the cervix not much good was done by replacement. There was one condition of prolapse which Dr. Kidd had hardly noticed, and that was, where the whole uterus became incarcerated in the pelvis—a state of things which at times led to a fatal result.—Dr. BAGOT, Dr. ATTHILL, Dr. SMITH and the PRESIDENT took part in the discussion, and Dr. KIDD replied.

Congenital Absence of Vagina.—Dr. MORE MADDEN read a paper entitled observations on treatment of congenital absence of vagina.—The PRESIDENT, Mr. O'CALLAGHAN, Dr. MACAN, and Dr. DOYLE took part in the discussion, and Dr. MORE MADDEN replied.

SECTION OF ANATOMY AND PHYSIOLOGY.

FRIDAY, JANUARY 3RD, 1890.

Professor PURSER, M.D., President, in the Chair.

The American Periglyph.—Dr. BROOKS, in the absence of Professor Cunningham, exhibited and explained the working of an American periglyph—an instrument by which geometrically cor-

rect projections may be drawn suitable for craniometrical work. Professor Cunningham had been recommended the periglyph by Professor Billings, on finding that he could not employ photography advantageously in working at casts of skulls.

Single Unilateral Sigmoid Kidney.—Professor BIRMINGHAM exhibited a single unilateral sigmoid kidney found in a subject undergoing dissection. According to Mr. Morris, in 12,978 *post-mortem* examinations made in London hospitals, only one sigmoid kidney had been found; the proportion of horse-shoe kidneys in the same *post-mortem* examinations was 1 in 1,600. Single kidney might result from (*a*) congenital absence of one kidney; (*b*) from atrophy of one organ; or (*c*) from fusion of two kidneys. If the fusion were complete, disc-shaped kidney resulted; horse-shoe kidney represented the smallest degree of fusion, and intermediate between the other two stood sigmoid kidney. In the specimen exhibited the left organ was nearly normal in position; attached to its lower and inner part was the right kidney, which extended down on the left side of the aorta almost to its bifurcation.

Meckel's Diverticulum.—Professor BIRMINGHAM showed two cases of Meckel's diverticulum, one of which was obtained at the *post-mortem* examination of a man whose intestine had been resected immediately above the diverticulum. The diverticulum was hollow for about an inch and three-quarters; beyond this it was a fibrous cord attached to the back of the umbilicus.

Topographical Anatomy of the Abdomen.—Dr. BROOKS exhibited plaster models illustrating the topographical anatomy of the abdomen. He explained the mode of producing the cast from frozen sections, forming a series of eight vertical pieces.

Abnormal Right Subclavian Artery.—Dr. W. HENRY THOMPSON read a note on a case of abnormal right subclavian artery, which he exhibited. The vessel arose from the arch of the aorta near the junction between its second and third stages, and towards the the posterior aspect of the vessel. The artery then passed up behind the trachea and œsophagus to the right side of the neck, where it came to occupy the usual position.

Topographical Anatomy of the Brain.—Professor FRAZER exhibited an extensive series of photographs of heads, illustrating the topography of the brain in the adult male and female, and also in the child. Measured tapes were laid on the heads, running in certain definite directions; these tapes were reproduced in the photographs, and by means of them the correct distances between various points on the photographs were arrived at. The pictures were composite, showing besides the tapes and the surface of the head the deeper parts of the same head at two different levels overlying one another—for instance (1), the surface with tapes; (2) the dura mater; (3) the surface of the brain and the convolutions, and so on, until every part as far as the corpus callosum was shown with its exact relations to the surface. According to this method, the topography of the adult and young head showed a wonderful correspondence; there was not the sixteenth of an inch difference in any of the parts spread over the entire area of the brain, so that in any case any part of the brain could be located on the surface with perfect accuracy by means of a pair of compasses and the tapes guided by the photographs. Though the method might seem elaborate, it had been tried twice lately by an operating surgeon, who had opened the lateral ventricles with the assistance of the photographs.—Remarks were made by the PRESIDENT, Professor BIRMINGHAM, and Dr. PATERSON, and Professor FRAZER replied.

Nerve Supply of the Extensor Brevis Digitorum Manus in Man, and Valvulæ Conniventes in Man.—Dr. BROOKS read two short papers. In the first he pointed out the nerve supply of the occasional muscle in man—the extensor brevis digitorum of the hand. He showed a specimen of the muscle lately found in the dissecting room of Trinity College, with a well-marked nerve from the posterior interosseus of the forearm; he had previously observed a similar condition. In the other paper Dr. Brooks pointed out that at least in the upper part of the jejunum—to which his observations had been confined so far—the valvulæ conniventes frequently formed complete rings, and sometimes spirals, extending more than once round the intestine. He exhibited several specimens.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, JANUARY 22ND, 1890.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimen.—Dr. RATCLIFFE showed a specimen of Meckel's Diverticulum that had been the cause of a fatal obstruction.

Communications.—Mr. BARLING read notes of a case of Epithelioma of the Pharynx and Larynx.—Dr. SHORT read notes of a fatal case of Phosphorus Poisoning.

Syphilitic Epiphysitis.—Dr. SUCKLING showed an infant a few weeks old with a syphilitic rash on the face and buttocks, and with a hard swelling at the lower end of each humerus. The swelling was exquisitely tender when the child was first seen, and it cried when either upper extremity was touched. The rash and swellings had much diminished under the administration of hydrarg. c. cretâ, a grain twice a day being given. Dr. Suckling stated that he frequently met with such cases at the Children's Hospital, and that he never could obtain any history of injury; and he fully believed the epiphysitis was purely syphilitic. In the majority of cases the lesion was one-sided, and the lower epiphysis of the humerus was the one most commonly affected. Recovery almost invariably followed the administration of mercury in sufficient dose and prolonged for some weeks.

Right Hemiplegia and Aphemia, due to Syphilis.—Dr. SUCKLING showed a young man, aged 27, who was affected with severe right hemiplegia with late rigidity and contracture. There was well-marked ankle clonus on the right side. The patient was quite speechless, or, at least, wordless. He could only utter inarticulate sounds, not being able to say yes or no, but nodding or shaking his head. When excited in any way he would utter the phrase "Dog bite me" repeatedly. He had never been able to write or read. He understood everything said to him, and appeared quite rational. He had had syphilis, and his hemiplegia supervened upon severe nocturnal headaches. Dr. Suckling dwelt upon the great importance of recognising cerebral syphilis in an early stage, as many cases of hemiplegia from this cause could be cured if promptly treated. Several varieties might be recognised. In one form hemiplegia followed apoplectiform attacks, and the patient recovered; but, if not treated, the paralysis ultimately became permanent. In another form the hemiplegia followed attacks of Jacksonian epilepsy, and was due to gummatous mischief in the motor area of the cortex. This form was easily recognised, and was amenable to prompt and vigorous treatment. In another form the hemiplegia supervened suddenly with or without aphasia, was often not preceded by nocturnal headache, and was severe and followed by severe rigidity. This form was due to thrombosis in an artery diseased from syphilis, and was quite unaffected by treatment. Dr. Suckling considered that his patient was suffering from the last-mentioned variety, which was the one most often met with. The incurability was due to the fact that, though the diseased vessel might be altered by treatment, yet the softening itself was not syphilitic, and could not be ameliorated. Where there was any syphilitic lesion, such as a gumma compressing the motor tract or centres, or pressing on the middle cerebral artery, then recovery followed energetic treatment. Severe headache and a gradual onset pointed to such a lesion, and were of favourable omen. Dr. Suckling, in such cases, recommended the administration of mercury with large doses of iodide of potassium; and he was of opinion that in young adults, excluding heart disease and Bright's disease, one might safely regard the hemiplegia as syphilitic. He recommended that in all such cases the fundus oculi should be carefully explored, for optic neuritis or choroiditis were often present, and were valuable confirmatory evidence.

Cyst of Broad Ligament.—Mr. JOHN W. TAYLOR showed a large cyst of the broad ligament, which he had removed by enucleation from a patient at the Women's Hospital a few weeks previously, the patient making a good recovery. Mr. Taylor remarked on the difficulty of exactly deciding whether such cysts were "parovarian" in origin or not. While embedded cysts, distinct from the ovary, and possessing a glove-finger-like prolongation, or containing papillary growths, might with considerable confidence be classed as "parovarian," other cysts, distinct from the ovary should preferably be described as cysts of the broad ligament.

Double Sessile (Imbedded) Parovarian Cysts.—Mr. JORDAN LLOYD showed two cysts which he had removed by abdominal section from a married patient, aged 28, and which had given rise to frequently recurring attacks of retention of urine during nearly two years. Both cysts lay between the layers of the broad ligament, the one on the right side containing nearly three pints of perfectly clear fluid, and that on the left about one pint. Both were sessile and buried in the pelvis, completely choking up that space; each was removed by incision of the broad ligament and enucleation. The openings in the broad ligament were not stitched to the parietal peritoneum, but were dropped back into the pelvis and a glass drainage tube inserted. The woman made

rapid and complete recovery. From the inner side of each cyst curious process, like the finger of a glove, ran horizontally inards towards the uterus, and their external ends tore away and uld not be shelled out like the rest of the cyst wall. This pointed the cysts being developed from the parovarium, and not originating as simple cysts of the broad ligament.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 6TH, 1889.

THOMAS MOORE, F.R.C.S. (President), in the Chair.

Papers.—Dr. ERNEST CLARKE narrated a case of Strangulated moral Hernia. The sac was ligatured with silk at the neck, and en cut off. The wound, which was dressed antiseptically, aled almost by first intention, without any rise of temperature, d a radical cure of the hernia resulted.—Mr. MAINWARING read me notes on the treatment of Ulcers by covering the Surface th Melted Wax. He claimed that the results were better than ordinary treatment, such as bandaging, strapping, etc., and also at the ulcers did not require dressing oftener than once a week, d that the patient could go about all the time.—Dr. MACGAVIN ad notes of a case of Malignant Disease of the Œsophagus, and st Menstruation in a patient the subject of hæmophilia.

Specimens.—Dr. CREED showed a Perforating Ulcer of the omach.—Mr. FULLER showed a case of Ulcerative Colitis, dendent on malignant disease. The patient only lived three days ter active symptoms appeared—Mr. E. J. MOORE showed a comencing Aneurysm of the Left Ventricle of the Heart; and an fantile Uterus and Ovaries from the same patient. He also owed an Abscess of the Brain following Empyema.—Dr. ACGAVIN showed a portion of a Tongue removed in an attempt suicide; also an Anencephalic Fœtus.

Coccygodynia.—The PRESIDENT showed a coccyx which he had moved from a young lady three months previously. She was ry active and intellectual, but came of a gouty family. Four ars ago she suffered from obstinate constipation, and ever since at time had had pains about the rectum and down the thighs, nich gradually became so severe that she could neither sit nor alk and could not sleep without narcotics. Numerous remedies, ternal and internal, were tried with only temporary benefit. length the bone was removed, and it was found to have its int bent backwards, so as to be pressing upon the skin. The ound healed in about three weeks. The pain was gradually lieved, and the patient was now quite well.—Dr. PETER HORCKS, Dr. ERNEST CLARKE, Dr. PURVIS, Mr. J. BRINDLEY JAMES, d others took part in the discussion.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, JANUARY 8TH, 1890.

NELSON C. DOBSON, F.R.C.S., President, in the Chair.

Case of Acromegaly.—Dr. WALDO read notes on the case of a an, aged 54, the subject of this disease. The patient had suffered r some months from weakness of the legs and gradual enlargeent of the hands and feet and ends of the long bones. Shortly fore death, symptoms of bulbar paralysis supervened, and on e occasion there was an attack of unconsciousness with general nvulsions. At the *post-mortem* examination the brain was found contain cavities in cerebrum and cerebellum.

Intra-cranial Tumour.—Dr. SHAW exhibited a specimen of intraanial tumour from a male patient, aged 29. The man contracted philis four years before his death. Three years later he began suffer from constant pain in the right temple, which steadily creased until it beame very severe. Soon after this commenced noticed that his left leg became weak and his gait unsteady. is left arm also became feeble, and vomiting occurred after meals ring the paroxysms of pain. The sterno-mastoid and trapezius uscles atrophied on the left side, and the left facial muscles were fected. There were also optic neuritis, dysphagia, deafness in t ear, and paralysis of left side of palate. At the *post-mortem* amination an oval tumour, the size of a hen's egg, was found ojecting from the posterior surface of the left petrous bone. It as covered with dura mater, and separated the left lobe of the rebellum from the pons and medulla. The last five cranial rves were pressed or stretched by the growth, which was a indle-celled sarcoma.

Specimens.—Mr. EWENS exhibited a specimen of Dermoid Ovarian rst which he had removed from a child; it contained numerous eth, and a lock of hair 30 inches long. Mr. Ewens also showed a persistent Meckel's Diverticulum, which had caused symptoms of intestinal obstruction owing to strangulation of a piece of gut under the process, which reached from the ileum to the umbilicus. —Dr. SHINGLETON SMITH showed a specimen of Aneurysm of the Aorta rupturing into the Pericardium, taken from the body of a powerfully-built gas-stoker, who was in active work forty-eight hours before his death. He was seized with violent pain at the pit of the stomach and shortness of breath; he became cyanosed, and died the day after these symptoms developed.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, JANUARY 30TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Specimen.—Dr. BURGESS, for Dr. CLEAVER, showed a Brain with a recent blood clot in the right corpus striatum, and marked atheroma of the main vessels and their branches, from a patient who had been under Dr. Cleaver's care. Also some sections of an old Syphiloma of the Cord from a patient who had died of phthisis under Dr. Burgess, but who had, six years before, been in the hospital under Dr. Porter with paraplegia, from which he made a rapid recovery at the time under anti-syphilitic remedies, so complete that he had been able to work up to last summer.

Cases.—Dr. BURGESS also showed two patients: 1. A cook, unmarried, aged 44, with the Discoloration of the Skin and constitutional symptoms found in Addison's disease. The patient had been losing strength for about two years. The discoloration was first remarked twelve months before. Nausea, sickness, shortness of breath, and giddiness had become much worse, and skin much darker during the last four months. There was pain in the epigastrium, striking through to the back, but no tenderness in the region of the suprarenals. 2. The other patient was a gouty female, aged 58, who had had "eczema seborrhœicum" for twenty years. It began on the scalp, spread to the face, and there were two large patches with gyrate borders on the thorax.

Muscæ Volitantes.—Mr. BERNARD WALKER related his own experiences in reference to "muscæ volitantes." As he was walking through a village one frosty afternoon in a dense mist, he was annoyed by what appeared to be smuts from an adjacent chimney, one of which presented itself within a short distance of his right eye. He found, however, that the object when steadily looked at became gradually less dark, then semi-transparent, afterwards assuming the form of finely curled and twisted hair, and lastly a form resembling a "bur," or the prickly seed case of the chestnut or burdock. They all terminated in this latter shape, and disappeared rapidly in various directions according to the manner in which the head was turned.

Hydramnios.—Mr. JAMES read the notes of two cases of hydramnios. 1. Mrs. W., aged 31, a fairly healthy active woman, had had two children and two abortions, the last in November, 1886. She had been regular since up to 4½ months before he was called to see her in January, 1888. A fortnight before she had been nursing her husband, who was a very heavy man, and had had to lift him. Mr. James was called to see her on account of a very rapid increase in size of the abdomen, the patient appearing to be at full term. She was greatly distressed by dyspnœa and cardiac disturbance. Rather more than a week later labour set in, and was very protracted, the amniotic fluid being very excessive and saturating three successive changes of bedding. She was delivered of twins, one, a female, with an adherent placenta. The patient was much collapsed, and made a slow though perfect recovery. 2. The second case he was called to on January 6th last. Mrs. S., aged 27, had had one child and one miscarriage at seven months. A year before she had been under treatment for serious lead poisoning, with severe anæmia and neuralgia. She was then seven months pregnant, and measured 65 inches just above the umbilicus. She had begun to increase rapidly in size a month before, and the increase had been very great the last few days before he was called in, with great pain in the back and contractile pains in the body. On January 20th last labour came on suddenly; four quarts of amniotic fluid were caught in the night chair. A microcephalic monster was born, with double spina bifida and incomplete closure of the ventral wall at the umbilicus. Mr. James said that these cases ranged themselves under the usual varieties found in hydramnios. The sex of the fœtus was female, as was usual. There was an arrest of development and monstrosity, with adherent placenta in one case. In the first case the question arose whether separation in the placenta had not

occurred to some extent when the patient was lifting her husband. In the second there was a history of violent exertion on the flying trapeze in the second month of pregnancy, though no ill effect from it was noticed at the time.—Dr. KEELING, Dr. MARTIN, and Mr. GARRARD took part in the discussion which followed.

REVIEWS AND NOTICES.

FOOD IN HEALTH AND DISEASE. By I. BURNEY YEO, M.D., F.R.C.P., Professor of Clinical Therapeutics in King's College, London, and Physician to King's College Hospital. London: Cassell and Co.

THIS book forms one of the series of clinical manuals published by Cassell and Co., and it is one of the best of the series. Dr. YEO is fully master of his subject, and he supplies in a compact form nearly all that the practitioner requires to know on the subject of diet. The work is divided into two parts—food in health and food in disease. In the first part, after giving a succinct account of the origin and purposes of food and the comparative nutritive value of different classes of food, Dr. Yeo surveys the various forms of animal and vegetable articles of diet, and of the various beverages and condiments which are in common use. He then discusses the several modes of cooking and preserving food, and the scientific basis of dietaries and rations. Then follow three useful chapters on the dietaries of soldiers and seamen, and of prisoners; on the order and frequency of taking food; and on food in relation to age and condition—in infancy and childhood, at school, in adult life, and in advanced age. Dr. Yeo devotes a chapter to an examination of the relative value of animal and vegetable foods, and discusses the question of vegetarianism with much good sense.

Writers on dietetics seem scarcely to have sufficiently realised the principle that the guiding rules of diet are to be sought in the dietetic customs of mankind, rather than in physiological deductions. These customs have grown up slowly under the influence of the inexorable law of the survival of the fittest. The authority of these customs is incomparably greater than that of any physiologist or physician. Dietetic habits ought to be studied objectively, as facts of natural history, with a view of eliciting their meaning rather than of questioning their utility. It is bad science to speak of the free use of meat and the systematic use of alcohol, tea, coffee, and cocoa, as if they were matters of self-indulgence and a purposeless gratification of the senses. The impulses which lead to the use of these substances lie deep, and far beyond the ken of contemporary physiology. "By their fruits shall ye know them," and the broad results of diet can only be judged by their national and racial effects. It is often said that we in this country eat too much meat and neglect vegetables; and we are recommended to copy the example of our Continental neighbours, who use less meat and more vegetables. But, what about the results? Are our neighbours across the Channel, with their lower diet, healthier, stronger, more enterprising than we are? Do they display higher intellectual and moral qualities than we do? It will be time enough to criticise adversely our national diet when we are falling behind in the march of nations. Is it not likelier that the more stimulating diet of the Anglo-Saxons has something to do with their undoubted and increasing ascendency on the world's stage?

At the same time it must be borne in mind that the national diet is formed and developed for the benefit of the healthy mass of the population, and that there are numerous individuals, not only in the ranks of invalids, but among the healthy, for whom the national diet requires modification; and it is precisely here that the functions of the medical practitioner come into play. It is his special business to adjust the current diet to the exceptional needs of the individual; and to do this efficiently the twofold purpose of diet must be recognised: the one to keep body and soul together, the other to bring out the maximum faculty of the man. In the case of invalids the purpose in hand is nearly always the former one; and consequently, in this country of high living, the dietetic scale has oftener to be lowered than raised by the medical practitioner, especially among the easier classes.

The second part of Dr. Yeo's book, which is devoted to food in disease, is remarkably full and complete. Dr. Yeo enters a much needed caveat against the tendency to overfeeding our patients. "In many diseases," he says, "indeed, in all febrile diseases, while the tissue waste and the demand therefore for food are augmented the capacity for digestion is greatly impaired; and if in our eager ness to supply food to compensate for the waste of tissue we los sight of the coexisting disability of the digestive and assimila tive processes, we shall not only fail in the object we have i view, but we shall inflict positive injury on our patient." It is i the spirit of these remarks that the diet of the sick is considere throughout. A very full account is given of the best modes o feeding in febrile complaints, and a due warning is given regard ing the too profuse and careless administration of milk to feve patients, whereby hard curds are formed in the intestines, whic are wastefully and injuriously discharged with the fæces. Th dietetic treatment of diseases of the digestive organs is considere in a very carefully drawn up chapter. Then follows, in separat chapters, an exhaustive account of the diet in diabetes, albumin uria, gout, and calculous disorders, and in obesity.

The ninth chapter includes a description of certain specia dietetic cures—the "dry" cure, milk and whey cures, the koumis cure, and the grape cure.

The last chapter gives a condensed account of artificial digestiv agents and artificial alimentation. The following remarks on thi subject display Dr. Yeo's usual judicious frame of mind: "An ob jection, it seems to us, of a somewhat singular character has bee made to the employment of predigested foods, namely, that the usurp the gastric and duodenal functions, and that their use i demoralising to the healthy stomach. No one dreams of object ing to crutches on the ground that they are demoralising to thos who are not lame, because no one imagines that they will ever b ordered for persons with sound limbs. So with these artificia digestive agents; they are intended and devised for the sick, an not for the sound, for the abnormal stomach, not the normal on to supply what is defective, not to add to what is alread abundant, and it is a perfectly gratuitous objection to assert tha they are demoralising in certain healthy conditions, in which was never intended that they should be used."

In an appendix Dr. Yeo gives a useful summary of the dietari used in the several London hospitals and in the Edinburgh I firmary.

Dr. Yeo has gathered together from all quarters an immen amount of useful information within a comparatively small com pass; and he has arranged and digested his materials with ski for the use of the practitioner. We have seldom seen a boo which more thoroughly realises the object for which it was writte than this little work of Dr. Yeo.

OLD AGE. The results of information received respecting near 900 persons who had attained the age of 80 years, including Centenarians. By GEORGE MURRAY HUMPHRY, M.D., F.R.S Fellow of King's College, Honorary Fellow of Downing Colleg Professor of Surgery in the University of Cambridge, and Su geon to Addenbrooke's Hospital. Cambridge: Macmillan an Bowes. 1889.

NOT a few of our readers who, though well past middle lif can count themselves among Professor HUMPHRY'S former pupil will regard with peculiar interest the evidence which this boo affords of the unbroken energy which its author still carries in his numerous self-imposed tasks. It is especially characteristic the bent of Dr. Humphry's mind to have devoted the scanty leisu that even yet falls to his lot to the investigation of a subject complex and at first sight so unpromising, but withal so eminent practical, as the conditions that make for and attend the attai ment of extreme old age. The research, as most of our readers a aware, was undertaken as part of the work of the Collective I vestigation Committee; and the volume before us is a reissue, wi some valuable additions and illustrations, of the various pape and reports in which Professor Humphry from time to time ma known the results of his inquiry in these columns.

As the author probably anticipated, the results obtained reve little of a startling or unexpected character. They open up r royal road to the attainment of old age; but at the same time the furnish a standing rebuke to fanatics and doctrinaires, and pla on a firm basis of fact many sober and rational principles of livi that have commended themselves to the common sense of t shrewder part of mankind. We find that the very old, for t most part, have come of healthy and long-lived families, ha been themselves sound and of good stature in body and in min and have kept both in a state of moderate and wholesome activi

from youth up; that they have had the faculty of good sleep and speedy recovery from fatigue, have shown no undue tendency to obesity, have neither been the children of immature marriages nor have contracted such themselves, have lived in comfort rather than luxury, and have displayed "temperance in all things" throughout life. There are exceptions, as to most rules that govern human affairs; but the rule of the "golden mean" none the less shines clearly out of Dr. Humphry's interesting pages. The active controversialists who have of late been assuring the world, on the strength of a few misquoted figures, of the deleterious results of abstinence from alcohol will find small support in Professor Humphry's tables. If we regard the male sex only, we find that between 8 and 9 per cent. of his veterans had been abstainers the whole or the greater portion of their lives—a large number when we consider the comparative rarity of total abstinence in their young days. The Collective Investigation Committee's inquiry on "Habits of Intemperance" yielded but 4 per cent. of teetotallers at the outside among males (deceased) at all ages over 25. On the other hand, those who are reported to have exceeded strict temperance in the the use of alcoholic liquors amount to about 15 per cent. of the whole, as against the 55 per cent. of the general adult population suggested by the "Intemperance" inquiry.

The author has struck a less familiar note of warning, but one which our generation will do well to lay to heart, when he points out the singularly large proportion of the very aged whose habitual diet has been composed in but small degree of butcher's meat. On grounds of economy as well as of health, the popular notion that an excessive use of flesh food is essential to bodily vigour needs more active combatting on the part of our profession than it gets at present. That persons destined to long life are prone to "keep their hair on," in a literal as well as in a metaphorical sense, will surprise but few; but it may startle a generation accustomed to attacks on primogeniture to know that nearly one-fourth of these persons of exceptional vitality were the eldest born of their respective families.

We have touched on a few only of the many points of interest which occur in this closely-written book. Did space permit, we might particularly allude to the remarkable evidences given of the reparative powers of old age and to the collection of *post-mortem* reports of centenarians, which adds a fresh chapter to scientific anatomy. We will only express, in conclusion, the hope that the author may be called on for further editions of his work until the day when the centenarians' chapter is adorned with a history of his own life.

Rectal and Anal Surgery with Description of the Secret Methods of the Itinerant Specialists. By Edmund Andrews, M.D., and Edward Wyllis Andrews, A.M., M.D., Professors of Clinical Surgery, Chicago Medical College, etc. Second edition, revised and enlarged, with Illustrations and Formulary. Chicago: W. T. Keener. 1889.

This work, the first edition of which did not come under our notice, is chiefly interesting for the authors' observations on the curious subject referred to in the title. Taken as a whole, it is a good average book on the surgery of the lower bowel. The drawings are of very unequal merit. Thus Fig. 14 is a capital sketch of internal and external piles, instructive to all—not so few as might be supposed—who are not thoroughly clear as to the distinction between the two varieties of hæmorrhoid. On the other hand, Fig. 32 "fissure of the anus" shows absolutely nothing. Had the parts immediately adjacent been indicated, the woodcut would have been of some utility. The best ordinary chapter in this work, in point of originality, is the fourth, which treats of Proctitis, or Inflammation of the Rectum. The increase of mucous secretion, "expelled in small gelatinous masses apart from defæcation," is a symptom which may puzzle the practitioner, and which is not distinctly noted in several standard works.

The chapter on Hæmorrhoids is the most essentially instructive, taking the work as a textbook. Drs. Edmund and Edward Andrews are strongly in favour of the ligature. They admit that the local application of cocaine may be sufficient, instead of chloroform, in operations upon mild cases, but care must be taken not to exceed a safe dose. "A young surgeon in New York trying to operate under cocaine, and not getting full anæsthesia, yielded to the temptation to repeat the dose until he had injected 8 grains into the tissue of the rectum, causing the death of the patient. Overcome with horror at the result of his error, he then committed suicide."

The title of this work, it is but fair to say, indicates that the authors had an object not entirely identical with the aims of the compiler of an ordinary textbook. The passages on the habits and customs of quack pile curers and fistula curers are sufficient to render the *Rectal and Anal Surgery* an important publication. The principle of "fistula cured without the knife" is based, as the authors indicate, on the truth that anal fistulæ have a natural tendency to recovery, and are held back from it on account of the unfavourable effect of the undrained septic fluids within the sac, and the tightness of the external opening, which prevents free drainage, and keeps the sac distended with putrid pus. The quacks dilate the external orifice with probes and smear the track with strong antiseptics. The paragraphs on "the Hypodermic Injection of Piles, or the Method of Itinerants," deserve special study; they are too long for condensation in this review. Suffice it to say that they include a history of this practice, which it appears was first practised by a Dr. Mitchell, of Clinton, Illinois, in 1871. Mr. Cripps and Mr. F. S. Edwards, amongst others, have tried injection of carbolic acid in this country, without thoroughly satisfactory results. Dr. Kelsey, of New York, once the chief advocate of this practice, no longer holds that it is absolutely safe. The authors of this work, however, have made searching investigations into several thousand cases under legitimate and "irregular" medical treatment. Carbolic acid was generally, but not always, the active ingredient in the injected fluid. The following accidents have been reported to the Drs. Andrews out of about 3,304 cases:—"Deaths, 13; embolism of liver, 8; sudden and dangerous prostration, 1; abscess of liver, 1; dangerous hæmorrhage, 10; permanent impotence, 1; stricture of the rectum, 2; violent pain, 83; carbolic acid poisoning, 1; failed to cure, 19; severe inflammation, 10; sloughing and other accidents, 35." No doubt in many of these cases the empiric who operated was rough and careless, and the patient, relying on immediate cure, did not rest sufficiently after the operation. Still, the above statistics are a warning to all who may have recourse to injection as a method of treatment more simple and safer than the ligature. Dr. Kelsey admits that he has had cases of abscess, sloughing, and other accidents, and he now confines this method mainly to selected cases of completely internal piles of moderate size with well-defined pedicles.

An instructive history of "rectal specialists" as a class is included in the preface. In the appendix we find a "contract to cure piles," shown to the authors by a patient who was still suffering from hæmorrhoids. The authors mildly state, as a comment on the contract, that the use of such a document "is not only unprofessional, but does nothing towards raising an operator in the estimation of intelligent patients."

The Nervous Substratum of Influenza, and Other Papers. By J. W. Springthorpe, M.A., M.D.Melb., M.R.C.P.Lond., Physician to the Melbourne Hospital, Lecturer to the University on Therapeutics, Dietetics, and Hygiene. Melbourne: Stillwell and Co. 1889.

Influenza, its Prevention, Symptoms, and Treatment. By J. Ernest Viney, M.A. and M.D. (Cantab.), M.R.C.P. and L.R.C.P. Lond. London: H. K. Lewis. 1890.

Influenza, its History, Symptoms, Treatment, etc. By Scrutator. London: W. H. Allen and Co. 1890.

Dr. Springthorpe's paper, which was read before the Intercolonial Medical Congress of Australasia, reaches our hands at an opportune moment. He states that epidemic influenza, after many years of comparative absence, reappeared in a severe form in May, 1885, and reached its acme in August, when it prevailed over a large portion of Australasia. He tells us that the epidemic has returned each autumn and winter since 1885. He describes the somewhat frequent occurrence of cases resembling diphtheria, a deposit of mucus simulating false membrane. The gastro-intestinal form has been, in his experience, confused with typhoid fever. The pyrexia in such cases might continue for ten days, and was accompanied by profuse sweating and great prostration. The aspect of the patient, however, was more natural; there was no delirium and no eruption. In severe cases he has observed sloughing of portions of the intestinal mucous membrane, but diarrhœa, when present, was not characteristic. He has seen a considerable number of cases of more or less acute phthisis,

and even of acute tuberculosis, which have dated their origin from attacks of influenza. An interesting observation which he makes is that the heart's action is apt to become irregular and extremely rapid or intermittent. In such cases distinct cardiac dyspnœa might be observed, and sometimes syncope. In persons already suffering from organic disease of the heart an attack of influenza was, he found, liable to produce very serious deterioration. When Dr. Springthorpe passes from the description of his clinical observations and propounds a theory as to the pathology of influenza he is a less safe guide. He believes that the poison of influenza, possibly, as he suggests in a manuscript note, an alkaloid secreted by a micrococcus, acts through the nervous system.

The second book on our list has little scientific interest; it is a very slight sketch of the characters, symptoms, and treatment of influenza. It is difficult to know to whom it is addressed; but, if to the medical profession, it was hardly necessary to write out the prescriptions in English and so fully, and all, and more than all, the pamphlet contains could have been found in any textbook.

The next pamphlet appears to be a belated magazine article, and to have been mainly compiled from a collection of newspaper cuttings, eked out by a few references to Copland's *Dictionary* and Professor Hirsch's well-known work.

A Manual of Nursing, Medical and Surgical. By Laurence Humphry, M.A., M.B., M.R.C.S., Assistant-Physician to and Lecturer to Probationers at Addenbrooke's Hospital, Cambridge. London: Charles Griffin and Co.

Manual of Nursing, Medical and Surgical. By Charles J. Cullingworth, M.D., F.R.C.P., Obstetric Physician to St. Thomas's Hospital. Third edition, revised. London: J. and A. Churchill.

Nursing literature is expanding, and, what is more to the purpose, it shows manifold signs of improvement with its growth. In the fullest sense, Mr. Humphry's book is a distinct advance on all previous manuals. It is, in point of fact, a concise treatise on medicine and surgery for the beginner, incorporating with the text the management of childbed and the hygiene of the sick room. Its value is greatly enhanced by copious woodcuts and diagrams of the bones and internal organs, by many illustrations of the art of bandaging, by temperature charts indicative of the course of some of the most characteristic diseases, and by a goodly array of sick-room appliances with which every nurse should endeavour to become acquainted.

The systematic arrangement of subjects adopted by the author is excellent, and is that which we have always held ought to be followed where the task of instructing probationers is confided to one person, as is the case in some London and in most provincial hospitals not associated with medical schools. In these establishments the duty generally falls to the lot of the house-surgeon or to some junior member of the staff. In the volume before us the course is prefaced by a chapter on the requirements and general management of the sick room, a subject with which every nurse entering on her probation is bound to make herself familiar; and this is followed by an elementary description of the body, its bony framework and muscular setting, together with an account of the organs which minister to the work, waste, and repair of its numerous tissues. After this we have five chapters, which we assume are consecutive lectures, dealing respectively with the nervous, respiratory, circulatory, digestive, and excretory organs; and prior to describing the diseases to which any organ or system of organs is liable, and their management, the author gives a succinct account of their anatomy and uses. The subject of fevers and their peculiarities is discussed in a separate lecture, and much useful information is given to the nurse, especially with regard to disinfection, or, in other words, to prevent others, and as far as possible herself, from contracting infection. A chapter on disease in childhood completes the purely medical part of the manual; but, to render the work useful to all classes of readers, another chapter has been added, dealing with the management of the lying-in chamber before and after confinement, which ought to be found serviceable to monthly nurses. In all, five of the fifteen subdivisions are more or less taken up with matters of surgical interest, comprising wounds, ulcers, burns and scalds, fractures, the nursing of operation cases, bandaging and sick-room appliances, and contribute to form not the least attractive part of the book. In the shape of an appendix, Mr. Humphry has added a few pages of receipts for invalid cookery which will also be found valuable. Nurse-probationers will do well to purchase this book, or get their friends to present them with it, for it contains more direct information in connection with the duties they are likely to be called on to perform, and in smaller compass than any other manual we have seen. It should also prove useful as a guide to house-surgeons and medical men about to inaugurate courses of lectures to nurses, on account of its convenient and systematic arrangement.

We referred to Dr. Cullingworth's little manual of nursing on the occasion of its first issue in terms of high praise, and we can only repeat more emphatically what was said of it on that occasion. The book makes no pretension to deal systematically either with physic or surgery, but confines itself to those technical and domestic details which every properly trained nurse ought to know. These are clearly and concisely expressed; and the fact of a third edition being called for in the course of a very few years shows that the book is well thought of by those for whom it was originally intended, and possibly by others. An additional chapter on antiseptic treatment has been added to the present edition, and the price of the manual has been reduced to half a crown.

Chronic Bronchitis and its Treatment: A Clinical Study. By William Murrell, M.D., F.R.C.P., Lecturer on Pharmacology and Therapeutics at the Westminster Hospital, etc. London: H. K. Lewis. 1889.

There are few subjects of more practical importance than the treatment of chronic bronchitis. Winter cough, with complicating asthma or emphysema, figures largely on the ordinary practitioner's list, and its treatment is, in many instances, admittedly disappointing. This want of success is frequently due, doubtless, to the *laissez faire* method which is sometimes followed, but other factors, of greater moment, contribute to make the treatment of chronic bronchitis no easy matter. Foremost amongst these are the grave anatomical and physiological changes in other organs, which tend to occur—in some cases comparatively rapidly—in connection with bronchitis. Hence few subjects require more exactness in the examination and diagnosis or greater wisdom and patience in prescribing a course of treatment. Dr. Murrell deserves the thanks of the profession for his praiseworthy endeavour to stimulate the spirit of aggressiveness in this important department of therapeutics. The present volume, which embodies the substance of several papers already published, gives a light and easily read *résumé* of the author's clinical studies in the use of various of the more special remedies, such as ipecacuanha, lobelia and other sprays, tar, creasote, benzole, terebene, cheken, cubebs, sandalwood oil, and chloride of ammonium, and fuming inhalations. The work is valuable as the clinical record of a physician who has taken the trouble to test the worth of the frequently shifting list of vaunted remedies for winter cough, and who has himself contributed towards the increase of the list. But it may be suggested—without any wish to minimise the interest of such work—that perhaps the promise of success which the perusal of the work might afford will hardly be fulfilled in the average experience of practice. We cannot help thinking that the excellent mission of the little volume would have been carried through with a greater measure of ultimate success had due prominence been given to the less bright side of the treatment of chronic bronchitis. The author rightly complains that some of the recognised textbooks are unduly reticent with regard to the treatment of bronchitis, and accordingly this attempt to appraise the value of the more special remedies recently introduced will be welcomed by many who have experienced this want.

The General Theory of Cancer Formation. By Herbert Snow, M.D. London: J. and A. Churchill, 1889. Pp. 24.

This little tract contains the substance of a lecture delivered at the Cancer Hospital, Brompton. In it the word cancer is used in the popular sense to include tumours so widely different in histological details as epithelioma and sarcoma, rodent ulcer and myxoma, xeroderma pigmentosum and keloid. This is extremely unfortunate. In former years the term cancer had a vague clinical significance equivalent to what we now imply by the adjective "malignant." Gradually pathologists have succeeded in inducing practitioners of medicine and surgery to restrict the term "cancer" to tumours of epithelial origin. At the present time cancer may be defined as a malignant adenoma, and as rays of light are beginning to disperse the thick darkness in which the nature of cancer has been so long involved, a few deformed ex-

pressions of opinion like those contained in this tract will do much harm.

Malignant tumours fall into three very distinct groups: 1. Infective granulomata, including tubercle, glanders, actinomycosis, lupus, and the like. 2. Sarcomata. Many tumours formerly placed under this heading are now known to be infective granulomata, indeed, group 1 now mainly grows at the expense of group 2. 3. Epithelial tumours. This includes warts and adenomata, malignant gland tumours being designated cancer.

If we are to deal successfully with such a terrible disease as cancer, we must clearly understand what we mean by the term. If in describing the affinities of parrots we frame our descriptions so loosely as to admit the flying lemur, they become useless as representing accurate knowledge. Yet, ludicrous as it may seem, it is tantamount to this when the term "cancer" is used in the indefinite sense implied in Dr. SNOW'S ingenious lecture.

NOTES ON BOOKS.

The Charities' Register and Digest, being a Classified Register of Charities in or Available for the Metropolis. With an Introduction by C. S. LOCH, Secretary to the Council of the Charity Organisation Society, London. Third edition. (Longmans, Green, and Co. 1890.)—This work, as its title implies, is a *catalogue raisonné* of London charitable institutions, the conditions of admission, amount and sources of income, management, and other necessary details being succinctly given. Charity is here classified into its natural orders; its scope is all-embracing, including not only provision for the wants of the suffering body but spiritual sustenance for the destitute soul, in the shape of bible and tract societies, missions, etc. The passion for system has led to one or two eccentricities of arrangement. Thus, the St. John Ambulance Association, the National Society for the Prevention of Cruelty to Children, the Society for the Suppression of the Opium Trade, the Home for Lost and Starving Dogs, and the Brown Institution are grouped together under the heading "Protection of Helpless." Under the same heading are placed the anti-vivisection societies, of which there are two—the London Anti-vivisection Society, established in 1876, and another, founded in the same year, with the somewhat pleonastic title of "Society for the Total Abolition and Utter Suppression of Vivisection." The financial details given with regard to the former of these bodies do not imply a very extended measure of public support; as to the latter, the honorary secretary and treasurer of which is Mr. George R. Jesse, "no recent information" is forthcoming. A most valuable feature of the book is Mr. Loch's "Introduction," which may be described as a bird's-eye view of the vast field of human suffering, wih a clue to the complex machinery which has been devised for its relief. The principles of the organisation of charity and the practical working of the system in all its legal and administrative relations are here clearly but concisely set forth. To all interested in what Carlyle called "the condition of the people question," and especially to wealthy philanthropists anxious to help the cause of charity without flying in the face of political economy the book is simply invaluable.

The Goulstonian Lectures on Secondary Degenerations of the Spinal Cord. By HOWARD H. TOOTH, M.D., F.R.C.P. Pp. 71. (Churchill. 1889.)—We are glad to find that Dr. Tooth has reproduced in book form his very able lectures which we published in our columns last year. The subject matter of Dr. Tooth's work was rendered of particular value by the original observations upon which it was based. It is unfortunately permitted to many who are appointed to lectureships of this kind to occupy the time with an eloquent description of ingenious hypotheses on pathological subjects, exact knowledge on which is as yet wanting. Dr. Tooth, however, chose to give us a solid contribution in the shape of fresh facts, to extend our knowledge of the modes of degeneration, and so, also, of the anatomical arrangement of the fibres in the spinal cord. As Gaule points out in his recent laborious and accurate description of the spinal cord in the frog, it is a matter of much moment at the present time that our knowledge of function is passing ahead of our knowledge of structure. This means that the relation of function to structure needs closer investigation. We hope, therefore, that Dr. Tooth will continue his very valuable investigations, and that others may come forward and supplement the anatomical side by extensive experimental observation of changes in function. We cannot close this reference without a word of praise for the very beautiful drawings which Dr. Tooth has executed in illustration of his work.

On the Animal Alkaloids. By Sir WILLIAM AITKEN, M.D., F.R.S. Second Edition. (London: H. K. Lewis. 1889.)—The author, in the commencement of the volume, acknowledges that he is mainly indebted for his chemical facts to Dr. A. M. Brown's book on the animal alkaloids. The nature and scope of the chemical side of the work can be very well gauged from this confession. Sir William Aitken's book is, however, free from glaring misprints and obvious inaccuracies. The subject of the animal alkaloids is no doubt an important one, and may be of more importance in the future as our knowledge develops; but Sir William Aitken seems hardly to have kept himself sufficiently acquainted with the whole progress of our knowledge in respect to these alkaloids, especially that due to German researches.

Talim-I-Zabán-I-Urdu. A Guide to Hindustání, specially designed for the Use of Officers and Men serving in India. By G. S. A. RANKING, B.A., M.D.Cantab., Surgeon-Major Bengal Medical Service. (Calcutta: Thacker, Spink, and Co. London: W. Thacker and Co.)—This little book has been prepared by its author, well-known in India as the author of *Arabic and Persian Prosody*, as a help to candidates for Government examinations. A work of this kind supplies a want long felt, by none more than by young medical officers of the army of India who have to pass in certain standards before they can draw certain allowances. The first part gives colloquial sentences and idiomatic phrases, general, special, military, and medical. Part II is a concise grammar of Urdu. Part III, exercises in MSS. Part IV, exercises for translation from English, with translations (*a*) colloquial, (*b*) historical, (*c*) narrative. We have looked carefully through this work, which we think admirably well adapted for its purpose. Young medical officers may turn their time to good purpose on the passage to India in the study of Surgeon-Major Ranking's book, and if they have any aptitude for acquiring languages will, by the time they reach their destination, be ready to turn to good account the lessons of their Munshi, and will soon be able to face the Government examiners. Dr. Ranking, by giving as he does extracts from India army circulars, shows exactly the qualifying examination required to be passed by officers holding any appointment for which the lower standard in Hindustani was formerly a necessary qualification.

The Latin Grammar of Pharmacy. By JOSEPH INCE, F.C.S., F.L.S., F.G.S. (London: Baillière, Tindall and Cox. 1890). It is well known that a classical education alone does not prove sufficient to master the technical details involved in writing medical formulæ, and hence the necessity of the study of a work of this kind. Mr. Ince's book will be found useful by medical students, especially those who intend to enter for the M.B. examinations in which candidates are required to write prescriptions in Latin without symbols and abbreviations. The work comprises not only a Latin grammar, but also an essay on the reading of Latin prescriptions, in which the uses of special words and expressions are explained and illustrated by numerous examples; then follow medical directions for mixtures, pills, draughts, and, in fact, for every possible form of administration or application of drugs. A list of abbreviations, a vocabulary, and English prescriptions for translation into Latin are appended.

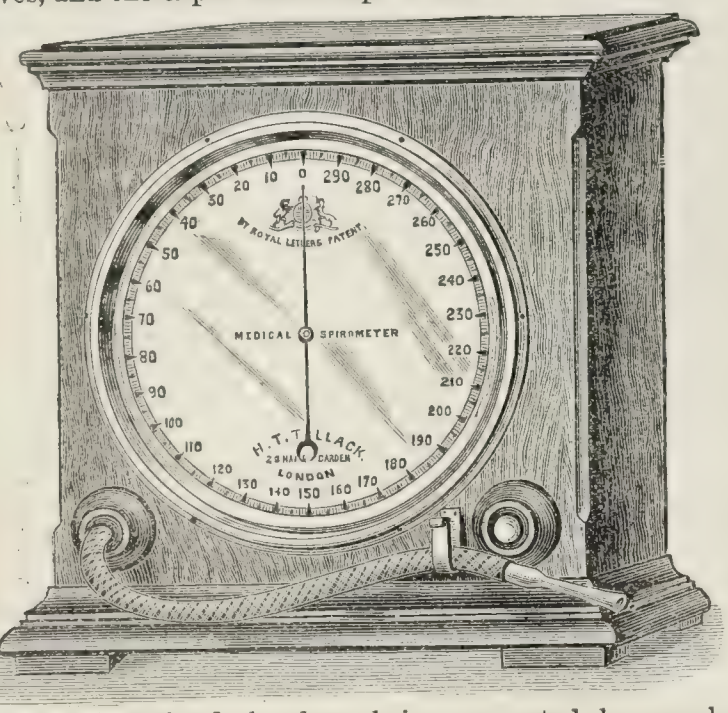
Casuistique et Diagnostic Photographique des Maladies de la Peau. Par le Dr. D. VAN HAREN NOMAN. (Haarlem: De Erven F. Bohn. London: Henry Renshaw. 1889.)—This is the first part of an important work, which will consist of ten parts, each containing six plates, with nine photographs, and letterpress in French. This part, which is beautifully illustrated by phototype, treats of the symptomatology and differential diagnosis of dermatoses. The plates have been very carefully prepared, and are selected from cases which have presented themselves at the Clinique for Diseases of the Skin and Syphilis, in Amsterdam. The plates are not coloured to represent Nature, although the background is in many cases of a light flesh colour; but the reproductions are so exact that, although uncoloured, they will compare favourably with the coloured atlases hitherto published. The cases illustrated in this part are of herpes zoster, several varieties of psoriasis, and acute multiple gangrene of the skin.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

STANLEY'S MEDICAL SPIROMETER.

THIS is a well-devised form of spirometer, suitable for hospitals and large institutions where it is advisable to test the respiratory power of a large number of healthy or sick persons.

The measuring part of the instrument consists of a cellular drum containing a series of overlapping butterfly-wing shaped cells, each of which is accurately gauged to contain a given number of cubic inches, and the air is admitted by a valve under the central overlapping portion of the cells on one side of the centre only. The drum is half submerged in a cistern of water, in which it revolves, and the expired air displaces the water from the suc-



cessive cells, the axis of the drum being connected by cogwheels with a dial plate divided into 300 cubic inches. Patients are instructed to expire slowly through a flexible tube with a glass mouthpiece; and, in the case of the healthy, the amount expired depends on the height and sex. A man of 5 feet 7 inches should expire 160 cubic inches, and a female of the same height 109 cubic inches.

The apparatus is apparently simple and not likely to get out of order, but to work it effectually requires some practice and considerable muscular effort. The diameter of the tube for expiration is rather small, and might be with advantage widened. The manufacturer is H. T. Tallack, of 24, Hatton Garden.

THE VIADUCT AMBULANCE LITTER.

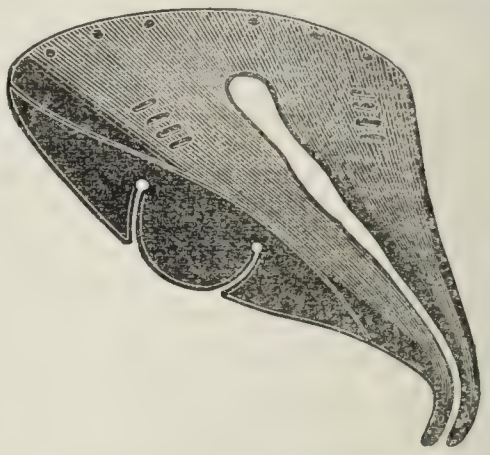
THIS new street litter consists of a strong, light, ash-framed stretcher, webbed and covered with tanned canvas, wedge-shaped pillow, body and leg straps, and fitted with removable hood. The under frame to which the wheels are attached is separate and complete in itself. It is fitted on easy steel springs and india-rubber tyred bicycle wheels. The special advantages claimed for this ambulance litter are great strength and extreme simplicity in construction, lightness of draught, freedom from liability to accident from tilting either backwards or forwards (as in a two-wheeled litter), as the stretcher must always remain horizontal, that its use is easily learnt, that it requires no adjusting or fastening. The bearers have merely to lift the stretcher from the wheel frame, and when replaced it remains secured by its own automatic mechanism. The hood when not in use can be removed and folded into a small parcel. It is well and strongly made throughout. It is stated by the maker, Alfred Carter, 47, Holborn Viaduct, London, E.C., that this ambulance is not only available for street accidents, but a patient can be taken from bed and conveyed into the country without removal from the stretcher, which does not require to be slung, as the entire appliance can be wheeled into a guard's or ordinary railway van with the patient on it, and being on easy springs and india-rubber tyred wheels, the patient can ride with great comfort and free from all jarring or shaking. It is suggested that this ambulance offers a simple and cheap means



of transporting a patient from place to place by road or rail. When the stretcher is once placed on the wheel frame one attendant only is required, and it is only when the stretcher has to be lifted off and carried that a second person's assistance is needed. These stretchers have, we understand, been extensively used by the Hospitals Association, and are said to have elicited the approval of the police, the Fire Brigade, and others.

IMPROVED CYCLE SADDLE.

CAPTAIN PATTISSON'S cycle saddle for the relief of perineal pressure—the one which I mentioned I had ridden for a year, and found that it practically does away with perineal pressure—is open in the middle line in front, and each side of the saddle is fixed in front to one part of a bifurcated iron support. This bifurcated arrangement prevents the thighs compressing the sides together, so that actually the middle line of the perineum rests within the open space and is not exposed to pressure. All other saddles I



have tried which are open in the middle line are united in front on one point; in consequence the thighs press the sides together and tend to form a ridge of leather under the middle line of the perineum, and thus press more instead of relieving pressure. Perineal pressure is a cause of so much suffering and inconvenience to cyclists that I venture to send this block and note for publication.

E. D. TOMLINSON, M.D.

Upper Tooting.

DENTAL MOUTH MIRROR.

MR. E. A. TICE forwards to us a very ingenious and convenient mouth mirror, enabling everyone, by a simple arrangement of reflex mirrors, to examine his own teeth on the posterior as well as the anterior surface, and to thoroughly explore the state of the upper and lower teeth and gums. It enables parents also to see to their children's teeth, showing all the surfaces, and enabling anyone to discover the existence of a cavity or of irregularities, and to watch the condition of the mouth, a proceeding which is as useful for the purpose of absolute cleanliness as it is for the easy arrest of incipient caries or other dental disorders. The little mirror will be found useful in practice by medical men as well as for their own personal use. The agents are Messrs. Lynch and Co., 192, Aldersgate Street.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 8TH, 1890.

THE LAW AND EQUITY OF ATTACKS ON MEDICAL PRACTITIONERS.

FROM time to time we are made aware that a member of the medical profession has been subjected to a charge of assault by some woman or girl who has consulted him as a patient. The charge is investigated, and in the result, we are glad to say, almost always is proved to be unfounded, and the defendant is generally said to leave the court without a stain on his character. He has, nevertheless, in most of these cases, been put to considerable expense, and to still more anxiety, in providing for his defence; and the damage to both personal and professional reputation which he may sustain, in spite of a verdict of acquittal, is difficult to estimate. Other persons may be, and are, at times subjected to groundless charges, but they are not so liable to attacks, especially of this kind, as medical practitioners. A doctor may be obliged to see a female patient alone, and it is well known that women are often subject to hysterical delusions, which lead them to imagine assaults when none have been committed. Charges so made may be difficult to answer; but still more difficult are those which, as experience shows, are brought for the sake of levying blackmail. The only safe way of meeting such charges is by a prompt denial and a prosecution of the offender for the felony of attempting to extort money by threats. Such a course of conduct should be regarded as conclusive of the innocence of the prosecutor, who was originally accused, and confers a benefit on society by leading to the punishment of the intending blackmailer. But it is troublesome and expensive; and many men—especially professional men—shrink from the annoyance and publicity which it entails. Occasionally a prosecution for attempted extortion is brought, and the scoundrel so prosecuted is convicted and severely punished; but we fear that much more often the victim succumbs and pays hush-money sooner than face a charge of which he knows himself to be innocent. Sometimes he declines to pay or to pay enough, and then he finds himself in the position of defendant, obliged to meet the charge brought against him under much less favourable circumstances than if he had been prosecutor. Even after he has secured his acquittal a suspicion that there must have been some foundation for the charge remains, and his professional position (supposing him to be a professional man) is worse than it was previously.

The present law no doubt in theory provides a remedy, for any man who has been unjustly prosecuted is entitled to bring an action for malicious prosecution against his accuser, and to recover from him pecuniary recompense for the costs to which he has been put and for any damage he has sustained. This right of action is, however, a very inadequate remedy for the injury which a prosecution may have caused to an innocent man. In the first place the plaintiff must show that the prosecution was instituted maliciously and without reasonable and probable cause for preferring the charge; and this it is often impossible to establish. Even where this can be done, it is useless to bring an action claiming large damages against a person of no means; and under this category those who prefer charges for the sake of extorting hush-money would usually come. A medical man who has been wrongly charged with an assault would often find it impossible to show that the woman who brought the charge knew it to be groundless, and consequently would be liable to lose the verdict if he brought an action, and so would only add to his costs and increase the injury which the charge had already caused to his reputation. Even if he could prove clearly that the accusation was made merely for the purpose of blackmailing him, the prosecutrix would almost certainly be a girl, very likely under age, from whom no damages could be recovered, and against whom therefore no one would advise him to take civil proceedings. For cases such as these the law does not at present provide any effective remedy, and a change, if a satisfactory one can be devised, certainly seems desirable.

If public opinion can once be brought to see that the power of preferring charges of assault is peculiarly liable to be abused, and that such charges are frequently brought for other objects than procuring the punishment of real offenders, it may come to look on the complainants with suspicion; and magistrates may be induced to dismiss such charges instead of committing them for trial as they now generally do. There seems, however, to be no immediate probability of this change being brought about. Any movement in the direction of discouraging women from bringing forward charges, and having them subjected to full and public examination, would be sure to stir up an outcry calculated to defer rather than help on the desired change. In our judgment it would be a boon to the public, which should be welcomed by all who care for decency or morality, if such cases, at any rate in their initial stages, had to be investigated in private, and if newspapers were prohibited from reporting or commenting upon them. A section of the press, however, finds that it pays to publish reports of such cases, especially if the defendant is a man in a public or official position, and would be sure to resist strenuously all attempts to restrain their publication of sensational and profitable details. Any proposed change of the law, however beneficial to the public, which would tend to deprive them of these pecuniary gains, would be misconstrued and misrepresented as being brought forward in the interest of a class, and would, we fear, fail to pass. If publication of the proceedings could be prevented, it would be a considerable mitigation of the injury caused to a defendant by a false charge being brought against him, but the improvement is one which we cannot expect to get at present.

The only other way in which persons unjustly accused can be reinstated in the position from which they have been driven

is by providing that, from some source or other, they shall get full recompense for all the damage they have sustained. Under our jurisprudence a successful defendant in a criminal case is sometimes, but very seldom, entitled to an order for payment of his costs by the prosecutor. It might be possible to alter the law so as to give the court power to order such payment in cases where charges of assault were shown to have been preferred improperly. This alteration would, however, be of very little practical use, unless, in the first instance, the prosecutor (or prosecutrix) had been ordered to give security for payment of costs if ordered. It might lead to grievous injustice, and to the stifling of prosecutions in cases where crime has really been committed, if security for costs were always to be required; but, if a discretionary power of requiring such security were vested in committing magistrates, it would place them in a very invidious position, and would probably end in their requiring it so seldom as practically to afford no protection. We should like to see the law altered so that an unsuccessful prosecutor might be ordered to pay the defendant's costs just like an unsuccessful plaintiff in a civil action. But we cannot think that this alteration would often benefit defendants in the class of cases with which we are dealing. In them the only real assistance to which a defendant can look is that provided by the sympathy and assistance of his friends. This, we are glad to know, medical men already have. Associations are springing up in most parts of the country, which, on the principle of mutual assurance, are ready to undertake the defence of one of their members should a charge be brought against him, and these have, in many instances, led to a defence being successful where the unassisted efforts of the defendant might have failed. These associations should be extended—and this, we hope, will be the work of the Medical Defence Union—so as to embrace the whole medical profession. Already they are commencing to give an efficient support and protection which are the envy of other professions.

There still remains to be provided some method whereby a defendant after his acquittal may be able to set himself right before the public, and to be recouped for the pecuniary loss entailed upon him. We have shown that, apart from the difficulty of establishing that a prosecution was instituted improperly, it is seldom worth while to bring an action to recover damages for malicious prosecution, because the position of the prosecutor is generally such that no substantial damages could be recovered from him. It must be remembered, however, that in name the Crown—that is, the community—prosecutes in criminal cases, and the community, therefore, is responsible for a share in the injustice inflicted on a defendant by an unfounded prosecution. The community can only act in such matters through its officers, the police and the magistrates; but if they act in their employment recklessly and hastily, and so cause injury to individuals, there seems to be no reason why their employers, the community, should not be liable to pay compensation to persons who suffer in consequence, just in the same way as other employers are liable to pay for injuries caused by the defaults of their servants.

In this country the theory of the law is that the Crown is not liable to pay compensation like a private individual, and no action to recover damages consequent on the default of public servants can, as a rule, be maintained against the Crown or against Government officials. This theory has not always been strictly acted on, and in recent years there have been several instances in which compensation has been paid out of the public funds to persons who have been accused or convicted unjustly. If these precedents could be followed and made the basis of legislation, so as to entitle persons, who could show that criminal proceedings had been carried on against them improperly, to compensation from public funds, a great improvement would be effected, magistrates would exercise greater care in their preliminary investigations, and many innocent men would be spared the anxiety to which they are now subjected. We do not believe that the cost to the public would be great, for, in cases where magistrates were induced to commit by perjured testimony which, if true, established the charge before them, the public would not be liable to pay anything. The establishment of the right to obtain compensation in proper cases would, however, remove a very real grievance which at present exists, and would also, we think, produce a substantial improvement in the administration of justice by the subordinate tribunals before whom all criminal proceedings are brought in the first instance.

The subject is one which the Parliamentary Bills Committee of our Association may be able to deal with. A statement of cases in point, from any of our readers who can bring forward impressive examples within their knowledge, would strengthen the hands of the Committee.

PRECAUTIONS AGAINST THE ADVENT OF CHOLERA.

Sir Robert Rawlinson has well earned the title to be listened to on public health questions by long and good service as a sanitary engineer, and by the strain of good sound sense which almost invariably underlies even the most loosely thought of his numerous public utterances. His last effusion on the coming of cholera is not without irrelevant references to the part he has played in the promotion of public works, and displays his customary pronouncement on the pathological and etiological sides of the question, which does not prevent him from propounding *ex cathedrâ* statements which can but provoke a smile. Nevertheless, the veteran engineer has the root of the matter well established in his mind, although he confounds in his own person the relations of cause and effect; he is in fact the effect of the progress of sanitary knowledge, although he is always ready to represent himself as its cause, just as he alleges that the mud of the Thames is the cause of the red worms which abound in it. The successive generations of sanitary investigators and students whose doctrines have given rise to, and whose studies have directed and justified the sanitary works of which he speaks, have, however, succeeded in imbuing him with perfectly just notions of the relation of public sanitation to the prevention of the spread of epidemics such as cholera; and he very wisely says in homely words, which will have a good effect if they are taken to heart by popular readers, that the secret of the prevention of all filth diseases such as cholera lies in the purification of the soil, air, and water; in the increased

activity of local authorities, in sewering, house draining, street paving, and in the removal from villages and towns of many sources of nuisance—such as common privies, movable pails, slaughterhouses, cowsheds, and dairies—from places where they ought not to be. He insists, wisely too, on the local and general inspection of our food supplies, and especially of our water supplies. We can excuse the nonsense he talks about claret and champagne being for the most part chemical compounds and causes of cholera, and his bold statement that bodies dissected after cholera show, as a rule, organic disease which would have rendered life uncertain and short, in favour of the reminder which he gives to the public that medical investigations have proved (although, by the bye, he leaves the source of proof altogether out of view) that cholera is essentially a filth disease; that it is mainly conveyed by impure water supply and contaminated food; that it makes its places of selection in crowded populations, where scavenging is defective, where personal cleanliness is neglected, and where drainage and sewerage are inadequate, and scavenging and surface cleaning unequal to the necessities of healthy life. By attention to these principles, and by carrying out in the early life of individuals, in the regulation of the home and in the governing of communities, it is now—thanks to the investigations of Snow, Simon, Farr, Netten Radcliffe, and others—pretty clearly established that cholera may be successfully kept at bay, at least in European countries; no other system of precautions will avail, and a reminder that it is so is just now timely and useful. Nothing useful can be expected from sanitary *cordons* or quarantine; much may be attained by civic sanitation and personal hygiene.

It is stated that the Children's Hospital in Great Ormond Street has received a legacy of £60,000 and of £5,000 for the Building Fund. The erection of the new wing is to be commenced forthwith.

It has been suggested as a most fitting manner of perpetuating the name and labours of the late Deputy Surgeon-General T. G. Hewlett, C.I.E., in connection with sanitary reform in the Bombay Presidency, that a prize or scholarship in hygiene should be established in the Grant Medical College, and, if funds permit, that the nucleus of a museum of hygiene be formed in Bombay.

On Monday, February 10th, Dr. Lauder Brunton will read at the Medical Society a paper on Experiments on Anæsthetics at Hyderabad, and an important discussion is expected to follow, in which several leading authorities will take part. The Medical Society is also arranging for a discussion on the recent Epidemic of Influenza on February 17th.

We regret to hear that Brigade-Surgeon Davies died, early in January, at Meerut, from typhlitis and multiple abscess of the liver. It is stated that he was overworked all last hot season, and got no leave, with the result that he completely broke down. He was an excellent officer and highly esteemed. He married a daughter of Sir Donald Stewart, late Commander-in-Chief in India.

The report presented at the last meeting of the Hospital Saturday Fund shows the amount collected during last year to have been £14,000, as against £11,000 the previous year. The sum of £12,000 has been divided, it was stated, among participating institutions. The sums received up to January 24th for the current year amount to £1,360.

THE JOULE MEMORIAL.

The sum already in the hands of the Committee for the proposed memorial to the late Dr. Joule amounts to £2,435. It is estimated that at least £1,000 additional will be required to carry out the objects of the memorial.

MEDICAL BARONETS.

The death of Sir William Gull reduces the number of medical baronets to two, one of whom, Sir William Jenner, has virtually retired from practice, leaving only Sir Andrew Clark. Of surgical baronets, on the other hand, there are seven, of whom all but two are in active practice.

PROVIDENT INSURANCE AGAINST INFECTIOUS DISEASES.

Some of the insurance societies established at the large Sheffield factories during the small-pox epidemic are still pursuing a useful course. At the annual meeting of the insurance society of the *employés* of Messrs. J. Dixon and Sons it was reported that though there had been no cases of small-pox during the past year, there had been 14 cases of scarlet fever, 1 direct and 13 indirect, and that 52 claims, amounting to £49 19s. 8d., had been paid. The Society has now become permanent, and though it and kindred societies may not be the means of doing such excellent service as was possible during the late epidemic, still they are capable of rendering material aid against the propagation of disease at the same time that they render immediate help to those who suffer.

THE ADMIRALTY.

The Lords Commissioners of the Admiralty have approved the formation of a Board of Examiners to conduct the competitions for admission into the medical department of the Royal Navy. The new Board will consist of the following gentlemen:—*President:* Sir Andrew Clark, Bart., M.D., LL.D., F.R.S., President of the Royal College of Physicians. *Examiners:* Sir Dyce Duckworth, M.D., Treasurer to the Royal College of Physicians, Lecturer and Physician to St. Bartholomew's Hospital; Sir William Mac Cormac, F.R.C.S., Professor of Surgery at St. Thomas's Hospital and Medical School; Mr. G. H. Makins, F.R.C.S., Assistant Surgeon and Lecturer at St. Thomas's Hospital and Medical School; and T. W. Shore, M.D., Lecturer on Comparative Anatomy, etc., at St. Bartholomew's Hospital Medical School.

THE ABUSE OF COFFEE.

Much has been said concerning the undoubtedly evil effects of excessive tea drinking. Dr. F. Mendel has recently enjoyed opportunities of studying the results of an unbridled abuse of coffee, and his results are now published. The great industrial centre round Essen includes a very large female population. Whilst the women of the working classes in this country are often addicted to dosing themselves with tea that has stood too long, it appears that the workmen's wives at Essen drink coffee from morning till night. Some consume over a pound of Ceylon coffee weekly, and one pound contains over sixty-four grains of caffeine. In consequence, nervous, muscular, and circulatory disturbances are frequent. The nerve symptoms are characterised by a feeling of general weakness, depression of spirits, and aversion for labour even in industrious subjects, with headache and insomnia. A strong dose of coffee causes the temporary disappearance of all these symptoms. The muscular symptoms consist of distinct muscular weakness, and trembling of

the hands even during rest. The circulatory symptoms are marked by a small, rapid, irregular pulse, and feeble impulse of the apex of the heart. Palpitations and heaviness in the precordial region are frequent. The hands and feet feel very cold, and the complexion becomes sallow. Dyspeptic symptoms, chiefly of the nervous type, are very common. Acne rosacea is seen in a large number of the sufferers. These coffee drinkers cannot be cured by simple abstention from their favourite drink, with substitution of milk as a beverage. They require rest from work, open-air exercise, cold ablutions followed by friction, and small doses of brandy. Care must be taken, especially when a large body of working women are under the care of a medical officer, lest the first and last items of treatment do not lead to malingering.

PUTREFACTION IN THE DEPTHS OF THE SEA.

DR. REGNARD has raised the question as to whether a corpse which sinks to a very great depth is preserved indefinitely or otherwise from putrefaction. According to his researches, published in the archives of the Biological Society of Paris, putrefaction does not take place in decomposable substances submitted to a pressure of 600 to 700 atmospheres. These figures correspond to a depth of 6,000 or 7,000 mètres at sea. From these experiments it must not be concluded, according to Dr. Regnard, that there is a total absence of putrefaction in the greater depths of the sea. The curious "abysmal" fishes discovered in the *Challenger* and other expeditions appear to rise after death, so that they are sometimes found on the surface, though, as a rule, they go to pieces as the surrounding pressure diminishes, long before they reach the air. Still, there is no proof that bathybial or abysmal microorganisms do not exist, and, if so, they could cause decomposition in the corpses of men as well as in the dead bodies of abysmal fishes. The question is of considerable medico-legal, and yet greater biological, interest, and it is far from settled.

WHITE MEN IN CENTRAL AFRICA.

ON his arrival at Alexandria on January 22nd, Surgeon Parke was welcomed by Brigade-Surgeon Gore, Senior Medical Officer of the Alexandria garrison. Surgeon Parke was serving at Alexandria up to February 2nd, 1887, when he started to join Stanley, and was, therefore, among old friends on returning to that city last month; by them he was entertained at a dinner over which Sir Charles A. Cookson, K.C.M.G., C.B., presided. Speaking in response to the toast of his health, Surgeon Parke gave a short account of the difficulties which the expedition had encountered, and spoke in warm terms of the energy and determination of its leader. Referring to the health of the expeditionary force, he said that the experience it had afforded appeared to prove that the white man had a better chance than the black man of living in Africa, for out of eleven white men only one life was lost, while considerably more than half the blacks perished. Dr. Parke considered it augured well for the future of Africa that it was proved that it could be colonised by white men.

CONSOLIDATION OF METROPOLITAN SANITARY LAW.

IT is satisfactory to find that the Government seriously intend to bring forward during the coming session their Bill to consolidate the sanitary law of the metropolis. Such a measure has long been urgently needed, and Mr. Ritchie was prepared last year to propose legislation on the subject, but the time of Parliament was so fully occupied with other business that he never found the opportunity of doing so. Drafts of the Bill which he now contemplates bringing forward have just been courteously sent to the various vestries and district boards in the metropolis, to the London County Council, and to the Society of Medical Officers of Health, with a request for observations and suggestions. The Bill is mainly a consolidation one, with some of the most useful clauses of the Public Health Act, 1875 (which hitherto has not applied to London), included in it, but still its various proposals will require very careful consideration, and probably in some respects modification. It is to be hoped that the Bill will be laid before Parliament at an early date, so that the public and those that may be affected by it may have ample time for considering its important provisions.

A NEW LUNATIC ASYLUM FOR LONDON.

A COMMITTEE of experts acting for the London County Council have recently drawn up a scheme for the erection of a new hospital for the treatment of insanity. There will be a school for the scientific study of mental diseases in connection with it, and there will be a staff of thoroughly experienced visiting physicians. The Committee have obtained estimates, and they calculate the erection of a hospital containing 100 beds to cost £32,000. The annual cost of maintenance, fees to the visiting staff, interest on capital, including the cost of the site, is calculated to be from £8,000 to £10,000 a year. When we have further facts and figures to go upon, we shall have some further remarks to make upon the subject. Our regret at present is that the number of beds proposed is so small. In our opinion there should have been beds at least for 100 patients of each sex, both on the score of economy and for the sake of the unfortunate patients.

INFLUENZA MORTALITY IN LONDON.

THERE was a further considerable decline in the number of deaths referred to influenza in London during last week. The fatal cases of this disease, which had been 4, 67, 127, and 105 in the four preceding weeks, further declined to 75 during the week ending Saturday, February 1st; 7 belonged to Paddington, 7 to Kensington, 4 to St. Pancras, 4 to Lambeth, and 7 to Camberwell sanitary areas. Of the 75 fatal cases of influenza registered last week in London, 7 were of children under 5 years of age, 4 of young persons aged between 5 and 20 years, 18 of persons aged between 20 and 40 years, 30 of persons aged between 40 and 60 years, and 16 of persons aged upwards of 60 years. The mortality from diseases of the respiratory organs in London during the week under notice also showed a very considerable further decline from that which prevailed in recent weeks, and was actually below the average mortality in the corresponding periods of the ten preceding years.

ENGLISH PRACTITIONERS IN FRANCE.

AT the last meeting of the College of Physicians a report was received and adopted from a Committee of the Council of the College which had been appointed to consider a communication from the Foreign Office in reference to the terms on which in future English medical men will be allowed to practise in France. The report, which was unanimously adopted, drew attention to the following points, some of which were briefly alluded to in the JOURNAL of February 1st; but the great importance of the subject justifies a further notice in detail. First: With regard to the facilities already open to French doctors of medicine desirous of practising in England. 1. Although a French medical man possessing no British qualification cannot at present be registered in this country, he is free to practise his profession without hindrance in any part of the United Kingdom, and is only subject to certain disabilities incidental to non-registration, namely, (*a*) that he cannot recover his charges if disputed in a court of law, and this disability he shares with all the Fellows of the College of Physicians; (*b*) that he cannot sign certificates of the cause of death; (*c*) that he is disqualified for certain public appointments. 2. A Doctor of Medicine of France desiring an English

qualification can obtain the licence of the College which will entitle him to registration, and confer the legal status of a physician by merely passing the final or purely professional examination and paying the fee, the French courses of instruction and the examination in letters and science being accepted. Secondly: Clauses 12 and 17 of the Medical Act of 1886 provide for complete reciprocity as regards British and foreign practitioners holding mutually recognised qualifications, such foreign practitioners being entitled to registration in this country without examination on payment of a registration fee whenever such foreign country grants a like privilege to English subjects. Thirdly: With regard to English doctors in France, the Committee were careful to point out that there was no desire to claim for English medical men, even when holding an English qualification satisfactory to the French authorities, that they should be admitted to the privileges of French practitioners without examination and without payment of the tax to which the latter are liable; but it is suggested that the French authorities might well concede what is granted to French Doctors of Medicine, namely, that they should be admitted to a full professional qualification on passing a complete and practical examination in purely professional subjects.

COUNTY MEDICAL OFFICERS.

THE Worcestershire County Council is to be congratulated upon having successfully carried the recommendation of its Sanitary Committee for the appointment of a medical officer of health, at a salary adequate to ensure the efficient discharge of the important duties of such an office. It will be remembered that the Sanitary Committee last autumn strongly recommended such an appointment, but the recommendation met with such a flood of opposition, mainly from the representatives of the minor local authorities, that the Committee reluctantly consented to postpone the further consideration of the question for six months. At the first meeting of the Council after the expiration of the period of respite the proposal was renewed, and the Committee allowed it to be stated that, should it be rejected, the resignation of the Committee would follow. The Sanitary Committee in their report presented at the meeting of the Worcestershire County Council on February 3rd recommended that a legally qualified medical officer of health for the county be appointed by the Council, at a salary of not exceeding £800 per annum, with such allowances for travelling expenses as may from time to time be sanctioned by the Council; and that the services of the officer shall be regularly available in the districts of such local sanitary authorities as may desire it on such terms as to payment to the Council or otherwise as may be arranged with the Committee. That he should not hold any other appointment or engage in private practice, but should be required to devote the whole of his time to the service of the county. The adoption of this report was moved by Sir Douglas Galton, and carried, but not without considerable opposition.

THE HOUSING OF THE LONDON POOR.

THE conditions under which the poor are housed in London attract a great deal more attention now than at any time within the last twenty-five years. A few days ago a member of the London County Council is reported to have summoned a person who is said to be the owner of a lot of bad property in the parish of St. Pancras, for letting a room, or cellar, at 13, Gresse Street, Tottenham Court Road, contrary to the provisions as to the occupation of underground rooms as dwellings. The evidence showed that the room was in a very insanitary condition, and there can be no question that it should have received the attention of the proper authorities. At the same date an inquest was held at Islington on a child, the daughter of a wood-chopper, of 28, Blundell Street, Caledonian Road. The evidence in this case showed that the father, who rarely earned more than £1 per week, paid 4s. 6d., or nearly a quarter of his earnings, for two underground kitchens, the walls of which were described as being damp to the height of four feet, and which, according to the medical evidence, were unfit for human habitation. The Coroner observed that it was the duty of the District Surveyor under the London County Council to inspect these underground dwellings, and the jury requested him to direct the attention of that officer, as well as the Islington Vestry, to the condition of these kitchens. We are glad to see members of the London County Council taking independent action to secure improvement in the dwellings occupied by the poorest of the wage-earning classes; but, at the same time, it must not be forgotten that the Council, as the successor of the Metropolitan Board of Works, has executive sanitary duties of its own. The district surveyors who are under the County Council have, we believe, some defined duties relating to insanitary dwellings, and the Council would have the support not only of the law but of public opinion if it were to institute an inquiry both as to the nature of their district surveyors' duties, and as to the way in which they are carried out.

THE NEW LABORATORIES OF THE COMBINED ROYAL COLLEGES.

THE following regulations have been passed respecting the conditions under which work will be permitted at the new Laboratories of the Royal Colleges of Physicians and Surgeons in the building on the Embankment:—1. Permission to work in the Laboratories shall not be restricted to those whose names are on the *Medical Register*. 2. All applications for permission to work in the Laboratories shall be made to the Director in the first instance, and shall be submitted by him to the Committee at its next meeting for decision. 3. When such application is made a description of the proposed investigation shall be sent in with as complete a list as possible of the necessary instruments and apparatus. 4. No research other than that originally approved by the Committee shall be undertaken without their previous sanction. 5. The publication of the results of work done in the Laboratories shall be under the control of the Committee. 6. Workers in the Laboratories shall not receive pecuniary remuneration for work done, but the expenses of investigation approved by the Director may be defrayed by the Colleges. 7. No purchase of instruments or apparatus shall be made without the sanction of the Laboratories' Committee. 8. All instruments or apparatus provided by the Committee are the property of the Colleges; a complete list or inventory shall be kept of them, and they shall under no circumstances be removed from the Laboratories.

THE SACRED GANGES A COMMON SEWER.

How are the mighty fallen! The Calcutta correspondent of the *Times* states that a matter arising out of Prince Albert Victor's visit to Benares is beginning to attract a good deal of attention there. The Prince, as mentioned last week, laid the foundation stone of a new water supply and drainage works at the sacred city of Benares. In the course of an address which was presented to him on the occasion it was stated that the municipality intended to discharge the sewage of the city into the Ganges a few miles below the town. As India has no enactment similar to the English Rivers Pollution Act there is no power to prevent their doing so, nor to prevent other cities in the Gangetic valley following their example, and thus converting the river by the time it reaches Calcutta into a gigantic cesspool. It is understood that the Calcutta Health Society has taken the matter up, and it is to be hoped that the Legislature will interfere before what is now only a possible danger of the distant future becomes a serious menace to all towns on the lower Ganges, and before any money

is expended on costly works which may have to be closed hereafter. While we congratulate the inhabitants of Benares, now numbering at least 190,000 souls, on obtaining a pure water supply and properly constructed drainage works, we sincerely sympathise with those who object to the noble river being converted into a sewer and reduced to the condition of Father Thames. The disposal of the sewage of Benares is no doubt a difficult problem, and, health considerations aside, the easiest solution was to pour it into the Ganges, which is certainly a more capacious receptacle than the Thames for this base purpose, inasmuch as the depth of the water in front of the town, even in the dry season, is fifty feet, and in the month of September the freshes add upwards of forty feet to this depth. In the dry season the breadth of the river at this point is 600 yards, extending to half a mile in the rains. All the same, we join with our contemporary quoted above in an earnest protest against the system of converting the rivers of India into sewers, a system of water pollution that in this country has been attended with grave consequences to the health of the community and has given rise to costly legislation, and many fruitless efforts to remove what on all hands is allowed to be something more than an abominable nuisance. Let the inhabitants of Calcutta, who have nuisances enough and to spare of their own to contend with, look to it in time.

DISEASED MEAT AT BRIGHTON.

ANOTHER attempt to dispose of unsound meat as human food was frustrated at Brighton on January 22nd. An assistant inspector of nuisances deposed to having visited Mr. Fryer's slaughterhouse, where he saw seven pieces of beef hanging up, all of which were unfit for human food. On the same day he saw the defendant, Stephen Cowley, of Tondean Farm, who told him he had sent a cow to Mr. Fryer's for him to do the best he could with it, as he had done on previous occasions. Dr. Newsholme, medical officer of health, gave evidence that the meat was diseased and unfit for human food. The pleura had been carefully stripped off. The meat was seized, and an order to destroy it obtained. Further evidence was given by Mr. Beach, veterinary surgeon, who said that he attended the cow for the defendant, and, under his advice, the cow was killed, because, in his opinion, it had disease of the brain. Witness afterwards saw the carcass in the slaughterhouse, and Fryer showed him the diaphragm and liver, which were much ulcerated. He told Fryer the meat was not fit for human food. The magistrate said he had himself seen the meat, and it was certainly from a very emaciated animal. The defendant must pay a fine of £5 and costs. The provisions of the Act of Parliament, with reference to unsound meat, would be a nullity if he held as a valid defence the plea that the cow had been sent to the slaughterhouse, it being known to be in some way diseased, to see what could be done with the meat.

CONVICTION UNDER THE INDECENT ADVERTISEMENTS ACT.

THE first conviction which, so far as we have observed, has yet been obtained under the Indecent Advertisements Act is reported in the *Bristol Times and Mirror* for January 30th. The provisions of the Act, which came into force on January 1st, 1890, were explained in a leading article published in the JOURNAL of January 4th. According to the report of the Bristol case, which is now before us, a certain Mayfield Archibald Lilly kept a shop in which were displayed advertisements of certain remedies bearing the name of Dr. H. L. Lilly. These remedies were called the "Champion Remedies," and, according to the statement of defendant's solicitor as reported, "were announced to cure all the ills that flesh is heir to." The police inspector swore that one advertisement at the back of the window was to the following effect: "Dr. H. L. Lilly's vital tonic, the restorer of vitality, cures nervous debility, losses, etc." The magistrates convicted the defendant, but in consideration of the Act having so recently come into force, and that the objectionable notice had been immediately removed, a fine of 10s. and costs only was inflicted. The defendant was also charged with having wilfully and falsely pretended to be a physician and doctor of medicine. The defendant's solicitor pleaded that his client had not so represented himself, and acted only as the agent of "Dr. H. L. Lilly, in the North of England, who was a very clever man and a renowned herbalist." An undertaking was given that the words complained of would not be used again, and the magistrates imposed the mitigated penalty of £10 and costs.

MONADS IN INFLUENZA.

IT is stated[1] that Professor Klebs, of Zürich, who has made a thorough examination of the blood of many patients suffering from influenza, has found in it enormous masses of flagellate monads. These were of two forms: a smaller with very active movements of the flagella, and a larger with much slower movements. In specimens stained with methyl blue Professor Klebs observed that the monads were sometimes on the edge of the red blood corpuscles, and sometimes inside them. They are said to resemble the hæmatozoa of pernicious anæmia and the plasmodia found by Laveran in the blood of patients suffering from malaria.

MEDICAL OFFICERS OF POOR-LAW INFIRMARIES AND FEES FOR INQUESTS.

OUR attention has been directed to an advertisement which appeared in our columns of last week, issued by the Salford Board of Guardians, in which it is stated that they will on the 14th inst proceed to the appointment of a gentleman as assistant medical officer for the Union Infirmary near Eccles. The person appointed is "to perform the duties named in the orders of the Local Government Board, and to give evidence at inquests on the bodies of persons dying in the infirmary, and make *post-mortem* examinations, if necessary, without additional remuneration." This appears to us to be an attempt on the part of the Salford Guardians to set the law at defiance; we are aware that boards of guardians are possessed of very considerable power, but we have not hitherto understood that this is distinctly within their province. It is our duty to remind the Salford Board that any one of the present or future medical staff can, notwithstanding the stipulations in this advertisement, still claim fees for evidence, etc., if by the Coroners Act, 6 and 7 Gulielmi IV, cap. 89, they are entitled any. In such case, therefore, the provision amounts to the ridiculous. If, on the other hand, no fees are payable under the same Act, then any regulation made by the Guardians in reference to the subject must be quite unnecessary. We should advise the Salford Board not to attempt any interference between the coroner and their medical officers, who, when served with a proper warrant under his hand and seal, have to act as his servants, and not theirs. We should be sorry to assume that they think they have anything to fear from their medical staff being so called upon, but this idea is naturally suggested by their extraordinary advertisement. In any case, however, we feel sure that the coroner of the district in which the Salford Infirmary is situated will do his duty, and hand over without hesitation to the medical officers all fees which the law authorises them to claim, either for evidence given at inquests, or for *post-mortem* examinations made under his warrant.

PUERPERAL TETANUS.

DR. VERZYNSKY, in the Russian *Journal of Obstetrics and Gynæcology*, No. 6, 1889, describes a case in which a primipara, aged was delivered by forceps on account of contracted pelvis. An

[1] *Wiener med. Zeitung*, February 4th.

omplete rupture of the perineum was sewn up at once. On the econd day the vulva became œdematous. On the fourth headche, with slight cramp of the muscles of deglutition, set in; on ne following day trismus; on the sixth cramp in the muscles of ne extremities, with opisthotonos. The urine contained an bundance of pus corpuscles, a trace of albumen, but no casts. radually the cramps recurred less frequently, and the general ondition of the patient improved. Suddenly, on the sixteenth ay after childbirth, when the patient was attempting to stand p, a violent cramp came on, followed nine hours later by another evere cramp which proved fatal. Unfortunately no necropsy was llowed. Dr. Verzynsky believes that the disease in this case was rue tetanus and not eclampsia, uræmia, ergot poisoning, tetany, r septic meningitis. Puerperal tetanus is exceedingly rare in old or temperate climates; in a series of over 46,000 labours in ne Guy's Hospital maternity department, collected by Dr. Galain, not one case of tetanus occurred. The mortality is very high. n hot climates it is more frequent, especially after abortion.

SCOTLAND.

THE Medico-Chirurgical Society of Edinburgh is to engage in a iscussion on the Physiology of Education on Wednesday, ebruary 19th. Dr. John Strachan, Dollar, will introduce the ubject.

THE SCOTTISH UNIVERSITIES COMMISSION.

HE meetings of the Scottish Universities Commission have, so ar, been largely occupied with preliminaries and the hearing of vidence on the question of theological tests. Statements have een presented, or are being prepared for presentation, by various odies, embodying recommendations and indicating the subjects n which the several bodies are prepared to lead evidence in deail, with a view to reform. The subject of desirable alterations n the medical curriculum will, it is evident, bulk largely. The oyal Colleges of Physicians and Surgeons, the authorities of he Extramural School, the representatives of the Scottish Assoiation for the Medical Education of Women, and of the Edinurgh School of Medicine for Women, the medical students of the niversity, through their Representative Council, will all, doubtess, have many details to add to the statements which they may odge, while the professors, lecturers, and assistants of the Medical aculty of the University will have much to tell, which should rove of interest to the profession. It is matter for regret that ne evidence on subjects of such importance should not be led in ublic, that the proceedings of the Commission might be intelgently followed from day to day or week to week.

EDINBURGH UNIVERSITY AND MEDICAL GRADUATION FEES.

MEETING of the Association for the Better Endowment of Edinurgh University was held in the Library of the Royal College of hysicians of Edinburgh on Friday, January 31st, when a strong epresentation was made as to the necessity of endeavouring to lace the University finances on a more stable basis. Attention as drawn to the large extent to which the University is dendent upon such fluctuating sources of income as matriculation nd graduation fees. Of the total income of the General Univerty Fund, about three-fifths were derived from medical graduaon alone—an item which had doubled itself within the last ten ears. This might, at any time, fall off from causes which the niversity could not control, as, for example, the increase of chools in connection with other universities, the improvement nd extension of universities and medical schools in the olonies, etc.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

THE second volume of Reports from the Laboratory of the Royal College of Physicians of Edinburgh has just been issued. It is a large work, containing the records of sixteen investigations, and is richly illustrated by the aid of photographic processes. It is sufficient for the present to add that the contribution to scientific literature just issued will still further enhance the reputation of the able editors, Drs. Batty Tuke and Sims Woodhead; a reputation, however, which, in respect of the last named gentleman, has cost the Royal College of Edinburgh dearly, in respect of his having been all too early called away to a corresponding position in London.

EDINBURGH UNIVERSITY.

THE Edinburgh University Court has selected the Lord Justice Clerk to be one of the Curators of Patronage of Edinburgh University, in succession to Lord Balfour of Burleigh. The Court has appointed Professor Herdman, Liverpool, to be additional examiner in natural history, and Dr. J. Crawford Renton, Glasgow, to be additional examiner in clinical surgery. In other departments of medicine the present examiners have been reappointed. It is matter for regret that the first special meeting of the General Council of Edinburgh University, summoned by requisition for the discussion of a number of items of business affecting medical interests in the University, should have been so poorly attended that—in accordance with the regulations for a quorum recently issued—it had to be dissolved without the despatch of business.

THE INFLUENZA EPIDEMIC.

THERE is still ample evidence that the epidemic of influenza has not left Edinburgh. Cases are recorded from all parts of the city and several medical men have been attacked since the date of our last report. In the Royal Edinburgh Asylum the percentage of cases has been 25. Dr. Clouston has classified the 170 cases into four leading groups: 1. The feverish type, with bad headache, and pains in limbs, and sometimes giddiness. 2. The rheumatic, where symptoms of subacute rheumatism are present. 3. The respiratory, with affection of the respiratory mucous membrane, from the nose to the minutest bronchials. 4. The gastric, where gastric and intestinal symptoms predominate. Five deaths have been reported at the asylum from influenza of the respiratory type. The Medico-Chirurgical Society of Edinburgh is to have a special discussion, on Wednesday, March 5th, on the subject, with special reference to the following points: 1. When were the first cases observed? 2. The prominent clinical symptoms and complications according to age. 3. Geographical distribution. 4. Distribution as to time, with dates, as far as possible, in order that they may be compared with meteorological observations. 5. What lines of treatment have been found most successful? 6. Is there any evidence that the disease is contagious, or the reverse?

PRESENCE AND SIGNIFICANCE OF ATMOSPHERIC DUST.

AN important communication was made to the Royal Society of Edinburgh at its fifth ordinary meeting, on February 3rd, by Mr. John Aitken, F.R.S., on the number of dust particles in the atmosphere, with remarks on the relation between the amount of dust and meteorological phenomena. With his special apparatus, the air had been tested at various places on the Contiuent last summer. He found that at Hyères the number of particles per cubic centimètre varied from 3,000 up to 24,000; at Cannes the number varied from 1,500 particles, when the wind was blowing from the mountains; to 140,000 particles when the wind was blowing from the town; at Hyères the sea air contained 1,800 particles, and at Mentone 5,000. Observations on the Righi were striking, the number of particles falling, in places, as low as 240, and varying from that

up to 2,300, and doubtless on this fact depended the peculiar brilliancy and transparency of the atmosphere in this locality. Observations made in Scotland and elsewhere indicated how extraordinary was the pollution in the air due to human agency. In regions clear of human habitations, the number of particles fell as low as 200, while in and around villages the particles amounted to thousands, and in towns to hundreds of thousands. His lowest observation was 200 particles per cubic centimètre. It was still a problem whether that was the lowest limit attainable, and how much of that was of cosmic origin and how much was due to natural pollution. The presence of clouds at great elevations proved that dust existed in the upper atmosphere, but there must always be a considerable quantity of cosmic dust present from the millions of meteors which fell daily. He had reason to believe that dust condensed moisture before the air was saturated, and this led to a loss of transparency, because the dust particles, by condensing the moisture in the air, increased in size. There was no doubt that haze was often largely due to dust. The condition of the air during fog had been tested, and in all cases a large quantity of dust was found. The explanation of fogs probably was that calms increased the quantity of dust in the air; the dust increased the radiating power of the air, which soon got chilled to the condensing point, when fog was formed. Fogs were more frequent in towns on account of the greater amount of dust in the air.

ABERDEEN UNIVERSITY COURT.

THE first meeting of the newly reconstituted University Court was held on January 31st. All the members were present. Principal Geddes gave a glad welcome to the new members, and referred to the increased representation from the General Council and Senatus, and also to the new element from the municipality, and trusted that all would work well for the good of the University. The Court resolved to approve of the appointment of John Gordon, M.D., to be Assistant Professor of Materia Medica, and of Charles Angus, M.D., to be Assistant Professor of Anatomy. It was resolved, on the recommendations of the Senatus, to recognise as valid for the purpose of degrees attendance at the lectures of Professor W. L. Reid (midwifery) and Dr. E. Duncan (medical jurisprudence), of Anderson's College Medical School, Glasgow. It was resolved to delay consideration of a report from the Senatus with regard to the laboratory instruction other than that required for medical graduation, some of the members stating that the new Commission would probably deal with the matter.

GLASGOW ROYAL INFIRMARY.

THE annual report of the Glasgow Royal Infirmary has been issued. It shows a total of 22,093 patients treated during the year, of whom 5,996 were treated in the hospital and 16,127 at the dispensary. The admissions to the house during the year were 365 in excess of the previous year. The total mortality in the house was 9.9 per cent., but deducting the number of cases that terminated within forty-eight hours of admission, which was 134 in all, the mortality is 7.6 per cent., 1.6 per cent. in advance of the previous year. The average number of patients daily resident was 538, and the average length of residence 35.41 days. The resident staff of the infirmary numbers 192, making a total daily average number resident of 730. The total ordinary revenue was £19,076 8s. 5d., and the total ordinary expenditure £26,540 8s. 7d., being an excess of £7,464 over ordinary revenue. The infirmary was fortunate enough, however, to receive £26,042 in legacies, from which the deficit was made up. On the whole expenditure, the cost of each fully-occupied bed was £49 6s. 7½d., being £1 15s. 1¾d. in excess of the cost for the previous year. The average cost of each patient treated to a conclusion was £4 18s. 4d., 11d. more than in 1888. Of the total ordinary income, it is grat fying to note that £5,500 came from the working classes. Th changes in the staff during the year were the appointment of D James Dunlop as dispensary physician to succeed Dr. Middleto resigned, and the appointment of Dr. J. L. Steven as pathologist, t succeed Dr. D. Newman, resigned. In the management, Dr Perry, S. J. Moore, J. D. Maclaren, and Bruce Goff represent th Faculty of Physicians and Surgeons, Professor McCall Anderso the University, and Dr. Neilson the Town Council.

IRELAND.

A MOST successful ball was held in the Rotunda on Monday las in aid of the Orthopædic Hospital. The attendance was ver large, and it is hoped that a considerable increase was made to th funds of the institution.

PROFESSOR TYNDALL, who recently inaugurated the work o the university extension scheme, Belfast, by his lecture in th Ulster Hall upon Our Invisible Friends and Foes, has given donation of fifty guineas in aid of its operations.

LAST week the annual meeting of the friends and subscribers the National Children's Hospital, Dublin, was held in the Boa Room of the hospital, Harcourt Street; Viscount Powerscourt pr sided. The report showed that the number of in-patients w 136, and 6,977 attendances of out-patients were recorded.

MERCER'S HOSPITAL.

DR. HUGH AUCHINLECK, Professor of Medical Jurisprudence the Royal College of Surgeons, Ireland, has been elected a phys cian to Mercer's Hospital.

DR. JAMES MARTIN, PORTLAW.

WE record with great pleasure the presentation of a purse of £2 and an address to this old and distinguished member of the pr fession. The occasion was the closing of fifty years of arduo professional work—done well—and it was the expression of a proval, by those who know him best, of his devoted life. T Marquis of Waterford made the presentation on behalf of the su scribers, and testified to Dr. Martin's great popularity.

ROYAL UNIVERSITY EXAMINERSHIPS.

AT a meeting of the Senate of the University on Thursday la the following gentlemen were appointed examiners in the facul of medicine. Midwifery: J. W. Byers and Alfred T. Smith. Me cal Jurisprudence: Michael F. Cox and Charles Y. Pears Materia Medica: F. J. B. Quinlan and William Whitla. Medicin John A. Byrne.

THE EPIDEMIC OF INFLUENZA.

THE influenza outbreak is slowly declining, but the returns whi are now coming in from the registrars show that it has caus many deaths, at least by leading up to the development of sev respiratory diseases. For the week ending January 18th t death-rate in Dublin was 48 per 1,000, the number being 10 ov the average for the corresponding week of the last ten yea Thirteen deaths from influenza were registered, being 9 over t number registered in the preceding week. In 5 of these 13 ca the influenza was complicated with bronchitis, in 4 with pne monia, and in 2 with cardiac disease. The epidemic has appear at Drogheda, and a large number of persons have been attack but no death has occurred, the cases being of a mild charact In Fermoy, County Cork, a considerable number have been s ferers. A death took place in Sligo workhouse from influenza.

BELFAST HOSPITAL FOR SICK CHILDREN.

THE annual meeting of this institution was held on January 24th, under the presidency of the Hon. Robert O'Neill, M.P., President of the hospital. The medical report showed that 386 patients had been treated in the wards during the year, and that during the same period there had been 9,397 cases in the extern department. Thirty students had attended the clinical instruction of the hospital. The Victoria Convalescent Home, in connection with the hospital, had been founded during the year, and would soon be open, with accommodation for twelve patients.

HIGH DEATH-RATE IN BELFAST.

THE death-rate in Belfast, which was 33.9 per 1,000 for the first week in January, had risen to 45.4 per 1,000 for the last week. Only 2 deaths were certified as due directly to the influenza epidemic, but this is probably much under the mark. It is significant that the deaths from diseases of the respiratory system were nearly half of the entire number. There were 24 deaths from measles. The deaths from enteric fever were only 3, showing that the epidemic of that disease which prevailed in Belfast during the latter half of 1889 has quite spent its force.

LIST OF AUTHORS AND OTHERS WHO HAVE PRESENTED BOOKS TO THE LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

SIXTH LIST.

Presented by JOHN ABERCROMBIE, M.D., London.

ST. THOMAS'S HOSPITAL REPORTS. Vol. II. (To complete series.)

Presented by JOHN BROWN, M.D., Bacup.

CLINICAL AND CHEMICAL OBSERVATIONS ON PLUMBISM DUE TO LEAD-POLLUTED WATER. 1889.

Presented by Messrs. CASSELL and Co.

THE PULSE. W. H. Broadbent. Clinical Manual Series. 1890.
YEARBOOK OF TREATMENT. 1890.

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GUY'S HOSPITAL REPORTS. 12 vols. 1855-1873. (To complete series.)

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ARCHIVES GÉNÉRALES DE MÉDECINE. 18 vols. 1856-1871.
BRITON. Diseases of the Rectum. 1863.
BELL. Surgical Observations. 2 vols. 1816.
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MEDICAL COMMUNICATIONS. 2 vols. 1784.
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WHITE (Chas.). On the Management of Lying-in Women. 1773.

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ASSOCIATION OF AMERICAN PHYSICIANS (Transactions). 1889.
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BENNETT (W. H.). Clinical Lectures on Varicose Veins of the Lower Extremities. 1889.
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DAVIES (H.). The Mechanism of the Circulation through Diseased Hearts. 1889.
DOBELL (H.). On Bacillary Consumption. 1889.
ELMAN (A.). The Story of Boston. Illustrated. 1889.
FURNHAM (J.). Crystal Models. 1888.
HAKE (H. W.). Coloured Analytical Tables. 1889.
HERBERT (A.). The Sacrifice of Education to Examination. 1889.
HUMPHRY (L.). A Manual of Nursing. 1889.
MERCIER (C.). The Nervous System of the Mind. 1888.
PURRELL (W.). Chronic Bronchitis. 1889.
OPHTHALMOLOGICAL SOCIETY'S TRANSACTIONS. 1889.
PINNEY (A. L.). Lectures on Nervous Diseases. 1888.
SMITH (B.). Treatment of Lateral Curvature of the Spine. 1889.
TILLOUS (C. E.). Annual of the Universal Medical Sciences. 5 vols. 1889.
VOEMAKER (J. V.). A Treatise on Materia Medica, Pharmacology, and Therapeutics. Vol. I. 1889.
WOW (H.). The General Theory of Cancer Formation. 1889.
WYNDER (J. K.). Early Symptoms and Early Treatment of Osteo-arthritis. 1889.

SUGGESTIONS TO MOTHERS ON THE MANAGEMENT OF THEIR CHILDREN By a Mother. 1889.
SURGEON GENERAL UNITED STATES ARMY, INDEX CATALOGUE OF THE LIBRARY OF THE. Vol. X. 1889.
WITKOSKI (S. I.). The Evil that has been said of Doctors. 1889.

Pamphlets, Papers, etc.

BAUDOUIN (M.). Guide Médical à l'Exposition Universelle Internationale de 1889 à Paris.
BERTHOLD (Professor E.). Die ersten zehn Jähre der Myringoplastik.
EWALD (C. A.). Klinik der Verdauungskrankheiten. Part II. 1889.
GUTTMANN (P.). Lehrbuch der klinischen Untersuchungs-Methoden für die Brust und Unterleibs-Organe mit Einschluss der Laryngoskopie
HARRIS (T.). Manuel d'Autopsies. 1888.
MOORE (Sir W.). The Immediate and General Treatment of Accidents and Injuries. 1889.
NEVE (E. F.). The Nature and Etiology of Bone Disease in Kashmir, etc.
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Presented by HUGH LANE, Esq., Bath.

RHEUMATIC DISEASES (SO-CALLED). 1890.

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A TREATISE ON THE DISEASES OF THE EYE. 2 vols. 1835.

Presented by J. J. NEVILLE, Esq., Chorley.

LANCET, THE. 6 vols. 1874-75-76. (To complete series.)

Presented by J. BLAND SUTTON, Esq., London.

BELL (Sir C.). On the Nervous System of the Human Body. 1830
——— On the Hand. 1865.
BROWN. On Diseases of Women. 1854.
CHALLENGER (THE) REPORT: Beddard's Isopoda; Hock, Myzostomida; Hock, Cirrepedia.
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——— Memoir on the Gorilla. 1865.
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Presented by FRANCIS VACHER, Esq., Birkenhead.

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Presented by A. O. WILEY, Esq., Knaresborough.

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Presented by Dr. DAWSON WILLIAMS.

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Presented by Messrs. WRIGHT and CO., Bristol.

PYE. Surgical Treatment of Common Deformities of Children. 1889.

BOOKS NEEDED TO COMPLETE SERIES.

THE Honorary Librarian would be glad to receive from any member of the Association copies of the following volumes needed to complete series in the Library.

American Gynecological Society (Transactions). Vol. 10.
American Surgical Association (Transactions). Vols. 4 and 7.
Braithwaite's Retrospect of Medicine. Vols. 1, 6, 42, 73.
Dublin Journal of Medical Science, all before 1879, 1st Vol. 1881, all since June, 1884.
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Edinburgh Obstetrical Society (Transactions). Vols. 1, 2, 3, 5, 7 and 12.
Guy's Hospital Reports. Third Series. Vols. 2, 4, 5, 8, 11, 12, 23.
Lancet, The, 1871-73 inclusive, 1877 to June, 1888, inclusive.
London Medical Record. All since 1885.
Mac Cormac's Surgical Operations. Part 1. Smith, Elder and Co.
Medical Society of London (Proceedings). Vols. 5, 6, 7, 9, 10 and 11.
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New Sydenham Society Publications. Vols. 1, 8, 9, 14, 17, 24, 27, 29, 34, 39, 40, 44, 48, 56, 60, 64, 69, 70, 77, 81, 83, 85, 87, 88, 89, 90, 91, 93 to 99, 101 to 104, 106, 107, 108, 110, 118, 120 to 125, 127 and 128.
Ophthalmological Transactions. Vols. 3, 6 and 7.
Philadelphia College of Physicians (Transactions). Third Series. Vols. 6, 7 and 10.
Registrar-General's Report of Births, Deaths and Marriages, England. 1888.
St. Bartholomew's Hospital Reports. Vol. 8.
St. George's Hospital Reports. Vols. 1 to 5, Vol. 10 and upwards.
St. Thomas's Hospital Reports. 1872, 1876 and 1888.
Yearbook of Pharmacy. 1888-89.
Yearbook of Scientific and Learned Societies. 1889.
Yearbook of Treatment. 1887.

IT is officially stated that of the staff of doctors, nurses, and attendants of the Charité Hospital in Berlin, which amounts to over 600 persons, 370, or more than 61 per cent., suffered from influenza during the recent epidemic.

ROYAL COLLEGE OF PHYSICIANS.

Fever Hospitals Committee's Report.

The Fever Hospitals Committee having met and considered the details of a working scheme for the utilisation of the fever hospitals of the Metropolitan Asylums Board for the purposes of clinical instruction, under the Poor Law Act, 1889, beg leave to submit the following for the approval of the College.

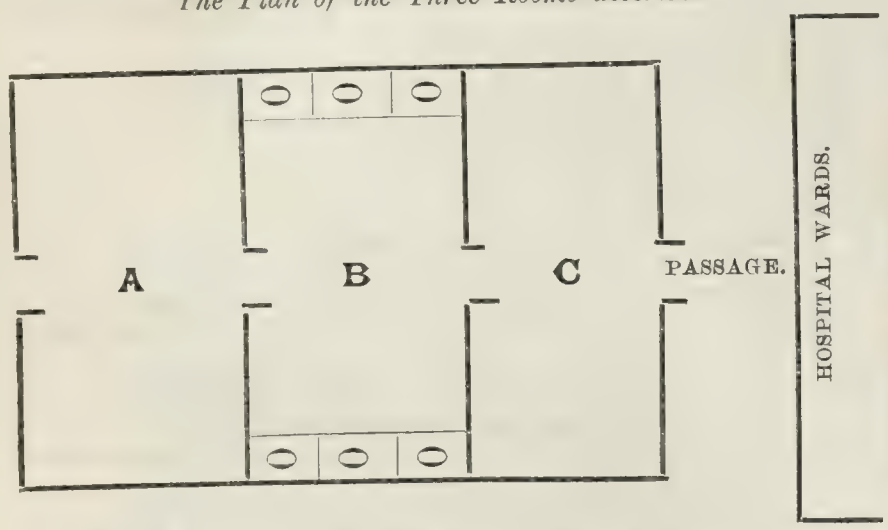
Scheme.

Precautions against Carrying Infection.—1. Every student will be provided with a suit of brown holland overalls, consisting of coat, trousers and cap, which he will be required to wear as long as he is within the hospital.

2. As far as the hospital arrangements admit, three rooms, which need not be of large size, shall be set apart for the students. The first which the student reaches on entering the hospital (Room A), shall be a cloak room, in which he shall hang his outer clothing; the second room leading out of this (Room B) shall be a lavatory; the third (Room C), also in direct communication with the second, shall contain the hospital suit, which the student shall put on, and then pass direct into the hospital.

On leaving the hospital the student shall enter Room C, and take off his hospital suit. Then passing into the lavatory, he shall carefully wash and also disinfect his hands and face, after which he shall go into Room A, resume his outer clothing, and at once quit the hospital.

The Plan of the Three Rooms described.



3. The students shall be required to keep their hair short, and to satisfy the medical superintendent that they are sufficiently protected against small-pox by vaccination, or otherwise.

Discipline.—In order that discipline shall be strict, the closest association should be maintained between the fever hospitals and the medical schools, so that the students should feel that while attending at the fever hospitals they are still subject, in every respect, to the full discipline of their own school. The Committee therefore recommends:—

1. That no student shall be admitted to study at the fever hospitals except when authorised by the medical school to which he belongs.

2. That the student, when so authorised by his school, shall attend at the office of the Metropolitan Asylums Board, bringing with him evidence of such authorisation, and at the same time specifying which of the fever hospitals he wishes to attend.

3. That the Metropolitan Asylums Board shall then furnish him a card, stating the hospital to which he is attached, and the times at which he shall attend.

4. That a register shall be kept at each fever hospital, in which shall be entered the name of the student and the times at which he has attended.

5. That at the end of the prescribed time of study, the student shall receive a certificate, showing that he has satisfactorily completed the course.

6. That such certificate shall be given by the Metropolitan Asylums Board after being signed by the medical superintendent of the hospital at which the student has attended.

This certificate, it is believed, would be found very useful to candidates for appointment at public institutions or schools.

Breach of Discipline.—In the case of any gross breach of discipline the resident medical superintendent shall have power immediately to suspend the offending student from attendance at the hospital, and he shall report the fact of such suspension at once to the managers of the Metropolitan Asylums Board or their representatives, who shall, in their turn, report it to the dean of the school to which the suspended student belongs, leaving the dean to take such action in the matter as he may deem expedient.

Time of Study.—The proposed course of study should be entered on late in the student's curriculum, and a student should not be allowed to attend the fever hospital before the end of his third year, and not until he has held the offices of clinical clerk and dresser.

The Duration of the Course.—The Committee is of opinion that the minimum duration of the course should be two months, the student being permitted to attend at the hospital three days in each week, and that in order to obtain the certificate he shall be required to have attended not less than twice in each week during the whole period of two months.

Clinical Instructors.—The Committee considers that the resident medical superintendents are the proper persons to act as clinical instructors, and that as remuneration for their services in this respect they should receive a portion of the special fees paid by the student for the course.

Fees.—The Committee proposes that the fee shall be three guineas for the first two months and one guinea for each month afterwards.

Small-pox Hospital Ships.—Owing to the situation and the special regulations in force at the small-pox hospital ships, the foregoing rules do not apply to them, but the Committee recommends that in the case of the ships some provision should be afforded for the residence of a certain number of students.

January 13th, 1890. Samuel Gee, Chairman.

*** The above report was, as we last week stated, adopted by the College on January 29th.

REFORM OF THE UNIVERSITY OF LONDON

On February 5th a deputation representing University and King's Colleges had a conference with the Committee of the Senate of the University of London. University College was represented by Mr. Erichsen, Sir George Young, Mr. Rotten, and Mr. Horsburgh (Secretary); and King's College by the Bishop of London, Dr. Wace, Dr. W. O. Priestley, and Mr. Cunningham (Secretary). Lord Granville, Chancellor of the University, was in the chair, and the University was also represented by Sir James Paget (Vice-Chancellor), Lord Herschell, Lord Justice Fry, Sir John Lubbock, Drs. R. Quain and Pye-Smith, and Messrs. Anstie, Q.C., Hutton, Fitch, Roberts, LL.D., F. J. Wood, LL.D., and by the Registrar and Assistant Registrar. The following statement, which had been previously submitted, formed the basis of a long conversational discussion:

1. The scheme approved by the Senate is described as being "on the general lines indicated by the report of the University of London Commission." It appears, however, to differ in material respects from the proposals contained in the principal report of the Commissioners. The Councils must, therefore, guard themselves against being supposed to admit that the scheme is drawn on the lines of that report.

2. The proposed basis of conference being a "scheme for the reconstitution of the University of London," it appears proper for the Councils to state that, with the present work of the University, that of testing in open examinations the qualifications of candidates for degrees, without any regard to their place of education, it is not their desire to interfere.

3. The work of the Colleges in giving university instruction in the metropolis differs from the present work of the University of London, both in kind and in area. In conducting it the Councils have encountered hindrances for which the appropriate remedy, in their opinion, the establishment of a teaching university in London.

4. The system of graduation in a teaching university requires that candidates for its degrees should have attended a regular course of instruction under teachers appointed either by the University or by institutions which for this purpose are identified with the University; and that the university examinations, whether preliminary or final, should follow the instruction, and be conducted by examiners who are thoroughly acquainted with

The course now usually adopted and approved by experience in teaching universities is that the university teachers themselves examine, aided and checked by external examiners.

5. This system being different in its purpose and dissimilar in its working from that of the University of London, the two cannot conveniently be administered by the same body. If, therefore, it is decided that the teaching university and the existing University should be united in a single organisation, there will be required (1) a body, constituted in some such way as the present Senate, to administer the system of graduation by open examinations, (2) a London body constituted in some such way as has been proposed for the Council of the Albert University, to administer the teaching functions or London side of the University, and (3) some third body to serve as the organic link between the two.

6. A convenient form of the third body would, perhaps, be that of a Court of Reference, constituted in equal numbers of members of the Senate and of the London Council, for which certain matters of importance, defined by charter, may be reserved.

7. If some such modification is made in Chapter II. of the scheme proposed by the Senate, it remains to point out its effect upon some other portions of the scheme.

8. "Chapter III.—*Senate.*" In such an organisation the Senate and the London Council might with advantage mutually admit representatives the one of the other; and such representation would be without prejudice to the representation upon the Senate of other institutions, whether within the metropolis or without, which it might be thought desirable to associate for the purposes of the open system of graduation.

9. "Do. cll. 18—23" (Standing Committees on the appointment of Examiners). The external examiners of the London side of the University might probably with advantage be appointed by the Senate.

10. "Chapter V.—*Constituent Colleges.*" The admission of new teaching institutions in London to the London side would be matter of administration for the London Council. But the sanction of the Court of Reference might fairly be required, before any such institution was admitted, or any change effected in the position of one already admitted.

11. "Chapters VI, VII.—*Faculties and Boards of Studies.*" The Faculties and Boards of Studies would belong to the London side. The Senate might command their advice and assistance in academical matters, and would not be precluded from inviting advice and assistance, on similar terms, from the teachers in university colleges out of London.

12. "Chapter VIII.—*Matriculation and Degrees:* cl. 51 (d.)." (Proposal for conferring honours on existing medical graduates). In conference with the medical schools, which would be represented in the London Council, and with the Royal Colleges of Physicians and Surgeons, which might also be represented, it seems probable that a solution of the medical difficulty might be devised, which would not interfere either with the status of existing graduates, or with the standard of the present London degree.

13. "Chapter IX.—*Professors.*" The establishment of university professorships and lectureships in London, whether for purposes of university extension, or of systematic university instruction, would of course be matter of administration on the London side of the University.

The scheme proposed by Professor Carey Foster was frequently mentioned in a favourable sense by several members of the Senate. The main feature of the proposed scheme is that the University should participate in the intra-collegiate examination of students, and thus exercise a direct influence on the standard and conduct of the examinations, upon the results of which degrees would be granted. The discussion was throughout of a friendly character, and at its conclusion it was understood that the Senate would send to the Colleges its remarks on the statement and representations of the Colleges.

The subject will be first considered by the Special Committee of the Senate, and subsequently will come under the consideration of the Senate, which may probably await the receipt of a communication from the Royal Colleges of Physicians and Surgeons before taking further overt action.

THE associates of Owens College proposed to obtain some permanent memorial of the valuable services rendered by Principal Greenwood to the Owens College during the very long period of his connection with the College.

PROFESSOR GAIRDNER ON INFLUENZA.

AT the annual meeting of the Glasgow and West of Scotland Branch of the British Medical Association, which was held in the operating theatre of the Western Infirmary, Professor Gairdner delivered an address on influenza. At the outset, he recalled the epidemic of 1847-48, and the milder one ten years later. From Dr. Russell and Professor Grant he had obtained meteorological facts that might have a bearing on the present epidemic. The summary of these facts was as follows: A winter of quite extraordinary mildness in respect of mean temperature, associated in November and December with a low degree of humidity and a rainfall below average, and with a relatively still or stagnant atmosphere, these latter conditions being replaced in January by an excess of rainfall and of humidity, with repeated storms of wind, the high mean temperature, however, being still maintained. On comparing the mortality from acute pulmonary disease—bronchitis, pneumonia, and pleurisy—from week to week, as given by the Registrar-General, with the data as to weather, Dr. Russell had framed a very interesting chart, which showed, *inter alia*, first, that the movement of the mortality from these diseases since November, 1889, to the present date very closely resembled that of the exceptionally cold winter of 1886-87, and differed entirely in the direction of excess from that of the winter of 1888-89, taken as a type of a mild winter of the ordinary kind, as regarded its epidemic phenomena. This difference might be shortly expressed as follows: In the present season we had had an almost continuously rising mortality from these causes up to the week ending December 28th; and since then only a moderate or partial decline, the entire curve of the mortality closely approximating to that of the exceptionally cold season 1886-87, and differing by about 14 to 18 deaths per week—or, say, exceeding by about a quarter or a third, on the whole, the weekly mortality of 1888-89. Now, it was notorious as a matter of ordinary sanitary experience that a sudden and great fall of temperature in winter was almost always followed or closely accompanied by a considerable rise in the death-rate, especially from respiratory diseases; while a relatively high temperature, contrary to the old proverb of the "green yule," was usually associated with a low death-rate. The present season, therefore, was undoubtedly exceptional in this respect, whether the exception be considered as due to an epidemic cause or not.

Professor Gairdner then went on to consider the view that the present epidemic was due, to some extent, to unusual stillness of atmosphere, and that the decline of the epidemic was coincident with the replacement of stagnation by movement. As regards Glasgow, it was clear that something was weighing on the death-rate. There had been an exceptional mortality in relation to the mildness of the season; what was that something? He himself had had cases, and had seen cases, both in hospital and elsewhere, that he believed to partake of the epidemic influence, but he had had very few cases that he could distinctly put his finger upon and say they were typical, unequivocal, and fully developed cases of epidemic influenza; therefore, he had communicated with the medical officers connected with all the public institutions of Glasgow, and with a number of representative men in various quarters of the city. The only public institution where the epidemic character had been well marked was in Gartnavel, where Dr. Yellowlees had had to deal with a considerable number of cases. In the Town's Hospital little or nothing had been seen of it. As to the results of inquiry from those engaged in private practice, many gentlemen declared they had seen none of the so-called "Russian" epidemic, but qualified the statement by saying that catarrh had never been so prevalent.

It would not do, Professor Gairdner thought, to pooh-pooh the influenza. That some unusual influence was at work on the health of the community seemed clear; that it was mysterious and erratic was true, and, therefore, presented difficulties in the way of a complete exposure of its nature, but because of this difficulty was not necessary to deny the fact of its existence.

GERMAN UNIVERSITIES.—The total number of matriculated students in the twenty-one German universities in the current semester is 29,007 as against 29,491 last summer session. Berlin stands first with 5,731 students, Munich second with 3,479, Leipzig third with 3,453, Halle fourth with 1,657, Rostock stands last with 346 students. The medical faculties have the largest attendance, the total number of students in them this winter being 8,714.

THE MEDICAL DEFENCE UNION.

THE annual meeting of this Union was held at the offices of the British Medical Association, 429, Strand, on Friday, January 31st. Amongst those present as members were: Mr. Lawson Tait (President), Dr. Granville Bantock, Mr. Ernest Hart, Dr. de Havilland Hall, Dr. Felce, Dr. Campbell Pope (Secretary, Metropolitan Branch), Dr. Mead (Newmarket), Mr. George Brown, Dr. Nicholls (Croydon), Dr. Masters, Mr. Dingle, Dr. Hugh Woods, and Dr. Leslie Phillips and Dr. Bateman, Secretaries.

Mr. LAWSON TAIT took the chair.

The report having been printed and circulated amongst the members previously, it was taken as read. It gave the details of a considerable number of cases in which the Union had given most effectual aid to members of the profession against unjust attacks.

There was then a short discussion, in which Mr. ERNEST HART, Dr. DE HAVILLAND HALL, Mr. GEORGE BROWN, and others took part, in reference to the paragraph in the report dealing with the support of the Union given in the case of Members threatened by the College of Surgeons with suspension. Dr. FELCE, Mr. ERNEST HART, and Dr. DE HAVILLAND HALL stated that they were of opinion that the Defence Union ought not to aid in what might be called a political battle, but act simply in defence of medical men and medical interests attacked from without and in danger of suffering wrong. It was pointed out that the whole question had been threshed out by the Council, and that the legal opinion, by its professional advisers was to the effect that this particular case was entirely within the province of the Union, and that, indeed, the Council had no power to refuse to act. It was urged on behalf of the Council that they had not taken up the case on political grounds, but entirely on its special urgency in respect to professional and practical questions involved, and the Secretary, Dr. LESLIE PHILLIPS, mentioned that other members who had received notice from the College of Surgeons, calling upon them to show cause why they should not be struck off the list of Members of the College, had instantly written off to him in consternation, as it was not a political matter to them, but one of life and death, as their living depended on their retaining their College diplomas.

Mr. LAWSON TAIT then addressed the meeting, and finally a resolution was proposed and carried unanimously that a sentence should be added to the paragraph in the report referring to the case, indicating that the action of the Union was not and would not be to take part in any question of internal medical politics.

The President (Mr. Lawson Tait) was then re-elected, as also were Dr. Granville Bantock as Treasurer and Drs. Leslie Phillips and A. G. Bateman as Secretaries. To the Executive Council were added Mr. Ernest Hart, Dr. Nix, and Dr. Masters.

The work of the Union was commented upon by all the speakers, and it was felt that the progress in the past year was more than sufficient to warrant the conviction that before long few members of the profession would remain outside its protective borders.

Votes of thanks were passed to the President, the executive officers, the Midland Medical Institute, the medical press, and finally to the Council of the British Medical Association.

By the report it was seen that the membership had more than doubled itself in the past year, and that the position of the Union financially was excellent. That there was ample need for such a society was proved most convincingly by the statement of cases.

BURIAL IN CHURCHES.—An application was made before the Chester Consistory Court on January 30th by Mr. Thomas Green, of Bebington, for permission to open a vault (of which he is the owner) under the chancel of Bebington Church for the purpose of burial. The application was opposed by the Burial Reform Association, who were represented by counsel. Chancellor Espin, in dismissing the application with costs, said: "The Court must absolutely refuse to authorise the works for which its sanction is requested. Interment within the walls of places of worship is altogether opposed to the spirit and tenour of recent legislation and of modern sanitary science, and in this particular case is strongly objected to by the parishioners."

PROFESSOR EDUARD VON WAHL, of Dorpat, one of the editors of the *St. Petersburger medicinische Wochenschrift*, died on January 29th, in consequence of an accident he met with a short time ago, by which several of his ribs were fractured.

ABORTION: THE LAW OF CONSPIRACY.

THE case of the Queen *v.* Whitchurch, Howe, and Cross, decided by the Court for the Consideration of Crown Cases Reserved on February 1st, decides no new principle of law, but is important as giving an authorative recognition to principles already known. Under the Offences Against the Person Act, 1861, Section 58, it is declared to be a felony (*a*) for any woman being with child to unlawfully administer any poison or noxious thing to herself, or use any instrument or means whatsoever with intent to procure her own miscarriage; and (*b*) for any person unlawfully to administer to, or cause to be taken by, a woman any poison or noxious thing, or use any instrument or means whatsoever with intent to procure her miscarriage, whether she be or be not with child. Section 59 makes it a misdemeanour for any person to unlawfully supply or procure any poison or other noxious thing or any instrument or thing whatsoever, knowing that the same is intended to be unlawfully used or employed with intent to procure the miscarrage of any woman, whether she be or be not with child.

The prisoners were tried at last Northampton Assizes, and the two male prisoners were convicted under the second part of Section 58, of the felony of administering drugs to Elizabeth Cross, with intent to procure her miscarriage. The woman was not, in fact, with child, though at the time she and the two male prisoners supposed she was, and therefore could not be convicted under Section 58. She seems not to have been indicted under Section 59, possibly because the facts were not such as, in the opinion of those concerned for the prosecution, to enable them to ask for a conviction against her for procuring poison with the intent; but the three prisoners were jointly indicted for conspiracy to procure her miscarriage. On behalf of the woman it was urged that, as she was not in fact with child, the means used could not have the effect of procuring miscarriage, and consequently that she could not be convicted. The Court, however, unanimously held this contention to be wrong. The charge against the prisoners was one of conspiracy to commit a felony (which was actually committed by the male prisoners), and the fact that the woman could not commit that felony in no way excused her from the substantive offence of conspiracy with which she was charged.

It is a well-known maxim that conspiracy is a crime of itself, even though the act which the conspiracy was intended to accomplish was not in itself prohibited by our criminal law. An old but apt illustration is given by the case in which it was laid down that a conspiracy to seduce a girl is a crime, punishable as such, although seduction of itself is not a crime by English law, but only gives rise to a civil action for damages. The present case is much stronger. The men Whitchurch and Howe took measures to commit a crime when they administered drugs, etc., to the woman Cross, with a view to procure her miscarriage, and she was a willing party to what they did, and so joined in the conspiracy to commit that crime. The case is important to members of the medical profession, because undoubtedly they are often invited to supply or prescribe medicines or use other means for purposes similar to those intended by the prisoners. It shows that not even the fact of the woman not being pregnant is an answer if the supply of drugs or use of instruments for the purpose prohibited by the Act is once established, and should be a warning to all to avoid meddling with matters with which no professional man can safely be concerned.

PRESENTATION TO DR. J. SPOTTISWOODE CAMERON.—Dr. J. Spottiswoode Cameron, the recently appointed medical officer of the the county borough of Leeds, was presented on January 31st with a gratifying testimony from his numerous friends in and around the borough, of their "admiration and esteem." The testimonial took the form of a purse of gold (£75) and a richly bound copy of the *Encyclopædia Britannica* in walnut case. The presentation was made by the Mayor, and acknowledged by Dr. Cameron in suitable terms.

A COURSE of four lectures on Domestic Hygiene will be given by Dr. A. T. Schofield at the Parkes Museum on February 24th, March 1st, 3rd, and 8th. The lectures will begin at 3 P.M., and an examination will be held at the conclusion of the course. Certificates will be presented to the successful candidates by the Duchess of Albany.

AN American admirer of the late Professor R. von Volkmann of Halle, has offered 5,000 marks (£250) towards a memorial of the deceased surgeon.

THE FUNERAL OF SIR WILLIAM GULL.

The remains of the late Sir William Gull were removed at an early hour on Monday morning, February 3rd, from Brook Street to Liverpool Street Station, and conveyed by train to Thorpe-le-Soken, near Colchester, for interment. The coffin was of plain oak with brass mountings, and inscribed: "William Withey Gull. Born, December 31, 1816. Died, January 29, 1890." The chief mourners were his eldest son, Dr. and Mrs. Acland, Colonel Lacy, Sir Henry Acland, Lord Justice Lindley and Mr. Lindley and Sir James Paget. General Sir Thomas Teesdale represented the Prince and Princess of Wales. The Royal College of Physicians was represented by Sir Andrew Clark (President), Sir William Roberts, and Dr. Liveing. Mr. Croft attended on behalf of the Royal College of Surgeons. Edinburgh University was represented by Sir Dyce Duckworth. Guy's Hospital was represented by Mr. Edward Lushington (treasurer), Dr. Steele, and Miss Jones (matron). The mourners, the special representatives, and a large number of the medical profession left by the 10 o'clock train from Liverpool Street, to pay a last token of respect to their late friend. Sir J. Lister, Dr. Matthews Duncan, Dr. Herman Weber, Mr. Aird, M.P., Dr. Russell Reynolds, Dr. Ord, Dr. Pye-Smith, Dr. Goodhart, and Mr. Howse, of Guy's Hospital, Dr. Sutton, Dr. Buzzard, Dr. Donald Hood, Dr. Felix Semon, Dr. Talford Jones (of Eastbourne), and Mr. Ernest Hart were among those present.



[From a photograph by Messrs. W. and D. Downey.]

Over 100 beautiful wreaths were sent from, among others, the Prince of Wales, Mdme. de Falbe, Mr. and Mrs Gull, Dr. and Mrs. Acland, Colonel and Mrs. Lacy, Mrs. Edward Lacy, the Misses Lacy, Sir Thomas Acland, Bart., M.P., Dowager Marchioness of Lansdowne, Mr. and Mrs. Stern, Mrs. Langenbach, Sir William Gull's household, Lord and Lady Henniker, Lord and Lady Burton, Earl and Countess of Pembroke, Lady Pryse, the Earl of Shannon, Sir Duncan Campbell, "An Ever Grateful Friend," Earl and Countess of Dunraven, Dr. and Mrs. Hood, Mr. and Mrs. Goldschmidt, Sir W. and Lady Jenner, Dr. and Mrs. Habershon, Mr. J. S. Morgan, Mr. and Mrs. W. H. Burns, Dr. and Mrs. Braxton Hicks, Mr. Alfred de Rothschild, and Dr. and Mrs. Matthews Duncan, etc.

The grave, which was lined with laurels and snowdrops and violets, lies on the north side of the church, close to the grave of Sir William's father and mother.

Hundreds of people were present in the churchyard, by many of whom Sir William, though not personally known to them, was regarded as a friend, owing to the interest he had always taken in the village, which had been the home of his childhood. This interest had been practically shown in the restoration of the church, to which Sir William had largely contributed, and he had also not long since relieved the village club, started by his brother, of a debt by which it was oppressed. Every head was uncovered as the procession, headed by the clergy and the coffin, followed by the chief mourners, passed down the path to the grave.

The concluding portion of the burial service was read by the Rev. J. Watkin Williams, of New College, Oxford.

After the conclusion of the service many friends came forward to place wreaths in the grave, which was almost completely filled with flowers.

A correspondent signing himself R.A. sends to the *Times* the following anecdote of Sir William Gull: "Some years ago a gentleman, whose failing health was coincident with failing fortune, consulted Gull. For a while the remedies were of use, but one day the patient presented himself looking so much worse, that Sir William had to seek for a special cause. The explanation was adequate. 'I have been obliged to call my creditors together,' whereupon the great physician wrote a cheque for all past fees (about thirty guineas), and, putting it into his patient's hands with the other prescription, said simply, 'Perhaps that will help you more than the medicine to-day, but pray take them both.'"

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 27th, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

WEST SOMERSET BRANCH.—A clinical meeting will be held at the Taunton and Somerset Hospital on Thursday, February 13th, at 3 P.M. Members wishing to show cases or specimens are requested to forward the titles thereof to Mr. Cosens not later than February 8th, when a circular will be sent to each member giving notice of the meeting and of the subjects to be brought forward. —W. BURROUGH COSENS, Assistant Secretary, Taunton.

YORKSHIRE BRANCH.—The next meeting of this Branch will be held at the Hospital, Rotherham, on Wednesday, February 26th, at 3 P.M. Members intending to read papers are requested to communicate with the Secretary before February 14th.—ARTHUR JACKSON, Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, N.E., on Thursday, February 20th, at 8.30 P.M. The evening will be devoted to a demonstration by Dr. Hadden of patients suffering from various forms of nervous disease. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, N.E.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The next meeting of this district will be held at the Tottenham Hospital, The Green, Tottenham, N., on Thursday evening, February 20th, 1890, at 8 o'clock precisely. Dr. W. M. Ord, President of the Metropolitan Counties Branch, will take the chair. Mr. G. Buckston Browne will read a paper on Some Practical Points in the Treatment of Retention of Urine. Dr. Wynn Westcott will give notes and exhibit a specimen of Root of Mandragora from Damascus. Some interesting cases from the wards of the hospital will also be exhibited. All duly registered medical men, whether members of the Association or not, are invited to attend these meetings.—GEORGE HENTY, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—A meeting will be held in the Governors' Hall, St. Thomas's Hospital (entrance from Westminster Bridge) on Wednesday, February 12th, 1890, at 8.30 P.M. The chair will be taken by Dr. Ord, President of the Branch. Dr. Bristowe will read a paper on Pseudo-Peritonitis and Epilepsy in Hysteria. Cases of interest from the hospital will be shown. All practitioners will be welcome.—R. PERCY SMITH, Honorary Secretary, Bethlem Royal Hospital, S.E.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the North-Western Hotel, Stafford, on Thursday, February 27th. The President, Mr. Vincent Jackson, will take the chair at 3.45 P.M.—GEORGE REID, General Secretary.

DUBLIN BRANCH: ANNUAL MEETING.

THE thirteenth annual meeting of the Dublin Branch was held in the King and Queen's College of Physicians, Kildare Street, on January 29th, Dr. WILLIAM MOORE, outgoing President, in the chair.

Report of Council.—The HONORARY SECRETARY (Dr. Conolly) read the report of the Council, which stated that during the past year the Council held eight meetings. Twenty-two gentlemen were admitted to the Association, of whom several joined the Dublin Branch. There remained on the books of this Branch 184 subscribing members. On February 28th, 1889, it was decided to support the action which was then being taken by the Irish Medical Association with regard to the superannuation of Poor-law medical officers, and the Secretary was directed, in conjunction with the Secretary to that Association, to sign and forward a letter to the Chief Secretary for Ireland, setting forth the grievances of the Irish Poor-law medical officers in regard of superannuation and the unsatisfactory state of the law at present in this respect, and expressing a hope that Government would introduce during the current session a measure similar to the Union Officers' Superannuation (Ireland) Bill of 1883, whereby pension would become a matter of right and not of grace. The report then went on to refer to proposals made by Dr. Rentoul with regard to regulations suggested to be made in deciding what class of persons should be eligible for out-patient medical aid, and to a proposition put forward by Mr. J. Brindley James that the Association should give active support to a scheme that would have in view the establishment of hospital co-operation for the better conducting of the out-patient department of general hospitals.

The Question of Hospital Abuse.—The following report was presented by the Subcommittee appointed to examine the question: "In examining these resolutions it will be convenient to deal first of all with Clause 5 of Dr. Rentoul's motion, since your Subcommittee fail to see that it has any pertinency to the subject of the other clauses, or anything to do with the question of medical attendance on the working classes. It is not applicable to Ireland. The question of opening workhouse hospitals for clinical teaching has been under the consideration of the colleges here, and we see no reason to question the wisdom of the decision arrived at after careful consideration by those bodies, which was adverse to the change suggested. In all Irish teaching centres ample opportunities are already afforded to students of medicine for the acquisition of a full knowledge of fevers. Dismissing Clause 5, the remainder of the resolutions cover a very wide field, and deal with some very intricate questions. In approaching such subjects we are met by the difficulty that the conditions of medical charities in this country, as well as many other conditions of existence, are very different from what are found in England. Though abuses doubtless occur here in hospital relief, yet the grievance that has always pressed most hardly upon the Irish practitioner has been the abuse of the public dispensary relief system. It is most gravely to be feared that in the present state of the law any attempt to limit the scope of medical charities, other than those administered under the Poor law, would merely have the result of throwing an additional burden upon the medical officers connected with the latter. More than ten years ago the Irish Medical Association addressed to the Chairman of the Poor-law Union Inquiry Commissioners a communication dealing with the abuse of dispensary medical relief, and they suggested the enforcement of the following among other rules: '2. That gratuitous relief should be afforded only to those who are barely able to support themselves and their families during health.' To which was appended this note: 'Careful inquiries in England have shown that (*a*) persons in receipt of over £2 a week are able to pay fees for medical advice, and may be left to arrange terms with their medical attendants. (*b*) Persons receiving at the rate of from £1 to £2 a week are sufficiently well off to provide for their medical attendance by means of provident dispensaries or sick clubs; as are also single persons in receipt of even less than £1 a week.' '3. That persons able to provide for their medical attendance by provident dispensaries or sick clubs should be debarred from receiving gratuitous medical relief.' To which is appended the following note: 'The Council consider it the duty of Poor-law guardians and other local representatives of the people to take the lead in founding provident dispensaries.' Your Subcommittee entirely agrees that without the co-operation of the Poor-law authorities it is impossible in this country to check the abuse of dispensary relief, and in the present state of the law the dispensaries afford such fatal facilities for pauperism, that to limit the activity of general hospitals would merely be to drive the people to the dispensaries."—Dr. ATTHILL moved the adoption of the report, which he described as a satisfactory one both in respect of the membership and finances of the Association. The greater part of the report was

taken up with the question of how medical officers should be remunerated who were in attendance on the better class of artisans, farmers, and such people. There was no portion of the community who gave more gratuitous assistance than medical practitioners, but that was no reason why they should be imposed upon. Those who practised in Dublin could protect themselves very well, but in the country the abuse of the medical Poor-law system was in many cases very gross. The tickets for medical relief were given out by the guardians, many of whom were illiterate men, without any selection whatever, and sometimes to persons who were relatively much better off than the medical officers themselves. He hoped pressure would be brought on the Local Government Board to protect the medical officers from the maladministration of this system. He considered the proposal to utilise the Poor-law infirmaries and fever hospitals as schools for clinical teaching instead of the hospitals in Dublin and Belfast as an unworkable scheme, because in some cases the teachers would not be competent to conduct the classes. He did not say this from want of respect for the local men, but he thought the system would be hardly workable. He thought something would be done to protect medical men from the frauds which were perpetrated on them owing to the present system of medical relief.—Mr. CROLY, Vice-President of the College of Surgeons, in seconding the motion, said he considered some young men in the country did themselves some injury in holding out for their guinea fee. There was no doubt that if some doctors started provident dispensaries, as they did in England, many persons who now had recourse to the Poor-law system would go to these dispensaries and pay fees. He knew cases where men who were well able to pay fees came to town and represented themselves as poor in order to obtain gratuitous relief. He remembered performing an important operation on one person who described himself as a poor boy and unable to give anything to the hospital, but who he (Mr. Croly) afterwards learned was a well-to-do baker who had his cars going along the road.—The report was adopted.

Installation of New President.—On the motion of Dr. BENNETT, seconded by Dr. ORMSBY, Dr. J. K. Barton was elected President of the Branch for the ensuing year. On taking the chair, the PRESIDENT, after expressing his thanks for the honour accorded to him; moved a vote of thanks to the outgoing president, Dr. Moore, for the manner in which he had discharged his duties during his term of office.—Dr. MOORE replied.

President's Address.—The PRESIDENT then delivered an address, in which he referred to the increasing growth and influence of the Association not only in the United Kingdom but in the Colonies. The organisation was now so complete that the opinion of the profession on any subject could be obtained. He then spoke of the ethics or what some might call the etiquette of the profession in certain matters, particularly in regard to the practice of one doctor handing over his cases to another when going on vacation, and also with regard to the duties of a doctor who was called into consultation by another. The profession was an honourable and noble one, and they should remember the principle of *noblesse oblige*, having for their motto, not every man for himself, but esteem yourself less than your fellow.

Irish Diplomas and English Hospital Appointments.—Mr. THORNLEY STOKER drew attention to the fact that in many English hospitals graduates and licentiates from Irish institutions were not eligible for appointment, and the offices were only open to men who had English and Scotch qualifications, whereas English and Scotch diplomates were eligible for appointment to medical offices here. They should bear in mind that the proportion of rejections in English and Scotch licensing bodies was smaller than in Ireland. He thought they should take action to have this unfair disability removed, and he proposed the following resolution: "That this Branch of the British Medical Association is of opinion that the diplomates of Irish universities and corporations should possess the same privileges in respect of public appointments in Great Britain as are enjoyed by diplomates in other parts of the kingdom."—Dr. ORMSBY, in seconding the motion, mentioned that some of the most distinguished medical men in London institutions were Irish diplomates.—Dr. ATTHILL, in supporting the resolution, said the action of English bodies in excluding Irishmen was rather a compliment to the latter, because they were evidently afraid of Irish competition.—Dr. MOORE said he endorsed every word of the resolution.—Dr. JACOB said they should urge on the parent Association to get this slur on Irish diplomates removed.—Dr. MACAN said he would move the following resolution as an addition to Mr. Stoker's :—"That the Dublin Branch of the British Medical Association desires to draw the attention of the Council of the Association to the invidious exclusion of diplomates of Irish universities and corporations from many hospital appointments in Great Britain, with a view of enlisting their co-operation to have such disabilities removed."—Dr. STOREY seconded the resolution.—Both resolutions were carried.

Officers and Council.—The result of the ballot for officers and Council for 1890 was declared as follows:—*President:* J. K. Barton, M.D. *President-elect:* W. G. Smith, M.D. *Vice-Presidents:* Sir William Stokes, M.D., F.R.C.S.; Arthur Wynne Foot, M.D. *Council:* Lombe Atthill, M.D.; Sir John Banks, K.C.B.; E. H. Bennett, M.D.; J. H. Chapman, F.K.Q.C.P.I.; A. H. Corley, M.D.; Kendal Franks, M.D.; T. W. Grimshaw, M.D.; E. Hamilton, M.D.; W. Moore, M.D.; L. H. Ormsby, M.D.; W. Thornley Stoker, M.D.; R. H. Swanzy, M.D. *Representative on the Council of the Association:* T. W. Grimshaw, M.D. *Honorary Secretary and Treasurer:* Conolly Norman, F.R.C.S.I., Richmond Asylum, Grangegorman, Dublin.

The proceedings then terminated.

Annual Dinner.—The annual dinner was held in the evening, under the presidency of Dr. J. K. Barton. There was a considerable attendance. The usual toasts were proposed, and the proceedings passed off with great success.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE fourth general meeting was held in the Medical Institute on Thursday, January 9th, the President, Mr. D. C. LLOYD-OWEN, in the chair.

New Members of Branch.—The following members of the Association were elected members of the Branch: William Rennie, L.R.C.P., Workhouse Infirmary; Charles Robertson, M.B.Edin., Workhouse Infirmary; Charles St. Johnston, M.R.C.S., Workhouse Infirmary; John Ogle Tunstall, M.D.Lond., Workhouse Infirmary; N. H. Turner, L.R.C.P., Ivy Walls, Edgbaston.

Cerebellar Lesion.—Mr. MARSH exhibited the patient shown at the last meeting of the Branch,[1] with symptoms pointing to a lesion of the middle lobe of the cerebellum. After a month's treatment by rest, administration of iodide of potassium (℥ss. daily), and counter-irritation to the occipital region and nape of neck, all the symptoms disappeared, and the patient was apparently as well as he had been prior to the accident.

Fracture Dislocation of Vertebra.—Mr. BENNETT MAY showed a fracture dislocation of the fourth cervical vertebra, illustrating some points of interest in the treatment of these cases.

Myoma.—Mr. LAWSON TAIT showed an enormous soft œdematous myoma removed by hysterectomy. The patient had been suffering for many years from a large pelvic tumour. The diagnosis was that of a soft uterine myoma. It was found to be entirely extra-peritoneal, and had to be enucleated from top to bottom. The tumour weighed twenty-four pounds.

Papers.—Mr. LANGLEY BROWNE read a paper on spinal injuries.—Mr. EALES read a paper entitled "The Treatment of Slowly-maturing Senile Cataract, more especially of the Nuclear Variety."

SPECIAL CORRESPONDENCE.

PARIS.

Strophanthus in Infantile Diseases.—Anti-microbian Properties of White of Egg.—Ethychloral Urethane.—New Theory of Diabetes.—Gonococcus in Simple Urethritis.—General News.

M. MONCORVO has treated infantile diseases with strophanthus, and comes to the following conclusions: As a diuretic and for combating cardiac disturbance strophanthus is invaluable in infantile therapeutics. Its action is prompt and energetic. It is perfectly innocuous. The tincture in mitral or aortic lesions with hyposystole and oliguria restores cardiac tone, regulates the rhythm, and strengthens the pulse. In infantile pneumonia or bronchopulmonary affections, accompanied by cardiac weakness, strophanthus is a valuable heart tonic. M. Moncorvo has not observed any marked influence on the nervous system or temperature. The action of strophanthus persists long after the treatment has been discontinued. M. Moncorvo employed an alcoholic tincture, in doses varying from four to twenty-eight drops in twenty-four hours.

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[1] JOURNAL, 1890, vol. i, p. 80.

MM. Wurtz, Charrin, and Roger recently communicated to the Biological Society some observations on the microbicide properties of the albumen of white of egg. One cubic centimètre, withdrawn by means of a small sterile tube, was placed in each cultivation tube, inoculated, and kept in a stove at 38° C. for an hour. If, at the end of this time, ten times its weight of gelatine was added to the albumen contained in each tube, no colonies developed. But tubes containing the same quantity of gelatine, without albumen, and inoculated in the same manner with the same cultivations became rapidly fertile. The bacillus anthracis (rods or spores), spirillum, Eberth's bacillus, etc., were checked in their development by the fresh albumen. When cooked the albumen of white of egg formed a good cultivation medium. M. Duclaux remarked that similar anti-microbian properties had been recently discovered in milk. He was inclined to regard these so-called properties as mere modifications of a general principle. When a certain kind of bacillus was transported from one medium to another, a number of them always died before becoming accustomed to the new medium. M. Charrin stated that the cultivations swarmed in the control tubes in which they were inoculated. The change of medium had therefore but a slight influence. M. Gley considered that the experiments confirmed the theory of Buchner, who attributed the anti-microbian properties of serum to the albuminoids it contained.

The *Paris Médical* states that Radlauer's new hypnotic, urethane ethychloral (éthychloral uréthane) is distinguished from chloral urethane by the addition of 2 atoms of carbon and 4 atoms of hydrogen. It fuses at 42° C. It is not modified by silver nitrate, nor by acids.

Two theories may be said to exist concerning diabetes. According to one, the glucose in the blood in diabetes is not concerned in the normal proportion. According to the second, the excess of glucose is due to an exaggerated quantity of sugar brought by the food, or to an abnormal production of hepatic sugar. Neither of these theories explains the nature of pancreatic diabetes, concerning which M. Lépine formulates two hypotheses. MM. Mering and Minkowski have shown that the complete ablation of the pancreas in a dog results in diabetes; if a fragment of this organ remains, even if deprived of its excretory duct, diabetes does not appear. Pancreatic diabetes is not, therefore, due to the absence of pancreatic juice in the intestine. M. Lépine supposes that a portion of the absorbed pancreatic ferment helps to destroy the glucose. He crushed a pancreas and placed it in an alkaline solution of glucose. At the end of a few hours the quantity of glucose had diminished. According to a second hypothesis the pancreas and liver, in a normal state, form an apparatus for eliminating the normal glucose, the pancreas representing not merely a gland discharging its juice into the intestine, but a vascular gland furnishing to its veins, which form a portion of the roots of the portal vein, the ferment necessary to the liver. Experiments have shown that the transformation of glycogen into glucose is a very gradual process, and requires the aid of the pancreatic ferment. If this is wanting, the hepatic sugar is not normal, but foreign to the economy, and will be eliminated by the kidney. M. Lépine considers that the explanation of pancreatic diabetes by the absence of the pancreatic ferment will reconcile and complete the actual theories concerning this affection.

Professor Straus records an instance of gonococcus detected in the urethral discharge from a youth aged 16, who had never had sexual relations with any woman, but who was addicted to masturbation from the age of 12. Two days after indulging this habit to an unusual extent, severe pain during micturition ensued, and was followed by well-marked symptoms of blenorrhagia. The discharge contained Neisser's gonococci, absolutely similar to those found in the pus of a patient suffering from ordinary blenorrhagia. This case would show that Neisser's gonococcus may exist as a simple saprophyte, and that by means of slight irritation it may invade the epithelium and determine characteristic catarrh.

Paris begins to wear the old look; bright weather and bright faces again gladden the ordinary routine of Paris life; social and business relations are quickly recovering their normal state; the epidemic is fast dying out, although not dead.

The French Society for Rendering Assistance to the Wounded has placed the tent which figured at the late Exhibition, with bedding and linen for twenty patients, at the service of the *Assistance Publique*. The same Society has sent £120 worth of medical comforts to the sick at Tonkin for the new year.

VIENNA.

Professor Weichselbaum's Investigations on the Pathology of Influenza.—Influenza in Domestic Animals.

At a meeting of the Imperial Royal Society of Physicians on January 31st, Professor Weichselbaum read a paper on influenza, embodying the results of his investigations of the blood and catarrhal secretions of the respiratory mucous membranes of patients suffering from the disease as well as the morbid products found *post mortem*. Examination of the blood of two patients which was obtained by artificial arterial bleeding, furnished a negative result, microscopically as well as in the cultures made from it. The sputum was examined in eighteen cases, among which there was one case in which broncho-pneumonia had been suspected, and two cases in which croupous pneumonia developed later on. The rest of the cases were uncomplicated. The sputum was examined on the second day after admission, when the patients were still in the febrile stage. In most of the cases the presence of the diplococcus pneumoniæ was proved, microscopically as well as by cultures; at least a capsulated diplococcus was discovered, differing very little from that micrococcus. Experiments on animals confirmed these results with one exception, namely, that only the third of the animals presented that degree of virulence which the diplococcus of pneumonia usually possesses. In six cases the sputum was examined, not only at the beginning of the disease, but during convalescence. The diplococci were but scanty, and the degree of virulence was slight, only a fifth of the animals thus inoculated having succumbed. In no case did Professor Weichselbaum find the bacillus of Friedländer. In a girl who had previously enjoyed good health, much albumen was detected in the urine during the course of the influenza; the sediment was examined, and the diplococcus of pneumonia was found, both microscopically and by cultures. This was the first case in which the diplococcus of pneumonia had been found in the urine. Professor Weichselbaum, moreover, examined the bodies of ten patients who at the outset had presented the symptoms of influenza, and had died in part with, and in part without, complications. An acute inflammation of the accessory cavities of the nose was nearly always found; the frontal and maxillary cavities were full of pus. Examination of the pus with the microscope and by cultures showed the certain presence of the diplococcus of pneumonia. Only on one occasion the "streptococcus," and on another occasion the "staphylococcus aureus" were discovered. The micrococcus which had been cultivated from the pus taken from the accessory cavities of the nose presented a high degree of virulence. With regard to complications, Professor Weichselbaum examined three cases of otitis media, and found the micro-organism microscopically and by cultures. In a young man an abscess came on over the upper eyelid eight days after he was attacked by influenza; the abscess was incised. The next day vomiting, headache, delirium, and death supervened. At the necropsy, besides the abscess, pus was found in the maxillary and the right frontal cavity, also between the posterior wall of the right frontal bone and the dura mater; the latter also presented some infiltrations. Over the right frontal lobe of the brain there was a large abscess. The cerebral ventricles were filled with pus, and there was also purulent leptomeningitis. Examination of the pus revealed the presence of the diplococcus of pneumonia to a very high degree. The same micro-organism was also found in the pneumonic processes; in the abscess the "staphylococcus aureus" was also discovered. Professor Weichselbaum mentioned the case of a young girl who was attacked with fever four days before admission. She presented the following symptoms: Distension of the abdomen, pains in the stomach, epileptiform attacks, pain in the ileo-cæcal region, and liquid stools. She died, and at the *post-mortem* examination "hydrocephalus internus," bronchitis, scanty broncho-pneumonic foci, and acute enteritis in the lower part of the ileum were found; the latter was probably the real cause of death. The culture plate which had been prepared of the contents of the intestine showed such a dense growth of bacteria that isolation was quite impossible. Rabbits infected with a solution of the intestinal contents succumbed within three days with the typical symptoms of "sputum septicæmia," and, at the *post-mortem* examination, the diplococci of pneumonia were invariably discovered. With regard to the conclusions to be drawn from these observations, Professor Weichselbaum said two possibilities had to be taken into account, namely (1) whether the pneumococcus was

the cause of the influenza, (2) or the influenza was produced by other unknown micro-organisms, the pneumococcus being due to a secondary infection. The following facts favoured the former of these alternatives: The constant presence of the pneumococci in influenza in the early stages of the disease, while the number and the virulence of the pneumococci decreased during convalescence; the variations in the clinical course of the disease were also in accord with this supposition, as the pneumococcus was able to produce various processes. Again, the rapid course of the disease was in conformity with the rapid loss of virulence of the pneumococcus. It was only the epidemic spread of the influenza which did not agree with the supposition of the pneumococcus being the cause of the influenza. As to secondary infection, this was supported by what was known of acute exanthems, in which staphylococcus, etc., were found to be the agents of secondary infection. The opinion that only a favourable soil for the development of the pneumococci was created by the influenza was supported by the fact that these micro-organisms were also found in healthy persons. Professor Weichselbaum inclined to believe that the second opinion was correct, as the complications observed in influenza, and particularly pneumonia, could thus be explained.

Professor Bollinger, of Munich, gives some details as to influenza in domestic animals. Three forms of influenza occurred in horses: 1. The catarrhal, which affected the mucous membrane of the respiratory tract—the nose, the larynx, the trachea, and the bronchi. When complicated with capillary bronchitis and broncho-pneumonia this form might become dangerous. 2. Epidemic erysipelas (*Rothlaufseuche:* horse typhoid, petechial typhoid) was characterised by a particular involvement of the digestive tract, by a tendency to the formation of petechial and erysipelatous swellings of the "subcutis" as well as the intestinal mucous membrane, and by nervous symptoms, rapid spread by contagiousness (proved by experiments), and by relative benignity. Besides high fever there was severe nervous depression, the animals were drowsy, and suffered from extraordinary muscular weakness. Gastric symptoms, conjunctivitis, and erysipelatous swellings of the extremities and the lower part of the abdomen and chest were also observed. The duration of the affection averaged one week; occasionally two to three weeks. Owing to its great resemblance to some forms of anthrax this form of the influenza was, under the name of horse typhoid, considered by some authors (particularly by the Vienna school) as belonging to the anthrax, a supposition in some degree justified by the fact that bacilli of anthrax were now and then discovered in the blood and tissues of the animals. 3. "Pectoral influenza" (*Brustseuche:* contagious pleuro-pneumonia of the horse) is influenza in the old and large sense. The infectious substance consisted of diplo-bacteria, which, when inoculated in mice, produced fatal septicæmia. This form was particularly observed enzoötically in large stables. In most of the fatal cases there was a malignant necrosing pleuro-pneumonia, and degeneration of the most important organs of the body, just as in septicæmia. Of these three forms of the influenza, only the catarrhal was related to human influenza. The erysipelatous and pneumonic forms, which were very frequent in army horses, were never communicated to man. In the great horse epizoötic, which in 1872-73 spread over the whole of Northern America, the symptoms were like those of *grippe*, and bore a close resemblance clinically to the epidemic now prevalent in Europe. About 90 per cent. of the total number of animals were affected, and of these from 3 to 4 per cent. died. As at that period there was no similar epidemic among human beings, Professor Bollinger believed that the catarrhal influenza of man and that of horses were, etiologically, perfectly distinct affections. As to the catarrhal fever of dogs *(Hundeseuche)*, which particularly affected young dogs in the first year of life, Professor Bollinger states that this disease differs from the catarrhal influenza of man and from that of horses by its long duration (in most cases from three to four weeks) and its high death-rate (50 to 60 per cent.).

EGYPT.

The School of Medicine.—The Drainage of Cairo.—The Weather.—The Pyramid Hotel.

Sir Evelyn Baring, in a report lately addressed to the Khedive, while attending to the state of the Government hospitals in Upper Egypt, and the shortcomings of many of the medical officers in charge, drew the attention of His Highness to the urgent necessity of improving the education of the Egyptian medical student by imparting a more practical character to the curriculum at the School of Medicine. A Commission was consequently appointed to consider the question, and determine the best means of applying a remedy to what was thereby admitted to be a serious defect. The Commission consisted of the Minister of Public Instruction, Aby Pasha Moubarek, as President: and seven members, of whom four were native professors attached to the school. The remaining three were the Director of the Sanitary Department, Dr. Greene Pasha; the Principal Medical Officer of the Egyptian army, Dr. Rogers Pasha; and Dr. Milton, Chief Medical Officer of Kasr-el-Aini Hospital. A programme of study extending over six years was presented by Dr. Milton, and after lengthened discussion duly adopted with a few trifling modifications. It was then proposed by the English members that the course of study being divided into two parts, theoretical and practical, instruction in the latter should be provided for by the appointment to each branch of joint professors, who should for the most part be Europeans. The native professors would continue their lectures and demonstrations as at present, while the holders of the new appointments would confine their labours to the dissecting room, the laboratory, and the wards of the hospital. This proposal was energetically opposed by the native members, who unanimously decided that it was untenable. The majority being thus against them, the English members, considering it useless to draw up a programme without at the same time providing a means of effectually applying it, withdrew reluctantly from the Commission, but being of opinion that their duty to the Government that had selected them rendered it obligatory that they should lay their views before it, they have drawn up a report dealing exhaustively with the subject, which will be submitted to the President of the Council of Ministers.

Mr. Baldwin Latham's scheme for the drainage of Cairo has been submitted to the authorities. The total estimated cost, including 10 per cent. for contingencies, is £565,700. The annual charge, allowing for interest on capital at 5 per cent., and redemption in forty years, would amount to £47,680. For this very moderate expenditure the whole of the drainage of Cairo, including Boulaq, Shubra, and Old Cairo, would be effected without contamination of the Nile or canals, as the project includes the establishment of irrigation farms in the desert, which would no doubt ultimately become a source of revenue. It is much to be desired that this excellent scheme may be given effect to, for the bugbear of insanitation once removed, there is no doubt that Cairo, with its magnificent climate, would soon become the first winter resort of the world.

Since the above was written, rain has been falling continuously for upwards of twelve hours, and the streets are consequently flooded. No drainage of any kind exists for the removal of surface water; the necessity, therefore, of adopting some scheme for its removal becomes accentuated. The discomfort of muddy streets and local accumulations of water is very great, and for this reason, if for no other, it is desirable that Mr. Latham's project should be put in force.

Invalids coming out to Egypt cannot do better than patronise the new hotel at the Pyramids. Perfect air with every English comfort can be secured at a moderate cost. Each room is provided with an English fireplace, and the table and service of the establishment, which can accommodate 100 people, is such that few hotels in England can equal it. The unanimous voice of Cairo is that the Mena House Hotel at the Pyramids is a great success.

LIVERPOOL.

Pylorectomy and Gastro-enterostomy.

At a recent meeting of the Medical Institution Dr. Wm. Carter and Mr. Rawdon showed a man, aged 56, the subject of successful pylorectomy. The patient was admitted to the Royal Southern Hospital with well-marked symptoms of pyloric stenosis of some weeks' duration, and a small tumour was felt in the abdomen under the left rectus a little above the umbilicus. Mr. Rawdon opened the peritoneum by a median incision about four inches in length, commencing one inch below the ensiform cartilage. The tumour proved to be a mass of carcinoma involving the pylorus and the pyloric end of the stomach. There were no abnormal adhesions, and the parts were drawn out through the abdominal incision, when it was found that a third of the stomach required to be

removed. The vessels coursing along the greater curvature were secured at the point where the line of incision was required, and the duodenum and the vessels immediately connected with it were compressed by a ligature of rubber tubing. The affected portion of the stomach and pylorus was now excised, only one or two vessels in its walls requiring a ligature. The omental connections were gathered up, transfixed, and tied, and the rubber tubing constricting the duodenum was removed, two or three arteries that spurted being quickly secured. The stomach wound was closed with continuous sutures of fine silk, except one inch at the greater curvature, which was left open to admit of the introduction of one of Dr. Senn's plates of decalcified bone. A second plate, cut circular, was passed into the duodenum, and placed so as to lie across it, with the coats of the bowel overlapping the plate. The openings in the stomach and duodenum were now brought into apposition, and the corresponding ligatures on the two plates tied together, so that direct communication was established between the two viscera. The parts were returned into the abdomen, and the wound closed in the usual way. The operation was completed in less than an hour. The patient made an uninterrupted recovery. He was supported by nutrient suppositories during the first week, he was then allowed a little pancreatised milk, and gradually returned to his ordinary diet. At the present time he is able to eat heartily without pain or other discomfort.

At the same meeting Mr. Stansfield showed a successful case of gastro-enterostomy, a full description of which is published on p. 294.

CORRESPONDENCE.

THE RELATIONS OF THE GRADUATES AND CONVOCATION OF THE UNIVERSITY OF LONDON TO THE PROPOSED REFORM OF THE UNIVERSITY.

SIR,—In the last number of the JOURNAL I stated that the Report of the Royal Commission left to the University of London the choice of accepting a new charter in harmony with the recommendations of the Commission, or of making way for a new university, to be constructed upon those recommendations.

Convocation has technically the power of accepting or rejecting the scheme drafted by the Senate for the reconstruction of the University. The scheme is now formally before Convocation. The House will no doubt weigh the important issues involved in a broad and liberal spirit, guided mainly by the motive which led to the creation of the University, that is, the advancement of literature and science, and only in a secondary measure by the incidental interests—may they be called vested interests?—acquired or claimed by individual graduates.

It is generally held that a true university embraces all the faculties—that is, arts, science, law, and physic. The *literæ humaniores* constitute the foundation of what may be called the practical faculties of law and medicine, science, pure and applied, entering into their construction. Rightly, the doors of the faculty of arts are freely open; but, when we come to the faculty of medicine, we find the access so blocked by difficulties that only a very few aspirants can break through. The demand at the present day, increasing in force until it is irresistible, is not to make access to the degrees in medicine as free as it in arts, but simply to remove unnecessary and vexatious restrictions.

It deserves to be remembered by those who are inclined to protest against the liberation of medicine from these restrictions that the promoters of this liberation are not acting against the spirit of the University. They ought to be reminded of an event in its history—not, I believe, put before the Commission—in its logical bearing upon the question of the reform of the University. It is this: In the original charter, which held sway for some years, the only condition exacted from a candidate for admission to the matriculation was proof of having completed his 16th year. Now, having been enrolled so far, and thus seeing the B.A. inviting him on—what next? He is met by this requirement: "No candidate shall be admitted to this examination unless he have produced certificates from one of the institutions in connection with this University, of having been a student during two years at one of such institutions." Two institutions were specially mentioned in the charter, namely, University College and King's College. For some years these colleges, and chiefly University College, supplied the greater number of candidates. The other institutions were almost all nonconformist; so that practically the degrees in arts were almost exclusively restricted to nonconformists. This was a very natural way of redressing the grievance presented by Oxford and Cambridge, which excluded nonconformists. But such a policy could hardly be called liberal or just. On the other hand, the degrees in medicine were "*ex necessitate rei*" restricted to those who produced evidence of education in recognised medical schools.

A curious anomaly arose. A man might pass the matriculation, but, as we have seen, he must produce evidence of two years' study in a recognised institution before he could proceed to B.A. It would naturally be inferred that the study must be in arts; but no! A student in medicine of University College had simply to get a certificate of having studied two years to be admitted to examination for B.A. Thus an obviously unfair advantage was enjoyed by University College. Its medical courses qualified for arts degrees. It was this anomaly that led to the organisation of the graduates for the purpose of reforming the University. This movement was initiated by me. The injustice had come home to me. I had passed the first M.B., when the ambition seized me to proceed to B.A. So I passed the matriculation—an ordeal not then imposed upon medical graduates, as then I found that I was barred from the B.A. by the restriction described. The Graduates' Committee, of which I was secretary for ten years, soon found occupation in redressing other grievances. But one result of our work was that the University was thrown open, and it has now the power of admitting persons to examination although they have not gone through any of the affiliated institutions. It is not pertinent to the present argument to discuss whether this opening *urbi et orbi* was judicious or not. The direct application is that the graduates in arts who had passed under certificates of study in affiliated institutions were henceforth liable to be swamped by men coming from anywhere. The collegiate graduates might thus complain that their degrees were deteriorated in value, that their distinctive character was lowered, and that their "vested" interests had been forfeited. This was strongly felt by the arts graduates. The Graduates' Committee almost unanimously protested, but their protest was overruled. Now, with this parallel case and precedent, can it be expected that the cry of "vested interests" from the graduates in medicine will prevail? And their case is not nearly so strong, seeing that the sources whence the candidates are to be recruited are not multiplied; and that the University will be strengthened by gathering under its wing its legitimate children, not driving them abroad to find alien universities.

There is another example in point. Sir George Young pointed out that "the Queen's University of Ireland was destroyed by Parliament for public reasons, and that the vested interest of the graduates was so far from being respected, that it might even be said a very considerable injustice was done to it by leaving them in the air, except in so far as they chose individually to take up the degree offered them in the new Royal University of Ireland."

Here, then, is a precedent which Parliament, a power that can dispense with precedents, may act upon. But, in truth, the vested interest of the London graduates is but an airy sentimental fancy. It is not proposed to deprive them of their degree, or to lower its real value; but, on the contrary, to strengthen, by enhancing the quality of the degrees, and by increasing the ranks of the graduates. Let this be remembered—a small university can never, in this progressive age, be a powerful university.

I propose, with your permission, in your next to offer some observations upon the difficulties in the way of obtaining the degrees in medicine, and upon the qualities of those degrees.—I am, etc.,

ROBERT BARNES.

Harley Street, February, 1890.

SIR,—The scheme for the "reconstitution" of the University of London gives hope that a University of London is about to be formed.

The teaching bodies out of which it can be formed *quâ* the faculty of medicine, exist already as the eleven medical schools; and I propose to consider some of the points in which the published scheme promises to influence the medical schools for good or for evil, and shall use as an occasional illustration the department of physiology. As regards influence for good, it is clear that the formation of a faculty of medicine with an adequate voice

(1) on a board of studies, of which the University examiners will be members, (2) on the Senate, and (3) on the standing committee in the faculty of medicine, must operate towards the amalgamation between teaching and examining, which is one of the advantages of a university education. Under the present system these two functions in many respects antagonise rather than supplement each other. I will give as an instance my own experience of the effect of the London University regulations as regards the teaching of physiology: 1. No practical physiology test is given; 2, physiology may be postponed at the intermediate M.B. examination. Both these regulations have an evil influence on the teaching of physiology in medical schools; the first discourages practical work and promotes book work, the second opens the way to a very inconvenient dislocation of physiological study. Neither of these drawbacks could have subsisted for five years if the examining and the teaching elements had been in contact.

As regards influence for evil, this is concentrated in Clause 51, which proposes to accept an inferior substitute for the matriculation examination, to supply a second class degree upon easy terms to London students, and to close the doors of the University to all others. This, if carried into effect, might meet the wishes of those who ask for a London M.D. for London medical students, but would be viewed with the greatest regret by those who think that a high standard attainable by a minority helps to keep up the general level of the majority. A reduction of the London degree may, however, be an absolute necessity; if so, we can only hope that the evil may be minimised, as, for instance, by offering an M.D.England as the honours degree, open to all comers and to the present holders of the M.D.Lond., and reserving the new M.D.Lond. as the ordinary degree to be taken by students of the new university.

The privilege of being admitted as a constituent college would entail upon the medical school so admitted, corresponding duties and a certain amount of responsibility, both of which would have a beneficial influence upon medical education in London, for we may take it that the Senate would require to be satisfied (1) with the published curriculum, and (2) with the actual means at command for carrying it into effect. Moreover, the practical difficulty which the present University of London is now grappling with as regards physics, but has not yet undertaken to deal with as regards physiology, namely, the difficulty of applying a practical test to a large number of examinees, may, it is to be hoped, find its solution in the way suggested by Professor Carey Foster, namely, by applying the test in the laboratory of each constituent college, university examiners and college teachers being *ad hoc* coexaminers. Such a plan would powerfully assist in harmonising teaching and examining; it would improve the quality and fairness of the latter, reducing the premium upon book work and the discount upon laboratory work, necessitating the existence in each constituent college of efficient laboratories. Nor need it be anticipated that such laboratories would require to be on any very extensive scale; it is impossible in a year, or in two years, to cover more than a small fraction of physics or of physiology. Forms and fashions are more diverse in apparatus than in dresses or bonnets. Beyond a smallest common minimum, a student cannot be expected to know instruments other than those which he has seen and handled.

It is much fairer and more satisfactory to examine men where they have worked, to see them use the particular apparatus which they have learned to use, or work through a fluid with the stands, bottles, and odds and ends they may have become accustomed to, than to watch them finding out the tricks of unfamiliar tools, or, worse still, to judge men without having seen them do anything at all. Beyond the common minimum, as determined at headquarters, it is of far less moment what a man knows than how he has learned it, and by examining a student where he has worked on the lines of a local syllabus approved by the Senate, the examiner may hope to find out what each student has learned at first hand.

If any such system is to come into effect, it will imply better examining, better teaching, better studying, better kept and more active laboratories, a simpler and less uncertain range of subjects undertaken by a larger number of students.

Another practical element has to be taken into consideration: How are the material interests of various medical schools likely to readjust themselves in the reconstituted university? It seems to be most probable that all the schools will be benefited; that a larger and larger current will each year set towards a London degree, toned down from its present high pitch to concert level, though not, it is to be hoped, reduced below Edinburgh or Manchester by loss of its matriculation test.

That a readjustment should be absolutely satisfactory is of course impossible, but the share which will fall to each will not, in all probability, be out of proportion to the deserts and efficiency of the various schools and other bodies in medical education. University and King's Colleges, as regards the medical faculty, stand in a different position from the other medical schools. These two colleges naturally take the lead in the faculties of arts and of science, and there appears to be a fear on one side, and perhaps a hope on the other, that in the reconstituted university the faculty of medicine also, may be mainly, if not exclusively, constituted by these two colleges. The sooner such a possibility is dismissed the better. It should be clearly understood that a medical school will be admitted to rank as a constituent college on the same terms of efficiency with the medical departments of University and of King's Colleges. There will then be no possible ground of complaint if these two colleges obtain the lion's share of university students by virtue of superior status in other faculties or of superior efficiency in the medical faculty. If, as is to be hoped, the efficiency of the medical schools is increased, and at the same time the number of university candidates, each school will obtain a share of university teaching proportionate to its efficiency, as recognised by common repute and in the pass lists of the University. And as the schools become welded together into the medical faculty of the University of London, the distinctions between University and King's Colleges, on the one hand, and the purely medical colleges on the other, will grow less and less, in so far as concerns the formation of medical graduates in and of that University.—I am, etc.,

AUGUSTUS D. WALLER,
Lecturer on Physiology in the St. Mary's Medical School; Examiner in Physiology at the Victoria University.

SIR,—Many will approve the statements in Dr. Barnes's letter in the JOURNAL of February 1st with regard to the necessity for a local university for London without necessarily endorsing his conclusion that to attain that object the present University must undergo a fundamental change in its constitution and purposes. Nearly everyone admits with Dr. Barnes that it has done much excellent work in the past, but we also maintain that, pursuing the same methods, it has equally good work before it in the future, and that the need for stimulating general and medical education is as great now as ever, especially when, owing to the overcrowded state of the profession, we should be careful to pick our men rather than deliberately encourage the entry of ever increasing multitudes. In this matter, unfortunately, the interests of the London teachers are not absolutely identical with those of the great mass of the profession.

What London wants is a real teaching university, the primary object of which would be to raise the character of the teaching rather than to lower the level of the examining, a body which would counteract that fatal tendency to decentralisation in which London compares so unfavourably with other great medical centres. Of course a further, but entirely secondary, purpose would be to grant degrees (on cheap terms if need be) in order, as the phrase goes, to put English and Scotch students on an equality, or, as it might be stated with more truth, to place London and Scotch medical teachers and lecturers on equal competing terms. The functions which the present University has fulfilled, and those which would be discharged by a genuine teaching one, are not really compatible; both are important, but in the compromise which forms the basis of the new scheme neither object would be attained, the stimulating influence of high class examinations on education would be lost, without adequate provision being made for improving the character of the teaching.

Let the present University continue its work as an imperial examining body to which students from all parts (and not from London only) could resort, as in the past, to obtain a degree which would still be honoured and esteemed. Let a new university concentrate and strengthen the teaching scattered at present through the various medical schools, let it render more accessible to all the vast quantity of clinical and pathological material as yet almost, or even entirely, wasted, and let it at the same time redress the so-called medical grievance, the absence of an easily attained degree.

With improved facilities for teaching and for clinical work,

probably more rather than fewer men would seek the higher degree of the older university. If Dublin can sustain a local teaching university (Trinity College) as well as the Royal University of Ireland, surely London can do the same.

The argument that men with a certain degree think they carry the stamp of superiority cuts both ways. If any newly fledged London M.B. or M.D. imagines his degree is going to carry him through life, a practical experience of months rather than years will probably disabuse his mind of the notion. The danger, now, is rather that the men with, or expecting to have, College qualifications only should fondly suppose that a M.D. will prove the universal panacea for all their professional difficulties.

The reference to "the jealousy of a few, a very few, men" is rather uncalled for. If they be really so few, they will hardly be able to injure the scheme. Serious opposition will come not from the very few acting from jealousy, but from the many who feel, what Dr. Barnes admits to be, a just pride in a degree which they have worked hard to get, and the standard of which they have, perhaps, some equally justifiable pride in still maintaining. Some, it may be, who have attained real distinction and become independent of any degree will not care to damage the prestige of a university to which, they owe much, or to trample on that which first gave them an honourable start in their career of success.—I am, etc.,

J. WALTER CARR.

Bloomsbury Square, February 3rd.

SIR,—If one dare to answer so great a man as Dr. Barnes in his own form, I should venture to say that in his letter in the JOURNAL of February 1st he has entirely missed the point of controversy respecting the proposed "reform of the University of London." Dr. Barnes states—somewhat dogmatically, by the way—that "it must be sought in the jealousy of a few, a very few, men, who seem to be possessed with the idea that they carry the stamp of superiority which will endure through life by virtue of their degrees alone; and that they will be dragged down from their high estate if others were permitted to graduate on less harassing conditions."

If I am not mistaken, this is not at all the point at issue. It is not that it is proposed by the University "to establish a second examination for the degree of M.D. not requiring the attainment of so high a standard as the existing examination"—quoting from Section viii of its scheme—but that it is further proposed "to confer on all existing M.D.s of the University, and all who may hereafter pass the examination which will require the attainment of the higher standard, the right to describe themselves M.D. with honours (M.D.Lond., Honours), and on all existing M.B.s the degree of M.D."

In opposing this, I think not only a few men "possessed of jealousy," but even very many M.D.s who have really "justified their degrees," men who are quite able to form an independent opinion, are to be easily found. I venture to designate this proposal of the University of London—that is, to give men titles they never earned and degrees they never obtained by examination—as utterly unreasonable, and as injurious to the University and unjust to those gentlemen who hold the M.D. degree; and moreover, I declare I will oppose it to the utmost of my power—nay, even at the risk of the fearful penalty that Dr. Barnes will be able to say that I have not "justified my degrees."

I submit in all humility to Dr. Barnes's consideration whether the last clause in his letter, in which he is manifestly unjust to his *confrères*, would not have been better omitted.—I am, etc.,

King's Lynn, February 3rd. WILLIAM DALE.

SANITARY EXPERTS AND THE CHARGE OF OBSTRUCTING JUSTICE.

SIR,—I have read the correspondence in your columns under the above heading, and also the full report as it appeared in the local papers, of the appeal case referred to, which lately was decided by the Recorder for Bradford.

As I was invited to give evidence in this case by the appellant and declined, I trust you will give me an opportunity of saying that my refusal was not owing to any sympathy with the view that it is unprofessional for the medical officer of health of one sanitary authority to give evidence against the action of another sanitary authority. On the contrary, I am wholly in accord with the remarks of the Recorder that it is undesirable for litigants, either on one side or the other, to have a difficulty in obtaining scientific evidence.

When Mr. Schussler's solicitor called on me, I read the depositions he submitted, and examined the plan of the slaughterhouse. Coming to the conclusion that the Corporation were right, from a sanitary point of view, in revoking the licence, I said I could give no evidence which would be of use to the appellant. Similarly, when I was asked to give evidence some time since in the well-known "tuberculous meat case," tried before Sheriff Berry, at Glasgow, I carefully considered all the facts of the case as laid before me by the representatives of the Fleshers' Association, and declined. It was pointed out to me that I had already written (in 1885): "Carcasses are not ordinarily condemned merely owing to the presence of pearls. When the disease is of old standing, and there are distinct cavities in the lungs and pus in the glands, and much wasting and dropsy, the whole carcass should be regarded as unfit for human food," and that I was requested to do little more than repeat that in the witness-box. This, however, I could not do, as four years had effected a great change in my opinions on the communicability of tuberculosis.

I hope and believe that whenever I am asked to give evidence as an expert, I shall not give one moment to the consideration whether it is for or or against a sanitary authority, and I maintain that this is the only right course. If it were generally held to be dishonourable for a medical officer of health to give evidence against a sanitary authority, the value of his testimony would soon be *nil*. When an important case was heard the sanitary experts in office would be ranged on the side of the Corporation, and the sanitary experts out of office would naturally be ranged on the opposite side.

Under such circumstances the judge might almost be justified in saying to the jury, "Gentlemen, you have heard all these medical officers of health, and will give what weight to their evidence you think fit. It is my duty to tell you that in my experience they always stick close to one another, jumping with whoever chances to be the bell wether."

I do not know if I am in a minority in the opinion I have expressed, but I shall be grateful if those medical officers of health who think with me would say so.—I am, etc.,

FRANCIS VACHER.

Birkenhead Town Hall, February 1st.

SIR,—I notice in the JOURNAL of February 1st a letter from Dr. MacLintock, Medical Officer of Health for Bradford, in connection with the above case, and I must ask you to allow me to say a few words in reply.

Dr. MacLintock complains, in the first place, of a want of courtesy on my part in not calling on him and acquainting him of my intention to oppose his evidence in the case. In answer to this I would reply that the first intimation I had that I was to be asked to see the slaughterhouse was by telegram to London, where I was on the previous day. I received this telegram at 5 o'clock on Friday evening, asking me to go down that night, inspect the slaughterhouse, and call on the solicitors at 9 o'clock next morning. Owing to a delay on the railway I did not arrive in Bradford till 4.30 A.M., and when I say I had inspected the slaughterhouse, interviewed the solicitors, and handed to them a proof of the evidence I was prepared to give before 9.30 A.M., at which time I went into court, it will be seen at once that I had no time to pay a courtesy call on Dr. MacLintock. I was in court all day, left the witness-box at 4.30, and caught the train for Birmingham at 4.55, while the Recorder was still sitting; so that, however much I might have wished to have done myself the honour of making Dr. MacLintock's acquaintance, time would not permit. But, Sir, I protest most strongly against the idea that Dr. MacLintock has any right to feel aggrieved because I chose to give evidence on a scientific matter at Bradford without first informing him of my intention. I may say that for the last fourteen years I have been constantly engaged giving evidence for or against the various corporations in the Midlands, and I have never thought it necessary or even desirable to inform my brother officers of my intention.

Dr. MacLintock from his letter appears to be very angry at losing his case, but that is no reason why he should indulge in phrases intended to be contemptuous, and which I feel I have a right to regard as impertinent.

I do not wish to review at any length Dr. MacLintock's statement of the facts. Suffice it to say, that many of them are put forward in such a way as, in my opinion, to give an unfair idea of the place. If it were so insanitary and so terribly injurious to health, how was it, may I ask, that no notice or complaint had

ever been served on the appellant, and why was not the inspector of nuisances, who had regularly visited the slaughterhouse, called to give evidence? If Dr. MacLintock, burning with zeal to effect a sanitary transformation in Bradford, wishes to improve the condition of this neighbourhood, I would suggest to him the abolition of some midden-privies much closer to houses than the alleged nuisances connected with the slaughterhouse, and especially one at the base of a chimney stack, where fæcal matter is carefully kept warm and fermenting, and from which odours arise most foul and most unnatural.

An amusing feature of the case to me is the position taken by Dr. MacLintock that he and his committee are such superior people that their action must of necessity be right, and that no one else has any right to differ from them. Dr. MacLintock coolly observes that in cross-examination I practically justified the action of the Bradford corporation. Such a statement is absolutely devoid of foundation. I did agree that public *abattoirs* were preferable to private slaughterhouses, which, of course, is a sanitary truism, but I did not express any opinion under examination or cross-examination which would show a valid reason for the suppression of the slaughterhouse by the Bradford corporation. Allowing, for the sake of argument, however, that I did practically support, under cross-examination, the Bradford corporation, this must of necessity be another proof of the weakness of Dr. MacLintock's case, as, with my support, they were unable to convince the Recorder, who, be it remembered, found for the appellant, not on a question of law, but on the facts presented to him.

Dr. MacLintock considers the decision of the Recorder by far the most regrettable incident of the case. This is not surprising considering the weight attached by the Recorder to Dr. MacLintock's expressed opinions.—I am, etc., A. Bostock Hill, M.D.,

D.P.H.Camb., F.I.C., M.O.H., Public Analyst, Joint Professor of Forensic Medicine, Queen's College, Birmingham.

Birmingham, February 3rd.

CLINICAL TEACHING IN DUBLIN.

Sir,—My attention has been called to the article appearing in the Journal of February 1st, signed "Irish Surgeon," referring to case-taking in the Dublin hospitals. If the gentleman thus hiding his identity will attend any morning at the Adelaide Hospital, I will have pleasure in proving, in so far as that hospital is concerned, that his statements are without foundation; and I must add, it is to be regretted that any person should permit himself to make such charges without taking steps to ascertain that they were warrantable.—I am, etc.,

Francis T. Heuston, M.D., F.R.C.S.I.,
Surgeon to the Adelaide Hospital, and Registrar to the Medical Board.

Dublin, February 3rd.

Sir,—"Irish Surgeon," in the Journals of January 11th and February 1st, is "so Irish." I shall not, like him, speak of anything of which I am not quite sure, and I am concerned merely with two of his statements. The first is that at the Adelaide Hospital no notes are taken of the patients' cases. But the very opposite is the fact. There is at the Adelaide an admirable system of case-taking, and the records of the cases both in medical and surgical wards are regularly kept and written up, and not anyhow or by anybody. But "Irish Surgeon" says he never saw any notes hanging up in the wards of the Adelaide. Of course not. They are not hung up in the wards for the patients to read, as well as their relations and friends at visiting hours; but they are kept in a convenient place for use only by the staff, dressers, and students. Any hospital, in which the histories of the patients' diseases are hung up in the ward is ill arranged in this respect—even though it be a London hospital.

Another statement of "Irish Surgeon" refers to the out-patient departments. He says there are no out-patient books, or sheets, in which diagnosis, symptoms, treatment, etc., are written, as in England. But at the National Eye and Ear Infirmary, which is attended by a large class of students, there is, and has been for many years, a system of case-taking in the out-patient department, as well as for intern patients, better, I venture to say, than that at any London hospital; and I think I know at least as much about London hospitals as "Irish Surgeon" knows about Dublin hospitals.

I am not intimately acquainted with the clinical working of any of the Dublin hospitals, except the two I have named; but from time to time I have occasion to visit some of them, and I must say that the impression made upon me with regard to the point at issue has been precisely the opposite of that gained by "Irish Surgeon." In none of them, however, have I seen the brutal system of hanging up the patients' histories in the wards.

"Irish Surgeon" finally says: "I am sure that most Irishmen will agree with me that many of the Dublin hospitals are sadly in need of reform in many ways." Here I am in accord with the writer; and if in this sentence "Englishmen" were put instead of "Irishmen," and "London" instead of "Dublin," it would be equally true. No one except a fool will think that either he himself, or the institution with which he is connected, has attained to perfection, or nearly so.—I am, etc.,

H. R. Swanzy, F.R.C.S.I.,
Surgeon to the National Eye and Ear Infirmary, Ophthalmic Surgeon to the Adelaide Hospital.

Dublin, February 3rd.

Sir,—I think you will admit that the letters of Mr. Johnston and myself, in reply to that of "Irish Surgeon," have answered their purpose—that is, they have shown that "Irish Surgeon's" statements to the effect that a history-sheet over a patient's bed is unknown, that no records of cases are kept, and that there is no note-taking by students in Dublin are, to say the least, not strictly accurate. I stated that five years ago notes were regularly taken in Dun's Hospital, which was the only one I answered for personally, but he seems to have skipped that sentence in my letter. I am quite sure that 75 per cent. of the students at Dun's in my time took regular notes.

"Irish Surgeon" has, as far as I can judge, made his statements without having first looked into the matter, so perhaps his letter was not worth a reply, although it is hard to see one's old school abused without trying to point out that the abuse is uncalled for, in part at any rate.

I conclude the matter, as far as I am concerned, by drawing attention to the very feeble sentence with which "Irish Surgeon" ends his letter in the Journal of February 1st, and by asking (not "Irish Surgeon," for he could not answer me), where is the hospital in Dublin or elsewhere which does not stand in need of reform in many ways.—I am, etc.,

Kempsey, Worcester. Theodore Bell, M.B.

Sir,—The attack of your correspondent "Irish Surgeon" on the clinical teaching in Dublin has not been taken up, for the following reason—because it is a well known fact from time immemorial that the instruction received at the bedside in Dublin is quite equal to that in any other part of the world.

Having served as a clinical clerk for a period of twelve months in one of our Dublin hospitals, I cannot agree with "Irish Surgeon" on many points. Of course they do not take copious notes of every trivial case admitted, and post them up on the hospital wall, that is quite true, but daily notes of every important case are taken.

If "Irish Surgeon" has failed to derive any benefit from his experience of clinical teaching that is entirely his own fault, as our professors have devoted years to the study of disease at the bedside, and take every care to impress on our memory the visible, audible, and tangible signs of disease, and if there has been any change within the last few years, I am quite confident that change has not been in any way detrimental to clinical work.

Fair Play.

Sir,—May I state that in the Adelaide Hospital, Dublin, notes are taken and kept of the cases under treatment in desks in the wards, which desks are open to all students? In the Rotunda Hospital I have read excellent notes of cases, certainly short, but to the point; certainly there is very little account kept of ordinary labours. I have seen notes in the Meath surgical wards, and while resident in the Richmond Hospital, I carried out the ancient rule of that institution by taking notes of the cases under my charge. About Baggot Street I know nothing, but the reason that perhaps notes are not kept much in Steevens's Hospital is that there are not more than half-a-dozen students, I believe, on the books.

There are no notes kept of the extern patients, but in Dublin such a multitude avail themselves of that department (there is no recommendation necessary for extern treatment), that it would

be impossible to keep an account of each case. I have seen the extern physicians kept going from 10 A.M. till past 1 P.M., and if notes were taken and looked up, they would require to live in the place. I don't agree with "Irish Surgeon" that no one knows anything about the extern patient, as I have frequently heard the extern staff in the hospitals referred to above pointing out the progress of cases. I never experienced any difficuly in getting information about the history of cases from the clinical staff, nor did I ever know a man that had a contrary experience.

In every hospital there are "lazy students," and I need not say that the clinical staff of hospitals, either in Ireland or anywhere else, will not run after students begging them to take notes.—I am, etc., DUBLIN STUDENT FROM 1883 TO 1888.

SURGICAL ASPECT OF HEPATIC ABSCESS.

SIR,—May I answer Mr. E. P. Nichols's question, which I quote from page 268 of the JOURNAL of February 1st? "In the case of a man spitting up a large hepatic abscess, and doing so ineffectively, what is the proper course of procedure?" I dealt with the matter in the lectures to which he has referred, and said on page 175 of the JOURNAL of January 25th, "If the abscess have burst into the lung.....and the position of the abscess can be clearly determined, it must be opened without delay. If the position of an abscess be only suspected and the patient be losing ground, it is right to puncture the liver in the most likely situations, bearing in mind that, though usually harmless, a slight amount of risk accompanies this very trivial operation." I am strongly of opinion that, under these circumstances, delay is most unwise. Even if the patient ultimately recover, the chance of permanent damage to the lung from the constant expectoration is by no means a remote possibility.—I am, etc.,

Wimpole Street, W. R. J. GODLEE.

ANÆMIA AND PERNICIOUS ANÆMIA.

SIR,—In your reports on Medical and Surgical Practice in Hospitals, etc., Dr. Lockie reports a case of pernicious anæmia which was cured by transfusion. Looking at the nature of lesions in pernicious anæmia, it seems hard to believe that a single transfusion could produce a cure. It is easy to understand the cure if we may regard the case as simple anæmia with a temporary loss of corpuscles from epistaxis. (It might have been mild enteric fever.)

In Dr. Lockie's interesting report he does not mention many of the more important points on which one could base the diagnosis of pernicious anæmia. The peculiar lemon-colour of skin, mentioned, I think, by Dr. Wm. Hunter, is not recorded. The amount of hæmoglobin is not mentioned, though this, taken together with the number of corpuscles, forms a point of the highest value in diagnosis. Though the number of corpuscles is mentioned, the shape of them escapes record, the shape of the corpuscles being, perhaps, the strongest evidence for or against pernicious anæmia, it is a pity that this has not been mentioned.

Recovery in anæmia after the corpuscles have reached as low as 2,000,000 per cubic millimètre is not uncommon without transfusion.—I am, etc., WM. R. GRAVES.

Dublin.

THE ETIOLOGY OF INFLUENZA.

SIR,—The profession is certainly deeply indebted to Drs. Robertson and Elkins for their very interesting report on the outbreak of influenza in the Morningside Asylum, Edinburgh. It is a splendid storehouse of facts, and facts are what are still needed to complete the life history of this peculiar epidemic. But on some branches of the subject even the very complete local history of these gentlemen does not throw sufficient light. First, as to incubation. We desiderate very much authentic information on this head. I shall give by-and-by the results of what I have been able to glean in the course of the epidemic here. Again, they seem very undecided as to the mode of propagation of the disease. As there exists much doubt on this point, I hope you will excuse my trying to show that its behaviour points to one and one sole means of diffusion, namely, contagion. Anti-contagionists insist on two objections. First, that it does not attack everyone. In Morningside the proportion is about 1 in 7. Surely partial immunity from contagion is common to all zymotic diseases, and if that be an argument against infection it tells still more against some general atmospheric cause. Secondly, they object that many are attacked simultaneously. But if one source of contagion is common to many provided the susceptibility is great, then one ought confidently to expect that of this number a certain proportion would be seized about the same time. Thirdly, the authors of the paper seem struck by the large proportion of outdoor persons attacked. But the explanation seems obvious, that those are precisely the people most likely to come in contact with infected subjects.

Again, there must be a large number of abortive and slight cases—designated in this report as common colds—and these are just as likely as the worst to become sources of infection to others.

The following is a short history of the epidemic in Dingwall and neighbourhood as far as it has occurred in my practice, or as I have personally learned from others about its origin and progress. Sporadic cases were observed in Inverness, twenty miles off, about the middle of December, but according to the evidence of the doctors there it did not appear in an epidemic form till about December 31st. There were several well-marked cases first seen professionally on January 2nd. The first batch of cases occurred in Dingwall on January 8th, and were striking, from their simultaneous appearance in the same establishment and from the vomiting which ushered in the symptoms in four of six cases, suggesting the idea of poisoning. These were most probably infected through a page who came from Inverness on the 2nd, and was ill more or less from that time till he left, on the day when the others became ill. Headache, muscular pains, and prostration, with fever, were well marked in all. On the same day—the 8th—on which this series of cases came under notice a patient was seen with pneumonia. He was nearly 80, and succumbed in forty-eight hours to the malady. It should be noted that he was a postman. Some days after his wife and two of his daughters were attacked with well-marked influenza, and in the same house two other women, living separately, were attacked. This so far has been the only death, though there have been other cases of pneumonia in the neighbourhood. Since the first outbreak up till now—nearly a month—with all sorts of weather (though generally mild) the epidemic has continued to spread, and is still spreading, but getting further and further off, reckoning Dingwall as the centre.

It is a pity that we have had so much speculation with so few attempts at really detecting the germ which, according to the analogy of similar diseases, must be present. I am no bacteriologist, but surely something might be done by examining the sputum or filtering the expired air of infected patients. I may be excused adding to the numerous hypotheses, and saying that I believe it will be found to be closely allied to the germ peculiar to contagious pneumonia, where in fresh sputum I have seen the bacillus active and moving. Anyone reading the record of such outbreaks, and particularly the set of cases reported by my neighbour Dr. Adam in this JOURNAL in 1887, must be struck by the great similarity to those recorded at this time. I wish merely to add that I believe from observation that the period of incubation is comprehended within the space of eight days, and that it may not exceed four or five days.—I am, etc.,

Dingwall. WILLIAM BRUCE.

SIR,—In the interesting paper on the outbreak of influenza in the Morningside Asylum, published in the JOURNAL of February 1st, the authors, Messrs. Robertson and Elkins, seem inclined to attribute the greater prevalence of the disease amongst males to the fact that they were more in the open air than the women, and to consider that this points to its origin in some aërial influence rather than to a germ generated in the systems of those previously affected with the disease, in other words, infection. But may not the true explanation be the reverse of this?

In an outbreak of small-pox two years ago, subsidiary to the Sheffield epidemic, in which every case in a population of about 80,000 was traced and isolated, almost all in a hospital, there were more than twice as many males as females, but no one would suggest that this proved small-pox infection to originate in the air. The true explanation was that men go about much more than women, and as our investigations proved, the great majority of the men had been exposed to infection directly traceable to Sheffield.

Again, I am told by those who have been residing lately in a suburban village some little distance from London, during the influenza epidemic, that those who were first and mainly attacked with this disease were men who went daily to London on business, and after them their wives and families very frequently took it.

he authors also mention that before the severe outbreak there e several cases of ordinary catarrh in the institution. It ns to be taken for granted by most people that cases of catarrh everish colds, such as are met with with more or less fre- ncy and varying severity every year, are quite distinct from demic influenza.

ut is this so very certain after all? We know that scarla- and small-pox may deviate from their accepted types in one ction to the most insignificant ailments, and in the other to most fatal of diseases, that at one place or season they will ad with the utmost rapidity and virulence, and at another w themselves only in widely scattered cases, and yet no one bts that the mildest and severest cases of these diseases are ntially the same in origin and cause.

essrs. Robertson and Elkins have shown how much the sym- ns of influenza may differ in different patients under the same . Is it not probable that the possible range under more varied umstances may be a still wider one?

n the artificial cultivation of micro-organisms, to attain com- e success it is needful not only that some of the organisms or r spores should be introduced to start with, but also that the lium in which they are to be cultivated should be an appro- te one, maintained at a suitable temperature, and free from ain substances (such as perchloride of mercury, etc.) which rd or prevent their growth, and according as these conditions present or absent in a greater or lesser degree is the develop- nt of the organisms more or less complete and rapid.

dmitting the germ origin of certain diseases, it must be that micro-organisms which cause them are aided or hindered in r multiplication by certain conditions. What those conditions for each disease it is the business of medical science to ascer- n.

r. Ballard, in his report on diarrhœa, has shown "that it is a eral disease of a specific character" (p. 17); that "it is always ent in a lesser or greater degree" (p. 29), but does not become demic until the earth at a depth of four feet has reached a cer- temperature.

this rise of earth temperature, with perhaps other circum- nces not yet ascertained, can change an ever-present disease, widely spread nor very fatal, into a serious and destructive demic, is it not possible enough that some circumstances may mulate ordinary catarrhal fever into epidemic influenza? Nay, re, seeing how often in the present epidemic influenza is com- ated with diarrhœa (at Morningside it was present in 25 per t. of the cases), how frequently in epidemics of diarrhœa lung ctions are seen side by side with it (Dr. Ballard says that umonia "is often discoverable when looked for and commonly nifested on *post-mortem* examination"), and how in our death urns those from "bronchitis" in the colder months seem to re- e those from diarrhœa in the autumn, is it not possible that three, influenza, bronchitis, and diarrhœa, in their epidemic ns, may be varying manifestations of one and the same poison?

am, etc., MICHAEL T. SADLER, M.D.Lond.,
Honorary Physician Beckett Hospital, Medical Officer of Health to Barnsley Urban and Rural Sanitary Authorities.

arnsley, February 3rd.

IOULD PREGNANCY BE TERMINATED PREMATURELY IN CASES OF PHTHISIS?

R,—This subject was debated at a meeting of the Obstetrical ety of London on January 8th, and fortunately for the abers present and for the medical profession, the weight of ument was overwhelming and for the negative.

hy should medical men, responsible to society and to law, ter- ate the existence of a vital human being—a human fœtus? y should they unnecessarily risk the life of a woman by a e operation? There is no certainty whether pregnancy is udicial or the contrary in phthisis, and it is an undoubted fact the induction of premature labour, and much more of abortion, most dangerous proceeding, and it is not certain but that the orality and scandal inseparable may induce the Legislature, if the executive, or even the judicature, to make it criminal. As essor Lawson Tait has said of Porro's operation, such may em- ically be asserted of pregnancy in phthisis: "There are two s to be considered, and not one."—I am, etc.

ngstown, Ireland. JOHN ROCHE, M.D.

ENGLISH AND FOREIGN HEALTH RESORTS.

SIR,—I cannot refrain from joining Dr. Hassall in repudiating Mr. Leonard Williams's remarks on the water supply of the health resorts of this coast. Hyères and Costebelle are in this respect distinctly superior to many English towns; in fact, the water bears comparison as to its "organic purity" with the best supplied to London. Its only fault is its hardness. At my villa the company is prepared to provide any quantity up to 1,000 litres daily at ordinary rates, the supply being continuous, and a similar arrangement obtains at all the hotels, villas, and private houses. My children have lived here for more than twelve months, winter and summer; like the children of other English residents born and bred here, they drink water freely. We do not flatter ourselves that "raw" water is made safe by the addition of wine—a vulgar error, which makes *vin ordinaire* one of the most remunerative commodities at our hotels.

As to home comforts and certain other drawbacks, my mind is quite open. I have written elsewhere to criticise the climate and to encourage an attempt to reform the dietary, to ventilate the bedrooms, and to provide invalids with certain privileges not demanded (because not wanted) by others. But in these matters —as a recent visit to Switzerland has convinced me—we by no means stand alone; nor is the English travelling public apparently satisfied that it can get at home what the continental hotels and *pensions* fail to supply.

The expenses, especially to the newcomer, are high; but much can be done to lessen them; at any rate, a broken-down man does not count the cost too nicely, for, speaking of the majority of cases, he has an awful choice before him, namely, to spend one pound at home and die or two abroad and live.—I am, etc.,

Costebelle, Hyères, France. T. H. SAWTELL, M.D.

SIR,—I have been much interested in the several papers published in the JOURNAL during the last few weeks under the above heading, and think that the keynote of the whole question has been struck by one sentence occurring in the last article published by Mr. Charles Roberts, that "It is time, moreover, that this question of climates should be decided by clinical observation rather than theoretical demonstration." The question the profession has to decide is a thoroughly practical one: Where do patients do best? A quarter of a century ago, before Continental climates had stood the test of experience, theorising was most essential; but now that we have the experience of all these years to fall back upon, we are in a position to answer the question by actual facts.

What theory built up upon observations of meteorological instruments can grapple with the great fact that invalids in ever increasing numbers flock to the Riviera every year, that physicians and surgeons both in town and country every succeeding year recommend more and more their patients to winter in these parts?

Can we imagine any treatment or system of treatment being submitted to by the public, or recommended by responsible medical men, which had not in it the elements of common sense, and which could not bring forward practical results as to good done? Is it possible to imagine that the same medical men would continue to recommend certain Mediterranean health resorts were they not satisfied year by year with the good results obtained? Is it possible to imagine that the British public—which in the long run generally proves itself to be right—would submit year by year to the great expense and to the very great inconveniences consequent upon a stay in the Riviera, unless they were satisfied that they got a thoroughly good return for their money in the shape of improved health or prolonged life? These observations do not only apply to our own nationality alone; Germany, Russia, France, Spain, and in fact all European countries, confirm the verdict first pronounced by the English.

In the face of these great facts, I think the British public and the British profession will require a little more proof before they desert Cannes, Nice, Monte Carlo, Mentone, and San Remo for Falmouth.—I am, etc., CHAS. F. HUTCHINSON, M.D.

Monte Carlo.

THE HOUSING OF THE POOR.

SIR,—In commenting on my letter in the JOURNAL of January 4th, you say "it will be observed that our correspondent avoids all reference to Lord Compton's five points, the first of which clearly indicates the desire of his committee to obtain power which would place all

local authorities in a position inferior to that which they now occupy."

The first point does no more than propose that the medical officer of the Council, and therefore of London, should have equal power with the local medical officer of setting the local authority in motion. At present it is the former who is in the inferior position, he has not even the power given by the Act to four householders of moving the local authority, by calling upon its medical officer to report; what is proposed is, in fact, to give him such power and no more. The other four points brought forward were (2) that the local authority should have the power of compulsory purchase where a demolition is ordered; (3) that the local authority should have power to retain the site; (4) an extended definition of the term "obstructive building;" (5) amendment of the provisions relating to appeal. Such are the proposals which, as I understand, you think "involve the degradation of all local sanitary authorities good and bad alike," whereas in fact they aim only at making Torrens's Acts available for clearing small areas so as to save the ratepayers the costly and tedious procedure involved in proceedings under Cross's Acts.

If sanitary authorities do their duty it is not likely the County Council, or any other authority, will desire to supplant them, but it must be established beyond a doubt that where they are in default, some other body must have full power to intervene.

The Act of 1868 directed that the Local Government Board should be the impelling force, without prescribing how the force was to be used. The Act of 1879 enabled the Council, in case of default, after report of medical officer, to step in; these Acts possibly placed the local authorities so far in an inferior position to that which they previously occupied, but how the giving to the medical officer of health for London the right of reporting premises under Torrens's Acts can be said to do this passes my comprehension.

Your readers may be better informed on the Acts but they can hardly have studied them more carefully than

YOUR PREVIOUS CORRESPONDENT.

AN INGENIOUS IMPOSITION.

SIR,—As some members of the profession have lately been imposed upon by a novel system of fraud, to prevent repetition of the same, I beg to mention it. The name of an M.D. was used whose death was announced in September last; his qualifications, etc., had been taken from the *Medical Register*. Begging letters so describing him, signed by him as if he were living, were presented to various medical men, stating that he had returned from India in great destitution and ill-health, and sought pecuniary aid. These were left by a woman passing as his wife, and handsome contributions were the result, as the dupes consulted the *Register*, and found a name, etc., agreeing with the letters. The name used was that of Charles Noyce Kernot, who studied at University College, took some degrees in London, his M.D. at St. Andrews, and practised in Calcutta. Fortunately Dr. Bourne, the Honorary Secretary to the Charity Organisation Society at Bristol, heard of the application of these impostors, and having known Dr. Kernot, knew that he was dead, after having amassed a large fortune in India. He pursued the case successfully; the result was that the impostors, who there gave the name of Clark, have been sentenced to nine months' imprisonment with hard labour.—I am, etc.,

C. KERNOT BUTT,
Executor to the late Charles N. Kernot, M.D.

Templeton Lodge, Hampton Hill, Middlesex.

MEDICO-LEGAL AND MEDICO-ETHICAL.

"OPHTHALMIC INSTITUTION."

A PRACTITIONER.—The professionally derogatory advertisement of Dr. J. C., M.D Brux., in the *Sunderland Herald and Daily Post*, through the medium of which he announces his local advent as an oculist, not only contravenes the time-honoured ethical rules of the medical faculty, but, we opine, the disciplinary laws also of the Royal Colleges of Physicians and Surgeons of which the culpable practitioner is a licentiate; and to the respective Presidents of which we would recommend our correspondent to forward a copy of the local paper alluded to, together with a short protesting memorial or note, and which, if backed up by the signatures of three or four resident practitioners, will probably result in an official explanation being sought from Dr. C.

MEDICAL PRIVILEGE.

R. H. M. writes: Some time since I attended a woman for an abortion, A few days since her husband called, informing me that he had heard of my attendance, and what it was for; also that she had been a very bad wife to him, had got him into a great deal of debt, and, when he advertised that he should no longer be accountable, she left him. He then sold up his home, and went to live with his parents. She then brought an action against him for maintenance, and, as there was no home for her, he was ordered to pay 5s. per week. Since hearing of what I have mentioned, he stopped payment, and now has been summoned for it. I declined to give any information; if subpœnaed me,—

1. Would I be obliged to answer, or could I plead privilege?
2. If I could, should I plead privilege?
3. I should be very much obliged if you gave general instructions how to act. If I am forced, or if you think I should appear, what fee can I charge?

*** 1 and 2. Our correspondent would not be entitled to plead privilege. All questions must be answered which the judge considers to be relevant.

3. A medical witness, before being sworn, should claim £1 1s. as a fee, and 3d. per mile (one way) for travelling expenses.

CONSULTANTS' FEES.

A MEMBER asks: Is it a correct proceeding for the man you take in consultation to send in a bill for his fee?

*** Although there is no ethical rule within our knowledge that debars a consultant from notifying to a patient by letter the amount of his indebtedness for professional advice, where payment of the customary fee has not been otherwise arranged, still, in the case submitted by "A Member," the consultant in question should, under the circumstances related in the accompanying explanatory note, have abtsained therefrom. Nevertheless, in view of his tendered apology and written assurance that he had no recollection of the alleged arrangement, we think that our correspondent may rest satisfied therewith.

With regard, however, to the second allegation that the same practitioner when called in consultation, is apt to revisit the case by himself, "just to see how it's getting on," we need scarcely remark that such action is indefensible.

A SUBSTITUTE IN AN EMERGENCY.

M.B.A. writes: A few days ago I was called to see a lady whom I found on my arrival had just expired. I was informed that a neighbouring practitioner, Dr. H., had been sent for, but he, being out, they called me in. Dr. H. had attended the patient previously, but had not seen her for a month, and in the meantime a medical man residing at a distance had been consulted, and had seen and prescribed for the patient a fortnight before her death. I called on Dr. H., and informed him of the patient's death; and, as he was able to state that she suffered from heart-disease, I resigned the case to him. I should be obliged if you would inform me, through the medium of your columns, if I acted rightly, or should I have been justified in keeping the case and attending the inquest?

*** In resigning the case to Dr. H., who had previously attended the lady, "M.B.A." acted in strict accord with the ethics of the profession; a contrary line of action would have subjected him to adverse criticism.

THE LAW AS TO UNQUALIFIED ASSISTANTS.

MEDICUS.—As explained by Lord Coleridge in Howarth *v.* Brearley, an unqualified man cannot be anything beyond "merely the ministering hand under the directing brain of the qualified man." The practice of an apprentice or unqualified assistant to an apothecary must, as laid down in Apothecaries' Company *v.* Greenwood, be confined to his master's house.

FEES TO MEDICAL WITNESSES.

ASSIZE.—Our correspondent is entitled for attending the assizes to a fee of £2 to £3 3*s.* per diem in addition to travelling expenses; but he cannot revive a statute barred debt by the device mentioned.

RUSTICUS.—Our correspondent would be entitled to a fee of £1 1s. and travelling expenses, 3d. per mile one way. Before being sworn, he should obtain definite assurance from the clerk to the local authority as to payment.

MEDICAL PRACTITIONERS IN GERMANY.—The number of medical practitioners is increasing at a rate quite disproportionate to the growth of the population. In 1889 the total number of doctors in the German Empire was 18,467, as against 17,694 in 1888 and 16,864 in 1887. The increase in 1889, as compared with the previous year, was at the rate of 4.4 per cent., about five times that of the general population. The increase in the number of legally qualified dentists was still more remarkable, there having been 659 in 1889, as against 570 in 1888 and 514 in 1887, showing a rate of increase last year of not less than 15.6 per cent.

THE LATE PROFESSOR BOTKIN.—It has been decided to honour the memory of the late Professor Botkin in the way which he himself would no doubt have chosen. A Home for destitute medical men and for their widows and orphans is to be established in St. Petersburg; it will be called the *Botkin-Haus*.

MEDICAL ASSOCIATIONS.—Steps are being taken to organise a Medical Association in Chili. It is intended to include all the medical practitioners in the country. The object of the Association is "to give help to all members of the profession or to their families as often as they are in need of it." It has also been decided to form a Medical Association in Cuba.

NAVAL AND MILITARY MEDICAL SERVICES.

THE ARMY MEDICAL SCHOOL AT NETLEY.

HE winter session of the army medical school closed on Feb-ıary 3rd, when the prizes were distributed at the Royal Victoria ospital, Netley, by Dr. J. S. Bristowe, F.R.S., LL.D., senior phy-cian and lecturer on medicine at St. Thomas's Hospital. Among ose present were Surgeon-General Sir Joseph Fayrer, physician the Council of India; Surgeons-General Longmore, Maclean, J. C. Reade, and C. D. Madden, principal medical officer at Netley; d the Hon. Mrs. Eliot Yorke.

Sir Thomas Longmore read the usual official correspondence ıd reports, which showed the following results:

List of surgeons on probation of the medical staff of the British my who were successful at both the London and Netley exami-ıtions. The prizes are awarded for marks gained in the special bjects taught at the army medical school. The final positions these gentlemen are determined by the marks gained in London lded to those gained at Netley, and the combined numbers are cordingly shown in the list which follows:

	Combined Marks.		Combined Marks.
ughes, M. L.	5,512	Waller, H. J.	4,968
ould, W. T.	5,362	Winter, H. E.	4,766
ewley, A. W.	5,180	Moores, S. G.	4,730
tone, C. A.	5,076	Way, L.	4,666

* Gained the Parkes Memorial bronze medal.

List of surgeons on probation in Her Majesty's Indian Medical rvice who were successful at both the London and Netley exa-inations. The prizes are awarded for marks gained in the ecial subjects taught at the army medical school. The final sitions of these gentlemen are determined by the marks gained London added to those gained at Netley, and the combined mbers are accordingly shown in the list which follows:

	Combined Marks.		Combined Marks.
elville, H. B.	6,200	Elphick, H. W.	5,543
aughan, J. C. S.	6,051	Bedford, C. H.	5,518
uke, A. L.	5,889	Williams, C. L.	5,488
hite, J. C.	5,663	Vickers, W. C.	5,356
mith, J. B.	5,643	§Smith, E. L. C.	5,291
leveland, H. F.	5,546	Shaw, T. W.	5,264

* Gained the Herbert prize of £20, with the Montefiore medal and prize of guineas, and also the prize in pathology presented by Sir Joseph Fayrer C.S.I.

† Gained the Martin Memorial gold medal.

‡ Gained the Montefiore second prize.

§ Gained the prize in clinical medicine presented by Surgeon-General W. C. aclean, C.B.

After the distribution of the prizes, Dr. Bristowe delivered a ief address, dealing chiefly with a consideration of the progress ıd advance of medical and sanitary science from the time of the imean war. Sir Joseph Fayrer tendered an expression of thanks Dr. Bristowe for his presence and address, and the proceedings osed.

The visitors were subsequently entertained at luncheon in the edical officers' mess-room. It was mentioned that Director-eneral W. A. Mackinnon, of the Army Medical Department, and esident of the Senate of the army medical school, was prevented tending by indisposition.

COMPOUND TITLES.

RSEVERE writes; There is one point in your valuable remarks on this subject which has not, I think, been sufficiently considered. How are medical officers o be introduced and addressed in society? The double title might fit official ife, and could easily be put on cards, but would not be employed in civil ociety.

*** We clearly recognise the above difficulty; but it is a phonetic drawback, which would doubtless be solved, as such usually are, in common speech by he process of decay or shortening. The military opponents of the double itle recommended by the Committee clearly see that; not only do they see hat the compound is but a step to the simple military title, but that in con-ersation and according to the usages of society it would speedily altogether esolve itself into the ordinary short military title; hence their desperate fforts to stop the granting of even the double title.

MILITARY EQUALITY.

M.I.L. writes: The annotations of "I.V.R.C." on the Medical Service are lways interesting; but his argument as to "equality within the army" as a eason for military rank to medical officers is open to objection. The adhe-ence to the axiom of equality within the department, especially during late dministration, has been full of evil for it. In the army, or out of it, and specially in the Medical Department, equality is an impossibility; let it, herefore, be dropped as an error; let reward be for merit, which will stimu-ate professional excellence. The levelling down principle has not been a success. I will give you a reason for not conferring military rank on medical officers culled recently from the pages of a military contemporary; because there would then be no use to "look after the health, clothing, and cleanli-ness of the men."

*** Individual equality is, of course, quite a different matter from depart mental or corps equality in the army.

MEDICAL DEPARTMENT IN THE ARMY LIST.

I.V.R.C. writes: Could not the Medical Staff in the Army List be shown by dis-tricts, as well as in the present seniority list, in the same manner as the Royal Artillery are shown in battery lists?

The staff of each station hospital in a district could be shown, and the same method pursued for India and the Colonies, together with the date of the officers having proceeded on foreign service. The name of the staff officer, Medical Staff Corps, is not shown in the War Office group of names, as it ought to be; and in the Indian Staff groups the names of deputies are gener-ally omitted, and only surgeons-general shown.

*** The policy relating to the Medical Staff in the Army List has hitherto been identical with that carried out generally, either to minimise or ignore it. The endeavour apparently has been not to show the department in any autonomous form, or even as an integral part of the army, but, if at all, as an appendage tagged on. Hence it is either omitted from the districts and general staff, or put lowest of all, as an index of the estimation in which it is held.

MEDICAL CASE BOOKS.

A CORRESPONDENT writes: The present case book might be remodelled; at pre-sent, all classes of cases are jumbled together, and it is very difficult to classify them afterwards. I propose to break up the case books, and issue single sheets, on which records of individual cases would be kept until completed, and the sheets as required be afterwards clipped together. In this way records of epidemics—such as typhoid—could be put together, instead of having to hunt them up in numerous books interspersed among all kinds of diseases. The expense would not be greater than at present; each medical officer might also be supplied with a personal book or journal of the kind used in the navy. As the case books are at present, they are of little value as per-manent professional records.

*** The above suggestions are from an experienced officer, and worthy of consideration. But we have always been given to understand, perhaps sar-castically, that the chief end of case recording was not professional matter, but the careful noting of diet and extras ordered. Under the *régime* of the old inspecting officers, woe to the poor medical officer who, through inadvertence, made a blunder in these. We have heard of an assistant-surgeon who had his leave stopped for having one day omitted the "barley water" given as a diluent in a case common among soldiers! No doubt there is an immense store of accurate and valuable professional observation buried in the military case books, which the suggestions of our correspondent would make more easily accessible.

THE NAVY.

STAFF-SURGEON FRANCIS R. M. LOFTIE and Surgeon HUGH ST. D. GRIFFITH have been appointed to the *Undaunted*, February 18th.

THE MEDICAL STAFF.

THE second Christian name of Surgeon-General G. M. SLAUGHTER is MOULAS, and not as stated in the *London Gazette* of January 28th.

Brigade-Surgeon THOMAS HENRY WHITE, M.D., retires on retired pay. He entered the service as Assistant-Surgeon, January 19th, 1860; became Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1875; and Brigade-Surgeon, May 26th, 1886. The *Army Lists* do not assign him any war service.

Surgeon R. F. ADAMS, M.B., who is serving in the Bombay command, is appointed to the medical charge of the Station Hospital at Deesa, *vice* Surgeon-Major J. E. V. Foss.

Surgeon J. D. MOIR, who is serving in the Bombay command, having returned from furlough, is posted to general duty, Sind district.

Surgeon-Major J. E. V. Foss and Surgeon M. O'C. DRURY, who are serving in the Bombay command, have leave to England, the former for six months on medical certificate, the latter to July 10th on private affairs.

Surgeon JOHN PERCIVAL HUNT, M.D., F.R.C.S.I., who dates as Surgeon from February 4th, 1877, is promoted to be Surgeon-Major, ranking as Major. He served with the Soudan Frontier Field Force in 1885-86, and received the Egyp-tian medal and Khedive's bronze star.

ARMY MEDICAL RESERVE.

SURGEON E. W. WILLETT, M.B., who was appointed to the Reserve on July 10th last, has now resigned his commission.

Brigade-Surgeon J. R. MURRAY, M.D., Senior Medical Officer of the Thames District at Chatham, has been placed under orders for foreign service, and will be succeeded at Chatham by Brigade-Surgeon W. H. B. Clapp, M.D.

The Secretary for War has recently, at the instance of the Royal College of Surgeons in Ireland, made an important concession, for which, it is believed, there has been no precedent. The College presented a memorial praying that, under the authority of clause 332 of the Royal Warrant, their recommendation might be accepted in favour of the grant of a commission in the Army Medical Staff to one of their licentiates. The licentiate in question has served for several years with an excellent record in the Army Hospital Corps as Staff-Sergeant, had afterwards passed with distinction his examination for the licences of the Colleges of Physicians and Surgeons, and had been duly in-ducted as Licentiate of both Colleges. The Council of the College of Surgeons, feeling that the case was an exceptional one, availed itself of its privilege of recommendation, and the Secretary for War has agreed to the grant of a commission after the applicant has fulfilled the usual courses of study at Netley.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR D. N. PARAKH, Bombay Establishment, has leave of absence for nine months, and left for Europe on January 31st.

Surgeon H. GREANY, M.D., Madras Establishment, is appointed officiating medical officer to the 1st Infantry, Hyderabad Contingent, *vice* Surgeon F. J. Doyle, on furlough.

Surgeon-Major G. P. MACKENZIE, M.B., Bengal Establishment, officiating senior medical officer at Port Blair, is confirmed in that appointment, *vice* Surgeon-Major W. N. Keefer, retired.

The services of Surgeon-Major A. S. LETHBRIDGE, M.D., Bengal Establishment, Inspector-General of Gaols, are placed temporarily at the disposal of the Government of India in the Home Department.

Surgeon-General E. W. EYRE, late of the Madras Establishment, died at Bath on January 26th, aged 83.

Surgeon-Major O'BRIEN BANKS, Bombay Establishment, is promoted to be Brigade-Surgeon. His commission as Surgeon is dated October 1st, 1866, and that of Surgeon-Major twelve years therefrom. He was in the Abyssinian war in 1867-68, and was at the capture of Magdala (medal).

THE VOLUNTEERS.

MR. GEORGE WILLIAMSON, M.B., is appointed Acting-Surgeon to the 1st Aberdeen Artillery.

Mr. WILLIAM MUNRO JENNINGS is appointed Acting Surgeon to the 1st Durham Engineers.

Surgeon T. L. GENTLES, 1st Volunteer Battalion Derbyshire Regiment (late the 1st Derbyshire), is promoted to be Surgeon-Major, ranking as Major.

Mr. GEORGE HENRY DARWIN, late Surgeon Volunteer Medical Staff Corps, Manchester Division, is appointed Surgeon to the 2nd Volunteer Battalion Manchester Regiment (late the 6th Lancashire).

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

THE Special Board for Medicine report that though candidates for the medical degrees must produce a certificate of proficiency in vaccination from one of the authorised vaccinators appointed by the Local Government Board, it has hitherto been found impracticable to obtain an authorised instructor in Cambridge. Dr. Robert Cory, M.A., of Pembroke College, the Director of the Animal Vaccine Establishment, and the authorised vaccinator at the principal station, Blackfriars Road, London, has offered to visit Cambridge weekly during term and in the Long Vacation, and to give instruction and examine for certificates at the Cambridge Vaccination Station in East Road. The Board are of opinion that it is desirable to recognise Dr. Cory's position and services, as they consider it of great importance that students should have the best teaching in regard to the operation of vaccination, and Dr. Cory's scientific eminence and practical skill are such as to guarantee the efficiency of the instruction he gives. They accordingly recommend: That Robert Cory, M.A., M.D., of Pembroke College, be approved as a teacher of vaccination in the University, and that he receive a stipend at the rate of ten pounds for each quarter during which he gives in Cambridge a course of instruction in vaccination.

CURATOR IN ZOOLOGY.—David Sharp, M.B.,C.M.Edin., has been appointed Curator in Zoology at the New Museum of Comparative Anatomy. Mr. Sharp is a Vice-President of the Entomological Society of London, and the author of a work on Zoological Nomenclature.

DEGREES.—At the congregation on January 30th the following degrees were conferred:—*M.B.*—J. A. Arkwright, B.A., Trinity; Charles E. Baker, B.A., Trinity; J. H. Drysdale, B.A., St. John's; Sydney Beauchamp, B.A., Caius; John S. Edkins, B.A., Caius. *B.C.*—J. A. Arkwright, C. E. Baker, J. H. Drysdale, S. Beauchamp.

OBITUARY.

LEWIS H. SAYRE.

THE death occurred on the night of January 2nd, of heart disease, of Lewis Hall Sayre, a son and assistant of the well-known surgeon of that name. Dr. Sayre was born in New York in 1851. He obtained his general education in the College of the City of New York, and his diploma from Bellevue Hospital Medical College. He was an assistant professor of orthopædic surgery in Bellevue Hospital Medical College, and a member of the Academy of Medicine, and several State and national medical societies. The deceased had been somewhat run down with overwork, and was in addition suffering from an attack of the prevailing influenza, but was not known to be suffering from any other disorder, and he did not refrain from his professional duties. On the night prior to his death he returned home to his father's house a visiting a patient at a late hour and when the other member the family had retired to rest. He did not appear at breakf and his bed was found to be undisturbed. He was soon a found sitting in a chair in the office cold in death. It is infe that he had been taken with a difficulty in breathing, for he torn his shirt and collar open. A necropsy showed a disord condition of the liver and kidneys, a fact hitherto unknow his friends. He leaves a wife and three children. He was a sulting surgeon to the Hackensack Hospital, and was well kn in connection with the York State Medical Association, the Pa logical Society, the Academy of Medicine, and the American M cal Association.

PROFESSOR KARL WESTPHAL, M.D.

SCIENCE has sustained a great loss in the death of Profe Westphal, of Berlin, which took place on January 27th. Gehei Medicinal Professor Dr. Karl Westphal was born in 1833, from 1851 onwards studied in Berlin, Heidelberg, and Zurich. 1856 he passed the State examination, and was appointed a tant physician in the small-pox departments of the Charité pital, Berlin. After a year he exchanged into the section mental diseases, then under Ideler's direction, and here a genial field for work was found. In 1861 he became *Docen* psychiatry in the University of Berlin, and in 1869 he succe Griesinger as professor extraordinary and medical director of department for mental and nervous diseases in the Charité pital. He added an out-patient department of these dise which afforded him a large material for observation and teac purposes.

In 1874 he obtained the honour of the Ordinary Professor in the above-mentioned, and became a Fellow of the Scie Deputation for Medicine.

Westphal was not one of those speculative spirits who striking discoveries by way of hypotheses in the first place was an eminent example as an exact investigator. By earnest work, by clear objective observation, he went on fact to fact, and so carefully examined his own results, that he at last published was unassailable. His aim was to ba far as possible, the disease before him in its clinical aspect its corresponding pathological alterations. To attain this ai trouble was spared, and all the resources known to diag were employed.

This is not the place for a critical review of his works, bu may mention his investigations on progressive paralysi epilepsy, on paranoia, on agoraphobia, on compulsive ideas especially his contributions to the symptomatology and p logical anatomy of tabes dorsalis. The loss of the patellar in this disease has been termed "Westphal's symptom," fro discoverer. Other investigations were on combined affecti the spinal columns, the formation of cavities in the spinal pseudosclerosis, Thomsen's disease, etc. Most of his pape these subjects are to be found in the *Archiv für Psychiatrie*, v he himself edited for almost two decades.

The various forms of ophthalmoplegia chiefly interested during the last few years, and he obtained important result only as to the pathology of this affection, but as regard anatomy of the brain. He was the earnest friend of every o his patients, hence his worldwide renown as a physician.

BERTRAM V. SORTAIN, B.A., M.B., B.C.

BY the death of Mr. Bertram Sortain, at the early age of 2 profession has lost a member who, had he been spared, v probably have taken a high position in it. Mr. Sortain, from his character and intellect, deserves that he should no away from us quite unnoticed.

He was born in Ceylon in October, 1862. When quite you showed signs of delicate constitution, and early developed a He was brought to England for a short time, but retur Ceylon, where he spent the later years of his childhood. H finally returned to England, and went to Bath College, wh spent the following six years of his life, being for some tim head boy of the school. He had pleasant memories of his time, and was known to cherish feelings of great respect f master, Mr. T. W. Dunn. In 1882 he obtained the Senior Classical Scholarship at Caius College, Cambridge, and enter his college life in the autumn of that year. At that tim future life was not determined, and he continued his cl studies, and in 1884 he took high honours in the classical

with the intention of studying for the bar. Whilst at the University he took several college prizes. Shortly after passing through the classical schools, he determined to take up medicine, the choice being entirely his own, as the vocation which he most wished to follow. Accordingly he began to study for that object, and in the two following years took an honours degree in the natural science tripos, and passed the earlier professional examinations. Whilst at Cambridge he took to the river for his recreation, and showed himself a good oar. Afterwards he became captain of his boat and of his college rowing club. About this time he began to be anxious about his health, and was advised to give up rowing.

He took a prominent position in his College, not only as an athlete, but also from his intellectual power and charming manner, and became a leader amongst his contemporaries.

In the autumn of 1886 he entered at St. George's Hospital as a perpetual student, and was the leading student of his year; and, two years later, he took the Brackenbury Prize in Medicine, the highest prize that he could obtain at the hospital. At the end of that year he passed his final M.B. and B.C. examinations, taking Asthma as the subject for his thesis in medicine, a subject that he was unfortunately too well acquainted with, and which, like other fellow sufferers in the profession, he had deeply studied.

On January 3rd of this year he began to suffer from a severe attack of influenza, which left him very weak. He, however, returned to his work at the hospital in little more than a week's time, looking, apparently, in fair health, but he himself complained of great weakness and lassitude. On January 15th, after spending the afternoon at the hospital, he felt, on his return home, curious nervous sensations in the extremities, and thought that he had diphtheritic paralysis. He got gradually weaker, and a fresh attack of asthma, with bronchitis, set in. Feeling himself getting much worse, at his own request, to save trouble and anxiety to the friends in whose house he was living, he was transferred to St. George's Hospital, under the care of Dr. Dickinson, on January 22nd, but, after passing through three days of considerable suffering with progressive weakness, he died early on the morning of January 25th.

As will be seen from what has been said above, his life had been brilliant and very full of promise. His intellectual qualities eminently qualified him for the pursuit of medicine. He had indomitable energy and enthusiasm for work, with first-rate powers of observation and reasoning, controlled by a singularly independent judgment. He had, moreover, the rare gift of being able to impart his love of work to others. The charm of his character is sufficiently shown by the fact that he was equally beloved by his elders and contemporaries, and all who were thrown in contact with him felt that he was a man of the highest honour and noblest purposes.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLAND AND WALES DURING 1889.

We are enabled to summarise the vital and mortal statistics relating to England and Wales for the year 1889 from the last quarterly return of the Registrar-General, which has just been issued. The birth-rate was equal to 30.5, and the death-rate to 17.9 per 1,000 of the population, estimated at rather more than twenty-nine millions of persons. The birth-rate was unprecedently low, and the death-rate, which in the eight preceding years had steadily declined from 19.6 per 1,000 in 1882 to 17.8 in 1888 (the latter being considerably below the rate recorded in any previous year of civil registration) was 17.9 per 1,000 in 1889. The recorded death-rate in each year since 1880 has been lower than in any year prior to that date. In the first nine years of the current decade, 1881 to 1890, the mean annual death-rate did not exceed 18.9 per 1,000, while in the preceding ten years, 1871 to 1880, it averaged 21.4. This marked and continued decline in the national death-rate since 1880 implies that more than 600,000 persons in England and Wales were alive at the end of last year, whose deaths would have been recorded during the past nine years, had the rate of mortality equalled that which prevailed during the ten preceding years, 1871 to 1880. The natural increase of population during 1889, or the excess of births over deaths, was 367,224, which showed a further decline from the numbers in recent years. According to returns issued by the Board of Trade, it appears that 259,063 emigrants of British origin left the various ports of the United Kingdom during the year under notice; of these, 167,820 were English, 25,715 Scotch, and 65,528 Irish. The amount of emigration from each division of the United Kingdom showed a decline from that recorded in 1888.

The 517,936 deaths from all causes in England and Wales during the year under notice included 61,027 which were referred to the principal zymotic diseases, of which 17,776 resulted from diarrhœa, 14,358 from measles, 11,514 from whooping-cough, 6,576 from scarlet fever, 5,455 from diphtheria, 5,320 from "fever" (including typhus, enteric, and simple or ill-defined fever), and only 28 from small-pox. These 61,027 deaths were equal to an annual rate of 2.10 per 1,000 against 2.37 and 1.83 in the two preceding years. The mean annual death-rate from these principal zymotic diseases, which had been 4.15 and and 3.38 per 1,000 respectively in the two decennial periods 1861-70 and 1871-80, was only 2.33 in the first nine years of the current decennium, 1881-90. Compared with the very low rates in 1888, the mortality during 1889 from diarrhœa, measles, scarlet fever, and diphtheria showed an increase, while that from "fever," whooping-cough, and small-pox declined. The increase last year was most marked in the fatality of measles and diarrhœa. The rate of mortality from different forms of "fever" (principally enteric), which was 0.91, 0.89, and 0.49 per 1,000 in the three decennial periods between 1851 and 1880, fell to 0.24 in the first nine years of the current decennium. Only 28 deaths from small-pox were registered in England and Wales during the year, the smallest number in any previous year on record being 275 in 1886.

The 517,936 deaths at all ages registered in England and Wales during 1889 included 127,426 of infants under 1 year of age, equal to a proportion of 144 per 1,000 of the registered births, against 145 and 136 in the two preceding years; this increase in the infant mortality, as compared with 1888, was due in great measure to the greater fatality of summer diarrhœa. In the past nine years of the current decade, 1881-89, the rate of infant mortality has averaged 141 per 1,000, against 149 in the preceding ten years, 1871-80. Among elderly persons the rate of mortality during 1889 showed a further decline from that recorded in recent years.

THE DEATH-RATE IN LONDON AND PARIS.

It is satisfactory to note a further marked decline in the death-rates recently prevailing in London and Paris. The rate of mortality in London, which had been 32.4, 32.1, and 26.3 per 1,000 in the three preceding weeks, further declined to 21.8 during the week ending Saturday, February 1st. During the first five weeks of the current quarter the London death-rate has averaged 28.1 per 1,000, while in the corresponding periods of the ten preceding years, 1880-89, it did not exceed 23.4. The number of deaths registered was 1,849, which was 211 below the average number in the corresponding week of the preceding ten years. The mortality from each of the principal zymotic diseases, except diphtheria, was below the average; 67 deaths resulted from whooping-cough, 24 from diphtheria, 14 from scarlet fever, 11 from measles, and only 9 from "fever." The deaths referred to influenza, which had been 4, 67, 127, and 105 in the four preceding weeks, further declined to 75 during the week under notice. The mortality from diseases of the respiratory organs showed a very marked decline from that recorded in recent weeks, and was below the average. To these diseases 550 deaths were referred last week in London, against 1,069, 1,010, and 736 in the three preceding weeks. Of these 550 deaths, 339 resulted from bronchitis, which were 88 below the corrected average weekly number, and 145 were referred to pneumonia, which exceeded the average by 17. From the latest returns from Paris it appears that the rate of mortality in that city, which had been 61.7, 47.5, and 34.0 per 1,000 in the three preceding weeks, further declined to 26.4 during the week ending January 25th, which, however, slightly exceeded the mean rate in the corresponding weeks of the five previous years. The 1,147 deaths registered during the week under notice in Paris showed a decline of 346 from the number recorded in the preceding week, and included 31 from diphtheria and croup, 17 from typhoid fever, 16 from measles, 5 from small-pox, and 5 from scarlet fever. The deaths from all these diseases, with the exception of typhoid fever, were below the average in the corresponding periods of recent years, although they each showed an increase upon those returned in the preceding week. The marked decline in the general

mortality last week in Paris was due to the greatly decreased fatality of diseases of the respiratory organs; the deaths referred to bronchitis and pneumonia, which had been 757 and 427 in the two preceding weeks, further declined to 242 during the week under notice.

COUNTY MEDICAL OFFICERS OF HEALTH.

THE following report to the Lancashire County Council by its Public Health Committee of what they consider to be the duties of a medical officer of health to the county council has been the subject of careful consideration, and will be read with great interest:—

(*a*) To receive on behalf of the Council the copies of the periodical reports from the local medical officers of health, and to tabulate and report upon the same for the information and guidance of the Council. (*b*) To inform the Council whether the various Acts affecting the public health are or are not being properly put into force within any district; whether any other matters affecting the public health of a district, such as water supply, drainage, scavenging, insanitary dwellings, etc., require being remedied, so as to enable the Council to decide whether a representation should be made to the Local Government Board on the matter under Section 19 of the Local Government Act, 1888. (*c*) To assist and advise the local authorities and their medical officers and sanitary inspectors as to epidemics, etc., and generally to advise them in the performance of their duties when required by them free of charge. (*d*) To assist and supervise the inspectors under the Sale of Food and Drugs Act. (*e*) To inquire and report as to the desirability of making by-laws for the prevention and suppression of nuisances not already punishable in a summary manner. (*f*) To perform the duties and be subject to the liabilities which by the Artisans and Labourers' Dwellings Improvement Act, 1875, a medical officer is required to perform and be subject to. (*g*) To assist the Council in dealing with the pollution of rivers. (*h*) To advise the Council on any bills introduced into Parliament with reference to (1) the public health, (2) the extension of towns, (3) the water supply of towns, (4) the housing of the working classes. (*i*) To advise as to the sanitary condition of all buildings belonging to the Council. (*j*) To devote his whole time to the duties of his office, and to hold himself at all times ready to advise the Council and its committees. (*k*) To be a county centre for all vital and hygienic statistics and other information bearing upon public health, including meteorological data from all available sources. The Committee also point out that many other important duties devolve on the Council in relation to which the advice and assistance of an experienced medical officer of health will be invaluable, such as the making of by-laws, the execution of the Acts relating to contagious diseases of animals, and many other matters, all of which are likely to be materially increased at an early date by the transfer to county councils of additional powers. Having regard to the absolute necessity of these duties being at once properly carried out, and to the practical impossibility of the Committee undertaking them itself, the Committee recommend:—1. That a medical officer of health be appointed for the administrative county of Lancaster at a salary after the rate of £800 per annum, with a reasonable allowance for travelling expenses, the appointment to be determined by a six months' notice on either side, and that such officer be not entitled to any claim for a pension. 2. That such officer be not allowed to hold any other appointment or engage in private practice without the express written consent of the county council. 3. That the official residence of the medical officer of health be in Preston, or such other place as the county council may determine. 4. That the Committee be authorised to advertise for candidates, to examine all applications and testimonials, and to recommend to the Council the candidate in their opinion most eligible for the office.

Applications have been made to the Local Government Board in accordance with the resolutions passed at the last meeting of the County Council for provisional orders constituting two joint committees, one representing all the administrative counties through or by which the rivers Irwell and Mersey, or any tributaries thereof, pass, and the other representing all the administrative counties through or by which the river Ribble, or any tributaries thereof, pass, and to confer upon such committees all the powers of a sanitary authority under the Rivers Pollution Prevention Act, 1876, and the Committee are now in correspondence with the Local Government Board on the subject.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 6,008 births and 4,246 deaths were registered during the week ending Saturday, February 1st. The annual rate of mortality in these towns, which had declined from 28.1 to 24.2 per 1,000 in the three preceding weeks, further fell to 22.8 during the week under notice. The rates in the several towns ranged from 14.5 in Nottingham, 17.1 in Derby, 18.4 in Birkenhead, and 19.1 in Halifax to 27.0 in Blackburn, 28.5 in Plymouth, 28.6 in Sunderland, and 29.3 in Manchester. In the twenty-seven provincial towns the mean death-rate was 23.6 per 1,000, and exceeded by 1.8 the rate recorded in London, which was 21.8 per 1,000. The 4,246 deaths registered during the week under notice in the twenty-eight towns included 328 which resulted from the principal zymotic diseases, against numbers declining from 423 to 354 in the four preceding weeks; of these, 133 were referred to whooping-cough, 58 to scarlet fever, 46 to diphtheria, 33 to measles, 29 to "fever" (principally enteric), 29 to diarrhœa, and not one to small-pox. These 328 deaths were equal to an annual rate of 1.8 per 1,000; in London the zymotic death-rate was 1.6, while it averaged 1.9 per 1,000 in the twenty-seven provincial towns, and ranged from 0.2 in Bradford, 0.4 in Cardiff, and 0.6 in Halifax to 3.3 in Plymouth and in Manchester, 3.4 in Salford, and 4.1 in Bolton. Scarlet fever caused the highest proportional fatality in Plymouth and Sheffield; and whooping-cough in Salford, Brighton, Derby, Bolton, and Bristol. In none of the twenty-eight towns was measles or "fever" fatally prevalent. The 46 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 24 in London, 7 in Manchester, 4 in Salford, 2 in Norwich, and 2 in Leeds. No fatal case of small-pox was registered during the week, either in London or in any of the provincial towns; and 3 small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, February 1st, of which 2 were admitted during the week. These hospitals contained 1,295 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,318 in the five preceding weeks; 95 cases were admitted during the week, against 72 and 84 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 6.5, and was considerably below the average.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, February 1st, 856 births and 661 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had declined from 29.0 to 26.4 per 1,000 in the three preceding weeks, further fell to 25.5 during the week under notice, but exceeded by 2.7 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Greenock and Perth, and the highest in Dundee and Aberdeen. The 661 deaths in these towns during the week under notice included 90 which were referred to the principal zymotic diseases, equal to an annual rate of 3.5 per 1,000, which exceeded by 1.7 the mean zymotic death-rate during the same period in the twenty-eight large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Dundee and Leith. The 249 deaths registered during the week under notice in Glasgow included 8 from measles, 7 from whooping-cough, 4 from "fever," 3 from scarlet fever, and 2 from diphtheria. In Edinburgh, 9 fatal cases of measles, 6 of whooping-cough and 3 of diphtheria were recorded; 6 deaths resulted from diphtheria in Dundee, and 8 from scarlet fever in Leith. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.2 per 1,000, against 6.5 in London.

HEALTH OF IRISH TOWNS.

IN the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, February 1st, were equal to an annual rate of 41.6 per 1,000. The lowest rates were recorded in Newry and Kilkenny, and the highest in Londonderry and Belfast. The death-rate from the principal zymotic diseases averaged 4.9 per 1,000. The 294 deaths registered in Dublin during the week under notice were equal to an annual rate of 43.5 per 1,000 (against 44.2, 48.0, and 48.8 in the three preceding weeks), the rate for the same period being only 21.8 in London and 25.2 in Edinburgh. These 294 deaths included 20 which were referred to the principal zymotic diseases (equal to an annual rate of 3.0 per 1,000), of which 9 resulted from whooping-cough, 5 from different forms of "fever," and 2 from diphtheria.

FEES FOR PAUPER LUNACY CERTIFICATES.

W. H. says: Will you oblige by stating in your next issue the correct fee for a medical man holding a district under a board of guardians to charge for signing a pauper lunacy certificate?

*** We suppose "W. H." means the certificate under 16 and 17 Victoria c. 97, Schedule E, necessary for sending a pauper lunatic to an asylum. The fee for this is nowhere fixed. The magistrate who calls to his assistance the doctor is empowered to order the guardians to pay a reasonable fee for the duty; the fee, generally one guinea, is most frequently paid without the magistrate's order. Some magistrates have ordered one guinea for the first case, and 15s. each for other cases when several are certified at the same time. Some boards of guardians have endeavoured to persuade magistrates to order half a guinea only to be paid, we believe in most cases unsuccessfully. In our opinion, the fee for a single case should never be less than one guinea.

We therefore recommend "W. H." to charge the guardians this amount and, if they refuse to pay it, to procure from the magistrate an order for them to do so; if this order is issued, the question is then settled.

PAROCHIAL MEDICAL ORDERS ON LOAN.

FAIRPLAY writes: I should like to hear the views of union medical officers on the following. It is a fast growing custom in my district for the relieving officer to give medical orders on loan, which are passed by the Board, and an order made by the Board for repayment at their value of my services. The money collected is kept by the guardians. Surely, as my property, the reward secret of these orders on loan is, it prevents the recipients becoming paupers and so losing their political vote.

*** This is a great hardship on Poor-law medical officers, and we see no limit to the abuse of the system, as, if persevered in, it might be possible for a board of guardians to pay a fixed salary to their medical officers, and then grant as many medical orders on loan as would repay, or more than repay, the whole of it. Surely this could never have been contemplated. The salary paid to the medical officer is supposed to be wholly paid by the guardians, and if they succeed in getting repaid for any of the medical orders, in fairness justice the amount received by them ought to be handed over to the medical officer. When the medical officer is paid per case, so serious an abuse cannot crop up, but even then it would be possible for guardians to be too liberal in granting medical orders on loan, being induced to do so by the fact that the orders cost them nothing. We cannot enter upon the political aspect of the system.

NEW GERMAN PHARMACOPŒIA.—It is not long since French, by Imperial decree, ceased to be the official language of culinary science in Germany. It appears that Latin is now about to be banished from the dispensary. The new (third) edition of the *Pharmacopœia Germanica* will, it is stated, shortly be published in German under the title of *Deutsches Arzneibuch*, or "German Medicine Book."

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITALS AND THE WORKING CLASSES.

The Wage Limit at Rotherham.

From the report read at the annual meeting of the Rotherham Hospital on January 30th, it seems that action is to be taken as to the class of applicants receiving the benefits of the institution. The Weekly Board, in consequence of the receipt of an official circular from the Yorkshire Branch of the British Medical Association urging the importance of the question as to who were and who were not eligible for out-patient relief, took the matter up. The following resolution submitted on the subject was confirmed: "In consequence of the institution having been imposed upon by the recommendations of improper persons, it has been resolved, at a special meeting of the work representative members of the Committee, and of the Weekly Board, that no case shall be eligible where the earnings were more than 25s. per week. Special provision to be made for exceptional cases, which must be noted in the recommendations." Much may be said on one side or the other as to the wisdom of fixing a wage limit in any way approaching a hard-and-fast line, but the authorities may well be complimented on the decided stand they have taken against abuse of the charity. The workmen of the district appear to support the hospital pecuniarily, and have their representatives on the management of the institution. It remains to be seen how they will now support the course their representatives took in this matter, but from what was said at the meeting the fault for recommending improper cases rested more with the shopkeepers and private individuals than with those coming from the various works.

Sir,—I consider the letter signed "Thomas Moreton" in behalf of the workpeople of Jones Brothers, an important expression of their views in reference to their treatment as recipients of charity. They, as subscribers to the hospitals, claim a just right to being treated as paying patients. I found this the feeling of ratepayers in agricultural districts. They thought themselves entitled to medical relief, including journeys, medicines, apparatus, etc., without further cost than the rates charged. I have often thought the idea could be carried out with advantage by a small additional sum entitling the contributor to the necessary benefits. Many persons employ medical men with profuse assertions that they will pay, who have not the slightest notion of doing so, and we have no redress. But, then, what of those persons who fail to contribute? Will Mr. Jones say whether he thinks all the patients should rank above paupers or recipients of voluntary relief—charity, in fact?

The difficulty is, how to distinguish between the two classes of patients. Obviously the paying patients who contribute reap advantages to themselves while the professional men's pockets are turned inside out and emptied. Is this fair after all their expenses in education?—I am, etc.,

February 2nd. Saml. W. Smith.

THE ABUSE OF MEDICAL CHARITIES.

At a meeting of the Nottingham Medico-Chirurgical Society, held on January 22nd, in accordance with a motion, notice of which had been given at a previous meeting, and at the instance of the Nottingham Division of the Midland Branch of the British Medical Association, the question of the abuse of local medical charities was discussed.

Mr. White, the President, in opening the discussion, said that although such abuse undoubtedly existed in the out-patient departments of many of our charities, still he believed that it did so to a much less degree than most people imagined. As a result of systematic inquiry on the part of the Weekly Board of the General Hospital, extending over a long period, it had been discovered that only a very insignificant proportion of even the most suspicious cases were undeserving of the gratuitous relief they sought. A few years ago an attempt was made to fix a wage limit among applicants for hospital relief; but the question having been discussed again and again at successive meetings of the governors the project was finally voted impracticable and abandoned.

Mr. Snell, who spoke next, after quoting at some length Dr. Rentoul's views, declared that any such scheme as he proposed would have the effect of lowering, even more than at present, the tone of middle-class practice, by showing to the public that skilled advice could be obtained at a low price, and by increasing the degrading competion at present existing among practitioners. He urged the medical men of Nottingham to shun any scheme which could possibly lead to the introduction of a provident dispensary on a large scale, and concluded by moving the following resolution, namely:—"That, in the opinion of the meeting, the abuse of local medical charities is not of sufficient magnitude or importance to justify the interference of the profession."

Drs. Cattle, Hatherly, and Pegg spoke in support of Mr. Snell's views and resolution, and the latter was carried unanimously.

ROYAL EYE HOSPITAL, MANCHESTER.

The annual meeting of the trustees and supporters of the Manchester Royal Eye Hospital was held last week. According to the annual report, the total number of patients admitted was 18,657, against 17,308 in the previous year. Of these, 7,523 attended at Oxford Street, and 11,134 at St. John Street. The number of in-patients was 1,341, being an increase of forty, and the period of their stay in the hospital was slightly longer than before. Notwithstanding an increase in the expenditure, owing to a larger staff and higher cost of provisions, the board were glad to state that their financial position continued satisfactory and that there was an increase in the income of the hospital, due to a large extent to the substantial interest taken in its welfare by the co-operative and by the various trade and benefit societies in the district. On the staff Dr. A. Hill Griffith has succeeded to the post of surgeon, vacated by the resignation of Dr. P. H. Mules.

CHESTER GENERAL INFIRMARY AND THE WORKING CLASSES.

At the annual meeting of the Chester General Infirmary it was decided that in consideration of nearly £1,000 having been collected for the infirmary by the District Working Men's Hospital Saturday Committee during the past four years, that Committee be granted a governor for every £100 subscribed.

INDIA AND THE COLONIES.

INDIA.

Leper Legislation.—The Bombay Government, according to a telegram in the *Times*, has taken prompt action in regard to the leprosy question. Instead of waiting for the legislation, which is understood to be occupying the attention of the supreme Government, it has issued a notification under a local Act, declaring the disease known as black leprosy to be an infectious disease, dangerous to life, and has named certain institutions to serve as sanataria in cases of leprosy. At Calcutta, on the other hand, there is a talk of postponing leper legislation for the present, the Government wishing to wait till the Commission from England has issued its report.

Leper Home at Bombay.—Sir Dinshaw Petit has offered a lakh of rupees for building a leper home for Bombay, and the Nawab Junaghad has promised to build a leper asylum for the province of Kattywar. Both buildings are intended to commemorate Prince Albert Victor's visit to India. At Calcutta, the Permanent Memorial Fund, also for a leper asylum, amounts to over 45,000 rupees.

CEYLON.

St. John Ambulance Association.—There has been established during the past year at Ceylon a branch of the St. John Ambulance Association, mainly through the exertions of Surgeon Lees Hall. Owing to the co-operation of numerous medical men classes for first-aid and nursing are fully established in the chief towns, and also in the railway, police, and other departments. A wheeled-ambulance stretcher and other appliances have been imported, and have already proved of considerable service.

The Chair of Surgery at Halle.—It is now announced that the successor of Volkmann, at Halle, will be Professor Otto Madelung, of Rostock. Dr. Madelung, who is now in his 44th year, began his career as an alienist, but turned his attention to surgery during the Franco-German war. He was afterwards assistant to Professor W. Busch, at Bonn.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having conformed to the by-laws and regulations, and passed the required examinations, were, at a meetingof the College on January 30th, admitted Licentiates of the College:

*Albert, J. V., St. George's
*Aspinwall, J. F., Manchester
*Badcock, J. H., Charing Cross
Bailey, R. C., St. Bartholomew's
*Banbury, G. R. S., Bristol
Bankes-Price, S. H., Middlesex
Barber, G. T. C., Birmingham
*Barlow, G., Manchester
Barnard, R., London and Cambridge
Batley, A. B., St. Mary's
*Berry, G. A., Manchester
Bickersteth, R. A., Cambridge and St. Bartholomew's
Brooks, C., St. Thomas's
Caiger, H., University College
*Callender, E. M., St. Mary's
Coates, H. H., St. Bartholomew's
Cobbett, L., Cambridge & St.Thomas's
*Cochrane, J. M., Toronto
Cooke, G. H., Manchester
Cooper, H. J., St. Thomas's
Cornilliac, J., King's College
*Cox, A. B., Sydney and Middlesex
Cribb, A. W. G., Middlesex
Daggett, H. I., St. Mary's & Cambridge
Davies, F. W. S., Guy's
Debenham, R. B., London
De Butts, S. B. C., St. Mary's
Devereux, W. C., Cambridge and Middlesex
Distin, H., King's College
Diver, E. W., University College
*Dixon, W. A., Toronto
Dove, P. W., St. Bartholomew's
*Dowling, G. W., Manchester
Dukes, T. A., St. Thomas's
Dunn, R. A., St. Bartholomew's
Earle, E. R. C., University College
Eccles, W. McA., St. Bartholomew's
Elgee, W., St. Bartholomew's
Faichnie, F., University College
Ferguson, R. B., St. Mary's
Fearnhead, T., Manchester
Foster, W. J., St. Mary's
*Fox, J. A., Guy's
Francis, H. A., Cambridge and St. Bartholomew's
Gill, J. McD., Guy's
*Gilchrist, A. W., Paris
Gimlette, J. D., St. Thomas's
Gore, H. B., Manchester
Gostling, P. R., St. Bartholomew's
*Grant, J. W. G., St. Thomas's
Gratte, C. B., Bristol
*Harris, E. B., Guy's
Harrison, T. H., Leeds
Harvey, C. E., Edinburgh
Heaton, C. J., St. George's
*Heelas, W. W., Westminster
Heywood, C. C., Cambridge and St. Thomas's
*Hickman, H. V., Guy's
Hicks, J. A., Westminster
Higgins, W., St. George's
Hobhouse, E., St. Thomas's
Howell, R. E., Edinburgh & Liverpool
Hulbert, E. B., University College and Newcastle on-Tyne
Jackson, F. T., Liverpool and London
James, G. T., Westminster
Jones, D. T., Guy's
Jones, M. Ll., St. Bartholomew's
Jones, R. F. H., St. Bartholomew's
Jones, W. E., Middlesex
King, F. W. R. J., Middlesex
Kingsland, A., Birmingham
Kirton, M. A., London
Lack, H. L., King's College
Lankester, A. C., St. Thomas's
Lansdown, R. G. P., Guy's
Lawson, D., Middlesex
*Lingwood, E. H., Charing Cross
Low, H., Cambridge & St. Thomas's
*Lunn, P. T., Middlesex
Lyons, A. W., King's College
*Macann, A. C. J., Middlesex
Molyneux, J. P., Manchester
Orr, F. L., University College
*Palmer, R. H., Toronto
Parry, H. J., Durham
Paterson, G. W., St. Mary's
Pawlett, T. L., St. Bartholomew's
Peirce, H. I., Dublin & King's College
Penberthy, W., London
Perkins, H. B., Guy's
Porter, F. J. W., London
*Potts, F. R. H., Guy's
*Prall, J. H., Guy's
Pringle, A. Y., St. Thomas's
Pritchard, E. J., Westminster
Procter, W. J., London
Reid, P. MacP., Edinburgh
Robertson, C., St. Thomas's
Robinson, W. H., St. Thomas's
Rollason, A., Birmingham & London
Ronald, A. E., Cambridge and St. Thomas's
Saunders, G. R., St. Bartholomew's
Scott, W. J., Guy's
Sewaki, H., Osaka and St. Thomas's
Sharpley, J. E., London
Simmonds, D. C. S., St. Thomas's
Spurrell, C., Guy's
Squire, F. H., London
Stabb, F. A., St. Thomas's
Stephens, H. W., St. Bartholomew's
Stevens, C. R., St. Bartholomew's
Storrs, W. H. T., King's College
Swan, C. R. J. A., St. George's
Valentine, T. H. A., St. Bartholomew's
Viret, B. P., St. Bartholomew's
Wagstaff, F. A., Middlesex
Westmacott, F. H., Manchester
Wiggins, C., Charing Cross
*Wilding, W. F. W., Liverpool
Wilkinson, R., Leeds
Williams, J. R., St. Bartholomew's
Wooding, W. B., Middlesex
*Woodruff, T. A., Canada

* Candidates who have not presented themselves under the regulations of the Examining Board.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the recent quarterly examination for the membership of the College, the following candidate was successful:

H. C. Earl, M.B.Univ.Dubl., *Lic. Med.*, 1888.

The undermentioned gentlemen having been successful at the Final Professional Examination, under the Conjoint Scheme with the Royal College of Surgeons in Ireland, held during January, 1890, were duly admitted on Tuesday, February 4th, as Licentiates in Medicine and Midwifery of the College:

J. Byrnes.
A. V. Shine.

The following is the result of the Final Professional Examination in question:

No. of Candidates Entered.	Retired.	No. Examined.	Passed.	Stopped.
19	1	18	*4=22.2 p.c.	14=77.8 p.c.

* Two of these entered for only a portion of the examination.

SURGEON PARKE is doing duty at the hospital at Cairo, where he will probably remain until March.

FROM a return made by the veterinary inspector of the county of Middlesex, under the Rabies Order for the quarter ending December 31st, 1889, it appears that there were thirteen cases of rabies as against three in the corresponding quarter of 1888.

THE report which has gained currency as to the prevalence of diphtheria in the West Kensington district is, writes Dr. Francis Egan, the medical officer of health for Fulham, unfounded. During last month only two cases occurred, and these were promptly dealt with.

A DINNER in aid of the funds of the French Hospital and Dispensary will take place at the Hôtel Métropole, on February 15th. M. Waddington, the French Ambassador, will preside, and will be supported by the Lord Mayor, Sheriffs, and Under Sheriffs of London and Middlesex.

THE medical school of Guy's Hospital was closed on Monday, February 3rd, the day of the funeral, as a mark of respect to the memory of the late Sir William Gull, who was for many years lecturer on medicine and at the time of his death one of the consulting physicians to the hospital.

M. DANIEL MOLLIÈRE, a leading surgeon of Lyons, died last week. He took a prominent part in the proceedings of the recent Surgical Congress at Paris, and was well known for his writings on diseases of the rectum, the surgery of bones, etc., and for his attempts to administer anæsthetics by the rectum.

THE HEALTH OF EXETER.—Dr. John Woodman, the health officer of Exeter, reports that the total number of deaths during 1889 in that city and county was 778, or at the rate of 19.3 per 1,000. This rate is identical with that of the twenty-eight large towns, and only slightly higher than that for Exeter in 1888.

CHOLERA IN ASIA.—The Russian Government has sent Dr. Avedik Babajew, who is the head of the Sanitary Department at Tiflis, to Persia, to report on the cholera in that country. A case of cholera is said to have occurred at Bologna. On investigation it was found to be one of sporadic, and not Asiatic, cholera.

HOSPITAL Sunday collections in Sheffield were taken on January 26th. The day was wet and boisterous, and the interests of the hospitals have, in some measure, suffered thereby. The same remark applies to the neighbouring town of Rotherham, where it is feared a falling off from the amount collected last year has occurred.

INVENTION OF THE MICROSCOPE.—The third centenary of the invention of the microscope will be celebrated this year at Antwerp, where a historical exhibition of microscopes will be held and public demonstrations will be given of the structure of the instrument and of its development from its first beginnings to its present form.

THE report of the Cotton Districts Convalescent Fund, presented at the recent meeting at the Manchester Town Hall, states that the total number of patients sent to the Convalescent Hospital during the past year was 2,053, at a cost to the fund of £3,399 3s. 2d., as against 2,071 in the previous year, at an expense of £3,618 14s. 9d.

DEWSBURY INFIRMARY.—More than ordinary interest attached to the proceedings of the recent annual general meeting of the Dewsbury and District Infirmary, the occasion being chosen for the presentation to the honorary medical staff of the institution of a number of articles, valued altogether at £200, as a recognition of services rendered.

DR. HEINRICH FREY, Professor of Anatomy in the University of Zürich, died on January 23rd, of an apoplectic seizure, which occurred in the course of an attack of influenza. He was well known in the scientific world by his works on the microscope and on histology, which have been translated into all the principal European languages. Professor Frey was in his 69th year.

VOLKMANN'S LITERARY TESTAMENT.—The late Professor Volkmann, of Halle, has left a monograph on cancer, on which he was engaged up to the time of his death, almost ready for publication. By his will his former assistant, Professor F. Krause, is appointed editor of this posthumous work. Volkmann has left several other scientific and literary writings in manuscript, but they are not intended for publication.

FIRTH COLLEGE, Sheffield, has now for some years been doing excellent work. The Government grant will be a material addition to its resources, but the authorities are desirous of still further extending the usefulness of the college. With this object in view an appeal is to be made for such a sum as will provide an increase in the teaching staff and enlarged accommodation. It is hoped the college may ultimately be affiliated with Victoria University.

CURE OF "ROARING" BY OPERATION.—The *Veterinary Journal* for February publishes a letter to Dr. Fleming from the Duke of Westminster testifying that a favourite hunter on which Dr. Fleming operated last spring for roaring has been restored to use, and that the operation must be considered to be decidedly successful. Mr. R. Pringle, M.R.C.V.S., of the Royal Scots Greys, also reports a short history of a troop horse successfully operated on some time ago for roaring by the same method.

UNIVERSITY OF ROSTOCK.—A new medical and surgical clinic was formally opened in the University of Rostock on January 18th. Addresses were delivered by Professors Th. Thierfelder and Madelung, the latter of whom congratulated his hearers on the fact that it would henceforward be possible to carry out the antiseptic treatment of wounds in an adequate manner at Rostock. A new feature in the arrangements is an installation for the manufacture of dressings in connection with the surgical clinic.

AT the Belgrave Hospital for Children, a lady has been appointed house-surgeon. The medical staff were unanimous in recommending Miss Frances May Dickinson, M.B.Lond., as the most suitable candidate, and the Hospital Committee elected her as house-surgeon for a period of six months. As yet the occasions on which a lady has been chosen to fill the post of resident medical officer are very few, and we may congratulate the Committee on having elected the candidate it considered best fitted for the post.

A NEW INDEX MEDICUS.—A new medical periodical is announced to appear on April 1st. It will bear the title of *Revue Internationale de Bibliographie Médicale Pharmaceutique et Vétérinaire*, and will be issued under the direction of Dr. Jules Rouvier, Professor of Obstetrics and Gynæcology in the French Faculty of Medicine at Beyrout, in Syria. It will appear every three months, and the object of the editor is to supply a complete index to current medical literature. The annual subscription is 10 francs.

NEW MEDICAL JOURNALS.—A new monthly journal devoted to hygiene has appeared since the beginning of the year. It is entitled *Rivista Internazionale d' Igiene*, and is under the direction of the well-known Italian hygienist, Professor Fazio, with the collaboration of Professors Weichselbaum, Cohn, Baumgarten, Flügge, Buchner, Peiper, Pfeiffer, and Uffelmann. Another new periodical called *Il Segno*, dealing chiefly with symptomatology, has lately appeared at Florence. The editor is Dr. Cesare Federici.

HEALTH OF KENSINGTON.—The death-rate of Kensington during the past year was as low as 13.5 per 1,000, the most favourable hitherto recorded, and 2.9 below the decennial average. Dr. T. Orme Dudfield, in his statistical abstract, shows that the ratio of infantile mortality was lower than in immediately preceding years, and the deaths from zymotic diseases numbered only 268. The mortality from diphtheria alone was in excess, that from all the other diseases being under the average. There was no death from small-pox, typhus, or simple continued fever.

DRAINAGE OF WEST HAM.—The Local Government Board on January 23rd sanctioned a scheme for a large extension of the outfall works, pumping station, and main drainage of the borough of West Ham, as designed by the borough engineer, Mr. Lewis Angell, at a cost of nearly £100,000. The original system of drainage was laid out by Sir Robert Rawlinson in 1860, also at a cost of nearly £100,000, and much added to since; but so great has been the development of the district, which immediately adjoins the eastern boundary of the metropolis, that it has been found necessary to practically reconstruct the sewerage system.

THE QUESTION OF TITLES IN GERMANY.—Even Germany, where the different ranks of the professional hierarchy are defined with military precision, is not entirely free from the question of medical titles. The Prussian Minister of Worship has lately called the attention of the Rector of the University of Berlin to a growing habit on the part of gentlemen engaged in private teaching of describing themselves in their publications and on their visiting cards as "Teacher in the University." His Excellency points out that "*Privat-docent*" is the only title which such persons can legitimately use.

MANCHESTER MEDICO-ETHICAL ASSOCIATION. — The annual meeting of this Association was held at the Queen's Hotel, Manchester, on January 31st. The reports of the committee and treasurer showed that the Association is in a most flourishing condition, there being an increase in membership and funds. The following gentlemen were elected office-bearers for the year 1890: *President:* A. Wahltuch, M.D. *Vice-Presidents:* W. Walter, M.D.; A. M. Edge, M.D.; J. F. Tatham, M.D.; A. Hodgkinson, M.B. *Treasurer:* D. Lloyd Roberts, M.D., F.R.S.Edin. *Secretaries:* F. H. Collins, M.D.; F. M. Pierce, M.D. *Committee:* H. W. Boddy, M.D.; Mr. J. Broadbent.; H. A. G. Brooke, M.B.; J. S. Bury, M.D.; J. T. Faulkner, M.D.; Mr. J. Ferguson; Mr. J. Foster; A. H. Griffith, M.D.; A. Godson, M.D.; Mr. G. W. Mould; Mr. J. A. Palanque; J. W. Watkin, M.D.

LENVAL PRIZE.—Baron L. Lenval, of Nice, offers a prize of 3,000 francs (£120) for the best easily portable apparatus to improve the hearing of persons suffering from partial deafness. The instruments must be sent before December 31st, 1891, to the President of the Jury, or to Professor Victor von Lang, of Vienna. Only completely finished instruments will be received. The prize will be awarded at the meeting of the fifth international Congress of Otology to be held at Florence in September, 1892. The jury consists of the following distinguished aurists: Professor Adam Politzer, of Vienna, President; Professor Victor von Lang, of Vienna; Dr. Benni, of Warsaw; Dr. Gellé, of Paris; Dr. Urban Pritchard, of London; Dr. St. John Roosa, of New York; and Professor Vittorio Grazzi, of Florence, President of the Ordinary Committee of the Congress.

NEUROLOGICAL SOCIETY OF LONDON.—At the annual general meeting held on January 23rd at the National Hospital, Queen Square, the following officers were elected for 1890: *President:* *Thos. Buzzard, M.D., F.R.C.P. *Vice-Presidents:* J. S. Bristowe, M.D., F.R.S.; *James Sully, M.A. *Council:* A. Hughes Bennett, M.D., F.R.C.P.; David Ferrier, M.D., F.R.S.; *Jonathan Hutchinson, F.R.S.; J. Hughlings Jackson, M.D., F.R.S.; *James Ross, M.D., F.R.C.P.; G. H. Savage, M.D., F.R.C.P.; E. A. Schäfer, F.R.S.; Seymour J. Sharkey, M.D., F.R.C.P.; *A. de Watteville, M.D., B.Sc.; Samuel Wilks, M.D., F.R.S. *Treasurer:* D. Hack Tuke, M.D., LL.D. *Secretaries:* James Anderson, M.D., F.R.C.P.; *Robert Maguire, M.D., F.R.C.P. Those gentlemen marked * have either not held office or not the same office during the previous year. The President, Dr. Buzzard, read an introductory address on "The Simulations of Hysteria by Organic Disease of the Nervous System." The next meeting of the Society will be held at the National Hospital, Queen Square, on Thursday, February 20th, at 8.30 P.M., and the subject for discussion will be "Treatment by Suspension."

MEDICAL VACANCIES.

The following Vacancies are announced:

CITY HOSPITAL FOR INFECTIOUS DISEASES, Newcastle-upon-Tyne.—Resident Medical Assistant for one year, subject to re-election: £50 per annum first year, £70 second year, board, lodging, and washing. Applications to the Medical Officer of Health, Town Hall, Newcastle, not later than February 28th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board, residence, etc. Appointment for six months from April 1st, 1890. Applications by February 13th to the Secretary, 24, Finsbury Circus, E.C.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—House-Surgeon. Salary, £60 per annum, with board and lodging. Applications by February 11th to W. T. Grant, Secretary.

HIGHWORTH AND SWINDON UNION.—District Medical Officer and Public Vaccinator to the 1st District. Salary, £70 per annum and fees. Applications by February 22nd.

NORTH STAFFORDSHIRE INFIRMARY.—House-Physician. Salary, £100 per annum. Applications to the Secretary not later than March 1st.

NOTTINGHAM GENERAL HOSPITAL.—Resident Medical Assistant. Qualified man or fourth year student. Appointment for six months. Board, lodging, and washing. No salary. Applications by February 17th, addressed to the Secretary.

PLYMOUTH PUBLIC DISPENSARY.—Second Honorary Physician. Applications by February 17th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Junior House-Surgeon. Applications by February 8th to the Secretary.

ST. MARK'S HOSPITAL FOR FISTULA, Etc., City Road, E.C.—House-Surgeon. Salary, £50, with board and residence. Applications by February 8th to the Secretary.

SALFORD UNION.—Assistant Medical Officer. Salary, £140 per annum, with furnished apartments at the Infirmary. Applications, endorsed "Assistant Medical Officer," to be sent in by February 11th.

SCHOOL BOARD FOR LONDON.—Medical Officer. Salary, £400 per annum. Applications by February 10th, on forms to be obtained from the Clerk of the Board, Victoria Embankment, W.C.

SWANAGE URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £21 per annum. Applications to the Clerk by February 7th; appointment to be made on February 18th.

WESTMINSTER GENERAL DISPENSARY. Honorary Physician. Applications by February 8th.

MEDICAL APPOINTMENTS.

ALLDEN, Sidney J., M.B., B.S., appointed House-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

BARTON, George H., M.R.C.S.Eng., L.R.C.P.Edin., appointed Medical Officer to the 7th District of Lincoln Union.

BOSTOCK, A. S., M.R.C.S.Eng., L.S.A., appointed Medical Officer to the Westhampnett Workhouse.

BROCK, W. J., M.B., C.M., appointed Medical Officer to the Parishes of Olrig and Dunnet, *vice* J. L. Waters, M.B., resigned.

CAIGER, F. F., M.D.Lond., M.R.C.S., etc., Assistant Medical Officer North-Western Fever Hospital, appointed Acting Medical Superintendent of the South-Western Hospital of the Metropolitan Asylums Board, *vice* Dr. Birdwood.

CROOK, Arthur, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer at the Boys' Home, Norwich Union.

CROOKE, Geo. F., M.D.Edin., M.B., M.R.C.S., L.S.A., Lecturer on Practical Pathology, Queen's College, appointed Pathologist to the Queen's Hospital, Birmingham.

DAVIDSON, P., M.B., C.M., appointed Honorary Physician to the Liverpool Infirmary for Children.

DICKINSON, Frances May, M.B.Lond., appointed House-Surgeon to the Belgrave Hospital for Children, Pimlico, *vice* F. J. McCann, M.B., resigned.

GEMMELL, J. E., M.B., C.M.Edin., appointed Honorary Anæsthetist to the Liverpool Dental Hospital, *vice* H. Briggs, F.R.C.S., resigned.

GIBBES, Cuthbert Chapman, M.D.Aberd., C.M., L.R.C.P.Lond., of Surbiton, appointed Medical Officer of Health to the Kingston Rural Sanitary Authority, *vice* Dr. Price Jones, deceased.

GOODWIN, Wycliffe, M.B., C.M.Aberd., appointed Senior Resident Medical Officer to the Joint Counties Asylum, Carmarthen, *vice* John Powell, L.R.C.P. & S.Edin.

HINDE, S. L., appointed Resident Assistant House-Surgeon to the North Staffordshire Infirmary, Hartshill, on the retirement of Mr. T. S. Worboys.

JONES, John Owen, L.R.C.P., L.R.C.S.Edin., L.F.P.S., late House-Surgeon to the Flintshire Dispensary, Holywell, elected an Honorary Surgeon.

JULYAN, George R., M.B., C.M.Edin., appointed Medical Officer and Public Vaccinator for the No. 1 District of the Bodmin Union, *vice* Charles Williams, L.R.C.P. & S.Edin., L.S.A., resigned.

LOGAN, Thomas, M.D.Aberd., L.F.P.G.Glasg., appointed Medical Officer and Public Vaccinator for No. 2 District, North Brierley Union, *vice* Henry A. Warburton, M.R.C.S.Eng., L.S.A., resigned.

MACKAY, P. B., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the East District, Doncaster Union.

MCNIELL, Hardinge C. C., L.R.C.P.Ed., L.R.C.S.Edin., L.F.P.S.Glasg., appointed House-Surgeon to the Dover Hospital and Dispensary, *vice* Arthur C. Mackenzie, L.R.C.P.Edin., L.R.C.S.Edin., L.F.P.S.Glasg., resigned.

MANNING, Frank B., L.K.Q.C.P.Irel., L.R.C.S.I., appointed Medical Officer of Health and Public Vaccinator No. 9 District of the Barnstaple Union.

MELLER, C. Booth, L.R.C.P., M.R.C.S., L.S.A., of Cowbridge, appointed Medical Officer to the Bonvilstone District of the Cardiff Union.

MUIL, William, M.D., M.B., C.M.Aber., appointed District Medical Officer and Medical Officer to the Workhouse, Kirkby Moorside Union, *vice* Arthur Wood, L.S.A.

OGILVIE, Alexander, B.A., M.B., B.Ch., B.A.O., appointed House-Surgeon to the Bristol Eye Hospital, *vice* Dr. Herman Snellen, appointed Assistant at Utrecht.

PEACOCK, A., M.D., appointed Parochial Medical Officer for the Gourock District, *vice* G. Wyllie, L.F.P.S.Glasg.

PLATT, J. E., M.B.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Ashton-under-Lyne District Infirmary.

POLLOK, Robert, M.B., C.M., F.F.P.S.Glasg., appointed Medical Adviser to the Western Friendly Society, Glasgow.

PRATT, John Wyatt, L.R.C.P.Edin., L.M., M.R.C.S.Eng., etc., appointed Medical Officer of Health to the Wiveliscombe Urban Sanitary District.

ROBINSON, J. H., M.B., C.M.Edin., appointed Medical Officer to the Wendorn Sub-district, Helston Union.

SAVAGE, Thomas, M.D.St. And., M.R.C.P.Lond., F.R.C.S., appointed Honorary Consulting Physician to the Wolverhampton and District Hospital for Women, Chapel Ash.

THOMPSON, Wesley H., M.D., appointed Medical Officer of Health to the Quarry Bank Local Board, *vice* Dr. Ashmead, deceased.

TURNER, F. H., M.R.C.S., L.S.A., appointed Medical Officer for the Capel District of Samford Union.

WALKER, George E., F.R.C.S., L.S.A., appointed Consulting Ophthalmic Surgeon to the Liverpool Northern Hospital.

WELLBURN, Edgar, L.R.C.P.Edin., L.R.C.S.Edin., appointed Medical Officer of Health to the Sowerby Bridge Local Board of Health, *vice* Dr. J. S. Horsfall.

WYNTER, Andrew E., L.R.C.P., M.R.C.S., appointed House-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, S.W.

DIARY FOR NEXT WEEK.

MONDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. J. B. Sutton (Erasmus Wilson Lecturer): On Morphology in Relation to Pathology. Lecture I.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Lauder Brunton: Experiments in Anæsthetics at Hyderabad. Mr. H. W. Allingham: The Question of Operation upon Fistula in Phthisis.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Dr. Abercrombie: On Syphilis in Infancy and Childhood.

TUESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Syphilitic Affections of the Skin.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Dr. M. Charteris: Rheumatism: Its Treatment Past and Present, with special reference to recent Experimental Research on Salicylic Acids and their Salts.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. J. B. Sutton (Erasmus Wilson Lecturer): On Morphology in Relation to Pathology. Lecture II.

HUNTERIAN SOCIETY, 8 P.M.—Dr. Stephen Mackenzie: Annual Oration.

ROYAL MICROSCOPICAL SOCIETY, King's College, W.C., 8 P.M.—Annual Meeting and President's Address.

BRITISH GYNÆCOLOGICAL SOCIETY, Hanover Square, 8.30 P.M.—Council, 8 P.M. Specimens will be shown by Drs. Bantock and Fancourt Barnes, Uterine Repositor. Dr. Inglis Parsons: Report on Dr. Fenton's case of Fibrocystic Tumour of Uterus. Adjourned discussion on Mr. Jessett's paper: The Surgical Treatment of Uterine Cancer. Mr. E. Sinclair Stevenson, F.R.C.S.: On a case of Laparotomy followed by Fæcal Fistula and Tetanus.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. T. H. Green: On Hæmoptysis. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. W. Lang: On Ophthalmoscopic Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Mr. Victor Horsley: On the Surgery of the Brain and Spinal Cord. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Abercrombie: On Syphilis in Infancy and Childhood.

FRIDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. J. B. Sutton: (Erasmus Wilson Lecturer): On Morphology in Relation to Pathology. Lecture III.

CLINICAL SOCIETY, 20, Hanover Square.—Living Specimens, 8 P.M. Papers, 9 P.M. Dr. Ord: Cases of Myxœdema. Mr. Kenneth Campbell (introduced): A case of Acromegaly. Mr. Silcock: Two cases of Hyperostosis of the Frontal Bone and Orbital Walls, one being associated with Epilepsy, and both treated by Trephining. Sir Dyce Duckworth: Two cases of Thrombosis of the Cerebral Sinuses and Veins. Dr. Hale White and Mr. Arbuthnot Lane: Case of Trephining for Old Hemiplegia, accompanied by Intense Headache. Dr. Seymour Taylor: Case of Biliary Fistulæ with Escape of Biliary Calculi. (Patient will be shown.)

SOCIETY OF MEDICAL OFFICERS OF HEALTH, 8 P.M.—Dr. E. F. Willoughby: The Italian Public Health Act.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. T. H. Green: On Bronchitis and Emphysema.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: On Alopecia: Its Different Forms.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTHS.

GODFREY.—On January 21st, at 4, Pavilion Square, Scarborough, the wife of Frank W. A. Godfrey, M.B., of a daughter.

LAURIE.—On February 2nd, at Laughton, Essex, the wife of Caspar R. Laurie, M.R.C.S., L.R.C.P., of a son.

MARRIAGE.

RICHARDS—RENTON.—At St. John's, Shotley, Northumberland, on January 30th, by the Rev. R. W. Wilson, R. C. Richards, M.R.C.S., L.K.Q.C.P.I., to Emma Hay, youngest daughter of the late Dr. John Renton, Shotley Bridge.

DEATHS.

ADAMS.—On January 26th, at Grately, James Edward Adams, F.R.C.S., formerly Lecturer on Surgery at the London Hospital Medical College, and Surgeon to the London Hospital, aged 45.

CHEVALLIER.—At Melbourne, on the 19th December, Charles Henry Temple Chevallier, M.B., C.M., son of the late Rev. Canon Chevallier, of Aspal Hall, Debenham, Suffolk.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C , London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

QUERIES.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

A. A D. asks how he is to proceed to obtain the appointment of surgeon under the Factories' Act.

*** This question was answered fully in JOURNAL of September 14th, 1889, page 653.

EXODUS asks for information as to the climate and prospects of the part of the country between Denver and Greely in Colorado, America.

A. H. asks for the title, and probable price, of a trustworthy medical and surgical guide for emigrants to parts where medical aid is not likely to be readily accessible, for example, the distant parts of British Columbia.

F.R.C.S.I. writes: I should feel much obliged if any member can give me some hint as to the best treatment to adopt in the following case: A lady, who is about to be confined of her fifth child, is most anxious to nurse it; with all her other children she has failed to do so, owing to her suffering from a form of galactorrhœa. As soon as the child is applied to one breast, the milk seems to leave it, and flow from the nipple of the other. The breasts are well developed, but the nipples are rather short and small. She is a fairly healthy young woman, but of a very nervous and hysterical temperament. This, I imagine, has a good deal to say to her inability to nurse.

SUPERNUMERARY THUMBS.

POLLEX writes: I am about to remove two rudimentary thumbs, and, having no work by me in which the subject is mentioned, perhaps some member will give me the benefit of his experience. The subject of the abnormality is a girl over 16, and the double thumb in each hand springs from the metacarpo-phalangeal joint. Is it necessary to remove the whole first phalanx by disarticulation, or only so much of the bone in question with cutting bone forceps as will remove the deformity to the eye?

CLIMATE OF MONTREAL.

PHTHISIS asks as to the suitability of the climate of Montreal in the case of a girl, aged about 26, who has lost one sister from phthisis, but who at present, although somewhat delicate, has no symptom of it.

ANSWERS.

MEDICAL DICTIONARY.

M.D.LOND.—The work referred to by our correspondent is probably Littré's *Dictionnaire de Médecine*, the sixteenth edition of which was published in 1886 by J. B. Baillière et Fils of Paris. For the etymology of English medical terms Murray's *New English Dictionary*, now in course of publication at the Clarendon Press at Oxford, or the *Encyclopædic Dictionary* lately published by Cassell and Co., will probably be found the most satisfactory.

DENTISTS' DRILLS.

MR. G. E. WILLIAMSON (Newcastle-on-Tyne) writes: In answer to some inquiries about the drill mentioned in my paper in the JOURNAL of February 1st, it is the Millers Falls Company Hand Drill, No. 1, with four different-sized Morse drills. I bought mine from T. Boston, Nun Street, Newcastle, price 5s. 6d., with a shilling more for the Morse drills.

NOTES, LETTERS, ETC.

ERRATA.—In the report of the Comitia of the Royal College of Physicians, on page 263 of the JOURNAL of February 1st, line 23 from bottom, Dr. J. H. Bridge should be Dr. J. H. Bridges; and on page 264, line 5, *first* examination for the licence should read *final* examination.—In the first line of the first paragraph on page 276 of the JOURNAL of February 1st, for "Peacock," read "Pocock."

AMERICAN DEGREES AND CULTURE.

DR. WILLIAM DONOVAN, L.R.C.P.Ed. (Erdington) writes: I think your correspondents on the above subject are not to be found fault with for an excess of good taste. I had the good fortune some years ago to make the acquaintance of a number of American practitioners in their own homes in the city of Philadelphia. I can therefore speak from personal knowledge; and I do not hesitate to say that the men with whom I came in contact were in no way inferior to men of the same grade in England.

MEDICAL DEFENCE UNION.

AN IRISH PHYSICIAN writes: There are several medical men in Ireland who would be willing to join the "Medical Defence Union." Is there to be a branch in Ireland? or can Irish doctors join? A reply from the Secretaries will oblige.

THE INFLUENZA.

DR. ARCH. D. MACDONALD (Liverpool) writes: During the week ending January 25th I have seen more of the epidemic than in the four weeks preceding. There has been more ordinary catarrh within the past two months than usual at the same time of the year. The first case was seen on December 23rd. Then on January 2nd and 5th I visited cases at Mossley Hill and Bootle, fully six miles apart. The rate is now a *crescendo*, and the type somewhat more severe; but only in one case have I observed pneumonia, delirium during initial fever in another; temperatures, 103°, 102.5°. Treatment: Antipyrin, grs. xv, once, followed by ℞ Liq. ammon. acet., ℥iss; liq. ferri perchlor., ℥iss; glycerine, ℥ss; tr. aconiti, ♏ xx, in aq. chlorof. to ℥viii. Sig. ℥ss, 3 vel 4 horis sumend. That is accompanied by a saline purge, also the hot water sponge to forehead, as well as to the nape of neck, where the catarrh is prominent; then, after a third day, plain or ammoniated tincture of quinine. I have heard directly of the disease being mistaken for dengue among the Spaniards. It is of interest to know that some of them speak of the present epidemic as "el trancazo" (the thrashing with a stick), a name quite as appropriate as the French "la grippe." Dr. Gimeno, of *La Medicina Práctica*, however, knocked the fallacious diagnosis of influenza as dengue on the head in the December 11th number of his journal when pointing out that the very climatic range of influenza at present should have prevented "algunos medicos poco cuidadosos" from being deceived regarding it.

STAFF-SURGEON WM. M. RAE, R.N. (H.M.S. *Briton*) writes: The following extracts from the Rev. T. B. Murray's book on *Pitcairn's Island* may prove interesting at the present time. The Rev. G. H. Nobbs arrived in H.M.S. *Portland* on May 15th, 1853. "The *Portland*," he continues, "remained off the island four days, and then left us for the Gambier Islands. The next day after her departure the influenza made its appearance, and as there were two or three persons on board the *Portland* who were affected with bronchitis, I am inclined to think the germs of the disease were derived from them. Unfortunately, the wind was from the north-west, and the atmosphere was very dense and heated, which acted as fuel to the contagion; and so rapid was its progress that in one week there were not ten people capable of attending to their own wants. It was the most severe attack since 1840, the date of its first appearance among us. After an elapse of nine days the *Portland* returned, and the people on board her observing a flag flying on the shore, supposed it to be an intimation that the surf was too heavy to admit of boats landing, and the vessel was in the very act of sailing away when they providentially observed our boat coming off. On their making known to the admiral our sad condition, he humanely lay by all night (it being very late when our boat got on board), and in the morning sent Captain Chads and his secretary, with one of the ship's surgeons, to our assistance....I attribute the severity with which the disease was felt to the debilitated state of the community, owing to the scarcity of food which prevailed for some months prior to my arrival, when they had been reduced to great straits in consequence of the want of rain, which had prevented their planting their usual crop of sweet potatoes. It was for some weeks almost actual starvation, their only resource being half-grown pumpkins.....Myself and my son and daughter, who came with me, escaped the epidemic, and the rest of the community have nearly recovered. No deaths have occurred, so that we are able to sing of mercy and judgment.....The number of inhabitants amount to 172; 85 males, 87 females."

The following are extracts from the Public Register of the Island for 1853: "Thursday, May 19th. Several of the people were attacked with influenza. Friday, 20th. The epidemic rapidly spreading; many very ill. Henry Chads Christian born. Wednesday, 25th. Most of the people seriously ill and unable to help themselves. Saturday, 28th. Rainy and very thick weather. About 10 A.M. a ship was reported in sight to the westward; 12, the ship seen from the village, and instantly recognised to be the *Portland*. After some hours a crew of invalids pulled off to her."

The above extracts are interesting as showing that an isolated community such as the Pitcairn islanders, the descendants of the mutineers of the *Bounty*, can be attacked by an epidemic of influenza, although there is no evidence to show that the disease prevailed on board the *Portland*, the only cases mentioned being "two or three cases of bronchitis." Secondly, that those in feeble or ill-health are more likely to be attacked, and to suffer more seriously than the well-fed and robust; and, thirdly, that damp and warm weather, such as we have been having lately, is an important factor in spreading the disease.

MR. CASPAR R. LAURIE, M.R.C.S., L.R.C.P., L.S.A. (Loughton, Essex) writes to recommend for the relief of the catarrhal symptoms of influenza the inhalation of chloride of ammonium every three hours for five or ten minutes at a time. For the post-orbital and frontal pain and aching in the limbs and back he has found nothing equal to antifebrin in five-grain doses every six hours.

DR. H. HANDFORD (Nottingham) writes: During the past fortnight the number of cases of influenza has gradually diminished, till now the epidemic seems nearly over. The specific character of the disease has now been pretty generally recognised by the profession. Many of the individual cases have been severe and accompanied by a temperature of 103° to 105°. Though widely spread, the epidemic never assumed serious proportions. Among the police the total sickness rate rose from about 3 to 6 per cent. Among the *employés* of the three railway companies the amount of sickness was never sufficient in any way to interfere with the traffic.

There have been no cases at the gaol. At one of the asylums ten or twelve of the attendants have been affected; at another none. In a considerable number of instances whole families have been attacked, but far more frequently single cases have occurred. Several severe cases have been admitted into the fever block of the General Hospital, being sent up with a diagnosis of commencing enteric fever. Other cases have been admitted into the general wards, but, so far as I can learn, in no instance has it spread to other patients in the same ward. All the residents have been attacked and about half a dozen of the nurses and ward maids. There have been several severe cases at Newark-upon-Trent and at Beeston.

The Practice of Medicine in France.

Dr. de Valcourt, M.D.Paris, M.R.C.P.Lond., Physician (Cannes), writes: A recent letter of the Ministre de l'Instruction Publique was not clearly understood by the English public. I think useful to explain here the fact.

France is the most liberal country in Europe, and I believe the only one where foreigners are allowed to enjoy the same privileges as its own citizens. To be an M.D. in France, and to have the right to practise as such, one must be a Bachelier-ès-Lettres, as well as a Bachelier-ès-Sciences, and go through a course of five years medical studies, also pass several examinations, making in reality six years of hard medical study. Furthermore, a Frenchman is obliged to deposit his diplomas at the *mairie* of the town where he intends to set up in practice, and has also to pay the fee, or "taxe de patente," as it is termed.

We consider it is just that foreigners who, in their own country, have followed an equally complete course of studies, and have passed their "exams." and obtained their diploma, should be allowed to practise in France after payment of the said "taxe de patente," but it is very natural that English doctors should not be exempt from the law any more than French ones are; consequently, it cannot suffice that a medical man who, having gone through an incomplete course of studies, and possessing a second rate diploma in his own country, should have the right granted to him by favour to practise in France. All this is the more important as in general English doctors establishing themselves in France do not hesitate to attend, not only their own country people, but French, Russians, Germans, and other nationalities who may happen to require their services. In our winter resorts more especially are to be found every season any number of medical men who come out with invalids as their private physician, and who do not scruple to offer their services to other families inhabiting the same hotel, or residing in the same town as the patient, from whom he is well remunerated, In fact, a considerable number of English doctors frequent the hotels along our coast in quest of clients. Now these doctors have no legal right whatever, and do not even pay the tax required of them; however, this does not prevent their obtaining patients, though in a most irregular manner. These remind one forcibly of Offenbach's "Table d'Hôte Major" in "La Vie Parisienne," and might be termed "table d'hôte doctors." I do not for one moment suppose that it enters into the mind of anyone to approve of these underhanded proceedings.

To resume my subject, allow me to state, first, it has never been a question of changing the present state of affairs with respect to the numerous English doctors who for years have settled at Cannes or elsewhere, and who have been authorised to practise, after passing certain "exams.," and after paying the yearly tax to Government. It is therefore perfectly false to lead the minds of the British public to suppose they will in future be deprived of the medical advice to which they have hitherto been accustomed. Secondly, it is much to be desired that the French Government should only grant the right, after a short "exam.," to practise to those English doctors who possess diplomas that come up to the same standard as those awarded by the French medical faculty, and who are willing to pay the same tax as French doctors are obliged. By these means some sort of arrangement could be made, but at the same time all abuses must be repressed.

Treatment of Cystitis.

T. M. R. writes: Having not infrequently had experience of the obstinate nature of cystitis, I have recently been quite charmed by the marked good effected by balsam of copaiba. I had never tried it before, but, reasoning on its effects in gonorrhœa as well as in some cases of bronchitis, I resolved to give it a trial; this I did in doses *ter die* of mvij, along with liq. potassæ mxv, suspended in a little mucilage of gum tragacanth; the patient, a middle-aged lady, who had for some weeks taken inf. buchu in two-ounce doses three times a day, along with liq. potassæ and tinct. hyoscyami, felt relief with the very first dose, and in the course of a week was almost perfectly well; the case is, however, so recent that I am still keeping up the treatment.

Perhaps "J. R. B. K." may find my observation of service; if he does, I should be glad to hear from him. I presume "J. R. B. K." has made sure of the absence of calculus.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. A. Whyte, Brecon; Messrs. Mansell and Co., London; Dr. W. Squire, London; Dr. J. H. Jackson, London; Professor C. Roy, Cambridge; Mr. T. L. Laxton, Bridgwater; Dr. W. Reid, Gosport; Mr. R. J. Godlee, London; Dr. A. Davaine, Paris; Mr. Adams Frost, London; Mr. G. D. Smith, Salisbury; Dr. Vacher, Birkenhead; Mr. C. K. Butt, Hampton Hill; Mr. T. L. K. Davies, Glen Menai; J. E. Gemmell, M.B., Liverpool; Dr. J. G. McKendrick, Glasgow; Pollex; Dr. F. Bagshawe, St. Leonard's-on-Sea; Exodus; Rusticus; Dr. T. D. Acland, London; Messrs. Burroughs, Wellcome and Co., London; Mr. J. Ringwood, Kells; Dr. G. Thin, London; Mr. F. Godfrey, Scarborough; A.B.; Dr. J. MacLintock, Bradford; Veritas; Mr. M. H. Lush, Fyfield; Mr. R. Irvine, Granton; Messrs. E. Street and Co., London; Dr. I. Owen, London; Mr. W. O. Steinthal, Rochdale; Microbe; Mr. G. Dalzell, London; Dr. Leslie Phillips, Birmingham; Mr. H. R. Swanzy, Dublin; Mr. Morton Smale, London; The Secretary of the Hospital of St. Cross, Rugby; Dr. T. Partridge, Stroud; Mr. G. S. Stansfield, Birkenhead; Dr. B. Rake, Trinidad; Mr. W. A. Thomson, Ampthill; Mr. A. H. Benson, Dublin; Mr. F. C. Wood, Nottingham; Sir Henry Acland, Oxford; Dr. F. Pollard, Upper Tooting; Dr. Rentoul, Liverpool; Mr. G. B. Browne, London; Dr. W. Donovan, Erdington; Dr. Myrtle, Harrogate Dr. T. Cranstoun Charles, London; Dr. F. H. Collins, Manchester; J. W. F.; Dr. J. Barr, Liverpool; Mr. G. R. Tweedie, Broadstairs; Dr. Saundby, Birmingham; The Dean of the Guy's Hospital Medical School, London; Mr. C. Begg, Edinburgh; Another Member B.M.A.; Surgeon-Major J. I. Greene, Alexandria; Mr. C. E. Abbott, Braintree; Mr. T. R. Allinson, London; Mr. C. E. Jennings, London; Messrs. Hertz and Collingwood, London; Dr. C. W. S. Barrett, Hinckley; The Honorary Secretary of the Society of Medical Officers of Health, London; Mr. J. P. Wills, Bexhill-on-Sea; Dr. H. C. C. McNiell, Dover; Dr. P. C. Smith, Motherwell; Messrs. Burgoyne, Burbridges and Co., London; Dublin Student from 1883—88; Our Manchester Correspondent; F. Kendall, M.B., St. Mary Bourne; Dr. W. A. Garry, Thornhill; Messrs. Rayner and Cassell, London; Sir R. Thompson, London; Dr. G. E. Williamson, Newcastle-on-Tyne; Dr. Fulss, Netherton; Mr. P. W. Measures, Todmorden; Mr. R. J. George, Port Isaac; The Director-General of the Naval Medical Department, London; Mr. M. Hughes, Croydon; T. N. Kelynack, M.B., Manchester; Dr. A. B. Hill, Birmingham; Dr. Edridge-Green, London; Dr. R. Percy Smith, London; Dr. F. Dick, Lancaster; Fair Play; Dr. Paget, Salford; Dr. Edwardes, London; Mr. F. Cane, Letterkenny; Dr. E. H. Hardwicke, Llantwit Major; Mr. E. Nettleship, London; Mr. A. Hulme, Birmingham; Mr. C. B. Keetley, London; Messrs. Thurbers, Gates and Co., London; Mr. E. M. Keely, Nottingham; Mr. H. H. Tomkins, Ramsey; Dr. R. Barnes, London; Dr. W. H. Fenton, London; Mr. R. Draper, London; Dr. J. Anderson, London; Mr. J. Joakim, Edinburgh; Dr. Balding, Royston; Dr. G. Henty, London; Mr. St. Vincent Mercier, London; Dr. P. Boobbyer, Nottingham; Dr. W. Bruce, Dingwall; Dr. J. Wylie, Hull; Justitia; The Secretary of the Sheffield Medico-Chirurgical Society; Dr. M. T. Sadler, Barnsley; Dr. S. W. Smith, Cheltenham; Dr. J. W. Carr, London; Dr. Brailey, London; Our Liverpool Correspondent; Mr. J. West, London; Mr. R. E. Durdin, Hungerford; Our Paris Correspondent; Dr. O. T. Woods, Killarney; Mr. W. P. Bridges, Devlali, India; C. C. Caleb, M.B., Lahore; I.V.R.C.; Dr. B. Poulton, Adelaide; X.; Surgeon-Major T. H. Hendley, Jeypore; Mr. J. Bland Sutton, London; Dr. F. E. Pocock, London; Mr. J. W. Williams, London; An Irish Physician; Dr. F. T. Heuston, Dublin; The Secretary of the Sanitary Institute, London; Dr. W. Dale, King's Lynn; Mr. A. Churchward, South Norwood; Lieutenant C. W. D. Beresford, Harrogate; Dr. C. W. Haig-Brown, Godalming; W. G. Stevens, M.B., Renfrew; T. Bell, M.B., Worcester; Mr. C. Macnamara, London; Mr. W. G. N. Burney, London; Dr. F. C. Turner, London; Mr. M. Rooke, Cheltenham; Professor F. J. Bell, London; Dr. S. Smyth, Bournemouth; J. A. D.; Mr. W. Pye, London; Mr. A. Cooper, London; Dr. Poulton, Adelaide; Dr. J. Reid, Melbourne; Dr. J. Farquhar, Burbage; Mr. Jonathan Hutchinson, London; Mr. C. R. Laurie, Laughton; Surgeon-Major T. H. Hendley, Jeypore; Dr. G. Johnson, London; Messrs. Lynch and Co., London; etc.

BOOKS, etc., RECEIVED.

New Zealand for the Emigrant, Invalid, and Tourist. By John Murray Moore, M.D., M.R.C.S. London: Sampson Low, Marston, Searle, and Rivington. 1890.

Syphilis et Santé Publique. Par T. Barthélemy. Paris: J. B. Baillière et Fils. 1890.

The Young Practitioner: His Code and Tariff. By Jukes de Styrap, M.K.Q.C.P., etc. London: H. K. Lewis. 1890.

A Textbook of Animal Physiology. By Wesley Mills, M.A., M.D. New York: D. Appleton and Co. London: W. Allen and Co. 1890.

Asthma Considered specially in Relation to Nasal Disease. By E. Schmiegelow, M.D. London: H. K. Lewis. 1890.

A Handbook for Operators in Medical Electricity and Massage. By H. Newman Lawrence, A.I.E.E. London: George Gill and Sons.

Habit and Health. By Guy Beddoes. London: Swan Sonnenschein and Co. 1890.

Health Troubles of City Life. By George Herschell, M.D. Second edition. London: Swan Sonnenschen and Co. 1890.

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REMARKS
ON
SOME FACTS ILLUSTRATING THE EARLY STAGES OF LEPROSY.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
President of the Royal College of Surgeons.

In the search after the cause of leprosy the study of its earliest stages becomes of much importance. Is it possible, by observation of its initial lesion (if it has an initial lesion) to infer anything as to the means by which the bacillus gains entrance to the body? All our popular notions of the disease are derived from examples or representations of its latest stages. I know but very few portraits or photographs which even profess to show the earliest symptoms, and none which show it well. In the living subject it is difficult of diagnosis, and would never be suspected except by skilled observers. When I was in Norway I remember well being struck by seeing in the leper hospitals children who appeared to me to be perfectly well. On asking to be shown the means by which identification was arrived at, little brown scaly patches on the limbs were pointed out, which were anæsthetic in their centres. Sometimes a child had only a single patch of this kind. At that time—it is more than fifteen years ago—endeavours were being made in the United States to prevent the ingress of Norwegian lepers, and all immigrants from Norway were inspected before they were allowed to land. "But," said my Bergen friend, "they only recognise bad forms, and those at seldom go over; they don't know such cases as these."

The lesions of leprosy chiefly concern the skin and the nerve trunks. We may, I think, take it as certain, for all observers agree on this, that the disease usually begins in the skin, and from the skin passes as an ascending neuritis up the nerve trunks. It is of great importance to know, however, whether this is invariable, and whether there are any cases in which it begins in nerve trunks and produces skin phenomena subsequently. If there are any such they are admittedly rare. It is next of much interest to ask whether the early phenomena of leprosy are such as to suggest local or general infection. Do they occur symmetrically or singly, and if single and local, is there ever any reason to believe that the poison has been implanted on the surface? Is there ever any primary lesion in the sense that a chancre is the primary lesion of syphilis? The cases which I have to record have been observed with especial reference to these questions. They contain, also, some valuable information as to the rate of progress and duration of the different stages. By demonstrating the occurrence of the different symptoms, brown patches, erythema, tubercles, anæsthesia and nerve lesions, all in the same patient, they also sufficiently confute the notion that there are various forms of leprosy. All cases are, if you observe them long enough—that is in all their stages—of the mixed form. Leprosy is invariably one and the same malady.

Case of Leprosy in which slightly marked Diffuse Erythema was the First Symptom.—A case of leprosy which was brought to me by Dr. A., of Jamaica, differed from most that I have seen in the exceedingly ill-marked and superficial character of the erythema. It was, indeed, so ill-marked that Dr. Anderson, himself well experienced in the disease, had felt some little doubt as to the diagnosis. The patient was of dark complexion, inheriting, in fact, a slight admixture of dark blood. It was impossible to define the areas which had become more dusky in consequence of the disease. They were very large, and involved almost the whole surface of the extremities and neck; possibly also the trunk, but I had no opportunity of examining it. The face was not affected, at least not in any material degree. The skin was not thickened, but had simply become browner than natural. In one or two places a slightly scaly condition, like an ill-margined psoriasis patch, had been produced, but these were very few. This condition was attended by a diminution of sensibility in all the extremities. She had put her feet into hot water, and scalded one of them so that it blistered, not being able to estimate the temperature properly. The pulps of all her fingers had wasted, leaving them tapered, or almost pointed. This condition was more observable in some fingers than in others. Around the roots of the nails little vesicles and pustules had formed repeatedly. She could, however, use her fingers tolerably well, and there was no obvious wasting of muscles (I did not test them by electricity). There was no special numbness of the ulnar nerve region in either hand, but the middle finger was in one hand decidedly more numb than the rest. I have no doubt that the numbness was due to the state of the skin, and not to any disease of the nerve trunks. On some parts of the neck there were similar areas of white, looking exactly like those of leucoderma. These patches were almost, but not completely, anæsthetic. I might have said that in the middle finger mentioned a pin could be thrust deeply without her feeling it at all. The white patches mentioned on the neck were so inconspicuous that they would not have been noticed unless specially looked for.

Our patient was aged 25. She was stout, and had the appearance of good health. She had been born in Jamaica, but there was no hereditary history of leprosy. She had been accustomed to eat fish, both salt and fresh, moderately. Dr. A., of K., who came with her, told me that in his practice leprosy was especially common in the Jews, and that they eat fish much more freely than the Christians.

March 28th, 1887. She is about to return to Jamaica. It is four months since my previous notes. The dusky erythema has spread rather rapidly over her face and hands; it is attended by very little swelling. The hands are dusky brown, and dry all over, the condition being most marked in the fingers. Patches extend up the forearms, which have definite margins, but very little thickening. The middle finger of the right hand feels, she says, heavy and numb, otherwise no parts of the fingers are anæsthetic. The conditions are fairly symmetrical.

Erythema of the Extremities, possibly preceded by Patches, the Earliest Symptom: Almost Simultaneous Occurrence on all the Extremities: Possible Error in Patient's Observation: Interval of Several Years since Patient's Residence in Leprous District before the Beginning of the Disease.—The subject of the following narrative is at present under my observation, and has been so for the last six months. He had previously attended at several hospitals, with a diagnosis of peripheral neuritis. His case is at first sight an example of the disease beginning as a symmetrical and very diffuse erythema of all four extremities. Both his hands are dusky and slightly puffy. The duskiness varies in tint at different times, excepting in being a little dry, especially in the palms; the skin of these parts presents no alteration in structure. On tracing the erythema upwards it ends about a hand's breadth above each wrist by an irregular but tolerably definite line. Wherever the erythema is there the skin is definitely numb, but it is nowhere quite anæsthetic. On the fronts of both elbows there are groups of yellow-brown patches, about as large as half-crowns, not in the least raised, and not in the least scaly. There are similar patches on the backs of the forearms and backs of the elbows. All these patches are more or less anæsthetic in their centres, the anæsthesia appearing to vary with the duration of the patch and the degree of whiteness of the centre. On the lower extremities the conditions are somewhat different, for the erythema is here not diffuse, but the condition is one of dark brown patches, which are pigmented rather than congested, and between which the skin retains its natural condition. All these patches are anæsthetic in their centres. There are groups of patches on the fronts of the knees, exactly like those described on the elbows. On the trunk, with the exception of a very few indefinite brown stains, there are no marked changes, nor are there any on his head or face. Some who saw him fancied that there were stains on the forehead. The ulnar nerves are enlarged. His hands are numb and somewhat helpless. His own remark is, "I can use my fingers provided I can see them, but if I cannot see them I cannot do anything." His history is exceptional, for he had been at least ten years in England before he recognised the disease. He is a man of 44, with the appearance of good health, and strong. He was born in Germany, but served in the English army in Burmah, India, and Abyssinia from the age of 22 to 32. He returned from Bangalore in 1878, and has not since that date lived out of England. When abroad he had good health, with the exception of syphilis, both primary and secondary, possibly more than once. He first noticed symptoms of his present affection not more than a year ago, and he began

to suffer from numbness of his fingers and inability to write well. It was diagnosed as rheumatic gout, and he was sent to Bath. At this time he had a good deal of pricking pain in the hands.

Leprosy beginning as Dusky Patches on one Foot, and next Affecting the other: Subsequently Patches on the Face.—March 3rd, 1882. A peculiar feature in this case is that the disease began on the feet, and for some time did not affect other parts. He has now many patches on legs and feet of both limbs, looking exactly like very superficial non-ulcerating lupus. He has no manifestations of the disease in other parts, excepting on the face, where during the last eighteen months a few dusky patches have appeared. These have now so much subsided as to be scarcely seen, and they have not left much anæsthesia. One only is definitely numb. They are not quite symmetrically placed, but almost so. None are round, but rather in ovals, the margins being indefinite. They are not now in the least raised, but he says that they were so formerly.

Mr. H. is aged 21; he is probably of remote Indian descent (on his grandmother's side). He was born in Calcutta. He lived fourteen years in Calcutta, and there went to Mussurie (to school) a Hill station, and subsequently (aged 18) returned to Calcutta. He knows nothing of leprosy in the family before. He has two brothers and two sisters quite healthy. At Calcutta he ate fish, usually once a day when in season (that is during cold weather), "mango" and "Backty." He says that these fish are eaten by everyone for breakfast; prawn currie was also much eaten. In September, 1879, he found that his right foot was numb, and that he could not move the toes. No discoloration was noticed till a month later. A feature of great interest in this case was the consequent wasting of a group of muscles in one leg. This was the leg on which the first patches had been observed (the right). In it the extensors of the leg were wasted, and the peronei to some extent. His right calf was wasted and measured only eleven inches in girth, whilst the other was fourteen. The wasting was quite conspicuous, and I had a drawing taken to show it. The history favoured the belief that the neuritis had travelled upwards from the patches on the skin.

Leprosy Case from South Africa: Erythema Patches, the First Stage—June 15th, 1885. R. —., aged 50, married, ten children. He is a wine farmer, residing in South Africa, 160 miles from Cape Town. He has been three months at the Taike Hospital, and three at a hydropathic institution. He states that Y., a fellow villager, began before him. He tells me that waggons travel inland with salt fish, and that the villagers buy a good deal. Sometimes they eat salt fish every day for a week, and then not for a month or more. He tells me that there is some leprosy at Wellington and some other places. He thinks that it is not common amongst the natives, and that it is indeed a new disease in South Africa. In him it was first noticed in November, 1883, as erythema patches. He is still, now two years later, in the erythema stage.

Leprosy commencing as an Erythema; Patches on the Legs.—In the following narrative I have unfortunately forgotten to note the dates. The patient was a young lady of English birth, who had lived in Jamaica. January 18th, 1876. The patches on the face are not accurately symmetrical, but on both sides freely present. Here they are ill-margined patches of erythema, without any difference between centre and margin. No degree of anæsthesia. On the legs the patches are much larger, dusky erythema at margins and paler in the middle; anæsthetic in latter. On the feet also the tendency to symmetry is very definite, but exact symmetry is not attained. Some of the patches get the start of the others. Very few and small patches on the body, one or two small ones on the waist, and several on the hips. They occur chiefly on the extremities.

February 2nd, 1880. Four years after the above notes, I heard that Miss B. had returned to Barbadoes, and that she had got rid of the red patches, and was in good health. I had prescribed arsenic, and as I invariably do, had prohibited fish.

Leprosy in Two Brothers of English Parentage, born in Jamaica: No Known Heredity: Erythema Patches on Limbs the First Symptom.—Master G. R., a tall thin lad of 15, was brought to me on May 26th, 1886. He had just come over from Jamaica, where he had been born; he was of English descent, but his mother, like himself, had been born in the island. It was not known that leprosy had ever before occurred in the family until his elder brother was attacked. This elder brother, five or six years older than G., had recently died of the disease after suffering from it severely for about three years. This lad was brought to me for the purposes of diagnosis. He was as yet in perfectly goo health, and had but little external indication of disease. On hi cheeks and forehead, however, there were ill-defined dusk patches of erythema, attended by the slightest possible thicke ing of the parts; these looked exceedingly suspicious. I mad him strip, and then found on the backs of both thighs a conside able number of erythematous blotches or patches. Many of the had white areas in their centre. The white condition ofte covered an area the size of a sixpence or a shilling, and where it wa the skin was anæsthetic or nearly so. These erythematous patch were arranged with tolerable symmetry on the two limbs. The were ill-defined and quite without thickening.

I have seen this patient recently, that is, two years after t above notes, and find no material progress. He has taken arsen continuously and abstained from all fish.

Leprosy in a Father and Child, both English: Commencement the Father as an Isolated Patch on Shoulder.—May 4th, 1883. M P., aged 48, born in England, of English parents. He has bee twenty-seven years in India, having been engaged on the Ganges f six years, from 1856 to 1862; in Allahabad from 1862 to 1868, Oude from 1868 to 1872, and Scinde from 1872 to 1879. He used eat fish whenever he could get it, and prawns. A white patch w noticed first on the right shoulder; it was numb. The disease w not then recognised. In 1879 the general outbreak took plac It did not show itself on the face till 1880. It is now (May 4t 1883) a very severe case. The whole surface is involved in dusk raised patches. The face is much disfigured, the voice husky, a the eyes congested. The ulnar nerves are enlarged. No part quite anæsthetic, but all are numb. He can judge of heat fair well. Cold does not suit him. His tongue is lumpy; a number small roundish lumps are scattered over it, the whole surface bei raised and partially bald. His gums are thickened, also t mucous membrane of the cheeks to a slight extent. He speaks "welts" of thickened skin. The iodide of potassium took aw some of these, but did him no other good. He has complain for five or six months of a cold feeling in the back, also of "pi and needles in some parts of the skin." For two or three years has lost sexual desire and competency, mainly, he thinks, fr numbness of the penis. One of his children, a boy of 9, return to England, and there developed leprosy. He was seen by Sir Fayrer and Mr. Balmanno Squire. He died of "heat apoplex No other child has suffered, nor has his wife. His wife was partial to fish.

August 31st, 1883. He now complains of lack of energy. can use his interossei well. He has numbness in fingers and h in outer parts of feet, and is obliged to put the feet out of bed cool them.

Dr. P. reported in April, 1884, that Mr. P. had had two sev attacks of iritis, and, latterly, sloughs at the bottom of the fo which have healed. He has returned to India.

Long Continued Restriction of Leprosy Conditions to One Lim Brown Patches the First Symptom.—The case of A. R., a Benga affords a remarkable example of leprosy restricted to one tremity for a long period, and in this feature is very like that the boy D., whom I have had under my care for many years, who has recently died. D. in the first instance was under treatment of several nerve specialists for paralysis of one ul nerve, and I believe that the diagnosis of leprosy was not s pected until I saw him, and this was at least two years after nerve first became paralysed. He was then beginning to sh patches in the skin of various parts, and diffuse general erythe and finally, about ten years from the beginning, was the subj of the most hideous deformity from the development of tuber on his face. His eyes, his mouth, and his larynx all suffered, he finally sank from laryngeal disease. Our present patient, A. may possibly be only in the early stage of a disease of sim severity. For the present he has nothing whatever, except contractures and numbness of his right hand from disease of nerves. His ulnar nerve has suffered the most, and there are tinct hollows between the metacarpal bones, but the media affected also, and the musculo-spiral possibly to some degree. extensor muscles are the only ones which he can use well. hand is clawlike, and the fingers bend backwards at the car metacarpal joints. There is general numbness of the whole ha though most definite on the ulnar nerve regions. His history firms the belief that the affection of nerve trunks in leprosy usually secondary to disease of the skin which they supply, probably travels upwards from the skin. He states that the symptom was some brown patches on his hand. The same wa

believe, the fact in the case of the boy D., whom I have mentioned above.

This patient subsequently told me that he was sure that he had had patches on his wrist in boyhood and some years before the weakness of his hand.

Leprosy beginning as Brown Patches on Thighs and Legs.—May 1883 A. ——, aged 18, born in Colombo, and has lived there all his life. A year ago first noticed spots on his thighs. He has six brothers, and he is the youngest but two. All the others are healthy. They have lived alike. Fish was abundant and taken freely. He was himself very fond of fish. The disease began as brown patches on his thighs and legs about a year ago. The patches are now large on his thighs, buttocks, and upper extremities; not any on face, excepting a few on ears, and very few on the trunk. The patches are scarcely raised, but are simply dusky, with white areas in the middle. Where the skin has become white it is anæsthetic. The feet are somewhat affected, the left more especially, but the patches are ill-defined, the whole limb being dusky; on the instep of the left foot is some thickening. I detect no numbness. His left leg looks thinner than the other, and its calf measures half an inch less than the other, 12½ to 13 inches.

Leprosy beginning as a Single Patch on One Thigh, which preceded all other Symptoms by several Years.—A gentleman, named ——, aged 27, was brought to me in November, 1880, by Dr. Hingston Fox. A papular eruption had quite recently shown itself on his body and limbs, but he had had, so he said, an anæsthetic patch on one thigh for several years. I saw him again in March, 1881. When, two years later still, I saw him for a third time, February, 1883, the conditions of leprosy were well developed. He was of mixed blood; had been born in India. He had suffered from syphilis and also from malaria. He had been fond of a fresh water fish which he knew as "rohu."

On March 31st, 1881, I saw him again, and made the following note: In right hand both ulnar and musculo-spiral nerve are defective, but neither of them quite paralysed; the ulnar is much enlarged. He is covered by an eruption in patches of various size arranged much like psoriasis on face, limbs and trunk; these patches often become confluent. In their centres, when it is receding, the skin is a little numb, but not absolutely anæsthetic; all are brown and desquamating; none are much thickened.

On February 28th, 1883, I made the following notes: It is a good example of loss of sensation in his extremities without loss of motion. He came with the palm of the right hand blistered all over from having taken hold of a hot iron handle, the heat of which he could not feel. He says that the whole of both hands is numb, and equally so in all parts, back and front, but thinks that the ring finger was the last to go. The failure, however, does not appear to have been in the region of any one nerve. The numbness, which involves the whole of the hand, wrist, and lower part of the forearm ends gradually at the elbow and a little above it, but sensation remains imperfect much higher. Here, as in the hand, we cannot distinguish any difference of skin in the distribution of particular nerves. He reports his feet in much the same condition as regards numbness, and on one there is a sore. There is little or no muscular wasting. He can use his hands for most purposes, though clumsily; he states that he could use them well until the last month or two. The skin of the hands at present is not much altered, and might easily escape observation; it is, however, abnormally dry and harsh, the palms especially so. There are no defects in the nutrition of the nails excepting a few transverse ridges. He has lost his toenails repeatedly. There is no wasting of the muscles of the leg, but it is to be understood that both legs and arms are thin. His ulnar nerves are enlarged to three times their natural thickness. On the trunk the erythema is still in the stage of large patches, which have not in many instances coalesced. These look much like huge urticaria wheals, but are of a yellowish-brown tint. They are spreading out their edges, and will probably in time cover the whole surface. On his face the erythema is diffuse and universal, but the patches show margins on his neck. On the trunk and face the erythematous areas are defective in sensation, but by no means devoid of it. On his face he thinks that the sensation is returning, but on other parts it appears to be greatest where the erythema has persisted longest, or disappeared. A sore under the left great toe passes down to the bone (*ulcus perforans*). He was born in the North-West Provinces of India, and lived there till 1880.

Leprosy beginning as Large Freckles on the Forehead.—Mr. R., a gentleman aged 35, was brought to me by Dr. Cassidy in July, 1882. He had been born in India, but brought to England for education. He returned at the age of 18. At the time of his return he was in good health, and remained so for some years. The first symptom noticed was some large freckles in his forehead, and subsequently on his body. The disease was not diagnosed until 1875, when, in consequence of having got a thorn into his foot, he had to show his limbs to a surgeon. He had lived in various parts of Bengal. He used to eat all sorts of fish that he could get, and had it frequently. Prawns, he said, he ate but seldom, as he did not like them. He said that the rivers and ponds abounded with fish, and he asserted strongly that a "native will eat anything that he can afford to buy." "All castes eat fish; some will not eat fowls, but in none does religious prejudice interfere with eating fish." He had never seen a European who had leprosy, but he had heard that a friend of his died of it.

Leprosy beginning as Erythema.—I saw in St. George's Hospital, under the care of Dr. Cavafy, a case of leprosy which presented some features of interest. The patient was a young man of 25, who had lived in India for many years. In the main his case exactly resembled that of the boy D. He had had general erythema, leaving the skin in a flabby, discoloured condition. His ulnar nerve regions, though not anæsthetic, were dull in sensation. I was particularly interested in the state of his eyes, which were like those of the boy D., only in a more advanced condition. There was general vascularity of the conjunctiva and all round the ciliary region; that was in a state of puffy thickening, without the development of any papules or pustules. A slightly marked ring was noticed in the cornea, but nothing that deserved the name of arcus. As regards the question of fish as a cause, the man stated that he had not been specially fond of fish, but had eaten it to a moderate extent. He had also eaten prawns, but not more freely than others did.

Leprosy beginning as Erythema Patches on the Cheeks: Symmetrical Development and Rapid Multiplication.—Mrs. H., aged 30, was born in India. Her father was a native of North Ireland, her mother of European parentage, but born in India. She was born at Trichinopoly, and has lived at various places in India, but always near the sea. She has been married sixteen years, and has two children. She has enjoyed good health, and has never been the subject of any serious illness until the present ailment. She has been accustomed at most places to eat fish, but has avoided what she thought unwholesome. Her present illness began in June, 1874, when she was living at Calcutta. She was feeling in perfect health, with the exception of a severe cold, when she first noticed red patches on her cheeks. Soon afterwards she had others on her arms and legs. They gradually increased, and appeared over the whole body. Since the disease began she has had pain in her back and general feeling of weakness. The aching in her back prevents her from sitting long, and also from walking much. There has been no pain or irritation in the patches, but they easily become sore if she scratches them.

The eruption is now fairly symmetrical, but the patches on the two sides of the body are not by any means of equal size. On the cheeks this is especially conspicuous, for a large patch covers the left cheek which has no fellow on the right. On the arms, etc., the patches vary in size from shillings to crowns, or even to the palm of the hand. Most of them are flat, slightly elevated, and of dull, dusky purple tint; none are tuberculated. Her eyebrows are not affected, but on the lower eyelids on both sides indistinct patches of discoloration are just making their appearance. On the arms and legs some of the largest patches have become white in the middle, and wherever this whiteness occurs there is more or less of anæsthesia. The loss of sensation is not complete, but considerable. It cannot be appreciated when the patches remain dusky. The ulnar nerves are not enlarged, and there is no muscular paralysis.

(To be continued.)

TENURE OF OFFICE.—A special meeting of the governors of the Hastings Dispensary was held on February 12th to consider proposed amendments to certain rules, the chief being a proposition to alter the regulations as to the election of medical officers of the institution, a question having been raised as to whether by the existing rule these officials were appointed for life. By the alteration they would be elected for the term of three years. There was much opposition to the amendment proposed, it being contended that it was put forward with a view to dismissing one of the best men on the present medical staff. Eventually the motion to amend the rule was rejected by an overwhelming majority.

A CLINICAL LECTURE
ON
THE ANALGESIC ACTION OF METHYL-ACETANILIDE OR EXALGINE.

Delivered at the Royal Infirmary Edinburgh, February, 1890.

BY THOMAS R. FRASER, M.D., F.R.S., F.R.C.P.E.,
Professor of Materia Medica and Clinical Medicine in the University of Edinburgh.

GENTLEMEN,—I intend to-day to depart a little from the kind of subject-matter which supplies the main topics for discussion in this lecture room. At the same time, the subject I propose to deal with is one that is obviously and intimately related to our studies in clinical medicine. We cannot, I think, too frequently be reminded that the chief object of these studies is to increase our therapeutic resources; and I do not know that there is any result of disease that more imperatively demands the attention of the physician than the relief or removal of pain. The success with which this can be accomplished may, on the whole, be regarded with complacency, for that success has proved one of the most powerful causes in establishing confidence in the art of medicine, and it has been associated with some of the greatest triumphs in the history of that art.

Restricting attention to pharmacological agents, you are aware that the most important of them are opium and several of its alkaloidal principles, belladonna, stramonium, and other plants yielding atropine-like bodies—aconite, cocaine, bromides, and volatile oils; as well as chloroform, ether, chloral, and other general anæsthetics and hypnotics of artificial production. Your pharmacological studies, however, have placed you in a position to appreciate the statement that the success obtainable by the use of these agents is not an altogether unqualified one. In the case of many of them, as of opium and belladonna, the relief of pain, produced by their general action or by their localised action is accompanied with other effects that are neither desired nor desirable. In the case of others, this relief can be obtained only when they are applied to or near the seat of pain, and this application is often impossible, and is generally attended with some inconvenience. Pain, further, is a sensation which, for its appreciation, does not require that all parts of the cerebro-spinal nervous system, nor even that all the sensory ganglia in the brain, nor all the fibres of a sensory nerve, should be involved. It is equally unnecessary for its removal that change should be produced in more than one or a few of the nerve structures concerned in its manifestation. Restricting attention to that part of its possible appreciation which is brought about by conduction along a sensory nerve, the distinction I am attempting to explain may be rendered more apparent if I remind you that in certain diseases of the nervous system, common or general sensibility may be retained, while in the same region the appreciation of excitations that usually cause pain may be absent; that, in fact, analgesia may be present, while tactile or thermal sensibility is retained. Whether this analgesia be due to a central or a peripheral change, its independent occurrence is significant, for it suggests that a pharmacological modification of a physiological condition, equally with a pathological modification, may remove pain by acting only on the special nerve fibres or on the special centres (hippocampal region of Ferrier) by which painful impressions are conducted or appreciated.

A pharmacological analgesia of this kind, indeed, appears now to be recognised as an effect producible especially by several bodies recently constructed by the chemist, and recently applied to the treatment of disease, and more particularly by many of the bodies included in the aromatic series of the carbon compounds. The salicyl compounds are probably those in which it has first been recognised, although, in all probability, the previously known pain-removing influence of quinine—a natural product in the same chemical series—is of the same kind. The analgesic power of most of the aromatic bodies is, however, only a subsidiary effect, generally overborne by such other effects as the antipyretic, diaphoretic, and antiseptic, and producible only by large doses. When used merely as analgesics, they accordingly, like opium and the older pain removers, have inconveniences, and they, also, are not to be regarded as free from danger in their analgesic applications. The requirements of therapeutics have not been entirely satisfied by them; for, while they may remove neuralgic pain by an action on pain-conducting or pain-perceiving structures, they cause, when used in the doses required for this purpose, other actions which have nothing to do with the relief of pain, and, besides, are often injurious to the patient. We recognise these disadvantages in antipyrin and antifebrin, probably the most efficient analgesics in this series, for analgesia can rarely be produced by them except with large doses, and, therefore, with the inconveniences and dangers of gastric disturbance, deafness, profuse sweating, disturbance of the circulation, and changes in the blood.

The study of the members of this aromatic series has shown that even slight changes in their chemical constitution may be followed by marked changes in their pharmacological action. Antifebrin illustrates this. It is acetanilide, and when it is combined with methyl, the new body, methyl-acetanilide, is found to be a more powerful analgesic than the acetanilide from which it is derived, and the doses by which pain may be removed by it, are, according to the statements that have been made, too small to produce any of the inconvenient or dangerous effects which may be caused by larger doses.

Methyl-acetanilide or exalgine is one of the four methyl derivatives of acetanilide discovered by Hoffman in 1874—the other three being ortho-, meta-, and para-acettoluid. Its formula is $C_9 H_{11} NO$. It is characterised by its complete solubility in benzole, boiling between 80° and 85° C.; by its melting point being between 99° and 100° C.; and by its forming a nearly colourless solution with strong nitric acid, which, when heated, becomes bright yellow, but does not evolve irritating fumes. It occurs in the form of colourless, needle-shaped crystals of considerable length, which have a faintly aromatic odour and a slightly pungent taste. It is nearly insoluble in water, but is freely soluble in rectified spirit, and even in dilute alcohol. I find that from 16 to 20 grains may be dissolved in half a drachm of rectified spirit, and that this solution may be diluted with 3 or 4 ounces of water and still remain perfectly clear. As a solution so made, and containing half a grain or 1 grain in a teaspoonful, has but little taste, I have generally used it without the addition of any flavouring agent.

Some of the pharmacological properties of methyl-acetanilide or exalgine were determined by Hepp and Kahn in 1877; but what promises to prove its most valuable action has been made known only within the last few months by Bardet, Gaudineau, Binet, Dujardin-Beaumetz, and Desnos. I shall refer to the results of these observers only so far as to say that methyl-acetanilide or exalgine is not an aromatic body whose antithermic action is likely to prove valuable, as it is producible only by doses which verge on the toxic; but that the analgesic action of exalgine, on the other hand, and in remarkable contrast with the analgesia producible by acetanilide, is manifested by relatively small doses. As the observations I shall bring under your notice have shown, this analgesic action further may be decidedly produced without any other observable effect, unless it be a doubtful tendency to induce sleep, and, therefore, by doses which apparently are absolutely free from danger, and even from inconvenience.

For the opportunity of making the observations I am indebted to MM. Brigonnet and Naville, of Paris, who have paid much attention to the manufacture of methyl-acetanilide, and, judging from the beautiful crystalline specimens they have sent me, have succeeded in producing it in an extremely pure form. My observations have as yet been restricted to the influence it produces on pain.

I have administered it in essential neuralgias, and in pain produced by a number of diseases. Having had no previous personal knowledge of its properties, I have generally given it in the small dose of half a grain; but 1, 2, and 4-grain doses were also administered. The largest quantity given in twenty-four hours was 14 grains, and no disagreeable, much less dangerous, effect was produced by this quantity.

I shall now give a few details of the observations that have been made, commencing with cases of neuralgia:

T. D., aged 30, under treatment for bronchitis, has recently begun to suffer from neuralgia of the right inferior and superior trochlear nerves. The pain is described as "gnawing" and "toothache-like" in character, constant, but with exacerbations of a severe stabbing sensation during coughing. There is also pain in the right eyeball, and tenderness on pressure over the right supra-orbital foramen.

January 23rd. At 11.30 A.M., gave half a grain of exalgine. Pain

oon became less severe, and in one hour it had disappeared, and remained completely absent for two hours.

January 24th. At 9.30 A.M., while pain was very severe, he received half a grain of exalgine. Within an hour great reduction in pain, but relief not so complete as with the first dose.

January 25th. Severe pain from 9.30 A.M. At 11.17 1 grain of exalgine was given. In one hour and ten minutes pain almost completely gone, and relief continued for nine hours.

January 26th. Severe pain from 9.20 A.M. At 11.43 1 grain of exalgine was given. In one hour almost no pain, though tenderness on pressure continued. Soon after the latter also disappeared, and there was no return of pain until the following morning.

January 27th. Severe pain began at 8.30 A.M. At 10.30 1 grain of exalgine was administered. In half an hour pain, and even tenderness on pressure, had completely disappeared, and they remained absent for twenty hours.

January 28th. Pain began at 7 A.M., and had become very severe at 8 A.M., when 1 grain of exalgine was given. The pain became much less in one hour, only slight tenderness was present in two hours, and there was neither pain nor tenderness in three hours.

On the 29th, 1 grain produced similar results, but within a shorter period.

On the 30th the pain commenced at 7 A.M. It was very severe at 8.20, when a grain of exalgine was given. In thirty minutes the pain had almost completely disappeared; in a few minutes afterwards the patient was asleep, and, when he awoke an hour afterwards, there was no pain nor tenderness. Since this date the patient has remained perfectly free from pain.

In the next case, that of A. T., aged 36, sciatica had been continuously present in the right leg for five months. During eleven weeks of this time he had been under treatment in Stirling Infirmary, where blisters, acupuncture, and several internal remedies had been employed, and had apparently lessened, without removing, the pain. He was admitted into the Edinburgh Royal Infirmary on January 4th, 1890. During the first few days following his admission no treatment for sciatica was adopted, and the pain increased in severity from day to day, so that immediately before using exalgine it was continuous, and of a dull "gnawing" character, but frequent severe paroxysms occurred, with tearing and stabbing sensations; and during the paroxysms, which generally lasted for from one to two hours, the patient moaned and perspired profusely. Exalgine was given on ten occasions during a week, and it is impossible to do more than briefly summarise the results. On each occasion the exalgine was given at the beginning of a severe paroxysm. Half a grain greatly reduced the pain in fifteen minutes, and it remained very slight for one hour and fifteen minutes; half a grain again greatly reduced the pain in fifteen minutes, and it remained very slight for three hours; 1 grain produced only slight relief; 1 grain almost completely removed the pain in forty minutes, and the relief continued for three hours and a half; 1 grain caused great relief in ten minutes, and almost complete removal of pain in thirty-five minutes; 1 grain caused great relief in fifteen minutes, and the pain was almost absent for one hour and ten minutes; 1 grain caused great relief in twenty minutes, after which the patient slept for six hours, and no paroxysm occurred during the three following days; 1 grain caused great relief in thirty minutes, and pain remained absent for eight hours; 1 grain caused great relief in thirty minutes, and pain remained absent for fifteen hours; and on January 21st, 1 grain caused great relief in twenty minutes, and no further paroxysm of pain has since occurred, although some uneasy sensations, not amounting to pain, have at times been felt in the right knee and leg.

In a case of herpes cervico-brachialis ten administrations of exalgine were made during five days. The patient, J. C., aged 35, suffered from continuous neuralgic pain, with exacerbations in severity, in the right interscapular and supra- and infraspinous regions, and extending down the whole of the right arm to the wrist. The pain began seven days before the eruption appeared, and it continued unabated after the appearance of the eruption. Exalgine was usually administered at the beginning of severe exacerbations of pain. Half a grain caused complete relief in ten minutes, which continued for an hour and twenty minutes; half a grain caused complete relief in a few minutes, when the patient fell asleep and slept for three hours; half a grain almost entirely removed the pain in twenty minutes, but the patient slept for only thirty minutes; three-quarters of a grain relieved the pain in a few minutes sufficiently to allow the patient to sleep, and sleep continued for two hours; three-quarters of a grain gave sufficient relief to allow sleep in thirty minutes, and the sleep continued for two hours and a half; half a grain produced only slight relief; half a grain was followed in five minutes by sleep, and the patient awoke one hour afterwards without pain, and no further pain occurred for nine hours; 1 grain caused entire relief in ten minutes, and the pain remained altogether absent for four hours; 1 grain caused entire relief in twenty minutes, and the patient then slept for five hours. On awaking slight pain gradually returned, but it was now felt only in the wrist and back of the hand, and the pain did not again anywhere become sufficiently severe to require further administration of exalgine, although the herpetic eruption still continued.

In another case of neuralgic suffering the patient, C. B., aged 45, was recovering from hemiplegia of the right side. The pain affected the right arm, which had only partially recovered its motor power, and especially the neighbourhood of the shoulder, elbow, and wrist joints, and the whole hand. The pain had been present for a month; it was dull and aching in character, and nearly constantly present, though most severe during the afternoon and evening, and sleep was frequently prevented by it. Eleven administrations of exalgine were made during a period of three weeks. In ten of the administrations the dose was half a grain, and in the eleventh 1 grain. Marked success followed each administration; the pain was removed in from five to twenty-five minutes, and it always remained absent for several hours after each dose, and sometimes for several days. On one occasion, early in the treatment, three doses of half a grain were given at intervals during twelve hours, and, for the first time since the pain began, the patient remained entirely free from pain for twenty-four hours. On another occasion, at about the middle of the period of treatment, no exalgine was given in a day when pain had occurred, and the patient suffered severely in the afternoon, slept only for a short time at night, and had severe pain also during the following morning and forenoon. Since the last administration (January 17th) there has been no return of pain.

I have been anxious to test the analgesic action in the pain of locomotor ataxy, but it has happened that no case of this disease has recently been admitted into my wards. Professor Grainger Stewart has, however, kindly allowed me to make observations on two of his cases. One, A. D., aged 28, has suffered from ataxy for three years. She has frequent pains of the ordinary description in the lower extremities, with girdle sensations there and in the trunk, and she also often suffers from headache. One evening, while these conditions were present, she received 1 grain of exalgine. In twelve minutes the pain in the legs was greatly lessened, and in twenty-five minutes pain had entirely disappeared, the girdle sensations were less marked, and she was free from headache. This relief was maintained for three hours, when the symptoms gradually returned. One hour afterwards, when the symptoms were apparently present in their former severity, another grain of exalgine was administered; in twenty minutes the patient was asleep. She remained asleep for three hours and a half, and, on awaking, she stated that pain was completely absent, although an uneasy heavy sensation, which she nearly constantly experiences, was felt in the back. A third 1-grain dose was given to this patient when she was suffering only from girdle sensations in the back, but only a slight diminution in the sensation appeared to be produced.

The second case of ataxy in which exalgine was given was that of a man, W. L., aged 48, who had suffered from this disease for four years. On the occasion of administration, "gnawing" and "aching" pain was stated to be present in the lumbar region, causing much distress. In fifteen minutes after 2 grains of exalgine had been administered, pain had almost completely disappeared, and soon after the patient was asleep. He slept all night, and had no pain when he awoke next morning.

I have been able to make observations on four patients suffering from toothache. In one patient, half a grain gave complete relief on two occasions; in the second patient the same result was obtained, also on two occasions, by 1-grain doses, but the relief lasted for only one and two hours; in the third patient, 1 grain completely removed severe pain for twenty minutes, and, on its return, 1 grain followed in twenty-five minutes by 2 grains eased the pain in seven minutes after the second dose, and nearly completely removed it in about eighteen minutes, soon after which time the patient fell asleep, and pain was absent on the following morning; and in the fourth patient, with a number of decayed

teeth, only slight relief was produced by a half-grain dose on two occasions.

I have had only one opportunity of testing exalgine in cardiac angina. The patient, J. F., aged 45, suffers from aortic disease. On each of the seven days during which he had been under my care before exalgine was given, severe, sharp, and burning pain had occurred in the pericardium, and pain frequently shoots down the left arm, and is accompanied with a choking sensation in the throat, and with palpitation and much sweating. The attacks usually occur between 6.30 and 7 A.M., but they last only for from a quarter of an hour to half an hour, and during them the patient is obliged to sit up in bed. The first dose of half a grain was given at 6 A.M., in order to anticipate an attack, and on that day, for the first time since he had been under observation, he remained entirely free from an attack. The second dose, also of half a grain, was given a few minutes after an attack had commenced; in three minutes he said he was much better, and in five minutes that the pain and every symptom had disappeared, and he was now able to lie down.

I have given exalgine in two cases of pleuritic pain. In one, only an imperfect observation was made with a single 1-grain dose; but, on the whole, the evidence led to the conclusion that no relief was obtained. In the second case, in an adult patient, the pleurisy was recent, acute, limited to the right base behind, and accompanied with friction and considerable pyrexia. The pain was so acute that movement was nearly impossible, the chest expansion was almost limited to the left side, and the cough, excited mainly by bronchitis of the left side, was accompanied with a distressing pain in the region of the pleurisy. While these conditions were present, half a grain of exalgine was given in the evening. The pain was much relieved in twenty minutes, it had almost disappeared in thirty minutes, and it did not again become severe until two hours and a half. Forty-five minutes thereafter a second dose of half a grain was given; in nine minutes pain had nearly gone; a deep inspiration could easily be taken, and the right arm could be moved without inconvenience. One hour and fifteen minutes afterwards, pain again appeared, and it had become severe in one hour and twenty-five minutes, when it was not relieved by a dose of anodyne cough mixture containing a little opium. A third half-grain dose of exalgine was given three hours and fifteen minutes after the second dose; in ten minutes there was scarcely any pain, and the patient slept for five hours, when he awoke with pain of nearly original severity. A fourth half-grain dose was therefore administered; in four minutes there was almost no pain, in five minutes the right arm could be freely moved about, a deep inspiration could be taken without pain, and the cough was less frequent than it had been. This absence of every painful symptom continued for at least an hour and a half, when other treatment was commenced for the pleuritic inflammation.

I have also administered exalgine in several cases where the pain was not so distinctly of a neuralgic character as in the preceding cases.

Thus, in a case of rheumatic synovitis of one wrist, with intermittent attacks of severe pain occurring each evening, and lasting for from an hour and a half to two hours, on one occasion, half a grain of exalgine relieved the pain in forty minutes and for half an hour; on a second occasion, in half an hour, and for a whole night; on a third occasion, the same dose produced no marked effect until fifty minutes, when the pain suddenly disappeared, and remained absent during a whole night, a sudden cessation having never previously occurred; and on a fourth occasion, half a grain caused complete removal of pain in twenty minutes, which was maintained all night; and, indeed, after this dose no further pain has occurred of sufficient severity to require special treatment.

In a case of blennorrhagic arthritis with severe continuous pain in both knee-joints, and much swelling there, the pain was much relieved in ten minutes by 1 grain, and for two hours; but on a second occasion, 2 grains produced only slight relief, which, although apparently sufficient to allow the patient to fall asleep in twenty minutes, did not last long, as the sleep was soon interrupted by a return of the pain.

In each of these two cases, even when marked relief from pain was obtained, no effect seemed to be produced on the tender condition of the joints.

In two cases of gastric pain, due to organic disease of the stomach, exalgine was found to give a certain amount of relief.

In the first, that of a woman, J. H., aged 49, the pain was caused by malignant disease. It was most severe during the evening and night, and was of a "burning" character, wit "tearing" and "dragging" sensations during movement, and usually prevented sleep. One evening she received 1 grain exalgine while suffering greatly from pain; in ten minutes th pain was lessened, and she soon fell asleep, and slept well for th greater part of the night. On another occasion when the pai however, was less severe, 1 grain again produced marked relie In the second case, much pain and tenderness were present in young patient, I. J., aged 19, suffering from a cicatrised ulcer an catarrh of the stomach. While the pain and tenderness were pre sent, half a grain of exalgine on two occasions gave slight bu only brief relief; and on other two occasions, the same dose a peared to give marked relief for several hours.

To conclude this detailed statement of the observations th have been made, in a case of cancer of the mesentery, ten admin strations of from 1 to 4 grains each were successful in givin partial relief from severe pain on six occasions, but entirely faile on four occasions; in a case of extensive carcinoma of the live 2 grains did not have any effect on the pain on two occasions in a case of large aneurysm of the descending portion of the th racic aorta with erosion of several vertebræ, half a grain and grain several times failed to give distinct relief; and in a ca of lumbar abscess of long standing, and discharging through drainage tube, where morphine had for several weeks been subcu taneously injected, three separate administrations of half a grai of exalgine did not affect the pain.

The observations I have briefly described were made on twenty one patients, and in sixteen forms of disease. The majority of th patients were inmates of the hospital, and I have to thank m resident physician, Dr. Gibson, for the large amount of carefu work he has done in connection with the observations. In orde to place the results clearly before you, I have summarised the in the following table:—

Disease.	Number of Observations.	Number Successful.	Number Unsuccessful or Doubtful
Facial neuralgia	8	8	—
Sciatica	10	9	1
Herpetic neuralgia	10	9	1
Neuralgia of arm, in hemiplegia	11	11	—
Locomotor ataxy, 1st case	2	2	—
,, 2nd case	1	1	—
Toothache, 1st case	2	2	—
,, 2nd case	2	2	—
,, 3rd case	2	2	—
,, 4th case	2	—	2
Cardiac angina	2	2	—
Pleuritic pain, 1st case	1	—	1
,, 2nd case	4	4	—
Rheumatic synovitis	4	4	—
Blennorrhagic rheumatism	2	1	1
Gastric pain, cancer	2	2	—
,, catarrh and cicatrised ulcer	4	2	2
Cancer in abdomen	10	6	4
Carcinoma of liver	2	—	2
Aneurysm of aorta	4	—	4
Lumbar abscess...	3	—	3
	88	67	21

The table shows that 88 separate administrations of exalgi were made, that in 67 of them pain was relieved, and that in no distinct benefit was gained. The condition of some of th patients, however, was not one in which the pain that existe was likely to be removed by any substance that did not produ general narcotism; as, for example, that of the patients repr sented in the three last diseases in the table. The best result undoubtedly, were obtained in neuralgia; and if we consid separately the observations in that disease, included in the tab between "Facial neuralgia" and "Cardiac angina," we shall fi that in 52 administrations, 48 were successful, and only 4 unsu cessful. Allowing for fallacies in estimating therapeutic effec where reliance has almost solely to be placed on the statements patients, these results are satisfactory, and justify the hope th exalgine may take a useful and important place among th remedies by which pain is relieved. Its analgesic power is not very powerful one, but it has the enormous advantages of bei free from the disturbances and inconveniences that are associate with the action of nearly all other pain-subduing agents and fro the dangers inseparable from the use of the more powerful these agents.

AN ADDRESS
ON THE
EXPERIMENTS ON ANÆSTHETICS
CONDUCTED AT HYDERABAD.

Delivered before the Medical Society of London, February, 1890.

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[R. PRESIDENT AND GENTLEMEN,—I thank you very cordially or your kindness in giving up an evening to me. I may also ıention that the main part of the work is not the conclu-ions—not what Dr. Laurie, or Dr. Bomford or I, or any other ıember of the Commission think—but it is the number of experi-ıents we have done, and which we have recorded automatically, o that the facts upon which we founded our conclusions are as eadily available for you as they were for us; and if any false onclusions have been come to by us you will be able at once to orrect them and come to the right conclusion, because you will ave all the data before you. The way in which we were able to ttain this end was by employing a different method of registra-on from the method formerly used. I can show you, though im-erfectly, the apparatus we employed. I should first, how-ver, mention, although it has been mentioned, that this ommission owed its origin to Dr. Laurie's great reverence or his former teacher, Professor Syme. Professor Syme was a ıan of great ability; he was also a man of very marked temper. .e could hate most cordially, and one of his colleagues whom he id hate was Sir James Simpson, and he showed this so markedly n one occasion that when Sir James Simpson wrote a book, Pro-essor Syme brought it into the lecture theatre and said: "Gentle-ıen, one of my colleagues has written a book," and he then pro-eeded to tear it in two and to throw it into the waste basket mong the sawdust. Every student knew this about Syme, and as e learned from his own lips that he had such a respect for the iscovery of his despised colleague, we thought all the more the chloroform which Simpson had discovered to be an anæs-ıetic. Syme used to tell us that in all his experience, and ı all the experience of his colleagues, in the infirmary there never ad been a death, and he said; "The reasons why we never ad any death were twofold: first, we used very good chloro-ırm; and, secondly, we gave plenty of it." Now occasionally eaths do occur even although the same chloroform is used as that hich Syme employed; and it occurred to me some years ago that ossibly one reason of the deaths which did sometimes occur was ıe neglect of the second part of his advice—not giving enough of ıe chloroform. I thought that in all probability some of the eaths might be due to shock, and I wrote a paper on this subject. ne finds very often that the deaths which are recorded as oc-ıring from chloroform occur just at the very beginning of the peration, and Simpson did record one case of a man who died om the simple opening of an abscess, although he had no ıæsthetic whatever. This man appeared to be particularly nsitive and to have died simply from shock, anæsthetics playing o part whatever in it.

On account of the great reverence which Dr. Laurie had for his acher, he instituted a number of experiments to show that me's teaching was entirely right, and that in giving chloro-rm one should follow the practice which he always adopted, atching the respiration and never minding the pulse; and a ımber of experiments were made by the Commission in Hydera-d, which led to a confirmation of Syme's conclusions, as the ıimals to which chloroform was given always died from a ilure of respiration, which invariably occurred before the ilure of the heart. In the first series of experiments 141 animals ere used. The second Commission was intended first of all to peat the experiments of the first; and we repeated them, using 0 animals, and in all those cases the result was the same. We d in all 571 animals to which chloroform was given, and in all e respiration failed before the heart There are two distinct eories before the profession as to the action of chloroform. The e that is generally adopted in Edinburgh is that chloroform ralyses the respiration and does not affect the heart, at least to any serious extent. The second theory is that chloroform does affect the heart, and may paralyse it, and that this is one of the sources of danger. This idea is chiefly held in London. It occurred to me before I went out that possibly there might be a difference between the people to whom the chloroform was administered; that in Edinburgh the comparatively small amount of beer drunk might lessen the tendency to fatty degeneration of the heart; that we might get cases of fatty degeneration more abundant in London and that this might have something to do with the apparent greater mortality from the heart under the influence of chloroform in London than in Edinburgh. This was evidently one of the points that required attention, and it was with this apparatus that we tried to investigate the action of chloroform upon the heart. More especially was the investigation of the effect of chloroform upon the heart by means of such an apparatus as this rendered necessary because it appeared to me that a great deal of the idea that chloroform paralyses the heart was due, not so much to clinical observation, as to laboratory experiments; that the results of laboratory experiments have been taken to explain deaths from chloroform upon the operating table. One of the most valuable of the researches that have been made upon anæsthetics was that made by the Glasgow Committee appointed by the British Medical Association, consisting of Professor McKendrick, Dr. Coats, and Professor Ramsay.[1] They had found, as they said, that chloroform sometimes paralysed the heart, and that this paralysing effect was exerted occasionally in an unforeseen way, so that it could not well be prevented. This, therefore, was a most important point that required our strictest attention. We then set to work with experiments upon blood pressure and upon the heart. In most of the experiments that have hitherto been made upon blood pressure the tracing has been taken upon a revolving drum, which revolved with very considerable speed, so that you got upon the tracing all the pulse beats recorded; but the tracing was so long that it was impossible to reproduce the whole of it; it was many feet or many yards in length, and only pieces could be taken out, engraved on woodblocks, and printed.

In order to obviate this difficulty I thought it would be advisable to take a tracing of the arterial pressure upon a slow drum; and here you have an instrument of this sort. There may be some here, perhaps, who do not know practically the mode of taking the blood pressure. It is simply this: the animal is put under chloroform, then the carotid artery is exposed, the distal end of it is ligatured, and then the proximal end is clamped by a pair of bulldog forceps. A small cannula (such as that which I will pass round) is inserted into the proximal end and tied firmly in; this cannula is then put into communication with a bent tube containing mercury; the part between the mercury and the artery is filled with a solution of bicarbonate of soda, in order to prevent the blood from coagulating within the tube. As soon as connection is made, the bulldog forceps which clamped the artery are removed, and then you have a continuous communication through the carotid right down to the heart with the mercury which is in the tube. At every beat of the heart the mercury oscillates, so that you see it passing up and down. In order to record the movement of the mercury, a light float is placed upon it which writes against a blackened smoked surface, so that we get upon the black surface oscillations like those which I have marked upon the blackboard. But if you use a very slow drum instead of getting a tracing corresponding with the beats of the heart, it will probably correspond only with the respirations, and you lose the beats of the heart. With a slow drum which revolves only once in half an hour you get the whole of the long experiments, lasting perhaps an hour and a half, into three tracings, which you are able to reproduce by photography. You can thus follow the condition of the arterial pressure from the beginning to the end of the experiment. But by taking the tracing on such a slow drum you lose all the advantage of knowing the condition of the heart. We therefore got the pulse tracings of the heart by a second drum revolving ten times as fast as the other, and by having both connected by a Y tube with the artery we could take a tracing by the one drum or the other just as we liked. What we were accustomed to do was every now and then at any interesting moment to clamp off the mercury manometer and to put the other, which took the pulse tracings and worked upon the quick drum in connection with the artery, so that we could take a sample

[1] JOURNAL, December 18th, 1880, p. 957. Towards the expenses of this Committee the Association made a grant of £100. Professor Ramsay was succeeded by Dr. David Newman.

of the condition of the heart at any moment. With the quick drum we have a different form of manometer, called a Fick's manometer, which has the advantage that it does not, like the other, oscillate by itself. The mercury in the ordinary mercurial manometer will continue to oscillate a little while after the original pulse beat which put it into movement has ceased. The Fick's manometer does not, and so it gives a true pulse trace. We had thus two tracings, one giving the ordinary blood pressure throughout the whole experiment, and the other the condition of the pulse at any one moment.

That is the advantage of this twofold method. By using it we have the great advantage that we are able to bring before you the whole of the work that we did with these instruments, because the Nizam had the whole of our tracings photographed, and is going to present a copy of the photographs to each of the principal medical libraries, so that by-and-bye the whole of this work will be brought before the profession, not only in this country but in other countries, and any error that we may have fallen into can be rectified. The first thing I show is a tracing of the action of chloroform when given steadily. I have also a tracing of ether. As a matter of fact, the difference between chloroform and ether upon the ordinary blood pressure was just what had been found by that exceedingly careful observer Claude Bernard many years ago, that they are similar in their action, but that chloroform is the more powerful of the two. We might compare them, indeed, to a sharp knife and a blunt knife in the hands of a surgeon; the sharp knife is more powerful either for good or for evil; it depends entirely upon how it is used. If a man is afraid of using a sharp knife, he may use a blunt one, and in the hands of some people the blunt knife will be the safer of the two. I will give you a typical tracing of the action of chloroform. You see that as you give the chloroform the pressure gradually sinks very slowly till you get down to the point indicated in the tracing; then you begin artificial respiration, and there are a number of tracings here which will show the effect of it. In one of these tracings you will see a sudden fall, because a great deal of chloroform has been given at once, and the effect of artificial respiration in raising it is also shown. The first tracing in experiment No. 84 shows this. In another tracing the effect is shown where chloroform is given slowly. If in place of chloroform you use ether, you generally get a much slower fall, and this is also shown in the tracing. You see the gradual fall that is obtained with chloroform and ether if you use these anæsthetics with plenty of air. With ether we found that if we gave plenty of air we could hardly get the animals under; in fact, we found it almost impossible. In giving ether we were obliged nearly to suffocate them as well. If you give chloroform, and give very little air, so that the animal is partially asphyxiated, then you are apt to get a sudden fall, as is the case in dogs when you put the inhalers over the muzzles so as to obstruct the respiration, or give the chloroform so strong that it causes the animal to stop breathing. In cases when we took the tracing upon a slow drum we found that at this sudden fall the heart had become very slow.

The next thing to consider was the question of how the chloroform acted. We did not try to go into all the scientific questions about it, but we directed our attention almost entirely to the practical part of it, namely, to find out how chloroform was likely to cause death, or rather how deaths were likely to occur during the administration of chloroform, and how they could be best prevented. The first question was whether chloroform itself was likely to paralyse the heart. Now chloroform is a powerful muscular poison; there can be no doubt of that. If you take chloroform and inject it into the artery of a limb, in a short time, almost immediately, you will find the muscles of the limb become as hard as this board. So it was thought very likely that chloroform might act distinctly upon the heart and cause paralysis of the muscular fibres; but we injected chloroform into the veins, and we did not get this distinct action upon the muscular fibres of the heart in anything like the degree that we expected. We found that its action was like that shown in one of the photographs. With the injection of chloroform and ether into the veins we got a fall of pressure, not so marked as there shown, but more like that which I showed in the first tracing. No. 92 shows the injection of chloroform into the veins, and No. 93 shows the injection of ether into the veins. There is not such a great difference between the two, although even there perhaps you may notice that the ether does not quite pull down the blood pressure so markedly as the chloroform There is this difference, however: ether always caused clots in the heart to a greater extent than chloroform. The next thing to do was to inject into the trachea, because if you inject it into the trachea you would expect the chloroform to be absorbed very rapidly—at least if you get it at all into the lungs—from the blood vessels of the lungs, and carried to the heart; you might then get the heart stopping, and we did get very markedly indeed the heart stopping after an injection of chloroform into the trachea. We got very much the same from the injection of ether. No. 64 shows the effect of the injection of chloroform into the trachea. The sudden fall in No. 70 shows the effect of ether injected into the trachea. These two, however, are very much alike. You will notice that the fall from the injection of ether is also very rapid, just as rapid as with chloroform. Now the action of chloroform given in these two ways is not really its therapeutic action; it is its toxic action, and we do not give chloroform for its toxic action. There is a very marked difference between the toxic and the therapeutic action of many drugs. I do not know that I can take a better example than the toxic action of strychnine. If you push strychnine to its utmost effect upon the muscles its effect is to paralyse the ends of the nerve in the muscle, and strychnine may be looked upon therefore as a paralysing agent. But it is not as a paralysing agent that we use it; in fact you cannot give it to a mammal to produce paralysis; you produce tetanus; but it is not even for its tetanic action that we use it; we always stop short of giving it to produce tetanus When we are using it as a remedy we use it only for its stimulant action. We therefore draw a sharp line between the use of a drug for its poisonous action and for its therapeutic action. What we want is to use chloroform for its therapeutic and not for its toxic action. But it is possible that even when you use things for their therapeutic action, you may get the toxic action beginning. For example, if you give strychnine you may get spasms of the muscles, and you want to stop short of that. We wanted to find what was likely to occur when we were using chloroform or ether in the ordinary way and employing them therapeutically, I mean by inhalation. If you continue to drive chloroform into the trachea after the respiration has stopped, if you use artificial respiration and drive the vapour in, you can paralyse the heart but what we found was that if you allowed an animal simply to inhale the vapour, the stopping of the respiration prevented the access of enough vapour to the heart to stop it. The chloroform paralysed first the respiratory centre, and then, by stopping the respiration, prevented enough of the chloroform from getting into the circulation to enable it to paralyse the heart.

I have made this statement, but there are certain points about it which want a more clear and a more full consideration, because it is quite evident that if an animal is just on the point of dying from paralysis of the respiration, it may, just as the respiration is ceasing, make one or two violent gasps, and may thus get a large quantity of chloroform into the respiratory passages, possibly enough to stop the heart. Well, we found that there was some risk in this, but the greatest risk which we found was always from the chloroform vapour *plus* asphyxia. Asphyxia itself will produce the symptoms which have been ordinarily ascribed to chloroform. On looking at the tracing which was given by the Committee of the British Medical Association, we found that we were able to reproduce it. I have reproduced it on the board. You observe a sudden drop and a slow action of the pulse. It was thought that chloroform occasionally acted in an unexpected and unforeseen manner. This slow pulse is clearly due to vagus irritation. Tracing 64, showing the effect of chloroform in the trachea also shows the effect of irritation of the vagus, and you will see the slow pulse due to it. But in this class of experiments the Committee had not irritated the vagus wittingly. We tried hard to find out how they did it, and thought they might have allowed some irritating solution, perhaps bicarbonate of soda, to fall upon the vagus, and thus might have irritated it chemically, but on trying the experiment we failed; we were not able to produce a tracing like that of the Glasgow Committee. Then we thought that we might have tied the vagus along with the trachea; we tried that, but it would not do. Then we found that we could produce this tracing at will by simply closing the dog's nostrils, and that this tracing was not due to chloroform but to asphyxia. We could produce it either by stopping the dog's nostrils or by putting a cannula in the trachea and stopping up the end. We also tried the same thing by making the dog breathe pure carbonic acid. We could produce this kind of tracing at will by asphyxia; but however often we gave chloroform and repeated the experiment with

lenty of air and without asyphyxia, we never got a tracing like this, hough we could produce it again and again by asphyxia. I think herefore we may conclude that this tracing on which the Glasow Committee laid so much stress was due to accidental sphyxia. I was puzzled for a time in thinking how they could ave got it; it was clear that they had not suspected ashyxia. Now there is an accident which is not at all nlikely to occur, and which occurred to me years ago several imes. If you are using artificial respiration, and you put a annula into a dog's trachea, unless you tie it in very firmly, a ittle oozing of blood may take place from the wound, and the lood may ooze down by the side of the cannula, and get into the ower part of the trachea and into the bronchi. It may there clot, nd thus form a plug, which will produce a stoppage of respiraion and cause asphyxia, and I am inclined to think that the ppearance, the disappearance, and the reappearance of the symtoms of asphyxia shown in the tracing may have been due, in he case of the Glasgow experiment, to the formation of a clot in he trachea or the bronchi, which moved up and down, causing t one time free respiration, then falling back into the bronchus, nd then leading to the product of this asphyxial tracing.

We tried also several experiments on the effect of shock, beause it seemed that shock was very likely to be a powerful agent n the production of death. The thing that struck us most was hat we were not able to get any very marked symptoms of shock. Now, there is one objection that may be brought against our exeriments. It may be said: "You never experimented upon any nimal which had not a certain quantity of chloroform or ether irst." That is quite true. There was a set of experiments which ve thought over carefully, as to whether we should do them or ot—namely, to fasten the animal down and put the cannula into he carotid without chloroform, and then try shock. But it seemed o us that the cases of shock which you get in men are comparaively rare, and that we should not in the case of an animal look or the production of shock such as occurred in Simpson's case, where the man died, without any anæsthetic, from the mere openng of an abscess. We thought that we were not likely to find hat, and that we might probably make a number of experiments, causing the animals a great deal of pain, and not come to any very lefinite result in the end.

Therefore, on account of the pain that we should have to inflict ve did not try the experiments. Many antivivisectionists proably think that it is a pleasant thing for men who are engaged n physiological experiments to inflict pain, but it is not so. Many a time long ago, before we used anæsthetics so much as we lo now, I have spent nearly a week in thinking over an experinent, and deciding whether I should do it or not, and putting off he evil day as long as possible. Now, we concluded that these experiments were not absolutely necessary, and that they would ot probably give definite results, so that we did not do them. We may have been wrong, but that is the fact of the matter. We ried, however, other experiments. We thought we might posibly gain the same result by putting the animal first of all under chloroform, then connecting the cannula with the trachea and allowing it just to come out, and then, as it was coming out, we irst of all tried to produce shock by the extraction of a tooth. This we repeated several times, because it seems that during the extraction of teeth a number of deaths have occurred.

Another class of operations in which deaths have occurred is hat of operations upon the anus; we therefore tried laying hold of the skin of the anus, pulling at it, and then snipping it. Deaths have also occurred during operations upon the intestines; we herefore opened the abdomen, drew out the intestine, and ligatured it. Then we thought it very likely that we might get shocks markedly from injury to the testicles; we therefore struck the animal, just after it came out from the chloroform, and while the cornea was sensitive, a blow upon the testicles, and we did sometimes find a slight fall, but not so marked as one would imagine. Then we tried the effect of position, and we noticed hat when you put an animal upright, with the head up and the egs down, there was a distinct fall in the blood pressure, which ose again to the normal height when the animal was restored to he recumbent posture. If we elevated the feet, we got a rise of blood pressure. Even by striking the animal upon the abdonen, or by extracting a tooth while it was in the upright position, we were still unable to get any very marked evidence of shock. The next thing we tried was to see how far a mode of dress which was likely to interfere with respiration would cause sudden leath. We tried these experiments upon monkeys, because they were more like men than dogs were; or rather, I should say, we tried them upon female monkeys, because it is women's dress that is more likely to obstruct respiration. We put on a monkey a plaster-of-Paris jacket, so as to imitate stays; we then tied round the abdomen a tight bandage, so as to imitate the band which would sustain the petticoats. The result of these experiments was very marked indeed. In two cases the animals seemed to die very quickly. I need not now go into the particulars, because these are contained in the tracings and in the record of experiments, some of which will be published, so as to be available afterwards. Another point was the effect of phosphorus poisoning, so as to produce fatty degeneration of the heart. The heart, in some of these cases, seemed to stop more quickly after the respiration than in the case of healthy animals, but the effect was not so great as one would imagine. In No. 159 the effect is shown of chloroform given to an animal that has been poisoned with phosphorus, and in which the organs were already more or less fatty.

I have said that in most of our cases the respiration stopped before the heart; this was the case in all those animals where the chloroform was given in the ordinary way, and which were not connected with the manometer. But there were one or two cases in which the animal was connected with the manometer, and where we did not find gasping movements occurring after the heart had stopped. The respiration would get weaker and weaker, and then stop, then the heart stopped, and after that there would be one or two violent gasps which had no effect upon the blood pressure, and which were apparently useless to the animal. It might be said that in those cases the stoppage of the heart must have been due to the chloroform, but we came to the conclusion that this was not the case. One reason why we did this was that in these experiments a number of other things had been done besides administering chloroform. In one of them we found that the animal was going to die in the ordinary way, and that it had, as it were, died. The respiration had ceased; we used artificial respiration and brought the animal round, and then after it had come round we did something else to it. I think we injected atropine, and we got these gasping movements. It might be fair to say that this was due to chloroform; but another reason which led us to say that it was not due to chloroform was that we produced the same effects without chloroform; by simply making the animal inhale pure carbonic acid we produced exactly the same phenomena, as is shown in tracings 160 and 161.

I have told you the general results obtained, namely, that chloroform and ether both act in the same way. Both of them paralyse the respiratory centre before the heart. If you are able to push either one or the other after the respiratory centre has ceased to act, you can then paralyse the heart; but the chloroform will do either the one or the other more quickly than ether. It is an agent much more potent than ether; and it will stop respiration and paralyse the heart in much less time than ether. We found that ether in hot countries cannot be used as an anæsthetic. First of all, I could not get pure ether in Bombay, for the simple reason that it would not keep. You may have it one day, and the next day you look at the bottle, and the pure ether is gone. So that the ether we used was not pure; it was the purest we could get, but we found that we were unable to keep the animals under unless we used the greatest pains to have them thoroughly suffocated at the same time. We found that whereas with ether we had to suffocate them, with chloroform the proper thing was not to suffocate them, but to give them chloroform with plenty of air, because if you do suffocate them with chloroform, the suffocation is a very deadly thing indeed.

The conclusion that we came to was that deaths from chloroform are due to asphyxia, and that in cases where deaths had occurred they had been due to the imperfect observation of the respiration. The most important experiments that we did were our accidental deaths. We had a large proportion of them, much larger than ordinary surgeons have, and we could always trace the mode in which they occurred. We knew that the time of day had something to do with it. The deaths did not occur in the morning when everyone was looking sharply after things, when we were not hurried, when there was plenty of time, but they occurred in the middle of the day when we resumed our experiments after the interval for lunch. An experiment was finished before lunch, then there was an interval, during which we left the apparatus standing, but the drums had to be blacked, and a lot of little odds and ends had to be done. We did not want to lose time, and while things were being got ready, some one would put the animal

under chloroform. The way in which it was done was this: we simply had a big packing case into which we popped the dog, and put in some chloroform on blotting paper; after a time the animal quietly went over, and then he was taken out. Someone looked in perhaps just to see that he was thoroughly over, and if he was not we gave him a little more time, put him back into the box, and put in a little more chloroform. Then, instead of watching, the man attending to the case would go away to black a drum, and when he went back he found the dog was dead. Another thing which is very instructive is the fact that very few deaths occurred upon the table. When a man was giving chloroform who was accustomed to give it at a hospital very few deaths occurred. But one day he was too much intent upon the operation; he had not seen it done before, and instead of watching the animal as he ought to have done, he was watching the other man operate, and the first thing that was noticed by a third person present who was standing by, was that the animal was not breathing. The animal indeed was already dead. Another case of accidental death occurred to myself; I was doing two things at once, giving chloroform and putting a cannula into the trachea. It was a peculiarly-shaped T-tube that I was putting in. Another man was doing the same thing at the same time, and I am sorry to say that we were running a race; I was trying to get my tube in before him, and he was trying to get his in before me, and in doing the thing as quickly as I could I forgot to attend to the respiration of the monkey, and he died. It was simply from the want of attention to the respiration.

Now it might be said: "Why do you want to insist upon attention to respiration so much and neglect the pulse?" The reason is simply this: that as far as experiments went the pulse did not begin to fail until after the respiration, and if we did not attend to the animal until the pulse gave signs of failure we were apt to be too late. But is it not advisable to attend both to the respiration and the pulse, because you may get signs of failure from one or the other? That is true; the only objection is that if a man has his attention distracted, and he is attending both to the respiration and the pulse, he may be perhaps not paying as much attention to either as he would if he were attending to the respiration alone. These are the most important points to be made out in these experiments.

Before closing, I think I ought to say that we owe a great deal to the Nizam for the interest he has taken in this matter, and the generosity he has displayed. It is not merely that he has had the experiments done; anybody might have done that, perhaps, but he has been so wise as to do what a great number of learned societies in this country will not do. After they have got a research they will not publish it, or they cut down the expense of publication so much that the published results are not worth a great deal. The Nizam has decided to have, at great expense, every tracing photographed, to have a hundred or a hundred and fifty copies made, and a complete set sent to all the principal libraries throughout the world. The example which he and his ministers have set is one which is worthy of imitation by our own Government, both in this country and in other parts of the British empire.

ABSTRACT OF

THE ERASMUS WILSON LECTURES

ON THE

RELATION OF MORPHOLOGY & PATHOLOGY.

Delivered at the Royal College of Surgeons of England.

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Lecture I.

Wallace, in his interesting account of the Malay Archipelago has shown clearly enough that a line commencing in the Indian Ocean and passing between the islands of Lombok and Bali, continued between Borneo and Celebes, till it emerges into the Pacific, divides this archipelago into a Western or Indo-Malayan, and Eastern or Austro-Malayan division. The nature of the animals and plants inhabiting the great islands of Borneo, Sumatra, Java, the Phillipine Islands and Bali indicate that these truly belong to Asia. In the same way the islands of Lombok, Celebes, and the Mollucas, with New Guinea, are as clearly Australian. This is the more remarkable seeing that Bali and Lombok are separated by only fifteen miles of sea. In the islands eastward of Wallace's line, kangaroos, opossums, wombats, the duck-billed platypus, brush-turkeys, cockatoos, and honeysuckers abound. These are mammals and birds characteristic of Australia. On passing from Lombok to Bali we find barbets, fruit thrushes and woodpeckers. In Java and Borneo, monkeys, wild cats, deer, civets, otters and squirrels, mammals and birds characteristic of south-eastern Asia. In the Celebes and the Mollucas, the prehensile-tailed cuscus is the only terrestrial mammal, except wild pigs; so that in passing from the western to the eastern islands the naturalist finds himself in a new world. Indeed, this enormous archipelago, though apparently homogeneous is, as a matter of fact, made up of parts derived from two distinct continents.

We have in our bodies, in a morphological sense, more than one such archipelago, and I shall endeavour to show that several apparently homogeneous organs may be subdivided by lines pathologically as characteristic as Wallace's line is justified zoologically. The tongue illustrates this in a striking manner. If a line be drawn transversely through this organ, immediately anterior to the foramen cæcum, it will divide it into an oral and a pharyngeal portion. The oral portion resembles, in the structure of its mucous membrane and in its diseases, the lips and buccal aspect of the cheeks. The pharyngeal division resembles structurally and pathologically the adjacent tonsils and pharynx. The anterior and posterior portions of the tongue have a separate nerve supply, as well as a different origin. The base of the pharyngeal segment arises by bilateral outgrowths from the branchial arches, whilst the tip is formed by an azygous median tuberculum, which arises in the meso-branchial area. The oral portion of the tongue is liable to gummata, nævi, the so-called ichthyosis linguæ, warts, epithelioma, and mucous plaques. The pharyngeal portion is prone to adenomata, dermoids, mucous cysts, and lympho-sarcomata, conditions resembling enlarged tonsils and varicose veins. Thus morphology and pathology insist that it is incorrect to jumble the diseases of these two regions of the tongue under one heading, as is the custom in textbooks of surgery, and even in monographs dealing with lingual diseases. The value of the morphological method as a basis for the classification of pathological conditions and its admirable convenience for conveying clear and lasting impressions in teaching, is well illustrated in the case of the testis. The embryological history of this organ establishes the fact that it consists of a secreting portion furnished with an excretory apparatus, the vasa efferentia, epididymis, and vas deferens, which originally served as excretory conduits to the primitive kidney, parts of which become entangled in the compound organ to which the name testis is applied. These entangled remnants of the mesonephros are easily recognised in the fœtal testis under the name paradidymis. This structure varies considerably in size in different individuals. Thus neglecting the coverings acquired by the testis in its descent, we have for pathological purposes three distinct parts: (1) the testis proper; (2) the efferent ducts; and (3) the paradidymis. Many of the cystic conditions arising in connection with the testis originate in some functionless tubules situated near the head of the epididymis, in series with the vasa efferentia. Such cysts are of two kinds; they may be small and resemble the "hydatid" of Morgagni, or, remaining sessile, be described as encysted hydrocele of the testis. These cysts lie quite outside the tunica vaginalis; they must not be confounded with unobliterated portions of the funicular pouch or the sac of an old hernia. The third portion, the paradidymis, gives rise, as Mr. Ev and myself pointed out some years ago, to the tumours described by Curling as "general cystic disease" of the testis. These tumours present very distinct characters, and, as they arise in the remains of a disused gland—the mesonephros—and are glandular in structure, it would be very convenient to refer to them as adenomata. Occasionally the gland substance contains hair. Thus the cystic tumours of the testis proper fall into two very different groups—namely, those belonging to the disused ducts of the mesonephros and those originating in the glandular remnants of that interesting ancestral organ. The tongue and testis may be described as organs anatomically homogeneous, but morphologically and pathologically heterogeneous.

In order to justify my view as to the relation of morphology and pathology I must compare organs anatomically heterogeneous but morphologically and pathologically homogeneous. A comparison of certain parts of the ovary and testis demonstrate this in a striking and suggestive manner. It is now accepted by com

petent anatomists that the parovarium and paroöphoron represent, in the female, the vasa efferentia and paradidymis of the male. Now the anterior tubules of the parovarium, known as Kobelt's tubes, give rise to small pedunculated cysts hanging from the broad ligament in every way resembling "so-called supernumerary hydatids of Morgagni" in the male; whilst the sessile cysts which burrow between the layers of the broad ligament, known as parovarian cysts, arise in the tubules which in the male give rise to encysted hydrocele of the testis. In a few words, encysted hydrocele of the testis and parovarian cysts are homologous. The pathological homology of the paradidymis and paroöphoron comes out in another way. The venous network known as the pampiniform plexus arises mainly in these degenerate remnants of the mesonephros; indeed, they are the persistent portions of the veins which, in the early embryo, conveyed the blood from the mesonephroi to the cardinal veins. Thus varicocele in the female and male is morphologically, as well as pathologically, homologous.

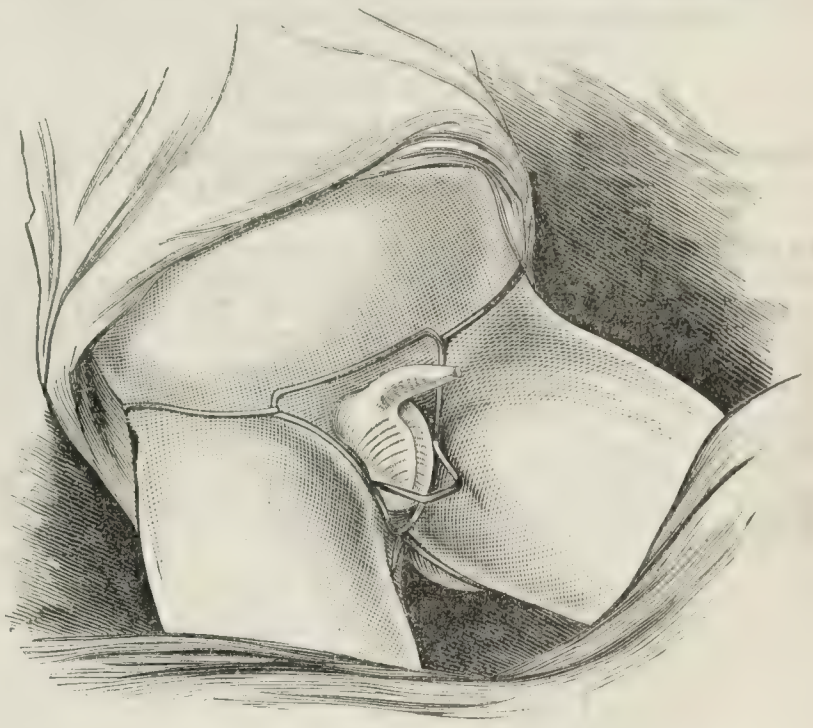
We may now consider some important observations made by Pozzi relative to the parts in the male homologous with the hymen in the female. These views may be summarised thus: Often in the female child, and occasionally in the adult female, we find running downwards from the clitoris a band of fibrous tissue which divides, surrounds the meatus urinarius, and becomes continuous with the hymen. This is the vestibular band. In a male the subject of hypospadias this vestibular band was found by Pozzi to be extremely well marked and to replace the corpus spongiosum penis. From this and some similar specimens he comes to the opinion that the hymen in the female is homologous with the bulb in the male. My own dissections of hermaphrodites do not lead me to concur with this conclusion. If this view be correct we ought to test it in a critical manner thus: If the bulb in the male is homologous with the hymen, we ought in some cases of imperforate urethra in the male to find the obstruction situated at or in the immediate neighbourhood of the bulb. To put it plainly: An imperforate hymen in the male should obstruct the urethra, and such an obstruction should be situated anterior to the sinus pocularis. At present I have had no opportunity of testing this critically, but in cases of males furnished with a uterus and vagina the latter has communicated with the urethra by way of the sinus pocularis. Shattock has recently pointed out that if the hymen is represented in the male it ought to be found at the spot where the sinus pocularis opens into the prostatic urethra, for this is the point where the confluent Müller's ducts, which form the vagina, open into the cloaca, and the sinus pocularis is regarded by morphologists as the representative of the vagina in the male. As a matter of fact a hymen occasionally occurs in this situation. Sometimes it is imperforate, and when associated with a uterus in the male will lead to its conversion into a retention cyst. Thus, according to Shattock, the hymen is formed from the anterior wall of the cloaca, and not from the proctodœum.

THE TREATMENT OF INCOMPLETELY DESCENDED TESTICLE.

By W. WATSON CHEYNE, M.B., F.R.C.S.,
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On account of the grave inconveniences which attend the retention of testicles in the inguinal canal, I have, like a good many other surgeons, made attempts in several cases to bring them down into their proper position in the scrotum, but I cannot say that the results of these attempts have been very brilliant. The following case, however, in which I adopted a new method, and in which the result was practically perfect, may be of interest. I may say that I have tried most of the plans suggested, and have in all cases, after freeing the cord and testicle, stitched the latter to the lowest part of the scrotum by means of catgut, and afterwards placed catgut sutures in the external ring to prevent the testicle slipping up again into the inguinal canal. The immediate result is that as soon as the hold on the testicle is relaxed, it retracts to the external ring, drawing in the scrotum with it, thus forming a pucker, and the ultimate result is that the testicle lies at, or very little below, the external ring, in a position very little better than that which it formerly occupied. It struck me, however, that if we could keep up the tension on the cord for some days it would gradually stretch, and that then, when the tension was relaxed, the testicle would remain in its new position in the scrotum. The accompanying drawing will show the mode in which this object was attained in the case which I am about to relate.

I had a small triangular wire frame constructed which fitted into the perineum and over the pubes in the manner shown in the accompanying drawing, and was kept in its place by threads of carbolised silk, attached to each angle of the frame and passed round the abdomen and thighs. At a point opposite the apex of the scrotum a projecting bar was attached to the frame to which the thread which passed through the cord could be tied. The mode of operation in this case was as follows: The testicle and cord were freed and brought down into the scrotum, in which a pouch was formed for its reception. A strong catgut stitch was then passed through the structures of the cord immediately above the testicle, and both ends were brought out through a hole at the apex of the scrotum and tied around the projecting bar. Care was taken that the vas deferens should not be on the side of the cord through which the thread might cut its way. In this way any desired amount of tension can be kept up on the cord, and in this particular case I did not stretch the cord at the time of the operation as completely as I intended ultimately to do, but tightened it at the second dressing some days later. After stitching up the external ring and the wound, the whole arrangement was enveloped in antiseptic dressings. I did not in this case pass the



stitch through the apex of the testicle but through the cord, because I did not wish to set up orchitis, nor to destroy any of the testicular structure, while I thought the stitch would not cut through the cord so quickly as through the testicle.

Of course it is only in a certain proportion of these cases that any operation with the view of bringing down the testicle can be of benefit, and I should only attempt it in cases where the testicle was fairly movable in the inguinal canal and could be readily made to protrude at the external ring. Where the testicle is retained at the upper part of the inguinal canal, the cord very short and the testicle much atrophied, I believe it is best, in view of the serious trouble to which it may afterwards give rise, to excise it at once and bring together the walls of the inguinal canal. The following is the case to which I allude.

H. E., aged 11, was admitted into the Paddington Green Children's Hospital on February 27th, 1889. Both testicles were lying at the lower part of the inguinal canal, and could be readily made to protrude at the external ring; they had been in this position since birth.

On March 1st I operated on the right side, but I did not employ the plan above described. In order to carry out the same prin-

ciple, however, after stitching the testicle to the bottom of the scrotum, and while the assistant held it in that position, I passed a catgut stitch through the skin at the junction of the scrotum and thigh, through the cord just below the external ring and through the skin on the other side of the scrotum, with the view of, so to speak, anchoring the testicle in the scrotum. The wound healed by first intention, but the ultimate result has been that though the testicle is considerably below the external ring, it is not in its proper position in the scrotum.

Before operating on the left side, I therefore had the wire frame described above constructed, and on April 2nd I operated on the left side in the manner which I have mentioned. The dressing was changed next day, and everything was looking well; patient comfortable. It was again changed on the 6th, and the catgut tightened as much as possible; the wound had healed. On the 13th the stitch was removed, the apparatus left off, and a small collodion dressing was fixed over the puncture through which the stitch had passed. The testicle hardly receded at all when the stitch was divided, and there was a good deal of thickening about the cord and the external ring, which no doubt helped to keep things in position. The patient was allowed to get up on the 15th, and went home on April 22nd. He was exhibited at the Medical Society about ten months later, when the left testicle occupied its normal position in the scrotum.

AN ACCOUNT OF AN OBSCURE OUTBREAK OF DENGUE

Occurring on Board H.M.S. *AGAMEMNON* while Stationed at Zanzibar between November, 1888, and September, 1889.

By CHARLES C. GODDING,
Staff-Surgeon, Royal Navy.

Communicated by the Director-General of the Medical Department, Royal Navy.]

An outbreak of dengue occurred in Zanzibar in 1870. It is stated to have been of a severe type, and which, commencing at Tamoo, worked south to Mombassa and Zanzibar. The disease is very common at Aden. There had been an epidemic there, I believe, in 1887-1888, and which had extended to Egypt. In tracing back the outbreak in this ship, the first case was an officer who had been staying for a few days at Aden, and had evidently contracted the disease there.

History of Outbreak.—On leaving Aden, November 1st, 1888, the crew were in a very healthy state, 8 on sick list out of a crew of 390, and these cases of a trivial character.

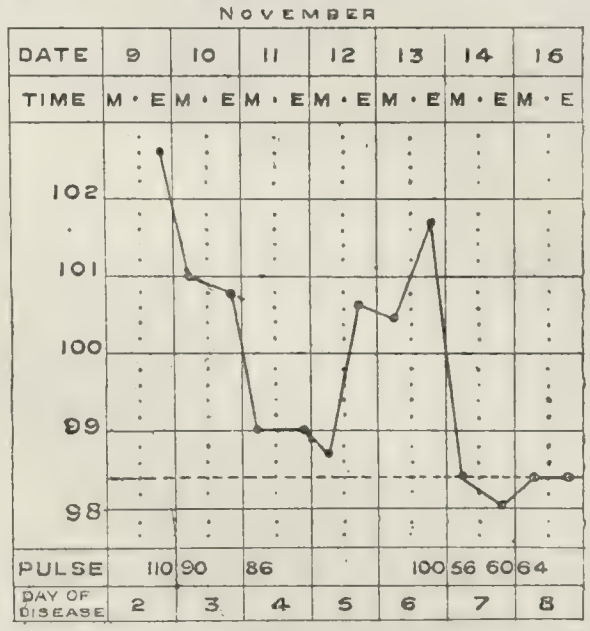


Diagram 1.

On November 9th, Commander M., officer taking passage and referred to above, came under treatment. Stated that on November 3rd he had suffered from aching pains in his legs, and had been poorly since.

On evening of 8th he felt very unwell, had cold chills, and was restless all night, but this morning (9th) he had bad headache, nausea, *malaise*, and severe pains on inner side of thighs; constipation.

November 10th. Rigors last evening, followed by profuse sweating during the night; pains between shoulders, tongue white, and conjunctivæ yellowish.

November 11th. Feels much better, but there is still some nausea and headache. The general muscular pains have gone; tongue cleaning; profuse sweating all night.

November 12th. Much better in the morning, but during the afternoon severe headache returned, with much weakness and *malaise.*

November 13th. Severe headache; face flushed; anorexia, general pains, debility, and *malaise*; bowels constipated. Left this ship at 5 P.M. On November 14th, skin moist, tongue slightly creamy; slept well and convalesced quickly, and returned to duty on November 21st. (See Diagram 1.)

This case was the first of its kind, and typical of all the cases which followed, both in symptoms and temperature. Attention was only called to it in tracing back the disease to its origin, and, at the time of its occurrence, it was diagnosed as a severe case of simple continued fever. In one or two doubtful cases a fleeting blush followed profuse sweating; but, until July 8th, 1889, a period of seven months, no case with an unmistakable rash had appeared, though during this period 118 cases and 57 mild cases had occurred. The 118 cases were diagnosed as a severe form of simple continued fever, closely resembling dengue peculiar to the station, and the thermometry of which had not been described, while the 57 milder cases were diagnosed as ordinary cases of febricula. The cases were all characterised by sudden onset. intense frontal headache, giddiness and great heaviness, retching and bilious vomiting, conjunctivæ yellowish, bowels frequently purged but sometimes constipated, marked anorexia, tongue yellow and coated, rigors and severe aching pains about body and loins. Partial defervescence and comparative comfort on third and fourth days, then considerable increase of fever to fastigium and defervescence by crisis with profuse sweating which continued for two or three days in decreasing quantities. Great debility followed, and relapses in several cases.

Difficulty of Diagnosis.—A similar type of disease is very common on the East Indies Station. In 1885, H.M.S. *Dragon* had 1[illegible] cases (simple continued fever) out of a crew of 156, the bulk of the cases occurring in April and May; average 4.5 days' sickness. H.M.S. *Turquoise*, 75 cases; average 7.5 days' sickness. H.M.S. *Briton*, 65 cases; average, a little over 7 days' sickness. In the cases occurring in the *Agamemnon*, though many of the symptoms closely resembled those of dengue, there was a complete absence of eruption, no pain and swellings of joints, no patient convalescing for a few days and then having a true relapse, nor did the disease assume a decidedly epidemic character till the end of June, when the cases occurred in batches with precisely the same general symptoms, but more severe lumbar pains. Symptoms were grouped as follows:—1. Sudden onset, severe headache, generally frontal; bad pains in loins, *malaise*, fever and characteristic yellow tongue. 2. Diminution of fever and comparative comfort for two days. 3. Increase of fever, headache, lumbar and general muscular pains, with fall of temperature by crisis and profuse sweats. 4. Convalescence rapid, but marked by considerable debility. 5. Temperature charts closely resemble the one already given. Sudden rise, considerable fall on third and fourth days, then a rise to the fastigium and descent by crisis; the symptoms accompanying the second rise were always severe, the headache, pains, *malaise*, and mental depression returning in a most trying manner.

This descent of temperature by crisis was not universal. In few cases the descent was by lysis, and this generally occurred in the most severe cases with long convalescence.

November 16th, 1887. Dr. F. M. Sandwith gives Diagram 2 as chart of a typical case in outbreak in Egypt:—Eruption: measly eruption afternoon of 18th, third day. Temperatures almost exactly the reverse of the cases occurring in this ship. Pulse bears some resemblance. Convalescence on twentieth day.

July 12th, 1889. Diagram 3 is typical of most of the cases having an eruption in this ship. Patient had also swelling of parotids, and slight salivation. Eruption: mixed, scarlatinal, and finely papular on morning of third day, and faded on sixth day. Temperature and pulse bearing close resemblance to the first case which occurred on board. Convalescence on eighth day. Duty on twelfth day.

The patient who first presented a decided eruption was under treatment on July 4th, and it was not till the seventh day of sickness that he was covered with a profuse, finely papular eruption, like prickly heat, and this lasted three days. After this, about 37 per cent. of the patients presented the eruption either at the beginning, course, or termination of the attack. Sometimes there were both initial and terminal eruptions, and there was no further question but that the disease was dengue.

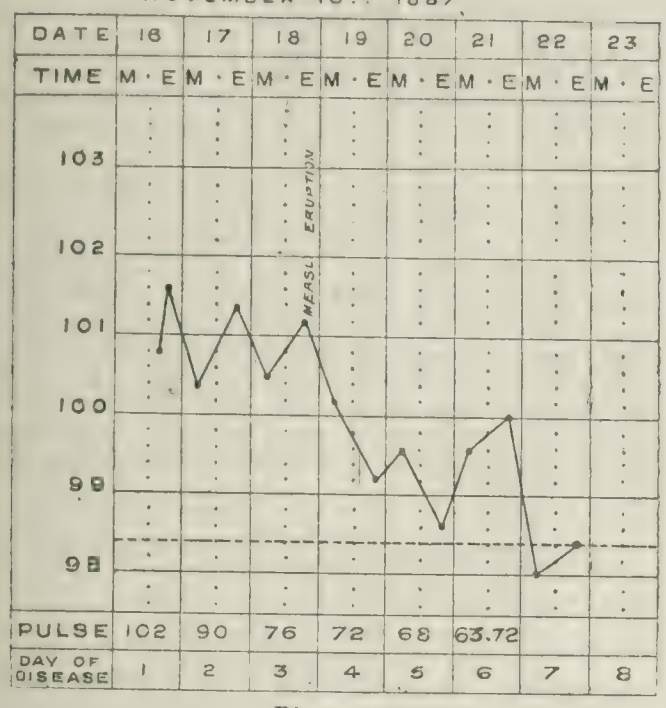


Diagram 2.

Number of Cases under Treatment after Diagnosis was Established.—In July, 130 cases; August, 79; September, 19; October, 7; total, 235; and these cases give an average of exactly seven days' sickness.

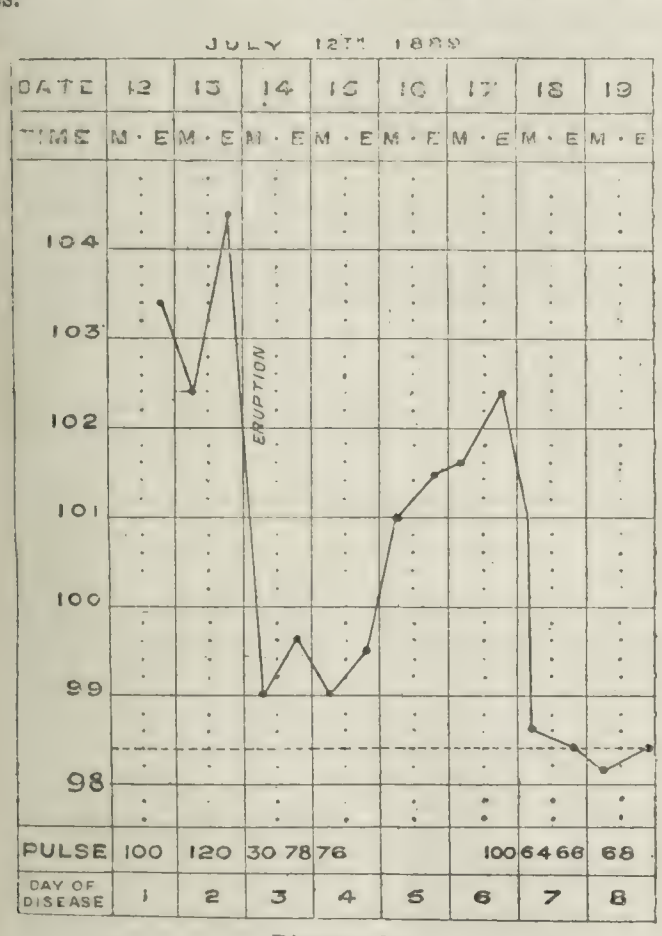


Diagram 3.

Average Number of Crew.—From November, 1888, to October, 889, the average number of the crew was 406.

Total Number of Cases of Dengue, 326 fresh cases.

Percentage of crew attacked is therefore almost exactly four-fifths. This result is very nearly arrived at in another way, namely: 10 officers and 90 men escaped having the disease, or rather more than three-fourths of the crew attacked.

Percentage of cases in Egypt given by Dr. Sandwith as four-fifths of population.

Incubation.—1. First case would put this at 8 or 9 days at least. 2. Prisoners received on board and kept separated from the crew as far as possible had the disease on thirteenth day. 3. Supernumaries received on board and living with the crew, three were down with the disease in $6\frac{1}{2}$ and 7 days. So the period varied from $6\frac{1}{2}$ to 9 days under conditions favourable to the disease, but it is evidently a very variable quantity. Sandwith gives it at from 2 to 8 days; Frayer says in *Quain's Dictionary* "The period of incubation is probably from 5 to 6 days; it may be a day or two more or less in some cases"; Roberts, 1 to 10 days. The period apparently depends greatly on the character of the epidemic.

Relapses and Subsequent Attacks.—One case only with two relapses, and in the primary attack and first relapse there were eruptions; 18 cases of undoubted second attacks, and 3 patients with third attacks.

Analysis of Symptoms.

Invasion nearly always sudden. Patients rarely kept about longer than twenty-four to forty hours.

Face.—Eyes often suffused and face flushed. Sudden enlargement of face and salivary glands noticed in 2 cases only on second morning of sickness, slight salivation in one of these cases only.

Eruption.—Thirty-seven per cent. of the cases occurring in July, August, September, and October had eruptions, but of the total number of cases the percentage having eruptions was barely 25. The eruption, therefore, was by no means general, even during the height of the outbreak, and, as I have already stated, the disease had existed on board for seven months, 118 cases had occurred, and though carefully looked for, the eruption was never found. The eruption was extremely varied and irregular in its (1) advent, (2) general appearance, and (3) duration.

Advent.—In some cases it came on first day and faded quickly, lasting a few hours only. In other cases it lasted during the whole attack. It appeared at any time between the second and seventh days, in many cases with a falling temperature and during convalescence, while in others, but more rarely, there were two eruptions, the first appearing on the first day, fading, and returning copiously on the fourth or fifth day with the fastigium.

Appearance.—1. Scarlatinal, which generally faded quickly. 2. Papular, from very fine to coarse red papules. 3. Measly, in large crescentic patches and lasting a long time. 4. Large blotches of white and red, itchy and troublesome, like urticaria. 5. Mottling of skin of trunk. 6. Petechial, seen in two cases only, and in both cases the petechiæ appeared after administration of large doses of soda salicyl. 7. Vesicular in two cases. 8. Pustular in one. Eruptions often mixed and frequently very itchy and troublesome.

Duration very irregular, lasting from a few hours to several days, and in one case lasting more than fourteen days.

Desquamation noticed in a few cases, and in one quite profusely.

Sore throat often complained of. The pains generally appeared to be entirely muscular, produced by and felt only during deglutition.

Cough.—In many cases there was a dry, noisy cough, no chest complication present, and disappearing during convalescence.

Temperature and Pulse.—Sudden rise of temperature on first day, with a quick, soft pulse of 100 to 120. During the first fall of temperature the pulse fell also in a remarkable manner, increased again with the rise, and fell again noticeably with the final defervescence. A full and soft pulse of 50 or 60 was often noticed.

Digestive system greatly disordered. Tongue characteristic, "yellow, coated, and slimy:" often peculiarly tremulous, as though the patient failed to control it after protrusion. Sudden and complete failure of appetite. Nausea a constant symptom, and early in the outbreak bilious vomiting. Diarrhœa common at first, but constipation the rule subsequently. No splenic or hepatic enlargements. Abdominal muscles frequently painful, and complained of as "pain in belly."

Headache an early and constant symptom, nearly always frontal, and associated with deep-seated pains in eyeballs. Headache severe and often intense. Giddiness nearly always complained of, and the men described it as a "giddy headache."

Lumbar and other Pains.—Backache an early and almost constant symptom, generally confined to the loins, and more rarely running up the spine. General muscular pains, described as a "bruised feeling all over," very common. Pains in joints rare, and in two or three cases only were the small joints noted as having been painful. No joint enlargements noted. Pains in bones very rarely complained of.

Delirium in one case only, and transient, but patients were always very restless and sleepless during the nights of high fever.

Fainting attacks in 12 cases, and a "faint feeling" often complained of.

Epistaxis occurred in one or two cases only.

Salivation slightly in 1 case. Enlargement of salivary glands in 2 cases.

Enlargement of lymphatic glands (inguinal) in a few cases only.

Orchitis none; nor pain ever complained of in these glands.

Duration of Disease.—Four to sixteen days; average, seven days.

Diagnosis.—Dengue liable to be confounded with rheumatism, scarlatina, malaria, and simple continued fever. During an outbreak in 1887 at Bombay the disease is stated to have been variously spoken of as "rötheln," "epidemic rose rash," and "simple continued fever." Dr. Sandwith speaks of the difficulty at Cairo of distinguishing dengue from scarlatina, and alludes to the liability of confounding the disease with simple continued fever, and says that the contagiousness and appearance of the eruption in dengue will distinguish it. The experience of the outbreak in this ship proves that both the contagiousness and eruption may be absent to a great extent; in fact, the number of cases fluctuated very much. Thus, in February, 1889, there were 22 cases; in March, 12; in April, 8; in May, 16; in June, 26; and in July, 130 cases, etc. Eruption completely absent for first seven months, and the other difficulties in the way of diagnosis on board here were the absence of sore throat and catarrh, absence of pains and swellings of joints, the peculiar thermometry of the disease, and finally the rapidity of convalescence and absence of sequelæ.

Variety.—I feel convinced that this outbreak was one of the many varieties under which this disease shows itself, and, as in this outbreak, often appears without an eruption, and so escapes a true diagnosis.

Mortality.—Nil.

Invalidings.—In no uncomplicated case.

Treatment.

Vomiting and retching easily controlled by sinapism or fomentation to pit of stomach; patient kept recumbent and three or four grains of calomel given by mouth. Bowels moved, if necessary, by enema.

Antipyrin failed to stop a rising temperature, but if given at the height hastened defervescence, promoted sweating and also at times relieved the severe headaches.

Aconite tincture used. I was much disappointed with this drug. It was given in various ways, as directed, but it failed to promote diaphoresis, nor was the headache relieved, and the temperature and pulse continued to rise, though the patients were under the influence of the drug.

Belladonna extract given in half-grain doses two or three times daily was of very decided value in relieving the distressing headache and promoting the action of the bowels.

Quinine and sodæ salicylate given in combination is a most powerful antipyretic. A standard of quinine, grs. x, and sodæ sal. grs. xv; increased or diminished by half, and given twice or thrice daily, is a very valuable remedy both in this and remittent fever. It is powerfully antipyretic, promotes diaphoresis, eases muscular pains and promotes the action of the liver.

Salines and diaphoretics given while the fever was running its ordinary course, and in combination with either belladonna or aconite. Belladonna preferred.

Mineral acids and quinine given during convalescence only. Quinine is useless in my opinion, and even harmful in the acute stages of the disease.

Arsenic with quassia, useful as a tonic in convalescence.

Conclusion.—In conclusion I would again call attention to Dr. Sandwith's Report. He and the army surgeons at Cairo were quite at variance regarding the diagnosis of the outbreak there; the former calling the disease dengue, and the latter maintaining it to be scarlatina, as it differed so materially from the types of dengue seen in India. In "Health of Navy" for 1887 it is reported that even at Bombay, a habitat of the disease, an outbreak was variously described as "rothëln," "rose rash," and "simple continued fever." On board here the material point of difference between the cases at beginning and middle of outbreak was the absence or presence of the eruption, but then again, even during the height of the outbreak, the eruption was more frequently absent than present. Further, on the East Indies Station, there is a disease which closely resembles, or is a type of dengue, as regards general symptoms, but with complete absence of eruption and sequelæ. I venture to submit the following propositions, which possibly may not be deemed very extravagant:—

1. That dengue is a disease not yet thoroughly understood.
2. That it varies very much according to locality and intensity of poison.
3. That there is a disease closely allied to but differing from dengue in absence of eruption and sequelæ.

My own convictions are conveyed by propositions 1 and 2.

Postscript.—Since writing the above, H.M.S. *Agamemnon* has returned to Malta, where influenza has been rife. The crew of this ship have suffered much less up to the present than any of the other ships. Has the dengue protected us? The treatment of influenza has been much the same as in dengue, but the results obtained with belladonna and aconite have differed. Aconite has best relieved the general pains and headache. Belladonna has been most serviceable where the cough has been the prominent symptom.

INFLUENZA AND PNEUMONIA.

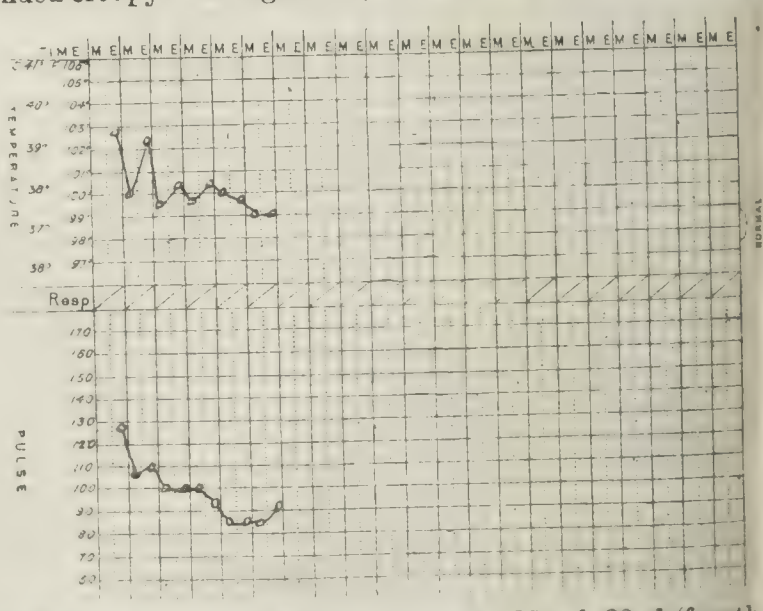
By JOHN HADDON, M.D.,
Canonbie, N.B.

At the present time, when influenza is so prevalent and causing such excitement all over the world, there are some questions one would like to have answered, such as: (1) Does it depend entirely upon climatic influences? (2) Is it infectious? (3) Do sporadic cases occur?

With the view of assisting in the solution of some of these questions, I desire to give an extract from notes of cases of pneumonia written out some years ago. After cases of croupous pneumonia and infectious pneumonia, I had written: "On another occasion I met with four cases in the same house, with more or less pneumonia, which I consider to be due to climatic influence and called influenza. They may have been due to infection. The first case, T., aged 28, who was in business in Manchester, began on February 26th, 1877; his sister M. began on March 17th; her mother on March 19th; and another sister on April 1st.

Case I.—T. went about till the eighth day, and the lung was not right till the nineteenth day, there having been a considerable amount of broncho-pneumonia. I give charts of the other cases with short notes of two.

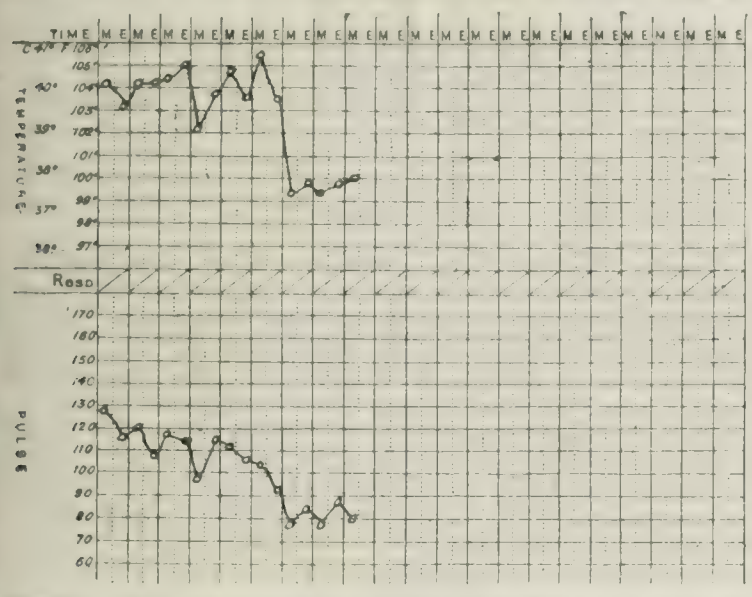
Case II.—Mrs. S., aged 50. On March 19th felt sick, giddy, and had a headache. On March 21st began to cough. The cough sounded croupy. At night temperature 102.8°, pulse 128. She had



six grains of quinine. Perspired much. March 22nd (fourth day) still perspires and coughs. Temperature 100°, pulse 108, morning

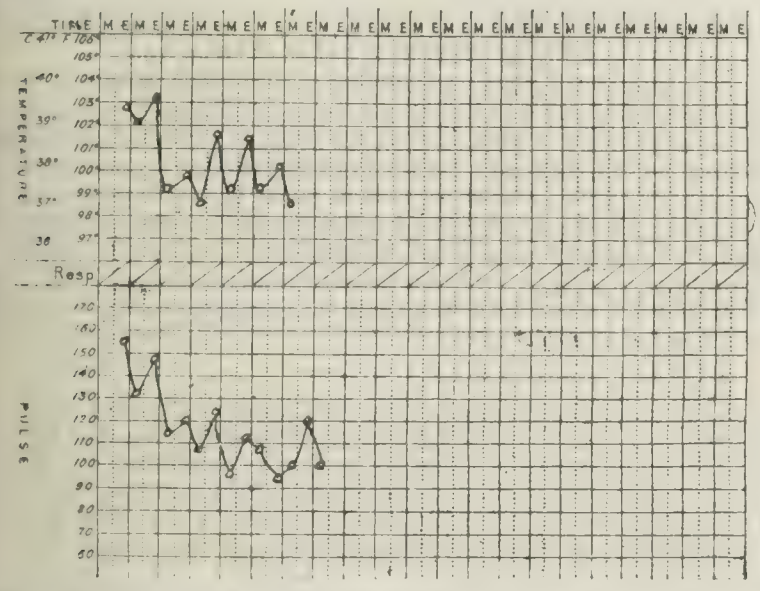
temperature 102.4°, pulse 110, evening. March 23rd (fifth day) delirious in the night. Profuse yellow expectoration. Temperature 99.6°, pulse 100, morning; temperature 100.4°, pulse 100, evening. March 24th (sixth day) had a good night. Moist *râles* on right side, with comparative dulness half way up. Temperature 99.8°, pulse 100, morning; temperature 100.4°, pulse 92, evening. She was soon up, but continued weak for a while.

CASE III.—Miss B. S., aged 25. Had pain in the chest on April 1st. On April 3rd some cough. Friction heard on left side. April 4th friction on left front. Moist *râles* on left, behind. These signs



continued. The temperature, which was 105.4° on April 6th, fell to 99.4° on April 7th, and she steadily improved. The chart shows the course of temperature and pulse.

CASE IV.—M. S., aged 9, began on March 17th with high fever, and went to bed at once. Broncho-pneumonia was developed, and ran a regular course. The chart shows the temperature and pulse.



From these cases there can be no doubt that the son introduced an infectious disease, which attacked three other members of the family. He stayed at home on March 6th, and on March 17th the second case occurred. There were no other cases in the district, and these were the only cases of the kind I ever met with. I was led to the belief that they were cases of influenza, from having read of the epidemics which used to visit this country; and the symptoms and course of the disease seem to correspond with those of the influenza which is now epidemic.

From the chart of Case III this disease evidently has a primary and secondary fever, such as all diseases depending upon a bacillus have, the primary being caused by the presence of the bacillus, and the secondary produced by the effects of the bacillus on the system.

Dr. SAUNDBY'S *Lectures on Bright's Disease* have been paid the compliment of translation into German. The translator is Dr. W. Lewin, the publisher Hirschwald.

REPORT ON THE VALUE OF SODIUM SILICOFLUORIDE AS AN ANTISEPTIC.[1]

BY T. JESSOPP BOKENHAM, M.R.C.S., L.R.C.P.

FOR some years it has been an accepted idea among medical men that in antiseptics they would at length find the means of combating infective diseases (that is, those due to specific organisms). Experiments made by Dr. Theodore Cash, F.R.S.,[2] showed that corrosive sublimate, when administered to guinea pigs, would afford protection from anthrax, the animals under certain conditions living quite unaffected by the inoculation. The danger here lay, however, in the extremely poisonous nature of the antiseptic itself, and it has been a desideratum to find a less dangerous substitute.

Such, I thought, might be the silicofluoride of sodium which was introduced to my notice some months back by Messrs. Burroughs, Wellcome, and Co. With regard to this substance the following particulars may be interesting, as they formed the basis of my subsequent work. It was introduced by Mr. Wm. Thomson, F.R.S.E., who, in a paper before the British Association in 1888, claimed that it was a powerful antiseptic, non-volatile, colourless, sparingly soluble in water, neutral, and above all, non-poisonous. Its saturated aqueous solution, 0.61 per cent., was unirritating, although large doses of the solid acted as an emetic. However, as much as 7 grains had been taken as a dose, though perhaps it was not desirable to take more than $\frac{1}{2}$ to 1 grain. Its antiseptic properties were demonstrated by adding the salt (1 to 700) to flour paste, or 1 to 200 to an infusion of chopped meat in water. The mixtures were placed in an incubator, and watched. After several days they were entirely free from either mould or decomposition. This was a more successful result than could be obtained with corrosive sublimate (1 to 500). The salt acted like alcohol in retarding the action of pepsin in albuminous bodies.

Mr. Robson, F.R.C.S.,[3] used the drug as an antiseptic in a great variety of surgical cases, and considered it specially useful in those cases in which there might be risk from absorption, if mercuric chloride were used.

Dr. Conrad Berens[4] found a solution of 1 to 1,000 strong enough to prevent all decomposition of vegetable and meat infusions, even when these were exposed for some weeks. He also found that a dose of 10 gr. in ℥iv of water could be borne without inconvenience, taken on an empty stomach and repeated three times daily for seven days.

After reading these accounts, I thought it would be interesting to undertake a series of experiments on the germicidal value of the substance given internally, working on the lines of Dr. Cash,[5] who found that a solution of mercuric chloride administered to an animal would protect it from the effects of a subsequent inoculation with anthrax. Before, however, undertaking this Dr. Brunton suggested that it would be well to first test the action of the drug on fermentation. This I proceeded to do. I took four flasks, and filled them as follows: Flask 1 contained 8 oz. glucose solution in water, sp. gr. 1040 at 15° C.; Flask 2 contained 8 oz. glucose solution in Na_2 Si F_6 soln. (1 to 150), sp. gr. 1040 at 15° C.; Flask 3 contained 8 oz. glucose solution in Na_2 Si F_6 soln. (1 to 300), sp. gr. 1040 at 15 C.; Flask 4 contained 8 oz. glucose solution in Na_2 Si F_6 soln. (1 to 600), sp. gr. 1040 at 15° C. To each I added a definite quantity of fresh yeast, and then plugged the necks, placing the flasks in an incubator at temperature 25° C. The specific gravities were taken every twenty-fours during seven days. It was thus found that the solution in Flask 1 became of lower specific gravity, whilst that in the others remained unchanged.

In experimenting with weaker solutions I adopted another method. A number of tubes of equal length and calibre were taken. These were filled with solutions of Na_2 Si F_6 of various strengths, each containing besides equal weights of glucose. Some actively growing yeast was then added; the tubes were inverted over pure mercury and placed in an incubator. The volume of CO_2, formed by the fermentation could thus be observed from day to day. The result is shown in the accompanying table:—

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[1] The expenses of this research were defrayed by the Therapeutic Committee of the British Medical Association.
[2] Report on Certain Chemical Disinfectants.
[3] JOURNAL, May, 1888.
[4] *Therap. Gaz.*, 1888, p. 443.
[5] *Loc. cit.*

TABLE.

Tubes 6½ inches. Yeast fresh, in active growth.

Tube No.	Proportion of $Na_2 Si F_6$.	Day 1.	Day 2.	Day 3.	Day 4.	Day 5.	Day 6.	Day 7.	Day 8.	Day 9.	Day 10.	Day 11.	Day 12.
1	Control	3 in.	6 in.	*	—	—	—	—	—	—	—	—	—
2	Satd. 1 : 150	0	0	†	—	—	—	—	—	—	—	—	—
3	½ satd. 1 : 300	0	0	†	—	—	—	—	—	—	—	—	—
4	¼ satd. 1 : 600	0	0	†	—	—	—	—	—	—	—	—	—
5	⅕ satd. 1 : 750	0	0	†	—	—	—	—	—	—	—	—	—
6	⅙ satd. 1 : 900	Small bubble	—	—	—	—	Large bubble	Not observed	6 in.	*	—	—	—
7	½ satd. 1 : 1050	Large bubble	—	—	—	—	—	1 in.	—	4 in.	6 in.	*	—
8	⅛ satd. 1 : 1200	2 bubbles	2 bub.	4 bub.	4 bub.	—	—	—	—	4¾ in.	—	Empty	—
9	§ ½ satd. 1 : 1800	1 bubble	—	—	—	—	—	2 bubbles	—	1½ in.	3 in.	4⅛ in.	5 in.‡
10	§ 1 : 7750	1 bubble	½ in.	3 in.	—	—	Empty	—	—	—	—	—	—

* Completely fermented. † No fermentation. ‡ Completely fermented; control empty on sixth day. § Separate control tube for these two experiments.

From these experiments it will be seen that a solution of $Na_2 Si F_6$ (1 to 750) will entirely prevent alcoholic fermentation; that solutions (1 to 900 and 1 to 1,050) will delay fermentation for a time, but that these latter cannot be considered truly antiseptic, as the growth of the yeast was only delayed.

[Experiments just lately performed with nutrient gelatine containing $Na_2 Si F_6$ (1 to 3,000 and 1 to 2,000) have shown that this proportion is quite without effect on the growth of the bacillus anthracis, and that there is no diminution in the virulence of bacilli cultivated through several generations on this pabulum.]

I next proceeded to try the effect of prolonged administration of the drug to guinea pigs.

EXPERIMENT I.—A saturated tepid solution of $Na_2 Si F_6$ was made in saline solution, 75 per cent., and of this 4 cubic centimètres were injected into the peritoneal cavity of a guinea pig (weight 1 lb. 14 oz.). A short time after the injection it was found with abdomen rigid and legs thrown out; temperature 38° C. in rectum. In spite of all efforts to recover the animal, it became collapsed, with temperature 26.5° C., and abdomen intensely tender. I then killed the animal, and found marked signs of peritonitis. No injury could be found attributable to the puncture of the syringe.

EXPERIMENT II.—Guinea pig (weight 10 oz.) 0.033 grammes, in warm saturated solution, were injected into the stomach with an œsophageal tube. Animal evinced uneasiness soon after injection; its abdomen became much distended, and it died after fifty-five minutes. *Post-mortem* appearances as follows: Stomach much dilated, with vessels injected; no signs of injury by the tube; full of pulpy food, with much thick mucus and gas. Intestines contained similar mucus. Heart arrested in diastole. Other organs normal.

EXPERIMENT III.—Guinea pig (female). On April 24th, injected 0.02 grammes in solution (1 to 300) into stomach. In three hours repeated the dose. April 25th. Animal quite well and lively. Injected during the day 0.1 gramme of the salt. April 26th. Again injected 0 1 gramme. April 27th. Animal quiet but feeds well. Injected 0.05 gramme in a single dose. Three hours afterwards it appeared uneasy, with some swelling of abdomen. Respiration became slow and laboured, and the animal seemed collapsed; temperature, 33° C. Shortly after this it died. *Post-mortem* appearances exactly as in Experiment II.

After this experience I had grave doubts as to the utility of trying further the internal administration of the drug. Still, I wished to control the statement as to its harmless nature when taken internally by man. My friend, Mr. Blackman, and I had noticed after drinking some of the saturated solution a feeling of distension of the stomach, with tendency to eructations, but had not thought of attributing these effects to the drug.

On April 28th, after a mixed meal, I took 0.05 gramme of the solid. I did not notice any effect for an hour, but, about that time after, a feeling of great nausea with eructations came on. This lasted several hours, and I felt utterly unable to do anything; the pulse was at the same time greatly slowed, tension being reduced. Next day all symptoms had passed off. Three of my friends, medical students, agreed to repeat my experiment on themselves. Each took a dose of 0.05 gramme, and the same feeling of nausea with eructations followed; the effects did not, however, last so long as in my case.

I think the above facts were sufficient to justify my abandoning the research. It is strange that my results did not tally with those of other observers, as I used a salt of great purity, and apparently identical in all respects with the one previously used.

In conclusion, I have to offer my best thanks to Dr. Lauder Brunton for his valuable advice, as well as for the use of his laboratory; and to Messrs. Burroughs, Wellcome, and Co. for the pains they took in procuring me an absolutely pure salt.

I feel that no apology is due for the appearance of the foregoing notes, as sodium silicofluoride seems to have been somewhat widely advertised, and I have frequently been asked whether it is a safe internal remedy. My experience will, at any rate, make others hesitate before they advise its use internally.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.,

INFLUENCE OF THE INFLUENZA WAVE ON PUERPERAL AND MENSTRUATING WOMEN.

IT is a matter of common observation that the influenza wave—whatever be the nature of the morbific influence borne upon it—acts in strikingly different ways upon different individuals, according to differences of age, constitution, or pre-existing disease or proclivities. Some cases I have seen in puerperal and menstruating women suggest to me the importance of observing closely the clinical history of similar cases, carefully noting the hygienic surroundings and the meteorological record. This is an opportunity that should not be lost of studying some of the relations of meteorology to health. ROBERT BARNES.

THE ETIOLOGICAL RELATIONS OF INFLUENZA.

BEFORE a specific form for this epidemic infection can be determined, some thought is due to the class of infection to which it belongs. All infective particles fall into two classes; for the one the living animal body is the only medium where the germ can be reproduced in its full vigour, those of the other class can increase in external media.

Keeping to the infective fevers, we may note the help gained from artificial cultures of certain germs associated with them, even when their specific infective power is weakened or lost in the process. Thus the rapid growth of the anthrax bacillus and the conditions under which it will or will not produce spores is instructive; also Koch's demonstration of the slower development of his bacillus tuberculosis, the steady high temperature close to that of the blood needed, and the fact that it does not sporulate in the air show why it is not a widely diffused aërial infection, and hardly to be reproduced or multiplied outside the living body. On the other hand, the germs of ague and remittent fevers, capable of growth and increase in the living body, so far lose their infective power as only to be revealed by uncertain inoculation, flourish and maintain their fullest powers in favourable external conditions indefinitely.

Ague, then, is the type of the second class of infection, smallpox and measles are typical of the first. Diseases of this class are not only directly infectious, they are propagated only by direct infection; moreover, one attack is protective against a recurrence.

Diseases of the second class may be in varying degrees directly infectious, but one attack is not protective against a recurrence, and their power or possibility of increasing out of the body makes them often widely epidemic in a way independent of direct infection from person to person. Cholera stands in this class, though less restricted to special districts than are remittent fevers. Influenza and dengue are nearly allied; both are readily infectious, but the latter has a distinctive rash, and is hardly known in Europe.

Those three diseases might be placed in a subclass to the true malarial fevers. In another subsidiary group more allied to the first would come yellow fever, typhus, and enteric fever; in these one attack is protective against a second, but infection is not essential to their propagation, and it is not yet ascertained whether infecting particles from the sick are only diffused by the media which convey them, or may there increase or even be intensified. Water is mostly the carrier only of enteric germs, but it would seem that they gain intensity under some conditions external to the body, and this is probable for typhus in foul air, or for yellow fever on board ship in hot climates. To whichever of these intermediate classes the infection of influenza may eventually be assigned, it is clearly not propagated only by direct personal contagion, as is the case with measles, scarlet fever, whooping cough, mumps, and varicella. Very little need be done in the way of closing day schools, or the isolation of convalescents for its repression. The relapse, which forms so marked a feature in its course, also points to a near alliance with the miasmatic class. The germ once received into the body is in no haste to quit, and evidently thrives there well enough to be reproduced in the relapse.

One other difference of this kind of infection to the directly infectious germs may be hinted at. These only flourish in the sick body, and if they gain intensity or malignancy of type, this power is conferred on them in and by the individual state of the sufferer, and such quality is, to some extent, transmissible to subsequent sufferers, while in influenza external conditions modify the intensity of the germ which they have, in all probability, evoked from the most frequently occurring form that habitually associates with us.

WILLIAM SQUIRE, M.D.

Harley Street.

INFLUENZA: TWO ATTACKS.

A PATIENT of mine has had two attacks of influenza. The first was in Lyons in the middle of December; he then had marked catarrhal symptoms with great depression, but no headache or lumbar pain. The second attack was on January 11th, after he had returned here, and then the characteristic symptoms were headache and pain in the limbs, with no catarrh. The French attack produced much more depression.

It would be interesting to collect cases of double attack in different regions.

ARTHUR MAUDE.

Westerham, Kent.

RASH IN INFLUENZA.

NOTICING Dr. Cecil Osburne's remarks in the JOURNAL for January 25th upon the rash occasionally observed in cases of "Russian influenza," I beg to send the following, as I think they will be of interest.

R. R., when first seen, had a rash all over his body closely resembling that of scarlet fever. His illness had commenced two days before with violent shivering, vomiting, loss of appetite, headache, and backache, and he had felt feverish and weak. The rash was first noticed thirty-six hours after the onset of these symptoms, and rapidly developed. It was most marked over the anterior border of the armpits and the inner surface of the thighs. On the fourth day of the illness desquamation commenced in the first-named situation. It gradually extended until on the eighth day the entire surface was involved. On the seventeenth day the patient presented himself with the epidermis of the hands (which was very thick and horny, especially in the palms, the man working as a blacksmith) being shed *en masse*. That on the feet, which was also very thick over the soles and heels, was being shed in a similar manner. The patient's temperature, 101.4° when he was first seen, became normal on the fourth day, and beyond feeling extremely weak he was otherwise quite well during the whole period of desquamation, which is now complete, twenty-three days from the first appearance of the rash.

L. D., rash of a papular character, closely set and intensely itchy, appeared on the second day of illness on the chest, back, arms, and legs, and was more or less present for three weeks, during which time the patient suffered from a good deal of catarrh—pharyngeal, laryngeal, and bronchial—and troublesome cough. There was slight desquamation of the apex of the papules, most marked on the legs, which received more scratching than the rest of the body.

Of the number of cases I have seen nearly 17 per cent. have been attended with rash.

T. L. K. DAVIES.

Glen Menai.

ANALOGY BETWEEN DENGUE AND INFLUENZA.

IN dengue and influenza the attack is often sudden, with redness and watering of the eyes; acute rheumatic pain in back and limbs; redness of the fauces, with pain in swallowing; general distress, prostration; sleeplessness, with pyrexia—lasting from three to eight days; followed by subnormal temperatures, varying from 96° to 97.8°. In both there is a remittent tendency, with a liability to relapse; anorexia and nausea in both at commencement, with some looseness of the bowels, or constipation.

There is often an initial rash, of a bright red colour, in dengue, commencing on the second or third day. In my opinion, this symptom in the present epidemic is modified by a colder climate, the hyperæmia of the skin not appearing, but showing itself by metastasis, as bronchial and intestinal hyperæmia.

The rash of dengue, moreover, only appears in about two-thirds of the cases (Charles). In many cases I have seen it has been absent. In the present epidemic I have seen, however, no rash, but the pyrexia and symptoms of the cases have presented the course of those of dengue fever.

It is known that dengue was present in an epidemic form in Turkey and Asia Minor before the epidemic wave passed over Russia, and thence through the rest of Europe. My hypothesis is, therefore, that the present epidemic is only dengue modified by climate, and exhibiting, instead of the rash of hot climates, the metastatic hyperæmia of the bronchi and bronchioles, and also of the intestinal canal. The treatment efficacious in both is practically the same: Quinine, diaphoretics, bromide of potassium, rest and warmth in bed, and tonics for the resulting anæmia and debility.

E. J. ERSKINE RISK, Surgeon A.M.S.

Milton Barracks, Gravesend.

ELONGATION OF THE UVULA AS A CAUSE OF LARYNGISMUS.

ELONGATION of the uvula in the case of young children, the faucial tonsils not being enlarged—though I cannot agree with Dr. Ringer that this last condition may not occur in earliest infancy, or indeed may not be congenital—is due of course to paresis of the soft palate, which in its turn is almost invariably caused by enlargement of the pharyngeal tonsil, otherwise known as adenoid growths. In fact, I have a tolerably sure conviction that, in almost every case of laryngismus, as well as in those of tetany and convulsions, the subject would be found to be a mouth breather, and that, if sought for, adenoid growths would always be discovered.

I have but rarely had occasion to reduce the elongated uvula of a child by abscission, for I have found that removal of enlarged tonsils, whether faucial or pharyngeal, or both, will in the majority of cases lead to restoration of the muscular contractility of the soft palate without further treatment.

The condition of epiglottis which Dr. Mantle quotes as mentioned by Dr. Goodhart is allied to that described by Solis Cohen as "imprisonment of the epiglottis" by what were then considered enlarged circumvallate papillæ, but now recognised as representing hypertrophy of the adenoid tissue at the base of the tongue—the lingual tonsil, in fact. When such a condition exists in the young, there is also associated hypertrophy of either the faucial or pharyngeal glands of the same nature.

Weymouth Street, W. LENNOX BROWNE.

CYANOSIS FROM MONOBROMACETANILIDE.

IN the JOURNAL of February 8th two cases of cyanosis following the administration of exalgine and monobromacetanilide are narrated; recently two cases with similar symptoms resulting from the latter drug have come under my notice, and, as they seem to show that monobromacetanilide is more active for evil than antifebrin itself, and also to lend support to Mr. Bokenham's suggestion of a possible menstrual idiosyncrasy, they are worth noting. Both patients had passed through a mild attack of epidemic

catarrh, and had not at the time entirely recovered from the ensuing prostration.

In the first case, a girl, aged 19, woke early in the morning with a severe headache, and at 11 A.M. took 5 grains of monobromacetanilide. The headache was not relieved, so eight hours later she took 5 grains more, though her friends noticed she was rather pale and dusky at the time. At 10 P.M. lips, cheeks, and fingers were deeply cyanosed; pulse 120, small and soft; she was restless, complained of headache, and said she felt she was dying. At midnight, pulse 140, small; complains of a rushing noise in her ears, and throws herself about restlessly, like one who has lost much blood. At 6 A.M. she attempted to get out of bed, and fainted; after this the headache lessened and the cyanosis gradually diminished, though it was still appreciable at 6 P.M. During the night menstruation came on, she slept well, and was quite recovered in the morning.

The second case was that of a woman, aged 33, who had previously on several occasions taken 5-grain doses of antifebrin for headache, with uniform benefit. A severe headache came on at night, when she took 4 grains of monobromacetanilide, and an hour later repeated the dose, in spite of a caution to the contrary. The headache was somewhat relieved, but in the morning she was blue and faint, and she staggered on attempting to walk. The pulse was 80, regular and soft, but not small. She was treated with ether and ammonia, and by the evening the headache and cyanosis had passed off, and menstruation had commenced.

In the first case menstruation was not due for ten days, but there had been previous irregularity; in the second not for three days.

I have seen the drug tried with men in similar doses without any such symptoms; though the good results were in no case as marked as with antifebrin.

Great caution is required in accepting evidence that the usual reaction of drug and organism may be interfered with by menstruation, and the occurrence of these three cases may be nothing more than a curious coincidence; at any rate, the monobromacetanilide would appear, under some circumstances, to be an unstable body, and liable to molecular change to a toxic substance, possibly aniline; so that it may be followed by unpleasant symptoms even when given in small doses. L. WORTHINGTON, M.D.Lond.

Woolwich.

FIRST PREGNANCY LATE IN LIFE.

WHEN at Great Yarmouth I attended a primipara, whose age was given as 48. I had known the person for some years; she had never aborted, and was a woman in sound health; she had been married about twenty-five years. Pains of a spurious character set in for a few days, at 2 A.M. previous to delivery—which proved tedious—upon the sixth day after commencement of the false pains. Labour proved natural, and a girl was the result, who afterwards manifested signs of mental imbecility. In other respects mother and child did well. Forceps were not had recourse to, but magnes. sulph. with small doses of antimon. tart. were given to act upon the bowels and overcome any rigidity that might exist in the delivery of the patient.

SPENCER SMYTH, M.D., L.R.C.P.Lond., F.R.C.S.Eng., L.S.A.

Bournemouth.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GENERAL HOSPITAL, BIRMINGHAM.

TWO CASES OF SEVERE HEAD INJURY: TREPHINING: RECOVERY.

(Under the care of W. F. HASLAM, F.R.C.S., Assistant-Surgeon to the Hospital.)

[Reported by E. N. NASON, M.B.Cantab., late Resident Surgical Officer.]

CASE I.—T. L., aged 12, was kicked on the head by a horse on the evening of August 5th. On admission about an hour later he was quite unconscious, and was said to have been so since the accident. A compound depressed fracture of the skull in the right parieto-temporal region was found, and evidently extended downwards towards the base of the skull beyond the limits of the external wound. There was no definite paralysis, though the left side seemed to move less freely than the right. The pupils were equal, moderately contracted, and acted, though sluggishly, to light. There was effusion of blood into the right eyelid, but no subconjunctival hæmorrhage. Blood was flowing from the nose and mouth, but there was none from the ear. The pulse was small, between 70 and 80 per minute; respirations slow and snoring. He had vomited once or twice.

Mr. Haslam decided to trephine at once. The smallest size trephine was used, and the opening thus made was subsequently enlarged by a pair of Hoffmann's gouge bone forceps. Several small pieces of loose splintered bone were removed, and on exploring further a linear fracture could be seen running downwards from near the anterior inferior angle of the right parietal bone towards the base of the skull. There was considerable bulging of the dura mater, pointing to some pressure from within. The child's breathing, which had all along been feeble and irregular, now stopped entirely, possibly from cerebral compression, as the anæsthetic was not being pushed at all. The dura mater was at once punctured; a small quantity of blood escaped, and the breathing immediately recommenced and steadily improved. The wound was closed by catgut sutures, two deep ones being used to control some troublesome hæmorrhage from beneath the temporal muscle at the lower angle of the wound. The wound was dressed with iodoform and wood-wool wadding. On the following morning the boy was quite conscious and did not complain of any pain. The temperature was normal.

On August 11th the wound, which had been dressed each day, had nearly healed. The temperature was still normal. There was no pain or any cerebral disturbance, but slight right facial paralysis was noticed, which might have been overlooked before, on account of the great swelling of the face.

On August 26th the wound had quite healed, and the facial paralysis was disappearing.

The patient was discharged cured on September 12th.

CASE II.—A. G., aged 11, was admitted on the evening August 24th, having fallen from a wall about five feet high, striking his head against a piece of iron. He was conscious but drowsy, taking no notice of anything. He answered questions fairly rationally, but resented being disturbed. His face was pale and his extremities cold and clammy; pulse feeble, and respirations slow and shallow. Pupils were equal, slightly dilated and reacting but sluggishly to light. He vomited soon after admission. One inch above the left ear was a lacerated wound, running for two inches forwards and upwards, and exposing the bone. A sharp edge bone could be felt beneath the wound, and extended beyond it in both directions. Below this there was a very marked depression. There was free hæmorrhage from the wound, but none from the ear or nose.

Elevation being thought advisable, the scalp was shaved and cleansed, and Mr. Haslam enlarged the wound in the direction of the line of fracture and made a second incision from the middle of the wound vertically downwards. It was then found that the lower inch and a half of the left parietal bone was separated from the rest by a fracture extending some two inches horizontally. This portion was itself split into three larger and several smaller fragments, and was driven beneath the squamous portion of the temporal, separation having occurred at the temporo-parietal suture.

A small piece was removed from the sound portion of the parietal bone by Hoffmann's gouge forceps, allowing the introduction of an elevator. The depressed portion was then elevated and the fragments, which were quite loose, were removed. A slight rent was found in the dura mater near the lowest point exposed, and from this a considerable quantity of cerebro-spinal fluid and some little brain substance escaped. A stream of warm mercurial lotion (1 to 3,000) was allowed to trickle over the exposed dura and the surrounding wound, the edges of which were then brought together by wire sutures, and two small drainage tubes inserted. The wound was dressed with iodoform and wood-wool wadding. After the operation the boy's pulse improved, and he soon fell into a quiet sleep, which lasted most of the night.

The dressings were changed on August 25th; the wound was looking quiet. There were no cerebral symptoms. On August 28th the drainage tubes were removed; the wound was nearly healed. On August 31st the wound was quite healed; a metal protecting plate was ordered. On September 10th the patient felt

and looked quite well, and went home on the following day. In both these cases the head injury was severe, but in both all symptoms disappeared immediately after operation. Hoffmann's gouge bone forceps were found exceedingly useful in both.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 11TH, 1890.

Sir E. H. SIEVEKING, M.D., President, in the Chair.

Rheumatism: its Treatment Past and Present, with Special Reference to recent Experimental Research on Salicylic Acids and their Salts.—Dr. M. CHARTERIS gave in this paper a general summary of the treatment of rheumatism previous to the introduction of salicin and salicylic acid, and described an experimental research as to the action of salicin, salicylic acids, and their salts of sodium, with the following results: Salicin 30 grains, salicylic acid (natural) 10 grains, and salicylate of sodium (natural) 32 grains, had no deleterious action on rabbits weighing 2½ lbs. Salicylic acid (artificial) 10 grains, and salicylate of sodium (artificial) 18 grains, in ordinary use, caused death of rabbits weighing 2½ lbs. He discovered an impurity on July 4th, 1889, in artificial acids; appearance like coarse flour, very soluble. This was not yet identified, but was probably derived from creasotic acid. One grain of this impurity proved fatal to a rabbit weighing 2 lbs. In further research the impurity was removed by the following process: Salicylate of calcium was first prepared, then decomposed by hydrochloric acid, setting free salicylic acid, which was subsequently purified by recrystallisation. The appearance of the purified acid was in every respect similar to that of the natural variety. The physiological action of this purified acid in 15-grain doses on rabbits gave "no paralysis, not even depression, after the last injection; the rabbit was able to run easily." This physiological action was contrasted with that of the best samples of artificial acid obtained from Messrs. Schering, of Berlin, which in similar doses proved fatal to one rabbit, and in two others caused marked prostration and paralysis, but not death. Practical deductions were drawn from these investigations.—Dr. MACLAGAN thanked Professor Charteris for the interesting paper he had read, and stated that he had abandoned for many years the use of salicylate of soda in favour of salicin in consequence of the deleterious effects he had observed during the use of the former drug. He found that salicylic acid and salicylate of soda, naturally prepared and artificially prepared, had anti-rheumatic properties, the basis of which was salicin, and it was merely the question as to what drug was the best and most convenient to use. He was accustomed to prescribe 30-grain doses of salicin every hour for six hours, and then every two hours, and he found that in from twelve to twenty-four hours all pain had disappeared. In his experience it was necessary to get a large amount of salicin into the system quickly, and he had been unable to use salicylate of soda so freely without producing deleterious effects. He thought that the question of price would arise if natural salicylic acid (purified) was used, as it was more expensive than salicin and salicylate of sodium. He was not prepared to accept the view of Senator that salicin was broken up in the system and formed salicylic acid, and that the beneficial effects were due to the action of this acid. This group of remedies had distinct anti-rheumatic properties apart from their febrifuge action.—Sir DYCE DUCKWORTH was interested in the paper, which might be studied from a chemical aspect or from that of a clinical physician. His own practice was to order 20-grain doses of salicylate of sodium every six hours, a second dose being given after the first three hours. He asked why Professor Charteris made these inquiries. What were the untoward effects of the drug? It had long ago been insisted by Dr. Latham, of Cambridge, that salicylate must be prepared from the oil of winter green. He had only twice observed toxic symptoms from using the sodium salt; in both cases cardiac depression. He asked if he was right in using the drug ordinarily met with in shops. If the one drug was the safer, it ought to be used irrespective of the increased price. He had but little experience of salicin, as he was quite satisfied with the ordinary salicylate of soda.—Dr. LUFF stated that the commercial salicylate of soda was generally prepared from salicylic acid; if it was prepared artificially from carbolic acid, it was possible that they might get an isomeric variation of salicylic acid which might be responsible for the deleterious results occasionally met with.—Dr. SHAW argued that all the evil effects generally attributed to the action of salicylate of soda were not due to extraneous causes. It was not only on account of price that it was preferred to salicin, as it was a more efficacious drug. He had seen delirium and hæmorrhages following the use of salicin as well as after salicylate of sodium.—Dr. ARCHIBALD GARROD drew attention to the fact that the rare accidents of rheumatism were often put down as being due to the action of drugs. For instance, albuminuria was now supposed to be due to toxic effects of drugs when it occurred in a patient suffering from acute rheumatism; if, however, the case books were examined in the præ-salicin era, it was found that the urine contained albumen in some cases during the expectant treatment. If the drugs contained impurities which could be removed by the simple methods of Professor Charteris, then let it be done at once, so that physicians could have drugs that they could use freely.—Dr. HAIG thought that the toxic effects of salicylate of sodium had been exaggerated. There was, however, a great difference in the different specimens met with, some of which smelt of carbolic acid.—Surgeon-Major MYERS had given various doses of salicylate of sodium, and had noticed that patients who had taken large doses had a tendency to make tardy recoveries. He could not agree with the great danger of producing toxic effects with that drug.—Dr. FREDERIC TAYLOR was accustomed to give 20 grains of salicylate of sodium every two hours; he thought delirium was by no means an uncommon complication.—Dr. MITCHELL BRUCE could not agree with Dr. Taylor, as he had rarely seen delirium. The dose usually given at Charing Cross Hospital was 15 grains every three hours. This was usually sufficient, or, if not, the dose was increased by half. He thought that the drug used now must be finer than formerly, for toxic effects were rarely met with. The paper suggested to him that the unequal results of using antifebrin or antipyrin might possibly be due to the presence of some isomeric variation.—Dr. LAUDER BRUNTON suggested that the danger lay in the impure quality of the carbolic acid from which salicylic acid was made. If the carbolic acid contained some higher homologue, then they might get oxy-toluic acid. They must first start with a pure carbolic acid, and he hoped that the British Pharmacopœia Committee would pass some regulations to effect this.—Professor CHARTERIS, in reply, informed Dr. Brunton that he had totally failed to procure any pure carbolic acid.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 10TH, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair.

Experiments on Anæsthetics.—The PRESIDENT, after a few preliminary remarks, called upon Dr. Lauder Brunton to read the address, which is published in full at page 347. At its conclusion, the PRESIDENT said he was sure he interpreted the feelings of the members rightly in saying that they desired to give a vote of thanks to Dr. Lauder Brunton for his most valuable communication.

Mr. BAILEY said he had nothing whatever to say about experiments of this kind. His own experience related to human beings. Mr. Clover's apparatus, he supposed, was the most perfect ever known for giving chloroform. He (the speaker) gave it many years in that way, but he had not the experience of Mr. Clover. He could only say that he thought in those early days chloroform was given in the south as well as it was in the north, and deaths occurred even with very able men. It used to be said that it was from failure of the heart, but it did not seem to be important whether it was failure of the heart or of the respiration. Mr. Clover's great aim was to find an anæsthetic that was not so dangerous, and at that time ether came into use. Ether was given long before chloroform, but it was given in a very haphazard and uncomfortable way, and the patients were no doubt often suffocated. Mr. Clover gave a little nitrous oxide first. It was found that the patient could be kept as quiet under ether as under chloroform. He differed from Dr. Lauder Brunton in one respect; there was no asphyxia whatever in ether properly given; absolutely perfect anæsthesia could be got under ether. Reference had been made to London in comparison with the north. It must be remembered, however, that Mr. Teale, in his address to the British Medical Association at Leeds, said how different his life had been to him since he had ether for his operations, because he had had no anxiety whatever; the patients got well, the whole operation was simply done, and there was perfect anæsthesia. In his (Mr. Bailey's) opinion, what should be done

was to ask the surgeons to say which they liked best. Any gentleman who had been in practice for twenty years should be asked that question. He thought most of them would say: "During my first ten years patients died, and during the last ten years for some reason they have not died." Gynæcologists, he knew, did not all like ether; they said that the patient was not so quiet; but there were exceptions. During the last fortnight he had been asking different men the same question, and he had only met one who preferred chloroform. They had been told by a distinguished writer, over and over again, not to watch the pulse. For himself he watched the pulse and the respiration and the pupil. Dr. Brunton seemed to think that it was a difficult matter to do anything but watch the respiration. He (the speaker) always took the pulse with the thumb, and watched the respiration and watched the pupil, and he did not find any difficulty in it. Where there had been any difficulty the pulse had most assuredly failed as soon as the respiration. He thought, on the whole, that the death-rate was enormously less in England from ether than from chloroform He hoped they would not be divided into two parties, etherists and chloroformists. Dr. Lauder Brunton had made no experiments with ether in India. Taking it all round, ether was the safest anæsthetic in his opinion.

Mr. WOODHOUSE BRAINE said he agreed with his colleague, Mr. Bailey, in everything that he had said. He thought that perhaps one explanation of the facts that had been stated was the tropical heat of India, which they did not get here. If one looked at the record of the deaths from chloroform it would be found that the patient went on very well for a certain time, then a little more chloroform was added, then a sudden pallor appeared upon the face, and if there was a cut section, and the vessels of that section ceased to bleed, the heart was examined. There was no pulse found, but the patient breathed afterwards. He remembered seeing a case like that when he was a pupil. The patient's heart certainly stopped. He maintained that one fatal case was of far greater importance than thousands of experiments on animals.

Dr. SANSOM wished to tender his thanks to Dr. Lauder Brunton for this most interesting exposition of some part of his work. He would also like to say that it was an immensely valuable thing to have confirmed, and reduced to manometric certainty those observations on the action of chloroform. He would refer to the observations on dogs, and would take two simple questions: first, what were the teachings up to that day of experiments on animals? and, secondly, how did those experiments on the behaviour of animals bear on the practice at the present day as regards anæsthetics? In years long past very careful experiments had been done in this country by Dr. Snow, and also by Dr. Anstie. Others were done by distinguished men abroad, and he might be permitted to add that he had done a great number himself. Those experiments had led to the same results as those which Dr. Lauder Brunton, with the valuable auxiliaries of modern science, had obtained. He did not know of a single valid careful experiment in which the heart did not cease after the respiration. But animals varied very much. In his experiments he had found that in the guinea pig the heart would beat longer after the cessation of respiration than in the case of the dog. It was almost impossible to paralyse the heart of a snake with chloroform, but it was easy to paralyse the heart of a warm-blooded animal. As to the general teaching of facts, it had been that if an animal were given a strong dose of chloroform vapour the heart ceased considerably sooner than with a weak dose. If an animal were killed by a strong dose of chloroform, the heart soon after death was very much less irritable to stimuli, or absolutely unirritable, whereas after a weak dose it was irritable. Further, M. Faure had said that long-haired dogs behaved very differently from short-haired dogs. He did not wish to be classed among those who would attach slight value to experiments on animals, but in this question he did not think it safe to argue from animals to men. The influence of emotion placed man in a very different category. The *post-mortem* appearances in the human subject and in animals were very different. If death was from failure of respiration, how was the fact that in a very considerable proportion of deaths from anæsthetics all the chambers of the heart had been found full to be explained? When all the cavities of the heart were found full, it pointed strongly to death in that particular case having taken place from paralysis of the heart. The general teaching of these experiments was of great value, but they ought not to be accepted as solving the question. The practical anæsthetist must be on the lookout for stoppage of the heart for the danger of syncope in the human subject was not imaginary, but very real indeed.

Mr. BRUDENELL CARTER related a fatal case which had occurred to him some years ago. He was once present at some interesting experiments made by Dr. Richardson (whom he was sorry not to see present) on rabbits which, so far as they went, fully confirmed the results of the Hyderabad Commission. Two rabbits of equal size and strength were put under a bell glass, the air of which contained a certain quantity of chloroform. They were left there until they were both apparently dead. Dr. Richardson then took away the bell glass, put one of the rabbits aside, and performed artificial respiration on the other. The result was that the rabbit that was not touched remained dead, while the other was, in two or three minutes, quite well again. He had used ether at St. George's, generally with nitrous oxide, for some years until the introduction of cocaine. The disadvantages of ether were the initial struggling and the venous congestion, which increased the risk of hæmorrhage in certain ophthalmic operations. Chloroform was free from this drawback.

Dr. ROUTH said he had seen six cases nearly die under chloroform, but the patients were brought back to life by turning them topsy-turvey. He had seen about 2,000 gynæcological operations, but he only knew of one case of death from ether. If it were true that respiration stopped sooner than the heart, some instrument similar to that which the late Dr. Sibson used should be placed upon the chest, so that its movements might show how the respiration was going on.

Dr. DAY said he had given bichloride of methylene in about 1,300 cases, and had never met with a single accident. He had given it frequently in cases of weak dilated heart and mitral constriction; and notwithstanding the severity of the operation the patient had borne it remarkably well. That, he thought, was also the experience of Sir Spencer Wells.

Dr. HEWITT said he thought confusion had frequently arisen in consequence of the stoppage of the pulse being taken as stoppage of the heart. He had seen two or three threatening cases in which the pulse had certainly given the first sign of danger. He had never known respiration fail while the pulse was fair at the wrist when there was no obstruction to breathing; therefore the pulse should be watched as well as the respiration. The fall of blood pressure under ether, to which Dr. Brunton referred, apparently occurred only when air was withheld to a considerable extent. Ether was never now given in that particular way, because when the colour of the patient's lips became at all dusky air was admitted, and hence it seemed to him that the fall of blood pressure under ether was prevented. The administration of ether could not be compared with that of chloroform, because with chloroform it was desired to give a large quantity of air; and with ether they wished only to limit, but not to deprive the patient entirely of air.

Dr. LAUDER BRUNTON, in replying, said, with regard to the stoppage of the pulse as compared with the stoppage of the heart, data would by-and-by be available for Dr. Hewitt to inspect. In the animals which had not been operated upon they found that the respiration stopped while the pulse was good at the part in the dog corresponding to the wrist. Even after the animal had been experimented upon for a long time, and the general strength appeared to fail, the respiration failed before the pulse, and the pulse did not give the indications which they looked for. The difference of opinion among surgeons as to ether and chloroform might be partly a question of temperature. They were unable to test the effect of a low temperature in Hyderabad. In the North of America, where the temperature was comparatively low, surgeons appeared to swear by ether; but in the Southern States chloroform was preferred. What they meant by asphyxia was more or less deprivation of air. Mr. Mills, in giving ether, generally kept the apparatus closely applied to the mouth and over the face for four respirations, and at the fifth respiration he would allow air to pass in, and that was very much less than in the normal respiration. In the case of chloroform, a large supply of fresh air without any carbonic acid was got at each respiration. He concluded that anæsthetisation with ether was more or less a process of asphyxia. In the warm climate of Hyderabad they had almost entirely to cut off the air before they could get the animal under. Their percentage of accidental deaths with chloroform was very large, and the impression they wished to convey was that it was possible to avoid death by taking the proper means, but that it was easy to produce death by chloroform. He agreed that one positive result was worth more than a million

negative ones. But they got positive results; they got death; they got the heart stopping in one or two instances before the last gasps occurred. They said those cases were not due to chloroform because something else had been done than the simple administration of chloroform, and in one case they got this very result from asphyxia without chloroform by making the animal inhale pure carbonic acid. One would imagine that, with a very strong dose, there would be more difficulty in bringing the heart round, but they found quite the reverse. The reason was simply this: they did not begin bringing the animal round until the respiration ceased entirely. When a strong dose was given respiration ceased quickly, and it could be seen at once when it had ceased; but when a feeble dose was given the breathing ceased so gradually that it was difficult to see when it actually stopped. Something like the indicator referred to by Dr. Routh had, he believed, been devised by Dr. Tuke, but he had not seen the instrument. A point alluded to—that of physical weight—was one of practical importance. He had seen two or three heavy dressers lying upon a man's chest and trying to restrain the movements, and he believed the process of suffocation thus induced might be very dangerous. If sufficient care were taken to avoid suffocation by artificial restraint of respiration, and the respiration were watched carefully, deaths would not be likely to occur.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBUARY 5TH, 1890.

ANNUAL MEETING.

A. L. GALABIN, M.D., President, in the Chair.

Specimens.—Dr. CARTER exhibited a Double Pyosalpinx.—Dr. AUST LAWRENCE showed a Rare Form of Cystic Disease of the Chorion.—Dr. J. PHILLIPS brought forward a Chorion from a woman, aged 42, four months pregnant.—Mr. C. H. JAMES demonstrated a preparation of the Uterus and Appendages from a child 5 days old, showing Hæmorrhage from the Uterine Mucous Membrane.—Dr. CULLINGWORTH exhibited for Dr. ARTHUR ROBINSON a Uterus with Placenta Prævia.

Urethral Diverticula.—Dr. AMAND ROUTH read this contribution. Three cases of urethral diverticula were related, and references made to others. The literature on the subject, though dating from 1847, was scanty and scattered. The symptoms were progressive discomfort and frequency of micturition, dyspareunia, and the formation of a swelling which appeared at the vaginal orifice. Pressure upon the swelling caused thin, offensive, irritating pus to pass into and out of the urethra. Cases were recorded showing that if these diverticula were left untreated retrograde changes occurred along the urinary track. The physical signs were unequivocal, differing on the one hand from dislocation of the urethra, and on the other hand from simple dilatation of the middle third of the inferior wall (urethrocele). The diverticulum was essentially a urinary pouch or cyst communicating with a urethra of normal calibre, usually in its middle third, by an orifice relatively narrow. The etiology seemed to be: 1. Closure of the ducts of pre-existing urethral glands, retention cysts resulting; suppuration and ulceration into the urethra by a small, often valvular, hole followed, and the inflammation was kept up by urine trickling into the sac at each act of micturition. 2. Blood cysts which had passed through similar changes. 3. The formation of pseudo-cysts by injury to the urethral floor during labour or instrumentation. Pregnancy, with its increased local activity, seemed usually to induce the formation of these cysts, and parturition appeared to be often the immediate cause of the rupture. The treatment was mainly surgical. First, where urethritis or cystitis existed, the cyst wall should be dissected out and cut off close to the urethra, and the vaginal wound left open for drainage. Secondly, where the urinary passages were healthy the cyst should be dissected out, the opening into the urethra enlarged to allow drainage, and the vaginal wound at once closed. In either case the urine should be drawn off till union was assured.—Mr. BRAXTON HICKS had seen five cases of the kind. In one the cavity was filled with phosphatic concretions. He opened the cavity in each case freely from the vagina, and kept it open till the urethral opening closed, which occurred after a short time. The plan recommended by Dr. Routh was possibly more precise.—Dr. HERMAN noted that these diverticula, even when converted into retention cysts by closure of their ducts, caused no symptoms such as Dr. Routh had described until they became inflamed. Hence his memoir should properly be named "inflamed urethral diverticula." Cysts in which fatty matter was discharged into the urethra were probably dermoid. In the *Transactions* for 1886, Dr. Herman had described a case very similar to one of those related in the present paper. He had reported that case under the title "Abscess of the Urethra," a term which he had used as not implying any theory of causation. The interior of the cavity in that case was ragged, not smooth, as would be expected in a true cyst, and so it was in one of Dr. Routh's cases. The condition, he had suggested, might have been a result of chronic congestion of the urethra, such as had been described by Sir Charles Clarke and Dr. West. This condition was especially frequent in pregnancy, and Dr. Herman observed that Dr. Routh had commented on the frequency with which the suppuration appeared to have been induced by pregnancy and labour. Dr. Routh attributed it to injury during labour, and Dr. Herman thought that the injury sustained during delivery would be more likely to bring about suppuration if the congestion described by Sir C. Clarke had been present before delivery. A "diverticulum" generally signified a communicating cavity due to a congenital peculiarity of structure. In that sense, the cases of abscess opening into the urethra, classed "2" and "3" under "etiology," were not true diverticula. They could only be called diverticula in the same sense that a pelvic abscess opening into the rectum could be called a rectal diverticulum. Dr. Routh's paper was a valuable contribution to the knowledge of its subject.—Dr. M. HANDFIELD-JONES had shown before the Society two small cysts which he had removed from the vagina of a patient sent to him as a case of cystocele. They lay so close to the floor of the urethra that he found it difficult to avoid wounding that canal when removing them. Had they been left alone, these cysts would probably have opened into the canal of the urethra, or had labour occurred they might have suppurated from pressure, and a communication with the urethra would thus have been established. In either case a urethral diverticulum would have been formed, and the irritation caused by the admission of urine would have given rise to symptoms rendering an operation necessary.—MR. ALBAN DORAN believed that diverticula certainly arose from one of at least two sources: a cyst, or else some change in a urethral gland or its obstructed duct; for cysts undoubtedly developed near the urethra, and urethral glands undoubtedly existed. A good monograph on cysts of the urethra and on the histology of the urethra in adult women was much needed. Certain interesting embryological and morphological questions must not be made too prominent in such a work; they did not directly concern the pathologist. The urethral pouch might be a "distension diverticulum," or a protrusion of the mucous membrane through a deficiency of the muscular wall, due, perhaps, to injury during labour. Dr. Hilton Fagge had described distension diverticula of the intestines in the *Transactions of the Pathological Society*, vol. xxvii.—In reply, Dr. AMAND ROUTH could find no word better than "diverticulum" to express all the forms of these cysts. In reply to Dr. Herman, he thought that the moment urine obtained access to the cyst inflammation ensued. The cysts might arise from a sebaceous follicle or from a dermoid cyst, as had been stated by Dr. Priestley. He thanked Dr. Braxton Hicks and Dr. M. Handfield-Jones for their notes and early history of other cases. In a recent case (the urine containing pus) he had only closed the vaginal wound partially, so as to allow free vaginal drainage. The wound had quite closed in ten days.

Annual Meeting.—The business of the annual meeting then commenced. The thirty-first volume of the Society's *Transactions*, for 1889 was laid upon the table.

Financial Report.—The report of the Auditors of the accounts of the Treasurer for the year ending December 31st, 1889, was read.—It was proposed by Dr. WATT BLACK, seconded by Dr. BOXALL, and carried, that the report be received, adopted, and published in the *Transactions*.

Election of Officers.—The officers for 1890, nominated by the Council, were declared to have been elected by ballot, according to the list published on p. 395.

The Library.—The report on the Society's library, including a list of donations of volumes, etc., received during the past year, was read.—Dr. BRAXTON HICKS moved, Dr. M. HANDFIELD-JONES seconded, and the motion was carried that the report be adopted.

Examination for Midwives.– The report of the Chairman of the

Board of Midwives respecting the examinations in midwifery showed that 143 candidates had satisfied the examiners during the year. The whole number of midwives now on the Register was 761.—Dr. WILLIAM DUNCAN moved, Dr. CLEVELAND seconded, and the motion was carried, that the report be adopted.

Composition Fee.—The following alteration in the laws was proposed and adopted:—"Fellows wishing to compound for their annual subscriptions may pay on admission a composition fee of fifteen guineas; after ten annual payments, ten guineas; or after twenty annual payments, five guineas."

President's Address.—The PRESIDENT then delivered the annual address. The past year was memorable, being the last in which the Society met in the old rooms belonging to the Royal Medical and Chirurgical Society, 53, Berners Street. Arrangements for transferring the library of the Obstetrical Society to that Society's new premises in Hanover Square were nearly complete. The President then expressed his satisfaction at the working of the Midwifery Board of the Society; an annually-increasing number of candidates presented themselves for the Society's diploma. The Society had always been in favour of legislation to establish a register of midwives and suitable test examinations throughout the country. It had been proposed of late to establish a voluntary register for midwives, in association with a similar register for nurses. A voluntary register might fail, however, to secure the full benefits which would follow compulsory registration, since it would become futile if any large proportion of the midwives did not choose to register themselves. Moreover, the midwives themselves, so far as they were represented by the Midwives' Institute, the members of which were holders of the diploma of the Society, preferred to stand by themselves, and declined to be associated with nurses. The President was therefore glad to say that this year there was again a possibility of legislation, since a Bill was to be introduced into Parliament by Mr. Pease, following in the main the lines of the draft Bill drawn up some years ago by the Obstetrical Society but, giving to the new county councils the duty of appointing the examining bodies. The project had received the approval of the General Medical Council. After reference to the library and the satisfactory financial condition of the Society, the President referred to the life and work of each of the Fellows who had died in the course of the year. They included Dr. Charles Davidson, Dr. H. J. Barron, Mr. R. B. Bothamley, Mr. Samuel H. Wheatcroft, Dr. G. C. Kernot, Dr. Oscar Prevot, of Moscow, elected Corresponding Fellow of the Society in 1876, Dr. J. Rutherford Kirkpatrick, Dr. Lawrence Trent Cumberbatch, and Mr. Francis James Bailey. The President, in conclusion, reviewed the work done by the Society in 1889, and looked forward with confidence to a year of yet more valuable work in the new meeting room. —Dr. GERVIS, in proposing a resolution of thanks to the President (which was seconded by Dr. JOHN WILLIAMS and carried unanimously), observed that the Society was deeply indebted to the President for the care which he had taken of its interests in the negotiations with the Royal Medical and Chirurgical Society, and for the very able manner in which he had brought them to a pleasant and satisfactory conclusion.

The Retiring Honorary Secretary and Honorary Librarian.—Dr. HERMAN, seconded by Dr. AUST LAWRENCE, proposed a vote of thanks to the retiring Honorary Secretary, Dr. Percy Boulton, whose labours in connection with the negotiations for the new premises had been very arduous, and to the retiring Honorary Librarian, Dr. Horrocks.—This vote was carried unanimously.

The Retiring Officers.—A vote of thanks to the retiring Vice-Presidents and other members of the Council was proposed by Dr. LEITH NAPIER, seconded by Dr. C. H. F. ROUTH, and carried unanimously.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 6TH, 1890.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Albuminuria.—Dr. GOODHART read a paper on albuminuria: a digest of peripatetic cases, 1879-1889. His observations were derived from an analysis of 272 cases which had come under his notice during that period. Dr. Goodhart called especial attention to a form of congestive albuminuria, in which the patient complained of a certain amount of ill health, whilst on inquiry it was found that he ate and drank too much, took no exercise, and probably had gouty antecedents. In such cases the urine was of high specific gravity, and contained only a small amount of albumen. The treatment consisted in the periodical administration of purgatives, and in making the patient live according to the ordinary laws of health. When this change of habit could be effected the albumen soon disappeared from the urine. These cases were clearly not due to nephritis, and it was in describing their pathology that the term "congestive" was of service. The temporary presence of albumen could sometimes be explained by the fact that in females the urine had become mixed with leucorrhœal discharge, whilst in the male the seminal and prostatic secretions might produce a similar result. Dr. Goodhart also maintained that intermittent albuminuria often occurred in highly neurotic persons, and to prove this point he quoted several cases which had come under his notice. In such instances the occurrence of albuminuria might perhaps be explained by assuming that there had been oxaluria or some temporary disturbance of the digestive functions. In other cases, where albumen appeared in the urine after scarlatina and was therefore presumably due to nephritis, the patient might remain in good health. Dr. Goodhart believed that this phenomenon might be explained by supposing that each organ in most individuals was endowed with a margin of working power which could be temporarily encroached upon without bad results. Acute nephritis might run its course without any dropsy, and it was then very liable to be overlooked unless the urine were examined. Dr. Goodhart related two such cases occurring in children, who were first cousins to each other. In both instances the skin was remarkably dry and shrivelled, and there was an unquenchable thirst. In one of the cases a necropsy was obtained, when it was found that the kidneys were small with adherent capsules; their surfaces were pale and speckled, and the cortex was much diminished in amount. Microscopically the Malpighian tufts were found to be undergoing hyaline degeneration. On the other hand, Dr. Goodhart had seen cases of chronic parenchymatous nephritis associated with dropsy lasting for some months, the patients recovering completely, even when their cases had appeared almost hopeless. Albuminuria might alternate with the elimination of uric acid or of sugar by the kidneys. In such cases it appeared as if there were a sudden unlocking of abnormal metabolic processes, but it was, perhaps, more correct to say that there were oscillations in pathologic processes and formations just as there were in the natural processes or in the normal body heat. In cases of albuminuria, Dr. Goodhart laid down the following as good rules for practice: "If a patient presents himself, and albumen is found in his urine, it is a case for further examination; if it be in a young person, and the examination be conducted upon the urine of the early morning the albumen will probably have disappeared at the next examination, or within a very short time, and it is a condition of no importance. If the albumen is in any quantity, and its presence persistent or reappearance frequent, it must be regarded, to use Dr. Gairdner's apt expression, as a danger signal to be watched and personally I believe that some of the cases, at any rate, are due to patches of inflammation irregularly distributed in the kidney." Dr. Goodhart believes that nitric acid is the best test for albumen in the urine. He had of late years discarded picric acid on account of the frequency with which this reagent caused a difficulty when quinine had been administered. Picric acid, however, undoubtedly made the greatest show when only a trace of albumen was present.—The PRESIDENT alluded to certain cases of albuminuria which sometimes occurred in connection with floating kidney, in which he believed that the presence of albumen was due to congestion owing to pressure or traction exerted upon the renal vessels.—Dr. EASTES quoted a case of floating kidney in which movement, however easy, caused albuminuria.—Dr. RAYNE BATTEN stated that he had recently seen four young men who had little or no albuminuria on starting from Exeter, but who, after a long railway journey in the cold, were found to have one-third albumen in their urine.—Dr. MAIR had seen cases of temporary albuminuria in candidates for the Indian Civil Service who had been working hard for long periods. In such cases the albumen had disappeared after the administration of tonics. In gouty subjects, too, albuminuria was not infrequently found in an intermittent form, whilst in India glycosuric albuminuria appeared to be especially common. In both these instances it appeared as if the albuminuria could be accounted for by supposing that the kidney was directly stimulated by the crystals of uric acid or of sugar.—Dr. LEES quoted a case of renal disease which had apparently lasted a long time without giving rise to any symptoms. The disease, which occurred in a woman, made rapid progress after a normal labour.—Dr. HAIG alluded to a patient who always had albuminuria after taking exercise, but in this case there was

a strong family history of calculus. Dr. Goodhart's cases of albuminuria with a harsh and dry skin seemed to confirm Dr. Haig's own work in this subject, and he believed that the condition of the skin would in itself be sufficient to account for the albuminuria.—Sir WILLIAM ROBERTS thought that oxaluria was undoubtedly a cause of albuminuria; in such cases he had frequently seen that the urine when recently passed contained slight floating flakes. These flakes might often be seen to contain crystals of uric acid or oxalate of lime, and they came direct from the kidney. A few scattered blood corpuscles in the urine were also often of service in clearing up a difficult diagnosis, for they pointed to some irritation of the kidney, such as a calculus. Albuminuria was often puzzling, even to the oldest observers. Some of these cases, where there had been profuse albuminuria lasting for prolonged periods, and passing away without leaving any trace or any permanent impairment of health, Sir William Roberts thought might be due to the presence of gummata in the kidney. In other and similar cases the albuminuria might result from an injury to the kidney, such as a laceration, where the organ subsequently repaired itself, or where the albumen lasted only so long as a part of the organ injured was undergoing atrophy. Embolism, too, might lead to a like condition.—Dr. MAGUIRE believed that magnesium nitrate was the most delicate test for albumen in the urine. Cyclic albuminuria was not of uncommon occurrence in people with low arterial tension. Albuminuria itself was common in young persons who felt "slack" with a pulse of low tension, and it was therefore frequently overlooked. In such cases it appeared to be due to vascular stasis caused by a weak and failing heart. This variety of albuminuria was not of bad prognosis.—Dr. LUFF thought that trichloracetic acid was the most satisfactory test for albumen in the urine.—Dr. GOODHART replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

FRIDAY, JANUARY 17TH, 1890.

AUSTIN MELDON, P.R.C.S.I., President, in the Chair.

The High Operation for Encysted Calculus.—Mr. MCARDLE read a paper on this subject.—Mr. BARTON said that some few months ago he had had to deal with a somewhat similar case himself—that of a patient, aged 68, from whom he had removed a calculus eight years previously by lithotrity. The man enjoyed good health until about six months ago, when he complained of acute inflammation of the bladder. On examination three months later, the bladder was in a fairly good state; but micturition was frequent, the bladder containing only three to four ounces of urine, and there was a copious discharge of muco-pus. His diagnosis was that he had to deal with a prostatic calculus impacted in the prostate, and also with a loose calculus in the bladder. It was impossible to reach the prostatic calculus from above, and he decided against the suprapubic operation, whereas perineal section in the median line, without the risk of lateral lithotomy being involved, was feasible, as opening a way to introduce a lithotrite into the bladder. Thus about half the stone was removed, the fatigue of the lengthened exposure making the complete removal of the *débris* undesirable for the time being. The case went on favourably for three weeks, when the man succumbed from abscess in the kidney. The same purulent discharge continued after the operation as well as before it, in spite of repeated washing, so that the mucous membrane could not be said to furnish the pus.—Mr. KENDAL FRANKS said that where the bladder was diseased, and the urine decomposing with every prospect of septic matter reaching the wound, he believed the consensus of opinion was that the suture should not be adopted; but in cases of healthy bladders, where the urine was healthy, the suture should be tried. There was no danger from suture in healthy bladders, while the period of recovery was shortened from twenty-one to seven or ten days.—Mr. MYLES agreed that the suprapubic method presented to the average surgeon, ignorant of anatomy, easier access to the bladder and safer exit than through the perineum; but in the hands of a competent lithotomist he doubted that the result would be better than through the perineum. It was desirable to distinguish—which had not been done—the cases suitable for the suprapubic and those for the perineal operation. He had himself operated on a man suffering from obstinate perineal fistula in addition to bladder irritation. The bladder was shrunk to the size of a walnut and empty through incontinence of urine. Every attempt to distend the bladder failed, and the incision had to be made on a contracted bladder. Several feet of the intestines came out without harm. The bladder was rotten and collapsed behind the pubes. The stone was, however, successfully removed.—Remarks were also made by Dr. COX, Surgeon-Major O'FARRELL, and Mr. TOBIN; and Mr. MCARDLE replied.

SECTION OF MEDICINE.

FRIDAY, JANUARY 24TH, 1890.

LOMBE ATTHILL, M.D., President, in the Chair.

Exhibition.—A patient suffering from pronounced gout was sent for exhibition by Dr. DUFFEY.

The Practice of Clinical Medicine in Europe, A.D. 1507.—Dr. J. F. KNOTT read a note on the practice of clinical medicine in Europe in the year 1507, derived from a book printed in that year in Venice, and now in the possession of Dr. Aquilla Smith, who had permitted its exhibition to the section.

Angina Pectoris in the Heart-Palsy of Acute Specific Infective Disease.—Dr. J. W. MOORE read a paper, the object of which was to bring under notice a cause of "breast-pang," or angina pectoris, which seemed not to have attracted that attention to which it was entitled. This was the cardiac paralysis due to acute infective diseases, especially diphtheria. Within the past year three notable cases of heart failure in infective disease came under his observation. Of these the first and third were cases of diphtheria; the second was a case of septicæmia. The first showed no marked anginal symptoms; in the second and third these were present in an extreme degree. The conclusions arrived at were the following: 1. The group of symptoms described as "angina pectoris" might show themselves in the latter stages of any of the acute infective diseases, particularly septicæmia, or pyæmia, or diphtheria. 2. The anginal attacks of acute infective disease often answered the definition given by Dr. Byrom Bramwell of true angina pectoris—namely, "a neurotic affection characterised by paroxysms of intense pain in the region of the heart, and a terrible sensation of impending death.....the affection is in many cases associated with organic disease of the heart and the root of the aorta, and in its typical and severe forms is apt to prove suddenly fatal."[1] While drawing a clinical distinction between true angina pectoris—rarely met with before the age of forty—and the pseudo-angina, or attacks of cardiac pain to which young persons were liable, Dr. Bramwell was careful to state "that the two forms run one into the other, and that it is sometimes difficult or impossible to separate them at the bedside." 3. These seizures of angina in infective disease appeared to arise in the following ways: *a*. Deficient innervation of the heart, or a true cardiac paralysis or heart palsy. *b*. A granulo-fatty degeneration of the heart muscle, the result of an acute parenchymatous myocarditis. *c*. A sudden increase of tension in the peripheral arteries, due to a cause acting upon the body from without, reacting upon an already weakened heart—the *angina pectoris vaso-motoria* of Nothnagel. 4. Any one of these causes might operate singly in a given case, or two or more of them might be combined so as to determine an anginal attack. 5. Treatment was often attended by the happiest results in the angina of heart failure from infective diseases, the most useful therapeutical measures being:—1. In *a*, the administration of alcoholic and diffusible stimulants, the application of hot poultices over the heart, and of mustard epithems to the extremities. 2. In *b*, besides the foregoing, the administration of heart tonics and stimulants, such as nux vomica and strychnine, arsenic, digitalis, convallaria, and strophanthus. 3. In *c*, the administration of the nitrites, spirit of nitrous ether, nitrite of amyl, nitroglycerine, as well as iodide of ethyl, and such like remedies.—Remarks were made by Dr. A. W. FOOT and the PRESIDENT; and Dr. J. W. MOORE replied.

Intestinal Obstruction.—Dr. WALLACE BEATTY read a paper on a remarkable case of intestinal obstruction in a boy aged 10. The illness commenced suddenly with severe abdominal pain, chiefly referred to the region of the cæcum. In a few hours vomiting occurred, but lasted only one day; moderate diarrhœa set in also. The symptoms during the first four days were not very urgent. On the eighteenth and nineteenth days an indistinct tumour was felt on deep pressure in the right iliac fossa. On the nineteenth day obstruction of the bowels had set in; the obstruction lasted for thirty-two days, yielding suddenly on the fiftieth day from the commencement of the illness. During these thirty-two days the symptoms were: (1) rapidly increasing distension

[1] *Diseases of the Heart and Thoracic Aorta.* By Byrom Bramwell, M.D., F.R.C.P.E. Edinburgh: Young J. Pentland. 1884. Page 672.

of the abdomen, commencing in the umbilical region and subsequently involving the whole abdomen; (2) paroxysms of abdominal pain, becoming each day more and more agonising, and subdued only by repeated hypodermics of morphine; (3) frequent vomiting of bilious fluid; on only one or two occasions had the vomited matter a fæculent appearance; (4) obstruction of the bowels almost complete; on only a few occasions some wind and a scanty amount of fæces came away, without being followed by relief; (5) rapidly increasing emaciation, which became finally extreme; (6) a normal or subnormal temperature; (7) a pulse of fair volume during the greater part of the time, and of moderate frequency—that is, under 100. At the termination of this period the pulse became more frequent. The boy was apparently dying; cold extremities, scarcely perceptible pulse, infrequent respirations (4 in minute), when the obstruction suddenly gave way, and pints of fluid fæces were passed. He made an excellent recovery. Dr. Wallace Beatty was assisted by Sir William Stokes in the conduct of the case. They considered the case to be one of typhlitis, producing paralysis of the bowel, and so leading to intestinal obstruction.—Sir W. STOKES said the interest of the case centred round (1) the diagnosis, and (2) treatment. On more than one occasion operative surgical interference was seriously discussed, backed by recommendations both in this country and in England that the patient should get the chance of laparotomy. But he persistently opposed that course. He did not think it was a case of intussusception. He looked upon it as a case of typhlitis, and that the paralytic condition which brought about the obstruction was due to localised inflammation. The indications in support of his view were, first, the early febrile disturbance, and, secondly, the absence (notwithstanding Treves's dictum) of shock, collapse, diminution of temperature, and failure of the pulse, which in every case of intussusception were present. On the other hand, the early diarrhœa contraindicated typhlitis, except for the consideration that the patient was a boy who, like the majority of boys, was fond of sweetmeats and had the opportunity of free indulgence. Hence, he concluded that the early stage was diarrhœa, and that typhlitis was the sequel. In that condition of things, and believing that it was not a case of purely mechanical obstruction, he knew that to open the boy's abdomen would militate against a successful result.—Dr. FOOT, Dr. MACAN, Dr. J. W. MOORE, the PRESIDENT, and Mr. ORMSBY took part in the discussion; and Dr. WALLACE BEATTY replied.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, JANUARY 22ND, 1890.

JOSEPH WHITE, F.R.C.S.Ed., President, in the Chair.

Dermoid Cyst.—Mr. HATHERLY showed a dermoid cyst which he had recently removed from the left broad ligament of a woman, aged 26, who had suffered from painful menstruation for the previous two years. The tumour, which weighed 7 ounces, was lying loosely attached to the upper surface of the broad ligament. Its blood supply was derived from the connective tissue by means of small vessels only. The contents, after removal, were found in a moist, caseous condition.

Ascending Spinal Paralysis.—Dr. COLLINS read notes of a case of acute ascending spinal paralysis in which the early symptoms had been intermittent and obscure.

Hypertrophied Mamma in a Boy.—Mr. H. E. BELCHER showed a rather delicate-looking boy, aged 12, who had noticed gradual enlargement of the left mamma for the past five months. It was quite free from pain and tenderness, and was precisely similar to that of a healthy girl at puberty. The right mamma was normal, and there was no abnormality of the genital organs.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

THURSDAY, JANUARY 9TH, 1890.

J. MURPHY, M.D., President, in the Chair.

New Members.—Three new members were elected.

Cases.—Dr. GOWANS exhibited a man the subject of a Backward Dislocation of the Knee. There was a history of a fall, followed a year afterwards by swelling of the knee-joint. Knee-jerk absent; no ataxia; no Argyll-Robertson pupil; patient swayed when his eyes were closed. Dr. Gowans was inclined to regard it as a case of Charcot's joint-disease, an opinion supported by Drs. Drummond and Oliver.—Dr. ROBERTSON showed a woman with Adhesion of the Soft Palate to the Posterior Wall of the Pharynx. There had been deficiency of taste, smell, and swallowing. There was no history of diphtheria or of scarlet fever, nor was there any pronounced history of syphilis. The adhesion had been easily dealt with by the knife, and patient was now wearing a small perforated vulcanite plate with the greatest comfort and benefit.—Dr. DRUMMOND exhibited a man whose right arm had been caught some months ago in machinery. Latterly the arm had become the seat of marked tremor, and there were now paresis and anæsthesia in addition. A degree of tremor was noticed on the left side of the body. Dr. Drummond discussed the case from the differential points of diagnosis as to a central or peripheral lesion.—Dr. OLIVER regarded the case as peripheral, thinking that tremor paresis and limited anæsthesia rather pointed to a peripheral than central lesion.—Dr. GEORGE MURRAY alluded to Oppenheim's cases of traumatic neurosis, in some of which both cerebral and spinal symptoms were present, and in the causation of which fright had played a part.—Dr. DRUMMOND, in replying, said he was inclined to regard the case as one of paralysis agitans plus a peripheral lesion.—Dr. DRUMMOND exhibited a man the subject of Organic Hemianæsthesia. There was anæsthesia of the left hand, arm, and leg, with hemiplegia, due to a slowly increasing growth affecting the posterior part of internal capsule.—Dr. DRUMMOND also exhibited a man the subject of Progressive Muscular Atrophy.—Dr. OLIVER showed a man with Subclavian Aneurysm and Aortic Regurgitation.

Specimens.—Mr. PAGE exhibited a specimen of Adenoma removed from a man's throat; also a woman the subject of rapidly Infiltrating Cancer of the Left Breast.—Numerous culture growths of Pathogenic and Non-pathogenic Bacilli were shown by Dr. GEORGE MURRAY, including those of Tubercle, Anthrax, Tetanus, Cholera, etc., after which Koch's work and Pasteur's protective methods were commented upon. The specimens were examined with interest, and for the exhibition Dr. Murray was accorded a vote of thanks.—Dr. JAMES DRUMMOND remarked upon continuous cultivation and the weakening of the virus.—Dr. ROBERTSON exhibited specimens from thirty patients operated upon for Nasal Polypi, Hypertrophies and Papillomata, and remarked upon their pathology and treatment.—Professor PHILIPSON showed a large Cystic Tumour of the Uterus, removed by Dr. Arnison from a woman, aged 32. She had made a good recovery.—Dr. GOWANS showed a specimen of Rupture of Kidney. It was removed from the body of a young man who died on the sixth day after the injury.

Papers.—Mr. WILLIAMSON read a case of Cerebral Abscess, localised and opened.[1] Mr. Williamson also exhibited a Drill for perforating the skull in order to detect pus within the cranium.—Drs. ADAMSON, MUNRO, DRUMMOND, MURRAY, and ROBERTSON took part in the discussion.—A paper by Mr. PAGE on a case of Excision of the Sigmoid Flexure, wherein afterwards the continuity of the rectum with the colon was apparently (spontaneously) restored, was taken as read.

REVIEWS AND NOTICES.

A TEXTBOOK OF PHYSIOLOGY. By JOHN GRAY MCKENDRICK, M.D., LL.D., F.R.S., Professor of the Institutes of Medicine in the University of Glasgow. Including Histology by PHILIP STÖHR, M.D., Professor of Anatomy in the University of Zürich. In Two Volumes. Vol. II: Special Physiology. Glasgow: James Maclehose and Sons. 1889.

THE second and concluding volume of Professor MCKENDRICK'S textbook will be welcomed by students of science and medicine alike. We regret that, through inadvertence, we have omitted to notice its appearance sooner. The favourable opinion which we formed of the first volume is fully justified by the second. The two together form a textbook which we can confidently recommend to all students, and we wish the work every success.

Volume I was entitled *General Physiology*: in the volume now before us, entitled *Special Physiology*, we have an account of nutrition and digestion; the blood and its circulation; respiration; excretion; the nervous system; the voice; locomotion; and reproduction. An appendix gives descriptions of certain special methods of making histological preparations.

The most striking feature seen in a cursory glance through the

[1] JOURNAL, February 1st, p. 235.

book is the large number and rare excellence of the illustrations. Those which accompany the histological descriptions are, as before, mostly derived from Stöhr's textbook of histology; both author and publisher have evidently spared no pains to make the book attractive from this point of view. In addition to the cuts in the text, there are two large charts of tracings of blood pressure, cardiac contractions, and the like. We believe these to be of great importance; they will give the student a much better idea of the value of, and results obtained by, the graphic method, than any mere description would do, even if accompanied by cuts of little pieces of such tracings. It must not, however, be concluded from this that we consider that illustrations, however elaborate, should usurp the place of practical teaching; for just as pictures will never teach a student his anatomy or histology, so the consideration of tracings will fail to convey to his mind any just idea of the graphic method, unless supplemented by actual demonstration or practical work.

On carefully reading the book, we find that the text is well worthy of the illustrations that accompany it. Professor McKendrick has in 800 pages massed together an immense quantity of facts, and all the most important of recent discoveries and investigations receive their due share of attention. The book, however, is not a mere catalogue of facts, but these are connected, and their relative importance pointed out in a most clear and readable manner. The student will find that Professor McKendrick does not, like Professor Foster in his textbook, omit all references to names and literature, but by mentioning these gives an interest to the narrative which it would not otherwise possess. Indeed, some of the most interesting passages in the book are those where, as in the account of the blood gases, the author traces the gradual steps in the progress of our knowledge in one or another direction. We are inclined to think that in a future edition Professor McKendrick might still further enhance the value of his work by a fuller quotation of references. The references to recent literature are fairly full, but the scientific inquirer, and those engaged in research, often find it more difficult to discover the source of the statements of older investigators.

Professor McKendrick states in his preface that, as far as possible, he has endeavoured to state physiological facts in terms of measurement, as the time for vague generalities is past. This promise is amply fulfilled, the chapters on food, diet, and metabolism being especially full of tables, which for purposes of reference will be found most valuable. In certain cases, however, where physiology is as yet very far from being an exact science, the author has found it impossible to resist the promptings of speculative inquiry, and has discussed the claims of rival theories. The cause of the coagulation of the blood, the origin of the red discs, and the subject of colour vision, are illustrations of fields where one can as yet merely discuss opposing theories. With regard to the origin of the coloured corpuscles, the view of Malassez that they are derived from the budding of Neumann's corpuscles (globuligenic cells) in the spleen and red marrow, is that which finds most favour in Professor McKendrick's eyes. In relation to colour vision, the Young-Helmholtz theory is still regarded as the most satisfactory, though we are inclined to think that Hering's doctrine demands more notice than the eight lines allotted to it.

An interesting chapter of a speculative kind is that on the nature and causes of rhythmic cardiac contraction; the recent work of Burdon Sanderson, Gaskell, and McWilliam is here reviewed and criticised. We note, however, that Gaskell's researches in another direction—namely, on the structure and function of cranial, spinal, and sympathetic nerves—are nowhere considered in a consecutive manner, though his principal discoveries may be found scattered in different parts of the book. Physiologists usually fight shy of another speculative field into which Professor McKendrick has boldly entered, and this is the relation of psychical phenomena with the occurrences in the cerebral cortex. We have no space here to reproduce the author's chief arguments, but will be content with stating that his general conclusion is in favour of the existence of a something superior to, though closely connected with, the changes in matter.

In the departments of physiology to which the laws of physics are applicable, Professor McKendrick is at his best. This is nowhere better shown than in the admirable and full account he gives of the special senses. The laws of optics in their relation to vision, the laws of sound in their relation to hearing, are subjects which are treated with a masterly hand. The functions of the semicircular canals are more thoroughly explained than in any other of our physiological textbooks. Crum Brown's experiments are described with great fulness, in the interests of the students we are inclined to say with too great fulness, for it is admitted that some of Cyon's experiments, if confirmed, may be fatal to the Crum-Brown theory. The subject is evidently one of great interest to Professor McKendrick himself, and it seems to us that he has devoted too much space in certain cases to these smaller points; a judicious compression here and there would have given more room for fuller descriptions of larger questions like the mechanism of urinary secretion, the innervation of the kidney, the abnormal constituents of the urine, and animal heat, which hardly receive the attention they deserve in virtue of their great importance.

One more point of adverse criticism we feel found to make, and this is in relation to the arrangement of subjects. In treating of the nervous system at the end of the book, Professor McKendrick follows the example of other authors, and there must be reasons for this arrangement, or so many practical teachers would not have adopted it. We are nevertheless inclined to believe that it would be advantageous to authors and readers alike if the functions of the nervous system were described earlier. Students always regard the nervous system as a bugbear, and the physiology of that system as the most difficult part of their studies. One reason for this exaggerated view of the case is to be found in the almost invariable custom of writers and lecturers to take the nervous system last, that is to say, at a period when examinations are approaching, when the student is growing tired with the previous work of a winter session, and also at a time when the lecturer finds that, in order to get his course finished by a certain date, he must compress what he has to say into so few lectures that he is unable to dwell upon and fully explain difficult portions of his subject. If the nervous system were described early in a course these difficulties would not occur, and author and lecturer alike would be able to explain be ter the functions of other systems if an elementary acquaintance with those of the nervous system had been first obtained. How, for instance, can a clear account of the nervous control of the heart, blood vessels, kidneys, and other organs be given unless there is first this preliminary knowledge of the functions of nerves and nerve centres? Yet this is what so many teachers attempt to do.

Although we have been obliged to comment in this way on what we consider to be blemishes, it will be seen that they are minor ones, and detract but little from the value of the book as a whole, which, as we have before said, is of the highest kind from both a scientific and a practical standpoint. Printer's errors and slips of the pen are almost unavoidable in a first edition, but both are few and far between. The misprints, when they do occur, are so obviously such that the correction will be easily made by the reader. The mistakes due rather to author than to printer are, however, more serious; and we will, in conclusion, point out the chief of those we have noticed. Thus, on p. 92, the words antipeptone and hemipeptone should be transposed; it is the hemipeptone, not the antipeptone, that is further decomposed by the pancreatic ferment. On p. 142, in speaking of Schäfer's views on fat absorption, he represents that writer as lending support to the idea that the attached end of a columnar epithelial cell is continued into branched protoplasmic processes; such arborescent processes are, according to Schäfer, mere figments of the imagination. On p. 371 the formula for maltose is given as $C_6H_{12}O_6$, whereas maltose belongs to the sucrose ($C_{12}H_{22}O_{11}$) group of carbohydrates. Throughout the whole of the chapter on glycogenesis the terms glucose and maltose are used as if interchangeable; Seegen's recent work on the carbohydrates has shown beyond all doubt that the sugar in the blood is glucose or dextrose, and not maltose; maltose is formed from starch by the salivary and pancreatic ferments, but this is further changed into dextrose before it reaches the blood. On p. 116 taurocholic acid is stated to occur in human bile in greater abundance than glycocholic acid; for "greater" read "less." On p. 400 urobilin is stated to be identical with bilirubin; for "bilirubin" read "hydrobilirubin."

On the Geographical Distribution of Tropical Diseases. By R. W. Felkin, M.D., F.R.S.E., F.R.G.S. Edinburgh and London: Young J. Pentland. 1889.

This is a reprint from the *Proceedings of the Royal Society of Edinburgh*. The intention of the author is to "focus our present knowledge of the geographical distribution of some tropical diseases, and to indicate, as far as possible, the knowledge which we

at present possess of those physical phenomena which influence the production of these diseases, and the area of their distribution." The author acknowledges that he is indebted to Dr. August Hirsch for the data concerning the geographical distribution of disease; and we cannot say that Dr. FELKIN has added much that is new to the information in *Hirsch's Handbook of Geographical and Historical Pathology*. The book is illustrated by sixteen maps "adapted from various sources." The most valuable are those selected from the *Challenger* Reports, Professor Elias Loomis's *Contributions to Meteorology*, and Lawson and Wilson, "showing the isoclinal lines with reference to pandemic waves of disease, and the prevailing ocean winds."

Dr. Felkin takes the definition and description of each disease from *Quain's Dictionary of Medicine*, without mentioning the names of the authors, or committing himself to an acceptance of their "views" "as to the cause, the disposition, or the description of the diseases referred to,"—a simple plan, that has the recommendation of being facile if not novel.

Our author takes credit to himself for acknowledging his indebtedness to authors in the text, of which, we are disappointed to find, there is but slender evidence "in the text." For example, in the description of filaria sanguinis hominis, we look in vain for the name of Lewis, its discoverer.

Dr. Felkin intends his book to be "useful to emigrants, and of special service to insurance companies." We are sorry, however, we cannot agree with the author "that this paper will be of special interest to members of his own profession," to those at least who have an acquaintance with tropical medicine.

YEAR BOOK OF PHARMACY AND TRANSACTIONS OF THE BRITISH PHARMACEUTICAL CONFERENCE, 1889. London: J. and A. Churchill. 1889.

The *Year Book of Pharmacy* comprises abstracts of papers relating to pharmacy, materia medica, and chemistry contributed to British and foreign journals from July 1st, 1888, to June 30th, 1889, with the transactions of the British Pharmaceutical Conference at the annual meeting held at Newcastle-on-Tyne, September, 1889. The abstracts are well made, and every source of information bearing upon pharmacy appears to have been thoroughly drained. The services which chemistry renders to the elucidation of subjects of pharmaceutical interest give it the first place. We note the following among the researches of the year as being of special interest, the alkaloids existing in cod-liver oil, namely, aselline and morrhuine, have been still further investigated and their physiological actions determined. Aselline is said to be feebly toxic, and to produce fatigue and stupor. Morrhuine excites the appetite, and has remarkable diaphoretic and diuretic properties. In large doses it produces fatigue and stupor. An acid has also been separated from cod-liver oil, to which the name of morrhuic acid has been given. It has a disagreeable odour; it is oily and viscid, when freshly precipitated, but it gradually solidifies. A new constituent has also been described, which has the property of causing fatty oils to emulsify with water. This substance is said to be identical with a body which by the same process can be obtained from pancreatic juice.

Strophanthin, the active principle of the seeds of strophanthus hispidus, has now been clearly proved to be a glucoside; its decomposition by acids results in the formation of glucose and strophanthidin, a crystalline body resembling strophanthin in its physiological action. It has been usually supposed that saccharin is completely eliminated in the urine, but it is now shown that about 20 per cent. of it disappears, and also that peptic digestion is not disturbed by saccharin, whereas the fermentation of pancreatic fluids, which contain 1 per cent. of it, proceeds very slowly. The fact is confirmed that, taken as a medicine, it is harmless. Iodoform is now manufactured by a process which is based upon the reaction between acetone and iodine, and by the use of hypochlorite of sodium at a later stage. Solutions of iodoform in ether become of a red colour from the presence of free iodine; the decomposition of the iodoform is said to be brought about by the oxygen of the air. Quinine lactate is recommended as a salt suitable for making hypodermic solutions. Its solubility is one in five. Experiments have been made upon the relative efficacy of both the clear fluid portion and the sediment of the ethereal extract of male fern, which show that both are active tænicides, the sediment being the more active of the two. The new antipyretics mentioned are pyrodine, also known as acetylphenylhydrazin, and methacetin. Ural is the new hypnotic.

The papers read at the Pharmaceutical Conference meeting were of a very practical nature. The *British Pharmacopœia* tincture of senna was shown by Mr. Proctor to be an inert preparation; Mr. Siebald proved that it was a misconception to regard lithium compounds as powerful agents for preventing the deposition of uric acid in the tissues, and removing such deposits when already formed. The *Year Book* has attached to it the Unofficial Formulary Addenda, 1889, which contains the formulæ of the following preparations: Scheele's hydrocyanic acid, hypophosphorous acid, chloroform of aconite, belladonna, and camphor; elixir of senna, liquid extract of logwood, and syrups of calcium and sodium hypophosphite.

A MANUAL OF PRACTICAL ANATOMY. By D. J. CUNNINGHAM, assisted by H. ST. JOHN BROOKS. Second Edition. Part I. Upper Limb, Thorax, Lower Limb. Edinburgh: Maclachlan and Stewart.

THIS volume is only one of others in which the anatomy of the human body is described, together with the methods of its dissection. When this particular part first appeared, it was much less exhaustive than in its present form. It has now been brought up to the level of Volumes I and II, which treat of the abdomen, and head, and neck. We should expect that one of our ablest anatomists, with an able assistant, would perform such a task as this with success, and we are not disappointed. The book is particularly adapted for use in the anatomical department, as the various regions are taken in turn, and each step of their dissection clearly given. Thus, in treating the arm, the back, axilla, shoulder, and scapula, front of upper arm, and so forth, are described, together with a few short paragraphs on the surgical anatomy of the palm and fingers. The plan which is pursued is worthy of commendation, and the surface anatomy of each region is likewise mentioned. We have quite recently had occasion in the JOURNAL to call attention to the neglect of this branch of anatomy, both in books on anatomy and by examiners in anatomy, and yet, as Professor CUNNINGHAM says, the importance of learning the various landmarks "cannot be exaggerated." Somehow or another there seems to be an impression abroad that surface anatomy is easy to learn, and even in this excellent work there are expressions which might strengthen this wrong belief. It may be easy to feel the cricoid cartilage in cold blood and undisturbed, but it is quite another thing to recognise it when it is displaced and when things are going wrong. Students should be encouraged and persuaded to give their closest attention to surface anatomy, and our authors are to be congratulated in that they inculcate this doctrine.

Each paragraph has evidently been written with extreme care and with great regard to accuracy, and, in speaking of variations, statistics are usually given; as, for instance, in speaking of variations of arteries, such as the posterior scapular or the nutrient arteries of the humerus. Of course correctness is all-important in a work of this kind, and in this particular the most rigid requirements are satisfied. Not only are the great organs minutely and clearly described, as well as the muscles, arteries, and nerves, but the joints and their movements are also mentioned. A number of new and clear figures are given, and frozen sections have been freely used in their composition. This work can be confidently recommended as a very clear and correct guide to the study of the part of human anatomy of which it treats.

SUGGESTIVE THERAPEUTICS. By Dr. H. BERNHEIM. Translated from the Second French Edition by Dr. C. A. HERTER. London and New York: G. P. Putnam's Sons.

OUT of the mass of literature on hypnotism pouring in upon us at the present time, some publications are altogether worthless, but a certain number are of value and repay careful study. Among the latter the work of Professor BERNHEIM must be included. It is a thoroughly honest book, and advances nothing which falls beyond the possible range of mental physiology, extended as this has undoubtedly been by our knowledge of hypnotic phenomena. The Nancy School has done excellent service by the practical success it has attained, and by demonstrating the enormous influence of suggestion in the production of extraordinary mental states, not the less genuine and worthy of medical study on this

ccount. For years Dr. Liébeault worked quietly and almost nknown outside his immediate circle at hypnotism, and came to ecognise the true nature of many misunderstood phenomena. thers, among whom Professor Bernheim is the most distinguished, ollowed in the same path, and a school grew up, which has ecome well known and of great importance. If suggestion or magination will cure disease in the susceptible stage of hypnotism, et it by all means be employed. All we demand is, that the nethod of cure be called by its proper name. That there are a onsiderable number of disorders beneficially influenced by hypotism must, we think, be admitted. Some nervous and hysterical ffections are greatly benefited, or cured, and even some cases of aralysis, rheumatism, chronic alcoholism, and amenorrhœa are enefited.

A long classified list is given by the author. He replies to the bjections naturally made to the dangers of hypnotic treatment. Iay it not, it is asked, diminish the activity of the brain, and end to induce intellectual torpor? Bernheim replies that he has ut to sleep very intelligent people once, even twice a day, for ears, and asserts he has never observed the slightest ill effects on he mental faculties. Sometimes, on the contrary, patients became nore active in consequence of the removal by suggestion of the ain, restlessness, and sleeplessness from which they suffered. Hypnotic sleep is stated to be as beneficial and as free from anger as normal sleep. But what about the effect of induced allucinations? The author admits that with certain feebleminded and neurotic individuals there might be some danger, but hat, as a matter of fact, he has not witnessed a single instance f mental trouble following his experiments. At the same time, xperiments of this description must be made "with prudence and eserve." A real danger arises, when subjects, after too numerous xperiments, including the induction of hallucinations when sleep, become susceptible to the same action when awake. They ease, in fact, to distinguish between the world of reality and hat of imaginary suggestions. The reply to this admitted danger s, that the unwarrantable abuse of a remedy, whether it be pium, whisky, or hypnotism, is a weak reason to give for proscribing its employment. It is enough for Professor Bernheim hat now for some eight years he has devoted himself, with the uccess he alleges, to the cure of a number of maladies, and that e would feel himself culpable if he did not in suitable cases insist pon this mode of treatment. We commend this work to all who lesire to make a legitimate application of hypnotism to those ases which are likely to be benefited by it.

The translator has done his work efficiently, and the work is ne which is likely to be much read.

NOTES ON BOOKS.

Street's List of Newspapers Published in Great Britain and Ireland. (London: 30, Cornhill, E.C.)—The list of newspapers published in Great Britain and Ireland, issued by Messrs. Street, s very complete and accurate, and will be found useful by those who wish from time to time to have lists either of class papers or of the local periodicals issued in many of the great cities and country districts. It is a most convenient and useful work of eference.

Annales de Dermatologie et de Syphiligraphie.—The January number of this valuable periodical begins a third series which is to e published under the direction of a committee consisting of MM. Besnier, Brocq, Doyon, Fournier, Horteloup, and Vidal, with Dr. Henri Feulard as secretary. The present issue is concerned chiefly with dermatology, and contains, among other useful matter, a paper by M. Besnier on Erythema, as well as the first part of a critical review on the subject of "Paget's Disease of the Nipple."

A Pathological Condition of the Lungs hitherto undescribed in this Country (America), but which is not infrequent. By F. Peyre Porcher, A.B., M.D. (*New York Medical Record.*)—Under this title Dr. Porcher, of Charleston, U.S.A., describes what he states to be a form of pulmonary lesion unrecognised in America, and claims, after Piorry, to be the first to draw attention to it. He states that the physical signs are "dulness or sub-dulness generally at the middle, lateral, or posterior portions of the chest, imperfect respiration, and sometimes sparsely disseminated *râles*, but oftener rough breathing." This condition was consequent on antecedent morbid states, and there is no evidence of acute inflammation or of any of the well recognised forms of chest disease; cough was moderate or absent, and dyspnœa uncommon. After death the lungs exuded a large amount of bloody serum, and the flow was more free when the lungs were squeezed. Dr. Porcher designates this affection as engorgement of the lungs, and differentiates between it and active and passive hyperæmia, and also hypostatic congestion of the lungs, and complains of its neglect in many leading works of reference. We have carefully studied Dr. Porcher's descriptions, and we cannot admit the existence of any real distinction between what he describes and gives examples of, and the various conditions of the lung included under the head of pulmonary congestion. Various they undoubtedly are, inasmuch as they are generally secondary to, and consequent on, some primary affections, such as catarrh, tubercle, valvular disease of the heart, or dilated cardiac cavities, but all presenting different degrees of the same pathological conditon, induced by varying causes. Dr. Porcher does not realise that in the lungs of a large number of elderly persons certain physical signs, such as fine crepitation of a scattered kind, are always, or at any rate generally, present, and can be made quite distinct on coughing; and that after over-exertion or, more commonly, chill, these signs increase largely, and that this condition gives rise to no cough or expectoration, though frequently to dyspnœa. The signs are not always basic, though generally lobar, and, as we have said before, often secondary to some other affection of the heart or lungs, or else to a general condition of the system. We cannot congratulate Dr. Porcher on the completeness of his cases, which are very lacking in history and symptomatology, and one of which he himself admits might be equally well designated as an example of hypostatic congestion, and we advise him strongly to study the links as well as the differences between pulmonary affections.

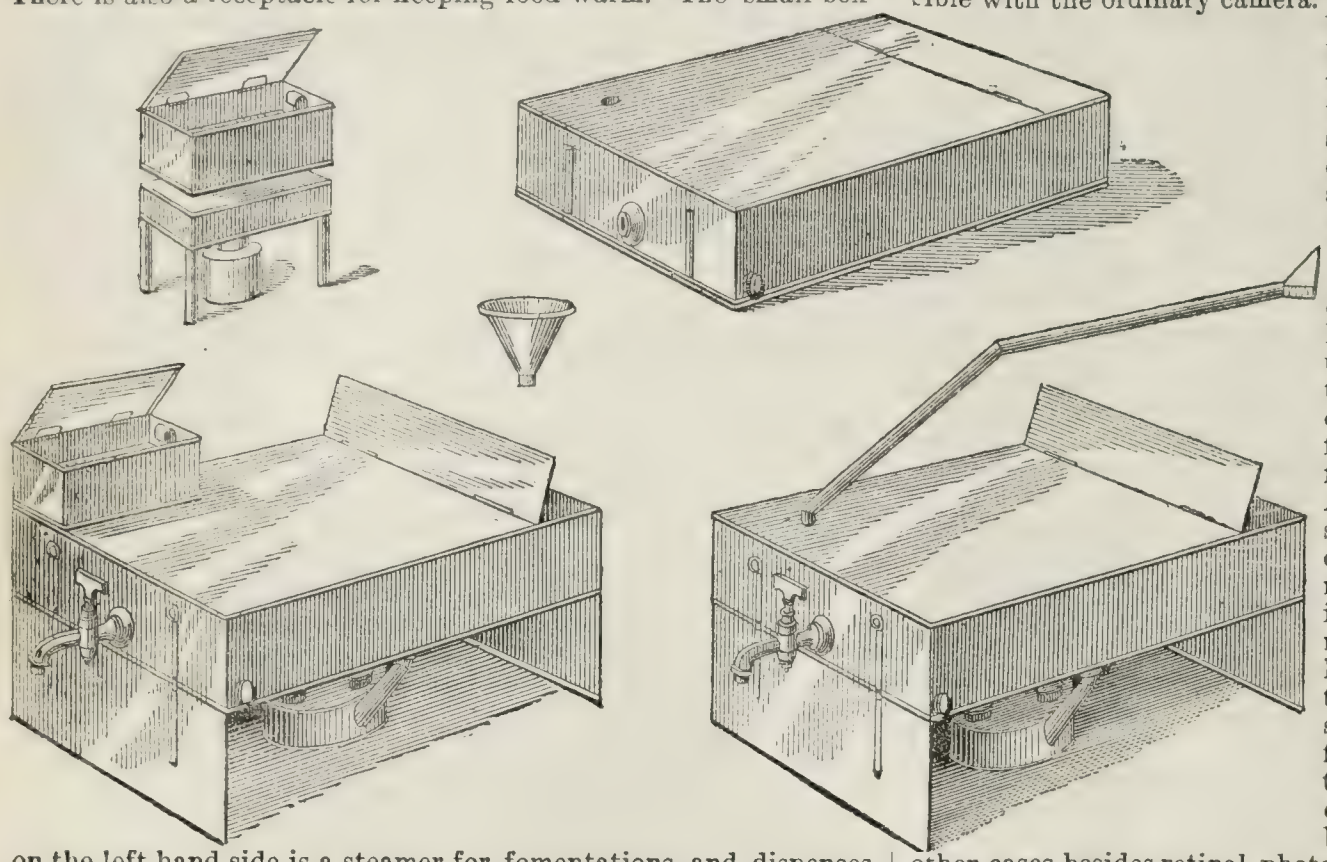
On Diseases of the Rectum and Anus: including the Third Edition of the Jacksonian Prize Essay on Cancer. By Harrison Cripps, F.R.C.S., Assistant-Surgeon, St. Bartholomew's Hospital, etc. Third Edition. (London: J. and A. Churchill.)—In the review of the original issue of this work, we had occasion to notice the author's interesting observations on the anatomy of the levator ani, and the part which that muscle plays in cases of disease of the rectum and anus. In regard to cancer of the rectum, Mr. Cripps's theory and practice are well known. His experience has greatly increased since the appearance of the first edition of this work. The chapters on the symptoms and differential diagnosis of rectal cancer are of interest to all who practise our profession, for the disease in question is apt to be overlooked in cases of other maladies which bring patients under the care of the physician, the obstetrician, and the psychologist. The value of this edition is greatly increased by the incorporation within its pages of the substance of a communication on colotomy which appeared in the Journal last April. Mr. Cripps speaks even less favourably than in 1884 of the treatment of piles by the injection of carbolic acid. He notes that his own results have by no means satisfied him, whilst Kelsey, once the chief advocate of the practice, admits that experience has led him to modify his views. The progress of rectal surgery is well demonstrated in this work by one of its most able exponents.

Hints as to the Working of The Infectious Disease (Notification) Act. J. Spottiswoode Cameron, M.D., B.Sc. (By Hamilton, Adams, and Co. Loddon.)—In this pamphlet of forty well printed pages, Dr. Cameron gives much information which is valuable to sanitary authorities, and many hints which may be useful to medical officers of health. In speaking of the advisability of notification, he takes what we think is a very sensible view, and says it is unwise to lead the public to suppose that the simple adoption of the new powers will at once make an end of zymotic disease. He gives the results of twelve years working of the system in Huddersfield. Speaking generally, these results, he says, have been eminently satisfactory. This part of his subject is thoughtfully treated, and deserves careful study. A considerable part of the pamphlet is devoted to the "procedure on receipt of notice," from which it is plain that compulsory notification entails a large amount of additional work on medical officers of health, who desire to make the most of their opportunities for preventing or controlling the spread of disease. We recommend the pamphlet to the careful perusal of all those engaged in the public health service.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW NURSING STOVE.

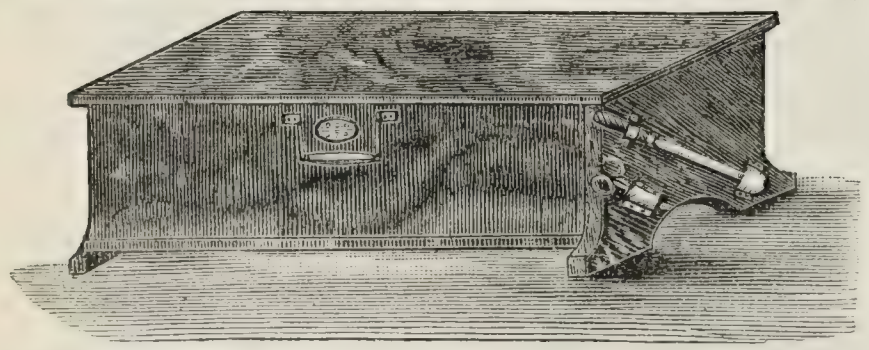
An ingenious apparatus, to which the name "Sister Rona's nursing stove" has been given, has been brought to our notice. It comprises, in a small compass, several essential requisites for a sick room. It has a reservoir, with tap for a supply of hot water. The flat surface on the top forms a plate, on which poultices can be kept hot during the process of making. The box on the right hand side opens to receive one part of a jacket poultice while the other is being made, and heats flannels for dry applications. There is also a receptacle for keeping food warm. The small box



on the left hand side is a steamer for fomentations, and dispenses with the necessity for wringing. The box can be brought to the bedside when a change of fomentation is required. When it is necessary to supply steam for bronchitis or croup, the steam pipe is to be attached instead of the fomentation box. The apparatus can be obtained at Messrs. Whiteley's.

"THE NEWLANDS TABLE."

This is the name given to a portable receptacle for instruments and dressings used in surgical cases, which forms at the same time a table for spreading ointments, etc. The drawer contains lint on a roller. The lint when exhausted can be easily replaced on the spindle in the drawer of the table, which, if required, will carry



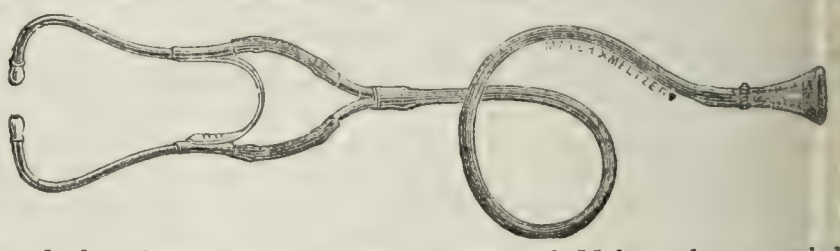
2 lbs. of lint by being drawn tighter on the roller. There is also room in the drawer for plaister, etc. Conveniently placed at each end will be found the necessary instruments, scissors, spatula, and forceps in specially arranged sockets. It is claimed for this invention that it will render easier the work of nurses, dressers, and house-surgeons, and that it will be found equally advantageous in the wards of a hospital, in the sick room, or on board ship. This appears to be a very fair statement of its advantages, in addition to which it might be added that the "Newlands Table" will be found both economical, useful, and cleanly, and as such has already commended itself to some infirmaries and nursing institutions, where it is said to have given great satisfaction, and to have met a long-felt want. The agents for Great Britain are Graham and Graham, 3, Poet's Corner, Westminster Abbey, S.W.

THE PHOTOGRAPHIC RHOMBOHEDRAL CAMERA.

This camera has been designed by Professor H. Cohn, of Breslau, with the object of seeing and at the same time obtaining an image of the retina, or anything else. This is, of course, impossible with the ordinary camera. Professor Cohn places two rhombohedra of glass in a special chamber behind the camera-lens, and thus two images are obtained on the upper and lower halves respectively of the ground glass, the eye looking between the two along a path for the purpose passing between the two rhombohedra. The instrument is used by puting a slide containing a sensitive dry plate, in place of the upper half of the ground glass, or the upper ground glass, and focussing till a well-defined image appears on the lower ground glass, the front of the slide being withdrawn from before the sensitive plate. At this moment an instantaneous shutter is released in the interior of the camera, opposite the upper rhombohedron, and the picture is obtained. The rhombohedra may be replaced by four rectangular glass prisms, two above and two below the central line. Four small plane mirrors will also reflect the images, but in this case they are not so well defined. This camera, for which patents have been obtained, will be of use in other cases besides retinal photography, as the image obtained is under strict control, its duplicate being under view at the precise moment of exposure. A magnesium light is used with advantage. Herr Pintzger, of Breslau, is the maker.[1]

MODIFIED BINAURAL STETHOSCOPE.

The accompanying figure illustrates a modification I have made in the binaural stethoscope, the advantages of which will, I think,



speak for themselves. Messrs. Mayer and Meltzer have carried out the construction.

Frederick C. Barker, M.D., F.R.C.S.,
Medical Officer to the Kathiawar Political Agency
and West Hospital Rajkote, Kathiawar.

[1] *Berliner klin. Wochenschr.*, 1889, p. 753.

The French Minister of War has forbidden the medical officers of the French army to practise hypnotism.

The Town Council of Brighton have revoked the muzzling order.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 15TH, 1890.

THE ETIOLOGY OF INFLUENZA.

WE are now in possession of a considerable body of literature from abroad, as to observations bearing on the above subject. The question of the manner of transmission is answered by different observers in different ways, but all are agreed that the disease is spread by a contagious virus. The difference of opinion is this: While some observers—as Nothnagel, Leyden, and Fürbringer—incline to the belief that the disease is essentially miasmatic, that is, that it spreads only by the air, others—as Henoch and Hirsch—maintain that it is essentially contagious, that is, that it spreads directly from person to person; and others again, like Baümler, consider that the disease, if it be not a purely contagious disorder, is so at least to a considerable extent.

Another important point refers to the relation of pneumonia to influenza. Nothnagel is very decided in his opinion that the pneumonia following influenza is of the catarrhal type, and is merely a further development of the bronchiolitis associated with and belonging to influenza. Croupous pneumonia, observed occasionally to follow influenza, is, according to Nothnagel, decidedly due to secondary infection, for which the disturbance in the respiratory organs, set up by the influenza, had, as it were, paved the way. Croupous pneumonia, and its causation by the pneumococcus, has really nothing in common with influenza or its cause.

The bacteriological investigations carried out by Professor Weichselbaum,[1] in the Vienna Hygienic Institute, lend strong confirmation to the above view. Weichselbaum examined the blood in two acute cases of influenza, and found it quite free from microbes. In the bronchial sputum obtained from the living (in twenty-one cases) he found constantly and in considerable numbers the capsulated diplococcus pneumoniæ (Fränkel and Weichselbaum). Professor Weichselbaum insists that he has not met, in a single one of his cases, with the capsulated bacillus of Friedländer, asserted to be constantly present by Dr. Jolles (see a former number of the JOURNAL) and at first alleged to be the microbe of influenza.

It must strike everyone as strange that the diplococcus pnemoniæ, held by many to be the cause of croupous pneumonia, should have been present in considerable numbers in the bronchial sputum in twenty-one cases, and yet only in two of these did croupous pneumonia actually occur later on. Weichselbaum arrives at the conclusion that the croupous pneumonia is of the nature of a complication, is due, that is to say, to a secondary infection, that the diplococcus pneumoniæ is not the microbe of influenza, and that this remains, as yet, undiscovered.

The last contribution is by Professor Klebs, of Zürich,[2] who maintains that during the febrile stage in influenza the blood contains, "in very large numbers, flagellate protozoa," either free in the plasma, or adhering to, or contained within the red blood discs. The protozoa belong to the family of Monadina (Rhizomastigina of Bütschli); they are of various sizes, the smallest, actively mobile, are spherical, and measure from 1 to 1.5μ in diameter; the medium sized are oblong, slower in their movement, and are 2.3μ long; the large forms measure 4.5μ in length, 2.3μ in breadth, and do not show active locomotion, but only slight peristaltic contraction of their body. By means of methylene blue, the protozoa can be easily stained, and in such stained blood preparations it can be seen that "a large proportion of the flagellate organisms are contained within the red blood discs, generally one red blood corpuscle containing two, three, to five, rarely only one single organism." Cultivations and experiments with these protozoa have not been made.

It is difficult to judge of these unique results of Klebs, considering that many other observers who have investigated the blood in the febrile state seem to have not noticed these protozoa, although, according to Klebs, they exist in the blood, notably in the red blood discs, in large numbers, and can be readily seen in stained specimens. There is, however, one statement made by Klebs which can already be declared to be contrary to fact. In order to bring his results in some harmony with the undoubted existence of protozoa in the blood in malarial or intermittent fever (the plasmodium malariæ), Klebs assumes that "in influenza also there is a repeated occurrence of febrile states, generally in the form of intermissions." Such an assumption is in direct opposition to the very extended and careful observations made by O. Fräntzel,[3] who investigated the course of the temperature in fifty pure cases of influenza without complications; the character of the temperature curves in these cases, with few exceptions, is singularly free from anything that could be interpreted as intermissions.

THE PROTECTIVE CLAUSES OF THE NEW LUNACY ACT.

IN the case of Freeman *v.* Staples and another, the plaintiff alleged that the defendant, a medical man, entered the house in which plaintiff was, and, in the presence of others, stated that he was authorised to call for the purpose of examining the plaintiff as to his mental condition, and wrongfully, illegally, and maliciously stated that the plaintiff was of unsound mind, and also untruly stated that he had a magistrate's order authorising his action; and the plaintiff also alleged that he had sustained damage by reason of this action on the part of the medical defendant.

It appeared that before the new Lunacy Act came into operation—that is to say, the clause of it bearing upon this

[1] *Wiener medicin. Blätter*, No. 6, xiii.

[2] *Centralb. f. Bact. und Parasit.* No. 5, vii.

[3] *Centralblatt für klin. Med.*, No. 2, 1890.

point—a stipendiary magistrate at one of the metropolitan police courts made an order, on the information of the relieving officer, directing the medical defendant to go and examine the plaintiff, and inquire into the matters alleged; and that as the result of such examination and inquiry the defendant had, as a matter of fact, certified that the plaintiff was *not* of unsound mind, and that his being placed in an asylum was not justifiable.

The new Act provides that a person who before the passing of the Act has signed or carried out or done any act with a view to sign or carry out an order purporting to be a reception order or a medical certificate that a person is of unsound mind, shall not be liable to any civil or criminal proceedings if he has acted in good faith and with reasonable care; and if any proceedings are taken upon such action they may be stayed upon summary application to the High Court of Justice or a Judge thereof.

In the present case the medical defendant had done an act with a view of signing a medical certificate that the plaintiff was of unsound mind, although he found and certified that he was *not* of unsound mind, and the Judge in Chambers had referred the matter to the Court, inasmuch as while the Act did provide protection for a person who did an act with a view of signing a medical certificate that a person was of unsound mind, it did not, in terms, provide protection for a person who did an act with a view of signing a certificate that a person was *not* of unsound mind.

It was maintained by his counsel that the act of the medical defendant was done with the view of signing a medical certificate that the plaintiff *was* of unsound mind, if he was.

But plaintiff's counsel now urged that it was not alleged that the defendant did an illegal act in going to the house to examine and give a certificate as to the mental unsoundness of the plaintiff; but the action was one for slander, the contention on behalf of the plaintiff being that a medical man going under an order to examine any person had no right to state before examining him that he was of unsound mind, as the plaintiff alleged the defendant had done in relation to the plaintiff, whereby the latter had suffered damage.

Their lordships were of opinion that defendant's counsel was entitled to the order he asked for, to stay the proceedings in the action; that it was quite clear that the medical defendant in what he did came within the protection of the Lunacy Act of 1889; that there appeared to be no ground for alleging slander; and they gave judgment staying proceedings in the action.

This is the second case in which medical men have obtained favourable decisions—though not without unexpected trouble—under the 12th Section of the new Lunacy Act. These cases will strengthen the future protection.

THE IMPLANTATION OF DECALCIFIED BONE.

Dr Senn is so well known as one of the most original observers among American surgeons that anything coming from his pen is looked at with interest. In a paper in the *American Journal of the Medical Sciences*, he discusses the best means of closing large bone cavities, and gives a series of experiments in animals upon the process of repair after implantation of decalcified bone. Something has already been done in attempting to close large cavities in bone after operation. Neubahr adopted the principle of folding in the skin and soft parts, Lesser that of encouraging the formation of aseptic blood clot, Hamilton that of supplying a nidus for new growth by sponge. Schede proposed a modification of Lesser's plan by the formation of a blood clot under a moist blood crust, and this method has perhaps met with most favour. In all of these the implanted substance probably acts as a framework in which development of bone can extend from the walls of the cavity, and Dr. Senn considered it worth while to inquire whether decalcified and aseptic bone would not prove a more natural and useful packing for such purpose. Dogs of various ages were submitted to experiment—first with a view to determine the usefulness of this implantation after trephining the skull, then in cavities formed in the long bones. After injury or operation on the skull, he considers it can be relied on as a measure well calculated to favour the reparative process, and to provide a firm, thick, unyielding cicatrix. After the experimental formation of bone cavities, it was found that the ossification proceeded consistently from the surface to the centre of the cavity, and without the implantation acting as a foreign body. He therefore extended his observations to the human subject, and details ten cases in which he has used the decalcified bone for packing a bone cavity produced by disease, and scooped out and disinfected before being packed. These cavities were of various sizes up to that of a pigeon's egg, and were filled with plates of decalcified ox-bone, which had been rendered aseptic by sublimate and by iodoform. The time occupied by the process of solidification was about one to two months, but the results were certainly better than are usually obtained. Care was taken to ensure capillary drainage by means of some absorbable threads, and when the bony implants had been forced into the cavities it was maintained that any infiltration by blood between the fragments acted beneficially as a cement. The author concludes "that the packing answers the purpose of an antiseptic tampon, and furnishes the best medium for the growth and development of the tissue resulting from the regenerative process initiated by the trauma." One of the cases narrated was not uncommon, one of excision of the knee with tuberculous deposits on the head of the tibia, which were scooped out and a cavity the size of a walnut left, which was packed with the bone chips. There was firm bony union in two months, with complete healing of the wound.

In a case of united fracture of the humerus, when the conditions, owing to crush of the parts and considerable nerve injury, were unpromising, an attempt to substitute bone graft has been made by Dr. White, the Professor of Clinical Surgery at the University of Pennsylvania.[1] Union had not taken place either primarily, or after scraping the ends and wiring, so that the recent experience of Mr. McGill, of Leeds, and of Dr. Sherman, of San Francisco, of the success of animal bone grafts, induced him to make the attempt. After scraping the ends of the bones, they were brought nearly together; but a number of fragments of dog's femur, which had been taken under careful antiseptic precautions, and mixed with pieces as large as peas, were placed between the ends of the broken humerus, the wound closed, and a few strands of catgut laid

[1] *University Med. Magaz.*, December, 1889.

in for drainage. The arm was fixed on a plaster bandage, which was renewed after some time, but how long it remained before a second plaster splint was put on is not clear. Two months later this was taken off, and no union had occurred, so the limb was amputated. The usual atrophy of the bones was found, and there had been no septic changes, nor was there any evidence of the implanted fragments having been a source of irritation. But there was a new formation of bone, apparently in the position occupied by some of the implanted fragments, and this new spur was connected with the lower fragment, and grew in the direction of the axis of the limb. It appeared, therefore, to show a formative effort which, under more favourable circumstances, might have given the case a successful termination.

In connection with this summary of Dr. Senn's results, it is well to refer to the antecedent experiments, clinical observations and achievements of Dr. Macewen, of Glasgow. At the British Medical Association meeting held in Glasgow in 1888, that eminent and original surgeon showed at one of his demonstrations given in the Royal Infirmary a series of cases in which cavities in large bones had been treated in various ways, by sponge-grafting, blood-clot, and introduction of chips of decalcified chicken bone, and also by permitting cavities to heal by being filled up with granulation tissue. All these methods serve the same end. The foreign bodies introduced require to be removed by absorption before the granulation tissue which penetrates them becomes converted into connective tissue. In the case of the sponge, it is least suitable, as it takes very much longer time to be absorbed, and is apt to produce irritation, delaying the healing of the wound. The blood-clot is the most easily absorbed, as its component parts break down into granular *débris*, which is readily removed by the leucocytes.

Decalcified bone occupies a medium position, much nearer, however, to the blood-clot, and its absorption, though occupying a variable time according to methods of decalcification and vitality of the tissues into which it is introduced, is generally effected in about a month. But Dr. Macewen found, taking it as a general rule, that cavities in bone were filled up with granulation tissue almost as quickly and as surely when they were treated with ordinary aseptic dressings, in the form of stuffing, the granulation tissue filling up the apertures, and ossification ultimately taking place. There is one advantage, however, of these bone and blood tampons; they permit healing under a single dressing.

It is a totally different matter, however, when one wishes to introduce viable grafts. Here the tissue introduced grows, there being no absorption and penetration of it by granulation tissue. In one such case, when the condyles of the femur were represented at the time of excision of the knee laterally and posteriorly by a mere shell of bone, the interior of which had been filled by a tuberculous caseating nodule removed at the time of operation, grafts were taken from the patella and placed round the periphery of the cavity as well as in the centre.

The wound healed under a single dressing, and the cavity was found to be filled by a hard substance which felt osseous to the touch, and there was firm osseous ankylosis between the femur and tibia. When an ordinary bone cavity has to be filled, much may be done by osteoplastic flap formation, which affords thoroughly satisfactory results, and is much better than those obtained by filling cavities with absorbable aseptic material.

In compound comminuted fractures, even when several inches of shaft are crushed into fragments, the soft tissues being in fairly good condition, Dr. Macewen does not amputate. The bone fragments are removed, rendered aseptic, and reimplanted, and when suppuration is prevented firm union takes place. This was illustrated by a case of a railway servant, who had been run over by a railway waggon and had sustained a compound comminuted fracture at the lower third of both thighs.

On the right thigh there were two large flesh wounds, the one on the inner, the other on the outer aspect of the limb. These communicated with one another and exposed numerous fragments of comminuted bone scattered among the muscles, the fracture involving the inclus of the shaft of the right femur. Some of these fragments were impregnated with dirty grease. The main vessels of the limb were intact. These osseous fragments were removed, carefully inspected, and the greasy matter pared from them by a sharp chisel. They were then rendered aseptic and reintroduced so as to form a continuity with the upper and lower ends of the fractured shaft. The wound healed under one dressing; the man was dismissed with two sound limbs, though with a little stiffness of the right leg, especially at the knee-joint.

To sum up—(1) The healing of osseous cavities is, as a rule, performed by granulation tissue, though this takes a considerable time when the cavity is large. (2) The introduction of aseptic absorbable material, such as blood-clot and decalcified bone, facilitates the healing, especially of the superficial parts of the wound. (3) Osteoplastic flaps are more useful and surer, especially for large cavities. These may be aided by bone grafts when there is a paucity of bone in the neighbourhood from which the osteoplastic flaps may form.

THE PROSPECTS OF SANITARY LEGISLATION.

ANOTHER Parliamentary session has commenced, and with it the sanitary reformer renews his hopes that some of the many public health questions which have from session to session been accumulating and are growing more urgent day by day may ere long be satisfactorily settled. It will have been gratifying, especially to Londoners, to have found at least two very important questions definitely referred to in the Queen's Speech. Bills are to be laid before Parliament by the Government "for the consolidation and amendment of the laws with respect to public health in the metropolis, and to the dwellings of the working classes." All who have had any experience of sanitary administration in London are well aware how urgently legislation in this direction is needed. The sanitary law in force in the metropolis is a labyrinth of confusion and difficulties, puzzling even to the expert. There are the Metropolis Management Acts of 1855 and 1862, the Metropolitan Building Acts, 1855 to 1882, the Diseases Prevention Act of 1855 and 1883, the Nuisances Removal Acts of 1855, 1860, and 1863, the Sanitary Acts of 1866 and 1868, the

Public Health Act, 1872, and a score of so of other Acts containing sanitary provisions applicable to the metropolis. Mr. Ritchie's Bill proposes broadly to do for London what the Public Health Act, 1875, did for the rest of the country. It will entirely supersede some fourteen Acts, and partially supersede a large number of other Acts, and it will thus bring into one intelligible enactment the various provisions relating to the metropolis.

The Bill will be simply a Consolidation Bill, drawn somewhat on the lines of the Public Health Act, 1875, and it will therefore not be largely of a controversial nature. But the Act of 1875, although much superior to the older Acts which are still in force in London, has been proved to be faulty and inefficient in several respects, and it will be important to see that those flaws are kept out of the new Metropolitan Act.

Consolidation of the laws as to the dwellings of the poor is also much needed. It has often been pointed out with truth that what is wanted is not so much fresh legislation as motive power to put the existing law in operation. But, whilst the greatest bar to effective enforcement of the existing Acts is undoubtedly to be found in the anomalous constitution of the London Vestries and District Boards, much of the inaction is also due to the complexity of the Acts themselves, and the cumbrous character of the procedure under them. It will be a long step in the right direction to have the metropolitan sanitary law and the law as to the dwellings of the poor placed on a proper intelligible footing; but it is at the same time disappointing that the Queen's Speech contained no promise of Bills for remodelling the Vestries and District Boards of London, and constituting District Councils in the rest of the country, in completion of the work of local government reform, which was begun by the passing of the Local Government Act, 1888. It would seem as if this all-important matter is to be postponed for yet another year.

Of minor sanitary legislation there is all already some indication. The President of the Local Government Board proposes to introduce a Bill to give an appeal from a sanitary authority failing to carry out the Allotments Act, 1887. Mr. Lees Knowles has proposals for preventing the spread of infectious disease. Mr. O. V. Morgan is anxious to secure to the London County Council powers to introduce new supplies of water into the metropolis, and to acquire the rights of existing water companies; and Dr. Farquharson has a Bill for the sanitary registration of buildings, etc.

The session promises to be an exceptionally busy one. It is to be hoped, therefore, that the Government measures will come under discussion at an early date, and will not be delayed, as has happened on several previous occasions, till the closing weeks of the session, when time would not admit of their careful consideration.

SIR JAMES PAGET has consented to take the chair at the biennial dinner of the Royal Medical Benevolent College on April 17th, at the Hôtel Métropole.

THE *London Gazette* of February 11th announces the appointment of Sir Alfred Baring Garrod, M.D., F.R.S., F.R.C.P., as one of the Physicians Extraordinary to the Queen. Sir Dyce Duckworth, M.D., has received the appointment of Honorary Physician to the Prince of Wales, in succession to the late Dr. T. K. Chambers.

THE Committee of the Senate of the University of London met on February 12th to consider the representations made by the University and King's Colleges of London at the recent conference. We understand that the proposal made by Professor Carey Foster that the University should appoint examiners to conduct the examinations within these Colleges in conjunction with examiners appointed by the Colleges was favourably considered, and that a communication will shortly be addressed to the Colleges by the University.

THE Royal Commission on Vaccination met on February 10th, Lord Herschell presiding. Most of the members were present. Dr. H. N. Maclaurin, of Australia, late Government medical officer of New South Wales, gave important evidence as to the working of the laws in that colony, after which the Commission proceeded to hear the evidence of those opposed to vaccination. The Commission met again on Wednesday, February 12th, and took evidence from persons who had suffered either imprisonment or fines.

STATE AID FOR IMBECILES.

A DEPUTATION of representatives of the Royal Albert Asylum (Lancashire), the Earlswood Asylum, and the Eastern Counties Asylum waited, on February 12th, upon the Lord President of the Council, to ask for a grant in aid. Mr. J. T. Hibbert (Royal Albert Asylum) expressed the hope that his lordship would see his way, in the Bill he was to introduce for giving a grant to the blind, deaf, and dumb, to deal also with the claims of the imbeciles. Lord Herschell contended that it was not only the duty, but the interest of the State to aid imbeciles. Mr. Alderman Sperling, the Duke of Norfolk, the Marquis of Bristol, the Bishop of Carlisle, and Mr. J. H. Kimbell also spoke as members of the deputation. Lord Cranbrook, in reply, said that he agreed with what had been said, and especially with the opinion that the matter was not one for the Education Department. He thought no one would deny that it was the duty of the State to advance, if possible, the position of a most unhappy class. He could not undertake that the wishes of the deputation should be met in the Bill he was to introduce in reference to the deaf and dumb, but he would represent to his colleagues the arguments that had been placed before him. He certainly thought that a case was made out for State aid.

INFLUENZA MORTALITY IN LONDON.

IT is satisfactory to note a marked further decline in the number of deaths referred to influenza in London during last week. The fatal cases of this disease, which had been 127, 105, and 75 in the three preceding weeks, further declined to 38 during the week ending Saturday, February 8th. This disease was proportionally most fatal in West London, while in the East and Central groups of sanitary districts very few deaths were referred to influenza. Of the 38 fatal cases of this disease registered in London last week 7 were of children and young persons under 20 years of age, 7 of persons aged between 20 and 40 years, 11 of persons aged between 40 and 60 years, and 13 of persons aged upwards of 60 years. There was also a further decline in the mortality from diseases of the respiratory organs in London last week, the deaths referred to these diseases being now below the average number in the corresponding periods of recent years.

IS INFLUENZA CONTAGIOUS?

DR. PROUST, as a proof of the contagiousness of influenza recently cited at the Paris Academy of Medicine the case of the ship *St. Germain*, bound from St. Nazaire to Vera Cruz. She stopped at Santander to take up a passenger from Madrid, where the epidemic was raging. All on board had been in perfect health, but four days afterwards the doctor was attacked, an

ultimately 154 passengers out of 436 had influenza, all in a mild form. In an article in the *Berliner klin. Wochenschrift* for February 3rd, based on cases observed by himself, Professor Rosenbach denies that "epidemic" influenza is a contagious disease. Moreover, "the fact that respiratory catarrhs, croupous pneumonias, cases of delirium tremens, and deaths undergo a striking increase in numbers during an epidemic of influenza does not prove that the latter is the cause; it only shows that the source or cause of influenza is particularly favoured or accompanied by a series of climatic alterations in the widest sense, which have an evil influence on the health of people, especially of those much exposed to external conditions." So that the micro-organism of influenza, supposing it to exist, requires for its development the co-operation of certain climatological factors of a very special manner. This is shown by the great increase of diseases and deaths amongst that part of the population spared by it.

INFLUENZA IN PERSIA.

DR. M. M. BASIL writes to us from Teheran under date of January 13th:—Influenza has been rife here during the last ten days. Few families have escaped the epidemic. The type of the disease is a mild one, judging from the low death-rate. The absence of aged people, in the same proportion to the general population as in Europe, is probably the real cause why so few cases end fatally here. Besides, our winter, though severe, is, as usual in Persia, dry and steady, not subject to any pronounced sudden alterations as in western Europe. The most marked phenomena in the epidemic appear to be the nervous ones. In many cases there is severe headache for two or three days; in others lumbar pains, like those of variola; in others, again, acute pains in the larger joints, as in rheumatic fever. The temperature varies from 100° to 103° or 104° F. As a rule, the pulse beat is not increased in the same proportion as the temperature. In some cases there is very marked œdema of the face, legs, and hands. The parts get œdematous apparently in a few hours, and the condition disappears as quickly in from twenty-four to forty-eight hours. The type of œdema is very suggestive of a similar condition, which I have seen in the last epidemic of dengue in Bengal. Influenza has been very general among horses during the last month. In them, I have been assured, the epidemic is of a very severe type, and accompanied with a high death-rate. Reports from Tabriz point to a similar epidemic in the human subject there, but of much more severe type. The tendency to anasarca appears to be greater, and many cases are said to have ended fatally.

INFLUENZA IN PORTUGAL.

ACCORDING to the *Correio Medico* of Lisbon, the epidemic of influenza has been very severe in Portugal. No preparations had been made for it, and the consequence was that at the end of December the civil and military hospitals of the capital were overcrowded. On December 30th 100 patients, and on the following day 75, were admitted into the S. José Hospital. On January 8th there was the unprecedented number of 1066 patients in that institution and its annexes. The mortality in the hospital rose considerably, 51 deaths having occurred between January 1st and 7th. On the 8th there were 11 deaths and 5 burials, all from the same hospital. On January 5th a medical service was established in each of the principal police districts, where not only medical advice, but medicines, food, clothing, and other necessaries were provided. The number of patients who applied at the four stations often exceeded 200 a day. In Portugal, as elsewhere, there has been a large increase of mortality, due not so much to influenza as to its complications and sequelæ. In Lisbon there were 819 deaths in December, as against 619 in the same month in 1888. In the week from December 29th to January 4th there were 300 deaths, as against 150 in the corresponding week last year. In the first sixteen days of January there were 799 burials, as against 329 in the corresponding period of 1889. Hardly any part of Portugal has escaped; one reads of whole training ships being attacked at once, of factories where, out of 400 women ordinarily employed, only 50 were able to work, and of villages and small towns where all the inhabitants without exception were affected. A writer in the *Coimbra Medica* estimates that in certain districts nine-tenths of the whole population were attacked. Since the middle of January the epidemic has steadily declined in Lisbon, but it is still prevalent in the provnces.

BOYCOTTING OF ENGLISH MEDICINES IN PORTUGAL.

A CURIOUS illustration of the present excited state of public feeling in Portugal with regard to everything English is afforded by a notice which occupies a conspicuous position on the front page of the *Correio Medico*. Our esteemed contemporary thinks it necessary to apologise for the appearance of a few English advertisements in its columns, on the ground that the management is bound by contracts entered into before "Portugal was offended and threatened by the English Government." It is still more comic to find the editor, Dr. G. M. da Silva Jones, describing himself in bold type as "Portuguese on the four sides" (which we presume means by his four grandparents), in order to minimise the bad effect likely to be produced on his readers by the uncompromisingly English surname with which he is afflicted. It is satisfactory to find that the "boycott" does not extend to our scientific output, for in the same number of the *Correio Medico* Sir Joseph Lister's recent account of his experiments in search of a perfect antiseptic dressing is given at length.

THE LIVERPOOL PUBLIC ABATTOIR.

THE Corporation of Liverpool has, at the present time, an opportunity of proving itself worthy of the great responsibilities that devolve upon it as the governing body of a city whose wealth and importance in our country is second only to that of the capital. Of all such responsibilities none are more serious than those connected with the preservation of the public health. Every citizen of the great Lancashire town should interest himself in the subject which is now under consideration, for the policy of its Corporation to-day will not only affect the present, but also future generations. One of the chief blots in the municipal sanitary arrangements of Liverpool is the existence in the very heart of the city of a public abattoir for the slaughtering of cattle brought to this great commercial centre and port by rail or steamer. The premises have been enlarged from time to time to meet increasing demands, and still further extension is considered necessary for the purpose of the business, which is here conducted on a very large scale; but their situation is most unsuitable from a sanitary point of view. The site is surrounded by a dense population, whose dwellings almost abut on the walls of the abattoir, while the Royal Infirmary, the University College, the Workhouse Hospital, with about a thousand beds, and the Lying-in Hospital, are all within a short distance from it. The offensive effluvia, inseparable from slaughter-houses and places where the accessory trades of gut scraping, hide dressing, etc., are conducted, pervade the surrounding streets and render them unhealthy. The danger arising from a public abattoir in such a situation has been pointed out by successive medical officers of health during the last forty years. Dr. Duncan, the first medical officer of health appointed in England, wrote strongly against it in his report of 1851. Dr Trench, who succeeded Dr. Duncan, in his 1865 report also condemned the existence of the abattoir in its present situation, on

sanitary grounds. In 1884 Dr. Stopford Taylor, the present medical officer of health, was instructed by the City Council to prepare a return of the death-rate from all causes within a radius of 500 yards of the abattoir for ten years past, making of course the proper corrections for persons dying in public institutions. The result of this inquiry clearly shows the existence of an influence unfavourable to health in the part of the town where this aggregation of slaughterhouses and other effluvia trades is situate, the death-rate being 29 per cent. in excess of that of the whole city, and, what is even more significant, 56 per cent. in excess of that of the wards in which the special area lay. Such facts as these point conclusively to the need of a radical change, whereby the necessary business of cattle slaughtering may in future be carried on under conditions which do not endanger the public health. This necessitates the removal of the abattoir from its present situation to a locality within easy access of the city, but, at the same time, at a reasonable distance from dwelling-houses. It behoves the Corporation of Liverpool to consider this subject with a due sense of its importance and of the magnitude of the interests involved. Vested rights must be respected, and fair compensation must be paid for this as for other necessary town sanitary improvements. But the common right of a neighbourhood to breathe an uncontaminated atmosphere is above all those arising from usage, and it is the duty of municipalities—the guardians of the public health—to protect that which of all others should be the most sacred right belonging to the people. We trust that when this subject is again discussed narrow views will not be allowed to prevail, but that the Corporation will be guided in its deliberations by the same breadth of principle which has placed another great city council in the foremost place amongst the staunch supporters and the best representatives of local self-government.

EXPENSES AND USES OF NOTIFICATION.

Now that the Notification Act is fairly in operation in the metropolis and a great many of the country districts of England, we may expect to hear of some few instances in which it is alleged that cases of trifling illness have been improperly notified for the sake of the fees payable to practitioners for certificates under the Act. Ten years ago, when a Local Notification Act first came into operation in a town which is now frequently referred to as affording a conspicuous example of the successful working of such a measure, some complaints of this kind arose. They were, of course, made the subject of inquiry by the proper authority namely, the medical officer of health, whose duty it is to report to the Local Board of Health on the medical points which from time to time arise for consideration in the operation of this and other Acts relating to the Public Health. These alleged irregularities are subjects for local inquiry, and, as they are of immediate interest to ratepayers, they are likely to receive all the attention they require. But there are other more important questions connected with the operation of the Act which are of wide public interest, and which before long must engage the attention of the Local Government Board. A great many urban and rural sanitary authorities have adopted the Act, and it is asked, What use are these authorities making, or likely to make, of the information with regard to the existence of infectious diseases which they have thus acquired? It is to be feared that many of these districts would be found quite destitute of any adequate provision by which good use would be made of the abundant information which they now possess, and for which they are legally bound to pay. It is only too true that the sanitary staff of many villages, and even more important districts, exists only in name; while there is, generally speaking, amongst rural sanitary authorities a want of appreciation of the value of medical services, in the shape of skilled advice, without which the Act cannot be successfully administered. Notification is only a means to an end, the object of the measure being to enable local authorities to prevent or control infectious diseases by applying the various powers of the Public Health Act where their application is most needed. We hope that the numerous boards of health which have recently adopted the Act of last session will immediately take such further action as may be necessary to ensure its being made of practical utility in the districts under their control.

A FACULTY OF MEDICINE IN SOUTH WALES.

At a meeting of the Court of Governors of the University College of South Wales and Monmouthshire, held at Cardiff on February 12th, under the presidency of Lord Aberdare, Major Jones moved a resolution, in which the governors pledged themselves to do their utmost to bring to a successful issue the appeal now being made for funds to establish a faculty of medicine. Dr. Edwards dwelt upon the need for establishing a medical school in connection with the college. In reply to a question, the Principal stated that about £600 to £700 a year, in addition to fees, would be required to carry on such a school. The buildings would cost about £3,500, but he estimated that 150 students would attend and make it one of the most successful departments of the institution. Lord Aberdare said he regarded the establishment of a medical school as a certainty of the near future. The resolution was carried.

COUNTY COUNCIL MEDICAL OFFICERS.

The Warwickshire County Council, at their recent quarterly meeting, expressed the opinion that the reports of the medical officers of health would be more valuable to the Council if received within three months after the end of the year. They recommended that the attention of the Local Government Board be directed to this with a request that an early day after the end of the year should be fixed. They further recommended that a return be obtained of the salaries of medical officers in the county, the periods and duration of their appointments, the area and population of their districts, whether they are debarred from private practice, and what other appointments (if any) are held by them. They did not recommend that the appointment of a medical officer of health should be made at present, but that the Sanitary and General Purposes Committee should be authorised to expend a sum not exceeding thirty guineas in employing some competent person to summarise the reports and tabulate the vital statistics for the year ending December 31st, 1889.

THE SANITARY CONDITION OF LONDON BOARD SCHOOLS.

We have previously referred to the evils arising from lack o supervision in the construction of our comparatively new Boar schools, which are now making themselves felt in the shape o enteric fever among the occupants. Mr. Helby, in his speech a the last meeting of the School Board, referred to cases of the wors kind of drainage defects which "he had seen with his own eyes, and about which, we understand, there can be no dispute. Th cases referred to were of the following kind:—Short length of new drain connected with an old drain by breaking a hole in th old pipe and pushing a new pipe into it; drain laid flat; drain lai with a fall the wrong way; broken pipe made good by pieces o brick and tiles; gullies with outlets several inches from the drai pipes. These are the kind of defects which were depicted i Mr. Teale's book on *Dangers to Health in Houses* and other wel known popular works. They are always likely to arise wher builders are uncontrolled. It is to prevent such defects that goo independent supervision of new buildings is required, and we ar of opinion that the Board has been greatly to blame in the pa in not having appointed architects or surveyors who would ha

en able to properly supervise the numerous works in progress various parts of the metropolis. The Rev. Prebendary Eyton, the same meeting, observed that it was unreasonable to expect at men elected as educationalists should be building experts id learned in the matter of drains. It needs no great amount of arning to appreciate the importance of having drains laid with e fall in the right direction, and it is absurd to speak of faults of is kind as if they were in any sense excusable. It is very well own at the present day that drainage faults of this kind are the t infrequent causes of illness and death, and that they are only o likely to occur when a certain class of builders are employed, id when adequate supervision of their work is not maintained. o men of common sense who are elected to any board can sup- se that a jerry builder is to be trusted to do his work according specification unless he is subject to independent supervision. ese remarks apply especially in the case of drainage, where, if e supervision is at all lax, the drains will be covered up before ere has been opportunity for inspection, the subsequent dis- very of their defects being generally coincident with the oc- rrence of some preventable illness. It has been stated at the ard that the present Works Committee in all cases where stop- ges of drains are found directed a careful examination and a ll report to be made by the superior officer. But, having regard what has already taken place, we should be more satisfied if ller details were given as to the mode of examining and report- g, and as to the way in which the drainage work at our Board hools is being tested as the present time.

THE MARCH OF CHOLERA.

R. I. I. HUEBNER, of St. Petersburg, writes in the *Vratch*, nuary 30th, 1890, p. 83, that, according to the latest informa- n received from the Russian mission at Teheran, cholera was ought into Persia from Mesopotamia about the middle of ugust, 1889, and raged at first in Mokhammer, Buthir, Mendelï, id Shuster. It subsequently invaded Kermanshakh, Maidesht, rumabad, and Khurrem-Abad in Luristan; later on Senneh, id, Kel-Kur-Abad in Kurdistan, and ultimately Hamadan and s vicinity. Anxious to protect Teheran and Azerbaidman from e disease, the Persian Government commissioned Dr. Albu to tablish quarantine in Kermanshakh and Kanhavar, the latter cality being situated midway between the former and Hamadan. multaneously, the Shah has ordered the governors of Kerman- akh, Hamadan, and Herus, "under pain of death," to detain, ntil further orders, all pilgrims and travellers in general arriving om Bagdad. At the same time, the Kurdistan Governor was dered to arrange quarantine in the Merivan District, in the wns of Ban and Sakkyz, and along the Turkish-Persian fron- r. The latest telegrams received by the Persian Minister the Interior from the authorities of the infected localities ere the following: 1. One from Khurrem-Abad, dated December h, announcing the occurrence there of 7 cases, all of which ded in death on the same day, and stating that these cases d made their appearance suddenly after a fairly long interval of mplete freedom from cholera. 2. One from Kermanshakh, dated cember 6th, announcing the occurrence of one fatal case, after free interval of one week, and reporting that the epidemic seases prevailing at present about the place were limited to evers" and malignant dysentery. 3 and 4. Two from Hama- n, dated December 13th and 14th respectively, announcing the currence of 6 and 7 fatal cases of cholera. 5. One from Melaïr, ed December 14th, informing the Government that the epidemic d "completely" died out in that locality. The Turkish Sani- y Board has issued an order, dated January 9th, according to ich "all Persian products (*provenances*) must be subjected to ve days' quarantine control." At the same time the Board nounces that "Mesopotamia is now free from cholera." The Caucasian Governor-in-Chief (*Glavno-natchalstviiiishtchy*) has just sent Dr. Bahdieff, of Tiflis, to Persia, to study and report on the epidemic cholera.

INSANITY AMONG THE AUSTRALIAN ABORIGINES.

IN a paper read before the Intercolonial Medical Congress of Australasia, Dr. Morton Manning, the Inspector-General of the Insane in New South Wales, gave a most interesting account of the cases of insanity found to have occurred among the Aborigines of Australia. Mental disease would appear to have been a very rare affection whilst they were in their primitive and uncivilised condition, and the manner in which they dealt with the few cases which did arise was of the most drastic nature. "If the lunatic was violent or aggressive he was promptly slaughtered; if melancholy he was allowed, if so disposed, to commit suicide; if demented and helpless he was allowed to die; and only when quiet and peaceable, and when his erroneous ideas did not result in offensive acts, was he allowed to continue in the tribe." In the course of time, as the aborigines were brought more into contact with civilisation and its attendant vices, insanity increased rapidly in proportion to the number of the population, and Dr. Manning states that since 1868, 18 aborigines had been admitted into the asylums of New South Wales, from a population which has never during that time exceeded 2,500, and is now less than half that number. In the census year, 1881, the proportion of the aboriginal insane to the aboriginal population of New South Wales was 2.83 per 1,000, a proportion in excess of that for the general population, and at the close of 1887 it was upwards of 5 per 1,000. The causes of insanity in the 32 cases of aborigines admitted into the asylums of Queensland and New South Wales were in a considerable proportion of the cases due to drink. The prevailing type of the malady was mania passing rapidly into dementia, with filthy and degrading habits. All the melancholic cases originated in gaol. Three were epileptics. No case of general paralysis or anything like it was seen. There were 20 deaths, and in several cases the only cause which could be assigned was marasmus—a gradual wasting without tubercular or other manifest ailment. The average duration of life was much shorter than in Europeans; the confinement, though tempered by many unaccustomed comforts, being apparently the great factor in shortening life.

REPRESENTATION OF THE MEDICAL STAFF ON HOSPITAL BOARDS.

THE question of the representation of the medical staff on the governing boards of hospitals has been pretty well settled in favour of such representation by the common sense of the hospital managers and by the results of experience. It is rather odd to see the managers of the German Hospital lagging in the rear, and furbishing up the old arguments of a bygone system against an arrangement obviously beneficial to the interests alike of the governors, the administrators, the patients, and the public. The Chairman of the Board of Management was so imprudent as to characterise this wise and modest request as presumptuous. The use of such an expression under such circumstances indicates that he does not approach the subject in a judicial frame of mind, or from the point of view of the public interest and the interests of the whole institution, which should guide the decision in such a case. The contribution of the small annual subscription which constitutes governorship is obviously intended only to give the right to contribute to the general welfare of the institution, to its good government, and to the efficient distribution of its benefits. It will certainly not be denied that the contribution towards those objects by the continuous services of the medical officers is at least as important as that of most individual governors; and that the physicians and surgeons of the hospital constitute in their way as important an element in the carrying

on of the work of the hospital as the financial and administrative element. If any evidence were wanted of the extreme value to the board and managers of the presence amongst them of the medical officers of the staff, it might be found in the excellent results which have followed the system of administration by an open board at St. George's Hospital and St. Mary's Hospital, two of the most efficient metropolitan hospitals, with which the German Hospital, supported, like them, wholly by voluntary contributions, might be proud to put itself in comparison. Even at Guy's Hospital, largely supported as it has been by early endowments, the presence of representatives of the medical staff on the Board of Governors has been found to be a great advantage, and to lead not, as was suggested at the meeting of the German Hospital to strife, but on the contrary to the abatement of friction which had previously existed, and to be for the general welfare of the institution. Nowhere can the governors find advisers so well informed or more anxious for the success and usefulness of a hospital than among its visiting medical officers, who are intimately acquainted with its daily needs, and with the best means of treating daily difficulties as they occur, and of extending the benefits of the institution to which they devote so large a part of their time and their special knowledge. We are glad to see that the resolution in favour of a change in this direction in the German Hospital was carried by a majority at the meeting. It is to be regretted that the question is still kept open by a demand for a poll, but it is sincerely to be hoped that the result of that poll will be equally affirmative, for it may be safely predicted that such a conclusion will be that which is most to be desired in the best interests of the hospital in the future.

DR. H. CROOKSHANK PASHA.

THE Khedive, we learn with pleasure, recently summoned Dr. H. Crookshank, Director-General of Prisons, and personally presented to him the patent raising him to the rank of Pasha. This flattering distinction is a just recompense of Dr. Crookshank's long and loyal services. Dr. Crookshank rendered signal services in the Red Cross Ambulance during the Franco-German war in 1870-71, and during the Turco-Russian campaign of 1876-77, receiving then the cross of Officer of the Medjidieh and Commander of the Osmanieh. Crookshank Pasha was summoned to Egypt in 1883 as medical inspector during the cholera epidemic, and was raised in recompense of his services to the grade of Commander of the Medjidieh. He was appointed Director-General of Prisons in 1885, and last year, after the battle of Toski, he was charged with the direction of the service, having charge of all the Soudanese prisoners and refugees.

BIOLOGICAL STUDY IN GREAT BRITAIN.

A SERIES of papers such as those which we publish to-day, and as appeared in our recent number containing reports to the Scientific Grants Committee of the British Medical Association, are interesting, not only in themselves, but as affording a signal answer to those who affect to doubt the influence of research on "practical medical knowledge." At the basis of practice lie the abstract principles and dry facts established by painstaking scientific research, and although much of such investigation must be of necessity without immediate practical conclusion, or incapable of it, although much of it may be valuable chiefly as clearing away misconception or destroying errors, the obvious march of medicine and surgery along the paths thus opened has led to the greatest triumphs of our clinical usefulness; and it is cheering to see that our colleges and public institutions—although they are still unable to place within the reach of scientific workers such facilities as exist in the great Continental cities of Europe—are yet taking steps to make a commencement in this direction. We have nothing yet to rival, and but little to compare, with the laboratories of France and Germany, and thus it is, perhaps, that in the two great departments of biological research which are most fertile in knowledge and the elements of progress—bacteriology and embryology—Great Britain has contributed for many years so little to the sum of new knowledge. It may be hoped that higher prospects are in store.

THE ALLEGED INCREASE OF LUNACY.

ON Tuesday evening next, February 18th, Mr. Noel A. Humphreys of the Registrar-General's department, will read a paper at the meeting of the Fellows of the Royal Statistical Society at the School of Mines, Jermyn Street, on "Statistics of Insanity in England, with special reference to evidence of its increasing prevalence." We are requested to state that any member of the profession interested in the subject may obtain a card of admission from the assistant secretary of the Royal Statistical Society, Adelphi Terrace, Strand, and can, if so inclined, take part in the discussion which will follow the reading of the paper.

THE USE AND ABUSE OF DISINFECTANTS.

IN a very practical address delivered before the sanitary inspectors of Yorkshire, and published in the *Sanitary Record* of this month, Dr. Spottiswoode Cameron, Medical Officer of Health for Leeds, discusses the ordinary methods of using disinfectants for the sick room, soiled clothes, etc., and warmly urges that active methods, which he describes, should be adopted and enforced. He objects to the use of concentrated disinfectants and soaps, recommending especially the use of a 5 per cent. solution of carbolic acid for many purposes, such as decomposition of typhoid stools or of perchloride of mercury 1 part in 1,000 for disinfecting houses. Dr. Cameron considers that the use of small quantities of strong carbolic subsequently diluted has many disadvantages while carbolic soaps are volatile and uncertain in their action.

SCOTLAND.

AT a special meeting of the Royal Society of Edinburgh last week a discussion on "Evolution and Man's Place in Nature" was introduced by Professor Calderwood, LL.D. He argued that the phenomena of mind, as manifested in man, were so different from those manifested in the lower animals as to necessitate the predication of a break in the developmental chain. So far as he knew the facts on which the evolutionary doctrine was based, a gap existed which it was impossible to bridge over. Considerable discussion followed.

HIGH MORTALITY IN EDINBURGH.

DR. LITTLEJOHN has communicated to the Public Health Committee of Edinburgh Town Council the health statistics for January, 1890. From these it appears that this year's mortality has been considerably above the average, the death-rate being 27.88, as compared with 20.29 per 1,000, the average for January the five preceding years. Deaths from diseases of the chest claimed 42.69 per cent. of the whole, zymotic diseases 19.84, and old age or debility 7.93.

THE LATE NURSE PORTER OF THE EDINBURGH ROYAL INFIRMARY.

THE announcement of the death of Nurse Porter, of the Edinburgh Royal Infirmary, will be received with sadness by a very large number of the profession in the United Kingdom and abroad. Nurse Porter was one of the last links which connected the infirmary closely with the past. She had seen almost fifty years of service within its gates, whether in Infirmary Street or Laur

n Place, and held the post of staff nurse successively under ofessors Syme, Lister, and Annandale. She was devoted to the ties of her calling, and though for some time past in infirm alth, she stuck to her post, where death met her, and called the thful servant to the reward of rest. Shortly after assisting to ss a patient on Monday forenoon, she passed quietly away. rse Porter will live long in the memories of many of more than generation, whose lot it has been to frequent the surgical rds of the Royal Infirmary of Edinburgh, and she leaves behind a record of unflinching devotion to duty and constancy in vice which time will not efface.

OYAL COLLEGE OF PHYSICIANS OF EDINBURGH: LABORATORY REPORTS.

HE second volume of the Reports from the Laboratory of the yal College of Physicians of Edinburgh, the appearance of which announced last week, is a volume of much importance, and will lly maintain the reputation which accrued to the recently nded laboratory from the earlier issue of the reports. This is t the place, and it would be premature to attempt, to analyse researches recorded in the volume, but a brief summary of its ntents will prove of interest and service. The work contains pages and 43 illustrations, and includes the records of sixteen ginal investigations carried out in the laboratory. The list is follows:—1. The Anatomy of Advanced Pregnancy and of bour as studied by means of Frozen Sections and Casts, by A. F. Barbour, M.D., F.R.C.P.Ed., and J. C. Webster, M.B., C.M.; 2. Contribution to the Normal Anatomy of the Female Pelvic Floor, Johnson Symington, M.D., F.R.C.S.Ed.; 3. The Nature and Aim Investigations on the Structural Anatomy of the Female Pelvic oor, by D. Berry Hart, M.D., F.R.C.P.Ed.; 4. Improved Method of naging the Third Stage of Labour, by D. Berry Hart, M.D., F.R.C.P. .; 5. A Contribution to the Pathology, Symptoms, and Treatment Adherent Placenta, by D. Berry Hart, M.D., F.R.C.P.Ed.; 6. Note Some Anomalous Cases of Separation and Expulsion of the acenta before the Birth of the Child, by D. Berry Hart, M.D., R.C.P.Ed.; 7. The Minute Anatomy of the Placenta in Extra-erine Gestation, by D. Berry Hart, M.D., F.R.C.P.Ed.; 8. Mitral enosis and Labour, by D. Berry Hart, M.D., F.R.C.P.Ed.; 9. Some w Points in Connection with Muscle Contraction, by Alexander nes, M.D., F.R.C.P.Ed.; 10. Secretion of Carbonate of Lime by imals; Part II by Robert Irvine, F.C.S., and G. Sims Woodhead, R.C.P.Ed.; 11. On Tuberculosis of Bones and Joints, by Henry exis Thomson, M.D., F.R.C.S.Ed.; 12. Necrosis of the Bladder, its thology, Etiology, and Course, by F. W. N. Haultain, M.D., R.C.P.Ed.; 13. On Certain Substances found in the Urine, which uce the Oxide of Copper upon Boiling in the presence of an ali, by Herbert H. Ashdown, M.D.; 14. On the Stomach of Narwhal (Monodon Monoceros), by G. Sims Woodhead, M.D., Robert W. Gray; 15. On the Connections of the Inferior vary Body, by Alexander Bruce, M.A., M.D., F.R.C.P.Ed.; 16. zyme Action in Lower Organisms, by G. E. Cartwright od, M.D.

TUKE VERSUS YOUNG.

GMENT was given last week in an action raised by Dr. Batty e, Edinburgh, against Mrs. Young, concluding for £270 17s. 1d. ayment of pursuer's rightful fees for bringing defender's son a America. The evidence of the defence went to show that pursuer had indicated his willingness to bring Captain Young, patient in question, to England for a small fee, and, in accord-e with this, the defender had tendered a fee of fifty guineas. the other side, it was suggested that the reference to a small was made under the belief that the patient was to be placed er the care of the pursuer on his return to England, and that, in contravention of this, the pursuer was informed, on reaching home, that other arrangements had been made. The pursuer, therefore, claimed that he was entitled to a fee more consistent with the extent of his services. In giving judgment, the Lord Ordinary expressed the opinion that the defender was under no obligation to send her son to Dr. Tuke's asylum, and that it was foolish to insist that it was an implied term of the contract. The question at issue was, what sort of sum the parties understood by the pursuer's reference to a small fee. The fee was to be small, and, therefore, could not be fixed according to the pursuer's position in the profession, but must be the kind of fee generally charged for the peculiar service rendered, irrespective of the pursuer's position. Under the conditions, Lord Kinnear thought that the sum tendered by the defender (fifty guineas) was sufficient remuneration, while, of course, it certainly was not an adequate fee for a person in Dr. Tuke's position professionally as return for giving up twenty-five days of his time entirely to the service of the defender. It was, however, sufficient in the sense of a small fee, in consideration of which the pursuer said he should, as he was going on a holiday, undertake to bring the defender's son from America. As the sum of fifty guineas had been tendered, his lordship concluded that the pursuer must bear the expenses of the action.

THE SANITARY CONDITION OF PAISLEY.

THE unenviable condition of the town of Paisley from a sanitary point of view was, more than a year ago, brought very prominently before the public of the West of Scotland, on account of the prevailing very high death-rate. The report for 1889 indicates that the Commissioners of Paisley have not yet fully apprehended the need of energetic action in dealing with the matter, that they have not yet passed the stage of mere talk. The report showed the death-rate to be 21.7 per 1,000. The deaths of children under 5 years of age made 41.13 per cent. of the total. An instructive analysis of the deaths had been made, showing their relation to house room. Of the total deaths, 26.04 were in houses of 1 apartment, 41.72 in houses of 2 apartments, 12.6 in 3 apartment houses, 8.83 in houses of 4 or more apartments, and 11.33 per cent. in institutions. As to the sanitary condition of the properties where death occurred, in 39.91 per cent. it was bad, and in only 30 per cent. was the sanitary condition found satisfactory. The principal number of deaths came from the small, overcrowded, and badly ventilated houses, having badly laid and untrapped drains, and badly constructed back courts, where no provision had been made for carrying off surface water, and where ashpits and offices were of an imperfect kind. The convener of the Public Health Committee, in moving the adoption of the reports, declared that the question of overcrowding had many times been brought before the Commissioners, but the overcrowding still went on, while the sanitary condition of many of the properties was discreditable to the Commission and to the town.

THE ABERDEEN ROYAL INFIRMARY.

THE third annual report of the Aberdeen Royal Infirmary under the new Act of Incorporation has been issued. The directors assure the management that a large amount of good work has been done during 1889, and that the internal management of the hospital has been efficient in all departments connected with the comfort and well-being of the patients. The directors also point, with feelings of pride, to the unusually large contributions from ex-patients, who have expressed their gratitude by giving liberally of their means to the institution. It is a pity that this gratitude of patients to medical charities should not grow from more to more. Another gratifying feature of the report is that the accounts show a balance on the right side. The average cost for the year of each occupied bed was £36 14s., or about 2s. 0½d. per

diem. Regarding the new buildings, most satisfactory progress has been made with the work, and a considerable part of the surgical pavilion has been roofed in. And we are assured that one of the first duties for the next board of directors will be to obtain working plans for the new medical pavilion, and to remodel the present front building for administrative purposes. The Jubilee Fund has reached £30,594 14s. 4d. The total number of indoor patients was for the year 2,301; of these 911 were medical and 1,390 surgical. Deaths in medical cases were about 1 in 11.25; deaths in surgical cases were about 1 in 25. The average number of patients in the hospital was 160.9; the highest number—namely, March 25th, was 187; the lowest number was 129, April 18th. The average number of days in residence was 27.3. The list of operations performed during 1889 shows a total of 466. The table does not indicate the results which followed these operations; this is a somewhat disappointing omission, which might be remedied in next report. Operations on the eye were 113. The total number of out-patients was 811, of which 243 were medical. 218 surgical, 350 eye. It may be explained that the outdoor department of the hospital is undertaken by the Aberdeen General Dispensary, and that only those dwelling beyond the municipal boundaries are entitled to advice and medicine at the Royal Infirmary. There is no alteration either in the medical or surgical staff.

IRELAND.

DR. GALLAGHER has been appointed coroner for North Mayo.

DR. STAFFORD having been appointed a Local Government Board inspector, a large number of candidates are in the field for the posts he vacates in the Boyle Union.

DR. COPE has been elected one of the medical officers of the South City Dispensary, in room of Dr. C. F. Moore, resigned. Dr. Cope is resident assistant physician in the Richmond Lunatic Asylum, and this office he must now resign.

THE GUINNESS GIFT.

AT a meeting of the Dublin Artisans' Dwellings Company on Monday, February 10th, the chairman stated that the trustees had asked the directors to superintend the construction of the buildings to be erected in Dublin under the provisions of the trust. This company has been a great commercial success, paying four and a half per cent. to its shareholders, free of income tax. It owns several large blocks of buildings and hundreds of cottages. It has cleared out some of the worst slums in the city, and it gives good, clean, and healthy homes to the working classes at a small rent. A noteworthy result is the effect upon the death-rate in the districts occupied by the company's dwellings. In the last half year fifty-seven persons died on the entire property, showing an average death-rate of 15.4 per 1,000, compared with 25.4 in the Dublin district for the same period. There could hardly be a stronger proof in favour of enlightened sanitary improvements in our large cities.

THE EPIDEMIC OF INFLUENZA IN CORK.

DR. DONOVAN, medical superintendent officer of health for Cork, in a recent report states that there is at present in that city an epidemic of a specific kind of a somewhat mild type, which is characterised by the symptoms of an ordinary feverish cold, but of a more aggravated kind than is usually met with. The attack passes off in four or five days, and as a rule is not followed by any lung complications or severe nervous depression. The disease, up to the present, has been chiefly confined to males, and as a rule attacks those who are engaged at outdoor employments and exposed to atmospheric vicissitudes. Large numbers of persons wh have been similarly situated as to occupation and modes of livin seem to have been seized at once, but not taking the infection on from the other, nor propagating the disorder among their famili or households. Whether this outbreak is the forerunner of in fluenza or a mild type of the disease itself Dr. Donovan is nc prepared to state, though he is inclined to believe it is the latter.

SAMARITAN HOSPITAL, BELFAST.

THE annual meeting of this institution was held on January 22n the chair being occupied by the Rev. Thomas Hamilton, D.I President of the Queen's College, Belfast. The medical repor submitted by Dr. W. K. McMordie, showed that 96 cases had bee treated in the wards during the year, and 857 patients in th extern department. There were only three deaths in the ho pital during the year. Four ovariotomies had been performed, i all cases successfully.

THE DENTAL HOSPITAL OF IRELAND.

DURING three days of last week a most successful bazaar was he in the Leinster Hall, in aid of the funds for the building of a ne and fully equipped dental hospital. The staff—among whom m be specially mentioned Mr. Theodore Stack, Mr. D. Corbett, a Mr. W. B. Pearsall—have been labouring during the past year f the success of the series of festivities which has just closed. The efforts were not confined to the bazaar. A concert and a gra subscription ball finished a full week's profitable entertainmer Her Excellency the Countess of Zetland, the Prince and Prince Edward of Saxe-Weimar, the Duchess of Abercorn, the Duchess Leinster, the Marchioness of Londonderry, and a crowd of oth distinguished persons, were present. Many artists gave their a in admirable contributions of work, and everyone engaged seem determined to make the *fête* a great success. It is believed th the end has been achieved, and that Dublin will soon be able boast of a specially built dental hospital, adapted in all respects modern requirements.

GALWAY INFIRMARY.

THE Commissioners who were appointed to inquire into t affairs of the Galway Infirmary have sent in their report. It w be remembered that the unhappy dispute arose out of the regular proceedings at the time of the election of a successor Dr. J. V. Browne. Dr. Colohan was elected, but Dr. Kin who was also a candidate, showed that several of the voters h acted illegally, and the election was subsequently set aside by Court of Queen's Bench. Then followed a wearisome series efforts to evade the order of the Court, and finally there has co this inquiry. The Commissioners recommend that the Infirm shall be supported by a general county rate; that it shall managed by a Board composed of the chairmen of the vari boards of guardians in the county, and by so many guardians the Local Government Board shall direct; that the patients sh be attended by the Queen's College professors; and that p patients may be admitted. This arrangement will probably m most of the requirements of the case. But it will be necessary have an Act of Parliament passed to give effect to the report. this be done, it will be the first step towards an interference w the county infirmaries generally, and the existence of these ex lent institutions will be imperilled.

THE new isolation wards of the Guest Hospital, Dudley, w opened by the Earl of Dudley on February 8th.

THE new ward and extensions to the Monkwearmouth Southwick Hospital, which have been erected at a cost of £1, was formally opened by Sir Hedworth Williamson, on February

A SUDDEN death occurred last week at Portsmouth from fluenza. A baker's man, named Ferbridge, was found sitting his cart with reins in hand, but quite dead.

NOTES
ON
SOME GERMAN UNIVERSITIES.

By WALTER K. SIBLEY, M.B.Camb.,
AND
W. SOLTAN FENWICK, M.B., B.S.Lond.

I.—THE UNIVERSITY OF STRASSBURG.
(Continued.)

The Physiological Chemical Laboratory; Construction and Arrangements; Blowpipe; Water-Vacuum Filter.—Library.—Professor Hoppe-Seyler.—Work in the Laboratory.—The Anatomical Institute; Construction.—Dissecting.—Professor Schwalbe.—The Medical Reading Room.

Situated on the east side of the pathological laboratory, and separated from it by a large grass enclosure, is the fine institute of Professor Hoppe-Seyler. Planned by the professor himself, and fitted up with every convenience for the pursuit of the science of physiological chemistry, this laboratory offers, perhaps, one of the greatest attractions in the whole University to a man seeking opportunities for original research. The building itself consists of a long central block and two large wings, the latter containing the laboratories. The main entrance is situated in the centre of the building, and there is a private door in each wing allowing of direct access to its laboratory. A long passage runs the whole length of the central block, and serves as a means of communication between the two laboratories and the various rooms upon the ground floor.

Passing in at the main entrance, and proceeding along the passage to the left, we notice in succession the lecture theatre, the storeroom, the professor's private laboratory, the *bureau*, and lastly, the special laboratory. This latter is a fine room, situated in the north wing, and offering accommodation for a dozen investigators. The benches are about eight feet long, and are arranged parallel to each other, a convenient amount of space being left between them. Each bench is supplied with its own set of reagents, several lamps and burners of various shapes and sizes, and an excellently arranged water supply. Beneath it are numerous cupboards and drawers, where any special apparatus or material can be kept under lock and key.

Between the large windows are numerous shelves containing the more rarely used reagents, while each corner of the room is occupied by a stink-cupboard of considerable dimensions, and the whole room is warmed by hot-water pipes and excellently lighted.

Among some of the appliances in general use is a large blowpipe, worked by hydraulic mechanism, by means of which a platinum crucible can be maintained for almost any length of time at high temperature, without the necessity of any exertion on the part of the operator. The waste heat of the water pipes is utilised in warming a series of small metal chambers, an arrangement exceedingly convenient for the drying, or maintaining at a uniform temperature, of precipitates or other manufactured material. Attached to the laboratory are several smaller rooms, some of which contain the glass and porcelain, and others the metal apparatus for use in the special laboratory. In one of these there is a large water-vacuum filter, the pipe from which, some thirty feet in length, passes through the flooring into a cellar. The advantage of this method of quick filtration is obvious; instead of being obliged to wait hour after hour while a tenacious fluid is slowly filtering, one has merely to connect the tube of the bottle with the filter, turn on the water, and in a few minutes the operation is satisfactorily performed. In addition to this large filter for general use, each bench is supplied with one of a smaller size, capable of being connected or disconnected at pleasure.

The library is a large and well-lighted room, situated upon the first floor, and immediately above the special laboratory. It contains an extensive and valuable collection of works upon chemistry and physiological chemistry, as well as most German and foreign periodicals relating to the science, these latter being regularly bound and arranged in series. The room is always open for study, and with the permission of the first assistant, books may be borrowed from it for a week or more. Adjoining the library is another large laboratory set apart for the study of practical hygiene; here demonstrations are given twice a week by the professor, and are largely attended by men from all parts of the empire.

The "general laboratory" is situated in the southern wing of the building and, though considerably larger, is fitted up in exactly the same manner as the special one. It is here that the student works daily during his fifth or sixth *semester*, the practical work being regulated by a definite scheme, and corresponding weekly with the subject of the lectures.

Beneath the ground floor are a series of cellars, some of which are used for preserving material at a low temperature, while others again are fitted with numerous forms of stoves, by means of which specimens may be maintained for weeks or months at a definite temperature, without lumbering up the laboratory with cumbrous apparatus.

The special laboratory is open only to those who are pursuing some original line of work, either of their own choosing or selected for them by the professor; hence to obtain a place in it it is necessary either to get the professor's approval of some original scheme, or else to accept and work out a subject suggested by him; a small fee to the laboratory and the matriculation fee to the University being sufficient to cover all the ordinary expenses. During the whole period of work the professor is always ready to demonstrate and to help any pupil to the utmost of his ability, and no day passes in which he does not personally inspect the progress of each individual piece of work. At the completion of the study, the student lays his results before the professor, who considers them and, should they be worth publishing, will suggest the scheme of the article. When it is finished he will himself revise it and often attend to its publication, either in his own *Archives for Physiological Chemistry*, or in some other scientific journal.

Situated, as the laboratory is, in close proximity to the hospital and *post-mortem* room, from both of which material can be obtained to any extent, the opportunities for original work in connection with the important relations of chemistry to medicine and pathology are unbounded, and we should doubt whether similar opportunities could be found in any other university in Europe.

The general laboratory, as before mentioned, is set apart for students commencing the study of physiological chemistry; but it is also available to strangers, on condition that they matriculate. This is a mere question of paying a guinea, unless they have previously matriculated in another university, in which case it is half a guinea, with the addition of the laboratory fee of about 40s. The first assistant, Dr. Thierfelder, is always present to give personal instruction, and the professor himself daily inspects the progress of each student, and explains any special difficulty that may arise. Since the day, now nearly thirty years ago, when he established the first physiologico-chemical laboratory in Germany, Professor Hoppe-Seyler has been the acknowledged leader in a science which he may almost be said to have founded; hence any attempt to describe his position in the scientific world might well seem superfluous. Not only, however, as an author, but also as a teacher, is Professor Hoppe-Seyler undoubtedly pre-eminent; always genial in manner, and never considering his time too valuable to help a pupil, even in the most trivial mechanical details, it is not to be wondered at that his name should be so popular and respected among the students as it is among those who can estimate more fully the benefits he has conferred upon the scientific world.

Well received as strangers always are in the University, the kindness of Professor Hoppe-Seyler towards Englishmen is almost proverbial there. Himself a thorough student of English literature, he welcomes and helps to his utmost ability any man coming to him with a determination to do good work, and, it may truthfully be said that no man has ever left him without having deep cause for gratitude to, and profound admiration for, one who may well be considered one of Germany's greatest men.

Space will permit only of a very brief note of the anatomical institute of Professor Schwalbe. Forming, as has already been described, the other half of the pathological institute, the two have a large common lecture theatre. The general construction, as seen by reference to the plan given in speaking of the pathological department, consists of a larger and a smaller dissecting-room situated in the south-east angle of the building, the two being in free communication, while a series of smaller preparation rooms, together with those of the director and his assistant, lie on either side of these. The chief feature of the dissecting room is that it is lighted by numerous side windows,

and not by skylights, so that the students sit in the windows and dissect. There is an almost unlimited supply of material, and so the parts are separated as early as possible, and each after the day's work is placed in a large tank with spirit. With the parts themselves, only one is used for one system; thus the arteries are dissected out in one arm, the veins in another, and the nerves in still another, and finally, the muscles and ligaments in a fresh one. The viscera, both thoracic and abdominal, are taken out *en masse*, and then dissected. Professor Schwalbe and his assistant, Professor Joessel, are always present demonstrating personally to the students. Of the painstaking attention of Professor Schwalbe, it is superfluous to write, and his name is too well-known among anatomists to make it needful to praise his work. Anatomical literature, especially that relating to the nervous system, bears ample testimony to his fame. Numerous models stand about for the students to study and work at, as well as a series of frozen sections of different regions of the body, for the demonstration of the intimate relations of the parts.

While Professor Schwalbe gives a course of lectures, and takes charge of the men who are dissecting the muscles, ligaments, viscera, etc., Professor Joessel gives lectures on topographical anatomy and practical instruction in neurology and angeiology.

We must not leave this institute without mentioning the medical reading-room situated on the ground floor, where the current numbers of the chief medical and scientific papers of every nation can be read. This is open to the students from 8 A.M. to 8 P.M., and on Sundays during rather shorter hours.

REPRESENTATION OF THE MEDICAL STAFF ON HOSPITAL BOARDS.

CONTEST AT THE GERMAN HOSPITAL, DALSTON.

THE annual meeting of the governors and subscribers to the German Hospital was held on February 7th at Cannon Street Hotel. There was a very large attendance. The meeting had been looked forward to with unusual interest, owing to a notice which had been given by the honorary medical staff to move that two of their number be added to the Committee.

On the motion of Dr. HESS, seconded by Dr. JAMES HASSLACHER, Baron Von Schroeder was unanimously voted to the chair.

Some preliminary business having been transacted, the annual report and balance sheet were laid before the meeting.—The report was adopted.

The vacancy in the post of Honorary Physician to the West End Dispensary, caused by the regretted resignation of Dr. Castañeda owing to ill health, was filled by the election of Dr. Ernest Groth.

Mr. RICHARD HILGERS moved, and Mr. EMIL TEICHMANN seconded, that the Committee be reappointed, and that Mr. Alexander Siemens and Dr. Hermann Weber be appointed members to fill vacancies.

Sir POLYDORE DE KEYSER said they should first deal with the notice of motion to alter Rule 15 so as to provide for the annual election of two of the honorary medical staff as delegates on the Committee.

The CHAIRMAN said they should first elect the eighteen members of the Committee.

Sir POLYDORE DE KEYSER said he understood the two medical men were proposed to make up the eighteen.

The CHAIRMAN said this was a mistake. The resolution clearly stated that the Committee in future should consist of eighteen members elected by the governors, and two medical officers elected by the medical board.

An amendment was ruled out of order, and the resolution was declared carried.

Dr. GEORGE LICHTENBERG, in moving the resolution to alter Rule 15, said that he was deputed by the whole active medical staff of the German Hospital, with but one dissentient voice, to bring forward a motion of the greatest importance for assisting to increase the usefulness of the institution, namely, for the proper representation of the honorary active medical staff on the Committee. In the working of a hospital the medical man was a most important, if not the most important, factor to accomplish this object. Up to the present, however, the Committee, consisting of eighteen members, did not number one medical man amongst them, and yet this Committee was entrusted with the whole management of the institution. There was the Medical Board; but the Medical Board had broken down for many years past, and had shown itself utterly useless. Even those of their medical colleagues, past and present, who did not now agree with their motion, were in accord with them on that point. An attempt had been made latterly to bring the Committee into closer touch with the medical staff. The honorary medical officers were invited once a month to be present at a meeting of the Board of Management, but this monthly meeting had no voting power, and was merely a deliberating council. He could not therefore blame some of his colleagues who never attended these meetings out of principle, considering them perfectly useless. The medical staff wished to be informed officially as to what was going on in the Committee with regard to medical matters, and had come to the conclusion that the only way to get out of the difficulties was by choosing two men from among themselves as delegates to be added to the existing Committee. From perusing the reports of other metropolitan hospitals he found (1) that the total number of metropolitan hospitals where such medical representation existed was 63 per cent.; (2) taking those hospitals which were of the best repute (special and general hospitals), the proportion was 76 per cent.; (3) taking the special hospitals of the same class the proportion was 85 per cent., in which there was direct representation of the medical staff upon the Committee. This, he thought, would satisfy the meeting that not they alone, but medical men of other institutions, had clearly seen the urgent necessity that the medical staff should be represented upon the governing board. Everywhere it was felt that the usefulness of a hospital was hampered continually unless members of the active medical staff worked side by side with the Committee. He wished to lay particular stress on the word "active," for it had been shown over and over again that the plan of giving to retired medical officers seats on the Committee had failed. In November the medical officers at the German Hospital sent a letter to the Committee requesting that the matter might be laid before the next general court. They applied to the Committee in the first case, as a matter of courtesy, but this consideration was not appreciated by the Committee, for they received, a few days afterwards, merely a reply couched in very curt terms, and concluding with the words "that the Committee had resolved not to entertain the proposal put forward." They replied to the Committee, therefore, that they reserved to themselves the right of full liberty of action whenever they thought it expedient to bring the matter forward again. The time had now arrived for them to appeal to the governors. They now merely wished to have a voice and vote the same as any other member of the Committee.

Dr. ADOLPHUS RASCH said he had served now for 33 years as honorary medical officer, and he seconded the motion. It was usual, he said, to have medical men represented in the hospitals in Germany. He considered the step proposed was a very wise one. There were matters which the kindest heart and the shrewdest head could not deal with unless aided by special knowledge and experience.

Mr. JACOB, Chairman of the Board of Management, said the resolution was uncalled for and presumptuous. (There was a great uproar at this point, and loud cries were raised for Mr. Jacob to withdraw the word "presumptuous.")

The CHAIRMAN called for order, and said Mr. Jacob had no wish to offend anybody.

Mr. JACOB, without withdrawing, said the gentlemen of the Medical Board were at loggerheads among themselves, and were agitating regardless of the material injury they were doing.

Mr. HERMANN GULICH also spoke against the resolution. He said he had had twenty years' experience, and knew every detail of the hospital. Hitherto not only the governors, but also the medical staff, had acknowledged the satisfactory management of the Committee, and the public held the German Hospital in very high esteem. The number of patients was increasing, and the financial position was good. The resolution, moreover, did not represent the views of all the Medical Board (A voice: "All except Dr. Port"), and if the rule were once introduced there might come a time—and it was sure to come—when it might work detrimentally to the interests of the hospital. He earnestly requested the governors present to leave well alone, and to give the Committee a vote of confidence by a large majority against the resolution.

After some remarks from Dr. TEICHMANN and Mr. HERTZ, the CHAIRMAN said he was perfectly unbiassed, but he begged to warn them. The hospital had prospered under Rule 15, and he advised them not to change it. If they did they would sow the seeds of discord. He admitted it was a good thing to have medi-

al officers on the Board, but whether paid or honorary they hould not sit on the Board while on the active staff, because they ould not sit in judgment upon themselves. They did not see the fficers of a public company sitting upon the board of manage- nent. They had elected one medical man on the Committee that lay who stood as high as anybody—Dr. Weber, who had retired rom practising at the hospital. If they passed the resolution ow brought forward it was next to a vote of censure upon the ommittee. He begged the meeting, before deciding to alter ule 15, to consider it at home and come again. Let them at resent, however, reject it.

The resolution was at this point put to the meeting, and the HAIRMAN, after counting hands, said there were 93 for the resolu- ion and 88 against. The result was received with loud cheers by he supporters of the resolution.

A poll was subsequently demanded by some members of the ommittee, and the CHAIRMAN stated that it would take place that ay three weeks, at 2 o'clock, at the Cannon Street Hotel.

THE HEALTH OF THE NAVY.

n the Statistical Report of the Health of the Navy for the year 888, which has just been issued, we are pleased to find substan- al evidence of continuous improvement in the sanitary condition f the sea service. For, while the total number of cases of disease nd injury, furnishing a ratio of 987.4 per 1,000 of mean force, is ne lowest shown during the past thirty-three years, the ratio of nvalidings is much lower than that recorded for any year sub- equent to 1856, and the death-rate of 5.71 per 1,000 is the lowest hich has ever been noted in these reports. These figures are tisfactory in every way, and go far to illustrate the skill and evotion to duty with which our naval surgeons, under disad- ntageous conditions, carry on the interminable conflict with sease and death.

We observe that in a total force of 50,060 officers and men the verage number of sick daily was in the ratio of 41.96 per 1,000, eing a decrease of 2.26 per 1,000 in comparison with the average the last ten years. The total number of persons invalided was the ratio of 25.28 per 1,000, a decrease of 10.7 per 1,000 com- ared with the average of the same period of time; and the ratio deaths shows a decrease of 3.6 on the average of the last ten ears. The total number of deaths was 286, of which number 198 ere due to disease and 88 to injury.

The lowest sick-rate, of 28.56 per 1,000, of men sick daily was on e south-east coast of America, and the highest, of 54.89, on the ast Indian Station. The home station shows a ratio of 40 16; e Mediterranean, 40.04; North America and West Indies, 39.2; acific. 37.66; West Coast of Africa and Cape of Good Hope, 42.43; ina, 50.44; Australia, 34.8; and in the irregular force, 46.55.

With reference to the comparatively large number of 19 cases of all-pox, of which 13 occurred in China, 4 on the home and 2 on e Mediterranean stations, the Deputy Inspector-General observes at at the end of 1887 and beginning of 1888 small-pox is stated have been epidemic at Hong Kong; that, with one exception, cases were mild, bore evidence of vaccination and revaccina- n of a recent date, and all returned to duty. In 1886 means re adopted on the China Station to secure the revaccination of all cers and men in the fleet who had not been successfully re- cinated during the previous seven years, and this precaution been taken annually since. It appeared, however, that the marine o died had but recently arrived at Hong Kong from England, had not been revaccinated since 1870, when he joined the vice, thus strikingly illustrating the benefits of vaccination and accination, not only with regard to the protection afforded to complements of the ships in which this highly-infectious dis- e appeared, but also by the low rate of mortality among those acked. It is also noteworthy that in the fatal case, as in the t severe of those that recovered, there was no satisfactory dence of successful revaccination, the necessity for which, and for a second revaccination, as recently carried out on the a Station, is from year to year more apparent.

nder the head of Primary Syphilis there is an increase of 5.73 1,000, and, under that of the secondary form, of 4 26 per 1,000, n this year's ratios are compared with those of the previous years.

the 9 deaths from suicide, 3 were by hanging, 3 by shooting, cut throat, and 2 by poison.

e Report—a valuable and interesting one, as showing the lts of improved methods of dealing with the ailments and in- juries incident to the naval service—is compiled with the intelligent care to be expected from Deputy Inspector-General Turnbull, to whose labours we are mainly indebted for it; and we have the greater satisfaction in thus referring to that gentleman in that his name is, for some inscrutable reason at variance with commendable and graceful precedent, rigorously excluded from its pages.

MEDICINE AND PUBLIC HYGIENE IN PARLIAMENT.

THE Queen's Speech on opening Parliament contains the following paragraphs.

"There will be laid before you Bills for the consolidation and amendment of the laws with respect to public health in the metropolis, and to the dwellings of the working classes; and also a Bill for the better regulation of savings banks and friendly societies.

"Your attention will be directed to the state of the accommodation now provided in camps and barracks, and you will be asked to make better provision for the distribution as well as for the health and comfort of my troops."

We have already called attention to the urgent need that exists for such a measure, and pointed out that Mr. Ritchie was only prevented last year from proposing legislation on the subject by the fact that Parliament was so fully occupied with the consideration of other business that no fitting opportunity offered; that he had forwarded to the various vestries and district boards in the metropolis, to the London County Council, and to the Society of Medical Officers of Health, drafts of the proposed Bill, with a request for observations and suggestions thereon. In the JOURNAL of February 8th we stated that the Bill in question is mainly a consolidation one, with some of the most useful clauses of the Public Health Act, 1875 (which hitherto has not applied to London) included in it, and expressed the hope that the Bill would be laid before Parliament at an early date, so as to afford ample time for the consideration of its provisions.

The following notices of new Bills have been given:—

Mr. BYRON REED: That day four weeks to call attention to the question of factory inspection, and to move a resolution.

Mr. ISAACSON: Bill to amend the law relating to the sanitation of houses.

Sir J. PEASE: To move a resolution dealing with the opium trade and the manufacture of the drug by the Indian Government.

Dr. FARQUHARSON: Bill for the sanitary registration of buildings.

Mr. DIXON-HARTLAND: To move for a Royal Commission to inquire and report on the action of the London School Board in connection with its sites and buildings, and also with regard to the irregularities which are alleged to have taken place both in the purchase of sites and the erection of buildings.

The following Bills were introduced on Wednesday and read a first time:—

Mr. STUART: Bill to provide for the better housing of the working classes in the metropolis.

Mr. O. V. MORGAN: Bill for enabling the County Council of London to introduce new supplies of water into the metropolis, and to acquire the rights of existing water companies.

Mr. BAUMANN: Bill to amend the Factory and Workshop Act, 1878.

Mr. H. PEASE: Bill to provide for the registration of midwives.

Mr. BOORD: Bill to amend the Contagious Diseases (Animals) Acts, 1878 and 1884.

Mr. COBB: Bill to reform parish vestries and to enable them to elect parish councils, with powers as to allotments, charities, the restriction of the sale of intoxicating liquors, outdoor relief of the poor, the management of elementary schools, and other matters, and to amend the Allotments Act, 1887.

Mr. A. THOMAS: Bill to amend the Poor Law, and to protect the property of the poor.

Mr. O'HANLON: Bill to amend the law relating to University education in Ireland.

Mr. F. STEVENSON: Bill to amend the Poisoned Flesh Prohibition Act.

Mr. MILVAIN: Bill to amend and consolidate the law relating to corporal punishment.

Mr. KNOWLES: Bill to prevent the spread of infectious disease.

Mr. STEPHENS: Bill to enable the local authorities to deal separately with the sewage and the drainage of their district.

Mr. OSBORNE MORGAN: Bill further to amend the burial laws.

Mr. QUILTER and Sir E. BIRKBECK: Bills for better securing purity of beer.

Mr. F. POWELL: Bill to amend the Public Health Acts.

Captain VERNEY: Bill to amend the law relating to the election of guardians of the poor.

Mr. W. H. SMITH, in his speech on Wednesday, referring to the proposed public health legislation of the session, said: We have a measure prepared for applying district councils to England, and a measure for applying district councils to Scotland, and there is no reason why, if the right hon. gentleman and hon. gentlemen opposite would give assistance in the progress of measures which have not a party or a political purpose, such measures should not become law in the course of the session.

THE PROVINCIAL COLLEGES AND THE RECONSTRUCTION OF THE UNIVERSITY OF LONDON.

AN important deputation, representing the Yorkshire College, the Durham College of Science, Firth College, Sheffield; Mason College, Birmingham; University College, Nottingham; and the three University Colleges of Wales, was introduced to the Lord President of the Council, on February 12th, by Mr. R. CHAMBERLAIN, M.P. The introducer stated that the deputation was not actuated by any feeling of jealousy of the London University, but objected to the "provincialising" of what had hitherto been a national institution, and putting its management entirely into the hands of the London Colleges.

Dr. PERCIVAL (head-master of Rugby) dwelt on the fact that the Royal Commission had been equally divided, and that it had not examined any witnesses from the provincial colleges. He quoted statistics showing that those colleges sent up as many, or more, candidates for intermediate examinations in science and arts and for the degrees of B.A. and B.Sc., and with at least as much success as the London colleges. The provincial colleges had, therefore, a right to be heard as to any scheme which would modify the London University as at present existing, which, as an examining body, had done magnificent work. The provincial colleges might very fairly object to be placed under the complete control of the Senate of the proposed reconstituted University without having any voice in its management.

Professor TILDEN, of Mason Science College, argued in favour of the *status quo*, and Professor ANDREW GREY, of the Bangor University College, said that the London University was the only body to which provincial colleges had now to look for the stamp or seal of the education offered in their institutions.

Professor SORBY, of Cardiff University College, and Professor LAWSON TAIT also spoke against any interference with the present constitution of the London University.

Lord CRANBROOK, in reply, said that the various arguments laid before him would be carefully considered. Having passed in review the various opinions expressed by the spokesmen of the deputation, he said that the time was approaching when the whole question would come before him for final decision. He was much indebted to the gentlemen connected with the provincial colleges for laying their views before him, and was glad also to observe the good work they were doing throughout the country. In any decision he might give his object would be to give an impulse and rise to those colleges rather than to depress them. The object in view was that the general education of England should be put on a high footing; but it must be remembered that the Commissioners were unanimous on one point—that there ought to be some teaching university for the vast metropolis.

TENTH INTERNATIONAL MEDICAL CONGRESS.

THE work of the Congress at Berlin will be carried on by eighteen different sections. The members are asked to declare upon enrolment to which section or sections they intend more particularly to attach themselves. The following is a list of the sections, with the names and addresses of the managing members of each:—(1) Anatomy: Hertwig, Maassenstr. 34; (2) Physiology: Du Bois-Reymond, Neue Wilhelmstr. 15; (3) General Pathology and Pathological Anatomy: Virchow, Schellingstr. 10; (4) Pharmacology: Liebreich, Dorotheenstrasse 34A; (5) Internal Medicine: Leyden, Thiergartenstrasse 14; (6) Diseases of Children: Henoch, Bellevue-str. 8; (7) Surgery: v. Bergmann, Alexander-Ufer 1; (8) Obstetrics and Gynæcology: Martin, Moltkestr. 2; (9) Neurology: Laehr, Berlin-Zehlendorf; (10) Ophthalmology: Schweigger, Roonstr. 6; (11) Otology: Lucæ, Lützowplatz 9; (12) Laryngology: B. Fränkel, Neustädtische Kirchstr. 12; (13) Dermatology and Syphilography: Lassar, Karlstr. 19; (14) Diseases of the Teeth: Busch, Alexander Ufer 6; (15) Hygiene, Pistor, v. d. Heydstr. 13; (16) Medical Geography and Climatology (History and Statistics): A. Hirsch, Potsdamerstrasse 113; (17) State Medicine: Liman, Königgrätzerstrasse 46A; (18) Military Hygiene: Krocker, Magdeburger Platz 3. Introductory addresses in the sections must, as a rule, not exceed twenty minutes in length, and ten minutes will be allowed to each speaker in the discussions. All addresses and papers and the substance of the remarks made in the discussions must be handed over to the secretaries in writing before the end of the sitting. The Editorial Committee will decide to what extent these contributions shall be included in the printed *Transactions*. The official languages of all the sittings will be German, English, and French. The subscription to the Congress is £1, or 20 marks. Communications or inquiries regarding the business of the sections must be addressed to the managing members thereof (given above); all other communications to the General Secretary, Dr Lassar, 19, Karlstrasse.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ST. PANCRAS (Population, 244,200).—*Peculiarities of Typhoid, Scarlet Fever, and Diphtheria: Measles.*—A new feature of Dr John Sykes's report is the insertion of a large scale map of his district, showing, by means of spots of various colours, the prevalence and fatality of zymotic diseases. The proximity of the blocks of houses and the narrowness of the intervening spaces give an approximate idea of the density of population and its distribution. It is noticeable that typhoid has definite centres of the map, thus marking the insanitary condition of the drainage of certain areas; that scarlatina shows its most characteristic peculiarity of rapidly spreading from person to person and house to house by personal contact; and that diphtheria manifests a peculiar affinity for the higher-lying districts. The zymotic death-rate, however, for 1888 was less than that for 1887, in consequence of a diminished mortality from scarlatina, diarrhœa, and whooping-cough. Measles and diphtheria showed a decided increase, the former disease being seriously epidemic, in spite of elimination from school of all children affected or coming from infected houses, and the exercise of strict vigilance. Dr. Sykes considers it is very doubtful whether the closing of schools is of much value in the case of measles, as an epidemic rapidly expends itself, and by the time it has been found necessary to close the schools is generally on the wane. He has found that the very young children not attending school were a fertile source of the disease. On comparing the statistics of St. Pancras for 1888 with those of former years it is found that the death-rate of 1888 (18.9 per 1,000) is by far the lowest on record, and that the birth-rate is decreasing year by year.

WELLINGBOROUGH RURAL (Population, 24,760).—*Decrease of Zymotic Mortality.*—The annual report for 1888 is satisfactory, and that Mr. J. Howell Thomas is able to record a slight reduction in the general death-rate—14.5 against 14.9 per 1,000 in the previous year—and a considerably diminished mortality from zymotic disease. The general character of the epidemics of the year was mild and their fatality small. Whooping-cough headed the list with 8 deaths, whilst typhoid fever caused 7 deaths; diphtheria and scarlet fever caused 2 each; measles and diarrhœa 1 each. For the sixth year in succession no case of small-pox occurred. Improvement in the sanitary circumstances of the district has been secured in various directions. Weekly scavenging is in vogue in several of the villages with satisfactory results, and defects in the system have been observed and remedied. Drainage defects have been removed with the important result in one case of protecting the wells in the surrounding neighbourhood. Building by-laws are in operation in the growing localities, and seem to be duly enforced. It would be well if this matter were more carefully attended to throughout the country generally.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

EMBERS are reminded that the Library and Writing ›oms of the Association are now fitted up for the accom›dation of the Members, in commodious apartments, at the ices of the Association, 429, Strand. The rooms are open ›m 10 A.M. to 5 P.M. Members can have their letters dressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

EETINGS of the Council will be held on April 16th, July 16th, d October 15th, 1890. Candidates for election by the Council the Association must send in their forms of application the General Secretary not later than twenty-one days before ch meeting, namely, March 27th, June 25th, and September 4th, 90.

Any qualified medical practitioner, not disqualified by any by-w of the Association, who shall be recommended as eligible by y three members, may be elected a member by the Council or by y recognised Branch Council.

Candidates seeking election by a Branch Council should apply the Secretary of the Branch. No member can be elected by a anch Council unless his name has been inserted in the circular mmoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

ORKSHIRE BRANCH.—The next meeting of this Branch will be held at the spital, Rotherham, on Wednesday, February 26th, at 3 P.M. Members in›ding to read papers are requested to communicate with the Secretary before bruary 14th.—ARTHUR JACKSON, Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DIS›ICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at ooke House, Upper Clapton, N.E., on Thursday, February 20th, at 8.30 P.M. e evening will be devoted to a demonstration by Dr. Hadden of patients ffering from various forms of nervous disease. Visitors will be welcomed.—W. HUNT, Honorary Secretary, 101, Queen's Road, N.E.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The next eeting of this district will be held at the Tottenham Hospital, The Green, Tot›ham, N., on Thursday evening, February 20th, 1890, at 8 o'clock precisely. . W. M. Ord, President of the Metropolitan Counties Branch, will take the air. Mr. G. Buckston Browne will read a paper on Some Practical Points in e Treatment of Retention of Urine. Dr. Wynn Westcott will give notes and hibit a specimen of Root of Mandragora from Damascus. Some interesting ses from the wards of the hospital will also be exhibited. All duly registered edical men, whether members of the Association or not, are invited to attend se meetings.—GEORGE HENTY, M.D., Honorary Secretary.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session ll be held at the North-Western Hotel, Stafford, on Thursday, February 27th. e President, Mr. Vincent Jackson, will take the chair at 3.45 P.M.—GEORGE ID, General Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this strict will take place on Thursday, March 20th, at Gravesend, Dr. Firth in e chair. Gentlemen desirous of reading papers or exhibiting specimens are quested to inform the Honorary Secretary of the District not later than rch 3rd. Further particulars will be duly announced.—A. W. NANKIVELL, .C.S., St. Bartholomew's Hospital, Chatham, Honorary Secretary.

SPECIAL CORRESPONDENCE.

PARIS.

fluenza.—Pseudo-eczema from contact with Sulphate of Copper. —Etiology and Treatment of Chlorosis.—Dental Origin of Rabies.—Etiology and Treatment of Acne.—Removal of the Facial Bones for Osteofibroma.—Operation for Encephalocele.—Blanc on Post-partum Hæmorrhage.

a clinical lecture at the Hôpital Broussais, Dr. Barth said that ntpellier was not attacked by influenza until the arrival of a passenger from Paris, who had visited the Magasins du Louvre. The epidemic attacked all the crew on the training ship *Borda*, at Brest, when a box of clothes sent from Paris was opened. Two other ships at anchor near to, but not in communication with, the *Borda* escaped the affection. In a family in which the mother had caught the *grippe* by visiting a patient suffering from it, all the household, with one exception, were subsequently attacked. In isolated farms and country houses the epidemic appeared after a visit from some inhabitant from the neighbouring town where it was present; while convents and prisons in infected localities remained free from it. Thus the *grippe* may be regarded as a microbian affection, which is contagious and frequently transmitted from one human being to another. The influenza first appeared at Montbéliard on December 13th last. The patient was an inhabitant who had returned on the 6th from a visit to Paris, where he had remained nearly a whole day in contact with persons suffering from the affection. On December 17th his two daughters were attacked; by the 23rd the epidemic had spread to eleven persons. In a town on the frontier the *grippe* only made its appearance eighteen days after it appeared in Paris; the propagation of the affection from town to town could be exactly followed until it reached the frontier town. M. Bouchard considers that if the *grippe* is due to a microbe, the organism is habitually harmless, but acquires an abnormal virulence in particular conditions. He has found the staphylococcus pyogenes in febrile herpes in influenza, the pneumococcus in certain cases of pneumonia and otitis, the streptococcus in bronchial pus, in the sputa of patients suffering from suppurating pneumonia and pleurisy, in meningitis, and in certain cases of arteritis and inflammation of the tonsils. The streptococcus, when injected into the cellular tissue of the ear, determines erysipelas. M. Bouchard does not regard the secondary affections of the *grippe* as specific. The *grippe* has merely prepared the way for the microbes. He cannot affirm that influenza is contagious or infectious, but during the affection an infectious element appears. This results from the diminished resistance of the organism, which allows the entrance of agents which were not previously pathogenic, or from the increased virulence of micro-organisms which until then were harmless. M. Ollivier reports a case of the *grippe* transmitted to a cat which had eaten pieces of meat previously sucked by a patient suffering from influenza.

A case of pseudo-eczema has presented itself in a young woman, a nurse at a lying-in hospital. Her hands are swollen, chapped, and excoriated. She has the charge of the antiseptic remedies, and her hands are constantly in contact with solutions of sulphate of copper. She does not present any symptoms of copper poisoning. M. Fournier considers that, in face of these pseudo-eczema symptoms, sulphate of copper should not be employed in obstetrics. The existence of analgesia in a non-hysterical patient would appear to be due to the copper absorbed.

M. Duclos regards real chlorosis as fæcal auto-intoxication, which should be treated by purging, prolonged until the intestine is completely freed from all the hardened and decomposed fæcal matters. He recommends a vegetable rather than meat diet. When constipation is not very marked the affection results from the great activity of putrid decomposition, and should be treated with carbonate of soda combined with carbonate of lime, magnesia, and carbon. Iron is beneficial because it forms an iron sulphide with the hydrosulphuric acid in the intestine. Hyposulphite of sodium has been of use in checking fæcal fermentation; naphthol might serve the same purpose. M. Duclos considers chlorosis which is not accompanied by constipation as an anæmic state.

M. Malleville, of Marseilles, states that he has cured a dog of hydrophobia by extracting the decayed teeth. He believes that dental affection is the real cause of rabies, and has suggested to M. Pasteur that he should try the following experiments, that is, take a dog and perforate a molar tooth on either side of the jaw, leaving only a very thin layer of tooth substance between the perforation and the nerve of the tooth. According to M. Malleville, the dog will show the first symptoms of hydrophobia in two or three days. During the second period, when the animal keeps its mouth open, the salivary glands being compressed will produce abundant saliva, which will be transformed into foam. This matter he regards as the contagious agent of the rabic virus. Every decayed tooth contains several kinds of microbes, which vary with the different stages of the affection.

M. Barthélemy considers that the presence of acne on the face or chest indicates the existence of chronic dyspepsia, dilatation of

the stomach, with the accompanying symptoms. A treatment of the digestive disturbance should be adopted. Dyspepsia only prepares the ground for the development of the acne germ, which only finds a favourable medium in a seborrhœal condition. This affection results directly from the defective elimination of the food in the stomach. The skin under the influence of seborrhœa absorbs the acne germs from outside, and the eruption is the result. This may be transmitted from one person to another where seborrhœa exists. In the same individual it extends from one sebaceous gland, primarily infected, to the other sebaceous glands. The character and extent of the eruption depend on the resistance or debility of the organism, and on the degree of seborrhœa presented by the skin. A person who has been once affected with acne preserves the germs in the skin. They remain in a latent state, and develop on the first favourable opportunity. The treatment, independently of surgical means, should consist of cutaneous antiseptic and gastro-intestinal antiseptic measures.

At the Academy of Medicine, M. Péan showed a patient from whom all the maxillary, malar, and a portion of the sphenoid bones had been removed in several operations for osteo-fibroma consecutive to dental heterotopia. He concludes that the complete ablation of the skeleton of the face may be successfully practised, and that this operation is indicated in cases of osteo-fibroma consecutive to dental heterotopia, when the new growths occupy the three maxillary bones simultaneously. In such cases M. Péan considers that a permanent cure may be effected, and that the deformity and consequent functional disturbance may be remedied by prosthesis.

M. Berger showed an infant of eight months, which he had operated on for occipital encephalocele by Périer's process. The little patient was completely cured. M. Berger considers that extirpation effected with antiseptic precautions is the only effectual means of treating these tumours.

When *post-partum* hæmorrhage resists ordinary methods, the physician is obliged to employ the following measures: 1. Antiseptic injection at 50°; 2, ergot; 3, compression of the uterus through the abdomen; 4, the introduction of the hand into the womb; 5, compression of the aorta. When these means fail, M. E. Blanc practises the plugging of the uterus. The neck is firmly fixed with forceps; a plug of iodoform gauze is introduced into the uterine cavity with a long ordinary forceps. The uterus is carefully plugged, and also the vaginal cavity to a moderate extent. Before introducing the gauze into the womb, the organ should be washed with an antiseptic solution.

The Municipal Council of Paris has authorised the director of the Assistance Publique to construct one or two tents containing twenty beds which may be moved and taken to pieces. The cost of these tents is £600.

VIENNA.

Etiology of Influenza.

Professor Ribbert, of Bonn, has found the streptococcus pyogenes, or erysipelatosus, in large quantities in five cases of influenza. The staphylococcus could only be seen in the trachea and the lungs, and not always. The streptococcus pyogenes, or erysipelatosus, was cultivated from the sputum, and numerous colonies were obtained from the tracheal mucus and the infiltrated pulmonary tissue. The streptococcus was known to be the agent of secondary infections, such as diphtheria, scarlet fever, typhoid fever, etc., and, according to Ribbert, pneumonia following influenza was also due to this micro-organism. This is confirmed by the fact that a small number of the cases of croupous pneumonia, and just those which terminated fatally, were produced by it. The variety of the symptoms agreed with the supposition of the streptococcus being the cause of the disease, but it should also be borne in mind that the sequelæ and complications (pneumonia, pleurisy, otitis media, etc.) might be looked upon as secondary phenomena. But if all these phenomena are eliminated, what, asks Ribbert, remains as the essential character of the disease?

He concludes that there is as yet no decisive evidence of the etiological importance of the streptococcus in relation to influenza, and that there is no proof that the streptococcus does more than find a particularly favourable soil for development in influenza, the specific virus being furnished by some other still unknown agent. There can, however, be no doubt that it plays an important part in the course of the influenza, and when complications exist it has a great influence on the final issue.

Professor Finkler, of Bonn, records his experience of forty-five cases of pneumonia in influenza, of which only two presented th symptoms of the simple typical lobar fibrinous pneumoni whereas the remaining forty-three had to be reckoned amon those diseases which he has designated streptococcal pneumoni which should be classified separately.

Professor Finkler's investigations included bacteriological ex aminations on the living patient, and *post-mortem* examina tions of patients who had died of influenza. In two of the latte cases cultures had been made of the lungs, spleen, etc. In si cases small quantities of material were obtained *in vivo* for cu tures with Pravaz's syringe out of pneumonic foci; and in twelv other cases the sputum was subjected to careful bacteriologic examination. The streptococcus was found in all pneumon lungs. The micro-organism was the same as those Finkler ha detected in the streptococcal pneumonia just referred to. In on lung he had also found a staphylococcus and a diplococcus, whic differed considerably from the diplococcus of pneumonia Fränkel. In two cases, besides the streptococcus, a large bacillu was found in the lungs, which, however, had nothing to do wit Friedländer's bacillus.

Among the numerous specimens of pneumonic sputum onl twice was the bacillus not found; in most of the cases the staphy lococcus aureus and albus were found besides this; on som occasions bacilli were seen, and twice a diplococcus was als found. Professor Finkler arrives at the following conclusions:- There exists a pneumonia which is produced by streptococci, an the epidemic of pneumonia which has recently been observed wa exclusively streptococcal pneumonia. These pneumonias, as t their essential character, stood in an internal relation to the pr cess of influenza. Professor Finkler looked upon this pneumoni as the localisation of the agent of influenza in the lung, becaus he had seen no case of this pneumonia without a simultaneou occurrence of the symptoms of influenza, because the pneumoni was frequently the first symptom of the influenza, and because h could find no reason which would lead to the supposition that th cases of streptococcal pneumonia observed by him were only of secondary character, and only accidentally coincident with th influenza. The same streptococcus which produced this pneu monia was also the cause of the influenza, which did not exclud the fact that influenza also occurred without pneumonia, and tha streptococcal pneumonia might also develop without the presen of influenza. Where both occurred the pneumonia belonged quit as much to the influenza as the affections of the trachea, th bronchi, and the respiratory apparatus in general.

CORRESPONDENCE.

THE RELATIONS OF THE GRADUATES AND CONVOCATIO OF THE UNIVERSITY OF LONDON TO THE PROPOSED REFORM OF THE UNIVERSITY.

Sir,—I now avail myself of your permission to state son evidence to aid towards forming a just appreciation of the val of the degrees of the University of London, and of some of th difficulties which hinder graduation.

The first step is the matriculation. This step—not very dif cult to take for lads trained in schools whose curriculum is se vilely framed *ad hoc*—is injurious and unjust to other studen who cannot bring themselves to give up all independent study a descend to the grovelling substitute of cramming. The case this: Professor Adams says "the great difficulty of (this) exam nation is the multiplicity of the subjects, making due study this age impossible." The Rev. Dr. Wace says: "If you set up these subjects, and require men to be examined in them, you m be quite sure that they will know none of them well." The chi impediments, Dr. Bristowe says, which have stood in the way the University becoming a real medical university for London a the vexatious difficulties of the matriculation and prelimina scientific examinations, and the extreme uncertainty of t result. "Nearly 50 per cent. of the total number fail at matric lation; of those who, having matriculated, present themselves the preliminary scientific, again nearly 50 per cent. fail; of thc who, having passed the preliminary scientific, present themselv at the first M.B. examination, nearly 35 per cent. fail; and of thc who finally become candidates for the M.B., 19 per cent. are jected." To say nothing of the M.D. Before the time comes this, the final examination, most men have to leave London a

vote their energies to the practical duties of life. Mr. Eve, an of the College of Preceptors, who has enjoyed the best prac-al opportunities of judging, says: "The London matriculation amination is the most worrying examination I ever met with my life; it is so multifarious." Professor Beesley is not less aphatic. "I despair," he says, "of classical learning in the llege; the University of London is, in my opinion, an im-sture; that is to say, considering the men who go in and the pers." And Professor Goodwin says: "A smattering of many ings, deadening to the mind in the end, might be replaced by e honest study of a few things."

These authorities are not selected because their testimony tells ainst the system that has hitherto prevailed. It would be diffi-lt to find any man, who has enjoyed adequate opportunities of servation, who could be cited in favour of that system. And, the question be urged, how comes it that so many graduates in edicine of London have obtained distinguished positions in the ndon hospitals? One explanation is that a large proportion of ese men took their degrees before matriculation or the pre-minary scientific examinations were required. And so we can ly see in this fact an additional reason of the strongest kind ainst the system now in force. And, again, many of these men ve it greatly to the circumstance that they were able to stay in ndon, with every advantage of central and pecuniary oppor-nities to work to a successful end.

I need not pursue this, the Arts branch of the question, further, regards the examination; but a word or two as to the influence the system on the teachers will not be out of place. Professor nkester shows the evil in the following facts: "I am not able control the curriculum which is laid down by the University. schedule is drawn up by the Senate, and I am told to examine that schedule.....Not only the subjects, but the details and nitations of the subjects are very minutely prescribed. The con-quence is that if one wishes to modify or extend one's teaching e is prevented from doing so." And if the teachers do not bow wn to the rigid rules of the curriculum, students forsake the acher and go to the grinder. And the University is supposed to courage literature and science!

This system of controlling teaching by examinations acts most ejudicially upon the study of the sciences ancillary to medicine. us, Sir Joseph Lister: "The result was that there was a ten-ncy to distract the attention of the students from work under eir teachers to making special preparations for the examina-ns.....One of the subjects in which we were examined was mparative anatomy.....We had an admirable professor—Grant. e gave an excellent course, with abundant illustrations by dis-ctions and preparations; but he was not the examiner at the iversity; that was Dr. Carpenter, who had written a large work the subject; and with very few exceptions the students did t take Professor Grant's course, but read Dr. Carpenter's book." hat student, in search of real knowledge and training, would llingly be drawn away from Grant's fascinating lectures to ad a chapter of Carpenter? It would be to sacrifice the sub-ance to the shadow. And so things work in a vicious circle, e two evils acting and reacting upon each other to the detriment ke of student, teacher, and learning.

The strictly medical examinations for M.B. and M.D. are laid wn on similar rigid lines and with like disastrous effects. Dr. istowe says: "I think no medical teacher will doubt that the fortunate medical students are over-examined. If a medical dent wishes to become an M.D. and M.S.Lond., he has to dergo seven examinations; and if he wishes to connect himself th the two Colleges he must, putting the preliminary arts ex-ination out of the question, undergo at least three examina-ns.....These multiplied examinations are a curse to the medical ools."

Mr. Rivington thinks the medical examinations are not suffi-ntly practical. Dr. Bristowe thinks the examiners in medicine d surgery are too few. The result of my personal observation hat the practical examinations at Glasgow are better than those London.

Sir Andrew Clark puts the case well from the true point of view: he tendency of the University examinations is to fill the ds of the men with isolated bits of scientific knowledge, very ful for the purpose of answering questions at examination, but very useful for the higher purpose of thoroughly disciplining faculties, and for thoroughly furnishing the candidate with t sort of practical knowledge which is essential to the due dis-rge of his duties in life."

How the goad of the coaching man is applied, the following example shows: "I have been going round my wards," says Sir Andrew, "and asked, 'Where is Mr. So-and-so, my clinical clerk?'" "He is getting up his moral philosophy for the University of London," has been the reply. I have known a more striking case. A very industrious student, who had taken honours at all examinations, including the M.B., was appointed house-surgeon. He had thus attained a prize of more worth than a degree if properly turned to account; but the demon of competition tempted him. He threw up his office, and with it the opportunity of fitting himself for the work of his profession. He won his M.D. His patients may perhaps not feel what he lost. All teachers might tell of similar examples. Many of us know that some of the best men—those who love their profession and pursue their studies in the best spirit—refuse to be drawn away from clinical work by the *ignis fatuus* of a London degree.

Professor Lankester urges strong objection to the prize system: "In the professional universities—in the Scotch universities, for instance—there are not such pecuniary rewards after competitive examination: those exist in Oxford and Cambridge, and are an immense injury to all real study. But we should hope that in the future University of London no such premium upon examinations would ever exist."

From all this it is surely reasonable to conclude that the University of London has failed as an examining body; that it has raised cramming to a science; that it has discouraged true teaching; and that it has fettered and impeded the march of knowledge.

This does not condemn the University utterly. It is never too late to mend. The general tendency of thought and of the several movements towards reform is to concentrate the efforts of all interested in the cause of arts, literature, and science to the most promising scheme, that is, the reconstruction of the University of London in such a way as to bring it into closer relation with the teachers and the hospitals. The Senate, we believe, acknowledges this necessity. It is imperatively demanded by public opinion, and it can hardly be that Convocation will withhold its assent.

I may venture to trespass again on your space to set forth more clearly how vain is the plea of "vested interests."—I am, etc.,

Harley Street, February 11th. ROBERT BARNES.

SIR,—I beg to be permitted once again to urge the argument that I expressed at the earliest times when the question of extending facilities to the medical students of London for obtaining degrees in medicine came to be debated, that it is far better that a second university should be established in the metropolis than that the existing university should so alter its constitution and methods as to supply the admitted need. No doubt those of my colleagues who are at once graduates of the University of London and Members of the Royal Colleges will duly consider the situation in respect of their obligations to all these institutions into which the report of the Royal Commissioners and the action of the Senate of the University places them; but it is also right that we should make our position clear to all our medical brethren. It is surely somewhat unfair that some of us should be dubbed illiberal and obstructive because we oppose what we consider to be the complete destruction, rather than the reform, of our university, whilst we admit the legitimate grievance of the medical students of London, and are anxious to provide a means for giving them, on equitable terms, and by examinations not more stringent than those of the Scotch universities, the M.D. degree. Nor is it just to say that in making our protest we place our judgment in presumptuous antagonism to that of the men of great ability and undoubted authority who constituted the Royal Commission. It should be remembered that three of the members—Sir W. Thomson, Professor Stokes, and Mr. Welldon—in the report state that they "doubt the possibility of effectually combining the functions of a teaching as well as examining university in the University of London." I am hardly open to blame if I express entire acquiescence with this view, still less if I agree so far with the general conclusion of the Royal Commission, that as a matter of wisdom and of policy the test question of the practicability of the adaptation of the University of London to the admitted want should be first submitted to the University itself.

Let me briefly state what I consider to be the probable consequences of the carrying out of the proposals indicated by the Royal Commission, and formulated for consideration by the Senate of the University of London.

I. *Consequences in regard to the University itself.*—Either the

medical faculty must be different from and inferior to all the other faculties or else a corresponding change must involve these others, and a general levelling down take place. In the one case there must be a long-continued disturbance of the harmony of the faculties and the frequent cropping-up of questions difficult to decide; in the other the university entirely abrogates its present position and all its degrees cease to have any special value. Further, there is the danger of its becoming unwieldy. After the lapse of some years it may want the space of Olympia for its examinations and the Agricultural Hall for the meetings of Convocation. It is impossible, I think, to come to any other conclusion than that if the proposals are carried out a university, which has admittedly done much to raise the tone of general and of medical education, will be destroyed, and that in the hey-day of its prosperity when the best men from all parts of the empire and the colonies come in ever-increasing numbers to its tests, and a new university with no special characters to raise it above those already existing will be instituted in its stead.

II. *Effect on the Medical Corporations.*—It seems to me unreasonable to come to any other conclusion than that if a degree of M.D. be offered to students on terms as easy as those of the Scotch universities candidates will flock to the institution which makes such offer, with the result that the two Royal colleges will practically cease to be examining bodies. It is scarcely probable that they will care to continue the preliminary examinations permitted by the scheme whilst bereft of their power of conducting the final examinations in medicine, surgery, and obstetrics. It is perfectly obvious that the consequences would be very far-reaching. The scheme promulgated by King's and University Colleges required that every candidate for the diploma should first present the certificate of having passed the examinations of the two colleges. In such case the existing machinery would be preserved.

The alternatives are now before us. The destruction of the present University of London and the establishment of a new university in its place, or the retention of the present university (preserving its existing standards of examination but abolishing its vexatious restrictions) and the establishment of a new university in London, associated with teaching institutions, in union with the two Royal colleges, and giving a degree on no more severe terms than those required by the Scotch universities. As the existing university draws many candidates from the other universities it is not likely that it would suffer much by the establishment of one more, and it should be the aim of all teachers to induce the young to work for its matriculation and its degree examinations. Experience shows that its tests are too severe for some, who nevertheless pass examinations qualifying to practise. Is this surprising? Is it not the experience of examiners that there are degrees of proficiency in matters medical?

As to the argument that there is not room for a second university in London, that may be considered in relation with the following statistics, briefly put:—

London.—Population, four millions; university, one.

Scotland.—Population, less than four millions; universities, four.

Ireland.—Population, five and a-quarter millions; universities, three.

In conclusion, let me say that those who agree with the views I have here expressed should not be content with a mere protest against the proposals of the Senate of the University of London but should practically join in the construction of an alternative scheme.—I am, &c.,

A. ERNEST SANSOM.

Harley-street, W., February 10th.

THE GLASGOW CHLOROFORM COMMITTEE AND THE HYDERABAD REPORT.

SIR,—The Hyderabad Report, which appeared in the *Lancet* of January 18th, naturally attracted our attention, and called for remark, especially as it seemed to traverse certain of our conclusions. On carefully reading the report, it appeared to us that, so far as the facts are concerned, it generally confirmed our own observations as to the action of chloroform, both on respiration and on the heart. Some of the inferences, however, are opposed to ours, but they are also opposed, as we believe, to the facts stated in the report itself. We therefore propose to criticise the report, and we would have done so immediately after its publication, but for a request communicated to us that we should wait for the publications of the tracings. on which the report is largely based. We at once agreed to postpone our remarks, and only make th communication lest our silence should be misinterpreted.—W are, etc.,

JOHN G. MCKENDRICK.
JOSEPH COATS.
DAVID NEWMAN.

MEDICAL OFFICERS OF HEALTH AND COUNTY COUNCILS.

SIR,—I am glad to see that several of the County Councils a proceeding to supply themselves with medical officers of healt and I have read with pleasure the account which you give in t JOURNAL of February 8th of the action about to be taken by t Lancashire County Council. There is just one point to which would wish to draw attention, and that is the clause which stat that six months' notice on either side will terminate the appoi ment. I consider this clause as it stands is manifestly unfair the medical officer. Many of these appointments are likely to applied for by men in good practice, but such would hesitate fore they gave up a certainty for what might turn out to be great uncertainty. On the part of the medical officers the appoi ment, I think, should be "ad vitam aut culpam," and he shou not be shunted unless gross negligence or incapacity can be a duced against him. I shall be glad to hear what others have say on this subject. I would suggest that the Local Governme Board should be the court of appeal.—I am, etc.,

MEDICAL OFFICER OF HEALTH.

SANITARY EXPERTS AND THE CHARGE OF OBSTRUCTING JUSTICE.

SIR,—I have no wish unnecessarily to obtrude my opinion i matter of this kind; yet, as an old urban sanitary officer, I ho I may be pardoned for troubling you with a few words on t case. In the first place, *pace* Dr. Vacher and Dr. Bostock Hill think it is a pity when medical officers of health are impor from distant places to counteract the legitimate action of a pu sanitary authority, acting in good faith and, however mistaken endeavouring to do its duty.

It appears to my mind to be a much less evil when some lit injustice is done by the mistaken, or even over-zealous, action o sanitary authority than when such authority is checked and d credited amongst its neighbours by testimony, however exp imported from a distance, is given by men who may have so day to support identically the same action in their own localiti

Dr. Vacher asserts "his right to give evidence as an exp without giving one moment's consideration whether it is for against a sanitary authority," and maintains "that this is only right course." Just so; but that is the pity of it. St justice may indeed be done by discrediting the opinions or actions of a sanitary authority and its medical advisers, who n be honestly endeavouring to do what is right. But is th nothing to be regretted in such a line of action? I think there

Dr. Bostock Hill seems to delight in the fact that "for the fourteen years he has been engaged in giving evidence fo against the various corporations in the Midlands, and that he never thought it necessary, or even desirable, to inform his brot officers of his intention." Well, Dr. Bostock Hill is certainly called upon by any distinct rule of professional conduct to le his card upon his brother medical officers in such circumstan but would it not be better were he to make a practice of doing I, for one, think so. Surely the preservation of the good feel of brotherhood, which ought to exist amongst us medical offi of health, is of far greater moment than the gaining of a n forensic victory about a dirty slaughterhouse! The com courtesies which should always be shown by one medical ma another whenever they are likely to be brought into conflict w each other would, if carefully observed, do much to soften asperities of professional, and especially of official, life. Vacher and Dr. Bostock Hill may be right in their views of off practice, and yet I cannot help thinking that there is "a n excellent way."

One word as to experts. The bias which a heavy retaining naturally gives to the mind of the expert who receives it has most carefully guarded against. It is to be feared that the fa being engaged to take a side, if it be possible to do so, tends to us to commit the fatal error of saying as much as we ca favour of our employer, and as little as we can against leaving out of the question the animus, the good or bad faith

he opposing authority or party. Is this practice (I am not referring to the Bradford case) altogether in the spirit of the oath we take to speak the truth, the whole truth, and nothing but the truth, so help us God? Then, to my mind, the reception of the fee tends to vitiate the whole proceeding.—I am, etc.,

WILLIAM STRANGE, M.D.,
February 10th. Medical Officer of Health for Worcester.

*** We are unable to devote further space to the correspondence on this subject.

SEA WATERS AND THE NUTRITION OF MARINE ANIMALS.

SIR,—The experiments of Drs. Pouchet and Chabry, so interestingly described in the JOURNAL of January 25th, 1890, in reference to the absence of skeleton in marine animals artificially reared in sea or saline waters deprived of most of their lime, is a fact not quite unknown to certain observant fishermen.

The New Brunswick fisherfolks profess to be able by inspection at once to distinguish and decide the nature of the feeding grounds by the colouring and composition of the shell of any individual lobster, whether, for instance, it is a cove lobster, a coast lobster, or a deep-sea lobster. Usually found near the shore in sheltered places and small harbours, where the bottom is soft and richly covered with dense growths of seaweeds, the cove lobster has a dull coloured shell containing so little calcareous matter that it yields everywhere to slight pressure, except about the claws. It thus recalls the soft bone-bending rickets of childhood, or the premature falling of nearly ripened corn from general deficiency of lime salts. Hence, such cove lobsters have only a small market value, as they are unable to stand the necessary handling by the trade, or to survive the blows when packed in the wells of smacks, or sent travelling about in baskets.

In New Brunswick the favourite of commerce is the easily caught coast lobster, feeding in the deep waters of open bays, where the ground is covered with thick kelp and other substantial marine weeds rich in lime and other salts. This coast lobster has a dark shell, often prettily variegated with green and other colours, but is less brittle, being largely composed of calcareous matter.

More hardy on land and sea is the larger powerful deep sea lobster which frequents calcareous bottoms, where the water and plants are still more highly charged with lime. It has a hard thick shell well developed all over its body, whilst its flesh is more delicate than that of the coast lobster, illustrating the usual rule that the flesh of fish and shell fish improves in proportion to the depth of the water habitually frequented by the animal. The giant lobsters and crabs collected in various museums are generally deep-sea specimens. The deep sea lobster is seldom trapped in lobster-pots, which cannot be profitably worked in deep waters, but it is occasionally hooked on a cod line, whose bait it frequently robs without being captured.

Among the many reasons why certain artificial oyster farms soon become exhausted and barren may be the fact of their being placed in waters where the calcareous supply is not equal to the demand made upon it by these lime-loving bivalves.—I am, etc.,

J. LAWRENCE-HAMILTON, M.R.C.S.
Brighton, February 10th.

CLINICAL INSTRUCTION AT THE FEVER HOSPITALS.

SIR,—I have given notice that at the next meeting of the Metropolitan Asylums Board I shall move that, in future, the principal appointments of medical superintendents of its hospitals shall be advertised when vacant. At present the practice is to promote officers who are already in its service to the principal posts; but a new departure will shortly be made, for some of the fever hospitals of the metropolis will no doubt very soon be open for the purposes of medical instruction. The scheme of the College of Physicians, which has already been agreed to by a Special Committee of the Board, provides that the medical superintendents of the hospitals shall be the clinical instructors in this important part of medical education. Under these circumstances, I am strongly of opinion that the appointments, when vacant, should be advertised.—I am, etc., EDWARD SEATON.
35, George Street, W.

ENGLISH AND FOREIGN WINTER RESORTS.

SIR,—In a recent issue of the JOURNAL I urged the necessity of employing the mean minimum (that is, the average of all the lowest readings) instead of the mean daily temperature (that is, the average of morning, evening, and highest day reading, or the highest and lowest readings) as the most important factor of climate for invalids as far as mere temperature is concerned, and I submit the following examples, taken from letters published in the *Standard* during the past week, as independent evidence of my argument.

Mean Minimum Temperature.

	Torquay.	Nice.	Swanage.
December, 1889 ...	39.5° ...	38.5° ...	36.9°
January, 1890 ...	42.3° ...	41.5° ...	40.6°

The observations were made at Torquay "on very high ground," and Swanage is an open situation. Nice is nearly 7 degrees south of Torquay, and while the mean day temperature at Nice is about 4° higher, the night temperature is 1° lower.

I am glad that Dr. Hutchinson agrees with me that it is time we had some clinical evidence of the relative merits of different winter resorts, but the evidence he offers is not of the kind we want. At Monte Carlo, from which place he writes, probably less than 5 per cent. of the visitors are real invalids, and the attractions of that place and, to a less extent, most of the Riviera stations, are of quite another sort than sanitary. The South of France is much more a winter and spring playground as Switzerland is the summer playground of many persons who may, indeed, want change, but who are not invalids in the ordinary sense. Judged by this standard Torquay, Bournemouth, and Hastings are much more popular health resorts.—I am, etc.,

Curzon Street, W. C. ROBERTS, F.R.C.S.

COLLECTIVE INVESTIGATION ON CANCER.

SIR,—Being desirous of collecting further evidence in favour of the view that cancer can be completely eradicated in its earlier stages, I venture to invite the co-operation of the members of our profession, including all registered medical students, in asking them to send me before April 30th next accounts of unpublished cases of cancer in which, after a lapse of at least five years from the destruction or extirpation of the growths, there has been no return of the disease. I would suggest that all who are willing to assist me should observe the following conditions:—

1. The notes to be written on one side of the paper only, and brevity is desirable.

2. The evidence of diagnosis should first be stated; secondly, an outline of the treatment given; and, thirdly, proof of the non-recurrence of the disease after the lapse of five years or longer from the date of operation.

3. Should the patient have died of some other disease, the clearest evidence of immunity from cancer at the time of decease should be adduced.

4. Each case should be written out separately, and bear the name and address of the sender.

Students of medicine sending notes of cases from hospitals can only do so by permission of the surgeons. I further propose to publish the names and addresses of those who kindly assist me in the medical journals, and, at a later period, to lay before the profession the results of this scientific inquiry.—I am, etc.,

CHARLES E. JENNINGS, F.R.C.S.
Upper Brook Street, Grosvenor Square, W., February 8th.

MEDICO-LEGAL AND MEDICO-ETHICAL.

FRIENDLY SOCIETIES AND THEIR MEDICAL OFFICERS.

AN interesting friendly society case has been decided in the Cardiff County Court. The Pember Lodge of the Ancient Benefit Friendly Society (apparently numbering about thirty members) had appointed Mr. P. J. O'Donnell its medical officer in February, 1888. Since then he had twice received votes of thanks from the society; but in July, 1889, he was suddenly informed that his services would be dispensed with. On Mr. O'Donnell applying by letter, and subsequently through his solicitor, for reasons for his sudden dismissal, the lodge resolved to return no answer to the communications. The judge (Mr. Owen) held that the course taken by the lodge was unreasonable, and calculated to injure the plaintiff (who sued for damages), and awarded him the full amount claimed—£20—with costs. It was incidentally stated that arrangements were made with another medical man to take the appointment before it was finally decided to dismiss Mr. O'Donnell. If this be so, it is one more instance of the manner in which an undue readiness to compete for such appointments weakens

the profession in dealing with friendly societies, and helps to produce and perpetuate a state of things in which small and almost nominal payment is frequently associated with heavy duties and responsibilities.

DUTIES OF CONSULTANTS.

W. A. T. writes: A. and B. are practitioners residing some fifteen miles apart by rail. B. has an old gentleman patient C. living close to him, who is nervous and fanciful. A. has been acquainted socially for some time with C., who has frequently expressed his desire that A. should attend him professionally on the grounds that he, C., disliked and distrusted B. A. has always refused to do so, except in consultation with B., or provided the latter was dismissed from all attendance. C. has had a number of different men called in consultation with B., and even goes into adjoining towns, and visits medical men alone, and there is no disagreement in their opinions. Last week C. told B. to send for A., and he and B. met in consultation, and everything went smoothly. Some days afterwards C. sends over a messenger to A. to say that he desires him to attend and visit him professionally, and without the consent or knowledge of B. The patient C. does not wish to have an open rupture with B., because he is the only medical man within seven miles, and it might be awkward should he, C., be taken suddenly ill at night, an event which has frequently happened. A. has replied that to comply with C.'s request would hardly be right, but C. insists that A. should attend him without reference to anyone else, otherwise he may get another gentleman to do so. What course should A. adopt under these circumstances?

*** Since A. clearly recognises the fact that it "would hardly be right" towards B. for him to accept attendance on C. upon the conditions alluded to, it is scarcely necessary to point out that a reverse line of conduct would contravene the rules of medical etiquette and the true ethics of the profession. Need we add that that which is not right cannot be expedient, and should be avoided.

MEDICAL ASSOCIATIONS AND CONTRACTS NOT TO PRACTISE.

M.B. asks whether a medical association composed entirely of friendly societies has the power to enforce the clause which prohibits practice by their late medical officer within a certain area for a certain length of time after leaving their employ.

*** If an agreement has been entered into containing a clause with the prohibition in question, it must, of course, be adhered to. The only way of preventing this would be by proving at law (1) that the society had no legal status and could not enter into such a contract; or (2) that the agreement was so drawn or executed as to render it invalid. If, as is probable, the association is registered as a friendly society, and the agreement was made with its trustees, there would be small chance of successfully resisting it.

PRACTICE BY UNQUALIFIED ASSISTANTS.

EVERGREEN asks for an opinion on the following: A. is a fully-qualified medical practitioner, W. is another, and M. is A.'s unqualified assistant. A. is laid up with "influenza," and M. is doing his whole work. Is it in keeping with the etiquette of the profession for W. to meet M. in consultation during A.'s illness? W. has two unqualified assistants, one of whom is taking full charge of an outlying district; is it legal for W. to carry on this form of practice?

*** For a full exposition of the rules relating to consultation with an unqualified assistant we would refer our correspondent to the *Code of Medical Ethics*, chapter ii, section 4, rule 1, from which we cull the following quotation as an answer to his first question: "In a non-urgent case, however, the consultant, in justice to the faculty and the public, should firmly decline to meet an unqualified assistant."

With reference to the second question as to an unqualified assistant being placed in "full charge of an outlying district," it was held, in the case of the Society of Apothecaries *v.* Greenwood, that such practising subjected the assistant to the penalty prescribed by the Apothecaries Act of 1815. A registered medical practitioner cannot recover fees for services rendered by the assistant in such a case.

NAVAL AND MILITARY MEDICAL SERVICES.

THE COCKADE.

J. W. F. asks: Referring to your answer, in the JOURNAL of February 1st, to a correspondent on the cockade question, will you let me know what is meant by Army Medical Reserve?

*** The Reserve—officially so-called—is made up of medical officers already serving in the auxiliary forces. The proper reserve, made up of retired army medical officers "liable to be recalled to service," has strangely (and perversely) never been designated Army Medical Reserve.

SURGEON PARKE.

JUSTITIA asks: What official recognition is to be made to this officer for his brilliant services with the Emin Pasha expedition? It must shortly be decided. Of late special promotion in the Medical Staff has been considered unjust in principle, which has placed it at a serious disadvantage compared with other branches of the service. Decorations being difficult to obtain and special promotion withheld, it has come to pass that in recent expeditions in Egypt and India the services of the Medical Staff have remained practically unrecognised. Will the present Director-General, himself an example of well-won special promotion, break through this impasse? The promotion of Surgeon Parke to the rank of Surgeon-Major for his exceptionally distinguished services would not only be a fitting reward, but hailed with acclamation by his brother officers.

BRIGADE-SURGEONS IN INDIA.

X. writes: With reference to the recommendations made by Lord Camperdown's Committee, permit me to state that up to the present nothing whatever has been done to remedy our grievances. Take my case: At the present moment I am in charge of three distinct hospitals, called "the Station Hospital," and in these are 360 sick—nearly half a battalion. All these men are under my military command; in addition to which I have 13 medical officers, 12 warrant officers, and 150 enlisted followers of the A.H.N.C. under me—for duty and discipline. I see the sick of four infantry regiments every morning. I correspond with 7 commanding officers of corps, in addition to the P.M.O., commissariat, ordnance, and staff officers. I am held responsible for the correct diagnosis and treatment of every man in the three hospitals, situated one mile and a half from each other. I am responsible for all the invaliding of the troops in garrison. I am paymaster, and disburse about 30,000 rupees per annum—all at my own risk, and for which I do not receive one farthing. I am barrackmaster, and am held responsible for the condition of all the buildings and out-offices, covering many acres of land. I am quartermaster, and I have to clothe and and indent for all articles for the A.H.N.C on the clothing department. I have to see all sick officers in consultation, and decide about the necessity or otherwise of invaliding them.

I am responsible for the sanitary duties of the garrison, namely, two regiments of infantry, one of cavalry, and two batteries of artillery in barracks, and, at present, two more battalions in camp. I am responsible for enormous stores of bedding, clothing, medicines, and instruments, and have to see that every article is condemned and replaced when worn out, and have to pass everything under my own eye, and see it is up to muster. I have the whole of the statistics of the European garrison to compile, and all the annual and other reports to write. I have to hold orderly room daily, and tell off prisoners of the A.H.N.C., and submit charges against European patients who misconduct themselves. In the absence of the deputy surgeon-general on duty or on privilege leave (that is, from three to four months yearly), I have to carry on his office in addition to my own work, for which I do not receive any extra pay whatever.

In addition to the above there are daily multifarious questions cropping up, all of which are sent to me. In fine, I perform the duties formerly carried out by six surgeons-major, and draw 90 rupees per mensem less than the officer in medical charge of either cavalry or Royal Horse Artillery drew in former years, both these officers having drawn allowance for three horses. I have one surgeon-major to assist me. For all this work I draw 37 rupees per mensem more than I got ten years ago, and, at the present rate of exchange, I draw almost exactly the same pay as I would in England. A surgeon serving under me has charge of a native regiment about quarter of an hour's work daily, for which he gets 100 rupees a month extra. I leave these facts to speak for themselves.

THE LATE WARRANTS.

MEDICAL STAFF writes: Two warrants seriously detrimental to medical officers have lately been promulgated, the first compelling three years' service in a rank before becoming entitled to the pension thereof, the second the extension of age to surgeon-general.

In applying the first retrospectively, by introducing what is practically compulsory service beyond that secured (?) in former warrants there is a distinct breach of faith; this service will be extorted from officers often in unhealthy climates and at the most critical period of their lives. The second combined with the first will produce further and almost complete stagnation in promotion to brigade-surgeons and senior surgeons-major.

What are the present age conditions of our seniors? The ten junior deputies have thirty-one to thirty-two years' service. In the face of that is there not something grimly humorous in the provision in the late warrant for the retiring pension of a director-general under thirty years' service? Why, the senior deputies have over thirty-six years' service!

When vested interests in other branches of the service are attacked, parliamentary influence is at once brought to bear; why is the Medical Staff so supine? Truly the medical service of the army is to be shunned under existing conditions.

WHAT IS A BRIGADE-SURGEON?

I. V. R. C. propounds this question: Is it a rank or an administrative title? In the volunteer service it is apparently considered the latter, for the surgeons, dubbed "brigade-surgeons," are placed senior to many of the oldest volunteer surgeons. In the regular service it is a rank quite apart from any brigade attachment or duty. Both are partly right, but how can the divergence be assimilated? Simply by abolishing the title and calling the future holders "lieutenant colonels or colonels on the staff." This would leave it a purely administrative title for senior medical officers, and one much needed in war, in the co-ordination and supervision of brigade ambulance work. Our brigades are about equal to a German regiment, which has a chief surgeon for the whole four battalions composing it. The late Sir Herbert Stewart wrote strongly on the need of a senior medical officer for the cavalry brigade, and Lord Wolseley himself has bluntly expressed the need for an experienced medical officer with field hospitals, to prevent schemers slipping away to hospital and so falling unnecessarily to the rear. With every brigade in the field should be a senior medical officer as head. The present brigade surgeons are treated as if they had never been selected or promoted, and both their title and functions should be more clearly defined. They are administrative and not executive officers.

THE NAVY.

THE following appointments have been made at the Admiralty:—G. J. FOGERTY, Staff-Surgeon, to the *Mercury*, February 18th; R. G. BROWN, M.B., Staff-Surgeon, to the *Colossus*, February 10th; R. J. BARRY, Staff-Surgeon, to the *Phaeton* undated; and W. H. PATTERSON, Staff-Surgeon, to the *Boscawen*, February 10th; H. W. G. DOYNE, Surgeon, to the *Colossus*, February 10th; W. C. STOTT, M.A., M.B., Surgeon, to the *Phaeton*, February 10th; D. T. HOSKYN, M.B., Surgeon, to the *Goshawk*, February 10th; G. H. MILNES, B.A., M.B., Surgeon, to the Haslar Hospital, February 10th; P. V. JACKSON, Surgeon, to the *St. Vincent*, February 10th; and E. F. S. M'KAY, Surgeon, to the *Vernon*, Feb

ruary 10th; W. W. JACOBS, Surgeon, to the *Excellent*, February 5th; J. H. THOMAS, Surgeon, to the *Grasshopper*, February 27th; J. L. BARRINGTON and O. M. JONES, Surgeons, to the *Wirsmite*, February 14th; H. CANTON, Surgeon, to the Royal Marines, Portsmouth, February 14th.

THE MEDICAL STAFF.

UNDER instructions from the Horse Guards, Brigade-Surgeon R. WATERS, M.D., who is serving in the Bengal command, will proceed to England in H.M.S. *Serapis*, leaving Bombay on April 12th.

Surgeons A. E. J. CROBY and C. G. D. MOSSE, who are serving in the Bombay command, are ordered to do general duty, the former in the Poona District, and the latter in the Bombay District.

Deputy Surgeon-General C. E. SMITH died on January 9th. Entering the service as Assistant-Surgeon, April 20th, 1859, he became Surgeon, March 1st, 1873; Surgeon-Major, July 11th, 1874; Brigade-Surgeon, May 30th, 1885; and Honorary Deputy Surgeon-General on retirement, August 18th, 1886. He had no war record.

Deputy Inspector-General G. G. ROBERTSON, M.D., died at Edinburgh on December 20th, 1889. His commissions were dated:—Assistant-Surgeon, August 12th, 1834; Surgeon, June 25th, 1844; Surgeon-Major, March 18th, 1854; and Honorary Deputy Inspector-General, July 31st, 1860, on his retirement. He also had no war record in the *Army Lists*.

Surgeon C. O'DONEL, M.D., whose commission bore date May 30th, 1885, died at Castlebar on January 9th. He was placed on half-pay on account of ill-health, March 30th, 1889.

Surgeon A. J. STRUTHERS, M.B., who entered the service February 5th, 1881, died at Aldershot, December 27th, 1889.

Surgeon G. H. SYMES, M.B., died at Sierra Leone on January 2nd. He became Surgeon, August 1st, 1885, and after serving at the Curragh, in Ireland, a little more than a year, he proceeded to the West Coast of Africa, and remained there till his death.

ARMY MEDICAL RESERVE.

SURGEON-MAJOR ARTHUR HALLAM, who was appointed June 13th, 1888, has resigned his commission.

Surgeon F. K. PIGOTT, 1st Volunteer Battalion King's Shropshire Light Infantry (late the 1st Shropshire), is appointed to be Surgeon, ranking as Captain.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR J. O'NEILL, M.D., Bengal Establishment, Civil Surgeon, is transferred from Kurnool to Umballa.

Surgeon G. F. NICHOLSON, M.D., Bengal Establishment, Civil Surgeon, is transferred from Umballa to Delhi.

The services of Surgeon E. M. DAMLA, Madras Establishment, Medical Officer, 4th Infantry, Hyderabad Contingent, are replaced temporarily at the disposal of the Commander-in-Chief.

Surgeon-Major J. F. FITZ PATRICK, M.D., Madras Establishment, has leave of absence for one year on private affairs.

Surgeon G. W. JENNEY, Bombay Establishment, on general duty in the Bombay District, is directed to officiate in medical charge of staff and details at Asseerghur, during the absence of Surgeon J. Crimmin.

Surgeon J. CRIMMIN, V.C., Bombay Establishment, is appointed to be Civil Surgeon, Shikarpur, and on being relieved by Surgeon F. F. MacCartie of the duties of Health Officer of the Port of Bombay, to act as Presidency-Surgeon, 3rd District, pending further orders, from the date of Surgeon-Major P. Murphy's departure on leave.

MILITIA MEDICAL STAFF.

SURGEON-MAJOR R. P. WALSH, 3rd Battalion Royal Inniskilling Fusiliers, has resigned his commission, which was dated March 1st, 1873; he is permitted to retain his rank and uniform.

THE VOLUNTEERS.

SURGEON C. ARROL, M.D., 1st Kent Artillery (Easton Division Royal Artillery), is granted the rank of Surgeon-Major, ranking as Major.

Surgeon-Major (ranking as Lieutenant-Colonel) W. L. WINTERBOTHAM, M.B., 2nd Volunteer Battalion Somerset Light Infantry (late the 2nd Somerset), has resigned his commission, with permission to retain his rank and uniform. His commission as Surgeon was dated January 13th, 1866; that of Surgeon-Major, February 1st, 1889.

Acting-Surgeon H. BENNETT, 1st Volunteer Battalion, South Wales Borderers (late the 1st Brecknockshire), has also resigned his appointment, which was dated August 11th, 1875.

Mr. JOHN COWPER is appointed Acting-Surgeon to the 5th (Isle of Wight, "Princess Beatrice's") Volunteer Battalion, Hampshire Regiment (formerly the 1st Isle of Wight).

Mr. ARCHIBALD DONALD is appointed Acting-Surgeon to the 2nd Volunteer Battalion Argyle and Sutherland Highlanders (formerly the 2nd Renfrewshire).

Surgeon P. KYNOCH, of the 1st Roxburgh Mounted Rifle Volunteers, is appointed Brigade-Surgeon, ranking as Lieutenant-Colonel, to the South of Scotland Brigade, Infantry Volunteers.

Surgeon and Surgeon-Major J. L. W. WARD, 3rd Volunteer Battalion, Welsh Regiment (late the 2nd Glamorgan), is appointed Brigade-Surgeon, ranking as Lieutenant-Colonel, to the Severn Brigade, Infantry Volunteers.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

	From	To
Surgeon-General T. Tarrant, M.D.	York	Aldershot.
,, G. M. Slaughter	London	Portsmouth.
Dep. Surg.-Gen. J. G. Faught	C. of Good Hope	Devonport.
,, R. Lewer, M.D.	Dover	London.
Brig.-Surgeon C. A. Maunsell, M.D.	Aldershot	Mauritius.
,, W. H. B. Clapp, M.D.	Edinburgh	Chatham.
Surgeon-Major R. De B. Riordan	Portsmouth	Tipperary.
,, J. Fraser, M.D.	Madras	Dublin.
,, W. J. Campbell	,,	York.
,, R. Exham	Templemore	Bengal.
,, R. H. Quill, M.B.	Woolwich	Bombay.
Surgeon E. R. Power, M.B.	Cork	Templemore.
,, E. F. Smith	,,	Madras.
,, J. A. G. Sandiford, M.D.	Tipperary	Cork.
,, D. Franklin	Dover	Brighton.
,, R. W. Ford	Bombay	Dublin.
,, W. Dick, M.B.	Salford	Chester.
,, P. J. Nealon, M.D.	Madras	Chatham.
,, T. R. Morse	,,	Dublin.
,, J. J. C. Donnet	—	,,
,, H. V. Dillon	Half Pay	Portsmouth.
,, G. F. Alexander, M.B.	Fort George	Edinburgh.
,, A. M. Kavanagh	Sierra Leone	Cape Coast C'stle
Quartermaster R. T. Osborne	Egypt	Southern Dist.
,, J. Thomson	Chester	N. W. Dist.
,, J. Beach	—	Natal.

INDIA AND THE COLONIES.

INDIA.

MEDICAL EDUCATION IN BOMBAY.—An introductory address delivered at Grant Medical College, by Brigade-Surgeon W. Gray, Principal and Professor of Surgery in that College, possesses much more than merely local interest, and may be read with profit by all, in any part of the world, who have anything to do with medical education, either as teachers or examiners. What has struck us most in the perusal of this outspoken lecture is its fearless honesty. His method of dealing with his subject would have commended itself to the heart of Carlyle; not that there is anything having the smallest resemblance to the style of that great writer, far less any attempt at imitation. Dr. Gray is, in one word, the sworn foe of humbug, and the great Thomas himself could not have more effectually applied the actual cautery to "shams" than the Bombay Professor does, and this without the use of language to which exception can be taken even by those who are, directly or directly, the subjects of his searching criticism. There is not an observation from beginning to end of the lecture that can be deemed personal. The lecturer passes in review the system of medical education, dwelling with much acuteness on most of its weak points, and suggesting improvements of a highly practical kind. He deplores the want of a sound preliminary education on the part of students, and the almost insuperable difficulties the deficiency in mental training places in the way of their professional teachers, and urges the Bombay University authorities, with whom the matter rests, to exact at least a reasonable minimum of general education before entering on the study of medicine and surgery. Every medical teacher in the British Isles has sad experience of the fact that this lamentable deficiency is not confined to Bombay. The Professor is very severe on the system of over-lecturing, and applies his pruning knife freely in this direction. Professor Huxley, who has placed on record his opinion as to the time wasted on lectures on materia medica, will rejoice to have this able teacher on his side. We can honestly recommend the Professor's remarks on examiners and examinations to all who take on themselves this difficult and delicate duty. We agree with him that the rule is that, with rare exceptions, to be a good examiner a man must be not only a teacher but a good teacher of the subject on which he examines. No one can read this lecture without congratulating the Grant Medical College on having for its principal so able and fearless a man as Professor Gray.

LADY DUFFERIN'S FUND.—The fifth annual general meeting of Lady Dufferin's Fund was held at Calcutta on February 7th, the Viceroy presiding. There was a large attendance, including many European ladies and gentlemen, and several members of the Hindoo and Mahomedan aristocracy. The report presented by the Central Committee recorded a steady expansion of the work during the first year of Lady Lansdowne's presidency. An important event was the establishment of a branch in the United Kingdom. The organisation of a provincial branch in Beloochistan was also mentioned. A number of small local branches have also been formed in various towns throughout the country. A list was given of 238 students who were studying at different medical schools and it was mentioned that several past students were doing well in private practice or in connection with institutions under the fund, and that many native States were sending students.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN 1889.

In the accompanying table will be found summarised the vital and mortal statistics relating to the twenty-eight great English towns issued by the Registrar-General in his weekly returns. Quarterly summaries of these statistics have already been published in these columns.

During 1889 the births registered in twenty-eight of the largest English towns were equal to an annual rate of 31.0 per 1,000 of their aggregate population, estimated at 9,555,406 persons in the middle of that year. This birth-rate showed a further decline from that recorded in recent years; the birth-rate in these towns has steadily declined since 1876, when it was as high as 38.1 per 1,000. In London the birth-rate last year did not exceed 30.3 per 1,000, while it averaged 31.6 in the twenty-seven provincial towns, among which it ranged from 24.4 in Brighton, 24 6 in Huddersfield, and 26.8 in Bradford to 36.0 in Sunderland, 38.1 in Preston, 38.2 in Newcastle-upon-Tyne, and 38.6 in Cardiff.

The deaths registered last year in the twenty-eight towns were equal to an annual rate of 19.3 per 1,000 of their estimated population, which, with the single exception of 1888, when the rate was 19.2, was lower than that in any year on record. During the ten years 1871-80 the rate of mortality in the large towns dealt with by the Registrar-General averaged 24.0 per 1,000. During the past nine years of the current decade, 1881-89, the rate of mortality in these towns has not exceeded 19.8 per 1,000. This reduction in the death-rate implies that upwards of 200,000 persons in the twenty-eight towns were alive at the end of last year whose deaths would have been recorded had the mean rate of mortality since 1880 equalled that which prevailed during the ten years 1871-80. It may be mentioned that the estimated saving of life in England and Wales during the same period of nine years, 1881-89, as the result of the marked decline in the national death-rate, is upwards of 600,000. The rate of mortality in London last year was only 17.4 per 1,000, while it averaged 20.8 in the twenty-seven provincial towns, among which it ranged from 15.1 in Brighton, 16.4 in Derby, 16.9 in Leicester, and 17.0 in Nottingham to 25.2 in Plymouth and in Newcastle-upon-Tyne, 25.5 in Blackburn, 26.7 in Manchester, and 30.0 in Preston.

During the year under notice 25,988 deaths were referred to the principal zymotic diseases in the twenty-eight towns, equal to an annual rate of 2.73 per 1,000, which, although it slightly exceeded the unprecedentedly low rate recorded in 1888, was considerably below the average rate in the ten preceding years, 1879-88. The lowest zymotic death-rates in these large towns last year were 1.5 in Brighton and in Derby, 1.7 in Halifax, and 1.9 in Norwich; while the highest were 4.6 in Salford, 4.7 in Blackburn, 5.8 in Plymouth, and 7.7 in Preston. The 25,988 deaths referred to the principal zymotic diseases included 7,850 which resulted from diarrhœa, 6,339 from measles, 4,589 from whooping-cough, 2,843 from scarlet fever, 2,466 from diphtheria, 1,894 from "fever" (including typhus, enteric, and simple or ill-defined fever), and 7 from small-pox. The rate of mortality from diarrhœa was equal to 0.82 per 1,000, against an average rate of 0.89 in the ten preceding years 1879-88; this disease showed the largest proportional fatality in Leeds, Sunderland, Salford, Leicester, and Preston. The death-rate from measles, which had been 0.79 and 0.47 per 1,000 in the two preceding years, rose again to 0.67 during 1889, and slightly exceeded the average in the previous ten years; in London the measles death-rate was 0.53, while it averaged 0.78 per 1,000 in the twenty-seven provincial towns, and was highest in Sunderland, Manchester, Bolton, Blackburn, and Preston. The rate of mortality from whooping-cough, which had been 0.62 and 0.58 per 1,000 in the two preceding years, further declined last year to 0.48, and was considerably below the average. In London the death-rate from whooping-cough was 0.40 per 1,000, while it averaged 0.55 in the large provincial towns, and was highest in Bradford, Oldham, Birkenhead, and Preston. The death-rate from scarlet fever did not exceed 0.30 per 1,000, and was considerably below the average rate recorded in the preceding ten years; in London the scarlet fever rate was only 0.18, while in the twenty-seven towns it averaged 0.40 per 1,000, and was highest in Sheffield, Salford, Blackburn, and Plymouth. The rate of mortality from diphtheria was equal to 0.26 per 1,000; it showed a further increase upon the rates in recent years, and was higher than in any year on record; in London the diphtheria death-rate was as high as 0.37, while it averaged only 0.17 in the provincial towns, among which, however, this disease showed fatal prevalence in Manchester, Salford,

Public Health Statistics relating to Twenty-eight Large English Towns, for the Year 1889.

Towns.	Estimated Population middle of 1889.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
				Births.	Deaths.	Principal Zymotic Diseases.										
28 Towns	9,555,406	295,156	183,617	31.0	19.3	2.7	25,988	7	6,339	2,843	2,466	4,589	1,894	7,850	2.1	161
27 Provincial Towns	5,203,668	163,669	107,934	31.6	20.8	3.1	16,279	6	4,025	2,059	878	2,840	1,298	5,173	2.9	177
London	4,351,738	131,487	75,683	30.3	17.4	2.2	9,709	1	2,314	784	1,588	1,749	596	2,677	1.1	141
Brighton	121,807	2,965	1,834	24.4	15.1	1.5	186	—	46	17	12	26	18	67	3.1	131
Portsmouth	141,253	4,945	2,550	35.1	18.1	2.1	294	2	8	12	32	93	34	113	1.0	138
Norwich	94,510	3,184	1,731	33.8	18.4	1.9	182	—	31	6	16	26	21	82	1.2	163
Plymouth	78,225	2,487	1,964	31.9	25.2	5.8	449	—	16	265	44	54	17	53	0.9	166
Bristol	229,361	6,694	4,022	29.3	17.6	2.1	488	—	182	28	16	100	37	125	2.4	146
Wolverhampton	82,544	2,666	1,697	32.4	20.6	2.3	191	—	40	7	7	48	12	77	1.5	180
Birmingham	454,835	14,035	8,485	31.0	18.7	2.7	1,213	—	197	155	57	277	44	483	2.4	170
Leicester	150,520	4,757	2,540	31.7	16.9	2.3	350	—	61	6	10	25	26	222	2.5	205
Nottingham	237,812	6,636	4,027	28.0	17.0	2.3	554	—	83	33	11	155	67	205	1.9	182
Derby	98,529	2,806	1,607	28.6	16.4	1.5	148	—	5	20	19	9	18	77	1.6	148
Birkenhead	102,541	3,197	1,820	31.3	17.8	2.8	285	—	68	13	8	93	35	68	1.5	170
Liverpool	606,562	17,676	13,046	29.2	21.6	3.4	2,029	1	485	352	57	342	211	581	5.6	188
Bolton	114,670	3,752	2,517	32.8	22.0	4.1	472	—	161	64	33	64	31	119	1.9	167
Manchester	378,800	13,332	10,088	35.3	26.7	4.0	1,516	1	525	174	153	164	97	402	2.1	176
Salford	234,283	6,993	4,782	30.0	20.5	4.6	1,067	—	222	180	167	60	103	335	3.3	181
Oldham	142,405	4,030	2,901	28.4	20.4	2.9	411	—	124	54	15	128	19	71	3.5	178
Blackburn	121,275	4,148	3,077	34.3	25.5	4.7	573	—	203	127	5	77	24	137	2.3	204
Preston	104,194	3,959	3,118	38.1	30.0	7.7	800	—	255	18	31	194	63	239	2.6	264
Huddersfield	92,825	2,275	1,742	24.6	18.8	2.0	187	—	90	26	12	15	9	35	4.8	168
Halifax	81,080	2,263	1,742	28.0	21.6	1.7	135	—	72	8	12	3	20	20	5.6	175
Bradford	235,056	6,272	4,491	26.8	19.2	2.8	647	1	118	62	12	192	52	210	1.9	182
Leeds	357,449	11,706	7,862	32.9	22.1	3.4	1,196	1	345	110	18	153	129	440	1.6	177
Sheffield	327,227	10,846	6,802	33.3	20.9	3.3	1,064	—	224	227	52	147	71	343	4.6	174
Hull	208,017	6,759	4,197	32.6	20.3	3.1	635	—	199	13	17	118	49	239	4.2	184
Sunderland	134,193	4,818	3,059	36.0	22.9	3.6	485	—	131	38	22	70	37	187	1.3	181
Newcastle-on-Tyne	160,983	6,128	4,042	38.2	25.2	3.0	488	—	93	29	32	130	25	179	2.2	175
Cardiff	112,712	4,340	2,191	38.6	19.5	2.1	234	—	41	15	8	77	29	64	1.8	158

and Plymouth. The death-rate from different forms of "fever" (principally enteric) was equal to 0.20 per 1,000, against an average rate of 0.26 in the preceding ten years; in London the fever death-rate was only 0.14 per 1,000, while it averaged 0.25 in the twenty-seven provincial towns, and was highest in Leeds, Salford, and Preston. During the year under notice only 7 fatal cases of small-pox were recorded in the twenty-eight towns, against 332 and 604 in the two preceding years; of these 7 cases, 2 occurred in Portsmouth, and one in London, Liverpool, Manchester, Bradford, and Leeds respectively. Only 4 small-pox patients were under treatment in the Metropolitan Asylums Hospitals during the year 1889; there were 4 admissions during the year, against 63 and 68 in the two preceding years.

Infant mortality, measured by the proportion of deaths under one year of age to registered births, averaged 161 per 1,000 in the twenty-eight towns during the year under notice; in London the rate of infant mortality did not exceed 141 per 1,000, while in the twenty-seven provincial towns it averaged 177, and ranged from 131 in Brighton, 138 in Portsmouth, and 146 in Bristol to 188 in Liverpool, 204 in Blackburn, 205 in Leicester, and 264 in Preston.

THE DEATH-RATE IN LONDON AND PARIS.

THERE was a further decline last week in the rates of mortality recently prevailing in London and in Paris. The death-rate in London, which had fallen from 32.4 to 21.8 per 1,000 in the four preceding weeks, further declined to 20.6 during the week ending Saturday last, February 8th. During the first six weeks of the current quarter the rate of mortality in London has averaged as much as 26.9 per 1,000, which exceeded by 3.5 the mean rate in the corresponding periods of the ten preceding years. The mortality from each of the principal zymotic diseases was below the average, with the single exception of diphtheria, which showed a slight excess; 91 deaths resulted from whooping-cough, 24 from diphtheria, 19 from scarlet fever, and 8 from measles. The mortality from "fever" was exceptionally low, only 2 deaths resulting from typhoid fever, the corrected weekly average being 14. The fatal cases of influenza, which had fallen from 127 to 75 in the three preceding weeks, further declined to 38 during the week under notice. The mortality from diseases of the respiratory organs also showed a further marked decline, and was considerably below the average. On the other hand, the deaths from phthisis and from diseases of the circulatory system showed an excess. As many as 54 deaths resulted from cancer in London last week, which, however, only slightly exceeded the average weekly number.

From the latest return from Paris, it appears that the death-rate in that city, which had declined from 61.7 to 26.4 per 1,000 in the four preceding weeks, further fell to 24.1 during the week ending February 1st, and was below the average rate in the corresponding periods of recent years. The 1,046 deaths from all causes registered during the week under notice in Paris included 36 from diphtheria and croup, 24 from whooping-cough, 9 from measles, 5 from typhoid fever, and 2 from small-pox. The mortality from all these diseases, except whooping-cough, was below the average, although the deaths referred to diphtheria and croup showed a marked further increase upon recent weekly numbers. The fatality of diseases of the respiratory organs in Paris continues to decline, and was last week considerably below the average.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General has just issued his quarterly return relating to births and deaths registered in England and Wales during the fourth or autumn quarter of last year, and to the marriages in the three months ending September last. The marriage-rate showed an increase upon that recorded in the corresponding period of 1888, and slightly exceeded the mean-rate in the third quarters of the ten years, 1879-88. The birth-rate and the death-rate were both considerably below their respective averages. The mean temperature of the air during the quarter at the Royal Observatory, Greenwich, was 43.5°, and was slightly below the average for the corresponding quarters of 118 years. The mean temperature showed an excess in November, but was below the average in October and December. The rainfall amounted to 6.15 inches, and was nearly an inch below the average.

The births registered in England and Wales during the three months ending December last were 216,838, equal to an annual rate of 29.6 per 1,000 of the population, estimated by the Registrar-General to be rather more than twenty-nine millions of persons. This birth-rate showed a further decline from the rates recorded in recent corresponding quarters, and was 2.4 per 1,000 below the mean rate in the fourth quarters of the ten years, 1879-88; it was lower than that recorded in the fourth quarter of any year since 1847. The birth-rate during the quarter under notice in the several counties ranged from 22.7 in Rutlandshire, 24.7 in Sussex, 25.5 in Herefordshire, and 25.7 in Shropshire to 32.6 in Durham, 33.1 in Staffordshire, 33.9 in Essex, and 36.0 in Monmouthshire. In the twenty-eight large English towns for which the Registrar-General publishes weekly returns, the birth-rate last quarter averaged 30.0 per 1,000, and slightly exceeded the general English rate. In London the birth-rate was 29.4, while in the twenty-seven provincial towns it averaged 30.6, and ranged from 24.1 in Brighton, 25.6 in Bradford, and 25.9 in Nottingham to 34.5 in Sunderland, 35.1 in Preston, 38.3 in Newcastle-upon-Tyne, and 39.0 in Cardiff. The births registered in England and Wales during the quarter under notice exceeded the deaths by 85,140; this represents the natural increase of the population during that period. From returns issued by the Board of Trade it appears that 59,876 emigrants (including 13,098 foreigners) sailed from the various ports of the United Kingdom at which emigration officers are stationed; of these, 35,447 were English, 4,031 Scotch, and 7,300 Irish. The proportion of British emigrants to a million of the respective populations of the three divisions of the United Kingdom were 1,222 from England, 989 from Scotland, and 1,548 from Ireland. Compared with the corresponding quarters of 1887 and 1888, the proportion of emigration last quarter showed a further decline in each of the divisions of the United Kingdom.

During the fourth quarter of 1889 the deaths of 131,698 persons were registered in England and Wales, equal to an annual rate of 18.0 per 1,000 of the estimated population. This death-rate slightly exceeded the unprecedentedly low rate in the corresponding quarter of 1888, but was 1.2 per 1,000 below the mean rate in the fourth quarters of the ten years, 1879-88. Among the urban population of the country, estimated at more than eighteen and a half millions of persons, the rate of mortality during the quarter under notice was equal to 18.9 per 1,000; in the remaining and chiefly rural population of more than ten and a quarter millions the rate was only 16.4 per 1,000. The urban rate was 1.2, and the rural rate 0.5 below the mean rates in the fourth quarters of the eight preceding years. Among the twenty-eight large English towns the mean death-rate was 19.4 per 1,000; in London the rate did not exceed 17.8, while in the twenty-seven provincial towns it averaged 20.7, and ranged from 15.7 in Birkenhead, 15.9 in Brighton, and 16.2 in Leicester and in Nottingham to 25.8 in Newcastle-upon-Tyne, 26.0 in Manchester, 26.5 in Preston, and 28.7 in Plymouth.

The 131,698 deaths registered in England and Wales during the three months ending December last included 2,657 from whooping-cough, 2,547 from measles, 2,210 from diarrhœa, 2,077 from scarlet fever, 1,733 from "fever" (including typhus, typhoid, and simple fever), 1,681 from diphtheria, and 8 from small-pox; in all, 12,913 deaths were referred to these principal zymotic diseases, equal to an annual rate of 1.77 per 1,000, a rate 0.52 below the average for the ten preceding corresponding quarters, which was 2.29 per 1,000. The mortality from whooping-cough and diphtheria showed an excess, while that of each of the other principal zymotic diseases was considerably below the average. The deaths referred to small-pox, which had been 8, 10, and 2 in the first three quarters of the year, were 8 during the three months ending December last, making only 28 in the course of the year. Only one small-pox patient was under treatment during the quarter in the Metropolitan Asylums Hospitals.

The rate of infant mortality, or the proportion of deaths under one year of age to registered births, was equal to 140 per 1,000, and was slightly below the average rate in the corresponding periods of the ten preceding years, 1879-88. In London the rate of infant mortality was 137 per 1,000, while it averaged 169 in the twenty-seven provincial towns, and ranged from 131 in Cardiff, 137 in Portsmouth, and 139 in Birkenhead, to 194 in Blackburn, 197 in Wolverhampton and in Hull, and 240 in Preston.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.

THE Association of Public Sanitary Inspectors held its seventh annual dinner on February 1st at the First Avenue Hotel, Holborn. The attendance numbered over one hundred. Dr. B. W Richardson presided, and gave a sketch of the history of the Society. The duties of the Association were, he said, to teach and

protect its members—to teach them how their tasks should be carried out, and to protect them in the execution of them. The Association ought to turn its attention to making provision for the future. The British public was taking up a decided stand on the subject of pensions, and he believed that in a few years' time there would be no such things as pensions for officials holding public offices. The Association should now take upon itself the duties of a provident society, and insure its members against the evils of an unprovided old age. At the conclusion of the address, Mr. S. Clegg, the honorary secretary of the Association, was presented by the chairman with an illuminated address and a purse of gold, on behalf of the members and in recognition of his ability and services. Mr. Shirley F. Murphy, medical officer to the London County Council, proposed the toast of "The Executive."

MORTALITY IN GLASGOW IN 1889.

DR. J. B. RUSSELL, in his report for the fortnight ending January 11th, 1890, gives the following figures in reference of the mortality in the city during the past year:—

During the year 1889 there were 13,128 deaths registered within the city, as compared with 11,675 in the year preceding, an increase of 1,453, representing a death-rate of 25 (24.86), in place of 22 (22.19), so that the descending series of death-rates which has been maintained since 1883 is now broken. In that year the death-rate was 28, and since successively 27, 26, 25, 23, 22, and now 25. Even the rough classification of the causes of death, which is at this early date available, makes it quite clear that, as compared with last year, the increased mortality has had three sources—first and chiefly, epidemic measles; second, epidemic whooping cough; and third, greater fatality of pulmonary diseases. From these three sources an increase of 1,263 deaths out of a total increase on the year of 1,453 is derived. The following are the figures:—

	1888.	1889.	Increase.
Measles	205	675	470
Whooping-cough.....	409	796	387
Pulmonary diseases ...	3,861	4,267	406
Totals	4,475	5,738	1,263

The following figures show the movements of the death-rates of Glasgow during the last thirty years:—

Mean death-rate,	10	years	1859-68	.....	.....	30.1
,,	,,	10	,, 1869-78	.....	.....	29.8
,,	,,	5	,, 1879-83	.....	25.9	
,,	,,	5	,, 1884-88	.....	24.6	
,,	,,	10	,, 1879-88	.....	.....	25.3

Death-rate 1889, 24.86.

All these calculations are based on the Registrar-General's estimate of the population and returns of deaths, so that we certainly have no undue advantage. According to my estimate, the death-rate for 1889 was 24 (23.54) per 1,000.

THE WESTMINSTER MAGISTRATE AND THE DOCTOR.

OUR attention has been directed to the remarks made by Mr. Sheil, the magistrate at Westminster Police Court, in reference to the refusal of a medical officer of a London workhouse to give the necessary medical certificate, without fee, for the admission of a boy of the workhouse to the Feltham Industrial School, a refusal at which Mr. Sheil appears surprised.

We believe it to be no part of the duty of the medical officer of a workhouse to give a certificate to enable the officers of other institutions to conduct their business, and if we are right in this opinion the delay in the case rests with the guardians, and not with the doctor. The certificate required is either worth something or nothing, and if worth anything the guardians ought not to refuse a small fee for it; if worth nothing the doctor ought not to be troubled to give it. There is, we consider, a responsibility incurred in giving medical certificates, and this is quite overlooked by many of the lay public.

May we ask if there is not a fee charged for all documents issued by the officials in Mr. Sheil's own court, even when no responsibility whatever is incurred by giving them? Has not every defendant whose bail is accepted by the magistrate to pay for the notice placed in his hands in reference to it (which, moreover, he really does not require, for he would be equally well without it), even if in the end the charge against him is dismissed, and the opinion of the magistrate perhaps emphatically expressed that it ought never to have been brought forward. We do not question the legality of the pecuniary charge for notice of bail in such cases; on the contrary, we believe the practice to be strictly in accordance with law, but we doubt whether Mr. Sheil would be prepared to uphold the system on any other grounds. The doctor in the case which has surprised Mr. Sheil evidently stands on his legal rights.

CHARITY AND INSANITATION.

IT is a great pity that the administration of property for charitable purposes should so often go hand-in-hand with insanitary conditions. Recently, at the Thames Police Court, the owner of 17, North Street, Limehouse, was summoned by the Limehouse Board of Works for having his premises in an insanitary condition. The sanitary inspector stated that he found the walls and ceilings very dirty and dilapidated, the upper window sashes immovable, the flooring, water pipes, and gutters dilapidated, the drain untrapped, the yard unpaved and very offensive. The premises were a nuisance and injurious to health. The defendant's agent said that the owner of the property was a Mr. Bellamy, a member of the Poplar Board of Guardians and the Poplar Board of Works, who derived no benefit from the property, as the whole of the money received in connection with it was distributed for charitable purposes. Mr. Lushington made an order for the defendant to abate the nuisance within seven days and pay £1 5s. costs.

HOUSEHOLD WARMING AND VENTILATION.

SIR DOUGLAS GALTON, K.C.B., etc., presided on Tuesday, February 11th, at a lecture given under the auspices of the Sanitary Assurance Association at the College of State Medicine, by Professor T. Roger Smith, F.R.S., B.A., on "Household Warming and Ventilation." In opening the proceedings, the Chairman said that the proper method of warming houses was a matter of the greatest importance, as upon it depended very largely the question whether we should continue to be polluted by the black smoke from our chimneys. If they could only heat dwelling houses thoroughly without poisoning the atmosphere with smoke, great good would have been done.

Professor Smith dwelt upon the importance of ventilation without draughts. To secure efficient ventilation, there must be inlets and outlets, by which fresh air could come in and vitiated air be carried off. An open fire grate was a good ventilator, especially when the fire was alight; but he was afraid that as long as the open grate was used for warming houses, it would be impossible to thoroughly deal with the question of smoke abatement.

Sir Joseph Fayrer, in moving a vote of thanks to Professor Smith, said he should deprecate very strongly any attempt to do away with the cheerful open grate.

Mr. Mark Judge, in seconding the motion, dwelt upon the importance of open windows as a means of ventilation. The basements of houses should always be supplied with windows capable of being easily opened.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, February 8th, 5,999 births and 4,292 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had declined from 28.1 to 22.8 per 1,000 in the four preceding weeks, rose again to 23.0 during the week under notice. The rates in the several towns ranged from 16.6 in Leicester, 18.6 in Derby, 19.4 in Nottingham and Birkenhead, and 19.9 in Huddersfield to 29.9 in Portsmouth, 30.4 in Manchester, 30.6 in Norwich, and 34.8 in Bristol. In the twenty-seven provincial towns the mean death-rate was 25.0 per 1,000, and exceeded by 4.4 the rate recorded in London, which was only 20.6 per 1,000. The 4,292 deaths registered during the week under notice in the twenty-eight towns included 345 which resulted from the principal zymotic diseases, against numbers declining from 423 to 328 in the five preceding weeks; of these, 168 were referred to whooping-cough, 51 to scarlet fever, 42 to diphtheria, 41 to measles, 24 to "fever" (principally enteric), 19 to diarrhœa, and not one to small-pox. These 345 deaths were equal to an annual rate of 1.9 per 1,000; in London the zymotic death-rate was 1.7, while it averaged 1.9 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Derby, in Huddersfield, and in Halifax, and 0.3 in Leicester, to 3.0 in Salford, 4.1 in Bolton, and 5.4 in Bristol. Whooping-cough caused the highest proportional fatality in London, Leeds, Oldham, Liverpool, Plymouth, Brighton, Bolton, and Bristol; measles in Liverpool; and "fever" in Sunderland. In none of these twenty-eight towns was scarlet fever fatally prevalent. The 42 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 24 in London, 5 in Salford, 4 in Manchester, 2 in Liverpool, 2 in Portsmouth, and 2 in Bolton. No fatal case of small-pox was registered during the week in any of the large towns; and 3 small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, February 8th. These hospitals contained 1,246 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,295 in the six preceding weeks; 67 cases were admitted during the week

against 72, 84, and 95 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 5.7 per 1,000, and was considerably below the average.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, 770 births and 646 deaths were registered during the week ending Saturday, February 8th. The annual rate of mortality in these towns, which had declined from 29.0 to 25.5 per 1,000 in the four preceding weeks, further fell to 25.0 during the week under notice, but exceeded by 2.0 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Leith and Greenock, and the highest in Aberdeen and Perth. The 646 deaths in these towns during the week under notice included 85 which were referred to the principal zymotic diseases, equal to an annual rate of 3.3 per 1,000, which exceeded by 1.4 the mean zymotic death-rate during the same period in the twenty-eight large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Edinburgh and Leith. The 254 deaths registered during the week under notice in Glasgow included 17 from whooping-cough, 6 from measles, 5 from "fever," and 2 from diphtheria. In Edinburgh, 16 fatal cases of measles, 3 of scarlet fever, and 3 of diphtheria were recorded, and 7 deaths from scarlet fever occurred in Leith. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 6.3 per 1,000, against 5.7 in London.

HEALTH OF IRISH TOWNS.

During the week ending Saturday, February 8th the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 39.2 per 1,000. The lowest rates were recorded in Dundalk and Waterford, and the highest in Galway and Belfast. The death-rate from the principal zymotic diseases averaged 4.3 per 1,000. The 226 deaths registered in Dublin during the week under notice were equal to an annual rate of 33.4 per 1,000 (against 48.8 and 43.5 in the two preceding weeks), the rate for the same period being only 20.6 in London and 24.4 in Edinburgh. These 226 deaths included 12 which resulted from the principal zymotic diseases (equal to an annual rate of 1.8 per 1,000), of which 6 were referred to different forms of "fever," 4 to whooping-cough, and 2 to measles.

OBITUARY.

ALEXANDER SHAW, F.R.C.S.

By the death of Mr. Alexander Shaw one of the last links which connect the present with the past generation is broken. His connection and intimate relation with the late Sir Charles Bell carries the mind back to a period which is now almost one of ancient history. Mr. Shaw was some years junior to his two veteran colleagues, Sir Thomas Watson and James Moncrieff Arnott, the latter of whom only predeceased him by a couple of years.

Alexander Shaw was one of the younger of the fourteen children of Mr. Charles Shaw, many years clerk to the justices of the peace for Ayr, and who was the eldest son of the Rev. D. Shaw, sixty years minister of Coylton, in Ayrshire. Mr. Shaw was born in 1804. He was educated in the University of Glasgow, where he obtained his medical qualifications. He then proceeded to Downing College, Cambridge, with the object of taking his degree in medicine, but he left before completing his term to replace (in 1827) his talented deceased brother, John Shaw, who had been for some time the trusted assistant to their brother-in-law, Charles Bell. For a time Alexander Shaw lived in the house with his brother-in-law, and was thus thrown into intimate association and relations with Charles Bell. He became a pupil at the Middlesex Hospital in 1822, was elected assistant-surgeon in 1836, and became full surgeon in 1842, and consulting surgeon in 1872. He became a member of the Council of the College of Surgeons in 1858.

Mr. Shaw belonged to a family remarkable not only for their longevity, but for the services which many of them rendered to their country. Marion, Lady Bell, attained her ninetieth year; James Shaw, whose death we recorded last December, reached his eightieth. Patrick, a Sheriff of Chancery, was the editor of some of the later editions of the standard legal works of another brother-in-law, George Joseph Bell, many years Professor of Scots Law in the University of Edinburgh. General Sir Charles Shaw was distinguished for his military services in Portugal; and Thomas George wrote one of the best books on wine—that which is called *The Vine, the Wine, and the Cellar.*

Mr. Shaw took an active part in the affairs of the various medical societies, especially in those of the Royal Medical and Chirurgical Society, of which he was secretary in 1843-44. He also contributed to the *Transactions of the Pathological Society*, and wrote various papers in the journals, etc. He will probably be best remembered for his papers on "Rickets," in the *Medico-Chirurgical Transactions.*

Mr. Shaw was an accomplished and high-minded surgeon. He had witnessed many and great changes in the practice of his art. His mind, although clinging to the traditions of the past, was ready to accept the improvements of the present age. He was not a brilliant operator but a thoughtful and painstaking surgeon. He was very successful in the treatment of his cases, paying the greatest attention to matters of detail, the dressing of his patient, etc. In this respect Mr. Shaw may be regarded as a pioneer of some of the great improvements of modern surgery. His opinions as a sound and judicious surgeon were always respected and valued by his colleagues.

After the death of Sir Charles Bell, Lady Bell resided with her brother, and for many years, under this accomplished and popular lady, their home became a favourite resort of the literary and scientific society of the period. Mr. Shaw married, somewhat late in life (1856), Susan Turner, widow of Mr. J. Randall. The result of this marriage was a child which did not long survive its birth. Mr. Shaw was attacked with paralysis about 1875, and although he made a fair recovery he remained in shattered health. During this period he was most tenderly cared for by his wife. He retained his interest in the scientific basis of our profession, and, thanks to such friends as W. H. Flower, J. Burdon Sanderson, and J. W. Hulke, he was kept in touch with what was going on in the world from which he lived apart.

The portrait of Mr. Shaw left upon the mind of an old friend of near upon half a century's standing is that of a man ever ready to heal a breach in friendship, but quite incapable of making or widening one. Had he to rebuke an idle student his reproof took the form of apologetic counsel rather than of a merited scolding, a method successful when addressed to sensitive minds like his own, and productive of expressions of regret at the vexation caused in lads of boisterous spirits and good hearts, but a mere waste of words when proffered to the less reclaimable. Incorrect statements and unfounded opinion Mr. Shaw seemed to regard in the light of spoilt children, to be amended without exposure or vexation to their holders. Thrown in early professional life amongst men of great eminence and strength of character, his feeling of admiration and respect for those so gifted were strongly developed, and found frequent expression, a mental attitude which became part of himself, and in later time hindered his assumption of that authority which his attainments and professional skill justified, and which, under different early surroundings, he would have exercised. His old associates have lost a wise counsellor and warm friend, and his acquaintances will accord to him the position of a high-minded, courteous gentleman of past days.

PROFESSOR EDUARD VON WAHL, M.D.,

Dorpat.

This eminent Russian surgeon, whose premature decease we announced last week, was born in the province of Esthonia in 1833. He matriculated at Dorpat in 1851 as a student of mineralogy, and graduated in the physico-mathematical faculty of that University in 1855 with a thesis on the Fresh Water Mussels of Livonia, for which he obtained a gold medal. He afterwards studied medicine, and took his Doctor's degree in 1859, the title of his inaugural dissertation being "De Retinæ in Monstro Anencephalico Structurâ." After graduation Von Wahl continued his practical studies in every department of the healing art, serving for nine years in subordinate capacities in medical and surgical clinics, in cholera and fever hospitals, in sanitary administration, and in medico-legal practice.

In 1868 he was appointed surgeon to the Prince von Oldenburg Children's Hospital at St. Petersburg. Here, in conjunction with Professor Rauchfuss, he worked for eight years, during which the materials for the well-known article on the Diseases of the Bones and Joints in Children in Gerhardt's encyclopædic work were accumulated. During this period Von Wahl was appointed Inspector of the National Girls' Schools in St. Petersburg, a post for which his previous training in sanitary science and his experience in children's diseases made him peculiarly well fitted. In 1876, on the death of Professor Weyrich, he was called to the Chair of Forensic Medicine and Public Hygiene at Dorpat. On the breaking out of the Russo-Turkish war, however, he volunteered for service in the field, and did excellent work as a military surgeon throughout the campaign. The Emperor acknowledged his services by the gift of a diamond ring. Von Wahl returned to Dorpat at the end of 1877, and in February, 1878, on Professor von Bergmann, the incumbent of the Chair of Surgery, being invited to migrate

to Würzburg, he was chosen to succeed him. In spite of the disadvantage of having to follow so brilliant a teacher as Von Bergmann, the new professor soon proved that the authorities had not been mistaken in selecting him. His fame as an operator and as a scientific teacher quickly spread, and students from all parts of Russia were attracted to his clinic. In 1879 the number of medical students at Dorpat was 389; in 1889 it was 799. This increase is admitted to be due mainly, if not exclusively, to the reputation of Von Wahl. His activity was not confined to his own province. He urged the establishment of a clinic of mental diseases at Dorpat, and so keenly did he feel the necessity of this step, that he himself purchased the ground and buildings suitable for the purpose, and handed them over to the University. He devoted much attention to the question of the spread of leprosy in Russia, and initiated an agitation for the establishment of lazarhouses for the isolation of the unfortunate sufferers from that disease. He also took much interest in the question of the prevention of syphilis.

Von Wahl was Rector Magnificus of the University of Dorpat from 1881 to 1885. During the ten years of his professorship he contributed largely to surgical literature, chiefly on injuries of blood vessels, the mechanism of fracture of the skull, and latterly on intestinal obstruction, a subject in which he took special interest.

It may be mentioned that Von Wahl's mother was an Englishwoman, a circumstance to which he owed not only an intimate knowledge of our language and literature, but a liking for English ways, and in particular an "elective affinity" for English surgery. He was an enthusiastic disciple of Sir J. Lister long before the antiseptic system had become the prevalent creed of the surgical world.

E. H. PARSON, M.R.C.S.Eng., L.S.A., J.P.

In the death of Mr. Parson, which occurred on February 2nd, Southsea loses a popular and public-minded townsman, and the medical profession a much respected colleague. Mr. Parson was born on December 20th, 1820, received his medical education at St. Bartholomew's Hospital, became M.R.C.S. in 1843, and subsequently held the post of house-surgeon at the Sussex County Hospital, Brighton. He took up his residence in Portsmouth in 1847, entering into partnership with the late Dr. Scott. Mr. Parson was one of the first medical officers of the Royal Portsmouth, Portsea, and Gosport Hospital. On resigning his position on the medical staff, he was appointed in 1885 honorary consulting surgeon. He had for some years previously been a vice-president of the institution. He was appointed by the Lords of the Admiralty visiting surgeon under the Contagious Diseases Act of 1866.

The demands of an extensive practice caused him to decline many invitations to become a candidate for the Town Council. He, however, took a warm interest in various matters connected with the development of the town. He was a justice of the peace for the borough.

Mr. Parson's health began to fail last year, but he continued in active work up till the close of the year. Since then unfavourable indications became more strongly marked, and, despite the most assiduous care of his medical attendant and friend, Mr. Henry Rundle, a fatal result could not be averted, the cause of death being weakness of the heart and congestion of the lungs.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE REFORM OF THE OUT-PATIENT DEPARTMENTS OF MEDICAL CHARITIES, Etc.

Sir,—At the late meeting of the Nottingham Medico-Chirurgical Society, held to discuss the above, Mr. Snell is reported as having said that my proposals "would have the effect of lowering, even more than at present, the tone of middle-class practice by showing to the public that skilled advice could be obtained at a low rate, and by increasing the degrading competition at present existing among practitioners."

To show that the proposals would not lower "the tone," I may say:

1. It is proposed to state definitely for whose use the medical charities exist. About 30 per cent. will be found to be ineligible cases, and so will be made to pay a doctor.

2. It is proposed that the out-patient medical staff shall be paid. How can this "lower the tone?"

3. It is proposed that a "wage limit" be placed on provident dispensary members, and that these be made to pay more. Can this "lower the tone?"

4. It is suggested that club members making from £150 to £600 a year be not eligible for treatment by paying from 2s. 6d. to 4s. per annum. Does this tend to "lower the tone" or heighten it?

5. It is suggested that students be taught to diagnose cases of fever, so that so many mistakes be not made. Can such a consummation "lower the tone?"

6. A Government inquiry has been asked for. We support such a demand. How is "the tone" injured here?

I think it a pity men do not carefully think out a subject before speaking on it. This is plainly seen in the statement of Dr. Atthill, of the Dublin Branch, when he said it had been suggested to use the workhouse and fever hospitals for clinical work instead of the hospitals. No such proposal has ever been made. It is far the easiest way to get rid of a subject by nicknaming it "impracticable," with a very large "I," as if anything could possibly be impracticable to that class of men who say so.

There is now little doubt but that the medical profession is rousing itself up after years of slothfulness, and it will be certain to note carefully those who try to keep back reforms for which a few have been fighting for at least twenty-five years.—I am, etc.,

Liverpool. Robert R. Rentoul.

Leeds Workpeople's Hospital Fund.—The annual report of the Leeds Workpeople's Hospital Fund shows a subscription for 1889 of £5,170, which had risen from £1,884 in 1886 to £3,694 in 1887 and £4,326 in 1888.

The North Riding County Council have voted a sum of £4,500 to the Committee of Visitors of the Pauper Lunatic Asylum to provide a hospital for infectious diseases, and application for leave to borrow this amount is to be made to the Local Government Board.

Manchester and Salford Hospital Funds.—Collections were made on Sunday, February 9th, in the various places of worship in Manchester and Salford in aid of the medical charities. This is the twenty-first year of the scheme. "Hospital Saturday" is fixed for February 15th.

Glasgow Eye Infirmary.—The thirty-sixth annual report of this institution records a total of 15,612 cases treated during the year; of these 7,334 were dismissed cured by ordinary treatment, 1,595 by operation; 2,347 were relieved, 80 were incurable. The house patients numbered 1,165, a weekly average of 61.

Clinical Hospital for Women, Manchester.—The report presented to the annual meeting of the supporters of the Clinical Hospital for Women and Children states that the Committee have furnished two small wards for paying patients. The number of out-patients has been 8,824 and in-patients 824, as against 8,515 and 790 in the previous year. The statement of accounts showed an adverse balance of £800.

Victoria Dental Hospital, Manchester.—At the annual meeting of the governors of the Victoria Dental Hospital it was stated that the number of patients for the past year was over 12,000, and the number has been so great that the extent of the work has now reached the limit of the accommodation provided by the present building. It is suggested that larger and more convenient premises should be secured at once. A sum of £10,000 would be required for the site and building.

Bradford Joint Hospital Fund.—The total receipts of the Bradford Joint Hospital Fund for the year amounted to £5,251 2s. 5d., and of this sum £2,319 5s. 7d. had been received in subscriptions from *employés*. The disbursements included £3,971 to the Infirmary, £641 to the Eye and Ear Hospital, and £409 to the Children's Hospital. The Chairman referred to the gratifying increase in the contributions from *employés*, which had risen from £800 four years ago to £2,319 at the last collection.

Glasgow Sick Children's Hospital.—During the year 1889, 566 children were admitted to this hospital for treatment, an increase of 26 on the previous year. Of this total 337 were medical cases and 229 surgical. The average daily number under treatment was 61, and the average duration of residence 35 days. The total death-rate was 9.26, and, deducting 6 deaths which occurred

within twenty-four hours of admission, it was 8.3 per cent. Among the patients were 14 infants under 1 year, 1 being only 3 months old. At the dispensary 2,878 medical cases and 1,289 surgical were treated, a total of 4,167, with an aggregate of 16,206 attendances.

ULSTER HOSPITAL FOR CHILDREN AND WOMEN, BELFAST.—The annual meeting of this institution was held on January 31st, the Mayor of Belfast presiding. The report showed that 221 intern and 3,938 extern patients had been treated during the past twelve months, being a large increase upon the previous year. Four deaths had occurred during the year. Dr. Jonas Poole and Dr. St. Clair Boyd had been elected upon the staff during the year.

GLASGOW CONVALESCENT HOME.—The usefulness of this institution, both to the general public and to the hospitals, is being increased. In order to admit of patients recovering from surgical operations and diseases being received earlier than hitherto, a trained nurse has been added to the staff, and the new arrangement has given satisfaction. During the year 1,637 patients were received, 936 of whom came from the Royal and Western Infirmaries; of these 1,099 were dismissed fit for work, 492 much improved, 41 not improved, and 4 died. The total expenditure was £1,915 7s. 11d., being a cost per patient of £1 3s. 4¾d., or 1s. 5d. per day.

ULSTER EYE, EAR, AND THROAT HOSPITAL.—The annual meeting of this institution was held on January 31st, the Right Hon. John Young, D.L., presiding. The report showed that during the past year 1,535 persons had been attended at the hospital, of whom 172 were intern patients. During the year the sanitary arrangements had been overhauled and put into good order. For the proposed extension scheme £400 were in hand, and about £600 additional were required. The report pointed out that the hospital was availed of not only by the inhabitants of Belfast, but by the people of Ulster generally. Dr. W. M. Killen had been appointed chloroformist to the hospital. Dr. McKeown, in his remarks, stated that he had been much occupied during the year in perfecting the operation for immature cataract, and that the results had been very satisfactory. He also gave a warning regarding the too general neglect of purulent ophthalmia in infants, and the evil results which followed the common practice of poulticing the eyes. During the year the clinical class for students had been unavoidably suspended, but would be resumed next session.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

ELECTORS TO PROFESSORSHIPS.—The following have been appointed Electors to the Professorships indicated:—Chemistry: Dr. E. Frankland, F.R.S. Anatomy: Professor Huxley, F.R.S. Botany: Professor Daniel Oliver, F.R.S. Natural Philosophy: Dr. Hugo Müller, F.R.S. Zoology and Comparative Anatomy: Professor Huxley, F.R.S. Physics: Sir William Thomson, F.R.S. Downing of Medicine: Dr. Richard Quain, F.R.S. Physiology: Professor Burdon Sanderson, F.R.S. Pathology: Dr. J. F. Payne. Surgery: Sir James Paget, F.R.S.

LONDON.

PRELIMINARY SCIENTIFIC (M.B.) EXAMINATION.—January, 1890. Pass List. Entire Examination.

First Division.—S. S. F. Blackman, St. Bartholomew's Hospital; F. Chown, St. Mary's Hospital; G. A. Clarkson, St. Paul's School and St. George's Hospital; A. P. Cummings, King's College; A. H. Gerrard, University College and Islington High School; S. C. Hodgson, B.A., Yorkshire College and private study; S. P. James, Guy's Hospital and private tuition; F. W. Robertson, St. Bartholomew's Hospital.

Second Division.—J. Ashton, University College, Aberystwith, and St. Mary's Hospital; F. J. H. Cann, Guy's Hospital and private tuition; L. A. Dowson, Yorkshire College; J. Dumas, B.A., private study; D. E. Evans, University College, Aberystwith, and St. Mary's Hospital; P. H. Fearnsides, Yorkshire College; Ella Catherine Flint, University College, Birkbeck Institute, and private tuition; M. L. G. Hallwright, Mason College and private study; A. Marriott, Firth College; A. Miller, Guy's Hospital and Birkbeck Institute; A. Young, Firth College.

Two Subjects of the Examination.[1]—J. A. Alston (C., P.), University College; L. C. Bean (C., P.)*, University College and private study; J. A. Belcher (C., P.), private study; A. Brebner (C., P.), University College; W. Craven (P., B.),* St. Mary's Hospital: H. S. Dobie (C., P.), private study; S. J. H. Eastwick-Field (C., P.), University College and private tuition; C. C. J. Erhardt (C., P.), King's College; A. R. St. L. Fagan (C., P.), London Hospital and private tuition; H. F. Forty (C., P.), Middlesex Hospital; D. Hamilton (P., B.),* Bedford College, London, and private tuition; J. C. Harcourt (C., P.), Merchant Taylors' School; A. C. Hovenden (C., P.),* Guy's Hospital; G. S. Hovenden (C., P.),* Guy's Hospital; E. L. Hunt (C., P.), private tuition; A. E. Hutton (C., P.), Yorkshire College and private tuition; E. J. Hynes (C., P.), Bedford Grammar School; R. W. Jameson (C., P.), Dulwich College and St. Bartholomew's Hospital; E. T. Jones (C., P.),* Mason and University Colleges; L. M. J. LeMaire (C., P.), private tuition; L. J. Miskin (C., P.), private study; E. Morris (P., B.), St. Bartholomew's Hospital; R. E. Murray (C., P.),* University College and private study and tuition; Helen F. Oliver (C., P.), private tuition; E. Shepherd (C., P.),* University College and St. Mary's Hospital; J. M. Stewart (C., P.), University College.

One Subject of the Examination.[1]—Lizzie Bennett (C.),* private tuition; R. A. Bennett (P.), Mason College and private study; J. R. Bishop (B.),* Owens College; G. J. Branson, B.A. (C.),* Mason College; A. W. R. Cochrane (C.), St. Thomas's Hospital; F. J. Coutts (C.), University College; W. H. Gossage (B.),* Westminster Hospital; W. H. Gray (C.), University College, Nottingham, and private tuition; J.W. Haines (B.),* Mason College and St. Barthelomew's Hospital; R. Hopton (B.),* Yorkshire College; A. Hunnard (B.), University College; P. S. Kesteven (B), St. Bartholomew's Hospital; E. Playfair (P.),* King's College; E. Pratt (B.), St. Bartholomew's Hospital and private study; J. Robertson (B.),* Guy's Hospital; F. G. Smith (P.), private study; J. Snowman (B.),* London Hospital; G. H. F. Stallard (B.), University College; J. E. Waite (P.),* University College; W. D. Watson (B.), University College.

[1] The subjects taken up by the candidates are indicated by an initial after the name:—C.=Chemistry; P.=Physics; B.=Biology.
* These candidates have now completed the examination.

VICTORIA.

IT is announced that gold medals have been awarded by the Council to Robert James McLean Buchanan, M.D., and Henry Waytes Pomfret, M.D., in consideration of the marked originality and special excellence of the dissertations sent in by them for the degree of M.D.

MESSRS. W. A. MANSELL and Co., 271 and 273, Oxford Street, have issued a very satisfactory and life-like mezzotint portrait of the late Sir William Gull, of which an artists' proof has been sent us. It is printed from a plate made by Mr. Robert S. Clouston, to whom special facilities were afforded for obtaining a good and characteristic portrait, and has the advantage of having been approved and signed by Sir William Gull.

PRACTICE OF MEDICINE IN FRANCE.—M. Fallières, the Minister of Public Instruction, attended on February 12th a meeting of the Committee appointed to investigate the practice of medicine in France. Referring to the question of foreign doctors, he said the present system could not be maintained, as it offered no guarantee of professional capacity. He shared the opinion that foreign doctors ought to submit their diplomas to the judgment of the French faculties, which would then decide whether they were on a par with those granted to French practitioners. Furthermore, foreign medical men should be required to undergo the final examinations to which French candidates for the qualification to practise have to submit themselves. M. Fallières admitted, however, that exceptions might be made for doctors practising in summer and winter resorts. With regard to dentists, he held that it would be well to insist upon residence for a term of three years at the house of a duly qualified French dentist, and registration at a faculty or school of medicine. The Committee will shortly hear the views of the Minister of the Interior and Justice on the matter.

OBSTETRICAL SOCIETY OF LONDON.—The following is a list of officers and Council elected at the annual meeting on Wednesday, February 5th: *President:* Alfred Lewis Galabin, M.A., M.D. *Vice-Presidents:* *Percy Boulton, M.D.; Francis Henry Champneys, M.A., M.D.; *Arthur Guy Elkington (Deputy Surgeon-General); *Thomas Crawford Hayes, M.D.; *Evan Jones (Aberdare); A. E. Aust Lawrence, M.D. (Clifton). *Treasurer:* G. Ernest Herman, M.B. *Chairman of the Board for the Examination of Midwives:* James Watt Black, M.D. *Honorary Secretaries:* Alban Doran; *Peter Horrocks, M.D. *Honorary Librarian:* *William Duncan, M.D. *Other Members of Council:* *Thomas Edward Bowkett; Robert Boxall, M.D.; Albert Charles Butler-Smythe; W. Radford Dakin, M.D.; S. Houston Davson, M.D.; Henry Gervis, M.D.; Robert Alexander Gibbons, M.D.; Frederick B. Hallowes (Redhill); Edwin Hollings, M.D.; *Henry Ambrose Lediard, M.D. (Carlisle); *Henry Colley March, M.D. (Rochdale); *Richard Henry Milson, M.D.; Oliver Calley Maurice (Reading); Thomas Cargill Nesham, M.D. (Newcastle-on-Tyne); Edward James Nix, M.D.; *John Baptiste Potter, M.D.; *Herbert R. Spencer, M.D.; Harry Speakman Webb (Welwyn). Those gentlemen to whose names an asterisk is prefixed were not on the Council, or did not fill the same office last year.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examinations, were at an ordinary meeting of the Council on February 13th admitted Members of the College, namely:

Albert, James Valek, L.R.C.P.Lond., 49, Sloane Street, S.W.
Aspinwall, John Fullerton, L.R.C.P.Lond., 48, St. George's Terrace, Bolton
Badcock, John Henry, L.R.C.P.Lond., 4, Dane's Inn, Strand
Bailey, Robert Cozens, L.R.C.P.Lond., 60, Millman Street, W.C.
Banbury, George Richard Scott, L.R.C.P.Lond., 62, Pembroke Street
Bankes-Price, Sydney Herbert, L.R.C.P.L., Llandwrog Rectory, Carnarvon
Barber, George Thomas Congreve, L.R.C.P.Lond., Lebanon Cottage, Coventry
Barlow, George, L.R.C.P.Lond., 23, Park Hill, Bolton
Barnard, Richard, L.R.C.P.Lond., 49, Argyll Road, Kensington
Batley, Albert Brook, L.R.C.P.Lond., 2, Queen's Road, Huddersfield
Berry, George Arthur, L.R.C.P.Lond., 59, Albert Road, Southport
Bickersteth, Robert Alexander, L.R.C.P.Lond., 7, Furnivals Inn, Holborn
Bott, William, L.S.A., 43, Workhouse Lane, Tipton
Branson, William, L.R.C.P.Lond., Carnson House, Rotherham
Brooks, Charles, L.R.C.P.Lond., 3, Richmond Terrace, S.W.
Caiger, Herbert, L.R.C.P.Lond., 20, Brownswood Park, N.
Campbell, James Tweedie, M.D., Bellevue, 6, Hillmarton Road, N.
Coates, Henry Honiton, L.R.C.P.Lond., St. Bartholomew's Hospital
Cobbett, Louis, L.R.C.P.Lond., 85, Lambeth Palace Road, S.E.
Collins, Edward Tenison, L.S.A., Campden House, Birmingham
Cooke, George Henry, L.R.C.P.Lond., Stamford Road, Altrincham
Cooper, Harry Joseph, L.R.C.P.Lond., 59, Lambeth Palace Road, S.E.
Cornilliac, Joseph, L.R.C.P.Lond., 4, Endsleigh Street, W.C.
Cox, Arthur Brooks, L.R.C.P.Lond., Middlesex Hospital
Cribb, Arthur William Gordon, L.R.C.P.Lond., 8, Highbury Park, N.
Daggett, Henry Ingledew, L.R.C.P.Lond., Vincent Sq., Newcastle-on-Tyne
Davies, Frederick William Samuel, L.R.C.P.Lond., 44, High Street, Merthyr Tydfil
Debenham, Robert Barsham, L.R.C.P.Lond., Heath House, Stepney, E.
De Butts, Stanley Brownlow Cromie, L.R.C.P.Lond., Ewell, Surrey
Devereux, William Charles, L.R.C.P.Lond., Middlesex Hospital
Distin, Howard, L.R.C.P.Lond., 153, Kennington Park Road
Diver, Ebenezer William, L.R.C.P.Lond., Henley, Surrey
Dove, Percy William, L.R.C,P.Lond., Brambledown, Crouch Hill, N.
Dowling, George William, L.R.C.P.Lond., Bowdon, Cheshire
Dukes, Thomas Archibald, L.R.C.P.Lond., 16, Wellesley Road, Croydon
Dunn, Robert Ayton, L.R.C.P.Lond., Stevenage, Herts
Earle, Edward Robert Charles, L.R.C.P.Lond., 12, Harrington Street, N.W.
Eccles, William McAdam, L.R.C.P.Lond., Lyndhurst, Upper Norwood
Elgee, William, L.R.C.P.Lond., 29, Rutland Road, Bedford
Faichnie, Frederick, L.R.C.P.Lond., University College Hospital
Fearnhead, Thomas, L.R.C.P.Lond., Wentworth Street, Bolton
Ferguson, Robert Bruce, L.R.C.P.Lond., St. Mary's, Willesden Park
Foster, William James, L.R.C.P.Lond., 472, Oxford Street, W.
Francis, Henry Alexander, L.R.C.P.Lond., 1, Barnard's Inn, Holborn
Gill, James McDonald, L.R.C.P.Lond., Guy's Hospital
Gimlette, James Desmond, L.R.C.P.Lond., St. Mary's Square, S.E.
Gore, Henry Bushell, L.R.C.P.Lond., The Vicarage, Bowden
Gostling, Percy Robert, L.R.C.P.Lond., Oakley, Bedford
Grant, John William Geary, L.R.C.P.Lond., Soldier's Point, Holyhead
Gratte, Charles Brooke, L.R.C.P.Lond., College Green, Bristol
Griffiths, John, L.S.A., Beechfields, Oswestry
Harrison, John Henry, L.R.C.P.Lond., 61, North Street, Leeds
Harvey, Charles Edward, L.R.C.P.Lond., Sav-la-Mar, Kingswood, Jamaica
Haswell, John Francis, M.B.Edinb., Monk Seaton, Northumberland
Heaton, Charles James, L.R.C.P.Lond., Verulam, Watford
Heywood, Charles Christopher, L.R.C.P.Lond., 24, Granville Place, W.
Hickman, Herbert Vigers, L.R.C.P.L., St. Stephen's Avenue, Uxbridge Road
Hicks, John Abernethy, L.R.C.P.Lond., 39, High Street, High Wycombe
Higgins, William, L.R.C.P.Lond., 22, Hill Street, S.W.
Howell, Robert Edward, L.R.C.P.Lond., Brancksome, Boston
Hulbert, Ernest Beddoe, L.R.C.P.Lond., 19, Thames Street, Windsor
Jackson, Fox Turner, L.R.C.P.Lond., 147, Kensington, Liverpool
James, George Thomas, L.R.C.P.Lond., 37, Gloucester Place, Hyde Park
Jones, David Thomas, L.R.C.P.Lond., 24, De Laune Street, Kennington
Jones, Martin Llewellyn, L.R.C.P.Lond., 23, Percy Street, W.C.
Jones, Rowland Francis Hugh, L.R.C.P.Lond., St. Bartholomew's Hospital
Jones, William Ernest, L.R.C.P.Lond., 37, Great Coram Street, W.C.
King, Frederick William Robert John, L.R.C.P.L., 12, Witherington Rd., N.
Kingdon, Ernest Cory, M.D.Edin., 6, Upper College Street, Nottingham
Kingsland, Alfred, L.R.C.P.Lond., Green Lane, Small Heath, Birmingham
Kirton, Martin Ainger, L.R.C.P.Lond., 13, Amersham Road, New Cross
Lack, Harry Lambert, L.R.C.P.Lond., King's College Chambers, W.C.
Lankester, Arthur Colborne, L.R.C.P.Lond., 1, Elm Park Gardens, S.W.
Lansdown, Robert Guthrie Poole, L.R.C.P.Lond., Samber House, Clifton
Lawson, Douglas, L.R.C.P.Lond., 12, Harley Street, W.
Low, Harold, L.R.C.P.Lond., Round Hill Villas, Sydenham
Lunn, Percy Trenavin, L.R.C.P.Lond., 1, Brompton Square, S.W.
Lyons, Algernon Wilson, L.R.C.P.Lond., 25, Bessborough Gardens, W.
Macann, Arthur Charles Joseph, L.R.C.P.Lond., 22, King Street, W.
MacKnight, Conway Montgomery, M.B. Melb., 31, Mornington Road, N.W.
Molyneux, John Pendlebury, L.R.C.P.Lond., 42, Market Street, Wigan
Moore, George Ogle, L.R.C.P.Edin., 4, Bramham Gardens, S.W.
Morton, James Douglas, L.S.A., 34, St. George's Square, N.W.
Orr, Frederick Layton, L.R.C.P.Lond., 17, Alexander Road, N.
Parry, Henry Jules, L.R.C.P.Lond., Middlesex Hospital
Paterson, George William, L.R.C.P.Lond., 65, Hereford Road, W.
Pawlett, Thomas Lawrance, L.R.C.P.L., 2, Selwyn Terrace, Upper Norwood
Peirce, Henry Ireson, L.R.C.P.Lond., 23, Endsleigh Gardens
Penberthy, William, L.R.C.P.Lond., Royal Veterinary College, N.W.
Perkins, Henry Bowen, L.R.C.P.Lond., 60, Doddington Grove, S.W.
Porter, Frederick Joseph William, L.R.C.P.Lond., Devereux Tower, Tower of London
Prall, John Henniker, L.R.C.P.Lond., Rochester, Kent
Pringle, Arthur Young, L.R.C.P.Lond., 36, Cambridge Gardens, W.
Pritchard, Edward Josiah, L.R.C.P.Lond., 28, Kingdon Road, N.
Proctor, William James, L.R.C.P.Lond., 2, Park Road, New Cross
Reid, Peter Macpherson, L.R.C.P.Lond., Middlesex Hospital
Robertson, Christopher, L.R.C.P.Lond., 9, Lambeth Palace Road
Robinson, William Henry, L.R.C.P.Lond., Clitheroe Castle, Clitheroe
Rollason, Abel, L.R.C.P.Lond., Holyhead Road, Handsworth
Ronald, Arthur Edwin, L.R.C.P.Lond., 83, Lambeth Palace Road
Scott, William Jermyn, L.R.C.P.Lond., 18, Castellain Road, W.
Sewarki, Hisao, L.R.C.P.Lond., 14, Richmoud Terrace, S.W.
Sharpley, John Ernest, L.R.C.P.Lond., The Abbey House, Louth
Simmonds, Durham Claude Somerville, L.R.C.P.Lond., East Woodhay, near Newbury
Spurrell, Charles, L.R.C.P.Lond., Carmarthen, South Wales
Sloggett, Harry Paynter, L.K.Q.C.P.I., 35, Stacey Road, Cardiff
Squire, Frank Henry, L.R.C.P.Lond., Colne House, Colchester
Stabb, Frederic Albert, L.R.C.P.Lond., 23, Vincent Square, S.W.
Stephens, Henry Woolcott, L.R.C.P.Lond., Langbargh, Woodford Green
Stevens, Cecil Robert, L.R.C.P.Lond., Manwood House, Honiton
Stoors, William Henry Townsend, L.R.C.P.L., Cambridge Lodge, Worthing
Swan, Charles Robert John Atkin, L.R.C.P.Lond., 10, Delamere Street, W.
Valentine, Thomas Harcourt Ambrose, L.R.C.P.L., Chichester Infirmary
Viret, Benjamin Pope, L.R.C.P.Lond., 115, Alexandra Road, N.W.
Wagstaff, Frank Alexander, L.R.C.P.Lond., Middlesex Hospital
Westmacott, Frederic Hibbert, L.R.C.P.Lond., Crompsall Grove, near Manchester
Wiggins, Charles, L.R.C.P.Lond., Meadowville, Sydenham Park
Wilding, Walter Frederick William, L.R.C.P.L., 7, St. Edmond's Rd., Bootle
Wilkinson, Robert, L.R.C.P.Lond., Newlay Grove, Horsforth, Leeds
Williams, John Robert, L.R.C.P.L., Porthywaen, Oswestry
Wooding, William Benjamin, L.R.C.P.L., 91, Albert Street, Regent's Park

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MR. ADAIR has given a donation of £500 for the purpose of improving the sanitary condition of the Wexford County Infirmary.

DURING the year 1889 the University of Kiev, in Russia, conferred the degree of "medical practitioner" (*Arzt*) on 102, and that of Doctor of Medicine on 3, persons.

IN January of the present year 103 students matriculated in the University of Dorpat; of these, 31 belonged to the medical faculty. The total number of students at Dorpat is 1,732, of whom 812 are medical.

IT has been decided to found a Dermatological Society at Vienna. A meeting with that object was held on February 6th, under the presidency of Professor Kaposi, and the rules of the new society were approved. The meetings will be held once a fortnight.

UNIVERSITY OF HELSINGFORS.—The Russian University of Helsingfors will celebrate the 250th anniversary of its foundation this year. It was founded at Abo in 1640, and was burnt down in 1820; the seat of the university was then transferred to the new capital of Finland.

NEW MEDICAL JOURNALS.—A new periodical entitled *Revue d'Orthopédie* will shortly appear in Paris, under the editorship of Drs. H. Petit and Kirmisson. It is also announced that a journal dealing with massage and electrotherapeutics is about to be published in Paris, under the direction of Dr. A. S. Weber.

GREAT sympathy is felt for Mr. John Parsons, F.R.C.S., senior medical practitioner of the borough of Bridgwater, whose wife was burnt to death in her bedroom on the evening of February 8th. The unfortunate lady, who was about 70 years of age, had taken a seat near the fire and had apparently fallen asleep; her clothes caught fire, and she died from the injuries received.

THE PASTEUR INSTITUTE.—During December, 1889, 120 persons were treated at the Pasteur Institute of Paris. Of these, 25 were bitten by animals who were proved by experiment to be rabid, 81 by animals certified to be so by a veterinary surgeon, and 14 by "suspected" animals. In 4 cases the bites were inflicted by cats, in all the others by dogs.

A GASTRONOMIC CONGRESS.—A "Universal Gastronomic Congress" will be held at Versailles this year. It will open on on March 23rd, and will last for a fortnight. It will include an exhibition of all kinds of food and drink, and the mode of preparing them. A special section will be set apart for the mineral waters of all countries.

PROFESSOR LUDWIG.—On January 31st Dr. C. Ludwig, the distinguished physiologist of Leipzig, celebrated the twenty-fifth anniversary of his installation as professor in that university. He received congratulatory messages from every part of Germany; the city of Leipzig made him an Honorary Burgher, and the King of Saxony conferred on him the Comthur Cross of the First Class and Star of the Albrecht Order.

INFLUENZA IN MADRID.—The epidemic of influenza, which was very severe in the Spanish capital up to the beginning of February, has gradually abated since then, and may now, according to the *Revista Clinica de los Hospitales*, be considered extinct. There are still, however, numerous cases of disease of the respiratory organs, and diphtheria, which has lately been comparatively in abeyance, is again on the increase.

CITY OF LONDON TRUSS SOCIETY.—The usefulness of this Society has been more than fully maintained during the past year, as is shown by the annual report, which states that no fewer than 10,065 patients were relieved during 1889, being an increase of 543 over the number of the previous year, and the largest number ever recorded in the history of the Society. The ages ranged from an infant of weeks to an adult, aged 107. The instruments applied were 10,113 in number.

BROCKWELL PARK, Herne Hill, has been virtually secured for the people of London. The area of seventy-eight acres has cost, with expenses, £122,050, towards which amount the County Council agrees to contribute £61,000, the Charity Commissioners £25,000, the Lambeth Vestry £20,000, the Camberwell Vestry £5,000, the Newington Vestry £5,000. As soon as the scheme receives the sanction of Parliament, this open space and playground will be thrown open to the public.

FOOTBALL CASUALTIES.—Two accidents occurred in a recent football match played between the Fulham and Stanley Clubs at East Acton—one described as a serious accident, necessitating the player's withdrawal from the contest; the other, that in which the leg of a player was broken. A like accident befell a player on Saturday, February 8th, in a match between the Torquay Athletic Club and Paignton Scarlet Runners. The match in this instance had been arranged for the benefit of a Paignton player who is suffering from a similar mishap.

THE Royal College of Physicians has an excellent system of fire-extinguishing apparatus connected to the constant pressure water mains in Pall Mall, enabling several jets to be thrown into any part of the building in case of an outbreak of fire, or, indeed, to attack any fire occurring in their neighbours' premises. The officers of the College are periodically drilled by one of Messrs. Merryweather's fire inspectors, and after each drill the secretary receives a printed report as to the condition of the fire appliances and the efficiency, or otherwise, of those taking part in the drill.

FIRST AID IN INDIA.—We have received from Sir William Moore a letter with reference to the review of his book *The Immediate and General Treatment of Accidents and Injuries*, which was published in the JOURNAL on January 25th. He states that the pamphlet had its origin in representations made to the Public Prosecutor and the Department of Police to the Bombay Government, and was written with the view of its being translated into vernaculars for distribution to the minor native officials and police. "Had the pamphlet," he adds, "been written for home consumption it would not have appeared precisely as it stands."

MEDICAL VACANCIES.

The following Vacancies are announced:

BOYLE UNION.—Medical Officer for Workhouse. Salary, £100 per annum. Applications to Mr. Odbert, Clerk of Union. Election on February 22nd.

BOYLE UNION.—Medical Officer, Boyle No. 2 Dispensary. Salary, £95 per annum, and fees. Applications to Mr. H. Lawrence, Honorary Secretary. Election on February 22nd.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Assistant Physician, must be a Fellow or Member of the Royal College of Physicians, London. Applications to the Secretary, T. Storrar Smith, 24, Finsbury Circus, E.C., not later than March 4th.

CITY HOSPITAL FOR INFECTIOUS DISEASES, Newcastle-upon-Tyne.—Resident Medical Assistant for one year, subject to re-election: £50 per annum first year, £70 second year, board, lodging, and washing. Applications to the Medical Officer of Health, Town Hall, Newcastle, not later than February 28th.

CLES AND DISTRICT MEDICAL ASSOCIATION.—Assistant Medical Officer. Applications to the Secretary, Byron Street, Patricroft.

FARRINGDON GENERAL DISPENSARY, etc., 17, Bartlett's Buildings, Holborn.—Honorary Surgeon, Members or Fellows of Royal College of Surgeons. Applications by March 8th to J. Lewis, Secretary.

GOSBURY DISPENSARY, Brewer Street, Goswell Road.—Surgeon; Fellow or Member of the Royal College of Surgeons. Salary, £40 per annum. Applications not later than March 3rd to H. Moreland, Honorary Secretary. Further information on personal application.

GAINSBOROUGH FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Resident Medical Officer. Salary, £160 per annum, with midwifery fees, house rent, rates, coals, gas, etc. Age not under 28 years. Applications to Henry Cuckton, 31, Cross Street, Gainsborough.

HAMPSTEAD PROVIDENT DISPENSARY. New End.—Medical Officer. Applications on or before March 1st to the Secretary, 23, High Street, Hampstead. The elected candidate to reside in Hampstead.

HIGHWORTH AND SWINDON UNION.—District Medical Officer and Public Vaccinator to the 1st District. Salary, £70 per annum and fees. Applications by February 22nd.

LIVERPOOL NORTHERN HOSPITAL—House-Physician. Salary, £80 per annum, with residence and board. Applications to be addressed to the Chairman of the Committee not later than February 27th.

LUTON FRIENDLY SOCIETIES' MEDICAL INSTITUTE. — Assistant Medical Officer. Salary, £120 per annum, rising £10 per annum to £150. All particulars of the Secretary, Mr. Thomas Keen, 12, Grove Road, Luton, Beds.

MANCHESTER SOUTHERN HOSPITAL FOR DISEASES OF WOMEN AND CHILDREN, Clifford Street.—Resident House-Surgeon; term not less than six and not exceeding twelve months; must reside near the hospital. Applications to George William Fox, 53, Princess Street, Manchester.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Assistant Dental Surgeon, holding L.D.S. diploma. Applications by February 25th to Arthur G. Klugh, Secretary.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—House-Surgeon, holding L.D.S. diploma. Applications by February 25th to Arthur G. Klugh, Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury.—House-Physicians, Senior and Junior. Salary of the former, £100 per annum; of the latter, £50 per annum, with board and apartments in the hospital in each case. Applications to be sent to B. Burford Rawlings, Secretary and General Director (of whom all particulars can be obtained) not later than February 28th.

NORTH STAFFORDSHIRE INFIRMARY.—House-Physician. Salary, £100 per annum. Applications to the Secretary not later than March 1st.

NOTTINGHAM GENERAL HOSPITAL.—Resident Medical Assistant. Qualified man or fourth year student. Appointment for six months. Board, lodging, and washing. No salary. Applications by February 17th, addressed to the Secretary.

OWENS COLLEGE, Manchester.—Lecturer on Diseases of the Larynx. Applications under cover to the Registrar, of whom all particulars may be obtained, should be received not later than March 10th.

PARISH OF BIRMINGHAM.—Resident Medical Officer. Salary, £150 first year, rising £10 yearly to £200 per annum, rations, apartments, washing, and attendance. Applications not later than February 15th to Walter Bowen, Clerk.

PLYMOUTH PUBLIC DISPENSARY.—Second Honorary Physician. Applications by February 17th.

POCKLINGTON UNION.— Medical Officer of Health to the Market Weighton District of the Pocklington Union Rural Sanitary Authority. Salary, £22 per annum. Applications not later than February 27th.

POCKLINGTON UNION.—Medical Officer for the No. 2 (Market Weighton) District of the Pocklington Union. Salary, £19 per annum. Applications by February 27th.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.—Two Resident Physicians for indoor duty. Duties commence May 1st next. Applications to be lodged not later than February 22nd with Messrs. Henry and Scott, 20, St. Addrews Square, Edinburgh.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon, unmarried. Salary, £80 per annum, with board, lodging, and washing. Applications to Thomas Taunton, Secretary, not later than March 1st.

WOLVERHAMPTON EYE INFIRMARY.—Resident Assistant, wishing to improve his knowledge; must be competent to administer anæsthetics. Applications addressed to the Chairman, Eye Infirmary, Wolverhampton, not later than March 3rd.

MEDICAL APPOINTMENTS.

ANGUS, Charles, M.B.Aberd., C.M., appointed Assistant Professor of Anatomy at the University of Aberdeen.

AUCHINLECK, Hugh A., L.R.C.P., L.R.C.S.Edin., elected a Physician to Mercer's Hospital, Dublin, *vice* C. F. Knight, M.D.

BAILEY, H. Bennett, M.D.Brux., M.R.C.S., L.S.A., reappointed Medical Officer for the Spittlegate District of the Grantham Union.

BARFORD, Arthur Morton, L.R.C.P., M.R.C.S., appointed Medical Officer for the Bracknell District and Workhouse of the East Hampstead Union.

BERRY, H. Poole, M.B.Lond., M.R.C.S., reappointed Medical Officer of Health to the Grantham Urban District.

BLAXALL, Frank Richardson, M.R.C.S.Eng., L.R.C.P., M.B.Lond., appointed Junior Assistant Medical Officer to the St. Pancras Infirmary.

BROCKLESBY, R., L.R.C.P.Edin., M.R.C.S., appointed Police Surgeon to the Borough of Great Grimsby.

BROWNE, David, M.R.C.S.Eng., L.K.Q.C.P.I., appointed Medical Officer to the Workhouse, New Winchester Union.

CHURCHILL, John Foot, L.R.C.P., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Chesham Local Board.

DAKEYNE, Thomas E., L.R.C.P.Edin., L.M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Leek Rural Sanitary District.

DAVIS, Gateward C., M.R.C.S., L.R.C.P., appointed Junior House-Surgeon to the Royal London Ophthalmic Hospital.

DAY, Edward J., M.R.C.S., L.S.A., reappointed Medical Officer of Health for the Borough of Dorchester.

EASTON, George F., M.D., L.R.C.S.Edin., reappointed Medical Officer of Health to the Alnwick Urban Sanitary Authority.

ELLIOTT, R. H., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Surgeon to the Bedford General Infirmary, *vice* Henry Skelding, B.A.Camb., M.B., B.C., M.R.C S.

FARDON, J. H., M.R.C.S., L.R.C.P.Lond., appointed Junior House-Surgeon to the Liverpool Stanley Hospital.

FARMER, Frederick Reginald, M.R.C.S.Eng., L.R.C.P.Lond., elected Assistant Medical Officer to the Fisherton House Asylum, Salisbury, *vice* J. D. Price, L.R.C.P., M.R.C.S.

FLOOD, E. F., L.R C.S.I., appointed Apothecary and Registrar to Louth Infirmary, *vice* Dr. Scott, resigned.

GEORGE, R. Julyan, M.B., C.M.Edin., appointed Medical Officer and Public Vaccinator for the No. 1 District of the Bodmin Union, *vice* Charles Williams, L.R.C.P. & S.Edin., L.S.A., resigned.

GIBSON, James, M.B.Glasg., C.M., L.F.P.S., appointed Medical Officer of Health to the Greetland Urban Sanitary Authority, *vice* J. Vere C. Denning, L.K.Q.C.P.I., resigned.

GORDON, John, M.D.Aber., C.M., appointed Assistant Professor of Materia Medica at the University of Aberdeen.

GRIFFITH, A. Hill, M.D.Aberd., C.M., appointed Surgeon to the Royal Eye Hospital, Manchester, *vice* Dr. P. H. Mules, resigned.

GRIFFITH, Alfred Leete, M.D., etc., appointed Medical Officer and Public Vaccinator to the Kensal Town District, Chelsea Parish.

GROTH, Ernst, M.D.Berlin., L.R.C.P.Lond., elected Honorary Physician to the Western Dispensary of the German Hospital, *vice* M. Castaneda, M.B., M.R.C.P.Lond., resigned.

HIGGINSON, J. W., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the General Hospital, Birmingham.

HILLIS, John D., F.R.C.S., appointed Surgeon to the Throat Hospital, Dublin.

HUSBAND, Charles, M.R.C.S., L.S.A., reappointed Medical Officer of Health to Ripon City.

JACKSON, J. B., M.D., appointed Deputy Medical Officer for No. 2 District Coventry Union until election, *vice* F. J. Malden, M.D., M.R.C.S., resigned.

KINGSTON, P. J., M.R.C.S., L.R.C P Lond., appointed House-Physician to the Royal Chest Hospital, *vice* C. E. Russel Rendle, resigned.

LUCAS, Herbert, M.R C.S., L.S.A., reappointed Medical Officer of Health to the Huntingdon Urban Sanitary District.

LOUGH, J. J., M.B., appointed Consulting Physician to the Royal Masonic Institution for Boys at Wood Green, N.

MANLEY, J. Herbert H., M.B., B.C.Cantab., D.P.H., appointed Medical Officer of Health to the West Bromwich Urban District, *vice* J. Manley, M.R C.S., L.S.A., resigned.

MORRISON, Alexander T., appointed Resident Surgeon and Apothecary to the Buckinghamshire General Infirmary, Aylesbury, *vice* Henry Caudwell, resigned.

NEWBY, Thomas, M.D.St. And., M.R.C.S., L.S.A., appointed Medical Officer of Health to the enlarged Borough of Great Grimsby and the Port Sanitary Authority.

NEWCOMBE, Frank, M.R C.S., L.S.A., reappointed Medical Officer for the Ancaster District of the Grantham Union.

NEWMAN, H. T., M.D., L.R.C.S.I., appointed Medical Officer for the Audlem District of Nantwich.

OSBORN, Frank Charles, L.R.C.S.Edin., L.S.A., reappointed Medical Officer of Health to the Urban Sanitary District of Bognor.

PALEY, F. J., M.D.Lond., M.R.C.S.Eng., L.R.C.P.Lond., appointed Honorary Surgeon in Ordinary to the Brighton and Hove Lying-in Institution.

PRATT, John Wyatt, L.R.C.P.Edin., L.M., M.R.C.S., L.S.A., appointed Medical Officer of Health to the Wiveliscombe Urban Sanitary District, *vice* Charles Randolph, L.R.C.P.Edin., resigned.

SMITH, James Johnson, A.S.A., appointed Dispenser at the North Dispensary of the Marylebone Guardians.

SMITH, K. R., M.D., appointed Medical Officer to the Halwell District of the Totnes Union.

TAYLOR, Lot Albert, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Kingswinford District of Stourbridge Union.

TIBBITS, John, M.D.St. And., M.R.C.S., L.S.A., elected a Medical Attendant of the Warwick Provident Dispensary and Cottage Hospital, *vice* Dr. Guthrie Rankin, resigned.

TURNER, Arthur, L.D.S.Ed., appointed Honorary Dental Surgeon to the Buckinghamshire General Infirmary.

WATSON, Joseph Riley, B.A.Camb., M.B.Edin., C.M., appointed Medical Officer for the Harrogate District of Knaresborough.

WATSON, W. R. K., M.B. & B.S., appointed Assistant House-Surgeon to the General Hospital, Birmingham.

WILLAN, George T., M.R.C.S., L.S.A., reappointed Medical Officer and Public Vaccinator to the No. 2 District of the Melton Mowbray Union.

WILSON, Albert, L.R.C.P., M.R.C.S., appointed Medical Officer for the East District of Kingston-on-Hull.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Gilbert Smith will open a discussion on Influenza.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor B. T. Lowne: On the Embryology and After-development of Insects. Lecture I.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Mr. Bernard Pitts: On the Modern Treatment of Certain Surgical Deformities in Children.

TUESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Leprosy.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Dr. Colman: Compression Myelitis with Ascending and Descending Degenerations. A second case without Secondary Degenerations. Dr. West: Large Cancerous Tumours of the Omentum with Miliary Cancer of the Peritoneum and Mesentery. Mr. Croft: Aneurysm of Popliteal Artery associated with Sarcoma. Mr. Willett: Embolic Aneurysm of Gluteal Artery. Mr. Eve: Ancient Egyptian Bones with Rheumatic Periostitis, and Senile Symmetrical Atrophy of Skulls. Mr. Johnson: Two cases of Persistent Thyroid Duct. Dr. Dalton: Chronic Lateral Invagination of the Colon following a Small Cancerous Tumour. Card Specimens:—Dr. Mackenzie: Meckel's Diverticulum producing Strangulation. Dr. Dalton: Œsophagus and Stomach from a case of Carbolic Acid Poisoning.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor B. T. Lowne: On the Embryology and After-development of Insects. Lecture II.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. F. T. Roberts: On Morbid Conditions of the Pleura. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Q. Silcock: On Ophthalmoscopic Cases

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 7 P.M.—Hon. Ralph Abercromby: Dust and Cloud. Captain D. Wilson-Barker: Cloud Nomenclature. Mr. Eric S. Bruce: An Optical Feature of the Lightning Flash.

THURSDAY.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Mr. W. H. A. Jacobson: On the Surgical Sequelæ of Fevers.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Dr. Bastian: Some points in Prognosis and Treatment of Cases of Hemiplegia. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Mr. Bernard Pitts: On the Modern Treatment of Certain Surgical Deformities in Children.

NEUROLOGICAL SOCIETY OF LONDON, The National Hospital, Queen Square, 8.30 P.M.—Discussion: Therapeutic Value and Method of Treatment by Suspension. Papers by Drs. Russell and Taylor, Dr. Sherrington, and Dr. de Watteville.

FRIDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor B. T. Lowne: On the Embryology and After-development of Insects. Lecture III.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. F. T. Roberts: On Morbid Conditions of the Pleura.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: On Ringworm: Its Recognition and Treatment.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d which sum should be forwarded in Post Office Order or stamps with the notice no later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

SHEE.—On February 9th, at Shelburne Lodge, Fethard, Co. Wexford, the wife of William Joseph Shee, L.K.Q.C.P.I., L.R.C.S.I., of a son.

MARRIAGES.

MILLS—WHITTINGDALE.—At St. Peter's Church, Saugor, Central Provinces, India, on January 18th, by the Rev. G. M. Davies, M.A., Bernard Langley Mills, F.R.C.S., M.S., only son of the late Rev. R. Twyford Mills, Rector of Halse, Somerset, to Florence Addis Louisa, second daughter of the late Lieutenant-General W. H. Freese, and widow of the late Captain T. V. Whittingdale, 5th Fusiliers.

SHEARER—KINGHORN.—At 4, Queen's Road, Aberdeen (the residence of the bride's grandmother), on February 5th, by the Rev. G. A. Smith, M.A., Queen's Cross Free Church, assisted by the Rev. H. FitzPatrick, B.D., Free Church, Keith (uncle of the bride), Johnston Shearer, M.A., M.B., C.M., Surgeon 27th Punjab Infantry, to Elizabeth Smith, eldest daughter of the Baillie Kinghorn, Mount Cottage, Aberdeen.

DEATHS.

CASKEY.—On February 5th, at Eastbourne, John Shaw Caskey, L.S.A.Lond., in his 50th year.

DAY.—On February 4th, at Davos-Platz, Switzerland, in his 30th year, Stewart Butler Day, sixth son of William and Elizabeth Day, late Resident Medical Officer to the Quebrada Railway and Copper Company, Venezuela.

STAPLE.—On January 30th, at 71, Old Market Street, Bristol, Mary Hermine Harriette ("Mina"), the beloved wife of James D. Staple, M.R.C.S., L.S.A., and eldest daughter of Fred Blair Staples, Lieutenant-Colonel (late 93rd Highlanders), of Stockport, aged 24. R.I.P.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C , London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

QUERIES.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

BRIGADE-SURGEON F. W. L. HODDER, M.S. (Jersey) asks for particulars of a good abdominal belt adapted to support weak inguinal regions in a man.

A MEMBER writes: Will some member who has employed the method of injecting piles with carbolic acid explain how it acts, seeing that it causes such free bleeding that I am led to believe that the acid must be washed out with the blood?

MR. HERBERT L. EVANS (Oxford) asks for the name of any institution that would accept an idiot boy, dumb from birth, but not deaf. The parish have refused him; and he understands that idiot asylums have refused him, being dumb, whilst institutions for the dumb refuse him because he is an idiot.

T. M. W. asks where is recorded the case of a British soldier who was found unconscious on the field, was brought home, and remained completely comatose until, after some months, he was trephined, with immediate recovery of his senses, and—so the story goes—resumed utterance of a sentence in which he had been interrupted when struck down.

TREATMENT OF BORBORYGMUS.

YOUNG COUNTRY PRACTITIONER asks for hints for the treatment of the unpleasant noises in the abdomen consequent on gurgling of the intestines. He knows opium would be a good thing, but dangerous. He cannot find any reference to the disorder in Ringer, or any other of the usual textbooks.

ANSWERS.

MEMBER.—The Honorary Secretary of the Cremation Society of England is Mr. J. C. Swinburne-Hanham, 8, New Cavendish Street, Portland Place, W.

HYSTERICAL GALACTORRHŒA.

DR. JAMES T. NEECH (Tyldesley) writes: I would advise "F.R.C.S.I." to try the effect of an ordinary nipple shield. The condition he describes undoubtedly results from a reflex act produced by the irritation of the nipple when the child is applied to the breast. I think that a nipple shield, by preventing direct contact with the nipple, would greatly diminish that irritation. Being of a nervous temperament, whatever treatment "F.R.C.S.I." adopts, a strong assurance to his patient that the treatment will be successful will no doubt help to promote a cure.

DERIVATION OF "MICROBE."

A NOTTING HILL MEMBER.—"Microbe" is formed from the Greek words μικρός (small) and βίος (life). The term was proposed by Sédillot in 1878 for any minute organism, vegetable or animal.

M.R.C.P. EXAMINATION.

ALPHA.—1. *Parkes on Hygiene*, edited by De Chaumont. 2. It is as well to read a little of *Celsus*, so as to know something of his style; it certainly would not be worth while to wade through all the eight books; sometimes a passage is taken from Sydenham or Sir George Baker. 3. Latin is compulsory, and either Greek, French, or German, at the option of the candidate. 4. We cannot answer the question about the assistantship; the question ought to be addressed to the Registrar of the Royal College of Physicians.

SEA WATER AND THE NUTRITION OF MARINE ANIMALS.

IN reply to several correspondents, we may here state that the original article in which this subject is discussed, and to which we referred in the JOURNAL, is "L'eau de mer artificielle comme agent tératogénique," by MM. Pouchet and Chabry, *Journal de l'Anatomie et de la Physiologie*, Paris, May-June, 1889.

NOTES, LETTERS, ETC.

DR. MILLIGAN (Manchester) writes: Will you kindly make the following addendum to the report on abscess of the cerebellum following chronic otitis media: "The patient had previously been treated for suppuration of the middle ear by Dr. F. Cox."

THE HISTORY OF THE DISCOVERY OF THE CIRCULATION OF THE BLOOD.

A CORRESPONDENT, who signs himself "Corpuscle," asks to be informed where he "can get the best short account of the facts leading up to the discovery of the circulation of the blood." In reply, we know of no "short account" of this great subject which can be looked upon as in any degree complete or even intelligible. Perhaps the most interesting account is that given by the illustrious Harvey in his essay, *De Motu Cordis et Sanguinis*, which, with the rest of Harvey's writings, was admirably translated for the Sydenham Society (1847) by the late Dr. Robert Willis. A still more complete history of the subject has been given by Dr. Robert Willis in a volume entitled *William Harvey: a History of the Discovery of the Circulation of the Blood* (Kegan Paul and Co., 1878), and an epitome of the subject will be found in Dr. George Johnson's *Harveian Oration* (Smith, Elder, and Co., 1882), the main object of the oration being to defend Harvey against the monstrous charge of plagiarism brought against him by some modern Italians.

Now that we are referring to this most interesting subject, it may be well to remind some of our readers that great additions to our knowledge of the circulation have been made since the time of Harvey. Without the aid of the microscope, which in Harvey's time was not available, he could only surmise that the communication between the arteries and the veins occurred through what he called "porosities in the flesh." The Italian physiologist Malpighi was the first, with the aid of lenses, to demonstrate the capillary circulation in the lung and mesentery of the living frog.[1] Malpighi speaks of the appearances as beyond the power of his pen to describe ("qui calami subterfugiunt descriptionem"); and we can imagine with what delight Harvey would have witnessed what every medical student has now the opportunity of seeing, namely, the circulation of the blood in the magnified web of a frog's foot. The most important additions to our knowledge of the circulation since the time of Malpighi have been made within the last half century. In 1840 Henle first described the muscular middle coat of the small arteries; and subsequently Claude Bernard, Brown-Séquard, and others, by a series of ingenious and conclusive experiments, made known the function of the vaso-motor nerves and the arterioles. The history of these interesting discoveries is set forth in the first of Dr. George Johnson's Lumleian Lectures, which was published in the JOURNAL in 1877, and republished in the chapter On the Physiology of the Circulation, in the same author's *Medical Lectures and Essays* (J. and A. Churchill, 1887).

If there should be any amongst our readers who imagine that these recent discoveries have a merely theoretical interest, with which the practical man has little or no concern, we venture to assure them that without a competent knowledge of the regulating and controlling influence of the arterioles, both systemic and pulmonary, upon the movement of the blood, it is impossible to interpret correctly many of the most important modifications of the pulse. The influence of the muscular-walled arterioles upon the pulse in various morbid conditions has been referred to and explained by Dr. Johnson in his *Essay on Asphyxia* (J. and A. Churchill, 1889), which was lately reviewed in the JOURNAL (July 6th, 1889).

THE INFLUENZA EPIDEMIC.

DR. WILLIAM VAWDREY LUSH (Weymouth) writes: Since my last report influenza has become very general at Weymouth and Dorchester, the nervous type predominating—frontal headache, pains in the limbs and back, with fever, being the usual symptoms. Brigade-Surgeon Baker informs me of cases of this type appearing in the barracks at Dorchester, and to-day I have observed symptoms amongst my out-patients at the County Hospital. There has, however, been no death from influenza registered in the Dorchester district, but there have been three deaths registered from pneumonia.

MR. REGINALD POLLARD (Torquay) writes: The following personal experience of a successful attempt at cutting short the fashionable complaint may interest some:

January 9th. Awoke with pain in lumbar region and slight frontal headache; these increased during the day.

3 P.M. Muscular pains; general feeling of *malaise;* temperature 99.5° F.; took quin. sulph. gr vj.

6 P.M. Pains and frontal headache severe; temperature 100.2°; went to Turkish baths and was thoroughly well shampooed in a hot (not Turkish) bath.

8 P.M. Muscular pains much better; headache very severe (across the eyes); temperature 100°; got into hot blankets and took antipyrin gr.x.

9 30 P.M. Perspiring; temperature 99.5°; headache much better; repeated antipyrin gr.x. After this slept well and woke free from pain though rather weak, but by the middle of the day was quite well again.

A CORRECTION.

MR. G. BUCKSTON BROWNE (Wimpole Street) writes: In your otherwise very correct report of the proceedings of the last meeting of the Clinical Society I am made to say that in performing suprapubic cystotomy I have twice opened the peritoneal cavity. This is not the case; fortunately the accident has never happened in my practice. I said that it was an occurrence which might sooner or later happen to anyone frequently performing the operation, but that I had only once had difficulty in avoiding the peritoneum, and that was in a case where the operation was the second hypogastric cystotomy performed upon the same individual.

[1] *Marcelli Malpighii Opera*, Lond., 1687, pp. 141-2; and *Opera Postuma*, Amsterdam, 1700, p. 122.

Army Surgeons and Civil Practitioners.

MICROBE asks why an "Army Doctor" should be so persistent in trying to act as a civil practitioner, and why some of them (as in his case) have tried to oppose him on every ground, and even contract for clubs, etc.?

Treatment of Cystitis.

DR. G. R. GILRUTH (Edinburgh) writes: In the JOURNAL of February 8th "T.M.R." extols the effects of copaiba in this somewhat intractable disease. One thing is certain, however, and that is, it cannot be looked on as a specific in cystitis. A few weeks ago an opportunity was afforded of watching the effects of this drug. No doubt the patient expressed the opinion that he felt better whilst taking it; but it neither improved the condition of the urine nor enabled the patient to retain his water longer than about half an hour at a time, and it brought out a very copious eruption. The liq. potass. and tinct. hyos. enabled him to retain his urine for about two hours. Washing out the bladder with a largely diluted solution of carbolic acid has a good effect in these cases.

Clinical Teaching in Dublin.

MR. W. GEM, L.K.Q.C.P. (City of London Infirmary) writes: I know from experience that notes are taken in the Dublin hospitals, and if a man wants them he can get them; but it is too much trouble for some students to avail themselves of such notes on account of the time it entails, which is nevertheless time well spent. Such an unwarrantable statement without proof only shows you the hardships Irish graduates and diplomates have to contend with simply through unfounde i statements made by their own members. I have had experience of both countries, and as an Englishman I consider the clinical teaching given in Dublin is quite equal to London. I believe in reformation but not destruction, and not do, as "Irish Surgeon," would, condemn the Dublin Hospitals *in toto*.

Toogood v. Wilkes.

THE following subscriptions have been received:—

	£	s.	d.
Dr. F. W. Coates	2	2	0
Dr. Lardner Green	0	5	0
Dr. J. Kelland	1	1	0
Dr. E. Kingscote	1	1	0
Dr. James Clifton	0	10	0
Dr. Harcourt Coates	1	1	0
Dr. L. T. Luckham	0	10	6
Dr. Eddowes	0	10	7
Dr. Penruddocke	1	1	0
Dr. F. Fawson Lee, Salisbury	5	5	0
Dr. Blackmore	1	1	0
Dr. J. E. Montague Finch, Leicester	1	1	0
Dr. G. F. Chadwick, Codford St. Mary	0	10	0
	15	19	1

Re Dr. Frederick Moon: An Appeal.

THE following subscriptions have been received since the publication of the list in the JOURNAL of February 1st:—

	£	s.	d.
C. H. Golding-Bird, F.R.C.S.	2	2	0
Claude Wilson, M.D.	1	1	0
Victor A. Jaynes, M.R.C.S.	1	1	0
John Rand, F.R.C.S....	1	1	0
Maurice G. Evans, M.D.	1	1	0
H. A. Latimer, M.R.C.S.	0	10	6
	6	16	6
Subscriptions previously announced	112	0	0
	118	16	6

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CLINICAL REMARKS
ON
PSEUDO-PERITONITIS AND EPILEPSY IN HYSTERIA.

Read before the South London District of the Metropolitan Counties Branch.

By JOHN SYER BRISTOWE, M.D., F.R.S.,
Senior Physician, St. Thomas's Hospital; and Senior Censor, Royal College of Physicians.

The paper which I am about to read this evening will be devoted mainly to the narratives of two cases which came into the hospital within a few days of one another, which presented so many points in common that, even up to the time of their dismissal, I regarded them as being cases of the same kind, but of which later developments proved, I think, pretty clearly that while my diagnosis with respect to one was correct, my diagnosis with respect to the other was altogether erroneous. I propose, in the first instance, to give an account of each case during its first sojourn in the hospital; in the second instance, to trace the subsequent history of each; and, in the third instance, to discuss the phenomena of the case in respect of which I was mistaken.

E. W., a married woman, aged 28, was admitted under my care on November 10th, 1888. Though supposed to be delicate, her only serious illness previous to the present one, was apparently the result of a miscarriage three years ago. The symptoms she presented then were much like those of the present illness, were attributed by her medical attendant to inflammation of the womb, and kept her confined to bed for nine months. A year later she was delivered of a still-born child at term.

Her present illness came on suddenly three days before admission, with general pain and tenderness in the abdomen, and was attributed by her husband to her having had to get up frequently in the night to attend upon him on account of an accident from the results of which he was suffering. She had complained of pain and tenderness in the belly ever since, with sickness and diarrhœa, and some difficulty in micturition. The catamenia appeared on the day of admission.

She was a fairly well-nourished woman, with an expression of great distress, complaining of pain and tenderness in the belly, and difficulty in passing water. She lay on her back with her knees drawn up, breathing irregularly and shallowly at the rate of eighteen in the minute, and with the intercostal muscles only. The tongue was dry and coated, and there were sordes on the teeth and lips. Her abdomen was somewhat swollen, tense, and with rigid parietes, and very tender. The pain occupied no particular spot, the tenderness was general. There was no dull area or evidence of tumour, and no sign of the presence of fluid. The lungs and heart were healthy; urine clear, acid, 1020, free from albumen. Examination *per vaginam* showed fixation of the uterus, and a little roughness about the os. Pulse 118, temperature varying during the day from 101° to 101.8°.

During the next five days her symptoms presented no great change. Her pain was less, and her bowels were confined owing, doubtless, to periodical exhibition of morphine; but her abdomen continued more or less hard and generally tense. She lay on her back with her knees drawn up and inactive diaphragm. She was occasionally sick, and occasionally suffered from hiccough; her tongue remained coated; her pulse ranged from 80 to 112, and her temperature from 99° to 101.2°. Then she began to improve; her sickness and hiccough ceased; her abdomen got softer and less tender; her temperature fell to the normal; her bowels, after an enema, became somewhat loose, her tongue cleaned, and desire for food returned. But as the abdomen became generally softer and less tender, a lump was detected in the right iliac fossa, which had never previously been recognised, and of which there could be little doubt that it indicated the presence of typhlitis.

She remained in the hospital down to December 12th, and, during the latter part of her stay, her temperature was generally normal or sub-normal, though occasionally rising to 99°. She improved steadily in health, and although, owing to the increasing flaccidity of the abdomen, the lump in the iliac fossa became more and more apparent for a time, it had almost entirely disappeared at the date of her discharge, and was wholly free from tenderness or pain. When she left the hospital she appeared, as far as her general health was concerned, to be quite well.

This was regarded from the beginning as a case of peritonitis, and was treated as such. But the cause was not recognised until the peritonitic symptoms were subsiding, when the discovery of a lump in the cæcal region rendered it probable that it was ovarian or cæcal mischief; the latter view was adopted. The case was interesting in the fact that the symptoms of general peritonitis were not preceded by any local symptoms.

The second case is as follows: B. G., a girl aged 19, was admitted on November 15th, 1888 (five days after the admission of the former patient). Four years previously, after a fright, she had been attacked with fits, said to be "cataleptic." She had about 100 during the first month, then they diminished in frequency; and latterly she had been almost entirely free from them. She had been under treatment at times at the National Hospital for the Paralysed and Epileptic, where her fits were said to have been regarded as hystero-epileptic. In the previous May she had had an illness which lasted for six weeks, during which she brought up a little blood from time to time, and was supposed to be consumptive. The catamenia came on two days before the beginning of the present illness. On the 12th (three days before admission), being at the time in good health, she sneezed while lifting a bedstead, and was attacked with sudden pain across the upper half of the abdomen; and she fell down across the bed on her stomach, where she lay unable to move on account of the severity of her pain. She was removed to bed, where she continued in severe pain and prostrate until the day of admission. During the greater part of this time she did not vomit, and had no difficulty in micturition; the bowels were unrelieved. On the 15th, prior to admission, she became suddenly much worse, and retching for the first time came on.

The patient was well nourished, had an anxious and distressed expression, and complained of general abdominal pain. She lay on her back with her knees drawn up; the abdomen distended and tense, and extremely tender on pressure; and the breathing almost wholly thoracic. There was no dulness to be detected, nor was there any evidence of tumour or of fluid effusion. Nothing abnormal was detected either *per vaginam* or *per rectum*. There was no reason to suspect the presence of intrathoracic disease. Tongue dry, thinly coated; pulse 124; temperature 99°.

November 16th. She had been frequently sick between 4 and 9 A.M. this morning. Her face was flushed, and her look still anxious. Her general condition and symptoms had undergone no material alteration, but she still retched at times, while her tongue had become moister, her pulse had fallen to 104, and her temperature to 97.6°. Her respirations were 22. She continued in much the same condition during the remainder of the day; her temperature remained normal; she was occasionally sick, and her water had to be drawn off. She remained on the whole (but with occasional intervals of amendment or aggravation) in much the same state as on admission down to the 22nd. During the whole of this time her abdomen was swollen, tense, generally painful, and extremely tender; she lay on her back, and her respiration was almost entirely thoracic; she continued very sick; her bowels were unrelieved, and her water had to be removed by catheter. Her pulse varied from 92 to 120, and her temperature was usually normal or subnormal, but on the 17th ranged generally between 99° and 100.4°. She was treated at first with the periodical subcutaneous injection of morphine, but latterly opium was given by the mouth.

On the 17th, twelve leeches, followed by poultices, were applied to the abdomen with much temporary relief; subsequently an ice-bag was applied, also with apparent benefit.

About the 22nd her abdominal pain and tenderness began to subside, she lost her sickness, she recovered the power of passing her water, and she began to take milk and other fluid foods without difficulty. On the 23rd the bowels were relieved for the first time by means of an enema. On the evening of the 22nd an ill-defined lump, or rather area of resistance, was observed above the right groin; and this was still detectable for several days subsequently. But there was no definite tumour, and the tenderness was no greater there than elsewhere.

By the 27th the abdomen had recovered its healthy condition, and no lump whatever could be felt in it. Her bowels were relieved by enemata; she took food well, and was, in fact, convalescent. She was discharged well on December 8th.

I need scarcely say, perhaps, that this case, like the other, was

regarded as a case of peritonitis; and that the detection of an ill-defined lump in the neighbourhood of the cæcum, so soon as the general tenderness had subsided and the abdominal walls had become flaccid, led me to believe that in this case, as in the other, the peritonitis had been induced by disease of the vermiform appendage.

If nothing more had occurred, I should have regarded the two cases as absolutely identical, and should have stored them up in my memory as typical examples of peritonitis secondary to disease of the cæcum, but coming on antecedently to any symptoms referable to the cæcum.

On June 2nd, 1889 (about six months after her dismissal), E. W. was again received into the hospital. It appeared that in the interval she had had two recurrences of peritonitic symptoms; one soon after leaving the hospital, and one towards the end of March. Her present attack began on May 25th. On admission she presented the characteristic symptoms of peritonitis: anxious look, dorsal decubitus; tense, tender, and painful abdomen; thoracic respiration, vomiting, retention of urine, and constipation. The tenderness was greatest in the lower part of the right side, and there was distinct sense of resistance there. Her pulse varied from 84 to 120, and her temperature from 100° on coming in to 105° at midnight. It is sufficient for me to say that the patient went on badly, and died five days after admission, on June 7th. Although nominally under my care, I did not happen to see her on this occasion, and am, therefore, not responsible for her treatment. But I gather that for the first two or three days she seemed to be improving with treatment, and her temperature fell; but that after that collapse set in rather rapidly, and an operation, which might have been of service at the beginning, was then deemed inadvisable.

Necropsy.—The peritoneum presented many old adhesions, the result of former peritonitis. There were also slight evidences of general recent peritonitis. In the pelvis and right iliac fossa the parts were bound together by a considerable quantity of buttery lymph; in the former situation a few small collections of pus were observed; in the latter there was no pus, but the cæcum and small intestines were welded into a mass. The vermiform appendage was thickened and ulcerated, and presented a small perforation, but no concretion could be found. The right ovary formed a thick-walled cyst the size of a hen's egg; the left (about the same size) presented several cysts filled with caseous matter. There was no important disease of any other organ.

The correctness of the original diagnosis in this case was thus unfortunately confirmed.

I will now return to the case of B. G. She had left the hospital apparently well on December 8th. About a month later, on January 10th, 1889, she was brought back late in the evening. Unfortunately, the history of her case during this month has been lost or mislaid; but I believe she had remained well until a day or two before admission, when she had been seized with recurrence of her abdominal symptoms, and shortly afterwards with fits, such as she had been liable to for some years. These fits, though occurring at other times, had always been liable to come on during the menstrual period. She had now been menstruating for two days.

After being warded she lay on her back, with the legs extended. Her cheeks were flushed, her eyes half closed; her breathing was shallow, thoracic, irregular, and jerky, and about 32 in the minute. She was continually retching, but only brought up a small quantity of brownish offensive fluid. The tongue was coated but moist. The abdomen was much distended and excessively tender; it was universally resonant. Every now and then she ceased breathing for a few seconds, becoming first rigid and then slightly convulsed, and unconscious. Each fit lasted only a few seconds. Pulse 92, temperature 98°. She was ordered fifteen leeches to the abdomen and a morphine injection.

January 11th. She passed a bad night, had many slight fits, complained of much pain and tenderness in the belly, and was constantly vomiting. As she retained nothing, she was ordered to be fed with nutrient enemata. There was still pain, tenderness, and distension of the belly, and sickness. Her pulse was 112, weak; her respirations about 40, shallow, explosive, and irregular; her urine had a specific gravity of 1022, was alkaline, phosphatic, and free from albumen. Her temperature in the early morning was only 95°, but it rose later in the day to 98.6°.

From this date until the 17th she continued, on the whole, without much change or any obvious improvement. She suffered from frequent fits, coming on irregularly night and day, and often in groups of two or three; her abdomen remained swollen, painful, and tender; she frequently vomited, and had to be fed almost entirely with nutrient enemata; her tongue remained coated; her respirations were variable in frequency, and mainly thoracic; her pulse ranged from 72 to 130; her urine had to be removed by catheter, and continued free from albumen; her bowels remained unrelieved, and the temperature varied generally between 97.2° and 98.8°. On the afternoon of the 16th, however, it rose to 100.2°, and it reached 101.4° at midnight; the next day it rose to 102°. During the last day or two of this time she was taking milk in small quantities and at frequent intervals.

On the 18th, although the temperature rose to 100°, she was much better; she could lie on either side, she had no sickness, and she was able to take food freely and to retain it. The fits continued.

After this, all symptoms supposed to indicate the presence of peritonitis subsided, and nothing arose to confirm the suspicion, formerly entertained, that her peritonitic symptoms had any relation to typhlitis. The fits, however, continued. These varied in severity, but were all of them apparently epileptic. They came on either without warning, with a sense of faintness, or with twitching of some of the muscles of the hand and arm. They were occasionally ushered in with a plaintive cry, once with three cries. During the beginning of a fit respiration ceased for some seconds, and she generally got livid in the face; she presented tonic convulsion of the face, head and neck, and limbs, the chin was generally thrown over towards the left, and the eyes turned strongly in the same direction and upwards; her arms got stiff, sometimes extended, sometimes flexed on the chest, sometimes one or other being drawn up slowly towards the head, with the thumbs thrown across the palms, and the fingers more or less firmly closed upon them. The legs also became rigid. Clonic convulsions of more or less severity followed, with noisy respiration; and occasionally she bit her lip in this stage, and occasionally passed her water. The pupils remained small and active; the conjunctivæ rarely, if ever, became wholly insensitive. The fits lasted from one to about five minutes, and as they were passing away, the patient perspired profusely, and exaggeration of tendon reflexes, and generally ankle and patellar cloni were observed. The convulsive symptoms varied a good deal in their seat of onset, and in their distribution in different fits. To the best of my belief they were epileptic, and I think I am justified in saying that Dr. Hughlings Jackson, who occasionally at this time visited my wards with me, and saw the patient in two or three of her fits, admitted that, although perhaps they were not typical epileptic fits, still they were essentially epileptic.

On February 5th it was noted for the first time, after one of her fits, that there was impaired sensation all down the right side of the body. This observation led to a more careful examination of the condition of the patient's sensory functions.

On the 8th it was ascertained that she was suffering from imperfect right hemianæsthesia. Sensation was blunted on that side. Although she could feel anywhere on the affected side; she had no sense of pain on being pricked with a pin. Her taste was defective on the same side, so that she could not taste with the right half of the tongue either sugar, salt, tartrate of potash or quinine. Her colour vision was also imperfect.

On the 9th a more careful examination was made. Light touches with the blunt end of a penholder were not perceived on the right side; the prick of a pin was not felt as pain; a cold or hot spatula gave the impression of cold or heat; but when of the temperature of the blood it was not felt. On again testing her vision it was found that the visual field of the left eye was much contracted. The field for white was included for the most part within the 30° circle, that for blue wholly within the 10° circle; and that for green occupied little more than a mere point in the very centre. In the right eye, on the other hand, the field for white was included within the 10° circle, and colour was not recognised even at the centre.

On the 12th the field of the right eye for white had become considerably enlarged, and red could be distinguished within the 10° circle.

She remained in the hospital until April 24th, at which time it was noted that, although she still suffered from fits, these had diminished in frequency; that she was anæsthetic throughout the right side, excepting about the face; that there had been no return of abdominal symptoms; and that her general health had greatly improved.

She was admitted for the third time on May 11th, 1889. She

stated that she had had pains in the abdomen off and on ever since she left, and that she had had only three fits. On the evening of the 9th she had crab for tea; and in the night woke up in severe pain. The pain was general over the abdomen, but worse on the left side, and had a "dragging" character. The abdomen became swollen and tender. The bowels had not been relieved since the 7th, and she had not passed water since the pain came on.

On admission (about noon) the patient was writhing in apparently great agony, groaning, and frequently retching. The legs were drawn up, and respiration was entirely thoracic. The abdomen was much and uniformly distended, and extremely tender to the touch, especially in the left iliac region. She was examined under chloroform, and had a fit while it was being administered, but nothing unnatural was discovered in the abdomen. Tongue dry; pulse 75, full; temperature 100°. She was anæsthetic throughout the whole of the right side. Water removed by catheter.

The next day (the 11th) she was much better. Her tongue was moister, her temperature was normal, and she passed water voluntarily. She had lost her sickness, and her abdomen was less swollen and less tender, and her breathing was more abdominal than it had been. The bowels had not been open since admission, and she had some headache. She improved rapidly; her bowels were moved by an enema on the 14th; and on the 15th she was discharged well, excepting that her anæsthesia continued. She had two fits while in the hospital.

On November 13th, 1889, she was admitted for the fourth time. She had continued to have fits at the rate of three or four a week ever since she left; but she applied for admission on account of violent jerky movements of the limbs, head, and trunk, and stammering, which had come on about a month previously. She looked fairly well, had no abdominal pains, and no anæsthesia. She presented irregular violent clonic movements coming on from time to time, and implicating her trunk and limbs. The muscles of the eyes and the respiratory muscles were not affected. The tongue twitched violently when protruded, and her lips partook in its movements. She had much hesitation in speech, and some stammering. She improved under treatment; and left apparently cured on the 17th. She had three fits while in the hospital.

The above two cases interested me very much at the time when they came in the hospital together, for they both appeared to me to be cases of peritonitis coming on in young fairly healthy women without obvious cause, but in which (from the results of former experience) I thought it not unlikely that the peritonitis was due either to perforative disease of the vermiform appendage, or to some ovarian mischief. The further progress of the former case during its first residence in the hospital confirmed my suspicions, and the further progress of the latter also I thought pointed, though not so conclusively, in the same direction; and, as I have already said, if I had never heard anything more of the patients, their cases would have been pigeon-holed in my memory as examples of the same pathological conditions. The unfortunate result of the former case put the exact nature of it out of the region of controversy. In regard to it, I can only say now that I wish I could have persuaded the patient to have an operation performed when she was first under my care, or that an operation had been thought advisable during her later fatal illness. I do not quote the case as one which we can look back on with much sense of satisfaction, but it has been outside the scope of my paper to enter into details concerning it, and I have not, therefore, given the grounds which determined those who watched over her to refrain from operative procedure.

When the second patient came into the hospital for the second time, I was still under the impression that she was suffering from peritonitis, and treated her accordingly. But the threatening abdominal symptoms soon passed away, and the epileptic fits which had accompanied the other symptoms from the beginning became the prominent feature in her case. Of course, it was quite possible that a person liable to epileptic fits should also suffer from peritonitis. But when, in the course of her case, it was discovered, almost by accident, that she had hemianæsthesia, and further examination showed that there was loss of taste on the same side of the mouth, and optical phenomena which are common as a feature in hysteria, a different explanation of her various maladies naturally presented itself for consideration.

That she was distinctly hysterical was further shown when, at a later period, she came under treatment for spasmodic muscular movements, and for stammering. I came to the conclusion, after reconsidering the facts of her case, that all her attacks suggestive of the presence of peritonitis were really hysterical, and of the nature of the more localised abdominal pains and tenderness which are common in hysteria; and that she had never had any abdominal inflammation at all—a conclusion which seemed to me fortified by the facts that there was no discoverable starting point for the successive attacks; that the temperature, with few exceptions, was normal or subnormal; and that on the third occasion her symptoms, though beginning with equal severity, subsided without special treatment in the course of three or four days. Were the fits also hysterical? The convenient term "hystero-epilepsy" as their designation, of course, suggests itself. The fits were certainly not hysterical in the ordinary sense of the word. They were often ushered in with a cry, the patient's breath ceased for a time, there were tonic convulsions, followed by characteristic clonic convulsions, she lost consciousness absolutely during their presence, and she occasionally bit her lips or tongue, and passed her water.

It must not be forgotten that patients suffering from epilepsy not infrequently present symptoms indistinguishable from those of hysteria, and that the use of the term hystero-epilepsy of epileptiform fits occurring in hysterical patients does not settle the true nature of such fits. I incline to the belief that the fits were epileptic. There is room for difference of opinion with respect both to the nature of the abdominal affection and of the epileptic fits, and with this remark I conclude my paper, and leave the subject to be discussed.

REMARKS
ON
SCLEREMA & ŒDEMA NEONATORUM.

By J. W. BALLANTYNE, M.D., F.R.C.P. Ed.
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Sclerema and œdema of the newborn infant are affections concerning which great confusion reigns not only in the minds of medical men, but also in a majority of the textbooks devoted to the description of the diseases of infancy and childhood. It is my wish in this communication in the first place to show the manner in which this confusion has arisen, and, secondly, to demonstrate that the two diseases are pathologically quite distinct from each other. I shall first give brief clinical notes of two cases which occurred at the Edinburgh Maternity Hospital three winters ago and which were examples, the one of sclerema, and the other of œdema neonatorum.

Case of Sclerema Neonatorum.—On December 27th, 1885, an unmarried woman of 19 years of age was delivered at the Edinburgh Maternity Hospital of a premature male infant. The mother was a primipara, and was in apparently perfectly good health. The labour was not a long one, the first stage lasting 12 hours, the second half an hour, and the third ten minutes. The vertex presented in the O.D.P position. The child was small; it weighed only 4lbs. 12ozs., and had a length of 18 inches. The placenta, which was normal, weighed 1lb. 3ozs., and the cord was 23 inches in length. The child, at the time of birth, had a premature appearance, and its breathing was with difficulty established, and, even when established, was shallow and weak. On the second day after birth it was noticed that the skin on the thighs, back, and buttocks, was hard and tense, and had a dirty yellowish appearance. Pressure with the finger did not cause any pitting of the skin. The child took the breast very badly, and the cry was weak and whining. The scleremic condition of the skin had, on the third day, spread to the neck, chest, and limbs, and was indeed almost universal. The body of the child felt cold to the touch, resembling the sensation given by contact with a half frozen corpse. The child died on the evening of the third day after birth. Through the kindness of Professor A. R. Simpson I was enabled to make a *post-mortem* examination of this, and of the following case, and to the conditions found at the necropsies I shall again return.

Case of Œdema Neonatorum.—On January 4th, 1886, a married

3-para of 31 years of age was delivered in the Maternity of a premature male child weighing 6lbs. 3ozs. The labour, which lasted for 16 hours, was complex, for the mother was at the time suffering from acute bronchitis and had pneumonic patches in both lungs. The vertex presented in the O.L.A. position. The mother was removed to the Royal Infirmary fourteen days after labour and there she made a tedious recovery. The child, which measured 18 inches in length, and had a wasted appearance, developed in a few hours after birth a markedly œdematous condition of the skin of the lower part of the trunk, of the external genital organs, and of the lower limbs, especially on their posterior aspect. The skin in these regions pitted readily on pressure, and had a bluish cyanotic appearance. The surface of the child's body felt cold, and the limbs hung limp and inert. The child was put in the incubator, friction was applied, and stimulants were given; but notwithstanding these therapeutic measures, death ensued two days after the birth. The child passed no urine. It may be stated that the placenta weighed 1lb. 6ozs., and that the cord measured 19 inches in length. Neither the placenta nor the cord showed any abnormality.

These two cases enabled Professor Simpson to demonstrate to the students in attendance the differences which existed in the symptomatology of the two diseases, and to these differences I shall make fuller reference in the course of this paper.

Historical Note.—The history of sclerema and of œdema neonatorum forms a curious chapter in the annals of medicine. Uzembezius in 1718 reported a case of what was no doubt sclerema, which was peculiar in being congenital, and which he attributed to maternal impressions, for the mother of the scleremic infant had, during her pregnancy, spent much time in the churches contemplating the marble statues therein! The most important early contribution to the subject of sclerema came from the pen of Underwood. This author gave a most correct and complete clinical picture of the disease, and indeed his description has since scarcely been excelled. The disease he described was true sclerema, an induration of the subcutaneous tissue. Andry read Underwood's paper at a time when he had under his care several cases of œdema neonatorum, and thinking that the disease with which he was acquainted was the same as that described by Underwood, he gave to it the name of "sclérème." Underwood pointed out this error in a later paper and described the differences between sclerema and œdema; but the confusion thus introduced was perpetuated by subsequent writers, and it was not till the time of Parrot that the matter was cleared up. Auvity, Chambon, Capuron, and Léger all confounded sclerema with œdema, and Denis did not make the confusion less by describing two varieties of induration, a serous and an adipose or concrete. Billard seems to have had a clear conception of œdema, but sclerema he regarded as a cadaveric phenomenon, or as a condition which supervened only in the last few minutes of life. Bouchut still further complicated matters by comparing sclerema to the adult skin disease scleroderma. Coley, West, and other writers in this country followed in the main the descriptions and mistakes of the French physicians, and this statement applies also to the majority of German authors. In 1873, Clementowski, of Moscow, threw some light upon the subject when he clearly distinguished between œdema and adipose induration. The latter condition he regarded as due to inanition of the newborn infant and not as a cadaveric phenomenon. To Parrot, however, belongs the credit of most clearly differentiating between sclerema and œdema, even if one may not be able to go so far with him as to state that sclerema is one of the symptoms of athrepsia, whilst athrepsia or infantile atrophy is only one of the complications of œdema neonatorum. Depaul in the *Dictionnaire Encyclopédique des Sciences Médicales* t. xiii, f. 675 gives a very complete summary of the contributions to our knowledge of the two diseases, and Henoch in his work on *Diseases of Children* distinguishes clearly between sclerema and œdema; but in modern textbooks there is still great confusion concerning these two diseases, thus Lewis Smith in the recently published American *System of Obstetrics*, vol. ii. p. 761, evidently includes œdema under the description of scleroma, whilst Ashby and Wright in their *Textbook of Diseases of Children* (1889) do not even mention sclerema. A few contributions of value have appeared in recent medical literature, of which we may mention Dr. Stephen Mackenzie's cases of sclerema and œdema which he showed not many weeks ago to the Clinical Society of London, and Dr. Barrs's "Notes of a case of Sclerema Neonatorum" which appeared in the BRITISH MEDICAL JOURNAL, May 4th, 1889. In concluding this short historical sketch of the literature bearing upon sclerema and œdema, I may add that the diseases have had many names given to them. Amongst the appellations which have been bestowed at one time upon sclerema and at another upon œdema, are scleroma, sclerisma, scleremia, œdematia, adipose induration, concrete induration, induration of the cellular tissue, and the skinbound disease.

This multiplicity of names has tended still further to complicate an already too complicated subject. I shall now pass in review the morbid anatomy, clinical features, etiology, diagnosis, prognosis, and treatment of sclerema and of œdema, noting the resemblances which exist between the two diseases, and at the same time calling attention to the marked differences which enable us to diagnose the one from the other.

Definition.—It is difficult to give a satisfactory definition of either sclerema or œdema, and in the present state of our knowledge an entirely correct one is impossible.

Sclerema may be provisionally defined as a rare disease, occurring most commonly in the newborn infant, characterised by induration of the subcutaneous tissue, and being little amenable to treatment. Until the pathology of sclerema and the nature of the physiological processes underlying its pathology are more fully understood, a more scientific definition than that given above is, I think, impossible.

Œdema neonatorum may be defined as a disease of the newborn infant, characterised by serous infiltration of the subcutaneous tissue, due in most cases to infantile cardiac, renal, or pulmonary disease. Œdema neonatorum is, therefore, manifestly more truly a symptom of several diseases than a distinct pathological entity; but until we have a fuller acquaintance with the symptomatology of cardiac, renal, and pulmonary disease in the newborn, and until we are better able to diagnose one variety of œdema from another, we must be content to study under one designation the characteristic features common to all.

Morbid Anatomy.—I was able to make a *post-mortem* examination of the scleremic infant within twenty-four hours after death and I then found, in addition to the conditions of the heart, vessels, and viscera peculiar to the newborn infant, the following pathological appearances. The lungs were in a state of partial atelectasis, their posterior and lower portions being undistended with air; the abdominal viscera, especially the spleen, liver, and kidneys, were markedly congested; and the brain and its membranes were also congested. The thymus gland appeared to be normal. It was in the skin and subcutaneous tissue that the most marked pathological changes were to be found. The skin over the back, shoulders, thighs, and to a less extent over nearly the whole of the body was firm and tense, could not be pinched up between the fingers, and could not be made to pit on pressure. On making a section of the skin and subcutaneous tissue with a knife a sensation was conveyed to the hand like that which one gets when one cuts bacon rind; and, on looking at the cut surface, one noted that the subcutaneous cellular tissue had a peculiar white glistening aspect quite unlike the yellowish appearance of the subcutaneous adipose tissue in the healthy infant. No serous fluid could be expressed from the cut surface, and to the naked eye the part did not appear to be congested.

In figure 1 are represented the microscopic appearances of the skin and subcutaneous tissue from the back of the scleremic infant. The outstanding feature in this drawing is the presence of a large quantity of brightly stained connective tissue which forms a network in the meshes of which lie the fat corpuscles. This connective tissue is very abundant and subdivides the subcutaneous adipose tissue into numerous patches of varying size. Not only are the bands of connective tissue increased in number, but they are also in many cases much thicker than is normal. In the true skin are seen the roots of a few hairs, and one or two sweat glands with slightly convoluted ducts. Such are the appearances noted with a magnifying power of eighteen diameters. Under a higher power it is seen that the fat cells have in some cases lost all their fat, and that in no case is the normal amount of oil present. The nucleus in all is clearly visible, and there is often also a rim of protoplasm underlying the cell wall. The cells making up the bands of connective tissue can be very clearly differentiated, and here and there are seen small vessels, surrounded by numbers of leucocytes, and pushing their way, as it were, into the clumps of fat cells. The papillæ are not well marked, and the outlines of the cells of the rete Malpighii are ill defined. The horny layer appears to be normal. The blood vessels in the papillæ are very small, but those in the adipose tissue are relatively large and have, as has been noted, a small cell infiltration surrounding them. Parrot, whose description of the skin agrees in the main with the

given above, considers the lesion to be a drying up of the skin with a consolidation of its layers and an atrophy of the adipose tissue. I believe that there is something more than a consolidation of the layers of the skin and atrophy of the fat cells, and am of opinion that there is an increase in the number and thickness of the connective tissue bundles, and that these bundles of fibres subdivide the masses of fat cells into smaller clumps and by pressure cause their atrophy. The starting point in the process is, I believe, the penetration of a capillary into a mass of fat cells, this capillary being accompanied by leucocytes which give rise to fibrous tissue



Fig. 1.—Sclerema neonatorum (section of skin of back × 18). *a*, bands of connective tissue; *b*, clumps of atrophied fat cells; *c*, epidermis; *d*, rete Malpighii.

which subdivides the mass of fat cells into smaller islands. The primal pathological factor may be, and probably is, a trophic lesion of the nervous system. This is a matter of hypothesis; but the hypothesis is strengthened by the fact that in three cases of sclerema reported by Dr. Angel Money[1], there was an accompanying paralysis, and by the resemblance which exists between sclerema and myxœdema.

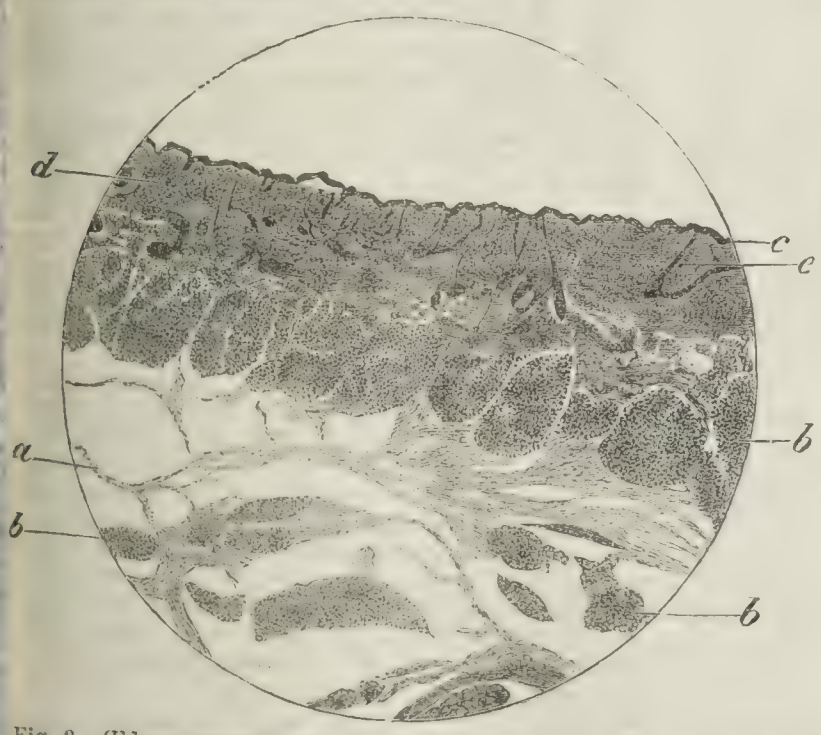


Fig. 2.—Œdema neonatorum (section of skin of back × 18). *a*, Loose bands of connective tissue separated by serous fluid; *b*, groups of atrophied fat cells; *c*, cuticle; *d*, rete Malpighii; *e*, hair.

The pathological appearances found in the infant with œdema differed in many respects from those which have been described in the sclerema case. Whilst the heart, liver, and spleen were normal, the kidneys showed on section an enormous degree of congestion, more especially of the cortex. The lungs, as in the sclerema case, were in a state of partial atelectasis. The skin of the back, abdomen, external genitals, and legs was of a bluish colour, had a soft feeling, and pitted readily on pressure. On making a section of the skin and subcutaneous tissue a somewhat congested surface was revealed, and a large quantity of watery serum drained away from the tissue. The microscopic appearance of a section of the skin of the back is represented in figure 2. The masses of fat cells are seen to be held together in a loose manner by thin bands of connective tissue, and so loose is the connection that in many places the fat cells have fallen out of the section. It was very difficult to obtain a satisfactory section of the subcutaneous tissue in this case, a circumstance which contrasted very forcibly with the ease with which perfect sections of the skin, and underlying tissue were obtained in sclerema. In the œdema section the tissue is opened out from the presence of the serous fluid, whilst in the sclerema case the tissue is indurated, and the fat cells held in position by the hypertrophied connective tissue framework. The fat cells in œdema as in sclerema are atrophied, and the appearances of the cuticle and rete Malpighii are similar in the two diseases. The difference, then, appears to be in the subcutaneous adipose tissue layer.

The microscopic examination of the kidneys in the œdema case revealed the cause of the subcutaneous serous infiltration, for both kidneys were enormously engorged, the congestion being especially well marked in the cortex, and in both kidneys was there cloudy swelling of the cells of the tubules, and small cell infiltration of the Malpighian bodies. There was, therefore, evidence of the presence of tubular and glomerular nephritis, and this fact, taken in conjunction with the suppression of urine which was noted clinically, leads me to the conclusion that in this case of œdema neonatorum, the disease and the death were due to the kidney lesion. The infant died two days after birth, and the renal changes found might quite well have arisen in that time, so that I do not think there was here any fœtal nephritis, at the same time the fact that the mother was suffering from bronchitis and pneumonia at the time of her confinement is noteworthy. No doubt there occur cases of œdema neonatorum in which the disease is due to lesions other than nephritis, such as cardiac and pulmonary diseases; but in this case the nephritic process was evidently the starting point of the pathological state. Œdema neonatorum I regard as a subcutaneous œdema, quite comparable to that which occurs in the adult and due to the same causes, whilst sclerema must, I think, be regarded as a disease peculiar to the newborn infant or young child, and most probably of the nature of a trophoneurosis.

Clinical Features.—In both sclerema neonatorum and œdema neonatorum the patients are weakly, often prematurely born, and in both diseases the body temperature rapidly falls below the normal. In sclerema the peculiar condition of the skin and subcutaneous tissue is found most markedly on the back, shoulders, and thighs, whilst in œdema the area of distribution corresponds with the lower part of the abdomen, the genital organs, and the back and legs. In sclerema the skin is firm and tense, cannot be raised in folds, and does not pit on pressure; in œdema, on the other hand, the skin is soft and boggy, can be pinched up between the fingers, and pits readily on pressure.

Etiology.—Very little is known concerning the etiology of *sclerema.* The disease occurs usually in prematurely born and weakly infants, which have been placed under bad hygienic conditions as to food, clothing, etc. It is, therefore, easy to understand how illegitimate foundlings are specially liable to it. It is most common in the winter months; but it is a rare disease in this country at any time of the year. It may occur in syphilitic infants, but any direct connection between the two diseases remains to be proved. With regard to œdema it may be said that in many points the etiology is similar to that of sclerema. It occurs also in premature infants placed under bad hygienic conditions, and most probably cold has a powerful effect in leading to the renal, cardiac, and pulmonary states which are so often associated with it. It will be noted that both the cases recorded in this paper occurred during the winter months.

Diagnosis.—If attention be paid to the clinical features which have been enumerated, the diagnosis between sclerema and œdema ought not to be difficult. The possibility of sclerema being mistaken for tetanus neonatorum is not very great, for the rigidity of the limbs is never so great in the former disease, and the

[1] *Lancet*, October 27th, 1883.

temperature curve in the latter disease will also serve to distinguish the two diseases.

Œdema and erysipelas might possibly be mistaken for one another, and indeed œdema may occur during the course of erysipelas, but here also the condition of the temperature will serve as a diagnostic guide.

From syphilitic roseola œdema may be quickly differentiated by the result of antisyphilitic treatment.

It is possible that œdema neonatorum and general dropsy of the fœtus may be confounded; but the confusion is more likely to arise in medical literature than in medical practice. General dropsy is a disease of the fœtus and not of the infant, and the observations of Smith and Birmingham[2], seem to show that the disease is due to absence of the thoracic duct and of the lymphatics of the mesentery and skin. I saw one case of general fœtal dropsy three years ago, and, although I am unable to speak certainly with regard to the thoracic duct, yet the appearances of the skin and mesentery I find to agree entirely with those figured by Smith and Birmingham.

Prognosis.—The prognosis is very grave in both diseases, very few scleremic or œdemic infants recovering; but occasionally a case of recovery is reported in the medical papers, for example, Barrs's case in the JOURNAL, May 4th, 1889.

Treatment.—In both diseases the infant affected should be placed in an incubator. Friction with a stimulating liniment is indicated as is also "*gavage.*" In cases of œdema where there is suppression of urine it would be well to try the effect of digitalis fomentations to the loins and of diuretics internally.

In conclusion, the hope may be expressed that with a fuller knowledge of the physiology and pathology of the newborn infant, these two diseases, at present so fatal, may become more amenable to treatment. At the same time it is well to remember that probably the diseased process is in both affections initiated *in utero.*

ON THE SUCCESSFUL TREATMENT OF CASES OF CONGENITAL DISPLACEMENT OF THE HIP-JOINT BY COMPLETE RECUMBENCY WITH EXTENSION FOR TWO YEARS.[1]

BY WILLIAM ADAMS, F.R.C.S.,

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AT the meeting of our Association held at Brighton in August, 1886, I read a paper in the Surgical Section on The Treatment of Congenital Displacement of the Hip-joint by long-continued Recumbency and Extension.[2] In that paper, after passing in review the chief points in the pathology and clinical history of this affection which are now well established, I brought prominently before the members the treatment adopted by one of the leading American surgeons, Dr. Buckminster Brown, of Boston, who had carried out the recumbency and extension treatment more thoroughly and for a longer period than had hitherto been done. Dr. Brown had in 1885[3] published the account of a very successful case, with photographs taken two years and three months after the commencement of treatment, which had been continued strictly for thirteen months. The child then began to walk in a go-cart for five months longer. To all appearance in this case, one of double displacement in a girl aged 4 years, there was a complete restoration of the natural form of the hips, and the lordosis was also completely removed. The walk was said to be natural, and the patient's health not in any way injured.

This success encouraged me to give the treatment a fairer trial than I had hitherto done. At the time of reading the paper I had commenced the treatment in two cases, and since then have applied the same method to four other cases. Two of the six cases were double, that is, both hip-joints affected, and four single; in three of the latter the right hip-joint was affected, and in one the left hip-joint. In two of the cases, both examples of single displacement occurring in girls of about 2 years of age at the commencement of treatment, recumbency with extension has been carried out to the full period of two years in one, and two years and seven months in the other case; and they have been now some months walking about with a steel support on the affected limb.

At the present time I am enabled to report that the result of this treatment appears to be extremely satisfactory, and equally so in both cases. When these children are examined undressed on the table there is no apparent inequality in the length of the legs. Sometimes, by careful measurement, the affected limb seems to be an eighth, or from that to a quarter, of an inch shorter than the other, but we cannot always make as much. The ilio-femoral triangle of the affected limb corresponds pretty closely with that on the healthy side, so that the head of the femur is now retained very nearly in its natural situation, and there is no disposition to any spontaneous alteration. Nor is there any tendency to displacement upwards when gentle manipulation is tried by fixing the pelvis, and testing by a little movement directed upwards from the thigh. Of course this has only been tried gently, but the head of the femur seems to be fairly maintained in its improved position; and the contrast, as compared with the condition of parts before the commencement of treatment, is very great. All the movements of the joints are free, and the muscular nutrition has been well maintained.

The general health has not been in the least interfered with, and, indeed, in both instances the parents consider that the children have improved in health. During the whole period of recumbency these children have been drawn out in a spinal carriage in the open air, lying down on the movable plane forming part of the extension couch, the extension acting all the time. This extension couch I have also used with great advantage in two cases of hip-joint disease.

At the present time we can only hope that the improvement gained by the treatment will be permanently maintained, but at least another six months or a year will be required to test this, after the children have left off the steel supports they are now wearing. I will give a further report at the end of that time. The details of these cases are given below:

OBJECTS OF TREATMENT, AND DETAILS OF THE METHOD ADOPTED.

In reference to the pathological conditions which have now been shown to exist in these cases, the object of any method of treatment adopted must be, when the case is undertaken at a sufficiently early period—say 2 years of age or less—to prevent the gradual displacement of the head of the femur by the elongation of the capsular ligament, which takes place when the child begins to walk and throws the weight of the body upon the limb, or limbs, in which the congenital malformation of the hip-joint with imperfect development of the acetabulum exists.

This can only be accomplished by long-continued recumbency with extension, so adapted that the head of the femur is retained as nearly as possible in its natural position during a long period of active growth, say, from a year and a half to two years' duration. For this purpose I use the new extension couch, constructed for me by Mr. Ernst, and described in my paper at the Surgical Section of our Association at Brighton, in August, 1886, when it was exhibited at the meeting. Drawings of this couch, given me by Mr. Ernst, are now shown to the meeting.

At the end of this period the child should be gradually allowed to walk with a steel support, when one hip-joint only is affected, somewhat resembling the American hip-joint instrument, which allows of motion at the hip-joint and still maintains extension, whilst the weight of the body is removed from the affected limb. In Sayre's hip-joint splint the weight of the body is sustained by the perineal straps attached to the pelvic band, but in the apparatus Mr. Ernst has constructed for me not only are the perineal bands used, but the tuberosity of the ischium is made to rest upon the back part of the metal thigh trough, so that every care is taken to prevent the weight of the body being thrown upon the affected limb. A raised boot, one inch and a half in thickness, is worn on the healthy limb, and an iron ring-patten on the affected limb. To this ring-patten the boot is fastened by short straps, and the extension is made by a rack-and-pinion movement in the lever on the leg. As a part of this walking splint I have combined the use of the pelvic belt suggested by Dr. B. Brown, with a large pad placed just above the great trochanter to assist in preventing the head of the femur slipping upwards. With this apparatus

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[2] *Journal of Anatomy and Physiology*, July, 1889.

[1] Read in the Section of Surgery at the Annual Meeting of the British Medical Association held at Leeds.

[2] JOURNAL, April 23rd, 1887.

[3] "Double Congenital Displacement of the Hip." By Buckminster Brown, M.D. Boston: Cupples, Upman and Co. 1885.

ne child may be allowed to walk for six months or a year, when may be gradually discontinued, the child at first using crutches nd then one or two sticks. Altogether extension is maintained or a period of two to three years—I prefer the longer period—and ne head of the femur kept as nearly as possible in its natural osition during the whole time.

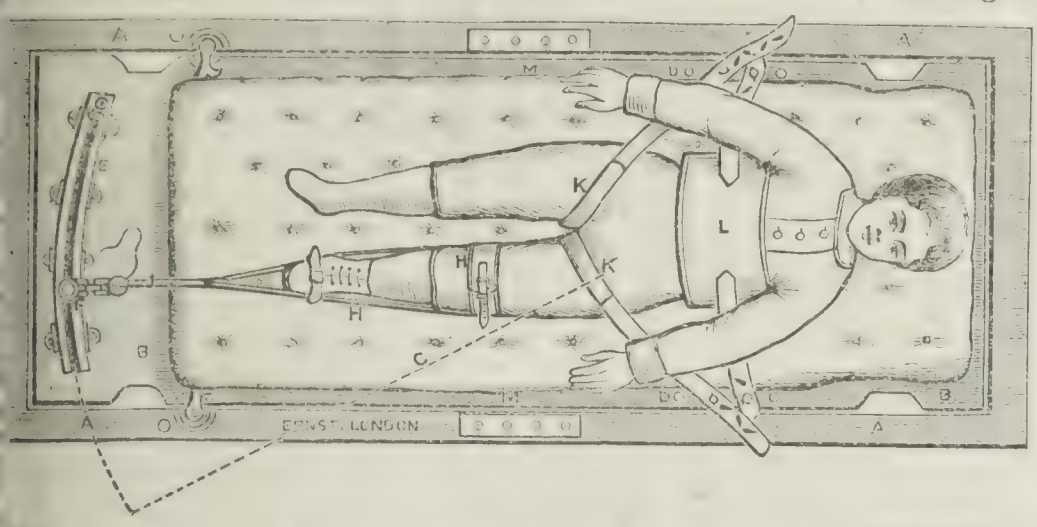
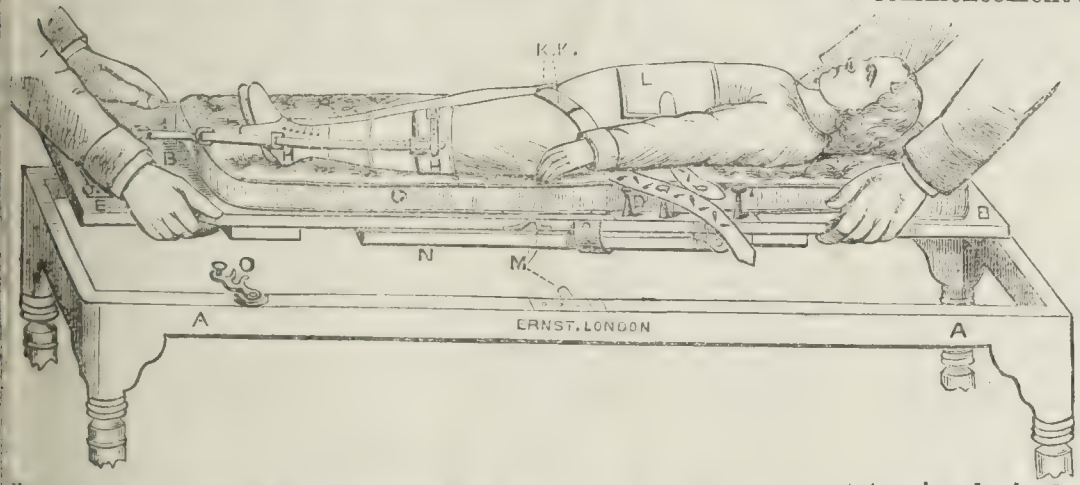


Fig. 1 represents the plan of the extension mechanism. The counter-extension is taken from the perineum by two perineal straps K K made of india-rubber tubing; these are cleaner and more adjustable than the padded form. A chest band L is attached to keep the child from moving Both the chest band and perineal straps are attached to studs D D on each side of the couch. The extension is made by the thigh bandage H and gaiter H. This is connected by a cord to the standard F, which has fixed at the upper part a check attachment known as Durham's pulley. The salient point here is the quadrant movement E. The standard F is fastened at its lower part to a flat sliding piece, which moves in the quadrant up to the distance of the thumb-screw G; by this means it is possible to bring the standard to the extreme point in the dotted line, giving the full abduction of the limb if requisite. As this quadrant is an arc with the radius emanating from the hip-joint it is apparent that in abducting the limb no loss or increase in the extension power takes place. The thumb-screw G is fixed at whatever position it is desirable to keep the standard.]



ig. 2, showing the method of detachment, will be clearly understood. The gun metal arches M are regulated so as to permit the tilting and easy removal; their shape explains the plan. It is now only necessary to fasten the "sliding guides" up to the couch by leather straps, and the board is complete for outdoor transport. In the cases under treatment the patients live in this position. The couch is fitted with a horsehair mattress, and at night a blanket and sheet are carefully placed between the child and the mattress; this can be best accomplished by one person holding the child under the axillæ, and extending gently whilst the perineal and chest straps are unfastened and the "bed" made. In washing it is necessary to place a mackintosh cloth over the entire mattress. The treatment principally depends on rest and the maintenance of the limb in an extended position. This is easily accomplished, for there is no existing contraction, and it is only when the patient stands that the elongated capsular ligament permits the rising of the limb and consequent shortening; the extension force is therefore very slight, and only sufficient to keep the limb in unison with the other.

When both hip-joints are affected the best form of apparatus to be d at the commencement of the walking period, that is, in the second ge of the treatment, is that employed by Dr. B. Brown, a kind square go-cart upon four wheels, with a leather strap passing m before backwards, and buckled upon the cross bars. On the ntre of the strap is a small saddle, on which the child sits at h a height as to allow only the toes to touch the floor. There crutches also attached to the sides of the go-cart to assist in sustaining the weight of the body, and a webbing belt passes round the body.

It will thus be evident that the treatment is divided into two stages.

The principle of the first stage is that of complete recumbency, with slight extension, and immobility as complete as can be sustained with comfort, continued night and day for a period of eighteen months to two years. I advise two years if the health is well maintained—and it has been well maintaned in the cases under treatment. If the case is undertaken at a sufficiently early period, say, at two years of age or less, the treatment in this stage is essentially preventive.

The principle of the second stage is that of extension, with mobility maintained during progression, without the weight of the body being thrown upon the affected limb or limbs. This can be accomplished in cases of single displacement by an apparatus very much resembling the well known American hip-joint instrument, and in cases of double displacement by the go-cart and saddle used by Dr. B. Brown. This apparatus should be used for a period of six months to a year—I advise a year. Crutches may be used at first.

The transition from the first to the second stage should be made very gradually, the child at first being allowed to walk with the instrument two or three times a day for a quarter to half an hour, and then return to the extension couch, which is also to be used at night during the whole treatment, and possibly afterwards. During the whole of this stage, and for some time before it is commenced, massage to the affected limb or limbs should be practised twice daily for half an hour each time. It should be applied more especially to the neighbourhood of the hip-joint and the glutei muscles, but it should also be used to strengthen the muscles of the thigh and leg in the affected limb or limbs.

At the end of the second stage, the patient begins to walk in the ordinary way, without any instrumental assistance, but at the commencement crutches should be used, or the nurse should give the child assistance by holding it under the arms, so as to prevent the whole weight of the body being thrown upon the affected limb or limbs. The transition from the second stage to walking without any mechanical assistance must also be made very gradually.

When the case is undertaken at a later period, say about 5 years of age, or even up to 8 or 10, when the displacement has become more confirmed, the same treatment may be carried out, in the hope that the upper and unused portion of the dilated capsule will spontaneously contract during growth. In unilateral displacement, the pelvic tilting and deformity, as well as the lateral curvature of the spine, will certainly be diminished to the lowest possible point by recumbency with extension during active growth, and in a case of double displacement, the pelvic deformity and lordosis will certainly be diminished.

At a still later period, that is, after 10 years of age, there cannot be any reasonable hope of much improvement so far as the articulation is concerned, except in favourable cases, by the subcutaneous operation which I have proposed, in the hope of obliterating the upper part of the cavity formed by the elongated capsular ligament. By this means, together with partial recumbency and extension, the consecutive deformities may be diminished during the period of growth, say up to 17 or 18 years of age.

In cases of unilateral displacement, weight extension at night and recumbency, or partial recumbency, for four or six hours a day in a spinal chair will be useful up to 17 or 18 years of age; and, as a gymnastic exercise, I recommend the use of the trapeze bar three times a day, the patient wearing a leaden clog, weighing four pounds, on the foot of the affected limb during the exercise. By this means the muscles surrounding the hip-joint are brought into play, whilst the head of the femur is drawn down towards its natural position by the leaden clog, acting as an extension weight, attached to the foot. When all hope even of diminishing the consecutive deformities is given up, it is still desirable that the patient should avoid long standing, and all walking exercises

should be limited to one hour, and then followed by recumbency for one hour; exercise for short periods alternating with rest.

PERMANENCY OF THE IMPROVEMENT.

With regard to the permanency of any improvement gained by long-continued recumbency with extension we must expect the profession to remain sceptical until sufficient time has elapsed after the discontinuance of all treatment; and also until it has been tried in a sufficient number of cases. I have frequently been asked: What is to keep the head of the femur in or near to its normal position when there is no acetabulum?

I believe the answer will be found in the adapted growth of the capsular ligament and all the surrounding muscles and fibrous structures, gradually occurring in the period of two or three years, during which the head of the femur is retained as nearly as possible in its natural position.

We know that the displacement of the head of the femur upwards, or in whatever direction it may be, is limited by the surrounding muscular and fibrous structures, and that a resting place is found, not by any new bone thrown out or any attempt at the formation of a new acetabulum, which would be prevented by the capsular ligament intervening between the head of the femur and the surface of the ilium, as the head of the bone never leaves the capsular ligament; but, still, a circular-flattened depression is gradually made on the surface of the ilium by the pressure of the head of the bone. This may be seen in all the specimens, except the one in St. Thomas's Museum, in which a little periosteal bone had been thrown out where the head of the femur had rested. We may therefore reasonably hope that a similar depression will be made in or near to the natural situation of the acetabulum by the treatment adopted, and this, together with the adapted growth of the capsular ligament and the surrounding muscular and fibrous structures, will assist in maintaining the head of the femur in the improved position in which it has been maintained for two or three years. The unused upper portion of the capsule, we may also hope, will gradually contract.

Some support of these views may be derived from the following observation: When the limit of displacement has been reached the head of the femur becomes much more fixed in some cases than in others, that is, it cannot be moved downwards by extension except to a very limited extent; and the lower and unused half of the capsular ligament appears to undergo a process of contraction, so that it would be incapable of receiving the head of the bone. The sides of this portion of the cavity may become flattened and compressed, or approximated, and, without anything approaching to obliteration, the cavity may be intersected by some bands of adhesion.

The only specimen in London, so far as I know, in which these pathological changes can be demonstrated is the one in St. Thomas's Hospital Museum, Nos. 42 and 43, Section D. This specimen is figured in the *Trans. Path. Soc.*, vol. xxxviii, 1887, Plates XII and XIII. The case was evidently one of congenital displacement of both hip-joints in a girl aged 16—a dissecting room specimen, without any history, but it is mentioned that both thighs were flexed and contracted at the hip-joints, so that movement had become restricted. One innominate bone, with the upper portion of the femur, has been completely macerated and put up dry to show the osseous changes, No. 42, and the other innominate bone, with the upper portion of the femur, has been partly macerated, with the capsular ligament dissected and remaining intact and put up as a wet preparation, No. 43. In the dry preparation, on the dorsum ilii, near to the upper margin of the sciatic notch, is a flattened, circular, medallion-like surface, slightly raised, upon which the head of the femur had undoubtedly rested for a considerable time, in consequence of impaired mobility from some muscular contraction. In the wet preparation the capsular ligament is seen to be greatly elongated, extending from the upper border of the obturator foramen below to cover the head of the femur above in its displaced position on the dorsum ilii; it is also greatly increased in thickness and density. Mr. Shattock was kind enough, at my suggestion, to lay open the capsular ligament in front in its entire length. This exposed the head of the femur, still within the capsular ligament, at its upper part. In its lower half the thickened capsular ligament was depressed or flattened so as to diminish the cavity, which apparently would not have been capable of receiving the head of the femur, had any attempt been made by extension to draw it towards its natural position. The inner surfaces of the thickened capsular ligament, although approximated, were not at any part adherent, but some slender bands of adhesion passed between these surfaces, intersecting the cavity

This is the nearest approach to what I think may take place in the upper half of the capsular ligament when the head of the femur has been held down by extension for a sufficiently long period; or what might be accomplished by the operation I have suggested, of transfixing the upper half of the cavity by a double ligature, and then carrying one of the threads subcutaneously round each segment so as to emerge at the aperture of entrance. Then each segment could be tied separately, in the hope of occluding more or less completely the upper portion of the cavity. Should more than slight irritation follow the threads could be cut and removed, and if necessary from excessive effusion with tension the cavity might be punctured with a small trocar. I have not yet had the opportunity of performing this operation.

For a practical demonstration as to the permanency of the improvement obtained by the long-continued recumbency with extension, carried out by the method I have adopted, sufficient time has not yet elapsed in my two earliest cases now reported, although the prospect at the present time is extremely favourable.

In Dr. Buckminster Brown's case, the child was allowed to walk without any support eighteen months after the commencement of treatment; and at the end of two years and three months, when the published photographs were taken in March, 1885, the improvement gained by treatment had been fully maintained. The result had the appearance of being perfect, and with every prospect of being permanent.

Dr. B. Brown, when residing in Paris during the years 1845 and 1846, had the advantage of seeing three or four of these cases treated by the late M. Jules Guérin, who practised subcutaneous division of the muscles, followed by extension, with partial though not complete success, according to the report of the Commission issued in 1848.[4] Dr. Brown did not, therefore, adopt the operation, but relied upon recumbency, with extension.

The late Dr. Carnochan,[5] who first directed my attention to this subject in the year 1844, at St. Thomas's Hospital, also gained his early knowledge of the affection from the study of Dupuytren's unique collection of specimens in Paris, and the observation of the practice of Guérin and other surgeons. He gives full credit to the successful result of treatment in some cases of M. Pravaz,[6] of Lyons, which was confirmed by a report of the Commission of the Royal Academy of Paris, appointed to examine these cases in the year 1838. In this report, one case is stated to have remained cured two years after the reduction.

The best result of the treatment by recumbency with extension which I have seen, though not carried out to the full extent or in the manner I have recommended, was in the case of a young gentleman, aged 19, who had been treated in this way, when about 6 years of age, for displacement of the left hip-joint, considered by the surgeon who attended the case to be the result of infantile paralysis, for which the same surgeon had previously treated him.

I first saw the case on December 6th, 1872, and pronounced it to be one of congenital displacement of the hip, an opinion in which Mr. (now Sir) Prescott Hewett entirely agreed with me. Not a trace of paralysis existed, nor was there any history of hip-joint disease. The child had limped from the time it began to walk. Recumbency, with a long straight splint and weight extension, had been carried out for fifteen months, and then very little walking was allowed, with steel supports, a pelvic belt, and crutches for seven months. When last seen by me (May 21st, 1883), the patient being then 19 years of age, there was only one inch and a quarter shortening, and, with a boot raised one inch and a quarter, the limp in walking was very slight; the leg was strong and all the joint movements free. He said he was able to take any amount of exercise. Only a slight spinal curvature existed in the lumbar region, and the pelvic tilting was also very slight.

This is the only case I have seen at the completion of growth after recumbency with extension has been carried out in childhood for congenital displacement of the hip-joint, and the result must be regarded as extremely satisfactory, when we consider that without treatment the shortening would certainly have been not less than three inches, and it might have been four or five

[4] Rapport adressé à Monsieur le Delégué du Gouvernement Provisoire sur les Traitements Orthopédiques de M. le Docteur Jules Guérin à l'Hôpital des Enfants pendant les Années 1843, 1844, et 1845, par une Commission composée de MM. Blandin, P. Dubois, Jobert, Louis, Rayer, et Serres. Président, M. Orfila. Paris. 1848.

[5] *A Treatise on Congenital Dislocations of the Head of the Femur.* By Dr. John Murray Carnochan. New York: S. S. and W. Wood. 261, Pearl Street. 1850.

[6] *Traité des Luxations congénitales du Fémur*, par le Docteur Pravaz. 1847.

aches, which I have seen in several cases of unilateral displacement, the spinal curvature and tilting of the pelvis resulting in a roportionate degree. This case sufficiently proves the great advantages of the treatment I have recommended.

It is remarkable that for this valuable illustration we are indebted to an error of diagnosis, upon which the treatment was, as were, accidentally carried out.

In my own cases, when undertaken at an early age, and the reatment extended over two or three years, the ultimate result annot fail to be good; but some permanent defect—partly due o the malformation, and partly to the subsequent changes in the ead and neck of the femur—must remain; and after the completion of growth, say at 20 years of age, there will probably be only bout half an inch of shortening, or perhaps from that to one inch n some cases; but this result I should consider to be very satisactory. Because absolute perfection is not to be reached, and a ew hip-joint made, that is no reason why the consecutive deformities, which invariably result when these cases are left to ature, should not be reduced to the minimum point, with a lifeng benefit to the patient.

On the Intermediate or Halfway Treatment.

I have frequently been asked whether anything could be done o diminish the resulting deformity in these cases when the whole reatment, according to the programme above laid down, either annot be carried out, or is objected to by the parents, either om a fear of injury to the general health or some other cause. he answer is that although a halfway treatment can only end a halfway result, still by adopting the following rules much ay be done to diminish the consecutive deformity, either in a ase of single or double displacement. When one hip-joint only affected

1. Weight extension must be employed during the night, and art of the day, when the child is reclining on a sofa, say four to x hours, about two hours each time. The extension apparatus r this is simple enough, and such as is usually employed in ases of hip-joint disease.

2. The child may be allowed to walk about in the intervals of clining, if old enough to use crutches, and then a raised boot of ne inch and a half must be worn on the sound limb, the foot of e affected limb not being allowed to touch the ground. The fected limb will however swing backwards and forwards, and its vn weight will to some extent act as an extending force. This n be carried out by the poorest class of patients.

Another method of locomotion, when a little expense is not jected to and more attention can be given, is by means of the lint or apparatus, which Mr Ernst has constructed for these ses, somewhat resembling the American hip-joint instrument, hich combines extension with motion, and crutches are avoided, cept perhaps to start with. The child usually gets along very ell with one or two sticks. The raised boot is of course necesry on the sound limb when this apparatus is used, and an iron ng-patten on the foot of the affected limb, the boot being tached to the ring by straps, and the extension made by a rackd-pinion movement in the side steel. The pelvic belt with pad aced above the great trochanter should also be used.

When both hip-joints are affected weight extension at night ight be used; and recumbency with weight extension, during a rtion of the day, say from four to six hours, taken partly in the orning and partly in the afternoon. Long standing and long tting should be avoided, and the child should walk as little as ssible in the earlier years of life. By these means the concutive deformity will be diminished.

The Two Cases Referred to.

Case I.—*Congenital Displacement of Left Hip-joint treated by ecumbency, with Extension for Two Years and Seven Months.*—uesday, December 4th, 1885. Miss S., aged 2 years, was brought me by Dr. G. Ransford.

Objective Symptoms.—She walked, leaning on one side, with a aping gait, dragging the left leg, with the foot everted. This g appeared to be short and weak, but well-nourished. I first sted the muscular power in the various movements at the hip, ee, and ankle joints, which were all well performed, and I uld find no trace of paralysis. Abduction at the hip-joint was mewhat limited by tension of the adductor longus. There was pain in any movement at the hip-joint, nor any symptom of p-joint disease.

Examination of Hip in the Standing Position.—When the child was standing undressed on the table, I placed a dot of ink exactly over the anterior superior spinous process, and then, drawing a line horizontally backwards from this point, it was at once evident that the top of the great trochanter was on a level with this line, and that the ilio-femoral triangle was obliterated. On the opposite side the base of the ilio-femoral triangle measured fully one inch—that is, the base of the triangle made between the horizontal line, from the anterior superior spinous process and a line drawn obliquely downwards from the same spot to the top of the great trochanter. In this little patient, a fat and well-nourished child, the top of the great trochanter on the healthy side was not so easily felt, but this can always be done when the child is standing on the table if the weight of the body is thrown upon the heel when the front part of the foot is uplifted, and then, the surgeon moving the foot inwards and outwards with one hand, the top of the trochanter can easily be felt with the other hand as a movement of horizontal rotation is communicated to it.

This examination conclusively proved that the head of the femur could not possibly be in the acetabulum if this cavity existed, and as there were none of the ordinary symptoms of dislocation, the only conclusion we could arrive at was that the head of the femur was displaced in consequence of an absence or malformation of the acetabulum.

Examination of the Hip when Lying Down.—When examined undressed on the table, the left leg appeared to be nearly one inch shorter than the right, but by a little extension the length was easily restored, and the head of the femur evidently moved up and down through the space of about an inch. With a thumb on the anterior superior spinous process, and a finger on the top of the great trochanter, the latter was felt to move up and down independently of the pelvis, and the base of the ilio-femoral triangle was easily restored.

This examination proved the deficiency of the acetabulum, and the diagnosis of the case was clearly established as one of displacement of the femur in consequence of congenital malformation of the acetabulum.

Dr. Ransford agreed with me in advising the parents that the child should undergo the treatment of recumbency, with extension, which had proved so successful in the case published by Dr. Buckminster Brown, of Boston, but objections to the long confinement, with restraint, were at first raised.

History.—Dr. Ransford, who attended at the confinement, told me this was the first child, foot presentation; labour not difficult; no turning or manipulative interference required; no peculiarity noticed at or immediately after the birth. The child walked later than other children, and walked with a limp; when it began to walk, the left leg appeared to be weak, so that it seemed to drag, and the foot was everted.

Wednesday, February 3rd, 1886. Dr. Ransford and myself again met to examine Miss S., who had been kept off her feet a great deal, and allowed to walk only for a short time, with a boot raised half or three-quarters of an inch. We found the hip in every respect the same as before. The parents now consented to the extension treatment being carried out. The only modification in Dr. Brown's treatment which I felt desirous of making was with regard to the method of carrying out the extension. Dr. B. Brown's patient was confined to the bed, that is, outside the bed the whole time, and extension was made by weights and pulleys.

I wished to have a movable extension plane, resting on a couch, when the patient was in the house, but capable of being carried about from one room to the other, and also of being placed in a spinal carriage, so that the child could be drawn into the open air every day, without any interruption to the extension. This of course presented many difficulties, but Mr. Ernst undertook it, and succeeded to perfection in constructing a movable extension plane and couch, which I have now used in six cases of congenital displacement and two cases of hip-joint disease requiring extension.

Instead of using the weights and pulleys Mr. Ernst employed the check-pulley—sometimes known as Durham's pulley—and the cords were fastened to brass standards fastened on the sides of the movable plane.

On Tuesday, May 18th, 1886, Miss S. began the treatment regularly, having been on the plane for a fortnight only part of the day, and no difficulty was experienced in carrying it out. Dr. Ransford had the case closely under his observation, and I saw it occasionally.

On Wednesday, June 9th, 1886, we examined the little child, and the new apparatus seemed to be answering very well, and the child had already become accustomed to it.

On Wednesday, September 22nd, 1886, Dr. Ransford and myself examined Miss S. and some improvement had evidently taken place, as with the slight extension used the left leg nearly corresponded in length with the right, and the ilio-femoral triangle on the left side more nearly corresponded to that of the right leg.

Friday, October 29th, 1886. At this date there was risk of the treatment being seriously interfered with, as I received a note from Dr. Ransford to say that Mrs. S. had taken her child to Hutton (the well-known bone setter) who said "the hip was dislocated, that he could reduce it five minutes, and at the end of two months the child would be perfectly well and walking." I advised that the highest surgical opinion should be taken independently of myself, and suggested Mr. T. Bryant, who I knew had paid much attention to these cases.

Friday, November 5th, 1886. I received a note from Mr. Bryant to say that he had seen Miss S. in consultation with Dr. Ransford, and observed: "The diagnosis is clear, and the benefit derived from treatment is most encouraging. So much so indeed, that I could not sanction the least deviation from the lines you have laid down."

As a result of this consultation the treatment was resumed, and on Tuesday, December 14th, 1886, I again saw the case with Dr. Ransford. We found that when the extension was removed the shortening of the left leg was scarcely half an inch, and very slight extension brought the left leg to the same length as the right, and restored the base of the ilio-femoral triangle. The parents seemed now to be satisfied that the treatment was likely to lead to a permanently good result. The child was drawn out in a spinal carriage once or twice a day, and the health was perfect.

On March 3rd, 1887, Dr. Ransford and myself examined Miss S. and found a steady improvement going on. No shortening of the left leg when slight extension is on, and very little when the extension is removed. The ilio-femoral triangle is nearly equal on both sides when extension is removed, and the head of the femur is evidently becoming more fixed in the improved position. It is nearly ten months since the commencement of the treatment on May 18th, 1886, and she will be 4 years old on the 23rd of this month.

Friday, June 3rd, 1887. I again examined Miss S. with Dr. Ransford, and we found the measurements and general condition the same as in the last report.

Friday, September 23rd, 1887. Dr. Ransford and myself examined Miss S. again and found all the improvement continues, with some little gain. Both legs the same length with very slight extension, and hardly any appreciable difference when extension is removed. The left ilio-femoral triangle nearly equal to the right. The movements at the hip-joint, tested gently, were all free. No disposition to spontaneous displacement.

Friday, December 23rd, 1887. I examined Miss S. again with Dr. Ransford, but there was no alteration to report. The measurements were the same, and the child in excellent health.

Friday, March 9th, 1888. Dr. Ransford and myself met again, and on the present occasion, at the request of the family, Dr. Wharton Hood, whose experience in joint affections has been very great, was added to the consultation. After carefully examining the left hip-joint, and comparing it with the opposite hip, and measuring the length of the legs, in which very little difference—only about an eighth of an inch—was perceptible, Dr. Hood expressed himself as much pleased with the result, and said that in any future case he should adopt the practice. The child's health has never been interfered with.

On Wednesday, May 23rd, 1888, I examined Miss S. with Dr. Ransford again, but there was nothing special to report.

Monday, November 19th, 1888, Dr. Ransford and myself examined Miss S. again, but found no change. The joint seems to be improved when a little movement is made, and no disposition to displacement.

Friday, December 7th, 1888. Dr. Ransford and myself agreed that Miss S. might now be allowed to begin to walk with a steel support to the left leg, in principle much resembling the American hip-joint instrument, but with some special arrangements which Mr. Ernst suggested, and for this he took the necessary measurements on this day. Mr. Ernst found the shortening of the left leg to be one-eighth of an inch, and also measuring the base of the ilio-femoral triangle, whilst I marked the spot, he found that on the left side to measure one inch and a quarter and on the right side one inch and three-eighths. Dr. Ransford and myself found the head of the femur could not be displaced upwards by the moderate degree of force which it was only justifiable to try. When the great trochanter moved upwards the pelvis moved with it. Altogether the result seemed to be very satisfactory.

Thursday, December 20th, 1888. Miss S. began to walk to-day with the instrument Mr. Ernst had specially constructed for the case, and applied it himself. The nurse and mother quickly understood the details. Dr. Ransford assisted the little child in her first walk since the treatment was commenced, May 18th, 1886, just two years and seven months.

Wednesday, February 6th, 1889. Dr. Ransford and myself examined Miss S., who has now become well accustomed to walking about with the instrument and using a pair of crutches. When examined undressed on the table we could not find that any change had taken place at the hip-joint, or in the length of the leg. She walks only for a short time in the morning and afternoon.

Friday, May 10th, 1889. I examined Miss S. again with Dr. Ransford, and we were unable to find that any change had taken place. She walks about more freely and with confidence, the hip-joint moving freely.

CASE II.—*Congenital Displacement of Right Hip-joint Treated by Recumbency with Extension for Two Years.*—Friday, October 1st, 1886. Miss D. W., aged 1 year, 9 months, was sent to me by Dr. Thomas May, Crayford, Kent.

Objective Symptoms.—She walks with a conspicuous limp, and drops the body to the right side. The right leg appears to be short and weak. The foot is everted in walking, but can be easily turned inwards. The movements of the hip-joint are quite free and painless; but abduction is a little limited, and in this movement the tendon of the adductor longus becomes rather prominent and tense. No trace of paralysis in any of the muscles, either above or below knee. No indication of incipient hip disease.

Examination of Hip in the Standing Position.—This gave the same results as in the previous case. The base of the ilio-femoral triangle on the right side was obliterated, and the top of the great trochanter was very nearly on a level with the anterior superior spinous process. On the healthy side the base of the ilio-femoral triangle was about one inch. The head of the right femur was evidently displaced in a direction upwards and backwards.

Examination of Hip when Lying Down.—This gave results very similar to the previous case. The right leg appeared to be about three quarters of an inch shorter than the left, when the inner malleoli of both legs were approximated. With the thighs flexed at a right angle with the body, the child still lying on its back, this shortening was at once seen to be above the knee-joint. With a little extension to the right leg, the base of the ilio-femoral triangle could be restored, and the top of the great trochanter could be seen and felt to move up and down, proving the deficiency of the acetabulum. This examination sufficiently established the diagnosis.

History.—This was a first child, and a breech presentation, but no turning was employed; it was proposed, but objected to, and the labour proceeded without any difficulty, the child being born breech first. No instruments were used. She walked later than other children, not until 1 year and 4 months old, and then with a limp, which gradually increased and became much worse within the last three months.

Treatment.—I strongly advised Dr. Buckminster Brown's treatment by long continued recumbency, with extension, but using the improved plane, as in the previous case, so that the child could be drawn out daily in a spinal carriage.

On October 29th, 1886, this treatment was commenced, and no difficulty was experienced.

December 28th, 1886. I examined Miss W., and there seemed to be some improvement. With the slight extension on the plane, the shortening of the right leg was completely removed; but when the extension was released, the top of the great trochanter ascended again, but not so far as before treatment was commenced, hardly more than a quarter of an inch according to my note. The disposition to evert the foot was at first controlled by sandbags, and afterwards by a splint contrived by Mr. Ernst. This little child was constantly under the observation of Dr. Thomas May, and seen by myself at intervals of about two or three months. The mother was extremely attentive to all the details of treatment.

About the end of the first six months, on Tuesday, April 19th, 1887, Dr. May and myself carefully examined the child, with and without the extension, and the result appeared to be very satisfactory. When the extension was removed, the legs remained very nearly the same length, and the head of the femur was evi-

ntly becoming more fixed in the improved position; the great chanter did not ascend spontaneously.

On Thursday, December 22nd, 1887, I made another careful examination with the same result and measurements as before. The neral health remains very good. It is now a little over one ar since the treatment was commenced.

On Thursday, May 10th, 1888, Dr. Thomas May and myself examined our little patient again carefully, only with the result of e same favourable reports as to the length of the legs, which re very nearly equal, and the head of the femur becoming more mly fixed in the improved position. There had been noticed ne little tendency to elevation of the heel, or rather, I should y, inability to flex the foot beyond the right angle, no doubt used by the foot being so long retained in a position with the es pointing downwards during the extension, and for this I rected passive movement of the foot with the right hand, whilst ne extension of the leg was being made with the left hand. ere was nothing further to report.

On Wednesday, October 31st, 1888, as Miss W. has now completed her two years of recumbency with extension which she gan on October 29th, 1886, it was arranged that she should gin to walk with a mechanical support, and for this purpose . Ernst took careful measurements of the right leg, which he mpared with the left. The legs were very nearly of equal gth; not more than one eighth of an inch shortening on the ht side could be measured. No inclination to spontaneous discement, or any movement upwards, when a little manipulan to test this was applied. The ilio-femoral triangle was rly equal on both sides, the right being about an eighth of an h less. The joint movements are all free, and the muscular ver very good. The general health is excellent, in no way ured by her complete recumbency, with extension, night and for two years. During this time she has had a mild attack measles, and also the whooping-cough, but the extension was materially interfered with.

Monday, November 12th, 1888. Miss W. began to walk to-day h the instrument which Mr. Ernst has constructed for these es, and I have described in the paper. Mr. Ernst applied it, l, with my assistance, the little girl walked about the room for hort time. This was repeated every day, and she soon got ustomed to the use of her crutches.

Friday, February 1st, 1889. The little girl can now walk about ne, using crutches for half an hour in the morning, and the ne in the afternoon. When left to herself on the couch, without instrument, there is no disposition to displacement at the hip.

Friday, June 14th, 1889. Has walked without crutches somees, during the last three months, holding by the table and irs, but I prefer the use of crutches or two sticks. She lies vn on the extension couch two hours every day, and sleeps on he extension being used. All the measurements are the same, l there is no disposition to displacement.

Wednesday, August 7th, 1889. She now walks about more freely, has been a little restrained lately.

After the last visit to me on June 14th, her mamma took her to Zoological Gardens, and the fatigue and excitement were too ch for her, and caused irritability, with some brain excitement the evening, which has since recurred in the evening. The ily having removed to Sevenoaks, Miss W. is now attended by Worship. The measurements of the leg and hip-joint remain same, the difference not being more than an eighth of an inch.

ON THE TREATMENT OF DUPUYTREN'S CONTRACTION OF THE PALMAR FASCIA.

By J. MACREADY, F.R.C.S.,
Surgeon to the Great Northern Central Hospital.

The subcutaneous treatment of Dupuytren's contraction of the palmar fascia is so successful with those who use the necessary obvances, that it is hard to understand why the treatment by open and still holds its ground. There are surgeons in this country abroad who even now prefer one or other of the methods by wound; and there is some likelihood that in America the real of the fascia through long incisions will supplant the subcutaneous operation.

Yet to judge by the results hitherto recorded, the treatment by open wound by no means deserves such credit as it enjoys. Those cases, indeed, of which the details are not given, are said to be successful, but in the majority of those that are fully described the restoration of function is evidently far from perfect. It may be that the most successful cases have not appeared in print. If this be so, it is an instance that contradicts one of the most favoured traditions of surgery.

The cases of open wound that have been published of late years are four done after Goyrand's plan, by which the contracted bands are exposed by longitudinal incisions, and then divided across in several places. Besides these there are eight cases, and one that afterwards came under my own care, treated by Kocher's method, a method suggested by Sir W. Fergusson, by which the affected fascia is excised after it has been laid bare by longitudinal incisions.

The results of these operations are described with perfect frankness, and are put forward as successful, but no very close scrutiny is needed to establish the conclusion that these operations do not generally give complete freedom of movement; that especially are they inapplicable when the phalangeal articulations are contracted; that, as the subjects chosen have been for the most part comparatively young, the method, even by its adherents, is not deemed well suited to persons of advanced age; and, lastly, that the treatment by open wound may end in the ruin of the hand.

The cases treated by Goyrand's method are three by Mr. Hardie that appeared in the *Med. Chronicle*, 1884 (pp. 9 to 16), and one published in the *Bullet. de la Soc. de Chir.*, 1888, xiv, 265, by M. Terrillon.

M. Terrillon performed this operation on the left hand of his patient, aged 45, and briefly states that the result was successful. Mr. Hardie's first case, aged 62, had contraction of the three inner fingers of each hand, more in the left than in the right. The other cases, aged 60 and 63, had flexion of the right ring and little fingers. Photographs were taken after healing, and figures taken from them are given of the hands of the three last cases. In all of them the fingers are seen to be arched; and it is stated that this arching could not be overcome in the first case, in which, moreover, the distal phalanx of the left ring finger was not improved, and the scar of the incision over the right ring finger, where the fascia, instead of being divided, had been dissected out, was more evident than the others, and appeared to be producing some recontraction.

In the second case the patient, a month after operation on his right hand, moved his fingers with some effort, and there was considerable thickening along the line of the incisions. In the third case the power of extension and flexion was said to be almost complete, though somewhat sluggishly performed. The arching of the fingers is more strongly marked in this case than in the others. The flexion in all these cases was good, subject of course to such limitations as have been above indicated.

This operation was adopted by Mr. Hardie in preference to the subcutaneous method, chiefly on the ground that the minute processes connecting the skin with the fascia and binding those two structures together, cannot be divided by the tenotome.[1] That the skin is united with the fascia in these cases only at certain points and not universally, was long ago pointed out by Mr. W. Adams, and in 1882 Dr. Keen, of Philadelphia, observed that "the skin can always be differentiated from the band, even to some extent when they are fused, and where they are not fused, the cord is felt distinctly at a deeper level."[2] This objection, raised by Mr. Hardie, is not practically valid, and I do not gather that it was found by him to be a drawback when actually performing the subcutaneous operation.

Before passing to the consideration of the cases in which the fascia was dissected out through longitudinal incisions, it is necessary to observe that the contraction which occurs in this affection, may be limited to the fascia in the palm or may extend to the prolongations that are attached to the fingers. In the first instance the metacarpo-phalangeal joints alone are bent, in the second the interphalangeal joints are also flexed. It will be convenient to speak of the first and lesser degree of contraction as palmar and of the second as phalangeal.

To ascertain the effect of the removal of the fascia I will quote

[1] *Loc. cit.* p. 11, and also Vogt in *Pitha und Billroth's Handbuch*, 4 Bd. p. 143 1863.

[2] *Philadelphia Med. Times*, vol. xii. p. 372, 1882.

the case of Gersuny,[3] the four cases of Kocher,[4] the case of Reeves, occurring in a woman,[5] that of Le Bec,[6] that of M. Terrillon above referred to, in which he treated the left hand by Goyrand's and the right by Kocher's method, and lastly, a case that was treated in January, 1889, at one of the large London hospitals and that afterwards came under my care.

Dr. Willy Meyer performed Kocher's operation in 1888 on the hand of a man, aged 60, and communicated the case to the Surgical Section of the New York Academy of Medicine on December 10th, 1888. The result was successful, but the details are not at present accessible, and the account given in the *New York Med. Record* leaves it uncertain whether the disease was palmar or phalangeal. This case cannot therefore be made use of in estimating the difference in the result of the open treatment when the contraction is palmar and when it is phalangeal.

In the nine cases more or less completely described, twelve hands were subjected to the operation, and of these four had palmar and eight phalangeal contraction.

The right hand of Reeves's patient, and of Le Bec's, and the left hand of Gersuny's, had palmar contraction, and the result in all was good. The right hand in Kocher's first case had palmar contraction of the ring and middle fingers. Three years after operation the patient says that the fingers are not at all bent.....only the two middle fingers are not quite useful for writing; that he still works with difficulty, and can only wield the pen with the thumb and index. "In no other way can it be done." "I am (should be?) very well pleased with the operation if only I had more power of grasp (*Spannkraft*) in the hand."

The hands in which phalangeal contraction was present, and which were successfully treated by this operation, were the right hand of M. Terrillon's case and both hands of Kocher's fourth patient. M. Terrillon, soon after the operation, says that the fingers could be completely extended. No further details are given of the movements of the hand.

Kocher's fourth case was that of an apothecary, aged 66, whose little fingers were contracted. He was seen seven months after operation, and then the fingers could be almost extended by voluntary movement. Extension by passive movement was perfect. The scars were somewhat firm, densest on the fingers, weakest on the palm and movable there; when the scars were touched the patient still experienced an unpleasant sensation. The result of the case is not so fully described as that of the others.

The right hand of Gersuny's case had flexion of the first phalangeal joint of the little finger to a right angle and palmar contraction of the ring finger. About a month after the operation there was slight flexion of the first phalangeal joint of the little finger, and a year later Gersuny satisfied himself that the improvement was permanent, but does not say if the little finger was straight.

In Kocher's second case, that of a medical man, aged 42, there was phalangeal contraction of the ring and little fingers of the right hand at the first phalangeal joint, so that the first and second phalanges formed an angle of 110°. Seventeen months later the patient stated that after the operation complete extension of the fingers was not attained, which he attributed to the enforced disuse of the phalangeal joints for the two years previous to treatment; that massage and use had so far improved the condition that by stretching of the hand to the utmost both finger-tips could be brought out so as to fall short of complete extension only by about 2 centimètres. Passively the deficiency of extension could be almost adjusted, but the limited movements of the phalangeal joints in question opposed this. When the hands were closed the terminal segment of the ring finger did not quite touch the hand.

The third patient of Kocher, aged 52, had contraction of both ring fingers, chiefly at the first phalangeal joint, and in the left hand there was also a band going in the direction of the thumb. Three months after operation the flexion was good, but extension of the ring fingers fell short by 30°, and rather more on the left side than on the right. A year later he could work. All that hindered him was a dense cicatricial band of skin that stood out on the palmar surface of the first phalanx of the ring fingers during extension, and was exposed to the pressure of any object that he grasped. The palmar contraction appears to have been remedied, but there still existed a bend of 45° at the first phalangeal joint of both ring fingers.

[3] *Wien. med. Wochenschr.* 32, August 9th, 1884.
[4] *Central. f. Chirur.* June 25th, 1887, Nos. 26, 27.
[5] JOURNAL, March 7th, 1885.
[6] *Gaz. des Hôp.* May 17th, 1887.

The last case that I will refer to was operated upon in London in January, 1889. The patient, aged 41, had had contraction of the left little finger for seven or eight years, and the ring and middle fingers had more lately become flexed. According to his statement, the metacarpo-phalangeal and first phalangeal joints of the little finger were at a right angle, the ring finger was less flexed, and the middle still less. The fascia was dissected out through three longitudinal incisions corresponding to the three fingers affected. He came under my care in May, when his left hand presented the appearance depicted in Fig. 1.



Fig. 1.—The left hand of a man, aged 41, after Kocher's operation, performed in London.

The skin of the palm was immovable, and was traversed by three hard, raised and knotty scars diverging from the root of the palm and reaching the first phalangeal joints of the implicated fingers. The only movement possible in the fingers was made at the metacarpo-phalangeal joints, and admitted an excursion of 30° of the ring and of something less of the middle finger. The little finger was absolutely fixed. After many and long-continued attempts to improve this deplorable condition, I was obliged to amputate the little finger, as it rendered the hand completely useless. This is not an isolated instance of disaster after treatment by open wound. A case is related[7] of a physician who thus lost the use of his little finger, and Dr. Little[8] gives two cases where the fascia had been removed through crucial incisions. A large contracted cicatrix was left "more rigid than the former state of things, and quite irremediable."

Such are the results of the open treatment of Dupuytren's contraction of the palmar fascia, even when it is undertaken by eminent surgeons with all the aid that skill and knowledge can afford. Though the fullest credit be given to the cases imperfectly described, it is evident that the restoration of function is not generally complete.

The palmar contraction seems to fare somewhat better than the phalangeal, for in four cases of the first kind there was but one bad result, namely, the hand in which the emancipated finger could not be used to assist in holding a pen.

The phalangeal cases give three successes to four partial and one total failure. It might be supposed that the large proportion of phalangeal cases here quoted is accidental; on the contrary, the proportion is below the average. The frequency per cent. with which these different sets of cases present themselves to the surgeon, can be easily calculated from Professor Keen's table, and amounts to 79.4 per cent of phalangeal to 20.6 per cent. of simple palmar contraction.[9]

[7] At p. 39 of Mr. W. Adams's book.
[8] *Holmes's System*, vol. iii., p. 698, Ed. 2, 1870.
[9] *Loc. cit.*, p. 372.

It is of essential importance, therefore, that an operation should used that corrects the flexion of the phalangeal as well as of e metacarpo-phalangeal articulations.

The principal objection raised against the subcutaneous eration is that the fascia, which is the seat of the con- ıction, is left behind, and that therefore recurrence will ke place. That some amount of bending occasionally ap- ars with the lapse of time is not denied. There is no pe, however, of ascertaining with precision the proportion of ses that relapse. Mr. W. Adams tells me that his estimate of urrence is 10 per cent. or a little less. If it were much larger ın this a period of freedom for many years would be aply purchased at so small a sacrifice as this operation de- nds. And it has this advantage, that it can be repeated; ereas, after excision of the fascia, a relapse is lifelong and emediable.



. 2.—The right hand of the same patient as Fig. 1, showing the result of the subcutaneous treatment.

ıe more plausible objections to the subcutaneous treatment con- in its inability to correct the gouty deformity of the joints which etimes accompanies the contraction of the fascia and prevents restoration of movement. Secondly, in the impossibility of ling the bands when they have undergone calcareous degene- n, and, lastly, in the difficulty of the operation itself.

ıfortunately there is no operation, either subcutaneous or open, will restore the joints that are damaged by gout, though the y swelling often diminishes after the subcutaneous operation, calcareous degeneration of a part of the fascia, which was met in a case of my own, can only be dealt with, I presume, by sion.

e open treatment has a manifest advantage in the facility which it is performed. Anyone, even in his first rudiments, xecute the simple dissection of Kocher, but the subcutaneous ation, easy as it appears, is, in cases of any severity, attended considerable difficulty. This fact is insisted upon by Dr. Myrtle ıe paper wherein he gives the best English description of nset and course of the disease.[10] But the difficulty of the ation, were it much greater than it is, would be no discourage- to surgeons of such well-known ability as those whose cases en wound I have ventured to criticise.

e subcutaneous treatment possesses this superiority, that as it ıces no constitutional effects, it can be done at any age and in any condition of health. The average age at operation in the cases above cited, done after Kocher's method was 49.5, and the average in the cases on which I have operated subcutaneously was 60; two of these patients were 68. Few surgeons would recommend an operation involving long incisions to a person verging upon 70, and few persons of that age would accept such a recommendation.

To illustrate the ordinary result of the subcutaneous treatment, two cases will be given, one of palmar and one of phalangeal contraction.



Fig. 3.—The right hand of same patient as in Figs. 1 and 2 before the subcutaneous operation.

The palmar case, Fig. 3, is the right hand of the patient, whose ruined left hand is seen in Fig. 1. The contraction in the right hand had existed for about a year, and affected the three inner



Fig. 4.—The right hand of a naval officer, aged 64, showing extreme phalangeal contraction.

fingers. As the photograph was not taken in profile, the extent of the flexion is not well shown. The operation was done in May, and bands going to the little, ring, and middle fingers were

[10] JOURNAL, December 3rd, 1881.

divided. In Fig. 2 the present condition of the hand is seen. Flexion and extension are fully and freely performed.

Through the kindness of Mr. W. Adams I am able to present a figure of the worst case of phalangeal contraction with which I am acquainted, none of my own cases having reached the degree of severity shown in Fig. 4. The hand is that of a naval officer who distinguished himself in the search for Sir John Franklin. The contraction affected the thumb, index, ring, and little finger, and had begun twenty-five years before. At the time of the operation, which was performed by Mr. Adams five years ago, the patient was 64 years old. The result is seen in Fig. 5, and the condition there shown has been maintained to the present day. The deviation of the ring and little fingers to the inner side, which is often present after the correction of this deformity, is well shown, as well as the marked improvement in the position of the thumb. It will be seen that the index is not completely straight. The movements of the fingers are still quite free and perfect.



Fig. 5.—The right hand of the naval officer after the subcutaneous operation by Mr. W. Adams.

To obtain such results, which are the ordinary results of the subcutaneous operation, it is necessary to observe the difference in the after-treatment between the palmar and phalangeal cases. The palmar can be treated throughout with the ordinary soft metal splint, bent to the fingers and gradually extended. The phalangeal cases, however, are best treated by aid of a dorsal splint with rack and pinion movement over the finger-joints. The apparatus is depicted in Eulenburg's paper in 1864, and in a much improved form in Mr. W. Adams's book on this subject (p. 60). It is quite possible to obtain complete success, even in severe cases, by using the simple metal splint on the palm, but not without much diligence and constant attention on the part of the surgeon.

In all cases extension should not be made at once or pain is produced. After division of the bands and straightening of the fingers they should be allowed to resume their flexed position before the soft metal splint is adapted. Extension, whatever apparatus is used, should not be begun till four or more days have elapsed, and should be continued for a week or more after full extension of the fingers has been accomplished.[11] The best knife is that extremely fine instrument designed by Mr. Adams for the purpose, which leaves a wound $\frac{1}{16}$ of an inch long.

The common advice in books on surgery is to use the subcutaneous operation in slight cases and the open operation in severe ones. Looking to the cases adduced in this paper, I submit that this advice might well be reversed, and that the open treatment should be confined to palmar cases, if, indeed, there is ever any justification for recommending the open operation.

With the exceptions and with the precautions above alluded to, the subcutaneous operation may be trusted to be successful. No matter how far advanced in life the patient may be, nor how severe the contraction, he may be promised complete restoration of function without pain, without danger, and without one hour in bed. As Dr. Abbe says, "this operation leaves nothing to be desired." Like the operation of Medea, it makes the hand young again, but, like hers, it will fail, if practised by an inattentive or an indifferent performer.

[11] Adams, *loc. cit.*, 59.

ON SUBCUTICULAR SUTURE.[1]

By KENDAL FRANKS, F.R.C.S.I.,
Surgeon to the Adelaide Hospital, Dublin.

In these days when the surgeon's knife is much more frequently demanded than formerly, it is often necessary, in the more exposed parts of the body, to leave as little trace of its use afterwards as possible. This is especially desirable in operation wounds about the face or neck of the fairer sex, for in them we cannot hope, nor is it desirable, that as youth passes into the fuller development of maturity, the growth of hirsute appendages will eventually conceal the mark which the operator has been obliged to make. Much has been gained in this direction by the introduction of antiseptics in surgery, by means of which we can in general ensure an immediate union of the wound's edges. We thus substitute for the cicatrix, often thick and wrinkled, of a wound hat has healed by granulation, the delicate, pliant and frequently almost unnoticeable scar which we seek to obtain in union by the first intention.

In the neck, for instance, when such a wound is small, and lies in a natural fold of the skin, the scar itself requires no concealment, for it would pass unobserved were it not that on both sides of it small points are most distinguishable, red at first and eventually white, which mark the points at which sutures have been inserted. I have frequently endeavoured to avoid these marks by employing strips of sticking plaster to keep the edges o the wound apposed instead of resorting to stitches, but I wa obliged to abandon this method on account of the difficulty o ensuring a perfectly aseptic condition of the parts; because whe dry no sticking plaster is reliable, and if it is rendered aseptic b immersion in an antiseptic solution its sticking properties ar destroyed. And thus we run the danger either of not keeping th edges of the wound properly apposed, or by allowing the woun to become septic to delay union, in either of which cases th wound must heal by granulation, and the defacement caused b the scar becomes worse than that which would be due to th suture points. These considerations induced me to seek for som other plan which would insure union by first intention, and woul at the same time abolish the evidences of the needle. I believ these points are gained by the use of a subcuticular suture. fine curved needle is required, one of Hagedorn's needles I prefe and very fine catgut. The suture must be a continuous one. Th needle is inserted horizontally, that is parallel to the surface the skin, at the cut edge of the wound, not vertically to it, and a distance from the cut edge, as in the ordinary suture. Th method of inserting the suture is as follows:—

I begin at a point about quarter of an inch from the upp angle of the wound. The needle is passed horizontally unde neath the epidermis of the skin into the cutis vera a emerges again from the cutis vera at the angle of th wound itself. It is then passed in a similar manner into th cutis vera alone of the opposite side of the wound, beginning the extreme angle and emerging at a point a quarter of an inc from it. The catgut is drawn through so as to leave just enou at the first point of entrance to enable it to be tied to the portio of the suture which holds the needle. This forms a standi point. The needle is again inserted horizontally into the tr skin, beginning immediately below the first point of entrance a comes out again a quarter of an inch lower down; it is th passed similarly into the other edge of the wound, at a point co responding exactly to the last point of emergence on the opposi side, being brought out again quarter of an inch lower dow

[1] Read in the Section of Surgery at the Annual Meeting of the British Medic Association held in Leeds.

This metnod is continued until the lower angle of the wound is reached.

It will thus be seen, as in this model which I have here, that the suture, before it is tightened, has the appearance of a ladder, the visible portions of the suture forming as it were the rungs; and if the suture has been properly inserted, these rungs will all be parallel. Now, when the suture is tightened, in the same way as we draw tight the lace of a shoe, you will see that the edges of the wound come accurately together, without the suture being visible or a single needle point appearing. The suture, you will observe, gives the wound a very slightly wavy appearance, which however eventually disappears. A knot may now be placed on the free end of the catgut and the rest cut off. I have used this suture for several years, and my colleagues in the Adelaide Hospital have adopted it, and we are all satisfied with the results. It is certainly a little more difficult and a little more tedious than the ordinary suture, and therefore we do not employ it for wounds in the covered parts of the body, but in the exposed parts, and chiefly in the neck, it undoubtedly reduces the ultimate mark to a minimum.



Fig. 1. Fig. 2.

FIG. 1.—Needle in position, showing how the first suture is inserted. The dotted line shows the portion of the needle beneath the cuticle.

FIG. 2.—Shows the appearance of the wound, when the whole of the continuous suture is inserted, before it is tightened. The dotted line shows the portion of the suture beneath the cuticle.

There is one class of cases in which I look upon this suture as of the greatest value, namely, in the removal of scrofulous glands from the neck. Especially is this the case with girls; but it is also most desirable in boys who desire to enter the army, where the regulations of the service prevent their adopting those means of concealment with which Nature would provide them, and where the presence of an unsightly scar would arouse the suspicions of the medical examiner to the point of rejecting the candidate.

A very great and salutary impetus was given to the more radical treatment of these affections by Dr. Clifford Allbutt and Mr. Priden Teale, of this town of Leeds, and I have over and over again seen the excellent results to be obtained by the early opening and complete scooping out of suppurating scrofulous glands as advocated by them; but I believe that even more rapid and better results will be gained in those cases which we can approach even at an earlier stage, before the cheesy centres in the glands have broken down into abscesses, and before the capsule of the glands has contracted adhesions to the surrounding tissues, while the gland is still hard and movable, then, through a small incision, perhaps an inch long, or an inch and a half, the gland can be easily enucleated, like the walnut out of its shell, and the resulting wound kept together by a subcuticular suture will leave a cicatrix, which even a close scrutiny will only just detect.

The adoption of the subcuticular suture, as an adjunct to the early removal of scrofulous glands and other tumours from the neck, together with the immediate union insured by aseptic surgery, will I believe prove an addition to the cosmeticism of surgery which many of the sufferers of both sexes will not despise.

ABSTRACT OF

THE ERASMUS WILSON LECTURES

ON THE

RELATION OF MORPHOLOGY & PATHOLOGY.

Delivered at the Royal College of Surgeons of England.

BY J. BLAND SUTTON, F.R.C.S.
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LECTURE III: THE MORPHOLOGY OF CANCER.

UNTIL recently the term cancer has been used, even by pathologists, in an indefinite sense. In clinical medicine and surgery it is still frequently employed to signify a malignant tumour. Throughout this lecture the term "cancer" will be used as synonymous with malignant adenoma. An adenoma is a neoplasm conforming in histological details to the type of a secreting gland. The less perfectly an adenoma mimics a gland the more likely is it to exhibit malignant properties, and come under the denomination cancer. Adenomata and cancers have a common feature in the possession of epithelium arranged in a definite manner. Epidermic appendages, whether hair, wool, bristles, feathers, glands, or teeth, are developed on the same principle, and what is equally remarkable, simple glands, hair, and teeth may form erratically under similar conditions, and the relationship between these structures and cancer is much closer than at first sight appears. In ovarian dermoids we sometimes find even in one square inch of tissue epithelial pearls, enamel organs, dentine papillæ, sweat glands, hair germs, and epithelial ingrowths which may be called adenomata, cancers, or epithelial odontomes. Doubtless it sounds strange to say to say that teeth and cancer are related; it is nevertheless true.

In the second lecture I explained that certain aberrations of the enamel organs appear as tumours which, in structure, have been interpreted as adenomata, and as cancer until more exact researches showed their true nature. The relation of hair and cancer has long been indicated clinically in the tendency of hairy moles to become cancerous. This relationship has been further illustrated by the observations of M. Panas: he points out that cancer of the conjunctiva almost invariably occurs at the outer corneo-scleral margin, which is likewise a favourite situation for dermoid patches and pingueculæ.

In a general sense we may say that hairless patches are glandular, and glandular tracts hairless. Although hair and sebaceous glands are intimately associated, the smaller hairs have very large glands and the largest sebaceous glands occur in a hairless situation, for example, the nymphæ.

Speaking generally, it may be said that exposure and irritation favour the development of hair, whilst seclusion promotes the formation of glands. Thus the nymphæ in the adult female are overlapped and obscured by the greater labia; they contain sebaceous glands of large size, but no hairs. Not infrequently the smaller labia elongate, and emerge from the protected position they usually occupy. The protruded portions become pigmented, the sebaceous glands on the exposed segments are small, and occasionally hairs will be found growing from them.

The relationship of glands to cancer is especially shown in the uterus, and it will be well to study it in the three sections: Fallopian tube, uterus, and cervix. Textbooks of histology—and, as a consequence, books on midwifery—describe these ducts as glandless. In 1888 I attempted to show that the so-called recesses of the tube are really glands. Subsequent investigations in the human female and extended inquiries into the character of the mucous membrane of the Fallopian tubes of other mammals have only served to support this opinion. The Fallopian tubes are not only glandular, but they may be the seat of adenomata arising in the glands, and may even become attacked primarily by cancer, as Doran has unequivocally demonstrated. In the cavity of the uterus the glands are more complex than in the tubes. An innocent adenoma of this part of the uterus has not yet been placed on record, but specimens have been described as adenoma from their histological characters, but they recurred

after treatment and destroyed life. The glands of the cervix are more complex than those of the body of the uterus or in the tube. The mucous membrane lining the cervical canal is frequently the seat of adenomata (clinically miscalled erosions or ulcerations) and cancer. It is also noteworthy that to the naked eye adenoma of the cervix is very distinct from cancer, yet under the microscope the details are often so very similar that it is hazardous to decide whether the tumour should be called a cancer or an adenoma.

To my mind, it is very suggestive that in the three parts of the uterus—Fallopian tube, uterus proper, and cervical canal—adenomata and cancer occur; in each instance the histological type mimicked is that of the glands peculiar to each section. Careful inquiries in other regions of the body return the same answer. Such facts as these indicate more clearly than anything else that cancer or malignant adenoma has a local origin. The aim of this lecture is simply to show that cancer belongs to a group of structures, comprising hair and its modifications, teeth, and glands. Speaking generally, the environment favourable to gland development promotes the development of cancer, namely, seclusion, an equable temperature, and moisture.

It is important to bear well in mind that the term "cancer" must be used in a definite sense if we are expected to find a cause, much less a cure, for this disease.

BONE-DRILLING IN THE NEIGHBOURHOOD OF INFLAMED JOINTS AND ELSEWHERE.

By NOBLE SMITH, F.R.C.S.Ed.,
Surgeon to All Saints Children's Hospital.

I have found such great benefit to result from bone drilling in the neighbourhood of inflamed joints, and in the shafts of inflamed bones, that I publish the following record of cases operated upon.

Case I.—*Acute Disease of Hip-Joint in a Scrofulous Patient.*—T. H., aged 9 years, was admitted to All Saints Children's Hospital, September 4th, 1888, with acute disease of the right hip-joint. The history of the case showed that the disease had been in acute progress for the last six months, and was getting worse gradually. It was reported that one of the brothers was suffering from a diseased knee-joint. The thigh was flexed to an angle of 45° from a straight line with the body, and adducted to an angle of about 30°. The thigh from the neighbourhood of the joint to the knee was very much swollen, so that the circumference of its upper part was nearly double that of the sound side. The swollen part was hot and exquisitely tender to the touch, and the child could not bear the slightest movement. I applied a Thomas's splint, which soon gave him partial relief.

On November 6th he was in much the same condition; the joint equally swollen and sensitive to pressure. Since wearing the splint, and while resting quietly, the lad suffered no pain, but upon the slightest movement acute suffering was experienced. The general health was very bad, he was pale and thin, and visibly losing weight. While under an anæsthetic, I punctured the outer aspect of the thigh down to the bone at a point 2½ inches from the head of the femur, and using a drill one-twelfth of an inch in diameter, made a hole into the central cavity of the shaft of the bone. I then made a second opening into the top of the trochanter. Into both openings I syringed a solution of carbolic acid (1 in 40), and closed the wounds with pieces of lint, outside which I placed a pad of carbolised gauze. There was slight aching pain for the next three hours, when the child fell asleep, waking in the morning perfectly free from pain, and feeling in all respects better. The swelling of the joint greatly subsided during the next two days, and the heat diminished.

On November 13th my notes state: "A week has now passed and the child is improving daily; he can now be lifted in and out of bed on the splint, without risk of producing the pain which he before felt." The patient improved rapidly. The swelling departed, and in three months' time the limb could be handled without the splint, and the joint was ankylosing. The child gained flesh rapidly, and has become comparatively robust.

November, 1889, a year after the operation, I note: The joint became firmly ankylosed, so that he could bear his weight upon the leg. Last August he went to the seaside for a holiday of four weeks. He complained of the shaking of the train, but otherwise did not seem hurt by the journey, and while away he got about comfortably in a chair, but was not allowed to walk much. A few weeks after his return symptoms of an abscess appeared on the inner side of his right thigh, quite apart from the hip-joint, and only I believe as a result of his scrofulous constitution. At the present time, December 5th, the abscess has nearly healed, and the joint remains firm and free from inflammation. February, 1890. He is now hearty, fat, and well, walking about with firmly ankylosed joint.

Case II.—Miss M., aged 32, sent to me by Dr. Daniel, of Epsom, in August, 1887. This patient had suffered from symptoms of inflammation in the region of her right hip-joint for about a year. Acute pain was felt upon the outer side of the trochanter, aggravated by pressure. Pain was also felt above the centre of Poupart's ligament, also upon deep pressure upon the inner side of the thigh, just below the level of the great trochanter. Relief was obtained from cupping over the region of the trochanter, and she was always better after a night's rest. A fixation splint was applied, and afforded partial relief, but did not entirely remove the symptoms. The pain upon firm pressure upon the trochanter remained.

July, 1888. I cut down upon the trochanter, drilled into the bone in two places, and injected a solution of carbolic acid. The pain ceased at once, and has not returned. Ten days after the operation the patient returned home, feeling perfectly well, and has since remained free from all pain and discomfort.

Case III.—Miss E., aged 44. Twelve years ago the proximal phalangeal joint of the middle finger of the left hand was forcibly bent in flexion. It has gradually got worse, the joint remaining swollen, hot, and tender. These symptoms continued more or less, and had never ceased to trouble the patient. The articular ends of the bones were enlarged, and the movements very limited and the terminal part of the finger was bent to the ulnar side. Upon movement there were symptoms of changes in the joint as in chronic rheumatic arthritis. I drilled into the farther phalanx a quarter of an inch from the joint; this was followed in a few days by relief from pain, and by a diminution of the enlargement. These results, which relieved the patient from much suffering, have remained permanent up to the present time, eighteen months after the operation.

I have operated in a like manner in a case of non-syphilitic periostitis of the tibia, giving relief in a few hours to the considerable pain before felt, and apparently hastening the cure. In a case of chronic sacro-iliac disease, in which pain had been felt for many months upon pressure and in walking, drilling by the side of the joint was followed in three days by complete freedom from pain upon pressure. This patient then went, contrary to my advice, into the country, and walked about so much that the joint was soon as bad as before. This is the only case I have had in which the ultimate results have not been quite satisfactory, although I believe that had due rest been taken the effect would have been good.

I have operated by drilling into the apices of the spinous processes of three of the upper dorsal vertebræ in two cases of caries of the spine, in which much pain upon pressure upon these bones was a marked symptom. In the first case pain had been previously partly relieved by the actual cautery, applied by several punctures close to the affected parts, but the drilling, a less painful procedure to the patient, was followed by continued improvement. In the second case, although the patient had been making good progress in other respects by means of fixation of the spine, yet pain in the spinous processes of the third, fourth, and fifth dorsal vertebræ continued unabated, and very troublesome to the patient. Three days after the operation all pain had departed, and the patient felt greatly benefited. A fortnight later the good effect remained, and the general health was rapidly improving. It is now five weeks since the operation, and the improvement, both locally and generally, is very manifest. Thus, by means of a very safe operation, an inflammatory process may be cut short and a joint or bone saved from destruction. The value of the operation is very apparent in cases of inflammation of a joint, the acute symptoms being rapidly relieved, and the vexed question as to excision thereby possibly set at rest.

The North of England Surgical Aid Society held its first annual meeting at Newcastle last week, under the presidency of Dr. Bruce.

AN EPIDEMIC OF INFLUENZA IN A PRISON.

By R. F. QUINTON, M.D., M.R.C.S.,
Medical Officer Her Majesty's Prison, Wandsworth.

The following notes and observations are made in connection with 195 cases of influenza which recently came under the care of myself and my colleague, Dr. Dyer, at Her Majesty's Prison, Wandsworth. Of the whole number affected, 159 were prisoners, the others being members of the staff and their families, mostly resident in prison quarters. The proportion of officers and prisoners attacked respectively was as follows:—

Officers, 19 out of a total staff of 87.

Prisoners, 159 out of a daily average population of 902.

In the last few days of 1889 some sporadic cases of what seemed to be ordinary cold appeared amongst the prisoners, and one officer went on the sick list on December 30th with suspicious symptoms. By January 4th, however, the epidemic had got a good foothold and invaded all parts of the building indiscriminately, showing no partiality for any particular quarter, and no obvious tendency to attack the occupants of adjoining or neighbouring cells. From January 4th to the 16th every landing in the prison contributed cases in tolerably uniform proportion to its population, with the exception of two basements which contained only a few cells—7 in one case and 4 in the other. After this date the disease seemed to die out, only a few cases occurring at intervals.

The accompanying table gives an idea of the general incidence of the epidemic during the period inside the prison. The large and small prisons are alike in shape and construction, and consist in each case of a circular central hall with long wings radiating from it, the whole being open from floor to roof. Each wing has four landings, basement, ground floor, and two sets of galleries from which the cells open running along each side of the wing.

January		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total.	Total Number Cells.
Main Prison.	Wing A. Cases...	—	1	1	3	—	1	1	5	4	—	3	1	2	—	3	—	25	143
	,, B. ,, ...	—	—	1	3	3	3	3	1	3	2	1	—	1	—	—	2	23	164
	,, C. ,, ...	—	8	1	7	2	7	4	4	1	1	3	3	—	1	1	1	44	261
	,, D. ,, ...	2	1	1	1	—	4	1	—	1	1	—	—	—	1	1	1	15	153
	,, E. ,, ...	1	—	1	—	3	1	2	—	—	1	3	—	—	1	1	1	15	121
Attached Prison.	,, G. ,, ...	—	—	—	—	—	1	2	—	2	1	—	—	—	—	—	—	6	36
	,, H. ,, ...	—	2	—	2	3	—	1	—	1	1	2	2	1	1	2	—	18	90
	,, K. ,, ...	—	2	2	1	1	—	1	—	1	1	1	—	—	—	3	—	13	75
		3	14	7	17	12	17	15	10	13	8	13	6	4	4	11	5	159	1043

The symptoms and signs observed were shivering in various degrees, fainting, frontal headache, giddiness, general muscular pains and "soreness," especially in the back and legs with marked weakness of the knees, a sense of aching in the eyeballs and round the orbits, soreness of throat, running from eyes and nose, cough, vomiting, diarrhœa, loss of appetite, and perverted taste, etc. No distinctive rash was observed, but herpes of the lips occurred in a few cases, and in two instances there was marked œdematous swelling of the cheeks and eyelids followed by desquamation. Catarrhal symptoms were absent in a large proportion of cases—considerably more than half the number—at all events from the outset of the attack. Catarrh appeared to me to be more a sequela than a symptom of the complaint. The soreness of throat complained of seemed to be muscular, for nothing could be seen generally to account for the apparent difficulty of articulation and swallowing.

Suddenness of onset was a very common feature. Several men date their attacks ushered in by a fainting fit in chapel at the Sunday morning service.

Temperatures ranged for the most part between 99° and 102°. In two cases it reached 104°, but rapidly subsided in ten or twelve hours. Nothing was noted in regard to the pulse further than that it is usually found in connection with the febrile state. There were 2 cases of transient delirium occurring in the early stage. One patient had a slight attack of pneumonia of one base, and his urine showed a trace of albumen. Bronchial catarrh and bronchitis were frequent after the first few days of pyrexia, and slight rises of temperature in the evening, with "hot flushes," often continued for seven or eight days, though the morning and midday temperatures might be normal.

Among the 159 prisoners affected only one relapse was noted, and it was remarkable that this prisoner did not return to work in a warm cell, but in a draughty passage, where he was engaged in sedentary employment, making baskets. When readmitted to hospital two days after his discharge his temperature was 103°.

Of the 19 officers attacked, 2 who returned to duty too soon had relapses, which were in each case more severe than the original attack.

None of the cases ended fatally, although patients of all ages, from infancy to 76, were victims of the epidemic, which seemed to spare neither the weak nor the strong. The average duration of illness was four or five days.

The most troublesome complications and results noticed were irritating cough, general languor and weakness, with much anæmia, and these were out of all apparent proportion to the duration and character of the febrile stage.

Out of the whole number of prisoners who suffered, 20 of the worst cases were treated in hospital. The remaining 139 were dealt with in their cells, the essence of the treatment being strict confinement there for three or four days in an equable temperature of about 60°, which was easily maintained uniformly throughout the prison at this period owing to the mildness of the weather. Exemption from work was of course ordered in all cases, and rest in bed when necessary. The medicines ordered were generally Dover's powder, cough mixtures of the usual kind, ammonia, steel and quinine. Of these the last mentioned seemed to be the most serviceable and trustworthy, but I have grave doubts whether any medicine had much direct influence on the disease. It should be noted that all who showed symptoms came under notice very soon, and so enjoyed the advantage of early treatment.

I can give no facts that will throw a light on the length of the incubation period, but I should judge it to be short, and not more than from one to three days.

Whatever the mysterious influence may be which gives rise to this complaint, there can be little doubt that the very definite and peculiar symptoms point to a specific virus and a living organism of some sort. As an early victim in this epidemic, I had the unpleasant experience of studying in my own person the behaviour of the poison, and, although I am peculiarly susceptible to what I have hitherto known as an "influenza cold," I became convinced that this attack was quite novel to me. I had, in fact, no catarrhal symptoms from first to last, and I never felt so weak-kneed before.

The secondary effects of the poison, as shown in the notorious prostration that follows an attack, are equally striking. Other peculiarities of this contagium, which make influenza the most typical of epidemic diseases, and at the same time distinguish it from all others, are its extreme diffusibility, the speed with which it travels, and, I would add, its apparently rapid development, decay, and death. When the bacillus is brought to light, and its ways and habits investigated, I am inclined to think it will be found to flourish best in the open air.

In regard to the etiology of this epidemic in the prison, it will be seen by reference to the table that the outbreaks in the two prisons were practically simultaneous, and at points far apart from each other. The prison stands on open ground on 35 acres of land at Wandsworth common. Within the boundary wall there are enclosed 12 acres. In the prison quarters for officers outside the walls the disease had already made its appearance on January 1st, and in the Wandsworth district generally it was very prevalent at the same time. The postal service was carried on with difficulty, owing to the number of letter carriers who were on the sick list. All this would appear to point strongly, if not conclusively, to some general cause, and to signify that the contagion was in the air, and was not imported by one case and passed on rapidly to all the others. One warder was taken ill with influenza symptoms on December 30th, but when he reached the prison at 6 A.M. he was unable to go on duty, and returned home on the sick list. It seems highly improbable that even if he had gone on duty he could have inoculated the virus at so many points. Moreover, this would argue a very high degree of contagion in influenza patients, the existence of which there is much reason to doubt. Facts appear to me to point in a distinctly opposite direction, and to show that the disease is not infectious or communicable from person to person, at all events in any marked degree.

Isolated country houses are attacked where no known source of

infection is near, and within a few hours—much too short a time for an incubation period—several cases appear. Very few people can give any more definite account of how, when, or from whom they caught the infection than the man-in-the-street source—a circumstance that is not usually observed in case of other contagious disorders.

In this prison epidemic none of the patients already in hospital contracted the disease, although men in various stages of influenza, to the number of twenty, passed through the wards between January 2nd and February 1st. At the same time three hospital orderlies out of four, who were moving about and taking exercise daily out of doors, were struck down at the beginning of the epidemic, and suffered rather severely.

If it be true, as held by some, that the virus is given off in the breath of the patient, we have pretty strong evidence that this virus does not live long, or show such tenacity as the germs of other infectious diseases, notably scarlet fever. Since January 21st, when the last fresh case occurred in the prison, the average weekly number of prisoners received has been about 170. Many of these have occupied cells in which infected men, beds, and bedding were for several days together. None of these cells were disinfected, nor were any special precautions taken in regard to them. It is impossible to think that all these new comers were insusceptible to contagion; and yet none of them caught the influenza.

NOTES ON AN OUTBREAK OF INFLUENZA AT KING EDWARD'S SCHOOLS FOR GIRLS.

By HUBERT C. BRISTOWE, M.B.Lond.,
Clinical Assistant Bethlem Royal Hospital.

I am permitted through the kindness of Dr. R. Percy Smith, Superintendent of Bethlem Royal Hospital, to give an account of an outbreak of influenza at King Edward's Schools for Girls. The school is under the superintendence of the authorities at Bethlem Hospital; it contains in all 240 girls, varying from the age of 11 to 16; of these 175 were affected, making about 73 per cent. of the total number. Two mistresses are also included in this account. Before January 17th there had been one or two cases, of which, however, no special notes were taken. On the morning of January 17th there were 4 cases, by the 20th there were 76, and by the 24th, 162; after which only a few cases appeared daily till the 29th, since which there have been no fresh ones. These girls spend a great deal of time in the open air, but only in the grounds connected with the schools, and have practically no communication with the outside world, except through the mistress and medical officers, who might, of course, have carried the infection. In almost all cases the disease was mild, and there have been no deaths amongst them.

Earliest Symptoms.—In almost every case the first symptom complained of was headache; only two were without it, and it is extremely doubtful whether these two ever had the disease at all. The headache in most cases was in the frontal region, the eyes also very often ached, and in some cases were tender to the touch. In only 14 per cent. was backache complained of, whilst 15 per cent. complained of pain in the side, in the lower costal region; and here there was always distinct tenderness, which seemed to be in the muscles. Aching in the legs was present in 16 per cent. only.

In 176 cases there was distinct watering of the eyes, the conjunctivæ being slightly injected. The face in 143 cases was extremely flushed from the first, in the other 34 cases the face was pale, and the patients were anæmic.

The temperature in most cases rose above 100° F., but the majority did not exceed 102°; in one case, however, it rose to 105°, and in only 4 cases was there shivering at the commencement of the illness. The children generally slept well, and 9 were markedly drowsy. The pulse certainly was not particularly slow, and was usually above 100; it was soft and weak.

In the 73 cases the tongue was furred, in 78 pale, flabby, and indented by the teeth, while in 7 it was red and dry, and in some of these almost strawberry-like in appearance.

In 61 cases there was vomiting, in all of which it started on the first day, and in only one case did it last longer. The action of the bowels was generally normal, but in 21 cases there was diarrhœa, with more or less abdominal pain, and in 19 cases there was marked constipation.

In 4 cases there was epistaxis, and in 1 there was what seemed to be hæmatemesis, the vomit being largely streaked with blood, which was, however, bright red.

Cough to a slight extent was present as a later symptom in 72 cases, but in only 9 cases were there any signs of bronchitis. There have been 3 cases of pneumonia, 2 of which recovered rapidly. Sore throat was present in 5 cases only.

Rash.—Besides what appears to me to be the true rash, in 17 cases there was labial herpes. In 36 cases, or over 20 per cent., there was a distinct rash; it was papular in character, the papules being slightly larger than the darker elements in the rash of scarlet fever, and of much the same colour. The papules often contained serum, which occasionlly became purulent. The skin round the papules was of a bright scarlet colour. In most cases the rash was confined to the face and neck, though it often appeared on the arms and hands as well, and in 2 cases on the shoulders and chest; it itched much, and generally after two or three days the bright colour faded, and it became scaly. In one case the rash was all over the neck, chest, legs, shoulders, and arms, and was at the time thought to be scarlet fever; but the temperature never rose above 100.4°, and the other symptoms of influenza, including pains in all the limbs, were present. There was no sore throat, and the tongue was only slightly furred. In two days the rash had almost completely gone.

A simple erythematous blush on the face was present in cases. In the cases in which the rash was best marked no drug had been given, the rash appearing as one of the earliest symptoms. In the other cases salicylate of soda, in 2½-grain doses had been given three times a day, and only in cases in which the temperature had been high was antipyrin given, and then only in small doses of 2 grains.

In all cases the symptoms rapidly subsided, the worst symptoms that is, pain and high temperature, being over in two days, the watering of the eyes generally lasting two days longer, and convalescence was completed in a week except in the 9 cases of bronchitis and the 3 of pneumonia. Weakness and giddiness were greatly complained of during the first day or two of convalescence.

A good many accounts of influenza have already been published but, as yet, none of epidemics among children, and it is on that account that I think this may be interesting; it also shows that influenza affects children just as easily as, though perhaps in a lighter form than adults.

	Total.	Per. cent.
Headache	175	98.305
Backache	25	14.124
Sideache	27	15.254
Chest pain	6	3.338
Stomach pain	13	7.344
Legache	29	16.384
Armsache	2	1.130
Total pain	176	99.435
Watery eyes	170	96.000
Sick	61	34.463
Bowels normal	127	71.751
,, confined	19	10.734
,, diarrhœa	21	11.864
Tongue normal	19	10.734
,, furred	73	41.243
,, red and dry...	7	3.954
,, pale and flabby	78	44.067
Rash, herpes lab.	17	9.600
,, erythema	9	5.085
,, papular	36	20.339
Lungs, cough	72	40.676
,, bronchitis	9	5.085
,, pneumonia	3	1.700
Sore throat	5	2.825
Epistaxis	4	2,260
Drowsy	9	5.085
Face pale	34	19.709
,, flushed	143	80.800
Shivering	4	2.260
Total	177	
Total in schools	240	
Per cent. affected	73.75	

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.,

THE RESPIRATORY COMPLICATIONS OF INFLUENZA.

THE prevalent opinion seems to be that influenza is the cause of the diseases of the respiratory organs which accompany an epidemic of it. Dr. Squire, in his note published in the JOURNAL of February 15th, seems to look upon the relapse in influenza as allied in some degree to that occurring in miasmatic fevers from continuance of existence of the germ in the system, and a revival of its reproduction when a relapse occurs; but in miasmatic fevers, such as ague, relapses are in every respect like the original attack, except possibly in intensity or duration, and often occur several times after the primary attack, whereas, in influenza, the relapse (by which I understand Dr. Squire to mean the affections of the respiratory organs which frequently follow an attack of influenza) shows itself, as regards the symptoms, as a totally different malady.

Professor Rosenbach, as stated in the same number of the JOURNAL, page 373, observes that the increase in numbers of respiratory catarrhs, croupous pneumonias, etc., during an epidemic of influenza, does not prove that the latter is the cause.

The table of mortality in London during the six weeks ending February 8th last would seem to throw some light on that point. The reported deaths from influenza during that period are weekly as follows: 4, 67, 127, 105, 75, and 38 successively; while the mortality from diseases of the respiratory organs during the second of these six weeks was more than double the average. There was a slight decline in the succeeding week, although the number of deaths directly referred to influenza was 127, or nearly double that of the preceding week. During the week ending January 25th there was a considerable decline in the number of deaths due to respiratory diseases, although the number of those due to influenza stood up as high as 105. During the last two weeks of the period referred to, the number of deaths from diseases of the respiratory organs was actually below the average number in the corresponding periods of recent years; although the number of deaths directly referred to influenza during the first of these two weeks was 75, or above that of the week ending January 11th, when the number of deaths from diseases of the respiratory organs exceeded double the average number. Mortality tables showing the number of deaths from diseases of the respiratory organs during the weeks immediately preceding those reported here, and before a single death from influenza had occurred, and even before a single case of influenza had been observed in London, would no doubt throw additional light on this point, but I have not these at hand. However, from the foregoing observations, it would appear that the developmental cause producing the diseases of the respiratory organs during the late epidemic acted previously to the cause which produced influenza, and that, in the majority of the cases at least, the latter could not be the cause of the former.

During the epidemic of influenza which prevailed in the winter of 1847-48, not only was the number of deaths increased in the case of diseases of the lungs, etc., but also in that of the zymotic diseases, the increase in the latter being prolonged much longer both before the inception of influenza and after it had subsided.

As to the mode of propagation of influenza, opinions seem to be considerably divided on that point. My experience of the last epidemic would lead me to think that the atmosphere is the most effective vehicle for conveying that disease, but that it can also, though not in a high degree, be transmitted by infection, as in the clothing, etc., and also by contagion from person to person.

Berners Street, W. P. Z. HEBERT, M.D.

"PERIPATETIC ALBUMINURIA."

In the JOURNAL for February 15th, in the discussion that followed on Dr. Goodhart's paper on "Peripatetic Albuminuria," I am reported to have stated that I "had recently seen four young men who had little or no albuminuria on starting from Exeter, but who, after a long railway journey in the cold, were found to have one-third of albumen in their urine."

The facts of the case are that on the morning of November 26th, 1889, I had to examine and report on the health of four railway men; of these, one passed satisfactorily; of the other three: T. B., aged 20, urine contained nearly one-third albumen; J. S., aged 19, urine gave distinct evidence of the presence of albumen; G. M., aged 20, urine turbid on being stirred, and did not entirely clear on addition of nitric acid; faint trace of albumen. All four had travelled up from the West of England, three from Exeter, one from Cornwall; they had travelled by night, and it had been very cold, and had become so suddenly. I suspected that they were all cases of temporary albuminuria, but I did not feel justified in passing two of them.

T. B. I saw again on February 3rd, 1890. He then had albumen to about one-eighth. He brought a certificate from his doctor in Exeter, dated February 2nd, stating that he had examined the urine and found only a "very slight trace." All the men appeared healthy in every other respect.

Finsbury Circus, E.C. RAYNER D. BATTEN, M.D.Lond.

"EUCALYPTUS ROSTRATA" IN THE TREATMENT OF SEA-SICKNESS.

IT may be of interest to some of your readers, especially that portion who, like myself, have been employed as ship surgeons, to have my experience of the above.

From time to time, at sea, I have been driven nearly to my wit's end endeavouring to relieve that most distressing vomiting which takes place in some cases of sea-sickness, especially in the case of delicate or strumous females. I have tried amyl nit., camphor, cocaine, bismuth, chloroform, morphine, caffeine, bromides, and most of the other treatments usually employed, but, I must confess, with very little success. At length I was induced to try the effects of the "red gum." I got the idea from an old "gold digger," who was a passenger under my care, saying that it always cured him. I have made several experiments with it, and am very pleased with the result, as it almost invariably gave relief where the more orthodox modes of treatment failed. I think the most convenient mode of administration is in the form of lozenges (trochisci eucalypti gummi, gr. i, in each). The patient can thus easily carry about a few in the pocket, and take one when he feels the sickness coming on. By using them in this manner I have found three or four during the day sufficient; and, I may remark, I have never heard any of my patients complaining of the treatment producing constipation. I am convinced that if any of my "brother chips" at sea give this a fair trial they will not be disappointed.—I am, etc.,

W. M. RUSSELL, A.B., M.B., B.Ch., B.A.O.Dub.Univ.
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ON AN UNUSUAL VARIETY OF BLOOD POISONING.

I HAVE, within the last year, performed a *post-mortem* examination on two cases, in which the morbid appearances were practically identical and were associated in an unusual way. There was an interval of several months between the *post-mortem* examinations, and although both the cases were middle-aged women, they lived far apart and occupied very different social positions, so that they could hardly have been infected from the same source.

In both there was very acute pericarditis and double pleurisy, with only a few small patches of pneumonia. The serous membranes presented the appearances usually seen in virulent septic poisoning, the effusion being almost purulent. In both cases there was also acute lymphadenitis of the mediastinal glands.

In the first case I examined the pharynx and larynx particularly, on account of a deep-seated pain which had been complained of in that position during life. The fauces, soft palate, posterior nares, and pharynx were perfectly normal but, on each ary-epiglottidean fold there was a small patch of firmly adherent and in every way typical diphtheritic membrane. The patches were scarcely as large as a threepenny bit and were quite symmetrical, each lying on the upper edge of the fold just in front of the arytenoid cartilage. The rest of the larynx and the trachea were quite free from false membrane.

In the second case there was an equally typical patch of false membrane, occupying the middle of the upper edge of the right ary-epiglottidean fold. It was as small as the patches in the first case, but posteriorly it had begun to be detached. Exactly opposite to it, on the left fold, there was a raw surface of the same size, from which it is possible that membrane had recently been detached. There was not a trace of false membrane or of ulceration in any other part of the throat or air passages.

In the clinical history of the first case there was nothing to suggest diphtheria. The second case was admitted into the hospital moribund and died in an hour or two. If we regard these as cases of ordinary diphtheria, it is remarkable that the typical lesion in the larynx should be so small and so localised, while the lesions in the pericardium and pleuræ were so extensive. Besides, purulent pericarditis is not a very common complication of diphtheria. I am, therefore, inclined to think that they are really instances of ordinary septicæmia, in which the micrococci entered the body at an unusual spot, the ary-epiglottidean fold, and produced there a somewhat unusual lesion, that is, a coagulation necrosis of the mucous membrane, leading to the formation of a false membrane. Once the organisms were admitted, the lesions of the lymph glands and serous membranes would follow in an ordinary way, and might proceed to any extent.

On any hypothesis these cases appear to be members of a distinct group, in which infection occurs at a particular spot, produces there a definite lesion, and leads to definite sequelæ.

NORMAN DALTON, M.D., M.R.C.P.,
Assistant Physician and Pathologist to King's College Hospital.

PILOCARPINE IN POISONING BY BELLADONNA.

ON December 25th, 1889, about 11.30 A.M., a messenger came for me to visit immediately Mrs. McK., aged 37, who was said to be dying from having taken a quantity of a liniment by mistake for a dose of a mixture she had been ordered. I arrived at her residence, three miles distant, shortly after 12 o'clock. I found, on examining the bottle, that the liniment was the linimentum belladonnæ, *B.P.*, and that she had taken, about 8 o'clock, a large tablespoonful. Her condition was very serious. She was totally unconscious, was breathing stertorously; there were frequently recurring convulsions; pupils widely dilated, so that there was only a ring of iris, and not influenced by light; extremities cold, heart greatly excited and weak, and pulse scarcely perceptible at the wrist. She presented all the appearances of approaching death. Some attempt was made before my arrival to produce vomiting, but without success. As she could not swallow, I injected one-tenth of a grain of apomorphine; this failed to produce vomiting, and, fearing the depressing effects sometimes produced by this drug, I did not repeat it, but at once introduced the tube of the stomach pump, and thoroughly washed out the stomach. The stomach was almost empty, and I could not detect any odour of belladonna in the water returning from it. I then injected hypodermically one-third of a grain of pilocarpine (Burroughs, Wellcome, and Co.'s tabloid), passed the catheter, and withdrew nearly a pint of urine, threw up the rectum a pint of strong hot coffee, and used flagellation with a wet towel over the chest and cheeks, which at first was scarcely felt. I also applied mustard to the calves of the legs. In about half an hour improvement was observed; her countenance became more natural. A little later she looked about her, and was soon able to swallow small quantities of sal volatile and strong coffee. At 2 o'clock I left her, ordering the sal volatile and coffee to be continued alternately, and warning the attendants against allowing her to sleep. At 5 o'clock I returned, and found her sitting up in bed in a rather excited condition, and talking deliriously. She knew me, but did not realise her position, or know anything of what she had passed through. I injected another tabloid (one-third of a grain) of pilocarpine. It did not at any time produce perspiration, but only a little softness of the skin. From this time recovery was uninterrupted. She, however, remained very weak, and unable to get up for nearly a week, and complained for some days of thirst and dryness of throat.

REMARKS.—I consider the case worth recording on account of the undoubted action of the pilocarpine in antagonising the belladonna. Owing to the length of time from taking the dose and my seeing her (over four hours), the poison must have been entirely absorbed, as, indeed, was clear from the very marked toxic effects, and from the absence of odour of belladonna in the washings of the stomach. Although I used the stomach pump, I cannot attach much importance to this part of the means adopted. There can, therefore, be little doubt as to the effective part played by the pilocarpine in the cure, and in preserving a valuable life to a large family of helpless children.

WILLIAM MCGOWAN, B.A., M.D., Medical Officer Maghera Dispensary
Maghera, Co. Londonderry.

CASE OF HYMENEAL OBSTRUCTION: RETENTION OF MENSES.

FOURTEEN months ago I was called to see a pale sickly girl, aged 16, complaining of pains in the abdomen. Inquiry into the history of the illness elicited the fact that she had never menstruated. She had had slight abdominal pains, but only within the past few days had they attained such severity as to urge her mother to seek advice on her account. Defæcation and micturition had always been normal; there had been no sickness. On examination, the breasts were small; there was no areola. The abdomen presented a prominent tumour, filling the hypogastrium and reaching to within an inch of the umbilicus. It was tense, elastic, and globular; dull on percussion, and somewhat painful on pressure. Separation of the labia disclosed an unruptured hymen, dark blue in colour, tense, bulging, and elastic, and closely incorporated with the vaginal walls. Pressure on the abdomen increased the bulging below. The condition was manifest.

An anæsthetic having been administered and the parts washed with sublimate solution, a medium-sized trocar was pushed through the hymen and a few ounces of snuff-coloured odourless fluid withdrawn. As the fluid then ceased to come the hymen was incised, and moderate pressure applied to the uterus. These measures were followed by a copious evacuation—roughly estimated at 40 ounces—of thick viscid odourless stuff, resembling black currant jelly. An elliptical piece of the hymen was clipped away, the vagina was washed out with carbolised solution, and a strip of carbolised lint inserted in the orifice. Little or no discharge came away subsequently; the vagina was irrigated daily for a week with dilute Condy's fluid, there was never any rise of temperature, and the patient did uninterruptedly well. She menstruates every six or eight weeks. The points of interest in the case are (1) the entire immunity from discomfort, local or constitutional, which the patient enjoyed till tension symptoms from accumulation supervened, (2) the almost solid character of the retained material, and (3) the comparative rarity of the condition.

JAMES MACDONALD, M.A., M.B., C.M.
Carlisle.

THE ACTION OF POTABLE WATERS ON LEAD.

IN my pamphlet on "Plumbism," published by Tyne and Shepherd, Bacup, I have treated at considerable length on the above subject. There is one point that I have not referred to in my pamphlet, nor in the articles on Plumbism which appeared in the *Sanitary Record* of April 15th, 1889, and in the JOURNAL, vol. ii, 1889, page 461, which is of considerable importance. It is mentioned in Dr. Kirker's paper in the JOURNAL of January 18th, namely, "The Seasonal Variations in the Action of Water on Lead." Dr. White, of Sheffield, states that the Sheffield water is most active in the summer, and may be due to higher temperature of the water. Dr. Kirker supports Mr. Power's suggestion that the water acts most when micro-organisms are present; that would be in the summer months. Mr. Eaton, C.E., engineer to the Sheffield Waterworks Company, says that the water, "contrary to common report, acts with less energy in the summer time and most destructive in the winter time," etc. From my clinical observations, I found the most severe forms of plumbism occurred in the winter and early spring. My opinion is that the water contains more lead in the winter; that the water acts more on lead at low temperature; that the water is more acid in its reaction. The free acid in Bacup water is H_2SO_4, and is derived chiefly from the iron pyrites; another source and cause for its increased acidity in water may be the vast quantities of free sulphuric acid in the air due to the increased combustion of coals. The H_2SO_4 is washed down by the rain which is collected from the moors. The Bacup coals contain more sulphur than any coal that I am acquainted with.

Bacup. JOHN BROWN, M.D., D.S.Sci., M.O.H.

FIBROID THICKENING OF THE SPLENIC CAPSULE.

DR. JULIUS MICKLE, in the course of his observations on thickening of the splenic capsule in the JOURNAL of October 19th, 1889, remarks that "whether the foundations of it have always been laid during the turgescence of the organ is an unproved point." As I happen to have at the present time under my care a patient whose condition appears to correspond with the above description, I venture to send a few notes of his case.

Sergeant M., aged 29, married, with 9½ years' service, was admitted September 26th, complaining of severe pain in the left

le, apparently pleuritic in character. He stated that he had en in good health till a week previously, when he had been exsed from active exertion. He attributed the attack to a severe etting about a month previously whilst on the rifle range. There no history of syphilis. He has not had ague, but served for a ort time in Egypt and Cyprus in the 1885 campaign. At the tter station, where intermittent fever prevails, he was under eatment for twelve days for debility, quinine being given.

Physical examination on admission revealed extensive enlargeent of the spleen almost to the umbilicus; and—which is the int of interest in the present discussion—friction sounds were dible over the whole of the area of dulness, but most distinctly the circumference.

Since admission the enlargement has increased considerably, d appears to be painless except for the accompanying peritons. This has also extended, and is now palpable as well as dible.

The general symptoms are almost *nil*, as the temperature has t reached 100°, pulse is quiet, tongue clean, bowels slightly conpated. He can lie on either side, though when admitted he uld lie only on his back.

The case would seem to be one of simple hypertrophy of the leen, not malarial in origin, but such as is described by Bristowe "furnished by persons who have never suffered from any of e above disorders" (that is, malaria, cirrhosis, or rickets), "and whom there is no history pointing to the operation of any spedic cause." The localised peritonitis which is so marked a ature is doubtless due to thickening of the capsule in an otherse painless enlargement, which, but for it, might have remained onsiderable time unnoticed. It does not appear to have reved the attention it deserves as a symptom in such cases, ough I see that Sir W. Aitken mentions it (under the head, wever, of peritonitis) as being not uncommon in splenic engements. It is extremely probable that pressure from the dier's belt may intensify it, as suggested by Dr. Mickle, if it do t actually produce it. In the present case the patient expressly tes that he felt no inconvenience from the pressure whilst at ty. The condition amounts to more than the "splenic corn" ticed by Dr. Mickle, and answers more nearly to that described Billroth (and referred to in your editorial note) when he says it "occasionally the entire capsule is transformed into a coarse, rlike, fibrous mass."

G. S. ROBINSON, Surgeon-Major Scots Guards.
Marlborough Mansions, S.W.

REPORTS

ON

EDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

COUNTY AND CITY INFIRMARY, PERTH.

CASE OF TRAUMATIC CHYLURIA.

(Under the care of LEIGH HUNT, M.B., C.M.)

[Reported by J. C. G. DUFFUS, M.A., M.B.]

K., aged 22, was admitted on the evening of July 5th, with the tory of having fallen through a scaffolding and alighted ongst stones, from a height of some ten feet. Patient was unscious when picked up, and subsequently vomited during the rney to the infirmary. When admitted, he was suffering from siderable shock, and could with difficulty be aroused to answer estions put to him. He complained of great pain over the ion of the left lower ribs; no fracture could be made out. ening temperature 100.2° F. He slept very heavily all night, l was still in a state of semi-stupor in the morning, when the perature was again 100.2°. The point of interest in the case s the character of the urine passed during the night. There s about six ounces of it, only a test specimen of which had n kept. On the surface was a stratum of milky-white coagua about half an inch thick. The rest of the specimens consisted urine, turbid, like soapy water. The smell was that of new k. The clear liquor, on being drawn off by a *pipette*, from ler the semi-solid coagulum, showed a specific gravity of 1020; ction acid; on boiling became more turbid, and on addition of ric acid gave a heavy precipitate. The coagulum, when shaken up with ether, dissolved entirely, with the exception of a slight film of mucus which seemed to have become entangled in the coagulum. On evaporating this ethereal solution, a yellowish, buttery-looking residue remained. Microscopically, the coagulum was seen to consist of innumerable excessively minute oil globules, and here and there a few large granular cells; no casts; no blood-cells. After a few hours the stratum on the surface became more firm, and the underlying liquor more clear; the smell now became that of sour milk, and microscopically multitudes of bacterium termo were to be seen. The evening temperature was 101.6°; next morning 100.2°, and up till the 16th it varied between 99° and this; on the 16th it became normal, and continued so till he was discharged on the 30th. There was never again the slightest trace of chyle in the urine; on the same day, the 6th, the urine next passed was quite clear, with specific gravity 1040, a layer of about one inch of mucus and urates; a cloud on boiling, which the addition of nitric acid showed to be phosphates, and, as long as he was under observation, no further trace of chyle. The urine gradually returned to its normal specific gravity and appearance, and the patient gradually lost that heavy look of semi-stupor, and made a good recovery, and was discharged cured on July 30th. Up to the time that he was, to all appearances, perfectly well, about the 20th, he complained of more or less tenderness over the left hypochondriac and lumbar regions, which seemed to be of a peritonitic character.

REMARKS.—This was an undoubted case of chyluria, the immediate result of an external violence, and occurring only in one micturition. The probable explanation seems to be the rupture of a lymphatic somewhere in the left kidney, emptying itself into the urine stream.

MANCHESTER ROYAL INFIRMARY.

ATROPINE POISONING BY ABSORPTION FROM THE CONJUNCTIVA.

[Reported by T. N. KELYNACK, M.B., House-Physician.]

S. L., aged 10, was brought to the accident room about 5 P.M. on January 27th. Her mother stated that during the afternoon she had "gone queer in her head." She was suffering from keratitis of the left eye, and since January 13th a drop of liquor atropinæ sulphatis had been applied thrice daily. A few days previously she had slight difficulty in swallowing, but about 1 P.M. on January 27th she became very thirsty. A little later she complained of giddiness, and cried out that her right eye was also becoming affected, and that she could not see to read. She also felt sick. About 2 P.M. she lay down, being flushed on each cheek Her mother noticed that she was muttering to herself, staring wildly, and toying in an objectless way with anything she could lay her hands on.

On admission both pupils were widely dilated. Her gait was somewhat staggering, and she was very restless, constantly moving from place to place. There was very marked, active, busy delirium, with transitory spectral illusions. The pulse was exceedingly rapid, but respirations were not much accelerated. The skin was rather dry, but there was no distinct rash. The lips and mouth were not dry, and no complaint was made as to any difficulty in swallowing. On being put to bed she became very excited, talking incessantly, but incoherently. Optic hallucinations continued to be very marked, and she spoke of seeing cats and dogs. At times she was very rough, tearing her gown, and having to be forcibly kept in bed. There was no dysuria nor suppression of urine, but a trace of albumen was detected. No rash developed. There was no great thirst. Gradually she became quieter, and by about midnight talked and acted quite rationally. After passing a good night, she awoke apparently quite well.

Her mother is absolutely certain that none of the atropine solution ever got into the child's mouth or into the sound eye. She also says she only put one drop at a time into the affected eye, by means of a dropper. The bottle containing the atropine solution had recently been refilled, but when brought by the mother was still almost full, only a few drops evidently having been used.

RUSSIAN UNIVERSITIES.—The total number of students in the University of Moscow at the commencement of the present year was 3,471, of whom 1,265 belonged to the medical faculty. During 1889 the degree of Doctor was conferred on 8, and that of "medical practitioner" on 222 candidates. At Charkow there were, on January 1st, 1,000 students, of whom 553 belonged to the medical faculty. This number is less by 142 than that on the books at the corresponding date last year.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 18TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

Compression Myelitis, with and without Secondary Degenerations.—Dr. COLMAN showed specimens of myelitis and of secondary degenerations from a case of spinal caries in a man 64 years of age. He had suffered from persistent pain in the back for eighteen months, and twelve months before death he had suddenly lost power and sensation below the umbilicus. The paralysis was absolute. The sphincters also were paralysed from that time till his death. The knee-jerks were exaggerated, and there was ankle clonus. Two months before death he was operated on, and nine days later sensation began to return, but no motor power was regained. *Post mortem* the cord was found compressed by a mass of granulation tissue. The bodies of the eighth and ninth dorsal vertebræ were completely disorganised. Sections showed intense myelitis at the level of compression, but on longitudinal section a number of axis cylinders could be seen persisting in the inflamed and disorganised white matter. There were well-marked descending degenerations in both direct and crossed pyramidal tracts, and ascending degenerations in the postero-median and the adjacent part of the postero-external columns, in the direct cerebellar tract, and in the "ascending antero-lateral tract" of Gowers. There was also well-marked neuritis of the roots at the point of compression, which extended down into the nerve trunks. He also showed specimens from a case of compression myelitis without ascending or descending degenerations. The patient was a man, aged 40, who had suffered from symptoms of compression for twelve months. At the time of death he had almost complete paraplegia, with considerable blunting of sensation over the limbs, girdle pain at the level of the tenth and eleventh intercostal nerves, and well-marked angular curvature. There was loss of sexual power, and slight tendency to retention, no affection of the sphincter ani. Exaggerated knee-jerks and ankle clonus. *Post mortem* the cord was found to be compressed by the sac of an abscess connected with the ninth and tenth dorsal vertebræ. On section the cord was found to be red and opaque in this situation. Elsewhere it was normal. On microscopic examination there was well-marked transverse myelitis, the myelin sheaths of the white matter being degenerated in all the columns. The grey matter was much less affected than the white. Sections taken an inch above and below the lesion did not show any ascending or descending degeneration whatever.—Dr. ORMEROD thought the question of the presence or absence of secondary degenerations after transverse lesions of the cord due to compression was a very important one, not only pathologically, but it might become of importance with reference to prognosis; as if the lesion which caused the original compression could be removed, the question of recovery would very likely depend on whether secondary degeneration changes had supervened or not.—Dr. HADDEN mentioned a case of complete paraplegia from compression due to Pott's disease. Recovery occurred, and the patient regained good power in the legs. Several years later the patient died of some other disease, and at the *post-mortem* examination well-marked lateral sclerosis had been found. He asked Dr. Colman if there were any degenerated fibres in the pyramidal tracts, as it was now generally accepted that these tracts were not purely descending motor tracts, but contained a few ascending fibres, which passed to the cerebellum.—Mr. SPENCER thought that Dr. Colman's cases settled the question, which Mr. Jonathan Hutchinson had originally asked, why it was that the nervi erigentes were sometimes paralysed whilst those to the sphincters were not.—The PRESIDENT mentioned that degeneration of the posterior columns could follow amputation of the lower limbs, as he had shown long ago.—Dr. COLMAN, in answer to Dr. Hadden, said that about one fibre in twenty in the pyramidal tracts appeared to be healthy.

Cancer of Omentum.—Dr. WEST showed a specimen of this nature from a woman, aged 52. She had had symptoms of discomfort for two years, which had considerably increased, and her health had given way during the last five months. When first seen in May, 1889, her abdomen was found much distended. It was tympanitic; there was but little ascites. She had had severe pain, and probably acute inflammation of the bladder or of the peritoneum shortly before she was seen. The heart and lungs were healthy; the lower limbs were a good deal swollen. Soon after admission her abdomen was tapped and 12½ pints of blood-stained serum withdrawn; a large tumour could then be felt on the left side, which passed just under the ribs on the left side. It occupied the greater part of the left half of the abdomen and crossed about an inch and a half beyond the middle line. The surface of the tumour was smooth, and its thickness was ascertained to be about an inch and a half. He came to the conclusion that it was not the spleen. A fresh accumulation of ascitic fluid occurred, and there was some effusion also into the right pleural cavity. The patient died suddenly. The body was fat, and there had been no emaciation. It had been very difficult to form a diagnosis between tubercular and malignant disease of the peritoneum, but a hesitating one of malignant disease had been made. At the *post-mortem* examination the tumour was found to be the omentum rolled into a large mass; the intestines were matted together, and there were several small deposits scattered over the peritoneum. The large mass and the smaller masses were all found to consist of a very fibrous scirrhous cancer. The case was a very remarkable one, and he had been unable to find one exactly like it in the Society's *Transactions*. The growth was apparently a primary one of the omentum, and there were no secondary deposits anywhere outside the peritoneum.—Mr. EVE referred to the interest in this case of the resemblance between cancer and tubercle of the omentum. He mentioned a specimen of tubercular omentum which had been removed and sent to the College of Surgeons Museum as a malignant tumour. He then referred to several cases of myxosarcoma which he had published. The specimen under discussion was, he thought, probably one of endothelial cancer.—The PRESIDENT agreed as to the interest of the specimen with reference to its source, and gave the details of an almost exactly similar case which had some years ago come under his notice.—The specimen was then referred to the Morbid Growths Committee.

Aneurysm of Popliteal Artery and Sarcoma.—Mr. CROFT showed a specimen which included a large aneurysmal clot in a mass of sarcoma. He gave the following history of the case. The patient was a male, aged 71, who was the subject of aortic valvular disease, and had been seized, three months prior to his admission under Mr. Croft's care into St. Thomas's Hospital, with pain and swelling behind the knee and in the leg. The œdema subsided in two months, and then the medical attendant discovered a small strongly pulsating tumour in the popliteal space. A fortnight later he entered St. Thomas's Hospital, and was found to have a pulsatile swelling (fusiform) the size of an egg, which was diagnosed to be a popliteal aneurysm. He was seen by several members of the surgical staff, and no one doubted the correctness of the diagnosis. The artery was ligatured on the twelfth day after admission with an antiseptic silk ligature. Pulsation returned, and the tumour increased in size. Three weeks later the femoral artery was ligatured above and below the seat of the first ligation. Pulsation ceased in the tumour, and never recurred, and the swelling diminished and became harder. Five weeks after the second operation the tumour began to increase in size on its outer aspect, and soon became larger than ever. No pulsation recurred. A fortnight later fluctuation was indistinctly felt. Three months after the operation the local signs pointed to either disintegration and liquefaction in the aneurysm or to the presence of a new growth. An exploratory incision was made, and new growth discovered. The limb was therefore amputated. Rapid recovery ensued, and the patient left the hospital at the end of the month. He died twelve months later of recurrence and extension of the sarcoma. The preparation which had been made of the diseased parts showed that (1) the core of the mass in the popliteal space was formed by an egg-shaped lump of firm, laminated, pink clot, which was encapsuled by a thick, pale lamina; (2) that, except at its upper end, there was no distinguishable sac wall to this concrete laminated clot; (3) that the compressed popliteal artery was seen above to expand on to the upper end of the concrete clot, and, after being traced for about three-quarters of an inch, the walls of the artery were lost; (4) that the same artery was seen at the lower end of the clot to recommence, as it were, in a dilated condition, and to gradually regain in a tortuous course of about two inches, its natural calibre; (5) that this clot was traversed by or tunneled by a well-marked though winding channel, by which a current of blood passed from the femoral artery to the limb below; (6) that the large growth was formed by a roundcelled sarcoma, which had not sprung from

ne or periosteum ; (7) that it surrounded and compressed the tery above the clot or aneurysm. Above the body of the latter decidedly differentiated from it and in its lower part had quefied and disintegrated ; (8) that the sarcoma had followed the urse of, invaded and blocked the large veins, particularly the pliteal and femoral veins. Mr. Croft drew the following inrences :—(1) that the original lesion was a vascular one ; (2) that e vascular lesion was aneurysmal ; (3) that the aneurysm was cculated, and up to the time or stage before invasion by the alignant new growth possessed and retained its sac ; (4) that the inical history before and after the first ligature supported this (*a*) the strong expansile pulsation, (*b*) the collapse of the elling when the flow of blood into it had been arrested, (*c*) the finition of the early swelling, and (*d*) the sudden onset of the al disorder, suggesting an embolic origin ; (5) that about the ne of and after the second and successful ligation, the sarcoma netrated and destroyed the sac ; (6) that some of the outlying t coagulum disintegrated and mixed with the surrounding sarma, and they together formed the fluctuating portion of the elling on the outer side of the ham ; (7) that owing to the nsity of the cortical laminæ of the clot no extravasation of od had taken place, and therefore no pulsation recurred ; (8) at the case was one of aneurysm, which became complicated out the time of the successful ligation, by a rapid growth of ndcelled sarcoma.—Mr. JONATHAN HUTCHINSON, jun., asked . Croft on what grounds he had been able to exclude the idea at sarcoma had not been present from the very first? He sugsted that the specimen should be referred to the Morbid Growths mmittee.—Dr. MASON gave the details of a somewhat similar e which had occurred in the practice of Mr. Walters, of Reading. The PRESIDENT asked Mr. Croft to give, if possible, some further ails of the origin of the sarcoma.—Mr. CROFT said that he had ught the case before the Pathological Society for the purpose eliciting opinions on this point. With reference to Mr. Hutchin's question, he said that after the artery was ligatured the first d second times the tumour collapsed and completely disappeared, d that it was only later that it began to reappear.—The specin was then referred to the Morbid Growths Committee.

Embolism of Gluteal Artery.—Mr. EDGAR WILLETT showed a cimen from a patient who had suffered from ulcerative endoditis. The patient had been under Sir W. Savory's care in Bartholomew's Hospital, and he was indebted to him for leave publish the case. The patient was a married woman, aged 25. had had scarlet fever when 12 years of age, and rheumatic er four years later, and during the last five years had suffered m dyspnœa, and later her legs had swollen, and during the two nths before she was admitted into hospital a pulsatile tumour peared in the buttock. On admission, there was a large pulsing tumour, the pulsation being controlled by pressure. The atment was by tourniquet and ice, but the patient died in ee months from her heart disease. At the *post-mortem* exination an aneurysm was found under the gluteus maximus scle. The heart was much affected, and especially the aortic ves, and there were infarcts in the spleen and in the kidneys ; aneurysm was opened after being hardened. There was no ination of the clot, and no embolism was found ; the gluteal ery was obliterated beyond the aneurysm. The specimen preted the following points of interest ; 1, the situation, on ount of its rarity ; 2, its causation, probably due to a septic bolus. He lastly referred to the importance of recognising the dition with reference to treatment. If the patient was well ugh to undergo an operation it should be attempted, as such es offered a fair chance of success on account of the healthy dition of the rest of the vessel.

Ancient Egyptian Bones with Osteoarthritis and Senile Symtrical Atrophy of Skulls.—Mr. EVE exhibited several bones, ich had been found in the tombs at Gurob and had been preted to the College of Surgeons Museum by Mr. Petrie. The ibs were made about 1300 B.C. He first showed two tibiæ, with ametrical deposits of new bone on the shafts, and with osteoritic changes of the articular ends. The femora corresponding the tibiæ had periosteal deposits on their shafts, together h well-marked osteoarthritic articular changes. He thought robable that the changes in the shafts were due to the same ses as those which had produced the articular changes. He succeeded in finding a similar condition in a modern femur, in ich there was a node on the shaft near the linea aspera—very ilar to a syphilitic node—but the articular ends showed unbted osteoarthritic changes. Hitherto rheumatic periostitis had hardly been accepted by pathologists, but he thought that these bones were proof of its existence. The bones belonged to a period of high civilisation amongst the Egyptians, and he thought that their mode of life might have something to do with the presence of the disease. It was remarkable that osteoarthritis should occur in such a dry climate as that of Egypt. He showed some Egyptian skulls with symmetrical atrophy of the parietal bones between the eminences and the sagittal suture. The atrophied areas were as thin as paper, and translucent. There was no diploë present. The skulls in which they were found had belonged to old edentulous persons. He had found two modern European skulls with similar atrophic areas in the museum, and a few others had been described. In another Egyptian skull the earliest stage of the process of atrophy was present. He then described the process by which the areas were formed. It was probably an involution process, as it was only found in the skulls of old persons. The question why the involution should occur at this exact spot was possibly due to the facts that it was the latest portion of the parietal bone to ossify, and was the part least well supplied with blood ; Broca had shown that ossification occasionally never occurred at this spot, large foramina remaining.—Mr. SPENCER doubted whether osteoarthritis had any connection with rheumatism. In reference to the periostitis of the tibiæ, it was known that the Egyptians' legs were constantly exposed and very liable to traumatism, and that ulceration over them was very frequent. —Mr. SHATTOCK thought that Mr. Eve had failed to show conclusively that the nodes present were not syphilitic. He referred to Mr. Adams's classical work, in which he remarked that he had never seen rheumatic periostitis, and that Sir J. Paget had pointed out a similar condition in lions' bones, but there was no evidence that they were of rheumatic origin. With reference to the depressions in the parietal bones, Professor Humphry had described one specimen in which they had been present long before old age was reached.—Mr. J. HUTCHINSON, jun., asked how, if the depressions were due to want of nutrition, they did not occur nearer the middle line, which was the point furthest away from the blood supply.—Mr. EVE, in reply, said that by the term rheumatic arthritis he did not mean that the lesions were necessarily of rheumatic origin, but had used it simply in the sense of osteoarthritis. In answer to Mr. J. Hutchinson, jun., he gave an account of how the bone was ossified, as it had been made out by Broca, who had shown that the areas referred to were actually the last to become ossified.

Card Specimens.—Mr. MACKENZIE : Meckel's Diverticulum producing Strangulation.—Dr. DALTON : Œsophagus and Stomach from a Case of Carbolic Acid Poisoning.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 14TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Living Specimens.—Dr. ORD showed a case of Sporadic Cretinism ; also a case of early Myxœdema in a young woman.—Mr. KENNETH CAMPBELL showed a case of Acromegaly.—Mr. A. Q. SILCOCK showed two cases of Hyperostosis of the Frontal Bone and Orbital Walls, one being associated with epilepsy, and both relieved by trephining.—The PRESIDENT showed a case of Recurrent Sarcoma after excision of the scapula and upper arm. The original growth had been found to consist of oval and spindle-celled sarcoma, with ossification occurring at various points.—Mr. WAINEWRIGHT exhibited a case of successful Excision of the Ankle-joint for suppuration of the joint, in which there was now some slight movement ; also a case of Erasion of the Knee followed by movable joint. The whole synovial membrane of the joint had been in a state of pulpy degeneration. The cartilages of the bones were not touched nor the semilunar cartilages, but the synovial membrane was all scraped. There was now no posterior displacement of the tibia. The cause of the trouble seemed to be rheumatic.—Mr. A. H. ROBINSON showed a case of Gummata in the Sterno-mastoid Muscle in a woman aged 25, who had scars on the forehead but none on her legs, and in whom the liver was also enlarged.—Dr. SEYMOUR TAYLOR showed a case of Biliary Fistulæ discharging Gall Stones.

Two Cases of Thrombosis of the Cerebral Sinuses and Veins.—Sir DYCE DUCKWORTH, M.D., read notes of these cases. CASE I. A case of heart disease in which cerebral symptoms occurred, due

to thrombosis of cerebral sinuses and veins. A girl, aged 13, was admitted to St. Bartholomew's Hospital suffering from advanced heart disease of rheumatic origin. She had been laid up at intervals on account of this for three years. Five weeks before admission she had an attack of measles. The physical signs indicated disease of the mitral valve entailing both obstruction and reflux, with general dilatation of the heart. There was much dropsy. Phosphoric acid and digitalis were prescribed, and a "dry diet." Two days after admission hæmoptysis occurred. Venesection to four ounces was practised from the right arm. There was no pyrexia, the temperature being subnormal. Quinine and strophanthus were given, also citrate of caffeine. Vomiting came on, and was treated with effervescing sodium draughts. A few days later headache was complained of, followed by an acute shaking in the left hand. Vomiting occurring, the shaking ceased. An hour and a half later a fresh attack of jactitation of the left hand occurred, lasting ten minutes, accompanied by screaming, and the movements grew violent in the arm. The face was also twitched on the left side, and strabismus (internal) occurred in the left eye. There was pain in the left arm. The legs were unaffected. The movements stopped suddenly, but the arm was found to be powerless and anæsthetic. Another attack of similar nature followed in four hours, the left hand being held rigidly in claw-like position. Collapse and death ensued in five hours. At the necropsy the heart was found dilated and hypertrophied, weighing 13 ounces. The mitral valve was thickened. The lungs were collapsed, fluid existed in each pleura, the liver was enlarged and "nutmeg." The right lateral, superior petrosal, and superior longitudinal sinuses were distended with clots, adherent in places, and decolorised. The cerebral veins were all engorged, especially one passing just posterior to the right ascending parietal convolution. CASE II. This case was connected with the puerperal condition. There had been two attacks of phlegmasia alba dolens, and cerebral symptoms. Thrombosis of the cerebral sinuses and veins, capillary apoplexies, hæmorrhage into the right lateral ventricle, and hæmorrhagic softening of the right optic thalamus were found *post mortem*. S. S., aged 24, was admitted under the care of Dr. Matthews Duncan, October 31st, 1889. She had been married seven years, and had five children, the last born at full time three weeks previously. She had phlegmasia in both legs after her first confinement, the right leg having remained swollen and clumsy ever since. On getting up on the sixteenth day, a week ago, both legs began to swell, and had been enlarging since, the left limb being rather less affected. A trace of albumen was found in the urine. The heart sounds were clear. The legs were wrapped in cotton wool and bandaged tightly. Some general improvement followed during the next twelve days, the temperature being subnormal. On November 12th she vomited her dinner, and complained of frontal headache and aching of the eyes. This continued for three days when drowsiness set in. The limbs were found to be limp. She became subsequently semi-comatose. There was no squint, but oscillations of the eyeballs were noticed. No optic neuritis was detected, only slight blurring of the upper part of the right disc. Twitchings of the hands and fingers came on, especially on the left side. When the case was seen by Sir Dyce Duckworth he made the diagnosis of thrombosis of the cerebral sinuses, and ordered brandy and nutrient enemata, and a blister to the nape of the neck. The twitchings of the fingers and clenchings of the hand increased. The face was drawn to the left side. "Cheyne-Stokes" type of respiration ensued; and rigidity of the neck and arms, and sweating. The temperature began to rise steadily, and reached 106° before death, on November 16th. At the necropsy, thrombosis of the cerebral veins and of the straight and lateral sinuses was found, together with extreme congestion of both optic thalami, and hæmorrhagic softening of the posterior part of the right optic thalamus. The veins of both lower extremities were blocked, also the inferior vena cava and right renal vein. Remains of the placenta were found in the uterus. References to other cases were made, and the rarity of this condition as a concomitant of heart disease was pointed out. After reviewing the several points in each case, Sir Dyce Duckworth summarised the condition betokening the presence of thrombosis in the cerebral sinuses and veins as follows: 1. Headache, at times very severe, and sometimes plainly localised. 2. Vomiting, generally severe. 3. Motor symptoms, indicative generally of irritation, either cortical or central, hence tremors, jerking, spasms, and contractions in other parts, usually of one side, ending in paresis or paralysis. 4. Drowsiness, delirium, coma. 5. Variations in the size of the pupils. For treatment, the employment of alcohol, ammonia, and sodium salts was urged, with a good proportion of vegetable diet. Quinine with ammonia was recommended at the outset of any symptoms, indicating encephalic thombosis.—Dr. HADDEN asked what was the condition of the ears. Slight trouble there would produce much mischief in the cerebral sinuses. In Sir D. Duckworth's second case there was probably a general tendency to clotting of the blood. Thrombosis of these sinuses in cardiac disease was (as had been stated) distinctly uncommon.—Dr. S. COUPLAND said that venous thrombosis in any part of the body in heart disease was certainly rare. The cases he had seen (apart from inflammation of the middle ear) were mostly in the cancer patients in the Middlesex Hospital; and generally he might say that they were found in marasmic diseases. In one very remarkable case which he had witnessed thrombosis was present in a case of chronic Bright's disease.—Dr. BARLOW said that these cases were very difficult to diagnose. One symptom in the marasmic cases in children was very marked he alluded to the piercing shrill cry, very similar to the hydrocephalic scream. The thrombosis was often associated with small hæmorrhages, and it was generally bilateral, although it might predominate on one side of the brain.—Sir D. DUCKWORTH, in reply, said that the first case presented no symptoms noteworthy as to the ears. Dr. Ormerod had made the *post-mortem* examination, and had reported that the cranial bones were all healthy. That child had certainly screamed loudly, but there were no associated hæmorrhages in her brain.

Trephining for Old Hemiplegia accompanied by Severe Headache.—Dr. HALE WHITE read an account of the above case by Mr. ARBUTHNOT LANE and himself. C. G. E., aged 29, admitted into Guy's Hospital, September, 1888. Fourteen years previously he had twice fallen on his head. After each fall he was insensible, and he was admitted into Guy's after the second fall for left hemiplegia and violent pains in the head. He stayed in eight weeks, but had no fits during his stay, and he went out in the same condition as on admission. After he left the hospital he had frequent fits, which, according to his mother, were chiefly on the left side of the body, but somewhat on the right. The last fit was about March, 1887. During the whole of the fourteen years he had suffered from severe headaches. On his admission, September, 1888, his general health seemed good. Examination of his skull did not reveal any trace of his former injuries. He had left hemiplegia. The left arm was flexed and pronated, the muscles were wasted. The leg was affected to a less degree. The left side of the face was slightly contracted. The only other important symptom was the severe headache, which the patient said made his life unendurable, and he was willing to have anything done which would give him any chance of getting rid of it. It was thought probable that the falls on the head had caused in some way partial destruction of the cortical motor area on the right side, and it seemed extremely probable that there was still some chronic inflammatory thickening of the parts in the neighbourhood, because for thirteen years the patient had suffered from epileptiform seizures, and had always complained of severe headache. Accordingly Mr. Lane trephined over the middle of the fissure of Rolando on the right side. The bone in this region was three-quarters of an inch thick. This thick bone was present over the whole of the fissure of Rolando; it gradually shelved into normal bone on either side; the dura mater was thickened, and the ascending frontal and ascending parietal convolutions were much wasted. The thickened bone and dura mater were removed. The wound healed perfectly, and except for two attacks, consisting of a fit and severe headache, the patient did uninterruptedly well. These two attacks were probably due to some inflammatory exudation following the operation. Otherwise the patient had had absolutely no headache since the operation, which took place seventeen months ago. He had also gained considerable power in his walking, but his hand remained in the same condition. He was delighted with the result, and said that were he in the same condition as he was seventeen months ago, he would gladly go through the operation again, for now he never had any headache, and previously it had been so severe and constant that it made his life not worth having. He was also much pleased with the gain in power in the leg.—The PRESIDENT observed that the case was certainly gained by the delay which had been made in presenting it to the Society. Cases were often reported much too soon, before it was possible to see whether the improvement in them was permanent. Here the seventeen months that had elapsed enabled them to judge of the permanence of the results.—Mr. How-

Marsh asked how much bone had been removed, and how many small pieces of bone had been replaced?—Dr. Hale White said there were at least six pieces replaced, each piece being of about the size of a quarter of the little finger nail, and all of them being kept warm in carbolic lotion whilst away from the patient's body. Mr. Lane had trepanned the bone in two places, making thus a figure of 8, and had subsequently united and enlarged the openings with the forceps. All the thickened bone had been thus removed.—Mr. Marsh had found great difficulty in one case in which he had made two trephinings; the central piece between those openings was so hard that it was very difficult to remove with forceps. He thought for such a case an instrument similar to the dentists' circular saw would be preferable.—Mr. Barker thought that in such a case the filling up of the hole with bone, though in small fragments, might be detrimental to the patient, if much ossification were thereby induced. In some cases it might be advantageous if the aperture were simply filled up with membrane alone. He asked how much of the dura mater had been removed.—A Member asked if the dura mater had been sutured after the piece of it had been cut away.—Dr. White, in reply, expressed Mr. Lane's regret at not being able to attend the meeting. He said that he (Dr. White) and Mr. Lane had thought that the little pieces of bone put back could not here trouble the trephied brain, though it might not be desirable in all cases to induce ossification. The piece of dura mater removed was about an inch across. It was notably thickened, but not so much so as the bone. The aperture in the dura mater had not been sutured.

Biliary Fistulæ with Escape of Biliary Calculi.—Dr. Seymour Taylor contributed notes of this case, which had been exhibited earlier in the evening. W. W., aged 57, a plasterer, came under care as an out-patient last autumn, suffering from eczema. He had, in addition, four sinuses in the belly wall. Previous history: He had had English cholera, followed by jaundice, 22 years ago, the character of the evacuations not being then observed; then a history of paroxysmal pains in the right hypochondrium eight years ago, subsequently redness, tenderness, and, finally, a "gathering" which formed over the liver region. The "gathering" went on for eighteen months, during which time he was admitted to the London Temperance Hospital, and five days after his admission the abscess burst near the umbilicus, discharging yellow pus. Two weeks later a gall stone escaped by the sinus. Then other sinuses formed in the right side of the belly wall, from which numerous gall stones, at least twenty, had escaped during the last ten years, at varying intervals of time. The largest calculus appeared from the sinus near the umbilicus, and was the tenth in sequence. The last one to be discharged was in August, 1889. No previous tumour or enlargement of the liver had been observed prior to his acute illness. Present condition: There were now four sinuses in the belly wall, all discharging clear, bile-stained serum, and, at times, a calculus. The largest sinus was a little above and to the right of the umbilicus, the other three were in the neighbourhood of the right inguinal canal. The motions were of good colour. The bowels were slightly constipated, and required the help of aperient medicine. His urine was not bile-stained, and contained neither albumen nor sugar. He had no vomiting. Occasional rigors occurred, probably as the result of a travelling gall stone. Remarks: Many cases of gall stone escaping by biliary fistulæ had been recorded. Murchison gave references to eighty-six. The present case was interesting, inasmuch as it occurred in a male. The tracks which the fistulæ had taken were probably those which led to some of the weaker parts of the belly wall; the larger sinus possibly being directed towards the umbilicus by the round ligament of the liver, the others tending towards the inguinal canal. The escape of a calculus always gave rise to severe paroxysmal pain and rigors. The glairy discharge, now oozing from the sinuses, probably consisted of mucus from the gall bladder, together with a little bile. Nevertheless, one must infer that bile also passed into the duodenum, since he was well nourished, enjoyed fairly good health, and had lived nearly seven years since the first sinus formed. Treatment: It was proposed to leave things alone, as Dr. Taylor was inclined to think that any probing of, or surgical interference with, the fistulæ would be attended by danger of the escape of bile into the peritoneal cavity, with subsequent fatal peritonitis.

The Sanitary Institute.—The Duchess of Albany has expressed her intention of being present at the course of lectures on Domestic Hygiene for Ladies, commencing February 24th, at the Parkes Museum, 74A, Margaret Street, W.

MEDICAL SOCIETY OF LONDON.

Monday, February 17th, 1890.

C. Theodore Williams, M.D., F.R.C.P., President, in the Chair.

Influenza.—Dr. Gilbart Smith read a paper on epidemic influenza. He described the characteristics of the disease, giving the course of the present epidemic, together with its symptoms and varieties. He classified the disease according as it affected the nervous system, the pulmonary or abdominal organs; and in respect to treatment he recommended the salicylate of soda, salicin, bromide of ammonia, and in the later stages quinine. He deprecated the use of antipyrin, and recommended generous diet and the careful administration of alcohol. He expressed the view that influenza was a disease affecting primarily the nerve centres, and that the bronchitis, bronchopneumonia, pleurisy, and abdominal symptoms, meningitis, otitis, etc., resulted from inflammation set up by an irritation due to the action of the special virus. He believed that the disease was of an acute infectious type, arising from some unknown cause apart from recognised telluric or atmospheric conditions, and considered that its dissemination was furthered by elements of a contagious nature. He believed the period of incubation to be short, possibly of a few hours only, but generally of from one to two days. He gave an epitome of the bacteriology of the question so far as known, and in conclusion placed the following questions before the Society for its consideration: 1. Is the present disease true epidemic influenza? 2. Is epidemic influenza spread by means of a specific microbe, or by a miasm? or is it caused *de novo* by some atmospheric or telluric condition, of which as yet we are in complete ignorance? 3. May the morbific agent, howsoever originally produced, be further developed in the human body, and become the source of increased distribution of the disease? in other words, is the disease contagious? Is it bacterial in kind? 4. What is the length of the period of incubation? 5. Are the neuro-muscular symptoms so generally observed due to the fact that influenza is an acute specific fever primarily affecting the nerve centres? 6. Does this present outbreak present any marked deviation from previous epidemics? 7. When did the epidemic make its first appearance in the metropolis? What was the percentage of the population attacked, and the mortality involved? 8. Does epidemic influenza as it appears in the lower animals bear any causal relationship to the disease in man?—Dr. Symes Thompson agreed that influenza was dependent upon something more than mere contagion, with which the universality and the rapidity of its spread were inconsistent. At the same time, it was not easy to put aside contagion as one of the factors in the spread of the disease, whatever its origin might be. He insisted upon the importance of ascertaining the length of the period of incubation, in order to determine the method of propagation. He urged that possibly the disease had existed in a modified form before breaking forth into an epidemic. If this were the case the rapidity of its spread might be only apparent. He alluded to the curious prevalence of analogous diseases among animals prior to, or concurrently with, its occurrence in man, a fact which had been noted by his father, Dr. Theophilus Thompson, in relation to preceding epidemics of the disease. He then gave some statistics from the Post Office, showing the periods at which the disease had attained its maximum, and stated that inquiry had failed to show any special liability to the disease on the part of the men engaged in handling the foreign mails. So far as he had been enabled to ascertain, the average of persons attacked was about $13\frac{1}{2}$ per cent.—Dr. Buchanan said that he had ascertained that, as a matter of fact, the *employés* at the Foreign Office had not been the first to suffer. The particular point upon which he desired information was as to the beginning of the outbreak. He had a record of cases as early as October, at which time there was a marked epidemic among horses and other lower animals. He suggested that the disease might have existed for some time, in a mild and unrecognised form, only becoming epidemic later on. He pointed out that, with respect to diphtheria, cases of sore throat were often observed which, later, took on a diphtheritic character, and he urged that it might be the same with influenza. He stated that there was evidence to show that the later cases were more severe than at the beginning, and he urged that the prevalence of epidemic pneumonia during last year ought to be investigated in the same connection. He had observed an incubation period of two and of six days, but he thought that connecting cases might have been overlooked, and thus tended to give the impression of a longer incubation than was really the

case.—Dr. NORMAN KERR, who had collected notes of upwards of 800 cases, had met with some as early as October and November, but the first real specific case was on December 16th. He recognised five distinct forms of the disease, and noted that complications were most common between the ages of 30 and 40. With regard to the treatment, he had found diaphoretics most useful. The disease was one which was endemic in regions bordering the lower Danube. As a prophylactic he had used eucalyptus. He regarded the outbreak as one of general malarial poisoning.—Dr. STEPHEN MACKENZIE raised the question as to the disease being influenza at all, and as to the existence in England of a form of contagious catarrh. He thought that whatever the malady was, it bore a striking resemblance to microbial diseases in general, and said that certain micro-organisms had been obtained from patients suffering from influenza, although the crucial point of the pathogenetic properties of the organism remained to be established. He had observed an interval of three, six, and eight days between the cases in families, the average incubation period being four days.—Dr. WEST said that both relapses and second attacks had been uncommon, but he pointed out that the mortality from pneumonia had been twice as great during the weeks when the epidemic was at its highest. He called attention to the hemorrhages which occurred in the course of the disease.—Dr. BEZLY THORNE insisted particularly upon the peculiar tenderness over the fourth vertebra and elsewhere which obtained during the disease, coming on within a few hours of the onset. He thought he had noticed the incubation period to be from seven to ten days.—Dr. GILBART SMITH briefly replied.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 7TH, 1890.

H. CAMPBELL POPE, M.D., President, in the Chair.

Removal of Uterine Appendages.—Dr. LEWERS read a paper on the indications for removing the uterine appendages for chronic inflammation with notes of two cases. After describing the symptoms and physical signs, he said cases suitable for operation were the following: 1. When palliative treatment had been fairly tried, and had failed. 2. When the physical signs above mentioned were well marked. 3. When the patients themselves were anxious for operation.—Remarks were made by the PRESIDENT, Dr. M. HANDFIELD JONES, and Dr. LEITH NAPIER; and Dr. LEWERS replied.

Villous Disease of Bladder.—Mr. S. PAGET read notes of a case. The patient was a man, aged 60. Suprapubic cystotomy showed a large, soft, blood-stained growth, which was removed by avulsion, but a small portion was left behind. Patient did well in every way for two days, then suddenly sank and died, apparently from weakness of the heart. *Post mortem*, a small wound, made in the peritoneum during the operation, and stitched, with the deep fascia stitched over it, was found soundly healed. Beside the main growth there was an area about the size of a crown piece, covered with two low, close-set, delicate, villous filaments. Mr. Paget showed the bladder and the fragments of the growth, and expressed his regret that he had not been careful as to the presence of villous particles in the urine before operation.—The PRESIDENT, Mr. LLOYD, and Dr. CLEMOW having made some remarks, Mr. PAGET, in reply, said that, in using the cystoscope, he must have run the instrument into the growth, which filled the bladder, and so have been unable to see anything. Death seemed caused by loss of blood, and possibly by disease of the kidneys.

Excision of Villous Growth from the Rectum.—Mr. FITZROY BENHAM read notes of a case. The growth removed was shown at the meeting.

Specimens.—Mr. PERCY DUNN showed the following pathological specimens: Sarcoma of the Breast, Extensive Tubercular Ulceration of the Ileum, Caries and Necrosis of Os Calcis, Strumous Testis.

Cases.—Mr. KEETLEY showed a case of Excision of the Astragalus, and one of Excision of the Os Calcis.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, FEBRUARY 5TH, 1890.

Professor A. R. SIMPSON, M.D., President, in the Chair.

Paramyoclonus Multiplex.—Professor GRAINGER STEWAR showed a young girl illustrative of the rare condition of paramyoclonus multiplex. The spasmodic movements of the muscles were fairly general in distribution, but had distinctly lessened since the patient had come under treatment. Arsenic had been tried at first, but without much effect. Distinct benefit had followed the use of Easton's syrup and the continuous current. There was no history of fright or shock, or, indeed, of any sufficient etiological factor, as had been noted in the limited number of cases already described by Friedreich and others. The spasms in different cases varied, being sometimes clonic, sometimes tonic, sometimes tetanic, and, lastly, fibrillary. The pathology of the condition was not very clear, but it seemed highly probable that the condition was dependent on some functional disturbance of the anterior grey matter of the cord.

Pancreatic Cyst Successfully Treated by Abdominal Section.—Mr. CHARLES W. CATHCART showed a patient on whom he had performed abdominal section on account of the presence of a large pancreatic cyst. The patient, a young boy, had been run over, and it was feared had sustained serious abdominal injury. He was watched with care for about a fortnight, but no symptoms developed and he was dismissed from hospital. Some months after he returned on account of a swelling of the abdomen, which was variously diagnosed as due to an enlargement of the spleen, of the kidney, etc. On careful examination, Mr. Cathcart concluded that there was fluid present, and on introducing a subcutaneous syringe, he was able to withdraw a syringeful of dark brown fluid. Almost immediately thereafter the boy was seized with severe pain in the abdomen and soon became collapsed. After some hours, with the consent of the patient's friends, Mr. Cathcart opened the abdomen, which was found to contain a large quantity of the same brownish fluid, free in the cavity. On introdncing the finger the spleen and kidney were found normal, but, on passing more deeply, a collapsed cyst could be traced in the neighbourhood of the pancreas. The cyst was too collapsed to admit of it being stitched to the edges of the wound, but, as it stretched fa round in the left hypochondrium, Mr. Cathcart made a secon opening at the side to allow the sac to drain freely. The discharg was abundant, of serous character, and did not become purulent Both wounds healed well. The brownish fluid was alkaline in re action, was irritating to the skin, and, while inactive toward albumen, converted starch into glucose.

Trephining for Abscess of the Frontal Sinus.—Mr. A. G. MILLE showed a young man whose frontal sinus he had trephined o account of obstinate pain over that region. Curiously enough, o the removal of two or three teeth, in the belief that the conditio might be due to abscess of the antrum, pus was found presen but the free escape of this did not effect a complete cure. Th patient returned after the first operation, saying that the pain i the frontal region continued. Trephining in the middle line the nasal frontal region relieved pus, after the free escape of whic the patient was finally cured.

Retention Tubes for Constriction of the Œsophagus.—Profess ANNANDALE demonstrated the value of retention tubes in cond tions of constricted œsophagus. The patient into whose œsoph gus he introduced the tube could swallow fluid with difficult before, while after the fixation of the tube within the strictu the act of swallowing was easily performed, and the patient w dismissed to enjoy supper. Mr Annandale mentioned that he h used the tubes with advantage in a case of malignant stricture.

The Kochs-Wolz Microscope Lamp.—This extremely beautif and valuable addition to the armamentarium of the microscopi was demonstrated by Mr. GULLAND. By means of a curv glass tube the light is conducted from a shaded oil lamp to a co siderable distance from the actual source of light, and hence the difficulties of heat and attendant discomfort are remov from the practice of prolonged microscopic work by artifici light. Mr. Gulland suggested that the system of illuminati might prove of value for the clinical exploration of the accessib body passages.

Syphilis of Liver and Brain.—Professor GRAINGER STEWA showed the organs removed from a patient who had died som what suddenly of brain syphilis. The symptoms during life h suggested the presence of a hepatic abscess, discharging into t lung, with subsequent paralytic symptoms, which had suggest metastatic abscesses in the brain. The purulent collections we found on *post-mortem* examination, but the primary cause w ascertained to be syphilis.

Fatty Hernia.—Dr. KENNETH M. DOUGLAS read a paper fatty hernia.

Intestinal Obstruction successfully treated by Laparotomy.—M A. G. MILLER read an account of a successful case.

CARDIFF MEDICAL SOCIETY.

THURSDAY, FEBRUARY 6TH, 1889.

W. F. EDWARDS, M.D.Lond., in the Chair.

Hydatids of the Pelvis.—Dr. THOMAS WALLACE read notes of a case of this nature. The patient, a woman, aged 39, had been married eighteen years and had never been pregnant. She had suffered for six years from a feeling of weakness and weight in the abdomen and general ill-health, and for five years had noticed a lump in the right iliac region. Its growth was gradual and unattended with pain, and menstruation had always been regular. The swelling was round, freely movable, and resonant on percussion. Bimanually it could be rolled about; while behind the uterus was another mass, apparently distinct from the first. The uterus measured one inch and a half in length. The case was looked upon as one of ovarian cyst. The patient was operated on in the Cardiff Infirmary by Dr. Wallace. The omentum and intestines were found loosely adherent to the front of the tumour, while the mass itself was closely incorporated with the uterus and bladder below and to the right. After separating the omental structures, the upper part of the swelling was punctured, and this at once showed the cyst to be hydatid. After its complete removal—a pedicle having been formed out of part of the right broad ligament—a smaller cyst was discovered deep down in Douglas's pouch, containing whitish fluid with some calcareous matter resembling powdered eggshell. These contents were carefully removed, the peritoneum cleansed, and the abdomen closed. The patient, however, died from septicæmia on the fourth day. The necropsy showed that the cysts had been completely removed, and suggested that a drainage tube might have been used with advantage.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, FEBRUARY 12TH, 1890.

J. DIXON MANN, M.D., M.R.C.P., President, in the Chair.

Brain from a Case of Congenital Syphilis.—Dr. ASHBY showed microscopical preparations of brain and cerebral arteries from a case of brain softening in a syphilitic child. It had convulsions at eight months, followed by spastic paralysis of the left side, and later the right side. It died when fourteen months old. At the *post-mortem* examination the arachnoid was milky, with an excess of subarachnoid fluid; there was no lymph or chronic meningitis. There was white softening of the grey matter immediately beneath the surface, which was general; the white matter was also softened, though in lesser degree than the surface. Microscopically the grey matter showed extensive fatty degeneration; the minute arteries contained old thrombi, and their walls were thickened and contained an increased number of nuclei.

Perforation of the Bowel.—Dr. ASHBY also showed a perforating ulcer of the jejunum, the specimen being taken from a man, aged 48 years. The man was apparently healthy when seized with sudden abdominal pain, and died in twenty hours. The man stated he had had a fall just before being seized with his fatal illness.

Cheyne-Stokes Respiration.—Dr. DIXON MANN showed sections from the medulla of a patient who had manifested the phenomena of Cheyne-Stokes breathing for upwards of twelve months.

Sarcoma of the Tibia and Fibula.—Mr. STOCKS showed a specimen of periosteal sarcoma, probably traumatic, in a dyer, aged 20. Some two years ago he had a severe sprain of his ankle. About three months before his admission into the Salford Royal Hospital on October 24th, 1889, a swelling was noticed on the front of the lower third of the tibia, rather to the inner side. On December 23rd the girth of the tumour was 15¾ inches; it occupied the lower third of the tibia, and projected anteriorly for the most part; skin dusky, unbroken, surface nodular. The limb was removed on December 28th. The part of the tumour in front of the bones was a round-celled sarcoma; that behind the bones was densely osseous, evidently of much older growth. Lying under the popliteal artery, between the condyles of the femur, was found an osteophyte, 1½ inch long, unconnected with the bone, and another smaller one among the inner hamstring muscles, floating in and growing from the connective tissue.

Diseased Kidneys.—Dr. WILD showed: (1) a horse-shoe kidney, the right and left portions being united by renal tissue in front of the body of the fourth vertebra; the right half was converted into a loculated sac filled with pus, and containing three hard, black, spiculated calculi the size of small marbles, no kidney tissue remaining. The right ureter was much dilated, the bladder in a state of advanced cystitis; between the rectum and the urethra was a cavity with smooth walls opening into the rectum one inch above the anus, and into the urethra just in front of the prostate; during life the man had passed urine *per rectum;* probably the cavity had been formed by a previously impacted calculus in the urethra causing ulceration into the rectum. (2) A kidney, the upper half of which formed loculated cavities filled with cheesy pus, and presenting ragged, irregular walls; the ureter was dilated and walls much thickened and indurated; the bladder presented irregular superficial ulcerations, and deposits of phosphates on the mucous membrane. There were other tubercular lesions in the epididymis and one lung. (3) A kidney, entirely converted into hard caseous material enclosed in a fibrous capsule, which formed septa between the caseous masses, corresponding to the normal divisions between the pyramids; the ureter was normal; no other tubercular lesions were found. During life there were no urinary symptoms. The tubercular disease of the kidney was probably in a condition of obsolescence.

Spinal Cord in Alcoholic Paralysis.—Dr. REYNOLDS showed sections of the lumbar region of the spinal cord from a case of acute alcoholic paralysis in a man who died of respiratory paralysis within five weeks of the onset of the disease. The nerve cells were somewhat swollen, and a specimen stained with logwood and aniline blue-black showed the vessels engorged, tortuous, and with a marked proliferation of leucocytes in the walls. There was also enormous proliferation of cells in all parts of the cord, particularly the posterior and anterior horns. These cells had very large, deeply-stained nuclei, surrounded by a delicate, feebly-stained protoplasm, with numerous small processes, and were evidently inflammatory Deiter's cells in an early stage.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 6TH, 1890.

E. CRESSWELL BABER, M.B., President, in the Chair.

Demonstrations of Skin Disease.—Dr. E. MACKEY brought forward a child with urticaria pigmentosa; the eruption commenced at six months old, and vaccinal poisoning was suspected; there was much itching, and blebs here and there as well as spots, which did not show such pigmentation as the case previously shown. Dr. Mackey also showed a woman with lichen planus.—Mr. J HUTCHINSON did not regard urticaria pigmentosa as a morbid entity, but thought that any skin irritation producing much itching and scratching would produce urticaria, and eventually pigmentation. Chicken-pox, vaccination, and parasites would often cause it. He compared lichen planus with psoriasis in respect to their symmetry, their indefinite causation, and occurrence in persons in other respects healthy. As to treatment, arsenic at first did but little, but would eventually produce improvement.

Cancer.—Mr. JONATHAN HUTCHINSON read a paper on some points in relation to cancer. He showed illustrations pointing to the conclusion that cases occurred in which, after large doses of arsenic long continued, all gradations were seen, from thickening and cracking of the skin of the palms, productive of corns, and finally the development of genuine epithelial cancer. A drawing was shown of a growth in the side of the foot so produced, and also a malignant ulcer of the hand, necessitating amputation, and finally causing death by recurrence in the glands. Illustrations of "crateriform ulcer" were shown, and the disease described; it occurred on the face, cheeks, or nose, progressed rapidly, and generally attacked elderly people; it was a variety of epithelioma remarkable for rapidity of growth, did not recur rapidly *in situ*, nor quickly involve the glands. Certain regions were liable to peculiar forms of malignant disease, as, for example, rodent ulcer in the upper part of the face, not commencing in the mucous membrane, and epithelioma of lip and tongue. Spindle-celled sarcoma was most apt to attack the lower half of the body, and was very apt to recur. Chronic inflammations, such as lupus, were apt to become cancerous. "Granuloma fungoides" was a peculiar form of malignant disease, as some of the patches might get well. Mr. Hutchinson drew the following conclusions: 1. That common inflammation was a frequent beginning of cancer, especially in senile subjects, and should therefore be treated as cancer. 2. Cancer might be primarily multiple, as was seen occasionally in the tongue. 3. That the malignant growth owed its character to the region attacked, to the peculiarities of the individual, and

his period of life. 4. That cancer was due to perverted nutrition. 5. Anticipative treatment should be adopted, sedulous attempts made to remedy chronic inflammations, and, this failing, they should be dealt with as cancer. The negative evidence of microscopic examination should be regarded as of little consequence.—The PRESIDENT drew attention to the great difficulty in deciding when chronic inflammations were becoming cancerous.—Dr. MACKEY asked for details as to the doses of arsenic which had produced the conditions illustrated, and quoted Mr. Marshall's views as to cancer being due to loss of nerve control.—Dr. MENZIES drew attention to a connection between rheumatism and cancer.—Dr. WHITTLE doubted any direct connection between common inflammation and cancer.—Mr. BLAKER admitted a connection between ordinary chronic inflammation and malignant disease, and instanced the frequency of cancer at the sigmoid flexure of the colon, where the bowel was most apt to be fretted by fæcal accumulation.—Mr. HUMPHRY agreed with Dr. Whittle in questioning the connection between simple inflammation and cancer.—Mr. W. FURNER inquired whether any prophylactic measures were feasible in the precancerous stage.—Mr. OLDHAM asked how the Styrian peasants, who were reported to take large doses of arsenic, escaped cancer.—Mr. VERRALL alluded to the frequency of a history of local injury in cases of cancer as favouring the view of inflammation as an antecedent.—Mr. HUTCHINSON replied, stating that he feared that he had been misunderstood by some speakers; that he by no means asserted that inflammation and cancer formation were the same process; but that in individuals who were subjects of hereditary predisposition or senility, an irritation or subacute inflammation might, and often did, pass on into cancer. As regards prophylaxis, an illustration could be borrowed from our domestic animals, inasmuch as aged cats and dogs frequently died of cancer, whereas sheep and cattle did not, simply because we prevented them from becoming senile.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 7TH, 1890.

A. F. MCGILL, F.R.C.S., President, in the Chair.

Functional Disturbances of Speech.—Dr. JACOB, after giving a sketch of the principal ways in which speech might be pathologically affected, gave an account of two cases of functional aphemia lately under his care. In the first case, that of a middle-aged man, it had come on gradually eight years before in connection with mental troubles in consequence of business anxieties. In the other case aphemia had suddenly come on a few days before in the course of ordinary conversation. Both were completely cured by the inhalation of ether. In connection with the subject of ordinary nervous aphonia, Dr. Jacob recommended early treatment by faradism, though tonics were generally also required.—Mr. TEALE recalled the case of a hysterical woman, who could not speak, but he induced her to try and speak French, to which she had been early accustomed. She then could speak fluently.—Mr. FARROW related the case of an aphonic girl, who on two occasions on a journey to the same place recovered her voice at exactly the same station on the railway. She had been treated by faradism unsuccessfully.—Dr. BRONNER, in applying faradism for aphonia, used a strong current, and told the patients he would continue it till they screamed. He applied cocaine to the larynx before and after the operation, as he had seen considerable hyperæmia caused by endolaryngeal faradism.

Radical Treatment of Umbilical Hernia.—The PRESIDENT read a paper on this subject. He thought it desirable to advise this operation in all cases of adults in which the hernia could not be confined to the abdominal cavity by suitable apparatus. If left untreated these cases invariably increased in size, and not infrequently an operation was required when the hernia was inflamed or strangulated, and the case was in a comparatively unfavourable condition. The President next discussed the various methods that might be adopted. He described and advocated the formation of an internal pad made from part of the sac, and fixed in the subperitoneal space over the neck of the sac. This plan was merely a modification of the procedure recommended by Dr. Macewen for cases of inguinal hernia. It had much to recommend it, and promised excellent results. A patient was shown illustrating the operation and demonstrating its benefits.—Mr. TEALE agreed as to the great changes of view which had taken place on the question of treating umbilical hernia. He was now free to recommend operation, and he thought the President's idea a very promising one. The old operation of cutting through the sac and stitching it up was thoroughly bad. He himself, taught by his father, who he believed learnt it from Aston Key, had been in the habit, in cases of strangulation, of cutting down through the fat to the linea alba, at a distance from the sac, and then detaching the peritoneum till the ring was reached, which was then divided from within. In one year he had thus operated on four cases, all successfully. He now preferred cutting directly into the sac, which he removed. He then stripped the peritoneum from the abdominal wall round the ring. If necessary the ring was separated from the surrounding tissues, and its sides with the peritoneum brought into apposition by sutures.—Mr. ATKINSON thought any operation was to be welcomed which dispensed with the cumbersome apparatus usually worn in cases of umbilical hernia.—Mr. LAWFORD KNAGGS said the use of antiseptics and the plan of the removal of the sac and skin had been the principal factors in the increased success of such operations. The skin in such cases was of very low vitality and many subjects of this hernia were not good cases for operation.—Dr. EDDISON spoke of umbilical trusses as instruments of torture, which seemed to be worn as a kind of religious exercise. He had seen such a hernia kept in position by strapping when no truss availed.

Massage of the Membrana Tympani in Catarrh of the Middle Ear.—Dr. A. BRONNER, after mentioning the principal remedies used in chronic or "dry" catarrh of the middle ear (douches, powders, and the like), said that systematic attempts had recently been made to break down adhesions among the ossicula by movements of the tympanum. He showed several instruments devised for the purpose, consisting either of closed specula, with arrangements for alternately rarefying and compressing the air, or probes fitted with a delicate spring. He had used one or other of those methods, in conjunction with Politzer inflation, in sixty-four cases. In forty-three there was no good result; in twenty cases some improvement; in three cases tinnitus was relieved. He lamented the fact that patients allowed deafness to become very severe before seeking advice, and that treatment was persevered with for so short a time.—Dr. HELLIER had tried the instrument for this purpose lately invented by Dr. Ward Cousins without effect.

Cases.—Mr. MCGILL showed a case in which a Vesico-Vaginal Fistula had been sutured through an incision into the bladder by Trendelenburg's suprapubic method.—Mr. WARD showed a case of Perforating Wound of the Abdomen injuring the sigmoid flexure; the wound was sutured, the peritoneum cleansed and drained, and the patient had recovered.

Exhibit.—Mr. NORMAN PORRITT showed a series of Solid Ointments for cutaneous and rectal medication. These were of such a consistency as to melt when gently rubbed on the skin, and to leave a film adherent. Those for rectal use were moulded in the form of a cone. They were manufactured by Reynolds and Branson, Leeds.

Pathological Specimens.—Dr. ALLAN showed: 1. Heart, with extensive coronary disease. 2. Stomach, with disease of pylorus. 3. Humerus, showing a supracondyloid process.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, FEBRUARY 13TH, 1890.

D. C. LLOYD-OWEN, F.R.C.S.I., President, in the Chair.

New Members.—The following members of the Association were elected members of the Branch: John Biggam, M.A., M.B.Edin., Upper Gornal; H. J. McLauchlin, M.B.Edin., the Barracks, Birmingham.

Vesical Calculus.—Mr. HASLAM showed a uric acid calculus weighing 847 grains, which he had removed by the suprapubic operation, from a man aged 66. The case illustrated the formation of a large calculus in an old man's bladder without there being any of the characteristic symptoms of stone. During the operation the peritoneum was opened and immediately closed by a continuous catgut suture. Recovery was complete, and the patient left the hospital in five weeks.

Syphilitic Chancre of Lip.—Mr. BARLING showed a man, aged 26, with a syphilitic chancre on the lower lip, of which it occupied nearly the whole length. The surface of the chancre was excoriated and its base extensively indurated. The submaxillary glands on each side were much enlarged, and there was a roseolous rash on the skin of the chest and abdomen. The sore had com

menced six weeks before, and was probably due to the indiscriminate use of other people's pipes in smoking.

Agoraphobia.—Dr. SUCKLING showed a woman, aged 35, who for several years had suffered from an inability to walk in an open space. She had been under his care in the Queen's Hospital. When here, if she attempted to walk in the open she was at once seized with severe palpitation and terror. She could not walk well in a large room, but was all right in her own home. The woman was anæmic and decidedly neurotic, but not hysterical. She attributed her illness to frequent child bearing and to superlactation. She had much improved under the administration of iron salts.

Papers.—Mr. JORDAN LLOYD read a paper entitled Practical Observations on the Early Diagnosis, Pathology, and Treatment of Bone Abscess.—Dr. SUCKLING read a paper entitled Agoraphobia and Allied Morbid Fears.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 13TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Specimens.—Dr. KEELING showed a specimen of Scirrhus of the Labium, removed from an elderly woman; also Diseased Ovaries removed from another patient. In both ovaries cystic disease had commenced; the left one, for the removal of which the operation was undertaken, was about the size of a large hen's egg, and had long been the seat of great pain.—Dr. MORTON showed about 2 drachms of Brain Substance which had exuded from the left auditory meatus of a young man who had sustained a fracture of the base of the skull from a fall of about 20 feet. There was no external wound. The patient lived five days after the accident. Dr. Morton also showed a number of Melon-seed Bodies from a cyst on the inner side of the palm of the right hand; the tumour had caused much pain and inconvenience for a month.—Dr. SIDNEY ROBERTS showed a specimen of Contracted Granular Kidney due to plumbism from drinking water. The patient, a married woman, aged 39, had lived in that part of Sheffield which was supplied by water from the Redmires reservoirs, and had suffered from well-marked symptoms of lead poisoning. She died with kidney symptoms and uræmia. After death the kidneys were found very small and tough; the capsules thickened, opaque, and adherent; the surface granular and studded with a few small cysts; and on section great contraction of the cortex and a brick-red colour. There was considerable hypertrophy of the left ventricle of the heart, and atheroma of the aortic cusps, of which there were only two, together with old pericarditis. The aorta and cerebral arteries were also atheromatous. Dr. Roberts also showed specimens of Tubercular Pyelo-nephritis from a girl aged 15. The chief symptoms had been backache, and those indicating cystitis, with loss of flesh. There had not been any hæmaturia, vomiting, or diarrhœa. She had worked as a scissor-dresser up to nine days before her death, which occurred from suppression of urine and uræmia. *Post mortem* both kidneys were found riddled with cavities containing cheesy tuberculous matter, the right kidney being the worst. The left kidney possessed a double ureter, the junction occurring just above the bladder. The ureters were all thickened, and filled with purulent and cheesy matter. The inner surface of the bladder, which was empty and contracted, showed the appearance of subacute cystitis. The mesenteric glands were enlarged, but no other evidence of tuberculosis existed in the body.

Contracted Pelvis.—Dr. WYNNE read notes of nine cases of contracted pelvis which he had measured with the pelvimeter. He had used Lumley Earle's internal pelvimeter, but did not consider it very satisfactory. The smallest conjugate diameter in his cases was 3 inches. In those cases craniotomy had been performed; but he considered that where the conjugate diameter was as much as $3\frac{1}{2}$ inches the patient might be delivered by forceps or turning. In two of his cases, where craniotomy had been performed in a previous labour, a living child was subsequently born when the feet presented, which he thought was an argument in favour of delivery by turning. He considered that pelvimeters would be found a great aid to the practitioner.

Diphtheria.—Dr. PEARSON related the particulars of six cases of diphtheria, under his care at the Borough Fever Hospital last autumn. In three of them he performed tracheotomy. The first two cases were a brother and sister, aged respectively 9 and 6 years; another brother had died of diphtheria at home. They had both been ill about twenty-four hours before admission. Tracheotomy was performed on the boy the following day, and was followed by great relief. With the exception of a slight hæmorrhage from the lungs five days after, and some bronchitis, the child progressed favourably up to the ninth day after the operation, when, in the act of micturating, pulmonary apoplexy occurred, and the patient died in about three minutes. The necropsy showed congestion of the base of the right lung where the hæmorrhage had taken place. In the case of the sister tracheotomy was performed on the sixth day after admission. The cannula was removed four days after operation, and the patient made a good recovery. In a third case Dr. Pearson did tracheotomy at the child's home, subsequently removing it to the fever hospital. The cannula was worn for eighteen days. There was some trouble from bronchitis, and subsequent paralysis of the palate and of some of the pharyngeal muscles, but the patient was ultimately discharged cured. The other three cases were all from one house, a mother and two children. The mother's case was hopeless from the first, and she died six days after admission, the *post-mortem* examination showing extension of the membrane into the smaller bronchi and catarrhal pneumonia. Neither the son nor daughter, aged 9 and 15 respectively, had any very urgent symptoms, and both were discharged cured. In four out of these six cases albuminuria was present, paralytic phenomena in three out of the four who recovered. The general treatment was stimulating—champagne and brandy freely.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 5TH, 1890.

JAMES ROSS, M.D., LL.D., President, in the Chair.

Thomsen's Disease (Myotonia Congenita).—Dr. DRESCHFELD showed a very typical example of this affection in a boy aged 14, and demonstrated the myotonic contractions. The parents of the patient were quite free from the affection, but a paternal uncle was stated to show the symptoms in a mild form. Two brothers of the patient were similarly affected, an elder one only in a slight degree and a younger one (aged 7) in a most marked degree. [This patient met with an accident and could not be shown.] The affection dated from the earliest infancy, and prevented the patient from jumping, running, or ascending steps quickly. The patient was otherwise quite healthy, and the muscles, especially the deltoid, the biceps, the quadriceps femoris, and gastrocnemius on each side, appeared excessively developed; dynamometric measurements, however, showed no very great power in the arms. The myotonic disturbance was well marked in the lower and upper extremities and in the muscles of the face. After having sat for some time, the boy, on attempting to walk, showed at first muscular rigidity, which disappeared gradually on walking; when shaking hands, he was slow to release his grip; when forcibly shutting the eyelids, could only open them gradually after a time and with difficulty; the superficial reflexes were normal. There were no sensory disturbances; the tendon reflexes were only produced after several taps, and then were seen to be normal. The mechanical irritability of nearly all muscles was increased, and forcible percussion of the muscle produced a contraction lasting from six to eight seconds. Faradic irritation of the nerve showed minimum contraction at 110 millimètres; direct faradisation of the muscle (biceps) showed marked myotonic contraction of six seconds' duration with 55 millimètres distance of the secondary spiral. Single shocks from a two-celled battery gave rise to single contractions of muscle. The galvanic reaction of the nerves was fairly normal; the contractions were short and quick. Direct galvanisation of the muscles showed with weak currents (0.4 milliampère) single, short contractions, but with more powerful currents myotonic contractions lasting six to eight seconds. The rhythmical, wavelike contractions could often be seen with very strong currents applied, as described by Erb, to the vastus internus. Occasionally, however, they could not be elicited even with very strong currents. The patient showed no lordosis and no signs of pseudo-hypertrophic paralysis.

Intrathoracic Suppuration without Rise of Temperature.—Dr. T. HARRIS showed a patient who had a large accumulation of pus within the thorax, unaccompanied by any rise of temperature, although the temperature had been carefully recorded during a period of three months. During a fortnight of that time the temperature had been taken every four hours, in order to see whether there was any pyrexia at other times than in the morning and evening, when the temperatures were usually taken. The case

was one in which the absence of pyrexia was still more remarkable, as the pus withdrawn by aspiration was exceedingly foul. The case presented considerable difficulties in the diagnosis of the exact seat of the suppuration. It was either a case of localised pyopneumothorax, or of a chronic abscess in the lung itself. Pathological experience of the greater frequency of such purulent accumulations being seated in the pleura, as compared with the frequency of large accumulations of pus in the lung itself, would suggest the belief that the pus in this case was probably of pleural rather than of pulmonary origin. Nevertheless, the physical signs before and after the removal of the pus, were more consistent with the case being one of chronic pulmonary abscess than of a localised pyopneumothorax. Wherever the purulent accumulation was situated, whether in the lung or in the pleural cavity, it was probably encapsuled by firm old fibrous tissue, which prevented any absorption, and hence accounted for the absence of pyrexia. This case showed the importance of not attaching too much value to the temperature chart in doubtful cases, even when the temperature had been regularly recorded over a prolonged period.

Epidemic Influenza.—Dr. HUTTON opened a discussion on "epidemic influenza," and having quoted passages from early writers showing how little the main symptoms differed from those seen in the present epidemic, proceeded to call attention to the numerous and varied nerve symptoms, occurring both at the onset and in the course of the disease. Dr. Hutton then mentioned facts tending to show the disease to be only in a very slight degree infectious; and, by a reference to the statistics of mortality for the month of January, indicated to how great an extent the epidemic had contributed to the excessive mortality.—A discussion followed, in which Drs. SIMPSON, DRESCHFELD, HARRIS and the PRESIDENT, took part.

REVIEWS AND NOTICES.

INJURIES AND DISEASES OF NERVES AND THEIR SURGICAL TREATMENT. By ANTHONY A. BOWLBY, F.R.C.S. London: J. and A. Churchill. 1889.

THERE is no doubt that very great advances have been made of late years in the surgery of the nervous system; and though the results of operation on the central nervous masses of the brain and spinal cord have been the most remarkable, we have reason to be gratified with the success of many new departures in the operative surgery of the nerve trunks. Nerve grafting, nerve suture, nerve stretching, and nerve section have been extensively employed for various diseases and injuries, and attention has been directed to the subject both at home and abroad. Not only have so-called nervous diseases been more carefully studied, and important special works produced by Gowers, Ross, Ferrier, Thorburn, Weir-Mitchell, and others in our own language, but we have now special nerve atlases by Herberg, Hughes Bennett and others; and a knowledge of nerve diseases has become an essential. It seems probable that the amount of these diseases has much increased in extent, more than can be accounted for by the fact that the researches of Continental and English observers have called attention to diseases not previously recognised.

The work before us is very acceptable, for it is the most thorough attempt to deal with one aspect of the subject that we possess. Already Mr. BOWLBY has given a short account of the main features of the surgery of the nerves in *Heath's Dictionary of Practical Surgery;* but the accounts there and in the different manuals of surgery are rather meagre, and in many of them it is impossible to see what has been done by standard authorities, or where to refer to for further information. Mr. Bowlby has met these wants by giving very fully from all sources the cases which bear upon the different branches of his subject, and has not been content with reproducing his own prize essays—Jacksonian, 1882; Astley Cooper, 1886. He argues his subject fairly, and his opinions are carefully and temperately expressed; and though, as one would expect, his illustrations of English surgery are very much limited to cases from his own hospital, his other numerous cases are drawn from foreign and English sources very fully. One excellent feature of these records is that a large number of patients suffering from nerve injuries of the most varied kinds have been kept under observation for lengthened periods, and a record made of their progress. This is of great importance, as the true results of operative treatment are often not obtainable in the time which has elapsed when they are published. A large work of 500 pages is the result of his labours, and there are copious illustrations, chiefly representing the effects of nerve injuries. The arrangement is clear, and the object of the author has been to produce a standard work of reference on the injuries and diseases of nerves and their surgical treatment, and that he has succeeded is evident on careful perusal of the book.

After giving a short account of the anatomy and physiology of nerves, he takes in order the changes found in nerves after section, their degeneration and repair, and the important, but long denied, union by first intention. Trophic changes caused by injury to nerves are well illustrated and described, but we miss any reference to the disease of joints known as Charcot's disease, which, we think, should have been here discussed, whatever the author's views may be as to its being a special trophic change due to disease in the nerves or their centres. The symptoms of nerve injuries of various kinds are well given, and a large space is devoted to this subject. We would suggest, however, that a future edition, to be complete, should give more attention to the symptoms occurring in the injuries of the different spinal nerves, as they have been tabulated by Ferrier, Gowers, and Thorburn, for the subject is an important one, and will bear further inquiry. A few cases of spinal nerve injury are given, but the author hardly does justice to the subject.

The value of primary and secondary suture of nerves is strongly advocated, and rightly so, in our opinion, but the author is somewhat inconsistent in his views as to Liétévant's recommendation to split and turn down part of the proximal end of a divided nerve, and use it as a sort of inverted graft. This he condemns for primary suture (p. 162) on the ground that the graft will be completely separated from each end, and yet for secondary suture (p. 208) he inclines to this course of treatment. The other plan suggested by Liétévant, or rather by Kawa, of lateral grafting on to an adjoining nerve-trunk, Mr. Bowlby condemns, and does not recognise that it has been successfully adopted by Déprè in both primary and secondary suture, and by Dr. Gunn, of Chicago, for primary suture after division of the ulnar for tumour involving its fibres. The plan of laying down decalcified bone grafts as guides for the development of new nerve growths is not considered.

Nerve injuries and their complications are fully discussed, but we should have been glad to have seen a fuller reference to the bacterial work, especially the ptomaine and alkaloidal origin of tetanus. To discuss the older views of nerve inflammation, nerve irritation and the like seems only like putting up dummies to have the inglorious honour of demolishing.

Nerve stretching is well given, and Marshall fully quoted, but the author seems to hesitate about accepting Mr. Horsley's nervorum. Should he not take the means of speaking clearly for or against so important a fact claimed for anatomy, and on which is made use of to explain the pathology of nerve stretching and of neuralgia and allied diseases? We are glad the author uses the term nerve stretching, for neurotony is too near in sound and appearance to neurotomy, but neurectasis is perhaps as good as the term nerve stretching, and more acceptable to foreigners. Neuralgia and epileptiform neuralgia, neuritis and neuroma form the last chapters, and then follows an index which might with advantage be made fuller for a work which contains so much material and such copious references to actual cases reported in foreign and English literature. It is difficult and by no means profitable to draw the line between medical and surgical affections of the nerves, but the author has apparently considered his subject as limited to those conditions of the nerves for which operative treatment can be adopted with some hope of success, and, as we have said before, it is the clinical aspect of the subject he has treated. The pathological and operative details are less fully considered than the clinical, but are certainly not omitted.

The remarks we have made will show our high appreciation of this work, and at the same time call attention to some points in which a future edition might make some extension and improvement; but there is no doubt of the great value of the book, and the certainty of its being accepted as the best English work of reference on this important subject.

THE total number of students in the University of Vienna during the current winter semester is 4,996, of whom 2,598 belong to the medical faculty.

HUNTERIAN LECTURES ON THE MORBID ANATOMY, PATHOLOGY, AND TREATMENT OF HERNIA. By CHARLES BARRETT LOCKWOOD, F.R.C.S., Hunterian Professor, Royal College of Surgeons of England: Surgeon to the Great Northern Hospital; Senior Demonstrator of Anatomy and Operative Surgery in St. Bartholomew's Hospital. Thirty-six Illustrations. London: H. K. Lewis.

MEN love epitomes and summaries, which save thought and study. Some theories can be accurately expressed in short sentences; some physiological mechanisms can be correctly demonstrated in pigrammatic language. As a rule it is otherwise, and hernia is a subject which follows the rule. Its anatomy and pathology are ill understood, for the zeal of authorities has evolved doctrines and theories far too exclusive to be trustworthy.

Scarpa and his followers have led many to believe that the contents of the abdomen are held in place by the pressure of the muscular walls, and that hernia depends on a loss of balance between the muscular power of the walls and the resisting power of the fibrous fabric of the inguino-crural aponeuroses. Displacement of intestine is, according to this, the "mechanical theory," normal condition. Richter and his school admit that hernial protrusion is the result of the mechanical action of the muscular walls, but deny that the greater part of the intestinal tract is subject to displacement as long as the mesenteries, ligaments, and peritoneal folds are normal. The mechanical action of the walls does not cause protrusion until the intestines have descended, to a certain extent, in the abdominal cavity, through abnormal lengthening of their serous attachments. This is the "pathological theory." Through zeal for antithesis, which simplifies the comprehension of two different theories, surgeons are apt to conclude that the "pathological theory" absolutely denies the mechanical supporting power of the abdominal walls, solely because the opposite theory maintains that power; but this idea is inaccurate.

Whilst the "mechanical theory" relies too much on the influence of the parietes, as has long been recognised, Mr. LOCKWOOD shows in these lectures that the "pathological theory" holds too much for granted respecting the supporting power of mesenteries. The advocates of this theory do not appear to have taken series of measurements of the peritoneal folds in question. Mr. Lockwood has taken such measurements. His work is a careful analysis of his subject, to understand which the reader must study the lectures from beginning to end, a task not so very difficult, for the matter is interesting, and the literary style clear. The reader must not look for comfortable summaries or concluding paragraphs which explain everything. The pathology of hernia, we repeat, cannot be taught by epigrams.

The length of the mesentery, its attachment, and the range of movement which it allows the intestine are severally considered. Mr. Lockwood shows that Treitz's suspensory muscle and the tissues at the root of the mesentery are sufficient to uphold the small intestines. He has carefully dissected this muscle, which runs from the diaphragm close to the œsophageal opening, to its insertions in the duodenum and mesentery. In acquired hernia it may lose its supporting powers. On the other hand, Mr. Lockwood brings forward cases of acquired hernia without prolapse or elongation of the mesentery, which were presumably due to a fault in the abdominal wall. He further describes cases of acquired hernia with simple prolapse of the mesentery, and other cases where other structures—the anus, bladder, or internal female organs were also prolapsed.

After careful measurements, Mr. Lockwood inclines to the belief that prolapse of the mesentery is a predisposing cause of the hernia and not an effect; yet he notes that the evidence in support of this supposition is far from being of a convincing nature. He describes cases of hernia where the mesentery was very short. In many subjects devoid of hernia he found very long mesenteries.

The passages in these lectures which will most interest the surgeon refer to the radical cure of hernia by operation. These procedures depend on the mechanical or abdominal wall theory, which is based on truth as far as the wall is concerned. Gradual prolapse or elongation of the mesentery predisposes to hernia—to the acquired varieties, of course. Hence congenital herniæ are the most suitable for curative operations, for in these varieties of structure there is neither prolapse nor elongation of the mesentery, and the fault is deficient development of the abdominal wall. The operation is best performed when adult life is reached, and not later than the forty-fifth year.

Mr. Lockwood's lectures form a standard work which every surgeon should read, and which the physician and obstetrician may also study with profit.

KRITIK DER VACCINATIONS-STATISTIK, UND NEUE BEITRÄGE ZUR FRAGE DES IMPFSCHUTZES. Von JOSEPH KORÖSI, Director des Budapester Communal-Statistischen Bureaus, etc. Second Edition. Pp. 240. Berlin: Puttkammer and Mühlbrecht. 1890.

THIS work, which has already reached a second edition, is entitled a *Denkschrift* (Memorial) of the International Medical Congress, Washington, 1887, being founded on papers laid before that Congress. It will be remembered that the author laid before it ample proof that Keller's Austrian statistics (regarding the railway *employés* and the effect of vaccination amongst them) were falsified by Keller. As is well known, these statistics have always been regarded as one of the sheet-anchors of the Anti-vaccination Society. The Congress thereupon delegated the task of reporting on the subject to a subcommittee consisting of Professors Ouchterlony, Leister, and Lynch, together with Dr. A. B. Arnold, President of the Section of Medicine. These gentlemen, who had before them recent copies of the returns originally given to Dr. Keller, from eight of the nineteen surgeons who sent in the returns, have certified that the original returns were falsified by Keller, and constitute an unpardonable attempt to mislead scientific and public opinion. Müller's Berlin statistics are also shown to be defective, whether regarded quantitatively or qualitatively. But the special aim of this important work is to examine into the whole question of vaccination, and the arguments for and against, as considered by an unprejudiced professional statistician. London, Scotland, England, and Prussia in particular are compared with Austria and the Netherlands. The imperfections of the present system of statistics are plainly laid before the reader, and it is shown that the "problem of the living totalities" (that is, as regards the proportion of vaccinated to unvaccinated living) may be solved by an indirect method called the "method of relative intensity." The relative morbidity (or else mortality) of the vaccinated and unvaccinated respectively, according to age, in regard to diseases other than small-pox is first established, from abundant data officially furnished to the author, and then the morbidity and mortality as to small-pox can be examined with the possibility at last of a direct conclusion as to the protective power of vaccination. For it is argued by the opponents of vaccination that the fact that more unvaccinated than vaccinated die of small-pox does not prove that vaccination protects; because, according to them, the unvaccinated constitute the weaker section of the community, and more easily fall a prey to disease in general than the vaccinated. Hence the importance of the method here given. The same method is used in regard to the alleged inoculation of various diseases by vaccination. An appendix to the work contains a minute examination of two works against vaccination by two prominent public men of eminence, namely, Dr. Reitz, of St. Petersburg, and Professor A. Vogt, of Berne. The author has deeply studied the use and value of statistics in other published works, and the present work is deserving of the closest study by all who are interested in the question of the protective power of vaccination against small-pox and the alleged dangers of vaccination. The latter are proved statistically to be practically *nil* compared with the saving of life which vaccination effects.

A HANDBOOK FOR THE NURSING OF SICK CHILDREN; with a few Hints for their Management. By CATHERINE JANE WOOD. London: Cassell and Co. 1889.

THE number of books on nursing is now so large that the author of a new work may fairly be called upon to assign some reason for increasing the number. The nursing of children has, however, some claim to be considered a special department, and Miss WOOD has had a long experience in it. She thoroughly understands her little charges, and has the power of expressing herself in plain simple language. In her introductory remarks she truly says that many children are allowed "to drift into a sickly habit when a little well directed energy could turn them into another path." Anyone accustomed to listen to the histories of the commencement of children's illnesses can appreciate the truth of this. Indolence and ignorance are no doubt, as she asserts, responsible; but with regard to the latter, society does little, if anything, to remove it. Women of the working classes marry, as a rule, at

such an early age that they have had only time to learn something of the three R's; moreover, they are not, as a rule, blessed with much originality, and can hardly therefore be expected to know or understand anything about the handling or management of such a delicately organised animal as a child. The establishment of an institution where this class of young women could receive instruction in the care of their children *in esse* or *in posse*, and where much of their traditional ignorance might be removed, would be a good work for a lady of knowledge and benevolence.

Miss Wood's remarks on the special kind of nursing sick children require are most interesting. "Mothering," to use Miss Wood's word, is part of a sick nurse's duty, and there is no small difficulty in making would-be children's nurses feel this.

The chapter on the training of nurses is excellent, and any young woman desirous of entering on a course of nursing would do well to read carefully and bear in mind what is said on this subject. Many young women on first entering a hospital are disappointed and disgusted that they are not instantly given an important case to nurse, and resent being told off to wash, dress, and care for some convalescent children; not a few in consequence find they have mistaken their vocation. The length of time required for the training of an experienced nurse is of course not less than three years, but a shorter period than this would teach many to be helpful and useful in their after-lives. Even "factories," which Miss Wood so strongly condemns, where so many would be turned out annually with a little knowledge, would be better than the existing system of no knowledge at all.

The chapter on general nursing of sick children will prove of great use to persons nursing children in their own homes. The recommendation to be always perfectly truthful with children cannot be too strongly impressed on the memory of the nurse. The habit of telling children that a medicine is nice when it is very much the reverse, and that any small operation which may have to be performed will not hurt when of necessity it must, only results in destroying the child's confidence in its nurse.

The chapter on general symptoms of disease contains a chart and instructions how to use a thermometer, and also hints as to the various postures to be observed in different diseases.

The chapters on infectious diseases, brain and nervous affections, on infantile paralysis (the latter with useful directions for home treatment by Dr. Barlow) will repay perusal, as will also those on tabes mesenterica and tubercular peritonitis, affections of the throat and mouth, skin disease, and how to manage childish complaints.

Chapters XIII and XIV deal with surgical diseases and how to dress them, the latter giving particulars with regard to antiseptic dressings.

The remaining chapters deal with food in sickness, feeding, the trained nurse in private, baths, bathing, and clothing, and contain excellent practical advice. The last few pages are filled with "recipes" for making food suitable for sick children.

DIE ALBUMINURIE IN PHYSIOLOGISCHER UND KLINISCHER BEZIEHUNG UND IHRE BEHANDLUNG. Von Professor H. SENATOR, Geh. Medicinal-Rath in Berlin. Zweite, gänzlich umgearbeitete Auflage. Berlin: Verlag von August Hirschwald, 1890. (Albuminuria in its Physiological and Clinical Relations, and its Treatment. By Professor H. Senator, M.D., Medical Privy Councillor in Berlin. Second, completely Revised, Edition. Berlin: August Hirschwald, 1890.)

THE first edition of Professor SENATOR'S monograph on albuminuria is well known to English readers through the translation published in the Sydenham Society's selected monographs for 1884. The present form follows the original lines, with such additions as have become known to the author since his earlier publication (1882). Among these we may refer to the albuminuria of newly born children, described by Martin Ruge and Hofmeier, and the albuminuria which follows attacks of paroxysmal hæmoglobinuria.

The chapter on the clinical forms of albuminuria is almost entirely new; in it the author deals with each clinical form of albuminuria, and attempts to supply an adequate explanation of its pathogenesis. The only suggestion not generally known which we have observed is that of Virchow, that fat embolisms are found in pregnancy in the glomeruli of the kidneys, and may be sometimes the cause of albuminuria.

The last chapter, on treatment, is entirely new, but does not contain any novel suggestions, except the use of sodium sulphoichthyolate as an astringent in doses of 0.15 to 1.2 gramme daily. Professor Senator recommends milk and vegetable diet, abstinence from alcohol, moderation in the use of tobacco, warm clothing, and a mild winter climate. He gives the results of some experiments with eggs to show that their use as an article of diet increases the amount of albumen, but nine eggs a day—four for dinner and five for supper—is not a usual quantity!

This monograph collects together a number of useful data, but contains little that is not to be found in systematic treatises on the same subject published in this country.

ATLAS OF ILLUSTRATIONS OF PATHOLOGY. Fasciculus VII. New Sydenham Society. 1889.

THIS number of this well-known series contains four large plates which are reproductions from standard works which are most of them not available for reference to most readers, and consist of urinary calculi and gall stones which have been remarkable chiefly for their size; enlargements of the prostate from Stanley's work, Baillie's *Morbid Anatomy*, and the *Medico-Chirurgical Transactions*, with typical phosphatic calculi. Of these plates we must confess that they are not so instructive as those to be found in Dr. Watson's recent admirable memoir on prostatic disease. Finally, there is a reprint from the *Medico-Chirurgical Transactions* of one of Sir James Paget's cases of osteitis deformans, and a reference to one—but only one—other set of figures of the same disease of recent time. Short descriptions of the plates, and of the points they illustrate, accompany the pictures which, it is hardly necessary to say, are excellent and a credit to English workmanship.

ARCHIVES OF SURGERY. No. 3. By JONATHAN HUTCHINSON, F.R.S. London: J. and A. Churchill.

MR. HUTCHINSON continues his *Archives* with some interesting and suggestive papers, which are mainly concerned with skin diseases and syphilis. The illustrations are of nævoid lupus, a mixed form of lupus, crateriform lupus, and lupus beginning in the gum. But there are short papers on the cancerous process and on new growths in general, and on heredity; and he continues, but does not conclude, his instructive paper on intestinal obstruction. The catechism of surgery contains a number of cases for diagnosis by students, but we should hardly quarrel with students for not being able to answer some of the questions. In his notes on the cancerous process he expresses himself clearly that micro-organisms "are not the causes of cancer," and that as we learn more of the various processes of inflammation the more we shall find that even the infective property of cancer finds its border lines merge into the infective processes of inflammation. He disagrees with a recent authority who has maintained that glandular infection does not occur in rodent ulcer on account of the scanty supply of lymphatic channels in the neighbourhood of the local in which rodent ulcer occurs, and suggests that rodent cancer begins in a different tissue from that in which epithelial cancer takes its start. The paper on heredity is suggestive, and contains a number of questions bearing on Weisman's views of Darwinism and Lamarckism in reference to his subject.

TRAITÉ DES MALADIES DU TESTICULE ET DE SES ANNEXES. Par CH. MONOD et O. TERRILLON. Paris: G. Masson, Editeur. 1889.

THIS work is an elaborate and discursive treatise upon diseases of the testis and cord, and their coverings. The numerous references to authors of all countries, given at the end of each chapter, show that the writers have been at considerable pains to acquire an extensive acquaintance with the literature of the subject. This is also marked in the text. Scarcely any method of treatment known in this country is omitted from notice, hardly any rational pathological theory fails to receive passing discussion. Frequent reference is made to the work of Curling, and the articles of Humphry and Jacobson. The book is enriched by ninety-three plates. Some of these are diagrammatical, and none of them are coloured, but they well serve to illustrate the text. Where all the articles are good it is difficult to choose examples of excellence, but the chapters on neuralgia of the testis, and hæmatocele, may be selected as worthy of special commendation. A leading

nay fairly be assigned to this book among treatises of its kind. It ought to be read by surgeons in this country, and its perusal would be advantageous to candidates seeking high surgical honours, for it contains a most complete account of modern ideas upon the subjects it proposes to deal with.

NOTES ON BOOKS.

De l'Hémiplégie dans quelques Affections Nerveuses. By MLLE. BLANCHE A. EDWARDS, Docteur en Médecine de la Faculté de Paris, etc. (Paris: aux Bureaux du *Progrès Médical*, 1889.)—The symptomatology of the classic hemiplegia, due to hæmorrhage from a cerebral vessel, or to embolism or thrombosis, has been studied with great completeness, and the relation of the symptoms to the nature of the lesion fully worked out; yet there still remain obscure certain cases in which more or less marked unilateral paralysis occurs in the course of other nerve disorders. We know scarcely anything of the lesion which in these instances causes the hemiplegia. In the work before us Miss Blanche Edwards has collected seventeen cases of such paralysis, which have come under her own observation. She has compared with great care the symptomatology of each case, and in two instances has detailed the results of a *post-mortem* examination. Other cases are collected from the literature of the subject, making in all eighty-eight, from which certain conclusions are drawn. The first general conclusion is that the form of hemiplegia in question, that which is not due to gross cerebral vascular lesion, is a condition which is met with frequently in neurotic families, and that it may present all the symptoms of ordinary hemiplegia, and may be slow in its onset, or, on the other hand, apoplectic in character. The nature of the hemiplegia may be suspected when it has been preceded by repeated paralyses of transitory duration, and when groups of muscles are paralysed beyond those usually affected by hemiplegia. The cases described in Miss Edwards's book illustrate hemiplegia occurring in association with locomotor ataxy, sclerosis in patches, hysteria, and paralysis agitans. Various points are given whereby the association of the hemiplegia in each case may be determined. The first necropsy described by the authoress was upon the body of a patient attacked by hemiplegia in the course of locomotor ataxy. Numerous small old hæmorrhages were found in the brain, but it could not be determined which of these, if any, had been active in producing the hemiplegia. The second observation was upon a case of hemiplegia in association with sclerosis in patches. Unfortunately, however, only the spinal cord and not the brain could be examined, and this threw no light upon the nature of the hemiplegia. It is rightly concluded that these two instances, even when with the few others on record, allow of no generalisation with regard to the lesion which causes the unilateral nervous symptoms. Dr. Blanche Edwards's work has been very carefully done and is a valuable contribution to our knowledge.

Nervous Syphilis. By H. C. WOOD, M.D., LL.D. (Detroit, Mich.: G. S. Davis. 1889. Pp. 135.)—This volume is one of a series called "The Physician's Leisure Library," and though in outward appearance, as well as in price, it resembles what is known in this country as the "shilling shocker," it contains a considerable amount of useful information on syphilitic diseases of the nervous system. The book, which is "largely the outcome of personal experience," is divided into four chapters, treating respectively of syphilogy, the brain and its membranes, spinal syphilis, and the peripheral nerves. Cases in illustration of various points are also given, both from the author's own notebook, and from the works of English, French, and German writers. In regard to the diagnosis of diseases of the nervous system, Dr. Wood holds the rather singular opinion that the fact of tolerance of the iodides by the patient is in favour of syphilis. He remarks that the vast majority of persons, who are free from syphilitic infection, cannot take doses of over ten grains of the iodide three times a day without the production of iodism, except as the result of habitual use of the remedy; therefore, in Dr. Wood's opinion, "when we find that a person can tolerate large doses of iodides, the probabilities that such person is suffering from syphilitic infection are so strong as to warrant the tentative diagnosis of syphilis, if the tolerance of the iodide be accompanied by the presence of symptoms of chronic nerve disease not readily explainable."

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW VACCINATOR.

I HAVE for some time employed a new vaccinating lancet, made to my design by Messrs. Weiss and Sons, of London, and which is well represented, one half scale, in the annexed woodcut. Since using it I have vaccinated with much greater celerity, ease, and certainty than I formerly did, and I can strongly recommend it to all who, like myself, are extensively engaged in the performance of this operation. It appears to possess the following advantages:—



1. Greater certainty in regulating the amount of blood drawn.
2. Facility of cleaning each time it is used.
3. It can be used in arm to arm vaccinations both to collect and rub the lymph into the incisions.
4. Moderate cost; Messrs. Weiss make them for 2s. 6d. each.

This is not a needle vaccinator, each tooth having a knife edge and making a clean incision. I had some difficulty in getting this detail properly carried out, but Messrs. Weiss have now perfected the little instrument, and it is quite a pleasure to vaccinate with it.

JOHN BARK, Public Vaccinator, West Derby Union.

DEATH UNDER CHLOROFORM. — The death, whilst under the influence of chloroform, of Emily Vials, aged 24, was the subject of a coroner's inquiry held at Exmouth on February 13th. Mr. John Cock stated in evidence that deceased suffered from lupus and some of its consequences; apart from this she was quite healthy. During the past twelve months she had undergone five or six operations, and with no bad effects as to the chloroform. The drug was applied by a Skinner's inhaler. The face being the seat of the disease, witness had to stop the administration to give place to the operator, the nose being the first point to be treated. In the first place witness was seven or eight minutes administering the chloroform before the patient was in a fit state for the operation. Soon after Dr. Hodgson commenced to operate, and had done so only about three minutes, when witness—watching deceased's respiration and pulse—noticed that she was recovering, and more chloroform had to be administered. Then the patient suddenly stopped breathing, and witness drew out her tongue with a pair of forceps, and immediately began to perform artificial respiration (Dr. Sylvester's method). Dr. Hodgson relieved witness after ten minutes, and he continued it for about a quarter of an hour longer. Then, while Dr. Hodgson was getting the galvanic battery ready, witness resumed the efforts at artificial respiration. For nearly half an hour these efforts were continued, but deceased never showed a sign of life. In reply to the jury, the witness stated that the deceased had inhaled much more chloroform on previous occasions. He had never seen a patient behave better under chloroform. It was impossible to account for the fatal result in this case. The breathing stopped suddenly. He had given chloroform in about 500 cases, about 200 being in Guy's Hospital, where he was house-surgeon. He had never lost a case of his own before this. Mr. Arthur Curtis, M.R.C.S., who had been directed by the coroner to make a *post-mortem* examination, said that he had found nothing the matter with the heart. In fact, there was *post mortem* evidence that that organ acted after breathing stopped. There was no organic disease of any other internal organ. The jury returned a verdict of "Accidental death." In a rider they exonerated Mr. Cock, who skilfully administered the chloroform, from all blame, and expressed the opinion that everything possible was done to restore life after respiration had ceased.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 22ND, 1890.

LIFE ASSURANCE WITHOUT MEDICAL EXAMINATION.

TRULY there is no new thing under the sun, and that which hath been done is that which shall be done. In the early days of life assurance a medical examination was not deemed necessary, and though there is evidence forthcoming to prove that the system then in vogue worked satisfactorily, the conditions of asssurance have so altered of late that it would not be safe to base any argument on this fact.

Some forty or fifty years ago the directors of the various offices awoke to the importance of subjecting applicants for assurance to a medical examination, and we believe that at the present time, with the exception of assurances in the Post Office for sums not exceeding £25, and certain industrial insurance companies, a medical examination is insisted on by all British companies. It is stated that the Sun Life Assurance Society intends to revert to a modified form of the old and discarded method of assurance without examination.

Though we fully recognise the value of a good family history, we cannot agree with the statement we once heard drop from the lips of a distinguished actuary, that given a good family and personal history he thought a medical examination might be dispensed with. One thing, however, is certain, that it would not be possible at the present time to accept lives for assurance in the ordinary sense of the term without a medical report.

The scheme, as propounded by the Sun Life Assurance Society, differs materially from an ordinary policy of assurance. In the latter, as soon as the first premium has been paid, the sum assured will be handed over to the representatives of the assured should he have died immediately after the policy had been effected, the absence of any fraudulent representation being assumed. This certainty of payment constitutes the chief attraction of assurance. The great bulk of policies are effected to provide for those dependent on the assured, as a security for loans, or to enable partnership arrangements to be made. The Sun Office has formulated a plan whereby a medical examination may be avoided, a declaration before a responsible officer of the society being deemed sufficient; but in the event of death occurring in the first five years, all premiums paid will be returned with compound interest at 5 per cent. At the end of the five years the policy holder may make a declaration as to the state of his health, and has to accept an endowment policy payable at death or twenty years from date of issue. Now, as we have already pointed out, what is demanded in life assurance is the certainty that when once the life has been accepted and the premium paid, the sum assured will be forthcoming in the event of the death of the assured, be that early or late, and all the business arrangements hinge on this certainty.

The few eccentric persons—and we do not believe that there are many—who object to a medical examination, may be attracted by this novel arrangement, but it certainly will not effect any marked alteration in the system of life assurance now so extensively carried out in this country and other parts of the world. Some of the daily papers have taken advantage of the announcement made by the directors of the Sun Life Assurance Society to comment on the supposed worthlessness of a medical examination. It argues the want of sound judgment to say that because there are numerous examples of candidates for assurance who, after having been rejected on the ground of weak health have yet lived to old age, therefore the system of medical examination has not justified its existence. In medicine, as in all affairs of this life, mistakes from time to time are sure to be made, and he is the best medical examiner who makes the fewest. What we do claim for medical examination in life assurance is this, that it diminishes as far as possible the inevitable selection against the company which is certain to exist. Mr. Morgan, a former actuary at the Equitable, puts this tersely: "Between a number of select lives (that is, lives which have passed a medical examination) and the general mankind, the difference in the rate of mortality will at first be considerably in favour of the former; but this difference will be continually lessening, till, in process of time, it will vanish altogether." In other words, all that the most skilful medical adviser can do is to prevent the excessive mortality which would probably occur within the first seven years after assurance, supposing no medical examination were insisted on.

The reproach cannot with justice be levelled against assurance directors and actuaries that they are unmindful of the wishes of their clients. Every variety of assurance is to be found at most offices. The system of endowment assurance, or, as it might be called, old age assurance, that is, payment of a specified sum on attaining a certain age, or in the event of death taking place previously, is more and more taking the place of the whole life policy. The inherent selfishness of human nature may possibly explain this alteration to some extent; men like to look forward to handling the money they have put by rather than to leave it to accumulate until after their death. Another form of policy is the investment security policy. By taking out one of these policies the investor of leasehold property can have a sinking fund provided for him without trouble and at a small cost, so that at the expiration of the lease the return of capital is secured. By a small extra payment the return of capital may be secured at the expiration of the lease or at the previous death of a life assured, or the premiums may be made to cease at death.

Since the passing of the Married Women's Property Act there has been a great increase in the assurance of female lives. There seems to be a special tendency among women who are about to take out endowment policies. The Medical Sickness

nity and Life Assurance Society represents quite a new eparture, as it is the first successful attempt to assure gainst sickness for persons above the rank of artisans.

From a consideration of the preceding facts it will be clearly en that, at the present time, assurance in all varieties and rms is offered to the public, and that a man must indeed be fficult to please if he cannot select a method of providing r the wants of those dependent on him, or for himself in d age, sickness, or accident. While then highly approv- g of the development which has taken place of late in the ethod of conducting assurance, we must deprecate any tempt to dispense with a medical examination, not from y professional bias, but from the conviction that any such tempt cannot in the end be successful, and may tend to eck the onward progress of assurance.

THE STUDY OF TUBERCULOSIS.

many ways our neighbours, the French, are a long way ead of us. Although we are not usually in the habit of editing them with thoroughness of system, it is often brought ry forcibly home to us that the French scientific mind is not ly more brilliant, but that it is in many ways more metho- cal in its workings, than is the average Anglo-Saxon or erman mind. In the field of biology the French are eminently ientific, but they are at the same time eminently practical. ese characteristics they also carry into their work on path- ogy, bacteriology, and hygiene.

The best phases of the French scientific method will be found irrored in the *Comptes Rendus et Mémoires du Congrès ur l'Etude de la Tuberculose chez l'Homme et chez les Animaux*, st session, 1888 (Paris, G. Masson, 1889) which will be read th great interest by all interested in this most important sub- ct. The publication of this volume affords us an oppor- nity of recurring to and summarising the results of the eetings which we briefly reported at the time of their oc- rrence.

From the programme of the work done by the Congress, it evident that those who promoted the meeting had two objects view, the first to bring together as much material and as any observations as possible to be discussed by the members the Congress, and the second, to exert a kind of educational fluence in the subject of tuberculosis on those members who ok part in the meetings. The results of the efforts in the st direction are given in the reports before us, whilst those der the second heading may confidently be looked for in the oceedings of future Congresses. The lines on which the scussions were laid down were (1) the dangers resulting from e use of meat and milk of tuberculous animals, and the ans of preventing the same; (2) the human race, the spe- s of animals, and the organic media, considered from the int of view of their susceptibility to tuberculosis and adapt- lity to the growth of the bacillus tuberculosis; (3) the annels of introduction and propagation of tuberculosis in the tem; prophylactic measures to be adopted; (4) early dia- osis of tuberculosis in human subjects and in animals.

Numerous papers were given in all these various depart- nts, and were fully discussed, and the reports thus contain nost excellent summary of our knowledge of tuberculosis up date.

The President, Monsieur Chauveau, in his inaugural discourse on the infectious nature of tuberculosis, points out that a somewhat unusual step had been taken in organising a congress to discuss a single disease. It might seem, at first sight, that this savoured of ultra-specialisation, but from the way that the work has been carried out it is evident that such specialisation was amply justified. He showed that the disease had long been considered to be of an infective or contagious nature, and in this relation he quoted Morgagni, who had an ineradicable horror of the dangers associated with the making of *post-mortem* examinations on tuberculous subjects. Davaine, he said, had, by his work on bacteria, opened up the way for the brilliant researches into the infective nature of tubercle and the bacillary theory of that disease, carried on by Villemin, Toussaint, and Koch; but to Koch was the honour due for the discovery of the true causal agent of tuberculosis. He insisted that all our present knowledge on the subject of tuberculosis pointed to a unity of type in the causal agent of the disease, but to wide and almost inexplicable differences in the soil on which the germ of disease was sowed. Some tissues were far more readily attacked, and certain species were much more refractory to the disease than others even very nearly allied. It was for the Congress to throw light on these various subjects, and even though they did little they might still add something towards bringing about that era when the pathologist could work as easily as the naturalist, as precisely as the physician, and could obtain laws as rigorously exact as those of the mathematician. In the meantime it was necessary to work and to discover the laws that govern the extension of this disease. If they could arrive at a knowledge of a means to be adopted for stopping its ravages; if they could succeed in thus lengthening or adding to the sum of life and happiness in the world, they would have rendered to the individual as well as to society a most important service.

After a description of the mode of origin of the Congress by M. Verneuil, M. Nocard treats of tuberculous infection through milk and through meat. He reports numerous experiments, and arrives at the conclusion that the flesh of tuberculous animals is only slightly dangerous, but that in certain cases it may give rise to tuberculosis in the human subject, whilst in the case of milk the danger is very much greater. Messieurs Arloing, Bang, Galtier, Baillet, Veyssière and others discussed these questions, as an outcome of which discussion it was agreed that in all cases the danger arising from the consumption of tuberculous meat was so great that it was necessary to apply the general principle of seizure and destruction wherever a carcass was found to be tubercular. Some most interesting information is given as to the distribution of tuberculosis, geographically and anatomically, and one of the most interesting sections of the whole report is that in which the pathological side of the question is considered, and several facts not generally known, or, at any rate, not usually insisted upon, are brought out in some of the papers given in this section.

P. de Toma's experiments on the propagation of tubercle bacilli in the cornea are specially interesting. The records of secondary inoculation of the skin are also of considerable interest, and throw light on some of the vexed questions so frequently discussed in connection with inoculation of tuberculosis.

In Section IV the question of the diagnosis of bovine tuberculosis is very fully treated of; heredity, treatment of tubercle, both medical and surgical, are also fully gone into; and although there appears to be some difference of opinion as to the relative merits of the expectant treatment and radical surgical operations, the value of iodoform, salts of copper, boracic acid, hydrofluoric acid, terebene, and the rest, there can be no doubt that anyone perusing these chapters on treatment will be in a much better position to apply his remedies rationally and most advantageously for his patients than are many of those who at present are attempting to deal with this terrible scourge. The recommendations of the Congress to the French Government are already well known, and if the outcome of such a meeting had been nothing more than the framing of such a series of regulations as those now known as the French tuberculosis regulations, the sitting would not have been in vain. But the Congress has done something more than this; it has been the means of collecting a number of most valuable facts, and those who peruse the records of the meetings, although they may not be able to agree with the conclusions in all cases, will, nevertheless, have possessed themselves of records of observations and experiments which may assist them, along with their own observations, in arriving at more or less definite and satisfactory conclusions on the various points taken up by the eminent authorities who took part in the Paris meetings.

These published reports, moreover, serve another purpose. They indicate very directly the lines on which future work must be carried on if our knowledge of the subject of tuberculosis is to be rapidly extended. Full though the agenda list was, one cannot but be struck by the fact that there were two departments in which the amount of work reported is exceedingly meagre: first, the department of statistics, and, secondly, the physiological or biological department. It is, perhaps, natural that these should be less fully discussed at such a period than are some of the subjects of which mention has been made. Statistics, if they are to be of any value at all, should be compiled on a systematic plan, and until some agreement is arrived as to what the plan shall be, any comparison of statistics gathered can, necessarily, be of only relatively small value. In regard to physiological questions, it is, perhaps, too much to expect that at this stage of the growth of our knowledge of tubercle we can have anything more than a very superficial notion of the exact relations, physical, chemical, or vital, either of the causal agents of the disease or of the reaction of the tissues upon them; but it is to be hoped that not only in France, which must be regarded as the cradle and nursery of bacterial biology, much valuable information under this heading will shortly be forthcoming.

These reports, we say, are valuable both for what they contain and for their indication of the lines on which future investigations must be carried on. Anyone working at the subject of tuberculosis will save himself enormous labour and will receive most valuable help from a careful study of the work of this Congress on Tuberculosis, and those who were instrumental in organising the meeting must be congratulated on the admirable results obtained at this the first of their sessions.

CORONERS' INQUESTS.

Colonel Howard Vincent's letter to the *Times* on "Criminal Reform—Coroners' Inquests and Grand Juries," is a series of assertions most of which, upon careful examination, will be found incorrect and untenable. His general attack upon the coroner and his court is ungenerous, to say the least of it, and from the position which he once held in connection with the Criminal Investigation Department of the Metropolitan Police, he should know, although his own personal experience may have been exceptional and peculiar, that frequently when no charge can be preferred by the police against any individual in connection with the crime of murder or manslaughter for want of evidence, the perpetrator of such crime would escape, and the ends of justice be defeated altogether, but for the patient and often prolonged investigation which the inquisitorial character of the coroner's court affords.

The opportunity that is given to a suspected person to make a statement upon oath, has on more than the one occasion within the recollection of Colonel Howard Vincent materially assisted in proving satisfactorily to the jury and the public that the death was due to either suicide or natural causes; and the suspected, or even charged, person has been cleared of suspicion and discharged the next day by the magistrate. Colonel Vincent states that the coroner's inquest not infrequently operates to the direct hindrance of justice, and further "it is ridiculous for two courts of first instance to be simultaneously and independently inquiring into one and the same case." Surely every one must know that in the coroner's court the "cause of death" is the primary subject for investigation and that before the magistrate someone, either innocent or guilty, stands accused of crime. The functions of the two courts so materially differ that instead of the inquest in anyway being a hindrance to justice, it is the reverse, and is frequently of material assistance to the police in the discovery of crime, if they will only avail themselves of the special facilities which the court offers in the summoning and examination of witnesses.

Colonel Vincent must have been asleep in the House of Commons during the passage of the last Local Government Act, otherwise he would have known that the "quaint franchises" under which he says "coroners are elected," have been abolished and that, except in cities and boroughs, coroners are now elected by the county councils. This is a reform in the mode of election which was much needed. It may happen that from want of better accommodation coroners, as frequently the magistrates, may be obliged to hold their courts in a public hall or room in connection with a hotel or public house, or perhaps even the village tavern; yet Colonel Howard Vincent's statement that "his court is an attraction to the bar of a public-house" is certainly somewhat offensive to the many corporations and local authorities, who have provided proper Coroners' Courts in connection with the Public Mortuaries—many excellent examples of which are to be seen in the Metropolis, where inquests are held and conducted with due dignity and decorum, and where both coroner and jury do their duty well.

We are aware that legal coroners do not often possess the amount of medical knowledge which is one of the fitting qualifications for the office, and we admit that occa

ionally an improperly conducted inquest may call for public omment or the interference of the Lord Chancellor, to whom coroners are responsible, yet we cannot join in the wholesale condemnation of the court, because Colonel Howard Vincent in his letter describes it as "belonging to a bygone ge" and that "the practice is in urgent need of regulation."

To abolish the Grand Jury as advocated by Colonel Howard Vincent, would be a retrograde step in the cause of iberty. This is the only really independent tribunal in the ountry; the only one that in any time of great political or evolutionary excitement would occupy an independent posiion between the Crown and the subject. Many an innocent nan has been saved the degradation of being placed in the ock by the timely intervention of the Grand Jury. Governor Eyre was a notable example in this respect. Confidence in ur tribunals is the first necessity of justice, and whilst we re not prepared to mutilate or destroy such institutions as he Coroner's Court and the Grand Jury, yet we are quite preared to see them better represented and the duties, in some nstances, more efficiently performed.

DANGER OF FLUSHING THE PERITONEUM WITH SUBLIMATE.

OF all recent innovations in abdominal surgery, flushing or rrigation of the peritoneum is undoubtedly the most popular n the best sense of the word. Operations for the removal f diseased uterine appendages, electrolysis for fibroids, and omplicated manœuvres in the region of the gall bladder, uodenum, stomach, or kidney are seldom taken in hand xcept by experts. Every surgeon, however, may be called pon to open the peritoneal cavity, and one of the best safeuards against the dangers of intraperitoneal operations is ushing of the peritoneum, judiciously performed. The uccess of this practice has urged many surgeons to seek yet igher success by various modifications.

Mr. Lawson Tait uses fresh water, and others can claim igh success where the peritoneum is flushed by the same unsohisticated fluid. But the antiseptic school of operators have rgely adopted this practice. Of necessity, they had to take a reat physiological problem into consideration: How much of he antiseptic must be mixed with the water poured into the eritoneum so as to ensure asepsis without poisoning the atient?

The merits of the antiseptic and the opposite school are not o the purpose in the present argument. Surgeons of the ormer school believe that an antiseptic agent should be ixed with the water, so they are right to estimate the irtues and dangers of that agent. Dr. Gellé has shown[1] that ublimate is a perilous compound for flushing. He describes ree cases of ovariotomy where a 1 in 10,000 solution of perloride of mercury was employed. In the first case, violent bdominal pain and vomiting took place during the night ter operation. On the next morning a scarlatiniform rash ppeared on the face, trunk and arms. No rise of temperare or salivation occurred. By the third day all bad symtoms disappeared. The second patient died from exhaustion rough diarrhœa, fifty-two hours after the operation, where he walls of a dermoid cyst were sewn to the edges of the abdominal wound. Interstitial nephritis was discovered. In the third case parovarian cysts were removed. Obstinate vomiting lasted for two days. How far the sublimate was to blame, especially in the second case, which was incomplete, it would be hard to determine. Dr. Delbet's important researches must not be overlooked. He has shown that a large amount of the water first poured into the peritoneum is actually absorbed, especially if it contain a little table-salt. In fact, the process is a true transfusion, more likely to act as such on the circulation than Dr. Münchmeyer's practice of injecting water into the subcutaneous cellular tissue, as a substitute for transfusion of blood in hæmorrhage after labour. Transfusion, however, is not what is wanted in flushing the peritoneum. What is especially to the point is another fact discussed by Delbet. After a certain amount of water has been poured into the peritoneum, no more can be absorbed; then strong antiseptic solutions can be added without fear of absorption, provided that they be displaced by a final injection of pure water. This process might have prevented the serious results in Gellé's cases. Unfortunately, though a very pretty physiological experiment, Dr. Delbet's method is complicated. The second flushing with an antiseptic solution, followed by a third with pure water, is hardly in accord with the principles of the strict antiseptic school, for, according to them, the third would undo all the good done by the second. Carbolic acid is almost as likely to irritate as sublimate, if injected in a sufficient amount to counteract sepsis. No wonder, therefore, that the majority of antiseptic surgeons prefer, we believe, sterilisation of the water by prolonged boiling.

Flushing of the peritoneum has, in short, been widely adopted in abdominal surgery, with excellent results. Like all other surgical proceedings, it requires to be done carefully. It certainly displaces clots and noxious solid or fluid materials. It also checks, if it does not actually stop, hæmorrhage. It counteracts shock due to chilling of the viscera, whatever M. Pollaillon's experience may show to the contrary. Lastly, the transfusion of water into the blood, though not aimed at by the surgeon, is no doubt beneficial. Judging from the experience of "non-antiseptic" surgeons, pure water answers all purposes with safety. The question was the subject of instructive correspondence in the JOURNAL last autumn. If, however, it should some day be shown that some antiseptic should be added, that agent will not be sublimate.

[1] *Annali di Ostetricia e Ginecologia*. Florence, 1889.

THE Report of the Royal Commission on Naval and Military Administration is, the *Daily News* understands, of a very sweeping character, and is not likely to be presented to Parliament in its entirety. In no case will the evidence taken by the Commissioners be published.

AT its last meeting, the Council of the Royal College of Surgeons adopted the report of the Laboratories Committee, nominating Dr. Sims Woodhead for the office of Director of the new laboratories, thus formally agreeing with the decision of the Royal College of Physicians.

THE Queen has been pleased to give and grant unto Surgeon Thomas Heazle Parke, Army Medical Staff, her Royal licence and authority that he may accept and wear the insignia of the Order of the Medjidieh of the third class, which His Highness the

Khedive of Egypt, authorised by His Imperial Majesty the Sultan, has been pleased to confer upon him in recognition of the signal services which he has rendered, under the leadership of Mr. Stanley, in effecting the deliverance of Emin Pasha.

Sir William Mac Cormac has undertaken form a committee in London to assist in carrying out the arrangements for the International Medical Congress at Berlin. Committees have already been formed for the same purpose in Holland, Denmark, and Italy, and it is hoped that other countries will follow their example.

THE PREVENTION OF OPHTHALMIA NEONATORUM.

A Bill has been introduced into the Legislature of the State of New York, entitled an Act for the Prevention of Blindness. It provides that every midwife or nurse who has charge of a case of the purulent ophthalmia of infancy shall be obliged to report the same promptly to the local health physician; and failure to do so is to be punished by a considerable fine, or punishment, or both.

THE YORKSHIRE COLLEGE, LEEDS.

The Council of the Yorkshire College are appealing to the public for £40,000 to enable them to erect new buildings for the medical department, and also a college, library, and examination hall. Of this sum the council are prepared to devote £25,000 to the building and equipment of the department of medicine, and £15,000 to the erection of the College library and examination hall. Since the recognition of its claim to a Parliamentary grant, the College has received from the Treasury the annual grant of £1,400.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY

The New Hall of the Royal Medical and Chirurgical Society in its new home in Hanover Square will be used for the first time on Saturday evening, March 1st, when the annual meeting will be held, and the President, Sir Edward Sieveking, will deliver an address. The New Hall is a very handsome apartment situated at the rear of the premises, and approached through a long corridor, off which open other smaller rooms. The work of fitting up these rooms is now so far advanced that they will be open for inspection on the same occasion, when the whole will be lighted by the electric light.

SMALL-POX AMONG THE "PECULIAR PEOPLE."

An outbreak of small-pox has occurred in the parishes of Cressing and White Notley, near Braintree in Essex, under circumstances which might have led to a disastrous epidemic. A member of the sect known as the "Peculiar People" was attacked by small-pox, and neglected to call in medical aid. Four friends who visited the patient also contracted the disease. On the health officer becoming aware of the cases, all possible steps were taken to prevent the spread of the mischief, and, fortunately, with success. The need of a small isolation hospital was strikingly illustrated.

THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Mr. R. D. R. Sweeting has been appointed by the Local Government Board to be one of their permanent medical inspectors. He was formerly medical superintendent of the Fulham Small-pox Hospital, and for some years has held the appointment of medical superintendent of the Western Fever Hospital at Fulham, under the Metropolitan Asylums Board. He has also from time to time acted as a temporary inspector in the medical department of the Local Government Board, and is experienced in both the practice and the theory of preventive medicine.

PAYMENT OF AWARDS TO PUBLIC VACCINATORS.

We understand that a legal difficulty has arisen in connection with the payment of the usual awards to public vaccinators. Under the Local Government Act, 1888, these awards have now to be paid by the County Councils, but only on the certificate of the Local Government Board. Just as the Central Board were about to issue the requisite certificates for outstanding awards, a question was submitted to the High Court of Justice as to the liability of County Councils to pay awards to public vaccinators for a period prior to April 1st, 1889, and the Board are now deferring further action until the legal difficulty has been settled. We can only counsel the exercise of further patience.

THE LATE SIR WILLIAM GULL.

At the last meeting of the Clinical Society the President made the following remarks: "Before we proceed to the papers of the evening, permit me to remind you of the loss which the Society has sustained since our last meeting in the death of Sir William Gull, the third President of the Clinical Society. It is unnecessary, as it would be unbecoming, for me to attempt any analysis of Sir W. Gull's character; suffice it to say that he was undeniably one of the greatest of modern clinical teachers, and as such he was legitimately selected to follow Watson and Paget in this chair. In addition to two presidential addresses, remarkable alike for their originality and their eloquence, Sir William Gull contributed several papers to our *Transactions*, and among them were two memorable ones, the first on Anorexia Nervosa, and the second on a Cretinoid State Supervening in Adult Life in Women. Both of these have borne good fruit: the first in directing attention to the systematic feeding of hysterical patients, and the second in leading to the complete study of the disease since named myxœdema by our Treasurer, Dr. Ord. Of Sir William Gull it may, therefore, be truly said, 'Though dead, he ye speaketh.'"

CAMBRIDGE NATURAL SCIENCE CLUB.

The Cambridge University Natural Science Club held a most successful first *conversazione* on February 18th in Downing College Lodge, though the absence of the President of the Royal Society owing to his Parliamentary engagements, was naturally much regretted. He had intended to deliver an address on "Fluorescence." The Master of Downing and the President of the Club received the guests, among whom were included almost all heads of colleges, professors, and other distinguished residents, as well as many non-residents. Dr. Lauder Brunton gave an interesting account of the Hyderabad Chloroform Commission; and at a later hour Mr. Gaudiner discoursed on the sowing of seeds, illustrating their dispersion with great success. There were many unusual features in the exhibition of objects of scientific interest; physical, botanical, geological, and archæological specimens, including mummy heads, were lent by Professors J. J. Thomson, Lewis Hughes, and Macalister, and Messrs. Dew-Smith, W. Gardiner, and Harmer. The electric light was cleverly adapted to the occasion. The vocal harmony of the evening was supplied by the King's College Quartette and by Mr. Powell, and Mr. Richmond played a solo on the violin.

THE LONDON COUNTY COUNCIL AND THE HOUSING OF THE POOR.

In a recent number we expressed the opinion that members of the County Council should begin their crusade for the improvement of the dwellings of the poor by complying in their individual capacities with existing enactments. It is gratifying to find that this hint has been taken. At the instance of Mr. Alfred Davies, L.C.C., another member of the County Council, Mr. Thomas Bentley Westacott, has been summoned before Mr. Horace Smith at Clerk

nwell for unlawfully letting and knowingly suffering to be ccupied rooms or cellars at Nos. 14, 18, and 19, Charles Street, omers Town, as underground dwellings, such rooms or cellars ot being constructed for dwellings and contrary to the provi- ions of the Metropolis Local Management Act. The magistrate, n giving his decision, said that there had been an infringement of ne provisions of the section with respect to the areas. It was roved, to his satisfaction, that the area in front of the room was ot 6 inches below the level of the floors. He also found that nere was no area at all adjoining the back room, and that the ard at the rear was at a level of nearly 14 inches above the oor of the room. He imposed a penalty of £7. We heartily wish r. Davies success in his endeavour to improve the work of ne sanitary authorities of the metropolis. The London County ouncil is the highest of these, and it is to be regretted that there nould be members of that board who have themselves disregarded nactments relating to the letting of unhealthy dwellings. Every tizen of London should be grateful to Mr. Davies for his public- pirited action.

THE REMOVAL OF NUISANCES INJURIOUS TO HEALTH.

N several occasions lately paragraphs have appeared in the lumns of the JOURNAL, referring to the insufficiency of the wers conferred on local authorities for effecting the speedy re- oval of nuisances which are unquestionably injurious to health. ne Islington Vestry, in replying to the circular issued a short ne ago by the President of the Local Government Board, states hat although there appear to be large existing powers, delays e inevitable, and it is impossible to enforce the powers with the sired despatch; but that if the power should be given for the in- ction of a penalty on account of disobedience to an order of the al sanitary authority, many difficulties at present thrown in e way of sanitary work would be removed." This is what we ve frequently said of late, but the representation of a local thority which takes this view would be materially strengthened an explicit statement of the number of cases during the last few ars in which proceedings have been taken for the removal of isances injurious to health. The St. Giles's Board, in a docu- nt just published in answer to Mr. Ritchie's circular, is able to ow that: "During the past fourteen years, 328 prosecutions for ilure to carry out works necessary for the removal of nuisances, re instituted by the Board before police magistrates, and in ery instance orders were obtained and the works executed." It probable that no other metropolitan local authorities can nish a record as good as this, but it is incumbent on them to ow what use they have made of the powers they already sess, and we do not hear that this has been done by the Vestry Islington.

LEAD IN PUBLIC WATER SUPPLIES.

E delay in taking any effectual steps to prevent the continued ntamination of part of the public water supply of Sheffield with d is not much to the credit of the municipal authority. der the pressure of a very strong expression of public opinion Water Committee has at length set to work to make inquiries. s step should have been taken months ago, but it may be hoped t the delay will at least have the result of making the inquiry v to be held thoroughly exhaustive, and that the municipality l take means to prevent the evil at its source, and will not le with the question by adopting any makeshift expedients. Water Committee has had the advantage of a formal expres- n of opinion by the Sheffield Medico-Chirurgical Society, which ently, in response to a request by the Committee, held pecial meeting to discuss the question, and passed a series of olutions. The Society affirmed that there is, and has been for some time past, a very serious amount of lead poisoning in that part of the town supplied with water from the Redmires reservoirs, and that a large number of the cases cannot be accounted for by exposure to lead in connection with trade, occupation, food, or other sources than the drinking water. The Society further pointed out that water drawn from the taps supplied from the Redmires reservoir contains decidedly poisonous quantities of lead, and that the existence of this danger to the community was pointed out by Dr. Sinclair White, the then medical officer of health, in his report presented in 1886. Another resolution stated that members of the medical profession in Sheffield had, from time to time, drawn attention to the evil, in communications addressed directly to the medical officer of health, or some member of the Health or Water Committees, or through the medium of the public Press. The Society concluded by expressing a very decided opinion that the Redmires water, as at present distributed, is a serious danger to the health of the community, "which calls for an immediate and thorough scientific investigation by competent medical as well as chemical experts, with a view to its prevention." A public inquiry was opened on February 19th before a commission, consisting of the Chairman and Deputy-Chairman of the Water Committee, the Mayor and Deputy-Mayor, and several members of the Corporation, with the following gentlemen as assessors: Dr. J. S. Bristowe, F.R.S., Professor Dewar, Mr. Hawksley, C.E., and Mr. E. M. Eaton, C.E. After the Chairman of the Water Committee had expressed the anxiety of that body to get to the root of the difficulty and find a cure, evidence was given by the Chairman of the Health Committee, and by the medical officer of health. Evidence as to the prevalence of lead poisoning in Sheffield was subsequently given by medical practitioners in the town.

SCLEREMA NEONATORUM.

THE record of the case of sclerema neonatorum, which is published in another column, is a valuable contribution to our knowledge of a rare and very curious disease. Dr. Ballantyne's observation of a small cell growth in the corium, especially around the blood vessels, is interesting, and on the whole appears to be a confirmation and extension of the observations of Parrot, Löschner and Jenks. The case may be with advantage compared and contrasted with one observed by Dr. William P. Northrup in New York, and published in the *Archives of Pediatrics*, vol. vii, 1890, p. 1, after Dr. Ballantyne's paper had been received. The patient was a sickly female child, one of twins admitted into the New York Foundling Asylum; it was 5 days old, weighed about 7 lbs., was slightly jaundiced, affected with sprue, and the rectal temperature was only 96.5° F. It was carefully examined when 7 days old; the sclerema was then very well marked, the cutaneous tissues of the legs, thighs, hips, shoulders, arms, hands, scalp, and face were hard, giving to the finger a sensation as of half-frozen tissue. The face was rigid, cold, and masklike; the thighs and shoulders immovable, the elbows and knees stiff; the skin over the abdomen was less involved. The smooth, prominent cheeks and skin, the unchanging constrained posture of the infant, and the coldness of the surface were very remarkable. The pulse was not percepticle at the wrist, respiration was shallow and quiet, and the temperature had fallen so low that the mercury of a thermometer retained in the rectum for five minutes did not rise to the lowest figure of the register. The child died on the ninth day after birth; the *post-mortem* examination was almost entirely negative. On making a section through the affected surfaces no fluid escaped; the cut surface was as dry as though made through a half-frozen tissue. Scattered hæmorrhages, which involved the alveoli, connective tissue, and lymph spaces, were found in the lungs, but there was no collapse; the heart and great vessels, the liver and the stomach

and intestines were all normal; urates were collected in the tubuli uriniferi, but the kidneys were otherwise normal, and injection showed that the cutaneous capillaries were patent; and the most careful search detected no changes in the connective or adipose tissue of the skin. Dr. Northrup insists on the relation of this extraordinary condition to poverty and squalor in the parents. While admitting that its pathology is very obscure, he considers that a probable explanation is based on the observation that children's fat contains much more palmatin and stearin than that of adults, and that it therefore solidifies at a much lower temperature. Dr. Ballantyne, it will be observed, advances another and widely different theory; he believes that the hardening of the skin is due to overgrowth of connective tissue, leading to atrophy of the fat cells, the whole process perhaps depending on a trophic lesion of the nervous system.

THE ROYAL COLLEGE OF SURGEONS AND ITS MEMBERS.

THE Association of Members of the Royal College of Surgeons has recently been engaged in making arrangements for the introduction of its draft Bill for the reform of the Royal College of Surgeons into Parliament during the current session. Owing to the present state of public business in the House of Commons, the Association, acting under the advice of Lord Randolph Churchill, who considered that it would be better for the Bill to be introduced into the House of Lords, has been in communication with Lord Dunraven, who, after hearing the views of a deputation introduced to him by Dr. Danford Thomas, has recently written to express his willingness to take charge in the House of Lords of a Bill drafted on the same lines as the Bill prepared last year. Copies of the Bill may be obtained from Mr Ashton Ellis, 14, Grosvenor Road, Westminster. A meeting of the Parliamentary Bills Committee of the British Medical Association will shortly be called with the view of taking action in consonance with the resolution passed at the annual meeting at Leeds. At the last meeting of the Royal College of Surgeons a copy of the statement of defence in the action of Steele *v.* Savory, prepared by Mr. Wilde and Mr. Paget, was read by the President.

THE DURATION OF PREGNANCY.

THE science of obstetrics is remarkable for the real complexity of some of its most essential problems, which all at first sight bear the stamp of simplicity. We find men of experience mistaking a gravid uterus for a tumour. Very recently several obstetrical veterans publicly declared at a meeting of a London society that the position of the placenta could be diagnosed by palpation, upon which some other obstetricians of equal authority declared that it was impossible to ascertain the position of the placenta by palpation. Another subject of high interest to men and women in general is the precise time within the menstrual cycle at which impregnation is most probable, some writers implying, or laying down, a physico-ethical law that impregnation is natural only at that precise time. Closely associated with this subject is another question, the duration of pregnancy. The theme is treated with ability by Dr. A. R. Graham in a short but important contribution to the new volume of the *St. Bartholomew's Hospital Reports*. His figures tend to show that considerably more labours occur in fewer than in more than 280 days from the cessation of menstruation, but that over 300 days is not a rarely recorded period. He can find no direct confirmation of the view that the length of the pregnancy depends partly upon the sex of the fœtus. Dr. Graham's observations on the time in relation to the period at which pregnancy commonly commences, deserve the attention of obstetricians and practitioners.

CLINICAL INSTRUCTION IN POOR-LAW INFIRMARIES.

WE understand that the Paddington Board of Guardians, at a recent meeting, passed the following resolution on the motion of Dr. Felce:

That Professor J. Hutchinson and Dr. Broadbent be invited to examine the cases in the infirmary in consultation with the medical superintendent, and deliver lectures at the infirmary in connection with the London Post-Graduate Course now in process of formation, it being understood that such a procedure is not attended with any additional cost to the ratepayers, and does not interfere with the existing management and discipline of the institution.

This is indeed a new departure, being the first instance since the passing of Mr. Gathorne Hardy's Act in which a parochial infirmary has been made available for clinical teaching. When we remember that the beds in the parish infirmaries of the metropolis far outnumber those to be found in all its general hospitals, we can but express a hope that other boards of guardians will ere long follow the excellent example set by Paddington. Dr Felce has already been instrumental at the Metropolitan Asylums Board in promoting the employment of clinical assistants at the imbecile asylums, and in forwarding the scheme for utilising the fever hospitals for the purpose of clinical instruction.

INTERNATIONAL CONGRESS OF HYGIENE.

A DEPUTATION, consisting of Sir Douglas Galton, Professor Corfield, Dr. Mapother, Messrs. Shirley F. Murphy, F. D. Mocatta, and others, waited upon the Lord Mayor at the Mansion House on Tuesday, February 18th, to discuss the arrangements for the seventh annual Congress of Hygiene and Demography to be held in London in 1891. Hitherto, it was pointed out, the previous meetings of the congress had been held in Brussels, Paris, Turin, Genoa, The Hague, and Vienna, to which delegates had been appointed from all parts of the world. At Vienna, in 1887, 2,000 hygienists and statisticians hailing from all parts of the world were present. The questions which were brought forward at the former congresses included those of quarantine, the sanitary condition and overcrowding of factories and workshops, water supply, sewage disposal, and other questions of public health. The Lord Mayor has arranged to hold a public meeting in furtherance of the objects of the congress at the Mansion House on Thursday, April 24th.

DEATHS FROM SURGICAL SHOCK.

AN inquiry was recently held at the Radcliffe Infirmary, Oxford, into the death of a youth, aged 16, who died in the institution, subsequent to the performance of two operations. From the evidence of the house-surgeon, it appeared that the lad had been admitted on January 15th suffering from a congenital hydrocele on the left side. On January 21st an operation was performed, which was well borne by the patient, but he suffered more than usual pain. Besides the hydrocele the lad had a rupture, probably a congenital one; for this he had never worn a truss, nor had he, so far as appears, suffered inconvenience from it. On January 23rd, however, the hernia became strangulated and another operation had to be done. It was performed by Mr. Symonds under ether, but the patient died from "shock" five minutes after its completion. It is stated that slight signs of obstruction appeared on January 22nd, but the symptoms only became very urgent on the 23rd, when it was decided that the only chance of saving the lad's life lay in immediate surgical intervention. The remarks of the coroner, who dealt with the question of shock under anæsthetics, suggest the observation which is fully borne out by clinical experience, that in cases of shock the administration of an anæsthetic certainly lessens the risk of death, provided it be ether that is employed. There is a good deal of confusion in the minds of the public between dea

m shock and those due to anæsthetics, and it becomes a tter of no small importance to distinguish clearly between m. In the present case death seems to have resulted from ck pure and simple, consecutive upon strangulated hernia.

HE SO-CALLED DOUBLE CYANIDE OF ZINC AND MERCURY.

will be remembered that in a communication made to the dical Society in November last, and reported in this JOURNAL, Joseph Lister referred to a substance, supposed to be a double nide of zinc and mercury, which appeared to present great antages as an antiseptic material for impregnating surgical ssings, but which seemed difficult to obtain of constant com- ition. With a view of clearing up this difficulty the substance been, at the request of Sir Joseph Lister, made the subject of nvestigation in the Research Laboratory of the Pharmaceutical iety, and a report on the conclusions arrived at was presented week at an evening meeting of the Society by Professor Dun- . A sample of the substance supplied by Sir Joseph proved, nalysis, to contain 17.7 per cent. of mercuric cyanide, of which per cent. could be removed by cold water, the remainder g present in a condition in which water no longer exercised lvent action upon it. As mercuric cyanide alone, or in simple ixture with zinc cyanide, had been found to possess irritating erties, it appeared probable that any value the substance in tion possessed depended upon the mercuric cyanide being ent in it in this relatively insoluble condition, and it became rable to ascertain whether this modification, in its normal sical properties, was due to chemical combination or to some r cause. It was found that in preparing the substance by ipitating a solution of mercury-potassium cyanide with a tion of zinc sulphate, the proportion of mercuric cyanide not ovable by cold water from the resulting precipitate varied the greater or less concentration of the solutions used, it g reduced much below the quantity stated when the solutions dilute, while under the most favourable conditions a product obtained that contained as much as 36.17 per cent. of mercuric ide not removable by cold water. The varying composition of products obtained under differing conditions, as well as other iderations, appeared to preclude the possibility of the two ides being present in chemical combination, and the conclu- arrived at is that when very concentrated solutions are used particles of mercuric cyanide formed are in excess of the sol- capacity of the water present, and that the undissolved par- s become entangled and locked up by the particles of the in- le zinc cyanide during the process of aggregation. However may be, it has been demonstrated that a definite uniform pro- can always be obtained by working under similar conditions, the question then arises whether any further advantage is to rived from using a substance containing twice as much mer- cyanide as that originally experimented with. Presumably uld be more powerful as an antiseptic, and, so far as indi- by a single experiment, described by Sir Joseph Lister at eeting, it would appear to be devoid of irritating properties

SCOTLAND.

THE INFLUENZA EPIDEMIC.

entioned in the JOURNAL last week, the Medico-Chirurgical ty of Edinburgh is to have a discussion on Influenza on esday, March 5th, the discussion to be opened by Dr. Braken-

In connection with this announcement, the Secretaries to request that members of the Society will send to either em (Dr. James Ritchie, Charlotte Square, or Mr. F. Caird, Rutland Street), on or before February 28th, lists of cases, with dates of onset, in order that these may be compared with meteorological conditions, and a report thereon be submitted to the meeting. The questions for discussion were noted in the JOURNAL of last week.

ROYAL SOCIETY OF EDINBURGH.

AT the sixth ordinary meeting of the Royal Society of Edinburgh, on Monday, February 17th, communications from the chemical laboratory of the University of Edinburgh were made as follows:—On a New Synthesis of Dibasic Carbon Acids, by Professor Crum Brown; on the Electrolysis of Potassium-Ethyl Malonate and of Potassium-Ethyl Succinate, by Professor Crum Brown and Dr. James Walker; and on the Action of Sodium Carbonate and Bromide on Solution of Cobalt and Nickel Salts, by Dr John Gibson.

THE LABORATORY OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

BY the appointment of Dr. G. Sims Woodhead to the Directorship of the Laboratory of the London Royal Colleges, the post of Superintendent of the Laboratory of the Royal College of Physicians of Edinburgh has become vacant. Various names have been mentioned as those of likely candidates, and an earnest hope has been expressed that the Edinburgh Royal College may see its way to increased pecuniary liberality towards the Superintendent, so that Edinburgh may have a fair chance of retaining for a sufficiently long period the services of a thoroughly qualified man. The director of such a laboratory must be no mere tyro, and his training must have been an all round one, more particularly in the ever widening field of experimental research. But a man possessed of such qualifications must be sufficiently paid.

IMPROPER TREATMENT OF FEVER PATIENTS.

AT the last meeting of the Edinburgh Town Council, Baillie Ansell, M.B., drew attention to an abuse in the treatment of fever patients. It will be remembered that when the hospital was established, some years ago, the authorities concluded that, since the hospital was not too large for their own requirements, they would not receive patients from beyond the city boundaries, even for payment. In the interval a number of attempts had been made to place the Corporation in an unpleasant predicament. Patients had been sent from the country without announcement, and the Public Health Committee had had the unpleasant task laid on them of turning away such patients, with the risk of their dying on the road. For example, a patient suffering from measles was sent the other day from Burntisland. He had been taken ill in London, where the condition was diagnosed; but, instead of being ordered to hospital, he was shipped off to Burntisland, and thence by steamer, train, and cab to the City Hospital of Edinburgh. The cab was, of course, disinfected, but nothing could be done for the steamer and train, or for the persons who had come in contact with the patient there. After examination the man was sent back to Burntisland by the hospital ambulance, and there placed in hospital. The Public Health Committee had resolved that if the patient reached their hospital in a dying state, they would take him in, and prosecute the sender.

BEN NEVIS OBSERVATORY.

THERE are being added to the Observatory on Ben Nevis a set of instruments devised by Mr. John Aitken, of Darrock, for counting the dust particles in the atmosphere. Mr. Aitken explained his method and showed his apparatus to the Royal Society of Edinburgh last year; a note of which was made in the JOURNAL at the time. In a recent number of *Nature* also a full description is given. The counting of the dust particles depends on the fact

that fog is due to a condensation of vapour round the particles as nuclei. Mr. Aitken uses a receiver into which he can pump filtered or unfiltered air at pleasure. In the receiver and observed by a microscope is a silvered plane mirror, divided by fine lines into square millimètres. Dustless air is admitted to the receiver and is saturated with moisture, then a measured quantity of unfiltered air is pumped in; at once the watery vapour condenses in minute globules, each with a dust particle as nucleus. These are readily observed as they fall on to the glass plate, and the number on several squares is counted. Then the size of the receiver being known, the quantity of air admitted, the size of the squares, etc., the number of dust particles per cubic litre is easily ascertained. Two of these instruments have been bought for Ben Nevis Observatory by the Scottish Meteorological Society, and numerous interesting observations are likely to result.

ATHLETICS AT ABERDEEN UNIVERSITY.

THE opening of the Recreation Ground at King's College at the beginning of this session has given a great stimulus to athletics in the University. The Rugby Football Club with four teams, the Association Football Club with two teams, have had a successful season. Cricket, golf, and tennis clubs have been formed, and arrangements are being made to begin play. The ancient game of shinty, or hockey, has been revived by the Highland students, and it has been played with characteristic Celtic vigour. There are signs of activity in the swimming and boat clubs, so that altogether the Aberdeen students will soon be athletically as well equipped as their brethren in the south.

GLASGOW CANCER HOSPITAL.

FOR a year or two a small institution has been carried on in Glasgow by Dr. Hugh Murray, under the name of the Cancer and Skin Institution. The active assistance and co-operation of many influential citizens, including the Lord Provost, having been obtained, a new institution is about to be launched, "in view," as we are informed, "of the alarming prevalence and increase of cancerous diseases in Scotland." The committee appointed to cooperate with Dr. Hugh Murray has reported that large subscriptions have already been intimated to the funds of the hospital, and that they expected to be "able to inaugurate the Cancer Hospital under Royal and highly distinguished patronage." A subcommittee was appointed to look out for suitable premises.

IRELAND.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE annual meeting of the Belfast Branch was held recently, presided over by Dr. Browne, J.P. Dr. McClelland proposed that Dr. Browne, who had so faithfully, ably, and courteously discharged the duties appertaining to that office last year, be re-elected President. This was seconded by Dr. MacCormac, and carried by acclamation. A deputation was appointed to represent the Branch at the annual meeting to be held in Dublin next June. The members of the committee and other officers having been elected, the proceedings terminated.

ROYAL UNIVERSITY.

TWO vacancies on the Senate of the Royal University have been filled by the appointment of the Rev. Dr. Molloy, rector of the Catholic University College, and the Rev. Dr. Hamilton, President of the Queen's College, Belfast. Another vacancy has been caused by the death of Sir Robert Kane, F.R.S. The successor to the late Rev. Dr. Witherow, of Magee College, Londonderry, has not yet been nominated.

NICHOLAS COLAHAN, M.D.

THE death is announced of Dr. Nicholas Colahan, of Galway, at the age of 84. He was a victim to the influenza epidemic. He filled the office of professor of medicine in Queen's College, Galway, but he retired several years ago, owing to increasing blindness. Dr. Colahan will be remembered by many of his old pupils for his kindness of manner, and for the desire which he always showed to make his teaching thorough and effectual.

DUBLIN HOSPITALS BILL.

THE King and Queen's College of Physicians have had the Dublin Hospitals Bill under consideration, and have agreed to make certain representations regarding its provisions. They have, of course, dealt with the Bill of last year, as this year's has not yet been introduced. They deprecate the reduction of the grants to Dublin, they demand a larger representation of the College on the Governing Board, and they hold that all nursing shall be done by persons fully trained and approved of, not excepting religious sisterhoods. It is generally understood that this Bill will practically be the same as last year's, with the exception of the clause dealing with pensions and compensations, which will not be deducted from the annual grant, as was formerly proposed. The sum will in that respect be intact; but it will be a grant £4,5 less than is given at present, or a deduction of eighty-two beds the hospital accommodation in the city. Archbishop Walsh declared against this reduction. On the other hand, however, the only plausible reason for the Bill at all is that a large sum will be saved to the Treasury annually, and that department is not accustomed to yield much where money is to be gathered into its coffers.

HOSPITAL OR SICK ASYLUM?

THE authorities of Steevens's Hospital lately applied to the guardians of the South Dublin Union, requesting them to receive a patient who is paralytic. A cab was sent for him, but as the man's legs are rigid he could not be removed in the vehicle. The matter was reported to the guardians at their next meeting. It was also the suggestion from the house-surgeon of the hospital that the patient could be removed on a common cart properly prepared with straw. This was described by an indignant guardian as an inhuman proposal, and an order was made that the guardians could not receive patients "from city hospitals which are supported by grants." This decision raises a most serious question as to the liability of hospitals, and it could only have been come to by persons who are ignorant of the uses of public institutions such as Steevens's. Hospitals are not permanent homes for persons who are afflicted with chronic and incurable diseases. If such a rule were observed we should soon find them converted into asylums for the aged and infirm, instead of being as they are for the treatment of persons injured or who suffer from affections which can be cured or ameliorated. The hospital authorities are, of course, bound to take steps to have this question settled. So far as the guardians are concerned they seem to be unaware that they are inflicting a grave injury upon such of the poor as are precluded from entering the hospital so long as this particular patient occupies a bed there. The guardians of the poor are not always wise.

SMALL-POX AT MADEIRA.—The following telegram, dated February 12th, from Her Majesty's representative at Lisbon, has been received:—Following received from Keene: "Small-pox broke out at Madeira. Local authorities still give clean bills of health. My intention is to notify on bills of health issued by me."

METROPOLITAN HOSPITAL SATURDAY FUND.—At a meeting of delegates held on February 15th, the secretary announced that subscriptions to the amount of £1,681 5s. 5d. had been received up to February 14th.

NOTES
ON
SOME GERMAN UNIVERSITIES.

By WALTER K. SIBLEY, M.B.Camb.,
AND
W. SOLTAU FENWICK, M.B., B.S.Lond.

I.—THE UNIVERSITY OF STRASSBURG.
(Continued.)

The Pharmacological Institute: Construction; Laboratories; Experiments on Animals.—Professor Schmiedeberg.—Dr. Jacobi.—The Physiological Institute.—Professor Goltz.

The last laboratory of the group, situated behind and to the south side of the *Bürger Spital*, is the Pharmacological Institute of Professor Schmiedeberg. A short description of this will doubtless be of interest to our readers, inasmuch as there does not exist in any of our English medical schools or universities a laboratory of a like nature or one used for a similar purpose. Built of the same kind of rough stone as the others, this laboratory is a large square building, whose main entrance immediately faces the southern fortifications of the town. Upon the ground floor we notice the lecture theatre, a fine room lighted by electricity, and affording accommodation for an audience of about 200. Adjoining the theatre is the *Vorbereitungs Saal*, a kind of pharmaceutical museum, in which all the material used for demonstration in the lectures is prepared. One of the chief points of interest in connection with Professor Schmiedeberg's system of lecturing is the method of limelight demonstrations. Behind the lecturer is a large ground-glass screen, upon which, by means of an ingenious system of lenses and prisms, enlarged images of subjects under the microscope can be thrown. Thus, a large audience can observe the effects of various drugs upon the circulation in a frog's foot or in the mesentery, while many physiological experiments, such as the inhibitory action of the vagus, muscle contraction curves, blood pressure, and the like, can also easily be demonstrated. To the right of the theatre lies the pharmacological laboratory, a room fitted up with every appliance that modern science can suggest, and reserved exclusively for the use of those engaged in original research.

Attached to the laboratory is a large instrument room, containing among other things a huge water bath always in action; the cover of this presents some thirty or forty various-sized holes for the reception of evaporating capsules. The great value of such an arrangement is obvious, since it dispenses with the otherwise unavoidable necessity of each man employing and watching several water baths at the same time. Another room in the vicinity, called the electrical laboratory, contains a valuable collection of electrical apparatus, a large dynamo in one of the cellars serving also to illuminate the various rooms and laboratories.

Ascending a fine broad flight of stairs, we reach the first floor and enter the library. This is a large, square-shaped room, lighted by gas and electricity, and containing most English, French, and German books upon pharmacology and pharmaceutical chemistry. To the right of the library is a smaller room, set apart for spectroscopic and polarimetrical work, while another one adjoining it serves the purpose of a combustion and weighing room. To the left of the library is the professor's private laboratory and consulting room. Here, in his official capacity of Dean, he sits every day from 11 to 12 to give advice to any student who may apply to him. Proceeding still farther along the passage, we pass through a swing door and enter the physiological laboratory. This laboratory, as its name implies, is set apart entirely for experimental purposes, the chemical characters of a drug being investigated in the above-mentioned laboratory upon the first floor. It consists of a series of rooms of various sizes, the first being chiefly occupied by cages and large glass cases filled with the various birds and other animals used for experimental purposes. The second, the largest of all, is fitted up with tables and benches, and contains numerous pieces of apparatus, some of which are of very considerable size. In one corner of the room is a large machine, made by Miescher, of Bâle, for the carrying on of artificial respiration. So smoothly and regularly does this machine work, and so accurately can the volume of inspired air be regulated, that it is probably one of the most perfect instruments of its kind ever invented. Upon one of the benches is a large recording apparatus for variations in blood pressure, etc. It consists of a series of revolving cylinders, the sheet of paper upon which the movements of the levers are recorded being a continuous one, and its rate of movement easily regulated. The other benches are covered with smaller pieces of apparatus, such as kymographs, blackened cylinders, and the other instruments used for the study of drugs upon the action of the heart, muscles, respiration, etc. The room is illuminated by electricity, and, in addition to the fixed lamps, small incandescent lights can be used in any part of it by means of movable wires. The advantages of this method of special lighting are incalculable, since by its use the ordinary cumbrous and inefficient lamp or taper is dispensed with.

Among some of the later methods of experimental investigation we may mention one by which the action of any drug upon the various organs in the body can be directly observed and recorded. If, for example, it is desired to investigate the influence of a preparation upon one of the abdominal viscera, the method adopted is as follows: The animal is brought under the influence of urethane, and, when thoroughly narcotised and insensible, is strapped down upon the operating board, and a preliminary tracheotomy performed. The abdomen is then carefully opened in the middle line, from the ensiform cartilage to the pubes, and the animal, on its board, transferred to the water bath. This consists of an oblong glass case, about 30 inches by 15, in which the board is placed upright, and water containing 2 per cent. of sodic chloride is poured in until it reaches just below the level of the tracheotomy tube, the water being maintained at the normal temperature of the animal's body. By illuminating the bath a perfect view of the abdominal viscera is obtained, and a photograph is immediately taken. Should the breathing become embarrassed, the tracheotomy tube is connected with the machine for artificial respiration. A cannula is now tied into the right external jugular vein, and the drug whose action it is desired to investigate is introduced into the circulation, the cannula being left *in situ* for further use, if necessary. The viscera are carefully watched for any changes which may take place as the result of the action of the drug, and such changes as occur are photographed. In this manner Dr. Carl Jacobi, the inventor of the method, has observed the influence of numerous drugs upon the peristaltic action of the intestines, the rate of absorption of various substances from the intestines, the slightest change in the lacteals being clearly seen in the transparent medium. The movements of the viscera can be recorded, and any special organ can be dissected out and carefully watched. At the completion of the experiment, the animal is withdrawn from the bath and destroyed before returning to consciousness. Another important invention of Dr. Jacobi is a large and complicated apparatus for the maintenance of an artificial circulation. Until now, every attempt in this direction has met with only partial success; but the present scheme, the outcome of many years' work, promises to become one of great practical usefulness.

Adjoining the laboratory are various smaller rooms, one being set apart for the preparation of solutions; another for microscopical examinations; while a third, called the mercury room, contains numerous mercurial pumps, among which are those of Pflüger and Ludwig. Professor Schmiedeberg, the director of the institute, is a pharmacologist whose valuable contributions to science one can best appreciate by glancing through the literature upon the subject, which abounds with his name. Though still a comparatively young man, he holds the important post of Dean of the Medical Faculty, and discharges his onerous duties with such skilful tact as to retain his popularity with the least exemplary students in the university.

Unlike the other laboratories which we have had occasion to mention, the pharmacological one is open only to those who are engaged in original research; the ordinary student merely attending a course of lectures upon materia medica and pharmacology during his fourth or fifth *semester*.

Owing to its privacy and the splendid opportunities it offers for work, the laboratory is always full of researchers, some of whom are Englishmen; and seldom does a volume of the *Archives of Experimental Pathology and Pharmacology* (of which Professor Schmiedeberg is one of the editors) appear without at least one or two original articles emanating from his laboratory.

Before the medical laboratories of Strassburg can be left, we must describe the Physiological Institute of Professor Goltz. This large separate building is situated next to the Pathological Insti-

tute, and is also quite modern. Into the workings of the laboratory, space in the present article will not permit us to enter, but, before passing on, a word about the Professor of Physiology may be fitting. Professor Goltz, whose name is almost as well known here in England as in Germany, is at the present time Rector of the University of Strassburg, and has thus an enormous number of duties, apart from his professional ones, to perform. For many years an investigator of some of the more abstruse problems of physiology, especially those connected with the central nervous system, his work is ever prominently before the minds of physiologists. The Professor at home is (to use the expression of his wife) a slave to his pet dog, Bob. When he is at work in his study over some abstruse problems of physiology, if the dog rouses himself from his slumbers and utters a slight whine of discontent, he rises from his writing, seeks his hat, and takes Bob for a walk, and this may be repeated several times a day. But the great Professor is never happy unless his dog is also content. This is the man against whom, in conjunction with Dr. Ferrier, such accusations of cruelty were levelled during the London International Congress in 1881.

OPENING OF THE VICTORIA INFIRMARY, GLASGOW.

THIS latest addition to the general hospitals of Glasgow, the third possessed by the city, was opened, on February 14th, by his Grace the Duke of Argyll. It is situated on the south side of the river, opposite one of the large public parks of the city, in open ground, in a situation where it is practically impossible ever to be shut in by buildings, and at a considerable distance from any public works, so that it is surrounded by a comparatively pure atmosphere. The complete plan embraces four pavilions and a central administrative block. A mortuary, washing houses, etc., are at some distance from the main building, and a considerable amount of ground, tastefully laid out, surrounds the infirmary. As yet only the administrative block and one pavilion have been erected, and the mortuary and washing houses. There are thus provided at present a female and a male ward, and a ward for children, accommodation being sufficient for eighty patients, being between a third and a fourth of the total number provided for in the plans. The main wards are over 70 feet long and 26 feet wide, and have a perfectly clear floor space. They are covered for 5 feet up with cream-covered enamelled tiles. The wards have no cornicing nor woodwork, and all corners are rounded off to prevent ths deposition of dust and effluvia. The cost of the part already erected has been fully £20,000. It is more than ten years since the necessity of an infirmary for the south side of the city was urged in the Southern Medical Society, but the difficulty of obtaining funds caused many years' delay to take place before the project seemed within possibility of realisation. By the will, however, of Mr. Robert Couper, of Cathcart, the great bulk of his fortune was left for the building and maintenance of an infirmary and convalescent home on the south side of Glasgow. The money, being subject to life rents, might not have been available for many years but for the generosity of his widow, who gave £10,000 to enable the hospital to be proceeded with. Active steps were begun in 1887, and, in honour of Her Majesty's jubilee, the new hospital was, with the Queen's consent, called the Victoria Infirmary. In the building there are two features of special interest: the lighting and the ventilation and heating. All the wards, corridors, staircases, and board room are lighted by electricity. In the wards a small lamp is placed above each bed, and it is made movable. The ventilation is on the Plenum system, as adapted by one of the gas engineers of Glasgow, Mr. William Key. The fresh air is drawn in through a single shaft, lined by white enamel brick. It passes through a screen, presenting 200 square feet of surface, which is washed with pure water, and thus foreign particles are extracted. It is then warmed by being passed over steam coils, and enters a large fresh-air chamber, from which, by the action of two air propellers, it is sent along a fresh-air tunnel extending under the whole building. It reaches the wards by wide shafts opening 5 feet above the floor level, being directed to the ceiling, and the foul air is removed by four outlets in each ward at the floor level. The fresh air entering the building can reach 50,000 cubic feet per minute, heated to from 33° to 68° F. The foul air finally escapes up exhaust tubes to the roof, the outlet being guarded by valves to prevent down draughts. So successfully have Mr. Key's plans been carried out that no draught whatever is perceived in the wards, though the air meter at the outlet indicates a strong out-current, and the whole air in each ward can be renewed every seven minutes. This Plenum system has been adopted in the University College Buildings, Dundee, and four board schools, Aberdeen. Hot water is provided throughout the building, the water being heated by steam pipes in large tanks in the basement, which are in communication with tanks on the roof. The bathrooms and lavatories are ventilated on the same system, but apart from the wards.

The formal opening was carried out with much ceremony. The Lord Provost and magistrates of Glasgow, attired in their official robes, accompanied the Duke of Argyll, and after a tour of inspection of the building had been made, cake and wine were served in one of the wards. Thereafter a large public meeting was held in a neighbouring church, at which the Duke of Argyll delivered an address. He spoke of the building of such institutions as one of the means of facing the problems of our time, due to the growth of large cities. Such growth was the result of the economic conditions of our age, and could not be arrested. The problems they presented were to be faced and overcome. In the case of Glasgow the growth of 100 years represented the difference between a population of 50,000 and one of 750,000; but with that increase of people there had been a rise in the standard of comfort. The smaller population had not lived in healthier conditions, but rather the reverse; and to meet the problems due to the accumulation of population in our great cities, the practical applications of hygiene were being brought into play, which was the proper work of powerful municipalities, while to private benevolence there remained the duty of facing others of the difficulties by the founding and maintenance of such institutions as the Victoria Infirmary.

CERTIFYING FACTORY SURGEONS ASSOCIATION.

THE Association of Certifying Factory Surgeons held their first annual meeting for the election of officers, etc., on February 11th, at the Queen's Hotel, Manchester. There was a good attendance from all parts of the kingdom. The Honorary Secretary's report showed that a large amount of work had been done by the Association during the past twelve months, and that a considerable quantity of literature on the Factory Acts had been distributed. The Treasurer's report was equally satisfactory, showing, after the payment of all expenses for the past year, a considerable balance in hand. The following officers were elected:—Dr. F. H. Walmsley, Salford, President. Dr. J. T. Arlidge, Stoke-on-Trent; Dr. C. Johnson, Lancaster; Dr. G. M. Stansfield, Bristol; Dr. F. Moore, Dublin; and Dr. Kidd, Ballymena, Vice-Presidents. Dr. J. C. Eames, Farnworth, Honorary Treasurer. Dr. J. Holmes, Radcliffe Honorary Secretary. Dr. R. Gray, Honorary Secretary for Ireland and Drs. Livy, E. Moore, W. H. Hughes, F. M. Pierce, J. Hodgson Wright, W. H. Barr, J. Barr, J. K. Davidson, H. M. Ferrie, T. Crowther, J. White, W. E. S. Burnett, J. Lawson, W. Stanwell, J. Watson, T. Fort, F. H. Wood, Purdon, R. Patrick, R. Settle, W. F. Dearden, R. Atkinson, C. A. Greaves, C. J. Trimble, J. Johnson Bailey, Executive Committee.

It was unanimously decided that the next annual meeting be held in Leeds. After the business had been concluded, the members dined together. Amongst others present at dinner were:—Drs. F. H. Walmsley, J. T. Arlidge, J. C. Eames, J. Holmes, F. M. Pierce, W. Hugh Hughes, R. Patrick, C. A. Greaves, S. H. Owen, W. H. Barr, R. Settle, J. Sutcliffe, J. White, C. T. Trimble, S. Livy, J. J. Bailey, T. Fort, J. Watson, T. S. Jones, Atkinson, Dearden, and R. W. Coles, late Her Majesty's Superintendent Inspector of Factories for the North of England.

The CHAIRMAN proposed the health of Mr. R. W. Coles, the guest of the evening, and, on behalf of the Association, presented him with an illuminated address on his retirement from the official position of Her Majesty's Superintending Inspector of Factories for the North of England.

Mr. COLES, in his reply, alluded to the fact that he had been thirty-five years in the service of the Factory Department. During that time he had found the certifying surgeons of the greatest help to him in the carrying out of the Factory Acts, so much so indeed, that he felt that their services could not be dispensed with under the present Acts.

Dr. J. WATSON proposed "The Factory Department," coupled with the name of Mr. Alex Redgrave, C.B., the Chief of the Department.

Dr. J. T. ARLIDGE, President of the late Association of Certifying Surgeons, replied to the toast of his health, which was proposed by Dr. T. M. Pierce.

MEDICAL DEFENCE UNION.

A MEETING of medical men practising in Cardiff and the neighbourhood was recently held at the Town Hall, Cardiff, to consider the desirability of forming a branch of the Medical Defence Union. Dr. W. T. EDWARDS presided, and after an explanation had been given of the objects of the Union by Dr. TAYLOR and Mr. T. GARRETT HORDER, it was proposed by Dr. TAYLOR, seconded by Dr. M. G. EVANS, and carried unanimously, that a branch of the Union be formed for the district of South Wales and Monmouthshire.

On the proposition of Dr. M. G. EVANS, seconded by Mr. J. LLEWELLYN TREHARNE, Mr. Horder was requested to act as honorary secretary *pro tem.*, and to communicate with the medical men living in the district.

It was proposed by Dr. EDWARDS, and seconded by Dr. COOK, that Dr. TAYLOR be asked to bring the question before the next meeting of the South Wales Branch of the British Medical Association.

All the members present at the meeting consented to become members of the Union.

THE ETIOLOGY OF DIPHTHERIA.

DR. PARSONS'S REPORT ON ITS PREVALENCE IN THE LEEK RURAL DISTRICT.

A REPORT by Dr. H. F. Parsons on certain outbreaks of diphtheria in the Leek Rural Sanitary District, Staffordshire, which was recently issued by the Local Government Board, shows how much there still remains to be discovered respecting the cause or origin of diphtheria. The outbreaks in this instance were found to be as puzzling as those which have occurred in other localities. During the ten years, 1879-88, 25 deaths from diphtheria and 8 from "croup" were registered as having occurred in the Leek Rural District. These deaths were far from being evenly distributed through the ten years. Fifteen of them occurred in 1885, while the four years 1882, 1883, 1886, and 1887 were free from the disease. In 1885 multiple cases occurred in several households, and the incidence of the disease appears to have been not so much a general prevalence as a severe incidence upon a limited number of households widely separated one from the other. The report upon the more recent occurrences is thus summarised: Diphtheria, from which the Leek Rural Sanitary District had been free for three years, has during the past twelve months broken out in several distinct localities. The disease has been limited to a small number of households, but the members of these households have suffered severely, children being especially attacked. The spread of the disease took place by personal communication, but no history was obtained of its having been originally introduced into any place by means of infection from a previous case. In all the households attacks the inmates were living exposed to the influence of grave insanitary conditions, and in almost all the localities the first case was a person who had possibly been exposed to the infection of scarlet fever or measles. In some of the outbreaks a rash, somewhat resembling that of scarlet fever, and followed by peeling of the skin, was observed. Symptoms of diphtheritic paralysis followed several of the cases, including one in which a red rash had appeared. No connection was found with particular milk supplies, or with any concurrent diseases of the lower animals. The action taken by the rural sanitary authority for preventing the spread of infectious diseases has been defective as regards (*a*) the machinery for obtaining early information of infectious cases; (*b*) the provision of hospital accommodation for the isolation of such cases; and (*c*) the remedying of sanitary defects found to exist in houses where disease has broken out.

Sanitary administration seems to be somewhat lax in this district. At the meeting of the sanitary authority on January 29th it was decided not to adopt the Infectious Disease (Notification) Act, and also not to provide accommodation for the isolation and treatment of cases of infectious disease, or means for the disinfection of infected articles of clothing, etc. This is undoubtedly false economy. A hospital which the authority formerly had was closed in 1881, on the ground that it was an unnecessary expense. Only one patient had been admitted during the year, which had been comparatively free from infectious disease, and the maintenance of the hospital had cost £22.

Within a few weeks, however, after the closing of the hospital, a case of typhoid fever was brought home to a house in the immediate neighbourhood of the hospital. The result was that, as the patient could not be removed to hospital, the father and other working members of the family were compelled to leave their employment and apply to the guardians for relief. One after another took the disease, and the whole family had to be supported out of the rates, at a cost of 30s. a week, for five months. Another primary duty of a sanitary authority, which requires more attention than it receives in the Leek district, is the remedying of unwholesome conditions of houses and their surroundings. At all the houses where diphtheria had occurred gross and dangerous nuisances were found to exist, such as a damp, dilapidated, and ill-ventilated condition of the house, defective drains, some in direct connexion with the interior of the house; faultily-placed privies, and water supplies exposed to contamination; and though there is no sufficient ground, in Dr. Parsons's opinion, for ascribing the origin of the diphtheria solely to such defects, it is likely enough that they assisted its spread and aggravated its severity. In some cases trivial, but insufficient, works of improvement have been carried out, but the failure to secure the effectual execution of the required works appears to be the result of the view locally held, that the authority have only power to order the abatement of a nuisance, and must not specify in their notice the particular works required to be executed for the purpose.

This view is not in accord with some recent legal decisions. But in any case, having regard to the prevalent want of sanitary knowledge, the difficulty of getting country workmen to carry out works in any way but that to which they have been accustomed, and the hardship felt by owners when works which they have had carried out to the best of their knowledge and ability are not found satisfactory, it seems desirable, in the interests of owners themselves as well as of the public health, that when they are called upon to execute structural works for the abatement of nuisances, they should be told what the required works are, and the best way (which is by no means necessarily the most expensive one) of carrying them out. If these particulars be not specified in the formal legal notice, they may at least take the form of recommendations, which may precede or accompany the formal notice. In some districts it has been found useful to have lithographed plans and printed specifications giving information on such matters as the proper construction of privies or the details of house drainage for distribution in appropriate cases. In this way the adoption of improved methods of construction may often be brought about, such as perhaps could not be secured by legal compulsion.

EFFECT OF THE EPIDEMIC OF INFLUENZA ON THE SICK RATE.

EXPERIENCE OF THE MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

THE monthly meeting of the Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society was held on Wednesday, February 12th, at 38, Wimpole-street. Dr. F. De Havilland Hall presided (in the unavoidable absence of Mr. Ernest Hart), and there were present: Dr. J. W. Hunt, Mr. E. Bartlett, Mr. J. Brindley James, Mr. F. Wallace, and Dr. R. Lord.

It was reported that the progress of the Society was steadily and fully maintained, 14 proposals having been received during January. The sickness had been exceptionally heavy during the first month of 1890, and for the first time in the history of the Society the expectation assumed in the tables under which the Society was started had been exceeded. During this period—comprising five financial weeks—no fewer than 55 members had claimed and received sickness pay, this unusual experience being largely due to epidemic influenza. It was stated that in the first week of the year there were seven new claims, one of which was on account of influenza, and 19 weeks 1 day's sickness, including one week from the epidemic; the second week there were nine new cases, six being on account of influenza, this causing 8 weeks 2 days' sickness, out of a total of 25 weeks 6 days; the third week there were eight new cases, six being on account of influenza, causing 9 weeks 2 days' sickness, out of a total of 25 weeks 4 days; the fourth week there were twelve new cases, ten of which were on account of influenza, causing 14 weeks 1 day's sickness, out of a total of 30 weeks 5 days; while on the fifth week

there were nine new cases, eight of which arose from influenza, and absorbed 16 weeks 4 days' sickness, out of a total of 28 weeks 1 day. The total sickness for the five weeks amounted to 130 weeks, as compared with a computed expectation of 119 weeks, or an excess of 11 weeks, but this was considerably more than accounted for by the claims on account of influenza—48 weeks 2 days. Of the 45 new claims during the term, 31 were due to the epidemic. Although the expenditure for sickness claims only had averaged over £100 per week, the strain had been met out of current revenue, and would not necessitate any decrease in the reserves. This experience of the Society, therefore, proves two things: it shows the soundness of the financial and actuarial principles adopted at the foundation of the Society and faithfully followed in its subsequent management. It also illustrates once more the assistance which such an association is capable of rendering, and the wisdom of making timely provision for the periods of sickness which, especially in the medical profession, are liable to incapacitate the youngest and the healthiest. All particulars and documents can be obtained of the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, S.W.

NOTES ON THE MEDICAL ORGANISATION OF THE EGYPTIAN ARMY.

By Surgeon-Major J. G. ROGERS, D.S.O., M.S.,
Sewa and Principal Medical Officer, Egyptian Army.

At a moment when the organisation of the Medical Staff is still under discussion, perhaps a brief account of the medical organisation of the Egyptian Army may not be devoid of interest.

Organisation as a Corps.—The medical service is organised as a corps entitled "the Medical Corps of the Army," being thus similar in title to other corps, such as "The Camel Corps." It consists of English officers, English non-commissioned officers, Egyptian officers, and Egyptian non-commissioned officers and men.

English Officers.—The English officers, seconded from the Medical Staff, English Army, may be considered as administrative, or staff officers, although with the exception of the Principal Medical Officer, they also perform executive duties in charge of army hospitals. In their administrative capacity they are staff officers for medical questions to officers commanding districts or commands.

Principal Medical Officer.—The Principal Medical Officer is the staff officer for all medical questions in the head quarter staff of the army.

Recruiting.—Two officers Medical Corps are detailed as staff officers recruiting, to inspect the work of conscription by the Military Recruiting Commissioners in the provinces. They have the full powers of Deputy Assistant Adjutant-Generals Recruiting. In medical questions they report to the Principal Medical Officer, on all other questions to the Adjutant-General.

Egyptian Officers.—The Egyptian officers are chiefly executive, only the seniors acting as administrative officers in case of necessity. They are as it were the regimental officers of the corps.

Non-commissioned Officers and Men.—As in other corps these are conscripts, but the Medical Corps does not receive conscripts direct. It is recruited by transfers from other corps of men of good character and superior education. The pay being higher, and the position of the corps as good as that of any other branch of the service, there is no difficulty in obtaining good men.

Rank.—There is neither relative nor honorary rank in the Egyptian army; all have substantive rank.

Powers of Command.—Powers of command of officers Medical Corps are limited to their own corps, all officers and men attached for duty, and all patients in military hospitals. In case of necessity, however, they command drafts of other corps proceeding from one station to another.

Courts-martial.—They also serve on courts-martial or boards, taking their seniority according to their army rank.

Titles.—The titles of all officers are in Arabic, those of officers Medical Corps the same as those of officers of other corps. Thus: El Kaimukam (Lieutenant-Colonel), A, Assistant Adjutant-General; El Kaimukam (Lieutenant-Colonel), B, S.M.O., Cairo; El Sewa (Major-General), C, Adjutant-General; El Sewa (Major-General), D, P.M.O. The Adjutant-General, the Surveyor-General, and the Principal Medical Officer have all the same army rank, that of Major-General or Sewa.

Uniform.—There is a distinctive Medical Corps uniform, but all the English officers being staff officers wear the staff uniform of the army.

Pay.—Their rank and position being equal, their pay is the same as that of other officers of the rank. As, however, promotion is slower in the Medical Corps owing to the small number of English officers, a provision is made for increase of pay after so many years' service in the rank.

Allowances.—Pay for English officers being consolidated, there are but few allowances—namely, travelling allowance, Soudan allowance, forage allowance. Officers of Medical Corps draw the same as all other officers according to army rank and pay.

General Principle.—The general principle throughout is equality of rank, status, and pay with all other branches of the service. This has resulted in equality of consideration from all, and equal distribution of honours and rewards in His Highness the Khedive's service. Promotion by brevet does not exist, but were it introduced in the Egyptian Army, it would apply to the Medical Corps as to any other corps. The result of this organisation has been that the officers of the Medical Corps having no grievances, are absolutely content, while I have no hesitation in stating that the efficiency of the Medical Service has been largely increased by the position given to the Medical Corps as a scientific corps of the Army.

The late Adjutant-General, Egyptian Army, wrote as follows when leaving: "As you remark, the Medical Corps of the Army is really organised as a corps, and the officers have army rank. The result of this has been absence of friction between officers of the Medical Corps and other corps and departments, and total absence of grievances or discontent amongst the officers Medical Corps." This is the opinion of a distinguished officer for three years Adjutant-General, and under whose enlightened administration the present organisation was finally adopted. It is by such a measure as this that the contentment of the Medical Staff of the English Army can alone be obtained, their efficiency largely increased, and the *esprit de corps* which already strongly exists be still further developed, to the good of the entire army. In the large-minded spirit in which medical organisation in the Egyptian army has been dealt with the English Government and the English military authorities have an example well worthy of imitation.

THE SCOTTISH ASSOCIATION FOR THE MEDICAL EDUCATION OF WOMEN.

The Scottish Association for the Medical Education of Women has got fairly to work, and has adopted a series of by-laws. These have been issued to the public, along with a statement of the constitution of the Association and a preliminary prospectus. Copies may be obtained from the Secretary at the office of the Association, 51, Hanover Street, Edinburgh. The prospectus affords an excellent apology for the formation of the Association. After reference to the fact that medical classes for women have been conducted for about four years in Edinburgh, it indicates that there has been a prevalent feeling for some time that a medical school founded on a wider basis than the present school is essential no less in the interests of the students themselves than for the success of the movement at large. The Association has secured suitable premises and qualified teachers, and has already even in the present state of comparative unpreparedness, fifteen students at regular work. The Association has also reason to believe that this number will shortly be considerably increased. The aims of the Association, while including the encouragement of all proper endeavours in the direction of the medical education of women are, therefore, particularly in the direction of the foundation of a College of Medicine for Women at Edinburgh, where a thorough course of instruction will be given, which shall be open to all. It is further intended—a most important advance on conditions existing in some other schools—that "in all cases the fees will be the same as those charged to male students." The preliminary prospectus is endorsed by a most representative body of ladies and gentlemen, including the principals of three Scotch universities and a large number of the professional and teaching circle. The annual subscription, conferring the privileges of membership, is half a guinea. A further interesting feature in the constitution is the election of a Students' Committee, which, in terms of the by-laws, should have the effect of uniting the students, and keeping them collectively in touch with the Court of Management, so that their views and wishes may receive that fair consideration which the Scotch universities have accorded to male students by the institution of the Students' Representative Councils.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

EMBERS are reminded that the Library and Writing ooms of the Association are now fitted up for the accomodation of the Members, in commodious apartments, at the ices of the Association, 429, Strand. The rooms are open om 10 A.M. to 5 P.M. Members can have their letters dressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

ETINGS of the Council will be held on April 16th, July 16th, d October 15th, 1890. Candidates for election by the Council the Association must send in their forms of application the General Secretary not later than twenty-one days before ch meeting, namely, March 27th, June 25th, and September 4th, 90.

Any qualified medical practitioner, not disqualified by any by-v of the Association, who shall be recommended as eligible by y three members, may be elected a member by the Council or by y recognised Branch Council.

Candidates seeking election by a Branch Council should apply the Secretary of the Branch. No member can be elected by a anch Council unless his name has been inserted in the circular mmoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

ORKSHIRE BRANCH.—The next meeting of this Branch will be held at the spital, Rotherham, on Wednesday, February 26th, at 3 P.M. Members inding to read papers are requested to communicate with the Secretary before ruary 14th.—ARTHUR JACKSON, Secretary.

TAFFORDSHIRE BRANCH.—The second general meeting of the present session l be held at the North-Western Hotel, Stafford, on Thursday, February 27th. e President, Mr. Vincent Jackson, will take the chair at 3.45 P.M.—GEORGE ID, General Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this strict will take place on Thursday, March 20th, at Gravesend, Dr. Firth in chair. Gentlemen desirous of reading papers or exhibiting specimens are uested to inform the Honorary Secretary of the District not later than rch 3rd. Further particulars will be duly announced.—A. W. NANKIVELL, R.C.S., St. Bartholomew's Hospital, Chatham, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the ve District will take place on Thursday, March 13th, at Dover, Mr. A. Long the chair. All communications to be sent to the Honorary Secretary, W. J. SON, 10, Langhorne Gardens, Folkestone.

BATH AND BRISTOL BRANCH.—The fourth ordinary meeting of the session l be held at the Museum and Library, Bristol, on Wednesday evening, Febary 26th, at half-past seven o'clock. W. Johnstone Fyffe, M.D., President. e following communications are expected: L. A. Weatherly, M.D.: A Short planation of the Lunacy Acts Amendment Bill as it affects General Practioners. D. S. Davies, M.B.: The Infectious Disease (Notification) Act, 1889. M. Clarke, M.B.: Two Cases of Hepatic Disease. J. Greig Smith, C.M.: The dical Cure of Hernia—Umbilical, Femoral, and Inguinal. A. E. Aust Lawce, M.D.: Painful Micturition in Women. H. Waldo, M.D.: Ulcerative docarditis.—E. MARKHAM SKERRITT, R. J. H. SCOTT, Honorary Secretaries, fton.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The next meeting of this nch will be held in the Crown Hotel, Alloa, on the afternoon of Thursday, rch 6th, at 3.15 P.M. Members desirous of bringing any subject before the eting will kindly give notice as early as possible to the Honorary Secretary. J. J. LEWIS, M.D., Honorary Secretary.

PERTHSHIRE BRANCH.

ordinary meeting was held on Friday, February 7th, in the oms of the Perthshire Society of Natural Science.

Distribution of Cancer.—Dr. F. R. WILSON (the President) read aper on the local distribution of cancer, designed to show that disease was most common in sheltered and low lying localities, versed by fully formed rivers and having soil composed of the re recent geological formations. He also made it clear that cancer bore no relation to density of population. The paper was accompanied by illustrative diagrams embodying the result of Dr. Wilson's experience.

Separation of Funis.—Dr. FERGUSON related a case of separation of the funis from a child during parturition. The cord was found on delivery to be broken off short at the umbilicus, having been of normal length, but cartilaginous and brittle for a short distance from the navel. Immediate and profuse hæmorrhage resulted on the slightest attempt to set up artificial respiration.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

A MEETING was held at St. Thomas's Hospital on February 12th, at 8.30 P.M. The chair was taken by Dr. ORD, President of the Branch.

Cases.—The following cases were shown:—Mr. ROBINSON: Cyst of Breast.—Dr. HAWKINS: Epithelioma of Neck following Lupus.—Mr. SPENCER: Partial Left Hemianæsthesia of Doubtful Origin in an Old Man.

Pseudo-Peritonitis and Epilepsy in Hysteria.—Dr. BRISTOWE read a paper on pseudo-peritonitis and epilepsy in hysteria, which is published on p. 401.—Dr. ORD, Dr. CULLINGWORTH, Dr. PERCY SMITH and Dr. HAWKINS took part in the subsequent discussion, and Dr. BRISTOWE briefly replied.

Vote of Thanks.—A vote of thanks to the Treasurer of the Hospital, for the use of the room, was carried unanimously.

BRITISH MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 27, Temple Row, Birmingham.

President of the Council: THOMAS] BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Physician, General Hospital, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women, Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HENRY BROADBENT, M.D., Physician, St. Mary's Hospital, London.

The scientific business of the meeting will be conducted in twelve Sections, as follows, namely:

A.—MEDICINE AND THERAPEUTICS.

President: Sir DYCE DUCKWORTH, M.D.
Vice-Presidents: E. RICKARDS, M.B.; D. DRUMMOND, M.D.
Hon. Secretaries: ISAMBARD OWEN, M.D., 40, Curzon Street, Mayfair, W.; C. W. SUCKLING, M.D., 103, Newhall Street, Birmingham.

B.—SURGERY.

President: T. H. BARTLEET, F.R.C.S.
Vice-Presidents: BENNETT MAY, F.R.C.S.; J. G. SMITH, M.B.
Hon. Secretaries: F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingham; H. G. BARLING, M.B., 85, Edmund Street, Birmingham.

C.—OBSTETRIC MEDICINE AND GYNÆCOLOGY.

President: T. SAVAGE, F.R.C.S.
Vice-Presidents: C. J. WRIGHT, M.R.C.S.: J. MURPHY, M.D.
Hon. Secretaries: J. K. KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, M.D., 192, Broad Street, Birmingham.

D.—PUBLIC MEDICINE.

President: A. HILL, M.D.
Vice-Presidents: J. B. WELSH, M.B.; A. S. UNDERHILL, M.D.
Hon. Secretaries: L. C. PARKES, M.D., 61, Cadogan Square, S.W.; S. BARWISE, M.B., Clough View, Blackburn.

E.—Psychology.

President: F. Needham, M.D.
Vice-Presidents: S. H. Agar, L.K.Q.C.P.; E. B. Whitcomb, M.R.C.S.
Hon. Secretaries: E. L. Rowe, L.R.C.P., Borough Asylum, Ipswich; J. Wiglesworth, M.D., Rainhill, near Prescot.

F.—Anatomy and Physiology.

President: D. J. Cunningham, M.D.
Vice-Presidents: W. H. Gaskell, M.D., F.R.S.; B. C. A. Windle, M.D.
Hon. Secretaries: W. F. J. Allen, M.B., Mason College, Birmingham; W. P. Herringham, M.D., 13, Upper Wimpole Street, W.

G.—Pathology.

President: D. J. Hamilton, F.R.C.S.
Vice-Presidents: C. A. McMunn, M.D.; G. Sims Woodhead, M.D.
Hon. Secretaries: S. Delépine, M.B., 6, Chapel Place, Cavendish Square, W.; G. F. Crooke, M.D., Edmund Street, Birmingham.

H.—Ophthalmology.

President: D. C. Lloyd Owen, F.R.C.S.
Vice-Presidents: H. Eales, M.R.C.S.; J. B. Story, M.B.
Hon. Secretaries: H. E. Juler, F.R.C.S., 77, Wimpole Street, W.; E. W. W. White, M.B., 72, Newhall Street, Birmingham.

I.—Diseases of Children.

President: A. H. Carter, M.D.
Vice-Presidents: W. Thomas, M.B.; W. Pye, F.R.C.S.
Hon. Secretaries: H. Handford, M.D., 14, Regent Street, Nottingham; A. Foxwell, M.B., 47, Temple Row, Birmingham.

J.—Laryngology and Rhinology.

President: J. St. S. Wilders, M.R.C.S.
Vice-Presidents: C. J. Symonds, M.D; A. E. Garrod, M.D.
Hon. Secretaries: E. H. Jacob, M.D., 12, Park Street, Leeds; Scanes Spicer, M.D., 28, Welbeck Street, W.

K.—Otology.

President: C. Warden, M.D.
Vice-Presidents: W. Hill, M.D.
Hon. Secretaries: R. K. Johnston, M.D., 22, Lower Baggot Street, Dublin.

L.—Dermatology.

President: Jonathan Hutchinson, F.R.S., P.R.C.S.
Vice-Presidents: Malcolm A. Morris, F.R.C.S.; Radcliffe Crocker, M.D.
Hon. Secretaries: E. G. Smith, F.R.C.S., 93, Bristol Road, Birmingham; T. Colcott Fox, M.B., 14, Harley Street, Cavendish Square, W.

Honorary Local Secretaries:

R. Saundby, M.D., 83A, Edmund Street, Birmingham; Jordan Lloyd, F.R.C.S., 22, Broad Street, Birmingham; A. Harvey, M.B., 358, Wheeler Street, Lozells, Birmingham.

Programme of Proceedings.

Tuesday, July 29th, 1890.

9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

Wednesday, July 30th, 1890.

9.30 A.M.—Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. Walter Foster, M.D., M.P.

Thursday, July 31st, 1890.

9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by Lawson Tait, F.R.C.S.
7 P.M.—Public Dinner of the Association.

Friday, August 1st, 1890.

10.30 A.M. to 1 30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. Broadbent, M.D.

Saturday, August 2nd, 1890.

Excursions.

In response to an urgent request from the Hampshire County Council, the Board of Agriculture have extended the muzzling order to the county of Hampshire (except the Isle of Wight), and to the boroughs of Winchester, Portsmouth, and Southampton.

SPECIAL CORRESPONDENCE.

PARIS.

Tuberculous Laryngitis Transmitted.—Gold and Camphor Bromides in Epilepsy.—The Microbe of Influenza.—The Cholera Cry.—Medical Legislation.—General News.

Professor Cadier has observed advanced laryngeal lesions in cases in which auscultation revealed but very slight lesions in the lung. He remarked that in most instances this serious tuberculous laryngitis, of precocious form, was communicated by a tuberculous husband or wife. It first appears in the upper parts of the larynx, and remains long enough limited to this organ to allow of being checked by cauterisations and sprays. Immediately the affection is observed, the patient should occupy a separate bed. Cauterisation of the larynx with creasote vaseline ($\frac{1}{20}$ and $\frac{1}{10}$), and sprays with chloride of zinc, cocaine, morphine, or potassium bromide constitute the best method of treatment.

From his recent researches on bromide of gold, camphor bromide, and picrotoxin, and their effects in the treatment of epilepsy, M. Cornet concludes that the first substance, in doses of 3 centigrammes daily, has a beneficial action on certain patients, but is inferior to potassium bromide. It is eliminated by the urine. The bromide disappears rapidly from the organism. The gold remains a long time, and is found in the liver, and long after in the urine. Bromide of camphor modifies vertigo, and is eliminated in the urine. Picrotoxin in doses of $1\frac{1}{2}$ to 2 milligrammes modifies the epileptic attacks. Experimentally it provokes convulsive attacks of epileptic character. Its toxic properties are indicated by marked hyperæmia of the organs. It is found in the liver.

At a recent meeting of the Academy of Medicine, M. Laborde described a case of influenza which was followed by coryza and erysipelas; finally the patient had pneumonia, which proved fatal. In the lung which exhibited lesions the streptococcus of erysipelas was found. At the same meeting M. Proust stated that the vessel *Saint Germain* started from St. Nazaire, bound for Vera Cruz, stopping at Pauillac, then at Santander, where they took up a passenger from Madrid, where there was an epidemic of influenza; up to this moment every one on board was in perfect health. Four days after the Spaniard was taken on board influenza broke out, and among 436 passengers, 154 were attacked with influenza, but there were no fatal cases.

The epidemic of influenza has scarcely died out, and Dr. Jules Rochard, in an article in the *Temps*, on the water supply of Paris, sounds the note of alarm concerning cholera. He urges Parliament to pass as quickly as possible the Bill under discussion for bringing into Paris the Vigne and Verneuil spring water; whilst waiting for this supply, Dr. Rochard insists that Paris be temporarily supplied with pure water from another source, and thus prevent the annual visit of typhoid fever, which is a regular result of the use of Seine water, costing two hundred lives and a million of francs from loss of labour. At the present moment there is another enemy to be kept at bay, cholera. If it attacked Paris in the spring, the results would be less disastrous than if it appeared during the summer months, for the simple reason that the water supply is then pure, but later on in the summer, during the intensely hot weather the supply is insufficient, and Seine water is poured into Paris, carrying along its track death and disease. Dr. Rochard affirms that if cholera appeared simultaneously with Seine water supply, the death-rate would not increase by hundreds, as in the case of a typhoid fever epidemic, but by thousands; the supply of Seine water never exceeds twenty or thirty days, Dr. Rochard very sensibly suggests that spring water should by economy remain sufficient for the Paris population, and trusts that during the five months that will elapse before the summer heats set in, the problem how to economise the spring water supply will be solved; it is a question of life and death.

M. Thévenet, Minister of Justice, has issued a circular addressed to the *procureurs généraux* (public prosecutors), in which he refers to the Rodez incident, when two doctors refused to make the necropsy of a body found dead, knowing a fee of 6 francs would be tendered to them. M. Thévenet expresses his regret that certain doctors distinctly refused to obey a judicial authority and requests the *procureurs généraux* to consult the medical societies and syndics of their districts concerning the tariff of fees to be adopted. The medical papers comment on this circular in somewhat angry terms, reminding the minister that the medical profession is independent of Government, and rather scold him for

xpressing astonishment that a medical man refuses to give a ay's work for which he has been prepared by scientific study for 6-franc fee. The *Paris Médical* asks M. Thévenet if, when he as a barrister, he would have pleaded for 6 francs? and suggests nat medical men, like barristers, should be paid in advance. If I. Thévenet is surprised at the anger he has aroused, no one else ill be.

A doctor has been fined 10,000 francs (£400) for delivering a ertificate of insanity for the sequestration in an asylum of a oman who was perfectly sane. On the assertion of her shop ssistant, and in consequence of the doctor's certificate, she was iolently seized and carried off to the St. Lo lunatic asylum, hile her shop was closed and the business suspended. The sylum doctor finding her perfectly logical and calm, the case as inquired into and she was liberated. The above fine was nared by the shop assistant.

M. Schützenberger lately made a report before the Council of ygiene and Salubrity of the Seine Department on a stuff called *ilou*, which is highly inflammable. It is a cotton tissue made of ne twisted threads interwoven with coarse, rough, cotton threads, ut slightly twisted, which give thickness and a hairy surface to . Placed in contact with the flame of a candle or of gas this uff would rapidly take fire. Its inflammable properties are due, ot to the nature of the fibre, nor to the substances employed in yeing it, but to the physical condition of the thread employed in ie woof. The Council decided to publish M. Schützenberger's eport as a warning to the public against employing *pilou*.

From August 12th to December 31st, 1889, 735 bodies have been emated at the new crematorium at Père Lachaise; 483 bodies ame from the hospitals, and 217 were fœtuses sent from confine- ent wards; 35 persons were cremated at the wish of their milies. The new crematorium is much less costly than the old ne. Coke is employed, and the cost of the firing is 3 francs in- ead of 35 francs. The operation is completed in an hour to an our and a quarter.

The Minister of Public Instruction has decided on reducing the ours of study for pupils aged 7 to 10 by four hours, and those for upils aged 11 to 17 by two hours. Night studies are abolished. ix hours and a half of recreation will be allowed to the ele- entary classes, $5\frac{1}{2}$ hours to the grammar classes, and $4\frac{1}{2}$ hours to ie classes of rhetoric and philosophy. Forty-five minutes daily ill be devoted to gymnastics, and the hours of sleep will be 10 r pupils under 15, and 9 for those over 15. The real problem ems to be to diminish the school programmes and the severity f the examinations, otherwise the reduction of the hours of study ill hardly avert the bad effects of mental overstrain.

VIENNA.

Further researches into the Etiology of Influenza.

BACTERIOLOGICAL and pathological investigations on influenza are eing carried on in Vienna by the best men. At a meeting of the mperial Royal Society of Physicians of Vienna on February 17th, hree papers were read on the subject, one by Professor Gruber, ie Director of the Vienna Hygienic Institute; another by Pro- ssor Kundrat, Director of the Anatomo-Pathological Institute of ie Vienna Medical Faculty; and a third by Regimentsarzt Dr. owalski.

Professor Gruber related experiments which he had carried out gether with Dr. Marmorek. They had reference to nine cases, which seven were uncomplicated, one was complicated with onchopneumonia, and one with croupous pneumonia. The ood was examined on three occasions when the fever had tained its highest degree. The result was invariably negative. he sputum was examined in eight cases, and, microscopically as ell as by cultures, a diplococcus was invariably found which bore ie closest resemblance to the Frankel-Weichselbaum diplococcus neumoniæ. Inoculation of the sputum and cultures in rabbits ere unsuccessful. Only one animal died with the familiar sym- oms, and this was, perhaps, due to the sputum being inter- ingled with the true diplococcus. The conclusion was that they ad to do either with a variety of the diplococcus pneumoniæ, or ith a micro-organism similar to it. The lecturer abstained for ie present from drawing any conclusions as to the etiological portance of these micro-organisms.

Professor Kundrat communicated the results of extensive patho- gical investigations. They had partial reference to diseases of ie respiratory apparatus, which were characterised by their fre- quency, their intensity, and the course of the affection. With regard to frequency, according to the protocols of the Vienna Anatomo-Pathological Institute, the diseases of the respiratory apparatus were the most frequent in April and May, 1888 (fifteen cases in April and twenty-one cases in May), whereas in December, 1889, fifty-two such cases, and in January, 1890, twenty such cases were observed. Croupous pneumonia was noted in the least number of cases. In most cases bronchitis of a very peculiar character was observed; not only the smaller bronchi, but those of a middle size, were thoroughly obstructed by mucous masses, and they were not only situated in the posterior and lower parts of the lungs, but also in the upper and anterior portions. In the secretion, which was very thick, the diplococcus pneumoniæ was found in large quantity. Patients who had already been suffering from other diseases, such as emphysema, morbus cordis, etc., succumbed from bronchitis of this kind. The bronchitis was more frequently complicated with lobular pneumonia, which differed from the common type in the fact that the exudation was richer in fibrin; that it was not only situated in the posterior and lower parts of the lungs, but also in the upper and anterior ones; that the lobular foci were very large, and that in their central parts a purulent process of fusion took place, which spread around the bronchi. In some cases the lobular foci became transformed into abscess and anæmic necrosis, and, moreover, there was necrosis of the pleura, with copious pleuritic exudation masses. In the pus, staphylococci were detected, besides the diplococcus pneumoniæ. In some instances the simple bronchitis became complicated with large pleuritic conditions, and on two occasions with pericarditis. All the cases of bronchitis complicated with abscess or pleurisy were in young people between the ages of 17 and 24, who had previously enjoyed perfect health. In five cases these inflammatory processes became transformed into induration, in four into gangrene. On three occasions meningitis was observed, besides intense bronchitis (diplococci in the exudation), and in two cases pericarditis was noted (diplococci of pneumonia and staphylococci in the exudation). From the occurrence of these special forms during the epidemic, and their disappearance after its subsidence, Professor Kundrat believed that these cases were connected with the influenza, and that there were not two independent infections, as was stated by Professor Nothnagel. Professor Kundrat considered the complications as secondary infectious, like the infection in the streptococci after scarlet fever or the secondary infections after measles.

Dr. Kowalski stated that he had not detected bacteria in the blood of patients affected with influenza. The observations made in the sputum were not constant; sometimes he found bacteria which were already known, such as streptococci, staphylococci, etc., and which had nothing to do with influenza. As to the air, he found it almost free from bacteria at the time of the influenza, and after great snowfalls. He could not, from the bacteriological point of view, find a sufficient explanation as to the etiology of the influenza, and believed that atmospheric influences might have something to do with it.

Professor Nothnagel read a letter which he had received from Professor Babes, of Bucharest, in which the latter stated that in eight cases of severe bronchitis observed in patients suffering from influenza, he had found a micro-organism which had been designated by him as *Schleimbacterie*, and that in most cases he had met with the diplococcus of pneumonia. With regard to the relation of pneumonia to influenza, Professor Nothnagel reiterated his already expressed opinion that the real croupous pneumonia, such as had occurred during the epidemic of influenza, had nothing to do with the latter, but that the cases of pneumonia with the peculiar physical signs, such as want of the distinct bronchial respiration, impaired vocal fremitus, etc., might stand in connection with the influenza.

MELBOURNE.

The Australasian Association for the Advancement of Science.—Typhoid Fever and the Royal Commission on Sanitation.—The Medical School.

THE Australasian Association for the Advancement of Science is holding its second annual meeting this year in Melbourne. The Association aspires in these colonies to the same position which the British Association holds at home. Its first meeting in Sydney last year was so well attended that the originators of the movement felt encouraged to continue in their laudable efforts.

The result has justified their prognostications. The present meeting is largely attended. The roll of members includes 1,000 names, and the papers read are of a highly scientific standard, embracing a wide range of subjects. The President of the Association this year is Baron Sir Ferdinand Von Mueller, whose opening address was delivered in the Town Hall, in the presence of his Excellency the Earl of Hopetoun and a large gathering of distinguished guests. This address was not only eloquent, but surveyed the past history of science in the colonies, and summarised the present state of its different branches.

Papers read in the section of sanitary science again call attention to the evils that are allowed to continue from year to year. With regard to the present aspect of sanitation in Victoria, matters have reached a somewhat curious stage. Our main epidemics are diphtheria and typhoid fever. To such an extent have they menaced the public health that some two years ago a Royal Commission was appointed to deal exhaustively with the subject. This Commission has now finished its labours, but unfortunately its results are most disappointing. It has suggested nothing that was not previously known, and it leaves matters very much in the state in which it found them. With regard to that portion of the work of the Commission which deals with the question of our water supply, it has been shown by outside and independent investigation to be based on insufficient data. For had it not been for Mons. de Bavay, a practised bacteriologist and pupil of the Pasteur school, we should still have remained ignorant of the fact that our drinking water has actually become contaminated with the presence of typhoid bacilli. Under these circumstances the public mind is considerably agitated at the failure of the Commission to do or suggest anything to improve the state of the public health.

Our local medical school is progressing very satisfactorily. At present it has no fewer than 250 students. One change in the arrangement of the teaching subjects is the intention to separate the lectureship of anatomy and physiology.

Considerable interest is being taken in the present telegrams from Europe to the effect that the whole continent is being overrun by a severe epidemic of influenza. Though it is stated by Fagge that no epidemic of that nature has occurred in the Old World since that of 1847, it is a fact that in 1885 an exactly similar epidemic prevailed throughout a large portion of Australasia. Owing to the prevalence in Melbourne at that time of severe fogs, the attack obtained the local name of "fog fever."

CORRESPONDENCE.

THE RELATIONS OF THE GRADUATES AND CONVOCATION OF THE UNIVERSITY OF LONDON TO THE PROPOSED REFORM OF THE UNIVERSITY.

No. IV.

SIR,—In preceding numbers of the JOURNAL I have endeavoured to set forth—first, the alternative we have to face of a new University of London adapted to actual and prospective wants, or such a reconstitution of the existing University as shall meet those wants; secondly, some of the restrictions which repulsed many men, especially medical students, from the doors of the University; thirdly, evidence proving that the arbitrary and injurious action of the examination scheme alienated the great medical schools of London and the provinces; and, fourthly, how this scheme worked to the discouragement of independent teaching, to repress original research and true scientific culture, and to foster the debasing mechanism of cramming.

I now propose to offer a few observations upon a point only touched upon incidentally—that is, the argument which has assumed the form of a protest against the presumed "vested rights" of the present graduates and undergraduates. It is right in the first place to inquire who are the parties to the implied contract under which the plea of "vested interests" is created; they are three: 1, the Government which advised the granting of the charters to the University; 2, the Senate of the University; 3, the graduates and undergraduates.

If the Government of the day ever gave such a pledge as would confer a right of this kind in perpetuity, which may fairly be denied, it is enough to look to the history of Parliament and legislation to be convinced that such a pledge could not be maintained. We shall see presently that Government has absolutely overruled all supposed promises of this kind. This failure at the fountain-head of right brings down the derived power of the Senate; and since neither Government or Senate could give a valid permanent title, the claim of the graduates and undergraduates falls to the ground.

Parliament has always held its power unfettered in similar questions. It is continually abrogating old rights and making new laws in accordance with the prevailing ideas of the progress of knowledge and the public interests.

I have already shown that,[1] in the internal legislation of the University, and under sanction of the Government the "vested interests" of the graduates in Arts were set at naught, in spite of the protest of the Graduates' Committee, by the charter which abolished the exclusive rights of affiliated institutions to qualify for examination for Arts degrees, and which threw the University wide open to all comers who could, by examination, prove competent knowledge. It is clear then that no special claim to the perpetuation of the present system exists, and no real grievance is created for the Arts' *alumni*, by the changes proposed. They have their degrees, actually or potentially, and it is not proposed to take them away. Nor can it be reasonably contended that the value of these degrees will be lessened. On the contrary, it is highly probable that the reconstruction of the University on a more liberal basis will, by extending its influence, add to the value of actual and future degrees.

Then, if we examine the question from the medical side, we cannot resist the evidence of history, and the arguments based on public rights, that the plea of "vested interests" is preposterous and untenable. If ever a case of "vested interests" could be made out, surely such a case was that of the Royal College of Physicians. Under charters and Acts of Parliament, and the prescription of usage exercised for centuries, the College had enjoyed the privilege of qualifying to practise medicine in London and within a radius of seven miles, to the exclusion of graduates and others. In 1815 the Apothecaries Act gave the Society of Apothecaries the power to license to practise in medicine and pharmacy. Prior to 1858, not even a Doctor of Medicine of Oxford, Cambridge, or London, could practise as a physician within the seven-mile circle.

Thus said Sir Henry Pitman: "A very great innovation, a great violation of custom, took place at that particular period; and I mention it[2] because it is one of the objections that has been raised to the appeal made by the Colleges for a power to grant degrees, that it would be a violation of the present custom." So the privileges granted by charters and by Acts of Parliament, and strengthened by the custom of centuries, were annulled in favour of what was regarded as the paramount right of the public, and every person, according to his qualification, was enabled to practise medicine or surgery in any part of Her Majesty's dominions.

The Colleges are again asking for the right to attach degrees to their diplomas. They again find, as might be anticipated, weighty objection to the establishment of a one-faculty university, and they are driven to make terms with an existing university, or unite their forces with those who are seeking to create a new teaching university.

Compared with other bodies, the College of Physicians presents by far the most liberal and enlightened constitution. It is governed by the whole body of Fellows, each of whom has a direct voice in its government. A weak point, it is true, is exposed in the negation of all power, direct or representative, to the Members and Licentiates. This is unjust and impolitic; and at no distant date probably this wrong will be removed. Nothing can be said, except in the light of hope, for the College of Surgeons. The Fellows and Members of this close corporation are mere licensees; they are powerless. The College of Surgeons is an anachronism—an example of the survival of the unfit. It is out of court. It has not the same *locus standi* as the College of Physicians; and thus its plea for forming an integral part of a university is weakened. It cannot bring its due contingent of argument or right to the movement.

The College of Physicians, on the other hand, not only plead ancient right, but recent liberality. The Act of 1858 could not destroy the prestige attaching to its Fellowship and Membership. All the great medical appointments, nearly, were still held by its Fellows and Members. But the College acted in the true spirit of the new order of things. It at once threw open its doors to many graduates of other universities, who, up to that date, had been

[1] See Letter II, JOURNAL, February 8th.
[2] Evidence before Royal Commission, q. 891.

actising illegally. Many were admitted Members without examination; and many of these have since been elevated to the llowship. Surely here again was an example of the sacrifice "vested interests" greater than any which the graduates of the iversity of London are called upon to make! For it cannot be ntended that all the men so admitted produced qualifications ual to those of the Fellows of the College. Indeed, some of the llows and Members felt this keenly. The year in which this eral deed was done was officially called the "Year of Grace." ere were not a few very respectable men who dubbed it the ear of Disgrace."

n the face of these examples of the abolition of "vested interests" under the will of Parliament, and of voluntary surrender a College having far greater claims than the University, how the graduates and undergraduates maintain their protest gainst a contemplated infringement of privileges?"

Would it not be well to hesitate and reflect, whether it would be better for themselves and their University, to lend their inence in the promotion of a measure imperiously demanded in public interest, and in the cause of educational progress?—I , etc.,

ROBERT BARNES.

Harley Street.

SIR,—I think you will permit me to utter words of gratitude to Sansom for so ably taking up the cudgels on behalf of the mbers of Convocation, for whom Dr. Barnes has expressed such tempt.

We must first thank Dr. Sansom for pointing out how we should come the fulfilment of Dr. Barnes's threat—that a new univer- would be established in London in the event of our declining consent to a scheme which, in our opinion, would destroy a at national institution.

n support of the argument that there is room for another unisity in London, it might be pointed out that Scotland has four versities, and receives £40,000 per annum from the Governnt; whereas London, which has a larger population, has but university, and receives practically nothing now in support of t university, for its fees more than cover its expenses. Morer, as Mr. Richard Chamberlain pointed out when speaking for a utation from the provincial colleges to Lord Cranbrook, the a "London University" is a misnomer, for it draws its candies not only from a few square miles, but from all the provinces England; nay, more, from its most distant colonies. Is is not nge in these days of political freedom that Convocation, the representative body of so national an institution, should e no voice in the preliminary steps of a change which threatens very existence?

urely its members can be trusted to have the welfare of a unisity of which they are so proud as much at heart as Lords nville, Herschell, and Justice Fry,[1] who have likely enough otten the ambition and wants of their younger brethren, who after all, the members most nearly affected, that is to say they those who have either passed through the mill of education, or now bearing the chief burden of keeping it in step with the es.

an no one suggest how we London members of Convocation unite with our provincial and colonial colleagues to repel this able and retrogade movement from attacking our "British versity," for the fear of the baneful movement is already rring many promising candidates from entering their names he final examinations of their curriculum?—I am, etc.,

R. MUZIO WILLIAMS, M.D.Lond.

orth Kensington, W.

R,—I wish, with your permission, to make a few remarks on ain points in Dr. Barnes's letter in the JOURNAL of February , in which he submits to you what he considers to be "evie to aid towards forming a just appreciation of the value of legrees of the University of London."

would first call attention to the percentages of rejection at everal examinations, quoted from Dr. Bristowe, which do not ar to me to be quite accurate. He gives them as follows: iculation, nearly 50 per cent.; preliminary scientific, nearly r cent.; first M.B., nearly 35 per cent.; M.B., 19 per cent. I worked out the percentages for the whole period during which the examinations have been in force from the current calendar, and find the following: Matriculation, 43.1 per cent.; preliminary scientific (instituted in 1861), 44.8; first M.B, 35.1 per cent.; final M.B., 23 per cent.; M.D., 20 6 per cent. The average rejection for the last seven years has been—matriculation, 43.8 per cent.; preliminary scientific, 44.8 per cent. The rejections in 1889 were—matriculation, 45.3 per cent.; preliminary scientific, 38.2 per cent.

After quoting various opinions of teachers adverse to the matriculation examination, Dr. Barnes says: "And if the question be urged, how comes it that so many graduates in medicine of London have obtained distinguished positions in the London hospitals? One explanation is that a large proportion of these men took their degrees before matriculation or the preliminary scientific examinations were required. And so we can only see in this fact an additional reason of the strongest kind against the system now in force." Does Dr. Barnes believe, or expect anyone else to believe, what is clearly indicated in this sentence, that the fact of passing through the terrible ordeal of matriculation and preliminary scientific so enfeebles a man's intellectual powers that he is thereafter incapable of rising to a distinguished position? It may seem hardly worth while to bring facts to bear against such a contention as this, but I have taken the lists of the active staffs of the eleven large London teaching hospitals for 1888, and have found out what proportion of the London graduates on those staffs have had to pass through these mind-wasting ordeals.

I find that the matriculation assumed practically its present form in the year 1859, the only important change since then being that Greek has been made optional and French compulsory, the reverse formerly being the case. The preliminary scientific was instituted in 1861 in very much its present form.

There are 75 graduates of London on the staffs of the eleven hospitals. Of these, 52 have passed the modern matriculation (or have a degree in Arts of another university exempting them from it) and 53 have passed the preliminary scientific. I venture humbly to express my opinion that if these examinations had been in force in the time of Dr. Barnes and his contemporaries, that they would have passed them, and yet would have obtained positions as distinguished as those which they now hold.

To continue Dr. Barnes's letter: After objecting (with some reason) to the strict delimitation of the subjects in the preliminary examinations, Dr. Barnes says: "The strictly medical examinations for M.B. and M.D. are laid down on similar rigid lines and with like disastrous effects."

The regulations for the M.B. lay down no rigid lines whatever in any subject but the practical examination in forensic medicine, where certain poisons are scheduled for testing. The rest of the examination in medicine, obstetrics, and forensic medicine is limited in no way; nor is that for the M.D.

Whether it is common for men to be "drawn away from clinical work by the *ignis fatuus* of a London degree" is a question which I leave to those who have a larger experience of London University students than myself; but, as far as my limited experience goes, I can confidently say that they manifest at least as much eagerness after clinical opportunities as any other students.—I am, etc.,

PHILIP D. TURNER, M.D.Lond.

South Kensington, February 18th.

FELLOWS OF THE EDINBURGH COLLEGE OF SURGEONS IN LONDON.

SIR,—Will you kindly allow your columns to be the medium of conveying to the Fellows of the Royal College of Surgeons of Edinburgh residing in London (of whom there are about ninety) a suggestion as to the advisability of forming a society of their own in this metropolis? The Fellows of the sister College of Surgeons here have their association; the Brussels medical graduates, the St. Andrews graduates, the Irish medical schools and graduates, and others, have theirs. Why should we not combine also? The doors of some of the largest metropolitan hospitals are closed against us. For instance, the surgeoncy of my nearest hospital, the Great Northern Central in Holloway Road, can only be obtained by a Fellow of the Royal College of Surgeons of England. I shall very willingly do anything and everything in my power to aid the formation of such a society, and hope for an early public expression of opinion from those interested.—I am, etc.,

London, February 15th. A NORTH LONDON FELLOW.

[1] notice of the Conference between the Committee of the Senate and deputations from University and King's Colleges, JOURNAL, February 8th.

AN INGENIOUS IMPOSITION.

SIR,—The Charity Organisation Society does excellent work in this neighbourhood as well as elsewhere, but the credit of exposing the imposture referred to by your correspondent, Mr. Kernot Butt, is due, not to the able and energetic local honorary secretary of this society, but to Dr. Hancocke Wathen, of Clifton, who deserves our thanks for his public spirit in bringing to justice two clever scoundrels who were systematically trading upon the benevolent tendencies of our profession. Fortunately they found Bristol, on the whole, too wide awake to be profitable.—I am, etc.,

E. MARKHAM SKERRITT.

Thornton House, Richmond Hill, Clifton,
February 12th.

MEDICAL OFFICERS OF HEALTH AND COUNTY COUNCILS.

SIR,—I quite agree with the letter of "Medical Officer of Health," in the JOURNAL of February 15th, concerning the action of the Lancashire County Council in reference to the six months' notice on either side to terminate the engagement of the medical officer of health. The appointment certainly ought to be *ad vitam aut culpam*, and any other condition would undoubtedly prevent any application on my part for any post of the sort.—I am, etc.,

W. ILIFFE.

Derby.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PUBLIC HOSPITAL OR PRIVATE DISPENSARY?

SOUTHSEA.—With reference to the announcement made in the handbills which have lately been widely circulated in the town in question, we have, in response to our inquiries on the subject, received information to the effect that the so-called Hospital and Dispensary form "part of a small watchmaker's shop," the attendant physician being a reputed M.D.Brux. and F.R.C.S. M.R.C.P.Lond.; and in regard to the alleged honorary secretary thereto, our informant, a life-long resident, is altogether ignorant of the personage in question. We learn that the description "Hospital and Dispensary" has since been dropped. We need scarcely remark that the modern practice of assuming, apparently for the purpose of personal advancement, the titles and status of our public institutions, and parading private speculations as *bonâ-fide* hospitals and dispensaries, is alike censurable and ethically dishonest, and not only derogatory to the profession, but to the true interests of the public. Moreover, every practitioner who resorts to such unprofessional devices must not be surprised at being ignored by the faculty.

AN UNFORTUNATE MISUNDERSTANDING.

A CRITICAL examination of the correspondence (extending over seventeen folio pages of manuscript, inclusive of ten several questions), which has passed between Dr. L. and Mr. G., leaves a distinct impression that the former has, however unwittingly, misinterpreted the true intent and meaning of the latter's reply to his note of January 31st; and before assuming an unfriendly attitude, and expressing his resolve to refer the matter to the JOURNAL, he would, in our opinion, have acted wisely in soliciting some further explanation from Mr. G., inasmuch as the note in question admits of a different construction to that he attaches thereto. He would also, we think, have done well to have accepted Mr. G.'s friendly assurance that his attendance was given at the lady's "own particular desire," and that the name of her previous attendant was "not once mentioned during such attendance."

In view, moreover, of the fact that he (Dr. L.) had held with Mr. G. "friendly relations, both professional and social, for nearly eighteen years," it is, we think, to be regretted that he should have hesitated to acquiesce, otherwise than conditionally, in the declaration made in Mr. G.'s note of February 3rd, and so have amicably closed a regrettable contention.

In regard to the relative meanings of the word "supplant," Dr. L. may advantageously consult the standard work, Roget's *Thesaurus*, and so far disabuse his mind as to its one exclusive signification, as specified by himself.

PARTICULARS OF CHARGES.

J. A. C. writes: Can a patient legally demand from a medical man a detailed statement of his account for professional attendance and medicines? I have hitherto been in the habit of sending my accounts according to the following form:—

	£	s.	d.
For professional attendance, etc.:— From To			
	£		

But a patient of mine evidently means to be disagreeable, and demands the particulars and items of my account. It would entail a good deal of labour to do so, because it is for more than two years, and for the whole family. I have charged at the rate of 3s. 6d. per visit, inclusive of medicines, and two guineas for a confinement. Another point I should like to know is whether, having sent my account for a certain sum, I can now alter and make a higher charge, since he probably means to give me as much trouble as possible.

*** J. A. C. would certainly be required, on bringing his action to recover fees, to supply full particulars. He is at liberty to withdraw his present account, and send in a higher claim, but such a course might operate to his prejudice on the hearing of the action.

NAVAL AND MILITARY MEDICAL SERVICES.

SURGEON LE QUESNE AND THE VICTORIA CROSS.

THE following is an account of the presentation of the Victoria Cross to Surgeon Le Quesne at Rangoon, as given in the *Pioneer*:—"The troops in garrison paraded in review order this morning for the purpose of witnessing the presentation of the Victoria Cross to Surgeon Le Quesne. The brigade was under the command of Major-General Rowlandson. The Commander-in-Chief and Staff, with General Gordon, arrived on the ground about 7.30. After the usual compliment paid, the brigade formed in line of quarter-column, and were inspected in that formation by his Excellency. The whole force then formed a square, advancing on the saluting point. After the officers and colours had taken post in review order, the Commander-in-Chief and Staff moved into the centre of the square and dismounted, and Surgeon Le Quesne was called to the front. Colonel Rolland then read the extract from the *London Gazette*, dated October 29th, awarding him the Victoria Cross for his conspicuous bravery during the attack on the village of Tartan by a column of the Chin Field Force on May 4th."

His Excellency, in addressing Surgeon Le Quesne, said he knew of no act more deserving the Cross than that of a medical officer who, regardless of his own life, when in an exposed condition under fire, at close range, attends to a wounded man with perfect calmness and self-possession. You (addressing Surgeon Le Quesne) not only did this in the case of Lieutenant Michel, who unfortunately died, but later on you attended to another wounded officer, also under fire, and were yourself severely wounded. It must, I think, be added, be a matter of great gratification to the Medical Service, both staff and departmental, to know that the two Victoria crosses which have been given during the Burmah operations have both been conferred on medical officers, for very similar and gallant acts. Having pinned the decoration on the breast of Surgeon Le Quesne, his Excellency shook hands with him, and the proceedings terminated.

THE NAVY.

FLEET-SURGEON GODFREY GOODMAN has been placed on the retired list at his own request. His commissions are dated: Surgeon, September 23rd, 1859; Staff-Surgeon, January 6th, 1869; and Fleet-Surgeon, October 14th, 1879. He was especially promoted for his valuable services during outbreaks of yellow fever in the West Indies. During the Egyptian War of 1882 he was Fleet-Surgeon of the *Euphrates*, and received the medal and Khedive's bronze star granted for that campaign.

Surgeon J. L. BARRINGTON, who has been attached to the Chatham Division Royal Marines, since November, 1888, has been appointed to the *Warspite*, and superseded by Surgeon HERBERT CANTON, of the *Duke of Wellington*.

The following appointments have been made at the Admiralty:—ROBERT HAY M.D., Fleet-Surgeon, to the *Warspite* February, 14th; THOMAS E. H. WILLIAMS Staff-Surgeon to Haslar Hospital, temporarily, February 14th; THOMAS H ATKINSON, Fleet-Surgeon to the *Wildfire*, additional, temporarily, February 17th; ALFRED PATTERSON, Staff-Surgeon to the *Vivid*, temporarily, February 15th; HENRY D. STANISTREET, Fleet-Surgeon to the *President*, additional, temporarily, March 3rd, and then to Royal Victoria Yard, Deptford, March 26th Mr. THOMAS HOPE LEWIS to be Surgeon and Agent at Auckland, New Zealand February 17th; SIDNEY H. YOUEL, Surgeon, to the *Pigeon*, February 18th.

THE MEDICAL STAFF.

BRIGADE-SURGEON A. ALLAN, M.D., who is serving in the Bombay command is appointed Honorary Surgeon to the Viceroy, *vice* Brigade-Surgeon W Temple, M.B., V.C., who has proceeded to England on completion of his tou of foreign service.

Brigade-Surgeon C. A. MAUNSELL, M.D., has taken over the duties of Senio Medical Officer at Mauritius from Brigade-Surgeon J. Fleming, M.D.

Surgeon-Major S. H. CARTER, M.B., has been appointed to the medica charge of the Cavalry Brigade at Aldershot, in succession to Surgeon T. A. H Marsh, who has been posted to the Second Station Hospital at Aldersho for duty.

Surgeon-Major J. G. HARWOOD has been appointed to the Royal Horse an Field Artillery at Aldershot, in succession to Surgeon-Major G. R. Ra appointed Medical Officer in charge of the Third Station Hospital a Aldershot.

Surgeon W. H. HORROCKS, M.B., has been appointed to the Royal Engineer at Aldershot, in succession to Surgeon J. R. A. Clark.

Brigade-Surgeon W. KEIR, M.D., is appointed Medical Officer in charge the Cambridge Hospital at Aldershot, in succession to Brigade-Surgeon C. Maunsell.

Surgeon S. N. CARDOZO is posted to the Third Station Hospital at Aldersh for duty, in succession to Surgeon A. F. Russell, M.B., who is appointed the medical charge of the officers, women, and children at the North Camp.

Surgeon-Major WILLIAM TAYLOR, M.D., ranking as Lieutenant-Colonel, promoted to be Brigade-Surgeon, *vice* T. H. White, M.D., retired. Dr. Tayl entered the service as Assistant-Surgeon, September 30th, 1864; became Su geon, March 1st, 1873; and Surgeon-Major, September 30th, 1878. He has no w record.

The *London Gazette* of February 18th announces that "the Queen has be pleased to give and grant unto Surgeon THOMAS HEAZLE PARKE, Army Me

Staff, and unto Lieut. WILLIAM GRANT STAIRS, Royal Engineers, her Royal nce and authority that they may accept and wear the Insignia of the Order he Medjidieh of the Third Class, which his Highness the Khédive of Egypt, horised by his Imperial Majesty the Sultan, has been pleased to confer upon m, in recognition of the signal services rendered, under the leadership of . Stanley, in effecting the deliverance of E in Pasha."

INDIAN MEDICAL SERVICE.

GEON F. R. OZZARD, Bengal Establishment, is appointed to the officiating lical charge of the 20th Punjab Infantry, *vice* Surgeon W. J. Buchanan, who proceeded on field service with the Chin-Lushai force.

urgeon-Major E. PALMER, 9th Bengal Lancers, is appointed Principal Medi- Officer of the Cavalry Camp of Instruction at Muridki, *vice* Brigade-Surgeon . Greenhill, who has been reported unfit for duty owing to illness.

rigade-Surgeon W. S. FOX, Madras Establishment, is appointed to be Civil geon of Cocanada from the date of his relief from the appointment of Medi- Examiner at Poona, *vice* Surgeon F. C. Reeves.

urgeon-Major H. J. HAZLETT, Madras Establishment, Surgeon Fourth Dis- t, Madras, is directed to act as District Surgeon at Coimbatore, during the nce of Surgeon-Major J. F. FitzPatrick, M.D., on furlough.

urgeon F. C. REEVES, Madras Establishment, Civil Surgeon, Cocanada, and ing District Surgeon at Coimbatore, is appointed to be Civil Surgeon of Telli- rry, in succession to Surgeon H. K. Fuller, deceased.

rigade-Surgeon L. C. NANNEY, Madras Establishment, District Surgeon of hinopoly, is granted privilege leave for three months.

he services of Surgeon A. MILNE, M.B., C.M., Bombay Establishment, are aced at the disposal of the Commander-in-chief.

urgeon H. C. L. ARNIM, Bombay Establishment, is appointed to officiate in lical charge of the 1st Bombay Lancers during the absence of Surgeon G. H. l, M.D., in civil employ.

MILITIA MEDICAL DEPARTMENT.

GEON-MAJOR J. W. CAVANAGH, 3rd and 4th Battalion King's Liverpool iment (formerly the 2nd Lancashire Militia), has resigned his commission, n permission to retain his rank and uniform.

THE VOLUNTEERS.

ING-SURGEON W. ROSSER, M.D., and G. J. EADY, M.D., 1st Volunteer Bat- on West Surrey Regiment (late the 2nd Surrey), are promoted to be Sur- is.

ting-Surgeon H. P. WESTBURY, 2nd Volunteer Battalion Duke of Corn- 's Light Infantry (late the 2nd Cornwall) has resigned his appointment, h was dated March 8th, 1884.

ting-Surgeon A. R. F. EVERSHED, 20th Middlesex (Artists'), is promoted e Surgeon.

urgeon and Surgeon-Major C. S. HALL, 1st Volunteer Battalion Border iment (late th 1st Cumberland), is appointed Brigade-Surgeon, ranking as tenant-Colonel, to the Northern Counties Brigade Infantry Volunteers.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITAL REFORM IN IRELAND.

IR,—As an old Dublin student, I read with much interest the arks of the Dublin Branch of the Association on Dr. Rentoul's posals. I think the question of using the Poor-law infirmaries clinical teaching conjointly with the hospitals is worth their nsideration. In my time students used to be examined on s at the union, and the difficulty of acquiring at the hospitals miliarity with chronic cases, such as are met with at the rmaries, was a very real one to candidates.

s to hospital reform, so far as the excluding of well-to-do ients is concerned, there can be no doubt that it will be of le or no use without important reforms of the dispensary em. But why not reform the dispensary system? I wish one of our Irish friends would take the trouble to give us a r account of the dispensary system in Ireland and its regula- s. There is nothing of the kind in England, and consequently are rather ignorant about it.

rom what I know it seems to me that the mode of charging by eral practitioners in Ireland is rather behind the times, ough it is certainly better than the English 6d. or 4½d. method, its distribution of advertising handbills and its stylish shops. am right, the most common custom is to receive no fee less £1, such fee covering a varying number of subsequent visits quired. I have been told that the difficulty of producing this eads many to get dispensary tickets, who would not do so if a ge of 2s. 6d. or 3s. 6d. were made. At present farmers and r well-to-do people get attendance by dispensary ticket far frequently. The "guinea or nothing" system, or the old nod of leaving it to the debtor and taking what he thinks t, is rather out of date. *Tempora mutantur nos et mutamur lis*, and if we do not so change it is the worse for us in the end. edical teaching and the general condition of the medical pro- on in Ireland compares in many respects so favourably with tate of affairs here that I am sure we should be interested by ing from some of our Irish brethren full particulars as to the liarities of Irish practice.—I am, etc.,

ghgate, N. HUGH WOODS, M.D.

THE Lord Mayor will preside at a dinner, to be held on May 20th, in aid of the funds of the Evelina Hospital for Sick Children, Southwark.

ROYAL LONDON OPHTHALMIC HOSPITAL.—The Goldsmiths Company have paid over to the Royal London Ophthalmic Hospital the sum of £500, towards the extension and building fund of the proposed new building.

SANATORIUM AT LEEDS.—The Leeds Sanitary Committee propose to provide additional hospital accommodation, and also to erect a sanitorium for the patients from the borough hospitals, for which purpose they have decided to ask the Corporate Property Committee to reserve 15 acres of land.

THE LONDON FEVER HOSPITAL.—The annual meeting of the governors of the London Fever Hospital, Liverpool Road, N., will be held at the Freemasons' Tavern, Great Queen Street, W.C., under the presidency of Lord Balfour of Burleigh, this day (Friday).

GREENOCK INFIRMARY.—The annual report of this infirmary states that during last year 1,118 patients were admitted—118 in excess of the previous year. Of these, 348 were admitted to the fever house, and 770 to the medical and surgical wards. Of the latter, 50 per cent. were accident or urgent cases. More than half of the fever cases were children of 10 years of age or under. The mortality from fevers was 7.2 per cent., and of the medical and surgical cases it reached 13 per cent.

MANCHESTER HOSPITAL FOR CONSUMPTION. — The fifteenth annual meeting of the subscribers to the Manchester Hospital for Consumption and Diseases of the Throat was held in the Town Hall last week. In the annual report it is stated that the number of out-patients attending had been 5,233, against 4,508 in the preceding year; and the total number of their attendances was 27,772, against 25,046, or an overage of 534 per week, as compared with 484 in the preceding year. The number of in-patients treated at the hospital at Bowdon during the year had been 231, against 203, and the average duration of their stay 52 days, against 68 days in 1888.

CLINICAL ASSISTANTS IN IMBECILE ASYLUMS.—At the last meeting of the Metropolitan Asylums Board letters were read on the subject of the provision of accommodation and rations for clinical students at the imbecile asylums from the Hackney and Greenwich guardians condemning the scheme, and from the Paddington guardians approving the same. The following resolution, moved by Mr. Brass, was carried: "That it be an instruction to the several committees, who have not up to this date made provision to receive clinical students, to proceed no further with the resolution of the Board in reference to the same, and that the several parishes be so informed."

THE AFTER-CARE ASSOCIATION.—The After-care Association, the object of which is to exercise a certain amount of supervision over poor and friendless female convalescents on leaving asylums for the insane prior to their returning to active life, is sadly in need of funds. Dr. Hack Tuke points out that it was originally intended to provide a single convalescent home, but this so far has been found impracticable. Cases, however, have been boarded out in cottage homes in the country, and the result has been very satisfactory. Medical superintendents of county asylums find it a great advantage, when discharging a female patient as recovered, to know that the kindly care of this association can be obtained, along with small grants of money and clothing, until suitable employment is found. The Treasurer is Dr. Claye Shaw, County Asylum, Banstead; the Secretary, Mr. H. Thornhill Roxby Arden Lea, The Drive, Walthamstow, Essex, to whom, or to Dr. Hack Tuke, 63, Welbeck Street, W., subscriptions may be sent.

THE FRENCH HOSPITAL AND DISPENSARY.—The twenty-first annual dinner on behalf of this institution was held on February 15th, at the Hôtel Métropole, his Excellency the French Ambassador in the chair, supported by the Lord Mayor, the Sheriffs, and representatives of the Corps Diplomatique, together with some 250 friends and supporters of the charity. His Excellency insisted on the cosmopolitan nature of the charity, and announced that the new premises in Shaftesbury Avenue were rapidly approaching completion. Towards the expense of this building, the Minister of the Interior had that day promised a subscription of 2,000 francs. The annual report, read by the Honorary Secretary, M. Rüffer, showed that the work of the institution was constantly increasing and the Treasurer (M. Duval) announced that subscriptions to the

amount of £2,000 had been promised that evening. The intervals between the toasts were agreeably filled by musical selections, under the direction of Cavalière Tito Mattei.

OBITUARY.

SIR ROBERT KANE, F.R.S.

We regret to announce the death, in his 81st year, of Sir Robert Kane, F.R.S., which took place at Dublin on Sunday, February 16th. He had only been ill for a few days. An attack of influenza was followed by some congestion of the lungs, and the heart gradually failed. The deceased gentleman was father of Captain Kane, whose brilliant behaviour at Samoa in saving the *Calliope* was so prominently before the public last year. Sir Robert was throughout his long life a foremost worker in educational matters in Ireland, and his sagacious judgment was frequently appealed to by successive Governments in their attempts to settle the University question in that country.

He was born on September 24th, 1809. He was educated at Trinity College, Dublin, and was a Doctor of Medicine, Doctor of Laws, and a Fellow of the Royal Society and the King and Queen's College of Physicians. In 1830 he obtained the prize offered by Dr. Graves for the best essay on the pathological condition of the fluids in typhus fever. He became a Licentiate in 1832, and was elected a Fellow of the King and Queen's College of Physicians in 1841, having been previously appointed Professor of Chemistry to the Apothecaries' Hall, of whose board he was for many years a leading examiner. In 1832 he projected the *Dublin Journal of Medical Science*, confined in the first instance to chemistry and pharmacy, and afterwards extended to practical medicine. His direct connection with that journal ceased in 1834. He held the appointment of Professor of Natural Philosophy to the Royal Dublin Society from 1844 till 1847, and in the latter year the Royal Academy awarded him the Cunningham gold medal for his discoveries in chemistry. He had been a member of the Royal Irish Academy from 1832, was placed upon its council in 1841, and was afterwards elected its secretary, an office which he continued to hold until he received the appointment of President of the Queen's College of Cork. He presented, in 1840, to the Royal Society of London some researches on the colouring matter of the lichens, which were subsequently published in the *Philosophical Transactions*, and for which he received the Royal medal.

In 1843 he delivered a series of lectures on the different sources of industry which exist in Ireland. In 1846 the measures recommended by him for the formation of a museum of industry in Ireland were carried out; the museum in St. Stephen's Green was created, and he was appointed Director, the Ordnance zoological and mineral collection of Mountjoy being removed to it.

Dr. Kane's most extensive work, *The Elements of Chemistry*, appeared in 1842, and the *Industrial Resources of Ireland* in 1844. Dr. Kane was, in 1845, appointed, in conjunction with Professors Lindley and Playfair, to examine into the cause and means of preventing the potato blight. In 1846 he was appointed one of the Irish Relief Commissioners. He resigned the presidency of Queen's College, Cork, in 1864, and in 1875 was appointed a Commissioner of National Education.

As a scientific chemist he had few, if any, equals in this country, and his works on Chemistry and on Economics, of which *The Industrial Resources of Ireland* is the best known, hold a very high place. In 1846 he received the honour of knighthood from Lord Heytesbury in acknowledgment of his services to science. He was President of the Royal Irish Academy for many years, and was one of the first Roman Catholics elected by the Board of Trinity College on the Academical Council of the University. He was also a Senator of the Royal University of Ireland.

JOHN BLAND WOOD, M.D.Heidelb., F.R.C.S.Eng.

We have to announce the death of Dr. Wood, who died at his residence at Swinbourne Grove, Withington, in his 76th year. He was born at or in the neighbourhood of Pontefract, and he received the greater part of his education there. Having studied medicine, he became a Member of the Royal College of Surgeons in 1836, and in the same year obtained the degree of M D. in the University of Heidelberg. In 1859 he was elected a Fellow of the Royal College of Surgeons of England. He took up his residence in Broughton about half a century ago, and had an extensive practice there and in Salford, which about fifteen years ago he relinquished owing to failing health. Dr. Wood won much distinction as a botanist. Botany was a department of study which he had loved from his earliest years, and few men had a more extended knowledge of the Manchester flora forty or fifty years ago. He associated much with the artisan botanists of Lancashire, and aided them in their studies; whilst he, in turn, was assisted in no small measure by their acuteness and the assiduity which characterised their researches. The *Flora* of Richard Buxton was preceded, in 1840, by a catalogue of the plants of this district—published under the name of the *Flora Mancuniensis*—of which Dr. Wood was the author. He made a special study of the Carices, and accumulated a large and valuable collection of British species. Besides having an extensive knowledge of the flowering plants, Dr. Wood studied with great success the mosses of Britain, and for a long period in the latter half of his life these were his speciality. This pursuit naturally brought him into contact and correspondence with some of the most distinguished botanists of his day, both in this country and on the Continent. There were few with whom he had more intimate relations than the late Professor W. P. Schimper, of Strassburg, the learned author of the *Bryologia Europæa*. Dr. Wood was one of the party of English botanists who accompanied him in his botanical expeditions to Scotland and Wales. These visits resulted in the addition of several species to the British flora.

Of late years Dr. Wood was an invalid, and failing sight deprived him of the pleasures of his favourite study. He leaves a valuable bryological collection, which, with great care and neatness, he arranged after Schimper's classification.

Professor OTTO BECKER, M.D.,

Heidelberg.

In Dr. Otto Becker, Professor of Diseases of the Eye in the University of Heidelberg, who died on February 7th, Germany loses one of its foremost ophthalmologists. Only last September he was as usual the life and soul of the Ophthalmological Congress at Heidelberg, and his robust health seemed to promise a lengthened lease of life; and his unexpected death at the not very advanced age of 61 has caused the deepest regret throughout the medical profession in Germany, more especially among his fellow workers in the field of eye diseases.

Professor Becker was born in 1828, and first studied theology and philology at Erlangen, and afterwards mathematics and natural science at Berlin. It was not till 1854 that he entered on the study of medicine at Vienna, where he graduated in 1859. He then turned his attention specially to diseases of the eye under Albrecht von Graefe, at Berlin, returning after a time to Vienna, where in 1862 he was appointed assistant to Ferdinand von Arlt. In 1867 he qualified as *Docent*, and in the following year he was called to the chair of ophthalmology at Heidelberg, which he continued to fill till the end of his life.

Otto Becker had the highest reputation as a teacher, and his remarkable powers of organisation made his clinic a model which was widely imitated, not only in his own country, but abroad. Among his pupils are many of the leading ophthalmologists in Germany, several of whom are now the occupants of professorial chairs. His kindness of heart and genial manners made him extremely popular both with his pupils and his brother specialists. His scientific work was largely connected with the pathology of the lens, a subject with which his knowledge of mathematical physics made him specially competent to deal. All his contributions to ophthalmology gave evidence of solid work, and were real additions to the general stock of knowledge. His earliest work was a German translation of Donders's great work, *The Anomalies of Accommodation and Refraction*. Among his other publications the principal are the following: *Atlas of the Pathological Topography of the Eye*, Vienna, 1874-78; "The Pathology and Treatment of the Lens Apparatus," in Graefe and Saemisch's *Handbook of Ophthalmology*, 1876; and a monograph on the *Anatomy of the Lens in Health and in Disease*, in which he had the assistance of his pupils, Drs. Pinto da Gama and Schäfer.

CHARLES GREEN, M.D., M.R.C.S., L.S.A.

The death of Dr. Green, on February 4th, at the early age of 3 years, has caused a feeling of deep regret among his many friend in Gateshead and its neighbourhood. Though he had been ill fo some time, and had only recently returned from Bournemout where he had been for the benefit of his health, his death w

dden and unlooked-for. The deceased gentleman, whose father as a medical practitioner at Middlesbrough, took the M.D. gree at Durham University, in 1883, and shortly afterwards ttled down in Gateshead, where he was appointed medical ficer of health. During his term of office he paid assiduous at-ntion to his duties, and did much in the way of sanitary work, d effectually called attention and secured investigation into the atter of the great infantile mortality which was then the un-ppy experience of Gateshead. He resigned that appointment, d afterwards became medical officer for the East District of the teshead Union. He represented the North Ward in the Town uncil, and took a great interest in local affairs.

Up to within a recent period he was surgeon to the Newcastle tillery. The deceased is described as being of a very genial sposition and universally liked. His funeral was attended by mbers of the Corporation, Board of Guardians, and other public dies.

RICHARD STANISTREET, M.D., L.R.C.S.I., ETC.

t. STANISTREET, of Malahide, we learn, died very suddenly at s residence, 3, St. James's Terrace, on February 3rd, from an oplectic seizure. He was for over thirty years medical officer of e Malahide Dispensary District, where he was universally be-ed and respected by all those who knew him. He was engaged his medical duties up to the day of his death. He took the D. degree with honours at Glasgow University in 1853, and ame a licentiate of the Royal College of Surgeons, Ireland, in 52.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE DEATH-RATE IN LONDON AND PARIS.

E rates of mortality in London and Paris, which had steadily lined in recent weeks, showed a slight increase last week. The th-rate in London, which had declined in the five preceding eks from 32.4 to 24.6 per 1,000 persons living, rose again to 21.3 ing the week ending Saturday last, February 15th. During the t seven weeks of the current quarter the rate of mortality in ndon had averaged 26.1 per 1,000, while in the corresponding iods of the ten preceding years the mean rate was 23.2. The rease in the London death-rate last week was due to increased aotic fatality, although, with the exceptions of whooping-cough l diphtheria, the mortality from each of the principal zymotic eases was considerably below the average; 115 deaths resulted n whooping-cough, 39 from diphtheria, 21 from measles, 14 n scarlet fever, and 13 from different forms of "fever," includ-12 from enteric fever. The 39 fatal cases of diphtheria showed ery marked increase upon those returned in any recent week, were more than double the average; this disease was pro-tionally most prevalent in Bethnal Green, Clerkenwell, and olwich sanitary districts. The mortality from whooping-cough showed a marked further increase, and was highest in hnal Green, Wandsworth, and Plumstead. The fatal cases of uenza, which had declined from 127 to 38 in the four preceding ks, further fell to 30 during the week under notice. The tality from diseases of the respiratory organs also showed a her decline, and was below the average; while the deaths re-ed to phthisis and to diseases of the circulatory system showed xcess. No fewer than 68 deaths resulted from cancer in ndon last week, the corrected average weekly number being 51. om the most recent returns from Paris it appears that the h-rate in that city, which had declined from 61.7 to 24.1 per 0 in the five preceding weeks, rose again to 24.5 during the k ending February 8th, but was slightly below the average in the corresponding periods of recent years. The 1,067 hs from all causes registered during the week under notice in s included 45 from diphtheria and croup, 19 from whooping-h, 18 from measles, 7 from typhoid fever, and 1 from small-The mortality from whooping-cough and from diphtheria croup showed an excess, while that from each of the other otic diseases was considerably below the average. The fatal of diphtheria and croup showed a marked further increase recent weekly numbers; the deaths from measles and oid fever also showed an increase, but the mortality from small-pox further declined. The fatal cases of phthisis in Paris exceeded the average, and the diseases of the respiratory organs also showed a slight excess.

INFLUENZA MORTALITY IN LONDON.

THERE was a further decline in the number of fatal cases of influenza in London during last week. The deaths directly referred to this disease, which had been 127, 105, 75, and 38 in the four preceding weeks, further fell to 30 during the week ending Saturday, February 15th. This disease was proportionately most fatal in Central and South London, where 20 deaths resulted from it; while it appears to have almost disappeared from East London, where only one death was attributed to it. Of the 30 deaths referred to influenza in London last week, 7 were of children under 5 years of age, 3 of persons aged between 20 and 40 years, 12 of persons aged between 40 and 60 years, and 8 of persons aged upwards of 60 years. There was also a further decline in the mortality from diseases of the respiratory organs in London last week, the 439 deaths referred to these diseases being 86 below the corrected average number in the corresponding periods of recent years.

ACTION TO RECOVER PRICE OF CONDEMNED MEAT.

AN action which arose out of an "unsound meat" case has just been decided at Glasgow. On October 9th, 1889, a butcher named Macadam bought in the Glasgow Cattle Market two cows. The vendor was a Mr. Quill, and the price agreed upon was 53s. per cwt. The cows were handed over to one of Macadam's *employés*, who drove them to the south side slaughterhouse, where both beasts were at once slaughtered. On inspection, it was discovered that one beast was affected with tuberculosis, and the carcass was condemned as unfit for human food and destroyed. Macadam refused to pay for this carcass, and an action was brought by Quill to recover the price, £9 8s. 10d. For the defender it was contended (1) that what was sold was the unascertained weight of the dressed carcass, that the sale was not complete till the weight was known, and before the weight was known the carcass was condemned, therefore the loss should fall on the seller; (2) that there was an express warranty that the cattle would pass the meat inspector; and (3) that the cattle being sold for human food, there was an implied warranty that the cattle was fit for such purpose. The Sheriff gave judgment for the defender, holding that an express warranty had been established. The first plea of the defender was repelled, and upon the third no opinion was given.

ABERDEEN: HEALTH OF THE CITY.

DR. MATTHEW HAY, in his report for January, states that the usual high mortality for that month has been higher than usual. Compared with the mortality in the same month for the last ten years, the total death-rate during January is higher by 2.9 per 1,000 than the average, and it has only been exceeded in 1881 and 1883. The death-rate from diseases of the respiratory system is greatly above the average, and is highest in the decennium except 1881.

The death-rate from miasmatic diseases is also above the average, and is the highest of any for the last ten years. This high mortality is due to influenza, typhoid fever, and measles. Tubercular diseases, on the other hand, show a very low mortality, among the lowest on record.

Eleven deaths from influenza were reported during the month; these took place outside the municipal boundaries. The ages of those dying ranged from 10 days to 79 years, but was most fatal between the ages of 24 and 57 years. Only one of the fatal cases of influenza was uncomplicated, and that was the infant of 10 days; in 8 inflammation of the lungs was present, in 1 diarrhœa, and senile debility complicated another. The duration of the illness varied from three to twenty-two days, but was for the most part less than seven days.

Dr. Hay points out that the exceptionally high mortality from diseases of the respiratory system was possibly due to the prevalence of influenza, which initiated or predisposed to inflammatory attacks of the lungs, although no mention of it was made in the certificate of death. Dr. Hay, also, in an interesting note, shows that the high mortality from respiratory diseases which took place in January, 1881, did not result from any such complication as influenza or other zymotic disease, but from the excessive cold, the mean temperature for that month having been 10° below

the average, and was, as the Registrar-General remarks, the lowest ever chronicled for the same month, or any other month of all recorded years. In January, 1890, the weather was mild and equable, and the mean temperature was nearly equal to the highest during the decennium.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 6,103 births and 4,723 deaths were registered during the week ending Saturday, February 15th. The annual rate of mortality in these towns, which had been 22.8 and 23.0 per 1,000 in the two preceding weeks, further rose to 25.3 during the week under notice. The rates in the several towns ranged from 21.3 in London, 21.7 in Derby, 22.3 in Bradford,, and 22.8 in Brighton to 33.1 in Wolverhampton, 33.8 in Bolton, 34.4 in Plymouth, and 38.6 in Manchester. In the twenty-seven provincial towns the mean death-rate was as high as 28.7 per 1,000, and exceeded by 7.4 the rate recorded in London, which was only 21.3 per 1,000. The 4,723 deaths registered during the week under notice included 189 which resulted from whooping-cough, 67 from diphtheria, 53 from scarlet fever, 49 from measles, 31 from "fever" (principally enteric), 30 from diarrhœa, and not one from small-pox; in all, 419 deaths resulted from these principal zymotic diseases, against 328 and 345 in the two preceding weeks. These 419 deaths were equal to an annual rate of 2.2 per 1,000; in London the zymotic death-rate was 2.5, while it averaged 2.1 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Norwich, 0.6 in Huddersfield, and 0.7 in Portsmouth, Oldham, and Bradford to 3.7 in Liverpool, 4.3 in Salford, and 6.3 in Bolton. Whooping-cough showed the highest proportional fatality in Brighton, Wolverhampton, Salford, London, Cardiff, Hull, Preston, Bristol, and Bolton; and measles in Liverpool. In none of the twenty-eight towns was scarlet fever or "fever" fatally prevalent. The 67 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 39 in London, 4 in Liverpool, 4 in Manchester, 4 in Salford, 3 in Preston, 2 in Bolton, 2 in Sheffield, and 2 in Hull. No fatal case of small-pox was registered during the week in any of the large towns; and 5 small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, February 15th. These hospitals contained 1,222 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,246 in the seven preceding weeks; 62 cases were admitted during the week, against 95 and 67 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 5.2 per 1,000, and was considerably below the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, February 15th, 772 births and 742 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had declined from 29.0 to 25.0 per 1,000 in the five preceding weeks, rose again to 28.7 during the week under notice, and exceeded by 3.4 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Perth and Leith, and the highest in Glasgow and Paisley. The 742 deaths in these towns during the week under notice included 95 which were referred to the principal zymotic diseases, equal to an annual rate of 3.7 per 1,000, which exceeded by 1.5 the mean zymotic death-rate during the same period in the twenty-eight large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Leith and Edinburgh. The 331 deaths registered during the week under notice in Glasgow included 13 from whooping-cough, 12 from measles, 4 from "fever," and 2 from diphtheria. In Edinburgh, 18 fatal cases of measles, 9 of whooping-cough, and 4 of diphtheria were recorded, and 5 deaths from whooping-cough occurred in Dundee. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.6 per 1,000, against 5.2 in London.

HEALTH OF IRISH TOWNS.

In the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, February 15th, were equal to an annual rate of 41.2 per 1,000. The lowest rates were recorded in Lurgan and Waterford, and the highest in Galway and Kilkenny. The death-rate from the principal zymotic diseases averaged 4.4 per 1,000. The 256 deaths registered in Dublin during the week under notice were equal to an annual rate of 37.8 per 1,000 (against 43.5 and 33.4 in the two preceding weeks), the rate for the same period being only 21.3 in London and 23.3 in Edinburgh. These 256 deaths included 12 which resulted from the principal zymotic diseases (equal to an annual rate of 1.8 per 1,000), of which 5 were referred to measles, and 5 to different forms of "fever."

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, February 13th.

The Burgh Police and Public Health Bill.—The Lord Advocate, in reply to Dr. Clark, said the Bill consisted of 571 clauses, and involved a great amount of detail. If the Scotch members were practically unanimous in desiring that the Bill, which had already been very fully discussed, should pass through this House in the form in which it left the Select Committee of 1888, the Government would be most willing to effectuate this desire. But, unless upon a definite understanding to this effect, the Government could not undertake to find time for the Bill during this session, and it would not serve any good purpose to introduce it.

The Influenza Epidemic.—In reply to Mr. Cobb, Mr. Ritchie said an inquiry was now being conducted and evidence collected by officers of the Board's medical department as to the causes of the recent epidemic of influenza. The Board were not at present in a position to draw up an official statement, and they had no intention to give instructions for medical treatment.

Friday, February 14th.

Rabies in East Kent.—Mr. Chaplin, in reply to Mr. H. Knatchbull-Hugessen, stated that there had been no case of rabies in East Kent, but there had been thirty-nine outbreaks in Kent as a whole, and there had been cases so near the border of Kent that it seemed extremely inadvisable to withdraw the restriction at present.

The following Bills have been introduced and read a first time: Mr. W. Isaacson, Bill to Amend the Law relating to the Sanitation of Houses; Mr. Noble, Bill for the Registration of Architects; Mr. Macartney, Bill to give Further Facilities for providing Dispensary Houses, etc., in Ireland; Sir J. Lubbock, Bill to enable Local Authorities to establish a weekly Half-holiday for Shops, and Bill to make Better Provision for the Regulation of Theatres in London; Mr. Matthews, Infant Life Protection Bill; Mr. H. H. Fowler, A Bill to confer further powers on Urban Sanitary Authorities.

Monday, February 17th.

Vaccination Prosecutions.—Mr. Matthews, in reply to Mr. Bradlaugh, stated that as soon as the return of vaccination prosecution ordered last session was complete, it would be presented.

The Lunacy Laws.—In reply to Mr. Salt, Mr. W. H. Smith stated that a Bill would shortly be introduced relating to the lunacy laws, and it would be one of simple consolidation only. No fresh legislation would be introduced. The Lunacy Acts Amendment Act of last session would come into force on April 1st, and it was hoped that the Consolidation Act, as a code for the guidance of those concerned in the administration of the law, might be passed before that date.

Tuesday, February 18th.

Sewerage Works for Harrow Weald.—Mr. Ritchie, in reply to Mr. Cobb, said he trusted that the scheme for the sewerage works at Harrow Weald would be settled at an early date. He had no information as to an outbreak of typhoid fever in the district.

Army and Navy Administration.—Admiral Field asked the First Lord of the Treasury whether the Royal Commission, presided over by the noble lord the member for the Rossendale Division, on Naval and Military Administration, had agreed upon and presented their report to Her Majesty; and whether Her Majesty's Government would advise that the same be laid upon the table, or such portions thereof as were not of a confidential character.—Mr. W. H. Smith said said preliminary reports from the Royal Commission in question had been submitted to Her Majesty. They had yet, however, to be considered by Her Majesty's Government, but he did not doubt that they would be pesented to Parliament subject to the reservation made.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

Cavendish College.—An examination will be held on July 8th and following days, at which one scholarship of £50 and six of £30 will be offered for competition to candidates who have not commenced residence, and who will be under 18 years of age on October 1st. One or more of the following subjects may be offered for examination: classics, mathematics, natural science, modern languages. Particulars may be obtained from the Master.

Degrees.—At the Congregation on Thursday, February 13th the following degrees were conferred: M.B.—E. A. Wadeson, B.C., St. John's; W. G. Gabriel Stokes, B.A., Pembroke; Leonard Remfry, M.A., Christ's. B.C.—W. G. G. Stokes and L. Remfry.

LONDON.

Intermediate Examination in Medicine.—January, 1890. Pass list. Entire examination.

First Division.—Annie Mary S. Anderson, London School of Medicine for Women; J. Evans, University College, Liverpool; C. B. T. Musgrave, University College; C. E. Salter, Guy's Hospital; A. C. Stevenson, University College; T. M. Tibbetts, Queen's College, Birmingham; T. Warner, King's College; S. L. B. Wilks, Yorkshire College; J. Williamson, St. Bartholomew's Hospital: J. Green, Owens College.

Second Division.—W. Bligh, Guy's Hospital; G. G. Clarke, St. Mary's Hospital; S. G. Floyd, Guy's Hospital; G. P. Jerome, Queen's College, Birmingham; W. B. Jones, St. Bartholomew's Hospital; B. H. F. Lemann, St. Bartholomew's Hospital; H. D. Levick, St. Thomas's Hospital; J. Morrison, St. Bartholomew's Hospital; T. Olver, King's College; J. H. Parsons, Bristol Medical School; A. W. Peake, Bristol Medical School; E. A. Perram, St. Bartholomew's Hospital; W. L. Pethbridge, B.Sc., St. Bartholomew's Hospital; T. M. J. Powell, St. Bartholomew's Hospital; H. B. Wilson, Bristol Medical School.

Excluding Physiology.

First Division.—H. T. Parker, St. Bartholomew's Hospital; J. P. Tildesley, Queen's College, Birmingham.

Second Division.—H. O'N. Fraser-Luckie, St. Bartholomew's Hospital; Paling, Middlesex Hospital; S. H. Rentzsch, King's College; C. Rogerson, Yorkshire College; A. E. Tebb, Guy's Hospital; A. Thorn, St. Mary's Hospital

Physiology only.

First Division.—R. M. Smyth, St. Mary's Hospital; A. L. Whitehead, Yorkshire College.

Second Division.—E. B. Allan, University College; J. B. Byles, University College; H. Finley, University College; G. D. Parker, St. Bartholomew's Hospital; E. L. N. Pridmore, University College; J. H. Sprot, Queen's College, Birmingham; S. G. Toller, St. Thomas's Hospital; E. Ware, St. Thomas's Hospital.

EDINBURGH.

The Edinburgh University Court, at its meeting on Monday, February 17th, resumed consideration of proposed amended regulations as to the recognition of teachers of medicine under Ordinance No. 8, Section vi (4), and in connection therewith and before it a relative minute of Senatus. The regulations on which

enatus did not suggest any further amendments were approved nd adopted.

DUBLIN.

r the Spring commencements in Hilary Term, held, according custom, on Shrove Tuesday, February 18th, 1890, in the Examiation Hall of Trinity College, the following degrees in Medicine, rgery, and Midwifery were conferred by the University Caput the presence of the Senate:

Baccalaureus in Medicinâ.—G. Hollies.

Baccalaurei in Medicinâ, in Chirurgiâ, et in Arte Obstetriciâ.—D. N. B. Emerson, J. N. Eustace, F. T. Gage, T. P. Jones, A. Vigne, J. C. Worthington.

Doctores in Medicinâ.—A. Bell, G. Hollies, R. H. Johnston, J. C. Worthington.

INDIA AND THE COLONIES.

INDIA.

THE GANGES, A COMMON SEWER.—It is understood, says a *Times* rrespondent that the Sanitary Commissioners of Bengal have ade a representation to the Government on the dangerous conquences likely to follow the proposed action of the Benares unicipality in discharging the city sewage into the Ganges. It to be hoped that the Government will interfere promptly in s matter, which is of more than local interest, as anything ich tends to affect the sanitary conditions of Lower Bengal—birthplace and home of cholera—increases the already exist- danger to the health of Europe.

CIVIL AND MILITARY MEDICAL EMPLOY IN INDIA.—Further nmunications from India confirm our opinion, lately expressed, t the dual system of civil and military employ in the Indian dical Service, promulgated in 1880-81, will require speedy reisideration and revision. By creating divided interests the tem has, unfortunately, produced not merely discord but dision, as well in the executive as administrative grades, and a te of things which calls for a remedy. The question has been minently brought forward through the late promotion to the geon-generalship in Bengal. When three distinguished officers military employ are superseded by the fourth, who had the foe to be in civil employ, what other inference can be drawn n that the latter training is in future to be considered essential the highest medical appointment in India? This is the only lanation, as far as can be seen, for the selection in question. uch be the case, as we said before, we offer no objection, only the ruling be officially and clearly announced. It may be that the t of surgeon-general to the Government of India can be t filled by an officer having experience of civil administration; , if so, then he ought to be relieved from certain specific mili- duties for which the said civil training can be no preparation ny proper sense. Not only is he the head of the civil medical artment, but he is the confidential adviser of the Government he capacity and fitness for promotion of the medical officers have spent all their service in military employ. The Indian lical officers in military employ are, indeed, placed in a very leasant if not unfair position, while in matters pertaining to tary duty they are under the orders of the Surgeons-General Deputy Surgeons-General (Medical Staff) of Her Majesty's es, in all that relates to patronage and promotion they must to the quasi-civil Surgeon-General to the Government of ia. They are, as it were, between an upper and nether mille, and experience the proverbial difficulty and impossibility of ing two masters. This ridiculous system of administration, ady causing friction in peace, is a premium on failure in war; y medical officer in military employ feels he is handicapped. see no other remedy than clear separation between civil and tary employ; let each executive medical officer select one or other, according to his tastes and talents; let the administraof the two branches be apart and distinct.

BURMAH.

OSPITALS AND DISPENSARIES.—According to a resolution of Chief Commissioner of Burmah on the last sanitary report of province it appears that the Burmese exhibit much reluctin availing themselves of the European medical remedies ed by the various Government dispensaries and hospitals. They seldom enter a hospital, it is said, except as out-patients for some trifling ailment, or when brought there by the police for the treatment of wounds received in fights or at the hands of robbers and dacoits. It seems that they look on confinement in a hospital in the same way as imprisonment in a gaol; but the main cause, the Chief Commissioner thinks, is that all the medical officers in the country, until recently, were Europeans or natives of India, few of whom had even a superficial knowledge of Burmese. Lately, however, an endeavour has been made to train Burmese doctors by granting scholarships to natives of Burmah in the medical colleges of Madras and Calcutta. In consequence four Burmese hospital assistants and six assistant-surgeons are now employed, and it is hoped the number will increase yearly and gradually overcome the prejudices of their fellow countrymen. He thinks the task should not be difficult, as these spring from no caste rules or restrictions, but are mainly due to the conservatism of a semi-civilised race which is slow to abandon old habits and beliefs. The total number of in-patients during the year was 15,600, and of out-patients 213,057. In several places the number has largely declined, and the Chief Commissioner calls on the municipal committees to pay particular attention to this, and to the management of the local hospitals and dispensaries.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the February stated examination for the Licences of the College, the following registered medical practitioners were successful:

For the Licence to Practise Medicine:—J. W. Gallagher, L.R.C.S.I.; W. P. Lee, L.R.C.S.I. & L.A.H.; W. G. Ternan, L.R.C.S.I.

For the Licence to Practise Midwifery:—W. G. Ternan, L.R.C.S.I.

The undermentioned candidate has been granted the diploma in State Medicine:

M. Cheale, L.R.C.P.Lond.

SIR SPENCER WELLS has been unanimously elected an honorary member of the Trinity Historical Society of Dallas, Texas.

THE Congress of Scientific Societies will meet at Paris on Tuesday, May 27th, under the presidency of M. Berthelot.

THE Pope has granted a dispensation this year from fasting and abstinence during Lent in the countries where influenza has prevailed.

ACCORDING to a statement recently made by the Minister of Education, Count Csáky, the Hungarian Government proposes to establish a Pasteur Institute at Buda-Pesth.

ACTING upon the report of its Public Health Committee, published last week, the Lancashire County Council, after some debate, have decided to appoint a medical officer of health for the administrative county at a salary commencing at £800 per annum.

THE scheme for incorporating a joint sewage board for the drainage of Staines, Chertsey, and the Thames Valley, for which Parliamentary sanction was to have been sought this session, has been abandoned, and the Bill authorising the scheme withdrawn for the present.

AFTER the retirement of Professor Ernst von Brücke from the chair of physiology in the University of Vienna, which will take place at the end of the present academic year, it is settled that two professors will in future be appointed, as the classes are too large to be adequately managed by one.

PHTHISIS IN BERLIN.—In view of the very large number of phthisical cases admitted into the general hospitals every year, Professor Leyden has induced the medical societies of Berlin to combine together for the purpose of procuring the establishment of special hospitals for the reception of consumptive patients.

THE EPIDEMIC OF INFLUENZA.—There are rumours of an increase and spread of the epidemic of influenza in the Manchester district, which hitherto has been remarkably free from it. It seems to be very prevalent in the manufacturing villages and townships of North-east Lancashire. Influenza is said to be extremely prevalent in Berkshire, the cases both in town and coun-

try districts being numerous. As many as seventy of the inmates of the County Lunatic Asylum at Moulsford are said to be attacked, as also some of the prisoners in Reading gaol.

The medical staff of the "Policlinico Generale," of Turin, has lately instituted the laudable custom of holding informal meetings once a month, to which practitioners and students are invited. At these meetings subjects of practical interest in the various branches of the healing art are discussed.

THE nineteenth Congress of the German Surgical Society will be held at Berlin on April 9th to 12th. Among the subjects down for discussion are "Ether and Chloroform Narcosis," which will be introduced by Dr. Kappeler, of Münsterlingen, and "The Treatment of Joint and Burrowing Abscesses with Injections of Iodoform," by Dr. Bruns, of Tübingen.

SALE OF A MEDICAL LIBRARY.—The library of the late Dr. Decaisne, for many years editor of the *Gazette Médicale de Paris*, will be sold on March 3rd and two following days by MM. Baillière et Fils, 19, Rue Hautefeuille, Paris. The collection is said to be particularly rich in books and pamphlets relating to the history of medicine, medical curiosities, and hygiene.

CREMATION IN GERMANY.—The Senate of the City of Hamburg has given permission for the erection of a crematory with a columbarium for the reception of the urns containing the ashes The money required for the purpose, which amounts to 75,000 marks (£3,750) has been collected by the local cremation society, which has been in existence for several years.

THE CONGRESS OF INTERNAL MEDICINE.—The ninth Congress of Internal Medicine will be held at Vienna on April 15th to 18th. Professor Stricker will demonstrate his electric microscope; "The Treatment of Empyema" will be discussed by Drs. Schede, of Hamburg, and Immermann, of Bâle; and "The Treatment of Chronic Nephritis" by Professors von Ziemssen, of Munich, and Senator, of Berlin. Many other communications are promised.

THE Council of the British Medical Temperance Association has recently admitted 12 new members (abstaining medical men) and 14 new associates (abstaining students). A meeting to which visitors are invited is to be held on Tuesday, February 25th, at 4 P.M., at the Medical Society's rooms, Chandos Street, W., at which the report of a committee, consisting of Drs. Moir, Morton, and Pearce, will be presented, entitled "An Analysis and Comparison of the Consumption of Alcohol in Hospitals in 1863 and 1888."

NEW MEDICAL JOURNALS.—A new monthly periodical, entitled *Der Kinderarzt*, dealing with diseases of children, has recently appeared. It is published by Heuser, of Leipzig and Berlin, and is edited by Dr. Sonnenberger, "with the collaboration of eminent specialists." As the Russian journal, *Jeshenedeljnaita Klinitscheskaja Gazeta*, founded and conducted by the late Professor Botkin, has ceased to appear since his death, his son, Dr. S. S. Botkin, and some of his pupils, have started a weekly journal, entitled *Bolnitschnaja Gazeta Botkina*. The new periodical, which will deal with all branches of practical medicine, will be under the editorship of Dr. N. P. Wassiljew.

FEES TO MEDICAL WITNESSES IN FRANCE.—A meeting of the General Association of Medical Practitioners in France was held on February 7th, under the presidency of M. Henri Roger, to consider the question of the reform of the present scale of fees to medical witnesses in France. It was decided that the Council of the Association should place itself in communication with local societies throughout France with the view of bringing collective pressure to bear on the Legislature so as to secure more liberal payment for medical witnesses, especially in the case of necropsies and other medico-legal examinations ordered by the judicial authorities.

DISINFECTION OF RAILWAY CARRIAGES IN ITALY.—The Italian Minister of the Interior has called the attention of the railway companies to the clauses in the new Sanitary Law relative to the disinfection of railway carriages which have been used by persons suffering from contagious diseases. The whole inside of the carriage is to be repeatedly brushed over with a 2 per mille solution of sublimate. Cattle trucks must in all cases be thoroughly washed with a solution of carbolic acid, or some equivalent disinfectant, and when animals suffering from contagious diseases have been conveyed in them corrosive sublimate must be employed. Much resistance has been offered to the adoption of these measures by the railway companies, but they have now, more or less gracefully, given way.

THE Watch Committee of the Manchester Corporation have adopted a scheme which has been more than once suggested for the registration of dogs. It is proposed that the owners of dogs who wish to register them should supply the police with their address, a description of the dog, its name, etc. A number would then be given to each animal in the register, and a metal plate bearing a similar number, would be given to the owner, to be affixed to the collar of the dog, so that, in the event of the animal being found at large, the police would at once be able to trace its ownership. The register, it is believed, would also have certain advantages in the recovery of lost dogs and the prevention of dog stealing. It is proposed to charge a fee of 2s. 6d. for animals registered.

HUNTERIAN SOCIETY.—The following officers were elected at the annual meeting: *President:* Stephen Mackenzie, M.D. *Vice-Presidents:* Mr. G. B. Hicks; Mr. Alfred H. Smee; Edward G. Gilbert, M.D.; F. Charlewood Turner, M.D. *Treasurer:* W. Rivington, M.S. *Trustees:* H. I. Fotherby, M.D.; Mr. F. M. Corner. *Librarian:* Arthur T. Davies, M.B. *Orator:* Fletcher Beach, M.B. *Secretaries:* Mr. John Poland; R. Hingston Fox, M.D. *Council:* Mr. S. H. Appleford; Mr. T. Lloyd Brown; Sir A. Clark, M.D., F.R.S.; Mr. J. S. E. Cotman; Mr. T. Rowing Fendick; W. Fowler, M.B.; Mr. G. H. Jackson; Mr. T. Mark Hovell F. J. Smith, M.D.; Mr. G. J. B. Stevens; Mr. R. G. Tatham Mr. Percy Warner. *Auditors:* J. H. Stowers, M.D.; Mr. Warer Tay; Mr. T. Rowing Fendick; Mr. J. S. E. Cotman.

SANITARY EXPERTS AND THE CHARGE OF OBSTRUCTING JUSTICE.—We have received from Messrs. Wade, Bilbrough, Booth and Co., solicitors for the appellant in the recent case heard at Bradford, a letter to the effect "that the best commentary on Dr McLintock's description in the JOURNAL of February 1st was that the premises were not only specially built and approved by the Corporation for a private slaughter house—their surroundings being exactly the same then as now; that they had for thirty years been used as such, without during all that time provoking one single word of complaint, or even suggestion of alteration from the Corporation, the medical officer, the nuisance inspector, the meat inspector, or anyone else; that this was proved in court, and admitted by the Corporation, and that it was shown that in no respect were they inferior to, but in some respects better than, the public abattoirs."

CRUSADE AGAINST QUACKERY IN ITALY.—The Italian Government is taking vigorous steps for the suppression of illegal medical practice throughout the kingdom. The Minister of the Interior has sent a circular, dated January 14th, to all prefects, calling attention to a previous letter dated October 5th, 1887, instructing them to furnish at the beginning of every month a list of all the cases in their respective districts in which "the professions of medical and surgical practitioner, midwife, veterinary surgeon, pharmacist, and druggist's assistant, phlebotomist, and dentist have been practised by persons not holding a regular diploma. The Minister insists on this regulation being strictly carried out and further instructs the prefects to send information of all cases in which persons prosecuted for illegal practice have been acquitted, or have been let off with a lighter sentence than that prescribed by the law of December 22nd, 1888, in order that steps may be taken to have such faulty decisions quashed.

MEDICAL VACANCIES.

The following Vacancies are announced:

BALROTHERY UNION, MALAHIDE DISPENSARY.—Medical Officer. Salary, £145 16s. 8d. per annum, and fees. Applications to Mr. O'Neill, Honorary Secretary, Kinsealy House, St. Dolough's. Election on February 28th.

BOYLE UNION.—Medical Officer for Workhouse. Salary, £100 per annum. Applications to Mr. Odbert, Clerk of Union. Election on February 22nd.

BOYLE UNION.—Medical Officer, Boyle No. 2 Dispensary. Salary, £95 per annum, and fees. Applications to Mr. H. Lawrence, Honorary Secretary. Election on February 22nd.

BRISTOL HOSPITAL FOR SICK CHILDREN AND WOMEN.—A Third Physician. Applications to be addressed to the President and the Committee not later than February 26th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Assistant Physician, must be a Fellow or Member of the Royal College of Physicians, London. Applications to the Secretary, Storrar Smith, 24, Finsbury Circus, E.C., not later than March 4th.

HOSPITAL FOR INFECTIOUS DISEASES, Newcastle-upon-Tyne.—esident Medical Assistant for one year, subject to re-election: £50 per nnum first year, £70 second year, board, lodging, and washing. Applicaons to the Medical Officer of Health, Town Hall, Newcastle, not later than ebruary 28th.

K PROTESTANT FELLOWSHIP SOCIETY.—Physician. Applications o the Secretary, 104, Patrick Street, Cork, not later than February 24th.

NTY COUNCIL OF WORCESTERSHIRE.—Medical Officer of Health or the County of Worcester, Commencing salary, £600 per annum, with ravelling expenses, with an increase of salary if district duties be added. pplications must be made not later than March 15th on forms to be obained of W. Nicholas Marcy, Clerk of the County Council, County Hall, Worcester.

HAM UNION.—Medical Officer of Health to the Rural Sanitary Authoty, Eastern District of the Union. Salary, £75 per annum. Applications o William Lisle, Clerk, not later than February 28th.

HAM UNION.—Medical Officer of Health to the Rural Sanitary Authoty, Western District of the Union.—Salary, £75 per annum. Applications William Lisle, Clerk, not later than February 28th.

RINGDON GENERAL DISPENSARY, etc., 17, Bartlett's Buildings, Holborn.—Honorary Surgeon, Members or Fellows of Royal College of urgeons. Applications by March 8th to J. Lewis, Secretary.

BURY DISPENSARY, Brewer Street, Goswell Road.—Surgeon; Fellow Member of the Royal College of Surgeons. Salary, £40 per annum. pplications not later than March 3rd to H. Moreland, Honorary Secretary. urther information on personal application.

PSTEAD PROVIDENT DISPENSARY, New End.—Medical Officer. pplications on or before March 1st to the Secretary, 23, High Street, ampstead. The elected candidate to reside in Hampstead.

IWORTH AND SWINDON UNION.—District Medical Officer and Public accinator to the 1st District. Salary, £70 per annum and fees. Applicaons by February 22nd.

S GENERAL INFIRMARY.—House-Physician. From March 1st to Octber 31st. Board, lodging, and washing in the infirmary. Further inrmation from, and applications to, Mr. W. H. Brown, Secretary to the aculty, 19, Queen Street, Leeds, not later than February 22nd.

RPOOL DISPENSARIES.—Assistant-Surgeon. Salary, £80 per annum, th board and apartments. Applications to R. R. Greene, Secretary, ith Offices, Liverpool, by February 25th.

RPOOL NORTHERN HOSPITAL—House-Physician. Salary, £80 per num, with residence and board. Applications to be addressed to the hairman of the Committee not later than February 27th.

ON COUNTY ASYLUM, Banstead Downs, near Sutton.—Dispenser. n-resident; duly qualified. Salary, £100 per annum, with dinner daily the Asylum. Preference given to candidates who can play the organ. pplication to London Asylums Office, 17, Spring Gardens, S.W. (where e necessary forms of application can be obtained) not later than 9 A.M. on bruary 27th.

ON COUNTY ASYLUM, Banstead Downs, near Sutton.—Fourth Assist-t Medical Officer and Pathologist. Salary, £100 per annum, rising £10 nually to £120, with board, furnished apartments, and washing. Must single, doubly qualified, and not more than 30 years of age. Applicans to London Asylums Office, 17, Spring Gardens, S.W. (where the cessary forms of application can be obtained) not later than 9 A.M. on bruary 27th.

ON COUNTY ASYLUM, Banstead Downs, near Sutton.—Senior Assistant edical Officer. Salary, £250 per annum, rising £10 annually to £300, th board, furnished apartments, and washing. Must be single, and beeen 30 and 40 years of age; double qualification; must have had expence at similar institutions. Applications to be delivered at the London ylums Office, 17, Spring Gardens, S.W. (where the necessary forms of plication may be obtained) not later than 9 A.M. on February 27th.

NAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Assistant ntal Surgeon, holding L.D.S. diploma. Applications by February 25th Arthur G. Klugh, Secretary.

NAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Housergeon, holding L.D.S. diploma. Applications by February 25th to thur G. Klugh, Secretary.

NAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen uare, Bloomsbury.—House-Physicians, Senior and Junior. Salary of the mer, £100 per annum; of the latter, £50 per annum, with board and artments in the hospital in each case. Applications to be sent to Burford Rawlings, Secretary and General Director (of whom all parulars can be obtained) not later than February 28th.

H STAFFORDSHIRE INFIRMARY.—House-Physician. Salary, £100 annum. Applications to the Secretary not later than March 1st.

'S COLLEGE, Manchester.—Lecturer on Diseases of the Larynx. Apcations under cover to the Registrar, of whom all particulars may be ained, should be received not later than March 10th.

LINGTON UNION.— Medical Officer of Health to the Market Weighton strict of the Pocklington Union Rural Sanitary Authority. Salary, £22 annum. Applications not later than February 27th.

LINGTON UNION.—Medical Officer for the No. 2 (Market Weighton) strict of the Pocklington Union. Salary, £19 per annum. Applications February 27th.

EDINBURGH HOSPITAL FOR SICK CHILDREN.—Two Resident ysicians for indoor duty. Duties commence May 1st next. Applicas to be lodged not later than February 22nd with Messrs. Henry and tt, 20, St. Addrews Square, Edinburgh.

HOSPITAL FOR DISEASES OF THE CHEST, City Road.—Resit Medical Officer. Re-election required at the end of six months. ary, £100 per annum, furnished apartments, and board. Applications to Secretary not later than February 24th.

SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon, uncried. Salary, £80 per annum, with board, lodging, and washing. plications to Thomas Taunton, Secretary, not later than March 1st.

WOLVERHAMPTON EYE INFIRMARY.—Resident Assistant, wishing to improve his knowledge; must be competent to administer anæsthetics. Applications addressed to the Chairman, Eye Infirmary, Wolverhampton, not later than March 3rd.

MEDICAL APPOINTMENTS.

BARRET, Edward E., M.D., M.R.C.S., L.R.C.P., appointed Assistant-Physician to the Italian Hospital.

BROWNING, Frederick William, L.R.C.P., L.R.C.S.Edin., etc., appointed Assistant Physician to London Medical Mission, St. Giles, W.C., *vice* H. J. Bailey, M.B., C.M., resigned.

BRUCE, Robert Marston, M.R.C.S.Eng., L.S.A., appointed Medical Superintendent of the Western Fever Hospital of the Metropolitan Asylums Board, in succession to R. D. R. Sweeting, M.R.C.S., L.S.A.

CAMPBELL, A. W., appointed Junior Assistant Medical Officer to the Salop and Montgomeryshire Asylum, *vice* M. P. Ledward, M.R.C.S., L.S.A., resigned.

CLEARY, P. J., M.B., B.Ch., appointed Medical Officer of Health for the Kilmallock Dispensary District.

COLGATE, Henry, M.D.Lond., B.S., L.R.C.P., F.R.C.S., reappointed Medical Officer to the Eastbourne Memorial Hospital.

COLGATE, Robert, F.R.C.S., L.S.A., reappointed Consulting Medical Officer to the Eastbourne Memorial Hospital.

COPE, Dr., elected Medical Officer and Medical Officer of Health to the No. 3 South City Dispensary District of the South Dublin Union, *vice* C. F. Moore, M.D.Glas., F.R.C.S.I., resigned.

DEAKIN, James, F.R.C.S.Eng., elected Honorary Surgeon to the Hulme Dispensary, Manchester, *vice* J. J. K. Fairclough, M.D., resigned.

DRYLAND, John Winter, M.R.C.S.Eng., L.M., L.S.A., reappointed Medical Officer of Health to the Kettering Urban Sanitary Authority.

FALKNER, Edgar A., M.B.Dur., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Great Northern Central Hospital.

FARNELL, Henry Dawson, F.R.C.S., L.S.A., reappointed Medical Officer to the Eastbourne Memorial Hospital.

GALLAGHER, Dr., appointed Coroner for North Mayo.

HOLLINGS, Charles Edward, L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Calverley Local Board.

JOHNSON, Henry Sandford, L.K.Q.C.P., L.M.Irel., L.F.P.S.Glasg., reappointed Medical Officer and Public Vaccinator to the Buckfastleigh and South Brent Districts of the Totnes Union.

JOY, Frederick William, L.R.C.P.Edin., L.M., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Borough of Thetford.

LARMUTH, Leopold, M.B., appointed Honorary Aural Surgeon to the Manchester Clinical Hospital for Women and Children.

LEACH, Alfred, M.B.Aberd., M.R.C.P.Edin., elected Assistant-Physician to the Italian Hospital, London, W.C.

LIGHT, E. Mellor, M.A., M.B.Cantab., etc., appointed Medical Officer and Pathologist to the General Infirmary, Leeds.

MCCAUSLAND, A., M.D., M.R.C.P., L.R.C.P., appointed Medical Officer of Health for the Swanage Urban Sanitary Authority, *vice* J. F. Somerville, L.F.P.S.Glasg., etc., resigned.

MACGREGOR, D. A., M.B.Edin., C.M., reppointed Medical Officer of Health to the Skelmanthorpe Local Board.

MACLEAN, Ewen J., M.B., C.M.Edin., appointed House-Surgeon to the Bristol Hospital for Sick Children and Women, in succession to J. Lockhart Livingston, M.D.

ORR, Andrew Aylmer, B.A.Oxon, M.A., M.B.Oxon., M.R.C.S., appointed Anæsthetist to Chelsea Hospital for Women.

PRICE, Frederick Sterne, M.R.C.S., L.S.A., reappointed Medical Officer to No. 2 District of the Holborn Union.

SOUTHEY, Albert James, M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Slough Urban Sanitary District.

STAFFORD, Thomas Joseph, L.K.Q.C.P.I., L.R.C.S.I., appointed a Local Government Board Inspector, Ireland.

STOCKMAN, Dr., appointed to a vacancy on the medical staff of the Edinburgh New Town Dispensary.

SWEETING, Richard Deane Roker, M.R.C.S.Eng., L.S.A., late Medical Superintendent of the Western Fever Hospital of the Metropolitan Asylums Board, appointed an Inspector of the Local Government Board, *vice* Dr. Stevens, resigned.

TURNER, Philip Dymock, M.D.Lond., M.R.C.S.Eng., appointed Honorary Physician to the Westminster General Dispensary.

UBSDELL, Henry, M.R.C.S., L.S.A., reappointed Medical Officer for the Staverton and Rattery District of the Totnes Union.

WALKER, James Shirran Abernethy, M.B.., C.M.Aberd., appointed Assistant Medical Officer to the Salford Union Infirmary.

WOOD, Frederic C., L.S.A., appointed Resident Medical Officer to Nottingham Friendly Societies' Medical Institution, *vice* T. E. Rogers, resigned.

WRIGHT, Thomas Poynts, M.R.C.S., L.S.A., reappointed Medical Officer of Health to the St. Neots Urban Sanitary Authority.

DIARY FOR NEXT WEEK.

MONDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor W. Watson Cheyne: On the Etiology and Morbid Anatomy of Tubercular Diseases of Bones and Joints. Lecture I.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Dr. Angel Money: On Rickets.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Clinical Evening. Mr. Davy: A Case of Double Talipes Equino-varus after Operation. Dr. Beevor: A Case of Ossified Scalenus Medius. Mr. Allingham: A Case of Elephantiasis. Dr. Sidney Phillips: A Case of Erb's Paralysis. Dr. Beevor: A Case of Erb's Paralysis. Dr. Seymour Taylor: A Case of Severe Valvular Disease of Heart. Dr. Stephen Mackenzie: Case of Lead Paralysis.

TUESDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Arthur Ransome: The Milroy Lectures on the Etiology and Prevention of Phthisis. Lecture I.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Morphœa and Ichthyosis.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Dr. Henry Charlton Bastian, M.A., F.R.S.: On the Symptomatology of Total Transverse Lesions of the Spinal Cord, with special reference to the Condition of the Various Reflexes.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor W. Watson Cheyne: On the Etiology and Morbid Anatomy of Tubercular Diseases of Bones and Joints. Lecture II.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. P. Kidd: On Tubercular Affections of the Throat. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Q. Silcock: On Ophthalmoscopic Cases

HUNTERIAN SOCIETY, 8 P.M.—The President's Address. Dr. Hingston Fox: Notes and Cases Illustrative of Glycosuria.

HOSPITALS ASSOCIATION, Charing Cross Hospital, 8 P.M.—Mr. H. C. Burdett: The Financial Aspects of the Hospital Problem and how to Remedy some of the Existing Defects.

THURSDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Arthur Ransome: The Milroy Lectures on the Etiology and Prevention of Phthisis. Lecture II.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Mr. R. Brudenell Carter: On Ocular Symptoms in Nervous Diseases. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Angel Money: On Rickets.

FRIDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor W. Watson Cheyne: On the Etiology and Morbid Anatomy of Tubercular Diseases of Bones and Joints. Lecture III.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. P. Kidd: On Tubercular Affections of the Throat.

CLINICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Mr. Butlin: Two Cases of Glandular Tumour of the Tongue. Dr. Dickinson: Injection of Saline Fluid into the Veins in Diabetic Coma. Dr. Samuel West: Case of Cheyne-Stokes Breathing in the Course of Granular Kidney of Three Months' Duration. Dr. Pye-Smith: A Case of Acute Universal Dermatitis apparently due to the Administration of Chloralamide.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 2 P.M.—Dr. J. F. Payne: On Parasitic Diseases of the Skin other than Ringworm.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, W., 8.30 P.M.—Annual Meeting. Council's Report; and the President, Sir Edward Sieveking, M.D., LL.D., will deliver his Address.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

MARRIAGES.

DICKINSON—OXLEY.—On February 13th, at Christ Church, Linnet Lane, Liverpool, by the Rev. T. W. M. Lund, M.A., assisted by the Rev. Robert Irving, M.A., Edward H. Dickinson, M.A., M.D., to Emma, widow of the late Martin G. B. Oxley, M.D., of Liverpool.

SHEARS—JEVONS.—On February 18th, at the ancient chapel of Toxteth Park, Liverpool, by the Rev. L. P. Jacks, M.A., Charles H. Shears, M.R.C.S., and L.R.C.P.Lond., of Liverpool and Birkenhead, to Susan, fifth daughter of Henry Jevons, J.P. of Liverpool.

WOOD—ROBERTS.—On January 28th, 1890, at St. Luke's, Redcliffe Square, South Kensington, by the Rev. Herbert Maitland, cousin of the bridegroom, assisted by the Rev. W. Fraser Handcock, Vicar, and the Rev. H. H. Bartrum, Percy Moore Wood, M.R.C.S., L.R.C.P.Lond., late Government Medical Officer at Port Darwin, South Australia, son of the late Charles William Wood, Q.C., to Janet Sophie, younger daughter of Richard Willett Roberts, of 34, Redcliffe Square, and Gray's Inn.

DEATHS.

BUSH.—On February 14th, at 6, Gloucester-terrace, Hyde Park, suddenly, Richard Hake Bush, M.D., last surviving son of Colonel Richard Yeats Brown Bush, Bengal Army, deeply lamented. No flowers.

STANISTREET.—On February 3rd, at his residence, 3, St. James's Terrace, Malahide, very suddenly, Richard Stanistreet, Esq., M.D., aged 60 years.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2. Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu. Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalm M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1 Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstet M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Thr Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Opera Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Opera Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Opera Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dise of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Opera Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Wom S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Opera Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M

ROYAL WESTMINSTER OPHTHALMIC. *Operation Days.*—M. Th. F., 1.30; T S., 2.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S. Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthal F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2 30 and 5, T F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.3

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F. o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Th Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—I 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; D Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1 Electric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

MUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE FICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN RECEIVED ON THURSDAY MORNING.

MUNICATIONS respecting editorial matters should be addressed to the Editor, , Strand, W.C., London; those concerning business matters, non-delivery the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, and, W.C., London.

rder to avoid delay, it is particularly requested that all letters on the torial business of the JOURNAL be addressed to the Editor at the office of JOURNAL, and not to his private house.

IORS desiring reprints of their articles published in the BRITISH MEDICAL RNAL are requested to communicate beforehand with the Manager, 429 and, W.C.

ESPONDENTS who wish notice to be taken of their communications should henticate them with their names—of course not necessarily for publication.

ESPONDENTS not answered are requested to look to the Notices to Correndents of the following week.

USCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CUMSTANCES BE RETURNED.

IC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers Health if they will, on forwarding their Annual and other Reports, favour with *Duplicate Copies*.

QUERIES.

☞ *Queries, answers, and communications relating to subjects to which special artments of the* JOURNAL *are devoted, will be found under their respective dings.*

IC writes: As a hard-working country medical man, I would be glad of the ice of brother members as to the best way of spending a fourteen days' mer holiday so as to get the greatest amount of relaxation and change hout an extravagant outlay of money.

TREATMENT OF ALOPECIA.

M.A. writes: A gentleman, aged about 30, unable to grow moustache, , gives history of alopecia areata about three years ago. Hair now sparse, no patches of alopecia. Can any member suggest some treatment, and e hints as to diet and use of alcohol internally?

ANSWERS.

TH YEAR'S STUDENT had better consult a physician.

—Particulars as to the mode of obtaining the appointment of surgeon ler the Factories Act were given in the JOURNAL of September 14th, 1889, 53.

VASELINE.

BENJAMIN W. FORD.—Vaseline intended for pharmaceutical use ought er to be refined with the aid of acid. "Vaseline" was originally the protary name of an article patented by the Cheseborough Manufacturing npany. It is stated by this firm that it is necessary to use a carefully-sen crude petroleum, to avoid cracking during the process of reduction or centration, and to purify the residue simply by filtration through animal rcoal, without the use of acid or any chemical. Good vaseline may be gnised by the following characters: it should be completely volatile n heated in platinum, without giving any smell of burning fat (acroleïn) esin. When agitated with twice its measure of strong alcohol, it should ain practically undissolved. The spirit should not acquire an acid or line reaction, and should not give any notable precipitate on dilution n water. When agitated with cold concentrated sulphuric acid diluted n one-ninth of its weight of water, vaseline gives no marked increase of perature, and ought not to become very strongly coloured. It is not nified by solution of alkalies.

COTTAGE NURSES.

—Miss Broadwood's pamphlet on *Nurses for Sick Country Folk* is published . Sewell, 11, Stockbridge Terrace, S.W. The paper on "Cottage Nurses," ether with the discussion which followed the reading, is published by the pitals Association, Norfolk House, Norfolk Street, Strand.

MEDICAL DEFENCE UNION.

ESLIE PHILLIPS and A. GEORGE BATEMAN (Birmingham) write: Our ntion has just been called to a query from an "Irish Physician" in the RNAL of February 8th. Will you allow us to say that members of the ession resident in Ireland are eligible for membership of the Union? In we have at present many members there. We shall be happy to forward ication forms and particulars to any gentleman requiring them. We take this opportunity of saying that the executive are contemplating institution of an entrance fee to the Union almost immediately, and that bers of the profession joining the Union now would escape this.

TREATMENT OF BORBORYGMUS.

S writes: "Young Country Practitioner" will find his patient much ved by a draught composed of tincture of rhubarb and carbonate of mag- every morning for three or four days. The gurgling complained of is lly owing to the evolution of gas resulting from impaired peristaltic n; and rhubarb is well known for its action in strengthening the tone improving the secretions of the intestinal tract.

NOTES, LETTERS, ETC.

ERRATUM.—Mr. L. A. Taylor, L.R.C.P.Edin., M.R.C.S.Eng., was incorrectly described in the JOURNAL of February 15th as L.R.C.S.Edin.

SCALE OF MEDICAL AND SURGICAL FEES IN GERMANY.

IN the *Provincial Medical Journal* of February 1st, 1890, there will be found a translation, by Dr. R. R. Rentoul, of the scale of fees drawn up for the guidance of those called upon to "tax" medical accounts. Such a system has been for a long time in force in the legal profession of this country.

MEDICAL CASE BOOK.

DR. E. MACDOWEL COSGRAVE (Dublin) writes: In the JOURNAL of February 8th a correspondent makes a suggestion as to keeping cases on separate sheets, which could be bound up according to the disease or otherwise. The same idea occurred to me some years ago, and I drew up case sheets. After a time I showed one to Messrs. Danielsson and Co., and they have printed and published them since. Each sheet has spaces for family and personal history, symptoms, progress of case, etc., and on the top for the year, a letter, and a number.

When taking a case I enter the year and the initial letter of the surname, and, when putting the case sheet by, enter the number it occupies amongst sheets of the same letter. That is to say, if a man named Smith comes, and if this year I have already taken the cases of sixteen persons whose surnames begin with S., I head his paper "S. 17, 1890.' The case sheets of each year I keep in a separate portfolio, which is divided into alphabetical compartments. If I take out a sheet I can easily restore it to its place. Thus the sheet already described belongs to portfolio of 1890, compartment S., and fits in between 16 and 18. Messrs. Danielsson and Co., 52, Beaumont Street, W., supply case sheets and portfolios.

CHLORINE SOLUTION.

MEDICAL OFFICER OF HEALTH writes: If Messrs. Clark and D'Evelyn will refer to the *Lectures on the Principles and Practice of Physic*, by Thomas Watson, M.D., fourth edition, published in 1857, they will find in Lecture 88, page 910, on Scarlet Fever, a full account of this mixture and how to make it, and that an adult may take the whole pint in the day. I have used it for years in my private practice, my clubs and parish work, and in several cases lately I found it very useful in the influenza epidemic.

UNPROFESSIONAL ADVERTISING.

THE *Nationalist and Leinster Times*, Carlow, January 4th, 1890, publishes the following advertisement:—

"*Medical Notice.*—Dr. J. V. Ryan, M.B., B.Ch., etc. (ex-Scholar, Exhibitioner, and Lecturer, Cork Medical College) begs to say that he can now be consulted at his residence, No. 2, John Street, Carlow. Dr. Ryan will be happy to give medical advice gratis to poor persons on Tuesday mornings, from 9 to 12 o'clock.—December 14th, 1889."

THE ETIOLOGY OF INFLUENZA.

MEDICUS writes: With regard to the question as to the manner in which influenza is transmitted, whether by contagion or miasm, the following is, I think, an interesting fact: During the recent voyage of one of Her Majesty's Indian troopships from Bombay to Portsmouth, with about 1,600 souls, all told, on board, there were sixty-seven of the ship's crew admitted into hospital on account of influenza, while there was not a single admission for the disease among the officers, ladies, men, women, or children, numbering some 1,200 or 1,300.

If the disease is miasmatic in its origin, why were none of the military attacked, all being of course exposed to the same atmospheric influences? If it is contagious, it is equally strange why all the military escaped; for although the sailors occupy a different part of the ship from the soldiers, yet in such a circumscribed area it is not possible that some personal contact did not take place.

Perhaps some of your readers may be able to explain what appears to me to be a puzzle, and to report some of the theories regarding the etiology of the disease.

ARMY DOCTORS AND CIVIL PRACTITIONERS.

DR. THOMAS LAFFAN (Cashel) writes: I am free to confess that I am one of the numerous class who think that army doctors ought not to trench on the too confined, because too crowded, civic domain. If we had all the business that the hospitals rob us of we might indeed afford to be generous. Your army doctor asks on whom is he to practise if not on civilians, and my rejoinder is: "Happy is the man who is paid by salary for treating patients who are non-existing." Surely this naive admission will be seized on by some modern Joe Hume to supply argument for reducing your State salary. Might not, however, so delightful a state of things as pay without work content the most exacting spirit without coveting Naboth's little garden into the bargain? I was much amused at your correspondent's indignant disclaimer against trades unionism, while in the very next sentence finding fault with others for not acting as trades unionists. I must say that I am at one with him in his indignation on this last point. It seems to me, however, that we cannot use compulsion on army men, and that therefore we can only appeal to their sense of justice and of fair play. Too often by covering a local man, they keep out consulting men from fees which are as necessary to them as the ordinary ones are to the family doctor.

I agree with your first correspondent that we have done much for them, even though some of us have sinned against very proper trades unionism in the matter of the army reserve.

MEDICAL STAFF writes: A note from "Microbe" in the JOURNAL of February 15th, complaining of army doctors, seems to me to require some explanation, as I cannot conceive it possible that a man on our active list could possibly engage himself to a club, knowing he might be ordered away from wherever the place is at a moment's notice. Besides, though the regulations allow us to see private patients, so very few of us avail ourselves of the rule, that it seems to me more probable that "Microbe's" "army doctor" is retired, and of course acting perfectly within his right. May I ask "Microbe" to say whether I am right or wrong?

Uterine Disease discovered after Death.

Mr. W. F. Sheard (Putney) writes: On February 11th I was requested to make a *post-mortem* examination on the body of a single woman, aged 73, who was found dead three days before by the side of her bed. The appearances suggested an apoplectic fit, and the *post-mortem* examination confirmed this diagnosis. On examining the pelvis, I found the fundus uteri occupied by a large calculus, covered by what appeared to be only peritoneum, and adhering so closely that it was only with great difficulty it could be peeled off. Close by were the ovaries very much atrophied. The tumour was quite free and movable, except where attached to the cervical portion of the uterus, which was elongated and very thin. Bladder normal, and no signs of adjacent inflammation or adhesions. She had not to my knowledge complained of any pelvic symptoms.

The calculus is about the size of an orange, but of irregular shape and rough exterior, weighing a quarter of a pound. It much resembles a lump of asbestos such as are used for making gas fires, only solid and not perforated. Its large size renders it interesting, and I think must be of rare occurrence.

*** The calculus was probably a calcified fibro-myoma of the uterus.

Toogood *v.* Wilkes.

Dr. H. J. Manning (Salisbury) writes: Owing to the miscarriage of a letter from me dated January 27th last, which seems never to have reached you, the announcement on page 400 of the Journal of February 15th requires some explanation.

This action (*vide* Journal, December 7th, p. 1299) was instituted by the plaintiff against Mr. W. D. Wilkes, senior surgeon to the Salisbury Infirmary, for having, some twelve months previously, signed one of the certificates of lunacy by virtue of which plaintiff was placed under treatment in an asylum. Mr. Wilkes applied to a Judge at Chambers to stay the action, under Section 12 of the Lunacy Law Amendment Act, 1889. The application was successful, but the Judge, in giving his decision, reserved the question of costs, stating that he should give the defendant his costs if the plaintiff appealed. Plaintiff did not appeal, and the result was that defendant, although successful in his application, had to pay costs amounting to a sum not far short of £100. It was thought by Mr. Wilkes's professional friends in this neighbourhood that this was a burden which neither he, nor any other medical man similarly placed, ought in fairness to be called on to bear single-handed, and an indemnity fund has been started with the object of recouping the amount of his costs. As probably other members of the profession who are not resident in this neighbourhood may wish to assist, we ask you to be so kind as to give this letter a place in your next issue. I shall have much pleasure in acting as treasurer to the fund, and will acknowledge any sums that may be sent to my address.

Wilkes Indemnity Fund.

The following subscriptions have been received up to present date:—

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EXTRACTS FROM

THE MILROY LECTURES

ON THE

ETIOLOGY AND PREVENTION OF PHTHISIS.

Delivered before the Royal College of Physicians of London.

By ARTHUR RANSOME, M.A., M.D., F.R.S.,

Physician to the Manchester Hospital for Consumption and Diseases of the Throat.

Lecture I.—Pathology and Affinities of Tubercle.

The Curability and Preventability of Phthisis.—Search for Infective Material.—Koch's Discovery.—Pathology of Tubercle.—Toxic Principles Evolved by Bacillus.—Conditions of Growth.—Course of Infection.—Relation to other Pathological Organisms.—Contrast with Epidemic Disorders.—Affinities with Typhoid Fever.—Ague.—Glanders.—Actinomycosis.—Frambœsia.—Madura Foot.—Syphilis.—Cancer.—Leprosy.—Close Relations with Leprosy.—Micro-organism.—Pathology.—Endemicity.—Geographical Distribution.—Contagion.—Heredity.—Question of Identity.—Practical Conclusions.

TUBERCLE in its various forms at the present day carries off annually nearly 70,000 persons. In the form of phthisis, at ages between 15 and 45—the most useful stages of human existence—it kills one-third of the people who die at those ages, and nearly half between 15 and 35; moreover, in its prolonged and painful course it either prevents its victims from earning their livelihood, or at least interferes greatly with their daily work.

It is, perhaps, hardly necessary to defend the thesis that phthisis is both curable and preventable. The views until recently held as to the inevitable character and the incurability of phthisis are now altered; thus, Niemeyer remarks:[1] "Many a patient gets well who would formerly have been assumed to be the victim of tubercular, and therefore incurable, disease." Dr. Pollock shows[2] that many cases which were given up by doctors but outlived the prediction to arrive at old age, were undoubtedly recoveries from phthisis; many more were instances of an early invasion of the disease, with subsidence of the disease, and long tolerance of the deposit," and again (page 117) "the best authorities lean to the opinion that tubercle is capable of removal by absorption."

In his work on *Pulmonary Consumption*, page 324, Dr. C. T. Williams gives as the result observed in private practice that "a cure was effected in 4.6 per cent. of the cases; great improvement in 38 per cent.; the disease was stationary in 13.4 per cent.; but in 43.5 per cent. there was more or less increase." I have myself a list of more than 40 persons who have been under my own observation for many years, in whom the disease has made no progress, and who, therefore, may be considered as practically cured.

The evidence derived from *post-mortem* examinations of adults who have died of other diseases than phthisis also shows that a very large percentage of persons have suffered and have recovered from tubercular disease of the lungs; my colleague, Dr. Harris, found that in at least 39 per cent. of the necropsies at the Manchester Royal Infirmary there was evidence of cured phthisis. He also refers[3] to Cruveilhier, Rogée, and Déjerine's researches on this point, 50 per cent. of their cases, who did not die of phthisis, having shown signs of caseous or calcareous formations. Bollinger, in 56 similar cases, found 27 per cent. with evidence of healing. Landtacher, 26 per cent.; and Massini, 39 per cent. Evidently a very large proportion of our population suffer from tubercular disease, and recover from it.

With regard to the preventability of the disease, still less can any doubt prevail. In the last 30 years, if we take the returns of the Registrar-General as our authority, the annual rate of mortality has been reduced by more than one-third. In the three years 1858-60 the rate per million of persons living was 2,567. In 1888 it was only 1,541, a diminution of 1,000 per million; and if we take the population as about 29 millions, this means a saving of nearly 30,000 lives every year from consumption.

Nor is this improvement confined to England: "In 1857, 39.50 deaths from consumption were returned in the State of Massachusetts for each 10,000 of the population; in 1883 only 29.90. This decrease is too large to credit to greater accuracy in diagnosis and to the transference of consumption to other States, and is mainly attributable to the prevention of phthisis by improved hygiene."[4]

Evidence has been also forthcoming, of the strongest kind, of the influence of sanitary measures, and especially of good drainage and good ventilation, as a preventative of consumption.

So much has already been said upon the subject that it may well seem somewhat presumptuous in me to attempt to retread the path that has already been opened up and so well explored by men like the two Williams, Southey, Ancell, Treves, and a host of others.

Koch's great discovery alone, however, would have rendered it desirable and even necessary to pass under review the older researches into the etiology and prophylactic treatment of consumption. The full effect of Koch's great discovery upon our estimate of the secondary causes of phthisis has even yet hardly been correctly ascertained. The earlier years after 1882 were, in fact, mainly occupied with the researches of rival pathologists—Aufrecht, Spina, Klebs, Schottelius, Eberth, Malassez and Vignal, and many others discussed the essential influence of the newly found organism, and the possibility of zoogloœa-like forms of tubercle or of pseudo-tubercle.

Clinical researches were pursued in all countries, and numerous experiments on the inoculation of tubercle bacilli were undertaken and researches were made as to the presence of the virus in milk and other foods, in the air, in dust, on walls, and even in houseflies.

On the whole, it may be said that Koch's position has been only more firmly established by these observations, and that it must be acknowledged that whatever may be its mode of working, the tubercle bacillus is the specific cause of the disease. One consequence of the successful search for the "vera causa" of tubercle, and that perhaps not the least important, is that it thrusts aside all speculations as to the nature of tuberculous growths.

Scrofula and phthisis have been shown to be due to one and the same cause; lupus is recognised as tubercular disease of the skin; and the various forms of tubercle itself are seen to be due primarily to the extent of the irritation caused by the presence of the parasite and its products, secondly, to the efforts made by the surrounding parts to resist the invader.

Speaking of phthisis, Dr. C. T. Williams says:[5] "Reaching the alveolus through the breath, the bacillus enters the epithelial cell and causes proliferation by irritation. The alveolus becomes stuffed with cells, and if the irritation be a gradual process, it gives rise to a highly nucleated product—the giant cell. If the irritation be great, caseation is rapidly produced, though whether this be due to necrosis from overcrowded proliferation, or, as Mr. Watson Cheyne thinks, to a chemical change in the cells brought about by the action of the bacilli, is not yet determined."

Mr. Watson Cheyne himself says:[6] "Bacilli are inhaled into the air cells of a lung which is in a fit state, whether by predisposition or otherwise, for their growth. They at once attack the epithelial cells, and, in the first instance, cause their hypertrophy and multiplication. The bacilli growing in these cells produce poisonous chemical substances, and the cell, which in the first instance was stimulated to increased growth by a small quantity of the poison, soon succumbs to the increasing amount and undergoes caseation. Some cells or groups of cells are, however, stronger than others, and go on growing so as to form giant cells. These generally ultimately succumb, though in some instances they may get the upper hand and the bacillus may disappear; while this is going on inflammation spreads around, and the process creeps from air cell to air cell. I believe also that this view of the production of a poisonous substance by the bacilli may explain the fever and wasting of phthisis."

These views are confirmed by Veraguth and others.[7] Baumgarten[8] has even watched the development of epithelioid and giant cells, and describes the so-called epithelioid cells as arising from the action

[1] *Lectures on Consumption*, page 65.
[2] *Elements of Prognosis in Consumption*, page 68.
[3] "On the Curability of Phthisis," JOURNAL, December 21st, 1889.
[4] Flint quoted in Strümpell, *Textbook of Medicine, Amer. Trans.*, p. 213.
[5] *Pulmonary Consumption*, second edition, page 41.
[6] JOURNAL, 1885, vol. i, p. 170.
[7] *Arch. f. exper. Path.*, Band xvii.
[8] *Zeitschrift für Mediz.*, Band ix and x.

of tubercle bacilli on the fixed cells of the connective tissues, or on the epithelium. Out of the epithelioid cells the giant cells proceed. An increase of the nuclei takes place in them, while the partition of the cell body is omitted. This happens the more frequently the fewer there are of the tubercle bacilli, and the weaker their power of growth. If, however, an abundance of these bacilli are present, or their power of growth is increased, an irritation is caused in the walls of the vessels, and the white corpuscles migrate and gradually supplant the epithelioid cells, thus taking the upper hand in building up the disease already commenced.[9]

Weigert [10] also confirms this story of the formation of the giant cells. In Ziegler's words, we must "regard tubercle as an inflammatory product, the result of an irritation, an infection." [11]

Such constant association of the bacillus with the lesions of phthisis by no means excludes the possibility, often insisted on, of the secretion or production by the bacilli of certain unorganised morbific materials. As we have seen, Watson Cheyne attributes much importance to this secretion, and Dr. Wilson [12] says: "The constitutional manifestations of tuberculosis are not directly due to the bacilli, but to toxic principles evolved during their growth and multiplication. He quotes Nencki's chemical analysis of the tubercle bacilli, and his separation from them of a tetanising poison; and also Bonardi's demonstration in tuberculous sputum of certain organic bases, which caused disturbance of the nervous system when introducsd into rats and guinea pigs.

Dr. Coats, in his *Lectures to Practitioners*, page 185, seems also inclined to infer that it is not the bacilli themselves, but their products, that are harmful. It is unnecessary to recapitulate the characteristic points connected with the development and growth of the bacillus. For our present purpose it will be sufficient to recall to our minds, first, the small range of temperature within which the organism can be successfully cultivated (between 86° and 107° F.); secondly, the length of time (from two to three weeks) required for its development; thirdly, its tenacity of life in sputum, Fischer and Schill having found it virulent after 43 days in putrifying sputum, and after 186 days in sputum dried at ordinary temperatures; and, fourthly, the observation showing the antagonism that exists between the living elements, especially the wandering cells, the leucocytes of the body, and the bacillus, observations tending to show that, as a rule, the organism has a short life within the body, and that it can only maintain its presence for any length of time by the appearance of new generations to fill the places of the dying.[13] It hardly needed Koch's demonstration of the bacillus, however, to show the track by which it makes its way. A close relationship between the lymphatic system and tubercle had already been clearly shown by many observers, such as Virchow, Wedl, Rindfleisch, Wagner, Aufrecht, Buhl, Burdon Sanderson, and Treves.

Again, the mode in which the bacillus gains access to the system was noted long before Koch's time, the points of attack selected by the disease indicated that the infection comes from without the body; thus Cohnheim, in his work,[14] shows that a tuberculous or scrofulous product is mostly deposited in those parts of the body that are either most exposed to attack from without, or in which any virus coming from the outside may lodge for the longest time.

The demonstration by Koch of an organism that must in most cases come from the air, and that could in this way penetrate the lungs, or enter the lymphatics by sores, only served to make assurance doubly sure.

Tubercular bacilli were also found by Koch in dried and powdered sputum, by Cornil in the walls of rooms, by Dr. C. T. Williams in the air brought by ventilating shafts in Brompton Hospital, and by myself, though rarely, in the aqueous vapour condensed from the breath of patients in an advanced stage of consumption, and this latter observation was confirmed by Dr. C. Smith by means of gun-cotton respirators.

Another important result of Koch's discovery is that in placing tuberculosis undoubtedly amongst the class of microbic diseases, it imposes upon us the task of determining its affinities, and assigning to it its place amongst other such disorders. But even before the specific cause was established, its relationship with other infective disorders had been suspected. Both Villemin and Virchow compared tubercle to the granulations of glanders and the gummata of syphilis, and though the former separated scrofula from tubercle, he pointed out that they both shared, with syphilis, glanders and typhoid fever, the character of forming caseous material. Klebs and Cohnheim also pointed out the similarity existing between tubercle, glanders, syphilis, lupus, pearl disease in cattle, and even lepra, and they regarded them as closely allied in all essential points of their anatomical structure and history. In his Gulstonian lectures on tubercle, Dr. Southey also showed that typhoid lymphomata are very like tubercle, both in their composition and their course, affecting similar parts and leading to like lesions. He placed tubercle between cancer and these and other lymphomata.

Dr. Southey goes so far as to suggest that tubercle in its acute forms may even become epidemic, and he cites as instances of this form some cases recorded by Dr. Léon Colin in his paper on "Tuberculisation Aiguë." This view is, however, scarcely supported by the facts. I have read this paper, and find that his cases are mostly those of young soldiers who had recently joined their regiments, and M. Colin himself expressly points out that they may all have been the subjects of chronic phthisis before they came out, and the change from a temperate northern climate to a Mediterranean station had produced a sudden outbreak of acute disease. He does not suggest that it was a true epidemic, and he adduces the English army statistics as bearing witness to the danger of transferring men of northern climates to hot countries.

Tubercle, then, can only be said to be allied to ordinary epidemic diseases in the sense that they are all parasitic disorders. It may rather be regarded like leprosy as a type of an endemic disease. It by no means follows, however, that a disease need be contagious or epidemic because it is derived from without the body, and because it afterwards travels infectively along the channels of absorption or of circulation. Although infective, it need not be infectious, and may be incapable of being conveyed directly from the body of one patient to that of another.

Whether contagious or not, phthisis is sharply marked off from ordinary exanthematous disorders, not only by its specific micro-organism and by its endemic habit, but also by its usually slow and creeping and irregular course, and by the permanent growths and alteration of structure and destruction of tissue that are brought about by the bacillus.

In searching for the diseases kindred to tubercle, we must look for those which are chronic, endemic, irregular in their course, and produced by the action of a micro-organism which is of comparatively feeble power of irritation, but which, nevertheless, brings about inflammatory action, tending to produce permanent changes and necrosis of the tissues, and travelling along the track of the lymphatics or in the current of the blood.

Chronic glanders or farcy includes most of these points of resemblance. It is produced by a bacillus discovered by Drs. Löffler and Schutz, which has been cultivated in blood serum and isolated, and which produced the specific disease by inoculation into horses, guinea pigs, rabbits, and field mice. A close affinity to tuberculosis may also be traced in such diseases as actinomycosis, frambæsia or yaws, and in the fungus disease of India or Madura foot. The origin of two of these disorders is, however, too obscure to allow us to catalogue them in due order. It is even doubtful whether the fungus found in the dark variety of mycetoma is essential or adventitious, and frambæsia is more acute in its course than most forms of tubercle.

Actinomycosis certainly presents many features in common with tubercular disease. It is characterised by the formation of nodules, somewhat resembling tubercular growths, and showing, perhaps, some relationship in their mode of production. Actinomycosis would also seem to preserve a somewhat endemic character. It has been observed by Claus that, in Bavaria, the cattle affected by it were chiefly confined to three districts. At present, however, it is chiefly an epizootic disease, and, moreover, the organism causing these lesions belong to an order of algoe distince from the bacillus of tubercle. It is allied to the hyphomycetes, similar to aspergillus, or the pebrine of silkworms, the saprolegnia which causes salmon disease, the oidium of vines, and of favus, ringworm, and thrush. In spite of its infective character, therefore, and of the somewhat similar nature of its course and the injuries it inflicts, it cannot be placed in the same order as tuberculosis.

But it must be acknowledged that the closest resemblances are

[9] See also Cornil *Etudes Expérimentales et Cliniques sur la Tuberculose*. Verneuil, Paris, 1887, p. 14.
[10] *Deutsche med. Wochenschrift*, 1885, No. 35.
[11] *Tuberculose und Schwindsucht*, p. 279.
[12] "Etiology and Prophylaxis of Tuberculous Diseases," *Medical News*, June 8th, 1889.
[13] Koch's Etiology of Tuber., *New Syd. Soc.*, p. 98.
[14] *Die Tuberculose vom Standpunkt der Infectionslehre*, p. 20.

be found between tubercle, syphilis, and leprosy[15]. All these orders are of microbic origin, they are capable of varying grees of intensity, and possess the power of renewing their ages after varying periods of dormancy. They produce growths t are strikingly similar in pathological characters, and they her are or have been universal in their distribution apart from siderations of climate, race, and habits of life. Syphilis, it st be admitted, is in certain points more like exanthematous ease than it is like tuberculosis. Thus it is highly infectious, l it is not very discriminating in its victims. It does not usually ur, it has a fairly definite period, and has a number of distinc- e rashes, and in its initial stages is usually acute in its nifestations. Nevertheless, if we can trust the researches this point, it appears to be due to a bacillus, which is able of cultivation, and which takes a special kind of stain, l this organism apparently possesses the power of remaining ent for long periods of time. It is found in all lesions of philis, and these lesions, as in tubercle, are apparently due to slow irritative action of the organism, though they are con- ntly more vascular in character than true tubercle. The most minent feature of these lesions is the collection around the sels of round cells (? leucocytes), but in the more chronic pro- cts of the disease epithelioid and giant cells are found. The ential part of their destructive action appears to be due to their iltration of the tissue and the subsequent necrosis of the part m chronic inflammatory action, just as we have found it to be tuberculosis. When the mass of inflammatory tissue is con- erable it forms tumours, which in their earlier stages are with ficulty distinguished from tubercles. These gummata, how- r, differ from tubercles in being composed chiefly of trans- ent gelatinous material, which, in caseating, as it does later on, omes tough and fibrous. They also rarely soften, though they y cause destruction of surrounding tissues by ulceration, ving a mass of scar-tissue as their ultimate result.

Their most usual distribution also throughout the body differs newhat from that of tubercle, though when they attack the gs the diagnosis from phthisis becomes very difficult. The rse of the virus is along the same channels, and is mostly along course of the lymphatic vessels.

But of all these disorders, unquestionably the nearest approach to ercle is to be found in leprosy. In their pathology, in their rse and distribution, and in many other features, the diseases w the closest relationship.

. A micro-organism is closely associated with each disease, and bacillus of leprosy is so similar in appearance and its reception staining fluids, that the most accomplished bacteriologist can l little or no difference between it and the bacillus of tubercle. mgarted comes to the conclusion that both in morphology and ining they cannot be distinguished. He grants, however, that y produce decidedly different nosological results.

The bacilli of lepra are also found in much larger proportion in diseased tissues than those of tubercle; moreover, hitherto it not been found possible to produce the disease by inoculation, nough tissue implantation has recently been successfully per- med. Hitherto, in fact, it has been impossible to obtain pure tivations of the organisms.

I. Leprosy is like tubercle in its mode of attack. The entrance the virus takes place at the most exposed portions of the body. in phthisis the atmosphere conveys the bacillus to the air sages, so in leprosy, the bare hands and face, and in countries ere these are uncovered, the feet, are the first parts to receive ury. The unshod Japanese are especially liable to the disease. ppears, however, "that the epidermal covering forms an im- etrable varnish to the parasite," and that some injury to this ecessary before infection can take place.

II. After its entrance into the body leprosy is usually very v in its progress, creeping infectively through the body, and n with long intervals of latency, in this respect also resem- g tubercle. The main point of difference is the greater onicity of leprosy, which lasts on the average 10 or 12 years, ead of 3 or 4 in the case of phthisis. Both diseases tend mately to a fatal issue, but both are capable of becoming ab- tely quiescent and inert for long periods of time.

V. The pathology of the two diseases is also strikingly similar. nough leprosy chiefly affects the skin and mucous membranes, nerves and the bones, in the tubercular forms of leprosy, the structure of the leprous "knots" gives ample evidence that they are formed in the same way as tubercles, by the slow irritation of the bacillus. Baumgarten points out that the large epithelioid lepra cells so-called arise through the increase of the fixed tissue cells, whilst the lymphoid elements of the leprous growth are migrated colourless blood corpuscles. It is interesting to note, with reference to the site of leprosy, that it attacks internal as well as external organs, and that it has even been found in the lungs; on the other hand, tubercle bacilli have recently been found in the nervous system.

V. Both are distinctly endemic diseases, and they are or have been found in almost every country where human beings are collected together in any number.

They are equally uninfluenced by climate and temperature. As phthisis is now so leprosy was formerly, endemic, not only in Asia and Africa—where, perhaps, it originated—but also throughout Europe. We may leave out of sight for the present the question of its translation from the East by the Crusaders; but no doubt can exist as to its widespread prevalence in Europe both before and after that period.

I have here a map (see next page), kindly lent to me by Dr. Dreschfeld, showing the distribution of lazar houses throughout the British Isles in the Middle Ages. It will be seen that they are very numerous, and so spread out through the length and breadth of the land as to indicate a very wide prevalence of the disease. It is probable also that many have been omitted; thus, Newcastle-upon-Tyne is not marked, and yet I have learnt from Mr. Marsden Gibson, the Master of the Hospital of St. Mary Magdalene, that it was originally founded for the benefit of lepers, and perhaps the Hospital of St. Thomas the Martyr also. The funds of most of these places have been for the most part diverted to other purposes.

Even at the present time its presence is sufficiently manifest in the four quarters of the globe to show that it is independent of climate. (See map.)

In Europe it exists in somewhat large proportions: in Norway and on the Russian coasts of the Baltic and the Gulf of Finland, and on the shores of the Black Sea. It is abundant in Roumania and parts of Turkey and Greece. in the North of Italy, and on the Riviera. In Sicily and on the coasts of Spain and Portugal; Iceland is also deeply stained with the disease tint. In Africa it will be seen to exist around almost the whole of its vast coast. It is widely spread in Morocco, Tunis, Tripoli, Egypt, and Abyssinia, at the Cape, in Madagascar, and Upper and Lower Guinea.

In America it exists in Greenland, Quebec, and in many of the northern and most southerly States, Alabama, New Orleans, and Texas. It is widely spread in Mexico and California; in South America the northern and eastern portions are widely stained as far south as Monte Video.

In Asia, Arabia, Persia, Turkestan, the coast of China, Siam, and Japan are all more or less tinctured with it, but India is its great hot bed.

In Australia, Queensland on the north and New South Wales and Victoria in the south are affected by it, and both Tasmania and New Zealand are darkly coloured.

It seems to have a special predilection for islands; thus, in addition to those I have already mentioned, the Grecian Archipelago is especially subject to it, Crete, Tenedos, Patmos, Rhodes, and Samos worst of all. It is found also in Cyprus.

In Asia, the Philippines, the Moluccas, the Caroline Islands, the Mariannes, Andamans, Nicobar, and the Isles of the South—Borneo, Sumatra, and Java.

Off America, the Antilles, the West Indian Islands.

Off Africa, Madeira, the Canaries, the Cape de Verde Islands, Socotra, the Isle of France, the Seychelles, St. Helena, and Robben Island, off the Cape of Good Hope, is made into a leper sanatorium.

In the Pacific, we have only too recently heard of its ravages in Hawaii, and it exists, though less abundantly, in Tahiti, Fiji, New Caledonia, where it seems to have been recently introduced.

It is obvious from this long list of habitats of the disease in the past and present, that like phthisis it is independent of climate, even now it prevails alike in Norway and in India, and though certain races are more prone to it than others, none are entirely exempt. It is also more common amongst the poor and filthy than amongst the rich and cleanly, but it is not confined to this class, and appears amongst the well fed as well as amongst those who who are confined to vegetable diet and those who feed upon fish.

VI. Precisely the same controversy as is now waged with regard to phthisis is carried on as to the contagiousness of leprosy. In early times and middle ages, in all countries, no doubt at all was entertained upon the point. In all Eastern countries the leper was "unclean," his clothing and dwelling were equally regarded as contaminated, and in Europe all kinds of devices were adopted to avoid contagion.[16]

[15] rhaps at some future time when the microbe of cancer has been more fully made out, this disease may be added to the group.

[16] He wore a distinguishing costume, and carried a bell or clapper, with which to warn those he met. He had a separate "borde" or hut, or slept under a hedge; he might not even look into any well or fountain, or drink from any stream but his own, and must keep to the leeward of anyone whom he might meet or speak to. He had to wear gloves when he passed over a bridge, and could go nowhere without a special licence (Curiosities of Leperdom, *Cornhill Magazine*,

THE LEPRA HOSPITALS.

OF THE

BRITISH ISLES.

DURING THE MIDDLE AGES.

Prepared by Dr J. Dreschfeld
Professor of Pathology.
in the Owens College Manchester.



GEOGRAPHICAL DISTRIBUTION OF LEPROSY.

AFTER LOMBARD.



PREPARED BY DR J. DRESCHFELD
PROFESSOR OF PATHOLOGY
IN THE OWENS COLLEGE MANCHESTER

This belief in the contagious nature of leprosy still remains in many countries, and lepers are carefully isolated in Norway. But the greatest differences of opinion prevail on this question amongst medical men.

In the Report of the Royal College of Physicians in 1860, the Commission state decidedly "that the weight and value of the evidence they furnish is greatly in favour of the non-contagiousness of leprosy" (p. 7); and again: "The all but unanimous conviction of the most experienced observers in different parts of the world is quite opposed to the belief that leprosy is contagious or communicable by proximity or contact with the disease." Just as we shall see presently in the case of phthisis, they quote the experience of hospitals and the immunity of the attendants in leper asylums.

In the discussion on this question at the International Congress at Copenhagen, in 1884, the two chief speakers—Dr. Zambuco, of Constantinople, and Dr. Hansen, of Christiania—took entirely opposite views; the former maintaining that leprosy is not contagious, but is hereditary, and the latter that it is contagious, and not hereditary. Dr. Danielssen, the father of research on the subject, also takes the non-contagious view, and says: "According to my observation, heredity is sufficiently proved, whilst I have not found one single well-proved case of infection."

VII. With regard to heredity, Dr. Hansen states that of 160 Norwegian lepers who had settled in the States of Wisconsin, Minnesota, and Dacota, none of the offspring, in some cases as far as the great, great grandchildren, have shown signs of the disease. He points out that there could have been no question of heredity in the case of the great outbreak of the disease in Hawaii. A recent writer on the subject, Dr. Albert Neisser, also considers that leprosy is not an hereditary disease, though he acknowledges that the susceptibility of the individual appears to be of more importance than in any other bacterial disease.

It is not surprising that with all these points of similarity, the question should be asked, as it is by Danielssen, whether "Leprosy is not itself a tuberculous disease?" The circumstance that the bacilli of tubercle are larger and less disseminated in the tissues, ought not to be invoked as a sufficient diagnostic characteristic, nor can we draw any more conclusive argument from the mode of development of these bacteria. "The manner in which infection in leprosy takes place, the long and silent period of incubation which characterises it, recalls in the highest degree the infection of tubercle."[17]

Dr. Danielssen further affirms that tubercular disease is more common amongst lepers than among the general population, but even if this were true, the fact might fairly be ascribed to the general low state of health of lepers, making them more vulnerable to the attacks of the tubercle bacillus. This statement is, however, contradicted by Dr. A. Hansen, who, as I am informed by Dr. Stabell, of Bergen, in answer to a question of mine, states that "Tuberculosis, which was formerly very prevalent in the leper hospitals of Norway (and no doubt the patients were infected in the Hospitals) is now more seldom seen, because the hospitals are now not so crowded as before. Tuberculosis, indeed, attacks lepers as it does other people, but the acute form is not more frequently seen amongst phthisical lepers than amongst other persons affected with phthisis."

We cannot therefore allow ourselves to be led into affirming the identity of the two affections simply by such considerations as these. The strong tendency towards certain tissues as the favourite haunts of the two organisms, the fact that the lepra bacillus cannot be cultivated, the difference in their rate of progress, and the fact that though tubercle may attack persons affected by leprosy and *vice versâ*, there is no special proclivity to this interchange, shows that though they are probably closely related, there is no identity to be discovered between them. Lastly, the ready inoculability of tubercle, and its facility of cultivation, form a marked contrast to leprosy.

Certain practical conclusions may perhaps be drawn from this review of the pathology and affinities of tubercle which may assist us when we come to deal with the question of its preventability:—

1. That the bacillus which provokes the disease comes most frequently from outside the body, and is conveyed by means of the atmosphere.

2. That it requires a certain length of time and certain narrow limits of temperature within which it can develop.

3. That when it is entrenched within its encapsulating tubercle it is placed at a distance both from the currents of blood in the vessels and from air entering through the lungs.

4. That its life in the body is usually a short one, and that the living tissues are antagonistic to it, or, to use Dr. Moxon's words, that "the life of the bacillar parasite is difficult—easily discouraged by unfavourable circumstances—like an aphis by an easterly wind." And

5. That the resemblances which it bears to the bacillus of leprosy may encourage us to hope that, as this latter disease has been banished from our country, so also may the different forms of tuberculosis ultimately disappear.

August, 1889, p. 143, quoted from Grosley's *History of Troyes*). In the 14th century they were supposed to be associated with the Jews in a horrible plot to poison all the springs, wells, and rivers with their blood; and in 1321 a fearful massacre of them took place in France. At Chinon 160 were burnt in one day, and in Périgord and Languedoc, in a plague panic, fires were lighted everywhere, and lepers and Jews heaped thereon.

[17] *Loc. cit.*, p. 16.

AN ADDRESS
ON
ENDEMIC DISEASE IN BRITISH GUIANA
AND ON
CERTAIN RACIAL SUSCEPTIBILITIES.

Delivered at the Annual Meeting of the British Guiana Branch of the British Medical Association.

By ROBERT GRIEVE, M.D.,
Surgeon-General British Guiana; President of the Branch.

Improved Condition of Coolie Immigrants.—Twenty years ago it was said authoritatively that the Indian immigrants arriving in this colony during the period of their acclimatisation were peculiarly liable to suffer from ulcers and chronic dysentery. It is most satisfactory to be able to note that with regard to the prevalence of the first of these diseases of late years there has been a marked and unmistakable improvement. Some of you may even more clearly than I do remember the number of ulcers in many estates' hospitals ready at any time to take on malignant action, and which were a continual source of trouble and anxiety to all connected with them. An appeal to figures proves the progress that has been made. In the year 1875 ulcers formed 13 per cent. of the admissions to the estates' hospitals; in 1888 the percentage of ulcer cases amongst the admissions was 4—a very large reduction. That the change may be taken as an indication of an improvement in the sanitary condition of the coolie seems to me undoubted. It shows an advance in sanitation, using the term in its most comprehensive signification as including housing, feeding, and conditions of work. It is a fact which yields much encouragement. I specially mention food, because it seems to me that better feeding has had a special and direct bearing on the question, for the ulcers partook of the scorbutic character. Whilst, as now stated, improved sanitary surroundings are entitled to perhaps the greater portion of the credit, still I think for some share of the progress we are indebted in late years to improved means of treatment by the adoption of antiseptic surgery and its attendant cleanliness. Ulcers are now lessened in number because they are checked at the outset. I am sorry to say that the other class of diseases before mentioned—namely, bowel affections—have not diminished in frequency as have ulcers. The percentage amongst the admissions to hospitals due to these diseases remains practically the same now as it was in 1875. To my mind this is an indication that improvement of water supply has not kept pace with the advance in other matters of sanitation. During the last year or two in many districts a supply of drinking water of increased purity has been available, and though the effects of the change are as yet perhaps not very marked, they may become so in a short time.

Phthisis.—I pass now to another disease, phthisis, of which the increase in this colony is undoubted, and, so far, progressive. This increase has received notice more than once, and very fully, in a paper by Dr. Ferguson in the hospital reports. I wish to direct attention specially to a phase of its local development, which is also noticed by Dr. Ferguson—the different clinical history which the disease presents as it occurs in the two races form-

g the largest proportion of our very mixed populations. nongst the blacks the disease, considered from the clinical side, generally of the rapid acute form known as "galloping consumption"; or, looking at it from a pathological point of view, it esents in that race the form of tubercular caseous pneumonia. ıe phthisical East Indian, on the other hand, presents the clinical aracteristics of the slower and more variable forms, or, speaking thologically, suffers most commonly from tubercular interstitial ıeumonia or peri-bronchitis. Now, why this difference? We .ve as yet no reason to doubt that the bacillus of the disease is both instances alike, but this is a matter which it would be teresting to have settled by direct observation. The conditions ıder which the individuals live here are in both races practically e same. The difference, therefore, does not appear to arise from ıy factor acting immediately and directly on the individuals, ıt to be connected with something more remote. To me there ems but one solution of the matter; the peculiarity depends on inherited differences, in fact, on racial characteristics. Now, racial characteristics are in truth only the inherited results of fluences exerted on individuals acting through an unknown ımber of generations, by investigation into the conditions of dividual existence under which the various races have been ought to their present condition, we may arrive at some notion to the causes of the diversity in liability of the races to various seases, and from that obtain a clue to the varying tendency to sease in individuals of the same race which is universally recogsed, if not understood—a very speculative field of inquiry it may said. I admit this; but it is one that might, I think, be worked advantage, at least to the extent of ascertaining the facts with gard to the differing proclivities to disease evidenced among the ırious races inhabiting the colony. The broad fact stands out ear and distinct, that though living under identical climatic and nitary conditions, each of the races comprised in the population the colony is more specially prone to peculiar diseases. o emphasise this fact is of value in this time of devoon to the study of the other element in so many comlaints, the organisms, which we have a right to assume are ıe exciting causes. We think so much of the bacilli that we e apt to think too little of the soil in which they grow. ut that the factor is not even of secondary importance I think very observer in these regions will admit. The special local conition which has contributed to the continuous spread of conımption already noticed, is, in my opinion, the great and everıcreasing overcrowding in the dwellings of the labouring classes. vercrowding is but a synonymous term for deficient ventilation. he number of people who can be safely housed in a room, in this limate, entirely depends upon the amount of air which is allowed pass through it. When, as is too often the case, every chink ırough which air might enter is closed, and the sleeping accomıodation utilized is limited only by the number that can find om to lie on the floor, then the conditions which favour the ıultiplication of the tubercle bacillus are to be found in fullest rce. In Europe the open-air treatment of phthisis is coming ıto vogue, and it is claimed with success. Here I have pleaded r the adoption of the open-air method of prevention, and I trust hat such pleading has not been altogether in vain.

Pneumonia.—Acute inflammation of the lung tissue is far from ncommon in this colony, but it appears certain that this seldom omes from exposure to cold or climatic changes, it is either of ıalarial or septic origin. The history of the outbreaks of the isease in various localities points to these being dependent, in ıany instances, for their extension upon communication from erson to person; they are local epidemics of contagious pneuıonia. Many of you have no doubt seen examples of such outreaks, mysterious sometimes as to the origin of the first case, but iven one case the spread from individual to individual by direct ommunication is to be discerned plainly enough. Detailed acounts of such occurrences are of the greatest value, and with you t rests to put them on record as they fall under your notice.

Fever.—At least a full half of the cases treated in the estates' ospitals of the colony are classed as fever. Better and more xact information on the fevers of the colony would be of imıense value both from the curative and preventive aspects. With he ever present malaria looming large in view, the natural tenlency is to ascribe to its action, direct or remote, every febrile ymptom, even when unmistakeable organic change may be conıected with it. This is the more excusable as the range of temperature bears in almost every case more or less the impress of he malarious influence. But are we to assume from this that all the fevers of the colony are solely of malarial origin? For one, I am not quite ready to agree to any such assumption. I believe that specific fever organisms of one kind or another, apart from the malarial, live and thrive amongst our population, even though when the disease depending on their presence manifests itself, it bears an outward resemblance in one symptom at least to malarial fever. The pyrexia often varies in its progress from day to day, almost certainly to some extent following the course of the pyrexia of a fever of malarious origin. No one, I presume, questions the fact that the great bulk of the fevers of this colony are undoubtably malarial fevers, either of the intermittent or remittent type, both equally well known and recognisable; still it is equally true that fevers which fall readily in neither class are constantly met in practice. From my own observation as far as it has gone, I have received the impression that amongst the fevers in this doubtful class there are some which are instances of diseases of a kind completely undescribed, and therefore in that sense new. Again, as hinted before, we may have amongst them examples of the action of fever poisons of kinds familiar in other regions, but when disease results from such causes in this colony, the local conditions impress it with some peculiar and so far undescribed characteristics.

Enteric Fever.—A subject so wide as this is manifestly too great to be even touched on in its full extent in an address like the present. What I have to say just now will be limited to one phase of it, and this may be perhaps most easily and clearly brought into view by putting it in the form of a question. Does true typhoid or enteric fever ever arise in the colony? We know that the range of this disease is most extensive; certainly it has now been shown to prevail at times almost in every part of the globe in which Europeans reside in numbers, and how much of the earth's surface is comprised by this definition? It has been recorded as having prevailed in countries near to this colony, and having climatic conditions almost identical with it. Yet there is not on record a history of a clear and unmistakable case of specific enteric fever of local origin. There is *primâ facie* no reason in our material condition for this exemption, though there are certain facts which would go far to explain the absence of the occurrence of anything like epidemics of the disease. On my part, I believe that investigation would show that typhoid is one of the diseases in regard to which the races of men vary much in their susceptibility to its influence. It is pre-eminently a disease of white races, and here we have no white troops or large body of young Europeans who, in all tropical parts, supply the soil in which the poison operates. For some years past I have been watching for a case of undoubted typhoid, and except in one instance, in which the disease was contracted in the United States, I have not been satisfied of its existence. In the early days of my professional life, now some thirty years ago, I had plenty of opportunities of becoming acquainted intimately enough with the two forms of fever, typhus and typhoid, then differentiated only at a comparatively recent period, for in the Scotch hospitals in which in these years I was resident, there were plenty of both kinds to be seen. Since these days, happily, I have not had any opportunity of renewing practical acquaintance with typhus, but this has not been the case respecting typhoid. In the course of a rather varied professional experience before coming to the colony, I met the disease under various circumstances, but not infrequently; so coming here, I was quite ready to recognise the complaint if its well-known features had come under my notice, but this has not occurred. Here I may explain that I look upon a disease like typhoid as a well-defined and recognisable entity. I am not inclined to accept any one symptom separately as constituting the disease, nor am I more inclined to accept a single pathological fact divested of all connection with symptoms or history as constituting the disease. Ulceration of some portion of the intestine is a pathological fact, displayed very commonly on the *post-mortem* table of the Colonial Hospital. It may be at times that the ulceration is confined to Peyer's patches, and may appear like the ulceration of typhoid, but this fact, divorced from all connection with a history of the case during life which in the least resemble the history of a case of typhoid, is not to my mind conclusive evidence of the presence of the disease.

Intestinal Ulceration.—In this we come upon a fact opening out another field of observation, namely, the investigation of the causes of the extensive ulceration of the intestines, which undoubtedly are a pathological condition much more common here than in England.

Bright's Disease.—Before closing there is one other disease

which I should like to mention, namely, Bright's disease. Of its great prevalence in this country there is now no doubt; but, although this is well recognised, there has not as yet been much done in the way of describing the clinical or pathological varieties which are met with locally. Such an investigation is necessarily the foundation upon which any solid work in connection with the elucidation of its etiology or with its treatment must rest, and I trust it may be taken up in earnest by some of our members.

Intestinal Parasites.—There is only one other matter to which I may refer and then I am done, namely, the question of local intestinal parasites and their influence upon health. The identification of the anchylostomum was made some time ago by our colleague, Dr. Ozzard, and we look for further information on it from the same quarter; but there are many others which are plentifully found, and we stand much in need of these being carefully catalogued and described.

I have thus in a most discursive way covered a considerable space; but I have only scratched the surface of the soil which lies open for cultivation with the certainty of large returns to the diligent worker. Trusting that such scratchings may give some indication for the deeper ploughing to follow, I bring them before you, and I feel confident that competent labourers to undertake the task will not be wanting.

A CASE OF DILATATION OF THE STOMACH ACCOMPANIED BY THE ERUCTATION OF INFLAMMABLE GAS.[1]

By JAMES McNAUGHT, M.D., M.R.C.S.,
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The case I am about to relate occurred in a factory operative 24 years of age. He is a tall and rather spare man, somewhat pale, but not anæmic. He gives a history of stomach trouble dating back four and a half years. At the beginning of the time he suffered chiefly from pain after eating, but for the last three years his greatest complaint has been of acidity and flatulency. He has occasionally but only rarely vomited, mostly after dinner, but never at any time has he brought up any blood, nor such copious quantities as would point to ectasia. During the last two years he has suffered most severely from flatulency and in connection with this the most remarkable feature of the case made itself evident. His work requires him to rise early, and on one occasion after striking a match to see the time, and when holding it near his mouth, an eructation of gas from the stomach took place. To his consternation the gas took fire, burned his face and lips considerably, and set fire to his moustache. On a subsequent occasion a similar accident happened. At the time I saw him flatulency was extreme and persistent from one meal to another, and he was also much troubled with rancid and sour eructations. His appetite was good, tongue broad and pale, and bowels regular. In examining the abdomen the subcutaneous fat was noticed to be less than normal; there was a deep depression running across the abdomen a little above the umbilicus, but below this there was evident distension and marked tympanites. The lower line of stomach dulness was about three inches below the navel on the left side, and from this point it extended in a curved line to the right, where it reached the level of the umbilicus. A semilunar area of dulness showed the presence of a considerable quantity of food in the stomach, and above this a highly tympanitic note was given extending up into the left hypochondrium. Occasionally a splashing sound could be well elicited, but on other days it was absent. There was a little, but not marked, tenderness midway between the umbilicus and the ensiform cartilage. It was evident from these signs that the stomach was dilated. The stomach tube was used on several occasions about five hours after meals, and quantities of fluid and *débris* of food varying from one to two pints or more obtained. At first it consisted of a soupy matter smelling exactly like sour yeast, and when it was allowed to stand, a layer of frothy stuff half an inch thick, like dirty yeast, formed on the top. This was full of bubbles of gas which could be seen forming and bursting as it stood in the vessel, while below there was a considerable quantity of clear fluid through which gas bubbles could be seen rising, and at the bottom there settled a sediment of grumous remains of food in a very fine state of division, resembling the sediment from pea soup. The fluid after filtration gave an acidity equal to 3.2 grammes of caustic soda per litre, and it was found to contain 0.55 gramme per litre of volatile acid, and 0.18 grammes of lactic acid per litre, the residue, equal to 2.4 grammes of caustic soda, being due to mineral acid or acid salts. A strong reaction was obtained with methyl blue and congo red.

The microscope showed enormous quantities of yeast and some sarcinæ, with various remains of food At first I was unable to detect any bacteria, but subsequent more careful examination of the clear fluid showed their presence in great numbers. The fluid extracted from the stomach a week later gave an acidity equal to 2.44 grammes of caustic soda per litre, and of this 0.26 gramme was due to volatile acid, and 0.4 gramme to lactic acid. One hundred and fifty cubic centimètres were put in a flask connected with a gas-collecting apparatus, and kept at a temperature of 100° F. In a few hours 40 cubic centimètres of gas came off, and when a light was applied it exploded with a loud report and burnt with a blue flame. Analysis of a portion of the gas subsequently collected, which I owe to the kindness of my friend Dr. Bailey, of Owens College, Manchester, gave

CO_2 – 56 per cent.
H – 28 „
CH_4 – 6.8 „
and residual air 9.2 „

That the inflammable gas existed in the stomach itself was put beyond question by pouring water into it in a thin stream through a tube and igniting the gas as it issued therefrom owing to the displacement. Only one experiment of this kind was made, as the result of the first was to produce a flame of dimensions alarming to both the patient and myself. The acidity of the stomach contents was carefully tested on many subsequent occasions, the details of which it would be tedious to give here. Suffice it to say that it varied from 2.4 grammes of caustic soda per litre to as high as 4.2 grammes. The volatile acid and lactic acid were proportionately greater when the acidity was less. Thus I find when the acidity was 4.1 grammes per litre the lactic acid was 0.3 gramme and the volatile acid 0.24, but when the total acidity was 2.55 grammes of caustic soda per litre the volatile acid was 0.72 gramme and the lactic acid 0.18 gramme. No doubt this depended partly on the food taken, but chiefly on the fact that when large quantities of HCl were present the formation of lactic acid and butyric acid by fermentation was hindered. I was at some pains to make certain the nature of the acid, because at first sight it seemed impossible that fermentation could take place in a medium containing so large a quantity of mineral acid. I found, however, that the quantity of mineral acid was never appreciably less than 2 per mille and generally much higher. The influence of the acid on the fermentation I shall return to later.

I had evidently to do with a case of stenosis of the pylorus and subsequent ectasia. The treatment was directed to removing the residuum of food from the stomach by means of the tube, once daily at least, and administering various antiseptic agents. At first his diet was limited to milk and Benger's food, fats and vegetables being excluded, and a mixture containing bismuth, carbonate of soda, and magnesium and carbolic acid in chloroform water was given him. Under this treatment he improved very much. The quantity of matter remaining in his stomach five or six hours after a meal was lessened to about half a pint, and the quantity of yeast steadily diminished till none was recognisable with the naked eye, though it was always found after cultivation. Examination of the remains of food showed that large quantities of starch grains were always left, and when he had, contrary to orders, partaken of flesh or egg, that no trace of these could be found. This diet was therefore altered; the Benger's food was stopped, lean minced meat with very little bread was given at dinner, eggs beaten up in milk or boiled were taken at breakfast or tea, and no fat or vegetables allowed. I next directed my attention to the question of preventing the fermentation by drugs. With the view of determining the agent which, while innocuous to the patient, was most effectual for that purpose, I made a number of experiments by adding definite quantities of salol, Sanitas fluid, carbolic acid, salicylate of soda, salufer and aqua chlori to the contents of the stomach placed in bottles connected with a gas-collecting apparatus and kept at a suitable temperature. A control bottle was used in every case. I found that half an ounce of Sanitas fluid to 8 ounces was useless and aq. chlori, the same (10 ♏ to the ounce), salol in quantities of 4 grains to the ounce, and carbolic acid ℥j to ℥viij were only par-

[1] Presented in the Section of Medicine at the Annual Meeting of the British Medical Association held in Leeds.

lly successful, but salufer in quantities of 1 grain to the nce and salicylate of soda 4 grains to the ounce completely cessful. I had previously tried administering hyposulphite soda, but the result was great nausea and I was obliged to p it. Salufer in 10-grain doses produced violent vomiting, but icylate of soda was well borne; 15 grains of salicylate of soda re added to each dose of his medicine, and he was directed er washing out the stomach at night to pour in half a pint of ter containing 30 grains of soda salicylate. Under this treatnt he improved very much, acidity and flatulency became less d less, until at last he expressed himself as well. By examining contents of the stomach from time to time, it was seen that sarcinæ were the first to disappear, then the yeast became s until none could be found with a microscope or on cultivan, but the fluid on being kept at a suitable temperature still ve off an inflammable gas. Finally, after about six months' atment the quantity of residuum was reduced to from 6 to 8 nces, and on many occasions fermentation experiments with is gave negative results. He gained 7 pounds in weight, and ve up medicinal treatment, but continued to wash out the mach at least every other night. I saw him a few days ago, d found that he had begun to take liberties with his diet, and s eating largely of butter, or anything he fancied, and I was t surprised on emptying his stomach to find that the quantity residuum had risen to a pint, and that this gave evidence of th yeast and butyric fermentation. Nothwithstanding that, wever, he continues regularly at his work, though he has now t some flesh again, and manages to keep his gastric troubles in fficient abeyance to be tolerable by washing out his stomach ery alternate night.

Before entering into an account of some investigations conrning the causes and nature of the fermentation, it may be use- to give a brief summary of the literature of the subject. In e JOURNAL of February 13th, 1886, a case of eructation of flammable gas is recorded by Dr. Beatson, of Glasgow, in ich the face was burnt by its accidental ignition. In the URNAL for February 27th, 1886, Dr. Saundby, of Birmingham, ves references to several cases abstracted for the *Medical cord* of 1874. The first, by Schultze, is in the *Berlin. klin. ochen.* for July 6th and 13th, 1874, and is an account of a case Friedreich's of Heidelberg seen in 1865. The analysis of the s gave CO_2 and H in about equal proportions, nearly 30 per nt., and there was also a trace of marsh gas. Popoff records at eat length in the *Berlin. klin. Wochen.* for 1870, No. 38, 39, and , a case which occurred in the clinic of Professor Botkin, of . Petersburg. A similar case was described by Frerichs in the me journal, No. 8, for 1874. Two others are mentioned as having en seen, and the gas analysed by Carius. Another case was rded by Ewald in *Reichert* and *Du Bois's Archiv* for 1874, 217. In this case the analysis of the gas gave about 20 per r cent. each of CO_2 and H, and from 2.7 to 10 per cent. of marsh s. In a case reported by Heynsius, the gas contained in the mited matter was found to be CO_2 and H. In the JOURNAL for bruary 27th, 1886, Dr. Scott Orr relates briefly a case of the nd, but no analysis of the gas was made. These are, so far as I ow, all the recorded cases.

On comparing the results of analysis, it will be seen that the me gases were found in all, namely, CO_2 and H in smaller or eater quantities, and small quantities of CH_4. In my case the uantity of CO_2, 56 per cent., was nearly double that of the others corded, the H, 28 per cent., being about the same, and the marsh s 9 per cent. It will be at once noticed that the gases, with the ception of the marsh gas, correspond to those of butyric fer- entation.

In a paper by Paschutin in *Pflüger's Archiv*, vol. iii, for 73, Paschutin gives the proportions of gas obtained in buty- fermentation as 2.7 of CO_2 to 1 of H, and he says that no rburetted or sulphuretted H is formed. All the cases here given ow CH_4, and this is only to be accounted for by the presence of veral ferments.

It is impossible in the time at my disposal to enter fully into a scussion of the cases. In Popoff's torulæ and sarcinæ were und, but no mention is made of bacteria. As, however, butyric id was present in the vomited matter in considerable quantity, e gas is attributed to that fermentation. Ewald found butyric id present in the vomited matter, and noticed the presence of ds corresponding to Pasteur's butyric ferment. He carried on e fermentation outside the stomach and obtained inflammable s, but is inclined to attribute the presence of the gas in the stomach itself to its passage upwards from the intestine rather than its formation there. I made several attempts to carry on the fermentation in artificial mixtures inoculated from the contents of the stomach before I succeeded. Finally, I succeeded in carrying it on in a mixture of Benger's food and water. From this sterilised skim milk was inoculated, and a quantity of inflammable gas was obtained. Examination of the milk showed only few torulæ, but it absolutely swarmed with bacteria, resembling the bacillus butyricus in appearance.

The milk, after fermenting some days, gave an acidity equal to 10 grammes of NaHO per litre, and of this 1.4 gramme was due to volatile acid. It smelt strongly of butyric acid. I had, up to this time, not observed bacteria in the fresh matter obtained from the stomach, owing to the great number of yeast cells, and the confusion caused by the remains of food. But, on carefully examining with a power of 350 diameters, the intermediate clear fluid formed after separation of the scum and sediment from some of the matter passed (with suitable precautions) into a sterilised flask, large numbers of very small thick rods in active movement were seen. With a higher power these were observed to be straight, or slightly curved, rods, and besides these were noticed a great number of oval spore-containing bodies in exceedingly active movement.

I endeavoured now to get rid of the yeast and to isolate the bacilli by cultivation on potatoes. In this way two kinds of yeast, the saccharomyces ellipsoideus and the saccharomyces rosaceus, were isolated. There was also a small active bacterium, giving rise to a bright yellow growth, and two other bacteria resembling each other closely in appearance, and consisting of long straight rods, sometimes joined together end to end, and both actively motile. Experiments were made to determine which of these gave rise to the fermentation with the development of inflammable gas. One of these rodlike bacteria produced no gas, and was, I think, the common bacillus subtilis. Finally I succeeded in carrying on the fermentation in Pasteur's fluid, which was inoculated from a grey dryish spot on a potato. The bacilli forming this growth consisted of straight rods varying in size, but most of them of considerable length, and containing according to their length two, three, or four spores, which stained splendidly with methyl violet. The spores took up so much of the rod as almost to resemble a chain of cocci when stained, but their active movements showed them to be contained in the rods. Besides these were numerous elliptical actively moving bodies containing each a spore, and also some free spores. A flask filled with Pasteur's fluid inoculated from this with a needle gave off gas freely after standing two days, and continued to do so for seven days. The gas was inflammable and burnt with a blue flame. It was not analysed. The fluid at the end of the time smelt quite sweet, and on distilling very little volatile acid, neutralised with a drop or two of soda solution, and amounting only to 0.061 gramme of NaHO per litre, came over. Anyone who knows the strong odour of butyric acid is aware that infinitesimal quantities can be recognised by the nose, and I am quite sure that at the end of seven days practically none was present. Microscopical examination of this fluid showed numerous long, straight, transparent rods, many of them connected at their ends by a transparent medium in twos and threes, and also a great many actively moving elliptical spore-bearing bodies. Some of the single rods bore spores at one end. The plasma of the rods stained distinctly with iodine. Nutrient gelatine inoculated from these often failed to show any growth, but in two cases I succeeded in cultivating it. The needle track showed a straight greyish growth, but there was small surface extension. There was very little tendency to liquefaction, though the gelatine seemed to be moister than at first and bubbles of gas formed in the needle track. Tubes of gelatine inoculated from the vomited matter itself soon liquefied completely, owing probably to the presence of the bacillus subtilis.

I am sorry I have no slides of these bacilli to show you; but I sent what I had to a gentleman to examine and describe for me and he has unfortunately lost them. Suffice it to say that its appearance as obtained from the Pasteur's fluid closely resembled that of the clostrydium butyricum as figured and described by Prazmowski. The points of resemblance were the size of the rods, the presence of spores in the ends of some of them, and also the fact that great numbers of elliptical spore-bearing bodies were amongst them, such as are well described and figured by that author. They also stained slightly with iodine, which is one of the characteristics of the clostrydium butyricum. The bacilli further resembled the butyric ferment in fermenting freely

in the absence of air, as in a flask filled with Pasteur's fluid. But though thus closely resembling the butyric bacillus in appearance, there were some points of difference. One was their growth in gelatine. This was evidently a bad medium; only two out of several inoculations were successful, and, when successful, only a moistening, not liquefaction, took place. A second is the formation of spores in the rods when grown freely in air on the potato.

As previously mentioned, no butyric acid was formed in the Pasteur's fluid; and in a subsequent experiment, in which sterilised skim milk was, after inoculation, kept fermenting actively for twelve days, no butyric acid was detected by the smell and none was obtained on distillation, the acid developed being lactic acid only, yet the quantity of inflammable gas given off was very considerable. The gas was not analysed, but on ignition it burned with a pure blue flame, and in all probability consisted of H with CO_2. Present notions of the butyric fermentation, by which the development of CO_2 and H are accounted for by the splitting up of two atoms of lactic acid ($C_3H_6O_3$) into one of butyric acid with the development of two atoms of CO_2 and four of H, would necessitate the presence of sufficient quantities of butyric acid to be easily detected by the smell and chemically isolated, yet both the milk and Pasteur's fluid contained practically nothing but lactic acid, though large quantities of gas had been evolved. Of course these differences may depend a good deal on the method and conditions of the fermentation. When potato paste (2 ounces in 8 ounces of water) was inoculated direct from the matter obtained from the stomach, inflammable gas formed freely. The total acidity reached 6 24 grammes of NaHO per litre, and of this 4.28 grammes were due to lactic acid, the rest to butyric, from which the lime salt and the acid itself were obtained pure.

Another curious point about the fermentation is the very highly acid medium in which it took place. For instance, vomited matter, the acidity of which was carefully tested and found to be equal to 3.4 grammes of NaHO per litre, fermented freely when kept at a suitable temperature. The quantity of free HCl in this was ascertained both by ordinary methods of analysis and by adding definite quantities of the filtered vomit to a standard methyl blue solution, and comparing the colour change produced with that of the same solution to which different quantities of diluted HCl had been added. It has been shown conclusively by Klemperer, as had been previously pointed out by Ewald and myself, that methyl violet is not affected by acid albumen, but only by free hydrochloric acid, and as no other agent existed in the gastric juice likely to produce any colour change, any difference produced may fairly be attributed to free HCl present. In both of these ways the free acid was estimated at between 2 and 3 per mille, that is, it exceeded that of normal gastric juice, yet the fermentation proceeded in the fluid with great activity until the acidity reached 4.33 grammes of NaHO per litre. Now butyric fermentation is said in the text-books only to take place in a feebly acid or neutral medium, yet here we have a fermentation proceeding actively in a medium which is not only highly acid, but the acidity due to one of the most powerful antiseptic agents — free hydrochloric acid. Of course this may be accounted for to a great extent by the quantity of ferment present relatively to the quantity of acid. It is evident that a stomach containing immense numbers of bacteria may set up and carry on effectively a fermentation which under other conditions would be impossible; but there remains still here matter worthy of further investigation by others whose time and means are better fitted for it than mine. I am inclined to think from the results of my investigations that this bacillus, though in many points closely resembling the clostrydium butyricum, is not identical with it. Milk mixed with equal parts of 0 4 per cent. of HCl and inoculated with 1 drachm of vomit fermented freely; but, on testing, the milk gave no reaction with methyl violet, showing that the acid was not free, but combined with the albumen of the milk. Potato paste, 2 ounces mixed with 6 ounces of 0.2 per cent. HCl solution, failed to ferment, probably owing to the quantity of albumen present being too small to give sufficient nutritive pabulum for the growth of the organism. When the acidity of some vomited matter which fermented freely was raised from 2.7 grammes of HCl per litre, by the addition of a solution of 0.4 HCl to a little higher stage, the fermentation was completely stopped, though the microscope showed that the fluid still swarmed with active bacilli.

These facts show that this bacillus can grow in gastric juice of normal acidity and even in hyperacid juice. When present in very large quantity it is evident therefore that it is not the acid of the gastric juice which prevents its development in the stomach in normal digestion. Most probably, as with the common yeast, the reason of its non-development in the normal stomach is that the food is rapidly got rid of before fermentation has time to take place. When, however, owing to stricture of the pylorus, starchy and saccharine matters are constantly retained in the organ, fermentation becomes possible, though secretion be normal. The remedy is to remove the residual contents of the stomach at least once a day, and to wash out freely with antiseptic agents such as I have suggested, whilst carefully regulating the diet and restricting it to such substances as pass most easily out of the stomach, and are least liable to fermentation.

In conclusion, I should just like to point out how desirable it is that a fermentation test should be added to those already in use in investigating cases of stomach disease. Almost all the symptoms of dyspepsia, such as flatulency, acidity, etc., have been hitherto chiefly accounted for by fermentation, but it does not seem to have occurred to anyone how easy it is to put that to experimental proof. If the food after a stay of four hours be removed from the stomach by a tube, previously well washed or steeped in carbolic lotion, into a sterilised flask of suitable capacity, and the latter be connected by means of an india-rubber cork and bent glass tube with a bottle full of water or mercury standing in a basin, it is easy by keeping this on the top of an oven or in a warm chamber, to see whether any gas is evolved. The acidity of the fluid may be tested at the beginning of the experiment, and at the end to determine whether any increase has taken place. In this way the presence or absence of such ferments as give rise to flatulency or acidity may readily be determined. If no gas be developed in twelve hours, the absence of such a quantity of ferment as will produce flatulency in the stomach may be regarded as certain, and if the rise in acidity be slight, or none at all have taken place, fermentation acids as a cause of the symptoms may be safely excluded. It is much easier to prove the absence of gas-producing ferments in this manner than by gelatine cultivations, and such a simple test can be easily used in every doubtful case. It has the advantage over microscopical examinations of giving more easily appreciated and conclusive evidence. There is always a good deal of doubt about the presence of yeast in small quantity when it is mixed, as it usually is, in the contents of the stomach, with all kinds of cells derived from the mucous lining of the stomach and upper parts of the alimentary tract, and with the various remains of partially digested food. Twelve hours' cultivation will serve to develop yeast cells to such an extent as to make a mistake impossible, and the same may be said of micro-organisms. A fermentation test will also show conclusively whether these are gas producers or simply belong to the different innocent forms usually found in the stomach. I have often employed this method, but without taking up too much of yonr time, I can only here say that it is remarkable in how few cases any gas is evolved,

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THE ETIOLOGY OF RHEUMATIC FEVER, AND AN EXPLANATION OF ITS RELATIONS TO OTHER DISEASES.

By B. N. DALTON, M.D.Lond.

The consideration of certain cases of rheumatic fever which had been under my care led me, some months ago, to form the opinion that this disease might be caused by breathing air contaminated by the emanations from sewers and drains.

Until I read in the Journal of September 14th the report of the recent discussion on the relations of tonsillitis to rheumatism, I was not aware that this opinion was held by anyone else, and the evidence which I could adduce not being adequate to conclusively establish its truth, I had intended to seek for further proof before bringing the matter forward.

The statement made by Dr. Haig-Brown, in the discussion referred to, that the annual percentage of cases of rheumatism amongst the inmates of a large institution had been reduced from 4 per cent. to 1 per cent. of all cases of illness by improvement in the drainage, was so strongly confirmatory of my view, which I found he also held, that I began to write the present paper. Whilst writing it I have obtained so much further evidence in

pport of my view that there can, I think, be no doubt of its ıth.

Though some few observers have, as I now find, recognised a nnection between drain poison and rheumatic fever, it is not nerally acknowledged. I have found no allusion made to such use in any textbook, and, with few exceptions, none of the mbers of the profession to whom I have mentioned the subject d any idea that rheumatism might be so caused.

The knowledge of such a causal connection is of great practical portance, and seems to give the clue to the explanation of the ations of rheumatism, not only to tonsillitis, but to the other eases also with which it is frequently associated.

My suspicion of the connection of sewer gas with rheumatic ver was first aroused by the simultaneous occurrence of this ease in two brothers. Their house was free from any serious ain defect, but they had only a few days before returned from aside lodgings, where their mother had a slight attack of tonsilis. As tonsillitis is so frequently caused by drain effluvia, there some ground for thinking that very probably the lodging-house as in an insanitary condition.

Looking back, then, to other cases which had previously been der my care, I found that a considerable number of the patients d certainly been exposed to drain emanations.

It would occupy too much space to give the evidence in detail, d I am obliged to be content with giving very briefly some of e most significant facts which my investigation and inquiries ve brought to my notice; but I am sure that if further evidence required it will be forthcoming from other general practitioners o have investigated the sanitary condition of their patients' ellings. At least seven cases of rheumatic fever in my practice ve occurred in houses in which drain defects existed. In two tances two cases occurred in the same house at the same time. e patient who had had several attacks in two different houses d in both houses been exposed to drain effluvia, which had proced other illness in other members of the family.

A young lady went to stay with an aunt and cousins in the ntry. After a few days she felt so ill that she returned home, d a few days later was laid up with rheumatic fever. The drains the lodging-house were defective, and a servant and several of e cousins had sore throat, and one of them diphtheria.

Twenty years ago three of the residents in the dressers' rooms Guy's went home ill with sore throat; this was in each case lowed by rheumatic fever. The waste pipe of the lavatory sin attached to the rooms went straight to the drain. One of e three residents so affected was a former fellow student, and is w one of the surgeons of the hospital. He told me these facts, l said that he had always attributed his rheumatic fever to the anations from this lavatory basin.

These facts seem sufficient to prove that rheumatic fever may caused by exposure to the effluvia from drains. That there y be other media than sewage for the development of the son, and other channels than the respiratory by which it may er the system, are both probable; but seeing how frequently e air of houses is polluted by sewer gas it seems reasonable to pose that in towns the poison is thus very frequently introed into the system. Though a poison may be air-conveyed to pharynx it may subsequently be carried into the alimentary al and through its mucous membrane enter the tissues of the y. The poison of rheumatism to be thus conveyed by air must ost certainly be some form of microbe. Such a cause for umatic fever has been suggested by Dr. Maclagan and others. the JOURNAL of June 25th, 1887, is a paper by Dr. Mantle, who nd bacteria in the synovia and blood of rheumatic patients and l cultivated them, but he did not prove their connection with umatism by inoculation.

The probably bacterial nature of the disease brings it into reonship with those diseases which are known, or on good unds supposed, to be due to micro-organisms, and renders inigible the points of family likeness which it displays to them. ch might be said on this subject, but it will suffice to allude 1. Its tendency, especially if untreated, to run a pretty definite rse, lasting on an average about six weeks in adults and about weeks or less in children. 2. The tendency to relapse, a dency found in typhoid, and to a less extent in scarlatina and htheria. 3. The hyperpyrexia, which, occurring most frently in rheumatism, occurs also in typhoid and septic periitis. 4. The affection of the same parts in rheumatism and emia, and the sweats of these diseases. 5. The greater inence of the disease on the young, and the comparative immunity of the old, in this resembling all the other members of the group. 6. Its greater prevalence at certain seasons, the like being observed with regard to typhoid, scarlatina, and others. 7. The marked hereditary tendency, as with tuberculosis, typhoid, and diphtheria. 8. The liability to repeated attacks, in this respect resembling most erysipelas, and to a less extent measles, diphtheria, and variola.

A recognition of the bacterial nature of the disease also throws light on the influence of those drugs which have been found most useful, namely, iodine, iron, quinine, salicin and salicylates, an influence recognised in other diseases of the same class, drugs beneficial to some extent but for the most part powerless actually to cure, or if curative, requiring a prolonged administration to prevent relapses.

That the poison of rheumatic fever is a special one renders it possible that this disease should coexist with others; that it may enter the system by inhalation of sewer gas renders probable its coexistence with others which may be contracted in the same way. Sewer gas contains many kinds of bacteria, some innocent, some pathogenic, and the person who breathes it may be affected by none, by one, or by more kinds of those present, according to his special susceptibility and according to the kinds, number, and relative proportions of the microbes which happen to be present.

As ordinary yeast is a variable mixture of several kinds of sugar-destroying fungi, which produces results varying with the proportion in which each kind is present, to such an extent that to procure uniform results in brewing it has been found desirable to grow on from a single cell in sterilised liquids the special yeast fungus required; so the emanation from a drain or sewer is a variable mixture of several kinds of disease-producing fungi, and leads to results varying according to the soil it meets with, and according to the kinds of organisms present and their relative proportions.

When Nature inoculates a nutrient medium a mixed growth is almost always the result. Immense pains have to be taken by the bacteriologist to secure a pure culture. Is it to be expected that the human body receiving a mixed inoculation should grow only one kind of organism? Is it not rather a matter for further inquiry that we so often get typical and uncomplicated cases in this class of disease? That some kinds of bacteria are antagonistic to one another may be the explanation, but that two or more may grow together without destroying one another is shown by the concurrence of diphtheria with scarlatina, with measles, and with typhoid; and of whooping-cough with measles. Such combinations are recognised. Why should we not then recognise the combination of rheumatism with other diseases in the same way, instead of seeking some causal connection with those diseases? As the rheumatic poison occurs in a medium that is frequently the vehicle for the conveyance of other disease-producing organisms, there is special reason for its frequent association with the diseases which they produce.

That rheumatism is an addition and not a part of the disease with which it occurs is to my mind a simple and satisfactory explanation of the relation which it bears to tonsillitis. Two poisons are absorbed at the same time; that which produces tonsillitis has a shorter period of incubation than the other, hence the rheumatism follows the throat affection. If the poison of both can exist in drain air, what more probable than their entry together?

In one of my old notebooks is the record of a case attended in 1875. It is headed "Typhoid Fever simulating at first Rheumatic Fever." The patient was a domestic servant, who, at the beginning of her illness, had so much swelling and tenderness of the joints that the nature of the case was at first doubtful. There were subsequently unmistakable symptoms of typhoid, which ran a normal course. I should explain such a case by saying that the patient had at the same time received the two poisons of typhoid and rheumatism; the latter, having a shorter incubation period, manifested itself first. Cases such as the above are, I believe, not very uncommon. If enteric fever be caused by drain air, we see again what probability there is of its association with rheumatism.

The Malta fever or Mediterranean fever, as described in the JOURNAL recently, has amongst its many phenomena marked rheumatic symptoms. It is by many attributed to the emanations from decomposing fæcal matter. If it be so, may it not be a combination of rheumatism with other diseases, and thus specially deserve the name which has been suggested for it, "febris complicata?"

With regard to the relation of rheumatism to scarlatina I have some evidence that rheumatism occurs in patients living in houses with defective sanitary arrangements. The last case of scarlatinal rheumatism which I saw was in a house in which a defective soil pipe had been the cause of severe tonsillitis in two other adult members of the family. The patient had been specially exposed to drain emanations just before the scarlatina commenced. Two other cases of rheumatism with scarlatina occurred in houses in which defects in the drains were subsequently found. As sewer gas often penetrates bedrooms from the free communication that exists under floors and between the layers of lath and plaster partitions the poison may enter the system at any date after the scarlatina has developed itself.

Of the association of rheumatism with erysipelas I have met with no instance. Trousseau mentions it as sometimes occurring, and two such cases are reported by Dr. Downes in the JOURNAL of June 25th, 1887. As erysipelas occurs in connection with insanitary surroundings its association with rheumatism is quite intelligible.

How far the explanation of a mixture of poisons will hold with regard to the joint affections occurring in puerperal fever, pyæmia, gonorrhœal and other forms of urethritis, must be left for further inquiry, but I think it probable that in some of these the specific rheumatic poison may be at work. Defective drains may certainly cause puerperal fever, and the worst case of joint affection after urethritis which I have ever seen occurred in a house with gross defects in the drains.

The opinion held by some that there is a combination of rheumatism with gout—a true "rheumatic gout" is not incompatible with the views expressed as to the nature of rheumatism. The gouty constitution may modify the action of the poison and render the disease less acute. With regard to the possibility of various forms of chronic rheumatism being due to the same poison as rheumatic fever, we have good grounds for recognising it, seeing the great differences which occur in tuberculosis, which may manifest itself as an acute or very chronic disease. The changes in the body due to age no doubt play a very important part in modifying the action of the poison, but it is also likely that many individuals have acquired an immunity from the acute effects of the rheumatic poison by a similar process to that by which those constantly making *post-mortem* examinations acquired an immunity, the frequent absorption of poison in small doses rendering the body less vulnerable but not completely invulnerable.

Lastly, I wish to call attention to the explanation which a recognition of the specific nature of the disease and of its common mode of propagation affords of the otherwise unexplained facts given by the British Medical Collective Investigation Committee in their report.[1] The subjects of hereditary predisposition, age, time of year, have been already alluded to, and there remain for special consideration the influence of occupation, of exposure to wet and cold, and of special states of the weather. A table in the report gives out of 655 cases—of which details were sent to the Committee—71 domestic servants, 63 school children, and 46 married women. These together make up more than one-fourth of the whole number. These persons would be much indoors, more constantly in a polluted air due to defective drains; and the domestic servants, specially exposed to effluvia from broken drains under the house, untrapped sink pipes, and from defective soil pipes, from which air is forced when slops are thrown down a closet. Married women, amongst the lower classes, fulfil the duties and are thereby exposed to the same extra risks as servants. Children are by their age rendered specially susceptible. The Committee noted the remarkable number of cases occurring amongst servants, but only suggested that inordinate consumption of meat and beer, and want of exercise, probably rendered them more liable than other classes. Exposure to wet, cold, or fatigue, or a combination of these, is stated in the report to have been a previously existing condition in 430 of the cases. As predisposing causes there can be no doubt that they play an important part. Such causes, by depressing the vital powers, render the body more vulnerable and capable of being acted on by what at another time would have no effect. This is so well known with regard to other diseases that one readily recognises it as a powerful predisposing influence in the case of rheumatism. Fowls, frogs, and fish are under ordinary conditions insusceptible of inoculation with anthrax. Pasteur succeeded in inoculating a hen by administering to her a prolonged cold footbath.[2] Others have successfully inoculated frogs and fish by raising the temperature of their surrounding medium.[3] In both these cases, although alteration in the temperature of the blood may have had some influence, the vital processes must have been modified by the abnormal conditions.

The lowering of the vital resistance by the occurrence of another disease may also render an individual more easily affected by the rheumatic poison.

Conditions of weather may act indirectly in causing rheumatism. In cold and wet weather a house is shut up more closely, and the air in it being rendered warmer and less dense than the outside air there is greater suction at any existing leak in soil pipe or drain; hence in such weather there is greater chance of "catching" rheumatic fever. Atmospheric influences come into play in other ways. A certain range of temperature must be specially favourable to the micro-organisms concerned, and a moist still atmosphere would render their stay in and around a dwelling more prolonged than in windy weather. Dr. Haig-Brown states that he has observed outbreaks of tonsillitis and rheumatism after close, still, damp weather.

If the views expressed in this paper be correct, there will be the satisfaction of knowing that rheumatism, the treatment of which even now is more or less unsatisfactory, is to a great extent a preventable disease, the prevalence of which will be to a great extent lessened in the future by the progress of sanitary science. Meanwhile the occurrence of rheumatism, whether well marked as "rheumatic fever" or manifesting itself only by the so-called "growing pains" of children, or even as a continued fever without joint affection, as is sometimes the case, calls for a thorough and careful an examination of the drainage of the patient's residence as does the occurrence of typhoid, diphtheria or any other pythogenic disease.

[1] JOURNAL, February 25th, 1888.
[2] *Louis Pasteur: his Life and Works*, pp. 209, 210.

REPORT ON AN OUTBREAK OF DIPHTHERITIC TONSILLITIS AT ETON COLLEGE IN SEPTEMBER, 1889.

BY JAMES W. GOOCH, M.R.C.S.E.,
Honorary Surgeon Windsor Royal Infirmary and Eton College Rifle Volunteers.

SOON after the commencement of the Michaelmas term there occurred at Eton College an outbreak of tonsillitis, which could apparently be accounted for by the exceptionally damp, muggy weather which then prevailed, and which was causing the disease in so many parts of the country. Although, however, after a time the weather improved, cases still occurred in the school in increasing numbers, and assumed a more serious and diphtheritic type.

As the drainage of the town and the water supply are known to be as perfect as it is possible to be, it became necessary to endeavour to discover some other cause for the epidemic. Accordingly I turned my attention to the milk supply of the College, and learned that there were no less than fourteen distinct sources from which it was delivered. I found that one farmer supplied entirely six of the houses in which cases of tonsillitis had occurred, and one in which there had been no case; he also supplied half the milk to two other houses, in one of which there had been no case. None of these houses had anything in common excepting the milk supply. There was only one other case in the whole school, in a house not supplied with milk from the above mentioned farm; this was a case of simple tonsillitis, and had probably an independent origin. The above facts seemed strongly to indicate, therefore, that milk taken from a certain farm was the cause of mischief. It was suggested that I should visit this farm, which I did on October 19th, being assisted in every way by the owner. All the cows (eighteen in number) as far as I could discover were perfectly healthy, and no sores could be detected on any parts of their bodies. The sheds were clean, large, and well ventilated. One new cow only had been recently purchased, and she came from a neighbouring parish in which no disease was known to exist. She had a calf three days old when bought, but I was assured that her milk had not been used until the proper time had elapsed. The dairy itself and all pails and cans were clean and in good order, and there was no illness amongst the dairymen employed on the farm or in their families. Water for all purposes was taken from a surface well in the yard, but some distance from

[3] Crookshank's *Bacteriology*, p. 288.

ny drains. The well was about 15 feet deep, and the water in always stood at the level of the Thames. On analysis it was ronounced to be free from sewage contamination, but to contain certain amount of vegetable matter. I was also assured that ll tins, pails, etc., were always scalded and washed in boiling water. here seemed, therefore, nothing about the homestead to account or the contamination of the milk.

On further inquiry, however, it appeared that the cows had been rned out, early in July, into a meadow half a mile away, and hat this meadow was adjacent to the sewage farm of a neighouring town, the smell from which was often very offensive. Moreover, crude sewage had been seen to pour from this farm into ditch to which the cows had access, and from which they drank. n the middle of July there were a few cases of tonsillitis in two r three of the college houses supplied with milk from the abovementioned farm, but at the time the milk was not suspected, and ne term soon afterwards came to an end. On September 25th, owever, three days after the commencement of the next term, ne disease broke out again, and cases continually occurred. On ctober 18th the cows were all taken from the meadow to the omestead for the winter, and it is an interesting fact that since ctober 20th, two days after their removal, not a single case of iphtheritic tonsillitis has occurred in the school. It appears lmost to a certainty, therefore, that the contaminated water taken y the cows was the actual cause of the epidemic in question. hrough the courtesy of Mr. W. H. Power, of the Local Governent Board, I have been enabled to see his reports on the outreaks of diphtheria at Hendon, and Camberley and York Town. n the former report it appears pretty conclusively proved that he disease was caused by the milk pails having been washed in ewage-polluted water, and that this latter had also been taken by ne cows, or that the cows themselves suffered from disease. In s report, however, on the outbreak of diphtheria at Camberley nd York Town, near Aldershot, Mr. Power states that "nothing ould be discovered about the farm, dairy, and cowsheds that ould be regarded as affording a definite and completely satisfacory explanation of the infection of the milk." In conclusion, he ates that "there is not on record any authentic instance of ater, however impure, having been the means of conveyance of iphtheria to the human subject."

Further on, he says: "Finally, it had to be suggested that diphneria material thus annexed by the cow could either have been wept in" during the milking, "or else, being excreted from her ystem (as matters unassimilable by cows are excreted), could ave been delivered there unaltered along with the milk secretion, ne animal herself meanwhile suffering no inconvenience whatver. Perhaps the chief recommendation of this theory is its ovelty." Thus it has never been actually proved that germs in ewage-polluted water can pass through the cow, and be excreted n an active condition in her milk.

In the outbreak at Eton College, however, there can be no doubt f the possibility and probability of such an occurrence. In this ase the milk pails and cans were washed in boiling non-contamiated water at the homestead, were taken to a meadow half a ile away, filled with milk direct from the cows, and brought ack for distribution to the customers.

There were several arguments brought forward against the eory that the milk was the cause of the epidemic at Eton, nearly l of which, however, on investigation, could be explained away.

First, Why did a large house (I), containing forty boys, partly pplied with milk from the suspected source, have no cases of re throat? On inquiry, the cook stated that the above-menoned "milk taken in the evening is always boiled for coffee used the early morning, and that the morning's milk is mixed with ilk from another dairy, and drunk for breakfast, and tea in the ening."

Secondly, Why did the children in another house (F), also only rtly supplied with milk from the suspected dairy, escape, whilst hers in the house fell ill?

It was found that this milk was never taken to the nursery, but ways from that another source.

Thirdly, Why did one master living by himself in a small house cape, whilst another master similarly situated did not, both inking the infected milk?

The landlady of the former states that she "always boils the ilk directly it comes."

Fourthly, Why did twelve boys in one house (B) who had a mbler of milk given them each morning, and also three little ildren in another house (A), escape?

These last questions are not easy of explanation, for in both houses there were cases of tonsillitis, and the entire milk supply was from the infected source, and was not boiled.

Table, showing Dates of Infection, etc. Instead of giving the Names of those occupying the Houses, Letters are affixed.

Date.	New Households.	Number of Cases.	Abstract. House.	Abstract. Date.	Abstract. Number attacked.	Abstract. Total Persons in House.
1889.						
Sept. 25	1	1: A	A	Sept. 25, 26, 29, 30th; Oct. 6, 8, 9	7	58
,, 26		1: A	B	Sept. 27, 28 (2); Oct. 7, 9, 10, 15, 16, 17, 19, 20	11	76
,, 27	1	1: B				
,, 28		2: B	C	Sept. 29; Oct. 6, 7	3	46
,, 29	1	2: A, C	D	Oct. 3, 5, 8, 9 (2), 11, 16	7	44
,, 30		2: A	E	Oct. 5, 8, 9	3	5
Oct. 3	2	2: D, H	F	Oct. 6, 7, 9, 13	4	54
,, 5	1	3: D, E, H	G	Oct. 15	1	3
,, 6	1	3: A, C, F	H	Oct. 2, 5, 7 (2)	4	16
,, 7		5: B, C, F, H (2)	I	No cases, milk boiled	—	53
,, 8		2: A, D	J	,, ,,	—	3
,, 9		6: A, B, D (2), E, F				
,, 10		1: B				
,, 11		1: D				
,, 13		1: F				
,, 15	1	2: B, G				
,, 16		2: B, D				
,, 17		1: B				
,, 19		1: B				
,, 20		1: B			40	358

In the accompanying table will be found the dates of the invasion of the various houses, and also of the cases as they occurred. It will be seen that there were 40 cases amongst about 360 persons who drank the suspected milk, in a space of time extending over twenty-five days. As the first cases occurred three days after the term began, and the last two days after the removal of the cows from the meadow to the sheds, it would appear that the period of incubation of the disease is short. Most of the cases ran the same course, and none were ever in the least serious. They began with tenderness and swelling of the cervical glands, coated tongue, and more or less fever, which lasted for about twenty-four hours. In the more severe cases the temperature rose to 101° or 102°, there was headache and sometimes vomiting, and a general feeling of discomfort. Many of the patients, however, expressed themselves as feeling quite well, having only slight pain on swallowing. The tonsils were inflamed and scarlet, and were covered more or less with patches of a purely white exudation. This latter gradually appeared to melt away, leaving the mucous membrane almost free from any trace of abrasion. In only one case did I see any patches on the pharynx. All the graver symptoms of diphtheria were absent, and yet the disease differed entirely from ordinary follicular tonsillitis. The colour of the throat was that of scarlatina, but there was no rash. Several of the patients had relapses in convalescence, as if a fresh quantity of the poison had been taken from the milk. The average duration of the disease was eight days. From the facts above mentioned it would appear:—

1. That infected milk was the cause of the disease.
2. That the water in which pails, etc., were washed was not in fault, as it continued to be used after the cessation of the outbreak.
3. That disease germs can pass through the system of a cow and be excreted in her milk in an active condition.
4. That boiling the milk destroyed the vitality of the germs.
5. That the disease was perfectly distinct from diphtheria, scarlatina, or follicular tonsillitis.
6. That the disease was non-infectious from the fact that no person took it who had not drank the milk, although in close communication in school, etc., before isolation.

It is a fact that cases of scarlet fever have recently occurred in the town from the sewage farm of which sewage had escaped into the ditch to which the above-mentioned cows had access. Is it possible that in their passage through the systems of the cows the germs of scarlatina may be so altered in their character that they can set up in human beings a milder and non-infectious disease, just as when a cow is inoculated with the virus of small-

pox, as formerly supposed, that vesicles containing vaccine result? This latter sets up in human beings a non-infectious disease of a mild type; and in the same manner it might be supposed that the germs of scarlatina, modified as above, might possibly, when applied to the mucous membrane of the throat, also set up a milder non-infectious disease, running a regular and definite course.

It was a curious fact that in the outbreaks of diphtheria at Camberley and Hendon poor people who drank infected milk so often escaped the disease. Mr. Power, in his report, explains this from the fact that the poor buy a small supply just sufficient for a meal and use it at once, but that richer persons take a larger quantity, and probably keep it some hours before using it, during which time the germs appear to multiply, and thus render the milk more poisonous. In corroboration of this theory it is remarkable that, in the house at Eton in which the largest percentage and the most severe cases occurred, evening's milk was never used until the following morning, and morning's milk in the evening of the same day. Moreover, diluting the milk seems to have had the effect of diminishing the intensity of the poison, for in the house above-mentioned, in which no cases occurred, and where the evening's milk was boiled for early coffee, the morning's milk was always mixed with that from another dairy. Again, in another house, in which, as mentioned above, the children escaped, after the nursery milk was taken, the milk from the two sources was mixed, and although four cases did occur in the house, they were so slight that it was not thought necessary to keep the patients in bed.

A CASE OF FÆCAL EXTRAVASATION INTO THE PERITONEAL CAVITY: THOROUGH WASHING OF THE PERITONEUM: RECOVERY.

By HARRISON CRIPPS, F.R.C.S.,
Assistant-Surgeon to St. Bartholomew's Hospital.

Until recent times, the extravasation of fæcal matter into the peritoneal cavity was regarded as an almost inevitably fatal accident, the patient either rapidly succumbing from the symptoms of shock, or in a few days from acute peritonitis.

From a superstitious dread of opening the peritoneal cavity, no attempt was ever made to save such cases by surgical procedure. Owing, however, to the enterprise of the earlier ovariotomists, it soon became apparent that not only did the peritoneum safely admit of free exposure and handling, but that it possessed a power of repair probably in excess of that of any other tissue in the body. A further great advance in peritoneal surgery was the method of thoroughly flushing the cavity to remove obnoxious material contaminating it after ovarian operations, a method first suggested and successfully practised by Mr. Lawson Tait. The principle thus introduced has, through the practice of Mr. Treves and others, been found to be of as much value in the general surgery of the peritoneum as it has proved to have been in the hands of ovariotomists.

I venture to record the following case as an instance in which a life was undoubtedly saved by the employment of this principle.

Miss —, aged 52, sent to me by my friend Dr. Hudson, of Barbadoes, gave the following history: She had always lived in the West Indies, and had been in every respect a healthy woman until about a year ago. At that time she commenced to be troubled by slight constipation, followed by attacks of diarrhœa. The symptoms continuously increased, and for the last two months she has required to go to the closet several times a day, especially in the morning. At these times she passes only a small quantity, and has the sensation of the bowel never being completely relieved. She does not like to pass urine, for if she does so a teaspoonful or two of mucoid discharge escapes from the rectum.

She does not have much pain in the lower parts of the bowel, but has great pain occasionally in the small of the back. She is a stout woman, and has lost flesh lately. Upon making an examination the anus was found to be normal, but at a height of 4 inches was a tight anular stricture, which would only admit the tip of the finger. The stricture was fringed with hard malignant nodules, and the diseased portion of the bowel appeared to extend to a considerable height.

Owing to straining, the strictured portion of the bowel had become considerably invaginated, so that a *cul-de-sac* nearly an inch in height completely surrounded the diseased bowel, which felt to the finger not unlike a projecting cervix uteri. The height of the disease rendered its removal impracticable, and on account of the distressing symptoms produced by the stricture a colotomy was advised. The operation, however, was postponed for ten days, on account of a troublesome cough.

On June 20th, the patient being placed under an anæsthetic by Mr. Mills, I performed inguinal colotomy after the method I have recently described in the Journal.[1] The bowel was opened on the second day. All went well till the fifth day. At that date she had a violent fit of coughing at 8 A.M. This was soon followed by abdominal pain. The pain increased, and by the middle of the day became very intense, and she commenced to retch. At 1.30 I saw the patient. She was suffering intense abdominal pain referred to the umbilicus, and was rolling about the bed. Her hands were cold, her face looked pinched and shrunken; the pulse, which was extremely rapid, could scarcely be felt at the wrist. Indeed, she showed all the symptoms of severe shock.

On examining the wound, I found that the stitches had given way, and that the bowel, except at one corner, had dropped back into the abdomen, and that the peritoneal cavity in the neighbourhood was full of fæces of pea soup consistency. From the severity of the symptoms I feared the case was hopeless. However, with the aid of my colleague, Mr. Bruce Clarke, I picked out the bowel, and passed five strong silk sutures through the skin and then through the edge of the bowel on each side. These were not tied, but held in such a way as to prevent any more fæces being poured into the cavity. We then proceeded to thoroughly wash out the matter already extravasated. This was done by at first simply syringing with a Higginson syringe all the parts in the immediate neighbourhood of the wound. An india-rubber tube about the size of the finger was then passed 6 inches downwards towards the pelvis. Water was pumped through this, and allowed to regurgitate from the wound. It at first returned deeply stained with fæces. It gradually came back clearer, and after several quarts had been used returned perfectly clear. The position of the tube was varied from time to time during the washing.

A glass drainage tube was now passed in at the lower angle of the wound, and the stitches on each side drawn tight and fastened. To save time, no anæsthetic was given. It was a point of marked interest to observe that the abdominal pain which, had been intense, ceased entirely in a few minutes after the washing had begun.

5 P.M. Since the washing the patient has been entirely free from pain. She is still suffering much from shock, and the pulse at the wrist cannot be counted, and the glass tube is full of slightly turbid fluid which was drawn off.

10 P.M. Pulse very feeble, 152, no pain, tube again full of fluid but nearly clear. Temperature, subnormal.

June 26th. Restless night, was twice sick. Pulse stronger, 130.

June 27th. Better night. Pulse 110. No more vomiting. Fluid in tube smaller in quantity and quite clear. A large quantity of fluid motion is constantly running from the colotomy wound.

June 29th. Improvement continues. Pulse 100. Has almost constant diarrhœa, but which by careful nursing has been prevented coming into contact with the tube. Glass tube taken out.

During the next fortnight she had constant diarrhœa, the temperature ranging from 100° to 103°. The diarrhœa then gradually ceased, the temperature became normal, and the appetite increased. In the course of a month the colotomy wound had completely healed and the new anus was acting well, without pain or trouble. The following month she returned home to the West Indies, and I have heard since that she has been able to get out and about, and that the colotomy opening acts satisfactorily.

There are two particular points of interest in this case, the first is the rapid and complete relief from intense pain which followed immediately on the washing out of the fæculent matter from the abdominal cavity. The pain must have been due to the contact of the acrid fæcal matter with the peritoneum. It could not have been due to inflammation, for it came on too rapidly for such to have taken place.

The second point of interest lies in the fact that notwithstanding the extensive extravasation of fæcal matter it gave rise to no

[1] Journal, April 6th, 1889.

econdary peritonitis. The case, too, affords further evidence how ecal extravasation may be successfully dealt with by surgical nterference, although the accident has happened some hours reviously.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

N OUTBREAK OF INFLUENZA ON BOARD THE INDUSTRIAL TRAINING SHIP *MOUNT EDGCUMBE*.

HE first case of influenza occurred on January 31st, 1890.

On February	2nd	there were	6	fresh cases
,,	3rd	,,	8	,,
,,	4th	,,	16	,,
,,	5th	,,	16	,,
,,	6th	,,	16	,,
,,	7th	,,	10	,,
,,	8th	,,	4	,,
,,	9th	,,	7	,,
,,	10th	,,	0	,,
,,	11th	,,	1	,,

aaking a total of 85 out of 196 boys, or 43 per cent. The ages of he boys range from 12 to 16. The onset in most of the cases was ery sudden—shivering, pains in the head, and general feeling of llness being the usual commencement. The attacks lasted from wo to five days, the average time being three days.

The three cases given below under relapse occurred four days fter the onset, and all occurred in boys who were taken ill on the ame day, the same symptoms as at the commencement being resent, namely, shivering headache and a rise in temperaure. During the outbreak 4 of the officers of the ship were ttacked out of 12, in addition to the above cases. In all the cases mong the boys, except 5, I was struck with the comparative nildness in the severity of the pain as compared with adults uffering from influenza.

Frontal headache only	49	Sickness at onset	3
Pain in head and legs	3	Sore throat	5
Pain in head and back	17	Cough	10
Pain in head, back, and limbs	6	Eyes suffused	14
Pain in head and chest	7	Running from nose	7
Pain in head and epigastrium	3	Relapses	3
Papular rash	2	Complications (catarrhal pneumonia 11 days after the commencement of the attack)	1
Herpes labialis	4		

Temperature range from 99° to 103.6°; in two cases only was the emperature over 103°, 99 to 99.5° in 21 cases, 99.5° to 100.5° in 16 cases, 100.5° to 101.5° in 23 cases, 101.5° to 102.5° in 17 cases, nd 102.5° to 103.5° in 8 cases.

Saltash, Cornwall. GEORGE PRESTON, L.R.C.P., etc.

THE INFLUENCE OF THE INFLUENZA WAVE ON MENSTRUATING WOMEN.

N reference to Dr. Robert Barnes's note in the JOURNAL of February 15th, I send the following notes of cases in my practice:

M. H., domestic servant, aged 21, on the second day of menstruation, was suddenly seized with vomiting, and was much prostrated; temperature 103°. The usual symptoms of the epidemic hen set in, and on the following day the temperature in the norning was 104°, and in the afternoon 102.8°; the next day it ell to normal, and remained so; the weather previous to her ttack for two days had been foggy and damp.

M. A., domestic servant, aged 24. A relapse occurred on the econd day of menstruation, the patient having been free from all ymptoms of the previous attack for a week; her temperature on he relapse was 102° in the evening, and 100° the next morning; he weather in this case for the two previous days had been mild, nisty, and wet.

In a home for girls to which I am medical officer, the ages of he inmates ranging from 15 years and upwards, out of the 36 girls n the home, 10 were attacked between January 15th and 27th; 8 out of the 10 were menstruating, or menstruation appeared during the attack; the cases were marked with a high temperature, from 101° to 105° (in one case), and the weather just before the various seizures had, as a rule, been damp and foggy. The other 26 inmates, who were not attacked, were not at the time menstruating.

REGINALD EVERSHED.

Rosslyn Hill, Hampstead.

INFLUENZA: RAPID SPONTANEOUS GANGRENE.

H. B., aged 56, a rural postman, was taken ill while delivering his letters on February 3rd. Seen at 6 P.M., he had an undoubted attack of influenza: temperature 102°. February 4th, better; temperature 100°, 4 P.M. February 5th, a small black spot, size of small marble, is seen over dorsum of right great toe; temperature 102°, restless; pulse 120; some redness of foot, no pain or tenderness. February 6th. 5 A.M. The whole right foot was gangrenous; he was delirious. Temperature 104°; pulse 130. The leg from the knee downwards was red and inflamed. The patient died at 7 P.M. Last autumn the patient had an inflamed corn on the other foot, which for weeks refused to heal. He was a heavy drinker—ten pints of beer and gin a day. Cases of gangrene so rapid as this are, I think, rare enough to record. I imagine that the influenza was primarily to blame for the gangrene attacking him. The man was very stout and full blooded.

Dulverton. GEORGE F. SYDENHAM, M.R.C.S.

EPIDEMIC INFLUENZA IN A NEWBORN INFANT.

I RECENTLY attended a lady who, in the last month of pregnancy, developed an attack of the prevailing epidemic. On the fourth day, whilst she was still febrile but improving, labour came on, and she was delivered easily of an apparently healthy baby. He roared lustily at first; but after being washed I thought he remained blue and cold and without the usual reaction. The next day he was whining a good deal, and his temperature was 102° F. On the following day he had a redness of the face and chest similar to that seen in many cases of the epidemic, followed by a copious eruption of sudamina, and his respirations became very shallow, but no pleuritis could be detected; there was also subconjunctival ecchymosis. On the following day there was well-marked acute pulmonary catarrh, his temperature ran up to 105.8°, and he died in the course of the day. There was no *post-mortem* examination. The mother made a good recovery. Four days after the child's death the monthly nurse had a mild attack of the epidemic.

South Kensington. J. KINGSTON BARTON.

SEQUEL TO TWO CASES OF AMPUTATION FOR LEPROTIC GANGRENE.

IN the JOURNAL for March 7th, 1885, I recorded two cases of amputation for leprotic gangrene. Both these patients have since died from other causes, and a few notes on the *post-mortem* appearances may be of interest.

CASE I.—P., Hindu, aged 24. Admitted May 31st, 1878, with anæsthetic leprosy of two years' duration. Amputation through thigh on March 7th, 1884. Stump healed by June 5th. Died December 20th, 1889. Body wasted. Stump firmly healed. Some atrophy of median nerves. A few pleuritic adhesions. Spleen 24 ounces; simple hypertrophy. Kidneys 7 ounces; capsules adherent; cortices thinned and blurred. Dark purple patches of congestion in mucous membrane of large intestine; small ulcers in places. Magenta showed no bacilli.

CASE II.—J. S., Portuguese, aged 25. Admitted January 20th, 1877, with mixed leprosy of eleven years' duration. Amputation through knee-joint on April 18th, 1884. Stump never entirely healed. Died February 17th, 1886. Superficial ulceration of hands, nose, and neck. Healthy granulating surface over stump about three by two inches. Tip of epiglottis ulcerated away. Vocal cords replaced by a ragged, granulating mass. Slight pleuritic adhesions towards left apex. Pleuro-pneumonia at right base, with a few small abscesses. Several ounces of bloody fluid in right pleura. Spleen 30 ounces; simple hypertrophy. Magenta showed numerous bacilli in larynx, femoral gland, and testes.

In each case the patient appeared to be almost *in extremis* when amputation was performed, and the further history is of interest as showing that life was prolonged in the first patient for five years and nine months, and in the second for one year and ten months. Death in the first case resulted from mixed kidney and

dysentery, and in the second from pleuropneumonia, probably of embolic origin. Pyæmic infarction is common in tuberculated lepers, when absorption and ulceration of tubercles sets in towards the end. The cases only serve to emphasise what I have often said before, that very much may be done by operative interference in leprosy, even in apparently desperate cases.

BEAVEN RAKE, M.D.Lond.,
Medical Superintendent of the Trinidad Leper Asylum.

ON THE ANTISEPTIC AFTER-TREATMENT OF VACCINATION.

FOR some time I have been satisfied that the inflamed arms which sometimes follow the operation of vaccination, though properly performed, are due to septic poisoning after leaving the station, and I therefore made it a practice when I was connected with such duties to precede my morning's work with a few remarks to the mothers assembled upon the disastrous results likely to follow want of care upon their part, pointing out to them that the child must not be allowed to remain in a room where the sink is in direct communication with the main drain (not an uncommon case), nor where the gas is escaping, nor in close proximity to an insanitary ashpit, nor where there is any kind of smell whatever. For all these are conditions found among the houses of the poor. Coloured ribbons and other unwashed dyed materials must be banished from the arm and shoulder, which should be left as free as possible from clothing and handling. Likewise the use of all shields and poultices must be strictly prohibited. I directed that in the event of an arm becoming inflamed they should at once apply to me for a lotion and some lint. I always found that an inflamed arm could be traced to neglect of the above precautions, and that such inflamed arms were best treated by the application for several hours of lint wet with a lotion of hydrarg. perchlor. (1-3000) or of boric acid.

The authorities would do well to consider what is the best dressing to apply to all arms operated upon at their stations, as such treatment would tend to render bad arms things of the past.

G. W. SESSIONS BARRETT, M.B, late Honorary
Hinckley. Surgeon Hunts County Hospital.

SUDDEN EXTROVERSION OF THE VAGINA IN A NULLIPAROUS FEMALE.

IT is but rarely that one witnesses complete extroversion of the vagina in single and nulliparous females during early life. Under any circumstances this condition of affairs is very seldom suddenly produced.

A. B., aged 21, a single and nulliparous female, stated that menstruation was established at the age of 14, and had always recurred regularly and had been free from any associated disturbance. Fourteen days before attending, whilst apparently in her usual good health and without having previously experienced any sensation of "bearing down," she lifted a heavy box with both hands and immediately was seized with intense "bearing down" pains; locomotion increased the discomfort, and it was impossible for her to sit down except on the edge of a seat, and even this was painful. She had neither at the time of nor since lifting the weight experienced any trouble in passing water.

The vagina was completely extroverted; the cervix uteri was directed forwards, and the fundus, which was extruded beyond the external genitals, was readily detected posteriorly towards the anus. The mucous membrane of the cervical canal was everted —apparently—to the extent of half an inch, so that the nose of the cervix itself was equal in size to a five shilling piece. A sanious discharge was exuding from the everted mucous membrane of the cervical canal. The mucous membrane of the vagina was dry and thickened, and much excoriated in consequence of the exposure and friction. The whole mass protruding from the external genitals was extremely tender to the touch, and was with difficulty replaced.

JAMES OLIVER, M.D., F.R.S.Edin.
Gordon Square, W.C.

CASE OF RHINOLITH.

A GIRL, aged 4, was brought to the West London Hospital on June 15th, 1889, suffering from a purulent discharge from the right nostril. The mother stated that about eighteen months previously the nose became swollen and painful. The swelling lasted about a week and then went away. Since that time the passage always seemed stopped, and there was often a little discharge from it. Since February there had been a constant purulent discharge, which smelt offensively at times, and was occasionally bloodstained. The child slept with her mouth open and snored. There was no history of any foreign body having been introduced into the nose.

On examination, the right nasal passage was found to contain much purulent secretion. It was quite obstructed to respiration. About three-quarters of an inch from the orifice a hard rough mass could be felt with a probe. The pus having been wiped away, a little wool soaked in a 10 per cent. solution of cocain was introduced for a few minutes, and an attempt was made to remove the mass. A spud could be easily passed underneath it and it was felt to be fairly movable. Some small fragments were broken off, which were found to consist of calcareous matter, but in consequence of the hæmorrhage further attempts had to be desisted from.

At the next attendance chloroform was administered, and the body was extracted without difficulty with a fine pair of forceps. It was found to consist of a nucleus, about the size of a pea, which was obviously a vegetable substance, but the exact nature of which was not determined. Around this was a coating of calcareous matter about an eighth of an inch thick. The surface was rough and nodular. The mass might be said to be a foreign body covered with calcareous matter rather than a rhinolith; but the question is one merely of degree, for rhinoliths have been shown to be invariably formed round a nucleus, which in most instances is a foreign body introduced from without, but may in some cases consist of a blood clot or a particle of inspissated mucus.

JAMES B. BALL, M.D.,
Physician to the Throat Department, West London Hospital.

GLYCERINE AS A DRESSING IN NECROSIS.

IN connection with the recent article in the JOURNAL, on the means of closing large bone cavities, the following short notes on the use of glycerine as a dressing in such cases may be of interest, the more so, as although producing excellent results, its use is by no means common. The two following cases occurred in the surgical practice of the Bucks General Infirmary, under the care of Mr. Charles Hooper, Senior Surgeon.

G. P., a pale, unhealthy lad, aged 15. On admittance the anterior aspect of left tibia for a space of 8 inches was riddled with twelve sinuses connected with necrosed bone, and involving nearly whole length of tibia, except articular extremities.

April 8th. Patient chloroformed, and by help of chisel, gouge and forceps, sequestra were removed till little more than shell of tibia was left, with a large cavity of about 9 inches in length. This was at first stuffed with carbolic lint, but at next dressing when oozing was controlled, the cavity was filled with ordinary glycerine; then covered with pieces of protective and bandage and limb raised. This treatment was continued till July 12th, when the healing process was nearly completed.

July 20th. Patient discharged, leg quite healed.

S. E., girl, aged 7. Strumous family history; pale and emaciated on admittance. Over anterior and lower two-thirds of left tibia were five sinuses connected with necrosis of the bone, following acute periostitis.

May 2. Under chloroform the necrosed portions of the shaft of the tibia, together with some new bone formed around the sequestrum were freely removed, leaving large cavity. At second dressing this cavity was treated with glycerine as in previous case and continued till cavity was too shallow to hold the fluid.

July 30th. Completely healed, with exception of one small sinus, probably connected with spicule of necrosed bone.

REMARKS.—In both cases the reparative process was very rapid; the granulations florid and redundant, under the stimulating influence of the glycerine, the wounds quite healthy, and moreover, what is a great advantage with young patients, the dressing was absolutely painless as contrasted with the agony caused by plugging cavities in bones. Possibly had the glycerine been impregnated with carbolic or boracic acid, the results might have been still more satisfactory.

HENRY CAUDWELL,
Late House-Surgeon, Bucks General Infirmary.
Woodstock, Oxon.

THE Legislature of California has voted a sum of 80,000 dollars for the erection of new buildings for the Medical College of the University in San Francisco.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

YORK COUNTY HOSPITAL.

ENLARGEMENT OF RIGHT LOBE OF THYROID: REMOVAL: RECOVERY.

(Under the care of Mr. JALLAND.)

[Notes by Mr. L. WILLIAMS, House-Surgeon.]

S. T., aged 19, was admitted on February 11th, 1890. He first noticed a lump on the right side of his neck about eighteen months ago. During the last year he had been more or less under the care of Mr. Weekes, of York, who had tried all the various known remedies, internal and external, including iodine, steel, belladonna, and blistering, without any success, the tumour having gradually got larger until it had become a serious inconvenience to him, producing difficulty in breathing, some cough, and some dysphagia. His respiration was harsh and whistling. Mr. Weekes, finding no remedies of any avail, and as the tumour was producing these serious symptoms, advised removal, and the patient came into hospital for that purpose.

Present State.—The patient is a tall (about 6 feet 1 inch), fair-haired, slight youth, who, up to the time of the tumour commencing to grow, had been in the habit of taking a great deal of exercise. This is now prevented, his breathing becoming very bad on any slight exertion. He has a large swelling on the right side of the neck, attached to and evidently part of the thyroid gland, which extends under the right sterno-mastoid muscle, pushing outwards the carotid artery. It has a tense semielastic feel. The left lobe of the thyroid does not seem to be much, if at all, enlarged.

Operation.—On February 12th, ether being administered, an incision, about three or four inches long, was made over the right lobe parallel with the sterno-mastoid, and about midway between it and the middle line of the neck. The platysma and superficial fascia were divided, and the sterno-hyoid and shyroid muscles at the lower end of the incision were drawn aside. The lobe now appeared covered by its fascia, dark maroon in colour. Fluctuation somewhat indistinct, was perceptible in it. The fascia was carefully divided upon a director, any hæmorrhage being easily checked by pressure and ligatures. On its deep side the lobe was attached by several bands of thick fascia and large vessels, a double ligature was passed round them and divided between these. The tumour was now lifted up towards the middle line, and a double ligature of thick Chinese silk (which had been prepared by boiling and afterwards soaking for some hours in 1 in 1,000 solution of perchloride of mercury) was passed through the pedicle and tied, the lobe was then cut off. There was no hæmorrhage from the stump. The wound was carefully cleaned by sponges almost dry, and drainage tube, the edges were brought together with carbolic catgut sutures, and the whole dressed with iodoform and salicylic wool. The tumour, which was about the size of small closed fist, consisted apparently of fibroid tissue with a small cyst, containing dark venous blood, in the centre. After the operation patient was very quiet for the remainder of the day, vomited slightly. Temperature at 7.0 P.M. was 98°.

February 13th. Was very restless during the early part of the night. Had a one-sixth of a grain of morphine hypodermically at 10 P.M. Slept for two hours. Took some milk. Temperature at 8.30 A.M. was 102.6°. Face flushed, skin moist, pulse 100. Temperature at 2 P.M. 104°. Breathing quickened, moist *râles* over front of chest. Ordered steam in room; milk and soda water to drink. As he still continued very restless, an ice cap was ordered to head. Temperature at 6 P.M. 103°. As there was a quantity of sanious discharge, the wound was dressed. Has a very troublesome cough, especially after drinking. Is quieter, taking nourishment well. Temperature at 10.30 P.M. 103°.

February 14th. Temperature at 2 A.M. 103°. Wound dressed, as there was a good deal of sero-sanious discharge, centre sutures loosened. Breathing quick. Cough still very troublesome. Temperature at 10 A.M. 103.4°. Wound dressed, drainage tube removed; a great deal of pus from lower part of wound. Passed a much better night, taking Brand's essence, milk, and beef tea. Bowels opened. Temperature at 6 P.M. 101.2°. Has been restless during the day, but general condition much improved. Breathing quieter. Temperature at 10 P.M. 100.2°.

February 15th. Has slept well. Wound looking slightly red round edges. No bagging of pus. Sutures removed and edges brought together by strapping. Dressed with Gamgee's tissue. Temperature at 10 A.M. 102.0°. Ice cap discontinued. Cough still troublesome. Temperature at 6 P.M. 101.0°.

February 16th. Slept well, perspired freely during the night. Wound dressed, looking better; still a quantity of pus.

February 17th. Wound dressed, looking well.

February 28th. Was able to sit up in a chair to-day. Temperature normal. Cough nearly gone. From this date he continued to improve, with the exception of a slight catarrh, which he caught from going into the garden on a cold day. One of the ligatures came away through a sinus which was left unhealed.

March 13th. Was discharged to-day; wound entirely healed, with the exception of a small sinus at lower portion.

GENERAL INFIRMARY, DONCASTER.

CASE OF CARCINOMA OF THE THYROID.

(Under the care of Mr. J. W. SMITH.)

[Notes by J. KIRKUP ROBINSON, M.B.]

S. M., aged 47, a married woman, was admitted on October 6th, 1888, suffering from a large fungating mass in the neck. The tumour was evidently in connection with the thyroid gland. Since the age of 14 years she had suffered from chronic bronchocele, the thyroid gradually getting larger until she was 20 years old. It then became stationary, and remained so until three months previous to admission, when it began to grow again. This



was due to an accident. Whilst getting out of a cart she slipped and struck her neck against the projection at the base of the shaft; she became faint and ill, and the thyroid became swollen and discoloured. It gradually got larger, and ultimately burst, discharging a sanguineous fluid, which discharge had been going

on ever since. It was treated by poulticing, and lanced twice. It got rapidly larger, and a fungating mass presented itself. This mass was in connection with the right lobe. After admission the left lobe also burst, a small fungating mass presenting, and gradually but rapidly enlarging. The patient stated that goître existed in her mother and four female cousins (the cousins being on the mother's side). None of these ever in her recollection had malignant growths.

On October 6th her temperature was: morning, 100.6° F.; evening, 101° F.; and on October 8th it rose to 102.8° F., gradually falling to 99.8° F. on October 11th, when she was discharged at her own request.

Operation was out of the question, as the tissues and glands on both sides of the neck were infiltrated with the disease. All other systems were normal, with the exception of the circulatory, where were found increased pulse-rate and palpitation, with a degree of nervousness. There was no exophthalmos. I am informed that she gradually sank, and died about three weeks after leaving hospital.

A microscopic examination could not be made, but from the clinical history of the case it was evidently carcinomatous.

The photograph was taken on October 11th, previous to her leaving hospital.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 25TH, 1890.

Sir E. H. SIEVEKING, M.D., President, in the Chair.

On the Symptomatology of Total Transverse Lesions of the Spinal Cord, with special reference to the Condition of the Various Reflexes.—Dr. H. CHARLTON BASTIAN in this paper pointed out how widespread the notion was amongst physicians that in cases of total transverse lesions of the spinal cord, either in the lower cervical or upper dorsal region, the reflexes dependent upon the lumbar region of the spinal cord, after any shock might have subsided, became exaggerated, whilst more or less of rigidity showed itself in the lower extremities. This opinion he himself entertained till about ten years ago, when two of such cases came under his care, and were, over a period of several weeks, very carefully examined. The notion itself had been based upon the observed effect in man of partial loss of brain influence over the cord, together with the results of experiments made upon animals of very much lower organisation by physiologists. He pointed out, however, that it was not a question as to what would happen when brain influence in man was partially cut off from exercising this or that influence upon the spinal cord, but rather what the results would be when the influence of both cerebrum and cerebellum were completely cut off from the lower half of the spinal cord. What would happen with animals much lower in the scale was a totally different question. Having called attention to statements made by himself upon this subject in Quain's *Dictionary of Medicine* in 1882, the author cited some recently published neurological textbooks to show that the old opinions as to the exaggeration of the reflexes under the conditions in question were still enunciated. The author, therefore, now gave details of four cases of total transverse lesion in the lower cervical or upper dorsal region of the spinal cord, upon the prolonged examination of which his opinion was originally based that all the so-called tendon reactions and lumbar reflexes were abolished, excepting the reflex actions of the bladder and intestines, which were found to be impaired to an extent that was specified. He subsequently cited twice as many recorded and other cases of fracture dislocation affecting the cervical or upper dorsal regions of the spinal cord in which sensibility as well as motility had been absolutely lost, and in which the reflexes had remained abolished after shock had passed off—the necropsies in these cases having shown that here also the crushing and other lesions were limited, and that the lumbar swelling was undamaged apart from the occurrence of secondary degenerations. The author insisted that the loss of sensibility must be absolute, as well as the loss of voluntary power, in order to bring about the abolition of the reflexes. He pointed out that the two principal objections that had been advanced against the acceptance of his views were (1) that the abolition of reflexes was only temporary, and would cease with the disappearance of shock; this being an objection which he considered to be fully met by his own cases of transverse softening, where there was little or no shock and where the reflexes continued absent for week after week. The other objection was (2) that there must in these cases have been lesions in the lumbar swelling of the cord; to which he answered that in three of his cases no such lesions were discovered, and that in all the more numerous cases of injury that he had cited in his paper the lumbar region was reported to have been uninjured and to have a healthy appearance. The author showed that the subject discussed in this paper was of great interest, not only (1) from the point of view of the importance of obtaining a correct symptomatology for total transverse lesions of the spinal cord, but (2) that it had important bearings upon some other points in the diagnosis of disease of the spinal cord, and (3) because it tended to throw great light upon the pathogenesis of rigidities and exaggerated reflexes, and seemed to cast a side-light upon one of the functions of the cerebellum. The author believed, in short, that the abolition of the reflexes in these cases was due to the simultaneous cutting off from the lumbar region of the cord of the influence not only of the cerebrum, but also of the cerebellum.—Dr. HUGHLINGS JACKSON described the paper which he had just listened to as admirable. He gladly listened to it; the more so as it in so many respects entirely agreed with his own views. In cases of exaggeration of the knee-jerks and rigidity of the limbs, it was not essential that there should remain a connection of the cerebellum with the cord below the lesion. He referred to a case formerly in the London Hospital in which, after a fracture in the cervical region of the column, there was only diaphragmatic breathing and total loss of sensation and motion below; there was no sign of knee-jerks, and they remained absent for three months. It had been suggested that there had been a secondary myelitis of the lumbar enlargement of the cord. He contended that Dr. Bastian had proved his point, and that the future would show how important an advance in knowledge had been made by the paper just read.—Mr. BOWLBY narrated some facts bearing on the paper. His notice had been called six years previously to a case of fracture dislocation in the cervical region in which there was total absence of knee-jerks. Since then he had met with twenty-two cases, nineteen of which had terminated fatally, and in fifteen of these he had made a *post-mortem* examination of the body. In all these cases there was total absence of deep reflexes, and as several had lived many months, the question of shock might be put out of court. He urged that when the transverse lesion was complete, there were no knee-jerks and no ankle clonus. Although, if the lesion was absolutely complete, all deep reflexes were abolished, he had met with cases in which the superficial reflexes, especially the tickling reflex of the sole of the foot, had returned after a few weeks. He mentioned the case of a boy, aged 19, who was under Mr. Morrant Baker's care, in St. Bartholomew's Hospital, with an injury to the neck. When admitted there was complete paralysis of the legs and almost complete of the arms, with incontinence of urine and fæces. Next day the reflexes were greatly exaggerated. There was slight sensation in the left leg and some little power in the left arm. It was thought that the cause of the trouble might be due to hæmorrhage around the cord, as he got worse. The symptoms pointed to the injury not being a complete transverse lesion. Eventually he recovered with only a slight paresis of the left arm. He found that if the injury was a not completely transverse lesion, the reflexes up to the line of the lesion would be exaggerated. This paper was of great value to surgeons, because if the reflexes after a fracture were all gone then there was a complete transverse lesion, while, if they were not absolutely absent, then the lesion was not complete.—Dr. BUZZARD stated that in cases of myelitis, in which there was absence of the deep reflexes, the generally accepted explanation was that there was extension of the inflammation to the lumbar enlargement. Dr. Bastian sought to prove that a tranverse lesion above the lumbar enlargement would abolish reflexes proceeding from that enlargement. He could remember cases in which, with total transverse lesions, the reflexes were retained. He referred to a case of paraplegia in a man aged 22, due to caries of the vertebræ, the apex of the curve being opposite the sixth dorsal spine, in which the lower extremities were powerless, and there was incontinence of urine and fæces. There was total paralysis of motion and sensation below a line drawn two inches below the nipples. Yet in this case the reflexes in the skin were greatly exaggerated, while clonus quickly came on, and the patellar tendon reflexes were also exaggerated. When the cord was examined, it

had a mottled greyish appearance opposite the curve, there were very few axis cylinders, and the white and grey matter was crowded with nuclei. Critics might contend that in a case like this there was no complete transverse lesion. The statement that a total transverse lesion would destroy all reflexes was a hypothesis and not a proven fact.—Dr. BASTIAN, in reply, reminded Dr. Buzzard that it was a question of facts and not of logic. This case was not one of complete transverse lesion. There were only two classes of cases in which evidence of the reflexes could be studied: (1) cases of fracture dislocation; (2) cases of softening from thrombosis or myelitis, which went on till the cord was diffluent. There was no recorded case of rigidity of limbs and presence of the deep reflexes after a total transverse lesion. He was content to wait for the future to prove the truth of his proposition, and would not grope in the records of the past.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 24TH, 1890.

J. THEODORE WILLIAMS, M.D., F.R.C.P., President in the Chair.

CLINICAL EVENING.

Case of Phthisis and Psoas Abscess.—The PRESIDENT exhibited a case of phthisis and psoas abscess in which the drainage of the latter had been attended with partial arrest of the former disease. The patient, a girl, aged 16, was admitted into the Brompton Hospital in October, 1889, with a well-marked cavity in the upper part of the left lung, and some tuberculisation of the right. In November a globular swelling, about the size of a hen's egg, appeared over the eleventh and twelfth ribs, about two inches from the spine on the left side, which increased and appeared to communicate with some fulness in the left pelvic fossa. The lumbar swelling was incised by Mr. Godlee, and a quantity of pus let out. At a later date it was reopened, and a drainage tube inserted. Dr. Williams drew attention to the relief to the lung afforded by the discharge from the psoas abscess, which he had noted in other cases; but what was most remarkable was that contraction of the cavity took place under unfavourable conditions of recumbent posture and difficult expectoration, where retention of secretion and fresh lung infection would have been naturally expected.

Osteotomy in Club-foot.—Mr. R. DAVY showed a girl, aged 16, suffering from congenital talipes equino-varus of both feet, on whom osteotomy had been performed at the transverse tarsal joints, in preference to amputation. On the right side he removed parts of the os calcis and head of astragalus, and from the outer metatarsal bones the whole of the scaphoid, cuboid, and cuneiform bones (three). On the left side part of the internal malleolus, os calcis, and astragalus, three cuneiform bones, bases of fourth and fifth metatarsal bones, and the whole of the scaphoid and cuboid bones. He showed the bones removed and casts of the feet before and after operation.

Case of Ossifying Scalenus (?).—Dr. BEEVOR showed a young woman, aged 23, with a curious hard tumour in the left supraclavicular region. There was a history of a fall twelve months before. It seemed to be in the place of the scalenus medius. The tumour, which was very tender to pressure, could be traced down to the ribs, and upwards to the spine. The subclavian artery was in front.—Dr. STEPHEN MACKENZIE thought it was a cervical rib. He mentioned that he had seen two other cases of the kind, both in women and both, curiously enough, on the left side.—Dr. SEYMOUR TAYLOR had little doubt of its being a cervical rib, cases of which were fairly numerous.

Case of Elephantiasis.—Mr. H. ALLINGHAM showed a girl, aged 17, whose legs, two years ago, began to enlarge in size, and had continued to do so. The patient's sister suffered in the same way, but in one leg only. Much benefit had been derived from wearing an elastic stocking.

Two Cases of Erb's Paralysis.—Dr. SIDNEY PHILLIPS showed a man, aged 31, who had suffered from paralysis of the shoulder muscles consequent on a fall down stairs. He had benefited by galvanism.—Dr. BEEVOR showed a cabman, aged 37, who was pitched off his cab on to his head and shoulder. This was followed by paralysis. He was told the arm was "out." He had at present complete paralysis of the supinator longus, biceps, coraco-brachialis, and deltoid and supra- and infra-spinati. The affected muscles did not react to faradisation, and gave the reaction to constant current of degeneration.—Dr. STEPHEN MACKENZIE asked whether there was any difference in the size of the palpebral fissure and pupils, showing implication of the cerebro-spinal system.—Dr. BEEVOR, in reply, said that the symptoms referred to by Dr. Mackenzie only presented themselves when the second dorsal nerve was affected, which was not the case in either of these men.

Case of Rheumatic Nodules.—Dr. SIDNEY PHILLIPS showed a girl aged 7 who had rheumatic fever several years since, and who had nodules connected with the flexor tendons in the palms of both hands.

Case of Hydarthrosis.—Dr. SIDNEY PHILLIPS also showed a girl, aged 14, who, seven years ago, contracted syphilis. In 1887 she had gumma in left femur, which yielded to iodides. Lastly she had applied to him on account of a large painless distension of the synovial pouch of the left knee-joint. No pain, no heat, no tenderness; it was a typical case of hydarthrosis of knee-joint.—Dr. FLETCHER LITTLE and Mr. WALTER PYE made some remarks in reference to this case.

Case of Severe Valvular Disease of Heart.—Dr. SEYMOUR TAYLOR showed a woman, aged 26, who presented the typical signs of aortic obstruction and regurgitation, of mitral regurgitation, and of mitral obstruction, dating probably from two attacks of rheumatic fever, ten and seven years since. He remarked that mitral insufficiency might act as a safety-valve to the over-distended ventricle, in which cases hæmoptysis was a relief.—Dr. MACKENZIE said the relief afforded by mitral incompetency would be dearly bought.

Case of Chronic Lead Poisoning.—Dr. STEPHEN MACKENZIE showed a man, aged 45, the subject of chronic lead poisoning, of which he presented all the classical symptoms—blue line, wrist drop, etc. He had worked in lead works for twenty-seven years and had had several attacks of lead colic, with wrist drop. He had cardiac hypertrophy and albuminuria, with papillitis and retinal hæmorrhages. He had never been a great beer drinker. Dr. Mackenzie remarked that the muscles supplied by the musculo-spinal nerve were all affected, while the supinators escaped, thus differing from Erb's paralysis.—Dr. BERRY asked whether there was any anæsthesia. He said it was still doubtful whether lead paralysis was a peripheral or a central paralysis; he himself inclined to the latter view.—Dr. FLETCHER LITTLE mentioned a similar case, and was astonished to find how little these men knew of the means of prevention, and he suggested that the only way of inducing employers to be careful to enforce precautions would be to saddle them with a liability for their non-observance.—Dr. MACKENZIE, in reply, said that the acid lemonade was usually supplied, but the men would not take it. He suggested that if the naval plan of mixing grog with the lemonade were followed, the plan might be more successful.

Case of Recurrent Granular Urethritis.—Mr. HURRY FENWICK showed a man who had gonorrhœa six years ago, since which time the slightest cold had sufficed to bring on a well-marked attack of the disease. He demonstrated the existence of a condition of granular urethritis by means of the urethroscope.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, FEBRUARY 14TH, 1890.

HENRY E. ARMSTRONG, M.R.C.S., President, in the Chair.

Public Health in Italy.—Dr. EDWARD F. WILLOUGHBY read a paper on the Public Health Act of Italy of 1889, which he described as a masterpiece of scientific legislation, strongly contrasting with our clumsy and imperfect efforts in the same direction, which had resulted in a chaos of conflicting authorities, statutes, and interests. Two ideas, which our legislators had utterly failed to grasp, pervaded the whole scheme. First, that sanitation was not all that was implied in the care of the public health, but that the medical relief of the poor, the hygienic aspects of manufacturing and other industries, the health of the army, navy, and mercantile marine, the control of the sale of food, the purity of water supplies, diseases of domestic animals, the pollution of rivers, the practice of medicine and pharmacy, registration of births and deaths, etc., etc., were co-ordinate and interdependent branches of one great department of social economy and legislation. Secondly, that these matters demanded special knowledge, not only in the executive, but also in the administrative, officers, and that, consequently, the control of the public health could not safely be entrusted to boards elected on popular suffrage on other issues than that of special fitness. Boards of Health must be distinct from the local authorities, be composed of experts in the several branches of the science and art, and be, together with the higher sanitary officials, appointed by an independent authority, namely, the Crown, so as to be uninfluenced by the fear or favour of the

ratepayers and the public over whose interests they had to watch. This last principle was recognised in this country in the case of inspectors of mines, factories, shipping, etc., but, with strange inconsistency, ignored in that department which concerned, not fractions of the community, but the entire nation. A noteworthy feature of the Act was the judicious balance of the relative claims of central control and of local self-government, with a corresponding distribution of the fiscal burdens. While the administration of the public health, in the widest meaning of the word, devolved on the Minister of the Interior, the prefects of the provinces, and the syndics of towns and communes, the minister and the prefects respectively were advised by a superior and provincial councils appointed by the Crown, composed of specially qualified physicians, engineers, chemists, pharmaceutists, veterinarians, jurists, and members conversant with administrative business, the medical and engineering members varying in number with the population of the provinces, and each of the other professions having but a single representative. The heads for the time being of the medical services of the army, navy, and the mercantile marine, the agricultural department and statistical office, with a principal law officer of the Crown, were *ex officio* members of the superior council. The provincial medical officers of health were appointed by the Crown on the recommendation of the superior council, were restricted to such practice as was consistent with their official duties, and were irremovable *dum se bene gesserint*, the members of the provincial councils being appointed by the Crown for three years but eligible for reappointment. The inferior, or communal, medical officers of health were appointed for three years, renewably, by the provincial boards from the most competent, in their opinion, of the practitioners in their districts. One special feature of the Act was the rigid demarcation between medical and pharmaceutical practice, medical men being strictly prohibited from dispensing and pharmaceutists from prescribing; the sale of proprietary medicines, unless approved by the superior council, absolutely forbidden, and those medicines which alone might be supplied without an order from a medical man indicated in the *Pharmacopœia*. Another question in which Italy was in advance of this country was the prohibition, as in Germany, of the use of poisonous pigments in textile fabrics, wall papers, toys, etc., no less than in articles of food. The Italian law enjoined a deliberate inspection of the wares of all dealers at uncertain intervals, while the penalties, fines, and imprisonment were much heavier than ours. If our Legislature could be brought to approach the vast question of the public health with something of the scientific and judicial spirit, and absence of party feeling and factious opposition shown by the Italian Parliament, we might find in this Act a guide, if not a model, for our own legislation in the future.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 20TH, 1890.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Cases, etc.—Mr. JACOBSON showed a case of Multiple Exostosis on the thighs, tibiæ, and scapula of a girl, aged 14.—The PRESIDENT, Mr. JOHN MORGAN, and Mr. D'ARCY POWER took part in the discussion.—Mr. D'ARCY POWER showed a specimen of Complete Disintegration of the Urinary Organs, following upon a long-standing phimosis.—Remarks were made by Mr. JOHN MORGAN and the PRESIDENT.

Surgical Sequelæ of Fever.—Mr. JACOBSON read a paper on the surgical sequelæ and complications of fevers, more especially those met with in typhoid fever. Diseases of the periosteum and bones were not very rare after typhoid. In his own experience the ribs had been more frequently attacked than the bones of the lower extremity. The causes were thrombosis, enfeebled nutrition, weakened periosteum due to strumous taint, or, where the disease ensued long after defervescence, some muscular strain. Amongst diseases of the joints, dislocations and ankylosis were the most common. Phlebitis and its consequences were frequently met with. Gangrene was of importance, especially when it affected the genital organs, for it might easily be overlooked or mistaken in its earlier stages for other diseases. Pleuritic effusions following upon typhoid fever were remarkable for the insidiousness of their onset, and for their liability to suppurate. Abscesses were of three kinds: those which were superficial and were akin to boils, those which were glandular, and those which started in hæmatomata. Laryngeal troubles were of disputed frequency, and Mr. Jacobson believed that they occurred more often in some epidemics than in others. Parotiditis was of interest, not only on its own account, but because, as Mr. Stephen Paget had shown, it might be associated with any form of abdominal lesion. Orchitis was said by some French observers to be a complication of typhoid fever, but Mr. Jacobson had not met with any case.—Dr. SIDNEY PHILLIPS said that at the London Fever Hospital he had seen cases of periostitis of the tibiæ both in men and women, and he thought that periostitis of these bones was of more common occurrence than periostitis of the ribs. Bedsores were much less common than formerly, owing to the improvement in nursing. He had recently seen three cases of laryngeal trouble, all in male adults. He believed that cystitis and vesical hæmaturia were also sequelæ of typhoid fever.—Remarks were made by Dr. BLAKE, Mr. CRIPPS LAWRENCE, Mr. MORGAN, Dr GOODHART, and the PRESIDENT.—Mr. JACOBSON replied.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 12TH, 1890.

SIR T. CRAWFORD, K.C.B., M.D., President, in the Chair.

Malta Fever.—Surgeon GIPPS, R.N., read a paper on Malta fever, which he maintained to be a specific disease directly caused by the grossly polluted condition of the harbour. It was more prevalent in the hotter months, when putrefaction in the water was most active, the cases reported being ten times as numerous in July as in January, and probably even more so, since many were returned as remittent. The crews of Her Majesty's vessels thus suffered far more severely than the troops on shore, and among the troops it was mostly contracted in crossing the harbour. It was, he held, quite distinct from the remittents common to other parts of the Mediterranean; the contrary statements of some being based on the erroneous observations of ill-educated Levantine practitioners. It never occurred out of Malta, except within the incubation period of about a fortnight, and, as Dr. Bruce had shown from the examination of twelve fatal cases, a characteristic micrococcus was abundantly present in the viscera, cultivations of which in agar-agar produced the disease in monkeys. He deprecated the term "typho-malarial," for not only was the microbe totally unlike the bacillus of typhoid, but there were no intestinal lesions whatever. The disease set in with *malaise*, headache, severe lumbar pains, fever—101° F. on the first day, rising to 104° or more, with a diurnal range of 2° or 3°—perhaps bilious vomiting and diarrhœa. But constipation soon followed, and all the symptoms abated except the headache, fever and constipation, with sleeplessness, complete anorexia and consequent emaciation and anæmia. The tongue throughout was moist and covered with a yellow fur. The duration of the disease varied from a few weeks to many months, but when once the fever subsided, recovery was rapid, though sometimes this result was attained only by removal to England. There were no characteristic complications except enlargement of the liver and spleen; and a quasi-rheumatic affection of the muscles, with periostitis, especially of the tibia, often followed. The mortality did not exceed 2 per cent., but death had been known to occur as early as the third or fourth day. With respect to the treatment, aconite, salicylates, etc., had no influence on the fever or the "rheumatism," and quinine was worse than useless. When the fever was high and the skin dry, a few half-hourly 20-grain doses of antifebrin were very efficient; sleep should be secured by chloral, bromides, or sulphonal. The diarrhœa called for no interference, and the constipation was best treated with enemata. The diet demanded the utmost care, relapses frequently following the too early employment of solid food. For the periostitis nothing was so good as a visit to some of the baths and watering places of Germany.—Dr. PRESTON, R.N., Director-General DICK, R.N., and Surgeon W. E. HOME, R.N., took part in the discussion. The two former doubted the specific character of the disease, believing it to be merely a remittent fever intensified by local conditions. Dr. Home had found strychnine of the greatest benefit throughout.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 12TH, 1890.

M. A. MESSITER, M.R.C.S., in the Chair.

Sinus of Chest.—Dr. FOXWELL showed a girl, aged 11, with a sinus discharging two drachms of pus daily, situated below and internal to the inferior angle of the left scapula. Her mother's

ather and sister died of consumption. Five years previously, a welling was noticed over the region of the sinus; this was anced, but healed and then formed again, and was relanced, and ad remained discharging ever since. Six months ago some carious ib was scraped. The spine was rigid; the ninth dorsal spine as prominent, and below these was a slight concavity, but no ertebral caries had ever been clearly made out. The lower half f the left chest gave the sign of thick adherent pleura, and the pper lobe of the left lung exhibited chronic pneumonia. There as also mischief at the right apex. The heart was uncovered nd dilated; the liver was large. No bacilli had been found in ie discharge. Dr. Foxwell remarked on the difficulty of finding ie origin of the condition described. Could simple caries account or the extensive changes in lung, pleura, and heart, or was the rst event an empyema? Her rapid improvement under simple eatment and the chronicity were against tuberculosis. The ict that she was only laid up the first three months, and could fterwards get about like other children, militated against vertebral caries. Infiltration and thickening of tissues resulting from ruptured empyema might possibly produce the rigidity, and explain the other changes.

Lead Tremor.—Dr. SUCKLING showed a man, aged 37, who had orked in lead for many years. He had tremor in all four extremities, and could scarcely walk. The head and trunk were ffected. The muscles of the face, lip, and tongue were also the at of well-marked tumours, very similar to those seen in cases general paralysis. The tumour was present on exertion, only easing when the man was lying down and keeping his muscles rest. He had a well-marked blue line on the gums. The umour had existed for two years. Dr. Suckling pointed out iat in some cases of lead-poisoning, the facial muscles, lips, and ongue were affected with tremors, and the speech, and also in me cases the intellect, affected. Such cases simulated general aralysis of the insane, and a careful inquiry should always be ade as to any exposure to the risk of lead-poisoning. The abnce of a blue line was not to be relied upon as excluding leadoisoning as the cause of nervous symptoms.

Sphygmographic Tracings.—Dr. SUCKLING showed pulse tracings, ken with Dudgeon's sphygmograph. Dr. Suckling considered iat the sphygmograph was exceedingly useful as a means of ducating the finger, and that students should be encouraged to se the instrument. He also thought that it was useful in the calisation of thoracic aneurysm and in the detection of crotism.

Unilocular Cysts.—Mr. JOHN W. TAYLOR showed three typical ecimens of unilocular cyst, successfully removed in the course of ynæcological practice. 1. A unilocular cystoma of the ovary, conining when removed about three pints of clear fluid. The wall the cyst was clearly seen to be composed of ovarian tissue, the umour consequently being purely ovarian. 2. A cyst of the paroarium or broad ligament, which had grown in an upward direcon, separating the folds of the broad ligament and stretching the allopian tube in its growth, so that the latter was a long flatned tube traversing the walls of the cyst, and opening on its eriphery. 3. Another cyst of the broad ligament, which had own downwards into the pelvis rather than upwards into the odomen. It was accordingly sessile or "embedded," and had en removed by enucleation.

Papers.—Mr. BARLING read notes of a Case in which he had cised half the clavicle for Sarcoma.—Dr. SIMON read a Report Twelve Months' Work in the Skin Department of the General ospital.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF STATE MEDICINE.

FRIDAY, FEBRUARY 7TH, 1890.

A. W. FOOT, M.D., F.K.Q.C.P., President, in the Chair.

The Medical Selection of Lives for Assurance.—The PRESIDENT ad a paper on the medical selection of lives for assurance. He id the questions set forth in the proposal sheet were regarded some as vexatiously minute and unnecessarily numerous; but anticipated that ere long the companies would require informaon as to the condition of the retina, the state of arterial tension, e integrity of the various reflexes, the centesimal excretion of ea, the nutrition of nerves and muscles as estimated by elecicity, microscopic details of urinary sediments, and a statement the respiratory capacity. He criticised the tenacity with which mpanies clung to the ideal configuration of an apoplectic person, as short, stout, thick, and red. There were no external indications of the arterial degeneration which was the proximate cause of cerebral hæmorrhage. Little, if any, attention was paid to the significance of aural discharges—to that of recurrent erysipelas (especially facial), to that of latent disease of the rectum, and to cases of fæcal obstruction. Several points of a practical nature were made in reference to consumptive lives, and the means adopted to blind examiners. The subject of "habits" with reference to the use of alcohol was fully treated of. The question of the acceptance of an albuminuric life was discussed, and rejection of it under any circumstances recommended. Similarly, cases of chronic mitral regurgitation were considered unsound from an assurance point of view, though in private practice they might, with care and attention, live long and efficiently.—Professor PURSER, speaking from many years' experience in examining for life assurance, agreed almost entirely with the views expressed by Dr. Foot. It was difficult to know what value to put on family history. The causes of death assigned were so imperfect, and so frequently absolutely incorrect, as to be of very little value; and, therefore, except in very clear cases, he set no value at all upon family history. Often it was difficult to say what a patient died of; and, again, *post mortem* examinations disclosed that the causes were different from what the doctor thought. He did not think, therefore, that the Registrar-General's returns were sufficiently accurate to found scientific conclusions upon them. As regards renal disease, if he found an applicant had albuminuria, he advised that the case should be postponed for three, six months, or a year; and if there were albumen in the urine when he came up again he was rejected, but if not he was accepted. For a considerable period during the last twenty years it was left optional by the company to examine the urine for albumen, and his practice, accordingly, had been to examine it only where he had reason to suspect there was something the matter with the kidneys; but for some years past he was obliged to examine for sugar and albumen in every case, and in a considerable proportion of the applicants in whom there was no reason to suspect anything the matter with their kidneys he found albumen, and, though apparently in perfect health, they were rejected.—Sir WILLIAM STOKES said notwithstanding the advances in surgery, he would not recommend a person with hernia as a first class life; he would be extremely apprehensive of the result of the operation for the radical cure. Neither would he accept a person afflicted with hæmorrhoids as a first-class life. The operation only dealt with the existing condition of the parts the seat of the disease, and not with the conditions which brought about the disease. He would not recommend cases of albuminuria to be taken under any circumstances.—Sir CHARLES CAMERON said he attached much greater importance to the presence of albumen in the urine of a man apparently perfectly healthy than to its presence in that of a man suffering from illness of a transitory character; for there was disease of which it was a symptom.—Dr. MCSWINEY, Dr. BEWLEY, Dr. E. M'D. COSGRAVE, Dr. DONNELLY, and Dr. WILLIAM STOKER also took part in the discussion; and the PRESIDENT replied.

CORK MEDICAL AND SURGICAL SOCIETY.

WEDNESDAY, JANUARY 22ND, 1890.

FRANCIS W. GREENE, M.D., President, in the Chair.

Undescended Testicle.—Dr. C. Y. PEARSON read notes of a case in which he had operated for undescended testicle complicated with inguinal hernia, which had only appeared a short time previous to operation. After removal of the testicle the gut was replaced, and retained *in situ* by means of lacing up the scrotal canal with continuous suture of silkworm gut. The external wound having been closed with sutures, a short drainage tube was inserted, a pad of Gamgee tissue worn to act as truss, but soon discontinued as unnecessary. The result was perfectly satisfactory.

Nasal Tumour.—Dr. H. R. TOWNSEND read notes and exhibited some beautifully executed photographs of a case in which he had removed a large tumour from the external surface of nose, presenting the characters of mixed-celled sarcoma. By means of two incisions he brought forward a piece of skin from the cheek to act as a covering for the right side of the nose, with very good result as shown by the pictures.

Uterine and Urethral Electrolysis.—Dr. C. Y. PEARSON exhibited the apparatus used by him for the treatment by electrolysis of uterine and urethral disorders, one of Schall's Leclanché

forty-cell batteries with collector, current reverser, and galvanometer of the horizontal variety, with shunt. He also showed various electrodes.

REVIEWS AND NOTICES.

GESCHICHTE DES MEDICINISCHEN UNTERRICHTS, VON DEN ÄLTESTEN ZEITEN BIS ZUR GEGENWART. Von Dr. THEODOR PUSCHMANN, Professor an der Universität zu Wien. Leipzig. 1889. (A History of Medical Teaching from the most ancient times to the present. By Professor Theodore Puschmann, of the Vienna University.) Leipzig: Von Veit and Co. 1889.

WHILE in England there is an utter lack of serious histories of medicine, and even of inquiry after them, our German cousins, with that "unprofitable diligence," which Carlyle notes in them, devote bulky volumes to portions of the subject, which here would be considered redundant for the whole. In the present work, for instance, Professor PUSCHMANN has filled 500 stately octavo pages with the mere history of medical teaching, each page bearing evidence of erudition and research of a kind not to be looked for in our own literature.

The author, with Hippocrates, refers the origin of the healing art to necessity, the mother of invention. And it is in surgery rather than medicine that he sees the elder sister of our craft. The combative manner of life of primeval man, whose favourite occupations were war and the chase, led to wounds and hurts for which help was required. Compassionate friends and comrades relieved pain, when they washed out burning wounds and dressed them with cooling herbs, whence an empirical surgery had birth.

But it was medicine, not surgery, which betrayed us into the hands of superstition. When internal maladies and deadly epidemics swooped down upon the terrified savage, he turned for help and advice to his sole repositories of knowledge, the priests. This was the more inevitable since the mystery and enigma of disease led the untutored mind to ascribe to it a supernatural origin.

Hence our author traces the gradual birth in the temples of an art of medicine, and the formation of temple schools, and so traces through ancient days, up through the Middle Ages to the present time, the growth and advance, not so much of knowledge itself, as of the methods of imparting it. It would be most interesting, did space permit, to follow the study of medicine in India, Egypt, Greece, and the ancient world, or to examine with our author the Arabian and the monkish schools, or to visit with him Salerno, Montpellier, and the other famous teaching centres of mediæval Europe; but it seems more useful, at the present crisis of medical education in England, to lay before our readers the opinion which a distinguished foreign professor has formed of our methods of instruction. We trust that this "seeing ourselves as ithers see us," will have the excellent effects Burns attributed to it.

Professor Puschmann says that the methods of the Middle Ages have held their own the longest in the medical teaching of England. It therefore happens nowadays—even if seldomer than formerly—that medical students betake themselves to practitioners to become apprentices. Here they remain a year in order to gain a superficial acquaintance with those matters which their future life will require them to know. In this method much depends on the individuality of the pupil, and nearly everything on the personality of the teacher. If the student is industrious and gifted, and if the teacher possesses patience, knowledge, and delight in his work, then this year is for the former of inestimable use to his later studies. Under other circumstances it is lost time, and serves at the most to furnish him with a mechanical routine which often borders closely on charlatanism.

The same results occur if the first year of medical studentship is spent in a hospital, as is also frequently the case. The learners believe that here they have the opportunity of observing many sick, and they hope to receive instruction from the house-physicians on the more important phenomena. If they are not deceived in these expectations, they can acquire a certain dexterity in the examination of the sick which is very useful to them in their later medico-clinical work.

But in many other directions this form of entry into the medical profession has great disadvantages. It misleads the student into superficiality, since it accustoms him only to skim the reality of things, because he has neither sufficient knowledge nor intelligence to enable him to reach the foundation. And the results, such as they are, which are attained by this method scarcely repay the sacrifice in time and trouble they occasion the physicians who play the part of teachers, and still less justify the inconveniences they bring in their train in the treatment of the sick. Anyway, the systematic teaching of a medical school is far preferable to this feeling about on unknown ground.

From this preparation it has become more and more usual for the student to proceed at once to a medical school or university. The English medical schools have developed out of the above method of instruction. They are the outgrowth of hospitals, and originated in the physicians taking the pupils, and instructing them in the healing art. As the requirements of education increased, they divided the teaching of the single department of medicine among themselves, and took care, if they deemed themselves in detail not qualified to teach the theoretical branches, that efficient teaching power should be acquired, and the necessary teaching appliances and institution were provided.

The universities attracted only a small percentage of medical students, since until lately they dispensed with the necessary requirements of their education. The English universities were, as J. Döllinger calls them, only magnified grammar schools, which do not give the necessary opportunities for the formation of officials, or the production of physicians, jurists, or natural philosophers; they are rather fitted to supply the State and society, "by means of classical and mathematical studies, together with logic and moral philosophy and by a university life, with the finished and independent gentleman, and moreover to supply the State Church with clerics, rather formed on classical and literary than theological lines."

Dr. Puschmann, however, clears the Scottish universities, and especially Edinburgh, from these censures. "There," he tells us, "they early admitted practical medicine into their scheme of education."

Our author then passes in review the various hospitals and educational and examinational bodies, complaining of the want of uniformity, especially in the provision of teaching appliances, etc. "Many have high, airy lecture rooms, serviceable chambers for anatomical dissection, well-fitted physiological and chemical laboratories, collections in natural science, anatomical and pathological museums, libraries and clinical institutions of all kinds, while others suffer from poverty in these necessities, and offer in this respect less than the smallest medical faculty in Germany."

He notes that on the outside appearance of the university professors and students the theological character of these institutions stamps itself. "When," says he, "they walk in in their long black gowns and biretta-like caps, one imagines oneself set back in that time when the monks conducted the education of youth. The students are held in severe discipline; they are not treated like young men who are ripe for an assured freedom and independence, but like schoolboys who require a continual oversight."

In one particular, however, the professor admits our pre-eminence: "If England has not always kept pace with the advance which medical education has made in other countries, yet she has the great merit of having established the first effectual sanitary administration." He then goes on to describe the various duties of the local boards, and the examination for certificates in sanitary science of intending medical officers of health. He concludes of our sanitary government: "This organisation stands upon the principle of self-government, which, in a country whose inhabitants have been accustomed to self-management for centuries, which owns a great national empire, and understands the benefit of a national health supervision, will certainly, in this department, aim at noteworthy results."

Although medical education in England does not receive overmuch praise from the Austrian professor, that of the United States is far more severely handled. In America, we are told, several physicians in a place unite for the purpose of imparting medical instruction and issue diplomas to their pupils. Nobody inquires as to the qualification of the teachers, or the result of their instruction. The value of these teaching establishments is consequently most unequal.

Some medical schools, as the New York College of Physicians and Surgeons, founded 1791; the University Medical College, which has existed since 1841; and the Bellevue Hospital College in New York, as well as the Massachusetts Medical College at Boston, and the Rush Medical College in Chicago, rightly enjoy

good reputation; but by the side of these are shams which occupy a very low place in both educational and moral respects.

The scandalous traffic which many of these institutions carry on in medical diplomas is well known. We recently published an account of an almost incredible example of this. It is no wonder then that American diplomas of medicine are regarded with distrust in Europe, and are classed with those charming, if somewhat insignificant, certificates which may be won in the cotillon.

The education of American physicians, with numerous individual exceptions, stands in many respects below that of their European *confrères*.

President Eliot declared in a report for the years 1871-72:—"It is terrible if one regards the ignorance and incompetence of most American physicians who have graduated in American schools; they poison, cripple, and slay in every manner, and are not fit to receive charge of life and health."

Those capable physicians who are found in America partly originate from Europe, or else have followed their studies there. Yet some branches of practical medicine, as gynæcology and dentistry, are followed with excellent results. Moreover, gratifying endeavours are being made all over to remove existing faults, and to introduce methods of medical education on European patterns.

We especially recommend to our readers the "concluding observations." It is a pity that the work is not likely to be translated into English, for it would be most valuable at the present time, and it is certainly, so far as this country is concerned, a unique work.

The book is provided with a fair index, and is printed in the now common Roman characters.

PRINCIPLES OF UNIVERSAL PHYSIOLOGY: A Reform in the Theories of Physics, Chemistry, Biology, and Cosmology. By CAMILO CALLEJA, M.D. London: Kegan Paul and Co. 1889.

THE "universal physiology," of which the author gives us his principles, is not that science which is usually called physiology by everyday people, or, speaking more strictly, it is not that science alone but rather all science, both physical and metaphysical. Our author embraces within the term more than did even the learned of the century previous to our own. Anyone who has looked back into old volumes of the *Philosophical Transactions* of that most reverend of learned societies, the Royal, has probably experienced a feeling of surprise on making acquaintance with the nature of the contents of the papers entitled Physiological. Turning to, for instance, the abridged edition of the *Transactions* issued in the year 1720, "and disposed under General Heads by John Lowthorp, M.A., F R.S.," he may have found that the "physiological" papers deal with "Meteorology, Pneumaticks, and Hydrology." Physiology was then synonymous with natural philosophy. The "Decanum Physiologicum," by Mr. Hobbs, is an example of the employment of the word. Physiology, in the sense in which we understand it now, at that time barely possessed an independent existence in the sisterhood of the scientific muse. Observations we should now describe as physiological were then styled anatomical, anatomy being the next sister, and the elder. Yet physiology does, as the author reminds us, strictly mean "discourse on Nature," and with the prefix "universal" before it, we can hardly quarrel with him for his present use of the word.

At the same time it must be borne in mind that about the problems treated of by modern physiology the book before us has really very little to say. Twenty pages are all that are devoted to biological science altogether, and of course still fewer fall to the share of the branches of biology which constitute physiology in the modern restricted sense. In these twenty pages the reader is confronted by a perfect host of new and terrible terms, many of them headed by a capital: Concrete Biology, Abstract Biology, progene, interstitial progene, Exothermic microgeny, Endothermic combinations, dishydratation, biontologic animism, etc. New wine may, as one knows, be lost if put into old skins, yet while that risk is being run, it has at least the chance of getting tasted by the unsuspicious in their belief that it is the old and approved in quality. We do not think our author has a vintage to offer that would have run much risk of bursting the old bottles, but he spoils his chance of getting a taster for its quality by this very aggressive display of newness which he puts on. We say advisedly "puts on," for much of his biology appears to us the reverse of new, is, in fact, certainly antiquated. On page 93 he seems to think that by irritability of protoplasm physiologists suggest some quality belonging to protoplasm apart, and outside the range of chemical or molecular physics, vital in the sense of the vitalism of Unser or Prochaska. Surely the truth is rather that to-day the physiologist attacks the problems of his science from no other approach than the chemico-physical. From queries and methods metaphysical he abstains, and will probably for long to come continue such abstention. And our author of the *Principles* would have done well himself to follow the course pursued by the physiologist in this matter. The author hardly recognises that physiology makes use of the term protoplasm, not as a cloak for ignorance, but as a convenient expression for a quantity about which little is known, much is unknown, and all is desired to be known. In working at the problems before it, physiology uses the term as a convenient one much in the way that in mathematics the expression x is employed to devote an unknown quantity. The word "protoplasm" is obviously more manageable than any such periphrasis as "the substance which possesses that complex of actions which together confer on it the qualities of life," repeated on each occasion.

On page 104 the author is guilty of injustice to the French schools of biology, when he says that they to-day adhere to the doctrine of the origination of cells from intercellular material. One cannot call to mind a single statement from any of them that could form the basis for such an opinion.

Altogether the book appears to us to have no especial merit. Some views in it are given in an interesting way, and some of its novel terminology is clever, but as a whole the work strikes one as crude and unnecessarily obscure.

CLINICAL LECTURES ON SOME OBSCURE DISEASES OF THE ABDOMEN. Delivered at the London Hospital. By SAMUEL FENWICK, M.D., F.R.C.P., Physician to the London Hospital. London: J. and A. Churchill. 1889.

DR. FENWICK has done well to publish these important *Clinical Lectures* in the form of a handy volume. They may fairly be held as standard demonstrations of disease, not as complete nor so well defined in scope as those which form the well-known work of the late Dr. Murchison on the liver, but perhaps more thorough in respect to analysis of cases. Owing to the labours of Spencer Wells, Tait, and the general surgeons who have practised operations on the kidney, liver, spleen, and stomach, many appear to be under the impression that abdominal diseases have migrated from the province of medicine to the domains of surgery. Dr. Fenwick has not neglected to take this fact into account. He notes that the brilliant success of ovarian surgery may have led some persons to undervalue the ill effects likely to arise from operations on the eritoneum. Such persons may look upon a careful consideration of a case of abdominal tumour as unneccessary, under the idea that an exploratory incision will settle all doubts respecting it. Others, adds our author, still view with undue apprehension any operation on the abdomen, and are, in consequence, inclined to delay the adoption of measures on the prompt execution of which the life of of a patient may depend. Dr. Fenwick expresses a hope that his inquiries may prove useful to both the above classes of physicians and surgeons, assisting them to define the cases in which surgical procedures are most likely to prove beneficial.

Perhaps the most important lecture is the seventh, which treats of tubercular peritonitis in the adult. Dr. Fenwick has little faith in flsuhing of the peritoneum in cases of acute tubercle, the disease being too generally disseminated beyond the limits of the abdomen to be amenable to any active local treatment. The ascitic form of chronic tubercular peritonitis receives much attention from Dr. Fenwick. The physical signs in this interesting affection often simulate the presence of a tumour, as the author distinctly states. At the Obstetrical Society, last year, reference was made to cases where localised collections of fluid and masses of intestine matted by inflamatory products, gave rise to suspicion of the existence of cysts or solid tumours of pelvic origin. After exploratory incisions, nothing further being done, a remission of all symptoms, even disappearance of the "tumour," have been noted by several observers; but how long the patient may remain free from recurrence or active progress of the tubercular disease remains doubtful,

so that the advisability of opening the abdominal cavity must as yet be held equally dubious.

The lecture on perforation of the appendix vermiformis deserves careful study alike by the surgeon and the physician. Dr. Fenwick has high analytical abilities and few medical subjects more demand such powers than the diagnosis and treatment of that grave condition. No doubt the mortality after surgical interference is still high, even after the simple opening of a localised abscess; yet cases of suspected perforation which have recovered without the aid of the surgeon may represent errors of diagnosis; and where perforation really exists temporary recovery is not rare, and recurrence of symptoms is certainly frequent. Dr. Fenwick is therefore, we think, right in holding that in most cases where perforation is diagnosed a surgical operation is necessary in order to save life. The prospect of success will vary in each case, he adds, according to the locality occupied by the pus, the amount of general peritonitis, and the condition of the patient.

The lecture on perinephric abscess is another example of careful clinical analysis. The primary cause of this form of suppuration is discussed at length. It appears that a little under 30 per cent. of collected cases (32 in 107) presented signs of kidney disease, less perhaps than the pathologist might expect. Still more interesting is the fact that in only three of these cases was the capsule of the kidney found to be perforated, although that condition is generally held to be the cause of perinephric abscess. The suppurative process appears to extend from the kidney to the adjacent structures, without any accident of the nature of perforation. Still, some pathologists might hold that a perforation of the capsule may close before death so as to escape notice at a necropsy.

Enough has been said to demonstrate the character of these interesting *Lectures*. The remainder, on fæcal abscess, gastric abscess, stricture of the ileo-cæcal valve, and cancer and hydatids of the peritoneum, are written in the same spirit as those which have been briefly considered in the above paragraphs.

Beiträge zur pathologischen Anatomie und zur allgemeinen Pathologie. Red. von Dr. E. Ziegler. Jena. 1889. (Ziegler's Contributions to Pathological Anatomy.) Vol. V, parts 2 and 3. Vol. VI, parts 1 and 2.

The second part of the fifth volume is occupied with observations made in the Pathological Institute of Turin. Among them are communications by Carbone, on adenomatous tissue in the small intestine; by Foa, on the structure of the red blood corpuscles of mammalia, and by the same author on the experimental study of infarctions of the kidney.

The third part contains memoirs from various laboratories. Those of Cox of Deventer, on inflammation of the lungs; of Fischer, on minute changes in bronchitis; and of Löwit, on the connection of leucocytes with coagulation of the blood may be specially mentioned. There are also two interesting essays, one by Neumann, on inflammation, and one by Ziegler, on immunity against infectious diseases.

The most important memoir of the sixth volume is that which constitutes its first part, on the results of extirpating the suprarenals in rabbits, by Dr. Guido Tizzoni, of Bologna. The operation of destroying one or both suprarenal capsules was performed under anæsthetics and with antiseptic precautions on fifty-four rabbits. Most of them ultimately died, presumably from the deprivation of these organs, though in many cases only after the lapse of several weeks or many months. Some were killed a considerable time after the operation. Death was preceded by progressive and characteristic symptoms. The author's conclusions is, that destruction of one or both suprarenals causes death in rabbits, either shortly or after months, or even years. The symptoms of illness are comparable to those of Addison's disease, namely, pigmentation, especially of the mucous membrane of the mouth, progressive cachexia, and weakness, and nervous phenomena, such as loss of power, coma, and epileptic attacks. In the great majority of cases lesions of the nervous system were found after death in the cerebellum, spinal cord, and peripheral nerves, for an account of which reference must be made to the original.

These changes the author believes to be due to the destruction of the suprarenals acting through the sympathetic system on the blood supply of the nerve centres. Hence he regards the symptoms of Addison's disease as due to an organic or functional disturbance of the nervous system.

The second part of the sixth volume is taken up with observations in morbid anatomy from the Pathological Institute of Munich, among which may be mentioned those by Sparkuhl, on chronic oöphoritis; Prinzing, on the morbid anatomy of the placenta; and Frobenius, on congenital cystoma of the neck. None seem to call for special remark.

The Surgical Treatment of the Common Deformities of Children. By Walter Pye, F.R.C.S. Bristol: John Wright and Co. London: Simpkin, Marshall, and Co. 1890.

At the present time the abuses into which specialists had drifted have been much curtailed by the development of special departments at the general hospitals, and students have the opportunity of learning something at their own schools of what they would in past times probably not learn at all. Moreover, there is no doubt that the present instructors are men of much higher stamp than those who formerly were connected with the different specialities, and we must allow that even now those who limit themselves to one speciality are not generally distinguished by breadth of mind, or that consideration for patients or that professional rectitude for which a teacher should be looked up to by those learning from him. It is, therefore, a gain to the profession when hospital teachers of acknowledged eminence and independence of character can produce good textbooks on special subjects, and the work under notice will be welcomed as a useful addition to the well-known more general works on surgical diseases of children of Holmes and Owen.

That there is anything very novel or original in this volume cannot be claimed, but, as we should expect from the author, the advice given is clear and full of common sense. Expensive and complicated apparatus, which have long been the opprobrium of orthopædic surgery as the means of draining the patient's pocket and often supplying a detrimental support—all this is avoided, and such means described for treatment as the poor can find in the out-patient department of a general hospital. This is likely, therefore, to be of service to the practitioner as well as to the student.

The subjects treated of are limited, and do not include harelip or cleft palate as we should have expected, but the chapters are concerned with spinal deformities, ricketty and bandy legs, the different common deformities of the feet and hands, and a short chapter on the treatment of nævi and on congenital dislocations. It is essentially a book of treatment, and forms a useful appendix to the author's well-known work on surgical handicraft, and like it, is copiously illustrated.

Looking now at a few of the subjects considered, it is not surprising that most attention is given to the different kinds of spinal deformity, and here the advice as to examination and treatment is sound and simple. The exercise of spinal muscles rather than their imprisonment by splints and apparatus is reasonably urged, and the author goes with the advice given by Mr. Roth on gymnastic exercises and the unreasonable use of the reclining board. In flat foot, too, the beneficial action of muscular exercise is adverted to, but we think even more stress might have been laid upon it, in preference to artificial supports to the arch of the foot, which he refers to rather fully, and does not limit to the relief of pain. It appears to us also that more description might with advantage be given of the symptoms attending some of these affections. The use of massage is urged in many cases, and there is no doubt this is a sensible departure from the older forms of treatment, for many deformities due to muscular weakness and paralytic and spasmodic diseases, such as some forms of clubfoot, wry-neck, and some spinal deformities. Recent observations by Landous, of Leipzig, on flat foot, are instructive on this point. The work includes a reference to some of the rarer operations necessary for the more intractable common deformities of childhood, but it does not pretend to deal with the rarer though important and interesting affections. It can be safely recommended.

Lehrbuch der pathologischen Mykologie. Von Dr. P. Baumgarten. Braunschweig. 1890.

This work, begun in 1886, is now completed in two volumes. The whole subject of bacteriology in its botanical, chemical, and pathological aspects is treated in the form of lectures, the first volume containing Lectures I—VIII, the second IX—XIV. As its

itles indicates, the pathological aspect is the chief object of the work, and accordingly its use will be most recognised and appreciated by medical students and medical men.

The marvellous development of bacteriology that has taken place during the last fifteen to twenty years, the rapid strides that are constantly being made by a legion of workers in all countries, the necessity that every physician and surgeon must feel in having constantly forced upon his attention the study of bacteriology and the results of these studies, imply in themselves a desideratum of consulting and studying a reliable record of the progress of this important branch of pathology. Professor BAUMGARTEN'S book fulfils this in a most satisfactory manner. Every subject, general and special, is treated in an exhaustive and masterly manner; is represented in clear, methodical, and concise form; is largely illustrated, and contains as complete a bibliography to date as can be desired.

While carefully recording all well ascertained facts, and summarising them for the sake of formulating general theories, Professor Baumgarten, himself a distinguished worker in pathological mycology, constantly criticises in a fair and impartial spirit, compares contradictory statements, interprets facts, points out difficulties in accepting or rejecting this or that statement; and it is this portion particularly which, with the excellent bibliography, raises the book to a valuable work of reference also to the original worker in bacteriology.

The illustrations, many of which are in colours and original, are numerous, pretty, and well printed, though some are certainly rather diagrammatic. There are only very few drawings illustrating the aspect of cultures of the different species of bacteria, and in these respects the book is no doubt open to improvement; otherwise, it may be justly pronounced a most useful and highly creditable work.

NOTES ON BOOKS.

A Handbook of Diseases of Women, including Diseases of the Bladder and Urethra. By Dr. F. WINCKEL, Professor of Gynæcology and Director of the Royal University Clinic for Women in Munich. Authorised Translation. Edited by THEOPHILUS PARVIN, M.D. Second Edition. Revised and enlarged, with 150 illustrations. (Edinburgh and London: Young J. Pentland. 1890).—This translation of Winckel's *Handbuch* is perhaps the most popular of all purely systematic manuals in the English language. It appeared less than three years ago, and this second edition has been published before a new issue of the work in the original German. The editor explains that he hoped it would be otherwise, but that Professor Winckel had been unable to work at a second edition, owing to stress of other professional duties. The author has, however, added to the translation a section on Diseases of the Female Urethra and Bladder, a condensation of his previous work on that particular subject. Dr. Parvin may be congratulated not only on the speedy appearance of this new edition, but on its superiority to the first issue. The plates, not of high merit as a rule, are better printed than before, and the names of parts, indicated by dotted lines as usual in diagrams, are now given in English, and not in German as in the first edition. The woodcuts remain far inferior to similar illustrations in many British and American works on diseases of women, and this remark applies, in these days, to most illustrated publications of German origin. On the other hand, the text, which we have already had occasion to review in a favourable sense, may well serve as a model to writers in this country and the United States. It is an epitome of the latest views and practice of authorities, free from egotism and personality, and prepared for its professed object,—the instruction of its readers.

The Professional Pocket Book, published by Rudall Carte and Co. (Berners Street, W.) on a plan devised by Sir Julius Benedict, is specially adapted for professional engagements, and is arranged on a very convenient plan. There are three days on a page, and a line for every working hour of the day. The diary is divided into four quarterly parts, so that it is not necessary to encumber one's pocket with a whole year's engagements at one time.

A Textbook of the Practice of Equine Medicine. By WILLIAM ROBERTSON, F.R.C.V.S., Principal of the Royal Veterinary College, London. Revised by J. PENBERTHY, F.R.C.V.S., Professor of Pathology and Therapeutics in the Royal Veterinary College, London. Second Edition. (London: Baillière, Tindall, and Cox, 20 and 21, King William Street, Strand. New York: W. R. Jenkins. 1890).—It can be well understood, from the prominent position held by the late Professor Robertson, that a second edition of his work would soon be called for. Soon, however, as the call came, he himself was not spared to revise his work. The task has fallen upon Professor Penberthy, who rendered the author valuable assistance in the preparation of the first edition. Professor Robertson did his work thoroughly, and this book remains as a monument of his industry and characteristic method of expression, which sometimes renders it difficult to unravel a fact or opinion held by the author. The work of the reviser has been light, but although the second edition has so soon been called for, much might have been added to the original edition.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SODEN MINERAL PASTILLES.

IN Germany the Soden springs have a great reputation for chest diseases, and are also employed in atonic gout, scrofula, etc. The pastilles sent to us through Messrs. Clarke, Son, and Platt, 85, Gracechurch Street, E.C., contain the mineral ingredients obtained by evaporation from the springs of Baden-Soden, in the Taunus. We have made an examination of them, and find that there are present the salts of soda, potash, lime, magnesia, etc., which are given in the published analysis of the water of these springs. They are in the form of hard, white, oval lozenges, with a not unpleasant taste, and dissolve readily in the mouth. It appears to be an agreeable way of taking the mineral constituents of the Soden spring.

MENTHOL WOOL.

MESSRS J. LLOYD, BULLOCK AND CO., 3, Hanover Street, Hanover Square, W., have forwarded to us specimens of their menthol wool. The 5 per cent. and 10 per cent. are intended for use in influenza, a small pledget being loosely inserted in each nostril. The 20 per cent. is for use in an antiseptic inhaler in phthisis. The menthol wool is certainly very convenient for this purpose, and the vapour is less irritating than when obtained from menthol by heat.

SULPHONAL PASTILLES.

WE have received from Round's Dispensing Establishment, Southport, a sample of gelatine pastilles, each containing 15 grains of sulphonal. They are pink-coloured discs, which dissolve very readily, but we do not find that the taste of the sulphonal is entirely covered.

WOOD WOOL TISSUE.

THE Sanitary Wood Wool Company, 11, Hatton Garden, E.C., has introduced a new preparation, which is called "Hartmann's Patent Wood Wool Tissue." This tissue consists of a continuous layer of wood wool wadding between two pieces of sublimate gauze. In this form it is very convenient, as any length can be cut off with the scissors. The material is made antiseptic by being impregnated with a solution of corrosive sublimate. Wood wool has been in use for some years as an antiseptic dressing, and its absorbtive properties have been very favourably spoken of. This new form possesses the advantages of convenience, of being cool and comfortable to the patient, and of admitting of drainage.

SEA SALTS.

THE sample of Stoddart's Sea Salts received from the manufacturers, Messrs. A. and J. Warren, Redcliff Street, Bristol, is of a very superior quality. It is clean, dry, and entirely soluble in water. Some of it is put up in convenient packages, so that a bath can be made by dissolving the contents in two or three gallons of water.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 1ST, 1890.

REFORM OF THE COLLEGE OF SURGEONS.

THERE seems every prospect of a real and serious advance being made towards the settlement of this important question in the present session of Parliament. There are three different and independent lines of action which are being brought to bear in the effort to open the close-barred portals of the College to its Fellows and Members: (1) the action at law which is being brought to test the legal status of the Members, including the Fellows, all of whom are Members also, an action about which, as it is still pending, we can of course say nothing; (2) the Members' Bill, of which Lord R. Churchill has charge in the Commons, but which, on his advice, is now to be introduced in the House of Lords by Lord Dunraven; and (3) the action of the reforming party among the Fellows, represented by the Association of Fellows.

We publish to-day a draft of a Members' Bill, with a memorandum setting forth most clearly the grounds—irrefragable as they seem to us—on which Members protest against the way in which they have been ousted from all part and lot in the College which they have so long supported by their money, and still more by their high character and professional ability; and on which they claim from the Parliament of to-day the same measure of justice which they obtained from that of Lord Thurlow's time. Can anyone doubt what must be the issue of such a struggle? Can anyone believe that in these democratic days, when, as Bright forcibly put it, "every rat-catcher who keeps three dogs" is thought to be oppressed unless he is allowed a vote in a parliamentary election, about which he probably neither knows anything nor cares, several thousands of the most intelligent, active, and useful persons in the country are to be denied all rights of interference in the affairs of their own College—affairs which interest them in every possible way—and that College is to be retained under the exclusive and perfectly irresponsible management of a couple of dozen eminent surgeons—men, we freely grant, of the highest character and honour, but who have, for the most part, no knowledge of, and no interest in, the matters which more nearly concern the struggling "general practitioners."

The question seems to us to answer itself. Delay there may be, and, under our present system of conducting public affairs, probably must be; but the struggle, if properly maintained—as we doubt not it will—can only end in one way, and the heads of the College are quite wise enough to see this, and will doubtless in the end be glad to accept the present very moderate proposition for fear that a worse thing should befall them.

An excellent feature in this Bill is the perfect trust and confidence which it shows in the justice and wisdom of the future Council—once the principle of representation has been conceded. The Council, it will be observed, cannot be compelled to allot more than a certain proportion of seats to the Members, nor to admit Members below a certain standing; but there is nothing to prevent them from making further concessions in either direction, if the College is found to derive as much benefit from the co-operation of its Members as the advocates of reform confidently anticipate.

With regard to the action of the Fellows' Association, the profession will soon be in a position to judge. That Association was formed to urge the claims of the Fellows of the College to a greater share in its management—a share which up to the present time they have failed to obtain. But we doubt not that in this direction also the Council will gradually be brought round to a position less antagonistic to all change than that which they have occupied. The action of the Lord President, in declining to sanction any provisions in the new Charter except those which were not opposed, and his obvious sympathy with the desire of the protesting Fellows to enlarge the basis of the College, are hints which will not be thrown away, we hope, on the new President and his Council. If they are, the views of the Council are likely to be overridden in a way which will conduce neither to its dignity nor usefulness. For the sake of all concerned, and especially of the College itself, we trust that the moderate and truly conservative reforms now advocated may very shortly be granted.

THE NEW ENGLISH DICTIONARY.[1]

WHEN Dr. Johnson completed his great work—the *English Dictionary*—English philology was born; but, like all new sciences, it had to have its legendary and empirical stages, which lasted many years, and even now can scarcely be called past. Etymology was mere guess work; cognate forms of even later date were treated as original roots; wild guesses of puerile character were gravely recorded as etymological facts, and it was not until quite lately that confession of ignorance of origin, and serious attempts at historical research, brought etymology within the range of the sciences. The most important advance which has ever been made in this subject is the publication of the present *Dictionary*. Undertaken in pursuance of a motion passed by the Philological Society so long ago as 1857, at the suggestion of the late Archbishop of Dublin (Dr. Trench), the collection of illustrative quotations went on for some twenty years until about two million were amassed and the actual preparation of the *Dictionary* was undertaken in earnest, while the delegates of the Clarendon Press, with that liberality of spirit and pocket which distinguishes them, agreed to publish it. Another million and a half quotations were then secured, and the great work commenced. Its aims are defined to be to furnish an adequate account of the meaning, origin, and history of all English words, both modern and obsolete. "It endeavours

[1] *A New English Dictionary, on Historical Principles.* Edited by James A. H. Murray, B.A.Lond., M.A.Oxon., etc. Part V: Cast—Clivy. Oxford, at the Clarendon Press. 1889. Pp. 358.

show, with regard to each individual word, when, how, what shape, and with what signification it became English, hat new forms and meanings it has since developed, which of s uses have become obsolete, and to illustrate these facts by series of quotations ranging from the first known occurrence the word to the latest."

Unfortunately, many words used in medical literature are reign to the scope of the undertaking; but a very large mber are included, and it is only the bare truth to say at so much light has been poured on the early meaning, er uses, and original derivation of these words that even in edical philology the *Dictionary* inaugurates a new departure. hat we are not exaggerating in this unstinted praise will be st shown by a few examples extracted from the present part.

Take a common word like "catarrh" for instance. Medical iters define it as "an inflammation of the mucous membane, attended with increased secretion," and derive it from e Greek κατὰ (down) and ῥέω (I flow). Dr. Murray's *ictionary*, however, traces the connection between the Greek gin and the modern scientific meaning. It shows by quotaons ranging from 1398 to 1794 that it was not inflammation mucous membranes in general, or, indeed, in particular, at was originally called "catarrh," but the resulting discharge m inflamed nostrils, and that the first English use of the rd would be best expressed by "a running at the nose." shows how, since this discharge was supposed to pass down m the brain to the nose, apoplexy, or effusion in the brain elf, was during the sixteenth, seventeenth, and eighteenth nturies often called "catarrh;" and then it shows by otations ranging from 1588 to 1868 how the name catarrh" passed by extension from the mere mucous disarge to the causative inflammatory disease of the nasal ucous membrane, and so by further extension to that of all ucous membranes.

Cataract (of the eye) is correctly enough derived by medical iters from the Greek καταῤῥάκτης, a down-rushing, a waterl, but without any very exact explanation of the relation tween the original idea and its derivant; but Dr. Murray ows that cataract had also for a very early meaning, in both eek and mediæval Latin, a portcullis, or the grating to a ndow. He quotes Ambrose Paré as writing in 1550 of cataracte ou coulisse," and states that Cotgrave has, in 1, "coulisse—a portcullis—also a web in the eye;" "the ion being," as Dr. Murray remarks, "that even when the is open, the cataract obstructs vision as the portcullis does ateway;" a most satisfactory and picturesque explanation a difficult derivation.

The history of the word "cirrhosis" is a curious example of a staken pathology giving a permanent term to our medical abulary. "The name referred to the presence of yellowish nules [in the liver] which Laennec supposed to be a deposit new matter. But these were subsequently shown to be the ated and bile-tinged acini of the liver itself." When, howr, this correction was made, the word "cirrhosis" had become firmly naturalised and accepted as the name of the new ease to be replaced by a more correct designation, and it even passed on to distinguish a similar pathological condin of other organs where there was no trace or tinge of yelness to excuse the blunder in nomenclature.

The soaring corn-cutter who imagines he assumes a scientific title when he calls himself a "chiropodist," is perhaps ignorant of the origin of the term. In 1785 a certain D. Low published a work entitled *Chiropodologia: a Scientific Inquiry into the Causes of Corns, Warts, Bunions, etc.*, and on p. 83 he makes use of the expression, "a skilful chiropodist." "Whether," says Dr. Murray, "the inventor put together χείρ, hand, and ποῦς, ποδ-, foot, to indicate that hands and feet were the objects of his attention, or whether he had in view the ready-made Greek χειροπόδ-ης, 'having chapped feet,' does not appear. The latter would better justify his formation, the former better suit his meaning." Of this man Low and his new-fangled designation, the contemporary European magazine wrote: "Classic lore....has now reached Davies Street....the residence of our Lucretian *chiropodist* (*Anglicè*, corn-cutter)." So that it is to the unscholarly coinage of an eighteenth century charlatan that we are indebted for a word which the editors of the New Sydenham Society's *Lexicon* have admitted into their list under the high-sounding style and title of "chiropodology."

We suppose that ninety-nine out of every hundred lay persons would rest the fame of Sir J. Y. Simpson on his advocacy of chloroform. Here we get an accurate and interesting history of the drug and its employment in half-a-dozen lines. Its name we are told was given by Dumas, in 1834—(a confirmatory quotation from the *Annales de Chimie* of that year is added). It was, however, discovered (as we learn from a quotation from T. Thompson's *Chemistry of Organic Bodies*, dated 1838), in 1831-2 by Soubeiran and Liebig simultaneously. In 1847 Sir J. Y. Simpson recommended the drug as "a new anæsthetic," and its subsequent history is known. All its resultant forms are here given, both combinations (as chloroform-coagulum, chloroform-bottle, chloroform-drunkenness, chloroform-narcosis, and several more), as well as its simple extension into verb, adjective, and other grammatical forms, all illustrated by excellent quotations from standard writers. Castor-oil, a difficult word, is happily treated. In the first place there is no derivation given from an imaginary "Agnus Castus," as in Mayne and some other vocabularies. The origin is stated as uncertain, but a most acute and happy suggestion is made, that from the original title "Oleum Palmæ Christi," the name was formed by the vulgar confusion of Christi-oil with Castor-oil, in the sense of the oil of Castor or Castoreum (mentioned by Paré in 1550, and again in a cyclopædia of 1727). Most certainly the various preparations of castoreum, as favourite popular eighteenth-century remedies in midwifery, are now quite displaced by the modern castor-oil, without any very apparent reason, except this probable confusion of the names. A quotation is given from P. Canvane's "Dissertation on the Oleum Palmæ Christi, ...commonly called castor-oil," dated 1746, and believed to be the earliest mention of this drug in medical literature under its present name. Trousseau and Pidoux declare that it was from this dissertation that the oil became adopted both by English and foreign physicians as a useful drug; and the words "commonly called" imply that "castor-oil" was not yet considered the proper name.

In treating the words "chyme" and "chyle," the new *English Dictionary* shows that until the eighteenth century both words were used indifferently for the proceeds of diges-

tion in the intestines, and explains under "chyme" the origin of the present distinction. "The two forms χυλός and χυμός were practically identical in sense, some writers preferring one, and some the other; they were differentiated by Galen; and in *Orion Etym.* (c. 450) χυμός is explained as 'juice in its natural or raw state;' χυλός, 'juice produced by decoction or digestion (Liddell and Scott); this appears to be the foundation of the modern distinction of *chyle* and *chyme*."

We could give over twenty or thirty other examples from this single part of the great work to show its important bearing even on medical etymology, but difficulties of space compel us to refer our readers to the book itself. Under such words as "catalepsy," "cellular," "cellulitis," "chalicosis," "chest," "chicken-pox," "cinchona," "chincough," "childbed," "chloric ether," "cholera," etc., among medical words, and "cent," "chintz," "claret," "Charles's Wain," "church," "city," and many more among ordinary ones, most interesting and original information can be gathered.

There is, and always has been, danger that the great works of a century should be neglected and undervalued by contemporary readers. Very few of the masterpieces of mankind have brought adequate pecuniary reward to their producers. We feel sure that such cannot be the case with an epoch-making work like the present; at the same time, every little help counts in an undertaking such as this, which is perhaps to a great extent "caviare to the general," and our profession cannot better exhibit its advancing culture and education than by earnestly and actively supporting the publication. This can be done in one or more of several ways: (1) by collecting from their reading among medical and general literature, new and old, such obsolete or unusual words as may strike them, writing out on separate slips the sentence in which each occurs, attaching the name of author, title of work, date of publication, as well as edition, page, and chapter in which the word in question is found, and forwarding the slip to Dr. Murray, the editor of the *Dictionary*, Oxford; (2) by purchasing the parts already published, five in number, when for the cost of two modern three-volume novels they can get more interest, amusement, and information than could be got out of 300 works of fiction; (3) by becoming subscribers to the *Dictionary*, which, as only two or three parts are published each year, would not be beyond the power of the slenderest purse; and (4) by recommending its purchase to those libraries, public or private, with which they may happen to be connected.

At any rate, we wish the work every possible success, and hope one day, on its completion, to see a medical dictionary of similar aim and wider scope founded on the model of those medical words it has treated. We especially note that its chemical nomenclature is complete, modern, accurate and valuable.

CLINICAL INSTRUCTION IN MENTAL DISEASE.

The Committee of the London County Council appointed "to inquire into and report to the Council upon the advantages which might be expected from the establishment, as a complement to the existing asylum system, of a hospital with a visiting medical staff, for the study and curative treatment of insanity," has presented a very voluminous report. The evidence upon which the conclusions of the Committee are founded was furnished by sixteen eminent medical practitioners, whose names and qualifications are given. We note that five of them are on the staff of the Hospital for the Paralysed and the Epileptic, Queen Square, and that the Chairman of the Committee, as well as the gentlemen furnishing the estimates for the proposed building, are also connected with the same institution. The Committee state that "these names included not only experts in insanity and physicians chiefly engaged in the treatment of the nervous system with which insanity is not necessarily associated, but also physicians and surgeons in more general practice."

The first point that strikes us in connection with the quality of the evidence upon which the Committee base their conclutions is that, with the exception of Dr. Batty Tuke, of Edinburgh, and Sir James Crichton Browne, no medical superintendent of an asylum, and no physician of eminence experienced in the care and treatment of the insane was invited to give or gave evidence before the Committee. Dr. Clifford Allbutt, the recently appointed Commissioner in Lunacy, was a witness, but he stated that his experience was gained as a member of the Wakefield Asylum Committee, and not as an asylum medical superintendent. The evidence of most of the witnesses was limited to a mere expression of the opinion that the erection of such an institution was desirable; in fact, the Committee sought for their evidence in the wrong direction. They say: "We must be very much guided by experts in our inquiry." Within the control of the London County Council there are some of the largest county asylums in the kingdom, the medical superintendents of which are men of great experience in the care and treatment of the insane; one of them is a lecturer on the subject at a London medical school, but these men, who are experts in the strict sense of the term, were not called. Again names at once suggest themselves which, in this report, are conspicuous by their absence; they are the names of medical men who have written upon and taught the subject of insanity and its treatment, who have been connected with asylums for the insane, and whose opinions on such matters are sought for throughout the length and breadth of the land. We would especially mention Drs. Maudsley, Blandford, Hack Tuke, and Savage in London, as well as Mr. Cleaton, the Senior Medical Commissioner in Lunacy, whose knowledge and experience of asylum management and construction is unrivalled, and Drs. Clouston and Yellowlees in Scotland. The evidence of men such as these would probably have saved the Committee much ambiguity in their conclusions, and given weight to their suggestions.

The erection of hospitals in connection with the existing asylums is no new idea. Already in every asylum there is a hospital in the shape of infirmary wards and reception wards where all acute and recent cases are received and treated during the earlier stages of their malady before being transferred to the general wards. Dr. Hayes Newington, the President of the Medico-Psychological Association, read as his presidential address last year an admirable paper upon Hospital Treatment for Recent and Curable Cases of Insanity, which was followed by an interesting discussion. At Morningside Asylum, near Edinburgh, Dr. Clouston has for years worked out this principle in a most satisfactory manner

The opinions expressed by some of the witnesses with regard to the selection of a site for the proposed hospital will astonish practical men: "There are squares in London," it was said, "in which the site for such an institution might be obtained, and in which the whole or part of the garden might be obtained for the patients.....it should be within a mile and a half of Ludgate Circus"! Again: "Then as regards acute cases, cases of mania, it practically does not matter very much where they are"! Again: "Patients, if taken from their homes and placed in a hospital, and kept for a certain time under conditions of good light, good air, and good food, would be very much benefited without any airing ground"!

It must be remembered that these acute cases are the most curable cases, and most likely to benefit by the proposed hospital. The opinions expressed by these witnesses are not the opinions of the only two expert witnesses. Dr. Batty Tuke said: "If it could be placed out of London, but at such a distance that it could be reached by rail in a few minutes, that would add vastly to its success as a curative institution; and I doubt whether the experiment would be perfect unless it could be established under such conditions." Sir James Crichton Browne most properly "advocated the establishment of a larger hospital than the Committee feel able, in the first instance, to recommend." "All that you require," he said, "is sufficient amount of space for gardens in which airing and exercise might be taken, and a little ground for lawn tennis and recreative purposes." It must be remembered that even here Sir James Crichton Browne was speaking of only one class of cases. With regard to other cases he says: "Of course, when any case presented itself in the hospital in which farm work, digging, pushing a wheelbarrow, or vigorous exercise of that kind was judged requisite, they could be sent to some other asylum in a rural district." The proposed hospital ought to be suitable for all classes, otherwise its usefulness as a teaching centre would be small.

With regard to the experiment of having paid visiting physicians, Dr. Clifford Allbutt says: "It is very important that one should get rid of any idea that such an institution as you are contemplating should be anything like the St. George's Hospital, or the London Hospital, or such hospitals for the sick in our towns. I find myself, therefore, at issue partly with your question and partly with the witnesses in thinking as I do that it would not be desirable to have a visiting staff, unless it be for professional purposes only." He adds: "That medicines may be of the utmost possible importance no one, of course, would deny; but that they are usually of primary importance or that they are the treatment for mental disease is, I think, not true. I think the true treatment is briefly moral and humane, and not very much in the direction of drugs."

A more accurate knowledge of the treatment of the early stages of mental disease would be of great value; but the fact seems to have been overlooked that it is the general practitioners and the physicians to the out-patient departments of the various hospitals and dispensaries who really have such cases under their care until they get beyond their skill, and then they advise their being sent to an asylum. Asylums must exist, and every medical man cannot become an expert in insanity. If the care of the insane is dependent upon moral and humane treatment as well as skilled medical care and supervision, then only a very limited class of quiet cases could be housed and properly treated in the heart of a great city like London. Physicians as well as students can obtain experience in the care and treatment of all classes of cases of insanity only in the wards, airing courts, farms, and gardens of large rural institutions. The care and management of the insane are bound to stand before their medical treatment. Sir James Crichton Browne's recommendation of a much larger institution than that proposed by the Committee is to be commended. A small hospital with 100 beds would be practically useless to the great body of metropolitan students. The better course would be not to build one hospital in the heart of the City at enormous expense, but to build one in connection with each of the existing asylums. Let each such hospital be placed in connection with one of the medical schools; let a lecturer on insanity—who would be the resident physician—a skilled pathologist, assistants, and clinical clerks, be appointed to each; they would have the benefit of consultations with the physicians or assistant physicians of the hospital school, and they could command the services of the various specialists mentioned by the Committee. Thus means would be provided for the great body of students to receive the instruction which it is admitted on all hands would be of such benefit to the profession and the community at large.

One point of paramount importance which seems to have been overlooked is the necessity for making the attendance of students upon a course of instruction in the wards of an asylum compulsory. Upon this point the report is silent, but it is to be feared that it will be useless to increase the facilities for the study of insanity unless the various licensing bodies compel such attendance.

EXPERT EVIDENCE.

THE conflict of evidence which arises in a large proportion of the cases in which expert witnesses are called has become so much a matter of course that it excites public attention only when the case is, for some other reason, notorious. Lawyers are wont to say, however, that expert testimony can be obtained in support of any case, and the accusation, if such it ought to be called, is not made against the medical profession alone. Indeed, lawyers themselves when called as witnesses as to foreign law are apt to differ more widely, if that be possible, than any other class of experts. We are, however, only concerned with the medical profession, which has no doubt enough to answer for in this respect. It is easier to protest against the evil than to find a remedy for it, and we may therefore be grateful to Dr. Morton Prince, who recently read a very sensible paper on the subject before the Boston Society for Medical Observation.[1] He took as his text a case in which large damages were awarded against a railway company for injuries sustained by a young woman in a railway accident. There was a most complete conflict of medical evidence as to matters of observation, and not merely as to the interpretation of observed facts. This is very unsatisfactory but not very unusual. The causes of such conflict may be thus summarised: One cause is the natural

1 *Boston Medical and Surgical Journal*, January, 1890.

tendency of human nature to be biassed in favour of the side which claims, appreciates, and employs the services of the expert witness; another is the employment of witnesses of perhaps considerable general reputation, but not specially competent to observe a case of the class under investigation. A third cause to which Dr. Prince attaches much importance is the custom of requesting medical experts to make their examination of the patient independently of each other, at different times and under different conditions. This custom, though not universal, is, so far as it obtains, due no doubt to the belief that it favours independence of opinion.

This theory, however, does not work in practice, for the expert knows on which side he is to be called, and not improbably has a hint as to the opinions formed by his predecessors, or by the experts to be called by the other side. Further, an opinion ought to be the logical conclusion from all the pathological facts accurately observed. To attain this accurate observation of facts, Dr. Prince proposes to substitute a kind of board of experts, resembling the Medical Boards assembled to examine officers of the Army or Navy applying for sick leave or for retirement pensions on account of ill health. A certain, and by preference, large number of physicians and surgeons, specially competent in the various departments, would receive some sort of official recognition as experts, and each side would be at liberty to select one or more names from this list. The experts thus selected would form a board, and would collectively examine the patient and make a collective report as to the history and observed objective facts. Differences of opinion would of course arise as to the interpretation of these facts, and the legal decision would have to be taken upon this issue. It is to be feared, however, that it would often be very difficult to obtain an agreement even as to the purely objective facts, and Dr. Prince is compelled to admit this objection, which he attempts to meet by suggesting the creation of a special class of State experts, to be called in to act as umpires when such differences of observation should arise. Such a system, if it could be made to work, would no doubt very greatly diminish the number of cases in which a conflict of expert testimony would occur in court; a much larger number of cases would probably be settled out of court, and in other cases the admission of the facts in dispute would clear the ground and leave what ought to be the actual point at issue, which in nine cases out of ten is the prognosis only, for decision.

We believe that an analogous course has, with increasing frequency in recent years, been followed by some of the judges. In one case in which two expert witnesses were at issue on the simple matter of fact of the effect on pigments of a certain chemical manipulation, the judge before whom the case was heard insisted that the experiment should there and then be repeated by the two experts acting together. By this means an agreement as to the matter of fact was at once obtained. In Leeds the custom has, we believe, long obtained among the leaders of the profession to refuse to give expert evidence on any case until after a meeting of the experts on both sides; and this practice has worked so well that the Leeds Assizes are notable for the absence of these conflicts of scientific testimony which elsewhere has done so much to discredit such testimony in courts of law.

STUDIES IN THERAPEUTICS.

XII.—Salicylic Acid and its Impurities.

The paper by Professor Charteris and Dr. Maclennan, published in the Journal of November 30th, 1889, and that on "Rheumatism: its Treatment, Past and Present," read by Professor Charteris, before the Royal Medical and Chirurgical Society on February 11th, are deserving of careful consideration by the medical practitioner. The chief interest in these papers centred in certain experiments undertaken by Dr. Charteris regarding the impurities of salicylic acid and its preparations. In these days of the extensive use of drugs, especially of the more modern substances belonging to the class of organic chemical substances, it is first of all essential to get the drugs pure, not only for the good of the patient who takes them, but also for the accurate study of their therapeutical effect. These organic substances are made from others of a like nature, and are in many cases readily altered by chemical and mechanical manipulation; the alteration, moreover, which may take place in many cases completely changes the character of the drug. Dr. Charteris has, therefore, done good service to therapeutics in directing his attention to the salicylates, which are so extensively, and it is to be feared so often indiscriminately, employed in the treatment of disease.

The bad effects which salicylates produce have been often described; summed up, they are headache, singing in the ears, and delirium. For some time these effects were ascribed—with but little show of reason, it must be confessed—to the admixture of carbolic acid, from which salicylic acid is made. But it is generally admitted that ordinary salicylic acid does not contain carbolic acid; so that this explanation is not admissible.

The *British Pharmacopœia* allows the preparation of salicylic acid from two sources: "by the combination of the elements of carbolic acid with those of carbonic acid gas, and subsequent purification, or from natural salicylates such as the oils of winter green (*Gaultheria procumbens*) and sweet birch (*Betula lenta*)." As a matter of fact, most of the salicylic acid and salicylates present in the market is obtained artificially from carbolic acid; and it is the question of the purity of this artificial salicylic acid that Dr. Charteris investigated. The method which he employed was to compare the effects of a certain dose of the artificial and natural salicylates on rabbits weighing 2½ lbs. It was found that salicin, 30 grains, natural salicylic acid, 10 grains, and natural salicylate of sodium, 32 grains, had no deleterious effects on these animals; whereas artificial salicylic acid, 10 grains, and artificial salicylate of sodium, 18 grains, produced death. There was presumably some poisonous substance present in the artificial salicylates which was absent in the natural form of the salts. This deleterious impurity in the artificial salicylates Dr. Charteris found to have the appearance of coarse flour, and to be very soluble; and although it was not identified chemically, it was considered to be probably a derivative of creasotic acid. The chemical identification of this substance is not extremely important from a pharmaceutical point of view. Its physiological activity was shown to be great; for 1 grain killed a rabbit weighing 2 lbs., and we must therefore conclude from

he experiment above quoted of the effect of 18 grains of rtificial salicylate of sodium, that this quantity of the drug which is an ordinary dose) contains a grain at least of the mpurity.

The separation of this poisonous impurity from the drug is n important point. The greater part of the salicylic acid in ommon use is an artificial product; it is more convenient to repare it from carbolic acid than from the natural oils lready mentioned. Dr. Charteris has discovered a method of urification which is deserving of the attention not only of harmacists, but of the Committee of the *British Pharmaopœia*. The acid is combined with calcium, and the calcium alicylate decomposed by hydrochloric acid, by which calcic hloride is formed and salicylic acid set free. This is then urified by crystallisation, four or five times repeated, from hot ater. The final product is pure salicylic acid, which has the ppearances and the physiological action of the natural variety.

The result of Dr. Charteris's research ought to be the pre- nce of a pure salicylic acid in the market; and it is satisfac- ry to note that Messrs. Schering, of Berlin, are actively ngaged in the preparation of this product on the lines laid own by Dr. Charteris. It may, indeed, be said, and was said the discussion which followed the paper, that deleterious ffects from the artificial acid (or its sodium salt) in ordinary se are not commonly observed. But this is no answer to the ct that a poisonous impurity is present in the drug, which ught not to be there, and common sense dictates that the oner it is got rid of the better.

CERTIFYING FACTORY SURGEONS.

ET another deputation has waited upon the Home Secretary eking to gain his support for the mischievous policy of abol- hing the office of certifying surgeons in connexion with the dministration of the Factory Act. The published reports of ie proceedings are too brief to convey intelligence respecting ie views and arguments of the deputation, but it appears to ave been stated that not only were factory owners or ccupiers, but likewise factory operatives, to be reckoned upon aggrieved parties under the present system. That ie former may feel a grievance we can conceive, inasmuch as ey are called upon to pay money for which they appear to tain no return. But we are at a loss to imagine what are e grievances of the artisans employed in manufactories, con- dering that the provisions of the Factory Act are designed r the protection and wellbeing of the artisans, and more es- cially of their children. We can hardly believe that the jection on their part to the medical supervision exercised er the first employment of children and young persons in lls and manufactories generally is that this supervision some- nes runs counter to what they may conceive to be their terests, or their rights, as parents. It is a benefit that it terferes with their freedom to employ their children how and ere they like, by interposing the action of the surgeons in eventing the entrance on work of such as by deficiency of velopment, general weakness, or the presence of disease, e, in the eyes of those "meddlesome" officers, unfit for our.

It would be but fair to the certifying surgeons to learn at are the objections taken to their office and functions by factory "hands," so that they might be in a position to frame a reply. What masters have to say against them is well known, and has been abundantly discussed and answered. It is not very clear whence this deputation came and whom it represented. Past experience has shown "that deputations in the name of a trade" sometimes by no means represent the real opinions of that trade, but rather those of some few individuals whose feelings have been hurt by the factory medical officer, or who have fallen within the meshes of the law. The question, indeed, always arises, who has constituted the deputation the mouthpiece of the manufacturers they affect to represent, and it is a question usually left unanswered.

As a matter of course, the Home Secretary must prophesy smooth things to a deputation seeking his countenance and support, but he will multiply deputations—a circumstance held in abhorrence by most ministers—if he goes beyond the limit of platitudes and courtesies which constitute the varnish of official responsibility in the matter of replies to visitors. In the meantime, it is the duty and interest of the certifying surgeons to show their efficiency in securing the important ends contemplated by their appointment. They must convince the public that their work is real and valuable, and the greatest enemies they have, as public officers, are those among them, if such there be, who perform their duties in a slovenly and perfunctory manner.

MR. ALDERMAN STONE, who has held the position of treasurer to St. Thomas's Hospital since 1877, died in his 78th year on February 26th.

THE New York Post-Graduate Medical School and Hospital is stated to be very prosperous; more than 400 graduates, from all parts of America, attended the courses during 1889.

THE Royal Commission on Vaccination held a sitting an February 26th. Mr. Alfred Russel Wallace, the author of a pamphlet, *Compulsory Vaccination proved Wrong by Fifty Years' Statistics*, was examined at great length.

Mr. T. W. THOMPSON, L.R.C.P.Edin., M.R.C.S.Eng., etc., has been appointed a temporary inspector in the Medical Department of the Local Government Board. Mr. Thompson is medical officer of health for a combination of sanitary districts in Hertfordshire and Middlesex, and in this and other appointments has acquired a good experience in preventive medicine.

THE HOSPITALS OF THE ASYLUMS BOARD.

AT the last meeting of the Metropolitan Asylums Board, Mr. Talbot, M.P., Vice-Chairman, spoke strongly in favour of a proposal to advertise for the principal posts of medical superintendents to the hospitals of the Board. The custom hitherto has been to promote one of the assistant medical officers to the senior position. The limits of choice thus allowed are exceedingly narrow, there being only five or six of these officers in the service of the Board. Moreover, the assistant posts are of a temporary nature, the officers being sometimes appointed at epidemic times. It may also happen that a qualified man may have been in the service of the Board for a time, but because he is not actually in its service at the time one of the principal posts becomes vacant he is ineligible. It is evident that this condition of things needs to be altered at once. The appointments of medical superintendents to the Metropolitan fever hospitals are of growing importance, and

in the interests of the sick poor they should be thrown open to fair competition. If the Board desires only to have as candidates those who have had previous experience in the administration of fever hospitals it would be easy to frame their advertisements accordingly, but the present restricted system cannot be defended.

THE REPORT OF LORD CAMPERDOWN'S COMMITTEE.

Mr. Stanhope has still the report of Lord Camperdown's Committee under consideration, and we have reason to believe that he will propose the adoption of certain recommendations of the Committee when moving the Army Estimates, which must be presented to Parliament before the end of March. We understand that a question will shortly be asked in the House of Commons on the subject.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

We are informed by the Secretary of the Association of Fellows of the Royal College of Surgeons that a committee meeting was held on February 21st, at which a report of the origin, objects, and proceedings of the Association was received and adopted. This report will shortly be issued to all Fellows of the College.

CREMATION.

At Woking the number of cremations is steadily increasing. In three years, from 1884 to 1887, the annual average was 8. In 1888 there were 26. In 1889 the number increased to 46, the total number at the end of the year having been exactly 100. This year there have been several every week. In France, at the new crematorium in Paris, there were 35 ordinary cremations in 1889, but the number of stillborn children and the bodies from the hospitals and anatomical schools is so large that incineration is continually going on both night and day. The *Journal d'Hygiène* says that the total number was nearly 3,000 in the year. At Rome the numbers were 119 in 1886, 155 in 1887, and 202 in 1888. At Milan and other Italian towns the numbers are rapidly increasing, as they are in Germany and the United States.

FRESH OUTBREAKS OF INFLUENZA.

An alarming outbreak of sickness of the influenza type has occurred at Darwen, and careful inquiries at various mills and workshops have shown that more than 1,000 persons are affected. So serious has the illness become that it is highly probable several large mills will have to be closed, the hands at work being so few. The medical men do not remember so much sickness prevalent in the town at one time. The influenza epidemic is now prevalent in Ashton-under-Lyne and district also. The disease is assuming a serious character. In one of the principal schools no fewer than 400 scholars are absent suffering from the malady, in addition to some of the teaching staff. A large number of weavers and other mill hands are also attacked with it, and the machinery stands idle. At one large mill in Mossley there are 120 hands off, and at another over 100. The epidemic is reported to be spreading with alarming rapidity throughout Northwich, Middlewich, Winsford, and the adjacent townships in Cheshire. The disease is still very prevalent in some parts of the west of England. Dr. W. A. Carline, of Lincoln, writes that influenza has been exceedingly prevalent in that neighbourhood during the past few weeks, and as yet shows no signs of abating.

PLACENTA PRÆVIA: PREVIOUS RUPTURE OF THE UTERUS: RECOVERY.

A complex midwifery case is recorded by Dr. Deutsch in a recent number of the *Centralblätt für Gynäkologie*. The patient was aged 23. Four years previously, rupture of the uterus was caused by a fall during the eighth month of pregnancy. The fœtus had completely passed into the peritoneal cavity; it was delivered by abdominal section. Severe complications ensued, vomiting, fever, utero-abdominal fistula, and suppuration between the uterus and the parietes. When Dr. Deutsch attended her, she was in labour at term. Between the umbilicus and pubes was an extensive brown discoloration of the integuments, bearing several prominent cicatrices. The parietes were exceedingly thin and prominent. On vaginal examination, the cervix was found so high and short that it could hardly be touched; the promontory of the sacrum was easily reached, and the pelvis was contracted in all its measurements. The symptoms of placenta prævia were present. Chloroform was given, and turning performed after manual dilatation of the cervix. Severe flooding immediately followed delivery; the membranes were at once extracted. Free bleeding continued; it was traced to a laceration of the cervix and rupture of the perineum. The uterine and vaginal cavities were plugged with iodoform gauze. Slight febrile reaction followed during convalescence. The patient left the hospital quite cured on the thirty-seventh day. Professor Leopold has recently insisted strongly on the necessity of abdominal section in cases of rupture of the uterus, not only as an inflexible rule when the fœtus has escaped into the peritoneal cavity, but also when it has been delivered naturally, yet signs of hæmorrhage continue. Too often in such cases a trifling amount of external hæmorrhage may signify very severe bleeding into the peritoneum. Unfortunately, abdominal section is very trying to the inexperienced, especially in the course of a midwifery case, and sewing up a uterine wound is at least as difficult as Porro's operation.

A CASE OF MEAT-POISONING.

The principle that when a person sells provisions for food it is implied that they are wholesome is a sound one. An action has just been decided in the provinces showing that dealers who sell unwholesome food are liable to be mulcted in damages. Samuel Pemberton, a working man of Beeston, lately sued William Rose, provision dealer, alleging that certain potted meat purchased of him was unfit for human food. The plaintiff, his wife, and three children all partook of the meat. Tea was finished by six o'clock, and, at a quarter past eight, all were attacked with violent sickness and purging. Plaintiff was kept from his work eight days, and lost 34s. wages. He and his family suffered considerably in their health, and up to the present felt the effect of the poisoning. The potted meat looked dry, old, and stale. It tasted stale. He sent for some more, and handed it to Dr. Butler, the medical officer of health for the Beeston Local Board. Dr. Butler said that, on the following day, he examined a pound of potted meat at the plaintiff's house, and found it totally unfit for human food. It appeared to be becoming putrid. The defendant said he had partaken of the meat himself on the same day he sold some to the plaintiff, and felt no ill effects. Other customers had bought some, and none had complained of feeling ill after it. Judgment was given for £8 16s. against the defendant, part costs being allowed.

THE ESTIMATION OF URIC ACID.

Of the methods in use for the estimation of uric acid some are too delicate and others are wanting in precision. MM. Arthaud and Butte[1] propose the following, which obviates these two inconveniences. It is based upon the property which uric acid possesses of forming with salts of copper a completely insoluble urate. At first sulphocyanide of copper in solution with sodium hyposulphite was employed, but the following is the formula of the solution now used: sulphate of copper, 1.484 gramme;

[1] *Répertoire de Pharmacie*, January 10th, 1890.

odium hyposulphite, 20 grammes; sodium and potassium tarrate, 40 grammes; distilled water, a sufficient quantity to make litre of solution. The cupric salt in contact with the sodium yposulphite is reduced, and the excess of hyposulphite helps to aintain the salt of copper in the cuprous state; the part played y the soda tartarata consists in giving stability to the reagent, nd to prevent the formation of sulphide of copper. Experiment as shown that 1.428 gramme of copper sulphate is necessary to recipitate 1 gramme of uric acid. The above solution is therefore of such a strength that 1 cubic centimètre corresponds to milligramme of uric acid. In order to estimate the uric acid in rine the phosphates are first precipitated by the use of sodium arbonate in excess. After filtration 20 cubic centimètres of the rine are taken, into which the reagent is added drop by drop by eans of a burette. A milkiness is at first produced, and then a hite flocculent precipitate separates. When it is considered that he limit has been reached a small quantity of the liquid is ltered, to which is added a drop of the reagent. If any opacity produced the precipitation of the uric acid is not complete. he process is stopped when the filtered liquid is not affected by he reagent. This method of estimation is considered by MM rthaud and Butte to be a very accurate one.

ENGLISH PRACTITIONERS IN FRANCE.

HE Minister of Public Instruction in France has recently expressed opinions before the Commission which is investigating e subject of foreign practitioners in France, which will, we ink, be regarded as eminently satisfactory, and which are osely in accord with the resolutions recently adopted by the ollege of Physicians. He considers that foreign physicians ishing to practise in France ought to submit their diplomas to e authorities, who will decide whether they are equivalent to eir own, and that point being settled, the foreign physicians ould then be required to pass the final examination for the degree of Doctor of Medicine. This is almost identical with the ggestion adopted by the College of Physicians, but the Minister apparently willing to go a good deal further, for he would ake an exception in regard to foreign physicians wishing to ractise at the health resorts; he would permit such physicians to ractise without going through the examination, provided that eir patients were only those of their own nationality. This is a ery important concession, and we have no doubt that if the inister can succeed in obtaining the support of a majority of e Chamber of Deputies for his views, all the anticipated oubles on this subject will be avoided.

HALSTEAD'S OPERATION FOR INGUINAL HERNIA.

R. W. S. HALSTEAD exhibited, at a meeting of the Johns Hopkins ospital Medical Society, Baltimore, in October, five patients pon whom he had performed his operation for the cure of inuinal hernia. In operating, the incision is commenced at the xternal abdominal ring, ending one inch or less to the inner side the anterior superior spine of the ilium on an imaginary line nnecting the anterior superior spines of the ilia. Every structure superficial to the peritoneum is divided throughout the hole length of the incision. The vas deferens and its vessels e isolated up to the outer termination of the incision, and held ide. The sac is then opened and dissected from the tissues hich envelop it. The abdominal cavity is closed by quilled tures passed through the peritoneum at a level higher, by about vo inches, than the neck of the sac. The vas is then transanted to the upper outer angle of the wound. Strong silk tures are passed through all the layers on each side of the ound beneath the skin, and tied; the cord then lies superficial these sutures and emerges through the abdominal muscles about one inch to the inner side of the anterior spine of the ilium. The skin is closed after a manner practised by Dr. Halstead on all skin wounds. Interrupted sutures of very fine silk are passed through the under side so as to include only its deep layers, not occupied by the sebaceous follicles. The sutures do not perforate the skin, and when tied become buried. One or two small, short, gauze plugs are used as drains to the wound, and are removed about the seventh day, when the wound is dressed for the first time. The patients are allowed to walk about on the twenty-first day.

LOCAL GOVERNMENT REFORM.

THE discussion which took place in the House of Commons on Mr. Stansfeld's amendment to the Address, expressing regret that no intention was announced in the Queen's Speech "either of proceeding during the present session to the constitution of district and parochial councils in Great Britain, or of carrying further, in the metropolis and elsewhere, the organisation and powers of local government," will have served to emphasise the importance of the subject, and strengthen the hands of the Government in their desire to deal with these questions at the earliest possible moment. As both Mr. Stansfeld and Sir Walter Foster pointed out, the delay in completing the local government reform which was commenced by the passing of the Local Government Act, 1888, is very detrimental to sanitary administration. Apart from the grave defects in the present system, many local authorities, anxious for any excuse to postpone active measures and regarding themselves as moribund bodies which are eventually to be suppressed, hesitate to bestir themselves or enter into obligations or contracts for improving defective sanitary conditions which are prejudicial to the public health of their districts. As regards the metropolis, any attempt to deal comprehensively with the present anomalous system of local administration must include a bewildering array of subjects. But the question is growing more urgent and more complicated the longer reform is delayed. The consolidation and amendment of the metropolitan sanitary laws and of the laws as to the dwellings of the working classes, which the Government intend to push forward during this session, will be a boon and a long step in the right direction; but it will, at the same time, lay bare the rottenness of the present system of vestry government in London, under which the sanitary laws are administered. Bills for dealing with these questions have already been prepared by the Government, and are in the pigeon-holes at Whitehall. We can only hope, in the interests of the public health, that Mr. Ritchie will find the opportunity, before the present session has far advanced, of redeeming his promise to lay them before Parliament, if there is any prospect of passing them into law.

"FORCED RESPIRATION."

IN certain physiological experiments in which the animal is completely narcotised, artificial respiration is performed by opening the trachea and introducing a tube which is connected with a pair of bellows. Dr. G. E. Fell, of Buffalo, some time ago suggested the use of this method in the treatment of severe cases of opium poisoning. He applied the term "forced respiration" to the method, and reported some remarkably successful results from its use. It does not, however, appear to have made much way, probably owing to the necessity of performing tracheotomy. Dr. C. R. Vanderburg, of Columbus, has devised[1] a method of overcoming this objection. He uses a heavy flexible rubber cup, fitting over the mouth, nose, and chin; the cup is connected with a bellows by a rubber tube about 5 feet long; the direction in which the air travels is regulated by valves, so that the exhaled air is got rid of. The bellows is provided with a screw, by which the amount

[1] *New York Medical Record*, February 8th, 1890.

of air forced into the lungs at each compression can be regulated. The face piece, by slight pressure, can be made to fit nearly air-tight, and in this way the lungs, he states, can be easily inflated; he believes that with ordinary care there need be no fear of damaging the lungs, or of so much increasing the pressure within them as to interfere with the pulmonary circulation. He relates three cases; in one, a man, aged 30, took seven or eight grains of morphine, with suicidal intent. Forced respiration was commenced five hours and a half afterwards, when the patient was in a most extreme condition of narcosis; he was quite unconscious and cyanosed, respirations occurred only once a minute, and the pulse was 138, and very weak. The forced respirations were commenced at the rate of twelve to fifteen a minute, and continued for three hours. At the end of this time spontaneous respiration was found to have recommenced, and the patient made a good recovery. The second case was that of a child, aged 20 months, who had taken a grain and a quarter of morphine. About four hours later, when the child was apparently moribund, being cyanosed, with an uncountable pulse, and breathing ten times a minute, forced respiration was commenced. In less than two hours there was decided improvement, and the child ultimately completely recovered. The third case was less severe; the patient was a woman, aged 42; distinct improvement was noticed in less than an hour and a half, and this patient also rapidly recovered. In the first two cases the bowels became much distended with air: Dr. Vanderburg does not think that this had any unfavourable influence, but suggests that it might be prevented by plugging the œsophagus with a sponge secured by a piece of silk fish-line.

THE BUSINESS OF THE GENERAL MEDICAL COUNCIL.

THE business of greatest general importance before the Executive Committee of the General Medical Council at its meeting on Monday last was the series of replies to the circular addressed to the licensing bodies with reference to the requirements of the Council as to diplomas in public health. The Irish corporations pointed out that it would be impossible for them to comply with certain of the requirements; the Scotch and English licensing bodies have also sent in replies, in which they express their inability to comply with all the proposed regulations. The Executive Committee also had before it the reply of the Registrar-General to two communications from the Council. The request to number the death-certificate forms will probably be complied with, an alteration which will facilitate the task of tracing certificates which may have been improperly filled up. As to the other request—to supply the *Medical Register* to registrars of births and deaths—the Registrar-General observes that it would entail considerable expense, and could never be up to date; the local registrar might fail to find the name at the foot of the certificate in his copy of the *Register*, owing to registration having taken place after the date of issue of the annual volume. Certain disciplinary cases were also briefly mentioned to the Committee.

HOLIDAYS AFTER EXAMINATIONS.

WHEN a student has completed a section of his curriculum and passed the examination he usually takes a holiday before recommencing work. This rhythm of work—a time-table with periodical and diurnal remissions and intermissions—is an essential mode of mental training. If examination and training be in any case a stimulus aiding growth of brain, then, as in the case of all stimulation aiding development, it should be periodical and intermittent, with periods of rest and recreation in between. At a meeting oft he School Board of Kingswinford, Dr. Ellis moved:—'That after each annual examination by H.M. Inspector the children in the school where the examination has taken place shall have a week's holiday." Dr. Ellis thought that mischief had been done by the excessive strain which is thrown upon pupils in preparing for the annual examination, principally between the beginning of September and the end of January, during which period there was only one week's interval of rest. He also believed that most of the cases of nervous disease and grave disturbance of the system occurred during these few months. It was proposed to give a week's holiday after the examination, as well as a week at Christmas, together with the usual week's holiday at Easter and Whitsuntide and three weeks at Midsummer. This motion was carried unanimously. The Committee of the British Medical Association, in their report on schools, state that they found the percentage of nervous pupils in one school rise from 10 per cent. to 13.3 per cent immediately after H.M. Inspector's examination—a good reason for a holiday.

THE SEPTIC GERMS IN PERITONITIS.

WE have recently had occasion to refer to the distinctions between septic and simple peritonitis, and to note how Dr. Bumm, of Würzburg, has shown that the streptococcus is most deadly when taken from peritoneal fluid in the early stage of puerperal peritonitis. Dr. Orth has shown that the septic influence of undoubtedly septic germs is more strongly modified by certain pathological conditions than even Dr. Bumm's researches would lead us to suppose. Although strong infusions of "pure cultures" of staphylococcus pyogenes aureus or streptococcus pyogenes injected into the peritoneal cavity of rats, etc., failed to cause any lesion of the peritoneum, the same amount of germs caused deadly results when mixed with material which could not be absorbed or which could only be absorbed slowly. Disease of the peritoneum, already existing, favoured the action of the germs; in ascitic animals a very small quantity of staphylococcus caused septic peritonitis. The same result followed when any intra-abdominal structure was wounded, even when a piece of mesentery was excised or a spot cauterised. When a piece of gut was ligatured, with precautions, for six hours no bad results followed, but when ligatured for a shorter period with consecutive injection of staphylococcus fatal peritonitis followed. These experiments show the grave consequences which may follow the introduction of germs into the peritoneum after abdominal operations, especially if that serous cavity is not kept clear of effused fluids and solid particles. Rapidly fatal peritonitis followed the injection of staphylococci into the blood or into a compound fracture wound in cases where the intestine was ligatured.

THE RIGHT TO PERFORM OPERATIONS IN HOSPITALS.

AT an inquest held by Mr. Wynne E. Baxter at Shadwell on February 22nd on a child, aged 13 months, the question whether a hospital surgeon has the right to perform an operation on a child without the consent of its parents was raised. The mother stated that on Wednesday, February 19th, the child had a fit of coughing, and was taken to the Shadwell Children's Hospital. On admission, the child was given a hot bath, but as that did not have a beneficial effect, the doctor said that an operation on the throat was necessary. Witness refused her consent to this, and left the hospital to consult her husband. On her return to the hospital she found that the operation had been performed, and the child died shortly afterwards. The mother was very indignant, and stated that the doctor had no right to perform the operation without her consent, adding that she would rather the child had died at home than be murdered in the hospital. Mr. E. B. Hastings, medical officer of the hospital, stated that the child was suffering from an obstruction in the windpipe, and was first seen by the house-surgeon, Mr. Baker. After the mother left the hospital the child got worse, and Mr. Baker called his attention to the case. Seeing the child was at

he point of death, he at once performed tracheotomy, and for a hort time the breathing improved; but the child died in about alf an hour. The *post-mortem* examination showed that death was due to asphyxia, caused by a plug of caseous matter in the ronchus, derived from the rupture of a caseous gland. Vith regard to the charge brought against him of performng the operation without the parents' consent, Mr. Hastings aid that, in his opinion, at the time that was the only hance of saving life. He considered that if he had not operated e should have been gravely neglecting his duty. The operation id not in any way hasten the death. He submitted to the ury that if he saw a child drowning and could save its life, but id not do so because he had not obtained the consent of the arents, he would at least be guilty of gross inhumanity. The oroner went even further than this, and said that he doubted if ome juries would not have returned a verdict of manslaughter gainst the doctor if he neglected to perform an operation which e believed would save life because he had not obtained the arents' consent. The jury thoroughly approved of the conduct the medical officer, and returned a verdict in accordance with is testimony.

THE LIMITS OF THE TRUE VOCAL CORDS.

a recent meeting of the Berlin Laryngological Society, Herr Heymann read a short paper[1] entitled, "What do we mean by e term true vocal cords?" So much has been said and itten on the subject by anatomists, physiologists, and laryngoists, that it might be supposed no difference of opinion on the bject existed. But the Heidelberg Congress has taught us that ry different conceptions are current as to the limits of the ue vocal cords. These conceptions must be verified, and the thor proposes that this question be raised in next year's Interional Medical Congress in Berlin. None of the definitions given Hermann, V. Meyer, Johannes Müller, Luschka, and others, n be conveniently adopted, on account of either anatomical or ysiological objections. C. E. Merkel is the only author who es a precise limitation. Herr Heymann proposes that the inior boundary be placed where the mucous membrane of the rer laryngeal space begins to pass from the vertical into the ique. The lateral limit would be the part where the floor of sinus of Morgagni begins to be horizontal. At the same eting Herr P. Fränkel announced that the paper by him on nds in the true vocal cords would be further amplified in next number of *Virchow's Archiv*, where Herr Kanthack's ections would be replied to.

[1] *Berliner klin. Woch.*, 1889, No. 52.

E MEDICAL PROFESSION AND THE PREVENTION OF DISEASE.

ETTER has lately been published in the *Scotsman* by a writer o advocates the appointment of medical officers of health "not gaged in private practice." In so doing he asserts that "no e body of men can bring themselves to believe that medical ctitioners whose livelihood depends on sickness are likely to rt themselves in exterminating it. It is unnatural that men ractice should do their very utmost to lessen disease, as thereby y would be reducing their limited incomes." This writer has n well answered in the columns of the same newspaper by ther correspondent who signs his name, and who says: "Exing the venerable Chadwick, I believe I speak only the words ruth and soberness when I say every advocate for the higher th of the people, from Hippocrates downwards, has been a luate in medicine." He then enumerates the illustrious men , during the latter half of this century, have been strongest ng the many champions of the public health. The history and practice of vaccination in this country is perhaps the best proof that, strange as it may seem to some persons, members of our profession regard it as their first duty to lessen disease, although in so doing they must certainly diminish their profits. A considerable portion of the income of practitioners of former times was gathered from attendance on cases of small-pox, and the amount paid for vaccination at the present day is trifling in comparison with that paid for treating the sick, so that in this case members of our profession have had a great deal to lose and very little to gain, and yet amongst them the most earnest advocates of vaccination were and are found.

THE LATE EMPRESS AUGUSTA OF GERMANY.

THE International Committee of the Red Cross at Geneva have sent round a circular to the presidents and members of the Red Cross committees of all the countries that have joined in the Geneva Convention, suggesting the creation of a central "Augusta Fund," to be devoted to some useful and benevolent object that shall both perpetuate the name and philanthropy of the late Empress and at the same time assist in still further developing the beneficent operations of the Red Cross societies, which the late Empress endeavoured so earnestly, by thought and numerous generous acts, to promote. If the appeal should be liberally responded to, as it seems likely to be, the particular manner in which the fund thus formed will be employed will not be finally determined until the next International Conference of Red Cross Cross societies, which, according to the decision arrived at in 1887 at the International Conference in Carlsruhe, will take place in the year 1892. The Grand Duchess of Baden has sent a subscription of 1,000 francs toward the formation of the fund. It is requested that subscriptions may be sent to the care of the International Committee at Geneva, who will cause the amounts contributed, and the names of the subscribers, to be published from time to time in the *Bulletin International*.

THE UTERUS AND MYOMATA.

DR. ROESGER, of Halle, has detected a strong resemblance between the normal uterine tissue of a fœtus at about the sixth month and the tissue of a common "fibroid" or fibromyoma. In early fœtal life he found no trace of lamination in the uterine tissue; the uterus is then a uniform mass of embryonic plain muscle cells. Not until the fifth month could he find an adventitia surrounding the uterine artery, and its secondary and tertiary branches, just as in myoma the minuter arterioles, conspicuous in adult uterine tissue, were wanting. Kleinwächter, a few years since, traced the origin of myomata to the arterioles which he found ending in these growths, the muscular coat remaining as the incipient myoma, the adventitia and endothelium being lost. About the fifth month, Dr. Roesger also found, in the fœtal uterine tissue, a great abundance of canals lined with endothelium, far too wide to be simple capillaries; he spoke of these canals as pseudo-capillaries. At the ninth month, arteries with their adventitia were found to be more numerous; the pseudo-capillaries still abounded. There were already signs of lamination amongst the bundles of muscular fibres, which were otherwise felted together irregularly, so that a section of uterine tissue at this stage still resembled a "fibroid." In the uterus of the new-born child, the pseudo-capillaries were greatly reduced in number, true arterioles were present in numbers, and there were three layers of the uterine wall, the outer and inner being the more purely muscular, the middle layer containing a greater proportion of blood vessels. Dr. Roesger has published this communication in the first part of the *Zeitschrift für Geburtshülfe* for the current year. If it be true, as he and Dr. Kleinwächter appear to suggest, that the uterus and its myomata are so directly maintained, if not created, by the

tissue of their own blood-vessels, unlike any other tissue or new growth, we can understand how electricity, by acting on the muscular coats of the arteries and arterioles, may greatly control the growth of a myoma. Still much remains to be proved both respecting the origin of "fibroids" and the influence of electricity.

THE USE OF ALCOHOL IN HOSPITALS.

A VERY interesting report has been presented to the British Medical Temperance Association by Drs. Morton Moir and Pearce, on the administration of alcohol in hospitals. The Committee have drawn up a series of tables full of instructive figures, instituting a comparison between the amount expended under this head in 1863 and in 1888. The remarkable fact is noted that in these 25 years there has been, from the returns made by 113 hospitals, an increase of 300 per cent. in the charge for milk and a decrease of 47 per cent. in the charge for alcohol. A second table gives returns from 60 hospitals of which no previous record could be found. On the basis adopted by Dr. Fleetwood Buckle, in his report on 1863, these 60 hospitals showed a decrease of 39 per cent. in the expenditure for alcohol per bed. A third table shows the comparative alcoholic charges per bed in 1863 and 1888 respectively. In 73 hospitals there had been an increase of 2,108 beds, and a decrease of total average cost per bed of £78 3s. 5d. Beds have thus increased at the rate of 25 per cent. while the amount expended on alcohol has decreased at the rate of 47 per cent. Only eight of this group of hospitals showed an increase in the quantity of alcohol consumed. In the remaining 65 the decrease ranged from 30 to 83 per cent. In the London Fever Hospital, while milk has risen from £150 to £650 per annum the disbursements for alcohol were at the rate of only 15s. 2d. per bed in 1888, as compared with £3 5s. per bed in 1863. In St. Bartholomew's Hospital the milk bill had gone up from £600 to over £2,000, while the alcohol bill had gone down from £1,446 to £953. These statistics prove that there has been a gradually increasing rational medical administration of alcohol, the credit of which must be awarded to the medical staffs of the hospitals, a fact which affords yet another proof of the lively interest in the promotion of temperance taken by the medical profession.

RIGOR MORTIS.

IN the course of some researches on the nature and causes of cadaveric rigidity, in the *Revue Médicale de la Suisse Romande*, Mlle. Catherine Schipiloff endeavours to prove that rigor mortis is not caused by any special fibrinoplastic ferment, but by simple precipitation of the myosin by sarcolactic acid developed in the muscles. By effecting the artificial circulation of a very feebly alkaline fluid in the vessels of a dead animal rigor is prevented. If this artificial circulation be maintained for some time, rigor no longer returns when that circulation is discontinued, as the substance which produces the acid is probably exhausted. What that substance may be the author cannot inform us; it is not glycogen, for that substance is not used up during rigor. The acid precipitates the myosine, this phenomenon explaining the opaque whitish appearance of rigid muscles. This precipitation of the myosin is proved by microscopic investigation. Two other phenomena play a part in cadaveric rigidity—physiological and mechanical contraction of the muscles. The stimulus of the acid generated after the circulation has ceased may at first cause physiological contraction; this always occurs before the muscle has lost its normal excitability and become opaque and whitish. It may cause a maximum of shortening, but in very many cases it is altogether absent. Mechanical contraction begins after the cessation of excitability and the discoloration of the muscle. It is due to the precipitation of the myosin and to the elasticity of the muscular tissue. The cessation of cadaveric rigidity is due to the re-solution of the myosin in an excess of acid. This action of excess of acid on the myosin can also be proved by microscopic examination; it also causes the muscle to become supple again, and its extreme mechanical contraction undergoes slight abatement. The effects of death on the myosin contained in muscular tissue must be borne in mind, not only by experts who examine muscle in cases of death from paralytic and spastic affections, but still more by pathologists less skilled in the special examination of muscles and nerves, for they may be deceived in respect to alleged fatty changes in the heart and uterus, which are widely believed to occur under well-known physiological and pathological conditions, although careful observers declare that the degeneration is often not fatty at all.

SPONTANEOUS RUPTURE OF THE SPLEEN IN MALARIA.

DR. FRANCIS NICOLETTI, of Assoro, in Catania, reports[1] a case in which spontaneous rupture of the spleen occurred in a person suffering from malaria. The patient was a lad of 15, living in a malarious district, and exhausted by repeated attacks of intermittent fever. His nourishment was scanty, and, though weak and ill, he was forced to continue his work in a sulphur mine. The work, which consisted in carrying burdens of more than 120 lbs. in weight up steep subterranean passages nearly a mile long, was far too heavy for his strength, and he often complained of a dull pain in the left hypochondriac region. One day when at work he felt a sudden sharp pain in the same place, turned deadly pale, and fell fainting to the ground. He was carried out of the pit but died before reaching home, twenty minutes after the seizure. A medico-legal examination was ordered, but no mark of violence was found on the body. The cranial cavity, the heart and the great thoracic vessels were absolutely empty of blood; the lung presented no abnormality beyond the peculiar slate colour usually seen in sulphur workers. On opening the abdomen in the middle line a quantity of blood-stained liquid gushed out, and on turning aside the intestinal coils, the whole of the left hypochondrium was seen to be occupied by a blood clot as large as a child's head. Inside this mass was the spleen, which presented a laceration on the anterior margin, commencing about four centimètres below the notch and extending to the hilus. The rent measured altogether ten centimètres in length. The splenic pulp was so friable that the greatest care was necessary in handling it. The weight of the organ was 680 grammes. No other lesion was found. Dr. Nicoletti attributes the occurrence to sudden passive engorgement of the diseased organ during extreme muscular effort.

MICRO-ORGANISMS IN TUMOURS.

IN a valuable monograph on the pathogenic properties of micro-organisms contained in malignant tumours, published in the *Revue de Chirurgie*, Professor Verneuil comes to the following conclusions. The tissues of malignant neoplasms, cancer, sarcoma, epithelioma, etc., may be invaded by different germs, of which neither the origin nor the species can at present be determined with any accuracy. This invasion may remain latent for a long time, but it may at once, or at length, cause important modifications in the evolution and nutrition of the tumour, such as sudden increase in size, softening, or ulceration. These germs are not found in all kinds of new growths, nor in all tumours of the same kind, nor even in all parts of a tumour infected with germs at one point. They are not to be seen in lipomata, nor in pure fibromata, nor in incipient sarcomata, or cancers which grow slowly and are covered with healthy integument. On the other hand, they are almost always present in softened and ulcerated new growths.

[1] *Riforma Medica*, November 28th, 1889.

he germs have not only a prejudicial local action on the tissues f the tumour, but may set up a more or less intense attack of yrexia, when they infect a tumour rapidly growing or softening. rofessor Verneuil insists that during an operation for the removal f the tumour, the germs escaping into the wound beyond the mits of the new growth may of themselves set up septicæmia, ıdependently of any germs which may enter the wound from the .r, instruments, or dressings. The above theories favour the arly removal of malignant tumours, and warn the surgeon to cut eely and far outside the limits of the tumour when he is obliged) operate after it has reached an advanced stage. He must further .ke care not to allow any juice or portions of solid material from ıe growth to touch the operation wound, if such an accident can ossibly be avoided. Professor Verneuil's researches do not prove ıe existence of a special germ for any kind of malignant tumour, ill less do they indicate that any tumour is produced by germs. ıey rather imply simple infection from without, as in every open ound.

UNILATERAL FACIAL ATROPHY.

a. O. ROSENTHAL has recorded[1] a case of facial hemiatrophy, eceded by partial scleroderma, and accompanied by alopecia eata. Only one case of this kind has been recorded hitherto, mely, Gibney's case, to be found in the *Archives of ermatology*, New York, 1879. In this latter case there was also leroderma in the region of the left sciatic nerve. In the present se the patient was 7 years old, of a healthy family, and the ease had begun three years ago with whitish patches on the left ıe of the neck, which gradually extended to the scalp and face. en atrophy of the left side of the face set in. The vitiligo-like tches were surrounded by small pigmentary deposits. The facial ophy was very considerable (measurements are given), and there re small characteristics of alopecia areata on the left side of the lp. The combination of these three affections is of great in- est, and cannot be merely accidental. Schwimmer, in his work the neuropathic dermatoses, calls sclerodermy a "constitu- nal trophoneurosis," and Mendel, following Virchow and others, scribes it as an interstitial neuritis of the trophic fibres of the geminal nerve.

BISMUTH SALTS AND THE ODOUR OF GARLIC.

E cause of the odour of garlic occasionally communicated to breath of patients who are taking preparations of bismuth is d to be the presence of the metal tellurium as an impurity. e fact that tellurium gives this odour to the breath was first iced by Sir James Simpson, who when making trials of the salts cerium also experimented upon tellurium. He reports[1] a case a divinity student who inadvertently got a dose of tellurium ich was followed by the evolution of such a persistent odour garlic that for the remainder of the session the patient had to apart from his fellows. That specimens of bismuth prepara- ıs, which caused this peculiar odour of breath, contained urium was established in 1875.[2] The *British Pharmacopœia* rds against this impurity by giving a special test for its detec- in Bismuthum Purificatum.

FŒTUS PAPYRACEUS IN TWIN PREGNANCY.

TETRICIANS admit that retention of a fœtus is far more fre- nt in twin and triplet than in single pregnancy, especially n the placenta is single and the pair are conjoined. Hence placental degeneration occurs than in single pregnancy, and ıe fœtus is often slowly destroyed by a gradual cessation of placental circulation, and is of necessity subjected to much sure, mummification or "fœtus papyraceus" is also most fre- quent in twin pregnancies. Dr. E. W. Mulligan describes an instructive case in the *Buffalo Med. Soc. Journal*. On November 21st, 1888, he was called in to a patient, six months pregnant, suffering from abdominal pains coming on about once in every half hour. The abdomen was very large, and Dr. Mulligan suspected labour at term, the patient being mistaken, in his opinion, about her last period. He ordered the nurse to send for him when the pains became more severe and frequent. The patient's calculations proved correct, and he was not called in again till the end of February, 1889. This time the patient was in labour in earnest and at full term. The abdomen was much smaller than in November. A male child, ten pounds in weight, was delivered, the head presenting; immediately afterwards, a dead flattened-out fœtus was born; its cord had a velamentous attachment to the border of the placenta. Dr. Mulligan then learnt that soon after his first visit in November the bag of waters broke, and nearly a pailful of clear fluid escaped. The pains then ceased, and the patient was at once able to attend to her domestic duties, continuing in good health until delivery at term.

[1] *Berliner klin. Wochenschr.*, 1889, p. 755.
[1] *Edin. Med. Jour.*, December, 1854, p. 564.
[2] *Pharm. Jour.*, C. Ekin, vi, 501; G. Brownen, vi, 561.

CURE OF MALIGNANT ANTHRAX.

THE state of a patient in the later stages of malignant anthrax is desperate, and recovery very unusual. Dr. Lande describes in the *Mémoires de la Société de Médecine de Bordeaux*, 1889, two cases where this condition was reached, yet the patients were saved by subcutaneous injections of carbolic acid. In the first case, a man, aged 27, the upper lip was the seat of anthrax; in the second, a woman, aged 65, the anthrax developed on the interscapular region. Both subjects were very ill, low delirium and other unfavourable symptoms being present. The injections were generally made into the subcutaneous tissue of the peripheral inflamed zone of the anthrax. The strongest solution used when the symptoms were severe consisted of 15 grammes of neutral glycerine and an equal part of distilled water, in which 3 grammes of crystals of carbolic acid were dissolved. The injections were made at five points around the anthrax, and represented a total dose of 50 centigrammes of pure carbolic acid. This solution caused severe pain, but rapid improvement of the symptoms. This 10 per cent. solution was stronger than any previously employed for the same purpose by Boeckel, Raimbert, and others. Nevertheless, it does not appear to cause sloughing of the tissues. A 5 per cent. solution is strong enough, in the opinion of Dr. Lande, except in very severe cases where the patient feels little pain. The injections must be repeated until the bad symptoms cease to recur, which may occur within forty-eight hours.

INFLUENCE OF OPERATIONS ON MOLLITIES OSSIUM.

DR. J. BAUMANN, of Bâle, has recently published an inaugural thesis on the Influence of Porro's Operation and Castration (*sic*) on the Course of Osteomalacia. He is somewhat of Winckel's opinion, that mollities is of infectious origin. It has repeatedly been declared that women in whom Porro's operation has been performed, owing to pelvic deformity due to mollities, have recovered from that disease. Dr. Baumann's endeavour has been to ascertain the truth of these reports and to trace if any true relation of cause and effect between amputation of the uterus and the subsequent cure of the bone disease exists. He has only selected complete histories. These records include 44 Porro's operations in subjects with mollities; 26 recovered, the remainder died. Hegar's extraperitoneal treatment of the stump appears to exert in itself a distinctly favourable influence on the bone affection. The removal of the ovaries appears to be the direct cause of cure, but how it acts is not certain. Dr. Baumann suspects that the interference with the ovarian and uterine arteries exercises a reflex

action on the dilated vessels in the bones, and thus removes the hyperæmia. The author believes that considering the power, which Porro's operation possesses of curing so grave a disease as mollities, objections on the score of mutilation and sterilisation may be set aside. Even the greatest opponents of Porro's operation, Sänger, Kehrer, and others, have admitted its value in cases of mollities. The author does not, like Déancourt, dread the onset of a so-called "cachexia uteripriva." The entire subject demands much consideration and research.

FŒTAL RETENTION THROUGH FIBROID DISEASE.

Professor Alphonse Herrgott, of Nancy, describes, in the *Annales de Gynécologie* for December, a remarkable case of fœtal retention. A woman aged 34 became pregnant, and began to suffer from difficulty in micturition, which disappeared about the third month. The movements of the child were felt in the sixth month on the right side of the much distended abdomen. A month later symptoms of peritonitis set in; towards the middle of the eighth month all fœtal movements ceased. Then the patient became cachectic and the abdomen diminished a little in size. A tumour was discovered, hard in the middle line and to the left, softer on the right side, where *ballottement* was detected. At about term, reddish fluid escaped from the uterus. A month later the patient became very ill indeed. Fœtal retention owing to fibroid disease of the uterus was diagnosed. An incision was made about one inch to the right of the linea alba, over that part of the tumour where *ballottement* had been felt. Fœtid fluid escaped when the tumour was incised, and a partially macerated fœtus, over sixteen inches long and weighing a little over five pounds, was removed. As the patient was much exhausted and removal of the fibroid uterus could not be performed without great immediate and distant risk, the edges of the uterine wound were sewn to those of the abdominal wound and the placenta was left in place. The uterine cavity was carefully washed out daily with a solution of naphthol β, already recommended by MM. Pinard and Bouchard. The placenta ultimately came away bit by bit. Convalescence, though very protracted, was complete.

SCOTLAND.

A golf tournament has been arranged between the Royal College of Physicians and the Royal College of Surgeons of Edinburgh, and will be played at the end of March on Gullane Links, near Edinburgh.

The following appointments to the visiting staff of the Victoria Infirmary, Glasgow, have been made:—Physicians: Ebenezer Duncan, M.D., and Alex. Napier, M.D. Surgeons: A. Ernest Maylard, M.B., B.Sc., and R. H. Parry, L.R.C.S. The infirmary was open for the reception of patients on February 24th.

Alma Mater, the Aberdeen students' magazine, on Wednesday completed the seventh year of its weekly issue during the winter session. Student magazines are usually of the most ephemeral nature; but *Alma Mater* seems not only to meet all its own expenses, but is actually conducted with a considerable profit. It is managed entirely by a committee of students under the Students Representative Council, and to its present energetic editor-in-chief, Mr. Adam Mackay, medical student, is due much of the credit for the financial and literary success of the magazine.

DOUBLE ATTENDANCE AT LECTURES AT ABERDEEN.

At a meeting of the Students' Representative Council on Saturday, it was unanimously agreed to ask the Senatus if it is within the right of any professor to make a double attendance at his class practically compulsory, by his giving alternate courses, differing materially in nature, students being subject to examination over the whole ground covered by the alternate courses. The reply is awaited with much interest, as a tendency in this direction has has been by some of the professors at Marischal College.

THE PHYSIOLOGICAL BASIS OF EDUCATION.

A discussion on the physiological basis of education was introduced at the special meeting of the Medico-Chirurgical Society of Edinburgh last week, by Dr. John Strachan, Dollar. After referring to the frequent opportunity which all medical men had of observing a close relationship between prize-taking at schools and pale cheeks, poor appetites, headaches, sleeplessness, and other evidence of deteriorated health, Dr. Strachan maintained that physiology, instead of being distinct from education, was the basis upon which all true and safe educational procedure must rest, and that it was for the medical profession, as the only recognised authorities in physiological law, to lay down the plan upon which the practical educationalist might work with safety. Growth was a continuous process, and to attain to the highest results it must go on smoothly and uninterruptedly from birth to maturity. Concurrently with growth another process went on in the young, which they might call functional development. Along with growth it determined the ultimate attainable strength of the mature organ. A primary object in education must, therefore, be to maintain continuously and in the highest degree possible the conditions necessary for healthy growth and development. In judging of the complex requirements and conditions of healthy growth, it was, therefore, evident that age and apparent strength were no adequate or safe guide in this inquiry. Of greater importance was regard to the natural promptings of the child. The medical profession ought to insist upon the inadmissibility of punishment and prizes as applied to mental work in the young. Apart from this means of unnatural forcing, the teacher would be obliged to fall back upon the natural action of the young mind, and adapt his method to that, when a beginning would be made in scientific teaching. Dr. Clouston held that while education might be regarded as the guiding of the process of development from every point of view, this had to be done by reference to certain great principles and great facts. It was to be guided, first, by reference to the potentiality of every organ and every faculty of the body and mind. They had also to bear in mind the working life of the individual to be educated. It had further to be guided with due regard to the two primary instincts of humanity—the preservation of life and the reproduction of life. Thus any process which diminished the power of the female for maternity must be a bad education. The two things—the power of developing the female brain to fit women to be intelligent members of society, and at the same time to be the mothers of the future generations of mankind—were quite compatible. The problem in education was to make them as compatible as possible. In respect of pressure, he would say, press by all means, provided by that pressure no harm was done to the health of the pupil. After other members of the Society had expressed their views, Mr. Ferguson, head master of the Edinburgh Institution, insisted that teachers were but the servants of the public, and, if they were anxious in the discharge of their duties, it was not their fault. Dr. Rogerson, of Murchiston Castle School, begged medical men to support teachers in the matter of the physical development of the pupils, by encouraging parents to allow their children to take part in school games, which as a means of all-round training were not

mportant. The President, Professor Simpson, thought it right to nforce the importance of arrangements in their public schools, whereby the children might have a good square meal in the middle of the day.

IRELAND.

Dr. Austin Meldon, President of the Royal College of Surgeons, has issued invitations for a dinner on Saturday, March 15th, t which His Excellency Lord Zetland will be present.

POST-GRADUATE COURSES FOR BELFAST.

r a recent meeting of the Ulster Medical Society Dr. Burden ne of the ex-Presidents and Pathologist to the Royal Hospital) rought forward a resolution advocating the formation of post-raduate courses in connection with the Society. Several members having criticised the proposal favourably, its consideration as adjourned.

DUBLIN HOSPITALS BILL.

n the paragraph under this heading which appeared in the OURNAL of February 22nd, it was stated in error that the "College" of Physicians had made certain representations. It should ave read "a Committee of the College," which reported to the ellows. The College has deferred action until the Bill is introduced.

GEORGE W. HATCHELL, M.D.

E regret to announce the death of Dr. George William Hatchell, ne of the inspectors of lunatic asylums in Ireland, an office which e only resigned a short time ago. Dr. Hatchell was in his 82nd ear. He had been on the honorary staff of successive Lords ieutenant for about fifty years. His duties drew him away from ntact with the majority of the profession in Dublin, but he was, the circles in which he moved, greatly respected, and his death as caused very keen regret.

THE INFLUENZA IN BELFAST.

E influenza has much abated in Belfast, but is still severely t in some parts of the province of Ulster. The highest point uched in the mortality rate during the continuance of the idemic in Belfast was the very high figure of 58 per 1,000. is figure has now materially fallen, but is still abnormally gh.

THE ROYAL BARRACKS.

E work of improving the Royal Barracks having sufficiently vanced, some troops of the 4th Hussars were recently ordered be quartered there. The result, as stated in Parliament, has n unfortunate. Several cases of typhoid fever have appeared ongst the men, and it has been determined not to send any more ops there for the present. On Monday, February 24th, Prince ward of Saxe Weimar, accompanied by Sir Redvers Buller, ited the barracks and made a careful inspection. The dis-eries made during the alterations have been sufficient to ount for the presence of typhoid fever there during many rs. The sewers are shockingly bad. The ground has become urated by the leakage through defective jointings. It is stated t at one place a nine-inch and a fifteen-inch pipe were joined by cks, with the result to be expected. In another place a ventilng sewer pipe opened under the ventilator of one of the rooms. s evident that something more thorough than has as yet been cted must be done before the sanitary state of these barracks can be declared safe. The whole system of sewers must be taken up, and the infiltrated soil removed. The report of Sir Redvers Buller will be anxiously awaited; but meanwhile it is apparent that no soldiers ought to be quartered in any portion of the barracks.

BELFAST MEDICAL STUDENTS ASSOCIATION.

This Association, which has now been in existence for several years for the promotion of the interests of the students of the Belfast Medical School, held its annual *conversazione* upon February 12th, and the proceedings were very successful and enjoyable. The fine rooms and halls of the Queen's College were handsomely decorated, and a very large assembly, including the President of the College, most of the professors, the teachers in the medical school, the students, and a large representation of the general public came together. Tea was served in the Entrance Hall at 7.30 o'clock, and at its conclusion the various amusements, which were exceedingly well organised, were proceeded with. Professor Letts showed some soap-blowing experiments in the Chemistry Room, and in the large hall an excellent concert was given. The most amusing feature in the evening's entertainment was an exhibition of wax figures by Dr. W. N. Watts, who personated Artemus Ward in a very successful manner. The arrangements for the evening were under the direction of Dr. McKisach (President of the Association), and Mr. H. T. Heron, B.A. (Secretary).

ULSTER MEDICAL SOCIETY.

The last meeting of this Society was devoted to a discussion upon typhoid fever, with special reference to the recent epidemic in Belfast. The discussion was opened by Dr. Lindsay, who showed from the returns of the last five years that the annual mortality from typhoid fever in Belfast was about 80, whereas the deaths during 1889 had amounted to 175; of these, 52 had occurred in the first half of the year, and 123 in the second. The epidemic began somewhat abruptly in the month of August, 1889, and continued until January, 1890. It was preceded by a very warm May and June and a wet July. It was also preceded by a heavy mortality from infantile diarrhœa, the deaths from which cause for the months of May, June, July, and August, 1889, having been 176 as against 60 for the corresponding period of the previous year. The general character of the epidemic was somewhat mild, the mortality among the cases treated at the Royal Hospital having been only 5.7 per cent. Constipation cases were common and generally recovered. Relapses were somewhat common, but rarely fatal. Of the cases in which severe hæmorrhage occurred from the bowels about one-half succumbed. Albuminuria had been observed in several cases, none of which proved fatal. Otorrhœa had been rather common. Dr. Lindsay concluded by discussing various points of treatment, especially the management of hyperpyrexia and of intestinal hæmorrhage. The discussion was continued by Dr. Dempsey, J.P., who had been struck by the rarity of definite eruption during the late epidemic, and by the frequency of deafness, vomiting, profuse perspirations, epistaxis, and relapse without manifest cause. His mortality had been low, about 5 or 6 per cent. The discussion will be continued at the next meeting of the Society, much interest being felt in the subject.

Public Health in Russia.—A telegram from St. Petersburg states that for some weeks past the medical men of that town have noted a rather serious spread of recurrent fever following close upon the influenza epidemic, and now it is reported that several cases of cholera have appeared. It is not stated that any of them have been fatal, so that if it really be cholera it must be in a very mild form. The medical council of the military staff at Tiflis have just issued voluminous instructions to the troops and authorities of the Caucasus on the subject of the possible appearance of cholera in that part, in consequence, as the council states, of the continuance of the epidemic in Mesopotamia and Persia.

IS INSANITY INCREASING?

Of late years the impression seems to have been gaining ground in the public mind that insanity has materially increased in proportion to the population. The large increase in the number of insane persons who year by year are brought under official cognisance, especially in the annual report of the Lunacy Commissioners, has naturally helped to form this popular belief, and the amount the ratepayers have been called upon to supply in the different counties for the purpose of providing further accommodation for their insane poor and to pay for their maintenance, has helped to strengthen the impression. Again, the agitation which has of late taken place, and the legislation which has resulted from it, have tended to draw attention to the subject, and arouse public curiosity and criticism upon all matters connected with the care and treatment of the insane. It is well, therefore, that some sort of authoritative statement should be made which would tend to lead us to a more definite conclusion, and help to set at rest the oft-repeated question, "Is insanity increasing"?

To a large extent the solution of the problem becomes a matter of statistics, and at the meeting of the Royal Statistical Society on February 18th, a valuable and interesting paper upon the question was read by Mr. Noel A. Humphreys, of the Registrar General's department. It is unfortunate that the lecturer, in introducing the subject, had to express his regret "that materials do not at present exist for a thoroughly satisfactory inquiry into the amount, distribution, and the increase or decrease of prevailing insanity." He pointed out that one source of fallacy was to be found in the fact that the number of inmates of asylums was being recruited from cases of insanity detained in workhouses, or living with relatives, and that a proportion of quiet and harmless cases discharged from asylums found their way back to the workhouses or to the care of their friends, and thus a continual interchange of these cases was going on. Deeming the returns of the Commissioners inadequate to furnish the requisite information, the lecturer turned to the census statistics of insanity. It was in 1871 that the census returns for the first time provided for a return of the mentally unsound existing in the whole population of England and Wales. These returns showed at that time there were no fewer than 12,264 cases of insanity existing over and above the number given in the Lunacy Commissioners' report; whilst in 1881 the census returns showed there were still 11,390 insane persons who were not brought under official notice. "While, therefore, the lunacy reports understate the amount of insanity and its proportion to the population, they undoubtedly tend to overstate the rate of increase of insanity." What adds further to this belief is the fact that in the census returns certain cases would not be returned, owing to a natural reluctance on the part of the householders to return them as mentally defective. Upon one point there can be no doubt, namely, that there are now a vastly larger number of persons of unsound mind in detention, and under the official cognisance of the Commissioners, and that this number has shown a steady increase from year to year. This, however, may be accounted for by the large number of unreported cases shown to exist by the census returns, many of whom, doubtless, find their way ultimately into asylums, or otherwise go annually to swell the numbers under official cognisance.

Again, the prolongation of human life among the inmates of asylums, as shown by the decreasing rate of mortality, added to the improved and increased accuracy of registration, go to favour the appearance of an increase of insanity. The Statistical Committee of the Metropolitan Asylums Board show this very conclusively in their tables, for, had the high death-rate of a few years ago been maintained and no increase in the admissions had taken place between the years 1873 and 1888, the number of their patients would have been 3,346 instead of 4,919. We join Mr. Humphreys in his expression of regret that there are no annual returns furnished of the admissions, discharges, and deaths among the class of insane receiving outdoor relief. The responsibility of collecting and utilising these returns rests with the Local Government Board and the Lunacy Commissioners.

Dr. Hack Tuke, who has compiled valuable statistics upon this subject with reference to the county of Yorkshire, corroborates the view held by Mr. Humphreys. He found that the admission of patients labouring under first attacks contributed an imperfect, but at any rate the best, test that could as yet be supplied to ascertain the amount of occurring insanity at different periods, and the proportion of such admissions to the 10,000 of the population had not increased in Yorkshire. Dr. Hack Tuke, in his paper, states "that so far as statistics teach us anything, they fail to show the slightest increase in occurring insanity in the county since January 1st, 1878."

The facts and figures given by Mr. Humphreys in his elaborate statistical summary, supported by the conclusions of Dr. Hack Tuke, give us reasonable ground for hoping that the increase in the number of insane persons is more the result of accumulation than an actual increase in the number of new cases in proportion to the population.

Dr. Savage, whose large experience in acute and curable cases at the Bethlem Royal Hospital eminently qualifies him to speak with authority, stated in the discussion which followed Mr. Humphreys's paper, that we have reason for congratulation in the fact that the form of insanity in the cases recently admitted does not show any sign of becoming of a worse type than formerly.

We shall look with much interest to the approaching census enumeration of the insane, and we trust that if the Government should desire to extend the inquiry in this direction, it will do so in a manner which will not be calculated to impair the value of these returns, but in such a way as to ensure increasing accuracy in the collection, analysis, and tabulation of the information.

SCOTTISH MEDICAL PROFESSORS.

The following list indicates the relative value of the different medical posts in connection with the Scottish Universities. The statement is founded on a parliamentary return, which shows the emoluments accruing to the several professors for the year up to March 31st.

Edinburgh.

Professor.	Chair.	£
Isaac B. Balfour	Botany	2,189
William Rutherford	Institutes of Medicine	2,581
Thos. Grainger Stewart	Practice of Physic	1,571
Alex. C. Brown	Chemistry	3,450
Sir William Turner	Anatomy (average)	3,000
Alexander R. Simpson	Midwifery	1,230
J. Cossar Ewart	Natural History	2,409
Thos. R. Fraser	Materia Medica	2,235
Thos. Annandale	Clinical Surgery	1,068
Sir Douglas Maclagan	Medical Jurisprudence	953
John Chiene	Surgery	1,615
William S. Greenfield	Pathology	2,351

Glasgow.

Professor.	Chair.	£
William T. Gairdner	Practice of Medicine (average)	919
John Cleland	Anatomy	2,233
John Young	Natural History	1,024
Sir George H. B. Macleod	Surgery	1,239
William Leishman	Midwifery	598
John Ferguson	Chemistry	1,672
Fred O. Bower	Botany	938
Matthew Charteris	Materia Medica	956
John G. M'Kendrick	Physiology	1,115
Pierce A. Simpson	Forensic Medicine	622
George A. Buchanan	Clinical Surgery	420
Thomas M'Call Anderson	Clinical Medicine	572

Aberdeen.

Professor.	Chair.	£
Thomas Carnelley	Chemistry (average)	396
James W. F. Smith-Shand	Practice of Medicine	1,826
John Struthers	Anatomy	715
Alex. Ogston	Surgery	431
Matthew Hay	Medical Jurisprudence	627
John Alex. M'William	Institutes of Medicine	494
John T. Cash	Materia Medica	379
William Stephenson	Midwifery	753
James W. H. Traill	Botany	787
David James Hamilton	Pathology	

CONGRESS OF INTERNAL MEDICINE.

The following is the official programme of the Congress o Internal Medicine to be held at Vienna from April 15th to 18th under the presidency of Professor Nothnagel: Treatment o Empyema, by Drs. Immermann, of Basle, and Schede, of Hamburg discussion on Influenza, to be introduced by Professor Baümler, o Freiburg; Treatment of Chronic Nephritis, by Professors vo Ziemssen, of Munich, and Senator, of Berlin; Physiology of th Skin, by Dr. P. G. Unna, of Hamburg; Pemphigus, by Dr. Mosle of Greifswald; Influence of Diabetes on Gastric Digestion, by D E. Gans, of Carlsbad; Inflammation of Bone of Typhoid Origi by Professor Fürbringer, of Berlin; Effect of Alkalies on Met bolism in Man, by Dr. Stadelmann, of Dorpat; Mountain Disea

Dr. von Liebig, of Reichenhall; Connection between the Form the Pulse and the Closing of the Valves, by Dr. von Frey, of ipzig; Acute Overstrain of the Heart and its Treatment, by Dr. hott, of Nauheim; Therapeutic Communications, with demon-ations, by Dr. Mosler; Silicious Acid Gravel in the Urine, by . E. Pfeiffer, of Wiesbaden; Pathology and Diagnosis of the -called Ball Thrombi in the Heart, by Professor von Ziemssen; monstrations with the Electrical Microscope, by Professor icker, of Vienna; Influence of Drugs on Intestinal Absorption, Dr. Leubuscher, of Jena; Tendon Reflex, by Dr. Sternberg, of enna; Pathology of Movable Kidney, by Dr. H. Curschmann, Leipzig; Innervation of the Heart, by Dr. E. Romberg, of ipzig, with demonstration of preparations and models bearing the subject by Dr. W. His; Changes in the Heart Muscle from lvular Deficiency, by Dr. L. Krehl, of Leipzig; Tuberculosis, by . G. Cornet, of Berlin; Closure of the Semilunar Valves, by Dr. irthle, of Breslau. In connection with the Congress there will an exhibition of new chemical and dietetic preparations, drugs, truments, etc.

EFORM OF THE COLLEGE OF SURGEONS.

E following is the draft Bill to amend the constitution of the yal College of Surgeons of England prepared by the Association Members:—

Whereas it is expedient to amend the constitution and government of the al College of Surgeons of England, and to declare and give effect to certain he rights of the Members thereof, be it enacted, etc.

1. No Member of the said College shall hereafter be disqualified from being elected to, or holding any place or office in, the College by reason of his not being a Fellow of the College except as hereinafter provided.

2. The President, Vice-Presidents, and Council of the College shall be elected by the Members of the College, by means of voting papers, but the Council shall be empowered to provide by by-law that no Member who shall be of less than ten years' standing shall exercise the said electoral franchise unless he has been admitted to the Fellowship of the College.

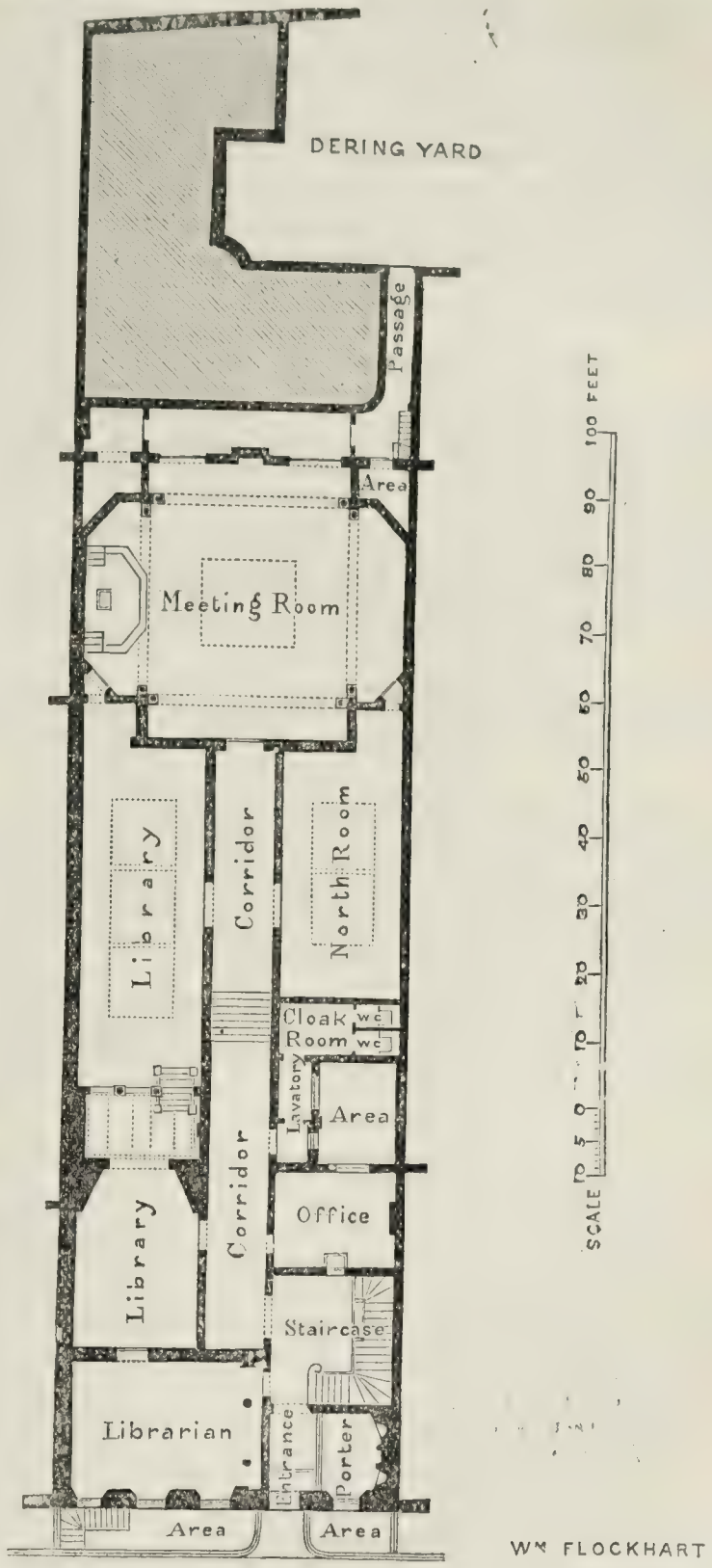
3. The Members are, and shall be, entitled freely to meet together within the College at all reasonable times, to consider and resolve concerning the affairs of the College, and any such resolutions passed at any such meeting by a two-thirds majority of the Members, voting concerning the by-laws or the expenditure of the College, shall be binding on the Council.

4. Section 17 of the by-laws of the College, and all action taken or to be taken thereunder, is hereby declared to be invalid.

5. So soon as may be after the next annual election for the Council, the Council shall make such provision by by-law as may be necessary for fully carrying out the provisions of this Act, and shall have power therein to provide that not more than a fixed number of places on the Council (not being less than six) shall be filled by Members who are not Fellows of the College, and that such Members shall be of twenty years' standing, or of such less standing as the Council may deem sufficient, and the Council shall forthwith provide by by-law for voting at any election by voting papers, and shall have power from time to time, by by-law, to amend the manner of election of examiners, and to alter the said distribution of places on the Council, and to shorten the term of office of the members of the Council; provided always that no such by-law shall be binding until it shall have been adopted by a general meeting of the College.

E ROYAL MEDICAL AND CHIRURGICAL SOCIETY'S NEW HOUSE.

annual meeting of this Society on this day (Saturday) will be first held in the spacious room built for society meetings; it at the back part of the ground floor in the Hanover Square nises. The library is on the same floor, taking up several ns, the first being the apartment immediately to the left on ring the house, where meetings have already been held. This n communicates, by a door, with the main part of the library, ch runs along the left side of the corridor leading to the ting room. This part is divided into two sections, the further, hat nearest the meeting room, lying lowest, so that six steps to it from the newer section. A third part of the library lies ie right of the corridor, and will serve as a room for conversa-, and for the exhibition of specimens during meetings. The ry will be opened in the course of next week. The first floor be taken up by the libraries of the Obstetrical and Gynæo-cal Societies. The Royal Microscopical Society will occupy part of the second floor. Through the kindness of the Resident Librarian, Mr. MacAlister, we are enabled to append the following plan of the premises:



HANOVER SQUARE

GROUND PLAN OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY'S HOUSE, NO. 20, HANOVER SQUARE.

AT a recent meeting of the British Nurses' Association, held at 20, Hanover Square, a paper was read by Miss H. Foggo Thomson on Private Nursing, which was followed by a discussion, in which Miss Wood, Dr. Heywood Smith, Mr. Pickering Pick (the Chairman), Miss Homersham, and Dr. Bedford Fenwick took part. The suggestions made included the registration of nurses, the special training of hospital nurses for private nursing, the giving of post-graduate lectures by medical men for the benefit of nurses, and a permanent exhibition of the newest nursing appliances.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Town Hall, Hackney, on Thursday, March 20th, at 8.30 P.M. Dr. F. de Havilland Hall will read a paper on the Causes and Treatment of Asthma. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place on Thursday, March 20th, at Gravesend, Dr. Firth in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District not later than March 3rd. Further particulars will be duly announced.—A. W. NANKIVELL, F.R.C.S., St. Bartholomew's Hospital, Chatham, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will take place on Thursday, March 13th, at Dover, Mr. A. Long in the chair. All communications to be sent to the Honorary Secretary, W. J. TYSON, 10, Langhorne Gardens, Folkestone.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this District will he held at the Queen's Hotel, Upper Norwood, on Thursday, March 13th, at 4 P.M. W. Soltau Eccles, Esq., of Upper Norwood, in the chair. Dinner 6 P.M.; charge 7s., exclusive of wine. The following papers have been promised:—Dr. Buzzard: On some Forms of Peripheral Neuritis. Mr. Lockwood: On the Treatment of Hernia. Dr. Duncan will open a discussion on Influenza. Members desirous of communicating papers or notes of cases please address, P. T. DUNCAN, M.D., Croydon, Honorary Secretary.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The next meeting of this Branch will be held in the Crown Hotel, Alloa, on the afternoon of Thursday, March 6th, at 3.15 P.M. Members desirous of bringing any subject before the meeting will kindly give notice as early as possible to the Honorary Secretary. —C. J. LEWIS, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE fourth meeting of the session was held, by the kind invitation of the Vice-President of the District (Dr. Adams), at Brooke House, Upper Clapton, on February 20th. Between twenty and thirty members and visitors were present.

Demonstration of Nervous Cases.—Dr. HADDEN and Dr. HALE WHITE demonstrated a most interesting series of patients, illustrating various forms of nerve disease. Among these was a group of cases of defective articulation in children, some of them showing excellent results obtained by treatment. Among other cases were ophthalmoplegia, interna and externa, with atrophy of the arms; extreme irritability of muscles and nerves in an athlete; locomotor ataxy; pseudo-hypertrophic paralysis; Thomsen's disease; word blindness; a case of trephining for the result of injury dating fifteen years back, followed by cure and no relapse after eighteen months. The demonstration was much appreciated, and warm votes of thanks to the demonstrators were proposed and carried.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.

THE second meeting of this district was held at the Tottenham Hospital, The Green, Tottenham, on Thursday, February 20th, at 8 P.M.; Dr. ORD, President of the Branch, in the chair.

Communications.—Mr. BUCKSTON BROWNE read a paper on some Practical Points in the Treatment of Retention of Urine.—Dr. WYNN WESTCOTT read notes on, and exhibited a specimen of, Root of Mandragora from Damascus.

Cases.—Some interesting cases from the wards of the hospital were exhibited.

Votes of Thanks.—The meeting concluded with the usual votes of thanks.

GLASGOW AND WEST OF SCOTLAND BRANCH.

THIS Branch held its annual general meeting in the Western Infirmary, Glasgow, on January 23rd. There was a very large attendance of members. The chair was occupied by the President, Dr. H. C. CAMERON.

Election of Officers.—The usual Branch business was transacted. Dr. W. Haldane, Bridge of Allan, was chosen President-elect for 1890, and Dr. Bruce Goff, Bothwell, the representative on the Council of the Association and on the Parliamentary Bills Committee.

Cases, etc.—The PRESIDENT showed two cases of Extroversion of the Bladder, and made some remarks on the Treatment of Chronic Abscess, with illustrative cases.—Professor M'CALL ANDERSON showed (1) a Case of Acute Phthisis, treated according to the method adopted by him in 1875; and (2) a case of Dermatitis Herpetiformis (Bullosa).—Professor GEORGE BUCHANAN showed (1) a case of Lumbar Colotomy; and (2) a Patient with a New Nose formed from the Skin of the Forehead.—Mr. A. E. MAYLARD gave a brief account of some experiments, and showed specimens, illustrating the action of Solutions of Bichloride of Mercury upon different Metals with a view to testing the relative value of Waste Pipes used for Drains, etc., in Hospitals and such Institutions.—Professor GAIRDNER gave an address on Influenza, which was reported in the JOURNAL, February 8th, p. 317.—Dr. JOSEPH COATS showed a series of Pathological Specimens.

Dinner.—Thereafter the members of the Branch, to the number of sixteen, with one guest, dined in the Alexandra Hotel, at 6 P.M.

BRITISH GUIANA BRANCH.

THE annual meeting of the British Guiana Branch of the British Medical Association was held on January 23rd, at the Colonial Hospital, under the chairmanship of Dr. R. GRIEVE, President of the Branch. There were present: Drs. F. Anderson, J. S. Wallbridge, J. E. London, A. D. Williams, N. Edghill, C. F. Castor, J. R. Hill, A. T. Ozzard, J. A. E. Ferguson, P. M. Earle, and E. D. Rowland (Secretary).

Minutes.—The minutes of the previous meeting were read and confirmed.

President's Address.—The PRESIDENT delivered the address which is published at page 468.—A vote of thanks was moved by Dr. ANDERSON and seconded by Dr. LONDON, who took occasion to observe that he had come across two well-marked cases of typhoid fever.—The PRESIDENT, in responding, said that Dr. London's statement strongly supported the point which he wished to bring home, which was that typhoid might exist in the colony. Professor Hirsch, who was a good authority, distinctly stated that there had been no record of any case in British Guiana, while it was prevalent in Cayenne, Surinam, Barbados, and Trinidad—in fact, all around them.

Election of Auditors.—Drs. Snell and Delamere were appointed the auditors for the current half-year.

Vote of Thanks.—The PRESIDENT having thanked the medical officers of the hospital for the use of their room, the meeting terminated.

SPECIAL CORRESPONDENCE.

PARIS.

Influenza.—Photophobia Cured by Anæsthetising the Auditory Canal.—The Bacillus of Mumps.—Gamaleia's Method of Vaccination.—The Action of Selenious Acid on Microbes.—A New Method of Isolating Typhoid Fever Bacillus Contained in Water.—Toxic Action of Hydrocyanic Acid.—Spontaneous Cure of Tetanus.—Antiseptics for Midwives.—Erysipelatous Bronchopneumonia.—General News.

AT the Académie de Médecine M. Jaccoud stated that of 42 cases of *grippe* (34 men and 8 women) in his ward 3 proved fatal; men and 1 woman succumbed to pulmonary accidents. The presence of Fräenkel's pneumococcus, occasionally combined with Friedlander's pneumococcus, was detected. These facts confirm M. Jaccoud's theory that primary and secondary pneumonia are identical. At the Société Médicale des Hôpitaux M. Comby stated that during December and January he had observed 218 cases

rippe in children; 48 of the little patients were under 2, 76 under and 94 under 15 years of age. The symptoms consisted of ervous and digestive disturbance fever. Hay fever was frequent. ruptions appeared in 12 instances. The complications were ulmonary, ocular, and auricular affections. M. Comby employed ntipyrin, quinine, ipecacuanha, scammony, naphthol, and sali-ylate of soda. He believes *grippe* to be contagious and infec-ous. M. Laveran stated that he had never observed eruptions *grippe*, and that from his observations among the Paris troops, does not consider that this affection is contagious. M. Vaillard as recently observed two fatal cases of *grippe*; in both instances e streptococcus was detected alone in the blood and viscera. e considers it probable that the streptococcus met with in *grippe* identical with that met with in erysipelas. M. Crégny ates that, from statistics taken among the officials at the re de l'Est, it appears that the influenza made much more voc among those employed in sedentary occupations than among ose employed in the open air. Scrofula, anæmia, pulmonary berculosis are more common than formerly, owing to the con-ed and overheated apartments of the present day. M. Crégny nsiders that the best means of warming railway carriages is by linary hot water tins, which keep the feet warm without affect-g the head.

M. Gutierrez Ponce publishes a case of intense photophobia red by anæsthetising the auditory canal. A child of 13 s attacked with phlyctenular keratitis in August. In Novem-the second eye was affected. The patient sneezed violently en the eyelids were opened to examine the cornea. M. G. nce introduced a pellet of cotton wool impregnated with oroform into the right external auditory canal, which enabled a to open the patient's eyelids without causing him to sneeze. is method was repeated daily, and the photophobia gradually appeared.

Cultivations made with the blood of patients suffering from mps furnish a bacillus, which develops in eight hours. This crobe, which may be termed bacillus parotitidis, is without vement at certain phases of its evolution, but takes the form of S or V when it divides. When the cultivation medium becomes overished this bacillus gives spores. The cultivations assume urky greyish aspect in broth. When after serving for eight s the broth is filtered, it becomes useless. The bacillus parot-is dies at a temperature of 60° C. and the spores at 90°. Boric d and corrosive sublimate mixed in broth in the proportion of 500,000 checks its development. The saliva furnishes large ntities of these microbes; it is possibly the contagious agent umps which would thus result from the deposit of the spores he parotid duct.

. Gamaleia's method of choleraic vaccination is as follows:—vibrio is sown in calves' foot broth; the cultivation is placed stove at 35° to 38° C., and is shaken once a day to submerge scum which rises to the surface, and to allow the air to reach cultivation. After two weeks the liquid is decanted, and the nisms at the bottom of the vessel are submitted to a tempera-of 120° C. during twenty minutes. The vaccine thus prepared be employed at once. Injected into the muscle of guinea in quantities of four to eight cubic centimètres, it causes h. If left for two weeks in the laboratory atmosphere, it ires a double and treble degree of toxic force. In order to the immunity conferred by this vaccine, the following method employed:—One cubic centimètre of an emollient made with olera cultivation on gelatine, with sterilised water, was in-d into the right lung of a rat. The animal succumbed in ty-four hours with a pleural effusion containing a pure culti-n of the comma bacillus. This effusion, mixed with water, d to inoculate another rat. After passing it through several als, the vibrios were found in abundance in the blood and . The pleural suffusion was then injected into vaccinated non-vaccinated guinea-pigs. The former survived, whilst the r succumbed.

m their recent researches on the action of selenious acid on bes and inferior organisms, and its physiological action on als of a superior order, MM. Chabrié and Lapicque conclude in very minute doses this substance does not pre-the fermentation of broth, and that it is reduced by the ct of the ordinary atmospheric microbes. Sulphites injected he blood of an animal are transformed into sulphates which no toxic action. Selenious acid, in an aqueous solution, ly neutralised by sodium, kills dogs when administered in of 3 milligrammes to 2lbs. of the animal's weight. The lesions observed at the necropsy consist of inflammation of all the viscera. The intoxication is accompanied by frequent vomiting and defæcation. Blood pressure is regularly and continuously reduced. The respiration assumes the Cheyne-Stokes character. The heart stops during systole. An abundant bronchial secretion is observed. An animal weighing about 20lbs. vomited 180 grains of limpid fluid, which coagulated immediately in the air in 25 minutes. No trace of selenium was detected in this fluid.

M. Vincent describes a new method of isolating the typhoid bacillus in water, which is as follows:—Five drops of carbolic acid at 5 per cent. to 10 cubic centimètres of broth, or 4 drops to 8 cubic centimètres are placed in a series of tubes. Five to 15 drops of the water to be analysed are poured into 6 of these tubes, which are closed with india-rubber tops, to avoid evaporation, and placed in a stove or in hot water, at 42°. The broth usually remains clear. Otherwise, directly it becomes dimmed one *öse* of each of these tubes is sown in six new tubes containing broth mixed with carbolic acid, as above. The tubes are then submitted to a temperature of 42°. The bacillus is frequently obtained pure after the first or second passage. It is therefore well to sow one *öse* of the first and second cultivation tubes in plain broth or on agar, in which condition the microbe presents its normal characteristics. In other cases certain saprophytes resist, and a third or fourth passage through the broth and carbolic acid is necessary before sowing in plain broth. In simple cases Eberth's bacillus is obtained pure and very active at the end of 24 hours, after one passage through the broth and carbolic acid. In this mixture it often assumes the form of very short diplobacilli, or diplococci, but immediately recovers its normal aspect in plain broth. This process has proved eminently successful, and was lately employed in analysing some water from Ginet, where an epidemic of typhoid fever appeared.

The usual method of testing the toxic action of hydrocyanic acid is to pour a few drops on the eye of a dog or rabbit, which rapidly kills the animal. M. Gréhant has made experiments to determine whether in such cases the proximity of the eye to the nasal fossæ does not allow the poison to pass into the respiratory passages. He placed a glass tube, to which an india-rubber tube 1.30 m. long was attached, in the trachea of a dog. The thorax was surrounded by P. Bert's pneumograph, which sets Marey's leverage tambour in action. This was furnished with a pen, which traced the respiratory movements on a turning cylinder. The time was marked by a metronome placed in contact with a tambour lever, connected with a second tambour furnished with a pen. Two cubic centimètres of the acid at $\frac{1}{4}$ were applied to the surface of the eye; part of the fluid flowed outside; the injection occupied fifteen minutes. The first effect produced on the respiratory movements, indicating the absorption of the poison, took place twenty-five seconds after the injection. A second injection was made one minute after the first with 3 cubic centimètres of acid; fifty-one seconds after the second injection the animal expired. This experiment shows that the absorption of the acid in the eye causes death in two or three minutes by the passage of the poison in the blood and the stoppage of the respiration.

M. Alexandre Paris describes the following case of tetanus cured spontaneously. The patient, an old man, aged 65, at the lunatic asylum at Alençon, presented the precursory signs of tetanus (trismus, canine laugh) towards the middle of June, which disappeared rapidly under the influence of chloral hydrate. The patient was apparently cured, but on July 8th the above symptoms reappeared. The contractions became general; the muscles of the thorax, arms, abdomen, and legs were subsequently tetanised; there was obstinate constipation. Chloral hydrate in progressive doses, reaching 6 grammes, and purgatives were administered. On July 24th the chloral was suspended. The patient complained of severe pain, which dry friction failed to diminish. Antipyrin (3 grammes) was administered on the 28th and 29th. The following day all symptoms of tetanus had disappeared. The gastric disturbance alone persisted. In October last no relapse had occurred since the recovery.

The discussion at the Academy of Medicine on the use of antiseptics by midwives is terminated. The Academy counsel the use of antiseptics subject to certain restrictions. It is proposed that chemists be authorised to sell to *sage-femmes* a mixture of 50 centigrammes of tartaric acid and 25 centigrammes of sublimate, arranged in small packets containing a colouring substance. What this substance is to be is reserved for future discussion.

M. Mosmy records a case of a woman of 37 who, after nursing

her master, suffering from erysipelas, was attacked by broncho-pneumonia, to which she succumbed. The streptococcus was found in the pulmonary effusion. Three drops of a recent cultivation on gelose injected into the ear of a rabbit determined the usual experimental erysipelas. This case is clearly one of primary erysipelas of the lung.

Dr. Ehrmann's pamphlet on the Consecutive Results of Plastic Operation on the Palate of Children has been deservedly crowned by the Académie des Sciences. The author has closely observed the patients he has operated on during several years after the operation, and has taken impressions of the different modifications that have taken place in the palate. These impressions are reproduced by photography, and published in Dr. Ehrmann's work.

M. A.-J. Martin's little volume, entitled *Contagious Diseases and Epidemics considered with relation to Laws and Regulations*, admirably sketches, in the first part, sanitary legislation and actual French sanitary administration. It also treats of the prophylaxis of epidemics and contagious diseases, and gives excellent instruction for the sanitary prophylaxis and disinfection of schools. The work concludes with the enumeration of the principal desirable reforms to be made in sanitary legislation and administration.

SHEFFIELD.

The Lead-Poisoning Inquiry.—Gifts to Hospitals.

As was briefly announced last week, an inquiry was held on February 19th and 20th to take the opinions of members of the medical profession and others as to the cause and prevalence of lead-poisoning in Sheffield. Besides the Chairman and other members of the Water Committee, there were present as members of the Commission of Inquiry Mr. Hawksley (Consulting Engineer) and Mr. Eaton (Resident Engineer), Professor Dewar (Chemical Expert), and Dr. Bristowe (Medical Expert). Dr. Thomson, the Medical Officer of Health, first gave evidence. He had investigated several cases which had been brought to his notice by medical men. Dr. Keeling, Mr. W. F. Favell, Dr. Dyson, Mr. R. J. Pye-Smith, Dr. Mathews, Dr. Porter, Dr. Sinclair White, Dr. Burgess, Mr. G. K. Thorpe, and Mr. J. Benson all gave evidence as to the prevalence of plumbism attributable to the drinking water, though they differed somewhat as to the serious extent to which the mischief existed. In the out-patient department of the infirmary and public hospital numerous cases had been seen, and in consulting medical practice Dr. Dyson was able to speak of many cases spread about the high level district. Other local practitioners could have borne similar testimony. Mr. A. Jackson, on the other hand, was sceptical as to existence of a serious amount of lead-poisoning. The Borough Analyst (Mr. A. H. Allen) also brought the results of his investigations before the Committee. On the conclusion of the evidence to be laid before the Special Committee, the Chairman submitted the following preliminary report, which they thought it best to publish at once:—"Your Subcommittee, including the professional gentlemen who have been called in to assist them, having heard and carefully considered the important medical, chemical, and other evidence that has been placed before them, unanimously find: 1. That such of the inhabitants of Sheffield as use Redmires water for drinking purposes are liable to be injuriously affected by the presence of lead therein, which is derived from the pipes and cisterns of the consumers. 2. That by way of practical experiment—pending further and more complete investigation of the subject, and with the view to immediately preventing the action which the Redmires water exercises on lead pipes and cisterns—a small but sufficient quantity of chalk, in a state of minute division, which will not, in your Subcommittee's judgment, prejudicially affect the water for domestic or manufacturing purposes, be added to the water at or near Redmires, before its distribution in the town. 3. That further time be taken before the presentation of a complete report." Dr. White complained before the Committee that the suggestions made in his report in 1886, of treating the water by bringing it into contact with fragments of Derbyshire limestone, had not been properly tested. But he and others who shared his views have received ample vindication in the evidence which was put before the Committee. The addition of chalk in minute particles is held to be a ready and cheap means of treatment. It remains for the Committee to see that the methods they adopt are effectual, and are carried out with as little delay as possible.

The Public Hospital and Dispensary has been fortunate of late. It is not long since a handsome legacy was bequeathed to it by the late Miss Ray. Now, when the question of rebuilding the present hospital is under consideration, a generous donor steps in and offers to provide a new dispensary and out-patients department, or to contribute to the cost of their erection to the extent of £6,150, the amount which the out-patients' hall and appointments at the General Infirmary, erected a few years ago, cost. At the annual meeting of the Jessop Hospital on February 24th it was announced that the family of the late Mr. Jessop had intimated their intention of bearing the cost of the erection of the best steam laundry that could be provided. It appears that at the last Board meeting which Mr. Jessop attended, the question of washing was discussed, and, with characteristic generosity, he at once instructed an architect to prepare plans. His death, however, prevented the project being carried out. A small excess of income over expenditure was announced.

NEWCASTLE-UPON-TYNE.

Annual Medical Report of the Infirmary.—Clinical Society Banquet.—Death of Dr. David Page.

THE staff of the infirmary presented their report to the governors of the institution at the annual meeting. The total number of cases treated during 1889 was 14,705, an increase of 2,741 over 1888; the increase was principally in the number of emergency cases and out-patient accidents; the number of in-patients treated was slightly less than that of the previous year. Of general and constitutional diseases there were 160 cases, including 43 of rheumatic fever, 13 of diabetes mellitus, 6 of scorbutus, and 2 of pernicious anæmia. Included in the list of nervous diseases were 15 cases of locomotor ataxy, 15 of peripheral neuritis, and 11 of tumour and abscess of the brain. Of diseases of the circulatory system, there were 10 cases of pericarditis with 3 deaths, 30 of thoracic aneurysm with 5 deaths, and 135 cases of other forms of disease, but principally of valvular lesions. Included in the respiratory disease were 37 cases of pneumonia with 16 deaths (2 within 24 hours of admission), 24 cases of pleurisy with 2 deaths, and 10 of empyema with 2 deaths. Thirty-three cases of poisoning were admitted during the year, 2 being fatal—one from phosphorus and one from belladonna. Phosphorus poisoning from matches contributed 5 cases, alcohol 16, mercury 1, belladonna 2, belladonna and aconite 1, atropine 1, oxalic acid 3, ammonia-sulphate of zinc and turpentine 1 each; in addition there were 30 cases of chronic plumbism. The number of operations performed during the year was 1,025, with a mortality of 4.8 per cent. The abdominal cavity was opened 29 times, namely, 1 abdominal hysterectomy successful, 1 enterectomy successful, 7 exploratory with 4 deaths, 8 ovariotomies with 8 deaths, 1 cholecystotomy with death on tenth day, the obstruction being outside the bile ducts; 1 oöphorectomy successful, 1 case of gastrostomy, and 1 of ectopic gestation both fatal. There had only been 5 cases of stone in the bladder during the year; 3 of these were suprapubic cases, the remaining being a median; only one case, a suprapubic, recovered; one suprapubic case, a man aged 49, died of old-standing kidney mischief, the other, a child, died of scarlet fever; one lithotrity was successful. There were 12 operations for strangulated hernia, with 7 deaths, and 6 operations for radical cure, with 1 death. There were 3 cases of trephining, 1 for tumour, 1 for abscess, and 1 hopeless gunshot injury. The tongue was partially excised in 3 cases, with 1 death: there was 1 successful vaginal hysterectomy. There were 52 major amputations, 23 for injury, and 29 for disease with 5 deaths, and 26 cases of joint excision, including 4 of the hip and 6 of the knee, with no deaths. The report shows exceeding successful work, but the results, especially in the lithotomies, are scarcely as good as they usually are in the Newcastle Infirmary.

The annual banquet of the Clinical Society was held last week and was honoured by the presence of the sheriff, the President of the Northumberland and Durham Medical Society, and the Sunderland Medical Society, and many other guests. A very enjoyable evening was spent.

The sudden death of Dr. David Page, of the Local Government Board, has cast quite a gloom over the profession in this district where he was well known and a universal favourite. Dr. Page's father was for some time professor of geology in the College of Science in this town, so that the deceased gentleman may be considered almost a local man. Dr. Page was an honorary member of the Clinical Society, and a welcome and frequent contributor to its meetings.

CORRESPONDENCE.

THE RELATIONS OF THE GRADUATES AND CONVOCATION OF THE UNIVERSITY OF LONDON TO THE PROPOSED REFORM OF THE UNIVERSITY.

No. V.

SIR,—I now propose to offer a brief exposition of some of the difficulties that lie in the way of graduation in the University of London; I refer more especially to those difficulties which are mainly artificial, and, if I may use the expression, bureaucratic.

It will be well, in the first place, to form some idea of the extent to which these difficulties act in repelling and baffling candidates. The University has achieved its jubilee. During the fifty years of its career it has made 1,304 M.B.'s, of whom 650, or less than half, achieved the M.D. This gives an average of about 26 M.B.'s and 13 M.D.'s a year. Of course, allowance must be made for the infancy of the University, when the graduates were necessarily few. But take the last 20 years, when it might fairly be expected that the University had reached maturity, and rejoice in the honours of a prolific *alma mater*. During this period she produced 729 M.B.'s, and 248 developed into M.D.'s. Nor can it be said that her fertility is very progressive. In 1889 the numbers fell from 41 and 50; in 1888, to 64 and 32.

Compare this with the Scotch universities—Edinburgh, Aberdeen, Glasgow, and St. Andrews. During the eight years ending 1888, all that I have been able to work out, Edinburgh sent out 1,492 M.B.'s and 349 M.D.'s, Glasgow sent out 713 M.B.'s and 148 M.D.'s, Aberdeen 449 M.B.'s and 173 M.D.'s. If we add to the London graduates during the ten years, 483 M.B.'s and 180 M.D's. (approximately), passed at Oxford, Cambridge, and Durham, we find a total of 912 English M.B.'s and 428 M.D.'s, whilst the Scotch produced 2,654 M.B.'s and 670 M.D.'s; and if we add the produce of two more years to make up the ten years credited to London, the difference would be still more remarkable.

It need hardly be said that a very large proportion of the excess of Scotch graduates is drawn away from English schools and the Colonies. Indeed, Edinburgh attracts almost all medical aspirants from the Cape. This redounds to the honour of Scotland, and, *pro tanto*, to the discredit of London. And I fear we are not entitled to affirm that London quality is a sufficient compensation for Edinburgh quantity.

Let us follow the course of a young man seeking the London M.D. 1. The Matriculation may be passed at the age of 16, complete. 2. The Preliminary Scientific may be passed at 17, complete. This passed, then begins medical education. 3. The first M.B., or Intermediate examination, may be passed at 19, complete, and one year after the preliminary scientific. But more strictly, two years must be allowed. 4. The second M.B. must be passed two years and a half after the intermediate. So a candidate successful at all the four examinations, at the minimum intervals, has to spend at least four years and a half in getting the M.B. Not so much certainly; but then comes the M.D.; for this he must wait two years longer. This will make five examinations, and exacts five years and a half at least. How many men from the country can afford to prolong studies for two years after the ordinary term? Most will necessarily be absorbed in the practical duties of life. And if they should chance to fail in any one subject at the matriculation, the preliminary scientific, the intermediate, it is but too likely that they will be thrown out of the running altogether. They will be beaten by time; and what becomes of those who fall by the way? Parents and teachers have many a sad tale to tell. Lost opportunities; industry wasted; intellects twisted from the right course; a blasted career.

In preceding letters I have adduced irresistible evidence from men of the highest authority in support of the arguments I have put forth. I am tempted to quote a passage from a memoir by Dr. Savage and Hack Tuke: "On the Psychological Bearings of the Recent Matriculation Examination of the London University" (1886).

"Little care they (the examiners) for the blow frequently struck at the physical or mental health of the lad at 16.....It has to be in vain that some of our ablest men have stated that they could not answer the questions set.....even in the department in which they themselves are authorities; in vain that medical men reiterate their opinion as to the mischief done to the brain by the incitement to overwork and cram.....in vain that psychologists write on 'intemperance in study'.....in vain that the melancholy catastrophe of self-destruction emphasises the teachings of those who endeavour to disseminate correct ideas on the subject of this intemperance.....We can only hope that some check may before long be put on the present abominable system." These are the utterances of men of authority who speak out what they know.

I am unwilling to press the case from my own observation, yet that is entitled to some weight. As a student at home and abroad, as a practitioner, hospital physician, teacher, examiner at the University, and at both Colleges; as a delegate from the General Medical Council to assist at, and report upon the examinations in Scotland and Ireland; as one in a position to look calmly upon the question from many sides; as one who has always taken a deep interest in the University, and who in its early days devoted much time and labour at no little sacrifice of personal advantage to its development; I feel that I cannot at the present critical juncture of its fortunes be silent. I sincerely hope that if any fellow graduates feel a little ruffled by what I have said, they will at least give me credit for being moved by the sincere desire to promote the objects for which the University was founded, by advocating such reforms as are felt by most impartial judges to be imperatively needed to strengthen the University; and so to enable it to keep in the van of the movement to extend true teaching and the advancement of learning. Whatever tends towards this end cannot fail to strengthen its graduates individually and collectively.

Harley Street. R. BARNES, M.D.

THE INDECENT ADVERTISEMENTS ACT.

SIR,—The metropolitan police are doing their best to carry out the suppression of indecent advertisements under the new Act. Owing, however, to their not being provided with legal assistance, they are severely handicapped in their crusade. The quacks, having plenty of money, are enabled to employ the best legal talent, and magistrates in London courts are naturally, perhaps, inclined to decide points rather in the strict legal sense than to take a common sense view of the case.

In a prosecution lately undertaken by the police against a man who was summoned for distributing indecent handbills, the magistrate, Sir James Ingham, fined the defendant 10s., or seven days.

The police, naturally thinking that, by this decision, the handbill came under the Act, soon after summoned the person whose name appeared on the advertisement. The case came before Mr. Vaughan, and, after a remand, was dismissed by the magistrate.

Here we have one magistrate declaring a handbill "indecent," and convicting the distributor, and another magistrate, sitting in the same court, dismissing the case against the issuer, thereby deciding that the same advertisement was not indecent.

Immediately the case was dismissed, the police applied to the court for a summons against the same defendant for circulating handbills without the name of the publisher being printed on them: this being now illegal. They were met with a prompt refusal.

I enclose the handbill which was the cause of these contradictory decisions, and you will see at once where the offence lies.

You lately pointed out how medical men could aid in suppressing these advertisements, but the case above will show how difficult the matter really is. An advertisement may be as "suggestive" as possible, but with a clever lawyer for the defence it is perfectly within the bounds of possibility for all such cases to be dismissed. The Act will either have to be read more generally, or will have to be amended and made to cover more ground, unless it is to be a dead letter.

The police authorities are very anxious to carry out their instructions to suppress this unwholesome traffic, but at present their efforts will, I fear, be fruitless if the Act is not interpreted more generally by the magistrates. I attended the court at the above case, at the application of the police, but was not called, as the dismissal of the case quashed the proceedings.

If any of your readers come across any cases which in their minds are within the Act referred to, I shall be much obliged if they will communicate with me, with a view to prosecution of the offenders, as I am in almost constant communication with the police in reference to such.—I am, etc.,

A. GEORGE BATEMAN, M.B., Hon. Sec.,
Longridge Road, S.W. Medical Defence Union.

HYMENEAL OBSTRUCTION: A BIBLIOGRAPHICAL NOTE.

SIR,—In reference to Dr. Macdonald's case,[1] allow me to give, by way of bibliographical note, a similar case occurring in the seventeenth century. I should be glad if any of your readers who know of an earlier example of the kind in English medical literature will quote it in the JOURNAL, giving author, date, edition, page, etc.

James Cooke, of Warwick, writes in his *Mellificium Chirurgiæ, or the Marrow of Chirurgery*, etc , fourth edition, Part II, Section 3, Chapter V, p. 159, date 1685: "A young maid of 20, by consent of her mother, having promised marriage to a young man, he having a mind to taste of the fruit before ripe, was interrupted by a membrane. He would have receded, pleading she was not fit, which, being searched into, it was found as he said. The mother and young woman were resolved to have it divided, and therefore she remained in bed with her head low, both her knees high, there being a couple of cushions under her loyns to raise her body that something might more fitly be put under; then with the hands, the part being kept open, there was, as well as could be, conveyed, the crooked incision knife to the upper part of the membrane, cutting it through downwards towards *intestin. rectum*, going in a direct line, shunning the other way for fear of the bladder, which was no sooner done but there issued out a dark bloody matter to the quantity of 30 ounces, judged a collection of the menses; a wonder that it should there lurk so long without inflammation, pain, fever, etc., and that there was so little stink, and the part to be of good health. After apertion there was conveyed into it a pessary, framed of a dry spunge moistened, cum ol. mucagin & mastichin. The place being widened with the spunge, there was the next day put in a pessary of yellow wax moisted with oyl, putting to it a thick boulster and a bandage, not to be removed unless to make water, or to use injection for the cleansing of the vagina, which was continued to perfect recovery, which was in fourteen days."

The preface to the *Marrow of Chirurgery* is dated "Warwick, March 1st, 1647." WILLIAM SYKES, F.S.A., M.R.C.S.

Mexborough.

THE PORRO-CÆSAREAN OPERATION.

SIR,—In answer to Mr. Lawson Tait's letter, I have to say that I wrote an abstract record of the results of the Porro-Cæsarean and Sänger-Cæsarean operations of the world, and sent it to the JOURNAL on July 8th, 1889, because of numerous letters of inquiry requiring the facts as given. If I had sent a record stating the salient points of each case, such as Mr. Tait requires, so as to show why certain operations ended in death, and others did not, it would have required an entire number of the JOURNAL to contain it. In the February number (1890) of the *Internat. Jour. Med. Scs.*, Mr. Tait will find a record of the Cæsarean work of this city, wherein all the points he can possibly demand for the benefit of humanity are more fully given than in any corresponding paper. I would recommend him, while he protests against the paucity of facts in my general record, to notice in what way he has given those of his own seven Porro cases, and to give them as I have, in my Philadelphia table, at an early day, for the benefit of the operation in Great Britain.

As the term "Porro-Cæsarean" appears to excite the opposition of Mr. Tait, I will give my reasons for using it. Professor Porro no doubt knew what he was doing when he named his operation "Amputazione utero-ovarica come complemento di taglio Cesareo" (Utero-ovarian amputation as completive of the Cæsarean section). The common title of the operation in Italy is "Taglio Cesareo metodo Porro." Ulietti, in 1885, writes: "Due operazioni Cesaree Porro," which I translate: two Porro-Cæsarean operations. Heusner[2] uses this title: "Uber eine Modification des Porro'schen Kaiserschnittes." Paul Grossman of Omaha, U.S.A., 1883,[3] heads his report: "A Modified Porro-Cæsarean Operation." I think I have had examples enough to warrant me in using a good explanatory title. The supravaginal amputation of the uterus, to be a Porro, must follow a Cæsarean delivery of the fœtus.—I am, etc.,

Philadelphia ROBERT P. HARRIS, M.D.

BONE-DRILLING IN THE NEIGHBOURHOOD OF INFLAMED JOINTS AND ELSEWHERE.

SIR,—My endeavour to be brief has caused me to be somewhat obscure in the last sentence of my paper in last week's JOURNAL. My remark that "the vexed question as to excision (of joints) being possibly set at rest," was not intended to imply that the operation I advocated was to supersede in all cases the operation of excision. It was intended to mean that the operation I described would in many cases so subdue inflammation as to set at rest the question which might previously have arisen as to the necessity or desirability of excision.

Having previously published a letter upon this subject, I was led to refer to it but briefly in my paper.—I am, etc.,

Queen Anne Street, W. NOBLE SMITH.

[1] JOURNAL, No. 1521, p. 420.
[2] *Centralblatt f. G.*, Leipzig, 1883.
[3] *American Jour. Med. Sciences.*

DANGERS OF FLUSHING THE PERITONEUM WITH SUBLIMATE.

SIR,—I read with much interest the leading article on this subject in the JOURNAL of February 22nd. I have for some time strongly held the opinion that one of the chief causes of the danger of toxic symptoms resulting from the use of corrosive sublimate as an antiseptic arises from the fact that, after it has passed into the circulation, it becomes converted into insoluble, or partially insoluble, compounds, both by the albumen and by the carbonate of soda of the blood (an albuminate of mercury and a carbonate of mercury being respectively formed), and that in consequence it becomes deposited in the various tissues, and so by not being speedily eliminated from the system, produces toxic effects.

This disadvantage is not possessed by the soluble biniodide of mercury in the form of the double iodides of mercury and potassium, which, besides being a more powerful germicide than corrosive sublimate, and therefore capable of being used in much weaker solutions, is not precipitated either by the albumen or by the carbonate of soda of the blood. There is, consequently, no danger of its being deposited in any of the tissues, and, as a matter of fact, after absorption into the circulation, it is rapidly eliminated by the kidneys. In a paper that I read before the Harveian Society in November last on the "Antifermentative Treatment of Infantile Diarrhœa," in which I recorded the result of the biniodide of mercury treatment which I had employed for eighteen months in the treatment of certain forms of infantile diarrhœa, I stated that the rapid diffusibility and elimination by the kidneys of this double iodide of mercury and potassium, was proved by the fact that in the case of a male adult who had not previously taken mercury, and who came under Mr. Hastings Stewart to be treated for secondary syphilis, a subcutaneous injection of three-quarters of a grain of the double iodide was administered, and within two hours of the injection I was able to find a small quantity of mercury in the urine.

I am strongly of opinion that the biniodide of mercury, of the strength of 1 in 4,000 to 1 in 10,000, is a more valuable and much safer antiseptic than corrosive sublimate; it has been used in the wards of St. Mary's Hospital with good results. The soluble double iodide of mercury and potassium is now prepared in a solid form under the name of "iodic hydrarg.," by Messrs. Burrough and Wellcome.—I am, etc., ARTHUR P. LUFF, M.D.

Westbourne Terrace.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON. The following is the list of officers for the ensuing year proposed by the Council for election at the annual meeting on this day (Saturday):— *President:* *Timothy Holmes. *Vice-Presidents:* Robert Barnes, M.D.; *J. Langdon Down, M.D.; *Alfred Willett; *John Croft. *Treasurers:* Charles John Hare, M.D.; John Ashton Bostock, C.B. *Honorary Secretaries:* Frederick Taylor, M.D.; J. Warrington Haward. *Honorary Librarians:* Samuel Jones Gee, M.D.; John Whitaker Hulke, F.R.S. *Members of Council:* *Walter Butler Cheadle, M.D.; William Miller Ord, M.D.; Arthur Julius Pollock, M.D.; *George Vivian Poore, M.D.; *T. Gilbert Smith, M.D.; William Harrison Cripps; *Clinton Thomas Dent; *Henry Greenway Howse; *Henry Walter Kiallmark; *Herbert William Page. Those gentlemen against whose names an asterisk is placed were not on the Council, or did not fill the same office last year.

IN consequence of a severe outbreak of measles at Morley, near Leeds, all the Sunday and day schools in the borough are to be closed. About 1,000 children are unable to attend their respective schools, and twelve deaths were reported on Monday last.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CERTIFICATES OF STILLBIRTH.

JUVENIS.—To give a false certificate of stillbirth not only affects the accuracy of the national birth and death registers (for stillbirths in this country are not registered either as births or deaths), but constitutes a grave offence against the law, as may be seen from the following extract from Section 40 of the Births and Deaths Registration Act, 1874: "Any person who makes, gives, or uses any false statement or representation as to a child born alive having been stillborn shall for such offence be liable on summary conviction to a penalty not exceeding ten pounds, and on conviction on indictment to fine or imprisonment with or without hard labour for a term not exceeding two years, or to penal servitude for a term not exceeding seven years." It has been held that a child is born alive if it breathes after having a separate existence.

ATTENDANCE ON HOMŒOPATHS.

M.R.C.S. asks whether it is usual to receive payment for attendance upon a homœopath. He was called lately to a retired practitioner in that line, whom he saw but once, as he soon died of apoplexy. His brother has requested him to make a charge for doing so. Would it be right for him to take a fee under the circumstances?

*** Although there is no medico-ethical rule, within our knowledge, that has a direct bearing on the particular point submitted by "M.R.C.S.," the following extract from the *Ethical Code*, chap. ii, sect. 2, rule 1, relative to "The Duties of Practitioners in regard to their Professional Services to Each Other," etc., may assist him in determining the question in relation to himself: "If a wealthy member of the faculty seeks professional advice, and courteously urges the acceptance of a fee, it should not be declined, for no pecuniary obligation ought to be imposed on the debtor which the debtee himself would not wish to incur."

THE APOTHECARIES' COMPANY AND IRREGULAR PRACTICE.

ALPHA.—A person holding a diploma of the College of Pennsylvania, and styling himself Dr. of such College, could not, we think, be successfully prosecuted for contravening the provisions of Sect. 40 of the Medical Act, 1858; but if he prescribes and compounds medicines for gain he renders himself liable to be proceeded against for penalties by the Society of Apothecaries for unqualified practice.

AN UNFOUNDED CHARGE.

MR. T. A. ROBSON, M.B., a surgeon practising at Hetton-le-Hole, was recently charged by the Superintendent of Deaths for the district, at the instance of the Registrar-General, with making a false certificate relating to the death of Annie Nichol, aged 2 weeks or thereabouts, on December 7th last. The evidence for the plaintiff went to show that both the child and the mother in her confinement had been attended by Mr. Robson's assistant, and that on the death of the child Mr. Robson, having ascertained the cause of death, signed the certificate without having seen the deceased. Mr. Travall, the assistant, on being called, swore that the defendant had visited the deceased child in his company before death. The charge was thereupon dismissed and costs granted.

NAVAL AND MILITARY MEDICAL SERVICES.

EXAMINATIONS FOR THE ARMY MEDICAL STAFF.—The following is a list of the successful candidates at the recent competitive examination for commissions in the Medical Staff of Her Majesty's Army:

	Marks.		Marks.
ackson, R. W. H.	3,005	Whiston, P. H.	2,825
cLoughlin, G. S.	2,935	Bray, G. A. T.	2,765
everidge, W. W. O.	2,905	Mawhinney, R. J. W.	2,750
nithson, A. E.	2,860	Parry, H. J.	2,700
orde, B.	2,835	Ferguson, J. D.	2,660

INDIAN MEDICAL SERVICE.—The following is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination held at Burlington House in February 10th, 1890, and following days. Seventy-one candidates competed for seventeen appointments, sixty-eight were reported qualified.

	Marks.		Marks.
ilth, H.	3,205	Fearnside, C. F.	2,970
ckson, J.	3,185	Carr-White, P.	2,965
tenab, A. J.	3,135	Luard, H. B.	2,965
olesworth, W.	3,100	Wright, E. H.	2,965
meson, J. B.	3,065	Street, A.	2,955
ore, E. W.	3,060	Wilson, W. McK.	2,950
Sutherland, W. D.	3,050	Giffard, G. G.	2,945
Vimberley, C. N. C.	3,050	Heath, A. J.	2,930
inston, C. A.	3,030		

EXAMINATION FOR THE MEDICAL SERVICE OF THE ROYAL NAVY.—The following gentlemen, who competed at the examination recently held at Burlington House for appointment as Surgeon in the Royal Navy, have been successful:

	Marks.		Marks.
Browne, R. H. J.	3,132	Borrett, G. G.	2,735
Kelsall, H. T., M.B.	3,088	Stalkartt, W. H. S., M.B.	2,716
Barnard, R.	3,010	Bell, G. A. S.	2,614
Parker, F. W.	2,792	Cuffey, E., M.B.	2,505
Randall, P. N., M.B.	2,758	Keogh, J. A., M.B.	2,493

THE EXTRA YEAR ABROAD.

WE learn from India that up to quite a recent date some medical officers who went abroad in 1885 were still uncertain as to whether they would be required to serve the extra year. Some had been ordered home, others not; this seems to indicate that the matter had not been definitely settled, which in justice it ought to be. The decision will, we hope, be in accordance with the recommendations of the Camperdown Commission.

UNIFORM OF VOLUNTEER BRIGADE SURGEONS.

BRIGADE SURGEON writes: Will you allow me to point out what must be an error in the Regulation just issued for the dress of volunteer brigade surgeons? "Steel scabbards and spurs will be worn with the departmental dress and undress." As the brigade surgeon and surgeon-major in the Medical Staff and the volunteer surgeon-major in corps dressed in scarlet wear the brass scabbard and spurs, where is the reason for this distinction? Surely the authorities do not wish to depreciate the value of the rank they have given to a few hard-worked medical officers. In large volunteer camps the sentries "present" to all brass scabbards and spurs; under this regulation I should only get "the shoulder;" when surgeon-major I got "the present." If I retain my regimental full dress (*vide* Regulations) I wear brass; if I get departmental uniform, I wear steel. Certainly some one has blundered.

*** We are not prepared to say whether "some one has blundered" in this matter. The Volunteer Dress Regulations are far from lucid in the matter of spurs and scabbards; a distinction seems to be drawn between corps which are dressed in scarlet and others. In lace the broad distinction between the regular and auxiliary forces is gold for the former and silver for the latter. May we conclude that silver lace suggests steel scabbards and spurs? Our correspondent should ask the question officially.

ACTION ON LORD CAMPERDOWN'S COMMISSION.

E. F. writes: Painful rumours are current that Mr. Stanhope has taken no action on the report of Lord Camperdown's Committee, and that it may be shelved altogether unless influence can be brought to bear. Are the hopes raised by the appointment of the Committee to be dispelled? The old evils are unredressed, and two new ones added: the three years in the rank, and the blocked promotion in the rank of surgeon-general. Meanwhile the Medical Staff remains quiescent, apparently in full confidence that justice will be done, but the cry is, "How long?" By a stroke of his pen, and without the expenditure of a shilling, the War Minister could redress the rank grievance.

*** We are loth to believe that the report of the Committee could, as our correspondent says is rumoured, be shelved altogether. Such a thing is impossible, seeing it made definite proposals on the initiative of the War Minister. His decision must now speedily be made known, and it is doubtless this fact which determines the "quiescent" and expectant attitude of the department.

ANTI-JUNKERISM asks: Is it true that the answers of a certain high official before Lord Camperdown's Committee to questions on the military and social status of medical officers were of such a nature that the Committee decided they could not be received or recorded?

*** We cannot say; the evidence before the Committee has not yet been made public.

T. E. H. is thanked for his suggestions; the direction in which Mr. Stanhope means to take action on the recommendations of the Camperdown Committee must soon be made evident; when this is known it will be easier, if necessary, to approach him by deputation or otherwise and lay before him the views of the profession on army medical matters.

COURAGE calls for the publication of the evidence given before the Camperdown Committee. Why keep it secret? Who is keeping it back? Do the Junkers dread publicity?

GOOD ADVICE.

M.D. writes: The Adjutant-General of the Forces (Lord Wolseley) gave some excellent advice to the cadets at the Royal Military Academy on February 13th, saying: The British soldier was, as regarded soldiering, what the British officer made him, and if they would get as much out of him as was possible, he would impress upon them to treat him well, to treat him as a friend and as a comrade. If they wanted him to be true to them and to stand by them at the post of danger, the best way to secure his goodwill was to treat him well. They should remember that the British soldier had ambitions the same as they themselves had; and they should teach him to be a good soldier, proud of the uniform he wore, truthful, and to love his country.

Now, let us substitute the words "army surgeon" for soldier, and how true and just also would be the advice. What a great pity it is that Lord Wolsele (one of whose brothers was an excellent army surgeon, under whom th writer served) does not inculcate the same method of treatment toward those medical men whose business it is to look after the health and efficienc of the British army and its soldiers.

ARMY SERVICE CORPS.

FAIR PLAY draws attention to the fact, as proved by recent Army Orders, that there seems every desire to develop and consolidate this important corps. How differently is the medical service treated; all efforts seem directed to divide and weaken it!

*** After much shunting and snubbing the Army Service Corps has at length (like the paymasters) been admitted to the military caste, simply because it is in future to be officered from regimental sources. When the medical department is similarly recruited then too will it become an "integral" part of the army.

NON-EFFECTIVE LIST.

F.R.C.S.I. states: It is to be hoped the medical members of Parliament will "catch on" to the following figures when the Medical Estimates are next discussed; particularly Mr. Bartley please note. Interested economists represent the "non-effective" list of the Army Medical Service to cost over £161,000, but ignore the fact that included in this sum is the retired pay of 170 officers still so far "active" that they are "liable to be recalled to service" in an emergency. Not only are these reservists ignored, but it is also conveniently forgotten that in late years the active list has been reduced by 300, with the result, of course, that the present full pay officers are doing the duty and foreign service of the 300, and thus effecting a great saving on the total Estimates.

TITLES.

M.D. remembers a regimental playbill of amateur theatricals in India wherein in the first piece a young drummer who took a female part was named as Dr. ——; in the second piece an assistant-surgeon played the chief part, and he too was described as Dr. ——! Of course, the rank and title of the other officers playing were very clearly indicated; only the doctor and the drummer were confounded. Comment is unnecessary.

MEDICAL COMMAND.

VERITAS points out that when Colonel Peel lately relinquished the command of the 7th Hussars the high state of efficiency, order, and discipline in the regiment was the subject of high encomium by the Inspector-General of Cavalry. Let it be noted that the officer here so highly praised began soldiering as an assistant-surgeon. Clearly the study of medicine and surgery in his case did not unfit him for exercising military command and functions, which one would have suspected it ought necessarily to have done according to certain well-known theories.

ACTION OF THE COLLEGES.

D. S. G. suggests that the time has now come when medical officers should assert their claims, not by letter writing, but by practical measures. The authorities will only move under pressure, not by the setting forth of abstract principles of justice. As military men they cannot combine; but they can get others to act for them; Committees of Colleges and members of Parliament are the persons to take practical steps. There are upwards of 1,700 medical officers in the home and Indian services, and surely they are worthy the attention of their Colleges. It is difficult to precisely understand why the Colleges are so inactive on this occasion, when formerly they took matters up. Is it because they are confused over the meaning of the thoroughly bogus gazetting of "ranking as"? The Irish Colleges would be easily moved if the English and Scotch would waken up. It was the action of the Colleges in former disputes that brought the military authorities to book. Let the military medical officers at home during the elections to the Council of the Royal College of Surgeons in Ireland in June see they are properly represented; their vote is quite 100 strong.

THE NAVY.

THE following appointments have been made at the Admiralty:—WILLIAM G. JACK, Surgeon to Bermuda Hospital, April 2nd; EDWARD FERGUSON, Surgeon to the *Forward*, April 2nd; S. SMITH to be Surgeon and Agent at Torcross and Hallsands, February 24th; JOHN H. THOMAS, Surgeon to the *Redbreast*, February 27th.

Deputy Inspector-General WILLIAM WOGAN BAYNES died at Kensington on February 17th, aged 76. His commissions were dated: Surgeon, July 13th, 1838; Staff-Surgeon, February 28th, 1844; Fleet-Surgeon, April 9th, 1861; and Deputy Inspector-General, March 15th, 1867; in which latter year he retired from the service. He served in the destruction of the Fatshan flotilla of war junks, June 1st, 1857, and as Surgeon of the *Sybille* with the Naval Brigade in the operations before Canton in 1857-58 (medal with two clasps).

A Greenwich Hospital pension of £50 a year for fleet or staff-surgeons, R.N., has been awarded to Deputy Inspector-General of Hospitals and Fleets FRANCIS Y. TOMS, in the vacancy created by the death of Deputy Inspector-General Charles K. Nutt.

THE MEDICAL STAFF.

SURGEON WILLIAM KEAYS, F.R.C.S.Irel., ROBERT T. BEAMISH, M.D., WALTER A. PARKER, JAMES ANDERSON, M.B., JULES I. ROUTH, HENRY GRIER, HENRY J. M'LAUGHLIN, M.B., EDWARD R. POWER, M.B., HUGH L. DONOVAN, M.D., NICHOLAS LEADER, F.R.C.S.Edin., JAMES TIDBURY, M.D., ALLAN A. LYLE, HENRY A. H. CHARLTON, HENRY E W. BARRINGTON, M.B., F.R.C.S.Irel., and CHARLES QUARRY, having served twelve years as Surgeons, are promoted to be Surgeons-Major ranking as Majors. The war services of the foregoing (as summarised from *Hart's Army List*) are as follows:—Surgeon-Major Keays, Egyptian war of 1882 (medal, and Khedive's star); Soudan campaign in 1885 (clasp). Surgeon-Major Beamish, Burmese war in 1886-87 (medal with clasp). Surgeon-Major M'Laughlin, Boer war of 1881, and defence of Standerton; Nile expedition in 1884-85 (medal with clasp, and Khedive's star). Surgeon-Major Power, Egyptian war of 1882 (medal, and Khedive's star); Soudan campaign in 1885 (clasp); Surgeon-Major Donovan, Egyptian war of 1882 (medal, and Khedive's star); Soudan campaign in 1885, and present in the engagement at the Tofrek zereba (mentioned in despatches, granted the higher rate of pay, two clasps). Surgeon Major Leader, Egyptian war of 1882 (medal and Khedive's star); Soudan campaign in 1885, and present in the engagement at the Tofrek zereba (two clasps). Surgeon-Major Tidbury, Egyptian war of 1882, in medical charge of the 1st Battalion of the Gordon Highlanders, and present at the reconnaissance in force from Alexandria on August 5th, and at the battle of Tel-el-Kebir (medal with clasp, and Khedive's star). Surgeon-Major Quarry, Nile expedition in 1884-85 (medal with clasp, and Khedive's star); Soudan Frontier Field Force in 1885-86. From the same authority we learn that Surgeon-Major Grier has received the Albert medal of the 2nd Class for the following services:—On August 26th, 1880, Lieut. Graham, 10th Regiment, was dying of diphtheria, when Surgeon Grier performed upon him the operation of tracheotomy, and, observing that no inspiration followed, at the imminent risk of his own life applied his lips to the wound, and by suction restored to the patient the power of breathing; Lieut. Graham's life was thus saved for the time, although unfortunately on the following day the disease extended to his lungs, and he died.

Surgeon C. A. WEBB has been brought on the strength of the British Forces in the Bombay command.

Surgeon C. R. EGAN, M.D., who is serving in the Bombay command, is appointed to general duty in the Bombay district.

Surgeon R. HOLYOAKE, who is serving in the Bombay Establishment, has leave to England for six months on private affairs.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON H. POTTER, M.D., Bengal Establishment, is appointed to be Medical Storekeeper at Meean Meer.

The services of Surgeon W. H. B. ROBINSON, Bengal Establishment, officiating Civil Surgeon of Jessore, are replaced at the disposal of the Government of India in the Home Department.

Brigade-Surgeon W. S. FOX, Madras Establishment, Civil Surgeon of Coconada, is directed to act as District Surgeon, Trichinopoly, during the absence of Brigade-Surgeon L. C. Nanney on privilege leave.

Surgeon C. M. THOMPSON, M.B., Madras Establishment, Secretary to the Surgeon-General with the Government of Madras, is appointed to act as Surgeon, 4th District, *vice* Surgeon H. J. Hazlett, employed on other duty.

The services of Surgeon A. MILNE, M.B., Bombay Establishment, are placed at the disposal of the Government for employment in the Civil Department.

Surgeon C. M. MOORE, M.D., has been brought on the strength of the Bombay Establishment.

Surgeon H. HERBERT, Bombay Establishment, Officiating Medical Officer 17th Native Infantry, is appointed to the medical charge of Staff and Details at Asseerghur, *vice* Surgeon J. Crimmin, V.C., transferred to the Civil Department.

Surgeon-Major J. A. HOWELL, Bombay Establishment, Civil Surgeon Karwar, is allowed furlough to Europe for eighteen months on private affairs.

THE VOLUNTEERS.

MR. PERCIVAL HUMBLE WATSON is appointed Acting Surgeon to the 1st Newcastle-on-Tyne Artillery (Western Division Royal Artillery).

Acting Surgeon JAMES WYLIE, M.B., 2nd Volunteer Battalion Highland Light Infantry (late the 6th Lanarkshire), is promoted to be Surgeon.

INDIA AND THE COLONIES.

SOUTH AUSTRALIA.

A NEW MEDICAL ACT.—A few months ago a short account was given of the unsatisfactory state of the law with regard to medical practice in the colony of South Australia, which had been disclosed by a decision of the Supreme Court of that colony. The Medical Act then in force required the Medical Board of the colony to register the name of any person proving to the satisfaction of the Board that he possessed qualifications which would entitle him to practise medicine in all its branches, and to hold appointments as a Government medical officer in any foreign State. The Supreme Court issued a *mandamus* to the Board requiring it to register the name of an individual holding the degree of M.D. of the Hahnemann College of Chicago. This decision led to the resignation of the Medical Board, and happily also to the immediate introduction of an amending Act into the Parliament of South Australia. This Act received the Governor's assent on December 6th. The new Act repeals certain portions of the old Act, and in particular the schedule; in future the Medical Board will be required to register: (1) a person possessing a qualification entitling the holder to be registered in the United Kingdom; (2) an M.D. or M.B. of any legally-authorised Australasian University; (3) any person holding a degree or diploma obtained from any colonial or foreign university or licensing body, such degree or diploma being, in the opinion of the Medical Board, equal to the qualification entitling the holder to be registered in the United Kingdom; (4) any person who can prove that he has passed through a four-years' graded course of medical study in a British or foreign school of medicine, and has received a degree or diploma after due examination. The Act also directs that no medical certificate of the cause of death shall be issued except by a legally-qualified medical practitioner, and that no burial shall take place without either a medical or a coroner's certificate.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, February 20th.

Sale of Food and Drugs and Margarine Acts.—Mr. MATTHEWS, in reply to Mr. O. V. MORGAN, said that there had been brought before the magistrates at the Wandsworth Police Court, during the past year, twenty-three cases under the Food and Drugs Act, and thirteen under the Margarine Act. He would be happy to show a return of the fines inflicted in each case.

Medical Certificates and Pensions.—The CHANCELLOR OF THE EXCHEQUER said, in reply to Sir G. CAMPBELL, that under no rule could a man take up or put aside a medical certificate as suited him. If the health of a Civil servant was sufficiently restored to permit of his re-employment it was the duty of the Government to appoint him to a first available vacant office for which he was qualified, and thus to save the whole or part of his pension.

Charge against a Surgeon.—The ATTORNEY-GENERAL, in reply to Mr. FOWLER, who called attention to the trial at Warwick on December 20th, 1889, of a Birmingham surgeon for manslaughter, and to the observations made by Mr. Justice Wills thereon,[1] said he had carefully considered the whole case, which was one of a charge against a medical man for causing the death of a woman in humble circumstances, and the coroner's jury had found a verdict of manslaughter. The prosecution was undertaken by the Director of Public Prosecutions, who acted throughout under the advice of two members of the Midland Circuit of great experience in criminal cases. Having considered the depositions, he was of opinion that, as the Grand Jury had found a true Bill, the Director was right in presenting the case for trial. Certainly the responsibility, if any, rested with the learned counsel, and not with him. He was informed that, had the Grand Jury thrown out the Bill, it was not intended to offer any evidence in support of the coroner's inquisition. The costs of the prosecution, which the judge disallowed, would be paid out of the vote for the expenses of the Public Prosecutor.

District and Parochial Councils.—Mr. STANSFELD proposed the following amendment on the adjourned debate on the Address: "And we humbly express our regret to Your Majesty that the Local Government legislation of 1888 and 1889 is still left defective, and that no intention is announced either of proceeding during the present session to the constitution of district and parochial councils in Great Britain, or of carrying further, in the metropolis and elsewhere, the organisation and powers of local government." There was every reason why the Government should deal with one or more of those subjects. He though the unit of local government must be the parish, and where the parishes were too large they must be divided, and where too small they must be amalgamated. Then there must be intermediate districts, consisting of groups of the unit of which he had spoken. There were now municipal, sanitary, and poor-law authorities, and it was as necessary that all those authorities should be brought into line, and all local government functions in one area vested in one and the same authority, elected on a popular basis. The right. hon. gentleman (Mr. Ritchie) had last year admitted the desirability of administering all these matters by one local authority. With regard to the metropolis, the Government had no proposal for any measure carrying further the local government organisation established by their County Council's measure.—Mr. LONG said the Government had every desire to complete the system of local government they had commenced, and the measure which he hoped the House would have an opportunity of considering this session would deal, he said, with all the matters referred to in the amendment.—Sir W. FOSTER desired the reform mainly for sanitary considerations. It was necessary for the health of the people that those local bodies should be reformed in order to cope with the insanitary conditions amid which the rural population in many cases live. The rural sanitary authority was elected on a wrong principle. It was elected on a property qualification, and the poor people in the villages had no authority over that body which had their lives and the lives of their families practically in their charge. What they wanted, therefore, was to give the people that power which would be of advantage to the sanitary condition of the rural community as a whole. The sanitary authorities would in many cases practically ignore the instructions of the Local Government Board, and make utterly imperfect modifications. The sanitary condition of schools was exceedingly bad. The result of all these conditions naturally was that people died, and died frequently; from some villages typhoid fever, a preventable malady, was hardly ever absent, while another disease arising from filth, namely, diphtheria, was practically endemic. Another subject to which he wished to call attention was the difficulties which medical officers of frequently health met in their endeavours to have nuisances removed. In Essex similar conditions existed; they were told of dwellings where the people had not proper sleeping accommodation, and where a man and his wife and children all had to sleep in one room. In Hertfordshire they heard of houses unfit for habitation, and described in the report as "miserable hovels." In showing the absolute neglect of sanitary laws in rural districts, he had made out a strong case for the rural population.

Friday, February 21st.

District and Parochial Councils.—The debate was resumed by Mr. RITCHIE, who said severe criticisms had been passed in the course of the debate on the conduct of boards of guardians as rural sanitary authorities. Well, boards of guardians did not always do what they ought to do in matters of public health, but this remissness was not confined to boards of guardians and bodies elected as they were elected. The Local Government Board had sometimes quite as much difficulty in getting municipal authorities in boroughs to deal properly with questions of public health as was ever caused by sanitary authorities. He had no hesitation in repeating the pledge which had been given by the leader of the House, that if the necessary time could be secured the Government would be only too pleased to introduce this session a measure dealing with the subject of district councils. They were very anxious to proceed with the settlement of the local government question on the lines which they had hitherto followed, feeling immense satisfaction at the way in which the Act was being worked. They (the Government) thought it might be possible even in this session to deal with the subject of district councils either for the country or for London. They had the necessary Bills prepared, and nothing would give them greater pleasure than to carry them. But they had from the first thought it to be their duty to deal with the many subjects requiring attention according to their relative importance. Accordingly, they had introduced a local government measure for England one year, and the next a similar measure for Scotland, and this year they held themselves bound to carry out some of their pledges with reference to Ireland. Having regard to the immense interest taken in the question of public health, they had also thought it necessary to introduce measures for the amendment of the laws relating to the sanitation of the metropolis and the housing of the working classes.

Insanitary State of the Royal Barracks, Dublin.—Mr. E. STANHOPE, in answer to Mr. MACNEILL, said that during the present month there had been three cases of typhoid fever among the men of the Hussars quartered in the Royal Barracks, Dublin.

Legislation for the Blind, Deaf, and Dumb.—Mr. W. H. SMITH, in reply to Mr. W. A. MACDONALD, said the Government hoped to be able to introduce legislation having for its object the amelioration of the condition of the blind, deaf, and dumb. Speaking generally, the proposed legislation would follow the recommendations of the report of the Royal Commission. It might be possible to introduce the Bill during the present session.

Monday, February 24th.

Pleuro-pneumonia.—Dr. FARQUHARSON asked the Minister for Agriculture whether it was the intention of the Government to establish an experimental station where the exact nature of pleuro-pneumonia could be ascertained and conditions established under which inoculation could be scientifically carried out; and, failing this, whether they would contribute to the expenses of any local authority which would undertake to carry out these experiments.—Mr. CHAPLIN said he was advised that experiments had been carried on for years in this country and abroad with the object of discovering the microbe of the disease, but hitherto without any satisfactory result. This inquiry was still being continued at the Royal Veterinary College, London. The annual report of the Veterinary Department would contain a statement of all that had been done on this subject by scientists up to the present time. It was being prepared, and, having regard to this fact and to the conflicting evidence given before the Departmental Committee which was appointed to inquire into pleuro-pneumonia and tuberculosis in 1888, it appeared desirable to wait for the statement which he had referred to before any further steps were taken.

Influenza in the Navy.—Mr. E. KNATCHBULL HUGESSEN put a question to the First Lord of the Admiralty as to a statement which had appeared in a naval and military journal to the effect that a sailor suffering from influenza on board one of the ships at Sheerness was sent the next day in a tug to Chatham Hospital (a two hours' journey), and died on the following day.—Lord G. HAMILTON, in his reply, stated that the barrack infirmary at Sheerness being overcrowded, the man was conveyed to Chatham in a cot on board the vessel specially fitted for removal of the sick, accompanied by a surgeon of the *Wye*, who took every care of him during the passage, and handed him over to the principal medical officer of the hospital. The patient died of pneumonia.

Typhoid Fever at the Curragh Camp.—In reply to Colonel DAWNAY, Mr. E. STANHOPE stated that there was no outbreak of enteric fever in 1888 in that part of the camp in which the Grenadier Guards were quartered in the autumn of 1889, which had been previously occupied by other troops without ill effects. The arrangements for the accommodation of troops in Ireland were made by the officer commanding, and were subject to local considerations with which the War Office had nothing to do.

Tuesday, February 25th.

Rabies.—Mr. CHAPLIN, in answer to Mr. ROUND, stated that no case of rabies had been reported to the Board during the last year from North-East Essex. Cases, however, had occurred at no great distance from the border of the division, and other cases had also been reported from other parts of the county, making in all a total of twelve cases in 1889. He hoped it might not be necessary to continue the dog muzzling order in Essex for any lengthened period of time, but he was advised that it would not be desirable to relax the restriction at present.

[1] JOURNAL, January 4th, p. 44.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

TEACHER OF VACCINATION.—Dr. Robert Cory, M.A., of Pembroke College, has been formally approved as a Teacher of Vaccination in the University, and proposes to give a course of instruction in each term, and in the Long Vacation if necessary.

ADDITIONAL LECTURER IN BOTANY.—The growth of the Botanical School has been such that the services of an additional University lecturer are urgently required to deal in particular with cryptogamic botany. The University has decided to found such a lectureship, the stipend being £100 a year. The appointment rests with the General Board of Studies.

PASS EXAMINATIONS.—The syndicate appointed for the purpose of considering the examinations for the Ordinary B.A. degree have presented a report, the general effect of which is to raise the standard of the degree. They recommend that the "general" and the "special" should each be divided into two parts.

THE LATE PROFESSOR C. A. VOIGT.—Christian Aug. Voigt, formerly Ordinary Professor of Anatomy in the University of Vienna, died on February 10th in his 82nd year. He was appointed Professor of Anatomy in the Medico-Chirurgical School at Laibach in 1847, whence he was transferred to corresponding chairs at Lemberg in 1850 and at Cracow in 1854. In 1861, when Polish became the official language of the last named university he had to resign his chair. Soon afterwards he was called to Vienna, where he taught till 1878, when he retired.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON SANITARY DISTRICTS DURING 1889.

In the accompanying table will be found summarised the vital and mortal statistics of the forty-one sanitary districts of the metropolis, based upon the Registrar-General's returns for the year 1889. Quarterly summaries of these statistics have already appeared in the JOURNAL. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of deaths occurring in the public institutions of London among the various sanitary districts in which the patients had previously resided. Thus the precise number of deaths of persons actually belonging to the respective sanitary districts is known; by this means alone can trustworthy data be secured upon which to calculate reliable rates of mortality.

The 131,487 births registered in London during the year 1889 were equal to an annual rate of 30.3 per 1,000 of the population, estimated at 4,351,738 persons, which showed a further decline from the rates in recent years, and was lower than that recorded in any year since 1840. In the various sanitary districts the birth-rates showed the usual wide variations, owing to the differences in the sex and age distribution of their population. In Kensington, St. George Hanover Square, St. James Westminster, St. Martin-in-the-Fields, and London City, the birth-rates were considerably below the average; while in Woolwich, Bethnal Green, Whitechapel, St. George-in-the-East, and Fulham, where the population contains a large proportion of young married persons, the birth-rate showed an excess.

The deaths of persons belonging to London registered during the year under notice were 74,362, equal to an annual rate of 17.1 per 1,000 of the estimated population, which was considerably lower than in any year since civil registration was established in 1837. During the past nine years of the current decade the rate of mortality in London has averaged only 19.8 per 1,000,' while it was equal to 24.4 in the ten years 1861-70, and to 22.5 in 1871-80. This marked decline in the London death-rate since 1880 implies that upwards of 132,000 persons in London have survived, whose deaths would have been recorded had the rate of mortality since 1880 equalled that which prevailed in the twenty years 1861-80. The lowest death-rates in the forty-one sanitary districts during 1889 were 12.4 in Kensington, 13.1 in Hampstead, 13.3 in Lewisham (excluding Penge), 13.7 in Hackney, 14.0 in Battersea, 14.1 in St. George Hanover Square, and 14.3 in Wandsworth. In the other districts the rates ranged upwards to 23.1 in Stepney and in St. Giles, 23.3 in Fulham and in St. Saviour Southwark, 23.6 in St. George Southwark, 25.5 in Holborn, and 26.5 in St. George-in-the-East. During the year under notice 9,635 deaths resulted from the principal zymotic diseases in London; of these, 2,670 were referred to diarrhœa, 2,309 to measles, 1,747 to whooping-cough, 1,552 to diphtheria, 778 to scarlet fever, 578 to different forms of "fever" (including 520 to enteric fever, 43 to simple and ill-

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths occurring in Public Institutions, during the Year 1889.

Sanitary Areas.	Estimated Population middle of 1889.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 births.
				Births.	Deaths.	Principal Zymotic Diseases.											
LONDON	4,351,738	131,487	74,362	30.3	17.1	2.2	9,635	1	2,309	778	1,552	1,747	15	520	43	2,670	141
West Districts																	
Paddington	112,590	2,864	1,657	25.5	14.8	1.5	165	—	11	10	42	26	—	16	—	60	138
Kensington	196,226	3,697	2,427	18.9	12.4	1.4	267	—	14	28	111	26	—	19	1	68	134
Hammersmith	102,453	2,831	1,634	27.7	16.0	1.9	195	—	23	19	45	38	—	16	2	52	150
Fulham	66,441	3,132	1,542	47.3	23.3	3.7	243	—	52	23	12	68	—	5	1	82	159
Chelsea	104,375	2,961	1,790	28.5	17.2	2.1	221	—	49	11	24	64	—	13	2	58	152
St. George, Hanover Square	87,944	1,670	1,235	19.1	14.1	1.7	153	—	46	4	30	28	—	13	1	31	138
Westminster	54,875	1,545	1,178	28.2	21.5	3.3	179	—	69	13	28	26	—	3	—	40	151
St. James, Westminster ...	27,231	534	500	19.7	18.4	2.5	69	—	32	6	2	10	—	4	1	14	183
North Districts																	
Marylebone	149,639	4,531	2,646	30.4	17.7	1.6	236	—	46	5	34	68	1	19	—	63	132
Hampstead	57,534	1,488	753	26.0	13.1	1.2	67	—	12	2	8	21	—	6	—	18	122
St. Pancras	245,291	7,292	4,345	29.8	17.8	2.0	491	—	87	28	62	116	—	30	2	166	144
Islington	337,596	9,566	5,035	28.4	15.0	1.9	629	—	177	40	63	110	—	54	7	178	132
Hackney	244,109	6,692	3,334	27.5	13.7	1.6	394	—	74	39	97	52	1	31	—	100	114
Central Districts																	
St. Giles	39,344	1,197	904	30.5	23.1	3.1	123	—	42	4	17	15	—	8	—	37	146
St. Martin-in-the-Fields ...	14,836	283	299	19.1	20.2	2.1	31	—	5	4	2	8	—	3	—	9	212
Strand	28,896	685	639	23.8	22.2	2.4	70	—	20	3	8	11	—	4	—	24	199
Holborn	29,937	941	761	31.5	25.5	3.3	69	—	13	11	17	8	—	4	—	16	157
Clerkenwell	70,860	2,277	1,372	32.2	19.4	2.6	185	—	53	16	24	23	—	9	1	59	157
St. Luke's	52,000	1,919	972	37.0	18.8	2.1	110	—	26	20	13	9	—	4	—	38	126
London City	37,054	748	822	20.3	22.3	1.4	52	—	12	6	12	4	—	4	1	13	135
East Districts																	
Shoreditch	125,340	4,526	2,445	36.2	19.6	2.4	295	—	28	33	69	31	1	17	1	115	156
Bethnal Green	132,079	4,939	2,708	37.5	20.6	3.4	452	—	132	40	102	62	1	17	3	95	145
Whitechapel	66,916	2,631	1,529	39.4	22.9	3.0	201	—	70	2	34	13	—	9	—	73	147
St. George-in-the-East ...	46,142	1,841	1,220	40.0	26.5	3.4	158	—	16	13	43	5	—	7	—	74	181
Stepney	58,888	2,092	1,357	35.6	23.1	3.4	201	—	28	25	47	23	1	12	2	63	151
Mile End Old Town	115,889	3,964	2,108	34.3	18.3	2.5	293	—	61	51	53	31	1	14	—	82	142
Poplar	190,896	5,836	3,013	30.7	15.8	1.6	302	—	26	31	64	75	—	18	4	84	130
South Districts																	
St. Saviour, Southwark ...	27,084	890	629	33.0	23.3	2.6	69	—	11	7	12	11	—	1	—	27	167
St. George, Southwark ...	60,133	2,212	1,417	36.9	23.6	3.4	206	—	78	20	20	32	—	5	—	51	175
Newington	123,278	3,936	2,416	32.0	19.7	3.1	386	—	114	43	55	79	1	22	2	70	166
St. Olave, Southwark	14,500	477	315	33.0	21.8	4.5	65	—	32	2	1	12	—	1	2	15	159
Bermondsey	90,143	3,170	1,787	35.3	19.9	3.2	287	—	101	21	23	59	4	12	—	67	146
Rotherhithe	44,316	1,442	729	32.7	16.5	2.4	107	—	27	4	16	24	—	6	—	30	131
Lambeth	289,474	8,906	5,008	30.9	17.4	2.5	728	1	157	73	156	137	1	32	5	166	142
Battersea	165,927	5,161	2,321	31.2	14.0	2.2	367	—	105	23	33	80	—	14	2	110	141
Wandsworth	130,489	4,068	1,861	31.2	14.3	2.2	292	—	32	12	44	42	1	12	—	59	106
Camberwell	264,999	7,271	3,880	27.5	14.7	2.3	613	—	194	37	70	151	—	30	1	130	138
Greenwich	160,376	5,377	2,892	33.6	18.1	2.8	453	—	128	25	30	103	2	13	1	151	143
Lewisham (excluding Penge)	67,161	1,758	892	26.3	13.3	1.4	92	—	21	14	5	16	—	7	—	29	131
Woolwich	37,212	1,386	761	37.4	20.5	1.6	58	—	17	2	6	10	—	4	1	18	131
Plumstead	81,265	2,751	1,229	34.0	15.2	1.9	151	—	68	8	18	20	—	2	—	35	112

defined forms of continued fever, and 15 to typhus), and 1 to small-pox. These 9,635 deaths were equal to an annual rate of 2.2 per 1,000, which was below the rate in any year on record. The zymotic death-rate during last year in the various sanitary districts ranged from 1.2 in Hampstead, 1.4 in Kensington, in London City, and in Lewisham, 1.5 in Paddington, and 1.6 in Marylebone, in Hackney, in Poplar, and in Woolwich to 3.3 in Westminster, 3 4 in Bethnal Green, in St. George-in-the-East, in Stepney, and in St. George Southwark, 3.7 in Fulham, and 4.5 in St. Olave Southwark. Compared with the preceding year the mortality from diphtheria and from diarrhœa showed an increase, while that from each of the other zymotic diseases showed a decline. Only one death from small-pox was recorded in London during the year under notice, the nearest approach to so low a number having been in 1887 and 1888, in each of which years 9 fatal cases of this disease were registered; the single small-pox death during last year belonged to Lambeth sanitary district. Only 4 small-pox patients were admitted to the Metropolitan Asylum Hospitals during the year under notice, and no patients remained under treatment at the end of December. Measles showed the highest proportional fatality in Bethnal Green, Whitechapel, Bermondsey, St. Giles, St. James Westminster, St. George Southwark, Westminster, and St. Olave Southwark; diphtheria in Lambeth, Kensington, Holborn, Bethnal Green, Stepney, and St. George-in-the-East; whooping-cough in Chelsea, Camberwell, Greenwich, Newington, Bermondsey, St. Olave Southwark, and Fulham; and diarrhœa in St. Saviour Southwark, St Olave Southwark, Stepney, Whitechapel, Fulham, and St. George-in-the-East. The rate of mortality from scarlet fever was not excessive in any of the sanitary districts, but the number of scarlet fever patients under treatment in the Metropolitan Asylums Hospitals, which had been 738 at the beginning of 1889, steadily increased almost throughout the year, and was as many as 1,541 at the end of December. The admissions were 4,574, the number in each quarter being 614, 625, 1,449 and 1,886 respectively.

Infant mortality in London during 1889, measured by the proportion of deaths under 1 year of age to births registered, was equal to 141 per 1,000, against an average rate of 152 in the ten preceding years, 1879-88. While the rate of infant mortality last year did not exceed 106 in Wandsworth, 112 in Plumstead, 114 in Hackney, 122 in Hampstead, and 126 in St. Luke's, it ranged upwards in the other sanitary districts to 166 in Newington, 167 in St. Saviour Southwark, 175 in St. George Southwark, 181 in St. George-in-the-East, 183 in St. James Westminster, 199 in Strand, and 212 in St. Martin-in-the-Fields.

THE SANITARY STAFF OF THE LONDON VESTRIES.

A SHORT time since, a letter appeared in the *Times* from a gentleman residing in Hampstead, complaining of the perfunctory manner in which an examination of his house drainage had been made by the local inspector of nuisances. Again, quite recently, the Greenwich Board of Works discussed a complaint of a somewhat similar nature from inhabitants of St. John's Park, Blackheath, and a member of the Board very properly raised the question of the insufficiency of the sanitary staff to thoroughly investigate complaints of this kind. The time has come for the vestries carefully to consider their responsibilities with regard to the supervision of the drainage of upper and middle class houses, and, if necessary, to provide themselves with a staff adequate for the performance of duties which at the present day public authorities are sometimes expected to perform. Hitherto in London it has been generally the practice to refer this class of complainants to the numerous "sanitary protection societies" which make a business of reporting upon houses in which the drainage arrangements are more or less complex. If, however, in the future this duty should be thrown on public authorities, the ratepayers will, of course, have to bear the expense. In Scotland and some of the provincial towns of England, where there are few private trading companies to supply this public demand, it has been met by the public sanitary authority of the locality, which, in this respect, is a sort of communistic agency, dealing alike with unhealthy conditions in the houses of the rich or poor. If it should be decided that it is part of the duty of a vestry, as the local sanitary authority, to supervise the complex house drainage of wealthy persons, it will be necessary to appoint surveyors or inspectors specially for the purpose; and these officers, if they are competent to perform the duties required of them, will need to be paid sufficient salaries. The whole question is evidently one which should be carefully considered by the representatives of the ratepayers.

THE HEALTH DEPARTMENT OF NEWCASTLE-ON-TYNE.

WE have received a copy of the "Rules of the Health Department" of the County Borough of Newcastle-on-Tyne, which have just received the sanction of the Corporation or City Council. The Health Department comprises the following divisions:—(*a*) The department proper of the medical officer of health, with clerks and special inspectors for infectious diseases, etc. (*b*) The hospitals for infectious diseases and the requisite staffs. (*c*) The work of the inspector of nuisances and the inspectors of dairies, slaughter-houses, food of all kinds and adulterations, with the requisite assistants in each sub-department. The Health Department as above constituted, and every officer connected therewith, is placed under the entire control and direction of the medical officer of health. Special rules are laid down for the inspector of nuisances, assistant inspectors of nuisances, inspectors for infectious diseases, inspector of dairies, etc.

These rules are most explicit, and, in our opinion, they are exceedingly well calculated to secure thoroughly efficient work in a department whose services are important to the welfare of the community. Newcastle-on-Tyne is fortunate in possessing the services of a medical officer of health who for several years has given his entire energies to the work of a department of which he has good reason to be proud. We congratulate Mr. Henry Armstrong on the success he has achieved, and we think that the "rules" laid down for his department will be found applicable by the authorities of some other large towns.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, February 22nd, 5,803 births and 4,685 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had risen from 22.9 to 25.3 per 1,000 in the three preceding weeks, declined again to 25.1 during the week under notice. The rates in the several towns ranged from 14.8 in Brighton, 18.6 in Derby, 18.7 in Cardiff, and 19.9 in Birkenhead to 33.4 in Oldham, 33.8 in Wolverhampton, 35.3 in Manchester, and 37.7 in Preston. In the twenty-seven provincial towns the mean death-rate was as high as 28.0 per 1,000, and exceeded by as much as 6.2 the rate recorded in London, which was only 21.8 per 1,000. The 4,685 deaths registered during the week under notice included 168 which resulted from whooping-cough, 51 from scarlet fever, 44 from diarrhœa, 43 from diphtheria, 39 from measles, 25 from "fever" (principally enteric), and one from small-pox; in all, 371 deaths resulted from these principal zymotic diseases, against numbers increasing from 328 to 419 in the three preceding weeks. These 371 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic death-rate was 2.2, while it averaged 1 8 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Birkenhead and in Cardiff, 0.3 in Leicester, and 0.4 in Brighton to 2.3 in Manchester and in Sheffield, 3.2 in Liverpool, 3.4 in Blackburn, and 4.9 in Salford. Whooping-cough showed the highest proportional fatality in Bolton, Salford, Hull, and Bristol; scarlet fever in Sheffield and Blackburn; and measles in Liverpool. In none of the twenty-eight towns was scarlet fever or "fever" fatally prevalent. The 43 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 27 in London, 5 in Manchester, 5 in Salford, and 2 in Liverpool. A fatal case of small-pox was registered in London, but not one in any of the twenty-seven large provincial towns; and 5 small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, February 22nd. These hospitals contained 1,200 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,222 in the eight preceding weeks; 77 cases were admitted during the week, against 67 and 62 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 5.3 per 1,000, and was slightly below the average.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns 793 births and 732 deaths were registered during the week ending Saturday, February 22nd. The annual rate of mortality in these towns, which had been 25.0 and 28.7 per 1,000 in the two preceding weeks, declined again to 28.3 during the week under notice, but exceeded by 3.2 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Perth and Greenock, and the highest in Paisley and Dundee. The 732 deaths registered in these towns during the week under notice included 100 which were referred to the principal zymotic diseases, equal to an annual rate of 3.9 per 1,000, which exceeded by 1.9 the mean zymotic death-rate during the same period in the large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Edinburgh and Dundee. The 324 deaths registered during the week under notice in Glasgow included 9 from measles, 16 from whooping-cough, 5 from scarlet fever, and 5 from diphtheria. In Edinburgh 11 fatal cases of measles and 9 of whooping-cough were recorded. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.9 per 1,000, against 5.3 in London.

MR. RITCHIE and his co-trustees in the Guinness Trust have for some time been in negotiation with the London County Council for the acquisition of a site on which to commence building residences for working men. The negotiations are said to be in such a forward state that a decision may be looked for in the course of a few days, and the work of building will be in progress in the early spring.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BASFORD RURAL (Population, 51,957).—*The Distribution of Phthisis: Infantile Remittent Fever and Typhoid.*—The death-rate of 1888 was practically identical with that of 1887, 14.9 and 14.7 per 1,000, and both were considerably below the average. Dr. Boobbyer gives a favourable account of the district as regards zymotic diseases, there having been no serious epidemic, whilst there was a diminished prevalence of some of the more important. Diarrhœa and whooping-cough showed an increased mortality, the autumnal rise of the former disease being very marked. Two cases only of small-pox occurred, and in both the infection was plainly traceable to Nottingham. The phthisis rate was generally low, but Dr. Boobbyer calls attention to the fact that an excess above the average is most steadily maintained on the damp, low-lying flats of the Wilford division, the vale villages of Carlton ranking next. A short history of an outbreak of typhoid fever in one family forcibly illustrates the necessity of recognising the identity of so-called remittent fever in infants with adult typhoid, and of guarding against the contagion alike in mild and severe cases.

BERKSHIRE COMBINATION (Population, 144,673.)—*Outbreak of Diphtheria.*—Dr. W. T. G. Woodforde gives a very interesting account of the public health during 1888 of the twelve sanitary districts under his charge. There were no serious epidemics of any of the zymotic diseases, though many little outbreaks had to be dealt with. The most troublesome and fatal disease was diphtheria, more especially in the Maidenhead and Windsor districts. No history of infection from a preceding case could be obtained as regards any "first" cases in these districts; nor was there any evidence to connect an attack with the diseases of animals or with an infected milk supply. In connection with the outbreak in Maidenhead, Dr. Woodforde notes that for five months the ground was open in different places for the construction of the new sewerage, and during a great part of the time the subsoil water was also very near the surface, owing to the long continuance of rainy weather. In addition to this, many of the old drains and cesspits were unsound, and the surrounding soil necessarily more or less sewage-fouled, while in one or two localities there was probably some amount of specific contagium still remaining from the cases that had occurred early in the year. The zymotic death-rate amounted to 1.1 per 1,000, the lowest that has hitherto been recorded, though in two previous years, 1881 and 1885, the minimum was also obtained. The general death-rate for the whole combination was 14.8 per 1,000, the district rates varying from 23.5 in Wallingford to 12.5 per 1,000 in the East-hampstead district. The statistics show an improvement upon those of 1887, and are the most satisfactory of any since the year 1881. Sanitary matters generally seem to receive Dr. Woodforde's constant attention.

BIRKENHEAD (Population, 100,093).—*Improving Vital Statistics: Prevalence of Typhoid: Unrecognised Typhus.*—Mr. Francis Vacher reports that in 1888 the birth-rate (30.7 per 1,000) was much lower than it has been in any previous year, and the death-rate (17.8 per 1,000) was lower than in any previous year, with the exception of 1881. This low rate was, however, chiefly due to a decrease in the mortality from zymotic diseases—the average zymotic mortality being actually 55 per cent. higher than the zymotic mortality of 1888. The death-rate from measles was less than two-sevenths of the average rate, the death-rate from scarlatina was about three-fifths, the death-rate from whooping-cough was about two-fifths, and the death-rate from diarrhœa was little more than half the average. The mortality from the minor zymotics was also below the mean. Fevers alone showed an increase, the number of deaths being 38, of which 6 were ascribed to typhus. Typhoid fever was exceptionally prevalent during the latter half of the year. A sketch map of the borough is appended to the report, and shows the boundaries of the wards and the position of houses in which deaths from zymotic diseases took place. There is also a street register of deaths and a tabular "description" of those who died during 1888. Mr. Vacher goes very closely into the statistics of the year, and his tables bear evidence of great care in compilation. He finds it necessary to refer somewhat specially to the difficulties which attend the efforts to prevent the spread of typhus fever. There is no reason to believe that there were any cases deliberately concealed in Birkenhead. Typhus fever is a disease so usually productive of alarm that friends and neighbours of the patient are always ready to report it when they recognise it; but there is evidence that cases, perhaps not rarely, escape being reported through their not being recognised as fever, but regarded as acute inflammation of the lungs or brain, etc. Herein lies a great danger to the community. For twelve days or a fortnight after the subject has become infected he remains to all intents and purposes in absolute health, and even after the fever has begun it may be a week before the characteristic eruption makes its appearance. Thus it happens that medical advice is probably not sought till some risk of infection has been incurred, and when a practitioner is called in he is possibly unwilling to certify "typhus" till the spots begin to appear and show what the disease really is. It may therefore often happen that no notice of a case of typhus is received by the sanitary authority until the disease is so far advanced that transfer of a patient becomes impracticable, and until there has been ample opportunity for the extension of the disease.

BILSTON (Population, 22,700).—*Small-pox Outbreak: Infection Spread by Culpable Carelessness.*—With the exception of a rather severe outbreak of small-pox and some prevalence of a mild form of scarlatina, this district was remarkably free from zymotic diseases during 1888. Dr. T. B. Bailey records a greatly improved death-rate both from general and zymotic causes, the actual number of deaths, 452, being 130 less than in the previous year. The measles epidemic of 1887 had quite exhausted itself, and there were no deaths from this disease during 1888. The health officer gives several instances of the spread of small-pox by the extreme carelessness of individuals. In one instance, a child of 5 years of age, unvaccinated, was found with the disease in a room where five other persons were living, whilst several other persons were living in the same house. In another case a young man, having presumably taken the contagion from his landlady, a nurse, was sent by her to his sister's, where he infected three other people. In all 42 cases occurred, 22 of whom were removed to the temporary cottage hospital. Three only proved fatal.

DUBLIN (Population, 352,082).—*Low Death-rates: Tenement Houses: Sewage Disposal.*—Commenting on the greatly lessened mortality of 1888, Sir Charles Cameron points out that it was chiefly due to the falling off in the number of deaths from zymotic diseases and constitutional maladies. The total number of deaths registered was 8,894, or a rate of 25.2 per 1,000. This was 3.9 below the average of the previous ten years, and 5.3 under the rate of 1887. The deaths attributed to zymotic diseases in the city amounted to 936; in 1887 they numbered 1,664; and in 1886 823. Small-pox caused 1 death. Measles was credited with 7 deaths, as against 423 in the preceding year. This disease, epidemic in 1887, was rather prevalent in the early part of 1888 lessening considerably towards the close of the year. Scarlet fever was also rather prevalent in the early part of the year Typhus fever caused 25 deaths. In 1887 this disease was eve less fatal, only 17 deaths from it having been registered. For merly typhus fever was a very common malady in Dublin, bu for some years past it seems to have been dying out. The most fat zymotic disease was whooping-cough; 221 deaths from it wer registered, whereas in the very unhealthy year 1887 only 1 deaths were ascribed to this malady. Enteric (typhoid) fev was more prevalent than usual. In 1887, 95 deaths were cause by it, whilst in 1888, 124 deaths were ascribed to it. Enter fever is the only zymotic disease which, during late years, h shown no tendency to decline. The deaths from diphtheri which were 14 in 1885, and 18 in 1886, rose in 1887 to 25, b declined to 22 in 1888. Diarrhœa and dysentery, which caus great mortality in 1887, were credited with 171 deaths in 18 In the order of fatality it stood second in each year. Sir Cameron considers that the close inspection of the teneme houses which has been carried on during the past few yea has resulted in a very substantial improvement of their co dition. The state of public health in Dublin has for some ti past been much more satisfactory than it was formerly result which is most likely largely due to the improved co dition of the tenement houses. The method of disposing of t sewage of Dublin is unsatisfactory, and Sir Charles Came strongly urges amendment. He considers that Dublin is ve favourably situated for the adoption of a "clarification" "precipitation" scheme of sewage treatment.

ISLINGTON (Population, 346,563).—*Low Death-rate and Low Birth-rate: Absence of Small-pox: Unwholesome Dwellings.*—The death-rate of 14.0 per 1,000 which Dr. Meymott Tidy reports for 1888 is the lowest to be found in the Islington records, and occurs in conjunction with the exceptionally low birth-rate of 28.6 per 1,000. The deaths referred to zymotic diseases, not including diarrhœa, were 515, and were below the number (687) recorded for the previous year, and below the average of the last twenty years. No death occurred from small-pox during 1888; the deaths from measles were less by one half than in 1887; from scarlet fever they were about the same, and there was a decrease from whooping-cough. The number of deaths due to diseases of the respiratory organs was 1,040, as against 1,169, 1,201, and 1,197 in the three preceding years. This is a satisfactory record; for, as Mr. Tidy points out, deaths from these causes, unless in very severe seasons, more nearly keep pace with the increase in the population than those from other diseases. The fatality from diarrhœa was 146, being about half the number which occurred in 1887, and considerably below the average of the last eight years. In July, August, and September, when the cases were most fatal, the numbers respectively were 22, 40, and 45 deaths. The dwellings of the poor have had Dr. Tidy's attention, and he has found it necessary to condemn a number of houses near the Holloway Road, under Torrens's Acts, and to prepare an improvement scheme under Cross's Acts, for another "unhealthy area."

ISLE OF WIGHT RURAL (Population, 28,355).—*Diphtheria Prevalences: Diphtheria following Scarlet Fever Outbreaks; Typhoid Fever: Hospital Needed: Continued Lax Sanitary Administration.*—This district did not contribute to the reduction of the death-rate which was noticeable throughout England and Wales generally in 1888. There were many deaths among children from measles and whooping-cough, and this circumstance helped to raise the death-rate to 17.3, or, deducting deaths of strangers, to 16.8 per 1,000, a rate which is much higher than that of preceding years. Dr. Groves reports that the year commenced with a prevalence of catching disorders, scarlet fever, measles, whooping-cough, and diphtheria being more or less epidemic. As the year grew certain of these diseases advanced, holding tenaciously to some districts and leaving others, or invading fresh neighbourhoods. Diphtheria was associated with scarlet fever in several places during the year, a connection which Dr. Groves has previously noted. Outbreaks of diphtheria have followed visitations of scarlet fever, and persons who had suffered from scarlet fever were often the first to be attacked with diphtheria. Five deaths were registered from typhoid fever, but other deaths seem to have been due to this cause. Careful attention was given to the sanitary surroundings of patients, the origin of the disease being frequently traced to polluted water. The zymotic death-rate amounted to 1.6 per 1,000. A great difficulty in the way of controlling the spread of these preventable diseases is the absence of sufficient means of isolation. It is regrettable to observe that the administration of the Public Health Acts in this important health resort continues to be lax and inefficient. The numerous needs of the district have been repeatedly pointed out, not only by the local health officer, but also in strong terms by Dr. Ballard and Mr. Spear on behalf of the Local Government Board. Yet Mr. Groves found it necessary in his last report to express his regret that "the committees appointed by your authority to consider my annual reports have not seen their way to recommend you to adopt the majority of my suggestions, because I believe, if you had fully realised the necessity of accepting the advice tendered, and if your authority had acted upon their recommendations, not only would increased prosperity have attended the greater confidence of the outside world, but the expenditure of large sums of money in the future would have been avoided or postponed." This is a question which affects not only the permanent residents in the district, but also that large section of the general public who look upon the Isle of Wight as a storehouse of health upon which they can at intervals draw. The sanitary administration of a health resort is a national concern, and should be above reproach.

KAPLETON (Population, 14,300).—Dr. William Brown reports the most entire absence of zymotic disease in this district during 1888. Measles was only just heard of, 2 cases being reported and no deaths; there were only 5 cases of scarlatina, none fatal; and there was no diphtheria or small-pox. The only zymotic fatalities were 3 of enteric fever, all of which were associated with unhealthy conditions in or around the premises, and 5 of diarrhœa. Respiratory diseases caused 36 deaths; phthisis 16 (an increase of 3 upon 1888); and heart disease 15 deaths. The general rate for the year was 13.3 per 1,000, the zymotic proportions being 0.8 per 1,000. As regards sanitary proceedings, a careful supervision seems to be exercised over the district. There appear, however, to be dairies and cowsheds which are not as wholesome as they should be, and the state of the private streets has called forth the health officer's condemnation.

TENDRING RURAL (Population, 26,500).—*Whooping-Cough Prevalence: Chest Affections.*—Dr. John W. Cook reports that from zymotic diseases during 1888 there were 31 deaths registered, giving a death-rate of 1.16 per 1,000. This was higher than in 1887, the increase being due to whooping-cough among very young children. There were 13 deaths from this cause alone. Measles and scarlatina were prevalent, but diarrhœa did not manifest itself to any excess. Of diseases outside the zymotic list, chest affections occurred in considerable numbers, and heart disease caused 43 deaths. The general death-rate was 16.7 per 1,000.

WEST SUSSEX COMBINATION (Population, 106,600).—*Distribution of Diseases: Influence of Age and Sex.*—In a series of interesting and well-written reports Dr. Charles Kelly gives the vital statistics of 1888, and describes the sanitary condition of each of the eleven districts under his charge. The returns are generally favourable. There was no case of small-pox during the year, nor was there any outbreak of zymotic disease calling for special notice, except a prevalence of scarlatina at Arundel, which caused 13 deaths. It is worthy of notice that whilst the mortality statistics of West Sussex show whooping-cough, diarrhœa, and diphtheria at the head of the list, followed by measles, enteric fever, and scarlet fever, in those for the whole of England and Wales scarlet fever and measles occupy a much higher and diphtheria a much lower position. Another point of difference to which the health officer draws attention is the distribution of age and sex, whereby the death-rate of West Sussex is slightly raised as compared with that for England and Wales. If due correction be made in this matter, the recorded rate of 13.6 per 1,000 in West Sussex becomes only 12.7 per 1,000. The infant mortality, measured by the number of deaths under one year of age to every 1,000 children born, was 77. Sanitation in this combination of districts is safe in Dr. Kelly's hands. He is evidently not always able to secure at once in all cases the improvements which he finds to be necessary, but the weight which attaches to his advice cannot fail in the end to overcome the difficulties and hesitation met with.

HOSPITAL AND DISPENSARY MANAGEMENT.

SEAMEN'S HOSPITAL, GREENWICH.—The annual report of the Seamen's Hospital Society shows that 2,198 patients, representing twenty-six nations, were treated at the hospital at Greenwich. Mr. Cleeve, on retiring from the chairmanship, was presented with a portrait of himself, in recognition of his services to the hospital for many years.

CHARING CROSS HOSPITAL.—The report presented at the annual meeting of governors of the Charing Cross Hospital on Wednesday, February 19th, shows an increase of 2,000 in the number of patients. The number of in-patients (1,870) was larger than in any previous year. There was a falling off in donations and legacies. The initial expense incurred by the Council in taking the nursing into their own hands had increased the expenditure of the year. In respect to the three important undertakings—the enlargement of the medical school, a convalescent home, and a nursing home—it was stated that arrangements had been made for enlarging the medical school, and a site had been purchased for a convalescent home at Clacton-on-Sea, but the state of the finances would not at present admit the rebuilding and enlarging of the nursing home.

BELFAST ROYAL HOSPITAL.—At a special meeting of the subscribers and life governors, held on February 24th, the Marquis of Londonderry was unanimously elected President of the hospital. This post, which was formerly filled by the late Earl of Shaftesbury, has been vacant for some time. At the last quarterly

meeting of the hospital a very material improvement in the financial condition of the institution was reported.

METROPOLITAN ASYLUMS.—At the meeting of the Metropolitan Asylums Board on February 22nd, it was reported that five cases of small-pox remained under treatment on the hospital ships. A letter was read from the Whitechapel Guardians expressing approval of the Board's proposal, in the widest public interest, to admit clinical students to the asylums and the Board's Hospitals in which alone, in London, peculiar phases of brain and zymotic diseases could be studied.

NATIONAL HOSPITAL FOR CONSUMPTION AT VENTNOR.—The twenty-first annual meeting of the governors of this institution was held on February 25th. The number of in-patients under treatment had increased to 759, as compared with 735 in the previous year, who resided in nearly every county in the kingdom. Regret was expressed at the loss of Mrs. Hamilton, a benefactress, who used to defray the chaplain's stipend, which will now fall upon the general hospital funds. The retiring members of the Board were re-elected, and votes of thanks to the honorary and medical officers, and the Chairman, brought the proceedings to a close.

HOSPITAL SATURDAY FUND.—The first meeting of the Hospital Saturday Fund, as a body enrolled under the Companies Act as an association not for profit, was held at the offices of the fund on February 22nd. The officers and delegates were appointed, the Lord Mayor being elected President, and Sir James Whitehead Chairman. The date of Hospital Saturday for the present year was fixed for July 12th.

THOMPSON MEMORIAL HOME, LISBURN.—The report presented to the annual meeting of this institution stated that the daily average of patients during the year had been 56, and the cost per head £33. The applications for admission being very numerous, the home being for incurables, and hence the annual vacancies being few in number, the General Committee were desirous of raising the average number of inmates to 60. To meet this increased expenditure, Mr. Bruce, on behalf of his wife (daughter of the late Dr. Thompson, of Lisburn, to whose memory the institution was erected), presented the Board of Management with the sum of £4,000. This munificent donation raised the total sum given by Mrs. Bruce for the erection and endowment of the Thompson Home to the total of £79,000.

UNIVERSITY COLLEGE HOSPITAL.—A festival dinner in aid of the funds of this hospital was held on February 25th at the Whitehall Rooms, Hôtel Metropole. The Lord Mayor, who presided, in the course of an appeal on behalf of the institution, stated that the Committee were desirous, in order to meet the present demands on their resources, of rebuilding the hospital, a work that could not be commenced until £30,000 had been received or promised. The result of the festival was the addition of upwards of £1,500 to the funds of the hospital.

MURRAGH DISPENSARY.—A special meeting of the Dispensary Committee was held recently to elect a medical officer, in the room of the late Dr. Orpen-Beamish. There were four candidates, but one, having neglected to forward his diplomas, was disqualified. There was a tie between two of the candidates, and the election has been postponed until March 21st.

OBITUARY.

DAVID PAGE, M.D., F.C.S.

To those who had the privilege of a personal acquaintance with David Page, the news of his unexpected death early in a career of much promise has come with a sense of peculiar pain. Few men were more kindly and upright than he; enemies, we feel certain, he had none; all who knew him well were his friends; and amidst a large circle he was respected by reason of his genial and cultured nature. He was the son of Mr. David Page, F.R.G.S., of Lanarkshire, the author of a number of notable works on geology. His son, the subject of this memoir, commenced his scientific career some twenty-five years ago by the study of chemistry, in which subject he acquired considerable proficiency; he then entered the medical school of the Edinburgh University, where, as a contemporary of Dr. Lauder Brunton and others, he soon made his mark; and in 1870 he took his M.B. with honours, and gained the Hope Chemical and the Ettles Scholarship. Three years later he graduated as M.D., taking the gold medal for the excellence of his thesis on the "Value of certain Signs observed in Cases of Death by Suffocation, and on Death by Hæmorrhage in the Newborn;" and last year he was appointed Examiner in Medical Jurisprudence to the University.

Resisting an advantageous offer to remain in Edinburgh, he entered into private practice at Kirkby-Lonsdale in Westmorland, where he remained until the summer of 1873, when he was elected first medical officer of health for the Westmorland Combined Sanitary Districts. The excellent work which he performed in this capacity attracted the attention of the authorities at Whitehall, and in 1883 he was offered and accepted a medical inspectorship under the Local Government Board. Some of the work which he performed in this latter capacity remains as a permanent contribution to the standard literature of epidemiology; and his labours during the Cholera Survey of 1884-86 are well remembered, both by the central and local authorities, by reason of the capacity he displayed of combining an honest declamation of that which he found to be wrong with an enthusiastic and winning appeal for the improvement and safeguarding of public health. These special characteristics called forth from the sanitary authorities of large towns and cities public expressions of thanks for the services he had rendered. So long as he had health his energy for work never flagged; indeed, he worked too hard, and yet he found time for cultured occupation and amusement, especially in the study of his native poets and in music. Three years ago he delivered at Newcastle-on-Tyne the oration at the Burns Centenary gathering, his address being printed by general request.

Some three years ago, and apparently as suggested by the event, connected with an antecedent injury, obscure symptoms of a brain affection were manifested, and only a month ago Dr. Buchanan, after consulting with Dr. Hughlings Jackson and Dr. Ferrier, who rightly diagnosed a cerebral tumour, insisted on his taking six months' complete rest from his official work. With a view to this he started for Dublin on February 17th, and after spending the evening of the 18th with friends, who found him in the best of spirits, he experienced some loss of power in the right lower extremity. This was followed, on the 19th, by intense head pain; he then became rapidly unconscious, and died early the next morning at the age of 44 years.

Dr. Page was twice married, and he leaves a widow, seven children, of whom the youngest is only some two months old, and a widowed mother, all of whom have our deepest sympathy. Apart from the value of his work, David Page's personal characteristics led to his relations with his colleagues at Whitehall becoming one of true attachment, and by them his loss is deeply deplored. Dr. Barry attended, on their behalf, the funeral of their friend and co-worker in the little Westmorland graveyard at Old Hutton, near Oxenholme, on February 24th. Several leading medical officers of health, his former colleagues, were also among the mourners.

THOMAS CAM, F.R.C.S., L.S.A., J.P.

BY the death of Mr. Thomas Cam, which occurred somewhat suddenly on February 17th, Hereford has lost one of its oldest and most respected public men. The deceased gentleman, who was in his 75th year, was born at Bath, and came of an old Hereford family, several members of which, including his father, were members of the medical profession. Mr. Cam became Member of the Royal College of Surgeons in 1837, and Fellow in 1884. He removed to Hereford, where he succeeded to his late uncle's practice. He was recognised as a good operating surgeon, and carried on a considerable practice until his retirement about fifteen years ago. He held the position of Surgeon and more recently that of Surgeon-Extraordinary to the Hereford Infirmary, of which he was a life-governor and chairman of the Board of Management. He found time to render long and valuable public services in connection with the Hereford Town Council. He held the office of Alderman for thirty years and was twice elected Mayor of the city. He filled many of the public appointments in Hereford, was a Justice of the Peace for the city and county of Hereford, and, since his appointment to the city bench in 1863, had invariably acted as chairman of the Brewster Sessions. The local press, which deals liberally with public services, speaks of him as being "widely respected and esteemed for his uprightness of character and an exceeding generous, charitable disposition, which was concealed under an apparently austere and dignified manner; and many are

istories of his timely and unostentatious sympathy and help." His funeral, which by his wish was of a private character, nevertheless included among its mourners a number of representatives of public bodies.

VICTOR GAUTIER, M.D., GENEVA.

DR. HORACE CHARLES VICTOR GAUTIER, one of the leading members of the medical profession in Switzerland, died at Geneva on January 11th, at the age of 66, of pleurisy and nephritis following influenza. He was born at Geneva in 1824, and began his medical studies at Zurich in 1841. Two years later he went to Paris, where, after working under Louis and other distinguished teachers of the day, he took his Doctor's degree in 1850, the subject of his inaugural thesis being "Erectile Tumours of the Skin." He soon afterwards returned to Geneva, where he practised every branch of the healing art with equal success. He was at once one of the most trusted consultants in obscure medical cases, a surgeon of repute, and a recognised authority on obstetrics and gynæcology. His personal predilections were, however, for the last named department of practice. He was for many years medical director of the Plainpalais Infirmary for Women and Children, and lectured for some time on diseases of women in the University of Geneva. He was President of the Medical Society of Geneva in 1858, and of the Section of Obstetrics and Gynæcology at the International Medical Congress held in that city in 1877. He was also a vice-president of the Congress of Hygiene in 1882. His merits were recognised beyond the limits of his own country by his election as a Corresponding Member of the Surgical Society of Paris and of the Obstetrical Society of Leipzig.

Gautier is claimed by his countrymen as a precursor of Sir Joseph Lister in the field of surgical antiseptics. In 1867 he published a paper entitled "De la Cause Principale et de la Prophylaxie des Accidents consécutifs aux Opérations Chirurgicales," in which he insisted on the importance of the most scrupulous cleanness in operations. "The sponges" (to quote his own words), the appliances for dressings, the basins, must be washed and disinfected every time they have been used. Before the operation, the surgeon and each of his assistants should wash their hands with chlorinated water, soap, and a brush."

Dr. Gautier contributed largely to medical literature, his most important publications, besides those already mentioned, being papers on Retropharyngeal Abscess, Rheumatism of the Uterus, Desquamation of the Tongue, Precocious Menstruation, and Puerperal Tetanus.

HARRISON BRANTHWAITE, F.R.C.S EDIN., L.S.A.

MR. HARRISON BRANTHWAITE died at Halesowen, near Birmingham, on February 18th, at the age of 62. He was born in Liverpool in 1828, and was apprenticed to Dr. William Barmak Clarke, of Whitehaven. After studying at the Sydenham School of Medicine, Birmingham, and Charing Cross Hospital, and obtaining his medical and surgical qualifications, Mr. Branthwaite settled at Leighington, Lincolnshire, where he remained till 1870, when, in consequence of his health failing from overwork in the Fen districts, he removed to Leighton Buzzard. In 1873, he migrated to Willesden, where he was elected medical officer, a post which he resigned only a year ago, when he left Willesden to establish a home for male inebriates at Twickenham. His efforts in this direction were so much appreciated that he shortly afterwards opened a similar home for females at Halesowen, which is now under the direction of his widow. Mr. Branthwaite was best known to the public as an ardent temperance advocate. In private life he was much esteemed by a large circle of friends.

SURGEON G. H. SYMES, A.M.S.

HIS promising young officer died on January 2nd, of the pernicious malarial fever peculiar to the West Coast of Africa. He received his education at Trinity College, Dublin, taking the degrees of Bachelor of Arts, Bachelor of Surgery, and Bachelor of Medicine, and was commissioned in August, 1885. After a short service at home, he proceeded to the West Coast of Africa, where he served for some time, and then returned to England on leave of absence. On the expiration of his leave he was again sent to the West Coast of Africa, and was immediately sent into the interior in charge of a detachment occupying the Yonnie stronghold of Karri, the strategic post established by Sir Francis De Winton during the late Yonnie campaign. Here he discharged his duties in such a manner as to merit the approval of his official superiors and to gain the affection and esteem of those under his charge. In the midst of this African jungle his genial manner and professional skill lent confidence to the detachment under his charge, and served to rob the danger of service in this unhealthy station of one of its greatest terrors—the dread that when stricken with disease efficient professional aid may not be near. Having piloted many through their attacks of this terrible African pest, his own time came at last. Struggling against it and endeavouring to do his duty, the time arrived when he could struggle no longer, and lying down he requested the only other officer at the post to report his condition to headquarters, and ask for assistance; but, alas, it was too late; pluck and fortitude were powerless, and he died at his post a martyr to duty, adding one more name to the roll of brave and devoted officers whose names lend lustre to the Medical Service of the army and the profession of which he was so worthy a member. His case is not unique, yet it is sad to contemplate. The officer of any other branch of the service has the comfort of knowing that when ill he has skilled assistance at hand, and even if the result is fatal, still his last hours are not rendered additionally trying by the thought that every chance of saving his life is absent. But what order of courage does it not need to stick to duty when the victim is a medical officer whose knowledge impresses on him the gravity of every symptom, and also tells him that whatever directions he can give for his own treatment in the earlier stages must cease with the onset of the inevitable delirium, and that a life which might be saved by the presence of a brother medical officer must be yielded up to duty and the exigencies of the service?

RICHARD H. BUSH, M.D.EDIN., M.R.C.S.ENG., L.S.A.

DR. BUSH, whose death we regret to record, was born at Simla in 1843, the fourth son of Colonel Richard Yeats Brown Bush, of the Bengal Army. He received his medical education at King's College, London, and at the University of Edinburgh, where he graduated as M.D. in 1865. Soon after qualification he was for a time Assistant Medical Officer at Bethlem Royal Hospital, where his services were highly appreciated. After his marriage, in 1878, he engaged in private practice in Paddington. He was Physician to the St. Pancras and Northern Dispensary for ten years, and when he resigned was appointed Honorary Physician on account of long and much valued services. He was an active member of the vestry of the parish of Paddington, in whose affairs he took a warm interest to the last. He was taken suddenly ill, and died on February 14th, from rupture of a blood vessel. Dr. Bush was very genial and kind hearted, and much beloved by all his patients and friends.

BRIGADE-SURGEON RICHARD WILLIAM DAVIES, A.M.S.

THE following account of the career of this medical officer, whose death we have already announced, has been forwarded to us by a correspondent, a friend of the deceased: "The lamented officer died on January 7th last at Meerut, where he was in charge of the Station Hospital. Mr. Davies entered the Medical Department in 1864. His earlier years of service were passed as Assistant-Surgeon of the 72nd Highlanders, in which regiment he was beloved by officers and men. After promotion to the rank of surgeon-major he served with the Carabineers, amongst whom he was equally popular. It may indeed be said that there was no greater favourite in the service than 'Dick Davies,' and the cause of his popularity was to be found in the fact that he was 'good all round.' His advice was sought and valued, not only in professional matter, but also as an authority on sport in India, and his natural charm of manner attracted all who made his acquaintance. He spent upwards of seventeen years in India. He received the medal for his services in the Afghan war of 1878-80, and he was mentioned in despatches."

Mr. Davies leaves a widow (daughter of General Sir Donald Stewart, Bart., G.C.B.) and two daughters. He died, after a month's illness, of multiple hepatic abscess following typhlitis; and was buried with military honours in Meerut Cemetery.

UNIVERSITY OF MONTPELLIER.—The formal celebration of the sixth centenary of the University of Montpellier will take place at the end of May. Strictly speaking, the celebration should have taken place last year, as the University was founded in 1289, but it was deferred so as not to clash with the national festivities in honour of the centenary of the Revolution.

MEDICAL NEWS.

DR. WALTER SPENCER has resigned the office of Deputy Coroner for the Retford district.

A GYNÆCOLOGICAL society has been founded at Cracow, under the presidency of Professor M. Madurowicz.

THE Congress of Russian Naturalists and Physicians, which was held at St. Petersburg on January 9th, was attended by 2,000 persons.

MR. GEORGE SMITH'S Movable Dwellings Bill, which last year passed the Committee stage, will again be brought forward this session.

INFLUENZA is said to be still greatly on the increase in Cape Town, and in all the coast ports. Hundreds of cases have occurred, but they are mostly of a mild description.

THE Drapers' Company of London have contributed £1,000 to the scholarship fund of South Wales and Monmouthshire University College, in addition to £1,000 given in December.

A GERMAN contemporary states that a pork butcher of Breslau, convicted of having sold as food the flesh of a pig suffering from trichinosis, has been condemned to fifteen years' hard labour, followed by ten years' police supervision.

MISS PRINGLE, after several years of efficient service, has resigned the matronship of St. Thomas's Hospital, and Miss Louisa M. Gordon, who is at present superintendent of the nursing department of the Leeds Infirmary, has been elected in her stead.

LEPROSY is said to be spreading in New Caledonia, and about 3,000 aborigines have been attacked. Two lazar houses have been erected, one on Goat Island, and another on Dead Men's Peak. Some French convicts living in huts have fallen victims to the disease.

OUR Japanese contemporary, the *Sei-I-Kwai Medical Journal*, states, in illustration of the supposed influence of the climate of Japan in causing rheumatism and neuralgia in foreign residents, that horses imported into Japan and China and other countries are soon disabled by rheumatism.

BY a recent ministerial decree midwives in Prussia are directed to observe the strictest antiseptic precautions in attending on lying-in women. A complete code of instructions on this head is furnished them, in which it is satisfactory to see that the nail-brush figures conspicuously.

NIGHT MEDICAL SERVICE IN PARIS.—During the year 1889 the total number of patients seen by the members of the Paris Night Medical Service was 8,544. as against 7,408 in 1888. Of this number 2,684 were men, 4,339 women, and 1,521 children. In the month of December, when the influenza epidemic was at its height, the number of patients seen was 1,250.

THE Russian *Army Pharmacopœia*, which dates from the year 1866, is now so obsolete that a Committee of medical men and pharmacists, under the presidency of Dr. N. W. Ssokolow, Professor of Chemistry in the St. Petersburg Military Medical Academy, has been appointed to prepare a new edition embodying the results of scientific progress up to the present day.

PRESENTATION.—In recognition of the great public services rendered by Mr. James Williams, F.R.C.S., J.P., as Chairman of the Royal National Eisteddfod Committee, he has been presented with a very handsomely carved chair, together with an illuminated address. A public banquet, which was largely attended, followed the presentation.

NATIONAL HEALTH SOCIETY.—The National Health Society, of 44, Berners Street, has organised a series of first-aid lectures, which are now being delivered to ladies by Mr. Owen Lankester. The course is held at the residence of Lady Egerton of Tatton, in St. James's Square. The proceeds will be devoted to giving courses of free lectures to the poor, but a more important effect will be to interest ladies of position and influence in the movement.

AN exhibition of the hygiene of trades and occupations, and of apparatus and other means for the prevention of accidents, will be opened at Amsterdam on June 16th. The exhibition will be divided into eighteen sections, and is intended to include the whole field of industrial activity. It is probable that a congress of industrial hygiene will be held at the same time.

DR. DANFORD THOMAS, Brigade-Surgeon of the 18th Middlesex Rifle Volunteers, is forming, with the permission of the War Office authorities, a volunteer brigade school, where the men requiring ambulance instruction from the various regiments in his brigade can be collectively taught their duties as stretcher bearers. The headquarters of the 19th Middlesex Volunteers, Chenies Street, Tottenham Court Road, have been placed at the disposal of the new class.

THE BERRIDGE BEQUEST.—The question as to the validity of the bequest of £2,000 made by Richard Berridge, of Ballynahinch Castle, county Galway and Knowle Hall, near Bridgwater, "for the advancement and propagation of education in economic and sanitary science in Great Britain," came before Mr. Justice Stirling recently, who decided that the legacy was a valid charitable bequest, and ordered the trustees forthwith to settle a scheme for the application thereof.

MEDICAL EDUCATION IN THE UNITED STATES.—The *Medical Record* of New York states that the staff of the Johns Hopkins Hospital, and several of the medical schools of Baltimore, have combined to propose that a conference should be held between all the medical schools of the United States, to consider the necessary reforms in medical education. The conference will probably be held during the meeting of the American Medical Association, at Nashville, next May.

PROFESSOR RIED OF JENA.—On February 11th, Dr. Ried, late Professor of Surgery in the University of Jena, celebrated his 80th birthday. He began his career as a *privat docent* of medicine, and afterwards shared the charge of the surgical clinic with Professor Jäger, whose work on resection he edited. He was called to Jena in 1847, where he occupied the chair of Surgery till a few years ago. The Grand Duke of Saxe-Weimar has, in recognition of his services to science and to the University, created him a Privy Councillor, and conferred on him the title of "Excellency."

SANITARY ASSURANCE ASSOCIATION.—The report presented at the ninth annual meeting of the Sanitary Assurance Association, presided over by Sir Joseph Fayrer, K.C.S.I., F.R.S., referred to the work of the Council in promoting the Sanitary Registration of Buildings Bill, to the lectures given by members of the Council on sanitary subjects. Special reference was made to the disclosure of serious sanitary defects in board schools and clergy houses which had been inspected by the Association during the past year.

EXPORTATION OF HORSES TO ANTWERP.—A revival of the report that old horses are exported from this country to Antwerp, for the purpose of being turned into extract of beef, having occurred, we are requested to state that the Royal Society for the Prevention of Cruelty to Animals recently instituted an investigation into the matter. The Society reported that the horses exported from this country were not turned into extract of beef in Antwerp, and that there were no factories in that city where such extract is prepared, but that there were large numbers of old horses exported to Antwerp and legally sold for "horse beef" in the shops.

BEQUESTS.—Edinburgh medical charities have received munificent bounties in terms of the will of the late Mr. James Taylor, of Stanley Hall, who died last week:—The Royal Infirmary, £2,000; the Edinburgh Hospital for Sick Children, £2,000; the Longmore Hospital for Incurables, £3,000; the Edinburgh Society for the Relief of the Destitute Sick, £3,000; Society for Relief of Incurable Sick at their own Homes, £2,000; Edinburgh Society for Relief of Old Men, £4,000; Larbert Institution for Imbeciles, £1,000; Edinburgh Blind Asylum, £2,000; Leith Hospital, £2,000; Leith Destitute Sick Society, £1,000, etc.—The late Mr. Samuel Fielden, of Centre Vale, Todmorden, out of a personalty of £1,170,113, leaves a legacy to the Manchester Royal Infirmary of £3,000; the Brompton Hospital for Consumption, £2,000; the Royal Albert Asylum for Idiots, £2,000; the National Orthopœdic Hospital, £2,000.

GERMAN SCIENCE FOR URUGUAY.—Dr. Federigo Susviela Guarch, resident Minister of the Republic of Uruguay at Berlin, being anxious that the light of German medical science should shine on his countrymen, has founded a periodical entitled *Revista General de Ciencias Medicas*, on the model of the German *Centralblättern*. The "review," however, does not seem to be "general," but to be confined to German work. Before entering

he diplomatic service, Dr. Guarch studied medicine at Berlin, giving special attention to the teaching of Professors Virchow and Waldeyer, and he won his title of Doctor in the University on the Spree.

FRANCE AND THE BERLIN INTERNATIONAL MEDICAL CONGRESS.—The French Medical Press Association had the subject of the Berlin Medical Congress under consideration at their ordinary quarterly dinner on February 14th. No definite conclusion having been come to as to the attitude to be assumed towards the scientific gathering in Germany, the members of the Association decided that it would be advisable to fortify themselves for finally grappling with this important matter by an "extraordinary dinner," which is to take place on the second Friday in March. It is said that the funds of the Association are "amply sufficient" for this expense, a circumstance which justifies the hope that the dinner may be good enough to let counsels of peace and good-will prevail.

BALNEOLOGICAL CONGRESS.—At the Balneological Congress, which is to be held at Berlin on March 6th to 9th, the following subjects, among many others, will be discussed:—(1) The Hygiene of Health Resorts; and (2) The Properties of Carbonic Acid, by Professor Liebreich; the Effect of Walking, Mountain Climbing, and other Muscular Movements on Metabolism, by Professor Luntz, of Berlin; the Importance of Heredity in Tuberculosis as compared with its Dissemination by Sputum, and the Value of Balneotherapy for those with a Hereditary Tendency to Phthisis, by Dr. Haupt, of Soden; Obesity and Hæmorrhage, by Professor Kisch, of Marienbad; Heat Regulation, and the Production of Fever, by Professor Winternitz, of Vienna; and Some Physiological Effects of Bathing, by Dr. Rosenbaum, of Berlin.

RABIES IN LONDON.—The Contagious Diseases (Animals) Acts Executive Committee of the London County Council presented, on Wednesday, February 19th, a return of the number of dogs killed by the police in the metropolitan police district, showing the proportion of such dogs which were found to have been rabid, and also of the number of deaths from hydrophobia registered in London. Of 141 dogs killed by the metropolitan police in 1887, 27 were found to have been rabid. The number of deaths from hydrophobia registered in that year in London were 2. In 1888, of 190 dogs killed by the metropolitan police, 49 were found to be rabid; and the number of registered deaths from hydrophobia, 3. In 1889, out of 330 dogs killed by the metropolitan police, 123 were found to be rabid; the number of deaths from hydrophobia, 7.

TWO CENTENARIANS.—The deaths of two women, who were reported to have lived considerably over a century, have recently been reported. One was Magdalena Ponza, who not long ago received a pension from the municipality of Vienna; she met with an accident when in her 109th year, by which she was laid up for a fortnight; she, however, managed to get about again for four years more, but for the last two years of her life she was confined to her chair. She must have been one of the last survivors of the subjects of the Holy Roman Empire, which came to an end when she was a girl of 17. The other aged woman was a Mrs. Catherine Currie, who died on January 26th, at Warwick, in the State of New York. She was believed to be over 107 years old, and a curious incident in her life was her marriage in her 92nd year to a second husband, whom she survived for nine years.

NEW SYDENHAM SOCIETY.—Flügge's treatise on micro-parasites has been translated for the New Sydenham Society by Mr. Watson Cheyne. It is a systematic treatise on the etiology of infective diseases, and is copiously illustrated. We are requested to inform members of the Society that it will be issued to those who have paid their subscriptions in the course of the next few weeks, and that it will constitute the first volume for the year 1890. With it will be sent out the concluding volume for the past year. It is the second and last of Henoch's lectures on Diseases of Children. It may be remembered that in a letter published in our columns a few weeks ago, the honorary secretary of the Society stated that the Council felt in doubt whether it could properly afford this volume in the last year's series, and made an appeal for new members in order that this might be accomplished. It is satisfactory to know that the response to this letter has attained what was wished. The Society's members for last year received for their guinea's subscription no fewer than five volumes. Amongst the names of the authors whose works are translated are Henoch, Charcot, and Cohnheim. We do not doubt that the honorary secretary, Mr. Hutchinson, 16, Cavendish Square, or the agent, Mr. Lewis, Gower Street, will be very glad to receive additional names of new members.

MEDICAL VACANCIES.

The following Vacancies are announced:

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—Resident House-Surgeon. Salary, £65 per annum, with board, lodging, and washing in the hospital. Applications to the Secretary not later than March 13th.

ALNWICK INFIRMARY.—House-Surgeon (unmarried). Salary, £120 per annum, with furnished apartments, attendance, coals, and gas, but without board. Applications up to March 22nd to the Honorary Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Assistant Physician, must be a Fellow or Member of the Royal College of Physicians, London. Applications to the Secretary, T. Storrar Smith, 24, Finsbury Circus, E.C., not later than March 4th.

COUNTY COUNCIL OF LANCASTER.—Medical Officer of Health for the County Palatine of Lancaster. Salary, £800 per annum, with travelling expenses. Applications to the Clerk, Fred. C. Hulton, County Offices, Preston, before March 22nd.

COUNTY COUNCIL OF WORCESTERSHIRE.—Medical Officer of Health for the County of Worcester, Commencing salary, £600 per annum, with travelling expenses, with an increase of salary if district duties be added. Applications must be made not later than March 15th on forms to be obtained of W. Nicholas Marcy, Clerk of the County Council, County Hall, Worcester.

CROYDON UNION.—Assistant Medical Superintendent and Dispenser at the Infirmary, Mayday Road, Croydon. Salary, £125, increasing £5 annually to £150, with furnished apartments, rations, washing, etc. Applications (on forms provided) to the Clerk not later than March 3rd.

DURNESS, Sutherlandshire.—Medical Officer. Salary, £150 (with practice, population 1,000) and free house. Applications to the Inspector of Poor up to April 2nd.

FARRINGDON GENERAL DISPENSARY, etc., 17, Bartlett's Buildings, Holborn.—Honorary Surgeon, Members or Fellows of Royal College of Surgeons. Applications by March 8th to J. Lewis, Secretary.

FINSBURY DISPENSARY, Brewer Street, Goswell Road.—Surgeon; Fellow or Member of the Royal College of Surgeons. Salary, £40 per annum. Applications not later than March 3rd to H. Moreland, Honorary Secretary. Further information on personal application.

HAMPSTEAD PROVIDENT DISPENSARY, New End.—Medical Officer. Applications on or before March 1st to the Secretary, 23, High Street, Hampstead. The elected candidate to reside in Hampstead.

KENT COUNTY ASYLUM, Barmingheath, Maidstone.—Third Assistant Medical Officer (unmarried). Salary, £120 per annum, with furnished quarters, etc. Applications to the Superintendent (Dr. F. Pritchard Davies) not later than March 7th.

KING'S COLLEGE, London.—Professor of Physiology. Applications to the Secretary.

LONDON HOSPITAL MEDICAL COLLEGE, Turner Street, Mile End, E.—Two Assistant Demonstrators of Anatomy. Salary of each, £90 per annum. Applications to the Warden not later than March 11th.

MARCH LOCAL BOARD.—Medical Officer of Health. Salary, £30. Applications to the Clerk by March 3rd.

NAAS UNION, Kildare Dispensary District.—Medical Officer. Salary, £140, per annum, and fees. Applications to Mr. John Heffernan, Honorary Secretary. Election on March 3rd.

NORTH STAFFORDSHIRE INFIRMARY.—House-Physician. Salary, £100 per annum. Applications to the Secretary not later than March 1st.

OWENS COLLEGE, Manchester.—Lecturer on Diseases of the Larynx. Applications under cover to the Registrar, of whom all particulars may be obtained, should be received not later than March 10th.

PARISH OF LIVERPOOL.—Assistant Medical Officer (unmarried) for the Workhouse, Brownlow Hill. Salary, £80 per annum, with rations and residence in the Workhouse; £20 extra for examining applicants for outdoor relief. Applications to the Vestry Clerk not later than March 5th.

PARISH OF MUTHILL, Perthshire.—Medical Officer. Salary not less than £40 per annum (with practice, population 2,300). Applications to H. Curr, Pitkellony House, Muthill, not later than March 15th.

ROTHERHAM HOSPITAL.—House-Surgeon. Rooms, commons, and washing in the hospital in lieu of salary. Applications to the House-Surgeon by March 7th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon, unmarried. Salary, £80 per annum, with board, lodging, and washing. Applications to Thomas Taunton, Secretary, not later than March 1st.

WEST LONDON HOSPITAL, Hammersmith.—House-Surgeon. Duties to commence April 1st. Applications to the Secretary-Superintendent not later than March 20th.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Pathologist, who will be required to act as Fourth Assistant Medical Officer. Salary, £100 per annum, rising £10 a year up to £150, with board, etc. Applications to the Medical Superintendent by March 13th.

WOLVERHAMPTON EYE INFIRMARY.—Resident Assistant, wishing to improve his knowledge; must be competent to administer anæsthetics. Applications addressed to the Chairman, Eye Infirmary, Wolverhampton, not later than March 3rd.

MEDICAL APPOINTMENTS.

ANSON, G. E., M.A., M.D., B.C.Cantab, L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

BOYCOTT, A. N., L.R.C.P., M.R.C.S., appointed Resident Accoucheur to St. Thomas's Hospital.

COBBETT, L., B.A.Cantab, L.R.C.P., M.R.C.S., appointed Non-resident House-Physician to St. Thomas's Hospital.

COWEN, T. P., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

D'EVELYN, Alex. McNeill, B.A., M.B., B.Ch.Dubl.Univ., appointed to the Honorary Medical Staff of the Ballymena Cottage Hospital.

DICKSON, T. H., B.A.Cantab, L.R.C.P., M.R.C.S., appointed Assistant House Physician to St. Thomas's Hospital.

DUNLOP, J., M.B., B.Ch.Viet., appointed House-Surgeon to the Manchester Royal Infirmary.

FLYNN, D. J., M.D., L.M.K.Q.C.P.I., appointed Extraordinary Physician to the Cork Fever Hospital.

FORWARD, F. E., L.R.C.P., M.R.C.S.(Extension), appointed Resident House-Physician to St. Thomas's Hospital.

FOTHERBY, H. J., M.D.Lond., M.R.C.P., appointed Consulting Physician to the Metropolitan Hospital, Kingsland Road.

FOX, Herbert, M.B., B.C.Cantab., appointed Resident Medical Assistant to the Nottingham General Hospital.

GERVIS, H., M.A., M.B., B.C.Cantab, L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

GREEN, H. W. Gordon, M.R.C.S., L.R.C.P., appointed House-Surgeon to St. Mark's Hospital for Fistula, etc., City Road.

HERRON, J., M.D.Univ.Irel., L.F.P.S.Glasg., appointed Medical Officer to the St. Saviour's District Board of Works.

HEYWOOD, C. C., B.A., M.B., B.C.Cantab, L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Throat, St. Thomas's Hospital.

HUME, Fredk. N., L.R.C.P Lond., M.R.C.S Eng., Assistant Medical Officer, South-Eastern Fever Hospital, reappointed Medical Superintendent of the Northern Hospital of the Metropolitan Asylums Board, *vice* Dr. Bruce.

JERSEY, W. B. de, B.A.Cantab, M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Ear, St. Thomas's Hospital.

JONES, S. H., F.R.C.S., L.S.A.(Extension), appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

LAMBERT, T. W., B.A.Cantab, L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

LANKESTER, A. C., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

LEGATE, Robert Lloyd, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Christchurch Town Council.

LITTLETON, Philip R., M.R.C.S.Eng., reappointed Medical Officer of Health to the Ashbourne Local Board.

LOW, H., B.A.Cantab, L.R.C.P., M.R.C.S., appointed Senior Obstetric Clerk to St. Thomas's Hospital.

MACKINTOSH, Angus, M.D.Glasg., L.F.P.S., L.M., reappointed Medical Officer of Health to the Chesterfield Rural Sanitary Authority.

MEAD, G. B. O., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Newmarket Urban Sanitary District.

MITCHELL, Samuel, M.D., C.M.Edin., appointed Second Honorary Physician to the Plymouth Public Dispensary.

MUDGE, James, M.R.C.S., L.R.C.P.Edin., L.S.A., appointed Medical Officer of Health to the Penzance Rural Sanitary Authority.

PICKEN, J. P., M.B.Glas., C.M., reappointed Medical Officer of Health to the Rawmarsh Local Board.

PORTER, F. J. W., L.R.C.P.Lond., M.R.C.S., L.S.A., appointed House-Surgeon to the London Hos, ital under Mr. McCarthy.

PRINGLE, A. Y., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Throat, St. Thomas's Hospital.

RAMAGE, A., L.R.C.P.& S.Ed., and L.F.P.& S.Glasg., appointed Deputy Medical Officer to the North Bierley Union, Yorkshire.

SEQUEIRA, James H., L.R.C.P.Lond., M.R.C.S.Eng., appointed Assistant Medical Officer to the North-Western Hospital of the Metropolitan Asylums Board.

SHEA, J. G., L.K.Q.C.P.Irel., L.R.C.S.I., appointed Medical Officer for the Brampton and Walton Districts of the Chesterfield Union.

STABB, A. F., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

STEVENS, Percy Richard, L.R.C.P.Lond., M.R.C.S.Eng., appointed Public Vaccination Officer for the Beneden District, Cranbrook Union.

STOKES, W. G. G., B.A., M.B., B.C.Cantab, L.R.C.P., M.R.C.S , appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

TABOR, Charles J., M.B., M.R.C.S., L.R.C.P., appointed Public Vaccinator for the Illogan District, Redruth Union, Cornwall.

TAIT, Lawson, F.R.C.S., etc., appointed Bailiff of the Trustees and President of the Council of Mason College, Birmingham.

THOMPSON, T. W., L.R.C.P.Edin., M.R.C.S.Eng., appointed a temporary Medical Inspector under the Local Government Board.

TOLLER, S. G., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital.

TOOTH, Howard H., M.D.Cantab, F.R.C.P.Lond., appointed Physician to the Metropolitan Hospital, Kingsland Road, *vice* Dr. Fotherby, resigned.

WATKINS, H. E., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Manchester Royal Infirmary.

WESTMACOTT, F. H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Manchester Royal Infirmary.

WHITE, P. B., M.D., appointed Medical Officer to the Workhouse of the Boyle Union, and Medical Officer to the Boyle No. 2 Dispensary.

WICKHAM, G. H., B.A.Cantab, L.R.C.P., M.R.C.S.(Extension), appointed Clinical Assistant in the Special Department for Diseases of the Ear, St. Thomas's Hospital.

WOOD, F. L., M.B., B.Ch.Vict., appointed House-Physician to the Manchester Royal Infirmary.

DIARY FOR NEXT WEEK.

MONDAY.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Messrs. J. Bland Sutton and T. Charters White: On Observations on the Structure and Development of Ovarian Teeth. Casual Communications by Mr. Storer Bennett, Mr. W. F. Henry, Mr. F. J. Vanderpant, Mr. J. Ackery.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart: On Phosphorescent Organs and Colour in Nature. Lecture I.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, W., 4 P.M.—Dr. Hadden: On Birth Palsies.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Percy Kidd: On the Question of Operating on Fistula in Phthisis. Mr. Herbert Allingham: On Subacute Indurative Pneumonia.

TUESDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Arthur Ransome: The Milroy Lectures on the Etiology and Prevention of Phthisis. Lecture III.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Certain Rare Diseases of the Skin.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Mr. Spencer: 1. Mammary Carcinoma in a Cat. 2. Prolapse of Wall of Stomach of Horse into Duodenum. Dr. Dalton: Chronic Lateral Invagination of the Colon following a Small Cancerous Tumour. Mr. Bowlby: Diffuse Papilloma of Bladder. Mr. Robinson: Loose Body from Knee-joint. Mr. Griffiths: Necrosis and Separation of Articular Cartilage, with a Series of Microscopic Sections illustrating the Nature of Loose Bodies. Dr. West: Bronchial Casts from Bronchitis Cruposa. Dr. Collins: Cancer of Œsophagus Eroding Trachea. Card specimens:—Mr. Robinson: Cavernous Angioma of Leg. Mr. Lunn: Myxœdema of Larynx; Tumour of Larynx; Ulceration and Perichondritis of Thyroid Cartilage. Mr. Bidwell: Double Ureter. Mr. Shattock: Triple Ureter. Dr. Sibley: 1. Retroflexion of Uterus in a Monkey. 2. Specimens of Tapeworm from a Python.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart: On Phosphorescent Organs and Colours in Nature. Lecture II.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. P. Kidd: Demonstration of the Methods Employed in the Examination of the Sputum. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Q. Silcock: On Ophthalmoscopic Cases.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown. Dr. Herman: The Changes in Size of the Chest and Abdomen during the Lying-in Period, and the Effects of the Binder upon them. Mr. Alban Doran: Apoplexy of the Ovary; Cystic Dilatation without Rupture. Dr. E. Sinclair Stevenson: Case of Spurious Pregnancy simulating Ectopic Gestation.—Special business respecting the laws, etc.

THURSDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Arthur Ransome: The Milroy Lectures on the Etiology and Prevention of Phthisis. Lecture IV.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, 2 P.M.—Dr. Gowers: (Title of Lecture not received.) Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Hadden: On Infantile Hemiplegia.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, University College, Gower Street, W.C., 8.30 P.M.—Professor Schäfer and Professor Horsley: The Centres Controlling Ocular Movements.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Clinical evening. Cases will be shown by Dr. Cautley, Mr. Johnson, Mr. D'Arcy Power, and others.

FRIDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart: On Phosphorescent Organs and Colour in Nature. Lecture III.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. P. Kidd: Demonstration of the Methods employed in the Examination of the Sputum.

SATURDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars 2 P.M.—Dr. J. F. Payne: On Ointments and other Local Applications to the Skin.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

DEATHS.

BRANTHWAITE.—On February 11th, at his residence, Colman Hill House, Halesowen, Worcestershire, Harrison Branthwaite, F.R.C.S.Ed., aged 62.

DALE.—February 16th, at his residence, 163, Islington, Liverpool, Thomas Dale, L.R.C.P.Edin., M.R.C.S.Eng., L.S.A.Lond. Friends please accept this, the only, intimation.

OURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

GER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

TRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

RING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

LSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

AT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

ITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

ON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

ROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

LESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

ONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

H-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye. W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

. FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

WESTMINSTER OPHTHALMIC. *Operation Days.*—M. Th. F., 1.30; Tu. W. S., 2.

RTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

RK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

RY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

MAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

AN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

ITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

NDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

STER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C, London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

ANSWERS.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

SUMMER HOLIDAY.

DR. FRANCIS H. PARSONS (West Worthing) writes: If "Rustic" desires to take his summer holiday abroad I would suggest: 1. Normandy *viâ* Newhaven and Dieppe, and from Rouen down the Seine by steamer to Havre, Trouville, etc. 2. From Harwich *viâ* Antwerp and Brussels to the Ardennes, visiting Namur, Spa, and Dinant. 3. Holland and the cities of the Zuyder Zee.

Any one of the above trips would be found agreeable, interesting, and inexpensive. If "Rustic" likes to write to me I shall be pleased to give him further details.

LEPROUS FAMILY HISTORY AND MARRIAGE.

H. T. writes: A patient's daughter wishes to marry a young man whose father and brother both died of leprosy. The youth developed it while at school in England; the father died in India. Would it be advisable to permit the marriage, and is leprosy hereditary?

*** Inasmuch as the young man has probably been exposed to the same risks which developed the disease in his father and brother, it would be well to wait and see whether it may not yet be shown in him. The risk of inheritance by children (born in England) would probably be nothing. Leprosy is heritable only in the lands in which it is endemic, that is, it is probably not heritable at all.

NOTES, LETTERS, ETC.

ACTION FOR DISAPPOINTMENT.

IT is said by the *Medical Record* of New York that a woman has brought an action against a physician of Philadelphia because he positively pronounced her to be pregnant. Time proved his opinion to be erroneous, and damages are claimed for the "disappointment."

"BRITISH" NOT "ENGLISH."

SCOTUS ET BRITANNICUS SUM writes: Allow me to draw attention to the fact that, although Sewa Surgeon-Major J. G. Rogers is so careful of the mention of titles in his short "Notes on the Medical Organisation of the Egyptian Army," he no less than eleven times writes the term "English" for the term "British." Were the error verbal only I would not trouble you; it involves considerations of nationality and race ascendency. Habit, I know, largely explains it; but had habit led Surgeon-Major Rogers to address you as "The Editor of the 'English' Medical Journal" its absurdity would have been glaringly apparent.

LONG INTERVAL BETWEEN PREGNANCIES.

DR. H. D. KING (Sudbury, Suffolk) writes: Some time ago I was consulted by Mrs. E., aged 42, on account of irregularity of menstruation, she not having been "unwell" for a month or two. Looking to her age, and the fact that the younger of her two children was a youth of 20, I considered the case to be one of commencing "change of life." The possibility of the symptoms being due to pregnancy was, however, mentioned, but no examination of the patient made. I saw no more of Mrs. E. until the beginning of February, when her husband came down to me late in the evening, saying that his wife was taken with pains in the body, and he should be glad if I would go and see her. I returned with him; and, about fifteen minutes after my arrival in the house, the patient gave birth to a female infant.

The only point of interest in this case was the length of time (twenty years) that elapsed between the two pregnancies. This was so unusual that I consider it worth recording in a note to the JOURNAL.

CONGENITAL STRICTURE OF THE ŒSOPHAGUS IN A PUPPY.

MR. FREDERICK SMITH, L.R.C.S.I. (Royal Infirmary, Dublin), writes: On December 6th I received a puppy, a month old and the smallest of the litter,

but otherwise in good condition. The following day he vomited, and as long as he lived continued to vomit at intervals of varying lengths. The animal ate voraciously, yet always seemed ravenously hungry, and withal became thinner and thinner. Excretion *per* bowels almost absent. Food retained for some hours was eventually ejected in almost the same condition as swallowed. A fulness about the neck was thought peculiar to the bull-dog breed; it was noticed, however, that any accidental pressure on the neck usually excited regurgitation.

Obstruction of the gullet by a foreign body was suggested as a diagnosis, but dismissed in favour of gastritis due to cold, the presence of a severe concurrent bronchial catarrh lending plausibility to this theory.

Supported by milk enemata for a month he quietly expired a veritable skeleton. A *post-mortem* showed the œsophagus constricted like an hour-glass about the middle, scarcely admitting a pin (the specimen is still in my possession); above this a largely-dilated pouch, containing an ounce or more of undigested food, and considerably larger than the stomach, which was contracted, empty, with the exception of a little gall, and deeply corrugated, but perfectly healthy. The walls of the dilatation were distinctly thinner than those of the portion below the stricture; at the seat of obstruction they were so thin as to be almost transparent, the connection between the upper and lower portions being of the frailest character; a little less indeed and there would have been no communication between the two portions.

Intestines empty; gall bladder distended with bile; other organs normal. The kidneys, however, seemed abnormally large for the weight and age of the animal, so far as I could judge from my limited acquaintance with the anatomy of the dog. The excretion of urine was certainly out of all proportion to the amount of fluid ingested, but I am unable to connect this with the large kidneys.

To account for the animal's living at all I surmise that his dam's milk would trickle through the narrow passage, and thus he was almost as well off as his brothers; but the first solid food stuck against and effectually closed the minute orifice, and hence the sequel.

Physical Strength in America.

Many Englishmen will be surprised to learn that, according to the *Boston Medical and Surgical Journal*, Surgeon-General J. B. Hamilton recently stated, in the course of a lecture on "Ancient and Modern Physical Culture," that not one third of the population of the States, of a military age, could pass the examination of a recruit.

Invalids' Bedroom Fires: Economical Coal Fires.

A Yorkshire gentleman has discovered for his own requirements a method of keeping in a bedroom fire the whole night without mending. His bedroom, 18 feet by 18 feet, and 11 feet 6 inches high, having two large ordinary windows, has been kept during the entire winter at an average temperature of 58°. His fire is "made up" at 9 o'clock each night in the following manner: about 4 or 5 lbs. of coal are placed evenly on the top of an ordinary fire; over this, about 7 lbs. of very small coal, or rather coal dust, known at the Yorkshire pits as "smudge" are spread. Over the whole, 4 lbs of fine coal ash is evenly strewed, and "patted" flat with the bedroom fire shovel. This fire burns the whole night without any attention, and in the morning the resulting cake of mingled ash and coal dust is broken up, producing a bright blaze. The fire is kept in during the day by the addition of a little fresh coal, and a small quantity of ash strewed from time to time on the surface. The quantity of coal burnt in twenty-four hours is 14 lbs. of best house coals and 7 lbs. of pit screenings or "smudge." This quantity of house coal costs in Yorkshire $1\frac{1}{4}$d., the pit screenings $\frac{1}{2}$d., together $1\frac{3}{4}$d. for the night and day. The method has several incidental advantages: (1) it is economical, which, in these days of expensive coal, is important; (2) it will keep a bedroom at an average temperature of 58° during a whole night, without any "mending;" (3) it produces almost smokeless fires, since the layer of superimposed ashes appears to filter the smoke which passes through it from most of its solid carbon. When this layer is broken up, it is quite black with carbon, and glued together by the liquid products of destructive coal distillation. Since nothing is unimportant which tends to the economical nursing of patients, or to the purifying of the air of cities from smoke pollution, we place this method of fire-making on record.

To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the Journal brevity of style and conciseness of statement greatly facilitate early insertion We are compelled to return or hold over a great number of communications, chiefly by reason of their unnecessary length.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. W. C. Grigg, London; Dr. F. H. Parsons, Worthing; Mr. F. C. P. Howes, London; One of Many in Doubt; Dr. H. R. Swanzy, Dublin; Dr. S. Felce, London; Professor D. J. Hamilton, Aberdeen; Mr. T. L. Laxton, Bridgwater; A. D'Evelyn, M.B., Ballymena; Dr. E. Willoughby, London; A. G. Bateman, M.B., London; Mr. W. Astley Cooper, Rotherhithe; Dr. James Finlayson, Glasgow; Mr. F. H. Westmacott, Manchester; Mr. Lennox Browne, London; Surgeon-Major A. Sanderson, Harrogate; Dr. David Newman, Glasgow; Dr. H. Page, Redditch; Mr. H. Joslen, Macclesfield; Dr. A. Napier, Crosshill; Mr. G. Meadows, Hastings; Mr. P. G. Lee, Cork; Mr. Cantlie, Hong Kong; Mr. H. Caudwell, Oxon; Mr. M. Smale, London; Dr. L. Shapter, Exeter; Mr. R. Durdin, Hungerford; Mr. D. E. Wilson, London; Mr. W. Hubbard, Hastings; Dr. Thomas Partridge, Stroud; Dr. Norman Kerr, London; Juvenis; The Secretary of the Sanitary Assurance Association, London; Dr. H. B. Robinson, London; Dr. T. O. Wood, London; Dr. R. Fitzgerald, London; Mr. E. East, London; C. J. Tabor, M.B., Carn Brae; Mr. Charles Sheather, London; Dr. Johnson, Beaconsfield; Mr. A. R. Evershed, London; The Jersey Company, Stroud; Dr. J. W. Moore, Dublin; Mr. A. Miers, Scarcroft; Dr. A. Ransome, Bowden; The Secretary of Sanitary Institute, London: The Secretary of the University of London; The Secretary of the British Nurses' Association, London; Mr. E. T. Thompson, Shipston-on-Stour; Mr. J. Hutchinson, London; Mr. C. H. Byers, London; The Secretary of the Royal Statistical Society, London; Mr. G. B. Browne, London; Dr. James Cagney, London; Dr. G. E. Herman, London; Tell; Mr. A. E. L. Devonald, Cowbridge; Mr. W. F. Haslam, Birmingham; Dr. H. Waldo, Clifton; Mr. A. W. Riddell, Bath; The Director-General of the Army Medical Department; Mr. H. T. Evans, Blackwood; Dr. A. Duke, Eastbourne; Mr. C. Duclaux, Paris; Messrs. Oppenheimer, Brothers, and Co., London; Messrs. Street and Co., London; Mr. J. B. Berry, Cobham; Messrs. R. L. and J. L. Lodge, Birmingham; Constant Reader; B. Squire, M.B., London; Sir Thomas Longmore, Woolston; Dr. G. Thin, London; Mr. A. W. Flood, Bundoran; Dr. A. S. Luff, London; Mr. J. Gibson, Greetland; Dr. S. Martin, London; Dr. Ralph Stockman, Edinburgh; Dyspepsia; Mr. C. E. Paget, Salford; Member B.M.A.; Dr. W. Sykes, Mexborough; Messrs. Dulau and Co., London; Dr. W. Sellers, Radcliffe; Mr. Joseph Mack, London; Mr. G. Rendle, London; Dr. P. Z. Hebert, London; Mr. John Croft, London; Mr. J. Ackery, London; Dr. William Squire, London; Dr. R. D. Roberts, London; Dr. J. W. Hunt, London; J. O'Conor, M.B., San Luis, Argentine Republic; Mr. R. J. Downes, Dublin; Dr. A. Macdonald, Liverpool; Our Newcastle Correspondent; Mr. Lawson Tait, Birmingham; Senex; Mr. S. O. Eades, Ipswich; Dr. Robert Barnes, London; Henry Ross, M.B., Stratford-on-Avon; Our Paris Correspondent; Miles; Dr. A. Ramage, Bradford; Mr. A. C. Morton, North Walsham; Our Manchester Correspondent; Mr. E. Noble Smith, London; Mr. W. Hughes, Cardiff; Dr. W. A. Carline, Lincoln; Nemo; H. E. H. M.; A Member; Dr. E. Seaton, London; The Secretary of the Royal National Hospital for Consumption, Ventnor; Dr. Fulss, Nethertон; Mr. E. Pigott, Wadsley; Dr. J. Brown, Bacup; Mr. D'Arcy Power, London; Messrs. Branthwaite and Boome, Twickenham; J. K. Murray, M.B., Whittlesea, Cape Colony; Director-General of the Naval Medical Department, London; Dr. J. W. Byers, Belfast; Dr. G. Thin, London; Mr. G. C. Branthwaite, Birmingham; Dr. Louis Parkes, London; Mr. H. Martin Shorncliffe; Dr. G. Henty, London; Mr. F. J. W. Porter, London; Dr. R. Thorne Thorne, London; Mr. L. Jarchow, Balham; Dr. Arlidge, Stoke-on-Trent; Mr. T. Holmes, London; Mr. G. Preston, Saltash; Mr. W. Horrocks London; Mr. E. Slade-King, Ilfracombe; Dr. R. Wade Savage, London Mr. J. H. Sequeira, London; Dr. G. Buchanan, London; Dr. W. S. Lang Edinburgh; Dr. A. R. Manby, East Rudham; Dr. E. J. Edwardes, London Mr. E. Stanmore Bishop, Manchester; W. Gemmell, M.B., Belvidere, N.B. Mr. C. J. Weller, Stonehouse; Mr. J. Cornhill, Ilfracombe; Dr. Norma Kerr, London; Dr. Ridge, Enfield; Mr. J. Lawrence Hamilton, Brighton Mr. F. J. Gant, London; etc.

BOOKS, etc., RECEIVED.

Papers on Surgery, Pathology, and Allied Subjects. By F. Le Gros Cla F.R.S. London: Adlard and Co. 1889.

Wanderings in Search of Health. By H. Coupland Taylor, M.D. Lond H. K. Lewis. 1890.

The Natural History of Specific Diseases. By Edward F. Willoughby, M London: H. K. Lewis. 1890.

Zur Kenntniss der syphilitschen Erkrankungen. Von Dr. H. Oppenhe Berlin: August Hirschwald. 1890.

Le Femme pendant la Période Menstruelle. Par le Dr. S. Icard. Pa Felix Alcan. 1890.

Essentials of Forensic Medicine, Toxicology, and Hygiene. By C. E. Arm Semple, B.A., M.B. London: Henry Renshaw. 1890.

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EXTRACTS FROM

THE MILROY LECTURES

ON THE

ETIOLOGY AND PREVENTION OF PHTHISIS.

Delivered before the Royal College of Physicians of London.

BY ARTHUR RANSOME, M.A., M.D., F.R.S.,

Physician to the Manchester Hospital for Consumption and Diseases of the Throat.

LECTURE II.—THE TOPOGRAPHY AND DISTRIBUTION OF PHTHISIS.

Ubiquity of Phthisis.—Influence of Climate.—Variations in Countries; in Counties—Male and Female Phthisis Rates.—Areas of Immunity: a. *In Sparsely Populated Regions;* b. *Elevated Sites;* c. *Sub-Arctic Regions.—Influence of Subsoil.—Malnutrition.—Hardship.—Exposure to the Elements.—Occupation.—Dusts.—Stooping and Constrained Postures.—Variations of Temperature.—Ill-ventilated Workshops.—Rebreathed Air.—Tubercular Infective Areas.—Infected Houses.*

[T is not unreasonable to expect that a study of the geographical distribution of phthisis would lead us to the discovery of at least some of the fostering causes of the disease. Our chief sources of information as to the comparative prevalence of phthisis are contained in two great general works, Hirsch's *Geographical and Historical Pathology* and Lombard's *Climatologie Médicale;* but we are able to obtain some data from the *British Army and Navy Medical Reports*, from official statistics of disease in different countries, and from various works by individual medical men.

Lombard's comparative figures are not very satisfactory, as he adopts the fallacious method of comparing the number of deaths from phthisis with each 1,000 of the total deaths—a method that gives a lower ratio from consumption, the higher the general death-rate—and thus a place with double the rate of mortality from phthisis, as compared with another of the same population, may appear in the same grade with it, if only its total death-rate is also twice as great as that of the latter.

Many of the other statistics are also open to objection, but in a general survey, such as we propose to make, it may perhaps be permissible to make use of somewhat imperfect materials.

Hirsch's tables are the most trustworthy, as he gives the mortality from phthisis per 1,000 living, and the years to which the returns apply, together with his sources of information, which are always the best that can be obtained. I have thrown his principal figures into the form of a diagram, which exhibits graphically the variations in the complaint better even than the figures themselves.

The disease appears upon the death-rate of almost every nation. As both Hirsch and Lombard remark, "phthisis is a ubiquitous malady." If we look at the map of the world (page 524), in which various shades are made to denote the presence of the malady in greater or less abundance, it would appear that they are quite justified in their assertions.

With very few exceptions, the degrees of shading denoting variation of prevalence serve also to denote variations in the relative density of the population in different parts of the globe. In other words, in proportion to the numbers of the people aggregated together upon a given space of ground, so also is the rate of mortality from phthisis.

In Dr. Lombard's maps the only portions of the earth's surface from which colour is entirely absent are the arctic and sub-arctic regions, deserts, and high ranges of mountains, and it is precisely in those parts that human beings are fewest and most sparsely scattered over the ground.

In all the capitals of countries, and in the chief cities of Europe, Asia, Africa, and America, there is but little difference in the phthisis-rate, and what differences there are are not to be accounted for by difference in climate. (Diagram.) We are impelled to similar conclusions by a survey of the army and navy returns from all parts of the world.

In the light of our present knowledge of the essential cause of phthisis there is nothing surprising in our thus finding the disease wherever human beings are gathered together, for, so far as we know, the chief source of the organism that provokes the malady is the human race. If, however, we break up the figures presented to us into smaller groups—in other words, if we try to analyse the returns of the disease—we shall find out that it has its predilections, and by observing more narrowly its selection of favourite habitats and breeding grounds we shall obtain important indications that will guide us to a discovery of the conditions that determine its choice.

We have already seen reason in the almost universal presence of the malady to conclude that the ancient doctrine of its origin in a damp, changeable climate is erroneous. If we take the map of almost any country in the world, and shade its several provinces so as to denote the varying prevalence of the disease, we shall discover not only that a great variety of tint has to be used, but also that the dark parts alternate with the light, without any reference to geographical position, north or south, east or west. We may take the variations in different parts of England, avoiding the places whose returns might be vitiated from the presence in them of large hospitals. There are only two exceptions to this rule, namely, Hastings and Liverpool; the difference between the highest and lowest returns is more than 50 per cent., and in some the highest reading is more than three times that of the lowest.

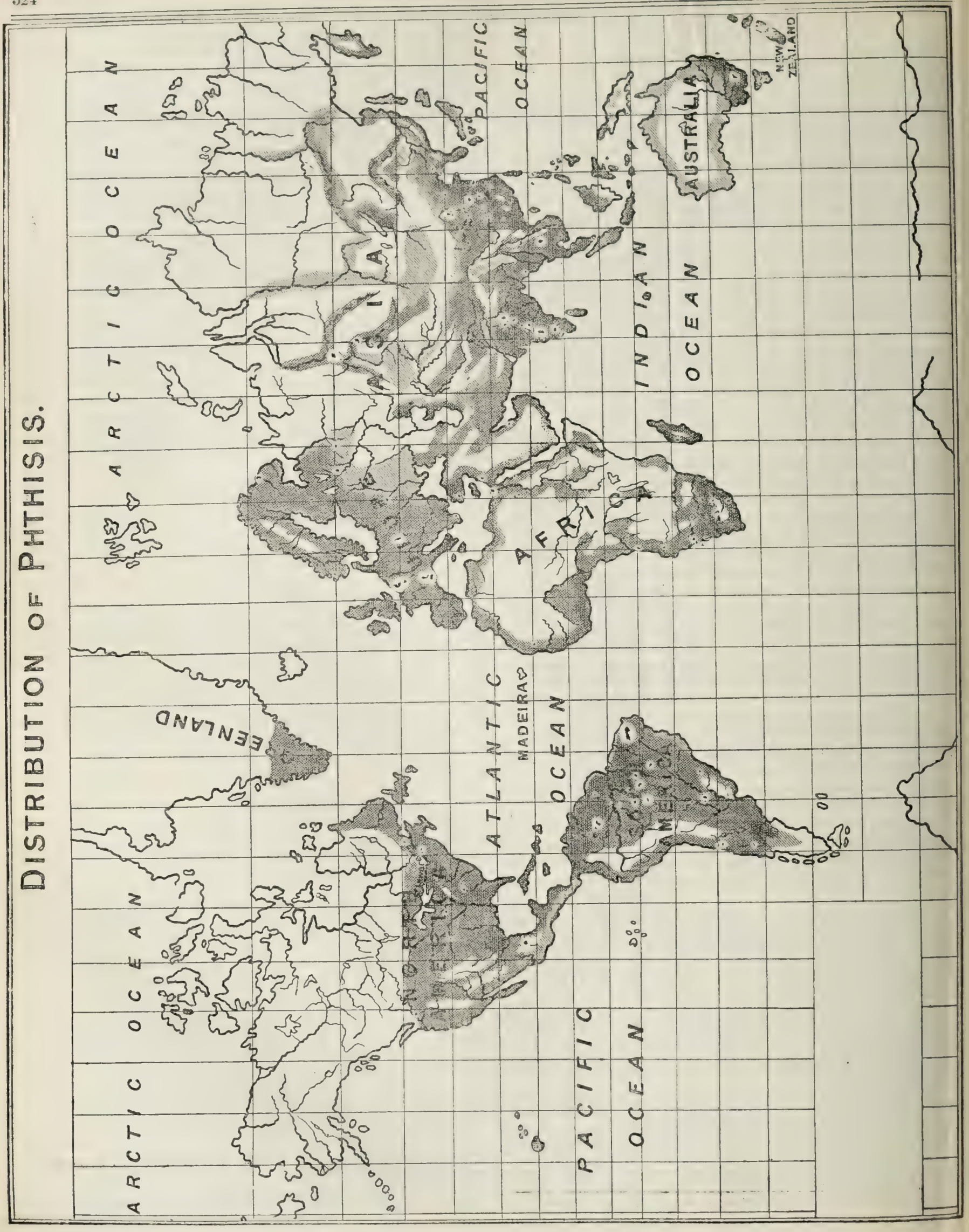
Variations in the Consumption Rate at Ages 15 to 55 per 100,000 living at those Ages (Males) (1861-70).

Counties.	Towns.	Highest.	Lowest.
Surrey	Guildford	526	—
	Farnham	—	242
Sussex	Hastings	(H) 643	—
	Battle	—	180
Oxford...	Headington	566	—
	Banbury	—	241
Cambridge	Whittlesea	469	—
	Wisbech	—	230
Norfolk	Walsingham	439	—
	Fligg	—	257
Wilts	Salisbury	438	—
	Mere	—	201
Cornwall	Redruth	461	—
	Launceston	—	223
Lincoln	Spilsby	361	—
	Caistor...	—	205
Lancashire	Liverpool	(H) 602	—
	Wigan	—	249
York	Reeth	589	—
	Settle	—	253

The same variation is to be found in other parts of the United Kingdom. Thus, in Scotland consumption is almost unknown in the Western Hebrides, but in towns on the west of the mainland, with a very similar climate and a similar race of people, it is very common. In Edinburgh the rate per 1 000 deaths is 102; in Glasgow, 371. In Ireland, again, the rate of mortality from the disease per 100,000 of the population in the ten years, 1865 to 1874, was in the eastern division, 259.62; in the western, 95.64. Similar variations are to be observed in other parts of the world. Lombard gives the number of persons dying of consumption per 1,000 deaths in different places as follows: In Canada the numbers vary from 241 in New Scotland to 138 in Quebec. In Russia, from 190 in Archangel to 30 in Riga. In Holland, from 141 in La Drenthe to 64 in Zealand. In Belgium, from 240 in Limbourg to 122 in Luxembourg. In Germany, Dresden 147; Weimar 74. In Italy, Milan 132; Turin 83. In Portugal, Lisbon 115; Malaga 54. In Egypt the general rate is 25, in Cairo 101. These variations cannot be due to climate, and probably arise from differences in the density of the population and in their mode of living.

But perhaps the strongest proof of the existence of causes much more powerful than climate in producing a tendency to consumption is to be found in the great differences between the male and female rates of mortality from the disease in the same towns and districts. In the following table I have selected from "Lowe's Tables" the male and female rates (1) in places where

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the male rate exceeds the female rate and (2) in places where the female rate is much the highest.

Annual Average Proportion of Deaths from Consumption between the Ages of 15 and 55 per 100 000 Persons living at those Ages between the Years 1861 to 1870.

Towns.	Males.	Females.	Differences.
Cambridge	570	395	− 175
Whitechapel	560	430	− 130
Bath	540	255	− 185
Greenwich	525	375	− 150
Brighton	520	345	− 175
Southampton	500	385	− 115
Birmingham...	475	345	− 130
Newcastle	470	395	− 75
Salisbury	410	305	− 135
Jedbergh	365	615	+ 250
Congleton	360	595	+ 225
Bootle	225	555	+ 330
Leek	355	525	+ 170
Belper...	275	455	+ 180
Buckingham...	275	455	+ 180
Sevenoaks	290	455	+ 165
Alston	285	425	+ 140
Tamelford	230	295	+ 65
Battle	180	365	+ 185
Pickering	160	315	+ 155
Hillesdon	120	265	+ 145

The differences between these figures, concerning two groups, male and female, of the population of the same places, constitute the main point of my argument at present, but I shall presently have occasion to return to them, and attempt to draw from them the other lessons that they teach.

In Lombard's maps we see that there are certain broad spaces untinted, showing regions still untainted by the disease. These spaces may be grouped broadly under three heads:—

1. Deserts, or sparsely populated places.
2. Mountains or high plateaux.
3. Arctic or sub-arctic regions.

It is not merely the scarcity of possible victims that makes the disease uncommon in deserts, for the proportion of cases to the number of inhabitants in these districts is also very low, so far as we can judge from the imperfect data at our command. Thus we are told by both Lombard and Hirsch that there is almost complete immunity from the disease in Nubia and Upper Egypt, that it is very rare in Abyssinia and Central Africa, in the capital town of Oran, with 25,000 inhabitants, it is practically non-existent, and Livingstone states that it is quite unknown in South Africa and in the interior of Cape Colony. It is rare in Asia Minor, Mesopotamia, Syria, Arabia, and Persia. In the steppes of Tartary, the interior of Australia, and in Tasmania, it is almost unknown.

There are, however, certain considerations, apart from the wide separation of these districts from one another, that prevent us from ascribing this freedom from disease altogether to the climate. These spaces are often bordered by regions where the disease is much more frequent. Thus in Asia Minor it is often met with with on the coast or in the principal towns. The Bedouins on the coast of the Red Sea, "who exchange their tents for stone-built houses," suffer from consumption.[1] In Syria it is met with at Aleppo, and in the Soudan at Khartoum. In Zanzibar it is said to be especially common among Arabian women of the higher class, probably on account of their seclusion. Whilst it is rare amongst the native Persians, who live an almost open-air life, it is more common amongst foreigners. In Algeria, whilst the nomad Arabs are free, "amongst the captives many die from the disease;" and in Egypt it is noted that whilst Syrians, Turks, Armenians, and Europeans seldom contract the complaint, Jews often become scrofulous, and die frequently of consumption. At Alexandria the mortality is nearly double that in England. In Australia it is almost as common in the large towns as it is in Europe. All these facts are significant of the influence of indoor life.

Again, we have to note the fact that in many parts of the world formerly almost free from the disease, it is now rapidly increasing in prevalence. Information to this effect comes to us not only from Australia, but from Greece, Brazil, New Zealand, and the United States of America. Some observers state (Hirsch) that consumption is unknown in the western prairies of Illinois, Missouri, Iowa, Wisconsin, and Utah, and also in the Rocky Mountains, but according to others it has of late begun to show itself much more frequently, especially amongst the female immigrants. The climate has not changed, but the conditions under which life is carried on, especially the crowding together of the inhabitants, have altered, hence the increase of the disease.

In all parts of the world, and in all climates, an elevated site seems to be to some extent a safeguard against consumption. The degree of elevation conferring this immunity was supposed by Gastaldi (who was one of the first to notice it) to be over 600 mètres—about 2,000 feet—the disease being as common just under that height as on the plains. But in Western Texas, at a height of 2,100 feet, consumption is not uncommon, and the same observation has been made respecting the elevated plains of Castille and Leon, and of the Styrian highlands.[2]

The population of these elevated regions is much less dense than that of the lower ground, and the air much less polluted with organic matter. That the immunity is not simply due to the rarity of the air is completely proved by Dr. Emil Müller, who has shown that there is no complete immunity from the disease in Alpine Switzerland. A certain proportion of the inhabitants of these high places die of the disease, the rate depending not upon the elevation of their dwellings above the sea, but upon the nature of their occupations. Industrial indoor pursuits give a rate varying from 6.5 to 10.2 per cent., and one of the highest of these rates (9.8) is at an elevation of 3,400 to 4,400 feet; at 4,400 to 5,000 feet, in mixed labour, the rate from the disease was 7.7 per cent. Here, then, we are obliged again to fall back upon the conditions of social life as a much more powerful factor than the influence of climate or locality.

It has been shown by Dr. Bowditch in America, and by Dr. Buchanan in England, that places situated upon a damp impenetrable subsoil are much more subject to consumption than those placed upon a porous soil; good drainage, also, has been found to diminish the prevalence of the disorder by as much as 50 per cent. These results have since been confirmed by Dr. Haviland and by the Registrar-General of Scotland.

And yet there is no necessary connection between dampness of soil and consumption. Dr. Buchanan's experience with respect to the influence of drainage of towns has not always been confirmed by other observers; thus Dr. Kelly, Medical Officer of Health for East Sussex, has shown that in 1861-70 the order of the several districts named by Dr. Buchanan had changed from that of 1851-60 without any difference of drainage. At Ashby-de-la-Zouche the mortality from phthisis rose 19 per cent. after the ground was drained. In Brunswick, according to Reek, "the mortality from consumption has not been greater in the wet parts of the town than in the quarters on a dry soil." "In Dantzig, where a system of main drainage was carried out fully in 1871, the death-rate from phthisis, which had been (according to Licoin) 2.12 per 1,000 in the eight years preceding (1861-70) rose in the nine years following (1871-79) to 2.48 per 1,000." "At Berlin, in like manner, no notable effect in the prevalence of phthisis can be traced to drainage of the ground,"[3] and Hirsch says: "It seems to me to be a more probable explanation that other etiological factors beside the influence of soil come into the account under the given circumstances—factors that have a modifying effect upon the amount of the sickness, and serve to neutralise the benefits even of the most favourable conditions of soil."[4]

Moreover, there are in different parts of the world large tracts of country that are excessively damp, many of them, indeed, wholly given over to malaria and to intermittent fevers, and yet these districts are so free from the prevalence of consumption that some Continental writers have supported the view that ague is antagonistic to phthisis.

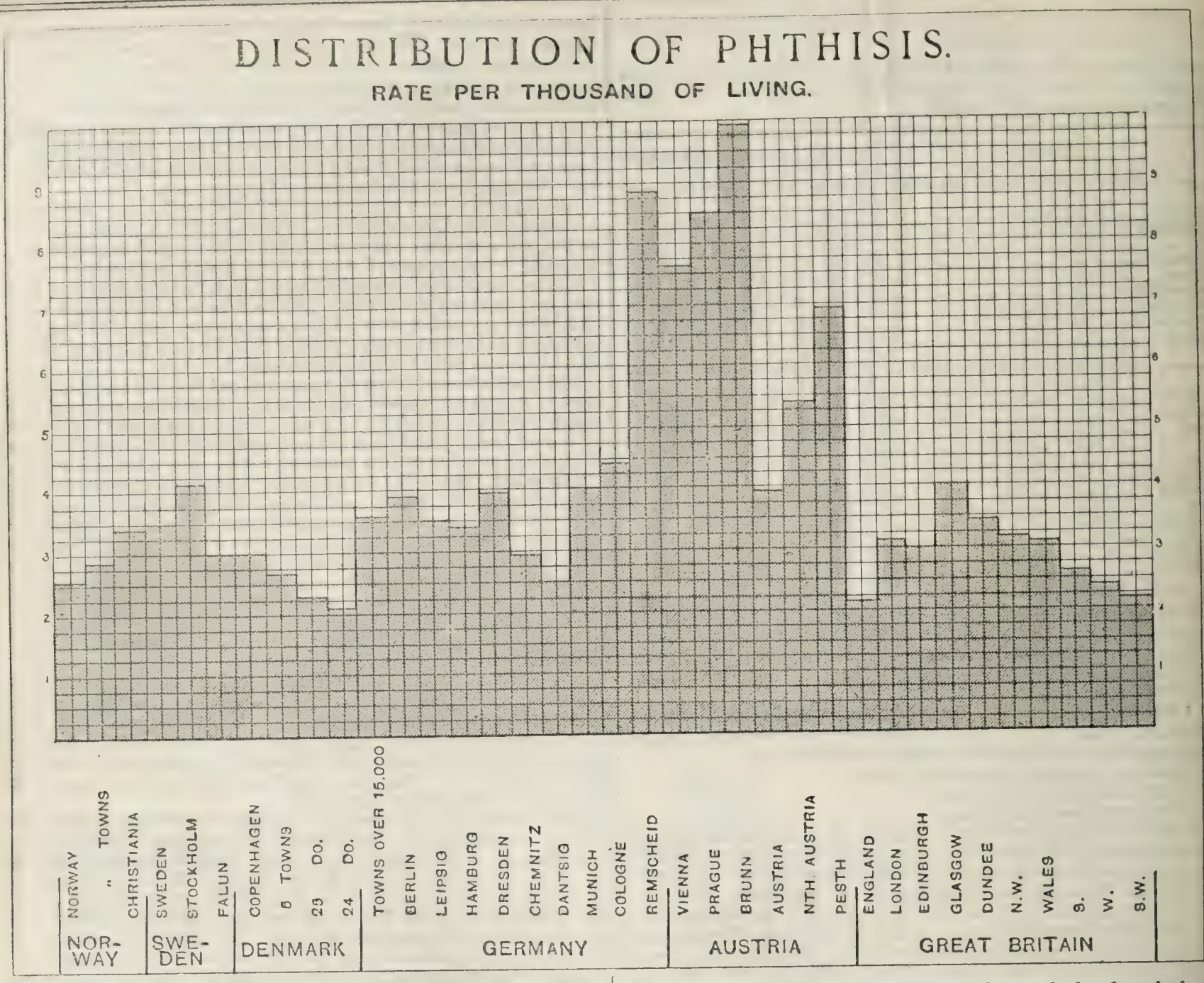
The last group of districts to a great extent exempt from consumption consists of the arctic and sub-arctic countries of Green-

[1] Hirsch, vol. ii, p. 65.

[2] Dr. Marcet has recently carried on a series of observations upon the influence of altitude upon human respiration which may throw some light upon the advantage of high levels in the treatment of phthisis (*Proc. R. S.*, vols. xxvii, xxviii, xxix, xxxi, and xlvi). He proves that the volumes of air required to yield the oxygen necessary for the production of a given weight of carbonic acid are smaller on mountains under diminished pressures than the plains under high pressures (the mean difference was 12 per cent.); and he concludes that the respiratory function is, therefore, carried on more perfectly at those heights than in the plains.

[3] Hirsch, pp. 203-4.

[4] Hirsch, p. 204.



land, Labrador, Iceland, Spitzbergen, Nova Zembla, Finland, Siberia, Canada, and the northern parts of the North American Continent.

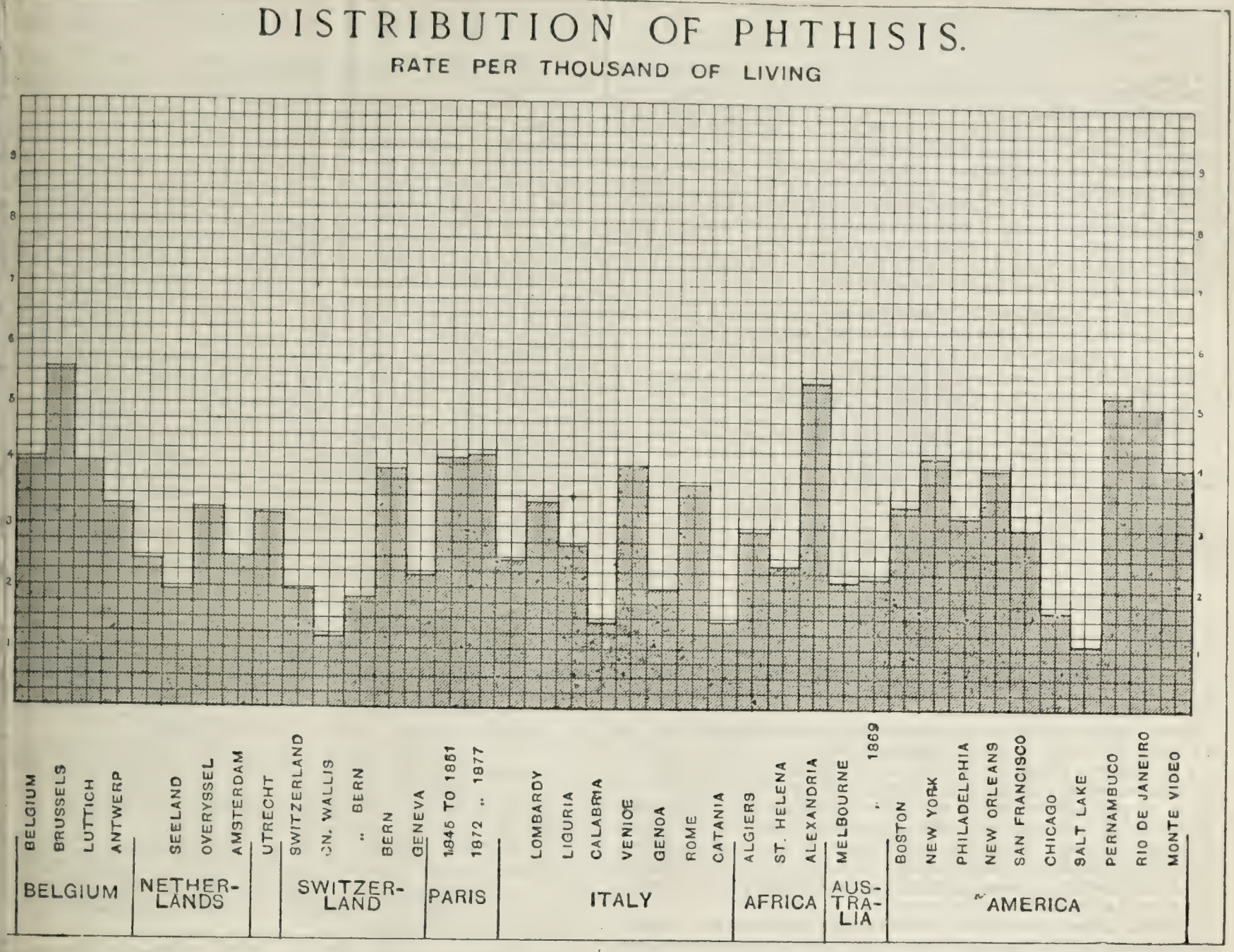
It is now certain that not only is there comparatively little consumption in cold climates, but that many people predisposed to the disease or actually consumptive derive great benefit from a sojourn in the keen, dry, cold air of Canada, or from a winter spent amidst snow and ice at Davos Platz or the Engadine. But it is not yet clear in what way a cold climate exerts this favourable influence; we may, indeed, surmise that the lower amount of humidity in the atmosphere of these regions may have something to do with the result; cold air has a much smaller capacity for aqueous vapours than warm air. It may thus be less capable of sustaining the life of the microscopic organisms that are the exciting cause of consumption; or, again, it is possible that there are smaller quantities of organically charged vapours arising from the ground, frozen as it is for so large a portion of the year. Moreover, in a frosty air the condensed moisture may entangle the organisms in its meshes, and may carry them down out of harm's way.

But all these suggestions are mere guesswork, and there are as yet no certain proofs as to the mode in which the tendency to consumption is lessened in these regions.

Here again, also, we must note the circumstance that all these countries are very sparsely populated, and that there is, therefore, comparatively little respiratory impurity constantly floating in the air; moreover, just as it was found possible for men to override the beneficial influences of an elevated site, so in cold climates also they may live under conditions such as will lead to consumption as certainly as in less favoured countries. The Esquimaux are not seldom affected by consumption, and the fact is hardly strange when we consider the mode in which they exclude all the air they can from their crowded huts. In Greenland phthisis is one of the commonest causes of death, and similar reports come from New Archangel and Alaska. In Canada also the mortality from this disease amongst the troops in the years 1830 to 1837 was no less than 23 per 1,000 of strength, while in healthy districts in England and Wales, at ages corresponding to those of the soldiers, the rate was only 7.7. In all England the rate was 9.2; and in Manchester, with all its unfavourable surroundings, it was 12.4, little more than half the military rate in Canada. The cause of this heavy mortality was discovered to be bad drainage and want of proper ventilation of the barracks, and after these defects had been remedied from 1863 to 1872 the rate was 9.49, and in 1874 it was only 6.0.

We may next inquire statistically into the influence of malnutrition. It is not surprising that at one time tubercular disease should have been ascribed to some form or other of bad nutrition, and especially to a deficiency of fatty food. Thus it was found by M. Marc d'Espine that, at Geneva, in every 1,000 deaths amongst the poor, 233 were from consumption, whilst of the rich only 68 were from this disease.

The terrible mortality from phthisis that prevailed at one time amongst the finest soldiers of the British army was certainly not brought on by starvation or misery. It occurred for the most part when they were not on active service, but in the time of peace, when they were well fed and well cared for, so far as their bodily comfort was concerned, far better in fact than the half starved workpeople and labourers, who only died of the disease at one-third the rate that they did.



Similar remarks, so far as the army and navy are concerned, ould apply to the next series of supposed causes of consumption, mely, hardship, exposure to the weather, and cold.

The poor fishermen of Iceland, the hunters and trappers of rth America, the nomad tribes of Asia and Africa, the wretched tives of Australia, all these people escape the disease almost en-ely, whilst one-third of the deaths of the well protected, well thed adult inhabitants of towns are from this cause. The ghlanders who inhabit well-built houses on the mainland of otland are subject to the same rate as the other inhabitants, hilst the ill-fed, ill-clothed fishermen of St. Kilda and the brides, who are of the same race, hardly ever contract the ease.

It is very doubtful whether exposure to the elements, taken ne, is a common cause of these inflammatory attacks of the spiratory passages. We do not find that men who are much in open air, and exposed to all vicissitudes of weather, are espe-lly prone to catarrhal affections of the lungs.

A close inquiry into the figures laid before us gives not only gative but positive information as to the secondary causes of nsumption, and we may safely draw the following conclusions m them:

. That the occupations of a people have an important influence r the disease.

. That its fatality increases with the herding together of ulations in large towns.

The mere fact that, in most countries where manufacturing cesses are carried on, the worst places are seen to be the manu-turing centres, would in itself be sufficient to rouse suspicion on s head.

In our own chart the two highest columns of disease are those of Brunn, in Austria, and Remscheid, in Germany, and both of these are actively engaged in manufacture, the former of woollen goods, and the latter of iron and steel. Nor are we left without direct testimony on this point: Drs. Headlam Greenhow and Arlidge in England; Finkelburg and Schweig in Germany; Meynne in Belgium; Boudin and Chatin in France—all these observers concur in attributing a malefic influence to certain kinds of work. In his report to the Privy Council in 1858, Dr. Headlam Greenhow pointed out the influence of occupation as a cause of pulmonary disease, and in 1860 and 1861 he followed it up by two admirable special reports upon the subject.

Without going into the minutiæ of these reports, it may be sufficient to summarise his conclusions as to the conditions that render workpeople peculiarly liable to these diseases by arranging them under four principal heads:

1. The inhalation of dusts of various kinds.
2. Stooping postures at work.
3. Exposure to changes of temperature.
4. Bad ventilation.

In considering the etiology of phthisis we are bound to follow the example set by Dr. Greenhow, and to decline to accept the figures placed before us as due to true tubercular disease. It is needful to attempt to distinguish between the direct effects of the occupation itself and those of the ordinary modes of life of the worker.

With these reservations, we may turn to the conditions mentioned as causes of pulmonary disease. It is certain that the kind of disorder at first produced by inhalation of dust is not true

phthisis. Various forms of these pneumonokonioses have been described arising from particles of coal dust, steel filings, dust from stone, glass, or porcelain, and even from tobacco and cotton flue. Doubt has been expressed as to whether most of these cases are not truly tuberculous (notably by Hilton Fagge); but those who have had much to do with such patients cannot share this opinion. I am quite sure that there are many cases of cirrhosis or fibroid disease of the lung, sometimes produced by irritating dusts, at others by pleuritic attacks often repeated.

But even if we assume that many workpeople commence with simple irritative diseases, we cannot refuse to recognise their trades as truly causes of consumption if we find that large proportions of those who work at them ultimately fall victims to that malady. All dusts, however, are not equally hurtful. The following list, abridged from Hirt's tables, show how greatly the incidence of phthisis from this cause may vary.

Percentage of Phthisis in total numbers of Sick amongst Workmen exposed to the Inhalation of Dusts of various kinds.

Metallic.		**Mineral.**	
Needle polishers	69.6	Flintworkers	80.0
File cutters	62.2	Grindstone makers	40.0
Lithographers	48.5	Stonecutters	36.4
Grinders	40.4	Plasterers	19.0
Dyers	25.0	Porcelain makers	16.0
Painters	24.5	Potters	14.7
Printers	21.6	Masons	12 9
Tinkers	14.1	Cement makers	8.0
Vegetable.		**Animal.**	
Cigarmakers	36.9	Brushmakers	49.1
Weavers	25.0	Hairworkers	32.1
Millers	10.9	Turners	16.2
Bakers	7.0	Buttonmakers	15.0
Mixed.		**No Dust.**	
Glasscutters	35 0	Shoemakers	18.7
Glassmakers	17.8	Glovers	10.0
Day labourers	15.1	Butchers	7.9

It is evident from this list that the sharpest and most irritating dusts are those that tend most surely to produce lung disease, ending eventually in consumption.

There are some differences between the arrangement of the trades in the order of their degrees of danger, as given by Hirt and by others; thus Eulenberg, in the *Handbuch der Gesundheitswesen*, with regard to the mortality in Prague, gives the order of phthisis mortality as follows: Bookbinders, goldsmiths, glovemakers, stonecutters, printers, turners, waiters, forgemen, locksmiths, bakers, joiners, potters, barbers, coopers, musicians, braziers, shoemakers, varnishers, tailors, furriers, weavers, masons, butchers brewers, tanners, mountaineers, gardeners, millers, room-decorators, shipbuilders, coachmen.

The differences between the several sets of statistics are probably due to variations in the conditions under which the several classes of artisans did their work, but they add to our reluctance to receive the figures as evidence of the influence of the occupations themselves, and make it probable that the conditions in question had at least as much to do with the result as the occupations themselves.

The next great exciting cause of phthisis mentioned by Dr. Greenhow is the interference with the respiratory apparatus by posture, and he adduces as evidence the heavy mortality of the women and girls employed in the lace and hosiery finishing and winding rooms at Nottingham, the watchmakers of Coventry, the handloom weavers of Macclesfield and Leek:—

Death-rate per 1,000 living from Pulmonary Affections.

	Males.	Females.
Nottingham	8.13	7.03
Coventry	6.61	5.73
Macclesfield	7.43	8 51
Leek	7.80	8.51
Six Northern Standard Districts	2.97	3.04

On the other hand, it is only right to notice the observation of Rokitansky, Wagner, and others, which has been generally confirmed by experience, that hunchbacks are but seldom affected by tubercular disease of the lungs.

Exposure to variations of temperature, moisture, etc., includes the third class of conditions that, according to Dr. Greenhow, render workpeople peculiarly liable to pulmonary disease, and he especially instances the case of slipmakers in the potteries and the spinners of flax, who are naturally exposed to heated and moist atmospheres, and the workpeople in over-heated factory rooms.

Most, if not all, of the conditions that we have found to lead to consumption have had associated with them air rendered impure by breathing, and allowed to stagnate through want of proper ventilation. Dr. Greenhow's inquiry in 1860 led him to the conclusion that "in proportion as the male and female populations are severally attracted to indoor branches of industry, in such proportion, other things being equal, are their respective death-rates by lung disease increased." He instances especially as occupations injurious in this regard: (1) The making of earthenware and china, as at Stoke-on-Trent and Wolstanton; (2) tin and copper mining (Penzance and Redruth); (3) lead-mining (Redruth); (4) flax factories (Pateley Bridge); (5) silk-working (Macclesfield and Leek); (6) wool factories (Leeds, Bradford, etc.); (7) the making of hosiery (Leicester and Hinckley); (8) cotton factories (Preston); (9) lace making (Towcester and Newport Pagnell); (10) straw plaiting (Berkhamsted); (11) glove making (Yeovil).

This is a long list, and it already contains several of the trades whose tendency to phthisis had been set down mainly to other causes, notably the potters of Stoke-on-Trent, whose illness had been ascribed to dust; the silkworkers of Macclesfield and Leek, who were supposed to have suffered from stooping during their work; and the spinners of flax, who were also exposed to variations of temperature; but, in truth, Dr. Greenhow's reports abound in notices of the bad ventilation of all kinds of workrooms, and instances of the good effect of ample cubic space and of free currents of air.

But perhaps the most striking proof of the influence of confined air in the production of consumption is to be found in the relative death-rates from this disease amongst males and females respectively, which have already been given. The greatest range of difference in these rates is found in the agricultural districts, where the men are mostly employed out of doors, and are but slightly affected, whilst the women are employed at home, and die of consumption at twice the rate of the men; I would especially instance Battle, Pickering, and Billesden.

We are thus led inevitably by the statistics to the reason for Dr. Greenhow's second proposition, that "the fatality of lung disease increases with the herding together of populations in large towns," and this is that the truly infective impurity of the air must be in some sense a respiratory impurity.

In one of his early letters to the Registrar-General, Dr. Farr gave some statistical evidence to show that the mortality from diseases of the respiratory organs and from phthisis is in direct ratio to the density of population. The following table is drawn from the annual report:—

Mean Mortality in Three Groups of the Thirty-two Metropolitan Districts, 1839.

Districts.	Square Yards to one Person.	Annual Rate per 100,000.		
		Totals.	Respiratory Organs.	Phthisis.
1 to 10	57	3,321	822	478
11 to 20	78	2,839	768	451
21 to 30	217	2,169	588	354

But the truth was hardly fully accepted until Dr. McCormac took up the subject, and with iteration insisted that "wherever there is foul air, unrenewed air, impure air.....there we meet consumption; there we meet scrofula and an untimely death."

The ravages committed in the ranks of the army by pulmonary disease are to be traced in a great degree to the vitiated atmosphere generated by overcrowding and deficient ventilation, and the absence of proper sewerage of barracks. In reference to this Dr. Farr said: "The prevalence of phthisis in the armies of Europe is probably due in part to the inhalation of expectorated tubercular matter, dried, broken up into dust, and floating in the air of close barracks," and Dr. Parkes remarks that this prevalence "can scarcely be accounted for in any other way than by supposing the vitiated air of the barrack room to be chiefly at fault."

But we have still not quite reached the limit of the aid to our inquiry that may be obtained from statistics of disease. We may push our investigations into still closer quarters, and, abandoning total death-rates of institutions and towns, we may examine into the mortality of certain districts and even of certain houses. In a paper on "Tubercular Infective Areas," read two years ago before the Epidemiological Society, I gave the details of an inquiry made into the incidence of phthisis in some of the worst districts of Manchester and Salford, an inquiry that was greatly facilitated by the medical officers of health of those boroughs and by the excellence of the mortality tables which they placed at my disposal. Its results showed that the portions of these districts most affected by the disease were the close courts and alleys, the shut-in or blocked-up lanes, and, above all, the houses built back to back, with no through ventilation. I especially noted the cases in which, in the space of five or six years included in the inquiry, double or treble occurrences of the disease had taken place in the same houses, and I found them very numerous. These results have been confirmed by other observers; thus, Dr. Niven, of Oldham, writes to me respecting 3,001 deaths from tuberculosis which occurred in that town during eleven years (1877 to 1887), and states that they took place in the worst class of houses, and in 302 cases there were two or more in a house. He has calculated mathematically the chance of any one house being twice affected (not infectively), and he finds that only 68 on this hypothesis would have thus suffered, whereas 274 were so attacked: and whilst the chance of thrice suffering was only 7.6, 24 were so affected.

Again, Dr. Flick, of Philadelphia, has recently carried out an elaborate topographic study of phthisis in that city, extending over a period of twenty-five years, and he draws the following conclusions:—

1. "That a house which has had one case of consumption will probably have another within a few years, and may have a very large number of cases in close succession."
2. "That when a case of consumption occurs in a house, approximate houses are considerably exposed to contagion."
3. "That houses in localities where endemic after endemic has existed have nevertheless escaped the disease."
4. "That tuberculosis of different kinds occurs in the same localities and often in the same lots as consumption."
5. "That during the twenty-five years scarcely 20 per cent. of the houses of the ward were so affected."

He ascribes these results to contagion in the houses themselves. These facts must be placed in apposition with Dr. Cornet's researches upon the bacillus-holding properties of the walls of houses in which consumptive patients have resided. They probably afford an explanation of many of the facts detailed in the course of this lecture.

REMARKS
ON
SOME FACTS ILLUSTRATING THE EARLY STAGES OF LEPROSY.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
President of the Royal College of Surgeons.

(*Continued from page 343.*)

THE cases which I gave in my last paper were published in order to illustrate, amongst other points, the mode in which leprosy first reveals itself. There is no doubt that there has arisen quite recently a tendency to revert to the old and utterly exploded idea that leprosy is a disease which spreads by contagion. This has been due to several circumstances: first, the discovery of a bacillus which at once placed the disease by the side of tuberculosis and other infectious maladies; secondly, the reported success of inoculation in the case of the Sandwich Island convict, Keanu; thirdly, the seemingly inexplicable character of the recent outbreak in the Sandwich Islands; and lastly, the publication of two or three reputed instances of observed contagion, notably the Dublin case. It becomes, therefore, in view of the revival of this opinion, to ask whether there is anything to be noted in the early stages of the disease which favours it, or in any way explains the mode of supposed transference. If leprosy can be transferred from one individual to another, is such transference affected through a lesion in the skin or mucous membranes, or is it by lung-inhalation? Is the disease contagious in the proper sense of the word, or is it infectious? Or lastly, do the clinical facts oppose the belief in either.

My first proposition shall be: *That there is no evidence whatever in support of the belief that leprosy ever has a primary lesion, or that its transference is effected by means of a sore on the external parts.* There is never anything which corresponds to the chancre in syphilis or the ulcer in malignant pustule. Not even the most zealous advocates of contagion have ever described any such occurrence. It is, indeed, remarkable how uniformly the discussion, or even the mention, of such a possibility is avoided. The conclusions to be derived from a perusal of the cases which I have published are, I may here say, in precise conformity on this point with those of all previous observers who have attended closely to the matter.

There remain open to debate as to the early manifestations of leprosy only a few, and those comparatively unimportant, points. All agree that by far the most common revelation of the malady consists in the appearance of one or more dusky patches of erythema in the skin. These patches multiply, and after a longer or shorter time are developed symmetrically, and over all parts of the limbs, face, and trunk. All such patches assume after a time the characteristic features of anæsthesia in their centres. The first patches are often so insignificant that they are overlooked by the patient; indeed, this is the usual event. Leprosy is seldom suspected until it has been in active existence for several years—a fact of no little importance in connection with the present demand for the systematic segregation of lepers in order to prevent contagion.

The brown patch above described as the first manifestation may in the first instance be a single one; indeed, if discovered soon enough, it probably is so usually. It may remain single for long, that is, for some months—possibly, in rare instances, for a year or more. In such cases the suspicion may arise that this patch is itself the primary lesion, and that the poison is breeding in it prior to its general diffusion. Not improbably the latter half of this proposition is true. We may with much probability suspect that the bacilli of leprosy do multiply in its patches rather than in the blood, and that, gaining access to the substance of wandering cells,[1] they are by them carried to other parts. Thus each patch may be a focus for increased contamination.

In this feature leprosy probably has analogies with infective tuberculosis, with multiple lupus, and a host of other diseases. It does not follow, however, from this admission that the first patch of erythema which appears is the primary lesion of the disease or that it has itself begun from local poisoning. Such a view of the facts is negatived by the following considerations: First, there is never any history of a local sore or injury having preceded the patch, the epidermis of the patch is always unbroken, and the changes always begin in the deeper layers of the skin. Secondly, it is common for these primary patches to appear on several parts of the body simultaneously; they may be quite symmetrical. Thirdly, the patches which are to follow will all be usually similar in all features to the original one. It seems, therefore, far more probable that the early erythema patches of leprosy are due to implanation of the bacilli from the blood than from external contagion. I have at the present time under observation a case which gives point to the above considerations. A boy of 12, born of English parents, in a leprosy district, has a single patch on one forearm of unmistakable character. It is not bigger than a shilling, has dusky, slightly scaly edges, and a whitish anæsthetic centre. On the most careful inspection of the whole surface no other patch can be found anywhere. If there is any exception to this statement it is that the skin near to the patch is at one point a little discoloured, in a manner suggestive of a commencing satellite. Would it be good practice to treat this patch—which I may add has been recognised for a year, and is spreading very slowly—as a primary lesion, and destroy it by cautery or excision? That it is likely to prove infective I do not doubt, but that it is primary in the sense of being of local origin I cannot believe. Probably the lepra bacillus already exists in the boy's blood and tissues at other parts, and is undergoing its slow development, and will in due time make its appearance, irrespective of the removal or otherwise of this. In spite of this latter consideration I must admit,

[1] The bacillus is not believed to possess any independent power of movement from place to place.

however, that the removal of the patch might materially reduce the probability of rapid extension of the disease. It is to be regarded, if not as the primary (and certainly not), yet as undoubtedly a secondary source of infective spreading.

If I may be permitted a little digression from my topic, I may here remark that diseases of the lupus family appear to me the closest congeners of leprosy that we can at present find in our nosological catalogue. They are, of course, in turn allied to tuberculosis. There was a time, prior to Hansen's discovery of the bacillus, in which I was inclined to call leprosy "fish-eaters' gout," but I should now prefer to name it "fish-eaters' lupus," or, perhaps better, "fish-eaters' tuberculosis."

The cases of lupus which came closest to leprosy are those in which the process is rapidly and extensively infective. A certain degree of manifest infectivity—the production of satellites, a spreading edge, etc.—are inseparable features of all forms of lupus. There are, however, rare cases, both in the vulgaris and the erythematous varieties, in which infection is very rapid and extensive, and the patient becomes covered with patches, which may be located with a certain amount of symmetry. Of this I published, with an illustration, a very remarkable example in my lectures on lupus in this JOURNAL two years ago. In this instance a young boy became covered on limbs, face, and trunk, with large patches of non-ulcerating lupus, which all developed apparently from the infection of one which was, in some sense, primary. This was an example of extreme multiplicity in lupus vulgaris, but there are also cases of lupus erythematosus in which the processes very closely resemble those of leprosy. The differences between the bacillus of leprosy and that of tuberculosis are, although definite, very slight, and may possibly be only acquired and temporary. It is well known that tubercular affections of the lungs are a common cause of death in lepers.[2] We must not rely too confidently on the permanent specificity of species in bacilli.

Returning from this digression to the consideration of the first or early stages of leprosy, it may be convenient to repeat what I have already said, that this malady is one and the same everywhere; that the several adjectives in use—macular, tuberculous, anæsthetic, etc.—have reference not to true varieties, but only to different phenomena in the same case. These phenomena, it may be admitted, are often conspicuous in very different degrees at different stages. No case of leprosy ever begins by anæsthesia or by the so-called tubercles. All cases are in the first instance macular. Such, at least, is the opinion which I have formed from a careful examination of the facts. All cases are anæsthetic more or less; anæsthesia being a necessary sequence of the erythematous inflammation of the skin, which is the first and throughout the commonest feature by which leprosy shows itself. We shall never get rid of the term tubercular in connection with leprosy; yet it is to a large extent a misnomer, since what are named tubercles occur almost exclusively on the face, are almost always produced when the face is attacked, and consist chiefly of folds and bosses of erythematous hypertrophy of the skin. Conditions which may properly be called tubercles are certainly rare. As regards the so-called anæsthetic leprosy, I find the term somewhat loosely used by authors. It is obvious that in leprosy anæsthesia may be produced in two different ways. In one, the erythematous inflammation of the skin disorganises the end-organs, and thus produces inability of perception; in the other, a process of neuritis disorganises a nerve, others produce incapacity for conduction. The first form of anæsthesia is constantly observed in the centre of leprosy patches, and spreads as the disease advances, varying, however, very much in degree. It is invariably present in leprosy. It may be distinguished at once from that caused by neuritis by the observation that the anæsthetic areas do not correspond with the distribution of nerves. The anæsthesia consequent upon neuritis of large trunks is always located according to the anatomical distribution of those trunks, it is usually almost complete, and it is often attended by muscular paralysis also. When the latter is present we may always, I suspect, assume that neuritis has produced it, for, unlike the skin, the muscles do not themselves suffer. It is yet an open question whether neuritis is ever a primary condition in leprosy; that is, whether it ever precedes the changes in the skin. We have plenty of evidence that skin changes usually precede neuritis, in fact, there can be but little doubt that in almost all cases the neuritis is simply an extension from the peripheral organs[3] a neuritis ascendens. In most cases when the disease is well advanced both conditions are usually present together. The only point under debate is, I repeat, whether there are any in which neuritis is the first stage. Can the leprosy bacillus locate itself in the nerve trunks in the first instance? It is not easy to answer this question, for exact observations are not numerous. Of this there can be no doubt, that complete paralysis of a single nerve in consequence of neuritis not very infrequently occurs in an early stage of leprosy. The ulnar nerve is almost always the one first implicated, but it may be any one of those supplying either the arm or leg.

A case which I have had under observation for some years, and which has recently ended in death, well illustrates several of the assertions just made. As I shall have to refer to it repeatedly, I will for convenience name the boy "Davies." This lad was first brought to me in 1879. He was then 12 years of age. His father was, I believe, dead, and his mother came with him. He had lived in India, but both his parents were English. They were in comfortable circumstances, and he had been well fed and cared for. It was not known that he had ever been in the company of a leper.[4]

The sequence of events as regards his malady was very instructive. For two years before I saw him he had been under the treatment of distinguished nerve-specialists for paralysis of the left ulnar nerve, and without any suspicion being entertained that the case was one of leprosy. It may from this fact be assumed that the changes in the skin were insignificant. They had been wholly overlooked. The paralysis of the ulnar nerve, the wasting of its muscles, and the anæsthesia of its skin territories were absolute. The nerve itself was enlarged to three times its natural size.

Although, however, neuritis had obviously occurred early and had in some sort taken precedence of the skin lesions, yet there were reasons for doubting whether it was really primary. At the time that I saw the lad there were unquestionably extensive areas of leprosy erythema, and on questioning his mother there seemed reason to believe that some of these had preceded the neuritis. They had, however, been but trivial, and she had never shown them to the physicians whom she had consulted for the nerve paralysis. Those who incline to use the term "anæsthetic leprosy" for cases in which nerves are involved might certainly have claimed this patient, as he was when I first saw him. His face was then almost free from change, and so also the greater part of his limbs and trunk. Subsequently, however, erythema spread over the whole surface, attended with considerable infiltration and thickening, but for a long time no tubercles. At length the face was after several years more severely attacked, and then was developed one of the most hideous examples of tubercular leprosy which it has ever been my lot to see. The eyes and the tongue were also attacked, and before his death the larynx also. The whole duration of the case was thirteen years, from 1875 to 1888. It was, as I have said, at first macular, then anæsthetic, and finally tubercular. Such, I believe, is the usual sequence of events in leprosy, and most unhesitatingly do I assert that all cases if carefully observed over long periods are mixed forms, the development of anything really deserving the name of tubercles being usually late and decidedly exceptional. Views very similar to these, though possibly less explicit, have been expressed by many observers who have had special opportunities for studying leprosy.

Nothing is easier than to classify the inmates of a leper house on any given day as "anæsthetic," "tubercular," and "mixed," according to the conditions which seem to preponderate at the time; but if the same patients be examined a few years later, they will be found to have changed their type. I regard it as a not unimportant simplification of the subject to assert that there are no real varieties of leprosy, that it is everywhere and always the same disease, and that the various adjectives which have been applied to it denote only temporary stages and changing features of the same case. Although a dusky erythematous patch is, I think, in nine cases out of ten the first symptom of leprosy, it may be granted that there are cases in which the erythema is

[2] Attention has recently been drawn to this fact by Dr. Beavan Rake, a gentleman who, availing himself of his opportunities as medical officer of the Leper House of Trinidad, has written some excellent papers on the pathology, etc., of the disease.

[3] See an important paper by Dr. Allen Sturge in *Brain* on this subject.

[4] As an illustration of the difficulty in getting trustworthy evidence as to dietetic habits, I may mention that on the occasion of his first visit I put to his mother, in the boy's presence, my usual question, Had he eaten in Calcutta much fish? His mother replied that her husband had been exceedingly fond of fish, and that their boy seemed to have inherited the taste and had taken a great deal. To this the boy assented at the time. Subsequently, when he learnt that I attributed his disease to fish-eating, he took a pleasure in assuring all who asked him about it that he had never liked fish and had taken scarcely any.

diffuse and not in definite patches. In some of these the hands nd feet are first affected, and a condition of peripheral numbness esults which may induce some to count these as the typical xamples of the anæsthetic variety. There is, however, always rythema and some degree of puffy swelling, and if the patient e stripped I believe that isolated patches more or less well-narked will always be found.

The advocates of contagion have invariably employed very ague phrases in reference to its precise mode. As I have already aid, no one professes to have ever identified the primary lesion. ne of the ablest of the contagionists, Mr. C. Macnamara, dis-vows any belief in aërial infection, but says that it is "necessary hat the discharge from a leprous sore should *enter the blood* f the healthy person." The question, however, is how does it et into the blood. Obviously Mr. Macnamara presupposes a cal sore, but I repeat neither he nor anyone else has ever ob-erved such.

Inoculation experiments, however carefully conducted, have lways, with the single exception of the Sandwich Islander, eanu, whose case has been so much quoted, been failures. The acillus has not proved capable of even maintaining itself in he inoculated spot, far less of infecting the system. It is true nat in the human subject such experiments have been but few. n the lower animals, however, they have been numerous. It may e freely granted that a disease which is attended by abundant acilli is in all probability, under favouring conditions, inoculable. t would be very strange if it were not. The facts, as regard eprosy, seem to indicate, however, that favouring conditions are f very great importance, and are but seldom met with. The case f the man Keanu is surrounded by fallacies. For a long time the noculation was thought to have failed; then a somewhat doubt-ul leprosy spot developed itself on the site of inoculation, and nally he became the subject of the disease in an unquestionable rm. We must remember, however, that he was one of a race in hom the disease was remarkably prevalent at the time, and on ne increase. The chances are not inconsiderable that he was ally a leper to begin with, and, if not, the advocates of a food ypothesis are entitled to suggest that he was probably fed roughout on the same food which in his countrymen was pro-cing the disease freely, quite independently of inoculation. At ny rate, it is clear that the favouring conditions were, in him, nusually good. Inoculation experiments, tried in districts where ne disease is already rife, are far from conclusive, and it is apossible that they should ever prove that contagion is the sole use.

The facts which the new school of contagionists have to meet, nd which, to my mind, appear to be unanswerable, are that the sease does not spread when imported into districts where it is ot endemic; and further, that of those Europeans who going to side in leprous districts themselves become lepers, not one in ten cognisant of having seen a leper, far less of having had any in-mate association with such. To fit the facts, the disease must supposed to be not only contagious, but infectious in an intense gree in rare instances, whilst in a large majority it shows no ch power whatever. The whole question of contagion is, how-er, at the present juncture of so much importance that I shall ave its full discussion for another occasion. For the present I ill remark only that if the disease does ever spread from person person, the clinical facts would suggest that it must be as in e rare instances of phthisical infection by lung inhalation. othing has been observed on the skin or mucous membranes to vour the belief that the bacillus gains access through them.

In a very few isolated cases it has been supposed that leprosy s been communicated in vaccination or by accidental pricks (by needle, penknife, etc.). In none of these has there been anything served at the seat of injury, and, in all, the development of the sease has been exactly on the same plan as in ordinary cases. It highly improbable that the blood can be infected by a local in-ry without a local sore. It is very important in the case of ccination to elucidate this as far as possible, since some of the ses in which leprosy originates in European children might sily be suspected to be of such origin. They always occur, how-er, to those who have been long exposed to endemic influences, d are exactly like others in which vaccination cannot possibly ve taken any share.[5]

[5] In the few cases in which tuberculosis has been transferred by wounds, re has, I believe, invariably been local evidence of contagion at the injured t.

REMARKS
ON
A SERIES OF ONE HUNDRED CATARACT EXTRACTIONS.

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SEVENTEEN years ago, a communication on "Accidents in Flap Extraction of Cataract" was made to the old Surgical Society of Ireland by Dr. Archibald Jacob; and, since then, the subject of cataract extraction has not been brought forward in this place. Yet it seems desirable that an operation, surrounded, as this one is, with so much interest from a humanitarian, as well as from a purely surgical, point of view, should occasionally form the subject of a communication to this Section of the Academy, although it is only some of those here who practice ophthalmic surgery.

Eventful as these seventeen years have been in the progress of general surgery, they have not been less so in the progress of ophthalmic surgery; and in nothing is this more apparent than in the statistics of the operation for cataract. As the chief agents in these improved statistics we recognise, above all, those antiseptic measures which have played so remarkable a part in other branches of operative surgery, and, next to these, the discovery of eserine and of cocaine.

From time to time, during this period, operators have proposed and practised new plans for different steps of the operation, and have devised new instruments for carrying out these new plans. But, although I may incidentally refer to one or two of these, I do not intend on this occasion to discuss any of them at length. Some of these proposals have been very generally adopted, while, again, others of them have had but an ephemeral existence.

Just at the present time, the great question which is paramount in the minds of ophthalmic surgeons, as regards the operation of cataract extraction, is—Whether an iridectomy should form part of the proceeding, or not? Into this discussion a good deal of warmth has sometimes been introduced, and we hear some of those who do not practise iridectomy describing that step as "mutilation of the iris," although they have not yet got so far as to call the iridectomists "mutilators." And, on the other hand, an iridectomist, who holds a high position in our profession, has stated it to be his opinion that it is not moral to leave out the iridectomy. All this is to be regretted, for it must be taken for granted that each one of us, whatever method he employs, is animated by the desire to do that which seems to him the best for his patients, and for the art he practises; and difference of opinion here, as elsewhere in medical science, must rather be useful for the general welfare than the reverse, if only the discussion of the point at issue be approached in a spirit of tolerance.

The operation which I perform is commonly known as von Graefe's, although it differs in some important particulars from the method as von Graefe left it to us. It is also known as "the three millimètre flap operation." I operate as follows: About half an hour before the operation a drop of eserine solution (4 grs. ad ℥j) is put into the eye to contract the pupil; and the patient's face, especially the eyelids and their neighbourhood, is carefully washed with hot water and soap. The instruments are washed with absolute alcohol, then boiled in water, and then laid ready for use in a bath of a 1 per cent. solution of carbolic acid. After the patient has been placed upon the couch, the eyelids are everted, and the conjunctival sac is thoroughly washed and wiped out with lint soaked in a 1 in 5,000 solution of corrosive sublimate. The same sublimate solution is used all through the operation for irrigating the wound and surface of the eyeball, and for washing away blood coagula and morsels of cortical substance, as may be required. No sponges are used, but, in their place, small bits of lint, which have been boiled in sublimate lotion, and which are kept stored for use in a closely covered glass jar filled with sublimate lotion. The patient receives about three drops of a 2 per

cent. solution of cocaine in the eye, with an interval of about five minutes between each drop, before the operation begins. This solution, as also the atropine and eserine solutions, is not made with plain water, but with a 1 in 5,000 solution of corrosive sublimate.

A wire lid elevator having been applied, the eye is fixed with a forceps by a fold of conjunctiva and subconjunctival tissue below the vertical meridian of the cornea. The point of a von Graefe's knife is entered just in the margin of the clear cornea, at the outer extremity of a horizontal line, the centre of which would lie 3 millimètres below the summit of the cornea. The point of the instrument is then passed cautiously through the anterior chamber, and the counter puncture is made in the corneal margin, at the inner extremity of the imaginary horizontal line just described, and then the incision is finished in the upper corneal margin by one or two slow strokes of the knife. While this is being done the aqueous humour flows away; but, owing to the action of the eserine, and to the slow way in which the aqueous has been allowed to flow off, the iris does not prolapse.

The fixation of the eye is now given over to an assistant, and the surgeon, passing a curved iris forceps, or, perhaps better, a Liebreich's iris forceps, into the anterior chamber, seizes the smallest possible portion of the sphincter of the iris, at a point corresponding to the centre of the corneal incision, draws it out, and with the forceps scissors cuts out a very narrow bit of iris. I like to produce a coloboma of 2 millimètres (Fig. 2) to 3 millimètres, and not more than 4 millimètres in width.

The operator now takes the fixation forceps from his assistant, who gently raises the speculum with the eyelids off the globe, so that no pressure may be made on it during the remainder of the operation. The cystotome is then introduced, and the anterior capsule divided freely. Until recently I scored the capsule chiefly from below upwards several times, making one final horizontal division of it along the upper margin of the lens. But I have of late practised horizontal division of the capsule exclusively, making several transverse scorings at different levels of the anterior surface of the lens. My reason for this is that, while an equally free opening is made in this way, I think the cystotome, as it is being withdrawn, may be less likely to drag tags of the capsule into the corneal wound—an event which it is very desirable to avoid—than when the instrument is drawn directly towards the wound in opening the capsule. But I must state that I know the method does not form a guarantee against a tag of capsule being found in the wound. I have occasionally employed the capsule forceps for tearing a bit out of the centre of the capsule, as recommended by some surgeons. I have never used what is known as the peripheral capsulotomy. Both of these methods have much to recommend them; but I think there are disadvantages connected with each which more than neutralises its advantages.

The cataract is now delivered by placing the edge of the hard rubber or tortoise-shell spoon just below the lower edge of the cornea, and making with it gentle pressure backwards, until the upper margin of the lens presents in the wound; then, the same pressure being maintained, the spoon is advanced over the cornea, pushing the lens before it and out through the wound; but as soon as the greatest diameter of the lens has passed the lips of the wound the pressure of the spoon must be instantly diminished, lest rupture of the zonula, with prolapse of the vitreous, be caused. The fixation forceps and speculum are now removed from the eye, and a cold compress, with sublimate lotion, is laid on the closed eyelids for a few minutes.

The condition of the pupil is then examined, and, as a rule, it is seen to be clear and black. On the other hand, it may be found that some of the cortical portion of the cataractous lens has not come away. It is well to clear the pupil of this, so far as possible, although very slight remains have no serious significance. For this purpose I employ exclusively what we know as "the lid manœuvre." Facing the patient the operator raises the upper lid with the thumb of his left hand, while he lays the tips of the first and second fingers of his right hand on the lower lid, and, with the latter, makes slight rotatory motions over the cornea, so as to collect the masses towards the pupil, and then a few rapid, light motions upwards with the margin of the lid will usually drive these masses towards and out of the wound. But great care and delicacy of touch are called for here, as any undue pressure on the eye may rupture the hyaloid. Some operators stand behind the patient, and make the lid manœuvre with the thumb, which does not seem to me to be a good method, for the delicacy of touch with the thumb is inferior to that with the first and second fingers.

I do not employ irrigation of the anterior chamber, or intracapsular injection, for the purpose of washing out cortical masses, as recommended by M'Keown, Wieckerkiewicz, and others. I rarely operate on unripe cataracts, and, consequently, I find no use for this proceeding as a routine method; while in those exceptional cases in which considerable cortical masses remain, and where they cannot all be delivered by the lid manœuvre, I prefer to leave some of them behind, to be dealt with later on, if necessary, by discission, rather than apply irrigation, which seems to me a somewhat rough measure. I did use Dr. M'Keown's syringe one occasion in this series to wash out cortical remains, without effecting the desired end. Perhaps I should have employed more force, but I shrank from doing so. Subsequently I succeeded in expelling the masses by the lid manœuvre in the ordinary way, and I think it likely I was assisted in this by the fluid which had been introduced into the anterior chamber by the syringe. Both before and since this experience, I have often thought that assistance in the expulsion of cortical masses might be obtained by simply introducing a few drops of suitable fluid into the anterior chamber; but I have not as yet carried out the idea in practice. We know that cortical masses often come away more readily, after we have waited for the formation of some aqueous humour.

The next step is one which I think is peculiar to myself, at least I have not seen it described by anyone else; nor, of the many oculists I have seen operate did any practise it. It consists in searching the corneal wound for any tag of capsule which may have become prolapsed into it. Owing to the transparency of the capsule, a tag of it may lie in the wound but be invisible to the surgeon, and, if allowed to remain, it becomes incarcerated in the cicatrix, and can, even long afterwards, give rise to serious and deep-seated mischief. This mischief may take the form of chronic iridocylitis, or it may appear in the form of acute purulent inflammation of the uveal tract, originating in the cicatrix.[2]

Again, Mr. Treacher Collins has very recently pointed out,[3] that another serious condition may result from entanglement of capsule in the cicatrix, for his investigations have shown it to be extremely probable that the accident may sometimes produce a tendency to glaucoma. It has been my routine practice then, all through the series of operations I am now treating of, to pass, at this stage, the points of a curved iris forceps, slightly opened, between the lips of the wound, then to close them, and to cautiously draw them back again. Frequently, it will be found that a tag of capsule has been captured by the forceps, and, if so, it is snipped off with the scissors; or, it may be, that no capsule is caught. The forceps is then similarly inserted at an adjacent part of the wound, and in this manner the wound is searched from end to end for capsule. In the one hundred operations of the series, a tag of capsule was found in the wound nine times. This proceeding is an extremely delicate one, and requires the greatest caution on the part of the operator. I have not myself had any disaster during its performance, but, as it must be done without fixation, the surgeon has to be on his guard against an unexpected upward motion of the patient's eye, which would bring the points of the forceps into the vitreous humour; and, when he has captured a tag of capsule, he must draw it out sufficiently, and yet not too far, or he will rupture the hyaloid. Indeed, one sometimes comes across patients who have such restless eyes, that it is quite impossible to search for capsule in the wound. This has happened to me three times. I think that this proceeding is an important one, and that it almost removes the one serious drawback to this method of cataract extraction.

The last point in the operation is to see that the whole of the iris has returned to the anterior chamber; and, in order to be quite sure of this, it is necessary to pass a narrow and slightly curved silver spatula into the anterior chamber, and to stroke down each pillar of the coloboma, as far as it can be brought. The influence of the eserine, dropped in before the commencement of the operation, being still present, the iris responds to this manipulation all the more readily.

The surface of the eyeball, and especially the wound, having been irrigated with the sublimate lotion, a drop of solution of atropine is instilled into the eye, and the dressing is applied. This consists in a piece of lint, which has been boiled in sublimate lotion, and of a size sufficient to extend a quarter of an inch be-

[2] Dr. A. Wagenmann, in his recent important paper, Ueber die von Operationsnarben und vernarbten Irisvorfällen ausgehende Glaskörpereiterung, *A. von Graefe's Archiv*, xxxv. 4, brings microscopic proof to bear upon this and upon other interesting points.

[3] *Trans. Ophthal. Soc.*, January 30th, 1890.

ond the orbital margin in every direction; again soaked in sub-mate lotion, and laid on the closed eyelids. Pledgets of absorbent otton wool, also previously boiled in sublimate lotion, and now gain soaked in it, are placed over this piece of lint in such a way hat the bandage, when applied, may exert equal pressure on very part of the eyeball. Over this, again, comes a layer of oiled-ilk protective; and then the bandage—a narrow roller of fine annel, which passes three times over the dressing and round the ead.

The patient remains in bed for two or three days. The dressing s changed for the first time after forty-eight hours, and then once very twenty-four hours for a week, when it is left off. The eye hould be protected from strong light and from cold until it is uite white, but glasses can usually be ordered in a fortnight or hree weeks.

With regard to the results which I have obtained by this method n 100 consecutive cases—the vision noted being that possessed by he patient when last seen, and the last of the series being the nal extraction in the year 1888[4]—there were only two ailures; and these were the result of suppuration, and were the nly cases in which suppuration supervened on the operation.

There was one case in which the resulting vision was finger-ounting at 2.5 m. This was one of three cases, in which a con-iderable amount of cortical substance remained behind. The pa-ient was discharged twelve days after the operation, with the eye quiet and doing well," and he was to come back for further reatment, which would probably give him very much better ight, but he has not returned.

There were two cases in which vision amounted to finger-ounting at 4.0 m.; of these, one had a patch of central choroiditis, which would have prevented any better vision, even if the patient ad never had cataract. In the second case, a minute bead of itreous presented in the wound just as the patient was closing is eye after the speculum was removed, became incarcerated in ne cicatrix, and, no doubt, gave rise to some irregular astigmatism ith its consequent deterioration of vision.

There were two cases in which the vision was finger-counting t 6.0 m.; in one of these there was a thick capsule, which the atient would not remain in hospital to have torn, or else his ision might have been vastly better, but still he was enabled to ead large print (with + 16.0). In the other case, too, there was a hick capsule, which was torn, but, unfortunately, the house-rgeon failed to take a note of the improvement that resulted, so hat I am unable to credit my statistics with it.

In two cases the vision was $\frac{6}{6}$; in one of these there was to-acco amblyopia, sufficient to account for an imperfection in sight. n ten cases the vision was $\frac{6}{9}$. In eight cases the vision was $\frac{6}{12}$. n thirty-seven cases the vision was $\frac{6}{18}$. In seventeen cases the ision was $\frac{6}{24}$. In fifteen cases the vision was $\frac{6}{36}$. Of these, one be-ame glaucomatous some months later. And in three cases the ision was $\frac{6}{60}$. Briefly stated, according to a conventional method, here was good vision in 93 per cent., moderate vision in 5 per ent.,[5] and no improvement in 2 per cent.

If the advanced age of most cataract patients be alone taken nto account, the restoration of what we call normal vision can be ut rarely expected; but with a vision of $\frac{6}{9}$, and even less, pa-ents operated on for cataract can get about freely, and can even njoy their sight for reading.

Now, the foregoing results, as they stand, are satisfactory; but hey would present a yet more favourable appearance were it not hat they are for the most part the results noted a fortnight or hree weeks after the operation. It is not often possible to keep atients in hospital for a longer period, and even many private atients, when they once obtain their spectacles, do not present hemselves any more to the surgeon; but frequently, when I have ad the opportunity of testing the sight some months afterwards, have found the acuteness of vision improved in a marked degree rom what it had been soon after the operation. As an example f this, I may mention the case of a Catholic clergyman from the outh of Ireland, upon whose right eye I operated in July, 1887. he vision a fortnight afterwards, just before his return home, as $\frac{6}{18}$, but a year later I found the sight improved to $\frac{6}{9}$ without a change of glass. I then operated on the left eye, and thirteen days later its vision was $\frac{6}{60}$, but when, after eleven months, he paid me a visit, I found the sight of this eye, too, $\frac{6}{9}$ with the same glass. I could give several other similar instances, and I have no doubt that if all the eyes in the series could have been examined some months after they were operated on, a much higher average standard of sight would have been noted.

I had not to record a falling off in the power of vision after a time in any of the eyes operated on, except in a case of glaucoma, and in those cases in which the capsule became slightly thickened. These latter were, of course, readily put right by discission, but to them I shall again refer.

Accidents During Operation.—Portions of the cortical substance were left behind eleven times. In eight of these cases the remains were insignificant in amount, and had no influence whatever upon the success of the result. But in the three other cases a considerable portion of cortical substance had to be left. In two of these the cataract had been artificially matured, and probably was not yet sufficiently ripe at the time of the extraction. One of them (already referred to) was very capable of considerable improvement by a needle operation, but did not have it performed. (V.=Fingers at 2.5 m.) In the other case the cortical remains gave rise to some increased tension, which subsided when the masses became absorbed, and at the time of the patient's discharge V.=$\frac{6}{36}$. In the third case the cortical remains were needled, and V.=$\frac{6}{18}$ obtained.

Loss of vitreous occurred only twice in the whole series of one hundred cases. In one case there was a defective zonula with fluid vitreous, and the cataract had to be delivered with the vectis (V. obtained = Finger-counting at 4.0 m. Patch of central choroiditis). In the other case, the lens being remarkably small, I did not think I had delivered it all, and, in applying the spoon to the cornea in order to press out some hypothetical cortical masses, I caused slight loss of vitreous to take place. (V.=$\frac{6}{18}$.) In one case some vitreous presented in the wound just as the operation was concluded, and became incarcerated in the cicatrix. (V.=Finger counting at 4.0 m.) These are the only accidents during operation which I experienced in this series.

Anomalies of the Healing Process.—There were, as already stated, two cases of suppuration of the wound. Both were in-hospital patients. In one of these the operation was perfectly normal, and I failed to trace any way in which the eye could have become infected. Yet there is no doubt but that, in some particular, the antiseptic precautions were defective. In the other case of suppuration there was some difficulty in delivering the lens, probably from insufficient eyeball tension, and after delivery a bead of vitreous presented in the wound, but there was no loss of it. At the end of the operation the eye looked well. Here, too, I credit the suppuration to some oversight in the antiseptic measures, rather than to the unimportant irregularity in the operation. In both of these cases the eye was lost, and, as I have said, they were the only total losses in the series.

Iritis was seen only once in the whole series. It appeared on the third day, and was very slight in degree, the eye gaining $\frac{6}{18}$ of vision eighteen days after the operation. The almost total absence of severe plastic iritis is eminently satisfactory, because it is a process by which formerly many an eye was lost. It is now held to be as much an infective process as is suppuration of the wound, and the freedom from it which we enjoy must be referred to the antisepsis. Of course, in a good many of the cases, there were a few fine synechiæ between the pupillary margin and the capsule, but these have no such significance as that possessed by the violent plastic iritis, which may jeopardise sight.

Incarceration of the iris in the cicatrix occurred once. In this case the patient was very unruly during the operation, so that the attempts at reposition of the pillars of the coloboma had to be abandoned. (V.=$\frac{6}{6}$.) In several cases there was an anterior synechia, an adhesion of a small portion of the iris to the posterior surface of the corneal cicatrix, but without any prolapse of the iris in the wound. In my opinion, this condition is not of importance, although there are some who do not think it innocuous. I believe myself that this anterior synechia is only liable to occur in those cases where, owing to some unknown cause, the wound in the corneal margin, instead of becoming sealed in the course of a few hours after the operation, with restoration of the anterior chamber, remains patent for a more lengthened period—it may be for several days. During this interval the iris is in contact with the cornea and with the inner aspect of the wound; and then, between it and the wound, delicate adhesions form, which are not

[4] This paper was to have been read last session, but circumstances interred with this being done. All the extractions performed in 1889, and, so r, in 1890, have been successful.

[5] But, of these, one case probably did obtain good vision, but no note was ken of the final result; a second case had central choroiditis, which alone in-rfered with what would have been good vision; while two cases might have btained good vision had they submitted to a slight secondary operation.

always broken down when, the wound healing, the anterior chamber refills and the iris returns to its normal plane. Mr. Priestley Smith considers this anterior synechia more likely to occur when no iridectomy has been made.

In one case, already twice referred to, a small prolapsed portion of vitreous healed in the cicatrix, and caused slight bulging of the latter. Vision resulting = Finger counting at 4.0 m.

In one case the patient was attacked with gouty scleritis nine days after the operation. Two days later he got a marked attack of gout in his toe, and this along with the scleritis, rapidly gave way to salicin and colchicum without any ill result to the eye. $V = \frac{6}{12}$.

A remarkable anomaly in the healing process occurred in one case. It consisted in an extraordinary long interval between the operation and the complete closure of the wound. The operation itself was absolutely normal, there being not even an atom of cortical substance left behind. There was subsequently no inflammatory reaction, either in the wound or in the iris; while the patient's health was perfectly good. Yet, although the eye was kept carefully bandaged, and other measures were taken, the wound did not completely close for a period of eight weeks, during which time the aqueous humour was dribbling away. The case was seen by several ophthalmic surgeons, who all declared they could find nothing to account for the tardiness in closing; and to this day I have not myself been able to account for it. I repeatedly searched for capsule, which might have prolapsed into the wound, but never found any. Finally, the wound did close, as stated, after eight weeks, and the patient obtained $\frac{6}{9}$ of vision, which he enjoyed for five months. Chronic simple glaucoma then set in, and this necessitated operative treatment. The case is still under observation, but it is to be feared that marked deterioration of vision will be the consequence of the glaucomatous process. How far the delay in healing may have had to do with the subsequent glaucoma as its cause would be an interesting subject for consideration, but one upon which I cannot enter here. It is right to state that there was one small anterior synechia at one side of the coloboma.

As regards secondary operations—in addition to sclerotomy in the case which became glaucomatous—discission of the capsule was performed in 21 of the 100 eyes of the series, and a needle operation, to break up cortical remains, was performed in one eye.

I am, then, one of those who perform an iridectomy in the course of every cataract extraction; but the coloboma which I make is a narrow one. I hold to the iridectomy because the writings of surgeons who perform the simple extraction have not, I think, shown it to be as safe a procedure as this one; for, in the simple extraction, it is not yet possible to guard with certainty against prolapse of the iris occurring, not merely at the time of the operation, but even after it is concluded, and after the bandage has been applied. The consequence of this prolapse is incarceration of the iris in the cicatrix—a condition, as all ophthalmic surgeons know, of serious import. In such eyes, after a few weeks, the incarcerated iris is liable to become cystoid and bulging, causing displacement of the pupil and irregular curvature of the cornea, with resulting deterioration of sight. Nor is this all. Such eyes, even more frequently than those in which a tag of capsule has become incarcerated in the cicatrix, are liable weeks, months, and even years after the operation, to take on severe irido-cyclitis, either of the plastic or purulent form, ending in total loss of sight; and in these eyes, I think, inflammatory action, often of a serious character, is more apt to follow upon a slight secondary operation, such as discission of the capsule, than in those eyes where no incarceration of iris exists.

In Professor Knapp's last published and interesting series of 100 cases, by the simple method, incarceration of the iris occurred in two cases. But there were four other cases in which, in order to avert incarceration, the author had to abscise prolapsed iris on the fifth, sixth, ninth, and fourteenth day respectively, after the operation; while in a fifth case the swollen and cystoid prolapse was abscised two months after the primary operation. And I think it will be admitted by a large proportion of ophthalmic surgeons, amongst whom I may probably reckon Professor Knapp himself, that, when once prolapsed iris has lain in the wound for even three or four days, it is difficult, if not impossible, to be sure that any measure we can adopt will reduce it, so that no portion of it will remain incarcerated. Nevertheless, this record of Professor Knapp's is a remarkable and an unusually good one for the simple operation, so far as my reading informs me. In the series of another friend of mine, Professor Stedman Bull, which was operated on by the same method, the iris was incarcerated in fifteen eyes; and this, too, is a good record. But in this series of mine the iris was incarcerated once only; and in this one case the incarceration was not due to secondary prolapse, but to the impossibility of completely reducing the pillars of the coloboma during the operation, owing to the uncontrollable restlessness of the patient.

Nor was there in any case, except in the one just referred to, a cystoid or bulging cicatrix. Nor had I, in this series, to resort to any secondary operation in order to reduce a secondary iris prolapse, because no such prolapse occurred.

I think, too, the clearing of the pupil of cortical remains must often be a more incomplete detail, and must be attended with greater danger to the hyaloid, in the simple method than in that with iridectomy.

The advantages claimed for the simple extraction are, first of all, the round and movable pupil. Now, so far as the question of beauty is concerned, I readily admit that an eye with a circular pupil is a prettier object than one with a keyhole pupil; and when this round pupil is movable, that is, when there are no synechiæ, æsthetic perfection is attained. But, I submit that the patients with whom we have chiefly to do in these cases are advanced in life, and that to them the question of personal beauty is altogether secondary to that of useful sight; consequently, that the operation to be preferred for them is that one which will give to the greatest number of them comfortable and lasting vision.

Again, it is claimed that the simple operation gives a higher average acuteness of vision than the operation with iridectomy; and it is also stated that persons operated on by the simple method have a better power of guiding themselves—a better power of "orientation," as it is termed. But in all this discussion one point is constantly left out of view, or passed over in silence—a point, to my mind, of very great importance—namely, the position and width of the coloboma, which those surgeons, who now advocate the simple operation, were in the habit of making in connection with their operations, before they adopted the simple extraction. There are iridectomies and iridectomies, colobomata and colobomata. Operators, of whom, as I know, there are many, who thought it necessary, as at one time I myself did, to remove a portion of iris corresponding to nearly the whole length of the wound



Fig. 1.

at the corneal margin (Fig. 1), would, I can understand, be amongst the first to fly to the other extreme of making no iridectomy at all. And, no doubt, with small circular pupils they obtain a better acuteness of vision and better orientation than they previously did with their enormous colobomata, even if the latter were made above and partially concealed by the upper lid. But I know, moreover, that amongst those who have adopted the simple operation, there are surgeons whose practice it was to extract through a section made in the lower margin of the cornea, and with a wide iridectomy. That the simple extraction compares favourably with such a method, I shall not deny. But in the method which I



Fig. 2.

employ the coloboma is very narrow—some 2 to 4 millimètres wide (Fig 2).

It is easy to understand why, in the simple extraction, prolapse of the iris, with subsequent incarceration, is so liable to occur, even some days after the operation, and why it is so difficult to devise a sure means for preventing the accident; as, also, how it is that even a very narrow coloboma is sufficient to protect the eye from this disaster. And yet I am inclined to think that, among those oculists who have reverted to the simple method, there are some who do not realise the *modus operandi* in either case. Within a few hours after the operation, as I have already mentioned, the wound in the corneal margin most commonly closes, the aqueous humour collects, and the anterior and posterior chambers are restored. But it takes many hours more for the delicate union of

the lips of the wound to become quite consolidated, and during this time it requires but little—a cough, a sneeze, a motion of the head, the necessary efforts in the use of a urinal or bed-pan, no matter how careful the nursing—to rupture the newly-formed union; and, as a matter of fact, this often does take place. The aqueous humour then flows away through the wound with a sudden gush, and, where the simple extraction has been employed, carries with it the iris. Doubtless, in this event, it is that portion of the aqueous humour which is situated behind the iris, in the posterior chamber, which is chiefly concerned in the iris prolapse; the aqueous humour in the anterior chamber probably flows off without influencing the position of the iris. The advocates of the simple operation endeavour to prevent secondary iris prolapse by a spastic contraction of the pupil, produced by eserine, which is instilled at the conclusion of the operation, and, again, by some operators, a few hours afterwards. In most instances the desired end is by this means effected. But there is a considerable percentage of the cases in which the contraction of the sphincter iridis is overcome by the pressure of the aqueous humour from behind, and iris prolapse takes place.

How, then, does the formation of a coloboma prevent prolapse of the iris when the wound bursts, as I have described? Not because the portion of iris which is liable to prolapse has been taken away. That would mean nothing less than the whole of that part of the iris which corresponds to the length of the opening in the corneal margin. But the coloboma averts secondary iris prolapse, because it provides a gateway for the aqueous humour contained in the posterior chamber to escape directly through the wound, without carrying with it the iris in its rush; and it is evident that the narrowest coloboma which can be formed will be amply sufficient for the purpose. To my mind, a narrow iridectomy here is no "mutilation of the iris," but rather a measure which rests upon a sound scientific basis, and which is calculated to insure the safety of the eye in an important particular.

As to disfigurement of the eye, there is practically none when the coloboma is so narrow, and is situated in the upper part of the iris. The pupil, too, is movable, almost, if not quite as much so, I venture to say, as in most cases of simple extraction, for it is entirely a mistake to suppose that a narrow coloboma renders the pupil immovable. Where there are no adhesions between the pupillary margin and the capsule, as frequently happens, the reaction to light is active, a drop of atropine will dilate the pupil widely, and a drop of eserine will contract it.

That the average acuteness of vision in cases operated on by the simple method is higher than in those operated on with a small iridectomy is a statement of which, I think, there is no proof. The average acuteness of vision in Professor Knapp's last series is, no doubt, very high, and I have seen it quoted as convincing evidence of the advantage in this respect of the simple method. But the high acuteness of vision in that series was not due merely, if indeed at all, to the round pupil, but rather, as Professor Knapp himself states, "the cause of this gain was the subsequent discission of the capsule, which was done in 74 cases." In Professor C. Stedman Bull's recent series, discission was performed in 50 out of the 100 cases, and his average vision is very good. Doubtless in my cases a higher average vision would have been obtained, had I discised the capsule in nearly every case, instead of in only 21 of them. But we must take the public as we find them; and in private practice in this country, when patients obtain sight which enables them to read and write fluently, or even sometimes to sketch and play billiards, as well as to go about with comfort, they are satisfied, and do not care to submit to a further operation, no matter how trifling, in order to increase their power of vision fractionally—no, not even to enable their surgeons to improve the statistics of their operations. In hospital practice our patients are always eager to get to their homes as soon as they find themselves allowed to leave their ward for the day room, and to take a walk in the garden, and it is not easy to submit more than a few of them to secondary capsulotomy.

With regard to the statement, now so often made, that the power of orientation is better in persons operated on by the simple method than where an iridectomy has been done, I would say that this may be the case if wide iridectomies are in the minds of those who make this statement, but my patients labour under no difficulty of orientation once they become accustomed to their spectacles.

In conclusion, I may say a few words with reference to the state of the general health required in order that the operation for cataract may be successfully performed. In my opinion, there is hardly any chronic disease which contraindicates this operation, and as ether and chloroform have become unnecessary—as the operation with cocaine is almost painless, as it entails but a short confinement to bed, and as it is the only means of restoring sight in these cases—it should be done whenever the state of the eye renders its prospects good, and the patient's life is likely to last for even a few months longer. Nor do very advanced years form a contraindication. I have frequently operated on persons over 80 years of age, and in them always with a good result. I know no more pitiable sight than that of an aged and infirm person, with bright mental faculties, who is doomed to pass the last years or months of life deprived of the joy of seeing those who are nearest and dearest; nor is there anything of which I feel more certain than this, that a successful cataract operation gives a renewed lease of life by reason of the improved psychical condition which follows upon it. I do not wish to convey that the state of the patient's general health is a matter of absolute indifference to me, but merely that I do not decline to operate on account of serious organic disease of a chronic nature which, so far as can be known, may not have a fatal termination for months, or, perhaps, for years to come. I have operated successfully in a case of pronounced Bright's disease, as also in the presence of diabetes; nor does chronic disease of the heart, liver, or lungs, even when they are all present in the same individual, cause me to decline to operate.

COLOUR BLINDNESS.

A Criticism of the Board of Trade Tests.

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The question asked by Dr. Farquharson in the House of Commons on this matter, and his notification that he would take an early opportunity to bring forward for discussion the subject in its entirety, has attracted a very considerable amount of public attention. How a subject with such important interests, interests intimately connected with life and property, can have been so thoroughly neglected, and for so long a time, is a question which affords abundant food for reflection. When the facts of the case have been fully and clearly stated, as they will be stated by Dr. Farquharson, it will be surprising if an intelligent public do not command that attention so urgently needed, and compel the department, which has the proud privilege of providing for the safety of the sea travelling community of the first maritime country in the world, to do what should have been done many years ago, its duty.

Until the year 1852, there were no definite rules regarding the carrying of lights at night by vessels at sea, but in that year the following regulations became law. Between sunset and sunrise a bright white light is to appear on the foremast head (steamer), a green light on the starboard side, and a red light on the port side. The lights are to be guarded by screens at least 3 feet long, to prevent them from being seen across the bow, and the expectation, as stated in the official notice, is that the effect of the arrangement proposed will be such, "that in any situation in which two vessels may approach each other in the dark, the coloured lights will instantly indicate to both the relative course of each, that is, each will know whether the other is approaching directly, or crossing the bows either to starboard or to port. This intimation is all that is required to enable vessels to pass each other in the darkest night with almost equal safety as in broad day, and for the want of which so many lamentable accidents have occurred."

At this time the subject of colour blindness had not awakened the attention of practical observers, and it is possible that had the fact that between 3 and 4 per cent. of the whole male population are colour blind then been known, some mode other than by showing red and green lights might have been devised to indicate the positions of vessels at sea at night.

But three years later, in the year 1855, Dr. George Wilson, of Edinburgh, a distinguished member of the medical profession, published an excellent and thorough work, entitled *Researches on Colour Blindness*. In the preface to this work occurs the sentence: "The most practical relation of colour blindness is that which it has to railway and ship signals," and to a consideration of this relationship he devoted many pages. He showed with the greatest clearness how the safety of a vessel lay in the hands of

men, "look-outs," officers, and pilots, who might be colour blind but unconscious of their defect, or afraid to confess it, and he came to the definite conclusion, that as the colour blind are in a minority in the community, therefore those destined to deal with signals should be selected solely from the majority whose vision was normal. I cannot do better than quote his almost last paragraph: "The professions for which colour blindness most seriously disqualifies are those of the sailor and railway servant, who have daily to peril human life and property on the indication which a coloured flag or a lamp seem to give. Fortunately a ship is seldom under the guidance of a single person, and in Her Majesty's vessels the colour signal men are selected from a large number, and are ascertained to have a quick eye for colour. In merchant ships the choice must necessarily be made from a much smaller number, and the appalling yearly list of lost vessels which appears in our wreck returns awakens the suspicion that more than one of these fatal disasters may have resulted from the mistaken colour of a lighthouse beacon or harbour lamp, which, on a strange coast and with perhaps the accompaniments of a snowstorm or a thick fog, has been wrongly deciphered by a colour-blind pilot."

The position of affairs, therefore, was this. The authorities, believing that the want of coloured lights at night at sea had led to "so many lamentable accidents," insisted on coloured lights being carried by all vessels at sea at night, in order to prevent collisions. Dr. Wilson pointing out that since there existed individuals afflicted with a physical defect known as colour blindness, a condition in which, while the vision for form is perfect, and while the colours blue and yellow can be recognised, no certain distinction can be made between the colours red, green, and brown, therefore to such men the exhibition of coloured lights (red and green) by vessels at night could convey no correct significance, and in consequence be no safeguard against collision. He also demonstrated how these colour-blind men were not only unable to detect danger when present, but how they actually created danger otherwise not present; and he urged that unless all colour-blind men were excluded from the position of officer (captain, first, second, and third mate), pilot, and "look-out," the system was fraught with unsuspected danger to all who trusted in it.

Was not his situation a thoroughly logical one. If the "want of coloured lights" had led, as officially stated, to "so many lamentable accidents," then similar lamentable accidents would continue to occur if men, who were physically incapable of interpreting correctly the significance of coloured lights, were placed in positions of trust.

This line of argument the authorities would not at that time acknowledge, and whatever the reason, ignorance, apathy, or rank carelessness, it is a fact that during the controversy which then commenced and has continued until the present day, all recommendations and suggestions by those whose education and line of thought entitled to an opinion, were set at naught, and not until twenty-two years later did the Board of Trade show any sign of life on this important question, and then not of their own free will, but because they were forced by public opinion, did they take any action.

In the December of 1876 a terrible railway collision took place at Arlsey Junction. A letter was written to the *Times* suggesting colour blindness on the part of the engine driver as the possible cause of the disaster, and this, which was the first letter on colour blindness published in the *Times*, was followed by many others, and the Whitehall authorities awoke from their long sleep of indifference. At the same time Mr. Jabez Hogg was championing the cause, and the outcome of his energy, and of the public reference to the real dangers of colour blindness, was that the Board of Trade at last grasped the fact that there was such a defect as colour blindness, and admitted "that the serious consequences which might arise from an officer of any vessel being unable to distinguish the colour of the lights and flags which were carried by vessels necessitated all candidates for examination for masters' or mates' certificates passing a test examination as to their ability to distinguish the following colours, which enter largely into the combinations of signals by day or night used at sea—namely, black, white, red, green, yellow, and blue." Having arrived at this conclusion, which, as I have shown, Dr. Wilson came to twenty-two years previously, and, as I shall show, individual shipping firms had, for their own safety, also previously come to, and, what is more acted on, the Board of Trade set themselves to frame tests and regulations with the ostensible purpose of guarding against those "serious consequences" spoken of. How these tests and regulations have fulfilled their object it will be my aim to show, and criticism naturally falls under two heads (*a*) as to the efficiency of the methods of testing employed to detect colour blindness, and (*b*) as to the efficiency of the regulations dealing with the colour-blind men when so detected.

The Board of Trade tests are as follows:—"The examiners are supplied with boxes of cards and glasses of several colours—red, green, white, blue, yellow—which have been chosen with great care. The cards should be mixed up. The examiners should then hold up each card separately, and ask the candidate to name the colour; and if the candidate does so without hesitation he is to be regarded as having passed the daylight test" (Circular of March, 1885). The report goes on to say:—"This method is found sufficient to prevent anyone who is more or less colour blind from escaping detection by the examiner, and is sufficient, therefore, for the purpose for which this test is applied."

I deny the truth of this statement, and I challenge the Board of Trade to name a single man, who has any reputation for knowledge of this subject to lose, who will corroborate it. The test, as a test of the colour sense, is not worth the paper it is written on. And their second test, which takes place in a darkened room, and consists in the candidate being asked to name the colour of various illuminated coloured glass slides, shown separately, is, so far as reliability is concerned, on a par with their first. "If," says the report, "a man can clearly distinguish red from green, and both from black and white, he will be able to follow the international rules for the prevention of collisions at sea." Quite so; but to distinguish colours correctly and to name colours correctly are two very different matters. When will the Board of Trade understand that to ask a candidate to give the name of a colour is a test not of the colour sense but of education in the names of colours, and that to rely implicitly on the correct naming of colours opens the road for an utterly wrong conclusion?

An educated colour blind may, and often does, succeed in guessing the names correctly. According to the Board of Trade, this colour-blind man is not colour blind, and, receiving their certificate, he becomes more dangerous to the community than ever, for his defective colour sense is thus authoritatively made perfect colour sense. On the other hand, an uneducated man with a perfect appreciation of colours, though ignorant of their names, would be, according to their rules, colour blind. That at one time the official mind had a glimmering of this fact is indicated by the third test mentioned in the report of 1885, namely, "that in some cases in which the examiners decide that the applicant has failed, and in which the applicant holds a contrary opinion, as well as in cases which may, in the examiners' mind, raise a doubt as to the propriety of passing him, the facts are reported to the Department with full particulars, and the applicant is retested by means of a modification of Holmgren's system of coloured worsteds."

Now, if, as the report says, the first and second tests are "sufficient for the purpose intended," why need a third test? And if, when a doubt in the examiners' mind does arise, he is advised, in order to settle that doubt, to apply a third test, is it not clear to an unbiassed mind that the third test is a more reliable one? Why, then, is it that this last test is not made the crucial test in all cases? This third test (Holmgren's), which depends upon the principle of comparison, and not upon the naming of colours, is safe, simple, and, in my experience, reliable. It is as easily and effectually applied to the uneducated as to the educated, to the foreigner as to the Englishman; and this latter fact is of importance, for a considerable number of our sailors are foreigners.

It is quite impossible to convey to another by words the impression made on our brain by a colour. I may say that a piece of sealing-wax is red, so may others, but it does not follow that the impression formed on my brain and on theirs is identical. A colour-blind man, on being asked the colour of the same piece of sealing-wax, would almost certainly answer "red," that being the usual colour of it, but he could no more describe the sensation produced on his brain that I can tell that on mine. To talk to a colour-blind man about the colour of objects conveys as much information to him as the talking to a deaf person about sound or to a dumb person about speech would do. It is essential, therefore, in order to judge of the impression made by colours on a man's brain, to get him to do something with his hands which will appeal equally to our sense. If we give to a man a skein of coloured wool—green, red, or brown—and he matches, from out of a very large number of skeins of differently coloured wools, green with greens, red with reds, and brown with browns, that man's

sense of colour is the same as ours, however ignorant he may be of the names of colours. On the other hand, if to match with green he selects red or brown skeins, to match with red, green or brown skeins, and to match with brown, red or green skeins, that man is colour blind, however correctly he may be able to guess at the names of coloured cards or of coloured lights. That the official mind had, as before remarked, a glimmering of this fact the insertion of this third test proved, but I regret to say the ray of intelligence died out, for we find in the report (1887), in the special instructions then issued to the examiners, this test omitted, and I am well aware that, even from the very commencement (1877), it was a dead letter test. So much for the tests; now for the aim of these examinations. It might be supposed—and without any great stretch of the imagination—that while the tests were devised to detect colour blindness, the regulations were framed to exclude the so detected colour-blind men from the sea profession. Such an idea would be, however, a very wide stretch of the imagination, for nothing is further from the intentions of the Board of Trade officials than that. In the first place, colour-blind pilots, colour-blind "look-outs," colour-blind A.B.'s, and colour-blind apprentices are, so far as these regulations are concerned, quite competent to assist in the navigation of ships. It is only in case any of these colour-blind men should desire to advance themselves and seek officers' rank that an examination of the colour sense is required.

Let us follow one of these colour-blind men. He applies for a certificate of second mate, and is asked to name the colours of cards and lights—it must be borne in mind that he is generally well aware beforehand what the names of the colours he will be shown are—guesses wrongly, and is rejected as colour blind for three months. At the end of this time he again applies, and either on this or a future occasion guesses correctly, and becomes the proud possessor of a second mate's certificate. Three months ago he was colour blind, now he is not. After sailing as second mate for a greater or less period, he applies for a first mate's certificate. Again he is tested as to his ability to name colours; if he names them correctly, he is not colour blind; if he names them wrongly, he is colour blind; but whether colour blind or not—and this is the point I wish to call special attention to—he obtains his first mate's certificate, though in the former case the remark, "this officer has failed to pass the examination in colours," is written across it. Still later he obtains his master's certificate, and later still, after one or more trials, he names the colours correctly, the endorsement is removed from his certificate, and the public have thrust upon them a full-blown captain upon whose colour sight the lives of hundreds of people, and property to the amount of tens of thousands of pounds, will depend. Yet this officer, though a colour-blind man, is a legalised colour-perfect captain. It may, and probably will, be said that this is an exaggeration. Do not, therefore, accept a single statement on my authority, but read the Board of Trade reports for yourselves. You will find by the report of 1885, out of 85 colour-blind men, as recognised by the Board of Trade tests, 31 eventually obtained unendorsed certificates; by the report of 1887, out of 127 colour blinds, at least 14 eventually received unendorsed certificates; and by the report of 1888, of 66 colour blinds, at least 4 received certificates with a clean bill of health; a total of 45. Now as colour blindness is congenital and incurable, there are at least 45 officers who were either not colour blind when rejected, or who are colour-blind to-day. Which of the two conditions is the more likely one may be gathered from the fact that, of these 45 legalised non-colour-blind officers, according to the Board of Trade's own showing, 4 at one time or other were unable to distinguish red from green, 22 more called red green, 5 others called green red, and the remainder made mistakes of a marked character. Yet in the face of this disgraceful condition of affairs, a writer in the *Nautical Gazette*, a journal well known for its advocacy of Board of Trade views, in criticising an article on colour blindness appearing in the JOURNAL, has the assurance to say that "while the members of the profession have been theorising and reading papers about it, practical steps have been taken to check its evil influence in the mercantile marine, and such steps have been attended with satisfactory results. The doctors would introduce intolerable details of a finikin character, while the practical people have really made the examinations eminently practical and quite sufficient for the purposes intended."

I am content to leave my readers and the public to decide whether or not their tests do not stand condemned on their own showing. I would like to know what is the "evil influence" which has been checked? which the "satisfactory results" spoken of? and, more particularly, who are "the practical people" who "have really made the examinations eminently practical and quite sufficient for the purposes intended?" I say unhesitatingly, and I have the proofs to show, that the tests are practically worthless, that the regulations are a disgrace to those who framed them, that the "evil influence," namely, the number of colour-blind sailors afloat is great, and that the colour-blind reports are a snare and delusion, leading the shipowner and the public into a false belief of security. The shipower and public believed that the Board of Trade examinations secured them against being at the mercy of colour-blind men, but, as I have shown, they do nothing of the kind; and I again repeat that the action of the Board of Trade in knowingly granting to a recognised colour-blind first mate and captain a certificate of competency in seamanship and navigation, even though it is endorsed "colour blind," is little short of a public scandal. As one writer pertinently asks, "Whoever heard of a shipowner asking to see a certificate? It is very rightly regarded by him in much the same light as a magistrate does a cab-driver's licence, which, until forfeited by misconduct, enables its possessor to follow his calling."

Again, as showing the false impression created by these reports, I may quote the following from the report of 1887:—"A circular letter was dispatched by the Board in October, 1885, to the authorities governing the various training ships for intended seamen and officers in the mercantile marine, requesting to be furnished with the results of the colour tests as applied on board their respective vessels. Among the more interesting replies were those from the *Conway*, the *Akbar*, and *Mars*. "On board the *Conway* (Liverpool), of 154 intending officers examined two were found weak in the colour sense, and a third, a cadet, of two years' standing, so deficient that he was promptly removed from the vessel. On the *Akbar* (Liverpool) 148 boys, intending seamen, were examined; four were reported very weak and five others weak in the colour sense." Is not the inference—that all these boys would be withdrawn from the sea life the one intended by the Board, and also that the testing for colour blindness was due to their action? As a matter of fact the testing had been done months before the circular arrived, and two, not one, of the *Conway* boys were withdrawn, but only after a strongly-expressed medical opinion; and so far as the Board was concerned, the lads might have remained at sea until this day. Of the four boys on the *Akbar*, whose colour sight is described as "very weak," but who were typical colour blinds, the public will be scarcely reassured to know that three went to sea. Again, as showing the make-believe-but-do-nothing policy adopted, Captain Milner Moger, of the training ship *Clio* (Menai Straits), informs me that some time ago the Board of Trade wrote asking for information about the colour vision of the boys on board. He answered that the boys had not been tested, but if the necessary tests were sent down he would be glad to apply them. In reply the Board wrote to the effect that it was no business of theirs to supply the tests, and there the matter ended. It will, however, interest the public to learn that of 258 boys on this vessel, 9 were complete colour blinds; and again, of 158 boys on board the reformatory training ship *Clarence* (Mersey), 7 were complete colour blinds, a total of 16 on the two ships, all of whom have already or will be drafted into the mercantile marine service to contribute their share in making history for the Wreck Reports. Who, then, are the "practical people" who "have really made the examinations eminently practical and quite sufficient for the purposes intended?" Where were they in the twenty-two years that elapsed between the pointing out of the dangers of colour blindness by Dr. Wilson and the establishment of any official test whatever? And as to examinations being "quite sufficient for the purposes intended," if by that is meant gulling the public and the shipowner into a feeling of security, I agree with them. But even for this purpose they are sufficient no longer. Speaking from my knowledge of the Liverpool shipowners, I am able to say, that many of them—I think I may almost say most of them—place no reliance on the Board of Trade colour tests, but employ other means to determine the colour vision of their officers and men. This fact is in itself a striking commentary on the official "eminently practical tests."

But a still more striking commentary on these "eminently practical tests, which are quite sufficient for the purposes intended," is to be found in a letter written by Captain John Smith, of 7, Winslow Street, Walton, Liverpool, to the *Shipping and Mercantile Gazette and Lloyd's List*, dated August 13th, 1889, which

reads thus: "On June 19th you were good enough to insert in your valuable paper a letter written by me on colour blindness, and I am pleased to find that my letter and your article commenting on same has attracted considerable interest—notably by the Board of Trade. My object in again troubling you is to impress upon the Board of Trade the necessity for a more perfect means of testing sight. I have lost my position as chief officer in the employ of one of the best and most influential firms in this port, in whose service I had been for a period of six and a half years, and with a near prospect of command, through not being able to conform to owners' rule and produce a colour-test certificate from their examiner, who, on the contrary, styled me colour blind. I, however, doubted the accuracy of the report, and presented myself to an oculist, but found, alas! the company's examiner's report too true. Now, I call this a very painful case, after being thrice passed by the Board of Trade for second, first, and master's certificates. If the Board of Trade examination on any of these occasions had been true I would have directed my energies towards another way other than the sea to obtain my livelihood. I may say that the defect in my vision has been, in the oculist's opinion, there from birth. I am now, morally and conscientiously, incapable of performing the duties of an officer on board ship at sea, though my certificate bears no endorsement of any kind by the Board of Trade. Many owners I know do not require their officers to pass the colour test, being satisfied with the Board of Trade certificate. But I should think my case ought to be a warning to ship owners not to place reliance on the present Board of Trade test. My colour blindness has destroyed my means of livelihood, and I fearlessly say that the Government test of sight is to blame for this. I am informed that I cannot claim compensation from the Board of Trade because they have not interfered with my certificate; but suppose I follow my avocation and get into collision through my defect, what then? and who would be to blame? I am a young man of 33, and I have a wife and family depending upon me, and my position at present is very distressing. The best part of my life (Captain Smith has been at sea for twenty years) has been passed in useless toil. My energies and prospects for the future have been unrewarded and blighted through no fault of my own, but through the lax and imperfect way in which I was examined and passed in sight by the test that was adopted by the Board of Trade throughout the whole of my examinations."

What answer the Board of Trade can make to Captain Smith's indictment I know not. They have ruined his life, and they cannot plead ignorance in the doing of it. For years past the worthlessness of their colour tests has been ably pointed out by men of high standing in the profession—Brudenell Carter, Brailey, Nettleship, Jabez Hogg, and last, but not least, Joy Jeffries, of Boston, U.S.A., of whose energies in this direction it is impossible to speak too highly. But all suggestions and recommendations have fallen upon stony ground, and it has remained for one whose best interests the Board of Trade has ostensibly had at heart to stir them up to a sense of the duty they owe, not only to the public, but to every individual sailor who presents himself for their certificate.

It goes without saying that the Board have not interested themselves in obtaining for the victim of their worthless tests any land position which would keep the wolf from the door, though it is true they took the trouble to find out whether such a person as Captain John Smith did really exist. Possibly, when his case is brought, as it will shortly be brought, before the notice of the House of Commons, some appointment may be found for him, and, in any case, the publicity given to his sad experience will have a beneficial result.

It must not be thought that this is an isolated case. It is now no uncommon thing in Liverpool to hear of officers being dismissed for colour blindness who have held, in some cases for years, lucrative and responsible appointments on board ship. Everyone will admit the justice of these dismissals, for upon the correct colour vision of the officer on watch depends the safety of the ship, and, in many cases, the lives of hundreds of helpless passengers and property to the extent of hundreds of thousands of pounds, but everyone will, at the same time, admit the hardship—nay, more, the injustice—done these men by the use of bad Government tests and regulations. The least the Board of Trade should do would be to find some employment for these unfortunate men whose lives and homes they have been the means of wrecking, and a healthy expression of public opinion would do much to compel a public department, not by any means distinguished for its broad and enlightened views, to adopt a sensible and humane view of this question; but to expect them to make of their own free will and accord a move in the right direction would be folly, for it must not be forgotten that in instituting tests in 1877, the Board of Trade simply followed the lead of the shipowners, and the credit of recognising the dangers of colour blindness and defective sight belong, the medical profession being excepted, to the latter. It is only right that credit in this matter should be given to those to whom it belongs, and, in this instance, it is the Liverpool Cunard Line who deserve it. The following correspondence, which speaks for itself, is an accurate copy of the letters sent in the year 1876 by the managers of that company to their respective officials:—

"Instructions regarding the ordinary and colour vision of 'look-out' men.—Cunard Line, British and Foreign Steam Packet Company, 8, Water Street, Liverpool, March 22nd, 1876. To Captain ——. Dear Sir,—Annexed is a letter addressed to the surgeon of your ship. You will at once perceive the importance of being assured of the capability of your 'look-outs,' especially at night; and, besides taking the opinion of the surgeon upon the question, you will kindly impress upon your officers that grave responsibility rests with them in their selection of men for a duty which is of paramount importance.—Yours truly, D. and C. MACIVER."

"To Surgeon ——. Dear Sir,—As it is of the greatest importance that a thoroughly efficient look-out should be always kept, we have to request that upon the day of muster you will kindly pay particular attention to the eyesight of the men who are told off as look-outs, so as to ascertain whether these men have sufficiently good vision to enable them to see with natural acuteness both by daylight and in the evening, and also readily to distinguish the colours of the different lights displayed by ships at night, so that they may report quickly and accurately and may otherwise fulfil the duties of a thoroughly efficient look out. In the event of your having any doubt as to the possession of the necessary qualifications by any of the men, will you please to report your opinion to the captain, so that these men may not be employed upon a duty for which, in the exercise of your professional discretion, you consider them unfit?—Yours truly D. and C. MACIVER."

No wonder the Cunard Company were able to say that they had never lost a passenger's life, when men who could grasp a situation so thoroughly as to write such letters were at the head of affairs; and these letters redound to the credit of the medical profession, for it was at the direct instigation of Dr. Caldwell—then surgeon to the crack passenger steamer *Russia*, but now practising in New York—that they were written. This gentleman also saw (1876) Mr. Thomas Gray, the Permanent Secretary to the Board of Trade, on the subject, and to his representations and to the public agitation over the Arlsey collision (1876) were, I believe, due those tests and regulations (1877) which have been already discussed. But to this day the Board have not recognised the importance of applying the colour test to "look-outs," A.B.'s and apprentices.

Messrs. D. and C. MacIver considered colour blindness and defective far-sight in a "look out" as fatal to the efficient discharge of his duties. The Board of Trade think differently. So far as their regulations go, a colour-blind man is quite capable of taking his watch as "look-out," and he may have in addition any degree of blindness due to disease or short sight, and yet be quite capable of taking part in the navigation of a ship. That ships have been lost through the defective far sight of "look-outs" and officers no one who reads the evidence given in Board of Trade inquiries can doubt. I have seen professionally officers and men whose sight has been so bad that I would not have trusted them to pilot me across a street, yet the Board of Trade trusted them with the lives of passengers and with valuable ships and cargoes. Perfect far sight is quite as essential as perfect colour sight, and not only should all entering the mercantile marine be subjected to a test as to their visual acuteness for form, but this test should be enforced from time to time. The importance of this latter contention is well shown in a letter received from a gentleman who now occupies a high position in the Board of Trade employ, and which reads thus:

"No man of any experience can doubt for a moment that colour blindness or defective eyesight may bring ships into great danger, and I have not the slightest doubt that many accidents have occurred through this cause; the difficulty is to prove it. However, the following happened to me, and although I do not want you to mention my name, you may make what use you like

of the incident. I was commanding a steamer in the China trade, and have always had excellent eyesight. In the bay on the outward voyage I was knocked by the sea against the rail, and my left cheek-bone broken, and the eye much injured. I could not see for weeks. By the time I arrived at Shanghai the swelling had gone down, and I was nearly well. I went to the best oculist there, and he said my eye was all right. On the voyage home I was taking the altitude of a star about 3.30 A.M., with the second mate. I always take the altitude of the sun with one eye, my right eye; but at night, with the horizon indistinct, it is much better to use both eyes. We took the altitude together, and I found I was 72′ different to his altitude. I at first thought he had taken a different star, and again pointed out the particular star, but on reading off the instruments we were again about 70′ different. By this time it was 4 A.M.; so I sent word to the first mate to tell him to bring up his sextant, and we all three took an altitude, when to my astonishment I found I was about 70′ different to my two officers. It only then occurred to me that this was caused by my left eye. I took the altitude again with my right eye only, and found I was correct. Now, supposing the altitude had been taken by me without the officer's assistance, and that it had been the first opportunity of getting our position for some days, the ship might have been run ashore on one of the numerous reefs there are in the China Sea, and I should have wondered ever after how it came about. I left the sea after that year."

Until the advent of that letter I had simply considered defective far sight in a sailor as preventing him from detecting danger when present, but now we see that it may directly lead him into danger, and danger of a nature from which it would be impossible to escape. In the first form of danger it is always possible that the other vessel may, by good luck and good management, get out of the way, but sunken reefs, sand banks, and shallows are stationary, and a course being set for them can have but one ending. The case related not only proves the necessity for a periodical testing of the acuteness of vision for form, not necessarily for colour, but it opens up a grave source of danger, a source hitherto unsuspected; and it throws a new light upon the innumerable strandings, wrong courses, etc., with which all who read the Wreck Commissioners' Report are only too familiar.

If those who should be most concerned in ascertaining the real causes of shipping disasters will look at the matter in this light, a distinct advance will have been made. One might have thought that as in most shipping inquiries the evidence as to the colour of the lights, and as to the distance at which they were seen, is bewildering in its contrariness, the first step towards a solution of the difficulty would be to examine on the spot the far sight and colour sight of the witnesses. But the wiseacres who adjudicate at these inquiries think differently. Though they are aware of the prevalence of colour blindness and of the fact that sailors are no more exempt from short sightedness and eye disease than the rest of the male population, they take it for granted that the witnesses coming before them have perfect far sight and perfect colour sight. One of the remarks most used in order to confound medical experts has been the one, "Point out cases where colour blindness or defective sight has led to disaster." A perfectly fair reply to this would be, "If the eyesight of sailors on colliding vessels were tested in court, examples would multiply." Where one witness swears the colour of a light to have been red, while another is equally positive it was green, there is, in the absence of proof, at least as much reason in believing the correct solution of the discrepancy to be colour blindness on the part of one or other, as to conclude it is found by believing one witness to be lying or drunk. But this form of argument is not necessary, for there are now a sufficient number of cases well authenticated where disaster due to colour blindness or defective sight actually occurred or was narrowly averted.

The first is to be found in the annual report of the Supervising Inspector-General of Steamboats to the Secretary of the Treasury, dated Washington, 1880, and reads as follows:—"On the night of July 5th, 1875, there was a collision near Norfolk, Virginia, between the steam tug *Lumberman* and the steamship *Isaac Bell*, the former vessel bound to, and the latter from, Norfolk. The accident occurred at about 9 P.M. on an ordinary clear night, under circumstances which, until recently, seemed more or less mysterious. The master of the steamer and all his officers made oath that at the time signals were made to the tug, the latter was from one to two points on the steamer's starboard bow, and consequently the steamer's green light only was visible to the approaching vessel. Yet the master of the tug, whose statement was unsupported by any other testimony, asserted that the steamer's red light was exhibited, and signalled accordingly. The discrepancy in the statements was so great that many persons uncharitably charged the master of the tug with being intoxicated, although no evidence was ever offered in support of the charge. By this accident ten persons lost their lives. Upon a visual examination of this officer under the rules during the past summer, and during which time there had been no question as to his sight, by the surgeon of the Marine Hospital at Norfolk, he was found to be colour blind, two examinations having been accorded him, with an interval of ten days between them."

A second case is mentioned in the *Shipping and Mercantile Gazette and Lloyd's List*, dated June 29th, 1881: "The pilot of the *City of Austral*, which was lost in the harbour of Fernandia, Florida, last April, is proved to be colour blind. In this way it would appear he mistook the buoys, and his mistake cost the owners 200,000 dollars (£20,000). An examination showed that at a distance of more than six feet he could not distinguish one colour from another. The physicians attribute the defect to an excessive use of tobacco. The services of the marine surgeons were tendered to the local authorities without fee two years ago, but were declined."

A third case is recounted in a letter from Messrs. Macintyre and Co., Liverpool shipowners: "Our ship *Carbet Castle* collided in the South Channel, bound from Dundee to Cardiff, in 1879, with the *T. H. Ramien*, due, as far as we can now make out, to the colour blindness or short sightedness of the chief officer."

The following account is written by Captain Coburn, who was for many years in the employ of Messrs. Leach, Harrison, and Forwood, of Liverpool, and is to be found in the *Mercantile Marine Reporter*, vol. xiv, No. 162: "The steamer *Neera* was on a voyage from Liverpool to Alexandria one night. Shortly after passing Gibraltar, at about 10.30 P.M., I went on the bridge, which was then in charge of the third officer, a man of about 45 years of age, and who up to that time I had supposed to be a trustworthy officer, and competent in every way. I walked up and down the bridge until about 11 P.M., when the third officer and I almost simultaneously saw a light about two points on the starboard bow. I at once saw it was a green light, and knew that no action was called for. To my surprise, the third officer called out to the man at the wheel, 'port,' which he was about to do, when I countermanded the order, and told him to steady his helm, which he did, and we passed the other steamer safely about half a mile apart. I at once asked the third officer why he had ported his helm to a green light on the starboard bow, but he insisted it was a red light which he had first seen. I tried him repeatedly after this, and although he sometimes gave a correct description of the colour of the light, he was as often incorrect, and it was evidently all guesswork. On my return, I applied to have him removed from the ship, as he was, in my opinion, quite unfit to have charge of the deck at night, and this application was granted. After this occurrence I always, when taking a strange officer to sea, remained on the bridge with him at night until I had tested his ability to distinguish colours. I cannot imagine anything more dangerous or more likely to lead to fatal accidents than a colour-blind man on a steamer's bridge."

A similar experience is thus related by Captain Heasley, of Liverpool: "After passing through the Straits of Gibraltar, the second officer, who had charge of the deck, gave the order to 'port,' much to my astonishment, for the lights to be seen about a point on the starboard bow were a masthead and green light, but he maintained that it was a masthead and red, and not until both ships were nearly abreast would he acknowledge his mistake. I may add that during the rest of the voyage I never saw him making the same mistake. As a practical seaman, I consider a great many accidents at sea arise from colour blindness."

Fortunately the day is coming when a new *régime* will be obtained. Dr. Farquharson, by his question in the House of Commons, calling attention to the subject, has done a great public service. It is undoubted that the Board of Trade are beginning to stir in the matter, and we may fully expect that this time the medical views will receive careful attention, and the Board of Trade may feel equally sure that those views will not be narrow or prejudiced. By working together, I have no doubt rules and regulations may be made which, while not bearing harshly upon the sailor, will ensure to the sea traveller immunity from those risks which the present employment of colour-blind and defective far-sighted sailors renders possible.

MALARIAL NEURITIS AND NEURO-RETINITIS.

By N. C. MACNAMARA, F.R.C.S.,

Surgeon to the Royal Westminster Ophthalmic Hospital, and to the Westminster Hospital.

The following cases are of interest because they appear to throw light on the nature of the changes which sometimes occur in various nerves among persons suffering from malaria; instances of this description are perhaps more common in this country than is generally supposed, and in places where malaria prevails cases of hemicrania, sciatica, and loss of sight in connection with intermittent fever are not unfrequently met with.

Case I.—Mr. M. had been employed as a tea planter in Assam and Catchar for thirteen years, and during that period had frequently had intermittent fever, after more than one of these attacks his eyesight was affected so as to prevent him from reading or writing for ten days or a fortnight; the impairment of vision had then cleared away. Mr. M. returned to England in April, 1889. On May 19th he got wet through in a shower of rain; the same afternoon he had a severe fit of ague. The following morning I found that his sight, which had been perfect twenty-four hours previously, was so far affected that with the right eye he could only decipher the letters of Snellen 2.25, and with his left eye he was unable to do more than dimly count fingers held up between his eye and the light. There was no pain in the eyes, photophobia, or conjunctival congestion, the pupils were somewhat dilated, and acted imperfectly to light; the optic discs were completely obscured by effusion which extended into the retina; the retinal veins were tortuous and congested. The patient took 10 grains of quinine at 11 A.M. and again at 3 P.M., but the fever returned at 5 o'clock. On the 21st the vision in the right eye had recovered so as to be about equal to that of the left eye on the previous day. Mr. M. had no pain in the head, vomiting, or symptom of intracranial trouble; his urine contained neither albumen or sugar; he had some enlargement of the spleen, but was not anæmic; there was no evidence of either syphilis or rheumatism in this case. Forty grains of quinine were administered on the 21st; the fever did not return. Subsequently the patient took arsenic and strychnine, and by avoiding exposure to chill and removal to a bracing seaside locality he remained free of intermittent fever; his optic papillæ gradually cleared, but it was not until two months after the attack that his vision so far improved as to enable him to read Snellen 1.25. I saw Mr. M. in November, 1889, his optic discs were white, but he could read Snellen 0.5, and his vision was $\frac{6}{6}$ in his right eye, and $\frac{6}{9}$ in the left; he had had no return of fever, and was about to join his appointment in India.

Case II.—This officer was referred to me by Surgeon-Major Maxwell, who was asked to see him the day after he complained of impairment of sight. Lieutenant —— had been in India for five years, and during that period suffered frequently from intermittent fever. While on the march with his regiment he suddenly found his eyesight growing dim. He was obliged to go on the sick list, and was therefore sent forward to Meerut, and so came under the care of Dr. Maxwell, who found that he was suffering from neuro-retinitis in both eyes. "The optic disc in the right eye was indistinct and congested, the vessels engorged and tortuous, bending over the swollen portion of the retina. The vessels were in some places concealed by the swelling of the retina. The right eye presented signs of disease similar to the left. The patient was quite blind; his pupils were dilated and inactive." There was no suspicion of syphilis, no albumen in the urine; the patient had not suffered from rheumatism; his spleen and liver were much enlarged. This gentleman was without delay ordered home, and arrived in England within three months after the affection of his eyes had commenced; since leaving Meerut he had been free of fever. In the left eye the optic papilla was hazy, and there were several white patches over the retina with filiform hæmorrhages near the yellow spot; with this eye the patient could count fingers; the left eye was in much the same condition, the vision, if anything, being worse than in the right eye. The patient's liver was of normal size, but his spleen was still enlarged. Full doses of arsenic combined with strychnine was ordered, and he was sent to a bracing climate; the symptoms of neuro-retinitis gradually passed away, the patient's vision became normal, and he returned to duty twelve months after his arrival in England.

Case III.—This patient was a lad aged 10, residing in India; he had suffered from intermittent fever on and off for some time before I saw him; during an attack of this kind his sight became dim, and in the course of a few days he was completely blind; it was then that he came under my care. I found his spleen enlarged, there was a trace of albumen in his urine with fine casts covered with leucocytes. The optic papillæ in both eyes were obscured by effusion, the retinal veins were distended, the serous effusion extended into the retina. This lad was ordered sulphate of quinine and subsequently arsenic and strychnine, by means of which further attacks of ague were prevented, and within a month of his coming under observation the symptoms of neuritis had passed away, and the boy's vision appeared to be almost normal; he was unable to read English, and I could not therefore test his vision by means of Snellen's types.

Case IV.—This patient, aged 27, was a native of Bengal, who, after an attack of ague, first began to experience a certain amount of dimness of vision; the fever returned every day, and the sight became worse until the patient was almost totally blind; at the same time he experienced much difficulty in swallowing, fluid returning through his nose; the muscles supplied by the left ulnar nerve were paralysed. Under treatment similar to that referred to in the above cases, the patient, within a period of three months regained complete power over the various nerves and of the muscles whose functions had been temporarily lost.

I have notes of a considerable number of cases of this kind but selected these because the patients came under observation, we may suppose, in an early stage of the affection of the optic nerve although it is quite possible the neuritis may have existed for some time before the sight became impaired. I referred to cases of this description as far back as 1866, in the *Indian Medical Gazette*, and again in 1872. In the former of these communications intermittent hemicrania with neuritis in connection with malaria was discussed; and in the second, neuro-retinitis, the result of malarial toxæmia. My idea was that these affections of nerves in cases of malarial fever were the effect of peripheral neuritis, an idea referred to by Dr. Todd, who was under the impression that periodical neuralgic affections were frequently due to the determination of some poison to a particular nerve, as the paludal poison, or some matter generated in the system, gouty or rheumatic. Dr. Todd thought that "there was no reason why such morbid matters should not affect a motor nerve as they affect a sensitive nerve, causing paralysis in the one case and neuralgia in the other." He adds, "Mr. Bowman has met with several cases of distinctly rheumatic paralysis of the portio dura, and also of some of the nerves of the orbit, at the Ophthalmic Hospital, Moorfields."

Among the patients I have referred to above it will be noticed there was an entire absence of symptoms indicating either meningeal or cerebral disease; they all regained complete power of vision; they were not suffering from marked anæmia although they had enlargement of the spleen; there was no indication of serious renal mischief, nor was there any evidence of syphilis or of rheumatism among them. Each of these patients was under the influence of malaria when they developed symptoms of neuritis affecting the distribution of the optic nerve. They all recovered their sight, but this is by no means the ordinary course of malarial neuritis or of neuro-retinitis, for if the fever continues atrophy of the optic papilla and total blindness too often occur. In the cases to which I have referred, it was possible to mitigate the power of the poison from which the patients suffered in an early stage of the disease; and it is to this cause I attribute the successful termination of the morbid process so far as the eyes were concerned. The neuritis passed off gradually, it is true, but effectually, because we were able to administer drugs which destroyed for the time the influences which produced the fever. I may observe, however, that the malaria was during this time in the bodies of these patients: they ate, drank, and slept well, were in no pain or weakness beyond the condition of impaired vision, but if exposed to sudden damp and cold, any one of them would probably immediately have suffered from an attack of ague. The poison was in their system; we could see its persistent action on the structures comprising the optic papillæ, it took two months before it left this spot, and its departure was probably hastened by the action of certain drugs.

After carefully watching cases of this kind, I incline to the idea that the inflamed state of the optic papilla is due to something of the nature of a microbe which becomes planted in the affected tissues, and growing there produces ptomaines, which in the

turn cause irritation of the tissues, engorgement of the vessels, and the transudation of serum and leucocytes into the retina and optic papilla. This effusion probably increases the already impeded circulation through the retinal veins by pressure exercised upon them as they pass outwards through the discs. I may repeat that, whatever the direct cause of the changes observed in the optic papilla and retina, it had an intimate connection with the cause inducing the fever from which these patients suffered, for unless the fever could have been checked, the neuritis would have gone on to produce atrophy of the disc. In one of the cases above referred to, other nerves besides the optic and retina were implicated, probably through analogous changes to those which had been observed in the distribution of the second nerve.

The idea I have referred to regarding the pathology of malarial neuritis as it affects the optic nerve is strengthened by the observations of Dr. Kipp on "Malarial Keratitis," published in the *American Ophthalmological Society's Report for 1889*. Dr. Kipp has had 120 cases of this kind under his care, and he states that when the affected eye is carefully examined within a few hours of the commencement of the pain, photophobia, and circumcorneal congestion, that "not far from the margin of the cornea, a number of small greyish opaque elevations may be seen extending in a line towards the centre of the cornea. The following day the elevations give place to a narrow serpiginous ulcer, which extends superficially from without inwards," thrusting out branches in its progress, and reminding one of the fungoid growth which erodes the surface of our microscope lenses in India.

Dr. Kipp states that the duration of these ulcers of the cornea depend on that of the malarial fever which is always present in cases of this kind. He remarks that "until the fever is cured, the affection of the cornea continues in spite of treatment." In fact, as in certain questionable syphilitic cases, we may be able to clear up the diagnosis by watching the effects of anti-syphilitic remedies on the disease, so in these malarial cases the beneficial action of quinine, arsenic, and strychnine are indicative of the the nature of the affection from which the patient is suffering. In the optic nerve, and also in the distribution of the nerves of the cornea, it would appear that whatever the nature of malaria may be, it is something capable of fixing itself on these structures, and, by producing irritation in the part may lead to destructive inflammation of these delicate tissues.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

ON RIGIDITY WITH EXAGGERATED TENDON REACTIONS, AND CEREBELLAR INFLUX.

IN the report of remarks I made in the discussion following the reading of Dr. Charlton Bastian's paper at the Royal Medical and Chirurgical Society[1] occurs: "In cases of exaggeration of the knee-jerks and rigidity of the limbs it was not essential that there should remain a connection of the cerebellum with the cord below the lesion." This gives what I was obliged to admit[2] before the important researches of Dr. Bastian. Now I can, as I said in the discussion, withdraw that admission, and adhere to the hypothesis of "cerebellar influx" as I stated it.[3] Dr. Bastian's conclusions and mine as to the concern of the cerebellum with exaggeration of the knee-jerks and rigidity in cases of hemiplegia are, as he mentioned in his paper, fundamentally the same. He has advanced proofs where I only speculated. Mr. Bowlby's cases give strong support to Dr. Bastian's position. The counter-evidence adduced by Dr. Buzzard will receive respectful consideration. As the subject is one both of practical and scientific importance, and as Dr. Bastian's paper will not appear in the *Transactions of the Medical and Chirurgical Society* for many months, I refer those interested to his book, *Paralyses: Cerebral, Bulbar, and Spinal*, 2nd edition, pp. 216 *et seq.*

J. HUGHLINGS JACKSON, M.D., F.R.C.P., LL.D., F.R.S.

Manchester Square.

[1] JOURNAL, March 1st, 1890.
[2] *Med. Times and Gazette*, February 12th, 1881.
[3] *Med. Examiner*, April 5th, 1877, and March 29th, 1878.

THE DYNAMOMETER AS AN INSTRUMENT OF DIAGNOSIS.

THE dynamometer is gradually making its way for its obvious purpose—namely, to measure accurately the strength of paralysed muscles of the upper extremities, and to determine the slightest difference in the muscular power of the two hands. Only flexile power is measured; the capacities and ranges of other movements are not even guessed at.

My object in this brief note is to remind those who use the dynamometer of its latent potentiality in making a diagnosis. At Bath, as at other spas where a number of rheumatic and gouty people crowd for relief, we have continually to bear in mind the discrimination of gout and rheumatism from their frequent counterfeit, osteoarthritis. Three specific types of hand are ever before us: 1, The gouty hand; 2, the rheumatic hand; 3, the osteoarthritic hand. The outward pathological anatomy of the three hands is often singularly alike. To state positively what that morbid anatomy is, merely from inspection and comparison, sometimes eludes the ripest judgment; and the collateral evidence of medical history is not always an infallible guide. For a hand, crippled by an original rheumatism or gout, may be gliding into another arthritic condition, more destructive and therefore more incurable.

Here the dynamometer steps in, and tells us with scientific promptness and decision that osteoarthritis is not merely the disablement of a mechanical apparatus, but a vital atrophy and paralysis as well. The struggling hand scarcely moves the pin on the dial; and I have seen a large masculine hand, not impotent to outward vision, unable to make the pin do more than a shuddering quiver. It is not pretended that this weakness proves the existence of osteoarthritis. Arthritis is assumed to be the postulate of the case; the question for our diagnosis being, What is the nature of that arthritis? Pure gout and rheumatism never produce this wasting and inertia in an early stage; but osteoarthritis often strikes its blow and works its havoc in a period which may be measured by weeks rather than by months.

The dynamometer is useful in showing improvement or further deterioration, and should be frequently employed during our treatment with the Bath thermal waters and their medicinal allies.

The instrument I use is made by Messrs. Krohne and Sesemann. Some explanation of the figures might be engraved on the dial.

Bath. JOHN KENT SPENDER, M.D.Lond.

HEREDITY AS TO TRIPLETS.

THE following case is not without interest, showing how very hereditary triplets are in some families.

I was consulted by a Mrs. M. B., a Wiltshire woman, aged 44, who gave me this history of her family: Great-grandmother, maternal side, had nine children at three births, triplets each time. Grandmother had seven children, triplets once, twins twice. Her mother had twelve children, once triplets, twice twins, five single births. Her mother's sister had seven children, triplets once, four single births. Her mother and her aunt married two brothers. Her mother had two brothers who married; neither had children. Mrs. M. B. has had sixteen children, triplets twice, ten single births. She has seven girls living. Eldest daughter, aged 25, married, has four children, one triplet and one single birth. Second daughter married September, 1889; pregnant. She states she herself was one of a twin, and her mother also. Her family seems to be well known in the village whence she comes as the "triplet and twin family." Her maternal great-aunt, aged 90, single, is still living, who declares that her grandmother told her that her grandmother informed her triplets were in the family as far back as any record could be obtained.

I do not suppose this case possesses any exceptional interest, and doubtless there are many families where this heredity is still more marked.

W. C. GRIGG, M.D.

Curzon Street, Mayfair, W.

ŒDEMA OF THE LARYNX A SEQUEL OF INFLUENZA.

H. W., a girl, aged 23, by occupation a barmaid, came to me on January 14th complaining of great hoarseness. A pale bladder-like projection of the right ary-epiglottic fold was seen with the laryngoscope, hiding the posterior third of that vocal cord, and occupying the interarytenoid region, so as to hide from view quite a third of the glottic aperture. The vocal cords underneath were

quite normal in appearance and movement. The patient had during the previous week been laid up with "influenza," inquiry into the patient's story corroborating this statement. There was no sign of renal or chest trouble. The patient's attention had been first drawn to the throat the day previously by the onset of hoarseness. The œdematous swelling was freely scarified, and pinol inhalations ordered. Three days after the œdema of that side was less, but there was a blueish-red œdematous swelling of the left ary-epiglottic fold, corresponding in situation to the first swelling. This was much reduced by scarification; the inhalations were continued, and in a few days all signs of œdema in the larynx had disappeared and the voice was normal again, and the patient quite well.

I do not know whether laryngeal œdema has been noticed by anyone else as a sequel of "influenza," but it seemed to me worth while to record the circumstance.

R. Norris Wolfenden, M.D.Cantab.,
Physician to the Throat Hospital, Golden Square.

Upper Wimpole Street.

INCUBATION OF RÖTHELN.

Seeing that the incubation period of German measles is very uncertain, according to most authorities ranging from ten to twenty-one days, I venture to give my experience, having attended a number of cases of German measles during the last few months. In three of these cases I can state positively that the rash appeared on the fifteenth day after exposure to infection, there being only a single exposure in each of the three cases. The invasion stage in all the cases I have seen was very short—only a few hours—the patient going to bed apparently all right, to find next morning his face and neck covered with distinctive rash. The only visible symptom before appearance of rash was enlargement of lymphatic glands of neck, which appeared a couple of days previous to it. In only one of the cases did the temperature rise to 102°; in all the others it remained under 100°. The rash could be distinctly seen on mucous membrane of palate and fauces, causing a sensation of roughness and soreness in mouth and throat. The fever and rash had disappeared by the third day, leaving patient a good deal pulled down. A week in house completed the cure.

A. W. Flood, R.N., F.R.C.S.E.

Budoran, co. Donegal.

THE ECBOLIC ACTION OF PENNYROYAL.

I have long been under the impression that the action of mentha pulegium (pennyroyal) on the uterus is more powerful than is generally supposed. I believe that in certain parts of England preparations of pennyroyal are in considerable demand, and that a great number of women ascribe emmenagogue properties to it. I have been told by married women of considerable intelligence and powers of observation that they are absolutely certain that pennyroyal will bring on the catamenia when they have been suppressed. In the tenth edition of Taylor's *Manual of Medical Jurisprudence*, that eminent authority is very explicit in declaring that pennyroyal has no ecbolic or emmenagogue properties. He states that it has no more effect on the uterus than peppermint or camphor water. Of course it is difficult for the ordinary practitioner to speak with authority on such points. In the same page as the passage quoted (page 508), Taylor cautions the average medical witness against dogmatising with respect to the properties of drugs. That is exactly the difficulty.

I once attended a case of abortion where I am absolutely certain the symptoms of severe flooding and expulsion of the ovum was produced by the taking of pennyroyal. There could be no doubt about the "ecbolic" properties of the drug in this case, the patient becoming collapsed. This result followed the taking of three drachms of the essence of pennyroyal.

"Pennyroyal," says Taylor, "is not described by any authority as an emmenagogue or ecbolic, or as a substance having any abortive or noxious properties." There is, obviously, great difficulty in collecting evidence as regards the real action of such a drug. The chemists who sell it do so in the full belief of the eminent opinion quoted above; at the same time they know that the catarrh for which it is asked is not one of the respiratory system. The purchaser naturally keeps her secret to herself, and will not relate her experience to anyone. We have no official preparation of mentha pulegium. I am certain that the eminent opinion quoted above requires considerable qualification, and I think that the sale of pennyroyal indiscriminately by druggists should be forbidden.

J. G. Marshall, M.B.Cantab., etc.

Dover.

REPORTS
on
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LONDON HOSPITAL.

FOREIGN BODY IN THE BRAIN.

(Reported by Mr. John Wilkins, House-Physician.)

The following case was recently the subject of a coroner's inquest:—

W. R., aged 38, came to the hospital complaining of weakness and shortness of breath. It was found that there was œdema of the legs and albuminuria, and patient was admitted. On further examination he was discovered to have extensive phthisis of both apices. He gave a history of an old injury to the head, for which he was treated as an in-patient at St. Bartholomew's Hospital. He had not suffered from headache, vomiting, fits, or any other cerebral symptoms. Ophthalmoscopic examination showed that the fundus was normal in both eyes. There was slight alcoholic tremor of the hands.

At the *post-mortem* examination, on opening the skull, a portion of the blade of a penknife, about three-quarters of an inch in length, was found impacted in the left temporal bone, passing down into the fissure between the middle and inferior frontal convolutions, to which its plane was parallel. The dura mater was thickened around the site of puncture. There was no injury to cerebral tissue.

On examining the outer table the point of entry was found to be covered with scar tissue. There was an old, pale cicatrix on the scalp.

MACCLESFIELD INFIRMARY.

A CASE OF ABDOMINAL ANEURYSM.

(From notes by H. Joslen, M.R.C.S., L.R.C.P.Lond., Junior House-Surgeon.)

The following notes of a case of abdominal aneurysm are of in
terest from the long period which elapsed between the bursting
of the aneurysm and the death of the patient and the extreme con
dition of atheroma of the aorta found at the *post-mortem* exami
nation.

J. H., aged 34, silk weaver, was admitted on November 9th, 1889
for heart disease and general debility. He gave no history o
rheumatic fever, scarlet fever, nor syphilis. The symptoms o
aneurysm had begun six years earlier, by pain in the back, but h
did not give up his work until two years before admission, whe
he developed symptoms of heart disease. On admission he com
plained of shortness of breathing and pain in the left side of hi
chest and back about the tip of the last rib. On examining th
heart a soft blowing murmur could be heard in the aortic area
and traced down the sternum. On examining the abdomen ther
was nothing abnormal beyond slight tenderness in the left ilia
region, no marked pulsation, and no *bruit*. Femoral pulsatio
equal on the two sides, and synchronous. Pain in the left groin an
knee. By rest in bed patient was relieved of his heart symptom
and gradually gained strength, although the pain in the back re
mained the same until December 13th, when he had an attack o
very acute pain in the abdomen, with symptoms of interna
hæmorrhage, and a tender, pulsating, ill-defined swelling forme
in the left lumbar region; no *bruit*. After this he had simila
attacks about every six hours, the swelling increased, and th
pulsation became more diffused. The symptoms of hæmorrhag
became more marked, and on December 15th he was partially u
conscious for four hours. On the 16th he had rallied considerabl
and he now had partial loss of sensation over the area supplied b
the internal saphenous nerve and some loss of power in the le
lower extremity. From now until the time of his death, at 1 P
on January 8th, 1890, he gradually got weaker, the swellin
gradually increased, and the pulsation became more diffused. Tw
days before his death the abdomen was much distended with flatu
he had hiccough, and vomited twice. The temperature througho
fluctuated between 99° and 101°.

Post Mortem.—On opening the abdomen the small intestin
were found distended with gas, and matted together by rece

lymph. There was a small quantity of blood clot free in the peritoneal cavity in the left iliac region. In the left side of the abdomen was seen a large swelling, having the descending colon stretched over its anterior surface, and the great omentum firmly adherent to it more internally. This swelling was found to be in the subperitoneal tissue, and to consist of a large laminated blood clot. It was situated, for the most part, in the lumbar region, but encroached also on the hypochondriac, iliac, and umbilical regions. The clot itself was about the size of the fœtal head at term, of an oval form, with its long diamater parallel with the spinal column, and was made up of a number of laminæ which apparently corresponded with the attacks of pain, the outermost being the oldest and the centre *post-mortem*. The left kidney was embedded in the posterior part of the clot; at its upper and inner side the clot communicated with an aneurysm about the size of a cricket ball, which was connected with the upper and back part of the abdominal aorta, immediately below its passage through the diaphragm. It extended backwards, downwards, and outwards and behind had eroded the bodies of the vertebræ, the intervertebral cartilages standing out in the cavity of the aneurysm. The wall of the aneurysm had given way at the lower and back part. The communication between the aneurysm and the aorta was a slit-like opening, 4 inches in length and 1 inch in breadth. The internal surface of the aorta was seamed and puckered by atheroma throughout its whole extent, and in one spot there was a calcareous plate about the size of a millet seed. The left ventricle of the heart was hypertrophied. The mitral and aortic valves were thickened, and the former somewhat shorter than normal. All the other organs of the body were normal.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

SATURDAY, MARCH 1ST, 1890.

ANNUAL MEETING.

Sir E. H. SIEVEKING, M.D., President, in the Chair.

Report of Council.—The Council reported to the Fellows details of the steps which had been taken in acquiring the new premises, 20, Hanover Square, and in moving from Berners Street to the present house. The debentures issued to raise the necessary funds had been subscribed entirely by the Fellows of the Society. During the past year, by the generosity of Dr. Quain and Mr. Hussey, the nucleus of a fund to be called the "Permanent Endowment Fund" had been invested, and it was hoped that in the future this would be largely added to.

Change of By-laws.—An addition to Rule vi, Chapter xiii, of the By-laws was agreed to, deciding that the duties of the referees should for the future include the consideration, at the discretion of the secretaries, as to whether papers forwarded to the Society were suitable for reading before the Society.

President's Address.—The PRESIDENT read his address, reviewing at length the career of those Fellows of the Society who had died during the preceding year, amongst whom were Professors Donders and Von Volkmann, Drs. King Chambers, C. J. B. Williams, Habershon, and Cumberbatch; Sir William Gull, and Messrs. Shaw and Coulson. The President mentioned the pleasure he had in asking the Society to accept a jewel consisting of a copy in gold and enamel of the Society's seal mounted by a crown, to be worn as a badge of office by the President whenever he presided over or represented the Society.

Election of Officers.—The ballot was taken for the officers for the ensuing year, and those gentlemen who were proposed by the Council were unanimously elected.—Mr. HOLMES, the newly elected President, having been installed in the chair by the retiring President, addressed the Society briefly, thanking it for the honour done him, and assuring the Fellows that it would be his constant endeavour to promote the welfare of the Society.

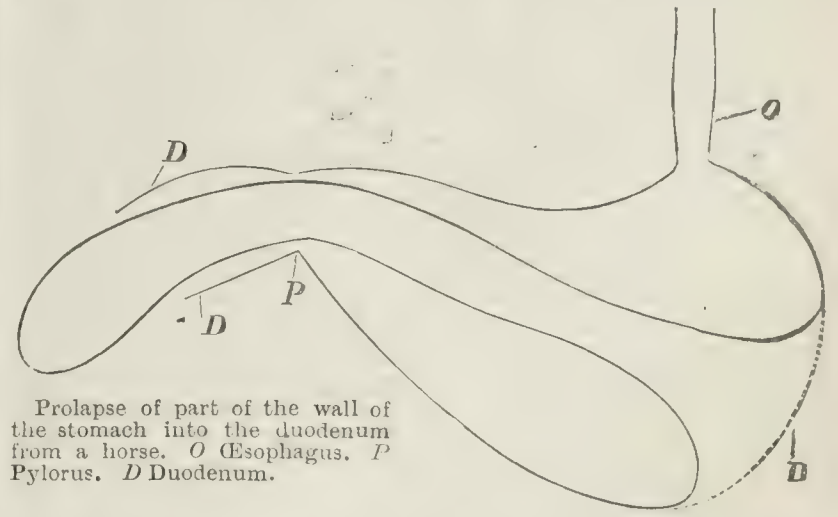
PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 4TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

Carcinoma (? Duct Cancer) of all the Mammary Glands of a Cat.—Mr. SPENCER showed the mammary glands of a cat, all being affected with carcinoma. The hinder glands were most diseased, and their place was taken by tumours from 1.5 to 4 centimètres in diameter, composed mainly of caseous material, but with some solid undegenerated portions at the periphery. Extension had taken place by the lymphatics passing up in front of the sternum, which were to be felt as indurated cords. These ended in glands in the root of the neck and in the anterior mediastinum, which had likewise become caseous. The lungs were studded with glistening semitranslucent nodules from a pin-point to 2 millimètres in diameter, without any sign of degeneration. Emboli had reached the lungs through the thoracic and right lymphatic ducts, and the pulmonary circulation. They had been arrested in the capillaries of the pulmonary artery, and had not extended further. The disease, which looked to the naked eye like tuberculosis, was found to be carcinoma, resembling the human duct cancer. The degeneration in the mammary and lymphatic glands was seen in progress, and the shrivelled nuclei were still present after the cells had disappeared. The specimens came from an adult female cat which had an irritating discharge from the nipples. The nipples were swollen and prominent, and the skin over the surface was red and excoriated, but there was no ulceration on the surface, nor was the skin involved. Three microscopic specimens were shown from the mammæ, lymphatic glands, and lungs.

Prolapse of part of the Wall of the Stomach into the Duodenum from a Horse.—Mr. SPENCER also read the following case: The cardiac end of the stomach had become inverted, and the inversion had extended across the cavity of the stomach into the duodenum. The prolapse beyond the pylorus formed a sausage-shaped mass about a foot in length, and nine inches in circumference. It consisted of all the coats of the stomach, much thickened by inflammation and congestion. In the recent state it was black from congestion, but actual gangrene had not begun, except where the prolapse was tightly constricted by the pylorus. The rest of the stomach was normal. The condition is shown in the accompanying diagram. This condition had not been noted, either in man or animals, either as a primary condition or secondary to a



Prolapse of part of the wall of the stomach into the duodenum from a horse. *O* Œsophagus. *P* Pylorus. *D* Duodenum.

tumour polypus. It was produced by perverted peristaltic action, but the exceptional character of the condition precluded any conjectures as to why it had occurred. Whilst the horse's stomach did not differ materially from man's except by having an intra-abdominal œsophagus, the animal hardly ever vomited except when the stomach was ruptured. There had been no vomiting in this one. The specimen was taken from an aged pony, which was thought before death to be suffering from intestinal obstruction. It had been ill about a week. It could not swallow food or water, although it desired to do so. During the last three days it passed water several times, but no fæces.

Case of Chronic Lateral Invagination of the Colon, following on a Malignant Growth.—Dr. NORMAN DALTON read the case of a man, aged 40, who was first seen by him at King's College Hospital in January, 1888. He had at that time symptoms of perityphlitis. The pain was entirely in the right iliac region, and no definite tumour could be felt in any part of the abdomen. He improved under treatment, but in May he began to have melæna, and in September he went into Guy's Hospital under Dr. Goodhart. The tumour in the left hypochondrium was then felt. He improved again and left the hospital, but returned to King's in August, 1889, and died there in October. The symptoms during the last year of his life consisted of a painful tumour in the left hypochondrium. The

tumour was cylindrical, and felt like a thickened piece of bowel, varying in size from two to four inches long. From time to time he became constipated, and then the tumour became larger and more painful. After a day or two's constipation he would pass a motion—usually fluid and freely mixed with blood—and then the tumour became smaller again and less painful. He never had symptoms of complete obstruction, and he lost flesh very slowly. Death occurred from rupture of the bowel into the retro-peritoneal connective tissue. The diagnosis was cancer of the bowel. In September, 1889, he was seen by Mr. Watson Cheyne, who recommended colotomy, with a view to subsequently removing the affected piece of bowel if possible. The specimen showed that nothing short of such an operation would have been of much use, but for various reasons it was not pressed on the patient. At the *post-mortem* examination the tumour was found to be a polypoid mass, lying inside the colon at about the splenic flexure. It was attached to the wall of the gut by two pedicles at about the same level. At the free end of the apparent polypus there was a small nodule of colloid cancer, but the greater part of the mass and both the pedicles were found to be invaginations of all the coats of the bowel. There were no adhesions between the tumour and the anterior wall of the bowel, and there was a channel behind, between the two pedicles, through which the fæces must have passed. The explanation of these appearances seems to be that there was first a growth of cancer on the left side of the colon, and that this projected into the lumen until it touched the opposite side, to which it became adherent. Thus a bridge was formed across the bowel, and this bridge, being constantly thrust downwards by fæces, dragged on the intestinal wall on both sides, until all its coats became invaginated. In this way the original base of the tumour on one side and the adhesion on the other would become invaginations.—The PRESIDENT thought that without doubt the original change was cancerous, and that the invagination was secondary. He had seen intussusception produced by polypi. One very remarkable point in the history of the case was the absence of obstruction.—Mr. CROFT looked upon the specimen as an interesting contrast to those cases due to obstruction of the rectum by cancerous growths, the bowel above becoming pushed down and prolapsed. The explanation of the occurrence of ulceration in this case was the same as that seen in intussusception; the bowel pushed down, causing, by pressure or otherwise, ulceration of the wall of the gut below. He was convinced that the early formation of an artificial anus in such cases as these would prolong life.—Dr. DALTON replied that the absence of obstruction was accounted for by the fact that there was plenty of room behind the tumour for the passage of fæces.

Diffuse Papilloma of Bladder.—Mr. BOWLBY showed a specimen of the above, and gave the following history: The patient was a man, aged 55, who had suffered from hæmaturia for a year. At first hæmaturia was the only symptom, but for four months before death there had been much pain and tenesmus, and for the last fortnight of life there was also some incontinence of urine. No growth could be felt *per rectum* or with a sound, but the bladder felt rough. The patient when first seen was too ill to bear any operation, and died, nine days after admission into St. Bartholomew's Hospital, from suppurative nephritis. On *post-mortem* examination the bladder was found to be much enlarged, and to contain some purulent, blood-stained, ammoniacal urine. Its mucous coat was covered with phosphates, and, when these were removed, a thick villous growth was displayed. Almost the entire mucous surface of the organ was covered by a dense, shaggy mass, which completely replaced the normal lining. The growth was white, and was formed by innumerable slender villous processes more than an inch in length, and frequently branched. These covered all the inner surface of the bladder except a small portion of the fundus, and here the mucous membrane seemed perfectly healthy. A very noticeable feature was that the muscular coats were nowhere infiltrated, although they were hypertrophied. There were no enlarged glands or secondary growths. Microscopical examination showed that the tumour was a papilloma, and that it contained no sarcomatous or carcinomatous elements. The papillæ were branched and covered with many layers of small, round, oval, epithelial cells.—Mr. BARWELL asked how long before death the sounding took place, and whether any papillomatous filaments were found in the urine.—Mr. SPENCER had recently seen a case of diffuse papilloma, in which the growths were successfully removed with a curette.—Mr. TARGETT brought a specimen from the Guy's Hospital museum, which showed similar appearances. He said that the presence of villi did not determine the innocence or malignancy of the growth; it had been said that the first change was a lateral budding from the vessels of the mucous membrane.—Mr. PYE referred to a case which, on examination, seemed like a meadow sown all over with papillary growths. It was treated by opening the bladder above the pubes, and removing the growth with the nail. Three years had elapsed since the operation, but no recurrence had occurred.—Mr. ROUGHTON also related an instance of successful removal of diffuse papilloma with the finger nail, and referred to a specimen in the museum of St. Mary's Hospital, where the growth involved principally the base of the bladder.—Mr. LUNN had operated a year ago on an old man of 75 by the suprapubic method. The growth was easily removed by the finger, and the patient was still in good health.—The PRESIDENT asked if the urine had been examined microscopically. He referred to a case in which a papilloma became totally detached from the vesical wall, was thickly coated with phosphates, and became converted into a calculus.—Mr. BOWLBY replied that on admission into hospital the patient's bladder was contracted and difficult to sound. The surface of the bladder only felt rough. The urine was examined, but no villi were found. Around the general mass of the growth there were several small isolated masses, with healthy mucous membrane intervening; this fact might lead to the supposition that recurrence would be sure to occur after removal, but clinically it was not found that such recurrence did take place. He lastly referred to a somewhat similar case on which Mr. Stephen Paget had operated.

Loose Body from Knee-Joint.—Mr. H. BETHAM ROBINSON brought forward a case of quiet necrosis of articular cartilage, causing a loose body in the knee-joint. This had been removed by Mr. Croft, from a boy, aged 17, who, six days before, when lifting a heavy weight, had felt something give way in his right knee. This was followed by synovitis and difficulty in walking, so that he applied for admission to the hospital two days after. There was very little pain and no history of a blow or of any previous trouble with the knee or of any specific fever. As the synovitis appeared to be due to the loose body, this was removed. Ordinary synovial fluid escaped from the joint. There was no irregularity felt about the condyles. The loose body measured $1\frac{1}{16}$ inch in length, $\frac{5}{8}$ inch in breadth, and $\frac{1}{4}$ inch in thickness. It had a smooth, glistening convex surface, like normal articular cartilage, except for a small strip at one border, which was made up of tough ligamentous tissue. Its convex surface was irregular and pitted, and a few gritty nodules could be felt scattered over it. There were no spicules of bone to be seen attached to this deep surface. The edges of the body sloped from the concave to the convex surface; they were irregular, showing small grooves, over which the most superficial layers of the cartilage projected. Microscopically the deep surface was found to be very irregular, and the cartilage cells were undergoing multiplication in patches, just above this surface. Calcification was present around these groups of cartilage cells, extending into the matrix, which elsewhere was homogeneous. There was no appearance of any bone formation in the sections. It was evident from the appearance of the body that it owed its origin to the articular cartilage. From its shape and from the ligamentous piece it seemed to have been ataached to the posterior part of one of the condyles abutting on the intercondyloid notch. The question was whether it had been detached by injury or quiet necrosis. Against a traumatic origin was the excoriated condition of its under surface and edges, and the calcification taking place in its deepest layers. Although the body appeared to have been detached by quiet necrosis or necrosis without suppuration, there was no cause for such detachment. There was no history of any specific fever nor of previous injury. It must be supposed, however, that from some slight injury which the boy had not noticed a chronic inflammatory process had been set up beneath the cartilage, which had led to its gradual separation and shedding into the joint.

Necrosis and Separation of Articular Cartilages.—Dr. GRIFFITH of Cambridge, gave an account of the minute structure of loose bodies in joints, and traced the formation of the common variety, namely, that drawn from the synovial membrane. He referred to Kölliker's description of the vascular tufts near the articular cartilages in the knee-joint, and suggested that they were really the result of some passing inflammation of the joint rather than normal vascular villi, because he could not find any similar structures in the same situation in the fœtus at birth. He also compared and pointed out the histological differences between the

common variety and the much rarer one, the result of immediate separation of a piece of articular cartilage with its subjacent bone. He also referred to a specimen of necrosis of a base of the articular cartilage on the external condyle of the femur, in which the dead piece of cartilage was in the process of becoming separated from the surrounding living and healthy tissues. — Mr BARWELL considered that the mode of production of a foreign body in Mr. Robinson's case was rare. No doubt the cartilage was removed by quiet necrosis. In these cases there was a portion of bone attached to the cartilage, which came away with the cartilage. The line of cleavage was in the bone, and not actually between the cartilage and the bone. He then referred to a foreign body from the knee of a medical man which he had removed and presented to the College of Surgeons' Museum. It was a round, heavy body, and which was found to be a hard bony mass similar to those which sometimes grow from the frontal bone.—Mr. CROFT said the specimen shown by Mr. Robinson was evidently not a new growth nor yet a rheumatoid arthritic nodule, but was evidently separated by quiet necrosis, which did not preclude the infliction of injury. The patient from whom the specimen was taken had been a football player, and therefore might have suffered an injury, though he himself could not remember one He thought that quiet necrosis probably had some antecedent which should in every case be sought for.—Dr. SIDNEY COUPLAND asked Dr. Griffiths what was his idea as to the origin of these loose bodies.—Dr. GRIFFITHS thought that if the separated cartilage showed no signs of necrosis it was probably of traumatic origin, but if the cartilage was necrosed it was not so.

Card Specimens.—Mr. ROBINSON: Cavernous Angioma of Leg. —Mr. LUNN: (1) Myxœdema of Larynx; (2) Tumour of Larynx; (3) Ulceration and Perichondritis of Thyroid Cartilage.—Mr. BIDWELL: Double Ureter.—Mr. SHATTOCK: Triple Ureter.—Dr. SIBLEY: (1) Retroflexion of Uterus in a Monkey; (2) Specimens of Tapeworm from a Python.—Mr. TARGETT: Sarcoma of Tongue.—Dr. LEDIARD: Loose Cartilages in Bursa behind Knee-Joint.

Recent Specimen.—Mr. HUDSON: Retrorenal Lipoma from Fox Terrier Bitch.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 28TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Two Cases of Glandular Tumour of the Tongue.—Mr. BUTLIN gave an account of two female patients who had been under his care on account of a prominent tumour of the back of the tongue, immediately in front of the epiglottis. The tumour, in the first case, was about as large as a hen's egg. It was shelled out, after division of the mucous membrane, with a finger and a scoop. Examination showed it to be a glandular tumour, containing cysts. The removal was not complete. Recurrence took place, but the recurrent tumour did not thrive, but there had been no necessity for a further operation. In the second case the growth was not so large. It was removed with the galvano-cautery, and exhibited the same structure as the tumour in the first case. In this case, again, the removal was not complete; but the patient had been seen lately, several months after the operation, and there appeared no need for further treatment. The author referred to all other cases of the same character which had been found in surgical literature; showed how they had all occurred in females, had (with one exception) precisely the same seat in front of the epiglottis, and presented the same structure. Two points of special interest were commented on. The success of partial operations was illustrated, not only by the present cases, but by a case which was treated by Mr. Rushton Parker more than ten years ago. The origin of the growths was probably, as suggested by Dr. Bernays and Mr. Bland Sutton, fœtal. The microscopic structure was not that of the normal glands situated beneath the mucous membrane at the back of the tongue, but resembled very closely that of the thyroid gland.—The PRESIDENT said he had not seen any cases of the kind. They were certainly rare. But it was as well to know that diseases of the kind existed, which might be removed effectually in this way.—Mr. BOWLBY said that the appearance of the tumours themselves and their microscopical characters rather negatived the idea that they had to do with the thyroid gland. The cysts in these tumours contained a thin mucoid fluid, not a thick colloid fluid such as was contained by cysts in the thyroid. The tumours also were found microscopically to be composed of tubes lined with columnar epithelium; whereas the tumours which resembled the thyroid contained follicles, not tubes. He thought these tumours were probably derived from the follicular glands at the back of the tongue.—Mr. BUTLIN, in reply, regretted the absence of Mr. George Stoker, as he had pictures of two tumours exactly like those of these cases. He said that the cysts in a large thyroid tumour contained fluid which was so thin that it might be drawn off through a cannula; it was not of a colloidal nature.

Cheyne-Stokes Breathing in Granular Kidney.—Dr. SAMUEL WEST described a case which was that of a man, aged 53, with a history of gout occasionally, and who had been suffering from shortness of breath for eighteen months, especially on exertion. Six months before admission he was suddenly seized with very severe dyspnœa at night, so that he thought he was going to die. After half an hour he rallied, but he had two similar attacks in the course of a month, and then remained well until three weeks ago, when the worst attack of all occurred, since which time his breathing had remained short. He had a pale, sallow, earthy complexion, with tortuous and thickened arteries, and a pulse of high tension. Pulse 104, respirations 48. The heart was not manifestly hypertrophied, and there was no murmur. The urine was of low specific gravity 1010, and contained about one-sixteenth of albumen. The retina was natural. The case was diagnosed as one of weak heart, as the result of granular kidney. A few days later Cheyne-Stokes breathing developed. The respirations were 48 in the minute. The cycles occurred about once a minute, and the pain lasted thirty seconds. There was no change in pulse or pupil or in appearance during the pauses. If asked to take a breath during the pain he attempted to do so, but succeeded only in setting in action some of the extra-respiratory muscles, the common one, namely, the diaphragm and intercostals remaining fixed. For fourteen days the Cheyne-Stokes breathing was continued night and day; then the pauses disappeared, the general character of respiration was to crescendo and diminuendo continuing. A week later the place of the pause was taken by intermission, about two or four respirations being missed. The heart was at the time observed to be gradually dilating and the apex was about the nipple; no systolic murmur was audible at the apex. A few days later the Cheyne-Stokes breathing, which had been absent for fourteen days, returned. After lasting again twenty days the pauses again disappeared. This condition lasted for four days, and then was replaced by Cheyne-Stokes breathing, which remained continuously present henceforth until the patient's death. The cycles occurred over a minute, the pauses lasting from 20 to 25 seconds, and the respirations numbering about 40. For two days a ravenous insatiable appetite developed, and then the appetite almost completely failed. The patient died after having been under observation three months, but no *post-mortem* examination could be obtained. The temperature was abnormal throughout. The points of interest were: (1) the long duration of the Cheyne-Stokes breathing; (2) the replacement of the pauses by simple intermission; (3) the disappearance of the pauses while the rise and fall of the respirations continued; (4) tracings had been obtained, and were exhibited.—Dr. BASTIAN said that he should presume there was fatty degeneration of the heart. The older writers thought that Cheyne-Stokes respiration was almost pathognomonic of fatty degeneration of the heart; now it was known to be more frequently due to disease or injury of the brain. Fatty degeneration of the heart was difficult to diagnose. Possibly some poison due to the kidney trouble circulated in the blood, and so affected the brain.—Dr. S. MACKENZIE described the case of an elderly gentleman with fatty heart and granular disease of the kidney, who had Cheyne-Stokes respiration for two months before death; also a case of hemiplegia recently in the London Hospital, with Cheyne-Stokes respiration most distinctly marked. In one case, as the ascending scale of respirations began, the patient always put his right hand up to his head. He inquired if any member of the Society had seen a case of Cheyne-Stokes respiration, not due to brain injury, which had recovered.—Dr. WEST, in reply, said that he could easily diagnose a fatty heart in his case, and with the dilatation there was apparently no difficulty in diagnosing it. He had never seen but one case of Cheyne-Stokes respiration recover; in that case it was supposed to be due to tubercular meningitis, but he presumed this diagnosis must have been incorrect.

Diabetic Coma treated by the Injection of Saline Fluid into the Veins.—Dr. DICKINSON reported this case, which was that of a woman, aged 25, who was the subject of diabetes in a severe form, upon which coma with the usual diabetic character had recently succeeded. The fluid employed was that made use of in cholera, consisting of chloride of sodium, chloride of potassium, sulphate

of soda, phosphate of soda, and bicarbonate of soda dissolved in water. This was slowly injected by means of a syringe, first into the right arm and then into the left, until in the course of an hour and a half 106 ounces had been introduced. There was no immediate improvement, nor did the patient seem any the worse. About ten minutes after the conclusion of the operation, however, consciousness began to return, and soon became so complete that the patient was able to converse with her friends, and take food in a natural manner. But she relapsed into drowsiness and then into coma, and next day was very comatose, as much as before the operation. The injection was now repeated into one of the veins of the leg into which the fluid was allowed to flow from an elevated funnel. A little chloroform had to be given during the exposure of the vein. Under the operation the aspect of the patient improved; the features became less pinched, the complexion less livid, and the pulse gained in volume. With these encouragements the injection was continued until increasing fulness of the superficial veins and some general appearance of congestion were taken as indications to stop. There was as yet no return of consciousness, in the hope of which the proceeding had been continued. It was now found that no less than 350 ounces, or 17½ imperial pints, had passed in. This was a much larger quantity than had been intended, but the process was allowed to go on under the encouragement which the former attempt seemed to afford, and in the absence of prohibitive symptoms until the increasing congestion was thus interpreted. After the conclusion of the injection the patient remained unconscious for about three-quarters of an hour, then recovered complete consciousness, and retained it without drowsiness for nine hours, after which she became at times drowsy, but was for the most part sensible for 30 hours, after which there was a lapse into coma which was final and fatal. The protraction of consciousness after the second operation longer than after the first might possibly have been partly due to the chloroform, though but little had been given. After the operation the turgescence of the veins gradually ceased, and a little œdema appeared over the tibia. Urine of low specific gravity (1012), which contained 1.8 per cent. sugar, was passed freely. It gave no acetone reaction, though this had before been strongly marked. The bowels were loose, but not extravagantly so; the skin, which before had been dry, was moist, but not sweating. The heart sounds were feeble; there was no murmur either in it or the great vessels. The acetone smell in the breath was still perceptible, though much less than before. The urine no longer gave the acetone reactions. Within the space of thirty-two hours 456 ounces, more than 22 imperial pints, had been introduced into the veins. Five days before the injection the patient had been found to weigh 81½ pounds; after death the body weighed 93 pounds, the gain being no doubt of water. On examining the body *post mortem*, much superficial bloodstaining along the course of the superficial veins, and some œdema were observable. The peritoneum contained 18 ounces of straw-coloured fluid, the pleuræ 12 ounces, and the pericardium 1 ounce of blood-tinged fluid. The heart was small, but healthy, its cavities bloodstained. The lower lobes of both lungs were loaded with blood, and besprinkled with punctiform extravasations. The spleen was firm, dark, and full of blood; it weighed 8 ounces. The kidneys were full of blood, and bloodstained. The brain was much congested, the veins loaded, the pia mater injected. The ventricles contained about half an ounce of blood-coloured fluid. The results of the examination could be summed up as venous engorgement and fluidity of blood. The hopelessness of diabetic coma under ordinary treatment was held to justify, or at least to excuse treatment which was exceptional. The first injection, 106 ounces, appeared to be wholly beneficial; the result suggested only a wish that it had been more. As to the second, 350 ounces, the postponement of the expected benefit led to its being carried beyond the region of therapeutics into that of pathology; not only was consciousness restored, but morbid venous congestion produced. The delay in the return of consciousness in both instances suggested that the benefit was due rather to elimination than hydration. It was clear that 100 ounces could be introduced with advantage, and probably twice that quantity, but the results were not such as to promise more than temporary benefit. As a practical and safe conclusion, it was suggested that the free drinking of water should be enforced before diabetic coma was established in cases where it was anticipated.—Dr. S. MACKENZIE said that many physicians had for many years been using saline injections in diabetes without obtaining much good result. Some had recorded quite a tarry condition of the blood. Dr. Dickinson's case showed how much more injection might generally be used than physicians were accustomed to employ.—Dr. B. O'CONNOR asked how much chloroform was given to the operation.—Mr. TURNER mentioned the case of a patient with a considerable amount of glycosuria due to a blow, who was comatose, had fixed pupils, and was supposed to be dying, and who, being treated with energetic mercurial purgation, after twelve hours regained consciousness, and had since quite recovered, every trace of sugar even having disappeared. Dr. Dickinson's patient had a very anæmic condition, as shown by the collapsed state of the veins, and this necessitated a somewhat longer operation and more chloroform than would otherwise have been necessary.—Dr. S. WEST asked what was the condition of the urine after the injection; what was the reaction of the urine to perchloride of iron afterwards; and did the injection increase the amount of urine and so wash out the blood.—Dr. DICKINSON, in reply, said that the blood after death by diabetes had a thick gummy state. It was this that had suggested the propriety of attempting to dilute it. As to the amount of chloroform used, it was very small. He had never known a case of diabetic coma recover. He had known it kept off by the use of purgatives, and he had known it increased by the previous administration of opium given for the treatment of diabetes. He had twice tried the inhalation of oxygen, and frequently other remedies for diabetic coma, but never with much benefit. After the injection acetone was absent from the urine, which gave no reaction with the iron test; but the smell of acetone was still slightly present in the breath.

Acute Universal Desquamative Dermatitis following the Administration of Chloralamide.—Dr. PYE-SMITH described this case. The patient, a man, aged 40, who was suffering from aneurysm, was, among other hypnotics, prescribed chloralamide in full dose, and with apparently good effect. Soon after acute inflammation appeared on the face, with coryza, stomatitis, and raised temperature; the skin affection rapidly spread over the whole body, the urine was feeble and slightly albuminous, and pyrexia continued for a week. Profuse desquamation followed, resembling that of exfoliative dermatitis, and the skin finally resumed its normal appearance. Drawings illustrating the case were shown.—Dr. HALE WHITE said that he had looked up many cases in which chloralamide had been given, and in none other had such a rash been recorded. He noticed that the large amount of 80 grains had been given in Dr. Pye-Smith's case, in two doses of 40 grains each, one at 8 P.M. and one after midnight; 60 grains was usually considered a full dose.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 3RD, 1890.

C. THEODORE WILLIAMS, M.D., F.R.C.P., President, in the Chair

THE meeting on Monday evening last was the general annua meeting, when the Report of the Council was read and adopted It was announced that 42 new Fellows had been elected, with corresponding and 5 honorary Fellows, making a total of 72 ordinary and subscribing Fellows. During the year the Society had had to deplore the loss of 4 honorary and 4 ordinary Fellows and 3 Fellows had resigned. The Council had decided in futur to publish the proceedings of the Society as *Transactions* in lie of *Proceedings*, as heretofore. It was also stated that the Counci was fu the indebted to the retiring president for a generous dona tion of £100, "to be expended as the Council may consider bes for the comfort and convenience of the Fellows." The report o the Treasurer, showing the financial condition of the Society to b very satisfactory, was then read and adopted. The Honorar Librarian's report mentioned an addition of 83 new volumes to th Society's library, also a donation of 200 volumes from the Sta tistical Society. Attention was called to the fact that the whol of the publications previous to the year 1700 had been catalogue The report of the Fothergillian Committee was received, and th subject of the essay for March, 1892, was announced to be "Per nicious Anæmia."

On the Treatment of Fistula in Phthisis.—Mr. HERBER ALLINGHAM read a paper dealing with the treatment of fistula i patients suffering from phthisis. He referred to the recent infor mation obtainable on the subject, and to the contradictory natur of the recommendations made in the textbooks which treated o the subject. He however made an exception to this remark i favour of the opinions set forth in their respective books by th President (Dr. C. T. Williams) and by Dr. Douglas Powell. H

then alluded to the disadvantages arising from the common practice of the surgeon or physician arriving at an opinion as to the desirability of operating without consulting with his *confrère*. The author then discussed the peculiarities that distinguished fistula occurring in phthisical patients from ordinary traumatic fistula. He suggested that, from an operative point of view, fistula in phthisical patients might be divided into three classes: 1. Fistula in conjunction with active tuberculosis. 2. Fistula in conjunction with chronic phthisis. 3. Strumous fistula. He described these three varieties and the proper treatment in each condition. The author approved of active treatment in the second and third varieties, and he insisted upon the importance of choosing an appropriate time and place for operating. He deprecated active treatment while the cough was troublesome, and advised that that the patient should not be allowed to remain in the strictly recumbent position in order to avoid any tendency to lung mischief of a mechanical origin. He preferred chloroform to ether in the operation for fistula, and recommended caution in imparting the information as to the existence of a fistula to the phthisical patient, who was liable to become very despondent when told that it could not be operated upon.—The PRESIDENT observed that a discharge, if not excessive in amount, often proved beneficial so far as the lung trouble was concerned, and he mentioned instances in which marked improvement had taken place consequent on the formation of a fistula, and, conversely, cases in which the closure of a fistula had been followed by a recrudescence of the pulmonary symptoms. He said they were in the habit of measuring the chances of the patient by the extent to which other organs than the lungs were involved, as, for example, when enlarged or suppurating glands were present. At the same time, he would advise operative treatment if the condition of the fistula were such as to worry or irritate the patient, though he would be careful to lead the patient to expect some augmentation in the lung symptoms.—Mr. MARMADUKE SHEILD said that each case required to be taken on its merits in regard to the propriety of operative interference, and he pointed out that the existence of fistula in phthisical subject was usually associated with patches of tuberculous ulceration in the rectal mucous membrane. Moreover, the edges of the sinuses were seldom healthy, and healing could not be expected to take place in a satisfactory manner unless special attention was paid to scraping the surfaces and removing unhealthy granulations. He insisted upon the value of iodoform as a dressing in these cases. He attributed the rapid change for the worse which had been observed to follow operations, whether for fistula or the removal of caseous glands, to systemic infection from bringing the raw surfaces into contact with tubercular matter which ought always to be carefully removed.—Mr. HARRISON CRIPPS said he had ascertained that about 15 per cent. of the cases of fistula occurred in tubercular subjects. Fistula in phthisical persons might be due either to a morbid tendency to suppuration in debilitated subjects or to a pre-existing ulceration. Great relief often followed enlargement of the external orifice of the sinus, allowing of the escape of matter. He suggested that the febrile and other symptoms which followed closure of a fistula might be due to tension rather than further lung mischief. He attached very great importance to the use of chloroform in preference to ether, since the latter had appeared in certain cases to light up latent pulmonary trouble.—Mr. JOHN LOWE said he had always been chary of interference in these cases, many of which went wrong after operation, with symptoms of septicæmia. He advocated the practice of the immediate ligation of fistulæ when not too large.—Mr. TAYLOR said that, so far as he had been enabled to make out from the records, only about 4 per cent. of the in-patients at the Brompton Hospital suffered from fistulæ, and since he himself had been there only 1 per cent, hence he inferred that the association was in reality very rare. When present, fistulæ gave rise to remarkably little trouble in phthisical patients, and, as a rule, very little attention was paid to them. He thought, therefore, that they were best left alone, but if, for any reason, he considered it desirable to operate he would not be deterred by any fear of increasing the lung symptoms. He urged that the removal of diseased joints in limbs was often attended by the greatest benefit to the patient, and he did not see why it should be otherwise with fistulæ. If the discharge were beneficial, then, to be logical, they ought to employ setons, as in years gone by. He had satisfied himself of the tubercular nature of fistulæ in some cases, but not in all. He had never succeeded in meeting with a case in which fistula had started from a tubercular ulcer in the rectum.—The PRESIDENT said that in the cases alluded to by him the greater intensity of the lung trouble was testified to by physical signs. As to the use of setons, they were still largely employed.—Mr. ALLINGHAM, in reply, said he had not tried ligaturing fistulæ, which would not do any good if, as was almost always the case, there were more than one sinus. He suggested that it would be well to make a practice of asking phthisical patients whether they suffered from fistulæ. Such cases required very careful handling, but he had seen great benefit to the lung trouble follow operations.

HUNTERIAN SOCIETY.

WEDNESDAY, FEBRUARY 26TH, 1890.

STEPHEN MACKENZIE, M.D., President, in the Chair.

President's Address.—The PRESIDENT, after thanking the Fellows of the Society for the honour they had done him in electing him their President, proceeded to speak of the advantages of medical societies. They were a help to individual workers, and a benefit to the community. Observations were controlled and corrected, and conclusions were confirmed or rejected. The experience of one practitioner was tested by that of others. The members of a society met with men of his own standing; with younger men, trained in new habits of thought, and with the audacity of youth; with elder men, but whose ripened experience had corrected or confirmed their former ideas. He met also those engaged in different branches of practice who viewed the subject from a different standpoint. Much of the best work of the most distinguished members of the profession had been brought before a medical society in the first instance, and the preliminary sifting which it had there undergone had been of great service in eliminating error and adding completeness to the views put forth. The usefulness of medical societies to the community was obvious, for whatever advanced the science of medicine was of service to the race. The Hunterian Society, founded in 1819, the second oldest of the general medical societies, had not been behind the other societies in the good it had done in the past or in the present, and few societies could boast of a more distinguished list of office bearers. Meeting first at the rooms of the London Orphan Asylum, then in St. Mary Axe, it subsequently moved to Aldermanbury, where it remained located 14 years, and later to Blomfield Street, where it remained for 33 years. The premises were then required for a railway company, and a new home had to be found. In this emergency the managers of the London Institution had kindly opened its doors to the Society. A scare was experienced a year or two back by a whisper that the London Institution could no longer find room for the library. This library, which had been formed at great expense, was rich in old and rare books, but needed to be completed in modern medical literature. The Society could not but feel a sense of insecurity in its tenure, not from want of consideration on the part of the managers of the London Institution, but because the needs of the Society might outgrow the capacity of the Institution to contain it. The value of property in the City of London was so high that the Society could not look to its own efforts alone to secure it a proper habitation. In these circumstances it was felt that they might legitimately appeal for help to the Corporation and great City companies. The Hunterian Society had always been a City society, and was the only medical society in the City of London. His predecessor, Mr. Clement Lucas, had approached the Lord Mayor, who had encouraged them to hope that their appeal might be favourably entertained. A few thousand pounds would enable them to establish themselves under a permanent roof, with ample room for their valuable library, a suitable room for meetings, and perhaps in course of time a laboratory for scientific investigation.

Tender Feet in Psoriasis.—Dr. HINGSTON FOX showed a case of psoriasis in a man, aged 59 years, which had existed for fourteen years at intervals, and was now attended by much tenderness under the heels, where the epidermis was thickened and hard. The man walked much, and the foot was flat. No relief had been obtained from remedies. A high-arched boot and salicylic plaster were suggested.

Glycosuria.—Dr. HINGSTON FOX read notes and cases illustrative of glycosuria, as distinguished from diabetes. Case I was of a stout old lady, aged 81, subject to severe recurring eczema and erysipelas, sometimes combined,[1] also to "gastric crises," resulting in diarrhœa, and to superficial glossitis, tinnitus aurium, and double cataract. For five years past the urine had generally

[1] Reported in the JOURNAL, 1886, vol. ii, p. 717.

contained some sugar, sometimes as much as 5 per cent., the specific gravity ranging from 1013 to 1029; the general health did not suffer. Case II was a stout lady of 86, who fell ill two years ago with profound disturbance of digestion, and severe crises, attended with abdominal pain, vomiting, hard white stools, bile-stained urine, and glycosuria. The sugar was never in large quantity, scarcely exceeding 1 per cent., and the specific gravity not above 1029. She wasted and nearly died of asthenia, but grey powder and magnes. sulph. always relieved her at the crises, and she eventually recovered. She still, however, had slight crises, the urine containing a little sugar. In Case III glycosuria was found once, during a sharp gastric crisis in a gentleman, aged 55, the subject of oxaluria and hypochondriasis. Dr. Fox suggested that a glycosuric "storm," as illustrated by these cases, was one form of what were known as "bilious attacks." Dr. Buzzard and Dr. E. Long Fox would appear to include the condition in their recent descriptions[2] of "nerve storms affecting the medulla oblongata." Case IV was an instance of the glycosuria of acute febrile disease. A gentleman, aged 35, was struck down by severe bronchopneumonia affecting most of the left lung, and threatening life. The urine was very copious, over 3,000 cubic centimètres (110 to 120 ounces) daily; urea was discharged in great quantity, 65 to 82 grammes (1,000 to 1,200 grains) daily; a little sugar was found on the second day, and traces as late as the fifth day of the disease. A fortnight later the urea had fallen to 22 3 grammes. Allusion was made to other cases of glycosuria, associated with pregnancy and the puerperal state, and some cases without any obvious causation. Dr. Fox discussed the causes of glycosuria, as detailed recently by Dr. Ord, and put forward the hypothesis that in many cases of diabetes the liver was overacting, glycogen transformed too quickly, and these cases required opium or codeine; whilst in many cases of glycosuria apart from diabetes, and especially in those attended by the crises described, the liver was inactive, glycogen was insufficiently formed, and the sugar of the portal vein passed unconverted into the circulation; these cases were relieved by mercurials and saline purgatives. The state of the biliary function might afford some guide to the activity of the liver. In conclusion, a ready method was shown of ascertaining the approximate percentage of sugar present by comparing the colour assumed by Fehling's solution with a standard scale.—Mr. TUBBY, Drs. GILBERT, F. J. SMITH, and FENDICK, Mr. F. R. HUMPHREYS, and the PRESIDENT discussed the paper.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

FRIDAY, JANUARY 31ST, 1890.

S. R. MASON, F.R.C.S.I., President, in the Chair.

Exhibitions.—Dr. MACAN exhibited a Uterus from a case of vaginal extirpation for carcinoma of the uterus. The mode of operation involved a separation of the bladder in front from the cervix, by which nothing was left but the broad ligament to cross the vessels on each side. These could be tied with a strong curved aneurysm needle. By pressing the bladder upwards, and drawing the uterus down, the needle was made to go in between the bladder and the portion of the broad ligament required to be tied. By this method the danger of tying the ureter was overcome. The woman's temperature and pulse were normal on the afternoon of the operation; but next morning she showed symptoms of sepsis, peritonitis came on, and she died about a week after the operation. He now believed that the cause of the sepsis was his having made a *per rectum* examination immediately before he operated. He disinfected his hands; but he was, nevertheless, quite convinced, from having read Leopold's cases, that the *per rectum* examination led to the peritonitis.—Dr. W. J. SMYLY exhibited an Ovarian Tumour.—Dr. MACAN exhibited a Dermoid Cyst which he successfully removed from a woman five and a half months pregnant.—Dr. MACAN, in reply to Dr. BYRNE, said that in cases of this description it was best to operate as soon as possible after their discovery. The mortality in cases of pregnant women operated on for this tumour was less than in the case of women in a non-pregnant condition who underwent operations for it. Moreover, the pressure on a dermoid cyst was known to be likely to cause inflammation.

A Cæsarean Section.—Dr. MACAN brought forward a case of successful Cæsarean section, which was, as far as he could learn, the only successful case ever performed in Ireland. The patient was a dwarf, 3 feet, 7½ inches in height, the measurement of the pelvis being: Sp. il.=23 cm.; cr. il.=23.3 cm.; d. c.=6.25 cm.; c. v. estimated at 4.5 cm. The operation was performed on August 5th, 1889, the cervix being quite taken up, and the os admitting one finger. The placenta was adherent to the anterior uterine wall, and was divided by the uterine incision; the hæmorrhage was controlled by an elastic ligature round the cervix. The child was slightly asphyxiated when extracted, but soon cried out lustily. The uterine walls were brought together by seventeen interrupted silk sutures, passed through the whole thickness of the uterine wall, and no separate ligature was used to bring the peritoneal edges of the wound together. The method of suture was in every respect similar to that used for closing the wound in the abdominal walls. There was considerable *post-partum* hæmorrhage, but the patient made an uninterrupted recovery. More than five weeks after the operation the temperature rose to 102°, which was much higher than it had been after the operation; this proved to be due to a return of menstruation.—Dr. SMYLY said it differed from other capital operations in this respect, that it was not so much an operation of the specialist as of the general practitioner. Therefore, if the lives of mothers and children were to be saved, the general practitioner should be as prepared to do Cæsarean section as to put on a forceps. Statistics at present showed much more favourable results from the rehabilitated Cæsarean section when done by properly qualified operators, than for Porro's operation. Taken as a whole, the mortality in the operation was still 30 or 40 per cent. Porro's operation was much simpler, and, he thought, was quite within the powers of an ordinary operator. One reason, however, why the statistics of the two operations when compared, were likely to lead to erroneous results was that all the bad cases had to be done by Porro's operation, while Cæsarean section was only adapted to the easier and better cases. He thought Lawson Tait's plan in Porro's operation, of having an assistant to manage the elastic ligature, was an improved practice which might be employed with advantage in Cæsarean section.—Remarks were made by Dr. DILL, Dr. FREDERICK KIDD, Dr. LANE, Dr. BYRNE, Dr. MOLONY, and Dr. DOYLE; and Dr. MACAN replied.

[2] *Lancet*, pp. 179, 345 of current volume.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 27TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Scleroderma.—Dr. SIDNEY ROBERTS showed a moulder, aged 7 suffering from diffuse symmetrical scleroderma, affecting the fe and legs only. The disease began in June, 1889, above the l ankle, and spread gradually upwards and downwards. The rig leg was not affected until three or four months later. At first t legs were swollen and hard, but not œdematous. When show the infiltration of the left leg had been replaced by atrophy of t tissues, and the same change was occurring in the right leg. both the skin was firmly adherent to the parts beneath, so that could not be pinched up or moved over the subcutaneous tiss It was very hard, dry, smooth, devoid of hairs, and of a dir appearance with fawn-coloured mottling. Both legs were sy metrically affected as far as the knees, but no distinct line of marcation was visible. The patient was unable to extend the l knee fully, owing to the rigidity of the skin. The ankles w fixed and the toes only slightly mobile. His general health w good, and his chief complaint was of a boring pain and intolera itching in his hide-bound legs, which interfered with sleep. Th was no anæsthesia. The condition of the skin and the itchi had much improved under ferruginous tonics and friction w oily substances.

Graves's Disease.—Dr. GWYNNE read notes of a case of Grav disease, in which death had occurred suddenly. The patient, unmarried woman, aged 34, who had suffered for some time fr chronic diarrhœa and headache, had noticed the enlargement the thyroid for two or three months. There was some protus of eyes, the pulse was very rapid, and there was marked gene nervousness, twitching of the facial muscles, and working of fingers. The case rapidly got worse, and the protrusion of the e became most marked, the eyelids hardly covering the sclerc when she endeavoured to close them. The pulse-rate avera from 120 to 130 per minute. Both lateral lobes of the thyr were enlarged to about the size of a small hen's egg; the mid lobe was but little enlarged. There was no marked anæmia, albuminuria or glycosuria, but the diarrhœa was frequent in recurrence. There was no sign of disease in the heart or lun

There was no pigmentation of the skin. About six months after she had first noticed the enlargement in the neck, while sitting up in bed to take some milk, she fell back and died. The pulse for some days previous had been 140, and she had been ordered to bed. Digitalis, bromide of potassium, cod-liver oil, and the ungt. potass. iodidi, externally to the neck, had been the principal drugs used, but treatment had done little to relieve the symptoms.

Hypnotism.—Dr. EDWIN GOODALL read a paper on hypnotism. After giving a brief history of the subject, and referring to the work of Braid, of the Salpêtrière and Nancy schools, and of Heidenhain, the modes of production and the symptoms of hypnosis were described. The phenomena and varieties of the hypnotic state were set forth in detail, and the theories relating thereto were discussed. Finally, the practical outcome of the study of hypnotism was considered; its services to psychology and physiology, its use as a therapeutic agent, the production of anæsthesia for operative ends, its value in the cure of insomnia, headache, tippling habits, functional paralysis, amenorrhœa, and refusal of food (in Germany and France). Dr. Goodall concluded by expressing a hope that in the future hypnotism might be entrusted entirely to the physician. —Mr. SNELL, Dr. ARTHUR HALL, Dr. SINCLAIR WHITE, Mr. PYE-SMITH, Dr. GWYNNE, and Dr. SIDNEY ROBERTS took part in the discussion.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 21ST, 1890.

A. F. MCGILL, F.R.C.S., President, in the Chair.

Specimens.—Mr. MCGILL showed: 1. Portions of Five Prostates, removed by suprapubic incision. 2. A Large Papillomatous growth, removed from the bladder by suprapubic incision. (Dr. JACOB made remarks.) 3. A Testis, much Enlarged, with Epididymis, very hard and fibrous, which was thought to be syphilitic. —Mr. WARD described a Testis he had recently removed, a soft enlargement with numerous hæmorrhages, as a case of sarcoma, and related a case in which a man in whom an apparently sarcomatous testis had been removed was perfectly well three years after.—Dr. ALLAN showed: 1. A Humerus, showing Abscess Cavity, from which there had been a discharge more or less for thirty years. Death occurred from phthisis. 2. The Brain of a Man, aged 76, who twenty years before had suffered from paralysis of the right arm. A short time after he began to have epileptic fits, with aphasia. There was a distinct lesion in the ascending frontal convolution. The fits sometimes began by tremor in the right arm. Aphasia was persistent. The nutrition of the arm was maintained. 3. Suprarenals from a Man, aged 67, who showed pigmentation of the skin and other signs of Addison's disease. Death occurred from phthisis. The right weighed 83 grains, the left 30. 4. Suprarenals from a Man, aged 37, in whom there was marked pallor of the skin during life. The right weighed 65 grains, the left 89 grains.—Mr. MAYO ROBSON showed: 1. Small Ovarian Cyst. In this case there was a diagnosis of hysteria, and many sorts of treatment were tried in vain. The patient recovered after the cyst was removed. 2. Broad Ligament Cyst. 3. Cirrhotic Ovary. The organ was converted into a homogeneous mass of hard tissue. There had been intense pain in the ovarian region. On the other side there was a large cystic ovary. 4. Fallopian Tubes Distended by Caseous Matter, lately purulent. The patient contracted gonorrhœa soon after marriage, and "had never had a moment's comfort since."—Dr. ADDISON showed a Liver with Obliteration of the Vena Portæ and Bile Duct, with dilatation of the hepatic duct, from a case of Sarcoma of the Peritoneum.—Mr. TEALE showed a Myoloid Sarcoma of the Head of the Tibia.—Mr. F. B. MUSGRAVE showed a Malformed Fœtus, with condition of acrania and ventral hernia.—Mr. WARD showed: 1. Sarcomatous Mass involving the Cæcum, from a man, aged 20, who had observed a lump in the right iliac region for about nine months. There was no obstruction. An exploratory incision revealed the character of the disease. An artificial anus was made. The patient died from acute peritonitis. 2. Stomach from Case of Oxalic Acid Poisoning. A very large dose was taken, and death ensued within 45 minutes. 3. Columnar Cancer of Rectum. Inguinal colotomy had been performed.—Mr. LITTLEWOOD showed some Coccidia from a Rabbit's Liver.—Dr. JACOB showed: 1. A series of lantern shades illustrating the Lesions of Leprosy. These were mostly copied from photographs from Dr. Arning, of Berlin, of natives of the Sandwich Islands, kindly lent by Dr. Dreschfeld. 2. A series of microscopic sections illustrating the pathological formation of Connective Tissue in the Liver, and included specimens of syphilitic disease (hereditary and acquired), hypertrophic and atrophic cirrhosis, with newly formed bile ducts, etc. 3. A Series of Preparations recently added to the museum of the Yorkshire College.

Cystic Disease of the Breast.—Dr. TREVELYAN read a paper on this subject. He said cases might be arranged in two classes—1. Those in which there was no real tumour, the cyst constituting the whole of the disease, the intervening tissue being healthy; both breasts were affected and the disease was innocent. 2. Those in which there was a real tumour, the cysts developing in it; usually only one breast was involved, and the growth was mostly innocent, as, for instance, the cystic adenoma or fibroma, but it might be malignant, as the cystic sarcoma. With regard to the histology of the disease, attention was called to the three kinds of breast tissue—1, the gland which had not secreted at all; 2, the lactating gland; 3, the atrophying gland. In the healthy breast these three kinds of tissue were never found together, but in cystic disease they might all be present, from the undeveloped to the atrophied tissue, as Brissand[1] had particularly pointed out. A very important structure in the cystic breast was the membrana propria, first described by Langhans[2], later by Mansell-Moullin[3], and lastly by Dr. Dreyfuss, of Strasburg[4]. Langhans stated that the membrane was made up of three layers—a subepithelial layer of spindle cells, then a structureless layer, in which the spindle cells were partially embedded, like the veins of a leaf, aud lastly an outer fibrous layer. A very important theory is to cyst formation had been based upon this membrana propria. In the formation of cysts the whole lobule, or part of the lobule, or even one single end vesicle might take part. Theories as to the origin of cysts and classifications had been numerous, from Sir Astley Cooper's time to the present, perhaps one of the most important was that of Labbé and Coyne, in 1876. The theory put forward by Langhans, and strongly supported by Dreyfuss, made cystic formation a direct result of changes in the membrana propria. The spindle cells were nothing else than unstriped muscle fibres, and the dilatation an active change instead of a mere passive one, as the advocates of the retention theory would have. The following naked eye specimens were shown in illustration of the paper: 1. Double Cystic Disease of the Breast, kindly lent by Mr. Jessop. 2. Multiple Cystic Fibromata of both Breasts, also lent by Mr. Jessop. 3. A diffuse Cystic Fibroma, lent by Mr. Robson. Also eight microscopic specimens, illustrating the Membrana Propria and Cysts in their various stages of formation.

ODONTOLOGICAL SOCIETY.

MONDAY, MARCH 3RD, 1890.

FELIX WEISS, L.D.S.R.C.S., in the Chair.

Teeth in Dermoid Cysts.—Messrs. BLAND SUTTON and CHARTERS WHITE read a paper on the origin and structure of teeth found in dermoid cysts. Cysts containing teeth might be found in children four or five years old, or even earlier, and they commonly contained three or four teeth, though as many as four hundred had been found in one cyst. Such teeth had been described by Salter in the *Guy's Hospital Reports* (1863), and by Coleman in the *Trans. Odont. Soc.* They were implanted in well developed sockets, lined with a membrane exactly resembling the alveoloperidental membrane. The appearance of the teeth and their surroundings was strongly opposed to the theory that they were the remains of a degenerated fœtus. Some of these teeth were multicuspidate, and looked like small wisdom teeth; they had short roots and a pulp chamber. The pulp may be converted into osteodentine, or replaced by fat. Others were cuspidate or incisiform, and these had longer roots and no pulp chamber. In the latter case the dentinal tubes seemed to start from a median line in the tooth. It was a matter of extreme rarity for a tooth, developed in a dermoid cyst, to have more than a single root. Salter alone described nerves in the pulps of dermoid teeth, but a recent attempt to demonstrate their existence failed to yield conclusive evidence. The first stage in the development of the dermoid tooth was represented by the epithelial pearl which arose where lateral epithelial surfaces met. These were common in the median palatine suture and about the gums, and this might throw some light on the development of supernumerary teeth in the palate and elsewhere. In the second stage an epithelial pearl might be seen resting on

1 *Arch. de Physiologie et de Pathologie*, vol. xvi.
2 *Virchow's Arch.*, vol. lviii.
3 *Journal of Anatomy and Physiology.*
4 *Virchow's Arch.* vol. cxiii.

and enveloping a papilla as the enamel organ invested the dentine papilla. In this way the dermoid tooth developed. The microscopic appearances of sections showed ill-defined enamel and dentine of irregular tangled structure with large scattered lacunæ. The cementum was normal, but very thin. The surface of the teeth showed prominent cusps separated by deep fissures, and the enamel was pitted and eroded. These worm-eaten patches were suggestive of dental caries, but were only seen in macerated specimens on the removal of the fibrous tissue which occupied the ravines and depressions on the surface of the tooth. There were no evidences whatever of dental caries.

LEICESTER MEDICAL SOCIETY.

FRIDAY, FEBRUARY 7TH, 1890.

C. W. COOPER, M.B.CANTAB., President, in the Chair.

Cases.—Mr. HODGES showed a patient whom he had treated for Sloughing Ulcer of the Cornea, which was accompanied by hypopion and iritis, and had been caused by injury. By evacuating the pus and applying the actual (Snell's) cautery the eye was saved.—Dr. MEADOWS showed a case of Addison's Disease in a woman, aged 25.

Melasma in Phthisis.—Dr. POPE showed a man, aged 55, suffering from phthisis, who had marked discoloration of the skin resembling Addison's disease. Dr. Pope also related particulars of a similar case. A patient with chronic phthisis was pigmented, though not so extensively as the former case. At the necropsy the adrenals were found reduced to small sacs containing a little chalky-looking matter.

Keratitis Subepithelialis.—Mr. HODGES read notes of a case of this disease. It had been observed to follow acute catarrh, and was especially noticed after influenza, and was most prevalent between December and March. The first symptom was a copious secretion, resembling tears, and neither mucous or purulent. After this might be seen numerous, 20 to 30, fine white dots occupying the centre of the cornea. A patient was exhibited who was seen in the third week of December, when he presented the above appearances. V. = $\frac{6}{18}$ disc looked hazy. He was treated with atropine and mercury, but an unfavourable prognosis was given. On December 24th, one week later, V = $\frac{6}{8}$. On December 30th, Vn.; he subsequently took iron and strychnine; one eye only was affected. The patient was now quite well, but faint traces of the affection could still be seen in the cornea.

Two Cases of Nephrotomy.—1. Mr. FRANKLIN communicated notes of a case in which he had performed nephrotomy on a man, aged 40, who had been kicked on the left loin by a horse twelve years before, when he was laid up for three weeks, and passed blood in his urine. Eight years ago he was in bed two weeks with "inflammation of kidneys," but had no dropsy or hæmaturia. Four years ago he had pain in the left loin and hæmaturia with vomiting, followed by the passage of three or four small stones. He had had similar attacks at intervals of about a year up to the time of his admission to the Leicester Infirmary. Mr. Franklin performed nephrotomy on the left side, and explored the pelvis of the left kidney digitally; no stone was detected. In the next twenty-four hours 328 ounces of urine were passed by the urethra, besides a large quantity that flowed from the wound. October 9th, urine 76 ounces; 10th, 88 ounces; 11th, 82 ounces, all by the urethra. The large deep wound healed well, and the patient left the infirmary in about eight weeks. He subsequently returned suffering from albuminuria, but was now going to a convalescent home.—2. Mr. DOUGLAS read notes of a case in which he operated on a man, aged 33. The patient had had good health until three months before, whan he had a rigor, and had been ill ever since. Two months ago the urine was dark-coloured, like porter. There was a large rounded tumour in the left lumbar region, with pain worse on movement. Urine specific gravity 1015, albumen and some pus cells. At the operation the kidney was found to be apparently much enlarged, and blood-stained fluid was drawn off with an aspirator. A free opening was then made, the substance being soft and friable. A large quantity of blood-stained purulent fluid was evacuated, causing the swelling in front almost to disappear. There was very profuse hæmorrhage from the kidney at the time of the operation, which recurred on two or three occasions up to the patient's death, which took place from exhaustion nearly four weeks after the operation. At the necropsy the descending colon was found intimately adherent to the anterior surface of the left kidney, and was full of altered blood, but no perforation was discovered. The left kidney weighed 3 pounds 13 ounces, and consisted of large suppurating cysts, one of which had been opened at the operation. The right kidney weighed 2 pounds 3 ounces, and was in an extreme state of cystic degeneration, hardly any normal structure being visible to the naked eye. The other organs were healthy.—Remarks were made by Drs. MEADOWS, POPE, and PRATT, and by Mr. BOND.

Specimens.—Mr. ROLL showed for Mr. CLARKE a Calculus of peculiar dumb-bell shape removed by suprapubic operation.—Dr. POPE showed microscopical specimens from a case of Malignant Endocarditis, showing the micrococci and other distinctive appearances.

REVIEWS AND NOTICES.

ENGLISH SANITARY INSTITUTIONS, REVIEWED IN THEIR COURSE OF DEVELOPMENT AND IN SOME OF THEIR POLITICAL AND SOCIAL RELATIONS. By Sir JOHN SIMON, K.C.B., Member of the General Medical Council, Consulting Surgeon to St. Thomas's Hospital, and formerly Medical Officer of Her Majesty's Privy Council. London: Cassell and Co., Limited. 1890.

[FIRST NOTICE.]

THE reader who takes up a work professing to relate the history of the growth of sanitary legislation and sanitary institutions in this country might well be excused if he anticipated that the perusal would be attended with more profit than pleasure. Such a reader, however, could not turn over many pages of the work before us without discovering that Sir JOHN SIMON is a literary artist of no mean order; that he was the master of a singularly clear and perspicuous style, and possessed an admirable power of marshalling facts and arguments, however, was well known to the students of his numerous official reports, recently edited by Dr. Edward Seaton, and reprinted by the Sanitary Institute; but even for them his narrative powers will be something of a surprise. The book is not addressed to the medical profession alone, but to that wider public—numbering among it, indeed, the great majority of the medical profession—which takes an intelligent interest in the progress of sanitary knowledge and sanitary administration.

Sir John Simon begins at the beginning; his first chapter contains some account of the habits of prehistoric man, and hurries the reader through the achievements of the earlier civilisations. The second contains a sketch of the institutions, so far as they affect the subject in hand, of the Romans, whose genius for administration has bequeathed to modern Europe the fundamental principles upon which all our modern legislation governing the limitation of individual liberty by the authority of the State is based. Passing quickly over the turbulent times of the decline and fall of the Roman Empire, he commences the special topic of his book by a sketch of the earlier sanitary condition of London mainly founded on the *Memorials of London and London Life in the Thirteenth, Fourteenth, and Fifteenth Centuries*, edited for the Corporation by the late Mr. Henry Thomas Riley. The earlier regulation has a quaint antiquarian interest in its juxtaposition of would-be fine ladies and pigs, "because that," it runs, "regrattresses, nurses, and other servants, and women of loose life, bedizen themselves, and wear hoods furred with *gros vair* and minever, in guise of good ladies, therefore the wearing of furred hoods is restricted to such ladies as wear furred capes;" while the second section provides that swine shall not "henceforth be found in the streets," or, if so found, shall "be killed and redeemed of him who shall so kill them, for fourpence each."

The city authorities very early began to restrict the following noxious trades within the city; among the trades thus put under regulations were tallow melting (1283), knackers (1311), and slaughterers (before 1371). From the beginning of the fourteenth century the disposal of refuse has been a source of trouble and perplexity to the city fathers. At first it was allowed to be shot into the Thames; but in 1357 a royal order was issued forbidding the continuance of such practices for divers very excellent reasons, but not least, perhaps, because the royal eye had been offended by beholding "dung and laystalls and other filth accumulated in divers places in the said city, upon the bank of the said river," and the royal nose had "perceived the fumes and other abominable stenches arising therefrom." "The filthiness that is increasing in the river and upon the banks of the Thames" was thus the su-

ject of complaint in the middle of the fourteenth century, and now, at the end of the nineteenth, we are still experimenting and inquiring, and still far away from a solution of our difficulty.

We must pass over much that is interesting in succeeding pages, merely noting that the Statute of 1388 (12th Rich. III, cap. 13) against nuisances near cities and towns may fairly be reckoned the first general English enactment with a distinct sanitary purpose; neither need we dwell on the interesting sketch of the aims and achievements of mediæval philanthropy .Special attention may be directed to that section of the book which deals, under the title of "post-mediæval England," with Tudor and Stuart times; at this period, also, the general condition and government of London is described in considerable detail, and probably afford a fair indication of the state of the principal towns in the country in these respects.

A most suggestive section of the book is that bearing the general title "New Momenta." The first chapter contains sketches of the work accomplished by sanitary pioneers, and here, perhaps for the first time in the work of a writer on hygiene, well deserved credit is given to Dr. Richard Mead, whose eminence as a fashionable physician and man of letters has obscured his claims to recognition as one of the earliest to promulgate rational views as to the measures to be taken to limit the spread of infectious diseases by personal intercourse. Pringle, Lind, Blane, Jenner, and Captain Cook each receive their meed of well-earned praise; the work they did is, with one exception, almost forgotten, owing to the very completeness of its success. "Of the present generation who in summer holidays enjoy their cider in Devonshire, not many know that Baker unpoisoned it for them. Of those who go down to the sea in ships, not many have reading and imagination enough to contrast the sea life which now is with the sea life which was suffered in Anson's days, and to be grateful for Lind and Blane who made the difference. And, in some such cases, ignorance best tells its tale by swaggering against the truce which protects it. At the anti-vaccination meetings of which we now occasionally read, where some pragmatical quack pretends to be making mincemeat of Jenner, how small would become the voice of the orator, and how abruptly would the meeting dissolve itself if, but for a moment, the leash were away with which Jenner's genius holds back the pestilence, and small-pox could start into form before the meeting, as our grandfathers saw it but a century ago?"

Great as was the work done by these men, their achievements were only rendered possible by that great movement in public opinion, that "larger sympathy of man with man which," in the words of Mr. J. R. Green, "especially marks the eighteenth century as a turning point in the history of the human race." Sir John Simon, in a highly philosophical chapter, discusses the influence of that "new humanity" which, whether it "expressed particular theological beliefs, or explained itself on grounds of political utility," equally "helped men to better notions of legislation and government than they had yet had." Perhaps the most important of these notions, at any rate in the present connection, was the perception of the essential coherence of social duties with social rights—a notion not, indeed, new, but needing to be extended and reinforced.

In this section of the book the author also begins to trace the slow and uncertain growth of the principle by which the State interferes with commerce and individual liberties in order to guard the community against the dangers of pestilence. In particular, as an event of historical importance, mention may be made of the appointment in November, 1831, when cholera was expected, of the Central Board of Health, which shortly afterwards recommended the appointment of local boards of health. Though these boards had only a temporary commission, and were specially charged to guard the country from cholera, their appointment marks an epoch, and afforded a precedent. Three years later the Act for registering births, deaths, and marriages became law, and for the first time rendered it possible to construct statistics of life and death in this country. A mighty instrument was thus placed in the hands of farsighted men who during the next two decades made so good a use of it, that the whole circumstances of life in this country were changed for the better.

Sir John Simon next sets himself to trace the history of the labours which culminated in the Public Health legislation of 1848. In so doing he pays a magnificent tribute to the work of Sir Edwin Chadwick, whose career of public usefulness began in 1828, and who happily still survives to witness the triumph of the principles which he was among the first to champion more than half a century ago. In 1838 the Poor Law Commission, of which he was secretary, addressed its historical letter to the Home Secretary (Lord John Russell), in which attention was directed to preventable disease as a cause of pauperism, and the "urgent necessity of applying to the Legislature for immediate measures for the removal of these constantly acting causes of destitution and death was pointed out." Thereupon followed the great general sanitary inquiry, the establishment of public vaccination, the reports on burials in towns, the Royal Commission on Health of Towns, and, finally, the Public Health Act of 1848, which, with all its faults, marks an enormous advance.

Into the history of the General Board of Health which is here related, and which possesses no little interest as a lesson for the future, we need not now enter. Greater interest, perhaps, attaches to the account of the work achieved by the two first medical officers of health, Dr. W. H. Duncan in Liverpool and Sir John Simon in London. It was in 1848 that the City of London obtained the power to appoint a medical officer, and the sketch here given of the organisation of the work in the City is most valuable and instructive. The story is told in a most interesting manner, and the reader is made to feel and take a living interest in the early difficulties of the post.

During the seven years that Mr. Simon acted as medical officer of health for the City very much was accomplished, thanks to his untiring energy and tact, though he modestly assigns half the credit to the City engineer, Mr. William Haywood. In Mr. Simon's earliest reports the chief unwholesome influences which affected the City were passed under review: "the filthy sewage pollution of the Thames and its banks; the unsatisfactory supply of water for domestic uses; the scandal of continued burial in overcrowded churchyards and church vaults; the nuisance of intramural slaughterhouses and other trade establishments evolving offensive effluvia; and the manifold grievance of London smoke."

The work of these seven years was fruitful in results, and when, in 1855, Mr. Simon was called to a still wider sphere of work, he was able to reflect that "the sanitary circumstances of tens of thousands of the poorer population were sensibly improved by the introduction of new drainage and water supply, by the enforcement of periodical house cleansing, by far stricter practice of scavenging, and by general mitigation of nuisances; not least, the abomination of cesspools had come to an end. At a time when cesspools were still universal in the metropolis, and while in the mansions of the West End they were regarded as equally sacred with the winecellars, they had been abolished for rich and poor throughout all the square mile of the City."

We must defer till a future occasion a further notice of this fascinating volume.

THE MECHANISM OF THE CIRCULATION OF THE BLOOD THROUGH ORGANICALLY DISEASED HEARTS. By HERBERT DAVIES, M.D., F.R.C.P. London: H. K. Lewis. 1889.

THE late Dr. DAVIES died before he could himself publish his highly philosophical reflections upon the mechanism of heart disease, and on his son, Dr. Arthur Davies, has devolved the duty of editing the little volume before us. Though small, it contains much valuable matter, and is clearly the outcome of many years of careful study and observation. Mitral regurgitation, mitral obstruction without regurgitation, aortic regurgitation and aortic stenosis without regurgitation, are successively considered, and the conditions of the circulation in each discussed. The author acknowledges the suction power of the left ventricle in diastole, but yet maintains that in diseased states the onward movement of the blood from the left auricle depends mainly on the contractile energy of the right ventricle. In mitral regurgitation he insists that dilatation of the left ventricle is not a mere evidence of failure of the heart, but is as essential to the mechanism of the circulation under the diseased conditions as is the hypertrophy itself. A certain degree of dilatation is one of the first changes developed, and to expel its increased volume of contents the ventricle must put forth increased energy, and hence in time ventricle must put forth increased energy, and hence in time hypertrophy. Those cases where ventricular dilatation and hypertrophy do not occur to any appreciable extent are explained by the presence of a gradual dilatation of the left auricle which prevents the ventricle dilating.

The time has gone when the state of the heart was diagnosed

only by the murmurs heard, but the author wisely remarks upon the desirability of considering not only the heart itself, but the condition of the general circulation if we are to obtain a correct idea of the case under examination. In the section upon regurgitant aortic disease there will be found a mathematical calculation by the Rev. Dr. Haughton, of the proportion in which the normal mitral and the abnormal aortic sources respectively contribute to form the left ventricular change in this form of heart affection.

There is very little controversial matter in the volume. The author has aimed at stating clearly the deductions to which his own observations have led him, and the book will be read with great interest by all those who have made a study of cardiac disorders.

REPORTS FROM THE LABORATORY OF THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH. Edited by J. BATTY TUKE, M.D., and G. SIMS WOODHEAD, M.D. Vol. II. Edinburgh and London: Young J. Pentland. 1890.

THIS second annual volume of reports contains sixteen papers, of which we have already given an enumeration. Sixteen contributions, filling a book of nearly three hundred pages, is no mean record of the twelve months' work of a single laboratory, and that one which has been only recently established. If Edinburgh can give us this, what ought we to be able to do in London when the new laboratories on the Embankment are in full swing? Although Dr. SIMS WOODHEAD cannot be held personally responsible for all that appears in the book which, conjointly with Dr. BATTY TUKE, he has edited, the present volume will be of especial interest to London men, as the translation of the superintendent of the laboratory, Dr. Woodhead, from the Edinburgh to the London laboratory is shortly to take place.

We have just alluded to the quantity of work done; a much more important question is its quality. The variety of subjects treated is so great, that the book will appeal equally to the sympathy and consideration of all classes of workers, whether they be purely scientific men, or those engaged in actual practice. Drs. Barbour, Webster, and Berry Hart contribute papers on obstetrics; Drs. Thomson and Haultain write papers of surgical interest, the former on tuberculosis of bones and joints, the latter on necrosis of the bladder. Anatomical papers are written by Dr. Symington on the normal anatomy of the female pelvis, and by Dr. Alexander Bruce on the connections of the inferior olivary body. A paper which will be read by histologists and physiologists with equal interest is that by Dr. Woodhead and Mr. Gray on the stomach of the narwhal. Purely physiological papers are those by Dr. Alexander James on some new points in connection with muscular contraction; and by Drs. Woodhead and Irvine on the secretion of carbonate of lime by animals. Many of the papers already mentioned will be of interest to the pathologist; also we have still to mention two which more strictly deal with pathological questions, namely, one by Dr. Ashdown on certain substances found in the urine which, like sugar, reduce alkaline solution of cupric hydroxide, and the other by Dr. Cartwright Wood on enzyme action in lower organisms.

We feel bound to confess on reading these papers that, although all are deeply interesting, many of them are out of place in a volume of laboratory reports, as they deal rather with matters of clinical interest, and do not come under the heading of laboratory work. About half the book deals with questions of obstetrical interest; these papers are chiefly written by Dr. Berry Hart, and although his frozen sections were doubtless made in the laboratory, and will prove of extreme value, much of what he has to say is of clinical interest, and a good deal of space is devoted to a controversy between himself and Dr. Symington on certain theoretical points in connection with the anatomy of the female pelvic floor.

Dr. Ashdown's paper, however, is of especial importance. As it has already appeared in full in the pages of the JOURNAL, we need do no more here than point out the importance of the discovery of a substance—glycuronic acid—which, like sugar, may appear in the urine and reduce Fehling's solution; unlike glycosuria, however, its appearance does not appear to be especially dangerous to health. The bearing of this on the diagnosis of diabetes and in questions of life assurance is obvious.

Dr. James's paper on muscular contraction relates to the so-called "tendon reflexes." Some of us who may have supposed that the controversy whether or not these are real reflexes was settled will be somewhat chagrined at finding that several physiologists have during the last few years reopened the whole subject, though without throwing any fresh light upon it. Especially unsatisfactory are the conclusions arrived at by Dr. James; a compromise rarely succeeds in satisfying anybody. He admits that the latent period of such an action as the knee-jerk is shorter than that of an ordinary reflex action; he, however, states that it is longer than previous observers have supposed, and therefore concludes it is neither a normal reflex nor the result of direct excitation of the muscle, but a peculiar reflex action which is more simple and so takes a shorter time for its accomplishment than what we ordinarily understand by a reflex action.

Dr. Wood's contribution on the enzyme action of the lower organisms should be carefully read and considered by all biologists, but especially by bacteriologists. It deals with the most important question: how the organised ferments produce their specific actions, and his general conclusions appear to coincide with those of the investigators who consider that the difference between their action and that of enzymes, unorganised or chemical ferments, is one rather of degree than of kind.

The connection of the inferior olivary body by means of an acustico-olivary tract with the auditory nerve, as shown by Dr. Bruce, is a point of considerable interest, serving to throw some light on the special function assigned to that body in maintaining the equilibrium of muscular balance.

In collaboration with others, the superintendent himself has furnished two papers; that written in conjunction with Dr. Irvine on the secretion of carbonate of lime by animals demands a few words more. The inorganic salts of the body are too often looked upon as more or less mechanical or accidental occurrences; diligent research has, however, shown that they are most important factors in maintaining and regulating vital and metabolic activity; in no case is their importance so marked as in that of the lime salts. In a previous paper Drs. Woodhead and Irvine have shown that hens can elaborate carbonate from sulphate of lime in the formation of the calcareous covering of their eggs. These two observers now find that strontium and magnesium will not replace lime in this capacity; they have further proceeded to study the same questions in marine animals like crabs and lobsters. The calcareous matter, which in these lower animals is chiefly carbonate, can be partially replaced by the phosphate. It is shown that the whole question of calcification is intimately associated with vitally active protroplasm. Researches of this nature are sometimes regarded by the ultra-practical as of little value, because their bearing on the human body in health and disease is not at once apparent. The authors show most lucidly, however, the importance of their work in relation to the process of calcification in the higher animals, man included. This does not merely include the process of ossification, but also that of the formation of calcareous deposits elsewhere, as around a caseating tubercle. We cannot speak too highly of the scientific value of this piece of experimental work, and we can only hope that such researches as these will issue from the laboratories, the superintendence of which Dr. Woodhead is soon to assume.

INSOMNIA AND ITS THERAPEUTICS. By A. W. MACFARLANE M.D. London: H. K. Lewis. 1890.

THIS is essentially a clinical and practical work, which can be strongly recommended as an interesting and well thought out treatise on the causes and treatment of insomnia as it is met with in general practice. There is an introductory chapter devoted to the physiology of sleep, the vexed question of its causation, the condition of the nervous and other systems, and various considerations of the same general character being discussed with full knowledge of the subject, but not with such minuteness as to become tedious. Following this is a chapter dealing generally with insomnia and its causes, in which the author embodies the valuable results of his own experience in practice.

The further plan of the work is carried out on a systematic clinical plan. Each of the great systems of the body, beginning with the nervous, is taken up in detail, those diseases in which sleeplessness is a frequent or prominent symptom being more or less briefly referred to. Under each disease the causation, character, and treatment of its sleeplessness is discussed at length. Special attention has been given to the therapeutical aspect of the subject, and, besides general directions for treatment, the author gives a large number of prescriptions which he has found valuable in individual cases.

In reading through the book, one is impressed with the feeling that the writer is a careful observer, and that his advice as to treatment is sound, and based very largely on long experience.

A chapter on the use of hypnotics would have been a valuable addition to the work. As it is they are treated very incidentally, little is said regarding their relative values, and the newer hypnotics are barely mentioned. On page 75 the curious mistake is made of describing amylene hydrate as a "tertiary nitrite," whereas it is tertiary amylic alcohol.

NOTES ON BOOKS.

Leprosy and its Prevention, as illustrated by Norwegian Experience. By ROBSON ROOSE, M.D., etc. (London: H. K. Lewis. 1890.)—Dr. Roose, having made several visits to Norway in recent years, and having when there taken the opportunity of observing cases of leprosy and of studying the forms and clinical features of the disease in that country, has embodied the results of his observation and reading in a small volume. The author does not profess to offer anything really new for the consideration of his readers, but he has brought together in a small space abstracts from the writings of recent authors whose works may be considered authoritative. Leloir, Neisser, Cornil and others are quoted in illustration of certain practical points, whilst Hirsch is placed under contribution in connection with the more general questions concerning the disease. Dr. Roose states that all the physicians whom he met in Norway were unanimous in the opinion that segregation is the most important part in the treatment of leprosy. The monograph is short and readable, and to those who are not familiar with recent works on the subject it presents a good deal of useful information.

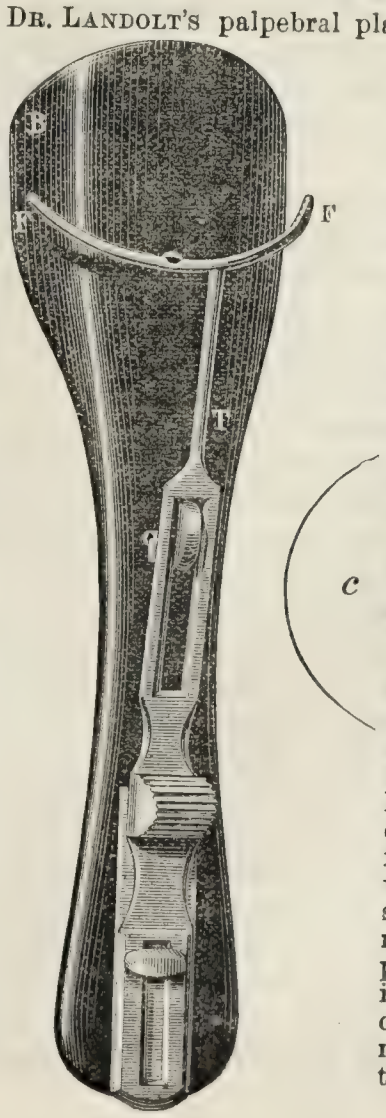
The Medical Annual and Practitioners' Index. (Bristol: John Wright and Co. London: Simpkin, Marshall and Co. 1890.)—The eighth issue of this *Annual* does not differ in general scope and aim from its predecessors. The first hundred pages contain a review of therapeutic progress during the year 1889. Dr. Sidney Martin has succeeded in giving in less than half this space a very complete summary of new facts with regard to drugs; the greater part of the remaining space, however, is occupied by a short treatise, mainly on warm baths, to which the author, Dr. Percy Wilde, applies a somewhat high sounding title—thermo-therapeutics. Dr. Rockwell, of New York, contributes a useful short article on electro-therapeutics. The next section of the book occupies about four hundred pages; it consists of a series of short articles, alphabetically arranged, containing notes on new methods of treatment. Among the contributors to this section we notice the names of Drs. George Harley, Saundby, C. L. Dana, De Havilland Hall, Shingleton Smith, and Fancourt Barnes; and of Messrs. Mayo Robson, Walter Pye, Hurry Fenwick, and Herbert Allingham. A useful article on sanitary science is contributed by Dr. D. S. Davies, medical officer of health, Bristol. There is the usual list of lunatic asylums, homes for inebriates, hydropathic establishments, medical and scientific societies, etc. Mention may also be made of a descriptive list of new pharmaceutical and dietetic preparations. The book is not free from defects, but as a handy work of reference for the consulting room table it will be found extremely convenient.

St. Bartholomew's Hospital Reports. Edited by W. S. CHURCH, M.D., and W. J. WALSHAM, F.R.C.S. Vol. XXV. (London: Smith, Elder and Co. 1889.)—These *Reports* appear in their usual form, including the proceedings of the Abernethian Society, a descriptive list of specimens added to the museum during the year 1889, and the medical and surgical registrars' statistical tables for 1888. The value of the latter is self-evident; the supplementary museum list is also a feature worthy of commendation. In this volume medical papers greatly preponderate, for, out of the twenty-nine articles, eighteen are purely medical, not including two devoted to obstetrical topics, and several of the remainder are on pathological questions. The students, again, showed special activity during last winter session in preparing medical papers for their society. Sir Dyce Duckworth heads the series of articles in this volume by two good clinical papers. The first treats of Two Cases of Heart Disease (Aortic Reflux), which recovered from severe enteric fever and diphtheria respectively; the second discusses Some Anomalies of the Papular Eruption in Enteric Fever. Four important articles are from the pen of that experienced authority, Dr. Gee. There is also an excellent paper by Dr. Samuel West on Simple Cicatricial Stricture of the Air Tubes. The chief feature for adverse criticism is the lack of contributions from members of the senior staff. Surely the great City hospital must expect every man on its staff to do his duty to the *Reports*, and the recent records of several well-known physicians and surgeons might well have been included in this volume. Work of this kind, however, has been ably done by deputy in several papers by house-physicians, house-surgeons, and other gentlemen on the temporary staff. Only two memoirs are contributed by surgeons to the hospital, Mr. Baker and Mr. Butlin. Mr. Baker writes on Whitlow, advocating a line of treatment less rough and ready than that which is generally practised in surgeries. He believes, with justice, that the theca is by no means invariably involved, and that it must never be opened as a prophylactic measure. In cases of true thecal whitlow relief should be given to the distended tendon sheath by a comparatively small incision over the head of the metacarpal bone, and not by a free incision exposing the tendons along the palmar aspect of the finger. Mr. Butlin's article on Malignant Disease of the Scrotum, Dr. A. R. Graham's memoir on The Duration of Pregnancy, and Dr. Vincent Harris's admirable monograph on The Antiseptic Treatment of Phthisis deserve the careful attention of physicians and practitioners. The illustrations in this volume can be counted on the fingers, but in quality they leave nothing to be desired. Three represent microscopical preparations, and are appended to Dr. E. T. Wynne's notes of a Case of Actinomycosis in Sir Dyce Duckworth's wards.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PALPEBRAL PLATE.

DR. LANDOLT'S palpebral plate greatly facilitates certain operations performed on the upper eyelid. A convex shoeing horn shaped plate (Fig. B.) constitutes the principal part of the instrument; it has a smooth surface, and is intended to be passed under the upper eyelid. Unlike other similar plates, it has the same dimensions and curvature (Fig. *c*) as that of the eyelid to which it is to be adapted; thus it stretches out the eyelid to its full extent, whereas with the instruments generally in use the extremities of the lid are unsupported. The smooth upper edge of the plate slips into the upper *cul-de-sac;* the lateral edges correspond to the inner and outer angles of the eye. The plate gradually merges into a stem long enough to be handled. The second part of the instrument consists of a metal crescent (F F), of the same length as the shoehorn plate; it is about 1 millimètre wide, and is supported by a metallic stem (T); by a simple mechanical arrangement it can be fixed higher or lower on the plate, so that the operator can adjust it at whatever distance from the edge of the eyelid he wishes. The inner surface of the semicircle presents a series of notches which prevent it from slipping from the eyelid. This plate, invented by Dr. Landolt, ensures complete hæmostasis, and does not limit the field of operation.



BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 8TH, 1890.

OFFICIAL REFUSAL TO REMEDY THE ACKNOWLEDGED GRIEVANCES OF THE ARMY MEDICAL DEPARTMENT.

MR. STANHOPE has missed a golden opportunity of restoring confidence and popularity to the medical department of the army. The existence of definite grievances had been fully admitted by the appointment of a Committee, and agitation and discussion had been suspended by common consent until its report had been received. A long period of incubation followed. Many months passed away, and expectancy was beginning to give way to hope, when Mr. Stanhope, in answer to a question by Dr. Farquharson, announced the intentions of the Government. The sinister forces which have been at work in the mean time are now too painfully evident. On the one hand the Treasury grimly tightened the purse-strings, and on the other "my military advisers" adopted their invariable tactics of jealousy and distrust towards their medical brethren. In the end "obscurantism" has prevailed, and nothing is to be done.

The first reason given by Mr. Stanhope for his decision was that some of the changes suggested by the Committee would cost £100,000 a year. Careful reading of the report is required to find out which these are, and it would have been well if he had gone a little more fully into detail. But it is quite evident that the financial sting which has wounded the economists is in the following recommendations.

1. The Committee advise that there should be fewer changes in stations and in the duties of medical officers. In the old regimental days these perpetual shifts mattered comparatively little, because the medical officer carried his home about with him, and had a family circle within which to seek refuge from the discomfort of moving and the stiffness of a new station. But all this has now been altered for the worse; he is a mere isolated unit in the framework of society, and at each different place he has to begin the laborious task of making fresh friends. These changes, therefore, more frequent as they are becoming year by year, are quite serious enough for the bachelor, but to the married man they are simply ruinous, and absolutely forbid any reasonable approach to domestic comfort. The Commissioners very properly suggest some modification of present arrangements and meet the objection that this would involve an increase of the Medical Staff with a wholesome scepticism. But unfortunately Mr. Stanhope's advisers take an opposite view, and it it is understood that it is this proposal which has more particularly alarmed those who are so diligently counting the cost of the proposed changes.

2. The Commissioners advise the removal of a long standing grievance, by recommending that medical officers on leave in consequence of disease contracted in or by the service, should be entitled to the same privileges as combatant officers. This was specially approved by Mr. Thompson's Committee of 1878, and, although its justice is too clear to require argument, its adoption will cost something, and it will therefore be summarily pitched overboard. Nor is a happier fate in store for No. 3, which was particularly championed by Sir T. Crawford, and which proposes to carry out the natural idea that the advantages of pay and allowances granted to medical officers under recent Warrants when serving at home or in the colonies should be extended to them when serving in India.

4. Particular attention is drawn to the fact that seventy-one home appointments are to be filled up by retired men, and strong disapproval is expressed of this bit of cheese-paring policy, on the ground that these are in some sense the prizes of the service, and that they should be thrown open to all. The economy thus effected will be small, and the objectionable plan will hold good, and we fear that the dread of expense will also nullify the sensible recommendations by which the Commissioners seek to remedy admitted defects in the present system of examination for promotion. We have now shown that many of the principal reforms suggested by the tribunal to which the War Office referred the case of the department are to be rejected, because they might cause a trifling increase in the estimates. Perhaps Mr. Stanhope wishes to pose as an economist, and he may have taken this line of his own motion. It is more probable, however, that the Chancellor of the Exchequer has put his foot down, and has refused to sanction what the War Office has passed. We may give him the credit for good intentions under the difficult circumstances in which he is placed, and whilst regretting his decision we might have even sat down in patient resignation to bea the blame.

But worse has yet to come. The concession of all other which our military brethren wished was a military title of som kind. The granting of this at all events would not cost on farthing, the necessity for it has been caused by changes i recent Warrants, it is demanded by an overwhelming majorit of medical officers, and it has been recommended by the D partmental Committee. All this would seem to make out a overwhelming case in its favour, and its rejection cannot b be viewed with indignation and dismay. Nor are these fee ings likely to be lessened by the refusal of the War Office t publish the evidence. Rumour has it that statements and r flections derogatory to medical officers of the Army were free made by military witnesses, and the persons most nearly co cerned may be pardoned some suspicion when they find that accessible record of these proceedings has been burked by th authorities. The introduction of the question of naval me cal titles, in which no one has proposed to make any chang is simply a "red herring" dragged in to confuse the re issue. We cannot affect to be surprised that Mr. Stanho should have stooped to this well-known device of the debat who has no case, for the logical position is so impregnable th

his only chance of weakening it lay in introducing some irrelevant topic.

Mr. Stanhope has now definitely thrown down the gauntlet. His statement is a slap in the face to the whole service, and amounts to a declaration that the Horse Guards is to override the whole medical organisation, and to defy even the decisions of a Departmental Committee. Under these circumstances it may be taken that the medical profession at large, the medical corporations, and medical schools will support this Association in the determination to carry on this contest until the claims which are acknowledged to be not only natural and just, but which have now received official approval, shall be distinctly satisfied. The British Medical Association and the Parliamentary Bills Committee have done their part in definitely bringing under the notice of the Minister and of Parliament the existing grievances; the Commission have done their part in investigating these grievances, declaring them to be substantial, and setting out their remedies. The military advisers of Mr. Stanhope gave their evidence before the Committee, and, after hearing and fully considering their evidence, the Committee decided against them; yet Mr. Stanhope falls back upon these military advisers, and permits them to override the decisions of the Committee before which they appeared as witnesses, and allows them to tear up the documents in which the Committee had affirmed the justice of the claims, and recommended reasonable remedies. It will now remain for the colleges and schools throughout England, Scotland, and Ireland to do their part by showing in the most decided manner what is their opinion of the attitude assumed by the military advisers of Mr. Stanhope, and of his weakness in yielding to that expression of professional prejudice. We greatly fear that the end of the struggle is not yet seen; but the claims of the Army Medical Department have now been formally approved by a strong Commission, and Mr. Stanhope has admitted that he is only restrained from yielding them, on the one hand by a sense of mistaken parsimoniousness, and on the other by military prejudices.

THE ETIOLOGY OF LEPROSY.

In Mr. Hutchinson's interesting paper, which we publish today, there are several problems discussed which well illustrate how many important points regarding leprosy are as yet undecided. It is well that the advocates of the doctrine of the contagion of leprosy, and the consequent necessity for isolation, should meet from time to time with criticisms like those brought forward by Mr. Hutchinson. Truth can only gain by the most searching examination of facts, and in no discussion is it more important than in the present one that theories should be kept well in hand, and that no action should be taken or advised that does not commend itself to unprejudiced men as being strictly warranted by the results of observation. Mr. Hutchinson naturally lays great stress on the fact that there is no evidence in support of the belief that leprosy is a primary lesion, or that its transference is effected by means of a sore on the external parts, and on this point draws a contrast with what is known of the inoculation of tubercle and syphilis. Contagionists, however, will not fail to find an answer to this objection. A primary sore, they will argue, is due to a poison which is inserted in the cutis, giving rise to a certain amount of inflammatory change. Although the syphilitic and the tuberculous poisons give rise to characteristic inflammatory changes, it does not, therefore, follow that the poison, or in other words, the bacillus of leprosy may not be able to contaminate the system through the epidermis, or more probably the hair follicles, without producing inflammatory change sufficient to excite attention, or, perhaps, with scarcely any inflammatory change at all. The tolerance of the tissues as regards this bacillus is remarkable. Myriads of bacilli may accumulate in the cutis for a period of years without leading to sufficient inflammation to cause either a tumour or ulceration. We know that in leprous persons the bacillus does live in the rete mucosum, and may be shown to be present in large numbers in the hair follicles. There is no proof that the bacillus finds its way into the system through the epidermis or hair follicles of a healthy person, but there is no reason to believe that this is impossible or even improbable.

Mr. Hutchinson points out trenchantly and clearly that there is nothing to show that the erythema of anæsthetic leprosy corresponds to the point of contamination of the affected person. The contrary indeed is the fact. So far from the erythematous patch being a first revelation of the disease, if we consult the excellent and important work of Dr. Hillis,[1] we shall find that in anæsthetic leprosy there are characteristic symptoms which precede the development of the eruption. Dr. Hillis states that before there is any eruption, patients complain of pain, tenderness in various parts of the body, attributed to approaching rheumatism, tenderness of the skin, shooting, lancinating or darting pain along the course of certain nerves, rendered worse by pressure, and giving rise to shocks as if from electricity. So far from the patch being the primary lesion or, as Mr. Hutchinson supposes, that the poison may be produced in it prior to its general diffusion, histological examination shows that in the anæsthetic variety the bacillus is entirely absent from the patches in the skin. It is in the nerve trunks that supply the affected parts that the bacillus is found, and it is a most remarkable fact which, in studying this disease, ought never to be lost sight of, that the bacillus of leprosy may live over a very prolonged period in the sheaths of the nerves without becoming deposited in the tissue of the cutis or in the viscera.

As to whether skin changes precede the neuritis, or whether the neuritis is a cause of the changes in the skin, evidence like that of Dr. Hillis, based on careful study of a large number of cases, must be considered authoritative.

Mr. Hutchinson rightly points out the paucity of facts in direct proof of the contagious nature of the disease, and as he rightly states, the case of Keanu and the Dublin case are probably the strongest instances which have been brought forward, but these instances will, to many minds, carry much greater weight than Mr. Hutchinson seems disposed to assign to them. In Keanu's case not only did the symptoms of leprosy develop after the inoculation, but the very much more important statement is made that certain unusual keloid changes took place at the seat of inoculation, and the bacilli were found to have multiplied at that point. The Dublin case

[1] *Leprosy in British Guiana.* By John Hillis, F.R.C.S., etc. Churchill. 1881 This work gives an exceedingly clear and interesting account of the forms o leprosy, based on large experience, and well deserves to be studied.

in some respects was even more remarkable. A man who had never left Ireland, where leprosy has been for a very long time entirely extinct, became a leper after close association with a leper who had acquired the disease in the East Indies. It will be very difficult to shake the impression which this fact must have made upon the very great majority of ordinary men.

As regards the contagiousness of leprosy, it is interesting to compare the progress of the disease in the Sandwich Islands with that of New South Wales. It is now matter of notoriety that leprosy, in the absence of restriction, spread with unexampled rapidity in the Sandwich Islands. In New South Wales, however, the population early took alarm. Not only did Chinamen, who may have brought the disease with them, develop leprosy in that colony, but Europeans born in the colony became its victims. The larynx, which furnished Dr. Thin, some years ago, with material for a paper published in the JOURNAL, on the bacillus lepræ, came from a man born in Australia of an English and an Irish parent. But what is the case now in New South Wales? Leprosy has not spread, and all the lepers in the colony, consisting, we understand, of only a few Chinese and one Englishman, are strictly isolated in the Leper Hospital. So great, indeed, was the popular terror of leprosy, that a criminal, who is now an inmate of that asylum, was, we understand, not tried for his crime, because it was believed by the authorities that it would be impossible to get a Sydney jury to meet under the same roof with him.

Mr. Hutchinson, in view of the discovery of the bacillus of leprosy by Hansen, prefers to call the disease "fish-eaters' leprosy," or "fish-eaters' tuberculosis," showing that this discovery has not made him waver in his support of the old fish theory of leprosy. We find in the *Friends' Quarterly Examiner*, first month, 1889, an article by Mr. Hutchinson, on the leprosy problem, in which an interesting popular summary is given of many points connected with the disease, and in which certain facts are brought forward in support of the proposition stated in the paper, that the evidence as regards this disease points to "fish as being probably the vehicle by which the poison of leprosy gains access to the human body." Until it is discovered either that the bacilli of leprosy are present in some other media, or until it is proved that leprosy is always conveyed from one person to another by contagion, the fish hypothesis, and many other hypotheses, will be always possible.

There is no *a priori* reason to deny the possibility of the bacillus lepræ being conveyed into the human body through the medium of fish; but so far there is very little evidence to show that this is the case. Fish, being usually a cheap article of food, is in such universal consumption all over the world, particularly in tropical countries, that it is only reasonable to suppose that fish-eating and leprosy should frequently coincide; but there are other articles of food in general consumption—farinaceous foods of various kinds—which, either in a wholesome or in an unwholesome state, might with equal reason be suspected of conveying the bacillus into the human body.

Those who are interested in testing the probable coincidence of fish-eating with leprosy might find material on which to work by a study of the disease as it is found in China. Information bearing on the point will be found in a valuable epitome of the *Reports of the Medical Officers to the Chinese Imperial Maritime Customs Service* from 1871 to 1882, compiled by Surgeon-General Dr. Gordon, C.B. From that work we learn that at Canton there are two leper villages, and we understand that lepers are compulsorily isolated in these villages, where they are allowed to marry freely.

The late Dr. Arthur Reid, who devoted much attention to the cases of leprosy which he saw at Hankow, found that there were certain villages in the inland province of Honan which furnished a considerable contingent of the lepers who applied to him for assistance, and it so happened that in this district fish was difficult to procure, and was only the luxury of the rich, whilst it was amongst the very poor who could not obtain fish that the cases of leprosy occurred. In Pekin, in the extreme north of China, where leprosy is not uncommon, fish is an expensive luxury whilst mutton is cheap, and the lepers there belong to the poorest classes who cannot afford to eat fish, whilst the rich and comfortable classes who can, there as in many other parts of China, are entirely free from the disease. In fact, there is a concurrence of opinion amongst Chinamen that leprosy is essentially a disease of the poorest of the poor, and that it is never found amongst people who are in anything like comfortable circumstances. As an illustration of how little importance can be attached to popular beliefs on such points, we may remark that the Chinese have the erroneous idea that the disease is restricted to the parts of China where the lichi grows, and by others it is attributed to excess of lime in the drinking water.

Dr. Ransome, in his first lecture on the Etiology and Prevention of Phthisis, published in the JOURNAL on March 1st, has considered the question of leprosy from a different side, and has pointed out certain features in which leprosy and tuberculosis resemble each other. In both the bacillus gives rise to certain changes in the surrounding tissues which are not in some respects dissimilar, and he calls attention to the similarity in size, appearance, and staining qualities between the pathogenic bacilli in the respective diseases. As a matter of fact, any worker who is familiar with this special field must agree with Baumgarten that it is impossible to distinguish by the microscope the tubercle from the leprosy bacillus, but none the less, as Dr. Ransome points out, has it been shown that inoculation experiments show an absolute diversity, and give no support to the idea that there is a bacillus common to both these diseases. The tubercle bacillus can be grown and regrown for many generations in certain media. Pure cultivations can be inoculated with certain success in animals, but this has never yet been accomplished in the case of the leprosy bacillus. Köbner, Campana, Thin, Neisser, Damsch, and Bizzozero have, in a series of carefully-arranged experiments, attempted to inoculate the leprosy bacillus in animals but have always failed. There can, therefore, be no doubt that these bacilli are specifically distinct.

Dr. Ransome points out clearly other points of difference in connection with the changes they produce, the chronicity of leprosy lasting from ten to twelve years, contrasting with the three or four years which is the average in the case of phthisis. Indeed, the points of difference between the two bacilli are even more striking than their resemblance. I

dealing with such minute organisms it would be unwise to attach much importance to their similarity in size. The capacity of both to retain the fuchsine stain after treatment with nitric acid, which distinguishes them from all other known bacilli, is a most remarkable property, which they have in common, and of which as yet no reasonable explanation has been offered. But these points of resemblance are insignificant when compared with the points of difference shown by cultivation and inoculation experiments. That they should both be capable of developing and producing pathological changes in the skin and in the viscera is not so remarkable; and they share that property with other morbid developments, such as cancerous epithelium, but even in the human body a striking difference is illustrated by their choice of habitat. By predilection the leprosy bacillus lives and multiplies in the cutis and nerves, and it is only in the case of later developments that it is able to accommodate itself to living and growing in the viscera. The tubercle bacillus, on the other hand, while it can also live in the skin, in the great majority of instances selects the viscera and, more particularly, the lungs as its first point of attack and as the field most suited to its growth. That they should both produce, in common with syphilis, the changes known since Virchow's designation as "granulation tumours" may, so to speak, be described as an accidental quality, and simply shows that while they act as poisons or irritants their destructive action is limited in degree. Both bacilli have the power to provoke changes and destructive effects on the vascular system, and the accumulation round their seat of action of masses of exudation cells, but even in this feature, which they have in common, a point of difference makes itself manifest, the poisonous action of the tubercle bacillus being more intense and more active than that of the leprosy bacillus, which for a long time seems to be able to exercise comparatively little effect on the surrounding tissues, and being able to multiply to an enormous extent without causing sufficient inflammatory action to lead to breaking down and ulceration. The distinctive faculty of lodging itself in the sheaths of the nerves, and there slowly leading to change in the nerve fibres, without necessarily being transferred to and becoming deposited in the other parts of the body, is a very distinctive and special quality of the leprosy bacillus, to which there is nothing analogous in the organism of tubercle. Our future knowledge of leprosy, so far as can be at present judged, lies in our obtaining more extended information regarding the life-history of the bacillus lepræ, and it is by extending facilities for laboratory experiments in the widest sense of the word, that that this more extended knowledge is likely to be obtained. More particularly is it desirable that well-equipped laboratories and trained workers should be associated with the large leper hospitals which exist in those parts of the world in which leprosy is rampant.

STUDIES IN THERAPEUTICS.

XIII.—Exalgine.

The physiological action of exalgine was first investigated by Dujardin-Beaumetz and Bardet in 1889, and as a result they were able to indicate its probable therapeutical uses with a considerable degree of accuracy. They found that, like antipyrin, antifebrin, and many other members of the aromatic series, it possessed antipyretic, antiseptic, and analgesic properties in a high degree, but that its analgesic effects predominated very greatly over the others. If pain were present, a small dose was found to produce insensibility to it without in any way altering general tactile sensibility, or, in fact, causing any visible change in the outward condition of the patient.

The value and advantages of such a drug are obvious at once; and since the publication of the original paper a number of observations have been made in France, with the view of testing the clinical worth of exalgine. In this country, Professor Fraser's valuable paper, recently published in the Journal, is the first contribution to the subject. From the evidence so far adduced, it seems clear that we have in our possession a substance capable of relieving pain, without causing any marked disturbance of normal physiological conditions, and, therefore, at once a pleasant and safe anodyne. But although it acts satisfactorily as an analgesic in doses which are so small as to be without accompanying disagreeable effects, exalgine is, nevertheless, a powerfully toxic substance, and its reckless use in large doses will have to be carefully guarded against. Experiments have shown that in rabbits about 7 grains per kilogramme of body weight is a rapidly fatal dose. The symptoms following on this or somewhat smaller amounts point to stimulation of the central nervous system, giving rise to epileptiform convulsions. The convulsions are chiefly cerebral in origin, but at the same time the medulla and spinal cord are both in a highly excitable condition. Between the spasmodic attacks there are intervals of rest, in which the animal lies panting, cyanosed, and agitated. Besides this action on the nervous system, the hæmoglobin is altered to methæmoglobin, the blood assuming the well-known chocolate colour of the latter substance. In consequence, oxidation and respiration are interfered with, and we get dyspnœa and cardiac disturbances. This action on the blood, however, is only seen after very large doses.

For the therapeutist the chief interest centres round the action of small or moderate amounts, and this is found to be very different from the toxic effects. The animal remains apparently quite unaffected, but is indifferent to painful stimuli. The blood pressure is slightly raised, and, as with most other antipyretics when administered to the healthy, there is no fall of temperature. Locally exalgine has an anæsthetic action on mucous membranes, or when injected subcutaneously.

In man, Professor Fraser gave small doses of one-half to two grains usually, and found that this amount was sufficient to entirely remove or relieve pain in suitable cases. The French physicians, however, have been accustomed to give considerably larger doses—4 to 8 grains at once, or 6 to 12 grains in two or three doses during the day. Pain vanishes entirely or is much diminished in about a half to one hour after administration by the mouth. The relief is in some cases permanent, in others the pain returns after a few hours if its cause still persists. Tactile and general sensibility are unaffected. Cyanosis has never been observed, probably because the sensory nervous system is depressed much earlier and by a much smaller dose than is required to disturb the heart and respiration. A rash has occurred only in one case, but

slight itching of the skin seems to be not infrequent. In most cases, however, after 6-grain or larger doses there have been observed in from two to fifteen minutes after administration symptoms of cerebral disturbance, such as a feeling of slight intoxication, dizziness, buzzing in ears, and less frequently nausea and headache. Their intensity varied much, but they were never very severe, while their duration, as a rule, was only about five minutes. Sometimes they passed off in about a minute, or they might last for half an hour.

The amount of urine is diminished, and in some cases it reduces Fehling's solution, but as a rule no change occurs. Exalgine can be extracted from the urine by a somewhat complex process, but no readily applied test for its presence has as yet been discovered.

The cases in which exalgine acts most successfully are neuralgias of all kinds—facial, dental, intercostal, sciatic, and others—due to cold and inflammation. In these it frequently effects a cure without further treatment, and at the worst relieves pain in a harmless manner and gives time for other measures to act. In muscular and joint pains it also acts well. The more recent the case the better, of course, are the results, while in cases of chronic inflammation affecting the muscles, joints, or nerves very little benefit except temporary cessation of pain can be hoped for.

In the pains due to locomotor ataxy, cardiac disease, pleurisy, and toothache it seems to give considerable relief, but in many cases of serious organic lesion it has failed to do so. In diabetes mellitus it has been found to diminish the quantity of sugar excreted, but no prolonged or very reliable observations have as yet been made with a view to determine its relative value as compared with other drugs.

Exalgine is without smell or taste; the best method of administering it seems to be in weak alcoholic solution, flavoured or not according to preference. On the whole, exalgine must be regarded as a somewhat feeble analgesic, not to be compared for a moment with morphine as regards intensity of action, and probably weaker even than chloral hydrate. It possesses, however, the inestimable advantage of relieving pain without producing narcotism or rendering the person incapable of pursuing his ordinary occupations if necessary. As to the exact method of its action we are still in the dark, but as it does not diminish general sensibility we are driven to the conclusion that it must have a special action on those parts of the sensory nervous system which are concerned in the conduction or perception of painful impressions.

FOREIGN BODIES IN THE BRAIN.

In another column we publish a short history of an interesting case of foreign body long tolerated by the brain. Instances of this kind, though very remarkable, are well known to surgeons; and surgical literature, particularly that portion relating to gunshot wounds of the head, proves conclusively that as individuals may live for some time with considerable depression of the cranial wall, and after deep and extensive destruction of the brain through injury or disease, so the presence of a foreign body within the skull is not incompatible with a prolonged and comfortable existence. In 1873 Dr. Wharton, of Philadelphia, was able to collect from different sources 316 cases of penetrating wound of the skull. In 106 of these cases the foreign body was removed, and in 88 of the remaining cases, in which the foreign body could not be reached and was allowed to remain, the patients recovered. That a bullet, or a fragment of a larger projectile, may remain imbedded in the brain for months or even years without causing any very serious symptoms has also been proved by a table of 72 cases collected by Dr. Andrews, of Pennsylvania. Sir Thomas Longmore has put on record the case of an English officer who, with a musket ball imbedded in his brain, was able to discharge certain military duties during nine years after the receipt of the injury.

In several of these instances the foreign bodies were of considerable size and weight. A well authenticated case has been published in which recovery followed the removal on the twenty-seventh day after the injury of the linch pin of a cannon, which had been driven into the brain through the frontal bone. Hughes, an Irish surgeon, has published an instance in which a patient lived for fourteen months without any bad symptoms, with a portion of the breech of a gun in the anterior lobe of the brain. One of the most remarkable of such injuries is that recorded by O'Callaghan, and referred to in Erichsen's *Surgery*, in which an officer lived for nearly seven years with the breech of a fowling-piece, weighing three ounces, lodged in the forehead, and resting on the surface of the brain, from which it was separated by false membrane.

Notwithstanding the numerous instances on record of apparent recovery from the effects of a penetrating wound of the skull, and of the survival over a period more or less prolonged of a patient carrying a bullet or some other heavy body in his brain, the prognosis in such cases, as has been insisted on by Bruns, is always very unfavourable. As a rule, even in cases in which the patient has survived for ten years or longer, the presence of the foreign body ultimately has a fatal result. In most cases the injury is followed by headache, impairment of hearing and vision, muscular debility, psychical disturbances, and epileptiform attacks, and the presence of the foreign body is apt to set up sooner or later inflammatory conditions of the brain or its membranes and cerebral abscess. The occurrence in some of the fatal cases of sudden death after a long-continued tolerance of the foreign body has been accounted for by the results of investigations made by Flourens, who found that a bullet or any heavy body lodged near the upper surface of the brain has a tendency to sink down gradually through the cerebral substance towards the life-maintaining centres of the organ.

This subject of foreign bodies in the brain has of late acquired increased importance and interest through its relation to the results of recent researches on the localisation of cerebral functions. Unfortunately in many of the recorded cases the seat of the penetrating wound has not been closely described, and much obscurity often remains as to the nature and extent of the morbid phenomena which have been hitherto observed. In many instances, and especially in those of unusually large and weighty foreign bodies, the frontal lobe seems to have been the region mainly if not exclusively, involved. The few investigations which have been made on this point fail to give much information, as ther

is a marked difference of opinion between the observers, Guthrie having held that a penetrating wound of the brain is more dangerous in the frontal and less so in the occipital than in the parietal region; whilst Brodie, on the other hand, was of opinion that recovery most frequently followed injury of the anterior lobe.

DEGREES FOR LONDON MEDICAL STUDENTS.

THOUGH the working out of a practical scheme for placing medical degrees within the reach of the majority of students of medicine in London must seem to onlookers an unconscionably long process, yet a comparison of the present position of the question with that which it occupied this time last year will show that real progress has been made. The report of the Royal Commission which was presented to Parliament on May 3rd, 1889, stated that the general case for a teaching university had been made out, and recommended that the University of London should be given time to formulate some scheme of reconstruction which would meet the urgent needs of higher education in London. Since then the Senate of the University has issued a scheme which, in spite of many imperfections, was yet a distinct step in advance, since it discovered a readiness to enter into relations with teaching and other examining bodies in London. The scheme, it may be apprehended, was intended less as a practical working plan than as an outline affording basis for discussion and conference; as such it has served, and is serving, a useful purpose.

The Conjoint Board of the Royal Colleges of Physicians and Surgeons is at the present time by far the most important licensing body in London; the number of its diplomates far exceeds that of the other bodies put together. It is not to be expected that the bodies which the Conjoint Board represents would willingly abdicate their position, nor have they been seriously called upon by any party to make such a sacrifice. Yet the difficulty is one which can only be solved by compromise, and it is one that calls for concessions on both sides. It is true that the question before the University is not one affecting medical interests alone, but these interests form a very special class, and it may well be that they may best be met by an arrangement of a special character. The curriculum and examinations of the Conjoint Board are doubtless capable of improvement, but they afford a guarantee, so far as teaching and examination can afford a guarantee, that the man who passes through the prescribed course is competent to practise medicine, surgery, and midwifery. The question is now being asked in many quarters whether there is any real reason why the University of London should not recognise this fact? Why should not the examinations of the Conjoint Board in professional subjects, it is urged, be accepted by the University as qualifying for a pass degree of M.B? This not improbably will be the substance of the proposal which will constitute the next phase of the movement. As will be seen from the brief report published elsewhere, the scheme of the Senate of the University, and a report by a committee thereon, were discussed at the last meeting of the Royal College of Physicians. The report presented to this meeting embodied important propositions, but obviously the College of Physicians cannot under its existing contracts take any decided step without consulting the Royal College of Surgeons, and it may be hoped that there is no truth in the rumour that the Council of that body is disposed to treat these propositions with indifference, or meet it with opposition.

The professional examinations of the University of London, even at the present time, are not the only, or indeed the chief, cause of its failure to meet the wants of London medical students. The character of its matriculation and preliminary scientific examinations is a far greater stumbling block, and as yet no serious attempt seems to have been made to grapple with this part of the question. The scheme of the Senate practically proposes to hand over examinations in preliminary science to the Conjoint Board, and to accept in lieu of the matriculation an examination held in a teaching college after an Arts year. The first of these proposals is not one which is likely to be entertained by the Conjoint Board, since the holding of such an examination is distinctly beyond the proper sphere of the Colleges. As to the second, it does not seem to be in consonance with the general plan of medical education, and would certainly encounter serious opposition in many quarters.

THE ETIOLOGY OF INFLUENZA.

IN the JOURNAL of February 15th, p. 369, a short summary was given as to the results of the bacteriological investigations in influenza and its complications by various observers —Jolles, Weichselbaum, and Klebs—and we have now to supplement them by the further results of such observations published recently by Ribbert, Finkler, Prudden, and Babes.

Professor Ribbert, of Bonn, vindicates for the streptococcus pyogenes the power not only to convey the croupous pneumonia complicating influenza, but he goes so far as to say [1] that he sees no reason why this organism should not be considered also the primary cause of the influenza, since in all and every one of the cases of pneumonia following influenza which he examined, both in the sputum of the living and in the body after death, he found this microbe and only this.

Professor Finkler, of Bonn, examined 45 cases of pneumonia after influenza; 2 of these were of the typical fibrinous croupous type, 43 of a type similar to, but not identical with, it. These latter cases were such as he had met with and described before,[2] and were caused by the streptococcus pyogenes, hence they had been called by him "streptococcus pneumoniæ."

Prudden [3] discovered in the sputum of two out of three cases of bronchitis associated with influenza the presence of large numbers of streptococcus pyogenes, this being the prevailing species; in the third case, however, he found the diplococcus pneumoniæ. Of six cases of pneumonia following influenza, the bacteriological examination of the sputum revealed the presence of the diplococcus pneumoniæ in four; in the fifth case that of the streptococcus pyogenes and staphylococcus pyogenes aureus; and in the sixth (fatal) case the diplococcus pneumoniæ was present in pure culture.

Babes [4] gives the results of the bacteriological examination

[1] *Deutsche medicin. Wochenschrift*, No. 4.
[2] Congress of Internal Medicine, 1888 and 1889.
[3] *Medical Record*, New York, February 15th, 1890.
[4] *Centralbl. f. Bakt. und Parasitenk*, vii, No.

of the secretion of the nasal cavity and frontal sinuses in several acute cases of influenza, and besides, as might have been expected, isolating staphylococcus aureus and albus, and the bacillus of Friedländer, obtained several new forms of bacteria, notably two species of bacilli, the cultures of both of which produced on injection into rodents fatal results, notably pneumonia. In several instances of fatal pneumonia following influenza, Babes isolated various forms of streptococci, the bacillus of Friedländer, the staphylococcus aureus, and various other bacterial species acting pathogenically on rodents.

Though all the observations recorded hitherto by the various observers cannot be said to have brought us directly nearer to a knowledge of the contagium of influenza, they have nevertheless paved the way, as it were, for further researches, for they have at least taught us to know and to discard as unessential those forms which are not the microbes of influenza, but which most commonly occur in the various secretions under certain pathological conditions, for example, in influenza and its complications. In these reports the research of Besser[5] deserves a place as a valuable introduction to the bacteriological observations of all the authors previously mentioned. Besser examined with the microscope and by bacteriological methods the secretion of the nasal cavity of 57 men between the ages of 20 and 60 years; 28 of these were convalescents from various ailments, not influenza or its complications, and the rest (31) were perfectly healthy. In 81 examinations Besser found the diplococcus pneumoniæ and the staphylococcus pyogenes aureus fourteen times each, and only twice the bacillus of Friedländer and seven times the streptococcus pyogenes. All these microbes acted pathogenically on rodents, and were present in large numbers, occasionally in pure cultures, but a whole list of other species were also isolated from the secretion in the various cases. Also other secretions, like that of the frontal sinuses, of the antrum of Highmore, of the larynx, and of the bronchi, were carefully examined bacteriologically, and the results described; among these the species found in the bronchial sputum deserve to be specially named. The streptococcus pyogenes was found in 2 cases of phthisis; a microbe similar to, but not identical with, it was found in 2 cases of scarlatina; the diplococcus pneumoniæ in 1 case each of fracture of cervical vertebra, of tuberculosis of the peritoneum, and of enteric fever; the staphylococcus pyogenes aureus in 1 case each of tuberculosis, carcinoma uteri, and gangræna senilis.

Two conclusions seem naturally to flow from these observations of Besser, namely, that of all the species of bacteria found associated with influenza by various observers, none can have a causal relation to this disease, and that the grave suspicions entertained by some, even as to the often asserted etiological relation of the diplococcus pneumoniæ to fibrinous or croupous pneumonia are well founded.

At the meeting of the Royal Medical and Chirurgical Society on Tuesday next, which will be the first ordinary meeting in the new hall, Sir Henry Thompson will exhibit a remarkable series of vesical calculi. The clinical histories of the cases from which the stones were removed have been carefully arranged and indexed, and the whole collection—documents and specimens—is probably the most extensive and instructive in existence. We understand that Sir Henry Thompson intends to present this unique collection to the Royal College of Surgeons.

5 Ziegler's *Beiträge*, vi, 4.

We are enabled to state, on high authority, that the Report of the Royal Commission on the Military and Naval Administration will not contain any proposal as to the Medical Department of the army.

The Royal Commission on Vaccination met on Wednesday, March 5th, Lord Herschell in the chair. Mr. Wallace, who is strongly opposed to compulsory vaccination, was again examined with regard to the statistics which he gave in evidence at the last sitting.

On Wednesday, March 26th, at 2 P.M., Mr. Gladstone will open the new residential college at Guy's Hospital. He will be entertained at luncheon by the governors and staff, who, after the ceremony, will hold a reception. Visitors will be invited to inspect the building.

For the treasurership of St. Thomas's Hospital, rendered vacant by the death of Mr. Alderman Stone, it is stated that it is sought to secure the services of Alderman Sir Henry E. Knight, who filled the office of Lord Mayor in 1882, and whose business qualifications eminently fit him for the position. A requisition is, we understand, in course of signature, which has already been most influentially signed by members of the governing body.

Dr. Michael Foster has been elected a member of the Italian Reale Accademia dei Lincei in the section of physical, mathematical, and natural sciences. Among the other foreign members elected at the same time were M. Berthelot, Dr. A. Chauveau, and Professors Karl von Nægeli and W. Kühne.

THE COST OF THE INFLUENZA EPIDEMIC.

The next meeting of the Medical Sickness Annuity and Life Assurance Society is called for Wednesday, March 12th, at 38, Wimpole Street, W., when it is expected that an interesting statement will be made, showing the severity with which the late influenza epidemic has fallen upon medical men, and the extent of total disablement from practice, concurrent with the claims upon the funds of the Society to which it has given rise among the thousand members of the Society. The cost to the country of the present epidemic of influenza has been calculated by Mr. Smee, the chief medical adviser to the Gresham Life Assurance Society, at two millions of money, about one half of this amount having been paid by insurance companies and friendly societies, and the remainder representing the loss on wages, disorganisation of business, and the like.

OBSTETRICAL SOCIETY OF LONDON.

On Wednesday evening the last meeting of this Society was held in Berners Street. Two papers, one by Dr. Herman, On the Change in size of the Chest and Abdomen during the Lying-in Period, and the Effect of the Binder on them; and the second, by Mr. Doran, On Apoplexy of the Ovary, gave rise to very instructive discussions. The April meeting will be held in the Royal Medical and Chirurgical Society's Rooms, 20, Hanover Square. Fellows of the Society must bear in mind that the library must be closed within a very few days, as it will be moved from Berners Street to Hanover Square.

THE REFORM OF THE ROYAL COLLEGE OF SURGEONS.

We understand that it is the intention of Lord Dunraven to introduce the Bill for the reform of the Royal College of Surgeons immediately, and that it will probably be put down for some day before Easter. A meeting of the Parliamentary Bills Committee of the British Medical Association was held on Tuesday, March 4th, when the draft Bill of the Members' Association, published last week (page 503), was under consideration. The meeting was adjourned until Friday, at 4 o'clock, when the consideration of the clauses will be resumed.

THE HEALTH OF SIR RICHARD OWEN.

We are glad to learn on inquiry that the statements circulated in the Press as to the serious state of the health of Sir Richard Owen are quite inaccurate. Sir Richard Owen slightly injured his foot last week, and his surgical advisers have found it necessary to recommend him to remain at rest for some days. This restriction to a man of Sir Richard Owen's extremely active habits is very irksome, but his general health is remarkably vigorous, taking into account his great age.

THE ALLEGED TRANSMISSION OF SYPHILIS BY VACCINATION.

Every case in which it is alleged that syphilis has been transmitted by vaccination is made the subject of special official inquiry by the medical department of the Local Government Board. Such a case occurred last year, about the time that the Royal Commission on Vaccination was appointed, and the evidence relating to it will no doubt be laid before the Commission. The President of the Local Government Board, in a statement made in answer to Mr. Summers in the House of Commons, gave some account of the case, which was very carefully investigated by an Inspector of the Local Government Board. Mr. Ritchie's answer gave information on many points, but it was not so full as to enable us to comment on the points of medical importance in the case. It was, however, stated by Mr. Summers, and his statement on this point was accepted as correct, that the mother of the child who has been the subject of the inquiry specially "requested that calf lymph might be used in vaccination," and that the vaccinator had not complied with her request. We think that in cases where the parents express a desire for calf vaccination they should be afforded reasonable facilities for obtaining it. These are officially provided in London, but not in the large provincial centres of Leeds, Manchester, and Birmingham. The subject is one which might well receive the attention of the councils of those cities, and of their several medical officers of health, who would be well able to advise them on the question now raised.

THE LUNACY CONSOLIDATION BILL.

This Bill, intituled An Act to consolidate certain of the Enactments respecting Lunatics, passed its second reading in the House of Lords on the 3rd instant. Its object is merely to consolidate the existing Lunacy Acts, incorporating the Lunacy Acts Amendment Act of last year with the various provisions of preceding Acts not repealed by it. A measure of consolidation was provided for in a number of the clauses of the Act passed last year; and one strong reason for the deferring of the day on which that Act is to come into operation until the first day of May of this year—except where otherwise specially provided in the Act itself—was to secure time in the interim for the passage of the present Bill through the Houses of Parliament. The Lunacy Consolidation Bill is introduced in order to complete, for the present, the lunacy legislation undertaken by the existing Government. It can scarcely, therefore, be said to contain contentious matter. The questions in dispute were threshed out during the five successive yearly sessions of Parliament, in which as many successive Lunacy Bills were before the Houses, until finally the Bill of 1889 was passed, greatly improved in its provisions by the efforts of the Parliamentary Bills Committee of the British Medical Association and of those members of Parliament who so cordially supported the recommendations of that Committee. Therefore difficulty in passing the Lunacy Consolidation Bill need not be apprehended apparently. This Consolidation Bill is a formidable document of 342 clauses, many of them subdivided into a number of sub-clauses, besides numerous statutory forms to be used in various contingencies, and arranged in several schedules; as well as a number of summaries, tables, and memoranda relating to the Bill and to the various existing Lunacy Acts. The whole extends to 164 large pages. When enacted, the Bill will be of immense convenience to all those concerned with the care of the insane, or dealing with their certification, or their being placed under control, or detained, or released; bringing, as it does, the numerous Lunacy Acts into conjunction and consolidation. The Bill is introduced by the Lord Chancellor.

"DRUNK OR DYING."

According to the reports which have appeared in the daily press, Mr. Plowden, the magistrate sitting at the West London Police Court, recently gave expression to an opinion which it is to be feared a little more experience will lead him very seriously to regret. He appears to have found fault with a policeman for sending for the surgeon to see a prisoner who was "speechless drunk." The magistrate is reported to have expressed his opinion that it was not fair to the prisoner to send for a doctor without his consent, and then charge him the fee. He asked what was the good of sending for a doctor to see a drunken man? He declined to order the payment of the doctor's fee, and discharged the prisoner. In future, therefore, when the police find themselves in charge of a prisoner in a state of unconsciousness, they are to decide for themselves the strictly medical question as to the cause of this insensibility. It is not, of course, to be expected that a magistrate should recognise the nature of the circumstances which render a diagnosis in many of these cases exceedingly difficult, but it is certainly astonishing that any man occupying that position should be oblivious of the too numerous scandals which have occurred in times past. A few years ago the title "Drunk or Dying" was almost a standing heading in newspaper offices, so numerous were the cases in which unfortunate persons suddenly seized in the streets with apoplexy or some other serious disorder producing unconsciousness and stertorous breathing were consigned to a drunkard's cell for the night. The police are, no doubt, as a body intelligent and humane men, but if they are set tasks which they are quite incompetent to discharge, the inevitable consequence will be mistakes which will scandalise the public. The responsibility for these scandals will, to no small extent, rest upon the shoulders of magistrates who take upon themselves to express opinions at variance, not only with medical science, but with the hard facts of past experience.

SUCCESSFUL REMOVAL OF A CANCEROUS TUMOUR FROM THE PANCREAS.

Professor G. Ruggi, of Bologna, has recently reported[1] a case in which he successfully removed a cancerous growth from the pancreas. The patient was a woman, aged 50, who had suffered for some time from swelling of the abdomen, which caused great discomfort and occasionally severe pain. Though still well nourished, she had lost flesh considerably; the digestive functions

[1] *Giornale Internazionale delle Scienze Mediche*, February 15th.

were much disordered, but all the other organs seemed to be perfectly healthy. The patient suffered from profound mental depression, which she said was worse than her bodily sufferings. On examination the abdomen was found to be uniformly distended by fluid in the peritoneum, and two tumours could be felt, one above the other, with a distinct line of demarcation between them. The lower one was continuous with the body of the uterus, and was judged to be a fibromyoma. The upper mass occupied the left colic and hypochondriac regions, and extended in front towards the umbilicus. Its posterior extremity corresponded to a prolongation of the mid-axillary line, and the anterior to a prolongation of the parasternal line. The tumour measured 25 centimètres in its long, and 13 in its short, diameter. If the patient lay down with her shoulders lower than her pelvis the tumour disappeared under the arch of the ribs, returning to its natural position when she sat up. Vaginal examination, whilst confirming the diagnosis with respect to the lower tumour, threw no light on the origin or relations of the upper one. The spleen, kidneys, and liver were normal to palpation. A provisional diagnosis of retroperitoneal adeno-sarcoma was made, and laparotomy was performed on September 4th, 1889. The patient having been placed on her right side the abdomen was opened by a lateral transverse incision just under the left costal arch. In attempting to separate the tumour from the peritoneum, to which it was adherent in front, the peritoneal cavity was opened, and a quantity of yellowish fluid escaped. The mass was then drawn through the hole in the peritoneal sac, bringing with it the omentum and a loop of the small intestine surrounding the lower and inner end of the tumour. The latter was soft, like brain substance, and broke down under the fingers, but the operator was able by degrees to pick it off the intestine to which it was attached, a catgut ligature being applied here and there. The adhesions to the omentum were firmer, and that structure had to be divided into bundles, which were tied separately and cut through. The tumour when brought away was a shapeless mass of pulp, bearing no resemblance to the normal pancreas. The peritoneal cavity was carefully cleansed, and drainage tubes placed in the posterior part of the wound. The front part healed by first intention, and the patient made an excellent recovery, being discharged cured on October 26th. Her appetite was excellent, and the deep depression from which she had suffered before the operation had entirely disappeared. Recent accounts state that she is still in perfect health. The fragments of the growth removed weighed 650 grammes; microscopic examination proved it to be a glandular cancer. Professor Ruggi thinks that little or none of the affected organ was left behind; the opening into the duodenum was certainly destroyed. The patient's digestion, however, is perfect, although no particular precautions have been observed as to diet.

REPRESENTATION OF THE MEDICAL STAFF ON HOSPITAL BOARDS.

We regret to learn that the poll demanded at the annual general meeting of governors of the German Hospital has resulted in the rejection of the reasonable demand of the active medical staff to be represented on the Board of Management. The numbers—1,040 to 2,879—show that the great bulk of the subscribers to the hospital have failed to appreciate the importance of a liberal policy, and have taken somewhat too seriously Baron Schröder's dictum, "that it would be detrimental to the best interests of the hospital if the honorary active medical staff should be represented on the Committee." This statement is altogether at variance with the experience of other hospitals in this country, and no reasons have been advanced which would tend to place the German Hospital in a special category. It is, indeed, surprising to find the representatives in this country of a nation which prides itself on being in the van of progress thus lagging behind, and grudging to their co-workers in a noble charity a due recognition of their status. Unfortunately, some members of the Committee of Management would seem to have introduced into the discussion of this administrative question a degree of heat which is quite inexplicable. We can only hope that the medical staff will not be discouraged by this reverse, but will renew their proposal at some future time, when possibly it may be considered in a more judicial frame of mind.

THE EVILS OF COMPETITIVE EXAMINATION.

A motion was brought before the House of Lords last Friday by Lord Wemyss in favour of the appointment of a Royal Commission to inquire into the whole subject of official appointments by examination. This line of Parliamentary action was taken at the suggestion of Mr. Auberon Herbert and others interested in the late discussion on "The Sacrifice of Education to Examination," and the motion was supported by numerous extracts from his book, showing that various medical authorities declared that a great increase of nervous affections is due to examinations, and that much brain disease results from overpressure, while mental strain in girls leads to highly-nervous women, weak mothers, and deteriorated offspring. Under a rule in the revised Educational Code recently issued for Scotland payment for results is to a great extent done away with, and much discretion is given to the schoolmaster in classifying his pupils. The Bishop of Carlisle, speaking in favour of the motion, took occasion to point out that class examinations are an essential part of good education, and that in such subjects as mathematics and Latin verses, an examination necessarily tests the candidate's mental training, not the amount of cram that he has acquired from his teachers. Lord Cranbrook, in his reply, showed the general convenience and advantage that result from admission to the public service by examination in place of the old method of nomination. With regard to the question of health, the President of the Council admitted the possibility of harm from competitive strain, both at school and college, and in the world at large, in the tremendous struggle for existence going on in the country, and that this might increase the frequency of disorders of brain. He continued,—"But the only question is whether the undisturbed brain is so valuable that it is dangerous to disturb it;" and again, "he did not believe that it was proven in any great degree that people's health was affected by the examinations in schools, or at college, or by the official examinations of the public services." Earl Granville was happy in finding that Government would not support any motion of retrogression to the old days of patronage in public service appointments, and concluded by saying—"Of course it would have been a very different thing if it had been shown that the present system was detrimental to the health of the competitors." It is the almost complete absence of knowledge of the mental and physical effects of a widespread and deeply-rooted system of competitive examination, together with a strong suspicion in the minds of many competent authorities that it is doing much harm, that strikes us in this important discussion. With a view to clearing up these unsettled points of discussion, we should be glad to see some scientific inquiry made as to the physical and mental effects of education and examination. The question may be temporarily laid at rest, but it is not settled, and public anxiety is not allayed.

INADEQUATE FINES FOR ADULTERATION.

The question which Mr. O. V. Morgan recently addressed to the Home Secretary in the House of Commons, respecting the smallness of the fines frequently imposed by magistrates for offences against the Sale of Food and Drugs Acts, touched upon a matt

which is of considerable importance to the general public, and to which attention has frequently been drawn in these columns. Mr. Morgan's question related more particularly to certain metropolitan cases, and it is satisfactory to learn, from the reply given by Mr. Matthews, that he proposes to draw the attention of the chief magistrate officially to this subject, "and to request him, in conference with his brother magistrates, to arrive, if possible, at some common understanding, with a view to secure uniformity of practice in the administration of these Acts." But interest in this matter is not limited to the metropolis. In the last annual Report of the Local Government Board it is recorded that, during the year 1888, 1,337 prosecutions were instituted, throughout the country, under the Sale of Food and Drugs Acts, and that fines were imposed in these cases amounting in the aggregate to £1,782, besides costs. The average penalty was thus under 27s. There were, however, amongst them six fines of £15 each, two of £10 15s., twenty of £10, seven between £5 and £10, and sixty of £5. "If," observe the Board, "we exclude these cases, amounting only to 7 per cent. of the whole number, the average fine was only 18s. Considering the large profits of adulteration, we cannot regard penalties of this amount as likely to check it effectually; and we have, as in former years, received various complaints of the leniency of magistrates in this matter. In one metropolitan district, for instance, where a sample of milk had been reported against, and where the chemists of the Inland Revenue Department had confirmed this verdict, the magistrates imposed a fine of 1s., with 2s. costs. As the actual costs of the proceedings were £3 12s. 2d., it was represented to us that, while the vendor had escaped with a nominal penalty, the vestry were practically fined £3 9s. 2d. for carrying out their statutory duty." In another case in which the vendor of milk stated that he rarely sold more than a farthing's worth at a time, the sample taken was found diluted with 15 per cent. of water, but the magistrate considered that 1s. was an adequate fine. On this decision the public analyst commented as follows: "It is these small portions of milk which are used to fill the bottles of young children, and are often diluted by the parents after the purchase, and thus it is impossible to say how weak the milk becomes before the same is used; but it is not very difficult to understand why the mortality amongst the children of the poor is so great." Instances of a similar kind to these are unfortunately far too common. The Sale of Food and Drugs Acts were enacted for the protection both of the consumer and of the honest tradesman. It is not always possible for the consumer to protect himself from imposition and fraud, especially if he be poor or ignorant; and hence it would be well if the Home Secretary could see his way to directing the attention of provincial magistrates, as well as those of London, to the importance of this subject, and to the powers which they possess of assisting the poor, by imposing such adequate and deterrent fines for offences under the Sale of Food and Drugs Acts as will tend to discourage deliberate fraud, and render the practice of adulteration unremunerative.

THE MEDICAL SOCIETIES AND ORIGINAL WORK.

A CORRESPONDENT who has had considerable experience of the working of medical societies sends the following suggestion:—Our medical societies have done good service in drawing out and giving publicity and criticism to the able work of many men, and in selecting the best portions of such work for publication in their *Transactions*. One of the most proper and legitimate ways of presenting new work to the profession is by laying it before a scientific society. Much useful ground has thus been covered and well worked over in the course of years; material for the solution of many clinical and pathological problems has been collected; gaps in our knowledge have been filled in; and fresh experimental researches have been encouraged in confirmation or refutation of previously accepted theories. The question may, however, be asked whether the arrangements of the societies are sufficiently elastic to encourage workers on new lines of thought and investigation. Obviously, there is considerable difficulty in raising a discussion on new lines of work and on new methods of making observations; if members of the society have not made observations of similar facts they are not prepared to discuss them. For this reason it appears desirable that there should be great liberality in receiving new work for discussion, and, if it appears to be really founded upon observation, the author has some right to the benefit of criticism; to find that nobody present is able to pass criticism is but cold sympathy for work done. Cases of difficulty of this kind might be met by a method similar to that used when a specimen presented is not understood—that is, by referring the paper to a sub-committee. Election as member of a society should imply the possibility of receiving help from its members in cases of difficulty; thereby the unwholesome isolation of an original thinker and worker is removed, and, on the other hand, the work of the society is enriched. Literary merit and clear enunciation are necessary qualifications of a paper for publication in the *Transactions*, and the clear representation of new views would be greatly aided by submitting a paper to a committee and their subsequent report.

MIDWIVES' INSTITUTE.

THE objects of the "Midwives' Institute Trained Nurses' Club (Matrons' Aid Society)" are to raise the efficiency and improve the status of midwives, and to petition Parliament for their recognition to establish both a registry for members, and a centre of information for the public; to provide a good medical lending library and club room for friendly meetings; and to arrange courses of medical lectures, and to afford opportunities for discussion on subjects connected with the profession. The institute consists of three classes. The "full members" are trained midwives over the age of 21 who have passed the examination of the Obstetrical Society of London. The "associate members" are trained midwives or nurses who hold any other diploma. The last class, or "lay members," are persons not midwives who are interested in the subject and have been elected by the Society. Fuller particulars may be obtained from the secretary of the Midwives' Institute, 15, Buckingham Street, Strand. The members of this institute hold, we understand, a firm opinion that a qualified midwife is distinct from a trained nurse, the former not always acting under the direction of a member of the medical profession, but often taking the entire charge of labours. The principles of the institute allow, we believe, that in abnormal labours medical assistance must always be summoned. It is doubtless a subject of gratification that midwives should form such an association, but obstetricians and practitioners, on the other hand, feel that the relation of midwives to medical men—a most important matter—needs further definition. The existence of a recognised institute may aid in setting such relations on a satisfactory basis.

THE SMOKE NUISANCE.

THE County Borough of Blackburn has taken a step of great importance towards the prevention of a nuisance which spoils the atmosphere of many Lancashire and Yorkshire towns. Acting under the instructions of the Health Committee of the Corporation, Dr. Sidney Barwise, the medical officer of health, has drawn up a report on the smoke nuisance and the means by which it may be prevented or diminished. The report contains a good deal of useful information respecting the various mechanical appliances which have been found efficacious, and it also gives an account of the practice of several important town councils in the matter of smoke prevention. It appears that there is

much difference in the practice of several authorities, some taking pretty vigorous action to control the nuisance, and others letting it alone. It sometimes happens that manufacturers concerned in similar trades and competing with each other, but carrying on their businesses in different towns, are in one place permitted to make smoke to any extent, whilst in another they are limited to one minute of dense smoke in the hour. Sheffield is probably the greatest of all offenders, and the state of this town may be truly said to be a disgrace to civilisation. By persistently neglecting its duty as a public health authority, the Corporation of this wealthy and populous town has permitted the atmosphere which the citizens are compelled to breathe to become so spoilt and polluted, that for six days out of seven the whole town appears to be in a thick black cloud. This state of things ought not to be allowed to continue, and we hope that the leading manufacturers of that town will awake now to a sense of their public duty. We cordially approve of the action taken by the Corporation of Blackburn. It has set an example which should at once be followed by the authorities of other large towns in the manufacturing districts.

PANCREATIC HÆMORRHAGE.

An uncommon cause of sudden death has recently been recorded[1] by Dr. F. A. Harris, of Boston. A working woman, aged thirty-five, of doubtful antecedents, was found on a doorstep, complaining that she felt very ill; a few hours before she had been at an "employment office," seeking work. The patrolman detecting a smell of alcohol in her breath seems to have considered that she was intoxicated, and had her removed from the doorstep to the station in a patrol wagon. On arrival she was found to be dead. A *post-mortem* examination was made; the body was well nourished, the brain and membranes, the heart, the great vessels, and all the organs, with the exception of the pancreas and lungs, were healthy. The right lung was œdematous, and there were some extravasations into the periphery of the lower lobes of both lungs. There was hæmorrhage into the splenic end of the pancreas; the whole of this third of the organ being infiltrated with blood, which was easily expressed on section. There was also a small amount of blood effused into the subperitoneal tissue, extending nearly to the suprarenal capsule. The whole amount of blood was apparently not more than a drachm and a half, by estimate. In gross, the pancreas presented otherwise nothing unusual. It was not enlarged, nor were there any gross appearances of fatty degeneration, or abscess or embolic infarction.

THE TREATMENT OF PHTHISIS BY CARBONIC ACID.

It is said that lime-burners enjoy a certain degree of immunity from phthisis, not because they take in more carbonic acid, but because its diffusion when expired is impeded. Again, the course of phthisis is often seen to be arrested in pregnancy, and this has been ascribed to the increased amount of CO_2 in the maternal blood Chronic heart disease, by causing chronic hyperæmia of the lungs, also affords a kind of immunity against phthisis; lastly, in emphysema there is also permanent dyspnœa in more or less degree, and the blood is overcharged with CO_2. Acting on these ideas, Dr. Hugo Weber (St. Johann-Saarbrücken) proposes to administer CO_2 by the stomach, in the form of effervescing powders. Ten cases are reported[2] in which decided improvement was noted after this treatment, which certainly merits further trial, especially as it can be carried out at patients' own homes. According to Ebstein's theory of diabetes, the increased proneness to phthisis which that disease entails is due to the defective development of CO_2, this being not only the final product of tissue oxidation, but a body which exerts a regulatory restraining influence on the destruction of glycogen and albuminoids. Bergeon, Dujardin-Beaumetz and others have used in phthisis gaseous injections *per rectum* of hydrofluoric acid, copiously diluted with CO_2, and the good results they met with are claimed by Dr. H. Weber as due to the diluent.

[1] *Boston Medical and Surgical Journal.*
[2] *Berliner klin. Wochenschrift*, No. 35, 1889.

SCOTLAND.

The Senatus Academicus of St. Andrews University resolved on March 5th to confer the degree of Doctor of Laws upon Sir Joseph Fayrer, M.D., K.C.S.I.

ROYAL SOCIETY OF EDINBURGH.

At a meeting of the Royal Society of Edinburgh, on February 28th, a paper was read by Dr. William Rutherford on the Structure and Contraction of the Striped Muscular Fibre of the Crab and Lobster. Dr. Haycraft communicated a paper on the Carapace of the Chelonia, in which he pointed out that the carapace was sensitive to the slightest impact, even of a drop of water; this he had ascertained was due to the fact that nerves terminated in the nuclei of the epithelial cells of the scutes. Dr. Haycraft also read a communication on the Rate at which Muscles Contract when the Motor Paths are Stimulated by Interrupted Electrical Currents. He drew attention to the statement that, when the spinal cord was stimulated with rapid induction shocks, the muscles were unable to respond as quickly. This, he maintained, was due to imperfections in the instruments used for recording the contractions, and Dr. Haycraft showed tracings of muscular contractions obtained when the cord had been stimulated as rapidly as thirty times a second. Even more rapid stimuli had been responded to, and the muscles gave out musical notes, which could be appreciated by the stethoscope.

DISEASED CARCASSES IN THE EDINBURGH SLAUGHTER-HOUSES.

A good deal of discussion has been caused by certain facts which were disclosed lately before the Burgh Court of Edinburgh, regarding the method of inspection at the city slaughter-houses. As a practical outcome of this, the following motion is to be proposed in the Town Council of Edinburgh: That, in view of recent circumstances disclosed in the Burgh Court as to the mode of examination and detention, seizure, or otherwise, of diseased carcasses at the slaughter-houses, it be remitted to the Market and Public Health Committees to report—1. Whether the present mode of admission, detention, and seizure of living animals or carcasses at the slaughter-houses is sufficient to protect the public health and the pecuniary interests of the public. 2. The official relations of the Inspector of Markets to the slaughter-houses, and whether, if so, how far these conduce towards effective control of diseased meat at the slaughter-houses. 3. What improvement, if any, may be effected in superintending the slaughter-houses and inspecting the meat supply of the city.

SANITARY PROTECTION.

The annual meeting of the Edinburgh Sanitary Protection Association was held last week, Sir Douglas Maclagan, M.D., in the chair. The report indicated that there had been a large increase in the membership of the Association, which was open to all town residents on payment of one guinea. This appeared to indicate that the public were becoming more alive to the necessity of careful inspection of plumber work recently executed, and of property, whose sanitary condition must necessarily depreciate with the lapse of time. The special advantage which the Association

afforded was that such inspection was made by a thoroughly independent authority who had absolutely no interest in the report. The Association had also undertaken a further important department of work, namely, the examination of the accounts of plumbers and other tradesmen employed by the members, and the preparation of specifications for work in contemplation, and the supervision of work in progress.

GLASGOW HUMANE SOCIETY.

THE report of this Society for the past year gives the number of submersions in the river Clyde, within the area of the Society's operations, as 156. Of these 109 were accidental, 24 of these being drowned. There were 12 suicides and attempted suicides, of whom 5 were rescued; while 35 persons, 22 men, and 13 women were found drowned, it being uncertain whether the death had been by accident or design.

GLASGOW TRAINING HOME FOR NURSES.

EXCELLENT progress continues to be made in Glasgow by this institution. During the past year 71 nurses have been connected with it, 61 fully qualified and 18 under training. In the house 172 patients were treated, and nurses had been sent out to 483 cases of sickness in private families. For the first time for ten years the financial report for the year shows a balance in favour of the institution of nearly £150.

GLASGOW PHILOSOPHICAL SOCIETY.

UNDER the auspices of the Philosophical Society Mr. Eadweard Muybridge, of the University of Pennsylvania, delivered a lecture, on February 26th, on the Science of Animal Locomotion Applied to Design in Art. The lecture had been arranged for by the Philosophical Society in terms of the agreement made between it and the Glasgow Science Lectures Association, when the latter came to an end some years ago. Mr. Muybridge showed by lime light his photographs of animals in the act of walking, trotting, etc., illustrating how the movements could be analysed by a consecutive series of instantaneous photographs, which could then be made to undergo a synthesis. Applying the scientific facts thus acquired, he criticised modern representations of animals in motion as found in the works of some of the best artists, and showed how much they were in error. In ancient paintings and sculpture, on the other hand, there was found a most remarkable fidelity to nature. On a subsequent evening, at the Art Club, Mr. Muybridge exhibited a series of photographs of nude male figures engaged in wrestling, fencing, playing base ball, and cricket. These were not only very remarkable exhibitions of the various muscular movements but also showed in an exceptionally interesting manner the varieties of expression on the faces of the persons engaged in the course of the contest.

THE WEATHER AND THE DEATH-RATE.

THE last report of Dr. J. B. Russell, medical officer of health for Glasgow, shows a very considerable increase in the death-rate, which, for the fortnight ending February 22nd, was 32 per 1,000, instead of 24.7 for the same period last year. The exact increase on last year is 6.4 per 1,000; and coincident with it there was during the fortnight a mean temperature of 3.6° F. lower, and a rainfall 0.67 of an inch less. The chief increase is due to pulmonary disease, which caused 44 per cent. of the total deaths. Of the total of 117 deaths in excess of the same period last year, 104 were contributed by pulmonary diseases; and the increase was most marked in persons below 1 year of age and of the age of 60 and upwards. The number of pulmonary deaths has not been exceeded since January, 1885. The first week of the fortnight had a mean temperature of 33.8°, the coldest week since February 18th, 1888, and the low temperature prevailed throughout the twenty-four hours, and was accompanied by sharp east winds and sunlessness. The effects on aged people are shown by the fact that 62 persons between 60 and 70, 45 between 70 and 80, 14 between 80 and 90, succumbed, a total of 121 above 60. This has not been exceeded or equalled since February, 1881, after a winter as severe as the present has been mild.

IRELAND.

HIS EXCELLENCY LORD ZETLAND has appointed Dr. Philip C. Smyly, one of the surgeons to the Viceregal court, to be physician in room of the late Dr. Hatchell; and Dr. Kendal Franks to be surgeon in room of Dr. Smyly.

INSPECTOR OF LUNATIC ASYLUMS.

IT is now officially announced that Dr. Edward Mazière Courtenay, Medical Superintendent of the Asylum at Limerick, has been appointed Inspector of the Lunatic Asylums in Ireland, in room of John Nugent, M.B., resigned.

DR. NUGENT.

DR. NUGENT, Inspector of Lunatic Asylums, intimated to the governors of the Richmond District Asylum at their last meeting that he was about to retire, after forty years' service. On the motion of Sir E. H. Hudson-Kinahan, Bart., seconded by Sir Percy R. Grace, Bart., D.L., the following resolution was passed unanimously: "That the governors of the Richmond District Asylum record their high appreciation of the public services of Dr. Nugent as head of the Lunacy Department in Ireland for a period extending over forty-three years. They sincerely regret his meditated retirement, as by his judgment and experience he has amply and beneficially fulfilled the unceasing and onerous duties of his office. In his immediate connection with the Metropolitan Asylum the governors feel deeply indebted to Dr. Nugent, not only for his assiduous and personal attention to the efficient working of the institution and the well-being of its inmates, but for the courtesy exhibited by him at all times in his intercourse with the Board, and his desire to carry out its wishes. It is understood that Dr. Nugent's long services in the office which he has just resigned will be recognised by the honour of knighthood.

THE Duke of Devonshire has given £250 towards the proposed fund of £40,000 for erecting new buildings for the medical department and a library and examination hall for the Yorkshire College, Leeds. About £30,000 has now been subscribed.

A WELL-KNOWN London member of the Society of Friends, says the *Manchester Guardian*, has just given the sum of £25,000, to be applied—one-fifth to establish, and the remainder to endow, a convalescent home for children at the seaside.

PRESENTATION.—On leaving the Western Fever Hospital, where he has been medical superintendent for ten years, Mr. Sweeting, the new Medical Inspector of the Local Government Board, was presented with a silver coffee pot by the staff. His late medical officers of the Asylums Board also entertained him at dinner, Dr. Collie in the chair, at the Café Verrey, in Regent Street.

BABY FARMING AT HOME AND ABROAD.—A woman was recently summoned by the London County Council, under the Infants Life Protection Act, for having "farmed" two infants, each under 12 months old, contrary to the provisions of the Act, her house not having been properly registered. Although it was shown that the defendant had treated the children with kindness and care, Mr. Partridge imposed a fine of £5 and 2s. cost, or in default of distress one month. The bodies of sixteen children have been found bricked up in the wall of a house occupied by a woman in Warsaw, who took in children to nurse. An attempt was made to lynch the woman.

RELATIVE RANK.

MR. STANHOPE AND THE ARMY MEDICAL DEPARTMENT.

DR. FARQUHARSON asked the Secretary of State for War on March 3rd what action he had taken, or intended to take, with reference to the recommendations contained in the report of the Committee appointed to inquire into the pay, status, and conditions of service of the medical officers of the army and navy which was laid upon the table of the House in August, 1889; and whether it was his intention to print the evidence taken before that Committee for the information of the House.—Mr. E. STANHOPE replied as follows: The recommendations of the Committee would, if carried out, involve an annual increase of expenditure exceeding £100,000, for which no sufficient grounds appear to me to have been brought forward. I do not propose to give effect to the recommendations involving expenditure; and as regards the recommendation to confer combatant titles on medical officers, as I find that my military advisers are unanimously opposed to it, and the naval medical officers do not desire it, no change is proposed in the titles. It is not intended to publish the evidence, but if the hon. member would like to see it, I shall be happy to show it to him or to any other hon. member who may be interested.

THIS statement of Mr. Stanhope's is of so serious a character, that it will be well briefly to review the events which have led up to the present situation.

It is just a year since Mr. Stanhope decided to appoint a Committee to "fully investigate and report," among other matters, on the status and rank of medical officers "in relation to their combatant brethren." The main reason for this step is stated to have been the diversity of opinion that had existed for some time between the War Office and the officers of the Medical Department of the Army on the question of rank. Mr. Stanhope and the military authorities at the War Office held that the Warrant of 1887, although it abolished relative rank in the army, made no practical difference to medical officers, because they were allowed to "rank as" combatant officers. On the other hand, a very large majority of the medical officers asserted that the term "ranking as" has no meaning to military officers or to anyone else unless it be children playing at soldiers. Medical officers state—and their statement has, we believe, been confirmed by Mr. Stanhope—that relative rank had substantially little more in it than "ranking as"; nevertheless, it was the only nameable rank they ever possessed, and when it was abolished they were left without any status in the army. Medical officers of experience assert that they find it is almost impossible, especially when on active service, to carry on the work of their department efficiently without substantive rank enabling them to command a definite position in a service which is absolutely regulated by titles giving precedence and rank.

So acutely do the medical officers of the army feel their position that, as Mr. Stanhope observed, repeated questions were raised in Parliament during the session of 1887 and 1888 as to their status in relation to their combatant brethren; but Mr. Stanhope omitted to mention that during that period the opinion of the medical officers of the army had been taken on this subject, and that 75 per cent. out of 922 officers stated that it is essential to the efficiency of the Medical Department that they should be granted substantive rank and corresponding army titles. In these circumstances the Secretary of State for War determined to refer the question to a Committee. After the most careful consideration, this Committee came to the decision that "the abolition of relative rank enabled medical officers to say, with a certain amount of logical correctness, that they had now no rank in the army," and to rectify this state of things the Committee recommended with reference to titles that "in the Queen's Regulations and the Army Pay Warrant it should be stated that officers of the Army Medical Department shall hold the following military rank with relative army rank, a table of which we append." Then follows the table, fixing the compound titles of Surgeon-General, Surgeon-Colonel, Surgeon-Major, and so on, with their relative army rank. We now have Mr. Stanhope's decision regarding the recommendations of the Committee which he had appointed and charged to "fully investigate and report on" this question. He states in Parliament that, as regards the "recommendations to confer combatant titles on medical officers, as I find that my military advisers are unanimously opposed to it, and the naval officers do not desire it, no change is proposed in the titles." He adds: "It is not intended to publish the evidence" on which the members of the Committee base their recommendations. It may well be asked, Why, then, have referred this question to a Committee? Mr. Stanhope knew perfectly well before March, 1889, that his military advisers were dead against the contention of the medical officers; why not have said so at once, in place of keeping the latter in a state of suspense for a year, only to find their legitimate aspirations crushed at the end of that period? It must be borne in mind also that one and all of the principal military advisers of the War Office were examined at length by the Committee before its members arrived at the conclusion above quoted.

Mr. Stanhope's action has rendered the present position of this vexed question infinitely more difficult than it was a year ago, and to have widened the gap which exists between the "combatant" and the medical officers of the army. The Secretary of State for War deliberately submitted these differences to a Committee. He selected the Chairman of that Committee, one of the ablest and most competent members of the House of Lords, to inquire into the matter, aided by Sir Herbert Maxwell, one of the Lords of the Treasury, and Colonel Cotton, in conjunction with two retired army surgeons; these five gentlemen out of eight constituting the Committee were unanimous in recommending that compound definite titles should be granted to medical officers of the army, which, after all, was the chief matter in dispute; and Mr. Stanhope's reply is: "No change will be made in the titles." We assume that he means in existing titles; without definite titles there can be no expressed army rank, and consequently no real status for medical officers in the army.

It was one of the strong points of the argument of those members of the Committee who disagreed with the recommendations contained in the report as regards titles, that there was no lack of candidates for the Army Medical Service under existing circumstances. Why

it was said, make any change? Men in the service entered it knowing what their position would be; the abolition of relative rank created no new phase in the history of the treatment of the Army Medical Service. The recommendations of Lord Camperdown's Committee will, however, remain to testify the unbiassed opinion of those who carefully considered the matter, and who heard all that the present military authorities of the War Office had to say on the subject. Secretaries of State for War and their advisers change, but the recommendations of the Committee remain; and if the medical service are true to themselves, it must be a secure stepping stone on which to rest while working out their right to be admitted as an integral part or corps of the army.

SIR,—The rules of the service forbid combination, and individual members of it can hardly be expected to destroy their own prospects by coming forward prominently as agitators. The members of Parliament who take an active and direct interest in these questions are too few to make their influence strongly felt—ready and willing though they are to do what they can. But there is an overwhelming force outside, which, if skilfully organised, may prove to be irresistible. Time after time has the medical profession, led by the great Association to which most of them belong, brought such pressure to bear on the Government that they have had to surrender at discretion. A crisis is now at hand. Militarism has ranged itself against the department, not for the first time. But we hold the trump card, and the time seems near at hand when it must be played.—I am, etc.,

M.D., M.P.

WITH reference to Mr. Stanhope's reply on Monday, Dr. FARQUHARSON put a second question on Thursday asking the Secretary of State for War which were the recommendations of the Committee on the Army Medical Department which would involve a largely increased expenditure.

As we go to press, we learn that Mr. STANHOPE replied as follows: Considerable increase of charge is involved in each of the following recommendations:—That the 50 brigade-surgeons should be the 50 senior surgeons-major (or surgeons-lieutenant colonel as they are called in the report). That medical officers on the active list should be substituted for the retired officers employed at home. That medical officers should be attached for a definite period to regiments and corps. That the tour of foreign service should be decreased. That three months' special leave should be given every seven years. That service should date from entry at Netley. That higher pay should be given in India to certain ranks.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

THE Association of Fellows of the Royal College of Surgeons of England has circulated among Fellows of the College a succinct account of the origin and progress of the Association, accompanied by an explanatory letter, pointing out the changes which the Association considers desirable.

Perhaps the most interesting portions of these documents is a summary of the privileges of the Fellows of the College, which conclusively proves that the Fellows of the College of Surgeons of England have been relegated to an inferior constitutional position to that of the Fellows of every other professional college in the realm.

This summary is of so much interest, and illustrates so well the unprecedented character of the claims set up by the Council of the College during the present century, that it will be well to reproduce it here.

Royal College of Physicians, London.—Quarterly meetings of Fellows, who discuss and determine all questions of importance, and elect the President. Council transacts routine business. Extraordinary meetings of Fellows on requisition.

Royal College of Physicians, Edinburgh.—Annual meeting of Fellows to elect President and Council of seven. Quarterly meetings of Fellows on roll of attendance. Extraordinary meetings may be called on the requisition of five Fellows. Fellows alone entrusted with the administration of property and internal affairs of the College, and the election and admission of Fellows and Licentiates.

King and Queen's College of Physicians, Ireland.—Monthly meetings of Fellows for transaction of business. President and officers elected annually by ballot on St. Luke's Day.

Royal College of Surgeons of Edinburgh.—President and Treasurer elected annually by the Fellows, the six other members of Council being annually elected. Quarterly meetings of Fellows.

Faculty of Physicians and Surgeons of Glasgow.—Ten Councillors, eight being elected by the Fellows and two by the Licentiates. Each Councillor holds office for four years. President and Councillors, etc., elected at the annual meeting. An ordinary meeting of the faculty to be held every month.

Royal College of Surgeons in Ireland.—Council of twenty-four, all of whom are elected at the annual meeting. Council transacts all business during its year of office.

Royal College of Surgeons of England.—Council of twenty-four, electing the President and Vice-Presidents. Three Councillors only as a rule retire annually, and the ordinary tenure of office is, therefore, eight years. Fellows have no inherent right of meeting in the College, and have never been separately summoned by the President or Council except to the annual meeting of Fellows for the election of Councillors, at which discussion is forbidden. The Fellows are summoned, in common with the Members, to an annual meeting, at which a report from the Council is received and may be discussed, but resolutions passed have no binding force, and no distinction is made between Fellows and Members.

From this summary it will be seen that even at the Royal College of Surgeons of Ireland, the constitution of which approaches nearest to that under which the Royal College of Surgeons of England is now administered, the Fellows meet annually as of right, and not on sufferance.

The historical summary of the action of the Association since its formation, in June, 1884, contains a clear account of the various steps taken (in the words of the resolution adopted at the first meeting) "to promote the general interests of the Fellows of the Royal College of Surgeons of England, and to consider all matters relating to the constitution, government, and administration of the College, whether in its corporate, examining, academical, or political capacity."

In particular, the policy followed during the period when the Committees of the Fellows' and of the Members' Associations were working conjointly is set out: "So long as the claims of the Members were capable of being met in friendly conference with the Council of the College, the Committee of the Association were of opinion that the interests of medical polity and education, and the cause of professional unity, would be served by a moderate and timely concession which, whilst satisfying the aspirations of the Members for a voice in the management of the College to the body corporate of which they belong, would leave a greatly preponderating influence to the representatives of the Fellows. The Council and a majority of the Fellows, who at the last election (1889) exercised their electoral privileges, have decided otherwise, and the points at issue have passed beyond the stage at which they could have been adjusted within the College itself, or could be beneficially influenced by any further action of the Association of Fellows."

The action of the Members' Association, it is urged, in drafting, for introduction into Parliament, a Bill transgressing the limits which had been sanctioned for the purpose of negotiation with the Council of the College, leaves the Association of Fellows entirely free to devote its energies to the real objects of its formation, namely, the increase of the power, privileges, and status of the Fellows of the College.

In pursuance of this purely self-regarding policy, the Association advises that the great end for which the Fellows should strive is to obtain from the Council of the College the right of meeting within the walls of the College for mutual acquaintance and for the discussion of collegiate affairs. A common room should be provided for the Fellows, and without interfering with the annual meetings of Fellows and Members, separate meetings of Fellows should be convened within the College not less than twice a year, at which meetings any question of importance and interest to the Fellows could be discussed and authoritatively determined. If these concessions were secured, the need for any external Association of Fellows would cease, for all other needed changes would soon follow.

The first step which it is proposed to take is obtain signatures to a memorial to the Council asking for the concession to the Fellows of the right of meeting within the walls of the College for mutual acquaintance and for discussion of collegiate affairs in an officially organised assembly.

The Members, therefore, must not in the immediate future look for any active support from the Association of Fellows, though we cannot doubt that the efforts of the Members to obtain a recognition of their rights will be regarded with a friendly eye, and will be vigorously assisted by many Fellows in their individual capacity.



THE HOUSE IN WHICH THE FIRST OVARIOTOMY WAS PERFORMED.

THE FATHER OF OVARIOTOMY.

IN vol. ii. of the JOURNAL for 1878 were published six lectures by Sir Spencer Wells, delivered at the College of Surgeons, on the Diagnosis and Surgical Treatment of Abdominal Tumours. The sixth lecture may be found in the number of July 27, 1878, and at page 132 there are some concluding remarks on the "father of ovariotomy," which we commend to the attention of all who are interested in the history of surgery.

"McDowell was wise, practical, and prophetic. He carefully studied the subject which filled his mind; did with an enviable success what his opportunities permitted; and looked with an anxious eye on the prospect opening up to his successors. We, more happy in our opportunities, have entered into full possession of what to him was little more than a promised land; and, speaking personally, I feel it my greatest happiness to have been able, chiefly through the encouragement of professional brethren (which at one time I had little reason to anticipate), to reach the point at which McDowell aimed. I have not only obtained the amount of operative success which he gave as the standard; I have not only the almost daily gratification of seeing some living and enduring evidences that my labours have not been in vain, but I have, for the rest of my days, the satisfaction of knowing that my example has emboldened others, and will be the means of still further extending to human suffering the consolatory assurance of the prospect of relief and ensuring the certainty of its realisation by the many skilful hands which are now betaking themselves to the work. This is a lot which falls to but few innovators. It is not given to every one to see the fruit of his labours; but the surest way of gaining that end is by studying the words and following the counsels of wisdom. The wish to do well what others have done is not all that is wanted. Step by step their course must be followed, difficult still, but somewhat easier from the result of experience; and while I content myself with a warning to aspirants that a fancied inspiration will not alone carry them on to success, I feel I cannot quit them and the subject better than by repeating the words of McDowell, who though better known in the open rugged field of practice than in the paths of literature, was a man of broad and elevated views, and thus expressed the advanced opinions he had already formed respecting the operation he had inaugurated after years of patient waiting and zealous preparation. He strove to make ovariotomy a boon to humanity. He had reason to believe it had proved so, but he foresaw the dangers of its abuse from rash and indiscriminate rivalry amongst his followers."

We have reproduced this eulogy upon McDowell because we are now able to present our readers with a drawing of his Kentucky home, which was forwarded with an interesting letter to Sir Spencer Wells by Dr. Dunlap, of Danville, Kentucky.

Dr. Dunlap writes: "I take pleasure in sending you by this post a photograph, which I am sure you will, above all men in the world, enjoy owning. It is the home where Ephraim McDowell lived for many years, and the small brick room in the foreground and to the left of the large building is the one in which the first ovariotomy was performed. The small room to the right just beyond the man leaning on the cane was the consulting room and office of Dr. McDowell. Time has wrought many changes, and the home is now in the possession of the lowest class of negroes, our former slaves. It is the haunt of thieves and law breakers, and the centre of most of the lawlessness in our village. It will soon go down, however, before the march of Western progress, and I am determined that so historic a spot shall not be entirely lost. I have a deep and lasting pride and interest in all that pertains to the early history of the operation, which you, more than any man living, have brought to its present state of perfection. I wish to assure you of the kind feelings entertained for you by the ovariotomists of the United States, and for them express the wish that you may be spared yet many days of happiness and usefulness."

It is always pleasant to see the work of British surgeons and o our associates gracefully acknowledged by foreigners, and espe cially by our American brethren, and our friends across the Atlanti are ever ready to return our appreciation of their work. We trus this British tribute to the memory of the "father of ovariotomy may be accepted as some slight addition to agreeable acts of inter national fraternity.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary comitia of the College was held on Saturday March 1st, Sir ANDREW CLARK, Bart., F.R.S., President, in th chair.

A letter was read from Sir E. Sieveking, calling attention to th late disastrous fire by which the University of Toronto had los its library, and, on the motion of the REGISTRAR, it was unan mously resolved that copies of Harvey's works, of his MS. lecture and of the Roll of the College should be presented to the Un versity, and it was further referred to the Library Committee t select such duplicate books in the library as they thought sui able and send them.

A letter was read from Dr. Sims Woodhead in acknowledgme

of his appointment as director of the new laboratories, and from Sir W. C. Gull, Bart., on behalf of his family, expressing their thanks to the College for the resolution referring to his late father.

Two communications from the Foreign Office were read, one relating to the resolution of the College respecting English practitioners in France, the second enclosing an extract from the *Journal des Débats*, repeating a speech of M. Fallières, Minister of Public Instruction and Fine Arts. Though not taken from the same source, this was in substance identical with the paragraph which appeared on p. 495 of the JOURNAL of March 1st.

A letter was received from the Secretary of the Royal College of Surgeons, and a report from the delegates of the two Colleges on the legal opinion relating to the action of the General Medical Council in the matter of diplomas in State medicine. The College adopted this after some discussion, and, whilst expressing their disapproval of the course taken by the General Medical Council, they accepted their regulations, considering that in themselves they were unobjectionable.

A report was received from the Committee on the Extension of the Examination Hall buildings, recommending the expenditure of a sum not exceeding £2,000 on electric lighting. This was adopted.

A report from the Laboratories Committee recommending a small outlay for fittings was also adopted.

The rest of the meeting was occupied with the consideration of a report from the University for London Committee, which in the end was accepted generally as the basis for a conference with the Royal College of Surgeons.

INFANT LIFE PROTECTION.

THE following is the text of the Bill to Amend the Infant Life Protection Act, 1872; prepared and brought in by the Home Secretary and Mr. Stuart Wortley.

Whereas it is expedient to amend the Infant Life Protection Act, 1872 (hereinafter referred to as the principal Act).

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. Persons Receiving Infants for Hire to be Registered.—1. It shall not be lawful for any person to retain or receive for hire or reward in that behalf any infant under the age of 5 years, for the purpose of nursing or maintaining the infant apart from its parent for a longer period than twenty-four hours, except in a house which has been registered as provided by the principal Act.

2. Section two of the principal Act is hereby repealed.

2. Statements with Respect to Infants.—1. Where an infant is received by a person registered under the principal Act, the person from whom the infant is received shall state truly the name, sex and age of the infant, and the place and time of its birth, and his own name and the place or places at which he has resided during the period of six months immediately preceding the statement.

2. Where an infant is removed from the care of a person registered under the principal Act, the person removing the infant shall state truly his own name and the place or places at which he has resided during the period of six months immediately preceding the statement.

3. If any person knowingly and wilfully makes, or causes or procures any other person to make, any false statement as to any matter with respect to which a statement is required by this section, he shall be guilty of an offence against the principal Act.

4. If a person registered under the principal Act receives an infant or allows an infant to be removed without obtaining the statement required by this section, he shall be liable to a penalty not exceeding £5.

3. Period for which Registration is to be in Force.—1. The registration of a house under the principal Act shall remain in force until December 31st, or such other day as the local authority may from time to time fix in that behalf, next after the registration is effected.

2. In section three of the principal Act the words "the registration shall remain in force for one year," shall be repealed.

4. Delivery up of Register.—If a person registered under the principal Act does not renew his registration, he shall within seven days after the registration has ceased to be in force, deliver up to the local authority the register which he is required to keep under the principal Act, and if he makes default in complying with the requirements of this section he shall be liable to a penalty not exceeding £5.

5. Appointment and Powers of Local Officers.—1. The local authority may appoint and remove officers for the enforcement of the principal Act and this Act.

2. Any officer so appointed may visit any house registered under the principal Act, or any house in which he has reason to believe that any infant under the age of 5 years is being kept for hire or reward, and may inspect the condition of the house and of any infant kept therein.

3. If any occupier of a house in which an infant under the age of 5 years is being kept for hire or reward, refuses to admit to the house any officer appointed in pursuance of this Act, or obstructs any such officer in the exercise of his powers under this Act, or refuses to give information, or wilfully gives false information to any such officer with respect to any infant detained in the house, he shall be guilty of an offence against the principal Act.

6. Short Title and Construction.—1. This Act may be cited as the Infant Life Protection Act, 1890, and the principal Act and this Act may be cited collectively as the Infant Life Protection Acts, 1872 and 1890.

2. This Act shall be construed as one with the principal Act.

7. Commencement.—This Act shall come into operation on October 1st, 1890.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 27th, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Town Hall, Hackney, on Thursday, March 20th, at 8.30 P.M. Dr. F. de Havilland Hall will read a paper on the Causes and Treatment of Asthma. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this District will he held at the Queen's Hotel, Upper Norwood, on Thursday, March 13th, at 4 P.M. W. Soltau Eccles, Esq., of Upper Norwood, in the chair. Dinner 6 P.M.; charge 7s., exclusive of wine. The following papers have been promised:—Dr. Buzzard: On some Forms of Peripheral Neuritis. Mr. Lockwood: On the Treatment of Hernia. Dr. Duncan will open a discussion on Influenza. Members desirous of communicating papers or notes of cases please address, P. T. DUNCAN, M.D., Croydon, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The next meeting of the above District will be held at the Esplanade Hotel, Dover, on Thursday, March 13th, at 3 P.M. Mr. A. Long in the chair. A tea will take place at 5.15 P.M., at the above hotel. Agenda:—Mr. Ashby Osborn: A Case of Double Vagina and Uterus. Dr. Gogarty: Ascites in Childhood. Mr. R. Lyddon: A Successful Case of Laparotomy for Intestinal Obstruction. Dr. T. Eastes: A Case of Ovarian Cyst with Twisted Pedicle; Operation.—W. J. TYSON, 10, Langhorne Gardens, Folkestone, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICT.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 26th. Mr. Cresswell Baber will preside. Members or others desirous of contributing papers or cases are requested to communicate with T. JENNER VERRALL, Honorary Secretary, 97, Montpellier Road, Brighton.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above District will be held at "The Hospital," Gravesend, on Thursday, March 20th, at 4 P.M. Dr. C. Firth in the chair. The dinner will take place at The Old Falcon Hotel, at 6.15 P.M. Charge, 6s. 6d. exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, Dr. C. Firth, 196, Parrock Street, Gravesend, not later than March 18th. All members of the South Eastern Branch are entitled to attend this meeting and to introduce professional friends. Communications.—Dr. V. D. Harris: The Treatment of Pleural Effusion. Mr. C. B. Keetley: The Treatment of Caries of the Spine and its Complications. Dr. C. Firth: A Case of Strangulated Obturator Hernia.—A. W. NANKIVELL, Honorary Secretary of the District, St. Bartholomew's Hospital, Chatham.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.—A meeting of this district will be held at Loughborough, on Wednesday, April 16th. Members desirous of reading papers or showing cases or specimens, will please communicate with the Honorary Secretary, FRANK M. POPE, M.B., Leicester.

YORKSHIRE BRANCH.

THE usual meeting of this Branch was held on Wednesday, February 26th, at the Hospital, Rotherham, the President, Mr. SNELL, in the chair.

Communications.—The following communications were made: Dr. DYSON: A Case of Myxœdema.—Dr. BURGESS: On a Fatal Case of Lead Poisoning from Drinking Water (microscopic specimens were shown).—Mr. ARTHUR JACKSON: Tuberculosis in Meat.

Cases.—The PRESIDENT exhibited and made brief remarks on the following cases: 1. Cases of Ectropion treated by Transplanting Non-pedicled Flaps; 2. A Case of Symblepharon, after Operation; 3. Congenital Orbital Cyst; Absence of Eyeball.

Dinner.—After the meeting the members dined together at the Ship Hotel, Rotherham.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

AN ordinary meeting of this Branch was held at 198, Union Street, Aberdeen, on Wednesday, February 19th, at 8 o'clock p.m. Dr. JOHN URQUHART, Vice-President, in the chair.

Minutes and Nomination.—The minutes of last meeting having been read and approved, Dr. A. Rudolf Galloway, Aberdeen, was nominated for ballot at next meeting.

New Members.—Dr. James Reid, Buxburn, and Dr. A. W. Dalgarno, Stranraer, were balloted for and admitted ordinary members of the Branch.

BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, February 26th; W. JOHNSTONE FYFFE, M.D., President, in the chair. There were also present 61 members and two visitors.

New Members.—The following gentlemen were elected: Surgeon-General R. Bowen, F.R.C.S., Banwell; O. J. Maclean, M.B., C.M.Edin., Bristol.

Communications.—1. Dr. L. A. WEATHERBY read a short explanation of the Lunacy Acts Amendment Act, as it affects general practitioners. Drs. MARSHALL, BONVILLE FOX, and SHAW made remarks on this subject. 2. Dr. D. S. DAVIES read a paper on the Infectious Diseases (Notification) Act, 1889. The following gentlemen joined in the discussion which followed: Mr. EWENS, Dr. SWAIN, Dr. ELLIOTT, Dr. BONVILLE FOX, the PRESIDENT, Dr. MARKHAM SKERRITT, Dr. HARRISON, Dr. LOGAN, Mr. CARR, and Mr. BUSH. 3. Dr. J. M. CLARKE read a paper on Two Cases of Hepatic Disease, which was discussed by Drs. R. S. SMITH, GOODRIDGE, and HARRISON, and the PRESIDENT.

SPECIAL CORRESPONDENCE.

PARIS.

Electricity in the Treatment of Tumours of the Uterus.—A New Cardiac Disease.—A New Dressing.—Eberth's Typhoid Bacillus.—Sulphonal.—Panbotano.—General News.

M. LUCAS-CHAMPIONNIÈRE employs a particular method for the electric treatment of fibrous tumours of the uterus. He condemns Apostoli's method. His own method consists of inverting the currents, and placing the platina electrode, covered with india-rubber, in contact with the cervix of the uterus. This operation is simple, painless, and efficacious. Hæmorrhage and pain are diminished or disappear. The tumour is reduced in volume. M. Lucas-Championnière employs 80 to 120 milliampères. The inversion of the currents is much more essential than their intensity. Certain cases present a curious resistance to the electric treatment. The first few operations show whether it will be successful or not. M. Lucas-Championnière considers his method is most useful in the case of women who approach the menopause, when surgical operations offer certain dangers.

M. Renaut, in a paper sent to the Academy of Medicine, describes a new form of cardiac lesion which he terms "myocardite segmentaire essentielle." It is a special form of lesion of the muscular cardiac tissue most frequently met with among old people, especially those who are prematurely senile, likewise among drunkards. The fibres become separated owing to degeneration of the connective tissue which unites the bundles; the substance of the muscular fibre is also attacked. The heart is not hypertrophied, nor is there fatty degeneration or arterial sclerosis, the myocardium is of grey colour. The necropsy shows that the left ventricle is flattened. The sphygmographic tracings are not those of other known cardiac affections; the symptoms are œdema of the ankles, stasis, and pulmonary congestions, which should be treated by digitalis and ergot of rye.

M. Roux proposes to abolish the ordinary method of dressings, which he regards as useless and troublesome, and to substitute a modified form of dressings. He has employed two methods with very good results, the *pansement suturé* and the *suture pansement*, both dressings being made with gauze saturated with sublimate, and again steeped in sublimate at 1 per 1,000. The *pansement suturé*, which is applied exclusively to wounds which are not drained, consists of a band of iodoform gauze covering the suture line, and one or more bands saturated with corrosive sublimate or compresses. The last of these is fixed to the skin by a stitch at each corner. These dressings, which are easily applied, allow the regions surrounding the wound to be watched. If necessary they are wetted again with the solution at 1 per 1,000 after a day or two. The *pansement suturé*, employed for wounds which close by the first intention only, consists of a double band of iodoform gauze, from 2 to $2\frac{1}{2}$ centimètres wide, which is placed on the exterior edge of each lip of the wound, and enclosed in the cutaneous suture. The operator begins with a knotted stitch, and unites the basis of the adjusted fragments by passing the needle through a small india-rubber tube between each stitch. When he has reached the end of the wound he returns backwards, adjusting the edges of skin in making them overlap. The thread is tied with the tail which remained free at the starting point. In order to remove this dressing the band is raised by one of the corners, and all the threads which are discovered on one side of the cicatrix are easily cut. In removing the other half the portions of threads which are inserted in the flesh are carried away. M. Roux considers that these dressings may be substituted with advantage for the ordinary method employed. But, as he allows that they can only be efficient when applied in localities and by persons absolutely free from microbes, it cannot be expected that they will entirely replace Lister's dressings in the present day.

At the Biological Society M. Chauveau presented a note by MM. Rodet and Gabriel Roux on the identification of Eberth's typhoid bacillus with the bacillus coli communis. Their examination of different specimens of water which had caused epidemics always resulted in the discovery of quantities of the bacillus coli. They cultivated Eberth's bacillus in the blood and spleen only of a typhoid patient. The fæcal matters only presented the bacillus coli communis. The authors are inclined to believe that this microbe may be modified in the blood and become Eberth's bacillus. The former may be made to present the characteristics of Eberth's bacillus by cultivations in broth or on plates.

Dr. Marandon, of Montyel, has observed the following morbid symptoms consecutive to a treatment with sulphonal; paresis, ataxia, dulled intelligence, loss of appetite, nausea, frequent vomiting. He employed this substance in eighty cases of mental alienation; the above symptoms occurred in fourteen instances.

At the Académie de Médecine M. Dujardin-Beaumetz made a report on M. Valude's paper on panbotano, a new specific remedy for intermittent fever. The tree which produces this substance belongs to the vegetable kingdom, and might be cultivated in certain European countries. Dr. Villejean, who analysed panbotano, found in it a particular kind of tannic substance, but was unable to extract any alkaloid. M. Valude has employed decoctions of the bark of panbotano in fifteen cases, in doses of 35 gr. per quart for children, and 70 gr. for adults. In many cases the treatment was successful, but M. Valude has omitted to describe the physiological action of panbotano.

M. Galippe has isolated a microbe from the stalk of the cauliflower, which he terms the micrococcus rosaceus Duclauxi. The organism is pink, white, or dichroic, according to the mediums on which it grows.

A curious specimen of deformed humanity has been brought to the notice of the Bordeaux Faculty. The subject is a young woman aged 21. A parasitical being, weighing about 20 lbs., is closely attached to the lower region of her abdomen. The creature's right leg is parallel to the direction of the woman's body; the left leg is directed forwards and bent upwards, so that the foot reaches her waist. The parasite, whose temperature is lower than that of the woman, is incapable of voluntary action. The young woman

was married at 15, and is the mother of two normally constituted children.

MM. Henri Rondet and Grabinski, two doctors in the Rhône department, have been condemned to a fine of five shillings for having refused their services when summoned by the mayor of Neuville-sur-Saône to make the necropsy of a body withdrawn from the Saône. It will be remembered that a similar instance occurred at Rodez, and was the cause of M. Thévenet's circular (Minister of the Interior), mentioned in a former letter.

The Chevandier Bill now before the Chamber of Deputies is in favour of abolishing *officiers de santé*, and only permitting medical men with a doctor's degree to practise. Dr. Brouardel, Dean of the Paris Medical Faculty, opposes this proposition, and states that if *officiers de santé* be abolished, that bonesetters and quacks of all kinds will multiply and proper, because the number of men with a full doctor's degree is insufficient for the wants of the French population. The Minister of Public Instruction admits the truth of M. Brouardel's statement, but considers that the new military law will render the existence of *officiers de santé* impossible. The Minister of War, M. Freycinet, has addressed a circular to the President of the Republic, "On Typhoid Fever in the Army," in which he states that the measures taken to prevent typhoid fever in barracks has resulted in 29 per cent. fewer cases, and 24 per cent. fewer deaths.

VIENNA.

Tuberculosis in Vienna.—Epidemic Hæmoglobinuria.—Electrolysis for Warts.—Actinomycosis.—Hemiplegia Infantilis Spastica.

At a recent meeting of the Viennese Scientific Club, Professor von Schrötter read a paper on Tuberculosis in Vienna, in which he urged the necessity of a special hospital for tuberculous patients in that city. He said that, on the average, fifteen persons died each day in Vienna of pulmonary tuberculosis, and this number represented 25 per cent. of all the deaths in the city. In some quarters of the city the deaths from pulmonary tuberculosis reached the frightful number of 90 per cent. The professor recalled the statement of Skoda, which was confirmed by modern investigations, that each kind of pulmonary tuberculosis, even the most severe, is curable. Surgery had, in these cases, already rendered services to internal medicine, but not sufficiently. There was only one remedy which helped in all these cases, namely, good food and an abundant supply of fresh pure air. The three large Vienna hospitals, on the average, contained 3,400 tuberculous patients. These must be sent away to regions abounding with forests and meadows. The complaint of want of room in the hospitals would then cease to be heard. The expense should not be considered. If the State could find money for palatial buildings it should not grudge it for such a purpose. The lecturer pointed out that such an institution had been established twenty-one years ago in the southern part of the Isle of Wight. The hospital was comfortably arranged so that each patient had his own room, and of the 688 patients whom it contained only 3.8 per cent. died. What town would be more qualified for such an undertaking than Vienna, with its charming environs? In 1883 he had mooted the question of a hospital for tuberculous patients in Vienna. In 1884 he had delivered a lecture on this subject before the Vienna Medizinisches Doctoren-Collegium, and a committee was appointed to consider the matter. The committee approved of his proposals, which also found favour with the Prime Minister of Austria and the Governor of Lower Austria. Nothing had, however, been done. A society, at the head of which were the directors of the three great Vienna hospitals, had now been formed for the purpose of procuring the establishment of such a hospital.

At a recent meeting of the Imperial Royal Society of Physicians of Vienna, Professor Weichselbaum showed microscopical specimens (which had been sent to him by Professor Babes) of epidemic hæmoglobinuria from the kidney of an ox, which had succumbed to this disease. Numerous red blood corpuscles, containing diplococci were seen. According to Babes, these diplococci were the cause of an epidemic which was observed among the deer in the lower regions of the Danube. It was difficult to explain how the diplococci got into the red blood corpuscles.

At a recent meeting of the Vienna Medizinisches Doctoren-Collegium, Dr. Ehrmann read a paper on the electrolysis of warty formations. Owing to the secretion of oxygen and acid on the pole, a steel needle, when used as an electrode, was oxygenated; this substance should, therefore, be avoided, and the electrode should be a platinum, or of an alloy of platinum-iridium. Dr. Ehrmann, however, had given up introducing the positive electrode usually, as the pain at the site of puncture was too severe, and the reaction too great. Moreover, the formation of scars, owing to the oxygenation process, could not be so easily avoided as when the negative electrode was applied. He applied the positive pole as a simple wet sponge electrode, in the fixable form, devised by Gärtner, to an indifferent place, and pushed the negative electrode, which is supplied with one or several steel needles, into the formation to be treated. Dr. Ehrmann pointed out that whereas Voltolini believed that the punctures had to be made at the base of the formations, and parallel to the level of the skin, he (the speaker) was of opinion that this method was only available in the case of flat hard warts on the hand. He had employed electrolysis in the case of papillomatous soft formations, namely, papillomata of the skin of the head, pointed condylomata of the external genitals, the urethra, the vagina, and succulent vascular papillomata of the hands. In the last-mentioned case which was brought forward before the Society, both the hands were uniformly covered with numerous warts. On one hand, these were thoroughly removed by electrolysis, after previous methods of scratching and cauterisation had proved inefficacious, though practised for many years. The other hand had yet to be submitted to treatment. The puncture, according to Ehrmann, was not made at the level of the skin, in the case of soft papillomata, but in an oblique and perpendicular direction, through the base of the formation and under the level of the skin, so that the points of the needles, which were used as negative electrodes, touched the layer of the round cells, out of which the papillomata were steadily proliferating. Dr. Ehrmann showed a patient from whom the late Professor Ullzmann and himself had excised, on two and on six occasions respectively, pointed condylomata of the "fossa navicularis" and the interior surface of the urethral labia with scissors; recurrence had always taken place. By means of electrolysis they were removed at one sitting, and no relapse had occurred during the one year and a half which had elapsed since the operation. In the case of pigmented moles of the face he pushed in several needles parallel to the direction of the hair follicles, and towards the direction of the hair follicles themselves, and had never observed the formation of scars after the removal of the pigmented moles. He demonstrated the method which he employed for this purpose. He used a constant battery of small Leclaus elements. The intensity of the electric current amounted to $1\frac{1}{2}$ milliampères, and never exceeded this degree. The duration of the current was from 1 to $1\frac{1}{2}$ minute, and in the case of small formations, particularly in the case of soft papillomata of the vagina, and the urethra even less. In these cases the electrolytic treatment was preceded by the injection of a 5 per cent. solution of cocaine. Professor Lang confirmed Dr. Ehrmann's statements as to the high importance of electrolysis in diseases of the skin, and particularly in contradistinction with galvanocaustic treatment.

At a recent meeting of the Imperial Royal Society of Physicians of Vienna, Professor Albert brought forward two cases of actinomycosis. One was that of an adult who suffered from a hard infiltration in the anterior region of the neck. Over one spot there was a violet discoloration of the skin and fluctuation. Professor Albert diagnosed actinomycosis. The second case was one of actinomycosis of the lower maxillary region in a boy. The disease developed with symptoms of periostitis. Professor Albert remarked that he had seen thirty-eight cases of actinomycosis in man during the last few years, and since the beginning of the present scholastic year alone he had observed eight such cases. This seemed to suggest that actinomycosis occurred more frequently than before. There was no doubt, however, that many cases had been overlooked in former times, and this was particularly true of the chronic dental fistulæ, which were explained by the supposition of tuberculous dyscrasia, and in which a fatal issue had often been observed.

At a recent meeting of the Vienna "Medizinisches Doctoren-Collegium," Professor Benedikt exhibited two patients who had been affected with hemiplegia infantilis spastica, and in whom he was able to remove the tremor of the left upper extremity by nerve stretching. In one case the ulnar and median nerves, and in the other the ulnar and radial nerves, were stretched.

DR. A. PAQUET, Professor of Clinical Surgery in the Medical Faculty of Lille, died recently, at the age of 49, of broncho-pneumonia following influenza. M. Paquet was highly esteemed as a surgeon throughout the North of France.

MELBOURNE.

Report of the Royal Sanitary Commission.

CURRENT surmises as to the incomplete and unsatisfactory character of the report of the Royal Sanitary Commission, the president of which, Professor Allen, left Melbourne just previous to its being printed, have been borne out by its publication. Though long delayed, the method of its appearance was quite sensational. It came to light in the columns of a paper the proprietor of which happened to be the uncle of the secretary. Not even the secretary knows how the report was abstracted. The other newspapers were so wroth at the preference given to a contemporary that the Government has been compelled to instruct the Crown Solicitor to institute a prosecution. As regards the report itself, it deals but slightly and superficially with the matters entrusted to it. The usual recommendations are made as regards noxious trades, abattoirs, and the like, which with us had been allowed to get somewhat beyond control. The battle royal has raged round its treatment of the great question of the purity or otherwise of our water-supply. When it is mentioned that this supply is for the needs of half a million of people, that typhoid is our national scourge (being responsible last season for some 6,000 cases of illness and some 600 deaths), the local importance of the question can scarcely be overestimated. Strange to say, the Commission left this question in abeyance until after the community had been visited by the most severe typhoid epidemic on record. And, stranger still, it appeared that when the Commission did report upon the matter, the water analysis upon which the report was based was conducted by a university professor, who afterwards was forced to acknowledge his incompetence to deal with the bacteriological part of the work. Thus the organisms which he was able to observe are always stated to exist in multiples of five, some samples of water are given as absolutely pure, whilst in no instance did he attempt to isolate a single germ. Meantime an outsider, Mons. de Bavay, a practised bacteriologist, had discovered true typhoid germs in some of the water, and demonstrated their characters to the profession. This discovery necessitated further investigation by the Commission, and we have in its report the result of that investigation. It is to the effect that whilst M. de Bavay's germs are accepted as the bacilli of typhoid; and whilst it is admitted that contamination of the water by sewage is highly probable in many ways, facts that were absent from its own report, still no other typhoid germs have been found within its reticulation by the expert of the Commission. However they have been found by de Bavay, and his positive results must weigh much more than the negative results of that expert, especially since the work of the latter has not been performed in a way free from scientific errors. This is the state in which the matter rests at present. The public is much troubled at the uncertainty of the position. In other respects, also, the work of the Commission has been disappointing. From the status of its members, the public expected to gain some conclusive information as to how our typhoid and diphtheritic epidemics might be controlled. But this has not been supplied; and there is an inexplicable absence from the report of any special reference to these subjects, and any specific advice as to the means best adapted to prevent their future continuance.

CORRESPONDENCE.

THE RELATIONS OF THE GRADUATES AND CONVOCATION OF THE UNIVERSITY OF LONDON TO THE PROPOSED REFORM OF THE UNIVERSITY.

SIR,—Dr. Barnes, in condemning the severity of the examination for the M.D. degree, should have taken care to have turned to the Calendar, so as to have set forth the curriculum correctly. He is not displeased, he says, with the four years and a half required to obtain the M.B. degree, which is a registrable title, but "then comes the M.D.; for this he must wait two years longer, and how many men from the country can afford to prolong studies for two years after the ordinary term?" If anyone will look at the Calendar he will certainly see that the student who has not been placed in the first class must have two more years additional hospital attendance, but if he has left with his M.B. qualification, private practice will be taken as equivalent to part of hospital attendance; and more than this, five years' private practice will wholly suffice, this even being reduced in the case of honours men. But there are greater facilities than even these for obtaining the M.D. degree. An M.B. who has been in practice can show that he is still cultivating medicine by presenting a thesis, and be exempt from all clinical and written examinations.—I am, etc.,

M.D.

EXPERT EVIDENCE.

SIR,—More than twenty years ago I was an occasional witness in railway and other accidents, and found it satisfactory work until, by the skill of the counsel upon the side for whom I appeared, I found myself diametrically opposed to my teacher in surgery, yet we were, privately, perfectly agreed as to the nature of the case. I had put my views into a brief. The counsel took out the pro's but would not put the con's, and when explaining I was checked by the usual plan—answer the question yes or no. The result of the cross-examination left the matter where it was so far as my evidence went, and I left the witness-box with a determination not to put my views of a case into a brief again.

It was not long before my resolution was put to the test. The subject of a well-known railway accident came into my consulting room with the aid of two crutches. He informed me that he wished me to examine him for the purpose of giving an affidavit upon his then condition, and my ideas as to his chance of recovery. He had brought an action against the Great Western Railway, and had recovered what he considered to be inadequate damages. He appealed, and the damages were raised to £750. The railway company now appealed against this finding, hence his application for further surgical assistance. Four of the most eminent surgeons of the day had given evidence, two asserting that he was injured for life, other two that he had only had a nerve shock and that there was no structural injury. A very careful examination led me to the conclusion that his paralysis was mainly of the hysterical or mental kind. I declined to put my evidence into a brief, and suggested that if the legal advisers in the case required my assistance they might call me. It is needless to say that I was not called; the case was reargued, and the appeal of the company dismissed.

About two years afterwards the man came again into my consulting room; but this time it was for magisterial, not medical, advice. He was perfectly well, and in a labourer's costume. He informed me that he was working as a navvy at the Banstead Asylum, then in course of building, and that all evidence of his accident had disappeared. I asked him as to what became of the money he recovered from the railway company. He said that he did not get a single penny, that the lawyers had it all, and that he should not have gone on with his actions except for the reasons which the doctor had given as to the impossibility of his recovery.

That case made a still further impression upon my mind as to the mischiefs which result from the present plan of examination in actions for damages. I have already suggested in *Medical Ethics* that the court should call the experts; that each side should name as many witnesses as they might think necessary; and that, if they cannot agree in private consultation among themselves as to which should give the evidence, they should elect an umpire who should hear both sides, sift the evidence, and give such parts of it as are undoubted and satisfactory to both parties in open court. It is really monstrous to read the opinions of experts upon cases in which, after all, it is quite impossible to do more than conjecture, and when men of high attainments consulting together there is not likely to be any vital difference between them as to the result.

I commend this plan as much more satisfactory than that at present in vogue. I need scarcely say that my determination not to put evidence into a brief prevents me from again appearing as a witness in similar cases.—I am, etc.,

Croydon. ALFRED CARPENTER.

COLOUR BLINDNESS.

SIR,—In the recent correspondence on this subject in the JOURNAL, great stress was very properly laid on the need for practical experience in the examiner using Holmgren's wools, but no reference was made, as I hoped there would be, to the colour ignorance and *gaucherie* of the examined, which is the chief source of embarrassment and error in determining the quality of the colour sense. It is desirable to avoid using the names of colours but in practice it is impossible to do so, as it is necessary to explain to the persons under examination what is required of them

and many persons (especially men) do not know the difference between the terms colour and shade, while others (mostly women) are so hypercritical they cannot perform the rough and ready sorting of Holmgren's wools which is required of them. Some men think that all shades are different colours, which are not identical with the test colour, while some women are troubled to classify the lightest and darkest shades which necessarily verge on the adjoining colours of the spectrum, a fastidiousness which may be easily mistaken for a faulty colour sense. Moreover, many persons are so little accustomed to sort colour objects, that a large bundle of wools confuses or "bothers" them, and they make all sorts of blunders, which are due to inexperience, but which may be attributed to a faulty colour sense. On the other hand, there are subtle ways by which colour blind-persons acquire a knowledge of colours which are quite independent of the colour sense, and which enable them to evade (unconsciously not intentionally) the inexperienced examiner. Holmgren's method, which is undoubtedly the best, is practically an effort to teach persons, by an object lesson, an elementary knowledge of colours and the terms employed in connection with them, and we declare those persons colour blind who seem incapable of learning the lesson. The result will depend quite as much on the knowledge of the teacher as the capacity of the pupil, hence the difference of opinion on methods of examination, and the absurdity of the proposals to test the colour sense of railway officials by a few coloured signal lamps, and the exceedingly inadequate method (a few coloured cards or lamps) adopted for sailors by the Marine Department of the Board of Trade.

To simplify the examination, especially when large numbers were to be dealt with, I adopted a method—for the Anthropometric Committee of the British Association for the Advancement of Science—which is the opposite of, but at the same time is in conformity with, Holmgren's method. I arranged patterns of coloured wools, in rows, on a card in the order in which colour-blind persons would arrange them, with Holmgren's test colours worked in among them, adding some rows of colours in different shades for comparison. All that is required by this method is to ask the person under examination which of the rows are of one colour in different shades, and which are of different colours. The card contains ten rows (ninety patterns), comprising the light green test colour and its confusion colours—showing defection of colour sense; the purple test colour and its confusion colours—distinguishing green, red, and violet blindness; and the red test colour and its confusion colours—distinguishing the darker or lighter shades of confusion colours of green and red blindness. The application of this method, which is the only one of the kind published in this country, does not require a knowledge in the examined of the theory of colour blindness, but it is a key to it, and to Holmgren's method. I may add that Messrs. Churchill, who publish these tests, have, at my suggestion, revised the diagram known as the "army test dots," so that the dots are now at a uniform distance of one diameter from each other, thus providing a test of eyesight at a range of from fifty to sixty feet, specially adapted for examining railway officials and sailors.—I am, etc.,

Curzon Street, W. C. ROBERTS, F.R.C.S.

THE EXAMINATION IN CLINICAL SURGERY AT THE UNIVERSITY OF EDINBURGH.

SIR,—At the examination in clinical surgery for M.B., C.M.Edin. last May, I was sent into a ward with five other candidates and had given a case. After a time an examiner came to me, called me by a wrong name, left me three or four times during an examination which lasted almost an hour to go and examine other candidates in the same ward, and during all this time making no note either of name, questions, or answers. After the six candidates in that ward were examined in the same free and easy style the examiners left the ward, and I suppose marked us from memory. When the result came out many received blue papers to inform them that they were referred in surgery and clinical surgery. Some, on making inquiries, were coolly informed that they had not been in for examination in clinical surgery (among them one candidate who was examined at the same hour as I was). Three other candidates who had obtained prizes in surgery and clinical surgery in the extramural school were referred one after the other. Two of them kept quiet, the other appealed several times. At the special examination in October I, the one who appealed, was referred again, the others passed. I again appealed, and, threatening to be "nasty," was given a faculty examination in three months, which means an examination, at which any of the professors may be present. At that examination held in January last I passed, and was capped soon afterwards.

It seems very hard that candidates have to pay £10 10s., work hard, and fairly pass, but get referred because the examiners won't take the trouble to mark properly. With such a number of candidates, almost 300, and only two examiners, it is perhaps impossible to prevent some mistakes, but in fairness every possible precaution might be taken to prevent mistakes which would be sure to creep in by examining six or a dozen candidates, and marking "in a lump" some time afterwards.

The absurdity of the examination is made more manifest when you consider that 300 are examined on the patients in four or five wards. Candidates for the final are expected to keep away from these wards during the examination. Those that keep away, either from honourable motives that reflect great credit upon them or from fear of being seen there, can easily find out the cases from the dressers; and as it is impossible to give each of the candidates a fresh case, many get a case that they know about because a friend had been examined on that case some days previously.—I am, etc.,

M.B., C.M.EDIN.

PORRO'S OPERATION AND THE CÆSAREAN SECTION.

SIR,—Dr. Harris says nothing in answer to my criticism at all, He merely begs the two questions I raise. Let me briefly repeat them: The Cæsarean section means opening the uterus through the abdominal wall, removing the child, and then leaving the emptied uterus. The new principle of Porro is to amputate the pregnant uterus, and this detail has proved so important as to reduce the maternal mortality from 90 per cent. (at least) to 8 or 10 per cent.

The prime law of statistical research is that such divisions should be made as indicate large influences. Could a larger influence be indicated than in this instance? To quote a mass of polyglot writers who have made the same mistake as Dr. Harris persists in is not to answer me but merely to expose them.

But the main point of my objection Dr. Harris always ignores. I said in my last letter: I have over and over again urged against his "lucky-bag" statistics, that he places on the same list cases in which every ingenuity of the misguided obstetrician has been exercised fruitlessly for many hours, with those in which the operation is performed within an hour after labour has begun, without any previous mauling. This is most illogical. Such a proceeding renders Dr. Harris's laboured statistics absolutely worthless, in fact worse than worthless, for they are misleading.—I am, etc.,

LAWSON TAIT.

Birmingham.

SUGGESTIVE THERAPEUTICS.

SIR,—Referring to the critique of Dr. Bernheim's work on *Suggestive Therapeutics*, in the JOURNAL of February 15th, I shall feel obliged if you will permit me to record the opinion that there can be no "legitimate application of hypnotism" in the cure of disease, and that any attempt to introduce it into English medical practice is to be deprecated.—I am, etc.,

GEORGE BROWN.

29, Threadneedle Street, E.C., March 3rd.

EXALGINE IN INFLUENZA.

SIR,—The continuance of influenza in various parts of the country induces me to ask those who may have the opportunity of doing so to test the effects of exalgine in this disease. Its actions indicate that it is likely to be serviceable, especially in the numerous cases in which pain is a prominent symptom. Probably the administration of two grains every two or three hours, or of four grains every six hours, would be sufficient to test its value. These doses refer to the exalgine of Brigonnet and Naville, of which alone I have as yet had any therapeutic experience.—I am, etc.,

THOMAS R. FRASER.

University of Edinburgh, March 3rd.

DIPHTHERIA AND THE COW.

SIR,—I read with great interest the "Report on an Outbreak of Diphtheritic Tonsillitis at Eton College," by Mr. Gooch, in the JOURNAL of March 1st, and should like to ask a question, and make a remark upon one of the conclusions drawn by Mr. Gooch,

from the facts mentioned therein. I refer to conclusion No. 3, namely, "That diseased germs can pass through the system of a cow, and be excreted in her milk in an active condition."

Now I will not say that this cannot and did not occur, but I should like to ask whether the cow's udders and teats were thoroughly cleansed each time before they were milked? Also, whether the cows were in the habit of getting quite into the ditch? Because, if so, the contaminated water would be splashed very much over the udders and teats, and if they were not cleansed before milking, germs would find their way into the milk during that process. If this point can be cleared up, and it can be shown that the milk could not be infected in the way above mentioned, I think the report clearly proves that germs can pass through the cow in an active condition.—I am, etc., JAMES T. NEECH.

Tyldesley, March 3rd.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CRIMINAL LUNATICS BEFORE TRIAL.

A CORRESPONDENT writes: An inquest recently held by the Coroner for Cambridgeshire on the bodies of two children killed by their father, who was insane, the coroner thought fit to criticise unfavourably the conduct of Mr. Balding, F.R.C.S., of Royston. As an important question of principle is involved, and as the trial of the prisoner has now taken place, it seems desirable to relate the circumstances with some particularity.

On February 18th, about 10 A.M., Mr. Balding, who is a magistrate for Cambridgeshire, received a telegram from Dr. Kidd, of Bassingbourn (three miles off), stating: "Walter Lawrence, of Litlington, suffering from homicidal mania, must be removed to Fulbourn Asylum to-day." Mr. Balding thought that the case was one of urgency, and arranged to visit Litlington without delay, being prepared to act as magistrate for the removal of the lunatic if required. The relieving officer of the district, having been also consulted, decided at once to go to Litlington, and there to meet Mr. Balding, who arrived just before 12 o'clock, both being ignorant of the tragedy until then. On reaching Lawrence's cottage, one child was found to have suffered serious injury to the skull and brain. The father, who had inflicted the injury, was sitting in a dazed condition by the side of the fire in the same room, watched by several labourers. In the adjoining cottage there was another child, similarly, and apparently more extensively injured, with exposed brain, though not so near death. Dr. Kidd, from whom Mr. Balding had received the telegram, was there, and had already done what was possible for the hopelessly injured children. No police were present when Mr. Balding arrived, but a policeman had previously visited the house, and had left without taking any action whatever.

Mr. Balding, after a brief consultation with Dr. Kidd, decided in his magisterial capacity to send Lawrence to the county asylum as a pauper lunatic, which he really was, as he had been for some weeks in receipt of parochial relief. Two policemen arrived before the lunacy forms were made out, and Mr. Balding then recommended them not to take Lawrence into custody. It was no doubt owing to this advice that Lawrence was not then apprehended by the police, but it was arranged that one of them should accompany the relieving officer and the lunatic to the asylum. One of the children died during the time the lunacy certificates were in preparation, and the other the same evening. The certificate of the mental condition of Lawrence was given by Dr. Kidd, who had had the medical care of the patient for some weeks. The lunatic was taken away as soon as possible and lodged safely in the county asylum.

Two days subsequently, on February 20th, an inquest was held by the county Coroner on each of the children. A coroner's inquest is held to ascertain the cause of death, but in this case evidence was taken by the Coroner which seems to have had no bearing on that point whatever, but had regard to the action of Mr. Balding some hours after the mortal injuries had been inflicted, to the action of the police on their arrival at the cottage, and to the conduct of one police constable during the journey with the relieving officer and the lunatic to the asylum. The Coroner expressed disapprobation of Mr. Balding's action in recommending the police not to take Lawrance into custody and in sending him to the asylum, stating that no one had a right to take a man out of the custody of the law and send him to an asylum set apart for persons of a different character.

The simple fact appears to be that the man was not taken out of the custody of the law inasmuch as he was not in custody. Apart from this, it may be observed that a man is not out of the reach of the law when in an asylum, but is really then in the custody of the law, committed with prescribed legal formality to the charge of skilled custodians. Indeed, in this particular case, notwithstanding the magistrate's order for Lawrence to be received and detained, he was before the expiration of a week taken out by the police for magisterial examination and subsequent trial at the Assizes. Further, though the Coroner's warrant was made out on February 20th, and handed to the police on the same day ordering the conveyance of Lawrence forthwith to prison, yet he was allowed to remain in the asylum until February 25th, when he was removed in order to be taken before the magistrates sufficiently early to insure his trial at the Assizes on February 27th, when the jury, by direction of the judge, found the prisoner insane and unable to plead. In leaving the man in the asylum the police showed good judgment. If the man had been apprehended by the police on the day of the murder he must have been conveyed to an ordinary police cell, where he would probably have had to remain for two, three, or more days and nights before the requisite authority could have been obtained for his removal to an asylum or elsewhere.

A QUESTION OF FEES.

J. G. writes: I have a case of fistula in ano. A surgeon is asked to come out and operate. His fee is twelve guineas. What should I charge?

*** Probably two guineas for meeting the other at the operation, and one for watching the case afterwards; the usual fees for visits.

THE TITLE OF DR.

J. L.—It is the custom in some universities to permit the graduates holding the degree of M.B., the courtesy use of the title of Dr.

LEGAL PRACTITIONERS ON THE PRACTICE OF UNQUALIFIED ASSISTANTS.

W. A. C.—It has been held that the practice of an unqualified assistant to a medical man must be confined to his master's house, and that such assistant must not act on his own responsibility, but only under the advice and direction of his principal.

If C., the unqualified assistant of A., practices otherwise than this, he may be rendering himself liable to the penalty imposed by the Apothecaries Act.

CONSULTATIONS WITH HOMŒOPATHS.

ANOTHER MEMBER, B. M. A., asks: Does the answer in the JOURNAL, page 271, with reference to "consultations with homœopaths," include the case of a consulting surgeon meeting a homœopathic practitioner, and operating on his patient.

*** If our correspondent will carefully reperuse the quotation in the JOURNAL of the 1st instant, relative to "Consultations with Homœopaths," he cannot fail to see that the rule in question is alike applicable to all classes of consultants, be they physicians, surgeons or general practitioners.

ADVERTISING SURGERIES AND DISPENSARIES.

MEMBER B. M. A.—We can only reiterate the opinion to which we have repeatedly given expression to the effect that the one and only efficient remedy for such a derogatory and covert system of advertising is the enforced application of the disciplinary laws of the respective Colleges of which the offending practitioners are members, and to the authorities of which in the cases alluded to, our correspondent would do well to forward a copy of the circulars in question, with a brief protesting memorial (with the facts concisely stated thereon) against the unprofessional device, signed by himself and two or more local medical men, with the view not only to emphasise it but to avert the possible contingency of the proceeding being ascribed to personal jealousy on the part of a young aspiring practitioner.

TOUTING FOR SPECIAL HOSPITALS.

IN November last we published a letter and circular, the former addressed to a lady, begging for her kind sympathy and support in favour of "The British Hospital for Mental Disorders, Out-patients' Treatment." The letter and circular were both signed by one and the same person. The signature to the circular was "L. Forbes Winslow, M.B., LL.M.Cantab., D.C.L.Oxon., 76 Wimpole Street, Cavendish Square, W., Consulting Physician and Medical Director to the British Hospital for Mental Disorders." "Out-patients' treatment."

A paragraph in the *Evening Standard* of February 24th, announced that this new "hospital" was opened by Dr. Forbes Winslow, at 11, Euston Square on that day. Its objects are reported to be to perpetuate the memory of Dr. Winslow's father; to treat mental disorders in their incipient stage, and to afford facilities for instructing medical students. It is added that Dr. Winslow intends to open branches of the Hospital in various parts of the metropolis.

MEDICAL WITNESSES AT INQUESTS.

THE *Bury Times* of February 22nd reports the proceedings of an inquest held by Mr. S. F. Butcher, the district coroner, in which it appears that he took upon himself to disallow the fees usually payable to the medical witness, on the grounds that he had, previous to the inquiry, given a medical certificate of the cause of the death of the person upon whom the inquest was held. It appears from the report that the deceased, a farmer, aged 71, was knocked

down by the opening of a gate, that he fell on his hands and knees, but did not fall heavily; that he got up by himself, walked about for some little time afterwards, and then went to his house. He did not complain of having been hurt, but told his wife the fall had given him a shake. Previous to this he had been ailing, and had a cough for two or three months, but had lately appeared somewhat better. Three days after the fall, according to the evidence of the wife, the deceased complained of feeling ill, and had a discharge from his nose and mouth of a greenish colour. The same day Mr. Horrocks, surgeon, Turton, was sent for, and he attended the deceased up to the time of his death, which occurred six days after his first visit. Mr. Horrocks found the deceased was suffering from pleuro-pneumonia, and on being told of the fall, carefully examined for injuries, but found none, with the exception of a graze on one knee. On the day following the death, the nephew of the deceased called on Mr. Horrocks and asked for a certificate of the cause of death, and in answer to inquiries as to whether an inquest was likely to be held, replied that he had heard nothing whatever about such a thing. Upon this, Mr. Horrocks, as required by the Registration Acts, gave a certificate on the usual form, stating that he had attended the deceased during his last illness, and that to the best of his knowledge and belief the cause of the death was pleuro-pneumonia. Now it appears, from certain rumours and reports that the death had been either caused or accelerated by the said fall, the coroner determined to hold an inquest, and called on Mr. Horrocks, and requested him to attend the *post-mortem* examination which was made by Mr. Mellor, surgeon, Elton, and also to attend the inquest. Mr. Horrocks complied with the requests of the coroner, assisting Mr. Mellor at the *post-mortem* examination, and giving evidence at the inquest. The medical evidence distinctly showed that death had resulted from natural causes, as stated in Mr. Horrocks's certificate, and although closely questioned by the coroner as to whether any injury or shock had accelerated the death, both the medical witnesses were quite satisfied that such was not the case. The jury then returned their verdict that the death arose from "Natural causes," namely, pneumonia.

The coroner, during the course of the proceedings, addressing Mr. Horrocks, is reported to have said: "the certificate of the cause of the death had been most improperly given," and although Mr. Horrocks explained that he was bound by law to give the certificate, he having attended the deceased during his last illness, and death having arisen from natural causes, the coroner concluded his observations by saying that "he felt bound to mark his sense of the mistake by disallowing any fees whatever."

*** Apart from the evidently mistaken observations of the coroner, we may at once say that he has no power to disallow the fees to medical witnesses as fixed by statute law (Coroners Act, 1887), except in the case where a *post-mortem* examination has been made without the order or request of the coroner, in which case the fee for making the same is not payable. The only discretion exercisable by the coroner in the payment of fees is in respect to those which come under a schedule of allowances made formerly by the County Magistrates, but now by the County Council. Mr. Horrocks is entitled to his fees for assisting at the *post-mortem* examination if requested to do so by the coroner, and for giving evidence at the court. We should advise Mr. Horrocks in the first instance to write to the coroner and request payment of his fess, pointing out the law on the subject, and reminding him that he has no discretion in the matter. If this application is unsuccessful, Mr. Horrocks should consult his solicitor, and if necessary take action in the County Court.

The clause in the Coroners Act, to which we refer, is as follows:—"That when any legally qualified medical practitioner has attended upon any inquest in obedience to the coroner, the said practitioner shall for such attendance at any inquest in Great Britain be entitled to receive such remuneration or fee as is mentioned in the table marked (B.) in the schedule thereunto attached:" and further, "the coroner shall, immediately after the termination of the proceedings of any inquest, advance and pay such remuneration or fee to every medical witness summoned under the provisions of the said Act, and the amount thereof shall be repaid to the said coroner in manner hereafter mentioned."

UNKINDLY COMPETITION.

MEMBER writes: One Sunday afternoon recently, while I was out, a message came for me to attend a confinement; being urgent, the messenger was sent for another doctor to attend for me. The same evening I called upon the patient, and found that instead of going for the doctor advised, they had called one living nearer, who attended, and said he would continue to do so, although he was told of the engagement with me. Finding that he continued in attendance, I wrote to him asking an explanation, but have received no answer, although weeks have passed, and he has received the fee. This is not the first time that he has acted in the same way, and behaves unprofessionally whenever a chance occurs: only the other day he called upon a patient I was attending, "just to see the baby," which he had vaccinated a few days previously at the public station. Seeing the mother was not at all well, he advised her to go to a certain chemist's shop (which belongs to him, and at which he has a dispensary, advertised weekly in a local paper) where he could get a bottle of medicine for 6d., and of course be attended by him. The advice was not acted upon.

*** The following is the medico-ethical rule by which the attending practitioner should have been governed in the obstetrical case above alluded to, and any deviation therefrom would constitute a breach of professional etiquette, as would also, under the circumstances related, the exceptional visit "just to see the baby," and the equally irregular suggestion to the mother in reference to the medicine obtainable at the chemist's shop.

"When a practitioner is called in, or otherwise requested to attend at an accouchement for another, and completes the delivery, or is detained for a considerable time, he is entitled by custom (except in the case of illness, etc., provided for by Rule 3), to one-half of the fee; but on the completion of the delivery, or on the arrival of the pre-engaged accoucheur, he should resign the further management of the case. In a case, however, which gives rise to unusual fatigue, anxiety, and responsibility, 'tis right that the accoucheur in attendance should receive the entire fee. Note: In either event, when the officiating accoucheur is a stranger, or a non-acquaintance of the family doctor, the full fee should be tendered to him."

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

THE undermentioned gentlemen have been entered as Surgeons in Her Majesty's Fleet from February 21st: ROBLEY H. J. BROWNE, HENRY T. KELSALL, M.B., RICHARD BARNARD, B.A., FREDERICK W. PARKER, PHILIP M. RANDALL, M.B., GEORGE G. BORRETT, WALTER H. S. STALKARTT, M.B., GEORGE A. S. BELL, EDWARD CUFFEY, M.B., and JOHN A. KEOGH, B.A., M.B.

The following appointments have been made at the Admiralty: GEORGE WELCH, Surgeon, to the *Sphinx*, February 26th; THOMAS BOLSTER, Fleet-Surgeon, to the *Victoria*, undated; EDWARD B. TOWNSEND, Surgeon, to the *Victoria*, undated; FRANCIS MOORE, Surgeon, to the *Victoria*, February 19th; GILBERT KIRKER, Surgeon, to the *Indus*; THOMAS C. ROWLAND, M.B., to Haslar Hospital, February 19th; Mr. SHULDHAM H. DUNLOP, M.D., to be Surgeon and Agent at Cultra, March 1st.

THE MEDICAL STAFF.

SURGEON HENRY MARTIN, M.B., has been seconded for service as Surgeon to Lord Harris, the newly appointed Governor of Bombay.

Surgeons W. L. LANE, M.B., M. KELLY, M.D., and J. W. COCKERILL, all of whom are serving in the Madras command, have been ordered on service with the Chin-Lushai expedition.

The following officers, on arrival in India, have been posted to the stations named: Surgeon-Major I. B. EMERSON, Secunderabad; Surgeon C. R. WOODS, Bangalore; Surgeon G. W. ROBINSON, Madras; Surgeon O. E. P. LLOYD, Bellary; Surgeon E. D. F. BRINGHURST, Secunderabad.

Surgeon FRANK WILLIAM HENNESSY, M.B., C.M., died at Lucknow on the 26th ultimo, in his 27th year. He entered the service January 30th, 1886, and after staying some time at Aldershot he was sent to Bengal in the latter part of 1886, and remained there till his death.

Surgeon D. M. SAUNDERS, M.D., who is serving in the Bengal command, has leave of absence for six months on medical certificate.

Surgeon A. DODD, who is serving in the Bombay command on general duty in the Bombay district, is transferred to the medical charge of the Azimghur Sanitorium, in the Nagpore district.

Surgeon C. A. WEBB, also serving in the Bombay command, is placed on general duty in the Bombay district.

INDIAN MEDICAL SERVICE.

SURGEON G. F. W. BRAIDE, Bengal Establishment, is transferred from the officiating medical charge of the 5th Punjab Cavalry to the officiating medical charge of the 16th Lucknow Regiment, *vice* Surgeon J. C. Lamont, proceeded on field service with the Chin-Lushai Force.

Surgeon J. J. PRATT, Bengal Establishment, Supernumerary Civil Surgeon 2nd Class, is transferred from Minpoorie to Mynee Tal.

Surgeon-Major W. PRICE, M.D., Madras Establishment, Civil Surgeon and Superintendent of the gaol at Nellore, is appointed to act as Surgeon at the General Hospital, Madras, during the employment of Brigade-Surgeon C. SIBTHORPE on other duties.

Surgeon F. C. REEVES, Madras Establishment, Civil Surgeon, Tellicherry, is appointed to act as Secretary to the Surgeon-General with the Government of Madras during the employment of Surgeon C. M. Thompson, M.B., on other duty.

Surgeon-Major W. PRICE, M.D., Madras Establishment, is appointed to act as Professor of Surgery, Madras Medical College, during the absence of Surgeon-Major W. R. Browne, M.D., on furlough.

Surgeon A. MILNE, M.B., C.M., Bombay Establishment, is directed to act as Civil Surgeon, Massick, during the absence of Surgeon-Major P. Murphy, M.D., M.Ch.

The undermentioned gentlemen have obtained leave of absence for the periods specified:—Surgeon-Major J. BLOOD, M.B., Bengal Establishment, Officiating Civil Surgeon at Mynee Tal, for one year, on medical certificate; Surgeon-Major C. J. MCNALLY, M.D., Madras Establishment, Acting Inspector of Vaccination and Deputy Sanitary Commissioner, Madras, for six months on urgent private affairs; Surgeon-Major W. R. BROWNE, M.D., Madras Establishment, for nine months on private affairs, Surgeon-Major M. S. EYRE, Madras Establishment, for one year on private affairs; Surgeon-Major S. J. GOLDSMITH, Bombay Establishment, for six months in extension on medical certificate; Surgeon-Major B. C. KEELAN, Bombay Establishment, for nine months in extension on medical certificate; Surgeon C. B. MAITLAND, Bombay Establishment, in medical charge of 23rd Native Infantry (2nd Battalion Rifle Regiment), for one year on private affairs.

THE VOLUNTEERS.

ACTING-SURGEON T. B. GRIMSLADE, 4th Lancashire Artillery, is promoted to be Surgeon.

Mr. WILLIAM ALFRED DINGLE is appointed Acting-Surgeon to the 2nd Tower Hamlets (East London) Engineers.

Acting-Surgeon G. J. LLOYD, M.B., 1st Volunteer Battalion Warwickshire Regiment (late the 1st Warwickshire), has resigned his appointment, which was dated July 28th, 1888.

Acting-Surgeon W. S. LIMRICK, 4th Volunteer Battalion King's Liverpool Regiment (late the 15th Lancashire) is promoted to be Surgeon.

Acting-Surgeon J. MEREDITH, M.D., 2nd Volunteer Battalion Somerset Light Infantry (late the 2nd Somerset), is also promoted to be Surgeon.

Acting-Surgeon W. T. COLBY, M.D., 2nd Volunteer Battalion Yorkshire Regiment (late the 2nd North Riding of Yorkshire), is promoted to be Surgeon, dated March 5th, 1890, and he is also further promoted to be Surgeon-Major, ranking as Major, from the same date.

Acting-Surgeon G. A. BARR, 5th Volunteer Battalion Hampshire Regiment (late the 1st Isle of Wight), has resigned his appointment, dated February 26th, 1887.

Acting Surgeon F. J. KNOWLES, 2nd Volunteer Battalion South Lancashire Regiment (late the 21st Lancashire), is promoted to be Surgeon.

Surgeon G. H. CABLE, 2nd Volunteer Battalion West Kent Regiment (late the 3rd Kent), has resigned his commission, which bore date February 1st, 1889.

Mr. ALEXANDER PEACOCK, M.B., is appointed Acting-Surgeon to the 1st Volunteer Battalion Argyll and Sutherland Highlanders (late the 1st Renfrewshire).

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, March 3rd.

The Lunacy Consolidation Bill.—The LORD CHANCELLOR, in moving the second reading of the Lunacy Consolidation Bill, said the Bill was introduced to complete the legislation as to lunacy undertaken by the Government. Many of the enactments contained in the Act passed last year were inserted with a view to the consolidation of the Lunacy Acts; and in the Act of 1889 it was provided that it should not come into operation till the 1st of May next, in order to give time for this Bill to be passed. It was simply a measure of consolidation; and it was hoped that every facility would be given for its passing.—The Bill was read a second time.

HOUSE OF COMMONS.—Monday, March 3rd.

The Naval Medical Service.—Dr. FARQUHARSON asked the First Lord of the Admiralty what action he had taken or intended to take with reference to the recommendations contained in the report of the Committee appointed to inquire into the pay, status, and conditions of service of the medical officers of the army and navy, which was laid upon the table of the House in August, 1889.—Lord G. HAMILTON replied that the Admiralty had had under their consideration the recommendations, three in number, relating to the naval medical service, which are contained in the report referred to by the hon. member, and they were in communication with the Treasury on the subject. The third recommendation, relating to Yarmouth Hospital, involved an important administrative question, which had already occupied the serious attention of the Board of Admiralty. Owing to the peculiar difficulties of the case, no satisfactory solution had yet been found.

Wednesday, February 26th.

Poor-Law Guardians (Ireland) Bill.—The Bill was read a second time, and then practically withdrawn, the Committee stage being appointed for that day six months.

Thursday, February 27th.

Artisans' Dwellings.—Mr. SALT asked the Secretary of State for the Home Department whether he was able to produce any statistics or to lay any report upon the table of the House that would give reliable information as to the effect of the erection of artisans' dwellings and of street improvements during recent years upon the poorest and most crowded portions of the population, who cannot afford to pay more than 1s. or 1s. 6d. a week for house accommodation.—Mr. MATTHEWS said he had endeavoured to collect information on the subject, and had made inquiries in various quarters, but they did not enable him to produce statistics or to lay a report upon the table of a complete and reliable nature. He had no better information than was elicited by the Royal Commission on the Housing of the Working Classes, by whom the subject of street improvements was dealt with, and full use was made of previous inquiries by the Select Committee of that House in 1881-2.

Sale of Food and Drugs and the Margarine Acts.—In reply to Mr. O. V. MORGAN, the HOME SECRETARY said that his attention had been called to the passage in the annual reports of the Local Government Board which commented upon the smallness of the fines frequently imposed in cases under the Sale of Food and Drugs Act. He proposed to draw the attention of the chief magistrate to the subject and to the complaints of the hon. member, and to request him, in conference with his brother magistrates, to arrive if possible at some common understanding with a view to secure uniformity of practice in the administration of those Acts.

Vaccination.—Mr. SUMMERS, on behalf of Mr. CHANNING, asked the President of the Local Government Board whether he was aware that Emily Maud Child, an infant, whose parents lived at Arthington, near Leeds, was vaccinated on March 26th, 1889, when three months old, and died on July 1st, 1889, and that previously to vaccination the child was perfectly healthy; and whether a medical examination proved that the parents were perfectly healthy too; and at the inquest subsequently held the jury found a verdict in accordance with the medical evidence that "the deceased died from syphilis acquired at or from vaccination;" whether the mother specially requested that calf lymph might be used in the vaccination; whether the gentleman who performed the operation, according to his own words at the inquest, "avoided the question by saying it would be pure lymph;" and whether the Local Government Board had made any inquiry into this case; and, if so, whether the evidence so obtained would be laid before the Royal Commission on Vaccination now sitting.—Mr. RITCHIE said he was aware of the facts as regards the child referred to. The child was, he understood, vaccinated on March 26th, 1889. The age was recorded as four months. According to the evidence at the inquest, the child was healthy prior to vaccination, and there was no evidence before the coroner that the parents were not healthy. The medical evidence at the inquest was that the weight of evidence was in favour of the view that the syphilis was acquired, and not congenital. The verdict of the jury was as stated. The facts as regarded the request of the mother and the statement of the vaccinator as to the lymph appeared to be substantially the same as those given in the question. An inquiry had been made by an inspector of the Board with regard to the case. His conclusions were not the same as those arrived at at the inquest. He stated that the child in question was the only sufferer from subsequent syphilis among all the children he reached and whom he saw that had been vaccinated with the same or any other lymph in the whole course of the vaccinator's March vaccinations; and, further, that the entire family to which the alleged vaccinifer belonged were, as far as he could discover by examination of them, free from any syphilitic taint or suspicion of such taint. The report of the inspector would be at the disposal of the Royal Commission on Vaccination.

London Sewage.—Mr. RITCHIE, in reply to Major RASCH, said he was informed that the London County Council had no definite scheme for the disposal of London sewage under their consideration, but they had instructed the Main Drainage Committee to secure the services of an eminent civil engineer to join the engineer of the Council in a thorough examination of the whole sewage system of the metropolis. As no definite scheme was at present before the County Council he was not in a position to say what opportunity could be afforded to the inhabitants of South-East Essex of expressing their views and giving evidence.

Friday, February 28th.

Medical Stores.—Mr. BRODRICK, in reply to Mr. HANBURY, stated that the question of obtaining medical stores for the Army by public competition was being very carefully considered, and as the paramount consideration was to obtain medicines of the best quality for the use of the troops the supply had been for some years intrusted to two firms of high standing.

The Royal Barracks, Dublin.—Mr. MACNEILL asked the Secretary of State for War whether it was true that Prince Edward of Saxe-Weimar, Sir Redvers Buller, and a large staff of experts inspected the Royal Barracks, Dublin, on February 24th, and condemned in the most emphatic terms the system of sewerage in the barracks; and whether, having regard to the fact that several men of the 4th Hussars, the only regiment at present stationed in these barracks, had within the last few days been attacked with typhoid fever, which had in one instance proved fatal, he would give an assurance that this regiment would be instantly removed.—Mr. STANHOPE said it was quite true that the officers named did inspect the Royal Barracks, but he had not heard that any such expressions were used as those mentioned. The work of improving the drainage of the Royal Barracks was not yet complete, and while it was going on he was anxious to move the 4th Hussars to some other quarters, but also, if possible, to do it in the manner which would cause the least inconvenience to the married men of the regiment.

Monday, March 3rd.

Inspection of Reservoirs and Waterworks.—Sir M. HICKS-BEACH, in reply to Mr. STANLEY LEIGHTON, who called attention to the increasing number of reservoirs and waterworks, and asked for Government inspection of the same in view of the danger to life and property, said if it were deemed necessary that there should be statutory inspection of such works he thought it should be conducted by officers of the county council rather than of a department of the State.

Wednesday, March 5th.

Infectious Diseases (Prevention) Bill.—This Bill was read a second time.

Public Health Acts.—The Public Health Acts Amendment Bill and the Urban Sanitary Authorities (Further Powers) Bill were read a second time, and referred to a Select Committee.

HOSPITAL AND DISPENSARY MANAGEMENT.

CANCER HOSPITAL, BROMPTON.—From the report presented at the thirty-ninth annual meeting of the governors of the Cancer Hospital, Brompton, it appears that during the past year 1,778 new patients were received, 679 as in-patients, and 1,099 as out-patients, whilst the total number of attendances of out-patients was 6,383; these figures being in excess of any previous year since the hospital was founded. The medical staff give a course of lectures in the lecture room of the hospital during the first three months of the year, which are open to all medical practitioners and students.

HOSPITAL SATURDAY FUND.—A public meeting for the discussion of what is known as the penny-a-week collection scheme was convened last week by the Clerkenwell Local Committee of the Hospital Saturday Fund. Mr. W. G. Bunn, the organising secretary, made a statement as to the work of organisation, and said that since its formation it had been the means of raising and distributing £124,000, which had been almost entirely contributed by the working classes of the community. Collecting sheets had been issued to no fewer than 4,120 firms and places of business; and the workshop collection, which in January, 1889, amounted only to £60, had reached in the same month of 1890 £1,000. The return for the fourth quarter of the year showed a total exceeding £2,000.

PAISLEY INFIRMARY.—The 104th annual meeting of the directors of the Paisley Infirmary was held on February 25th. During the past year 1,155 cases, of which 173 were cases of fever, were treated there. The admissions exceeded those of the previous year by 89. The total number of deaths was 83, being a percentage a little over 7, but 14 were moribund when admitted, and deducting these, the rate was barely 6 per cent. Besides the in-door patients, 5,350 were treated at the dispensary, an increase of 1,326 over the previous year. The income for the year amounted to £3,141, and the expenditure to £3,246. There had been a gratifying increase in contributions from the working classes. The amount of donations and legacies received during the year was nearly £3,000, of which £2,100 were given by Mrs. Arthur, of Bashaw, for the relief of consumptive patients. Only the other day Mrs. Taylor, widow of the late Dr. Taylor, intimated her intention to present £500 to be devoted to the building of a ward to be called the "David Taylor Ward," in memory of her late husband.

OBITUARY.

W. H. DIXON, M.D., M.R.C.S., L.S.A.

We regret to announce the death of Dr. W. H. Dixon, which occurred on January 18th, at his residence in Frederick Street, Sunderland, at the age of 60. He had been attended by Dr. Drummond, of Newcastle, and Dr. Hunter, his partner. He held the appointment of Medical Officer to the Post Office, and was Admiralty Surgeon. He was Consulting Physician to the Sunderland Infirmary, and also Consulting Physician to the Monkwearmouth Hospital. Apart from his general ability in his profession, he was held in high esteem in the town on account of his high scientific attainments and culture. The deceased gentleman was the son of the late Dr. Dixon, J.P., a well-known and much respected citizen of Sunderland.

GEORGES HUBERT ESBACH, M.D.PARIS.

In Dr. G. H. Esbach, who died of myocarditis on February 13th at the age of 46, the Paris Faculty of Medicine has lost one of its most energetic and resourceful laboratory directors. In early life he was engaged in business, and it was not till he was 29 that he was free to follow his inclination for the study of medicine. He was marked out by Nature for laboratory work, possessing, in addition to high intellectual aptitude for scientific research, remarkable manual dexterity and mechanical ingenuity. He was an excellent draughtsman, painter, sculptor, and etcher, and could do with his own hands everything that was wanted for the carrying out and illustration of his researches. He first directed his attention to photography in colours, for which he devised novel and ingenious apparatus which constituted a distinct advance in the art. His strictly medical work lay chiefly in the direction of physiological chemistry. He published several papers on the analysis of milk and others on albumen, urea, urinary and biliary calculi, oxaluria, etc. In 1886 he published a treatise on diabetes, and he is said to have left an important work on the analysis of calculi almost ready for the press.

Dr. Esbach's scientific conscientiousness made him an unsparing critic of careless or inaccurate work, and he had a sarcastic tongue which he used without diplomatic discrimination between the mighty and the lowly in the professional hierarchy. This prevented his attaining the position to which his abilities and his "record" as an original worker entitled him to aspire.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE STATUS OF SANITARY INSPECTORS.

At a meeting of the Association of Public Sanitary Inspectors of Great Britain, held on March 1st, the council report on the status of sanitary inspectors was adopted. The report states that the conditions under which sanitary inspectors are appointed and discharge their duties are inimical to the interests of the public health, and that those conditions are due to the defective state of sanitary law. The Council recommend that the influence of the Association should be directed to secure the following amendments in sanitary law: That every candidate for the position of sanitary inspector shall have a general knowledge of the building trades, and in addition shall possess a certificate in sanitary science; that sanitary inspectors shall be elected to a permanent tenure of office, and shall only be dismissible for misconduct or proved incompetence, with right of appeal to the Local Government Board; that it shall be the duty of sanitary inspectors to periodically inspect the dwellings of the district to which they are appointed, and to receive complaints of nuisances, and to serve notices forthwith requiring all necessary works to be done for the abatement of the nuisances, such notices to be as valid, if confirmed by the local authority, as if served by the authority's order; that in all appointments requiring the officer's whole time to be given to the duties of his office an adequate minimum salary shall be prescribed; and that the officers now variously named sanitary inspectors and inspectors of nuisances be designated sanitary inspectors.

SANITARY PLUMBING.

A deputation of the governors of the University College for North Wales recently had an interview with the Plumbers' Company for the purpose of explaining their system of technical education. The Master of the Plumbers' Company (Mr. W. H. Bishop) believed that the faculties possessed by the College might be highly serviceable in advancing the company's great public object, viz., to build up two classes of workers for the service of the public, well-intructed and skilled operatives, and sanitary scientists of a thoroughly practical type. As a proof of the company's great sphere of influence, he mentioned the fact that the combined efforts of educationalists, sanitary authorities, and the publicly-elected representatives of the plumbers of each locality were in operation at the present time in eighty-nine counties of Great Britain and Ireland. Sir Algernon Borthwick, M.P., invited the assistance of members of the deputation in the event of the company applying to Parliament for statutory powers to revoke the certificates of incompetent, neglectful, or fraudulent workmen, and for other objects. They would have the support of Mr. Ritchie, and, he believed, would be favourably looked upon both by the Government and the Opposition. The Croydon County Council have passed the following resolution:—"That the Plumbers' Company be informed that the council would consider it a great advantage if the Local Government Board would procure power for sanitary authorities to require that none but duly qualified and registered plumbers should be engaged in carrying out sanitary work."

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,569 persons, 5,764 births and 4,777 deaths were registered during the week ending Saturday, March 1st. The annual rate of mortality in these towns, which had been 25.3 and 25.1 per 1,000 in the two preceding weeks, again rose to 25.6 during the week under notice. The rates in the several towns ranged from 16.5 in Cardiff, 17.9 in Leicester, and 18.1 in Brighton to 36.3 in Blackburn, 36.5 in Leeds, 40.7 in Manchester, and 43.1 in Preston. In the twenty-seven provincial towns the mean death-rate was as high as 29.3 per 1,000, and exceeded by as much as 8.0 the rate recorded in London, which was only 21.3 per 1,000. The 4,777 deaths in the 28 towns during the week under notice included 168 which resulted from whooping-cough, 62 from measles, 43 from scarlet fever, 38 from diarrhœa, 36 from diphtheria, 32 from "fever" (principally enteric), and not one from small-pox; in all, 379 deaths resulted from these principal zymotic diseases, against 419 and 371 in the two preceding weeks. These 379 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic death-rate was 2.1, while in the twenty-seven provincial towns it averaged 2.0 per 1,000, and ranged from 0.0 in Birkenhead, 0.3 in Leicester, and 0.4 in Cardiff and in Oldham to 3.2 in Leeds and in Bolton, 3.4 in Blackburn and 4.2 in Liverpool. Whooping-cough showed the highest proportional fatality in London, Manchester, Brighton, Leeds, Bolton, and Bristol; and measles in Liverpool. In none of the twenty-eight towns was scarlet fever or "fever" fatally prevalent. The 36 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 24 in London, 3 in Salford, and 2 in Liverpool. No fatal case of small-pox was registered during the week, either in London or in any of the provincial towns, and 5 small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, March 1st. These hospitals contained 1,172 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,200 in the nine preceding weeks; 80 cases were admitted during the week, against 62 and 77 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 5.8 per 1,000, and slightly exceeded the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, March 1st, 830 births and 697 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had been 28.7 and 28.3 in the two preceding weeks, declined again to 26.9 during the week under notice, but exceeded by 1.3 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Greenock and Leith, and the highest in Glasgow and Paisley. The 697 deaths registered in these towns during the week under notice included 97 which were referred to the principal zymotic diseases, equal to an annual rate of 3.7 per 1,000, which exceeded by 1.7 the mean zymotic death-rate in the large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Paisley and Leith. The 287 deaths registered during the week under notice in Glasgow included 27 from whooping-cough, 13 from measles, and 2 from diphtheria. In Edinburgh 11 fatal cases of whooping cough and 6 of measles were recorded. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.8 per 1,000, against 5.8 in London.

HEALTH OF IRISH TOWNS.

During the week ending Saturday, February 22nd, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 37.3 per 1,000. The lowest rates were recorded in Lisburn and Armagh, and the highest in Galway and Kilkenny. The death-rate from the principal zymotic diseases averaged 4.9 per 1,000. As many as 239 deaths were registered in Dublin during the week under notice, equal to a death-rate of 34.3 per 1,000 (against 33.4 and 37.8 in the two preceding weeks), the rate for the same period being only 21.8 in London and 24.0 in Edinburgh. These 239 deaths included 14 which resulted from the principal zymotic diseases (equal to an annual rate of 2.1 per 1,000), of which 6 were referred to different forms of "fever," 4 to whooping-cough, and 3 to measles.

During the week ending Saturday, March 1st, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 35.0 per 1,000. The lowest rates were recorded in Kilkenny and Sligo, and the highest in Waterford and Dundalk. The death-rate from the principal zymotic diseases averaged 4.6 per 1,000. The 208 deaths in Dublin during the week under notice were equal to an annual rate of 30.7 per 1,000 (against 37.8 and 35.3 in the two preceding weeks), the rate for the same period being 21.3 in London and 26.9 in Edinburgh. These 208 deaths included 21 which resulted from the principal zymotic diseases (equal to an annual rate of 3.1 per 1,000), of which 9 were referred to different forms of "fever," 8 to whooping-cough, and 3 to measles.

Dr. BROWN (Bacup).—The following are the statistics required for England and Wales for 1889, per 1,000: Birth-rate, 30.5; death-rate, 17.9; zymotic death-rate, 2.10: small-pox death-rate, 0.001; scarlet fever death-rate, 0.23: measles death-rate, 0.49; whooping-cough death-rate, 0.40; diphtheria death-rate, 0.19; typhoid, typhus, and simple fever death-rate, 0.18; diarrhœa death rate, 0.61. Bronchitis, pneumonia, pleurisy, and rheumatic fever death-rate not known until publication of Registrar-General's 52nd annual report, about December next. Infantile mortality death-rate per cent. of births, 14.4.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

DEGREES.—At the Congregation on Thursday, February 27th, the following degrees were conferred:

M.B. and B.C.—J. H. Dewhurst, B.A., Trinity (thesis, Pernicious Anæmia); A. E. Ronald, B.A., Trinity (thesis, Influenza); H. A. Francis, B.A., St. John's (thesis, Exophthalmic Goître); G. H. S. Daniell, B.A., Caius (thesis, Recovery from Meningitis); W. W. Stabb, B.A., Caius (thesis, Association of Cardiac Affections with Gastric Ulcer); J. A. Wait, B.A., St. John's (thesis, Treatment of Diphtheria). J. B. Hurry, M.A., M.D., St. John's, was admitted to the degree of B.C.

UNIVERSITY OF TORONTO.—The Syndics of the University Press have made a grant of books to the library of the University of Toronto, lately destroyed by fire.

PHILOSOPHICAL SOCIETY.—At the meeting of the Cambridge Philosophical Society on March 10th papers will be read by Dr. Lea and Mr. Dickinson on the Action of Rennin and Fibrin Ferment, and by Mr. Bateson on Skulls of Egyptian Mummified Cats.

INDIA AND THE COLONIES.

HONG KONG.

AT a meeting of the Medical Society of Hong Kong on November 9th, a memorandum for the information of the Colonial Secretary was adopted, on the motion of Mr. Cantlie, with reference to the suspension of the Contagious Diseases Act. The memorandum stated that "the increase of venereal disease since the abolition of the Contagious Diseases Act can only be expressed as enormous;" and added that the medical practitioners in Hong Kong would "welcome the renewal of the Contagious Diseases Act in the most rigorous form." The memorandum also discussed the special circumstances of the mixed population of Hong Kong, which specially favoured the spread of venereal diseases.

MEDICAL NEWS.

THE German Government has under consideration a proposed new law regulating the sale of poisons in the Empire.

THE epidemic of influenza has been severely felt in Caithness. As many as thirty deaths from the disease are reported to have occurred in Wick alone.

THE Lord Mayor will preside at a dinner in aid of the funds of the Association for the Oral Instruction of the Deaf and Dumb on Monday, May 12th, at the Hôtel Métropole.

AT the anniversary meeting of the Institute of Chemistry of Great Britain and Ireland, held at Burlington House, on March 1st, Dr. James Bell, C.B., F.R.S., was re elected President.

THE Council of the Sanitary Institute have accepted the invitation from the Town Council of Brighton to hold its autumn Congress and Health Exhibition in that town in September next.

IT is stated that Mr. Byron Reed intends to introduce a Bill into the House of Commons for the purpose of placing the administration of the Factory Department on a different basis.

BARON FERDINAND DE ROTHSCHILD, M.P., is announced to preside at the anniversary festival of the City Orthopædic Hospitals on June 11th, in aid of the building fund of the hospital.

A NEW neurological journal, entitled *Revista de Neurologia e Psychiatria*, has appeared at Lisbon, under the editorship of Dr. Beltencourt Rodriguez, a well known Portuguese alienist.

PROFESSOR W. KIRCHNER has succeeded the late Professor von Tröltsch as head of the clinic of diseases of the ear in the University of Würzburg.

A FEMALE Medical Society has recently been established at New York, under the title of "Alumnæ Association of the Women's Medical College of New York."

A LADY PRESIDENT OF A MEDICAL SOCIETY.—At a recent annual meeting of the Montgomery County (Pa.) Medical Society Dr. Alice Bennett was unanimously elected President.

THE prize of 2000 francs (£80), offered to international competition by the Milan Institute of Sciences, for the best original work on hypnotism, has been awarded to Drs. de Granchamps and Regnier, of Paris, for an essay written in French.

THE Emperor of Austria has conferred the Order of the Iron Crown on Dr. L. Rydygier, Professor of Surgery at Cracow, on the occasion of the completion of a new surgical clinic in that University.

THE annual dinner of the Earlswood Asylum for Idiots and Imbeciles, Redhill, will be held on Wednesday, March 12th, at the Hôtel Métropole, presided over by Mr. Alfred L. Cohen, supported by the Lord Mayor and Sheriffs.

A COMPLIMENTARY dinner to Surgeon-Major J. W. Taylor, on his promotion to the position of Brigade-Surgeon of the East York Brigade, was given on February 17th by his brother officers at the Royal Hotel, Scarborough. Colonel Sir W. C. Worsley presided.

MISSIONARY STUDENTS.—At the annual meeting of the Great Northern Central Hospital it was stated that the application from the Church Missionary Society that certain missionary students might attend the practice of the hospital to gain some knowledge of medicine and surgery had been acceded to.

AN epidemic, which appears to be similar to or identical with influenza, is said to have appeared in Bombay, and is spreading rapidly. Large numbers of children are unable to attend school, and work at some of the mills is almost stopped from the illness of the *employés*.

DR. ARNOLD CLOËTTA, Emeritus Professor of Materia Medica in the University of Zurich, died on February 11th at the age of 61. He held the chair from 1870 to 1880. In 1881 he published a textbook of Materia Medica and the Art of Prescribing, which is very highly thought of in Germany.

IT is stated that the German Reichstag will before long have before it what may be called a coercion bill dealing with the drink question. Habitual drunkards will be subjected to pains and penalties ranging from simple fine to suspension of civil and political rights.

THE Brussels Academy of Medicine has passed a resolution in favour of establishing a special institution in Belgium for the treatment of epileptics. They recommend that the institution should take the form of an "open colony," on the lines of the establishment at Tain, in France, where 237 patients, divided into four classes, live in families under medical supervision.

THE French Minister of Public Instruction has, at the request of the Society for Preventing the Abuse of Tobacco, added the following subject of discussion to the programme of the Congress of Scientific Societies which is to meet at Paris on May 27th:—"The Influence on Hygiene and Morality of the Narcotics which are in common use throughout the populations of the globe."

DANGERS OF BORAX AS A PRESERVATIVE.—The German Government has forbidden contractors to supply the navy with preserved articles of food containing boric acid. This order is the result of the trial of a new preservative composed of equal parts of borax and salt, which has been sold as harmless. It was found that persons partaking of meat preserved with this agent experienced gastric derangements.

AN INTERNATIONAL TEMPERANCE CONGRESS.—The third International Congress on the Abuse of Spirituous Liquors and its Prevention is fixed to take place at Christiania from September 3rd to 5th, under the presidency of Professor Forel, of Zürich. Full particulars can be obtained from Dr. G. E. Benzen, of Christiania, the general secretary of the Congress.

THE following gentlemen have been appointed by the Post Office to the five new medical districts of Birmingham: Head Office District (Five Ways), Thomas Nelson, M.D.; Aston Manor District, Hugh William Thomas; S.E. District (Camp Hill), George Clyde Melson, M.B.; N.W. District (Great Hampton Street), Henry Samuel Cook; Smethwick District, Messrs. Jackson and Jackson.

WE are requested to state that the College of Physicians, Philadelphia, will award the Alvarenga prize, consisting of one year's income of the bequest, to the author of the best memorial or unpublished work on any branch of medicine, the College reserving to itself the right to reject all essays not considered worthy of the prize, and that they will be received by the Secretary until June 1st 1890.

BEQUESTS AND DONATION.—The sum of £200 has been bequeathed by the late Mr. H. Highway, J.P., to the Walsall Cottage Hospital.—The late Mr. John Fleming, solicitor, of Newcastle-on-Tyne, has bequeathed the following, among other large sums, to various local charities: £25,000 to the Fleming Memorial Hospital (which he founded); £10,000 to the Newcastle Infirmary; £1,500 each to the Newcastle Dispensary, Deaf and Dumb Institution, and the Victoria Asylum for the Blind; and £2 500 to the Prudhoe Convalescent Home at Whitley.—The Hon. A. E. Tollemache has sent a donation of £50 to the St. John's Hospital for Diseases of the Skin, Leicester Square.

THE LATE PROFESSOR LITZMANN.—Dr. Karl Theodor Litzmann, some time Professor of Midwifery and Gynæcology in the University of Kiel, died at Berlin on February 24th. He was born in 1815, qualified as a teacher at Halle in 1840, and was appointed Professor at Greifswald in 1845. He was called to Kiel in 1849, and resigned his chair in 1885. He wrote a good deal on purely obstetrical subjects, especially on malformations of the pelvis. He took a great interest in the education of midwives, and at the request of the Minister of Public Instruction drew up a textbook for their use, which is known as the Prussian *Lehrbuch für Hebammen.*

UNIVERSITY COLLEGE, LONDON.—At the annual general meeting of University College, Mr. Erichsen, LL.D., F.R.S., was re-elected President, Sir U. J. Kay-Shuttleworth M.P., Vice-President, and Mr R. N. Fowler, M.P., Treasurer; and Dr. C. Graham and Professor C. Heath were added to the Council. The following were elected Fellows of the College: J. R. Bradford, D.Sc., M.D.; H. P. Bowman, M.B., B.S.; H. M. Fernando, B.Sc., M.D.; J. Rose Innes, M.A., B.Sc.; R. F. Scott, M.A.; and W. E. Sumpner, D.Sc. The following were admitted life governors of the College: Sir F. A. Abel, C.B., D.Sc., D.C.L., F.R.S.; Mr. A. H. Acland, M.A., M.P.; Sir Henry Craik, C.B., M.A., LL.D.; Professor T. W. Rhys Davids, M.A., Ph.D.; Mr. R. B. Haldane, M.A., Q.C., M.P.; Mr. Ludwig Mond, Professor Karl Pearson, M.A., LL.B.; Sir Lyon Playfair, K.C.B., LL.D., F.R.S.; Rev. W. Gunion Rutherford, M.A., LL.D.; and Professor J. Stewart, M.A., LL.D., M.P. The following were elected auditors: Mr. E. Waterhouse, B.A.; and Mr. A. W. K. Miller, M.A.

NOSTRUMS FOR INEBRIETY.—The nineteenth annual meeting of the American Society for the Study and Cure of Inebriety was signalised by a dinner in honour of its first secretary, Dr. Joseph Parrish, who has for some years past been the President. In the congratulatory addresses of Drs. T. D. Crothers, Day, Mason, and others, special reference was made to the first International Congress on the subject in London in 1887. A report by a special committee gives some curious facts as to the composition of nostrums vaunted as effectual in preventing and curing inebriety. An analysis was made of fifty different proprietary specifics, and each of these was found to contain alcohol, varying in proportion from 6 to 47 5 per cent. Several of these preparations are advertised as "not an alcoholic beverage." In nineteen so-called "opium cures" morphine was detected. So far from curing inebriety, the President of a State Chemical Society testifies that he knows of men becoming drunkards through resorting to some of these widely advertised bitters for ordinary ailments. It ought to be made public that when inebriates think they can find useful medicinal remedies without either alcohol or opium in such compounds, they are more likely than not to be deceived. The committee denounced these "cures" in very uncompromising language.

MEDICAL VACANCIES.

The following Vacancies are announced:

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.—Resident House-Surgeon. Salary, £85 per annum, with board, lodging, and washing in the hospital. Applications to the Secretary not later than March 13th.

ALNWICK INFIRMARY.—House-Surgeon (unmarried). Salary, £120 per annum, with furnished apartments, attendance, coals, and gas, but without board. Applications up to March 22nd to the Honorary Secretary.

ATHLONE UNION, Brideswell Dispensary District.—Medical Officer. Salary, £140 per annum, and fees. Election on March 13th.

BIRMINGHAM CITY ASYLUM.—Clinical Assistant. Board, lodging and washing, no salary. Applications to E. B. Whitcombe, Medical Superintendent.

COUNTY COUNCIL OF LANCASTER.—Medical Officer of Health for the County Palatine of Lancaster. Salary, £800 per annum, with travelling expenses. Applications to the Clerk, Fred. C. Hulton, County Offices, Preston, before March 22nd.

COUNTY COUNCIL OF WORCESTERSHIRE.—Medical Officer of Health for the County of Worcester, Commencing salary, £600 per annum, with travelling expenses, with an increase of salary if district duties be added. Applications must be made not later than March 15th on forms to be obtained of W. Nicholas Marcy, Clerk of the County Council, County Hall, Worcester.

DURNESS, Sutherlandshire.—Medical Officer. Salary, £150 (with practice, population 1,000) and free house. Applications to the Inspector of Poor up to April 2nd.

FARRINGDON GENERAL DISPENSARY, etc., 17, Bartlett's Buildings, Holborn.—Honorary Surgeon, Members or Fellows of Royal College of Surgeons. Applications by March 8th to J. Lewis, Secretary.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Assistant Physician. Applications to the Secretary by April 9th.

H.M. PRISON SERVICE.—Dispenser, must hold diploma of the Pharmaceutical Society, age 20 to 40. Salary, £83, rising to £103 per annum. Applications to the Governor of H.M. Prison, Wandsworth.

KING'S COLLEGE, London.—Professor of Physiology. Applications to the Secretary.

KENSINGTON DISPENSARY.—Honorary Medical Officer. Applications to the Honorary Secretary, F. Leach, Esq., 7, Stanford Road, Kensington Court, by March 28th.

LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES.—Honorary Assistant Surgeon. Applications to the Secretary, up to March 13th.

LONDON HOSPITAL MEDICAL COLLEGE, Turner Street, Mile End, E.—Two Assistant Demonstrators of Anatomy. Salary of each, £90 per annum. Applications to the Warden not later than March 11th.

OWENS COLLEGE, Manchester.—Lecturer on Diseases of the Larynx. Applications under cover to the Registrar, of whom all particulars may be obtained, should be received not later than March 10th.

PARISH OF MUTHILL, Perthshire.—Medical Officer. Salary not less than £40 per annum (with practice, population 2,300). Applications to H. Curr, Pitkellony House, Muthill, not later than March 15th.

PAROCHIAL BOARD OF FETTERCAIRY.—Medical Officer. Salary, £18 per annum, including medicines. Applications to the Clerk by March 22nd.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Junior Resident Medical Officer. Appointment for six months Board and residence in the hospital. Applications to the Secretary, Conrad W. Thies, by March 19th.

SOUTHPORT INFIRMARY AND LOCAL DISPENSARY.—House-Surgeon, double qualification. Salary, £100 per annum, with board, furnished rooms and attendance. Applications to John Geo. Ripley, Exchange Buildings, Southport, by March 10th.

SOUTH SHIELDS UNION.—District Medical Officer for the newly-formed Hebburn District of the Union. Age, 25 to 40. Salary, £20 per annum. Applications to the Clerk to the Guardians by March 12th.

UNIVERSITY OF LONDON.—One Examiner in Surgery. Salary, £150 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

UNIVERSITY OF LONDON.—One Examiner in Obstetric Medicine. Salary, £75 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

UNIVERSITY OF LONDON.—One Examiner in Materia Medica and Pharmaceutical Chemistry. Salary, £100 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

WALLASEY DISPENSARY.—An Assistant or Junior House-Surgeon, unmarried. Salary, £80 per annum, with furnished apartments, coal, gas and attendance. Applications by March 20th to the Honorary Secretary, Elm Mount, Penkett Road, Liscard, Cheshire.

WEST LONDON HOSPITAL, Hammersmith.—House-Surgeon. Duties to commence April 1st. Applications to the Secretary-Superintendent not later than March 20th.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Pathologist, who will be required to act as Fourth Assistant Medical Officer. Salary, £100 per annum, rising £10 a year up to £150, with board, etc. Applications to the Medical Superintendent by March 13th.

WOLVERHAMPTON UNION.—Medical Officer for the District of Willenhall. Salary, £140 per annum. Applications to the Clerk.

MEDICAL APPOINTMENTS.

ANNINGSON, Bushell, B.A., M.D., reappointed Medical Officer of Health to the Chesterton Board of Guardians.

ATKINSON, Guy C. Barlow, M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator for the Stotfold District of the Biggleswade Union.

BENSON, Henry Thomas, L.S.A., appointed Medical Officer to the 3rd District of Deeping, St. Nicholas, Spalding Union, *vice* Mr. T. E. Stafford, deceased.

BLAKE, W. H., M.B.Lond., B.S., M.R.C.S., appointed Medical Officer for the 3rd District of St. Albans Union, *vice* F. R. Spackman, M.D., resigned.

BODMER, R., F.I.C., F.C.S., appointed Public Analyst to the St. Saviour's District.

BROCK, Ernest H., M.B., B.S.Lond., M.R.C.S., appointed Resident Medical Officer to the Royal Chest Hospital, City Road, *vice* W. T. Strugnell, M.B., etc., resigned.

BROWNE, Oswald A., M.A., M.B.Cantab., M.R.C.P., appointed Assistant Physician to the Metropolitan Hospital, Kingsland Road, E., *vice* Howard Tooth, M.D., promoted to Physician.

COLWELL, James Kear, appointed Public Analyst to the borough of Bedford.

CONWAY, B. W., M.R.C.S., L.R.C.P., appointed House Surgeon to the Manchester Royal Infirmary.

COOKE, G. H., L.R.C.P.Lond., M.R.C.S.Eng., appointed House-Physician to the Manchester Royal Infirmary.

CORDER, E. H., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., appointed Resident Medical Officer to the Parish of Birmingham.

CRESWELL, W. G., L.R.C.P., L.R.C.S.Edin., L.S.A., reappointed Medical Officer of Health to the Saltley Local Board.

EDGEWORTH, F. H., M.B., B.C., B.A.Cantab., B.Sc.Lond., appointed one of the Honorary Physicians to the Bristol Hospital for Sick Children and Women.

FISK, W. J., L.D.S., appointed House-Surgeon to the National Dental Hospital, Great Portland Street, *vice* E. H. A. Field.

FRANKS, Kendal, A.B.Dub., M.D., F.R.C.S.I., appointed Surgeon in Ordinary to the Lord Lieutenant of Ireland, *vice* P. C. Smyly, A.B.Dub., M.D., etc.

GALLETLY, John, M.A., M.B., and C.M.Edin., appointed Medical Officer and Public Vaccinator of the Rippingale District of the Bourn Union, *vice* G. N. Robins, L.R.C.P.Edin., resigned.

HAMILL, Robert James, M.A., M.D., L.R.C.P., appointed Medical Officer to the Buckingham Palace Road Workhouse, St. George's (Hanover Square) Union.

HANDS, Arthur, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the district comprising the township of Wednesfield.

HARRIS, Arthur G. R., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health to the Market Weighton District of the Pocklington Rural Sanitary Authority, also Medical Officer of No. 2, Market Weighton District, Pocklington Union.

HARRIS, J. Henry, M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator for the Ugborough District of the Totnes Union, *vice* R. Gillard, M.R.C.S., L.S.A.

HEPBURN, William Alexander, F.F.P.S., L.S.A., appointed Medical Officer of Health to the Durham Union Rural Sanitary Authority, Eastern District Union.

JEPSON, Edward, M.D., M.R.C.S., L.S.A., appointed Medical Officer of Health to the Durham Union Rural Sanitary Authority, Western District Union.

KILVINACK, T. N., M.B., Ch.B.Vict., late House Physician, Manchester Royal Infirmary, appointed Assistant Medical Officer to the Manchester Workhouse at Crumpsall, and Workhouse Receiving and Casual Wards, New Bridge Street.

MORRIS, Albert, L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer of Health to the Southend Local Board.

NISBET, F. J., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to Guy's Hospital.

OAKLEY, A. R. H., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer to the A District of the St. George's (Hanover Square) Union.

PAGET, F., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to Guy's Hospital.

PEARSON, William, L.R.C.P., L.R.C.S.Edin., appointed Assistant Medical Officer to the Norwich City Asylum, Hellesdon.

PORTER, Thomas, M.B., appointed Resident House-Surgeon to the Southern Hospital for Diseases of Women and Children, Manchester.

PRYCE, T. Davies, M.R.C.S., L.S.A., late Resident Surgeon to the Nottingham General Dispensary, elected Honorary Consulting Surgeon, *vice* Dr. Herbert Owen Taylor, resigned.

RUSHTON, W., L.D.S., appointed Assistant Dental Surgeon to the National Dental Hospital, Great Portland Street.

SCOTT, Arthur William, M.D.Brux., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Handsworth Urban Sanitary Authority.

SCURFIELD, Harold, M.D., appointed Surgeon to the Sunderland Post Office, *vice* W. H. Dixon, deceased.

SMYLY, Philip Crampton, A.B.Dub., M.D., M.K.Q.C.P., F.R.C.S.I., appointed Senior Physician to the Lord Lieutenant of Ireland, *vice* G. W. Hatchell, M.D.Glas., F.R.C.S.I., etc., deceased.

TREVELYAN, E. F., M.D.Lond., B.Sc., late Resident Medical Officer of the Leeds Infirmary, appointed Honorary Physician to the Leeds Public Dispensary, *vice* Dr. Barrs, resigned,

WALLACE, William, M.D., appointed Medical Officer for the Crick District of the Rugby Union.

WILSON, George, L.R.C.P., L.R.C.S.Edin., L.S.A.Lond., appointed Medical Officer to the 4th District, St. Albans Union.

YOUNG, William, M.D., reappointed Medical Officer of Health for Malton.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Samuel West: Paroxysmal Hurry of the Heart. Mr. Barwell: Treatment of Lateral Curvature o the Spine by Rachilysis.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart On Phosphorescent Organs and Colour in Nature. Lecture IV

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, W., 8.30 P.M —Sir Henry Thompson: Analysis of 964 Cases of Operation fo Calculus in the Bladder by Lithotomy and Lithotrity, wit Remarks. (The calculi removed will be exhibited to th Society.)

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. G. Newton Pitt: Th Goulstonian Lectures on Cerebral Lesions. Lecture I.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart On Phosphorescent Organs and Colour in Nature. Lecture V.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square W., 8 P.M.—Mr. J. B. Curgenven: On the Use of the Oil o Eucalyptus Globulus in Infectious Diseases.

BRITISH GYNÆCOLOGICAL SOCIETY, 20, Hanover Square, W., 8 P.M., Counci Meeting. 8.30 P.M.—Dr. R. T. Smith and Mr. Mayo Robson The Treatment of Pelvic Abscess.

HUNTERIAN SOCIETY, 8 P.M.—Pathological Evening. Dr. Turner: A Specime of Gumma in the Heart. Mr. Cotman: Kidneys from a Case o Puerperal Eclampsia. Mr. Bidewell: 1. Sebaceous Cyst of Um bilicus; 2. Tubercle of Thyroid. Mr. Tatham: Carcinoma o Liver. Dr. Hingston Fox: Large Gall Stones producing Fata Obstruction of Bowel; and other specimens.

THE HOSPITALS ASSOCIATION, Board Room of Westminster Hospital, 8 P.M.— Sir E. H. Currie: Provident Dispensaries in Relation to th Hospital Out-Patient Question.

THURSDAY.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Patien and card specimens at 8 P.M. Dr. Berry: 1. Demonstration o a New Stereoscopic Phenomenon, and the Possible Clinical U to which it might be put; 2. Case of Spontaneous Purule Hyalitis occurring long after Extraction of Cataract; 3. Note o the Metre Angle in Latent and Manifest Muscular Deviation 4. On the Immediate Effects of Tenotomy on the Concomitanc of a Squint. Mr. Spencer Watson: Case of Glaucoma. M Marcus Gunn: Case of Superficial Punctate Keratitis.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. G. Newton Pitt: Th Goulstonian Lectures on Cerebral Lesion. Lecture II.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAN Owens College, Manchester, 4 P.M.—Dr. Ross: The Psychic Disorders of Peripheral Neuritis. Dr. Shuttleworth will ope a discussion on the Best Provision to be made for the Paup Idiots of Lancashire. Dr. George M. Robertson: Does Man include two distinct varieties of Insanity, and should it subdivided?

FRIDAY.

CLINICAL SOCIETY, 20, Hanover Square.—Living specimens, 8 P.M. Pape 9 P.M. Dr. Savill: A Case of Abductor Paresis of the Voc Cords. Mr. Knowsley Thornton: Abdominal Nephrectomy f Large Sarcoma of Capsule or Suprarenal Capsule; Recover Mr. Croft: Rupture of Small Intestine without Exter Wound; Laparotomy; Excision of Injured Bowel; Enter raphy; Cure. Mr. H. W. Allingham: Obscure Case of Acu Abdominal Obstruction in a Boy, aged 10; Laparotomy; R moval of Suppurating Appendix Vermiformis; Recovery.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewa On Phosphorescent Organs and Colour in Nature. Lecture V

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6 which sum should be forwarded in Post Office Order or stamps with the notice later than Wednesday morning, in order to ensure insertion in current issue.

BIRTHS.

ATKINSON.—February 27th, at Turnastone, Vowchurch, Herefordshire, the w of T. Renel Atkinson, M.R.C.S., of a son.

DODD.—March 1st, at 14, Goldstone Villas, West Brighton, the wife of Arth H. Dodd, L.R.C.P., M.R.C.S., of a son.

HOUNSELL.—On Saturday, March 1st, 1890, at "The Fernery," Chudlei S. Devon, the wife of F. C. W. Hounsell, B.A.Cantab., M.R.C.S., L.S.A., a son.

MARRIAGE.

GODFREY—ROE.—On the 4th instant, at St. Michael's, Bournemouth, by t Rev. Prebendary Henry Roe, of Yeovilton, Somerset, uncle of the bri and the Rev. F. E. Toyne, vicar, Albert Edward Godfrey, M.B.Lond., s of John Godfrey, Northampton, to Annie Katharine, daughter of Geo Roe, Poyntington, Bournemouth.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Oostetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Tu., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2 30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1 30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

SOHO, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

QUERIES.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

CONVALESCENT HOME FOR SCARLET FEVER PATIENTS.

H. B. asks to be recommended a convalescent home at the sea side (South Coast preferred) for a child, aged 8, recovering from scarlet fever. The parents can pay any moderate charges, and would send a nurse with the boy, who would not be sent till all peeling had ceased. The parents find great difficulty in getting any lodging-house keeper to receive the boy.

ANSWERS.

MEDICUS.—Copies of the Habitual Drunkards Acts can be obtained of Eyre and Spottiswoode, East Harding Street, E.C.

CONSTANT READER.—The question can only be determined by consideration of the special facts of the case, and is one which might be addressed to a competent experienced medical agent.

F. W. C. should apply to Dr. W. C. Steele, Honorary Secretary of the Brussels Medical Graduates' Association, 1, Florence Terrace, Ealing, London.

THE "FIRST COLLEGE."

BICEPS.—Provided that you have acquired a fair practical knowledge of anatomy and the elements of physiology at your medical school, the standard textbooks which you name would be sufficient (as far as reading can serve) for study for the primary examination at the College of Surgeons. Do not overlook the regulation by which candidates who have commenced their professional studies in English medical schools on or after October 1st, 1882, must produce certificates of having passed an examination in elementary anatomy and physiology, conducted by their teachers, before they can present themselves for the primary examination.

A FORTNIGHT'S HOLIDAY.

H. E. H. M. ("Eskdale," Albert Road, Levenshulme) recommends "Rustic" to spend his holiday at Deganwy, N. Wales, and offers to give further information.

REPORT ON INTEMPERANCE AND DISEASE.

DR. W. V. LUSH AND A MEMBER.—See JOURNAL, January 19th, 1889, p. 130, 2nd column, Dr. Owen's remarks; also March 9th. p. 562, letter signed "Medicus;" April 6th, 1889, p. 779, top of 2nd column, and November 9th, p. 1054, 1st column, paragraph headed: "Report on Intemperance and Disease." As is there observed: "Common sense and common experience testify that habitual drunkards die sooner than abstainers, and the report expressly stated that there is not in the returns the means of coming to any conclusion as to the relative duration of life of total abstainers, and of habitually temperate drinkers. The report further stated that on the whole the committee might not unfairly claim to have placed on a basis of fact the conclusion that habitual indulgence in alcoholic liquors, beyond the most moderate amounts, has a distinct tendency to shorten life. Other tables given in the report, of deaths at greater ages, prove the accuracy of the committee's statement; and we can only express the hope that in future the committee will not be quoted as stating exactly the opposite of what is contained in their report."

NOTES, LETTERS, ETC.

THE SEPTIC GERMS IN PERITONITIS.

A PARAGRAPH bearing this title appeared in the JOURNAL for March 1st. It appears that Professor Orth did not himself conduct the researches therein described, but translated into German an abstract of a thesis of the original investigator, Dr. Herbert Waterhouse, Demonstrator of Anatomy to the University of Edinburgh; the paper appearing last February in *Virchow's Archiv*. Dr. Waterhouse carried out his researches in the laboratory of Professor Orth, at Göttingen, and as the result of his labours he summed up his conclusions in a thesis for the degree of Doctor of Medicine of the University of Edinburgh. He received a gold medal and the Goodsir Memorial Prize at the Graduation Ceremonial last August. Dr. Waterhouse may be congratulated on the importance of his researches, which show how ascites and injuries of abdominal organs favour septic infection.

ARMY SURGEONS AND CIVIL PRACTITIONERS

BACILLUS writes: "Microbe" complains, in the JOURNAL of February 15th, that an "army doctor" competes with him for private practice. It would be interesting to know whether it is one on "full" or "half pay," as if not on full pay, he has just as much right to go in for private practice as "Microbe." A medical man entering the army does not surrender the rights of his double qualification and registration to practise should he retire or go on half pay.

Were private practitioners to decline charge of troops at home stations at "contract rates," as long as half or retired pay "army doctors" were anxious

for such employment, there would be far less competition such as "Microbe" complains of; but that a fully qualified medical man should be debarred from eking out his half or retired pay by private practice, is asking a little too much, I think.

TOOGOOD *v.* WILKES.
Wilkes Indemnity Fund.

THE following subscriptions have been received since last publication:

	£	s.	d.
Dr. Macdonald, Dorchester	1	1	0
Mr. H. G. Dyer, Ringwood	1	1	0
Dr. Pye-Smith, London	2	2	0
Dr. Neal, London	0	10	6
Dr. Lush, Weymouth	1	1	0
Mr. J. P. Symes, Weymouth	1	1	0
Mr. R. W. Gosse, Eccleshall	1	1	0
Mr. T. J. Tucker, Hindon	2	0	0
Dr. C. S. Evans	0	10	0
Dr. Quain, F.R.S.	2	2	0
Dr. R. T. Finch	1	0	0
	13	9	6
Subscriptions previously announced	33	15	1
	47	4	7

H. J. MANNING, Treasurer.

"EXALGIN."

DR. ARCHIBALD D. MACDONALD (Liverpool) writes: The lecture of Professor Fraser, which appears in the JOURNAL of February 15th, suggests one or two observations. First, that it is almost of as much benefit to mankind to determine the minimum efficient dose of a drug as it is to fix the maximum dose which may be given without poisoning or incommoding the patient. This Professor Fraser has helped to do here; and I take it that a 1-grain dose every four hours is the standard of exalgin. Secondly, as the pain-subduing property of methyl-acetanilide is largely referable to its methyl molecule and acetanilide itself possesses a much greater heat suppressing power, would Professor Fraser approve of the following prescription in cases where both actions were desired. ℞ Antifebrin, grs. xxiv; exalgin, grs. vj; tr. card co., tr. limonis ãã 3j; aquam, ad 3iij. M. Sig. A tablespoonful to be taken every four hours. Thirdly, it would have been of interest to know the type of toothache benefited by exalgin, whether inflammatory or purely neuralgic, and also to have had some observations on the treatment of nervous headache by this drug. Small doses (7½ to 10 grains) of antipyrin answer well in such cases; but in a series of cases which I have treated within the past two months, and especially where the pain was limited to one temple, or "nail" like; I have found even one 5-grain dose of phenacetin to give the most striking pain-subduing result. Indeed, it is clear that the whole series forms the most valuable addition to our curative and palliative resources which has been made of recent years.

THE LATE PROFESSOR VON WAHL.

Mr. HENRY S. TAYLOR (Guildford) writes: In your obituary notice of Dr. Eduard von Wahl, in the JOURNAL of February 15th, you mention the fact of his mother having been an Englishwoman. This leads me to think that his family name was once "de Wahl," because I remember that one of Dr. Edward Rigby's sisters was married to a Russian gentleman of that name, who lived in Esthonia; and it was while on a visit to her that her sister Lady Eastlake, then Miss Rigby, wrote her delightful *Letters from the Baltic*. The doctor's age would countenance this supposition of mine, as also his Christian name, and his natural aptitude for medical science, if he was a grandson of Dr. Rigby, of Norwich.

Madame de Wahl was separated from her husband some years after her marriage, and returned to Norwich.

"BRITISH" OR "ENGLISH."

A SCOTSMAN writes to protest against the selfishness of his countryman, "Scotus, etc.," expressed in his letter to the JOURNAL of March 1st, in which he completely ignores Ireland, as he complains Scotland is ignored by Dr. Rogers. The term "English" is the only convenient adjective we have to include inhabitants of all divisions of the United Kingdom of Great Britain and Ireland; the term "British" would clearly exclude Irishmen. What credit or dislike attaches abroad to things or people "English," has been gained for them by the exertions of Scotchmen and Irishmen, as well as Englishmen, hence Scotchmen need have no shame in submitting to the apparent ascendency of England really gained in part by the toil of their own ancestors.

A COLD HARBOUR.

FEL. R. MED. CHI. writes: The annual meeting of the Royal Medical and Chirurgical Society was held on an unusually cold night, no doubt. Still it is evident that the fine new room in which the large audience assembled was not well warmed. Although there were so many persons in the room, the cold was a subject of almost universal complaint. On a warmer, average winter night, when the attendance is much scantier than on last Saturday, the room will still be very cold unless better warmed than at present. The truth is that it is often forgotten that the electric light does not give out heat like a gas-jet. Still the Fellows of the learned professional societies which meet at Hanover Square, will object more strongly to catching cold than to the less serious inconvenience of a slight headache from the fumes of gas. We need hardly say that the energetic officers of the Royal Medical and Chirurgical Society cannot be blamed for the low temperature of their meeting room. The warmth of a room when filled with people can never be correctly estimated until that room has actually been filled with people.

FALSE CERTIFICATES.

A DUBLIN MEMBER writes to recommend greater circumspection in giving certificates of inability to persons anxious not to serve on juries. Being importuned by such a one recently, he wrote a note stating that the bearer had been asking for a certificate, but not making any statement as to bearer's health. The man thinking that he had obtained the necessary document, handed in the note to the Recorder, who read it in open court. The sequel of the story is, however, unsatisfactory, as the Recorder contented himself with threatening the unwilling juror with imprisonment, and did not even compel him to serve.

COMMUNICATIONS, LETTERS, etc., have been received from:
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REMARKS ON CÆSAREAN SECTION,

WITH NOTES OF A

SECOND SUCCESSFUL CASE.[1]

By MURDOCH CAMERON, M.D., F.F.P.S.G.,

ssistant to the Professor of Midwifery, Glasgow University; Obstetric Physician and Lecturer on Obstetrics to the Glasgow Maternity Hospital; Dispensary Physician for Diseases of Women, Western Infirmary.

y a previous paper read at Glasgow last year, I gave the particu-rs of a successful Cæsarean section, and this year it has fallen to y good fortune to be able to report a second successful opera-on.

The patient, B. B., aged 18, primipara, was admitted into the lasgow Maternity Hospital on March 12th, 1889. She was arkedly rachitic, and was very small, thin, pale, and delicate ooking. She stated that she was pregnant, had menstruated last bout the end of July, 1888, and had first felt the movements of ie child towards the end of December. On auscultation, the etal heart sounds were distinctly heard, and abdominal palpa-on revealed a breech presentation. The measurements were as llows:—Height, 48 inches; intercostal diameter, $8\frac{1}{2}$ inches; in-rspinous diameter, $9\frac{1}{2}$ inches; external conjugate diameter, $5\frac{3}{8}$ ches; diagonal conjugate diameter, under 2 inches; true conju-ate diameter, 1 inch.

A consultation was held, at which were present Drs. S. Sloan, eid, Black, Oliphant, and Ritchie. Opinion was divided as to hether craniotomy at the time or Cæsarean section at full rm ought to be performed. A second consultation was eld next day, at which Professor Leishman attended, in addition the others. He strongly advocated Cæsarean section, and this as finally agreed to.

The patient was kept in the hospital and put on a liberal diet. abour began on the evening of May 7th, about the 280th day of egnancy, when I was sent for. On arriving at 11 P.M., the os eri admitted the tip of the forefinger, and accordingly operation as determined upon. Invitations to the staff and others to be esent were sent out.

At 3.15 A.M. the patient was put under the influence of chloro-rm, but subsequently ether was used to keep up the anæsthesia roughout the operation. Dr. Wright, the indoor accoucheur, sisted, Dr. Ritchie attended to the instruments, Drs. Williams id Gray gave the anæsthetic, whilst a staff of nurses attended the sponges, etc. A mesial incision was made from the nbilicus to a little above the pubes.

There was very little bleeding from the abdominal parietes. ie uterus, steadied in the middle line and held well forwards, as then opened. The sinuses bled freely, but not to any alarming tent, and none of the blood, nor, in the subsequent stage of the eration, any of the amniotic fluid entered the abdominal cavity. e amniotic sac was opened, and the child extracted by the head, ich lay at the fundus. The placenta was attached to the poste-r surface, and was easily detached and removed. After making re that the cervical canal was patent, the uterine incision was sed by means of thirteen silk antiseptic sutures, passed through e outer two-thirds of the uterine wall. Both Fallopian tubes re ligatured at the junction of the outer and middle thirds, and, ally, the abdominal cavity having been carefully sponged out, e external wound was closed by antiseptic silk sutures.

From the time of the first incision, at 3.30 A.M., till the delivery the child only eight minutes had elapsed, and the operation s completed at 4.15 A.M., thus occupying forty-five minutes. A podermic injection of Tanner's solution of ergotine was given d the wound dressed. A half-grain morphine suppository was en administered; but, in spite of that, patient complained of n in the abdomen for about an hour after the operation. She en, however, fell asleep, and did not waken till the forenoon, en her temperature was found to be about 98.4° F., her pulse 104, and the abdominal pain gone. She remained quiet and drowsy all day, and in the evening her temperature had increased to 101.2° F. and her pulse to 115.

Four 10-grain doses of quinine were given at intervals of two hours. The first at 7.30 p.m. For the first 36 hours she got nothing internally but sips of hot water and milk. The urine was drawn off every six hours. The child was a boy, weighed 7lbs. 13ozs., and measured $22\frac{1}{2}$ inches. The placenta weighed 1lb. 4ozs., and the cord was 23 inches in length. The measurements of the child's head were as follows: Occipito-frontal diameter, $4\frac{3}{4}$ inches; occipito-mental diameter, $5\frac{1}{2}$ inches; biparietal diameter, $3\frac{1}{2}$ inches: bitemporal diameter, $3\frac{1}{4}$ inches; sub-occipito-bregmatic diameter, 4 inches; circumference, 14 inches.

May 9th. Patient slept nearly all night. In the morning she complained of a slight pain chiefly in the back, and was given a half grain morphine suppository, which relieved it. In the evening she complained of a cough, which was relieved by a mixture.

May 10th. Rather restless during the night. After taking a little milk and lime water in the morning she was troubled with a slight feeling of sickness, but this soon passed off. In the evening she felt and looked very well. The cough was much better, and she took a little tea with relish.

May 11th. During the night she complained a little of flatulence. The temperature at 4 A.M. was 103.4°, and the pulse 110. Ten grains of quinine were administered, and at 9 A.M. the temperature had fallen to 100°. During the day she was fed on milk and tea. Her abdomen was distended with flatus and she complained of pain, but this soon passed off. Cough entirely gone.

May 12th. During the night she was pained, and had a half grain morphine suppository, which greatly relieved her and allowed a little sleep. She remained well till the afternoon, when sickness and vomiting set in and the tympanites returned. Sips of hot water with a few drops of peppermint were tried and gave relief, but, the sickness continuing, four-minim doses of glycerinum acidi carbolici were administered every two hours up to four doses.

May 13th. She was rather restless during the night, but, the sickness ceasing towards the morning, patient fell into a refreshing sleep, which lasted for a few hours. The lochia was slightly fœtid. During the day, as she was troubled with tympanites, an enema of six ounces of soap and water, with one ounce of glycerine, was followed by a free action of the bowels, but, the flatulence still continuing, a turpentine enema was given at 7 P.M., with the result that she felt much relieved.

May 14th. Had a half-grain morphine suppository, after which she slept well. During the day she complained of no pain, no flatulence nor sickness, and the lochia was normal.

May 15th. At noon patient was placed under chloroform, and the wound dressed; it looked very well. After the dressing she complained of slight pain, but there was no sickness. The breasts, which were slightly engorged, were exhausted.

May 16th. She had slept for three hours. At 7 P.M. she had an enema of glycerine, with the result that the bowels were freely moved.

May 17th. She had slept well during the night.

May 18th. Lochia ceased, but there was a slight discharge of pus *per vaginam*.

May 19th. She complained of a little pain in the abdomen, and a few drops of pus were observed at the lower part of the dressings. There was no rise of temperature nor rigor. The dressings were removed, and the wound at the lower part was found gaping superficially to a slight extent, no doubt due to the strain of coughing. The deep portion and the whole of the upper part of the wound were healed by first intention. All the stitches were removed, three strips of plaster applied, and fresh dressings put on.

May 20th. She had a good night and was looking well. Wound dressed.

May 21st. Only a few drops of discharge on dressing. She passed urine.

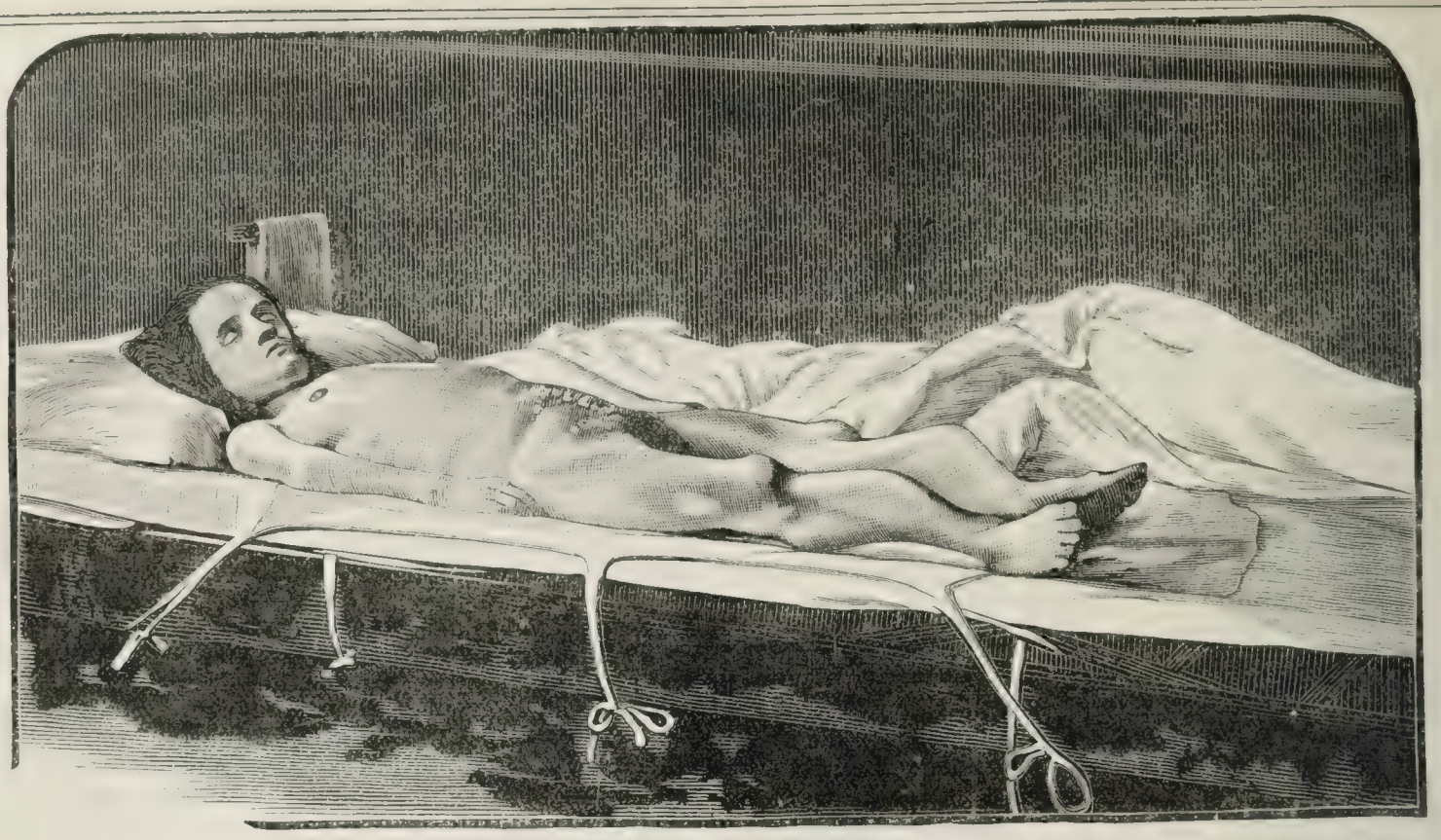
May 22nd. No discharge *per vaginam*.

June 15th. To-day a sanguineous discharge, very small in quantity, appeared *per vaginam*, accompanied with pain in the back and the other usual symptoms of menstruation.

June 16th. Patient allowed out of bed.

Several points in this operation offer themselves for our consideration. To begin with, I do not hesitate to rank myself with those who refuse to attach any single operator's name to this operation as at present so generally performed, as I think its present success is due more to the labours of several than to any

[1] Read in the Section of Obstetrics at the Annual Meeting of the British Medical Association held in Leeds.



Patient in Dorsal Position under Chloroform.

special procedure as claimed for Sänger. As evidence of the marked progress, I have only to direct your attention to the



Anterior View.

literature of the subject a few years ago and you will find no mention made of the various steps in the operation which now command our best attention. We have, for instance, argument for or against the turning out of the uterus before removing th child, varied opinions regarding the material for stitching th uterus, some preferring silver, whilst others use silk or catgu Again, opinion is divided as to whether Cæsarean section shoul alone be performed, or that in addition the Fallopian tube should be ligatured, the ovaries removed, or the uterus itself ex tirpated.

Concerning the first point, namely, the turning out of the uteru before emptying it, and the use of a ligature to control bleeding I have not in either case done so. With sufficient care the uteru

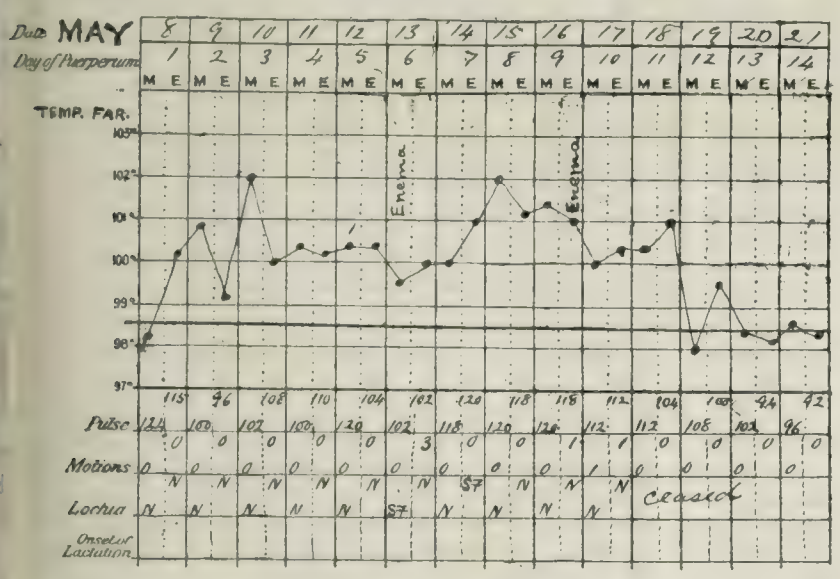


Portrait of child taken on the second day.

can be emptied without being turned out of the cavity, and I ma say that the extension of the abdominal wound for three or fou inches above the umbilicus, in my opinion, adds to the danger.

In opening the uterus any bleeding that may occur is easil controlled, and should it be troublesome after the child is e tracted an elastic band could then be very easily applied, as i earlier application is not without danger to the child. In my la

case very little blood was lost, not more, in fact, than in any normal labour. In extracting the child I prefer to do so head first rather than by the feet as taught in textbooks, as, the head once removed, the body follows easily when no time is given for the uterus to contract. In the case just reported this procedure was followed, as only eight minutes had elapsed from the first incision in the abdominal wall till the child was extracted. Owing to the high position of the head, the presentation being breech, before rupturing the membranes I carefully turned the child somewhat by pressing upon its right shoulder till I got the head immediately under the incision, when the membranes were opened and the child speedily extracted. The patient was sterilised by tying both tubes with antiseptic silk, a procedure at once simple and not very likely to be followed by any ill effects. The removal of the ovaries by some is now looked upon as being an operation almost likely to be followed by grave results, mental or otherwise. In any case it has yet to be shown that evil results will follow the tying of the tubes. Should this proceedure eventually be free from any bad effects, I think no one looking at the results now attending the improved Cæsarean section will for a moment hesitate to perform it in preference to the modification of Porro.



To stitch the uterus I used straight needles about three inches in length with silk prepared in carbolic acid. The threads were passed from the wound outwards, and grasped only the outer two-thirds of the uterine wall, avoiding the endometrium. The number of stitches must vary according to the judgment of the operator; in this case thirteen were inserted, whereas in my first case only seven were used. In both cases no difficulty was experienced in getting complete apposition of the peritoneal surfaces. With regard to the use of silver wire and catgut, I question the safety of leaving wire in the uterine tissue, and catgut has proved untrustworthy.

Concerning any interference with the internal surface of the uterus, I may state that in neither case was the cavity washed out; and as to sponging the surface with liq. ferri perchloridi, or dusting it with iodoform, I am thoroughly opposed, as either procedure would favour the formation of clot, which would be sure to set up irritation. On no account should a drainage tube be placed in the cervix, not only because, as Garrigues alleges, it may become a source of infection, but because it acts like a foreign body, and is apt to excite hæmorrhage, with distension of the uterus and gaping of the uterine wound.

In conclusion, I may state it as my firm conviction that the time is speedily approaching when this operation will take the place of craniotomy where the child is alive, and that it only remains for each one who has occasion to perform it to faithfully follow up the work with the same spirit as Sir Spencer Wells and others, in order to sweep from our practice an operation which is antagonistic to our own feelings, and which demands the life of the child whilst it imperils that of the mother. As in this case, let us, when possible, decide beforehand if Cæsarean section is to be performed, avoid unnecessary manipulations or attempts at delivery by other means, and secure the strictest antisepsis before, during, and after the operation, which should be performed at an early stage.

Note.—Since writing the above I have had a third successful case, notes of which will be read at the Birmingham Meeting.

EXTRACTS FROM

THE MILROY LECTURES

ON THE

ETIOLOGY AND PREVENTION OF PHTHISIS.

Delivered before the Royal College of Physicians of London.

By ARTHUR RANSOME, M.A., M.D., F.R.S.,

Physician to the Manchester Hospital for Consumption and Diseases of the Throat.

Lecture III.—Predisposing Causes of Phthisis.

Universal Distribution of the Bacillus.—Numbers Ejected by Consumptives. a. *Reasons for Immunity, Mechanical and Physiological.—Dosage of Bacilli.—Varying Susceptibility.—Mitral Stenosis.—Lithiasis.—Copper and Wool Workers.*—b. *Predisposition to Infection.—The Tuberculous Constitution.—Hereditary Tendencies.—Direct Infection.—Latency.—Vulnerability.—Age, Sex, Race.—Influence of Previous Disease.*—c. *Modes of Infection: by the Skin, Generative Organs, the Digestive Tract, the Lungs.—Food, Flesh of Tuberculous Animals.—Milk.—The Atmosphere.—Direct Contagion.—Sputum.—Dust.—Infected Houses.—Convents.*—d. *Conditions enhancing Infectiveness of Bacillus.—Foul Air.—Dampness of Soil.—Organic Vapours.*

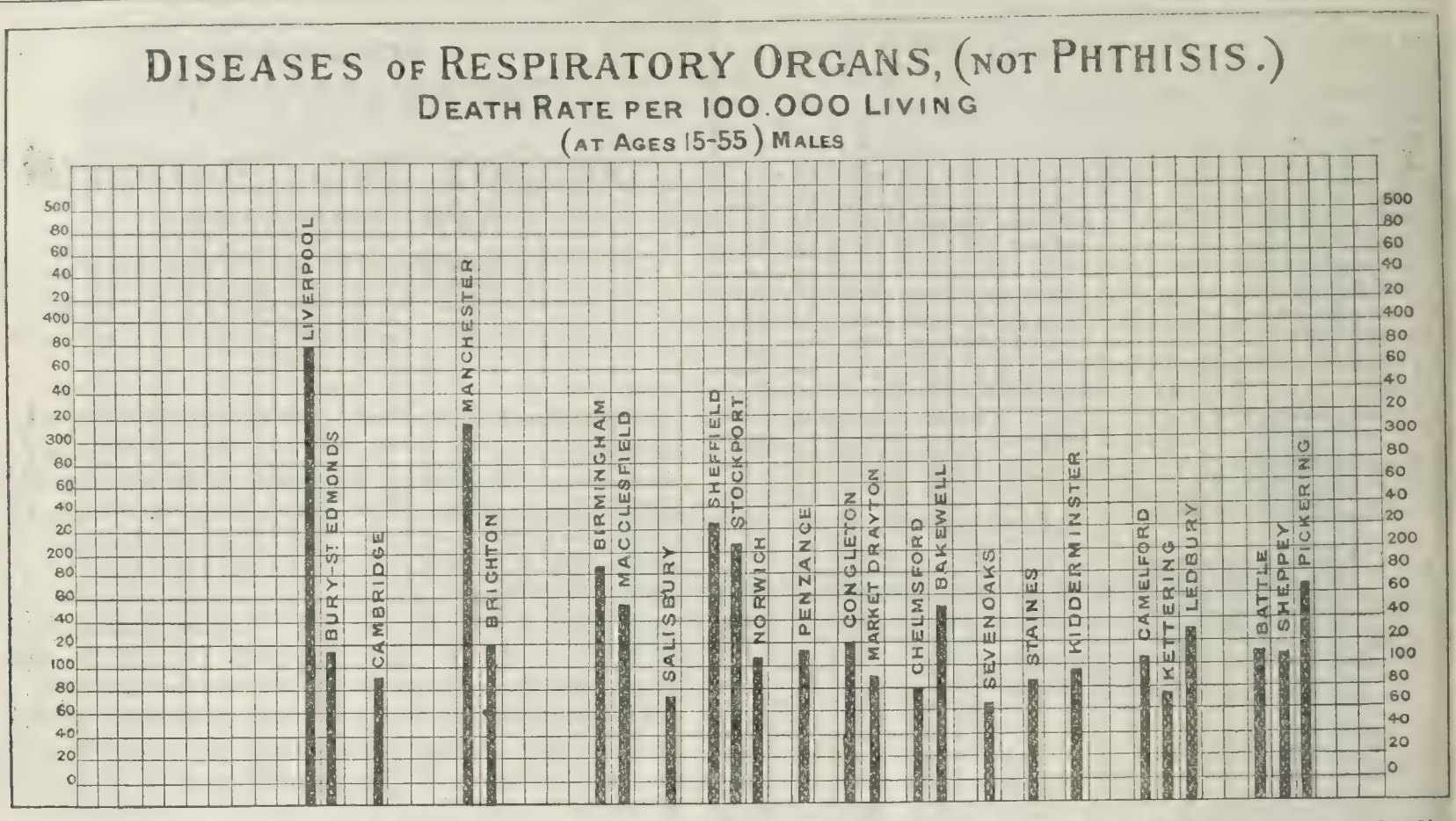
It has been calculated by Bollinger that one phthisical person may eject from his body in the course of twenty-four hours no fewer than 20 millions of bacilli. The sputum thus ejected has been found by Koch to possess a marvellous tenacity of life, being still alive and virulent in the dried up sputum after a lapse of several months. It is certain that the germs of the disease are almost everywhere present, and that we all of us inhale some of them in the course of each day or week. The presence of phthisis in our midst ought not, then, to be difficult of explanation; we should rather in the first place seek out the reasons for the exemption of so many from the results of infection.

Reasons for Immunity from Tuberculosis.—Amongst the conditions necessary for the growth of the bacillus there is yet one that was mentioned in the first lecture, and which is of great significance, namely, that it requires a sojourn of one or two weeks, and sometimes more, in a suitable medium before it can take root, so to speak, and develop into a colony. Now, from Mr. Watson Cheyne, and Dr. Kidd, and others we learn that the epithelium of the ultimate portions of the air passages is usually the first point of attack by the organism. We may therefore suppose that it is necessary for the organism to effect a lodgment somewhere in this position. Or, again, it may perhaps make its way into the interalveolar lymphatics by means of the prolongations of the branched cells of the alveolar septa, called by Dr. Klein "pseudostomata," which he has shown to be capable of taking up foreign bodies, such as oxide of iron, silica, and even carmine (Likovski), but there are in the healthy body various impediments, mechanical and physiological, which it is difficult for it to overpass.

1. We have the difficulty with which minute bodies such as the bacilli could reach the ultimate air passages.

It is true, as Professor Tyndall has shown by means of his illuminated tube, that the lungs possess a sort of filtering action, due to the entangling of the dust by the mucus lining the air passages. That this filtering action is not complete, however, I have myself proved, both by the microscopical examination of the aqueous vapour of the breath, in which there were numerous epithelial scales and other objects, and by the detection of a few very sparsely scattered bacilli in the breath of certain consumptive patients.

In some forms of lung disease, also, accompanied by copious bronchial secretion, the probability of this event is increased, especially if the accompanying cough prevents the lodgment of mucus in any of the air tubes. As has been shown in the research mentioned, the organic matter of the breath is always less when there is much secretion. The proportionate amount of this sub-



tance exhaled in the aqueous vapour from the lungs was only one-half of that from healthy persons; not that there is really less organic matter thus excreted, but because it was taken up by the mucus before it could reach the mouth. The immunity from phthisis of many cases of chronic bronchitis and emphysema is, perhaps, due to this cause. On the other hand, the influence of a lessened mobility of the chest, and the consequent partial stagnation of the air, is shown in the tendency of the upper lobes of the lungs to tubercular deposit, and we may place in the same order of predisposing causes the evil results of a stooping or constrained posture during work. Perhaps, too, the well-known tendency to tubercular infiltration of parts of the lung, confined by pleuritic adhesions or consolidated by catarrhal pneumonia, may be due to the facility afforded by a prolonged lodgment of the bacillus; and the same may be said of hæmorrhagic deposits in the lungs. In this case the organisms would receive both board and lodging for a term amply sufficient, in many cases, for its development.

2. Another barrier to infection from the bacillus, even if it obtains a temporary lodgment, may be found in the vital processes carried on in the lungs. I am not aware of any direct experiments upon the action of nascent oxygen or of ozone upon the virulence of the bacillus; but my own experiments with the latter agent in fifteen cases of phthisis seem to show that it has a distinct influence in enabling the system to tolerate the presence of these organisms, and gain health and strength in spite of their continuance in the body. In any case, whether by simple oxidation or by the energy of other vital actions, probably also, as Koch and others have shown, by the direct antagonism of phagocyte corpuscles, it is certain that the healthy human body has the power of disposing of a certain quantity of these creatures, even after they have been directly injected into the system.

The recent observations of Bollinger on this point[1] are of great interest. He shows that very dilute solutions of sputum (1 in 100,000) and of cultures of bacilli (1 in 400,000) are virulent when injected into the peritoneum, but that much lesser dilutions were inoperative upon the intestine. In these researches the peritoneum remained sound in two-thirds of the cases, but the disease attacked the lymph glands, the spleen, and the lungs. Incidentally it may be remarked that this observation shows that lung tuberculosis need not always depend upon inhalation, but may arise from virus that has been swallowed or injected.

But in addition to these evidences of varying susceptibility to the poison, Dr. Bollinger ascertained that whilst 800 bacilli, when injected into the peritoneum, are sufficient to cause the disease smaller numbers than these become less and less certain in their operation.

We may gather from these facts the lesson that, up to a certain point, the healthy body is able to destroy, or at least render innocuous, the organisms that gain access into its interior. There are probably great differences in this respect in different individuals, just as we know that some people seem to be quite proof against the infection of certain exanthemata, whilst they are especially prone to others.

These being some of the reasons for immunity, what, next, are the reasons for infection? It seems highly probable that a certain form of chest, with insufficient expansive and expulsive power may afford opportunities for the deposit of the tubercle bacillus; but, on the other hand, I have seen men of the finest physique and with magnificently developed chests, fall victims to the disease. I apprehend that many of the cases occurring amongst Her Majesty's Foot Guards must have been of this description.

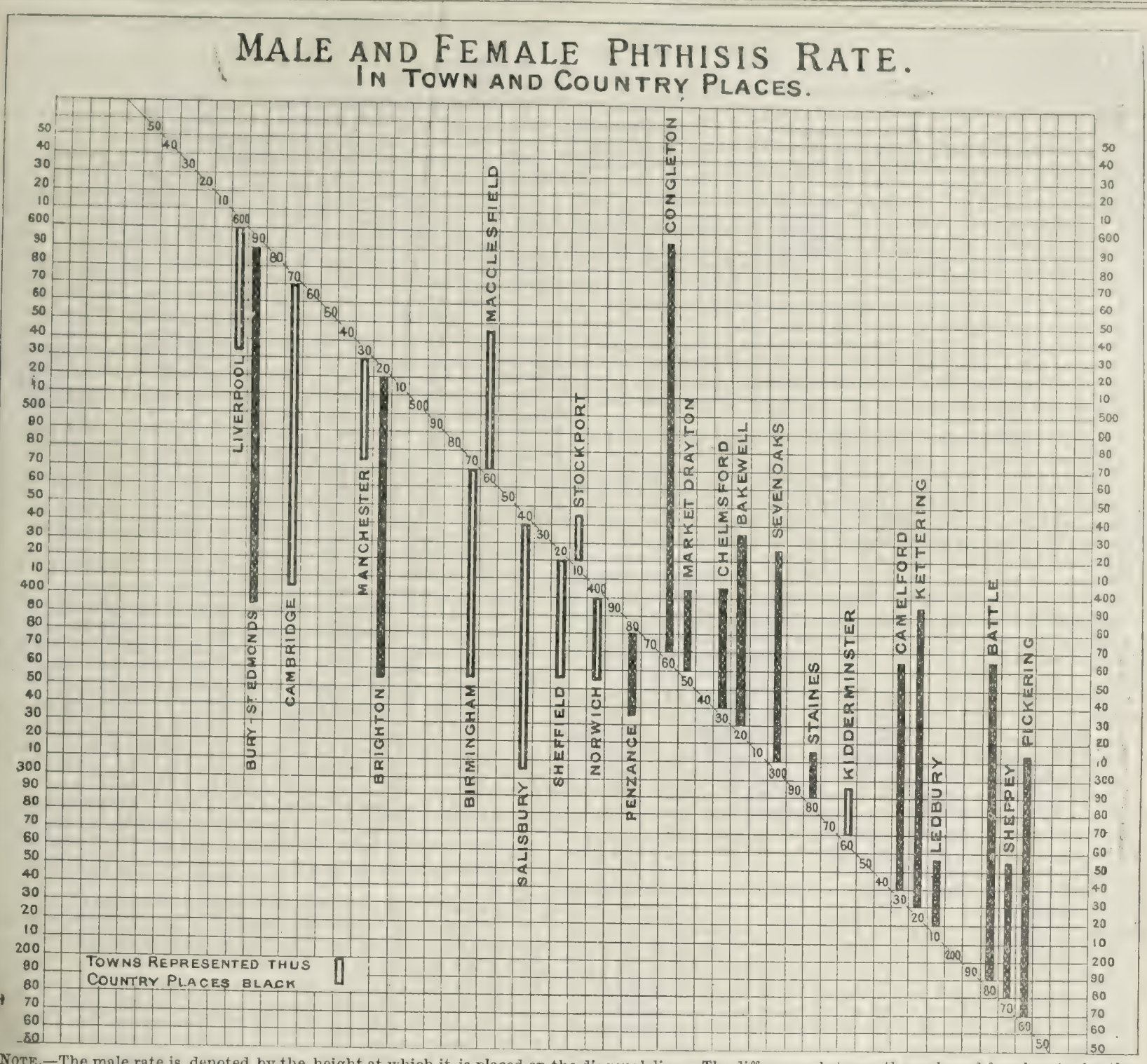
Heredity.—Few medical men who have been long in practice will doubt the existence of family predisposition to tubercular disease. Thus, Briquet found that one-third of the consumptive patients at a hospital were born of consumptive parents on one side or the other; Dr. Quain, 25 per cent.; Dr. J. Pollock, 30 per cent.; Dr. C. T. Williams, 12 per cent. of direct influence and 48 per cent. of family predisposition. Rilliet and Barthez found that 1 in 3 of tuberculous children had some hereditary taint; Mr. Phillips only 4 per cent.; Lebert, two-fifths; Lugol states that more than half the subjects of scrofula have consumptive progenitors. Francis Galton[2] gives 26 per cent. of consumptive children by one method of calculation and 28 per cent. by another. But in these figures no account is taken of the influence of external circumstances, sources of infection from without that are common to all the members of the family.

Again, there are so many deaths from phthisis in the country. Nearly half of all the deaths between the marriageable ages—from 15 to 35—are due to this cause; and hence, without any such thing as hereditary taint, there would be nothing surprising in the fact that half of the consumptive patients have had consumptive relatives, unless the families were unusually large; and if we draw grandparents and collateral relatives into the statistical net, it breaks at once and holds no solid conclusion.

Dr. Walshe obtained from his hospital patients the result that about 26 per cent. came of father or mother or of both parents similarly diseased; but in discussing the significance of these

[1] *Deutsche med. Wochenschrift* for October, 1889, p. 849.

[2] *Nat. Inheritance*, page 173.



NOTE.—The male rate is denoted by the height at which it is placed on the diagonal line. The differences between the male and female rates by the length of the lines above or below the diagonal, and the position of these above or below shows whether the female rate is above or below the male rate.

figures, he asks whether they prove the reality of hereditary influence, and decides that they do not. "This ratio," he says, 'of 26 per cent. might be, and probably is, no higher than that of the tuberculised portion of the population generally," and he concludes that "much phthisis is in each generation non-hereditary."

It is, moreover, highly probable that heredity has much less to do with consumption than is commonly supposed. A very large proportion of cases arise without any phthisical family history of the past. Many healthy families leaving the country and coming to reside in crowded towns lose some members subsequently from consumption. In the army more than 60 per cent. of cases are non-hereditary.

Whilst I admit the existence of hereditary predisposition to tubercle, I do not attribute to it a great importance, and if we set aside the few congenital cases of the disease, I believe that the transmission of an aptitude to contract it does not necessarily lead to the disease itself, if care is taken to avoid the sources of external infection. In short, I am inclined to agree with Louis when he declares that "few persons are born necessarily to die of consumption."

2. *Age, Sex, and Race.*—Somewhat similar remarks must be made with respect to the influence of age, sex, and race upon the tendency to contract the disease. We have already seen that up to the age of puberty the mortality from phthisis is comparatively rare, but after this age the younger residents in an infected house are often the first to succumb to the disease. All races, also, as we have seen, suffer more or less from the disease, though it is acknowledged that the negro, as well as the monkey, suffers grievously when transplanted from his own land.

It is well known that certain disorders, such as enteric fever and measles and small-pox, especially after an imperfect recovery, often leave behind them a serious tendency to contract tubercular disease; but it is to previous affections of the lungs that we must look as the most common causes of bodily predisposition. Many cases of phthisis are preceded by purely inflammatory diseases of the lungs, such as pleurisy, acute bronchitis, broncho-pneumonia, and imperfect resolution of ordinary pneumonic inflammation.

That there is no necessary connection between ordinary diseases of the respiratory organs and phthisis may be shown by comparing the rates of mortality of these two classes of disease. I have here a chart, drawn from Lowe's tables, from male populations at identically the same ages (that is, from 15 to 55), from which it may be seen that the height of the line indicating the prevalence of ordinary lung diseases bears no direct relation to the prevalence of consumption. It is true that both Liverpool

and Manchester are severely visited by both types of disease, but on each side of them stand many places in which there is no such correspondence to be seen.

There are four possible modes of access to the interior of the body—the skin, the generative organs, the digestive tract, and the lungs, The first two are, I believe, comparatively rare sources of infection. I. Tuberculosis is, indeed inoculable by the skin, and there are on record cases in which it has thus been accidentally contracted.

The most common mode of origin of scrofulous lymphatic glands is well known to be some previous lesion of the skin or mucous membrane. Lupus also, which is now generally acknowledged to be a tuberculosis of the skin, does not usually spread to the general system. On the whole, then, I believe that infection of general tuberculosis by the skin is a comparatively rare event.

II. Infection by means of marital intercourse is also probably very uncommon. It is impossible to say that it may not occasionally take place, especially in view of the observations of the French pathologists, which have already been quoted, as to the presence of the specific bacillus in the generative organs and in the semen.

III. *Food.*—In former times the discussion of the question of the production of tuberculosis by food was limited to the subject of the adequacy of certain foods; but Villemin and Cornil succeeded in producing tuberculosis by feeding animals with tuberculous material, and their researches have been confirmed by others, notably by Von Wesener. The question as to the suitability for food of the flesh of tuberculous animals undoubtedly is one of enormous importance. It has been stated (Dr. Berendt) that as much as 80 per cent. of meat sent to the London market came from such animals;[3] and in many places the prevalence of the disease amongst cattle has been found to be so great that it has been proposed, and in some places actually decided, to place an absolute veto upon its sale.

Extreme differences of opinion, however, prevail as to the necessity for so greatly restricting the supply of animal food. On the one hand, at the Congress on Tuberculosis, held in Paris in July, 1888, M. Nocard urged that if an animal presented signs of tubercle in any organ, howsoever localised, it should at once be rejected as unfit for food; and he was followed by other speakers on the same side, with the result that a resolution was passed by the Congress "that all meat derived from tubercular animals, whatever the gravity of the specific lesions found in them, should be seized and totally destroyed."

On the other hand, Kastner,[4] after adopting most rigorous antiseptic precautions, injected the juice from the flesh of twelve beasts, in all stages of tuberculosis, into the peritoneal cavities of sixteen guinea-pigs, with absolutely negative results. My friend, Dr. Dreschfeld, of Manchester, has made similar experiments with juice from the flesh of six cows, five of them in an early stage of tubercular disease, and one in an advanced form, though no tubercles were found in the flesh. The results from the first mentioned group were entirely negative, the rabbits injected remaining perfectly healthy; but the juice from the flesh of the cow in a more advanced stage of the disease produced a small crop of tubercles at the place of puncture into the abdominal cavity of two rabbits after the lapse of from three to five weeks, and material from this tubercular growth injected into another rabbit again gave rise to still more decided tubercle.

The evidence as to the transmissibility of tubercle by the ingestion of milk from tuberculous animals is much more distinct and positive as to its occurrence, even when there was no general infection in these beasts. In the Registrar-General's report for 1888, the deaths of 3,659 males, and 3,115 females are ascribed to tabes mesenterica, and 3,722 males, and 3,021 females, to tubercular meningitis. Hirschberger declares that 25 per cent. of all children dying under one year of age, die of tuberculosis. It is assumed that many of these cases are directly the result of intestinal infection by the bacillus.

Bacilli have been found by Bang[5] in milk, both when the udders of the tuberculous cows were affected, and when they were not and he obtained constantly positive results by feeding with the former, and occasionally with the latter; and he found that heating the milk to 70° C. did not always destroy its virulence; only boiling would entirely do so.

Ferdinand May and Gottlieb Stein have made similar observations, but these researches are open to objection on the ground that tuberculous material may have entered the milk from without; and on the other hand the digestive juices may act destructively on the infection when it is actually present.

On these grounds Dr. Hirschberger, under the guidance of Professor Bollinger, instituted a series of experiments in which extreme care was taken to avoid these possible sources of error. The milk was obtained in two ways: 1. By milking into glass vessels, sterilised by heat. 2. By drawing it directly from the udders of recently slaughtered beasts, antiseptic precautions being strictly observed. Guinea-pigs were the experimental animals employed, and the milk was injected into the free peritoneal cavity. The animals were always young, and fresh on the market, and they were kept under excellent hygienic conditions. A very large number of the animals contracted tubercle, even when, as in three cases, the udder itself was unaffected, and out of twenty udders used, in only one was the presence of bacilli demonstrated by the microscope.

In only six cases was no infection obtained; and even when the cows were in otherwise good condition, which seven of them were, positive results were obtained in three cases.

He concludes from his researches that there is great danger attending the consumption of milk from tuberculous animals, in whatever condition they may be, and whether or not the disease is localised only.

In the presence of facts such as these, we cannot deny the possibility of the transmission of tubercle by means of the flesh of cattle, and it is highly probable that mesenteric and intestinal disease is not infrequently produced, especially in children, by the use of infected milk, but there are certain broad considerations that should, I think, prevent us from attributing much of the phthisis that prevails to either source of infection.

1. The classes who eat most meat are not those who are most commonly attacked by phthisis. It would be interesting also to know how those who ascribe such dire results to the eating of the flesh of oxen would account for the fact that in India the Hindus who abjure such meat, are as subject to phthisis as the other races, and also why the Guachos of South America, who subsist almost entirely upon beef, are so remarkably free from the disease. Dr. Thorburn, of Toronto, tells me that the North American Indians, who now get no meat, are terribly subject to consumption.

2. Somewhat similar remarks apply to the use of milk, for the poor denizens of our towns, amongst whom both phthisis and mesenteric disease are most common, are often unable to procure milk; but it must be acknowledged that, when they do obtain it it is more likely to be obtained from diseased animals, and also more open to contamination by tuberculous dust in the small milk shops in which it is stored. Still the comparative rarity of the disease amongst the children of the rich, who consume it largely and who very seldom will take it after it has been boiled, show that the danger from this source is not quite so serious as it has lately been represented to be, both in this country and on the Continent.

IV. *The Atmosphere.*—The next medium through which the bacilli may be conveyed is the air. The word contagion implies transmission by contact, and, in the case of phthisis, it would naturally be taken to mean the direct transference of the disease from person to person. That contagion from a consumptive patient is a possible event is an opinion that has been held by many eminent men; and quite recently a number of supposed cases of contagion have been contributed by medical men to the Collective Investigation Committee of the British Medical Association. In a paper on "The Limits of the Infectiveness of Tubercle" I have pointed out that, when checked by means of Dr. Longstaff's formula, supplied by the Committee themselves, the number of cases of phthisis in husband and wife, supposed to be due to contagion is less than it would have been had only accidental and non-contagious cases been admitted into the record. Moreover, we have to take into account the possibility of contagion by sexual intercourse,[6] and the certainty that, in most of the cases of supposed direct infection, all the persons whose cases are noted were exposed

[3] This must be an exaggeration, as the Departmental Committee on Tuberculosis, in 1888, reported to the Privy Council that the proportion of tubercular disease among cattle slaughtered varies from .0.2 per cent. at Edinburgh to 50 per cent. (Quest. 4263).

[4] *Münchener med. Wochenschrift*, August 20th and 27th, 1889.

[5] *Tidsk. f. Landoeconomi*, 1886.

[6] It may perhaps be regarded as favourable to this view, that in 188 cases reported to the Collective Investigation Committee, 119 are of supposed transmission from husband to wife, and only 69 from wife to husband (Report, p. 33) and Dr. Weber's experience is to the same effect.

to the same risks arising from unhealthy environment; and, again, if phthisis were directly contagious, it is remarkable that it should be chiefly contagious in badly ventilated houses, and on certain soils; and it is further difficult to see why drainage of the land and elevation above the sea level should in any way affect its contagiousness. Dr. Dewar, of Arbroath, makes the significant remark that in all his cases of supposed infection (No. 166), "the patients lived in small confined houses, and slept in the 'box beds' in use in Scotland." "During twenty-five years," he says, "I have not seen one case of contagion in the airy houses of the well-to-do."

2. As to the dissemination of phthisis by means of dust, it is well known that Koch regards this as the most common way in which it is produced—by the drying up and pulverisation of matter expectorated upon the ground, on the floors of dwellings, or on handkerchiefs.

Long before the discovery of the bacillus of tubercle, also, this view was taken by some of the most competent observers; thus Dr. Farr, in his Report to the Army Commission, remarked that "the prevalence of phthisis in the armies of Europe is probably due in part to the inhalation of expectorated tubercular matter, dried, broken up into dust, and floating in the air of close barracks."

The retention of the bacillus either in dust or in the vapour of the air would fully account for most of the cases of the supposed direct infection recorded by the Collective Investigation Committee, and especially for those in which the virus appeared to be introduced from without into houses previously entirely free from the disease (see Cases No. 188, 194, 196, and 255). It accounts fully for all the additional cases mentioned by Dr. Burney Yeo in his able defence of the doctrine of contagion in the JOURNAL, April 18th, 1885.

3. We have now reached, perhaps, the most difficult part of our inquiry, as to whether any conditions outside the mere presence of the bacillus are necessary, or at any rate auxiliary, to its infective power.

(1). With regard to the influence of free ventilation, it is not only possible, but highly probable, that in many of the places where its good effects have been observed, other conditions as well have come into operation, and especially greater cleanliness and more complete removal of dust and other refuse. Where people care for fresh air, they also frequently show a preference for cleanly surroundings, both of house, and clothes, and person.

(2). Somewhat similar remarks may apply to the influence of an elevated site upon even indirect infection through dust, for in these situations we probably have both more movement of air and less dust.

(3). But no such explanations as these will touch the remaining two points that we have to consider. If there is no condition outside the body that influences the viability or the virulence of the bacillus, it is very difficult to account for the comparative immunity of frosty or sub-arctic regions, and for the intensity of the tubercular action in hot or tropical climates. It is certain that chronic inflammations of the lungs are not more common in the latter, and thus one source of the disease is not so frequently present; whilst in the cold regions, where these affections are rife, phthisis is comparatively rare and much less virulent. We have no reason to suppose that bacillus-laden dust is absent in the crowded towns and close rooms which are to be found in Canada, for instance, and yet the disease does not spread as it does in the warmer and more genial air of Italy and the tropics.

(4). Again, it affords no explanation of the influence upon such infection of damp or undrained subsoils, nor yet of the improvement in the phthisis rate that has been shown to follow thorough drainage of a town.

To account for these several points, it is necessary to assume the existence of some condition necessary to infection by the bacillus, which shall either enable it to live longer outside the body, or which may even increase its power of attack.

I have ventured to suggest that the tubercle bacillus, like some other infective microzymes, may actually take up an increase of virulence by a sojourn for a time in some medium external to the body, either in polluted ground air or in an atmosphere saturated with aqueous vapour from the lungs.

I do not know whether the same observation has been made by other physicians to consumption hospitals, but it has certainly struck me that a fresh infection of the lung in persons already suffering from phthisis is much more likely to take place from without than from within the body. Many times have I seen in-patients, with sputum teeming with bacilli, improve in health, gain weight, and almost lose the physical signs of their disease; and then they have returned home, and in a few weeks they have come back to the hospital, sometimes with fresh disease in the damaged lung, sometimes in the opposite lung that had been previously healthy, and sometimes with laryngeal phthisis.

Such facts as these certainly seem to show that there was something in the air of their own homes much more infective than the bacilli of which they were themselves the hosts. The one fact that might seem to bear against this theory is the high temperature required for the development of the organism; and the greater virulence of the disease in hot climates probably shows the influence of this condition, but it is by no means proved that in cold climates the bacilli contained in damp and foul dwellings may not in some way increase their power for evil.[7]

CASE OF CÆSAREAN SECTION FOR OSTEO-MALACIC PELVIS.

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ON December 4th, 1889, I was called upon to attend in labour I. McC., wife of a farm labourer. I saw her at her residence about two miles distant, at 7.30 A.M. The patient, aged 37, a small, delicate, emaciated woman, was mother of five children, and all her previous labours had been natural and easy. I myself attended her at her last confinement on August 17th, 1881, when the pelvis was quite natural and roomy, and she had an easy labour, not even the forceps being required. After this I lost sight of her, but there was the history of her having, immediately following this confinement, to keep her bed for over six months from what was called "rheumatic pains." For some six months or so more she was only able to be carried to a chair at the fire. After this she began to go about a little on crutches, and gradually gained strength, but remained permanently "bent in the back," "sunk," and "stooped." During the latter months of gestation, she said her health had been very bad, and scarcely anything was retained on the stomach, so that she was very weak. When I saw her she had been about forty-two hours in labour, and yet, as she said, "it was doing no good; the lump had not gone down, as it used to do." Examination revealed an extreme degree of pelvic contraction and deformity. The tubera ischia were less than three-quarters of an inch apart, almost obliterating the pubic arch; so closely approximated were they that the index finger could only with some difficulty pass between them. The sacrum and coccyx projected forwards, leaving only a narrow chink between them and the approximated ischia. For want of space, caused by this narrowing of the outlet, it was impossible to make out the presentation. As delivery by the natural passage seemed to me an impossibility, I sent for my friend Dr. Thompson, of Bellaghy, who arrived shortly after 10 o'clock. On examining her, he agreed with me that the only chance of delivery must be the Cæsarean section. The nature and dangers of the operation were explained, and the sanction of the patient and her husband having been unhesitatingly obtained, we determined to lose no time in carrying out the operation, as the powers of Nature were already greatly exhausted by the prolonged labour. Giving directions to have the house thoroughly heated and other preparations made, I returned home for the necessary instruments, etc., and proceeded again to the house at 12 o'clock, accompanied by Dr. Thompson and Dr. Hueston, of Maghera, who kindly afforded me their valuable advice and assistance. The patient was lying in the kitchen of a farm labourer's cottage, so that the surroundings were not favourable for a serious operation. However, there was no alternative. The rectum was well cleared out by an enema, a catheter passed, and the patient placed on a suitable table, and put under the influence of chloroform. With the strictest antiseptic precautions possible under the circumstances, the usual incision was made, and without any difficulty I speedily removed a living child, healthy, and fairly well developed. In making the incision in the uterine wall, I came on the placenta attached to the anterior surface. This I cut through, and the child and placenta were removed without any trouble from hæmorrhage. Owing probably

[7] The case against infection by sputum dust only without some increase of virulence from external conditions is well argued by Dr. Candler in his work on the *Prevention of Consumption* (Kegan Paul and Co.). Many of Dr. Andrew's observations in his Lumleian Lectures point in the same direction.

to exhaustion caused by the prolonged labour, the uterus did not contract well. After ascertaining that the passage to the vagina was patent, the uterus was sutured by chromicised catgut passed deeply into the tissue. The peritoneal cavity was sponged out, and the wound in the abdominal wall secured by six silk sutures passed deeply, so as to include the whole thickness of the wall and peritoneum, and superficial ones through the skin between these. The wound was dusted with iodoform, covered with wood-wool, and secured by four broad strips of adhesive plaster and a flannel binder over all. The external genitals were covered with carbolised tow and cotton wool. During the suturing of the external wound, vomiting set in from the chloroform, but it soon ceased, and the patient was put to bed, with a pulse, though weak, as good as before the operation. A hot water jar was put to her feet, her head covered with flannel, and a hypodermic injection of morphine given. In the evening I found her in a satisfactory condition, but retching and vomiting at intervals. Ordered nothing to be given by the mouth except small quantities of brandy and iced soda-water. Passed the catheter.

December 5th. Comfortable, but retching a little; passed catheter. In the evening she complained of rather severe pain in the right side of the abdomen with accelerated breathing; pulse 136, temperature 99.4°. Gave a quarter of a grain of morphine hypodermically, passed catheter, and syringed out the vagina with carbolic acid lotion. One grain of opium to be given every four hours until pain ceased.

December 6th. Found her much better, having slept after the morphine; pain almost gone; expresses herself as feeling comfortable; had passed urine voluntarily.

For the next two days her condition was fairly satisfactory; scarcely any pain; temperature never higher than 99.4°, but pulse continued to increase in rapidity and weakness. During the entire treatment, nourishment was given by means of enemata consisting of beef-tea, brandy, egg, Benger's food, etc., which were well retained. The vagina was syringed out regularly, and the discharge remained healthy.

On the evening of the 8th, I found her worse. Delirium and restlessness had set in and continued until her death, which occurred at 6 o'clock P.M. on December 9th, the sixth day after operation.

On removing the dressings after death, I found the wound in the abdomen healed, and not a drop of pus was observed. There was gaping between two of the sutures, but this was evidently caused by her restlessness before death, when she could only with difficulty be restrained from tearing off the dressings. I got permission only to reopen the abdominal wound, so that the examination was very limited, and it was also, under the circumstances, hurried. I found the stomach and intestines much distended with flatus. There was marked peritonitis with adhesions, which probably arose on the day after the operation. The uterus was forced down by the distended intestines, was well contracted, and there appeared complete union of the uterine wound. There was no blood or effusion in the abdominal cavity.

REMARKS.—As she got over the period of collapse, and escaped the second great danger (namely, septicæmia), hopes were entertained of recovery. The cause of death was peritonitis, and I may call attention to the obscurity or "latency" of the symptoms. Except for two or three hours she scarcely suffered any pain; her temperature was never above 99.4°. The most marked symptom was the accelerated pulse, gradually increasing in rapidity and weakness, which might have been an indication of exhaustion or prolonged collapse, independent of peritonitis, taking into consideration her enfeebled condition at the time of operation. Notwithstanding the unfavourable result to the mother, the case seems to me of interest not on account of anything novel in the performance of the operation, or, unfortunately, in the result, but from the nature and rarity of the deformity necessitating the operation.

There can be no doubt of this being a case of mollities ossium. The pelvis was characteristic of this deformity and contraction. The nature of the outlet has been already described, and from the slight *post-mortem* examination made I found irregularity and deformity of the brim corresponding to the outlet, although not to such an extreme extent. The iliac and pubic bones were pressed inwards, narrowing the cavity of the pelvis transversely, and the vertebral column had sunk into the pelvis, and overhung the brim.

I regret very much not having had the advantage of a complete *post-mortem* examination so as to have taken measurements. The case is of interest in several respects. 1. The rarity of the disease in this country. In the north of Ireland, at least, I believe it to be exceedingly rare. 2. The extreme degree of the deformity; and, 3, the complete ossification of the previously softened bones, and, as a consequence, the absolute necessity of the operation performed. Spiegelberg says, "It is extremely rare for complete recovery to take place, or for the pelvis again to become ossified." Barnes, in describing his new method of embryotomy designed "to effect delivery in extreme cases of pelvic contraction," where Cæsarean section was previously considered the only resource, and defining the cases suitable for it, says: "Where two fingers can barely pass between the tuberosities of the ischia, there will be insufficient room for manipulation, and it will be scarcely possible to guide the *écraseur* through the pelvis." "But in these cases," he adds, "the bones will often open up under pressure applied from within." Again, Spiegelberg says: "That most of such pelves are dilatable, and labours *per vias naturales* have become more common. Casati asserts that he has almost always found the osteo-malacic pelvis (which is so common in Milan) to be dilatable, and has extremely rarely been obliged to resort to Cæsarean section, only in two out of forty-one cases." These quotations show how rare it is for complete ossification to take place. Even if the head had entered the pelvis in this case, which it could not do, delivery would have been equally impossible, as the bones at the outlet were absolutely rigid and unyielding. This was easily tested on account of the close approximation of the ischia, where the slightest yielding could have been detected. No doubt the complete consolidation of the bones was promoted by the long freedom from child bearing. The morbid process which deprived the bones of their calcareous matter had ceased to progress, and they, in the course of time, had become re-ossified.

As regards the etiology of the disease, about which so little is known, I may mention that my patient attributed her illness to a damp, cold, and badly lighted house. So convinced was she of this fact that, as soon as she was able, she removed to another and drier house, after which she stated she improved much more rapidly. No doubt this may have been the exciting cause, under the lowering influences of the puerperal state, in a constitution delicate at the best.

ON THE HISTOLOGY OF A CASE OF SO-CALLED "DUCT CANCER."

BY ARTHUR E. BARKER, F.R.C.S.,
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THE patient from whose breast I have made these microscopic sections and drawings was a lady, aged 52, of healthy appearance but spare figure. Her attention was first drawn to her right breast some three years before she first came under observation by a slight serous discharge from the nipple; this had continued ever since. For about a week before I first saw her, on February 4th, 1889, this discharge had been tinged with blood. On examination of the breast I found it very much atrophied and scantily furnished with fat. The nipple was puckered at one side and hard at the base, but little if at all retracted. The skin over the breast, was in no way affected except by a trace of puckering at one spot on being pinched. There was a distinct hard nodule the size of a filbert, just above and to the inside of the base of the nipple, and another in the substance of the breast close to it. Manipulation of these knots caused an escape of bloody serum from the nipple. This fluid contained many large round corpuscles undergoing fatty change and also red corpuscles (Plate I *c d*). The former (*c*) were many times larger than the latter (*d*). There had been no pain in the breast until recently, and at the moment of examination it was said to be quite absent. The glands in the axilla were markedly knotty, but not enlarged, and were freely movable.

There was no history of abscess in the breast, nor of any injury except a severe bite of the nipple twenty-two years ago during nursing. The part is described as having been nearly bitten off and the irregularity at its base has always been attributed, and probably correctly, to this accident.

In view of all the facts of the case, I concluded that this was an instance of so-called "duct cancer," and thus described it to the patient's son who was the medical man who had brought the patient for consultation.

On February 7th, 1889, I removed the organ and the axillary glands in one continuous strip, cutting the skin widely. Convalescence was rapid; the wound healed everywhere by first intention, and the patient left the Nursing Home for her own house on the fifteenth day.

The examination of the breast turned out to be very interesting. My first section through the centre of the nipple and adjacent gland in the fresh state with a knife showed the ducts for the last inch or so of their course to be largely dilated as far as the base of the nipple. One which lay in the direct line of section was as large as a small goose quill. Its interior looked irregular, and like a varicose vein laid open (Plate I, *a*).

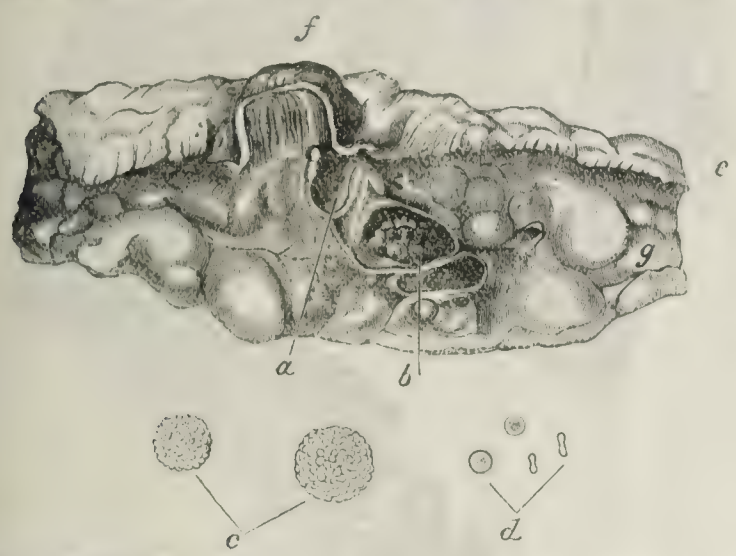


Plate I.—Section through centre of nipple of right breast, showing dilated ducts and a duct papilloma projecting into one of them. Drawn from fresh specimen. (Natural size.) (*a*) Dilated duct, (*b*) papilloma, (*e*) skin, (*f*) nipple, (*g*) breast tissue, (*c*) large granular corpuscles, (*d*) red blood cells in sanious discharge from nipple.

The corpuscles figured above were suspended in the sanious fluid which escaped from the nipple for three years preceding operation. There was blood only for a week previously. The relative size of these corpuscles and the red blood cells is well seen.



Plate II.—Vertical section through the large raspberry-like papilloma of Plate I. It is seen to be made up of four main lobes springing from a stem which is rooted in the duct wall. Each of the lobes can be seen to be broken up into smaller leaflets. (Natural size.)

The next thing noticed was a bright red, raspberry-like papilloma, about the size of a pea, projecting into the lumen of this largest duct from one of smaller size at a point about one inch from the surface of the nipple (Plate I, *b*). When I had made this drawing of the growth and its surroundings in the fresh state, the breast was hardened for microscopic examination. My first care was to determine the nature and relations of the soft papilloma. The sections which passed through its centre vertically showed it to the naked eye to be perfectly treelike in shape (Plate II, natural size), having a slender stem and many branches. The root was attached to the wall of the duct. Under the microscope, I found this papilloma to consist of a delicate strand of highly differentiated, almost non-nucleated, connective tissue, containing vessels of various sizes (Plate III, *d d*), and covered with a multiple or single layer of cuboid cells, tending in places to the columnar form. With the naked eye the papilloma (Plate II, natural size) can be made out to consist of four primary divisions spread out from the parent stem like the branches of an elm tree. The surfaces of each of these divisions or lobes when magnified are seen to be covered by a layer of low or tall cuboid cells, in parts quite columnar. These cells have in the section mostly fallen off the exposed surfaces of the primary lobes, leaving the fibrous substratum bare, but can be traced over the outlines of each where they are in contact one with another (Plate III, *g g*; Plate IV, *a a*). Each of these primary divisions of the growth is composed of secondary lobules (best seen in the less exposed parts), and these again of tertiary leaflets. All of these have essentially the same structure, but the cells which cover the smaller divisions are most distinctly columnar, being often very tall (Plate III, *a*). Each cell, if in single file, is attached to the fibrous substratum by its narrow end, the other being quite flat on the free surface. The single nuclei have nothing remarkable about them.

But besides these secondary and tertiary papillary outgrowths on the surfaces of the lobes of the main growths, each of the latter contains in its interior a number of spaces, of varying size and generally oval shape, separated one from the other by strands of the fibrous stroma, running for the most part in the direction



Plate III.—Vertical section of portions of two secondary leaflets of the large raspberry-like papilloma, showing a small tertiary papillary growth (*a*) springing from the fundus of the cleft between the two leaflets. Its structure is identical with that of the larger divisions of the papilloma. In its centre a small open cavity is seen corresponding with the large loculi (*c c*), fully formed in the fibrous stroma (*b b*) of the larger leaflets. Both the surfaces of the secondary and tertiary papillary formations and the loculi in their interior are lined with columnar epithelial cells. (*d d*) Capillary vessels running in the fibrous stroma of the papillary leaflets, and following the direction of their axes. (*g g*) Epithelial covering of two adjacent lobes of the first papilloma, forming the lining of a deep hollow between them, from the bottom of which springs the smaller papillary growth. (Low power. Hartnack, obj. 4, oc. 3 × 90.)

of the long axis of the lobe (Plate III, *b b*). These spaces are lined everywhere by irregularly columnar cells (Plate III, *c c*), in single or double layers, and into the larger spaces project again lobulated papillary growths (Plate III, *a*) of precisely the same structure as those already described. In some parts of the bodies of the lobes the stroma is so broken up by these spaces as to give the whole field an alveolar appearance, and as the epithelial cells in these alveoli are often irregular in shape, the resemblance to some forms of scirrhus is very close (Fig. IV). Whether each of these alveoli represents a section of a complete oval space in the stroma or only the bottom of a depression between adjacent lobules running at right angles to the plane of section I am unable to say, but the latter explanation appears at all events a possible one in view of the apparent branching in every direction of the lobules.

Coming now to the parts of the breast subjacent to the papilloma just described, I found nothing abnormal in the larger ducts either in the fresh state by the naked eye, or subsequently by the microscope. But in some of the smaller ducts a condition represented in Plate V is seen, which I think explains in a mea-

sure the mode of origin of the larger papillomata of the ducts. This change in the latter consists in a fairly regular outgrowth from the inner surfaces of the duct of projections covered by epithelium, which, on section, leaves little doubt that they are growths similar to the larger one just described, but at a much earlier stage of development. These projections consist of a central fibrous strand, covered by a double or treble layer of low columnar or cuboid cells. Some of these projections are simple spurs



Plate IV.—Vertical section through the body of one of the lobes of the raspberry-like duct papilloma showing the fibrous stroma split up into bands enclosing loculi filled with epithelial cells of varying size and shape. The whole section has a considerable resemblance to a section of scirrhus. The surfaces of the lobe are seen to be covered with columnar epithelium, *a a*. (High power.)

(Plate V *a*); some are commencing to branch (Fig. V *b*). The possibility of their being simply folds or wrinkles in the wall of the ducts, produced by shrinking of the fibrous tissue around had to be considered; but this seems to be negatived by the fact that the central folds of fibrous tissue in them do not appear to be folded, but to spring out from the duct wall, and to belong to the papillary growth itself. Also the commencement of branching in the growths is against this view. Again, many of the ducts close by do not present this appearance, but are quite smooth and free from wrinkles, although the fibrous tissue around them appears quite as dense and shrunken as in the case of the ducts which do show these papillomata. Their whole appearance, too, is that of definite outgrowths; and as we have a large macroscopic papilloma close by, growing obviously from the wall of a duct, and presenting the same general structure, it is, I think, safe to conclude that the smaller eminences are but forerunners of the larger.

Other deviations from the normal in the breast I am unable to detect either with the naked eye or the microscope. The superabundance of fibrous tissue met with can be accounted for by the advanced state of senile atrophy of the gland. In a few spots there were groups of leucocytes among the strands of fibrous tissue, but this is probably nothing out of the ordinary. There are certainly groups of epithelial cells imbedded here and there in the fibrous tissue surrounding the greater ducts; but, from their regular arrangement and general appearance, I think they must be regarded as remains of the atrophied acini rather than as of the nature of neoplasms. They are usually arranged in round, well-defined spaces, containing in their lumen, in many cases, a coagulated albuminous material.

The exact position which these duct papillomata are to occupy in the classification of tumours of the breast remains yet, I take it, to be determined. That the condition with which they are associated has been rightly called "duct cancer" provisionally, the history of many cases proves; and, among others, those recorded by Mr. Pollard and Mr. Bowlby deserve special notice. But the exact relation of the neoplasms to the other better known growths remains to be elucidated. In some respects they partake of the characters of scirrhus, as, for instance, in their tendency to infect the axillary glands, in their liability to recurrence after removal, and in some of their microscopic characters. The object of this paper, however, is rather to set forth the histological characters of these changes which this case gave me an exceptionally good opportunity of studying than to attempt to explain their causation. When all the histological



Plate V.—Transverse section of a small duct close to that containing the raspberry-like papilloma. Shows the whole inner surface covered with papillary growths, some single (*a a*), some commencing to branch (*b b*); (*c c*), groups of fat cells; (*d d*) fibrous wall of duct. (Low power. Hartnack obj.4 oc. 3 × 90).

details are fully known we shall be in a better position to give these growths their proper place and nomenclature, and investigate their actual causation.

SOME PRACTICAL POINTS IN THE TREATMENT OF RETENTION OF URINE.[1]

By G. BUCKSTON BROWNE, M.R.C.S.

In selecting retention of urine as the subject of the paper which your secretary, Dr. Henty, has honoured me by asking me to read before you to-night I proposed to myself no systematic essay, for I have already written that in the pages of Mr. Christopher Heath's *Dictionary of Practical Surgery*, but rather to touch upon certain points upon which there may well be differences of opinion, to refer to recent advances made by surgery in this department, and, while detailing some of the personal experiences of sixteen years, to elicit the opinions and practice of others.

I propose to discuss retention of urine caused by stricture of the urethra, and by prostatic enlargement, with special reference to instrumentation, hæmorrhage, fever, drainage of the bladder, and excision of the prostate.

When a man under fifty years of age finds he cannot pass any urine it is almost certainly due to urethral stricture. If this is the case there will usually be a history of difficulty in passing water and of a small stream, and often a history of previous instrumentation, all of which enable the surgeon to arrive at an accurate diagnosis. If the case is not one of advanced disease a small English gum catheter, or a small olivary catheter, will often pass with ease and relieve the patient. These instruments are

[1] Read before a meeting of the North London District of the Metropolitan Counties Branch, held at Tottenham.

now made very small, equal in size to No. ½ of the English scale, and are of the greatest use. As a rule, however, if they will "go," their introduction requires no great skill, while, if they will not "go," the most practised hand will fail to pass them. I have never seen whalebone, silkworm gut, or fine bougie guides, or twisted bougies useful in cases of really difficult stricture, and many of these instruments are dangerous. Not long ago, after performing internal urethrotomy upon a very tight stricture, I removed this fine bougie (11½ inches long) from the bladder, where it had lain for months, causing great suffering. It had broken off from its screw attachment, and its absence seems to have been entirely overlooked, although the patient asserted that he had never been comfortable since the treatment.

If soft gum instruments prove useless, metal instruments must be used, and I would advise that the patient should be upon his back, and that the surgeon, standing upon the patient's left, should keep his left forefinger in the rectum, so as to know at once if the point of the instrument leaves the floor of the urethra. In very tight strictures fine silver catheters are useless and dangerous, for the fine stems are too weak to bear the pressure required, and when bent the surgeon is unable properly to direct the point of the instrument. In such cases I strongly urge the use of conical steel sounds. I have these instruments made two sizes larger in the shaft than at the point; the smallest is 0-2, that is, 2 in the shaft and less than 1 at the point, then 1-3, 2-4, and so on. They are of naked burnished steel, which presents a finer surface than any plated metal can do. These instruments act upon the principle of the wedge. There are other instruments in the shops however, and largely used, known as "Lister's sounds." They are metal instruments, running to a point, with the actual point enlarged like the end of a probe; in fact, they are olivary bougies in metal. The principle of the olivary bougie is its very flexible neck, and I have never been able to understand the advantage gained by a rigid metal one, and, as in these instruments, the point must always be larger than the neck, however small the point, it follows that they cannot be made small enough for very narrow strictures.

In difficult cases of stricture, which require metallic instrumental relief, it is always well to place the patient under an anæsthetic. With the finger in the rectum, the smallest instrument can always be guided through the stricture, withdrawn, and immediately replaced by the next in size, until a No. 5 or 6 has passed. A small silver catheter can then be passed and the water drawn, and if desired a small gum catheter can be introduced and tied in. I strongly deprecate the practice of tying in small silver catheters; it is dangerous, and most trying to the patient in every way. I have never known a stricture that could not be run up by passing a series of conical steel sounds, the patient being anæsthetised, to at least No. 6. And in most cases the stricture may always be dilated in this way to 12 or 13, but usually with only temporary benefit. In all old hard strictures internal urethrotomy must always be resorted to sooner or later. In connection with internal urethrotomy there are three very practical points to be borne in mind: 1. If, in urethral stricture, instrumentation is always followed by rigor; free division of the fibres of the stricture, from inside the urethra (internal urethrotomy), will cause these rigors to cease. 2. In atony of the bladder resulting from stricture, internal urethrotomy will often be followed by complete recovery from the vesical atony. 3. If, when there is perineal abscess, the case is taken early, the stricture operated upon by internal urethrotomy, and the abscess opened from the perineum, no trouble will result from urine coming through the perineal wound, the abscess at first having no direct communication with the urethra.

When the subject of retention is over 50 years of age, with no previous history of urethral troubles, the cause of the retention is very probably prostatic enlargement. As a rule, no difficulty will be experienced in passing the catheter, but sometimes the difficulty will be very great. In prostatic retention metal instruments ought, if possible, to be avoided. If the usual soft instruments—the *coudée*, the olivary, and the vulcanised india-rubber catheters—fail to pass, I strongly recommend the *bicoudée* catheter. In a prostatic retention case uninjured by previous catheterisation difficulty, if encountered, is always at the very entrance of the bladder, and is due to the instruments catching in the prostate sinus or impinging upon a very prominent prostatic middle lobe. Sometimes the middle lobe so completely overhangs the vesical end of the urethra, that to enter the bladder the catheter has to travel from behind forwards (the patient being erect). In order to do this the catheter end must hug the roof or anterior wall of the urethra all throughout the passage. I have found no catheters so useful as the *bicoudée*, kept over curved, in boxes such as I have specially designed. I have often succeeded in relieving a bladder by means of these instruments when all other instruments have failed. Next to these instruments I rank a good, soft, well-made silk-web *coudée*. This should be remembered, because, while the *bicoudée* catheters are not easily obtained, these are to be had at every instrument-maker's.

Sometimes in prostatic retention the greatest possible difficulty will be experienced in putting in a catheter, and if there has been much instrumentation, and the urethra is lacerated and bleeding, the surgeon's powers may be taxed to the utmost to bring the case to a successful issue. Under such circumstances, it must be remembered that, as there is no closure of the canal as in stricture, the passing of an instrument is only a question of skill, patience, and determination; and that without any exception an instrument ought to be passed. Often a large catheter of No. 14 English will pass with ease when all others have failed. Its point is too large to catch in the urethral folds and pockets, and it is too blunt to lacerate and become entangled in the middle lobe. This is the reason that a lithotrite is always an easy instrument to pass; it is large and blunt-ended, and in consequence of this I have had "lithotrite" sounds and catheters made which I have long employed with satisfaction.

When there has been great difficulty in introducing a catheter, and it is almost certain that the retention will recur, and especially if the surgeon resides far from the patient, it is right to tie in a catheter. This tied-in catheter should always be a soft one, and, if the bladder has only been relieved by a metal instrument, it can frequently be replaced by a gum catheter, if the latter is passed immediately after the removal of the former, and if the soft catheter is moulded on an iron wire to the exact curve of the instrument which it replaces.

We have all had trouble in tying in a soft catheter so that it is retained, for patients will often manage to get rid of an inlying catheter in an extraordinary way, in spite of the most elaborate arrangements of tapes, bandages, and plaster. I was once almost beaten by such a case, and refer to it, as this is a very practical matter, and one which has evidently exercised the minds of surgeons, as witness Holt's winged catheters and the many apparatuses sold for retaining catheters. The patient I refer to wriggled about and turned over in bed in such a way that no catheter stayed in more than a few hours, and he was so reckless in his movements that to have tied in a silver catheter would certainly have sealed his fate. But, after he had given his attendants, Dr. Abud and myself, several nights and days of trouble, I thought of keeping in a lead stilette, and with the happiest results. It was sufficiently solid to prevent the catheter bending upon itself and slipping out, while it was soft enough to yield to the patient's postures without the risk of penetration of the urethral walls or bladder, which assuredly would have been the case had a iron stilette or silver catheter been employed.

Another practical point in the treatment of prostatic retention is that in old catheter cases the patient may have worried a certain part of his urethra into a condition of stricture by rough manipulation, or by using rough and improper instruments. This condition may account for the disease called prostatic stricture, which is often spoken of, but which does not exist, the stricture being always not more than six inches from the external meatus, and therefore in front of the prostate. This condition we may call "catheter stricture," and it often consists of true stricture—that is, a non-dilatability of a certain part of the urethral wall, together with a certain want of polish or lubrication of the mucous membrane lining the implicated urethral wall, due doubtless to inflammatory changes. Such conditions are most trying sometimes, and may offer almost unsurmountable difficulty in the introduction of a catheter. As a rule, a very soft ended olivary catheter will pass better than any other. Great advantage will often be afforded by the use of the conical steel dilators, while in some cases it is well to tie a soft catheter in for a week so as to thoroughly rest the part; and occasionally I have been obliged to resort to internal urethrotomy with great success. I operated upon a case of this kind three years ago with Dr. Burgess, of Streatham, and the patient has passed his catheter every four hours, night and day ever since, with perfect ease.

The next practical point is how to avoid urinary fever in cases of catheterisation. Here we look to the physician for help. I am obliged to be brief to-night, so I will not say more of this fever

than that it comes on immediately or within six days after the introduction of an instrument, and that it may end fatally. As a practical observer, the theory of the etiology of this fever which I have formulated in my own mind, and which has sufficiently practical results, is that it is a nervous fever, due entirely to urethral shock, communicated through the large nervous connection which we know exists between the urethra and kidneys, to the excretory apparatus of the kidneys, and producing all degrees of suppression of urine from the most transient to the most complete. I am satisfied that it is not due to the absorption of urine through the urethral wound, for the passage of a fine bougie through the stricture is often followed by high fever, when a free division of the fibres of the stricture by the knife is followed by little or no elevation of temperature; and I am not convinced that it is septicæmic in its origin, because it may come on directly an instrument is passed; while, on the other hand, patients live for many years and are well and hearty, whose bladders are constantly full of fœtid urine. Such a theory as is here propounded results in practical attention to the reduction of urethral shock by (1) great care and gentleness in instrumentation, and (2) the administration of certain drugs.

The drug of first importance appears to me to be opium with its derivatives, morphine, codeine, and nepenthe. I have often found in practice that the passage of a catheter is followed by high fever, when in the same individual, and with the same instrument, no fever follows, if before instrumentation a small dose of morphine has been administered. If opium and its preparations are not well borne, then small doses of chloral hydrate may be employed.

Occasionally, in the treatment of prostatic retention, we have to deal with hæmorrhage into the bladder. This varies from a very slight amount to bleeding of the most serious kind. When not unduly severe, no clots are formed, and although the urine may be the colour of Condy's fluid for days together, no harm will ensue, if the patient is kept at rest and the urine carefully and periodically drawn. When, however, clots form, the greatest difficulty may be experienced in drawing the urine, and the patient and his attendant in a few days may find themselves perfectly exhausted. When an elderly man in pain has passed his catheter, it is very trying to find no urine coming, because the catheter is blocked with blood-clot, and the clot may be so tenacious that it cannot be dislodged until the catheter is withdrawn; and the instrument may have to be introduced again and again before success is achieved. This repeated night and day, every two or three hours, is wearing to the last degree, and all the while bleeding is going on. At first an arrangement which I have designed and show to-night, by means of which the patient can dislodge clots from his catheter, without withdrawing the instrument, by means of suction with his mouth, may be of service. But in very severe cases of this sort I have found the best treatment to consist in keeping the patient under the influence of morphine, and allowing the bladder to fill with blood, urine, and clot. I gently put in the catheter now and then, and draw away what fluid I can, but I stay the vesical spasms by more and more doses of morphine. In about forty-eight hours the bleeding points are sealed, the urine quickly breaks down the blood clot, which comes away like used tea leaves, and recovery follows. I once, in a very desperate case, was on the point of cutting into a bladder to empty it of clot and to do away with the need for catherisation, by drainage, for the patient and I were entirely exhausted, when it was determined to practise this method, and it was carried out with perfect success.

Prostatic retention of urine relieved by constant catheterism may continue for years. I have known intimately men who have passed all their urine by catheter for fifteen, twenty and twenty-five years, and who have never apparently been any the worse for so doing. It is, indeed, a gratuitous assumption to say—as has been said—that when a man takes to the catheter he is doomed, and that it is only the beginning of the end. A man living to 86 or 90, having passed his urine by catheter for some ten or fifteen years, and dying in the end of bronchitis, cannot be said to fall a victim to the catheter, and we meet with such cases constantly. But there are cases, unfortunately too often met with, where the bladder has become very irritable, and the calls to pass the catheter so frequent that the patient's strength is severely taxed, and his life becomes a burden. This state of things is due to one or more of several causes: 1. An inflamed, contracted, and irritable bladder, the irritation being kept up by the impossibility of urine being passed except by catheter, and often aggravated by improper treatment. 2. A large intravesical prostatic growth, acting as a foreign body, and causing the most intense vesical irritation. 3. The presence of a stone.

A few years ago our only surgical resource in such cases was to open the bladder from the perineum and to drain. Some merely opened the membranous urethra and dilated the prostate. Others performed a lateral or a median cystotomy. Sometimes by accident, and more rarely by design, portions of the prostate were thus removed, but I never knew this removal followed by good result, although occasionally good came from the drainage and rest afforded to the bladder. I say occasionally, for often the drainage did no good at all. Hæmorrhage was often severe; the drainage did no good at all. Hæmorrhage was often severe; the operation was distinctly dangerous, and not infrequently when it was desirable to allow the wound to close, it refused to do so, and a perineal fistula was added to the patient's sufferings. Now that suprapubic cystotomy has been so thoroughly resuscitated, the bladder has been frequently opened in this way in these cases of advanced bladder disease, for drainage, exploration, and removal of prostatic tissue.

Some surgeons, amongst whom is Mr. Whitehead, of Manchester, maintain that the suprapubic wound does not drain the bladder, and that in attempting this drainage the drain is uphill, and therefore ineffective. *Tot homines quot sententiæ!* For I have satisfied myself that the drainage is excellent, and that the operation is free from many of the risks and disagreeables of the perineal one. In the class of cases under consideration the prostate is large, and the floor of the bladder is on a level with the top of the pubic symphysis, so that an inlying tube passes almost horizontally in, and not downwards. I have a prostatic case now which has drained well for twelve months, and by wearing the apparatus designed by me, and described in the JOURNAL of August 4th, 1888, is able to walk three or four miles daily. I lately drained a case of cancer of the prostate with perfect success for six months, and I have an experience altogether of six cases. The wound is well under the patient's control; he can see it and attend to it himself, and it is easily healed up, if it is desirable to allow it to close. I by no means say the proceeding is devoid of risk; it is necessary often in advanced age, in worn and weary men, and naturally some succumb, but they pass away from a life which has ceased to be worth living.

With regard to stone in these cases, the limits of this paper will not allow me to go into particulars, but there are many cases where stone is absolutely undiscoverable by instruments passed *per vias naturales*, whilst suprapubic operation allows of the discovery of stones in difficult cases, and of their complete removal with good results.

It has long been a question with surgeons whether in cases where a man, owing to prostatic obstruction, is entirely dependent upon the use of the catheter, anything can be done by incision or excision to remove this obstruction, and render the use of the catheter unnecessary. Mercier, of Paris, to whom we all owe so much in this department of surgery, worked hard at the fascinating problem; but a careful examination of his work, as reported by himself, does not leave a satisfactory impression upon the mind. His work, however, induced the late Mr. Teevan, in his Lettsomian Lectures, to refer hopefully to the subject, and this led to a controversy between that gentleman and myself, in which Dr. Gouley, of New York, joined; but both these surgeons were unable to prove that any good had resulted from attacking the so-called "bar at the neck of the bladder" by cutting instruments introduced through the natural passages. Gouley himself recommended median cystotomy and the excision of the middle lobe through that incision. Since then, Mr. Swinford Edwards has published a paper on the subject; but these operations seem to have failed to commend themselves to the profession, and we heard little or nothing of the subject until the revival of suprapubic cystotomy gave a fresh impetus to investigation.

In 1886 Dr. Belfield, of Chicago, excised the prostatic middle lobe after opening the bladder suprapubically; and, quite independently, Mr. McGill, of Leeds, in 1887, while performing suprapubic lithotomy, did the same thing, and commenced a brilliant and most important new departure in surgery. He was followed by his colleagues, Messrs. Atkinson, Jessop, and Mayo Robson, and by myself. Mr. McGill believes that prostatic retention is caused by a valve-like action of the intravesical prostate, the urethra orifice being closed more or less completely by the contraction of the bladder on its contents. He takes a very gloomy view of the prospects of a patient obliged to commence regular catheterism and he admits far too readily that it is sometimes impossible to

A Table of 13 Cases of Suprapubic Incision into the Bladder, in all of which the Prostate Gland was enlarged and the Patients dependent upon the Use of the Catheter.

No.	Case.	Age.	Vesical Condition.	Condition of Prostate.	Operation.	Result.	Remarks.
1	W. O.	68	Sacculated phosphatic calculus. All urine passed by catheter.	No intravesical tumour. Rectal examination: prostate moderately large.	Calculus removed.	Recovery.	Seen with Dr. Cronin. The urine has been drawn by catheter for many years. He is an exceedingly active member of society.
2	P. B.	71	Large uric acid calculus in post-prostatic pouch. Residual urine is 5 ounces.	Intravesical tumour. Rectal examination: prostate moderately large.	Calculus removed.	Recovery.	Seen with Dr. Geo. Dancer Thane. Catheter is used about four times daily.
3	R. J.	87	Intense irritation. No stone. All urine by catheter.	Enormous intravesical tumour. Rectal examination: prostate moderately enlarged.	Intravesical tumour removed. The pieces weighed 4 ounces.	Recovery.	Seen with Dr. Andrew Miller. The operation saved his life. Now well, and wears a suprapubic urinal.
4	W.	69	Sacculated uric acid calculus. All urine by catheter.	No intravesical tumour. Rectal examination: prostate moderately large.	Calculi removed.	Recovery.	Seen with Dr. Hardy and Dr. Gimson. Is quite comfortable, passing all by catheter about every six hours.
5	T. B. R.	81	Small uric acid calculus in post-prostatic pouch. All urine by catheter.	Large intravesical tumour. Rectal examination: prostate very large.	Calculus removed. Intravesical tumour removed.	Death.	Seen with Dr. Kidd. I was tempted to remove the middle lobe because there was so much vesical irritation, but I regretted afterwards that I had done so.
6	W. A.	61	Several small stones. All urine by catheter.	No intravesical tumour. Rectal examination: prostate enormous.	Calculi removed.	Recovery.	Seen with Sir John Simon, K.C.B. He lived six months, the bladder being drained all the time by my suprapubic apparatus.
7	T. J. D. T.	71	Nine uric acid calculi in post-prostatic pouch. All urine by catheter.	Large intravesical tumour. Rectal examination: prostate large.	Calculi removed.	Recovery.	Seen with Dr. Ed. Geo. Whittle. This case was a tempting one for prostatic removal, but I refrained.
8	E. K.	74	Sacculated uric acid calculi. All urine by catheter.	Large intravesical tumour. Rectal examination: prostate very large.	Calculi removed.	Recovery.	Seen with Dr. W. J. Harris. I should certainly have lost this patient if I had performed prostatectomy.
9	J. M.	83	All urine by catheter. Great vesical irritability.	No middle lobe enlargement. Rectal examination: prostate large.	Bladder opened and drained.	Death.	Seen with Dr. Alex. John Alliott. Died of bronchitis and exhaustion in eight days.
10	J. O.	77	Oxalate of lime calculus in post-prostatic pouch. Residual urine 4 ounces.	Slight intravesical tumour. Rectal examination: prostate very large.	Calculus removed.	Death.	This patient was really dying when I first saw him.
11	B. V.	71	Uric acid calculi in post-prostatic pouch. All urine by catheter.	Large intravesical tumour. Rectal examination: prostate large.	Calculus removed.	Recovery.	Seen with Mr. H. Fraser Stokes. I had correctly diagnosed enlarged middle lobe, and intended to remove it. Fortunately, during the operation I decided to leave it alone. For some time his state was uncertain after the operation.
12	H. W. F.	70	Residual urine 3 ounces. Great vesical irritability.	No intravesical tumour. Rectal examination: prostate slightly enlarged.	Bladder opened and drained.	Recovery.	Seen with Sir Oscar Clayton and Dr. Hickman. The bladder was relieved by the rest and drainage.
13	J. M. P.	78	All urine by catheter.	Some intravesical tumour. Rectal examination: prostate very large.	Bladder opened and drained.	Death.	Seen with Dr. J. R. Walker. Died in three days of exhaustion.

Four were purely prostatic cases; 2 died from simple cystotomy and drainage. Nine were prostatic cases *plus* calculus; of these 2 died, one of these being subjected to prostatectomy as well as to lithotomy, and the other almost in a dying state before the operation. Two of the 13 cases were submitted to prostatectomy; 1 recovered and 1 died. Eight had intravesical growths. Average age of the 13 cases=74 years. Nine made good recoveries.

each a patient to pass a catheter for himself. He is, therefore, nentally prepared to be very willing to operate upon any catheter patient who complains of the burden of catheterism, or who finds difficulty in introducing a catheter, and in consequence he and his colleagues have been able to publish particulars of twenty-four cases where they have hypogastrically excised portions of the prostate. I hope I shall not be considered censorious in my remarks upon Mr. McGill's work, but it is most important carefully to consider a new departure in surgery such as this, by which hope is held out to the aged and suffering of relief from the toil of constant catheterism. It is our duty to make up our minds as to the risk run, and what the chances are of obtaining relief. As a small contribution to the material necessary for the study of prostatectomy, I have drawn up a table of thirteen cases where I have suprapubically opened the bladder, in all of which the prostatic gland was enlarged, and the patients dependent upon the use of the catheter.

The first thing that strikes me on considering Mr. McGill's paper, read before the British Medical Association Meeting at Leeds last August, is that we are told nothing of any prostatic cases in which he has opened the bladder and found no prostatic intravesical growths. In my thirteen cases I found this intravesical growth absent five times, and one of these five (aged 83), a purely prostatic case, died. Secondly, in estimating the good done by such an operation, we must distinguish between acute and chronic cases. Several of the cases in Mr. McGill's list seem to me to have been more or less acute, and they would probably with ordinary care and treatment have recovered without undergoing a capital operation. By this I mean that a man with an enlarged prostate may be quite comfortable until from chill, or neglect of calls to micturate, he has complete retention. After this, he may be dependent upon the catheter for even six or nine months, and then recover his powers completely. Also a man with enlarged prostate may only have occasional attacks of retention, which, if at once relieved by the catheter, leave him with a perfectly acting bladder for some time after. And in this place I would particularly remark that we must not too readily accept it as impossible to teach an individual patient to pass a catheter for himself, whatever he may say and urge to the contrary, there is always some instrument to be found which, with kind and firm drilling, he can be taught to use. The difficulties of the patient's urethra, and his clumsiness, may often at first appear insuperable obstacles, but they are practically always to be overcome. And in the last place, in reporting the present state of a man who, previous to prostatectomy, passed a catheter, it is not enough to say "he continues well," or that "he has not required a catheter, but he still suffers from vesical catarrh." We want to know if the patient can empty his bladder by his own efforts, and this can only be proved by the passage of a catheter immediately after the natural act of micturition. I find this fact definitely stated in only 2 of the 24 cases in Mr. McGill's list. Full particulars are given of 21 of the 24 cases, 3 being too recent to be complete; and of these 21, 5 died, 6 of these 21 were calculous cases, leaving 15 pure prostatic cases, and of these 4 died. Out of these 15 prostatic cases, there are 2 excellent recoveries, the need for the catheter having ceased to exist, and there are 4 of which one would like to know more, but which certainly seem to have been improved by the operation.

In the 13 cases in which I have opened the bladder prepared to excise a portion of the prostate if found advisable, prostatic intravesical or middle lobe growth was only present in 8, although the

prostate was hypertrophied in every case. I only ventured to excise a portion of the prostate in 2 out of these 8 cases; one of these two cases died, and one recovered. The age of the patient who died was 81, the age of the patient who lived was 87. The latter is living now, wonderfully well and comfortable, and his case is recorded in the *Transactions of the Clinical Society*. He has never consented to allow the suprapubic wound to close, but has worn my suprapubic apparatus for a year. In several of my cases I am satisfied that the patients would have succumbed if prostatectomy had been performed; and I cannot agree with Mr. Mayo Robson when he says that the addition of a prostatectomy to a suprapubic lithotomy does not, in his opinion, add materially to the risk. It must, however, be remembered that an enlarged middle lobe may not only cause retention of urine, but may act as a foreign body in the bladder when very large, and cause intense irritation and misery; when this is the case, its removal must be undertaken at all hazards.

Taking into consideration, therefore, our present knowledge, it appears that when a catheter patient has got into such a state that the frequent use of the instrument renders life burdensome, the bladder should be opened above the pubes. By this means the organ can be completely explored, any calculus extracted, the bladder drained and rested afterwards. If any intravesical prostatic tumour is found, much must depend upon its size. If very large, it is probably a source of great irritation, as well as a urinary obstruction, and it had better be removed. When, however, the growth is small, and especially when a stone has expectedly or unexpectedly been found, which may have been the cause of nearly all the vesical misery, I should advise anyone to hesitate before opening the prostatic capsule and enucleating the lobes. Also, when an elderly man, who leads a tolerably comfortable life by passing his catheter even as often as every three hours, but who is anxious to be relieved altogether of his offending prostate, applies to the surgeon, I should still advise him to hesitate. Prostatectomy is a dangerous operation, only necessary in men already in broken health, and uncertain, even in cases of recovery, of being followed by release from the need of using the catheter.

CARDIAC INSUFFICIENCY IN ITS RELATION TO ABORTION.[1]

By MONTAGU HANDFIELD-JONES, M.D.Lond.,

Obstetric Physician in charge of Out-Patients to St. Mary's Hospital; Lecturer on Midwifery and Diseases of Women to St. Mary's Medical School; and Physician to the British Lying-In Hospital.

In his *Clinical Lectures on Diseases of Women* (1883), Dr. Matthews Duncan says: "It is only recently that great care has begun to be paid to the bearings of disease of the heart upon pregnancy and parturition; I know of none paid to the bearings of disease of the heart upon abortion. It is a subject well worthy of attention and study." It is now nearly five years since the above quotation arrested my attention, and during this time I have endeavoured, both in my private and hospital practice, to trace out how far a connection exists between morbid conditions of the heart and the occurrence, or recurrence, of abortion. So far as my researches into the literature of the subject have gone, I cannot discover that any great advance has been made in our knowledge of the relation between heart conditions and abortion, or that any author has endeavoured to follow out the investigation suggested by Dr. Duncan's words.

The pathology of intra-uterine death has been ably treated by Dr. Priestley in his recent Lumleian Lectures,[2] but even here I have failed to find anything more than a passing reference to the influence exerted by cardiac conditions on the progress of pregnancy. In his work on *Heart Disease During Pregnancy*, Dr. Angus Macdonald has, it is true, pointed out that in a large proportion of cases of mitral stenosis pregnancy is terminated by the onset of spontaneous premature delivery, and Duroziez, in his paper on *Pure Stenosis of the Mitral*,[3] remarks that this lesion is apt to be accompanied by a special tendency to the occurrence of abortion and premature delivery; but both these authors dwell more extensively on the onset of premature delivery in the later weeks of pregnancy, and confine their attentions principally to mitral valvular disease. How great an influence valvular disease of the heart may have in determining the occurrence of abortion, and what the relative value of the individual forms of valvular disease may be to each other in this respect, I am not yet prepared to state, but, so far as my observations have at present led me, I am inclined to think that the presence of valvular disease does not, broadly speaking, interfere materially with the progress of pregnancy, provided that sufficient compensatory hypertrophy of the muscular walls be present.

In this communication my endeavour will be to show that putting aside the consideration of valvular affections, the absence or insufficiency of the usual hypertrophy of the heart which should accompany every pregnancy is a not uncommon cause of the occurrence and recurrence of premature emptying of the uterus in the earlier months of pregnancy. Before bringing forward the clinical cases and other arguments which seem to support the view propounded, I should like to dwell briefly on two points—first, the normal hypertrophy of the heart during gravidity; and, secondly, the influence of a failing left ventricle on the systemic circulation at its periphery.

Without discussing how far Larcher, Ducrest, Beraud, Blot, and other *savants* of the French schools may have exaggerated the amount or overrated the importance of the cardiac hypertrophy of pregnancy, without attempting to settle the question whether the left ventricle only has its muscular walls thickened, or whether other parts of the heart share in the increase, I would take it as an established fact that at the close of a pregnancy the left ventricle is found considerably hypertrophied, and that this hypertrophy is due to the increased work entailed on the heart by the growth of the uterus and its contents. As a deduction from the foregoing truth, I would formulate, that if this hypertrophy is absent or insufficient, the heart will, as pregnancy advances, show signs of failing power, or, conversely, that if the heart exhibits symptoms of failing during the progress of gravidity, we may reasonably presume that the compensatory hypertrophy is either wanting or insufficient in degree.

The second point is this: the condition of the systemic circulation at its periphery depends very largely on the mode of action of the left ventricle. If the latter is healthy, vigorous, and has good driving power, then, *ceteris paribus*, the circulation in the arterioles and capillaries is brisk, the walls of the small vessels are normal and intact, and leaking or extravasation does not take place; but if, on the contrary, the left ventricle is acting in a failing or imperfect fashion, then the blood stream at the far points is sluggish, the walls of the capillaries and arterioles tend to become unhealthy, and dropsy or small hæmorrhages are very likely to take place.

Taking these two points as established, it will be well now to pass on and consider some cases which will illustrate abortion due to cardiac failure.

Case I.—Mrs. N., aged 34, married fourteen years, is a woman of large, flabby build. She came to my out-patient department complaining of frequent miscarriages. Her history was as follows: She had given birth after marriage to two healthy full-term children, the two pregnancies following each other rather closely, then she had had seven miscarriages, the last only a fortnight ago. Her health has never been good since the last full-term pregnancy; during and after this she had suffered with palpitation, shortness of breath, and inability for much exertion. All her miscarriages had taken place between the end of the third and fourth months. According to her own account, she usually felt fairly well until well advanced into the third month of her pregnancies, then she began to suffer with great shortness of breath, palpitation, præcordial pain, and swelling of the legs. This state of things became intensified gradually, and then abortion followed. Examination of the heart showed that the apex beat was hardly defined and very feeble; it was slightly outside the vertical nipple line; there was no valvular *bruit*, but the first sound was short and feeble. The area of cardiac dulness was, if anything, somewhat increased. A mixture of ammonia and digitalis was prescribed, and 10 grains of saccharated carbonate of iron ordered to be taken morning and evening. Under this treatment she improved materially, and again became pregnant. When three months gone she was still doing well; the swelling of the legs and other signs of cardiac failure had not appeared. Wishing, however, to give the heart every chance, I took her into the New Boynton Ward, and gave her the opportunity of complete rest, good feeding, and freedom from muscular strain. Under this *régime* she went on well, and reached safely the sixth month of

[1] Read in the Section of Obstetrics at the Annual Meeting of the British Medical Association, held in Leeds.

[2] Journal, 1887.

[3] *Archives Générales de Médecine*, Juillet, 1877, p. 47.

pregnancy, then, feeling herself so well and thinking herself safe, she returned home, resumed her laborious occupation, became rapidly worse, and miscarried at the end of the sixth month. Had she remained in the hospital quietly, I think there is little doubt she would have gone to full term. A vaginal examination was made in this case on several occasions, during both the pregnant and non-pregnant states, and beyond a slight bulkiness of the uterus nothing abnormal could be detected. There was no evidence of any syphilitic taint. It is rather noteworthy that this patient had only two sisters, and that each of these women had valvular disease of the heart, one mitral stenosis, the other a mitral systolic murmur.

Case II.—Mrs. X., aged 32, is a fairly healthy looking woman. She has been pregnant five times, but has never carried a child up to full term. With her first two pregnancies she went as far as six months and then miscarried; with her last three she only reached the fifth month. Her family history is good, and after careful investigation no trace can be discovered of a syphilitic taint. Vaginal examination reveals a perfectly normal condition of her uterus and its appendages. In the account she has given of her various pregnancies there is, however, one constant symptom which is very suggestive, and that is that in all her pregnancies she has suffered from repeated attacks of fainting. On each occasion when she has been in the family way, these attacks of fainting have set in towards the end of the third month and continued until the pregnancy closed, becoming more frequent and worse in the later months. In the intervals between her pregnancies she is free from this symptom. When I saw her for the first time, soon after the close of her fifth pregnancy, a very careful examination of the heart was made, but no sign of left ventricle hypertrophy could be discovered; there was no displacement of the apex, no increase in the area of cardiac dulness, and no murmur or other modification of the sounds could be heard, except a weakness and shortness of the first sound heard at the apex. Thinking the cause of the frequent miscarriages and faintings was probably due to insufficient cardiac power, I determined, should she again become pregnant, to direct my attention to stimulating the heart. In November, 1884, she ceased to menstruate, and I at once prescribed cardiac tonics for her, made her take a certain amount of stimulant, and regulated her exercise and muscular exertions; through the whole of this pregnancy she was entirely free from any fainting or cardiac distress, and, having gone up to the end of the eighth month of gestation, was delivered of a healthy male infant.

Case III.—Mrs. B., aged 35, gives the following interesting history: Always fairly strong and well, she married at 22, had her first child at full term, about ten months after marriage. Nothing noteworthy occurred in this pregnancy, but about a year later she passed through an acute and prolonged attack of rheumatic fever. From this she recovered without any valvular lesion, apparently, but, as she suffered with shortness of breath on exertion, palpitation and indifferent health, it is probable that the heart did not altogether escape damage. While in this state of health, she became pregnant, but miscarried at the end of the second month; again pregnant, she aborted at the end of the third month. After this she did not become pregnant for a year or more, and meanwhile, under medical treatment, her health greatly improved. In her next pregnancy she went nearly her full term, but had great swelling of the legs in the later months, accompanied by breathlessness on exertion, palpitation, and faintings. Next followed four miscarriages, each terminating about the end of the fourth month, and each accompanied by signs of cardiac failure; then came a considerable rest from child-bearing. Some years later a living child was born at full term, but, in the later months of this pregnancy, dropsy of the lower extremities and of the abdomen, faintings, and dyspnœa were very marked. Soon after this she came under my care, and her health became gradually much improved before she became again pregnant. As soon as she reached the second month of utero-gestation she was put on iron and digitalis, with occasionally small doses of strychnine, she was made to live on one floor and forbidden going upstairs. All severe muscular exertion was forbidden. Through this pregnancy Mrs. B. passed comfortably, with no œdema of the legs, no fainting, and very little evidence of any cardiac failure.

It would be easy to quote from my notebook many similar cases, which illustrate equally well the relation of an overstrained heart to abortion, but the three just narrated will serve as a sufficient context for my argument. Very little study of the cases just quoted suffices to establish beyond doubt that the heart was on each occasion unequal to its work. Making all allowance for the unstable equilibrium of the nervous system which attends every pregnancy; yet the repeated faintings, the œdema of the lower extremities, the palpitation, the dyspnœa, and other signs all pointed unmistakably to cardiac failure. Again, it is impossible not to connect this failure most intimately with increase in size of the gravid uterus, for the symptoms of heart distress commenced in most cases during the third month (when the heart was beginning to feel an increasing strain), and grew decidedly worse as pregnancy advanced, only ceasing, as a rule, when delivery had supervened and the mother's circulation had returned to its normal condition. That the want of power in the heart's action is due to an absence of the normal compensatory hypertrophy seems almost certain. The actual confirmatory proofs of the *post-mortem* room are fortunately absent, but the feeble, diffuse apex beat, the soft, short first sound at the apex, the character of the sphygmographic tracing, all point to the same conclusion. It is equally clear that the condition of the heart before the onset of pregnancy, and the degree to which the compensatory hypertrophy is absent, will play an important part in determining (1) how soon the signs of cardiac insufficiency will manifest themselves, and (2) how marked those symptoms will be.

Pathological Appearances.—The ova expelled by the uterus in these cases presented a fairly constant appearance; when examined shortly after expulsion they were found to be dotted over with small hæmorrhages, varying in size from a split pea to a threepenny piece, varying too in colour, according as the extravasation of blood had been recent or of some standing. The hæmorrhages had clearly taken place between the wall of the uterus and the membranes; in a few instances large blood clots were found, but usually the hæmorrhages were small in size.

Theory of Abortion.—It is not difficult now to follow out the course of events and see how premature expulsion of the ovum is effected. The first factor in the chain of events is the enfeebled power of the left ventricle; as a result of this the blood stream no longer passes briskly through the small vessels of the periphery, but is driven in a sluggish manner from artery to vein. The inevitable effect of this is, that the walls of the arterioles and capillaries rapidly deteriorate, commence to bulge, and then to leak, and thus blood extravasations are frequently permitted. This process is seen to perfection, if a piece of pia mater or omentum through the vessels of which a sluggish blood current has been passing for some time, is examined under the low power of a microscope: bulging and spoilt vessel walls with small extravasations are seen everywhere. Each small extravasation between the uterine wall and the membranes of the ovum separates the latter partially from the uterus, and when sufficient separation has occurred, the ovum becomes practically a foreign body, and as such is cast off, or in other words abortion occurs. Confirmation of the correctness of this theory, namely, that the ovum is gradually separated from the uterine walls by these small extravasations is afforded by the clinical fact, that small and repeated blood losses *per vaginam* often take place in these cases for many days before final expulsion of the ovum occurs.

Treatment.—If we accept the views propounded as correct, our treatment becomes at once clear. It is briefly to spare the heart as much as possible by maintaining the recumbent posture largely and avoiding any severe muscular exercise, at the same time by good hygiene, liberal diet, stimulants, and cardiac tonics to improve the nutrition of the organ.

In many of our textbooks on midwifery and diseases of women, the term "habit of abortion" is mentioned; the term is essentially a term of ignorance, and we find that as our knowledge becomes more exact, fewer and fewer cases of repeated abortion are referred to this category, other and more scientific explanations being forthcoming. Should the view here put forward to explain the causation of some instances of repeated abortion be deemed a true and scientific explanation, it may serve to rescue some of our hitherto unexplained cases from the unfortunate group referred to, and by making clear the mode in which abortion is brought about, may lead to a satisfactory and successful treatment.

In recognition of professional services rendered to the young King of Spain during his recent serious illness, Dr. Esteban Sánchez de Ocaña has been created a Grandee of Spain, with the title of Count; Dr. Pascual Candela has received the Grand Cross of Charles the Third; and Dr. Agustin that of Isabella the Catholic.

FIBRO-SARCOMA OF LEFT CLAVICLE AT STERNAL END: EXCISION: DEATH FROM SUPPURATION SPREADING DOWN THE ANTERIOR MEDIASTINUM.

By GILBERT BARLING, B.S., F.R.C.S.,
Assistant-Surgeon to the General Hospital, Birmingham.

L., a male, aged 23, was sent to me by Mr. Guthrie Rankin, of Warwick, for a suspicious swelling at the inner end of the left clavicle.

The patient's history showed that he had felt pain and uneasiness at the sternal end of the clavicle for about twelve months. The pain had extended up the neck and into the arm, producing a numb feeling there, but in the early days there was no swelling of the affected part. About ten weeks before I saw him a small swelling appeared, and, thinking that the bone was "out," he consulted a bonesetter, and, not getting relief, placed himself under medical care.

On admission to the General Hospital on April 4th, 1889, there was a pyriform enlargement, with its base inwards, occupying the sternal end of the left clavicle for about 3 inches. The skin was freely movable over the tumour, which was non-pulsatile, hard to the touch, nodular in places as though cartilaginous, and free from tenderness. The sterno-clavicular joint was more movable than on the opposite side, and, when the fingers were pressed deeply into the neck behind the growth, it was found to encroach more on the deep and posterior structures than appeared from the front view. The skin of the face and neck was dusky, but the large veins were not dilated, nor was there any murmur in any of the adjacent vessels. A feeling of suffocation was complained of occasionally, but no difficulty had arisen in swallowing. There was no history of syphilis, nor anything to suggest that the patient had suffered from it. The viscera all appeared healthy.

The diagnosis was sarcoma of very moderate malignancy, probably central in origin, and on April 12th I removed it as follows: Two skin incisions were made at right angles to each other, one about 3 inches long in the middle line of the neck, extending slightly on to the upper part of the sternum, the second commencing at the lower end of this, and running horizontally outwards to a little beyond the coracoid process. Keeping as close to the under surface of the skin as was possible without button-holing it, a triangular flap was dissected upwards, so as to freely expose the growth and adjacent parts of the clavicle.

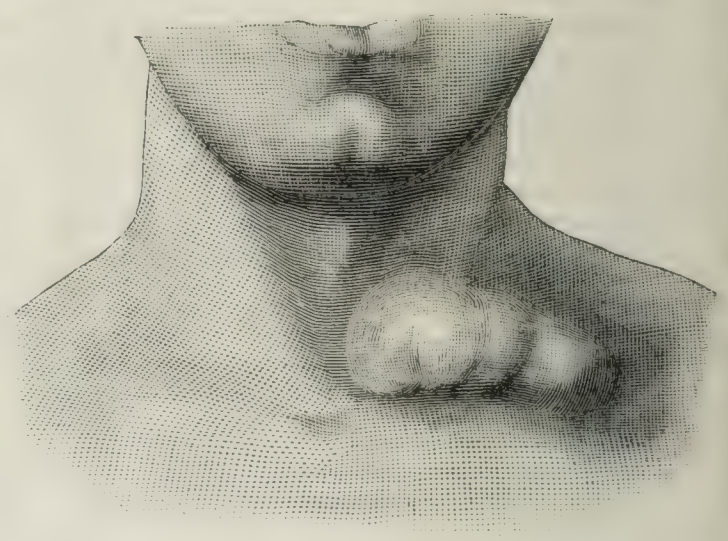
An aneurysm needle was worked carefully round the clavicle, just inside the coracoid process, and a silk ligature, threaded through it, was used to pull a chain saw round the bone, which was then divided. The pectoralis major was then cut through a little distance from its clavicular origin, the sterno-mastoid was next similarly treated, and the divided end of the bone being forcibly elevated the subclavius muscle, the rhomboid, capsular, and interclavicular ligaments, and the fibro-cartilage were all divided. Although of course numerous large and important vessels were more or less distinctly seen, only the external jugular vein and some unnamed arteries required ligaturing. The flap of skin was replaced, and free drainage was provided at the inner angle of the wound.

April 13th. Since the operation vomiting has been persistent. The discharge from the wound had drained freely, and the skin, though somewhat blue at the edge, is all living. Temperature 102.5°; pulse 120; respiration 40.

April 14th. Vomiting has ceased for some hours, but the patient has been very restless. The wound looks well; the discharge is abundant, odourless, and serous in character. Severe pain is felt over left chest, where friction is heard, but the breath sounds are not distinctly altered, and there is no marked dulness. Temperature 102°; pulse 146; respiration, 54.

April 15th. Still very restless, with great pain in the left side and in the epigastrium. The area of friction has extended widely. Face cyanosed. Temperature 101°; pulse 150; respirations 50. Death the next day.

At the necropsy the condition of the wound was carefully investigated. It contained a little blood but no pus, and the granulations looked healthy. The deep muscles and fascia were undisturbed; the pleura was not exposed; the phrenic, pneumogastric, and sympathetic nerves presented no evidence of any change, and the large vessels were uninjured. On opening the chest, a layer of lymph was found extending all over the anterior mediastinum. There was no patent communication between this and the wound, such as might have been produced by pulling the parts about severely at the operation; but evidently the inflammatory mischief had spread downwards in the loose tissue under the sterno-hyoid and thyroid muscles. In each pleural cavity lymph was found in considerable quantity, and some ounces of turbid fluid on each side also. There were no secondary growths.



The specimen shows that the tumour originated in the centre of the bone at the sternal end. It is very firm, on section looking almost fibrous, and microscopic examination shows that it is made up of fibrous tissue, with small spindle cells, varying in amount in different places, but sufficient to place the tumour amongst the sarcomas of low degree of malignancy.

Examination of the bone where it was divided shows, I think, that at the point of section the bone is healthy. My reasons for removing only part of the clavicle were that I regarded the tumour as one of low degree in malignancy, and I was anxious to leave the deltoid undisturbed if possible, and to preserve the rounded outline of the shoulder.

The difficulty of the operation was not as considerable as I had anticipated from the published accounts of similar cases. It was very disheartening that a fatal termination should follow upon a case in which so little disturbance of the deeper parts had been made, in which the inflammatory products drained away well, and especially in which the nature of the tumour justified one in anticipating freedom from recurrence.

The inflammatory extension into the mediastinum was, I think, greatly assisted by the violent efforts of vomiting induced by chloroform and by the extreme restlessness of the patient.

There is a tendency to take a very gloomy view of excision of the clavicle for malignant growths, partly from dread of the difficulties of the operation and of the immediate mortality, partly because recurrence seems probable owing to the impossibility from the nature of the surroundings, of going really wide of the disease. The truth is, we are in want of accurate information on these points.

I have been able to collect notes of twenty-four cases in which the whole or a considerable part of the clavicle has been removed for tumour. Most of these were probably cases of sarcoma, two were cases of secondary carcinoma, the primary growths being unrecognised at the time of operation; one is described as a primary alveolar soft carcinoma, and a few remain in which the description of the tumour is so meagre that one can only guess from the clinical history in such cases that the tumours were malignant.

Of these 24 patients, 6 died within five weeks of the excision but in 2 of them, Nos. 2 and 5 in the following table, the fatal result cannot be placed to the discredit of the operation:—

Surgeon.	Date of Death.	Cause.	Reference.
Dr. Warren	4th week	Septicæmia, pleurisy	Surgical Observations on Tumours—Warren. *Lancet*, vol. i, 1889.
Mr. Rouse	10th day	Septicæmia	
Mr. C. Heath	15th ,,	Coma from secondary growth in brain	*Lancet*, vol. i, 1888.
Dr. Segond	8th ,,	Asthenia, large primary carcinoma in kidney	*Bull. et Mém. de la Soc. de Chir.*, 1889.
Dr. Marchant	35th ,,	Hæmatemesis? growth in stomach	*Ibid.*
Mr. Barling	4th ,,	Inflammation extending down anterior mediastinum, pleurisy	

is gives a mortality of about 16 per cent., though of course s may be unduly low, as some of the unsuccessful cases probly remain unrecorded.

Of the 18 patients who recovered I have been able to trace only and some of those but for a short time. Five were either dead dying of recurrence within twelve months of the excision; 4 re well at periods varying from three to twelve months after operation, and of the 3 remaining, 1[1] was alive three years er, 1[2] ten years after, and 1[3] lived fifty-four years after.

n estimating the degree of the malignancy of these growths of clavicle one is hampered by the absence of exact information to the nature of the tumour and as to whether it arose from the riosteum or the medulla of the bone. I think, however, that details I have related are sufficient to show that the immedimortality of excision of the clavicle for growth is not so great night have been anticipated, and that the prognosis as to recurce and dissemination is better than it is after amputations for comas of the bones of the lower extremity. The central growths probably much more favourable for excision than the periseal.

NOTES ON 290 CASES OF INFLUENZA.

By EDWARD CHARLES BARNES, M.R.C.S., L.S.A.,
Divisional Surgeon, Metropolitan Police: Medical Officer, Hammersmith District Post Office.

E first case occurred December 28th, 1889, and the last, Febry 21st, 1890; a period of 8 weeks. No fewer than 140 of the es were in the 8 days from January 3rd to 10th.

One hundred and eleven cases (53 males and 58 females) were vate patients, 52 were policemen at Hammersmith and Shepd's Bush, 36 were Post Office *employés* (letter carriers and teleph messengers), 91 were resident in the Convent of the Good epherd. This will give 141 male and 149 female patients. The private patients include 14 children under 12 years old, one ng a small twin infant of 9 months. The rest of the private ients were between the ages of 12 years and 75 years.

n the table I place the police in two columns, because there is rly one mile and a half distance between Hammersmith and pherd's Bush Stations. I also place the convent inmates in ee columns, because the Sisters, Magdalens and Penitents upy different parts of the house, and have but little to do with another, except for nursing in sickness.

The Convent inmates	are	260	179 were attacked. 27.3 per cent.
,, Hammersmith police	,,	124	
,, Shepherd's Bush ,,	,,	77	
,, Post Office *employés*	,,	193	

ll recovered, if we except the only patient who has died since, er the following circumstances: for I doubt if her death in any resulted from influenza.

girl at convent, aged 23, unhealthy, strumous, and anæmic, had one eyeball removed a year ago at West London pital, had influenza on January 3rd, with eight of her comions. All apparently recovered equally well, and she was not er treatment more than 10 days. She had resumed her work, manifested her usual activity and good spirits until 1 A.M. on ruary 3rd, when she complained of pain and dyspnœa, and before 8 A.M., when I was sent for. *Post-mortem* examination revealed right pleuritic effusion, pericardial effusion, and congestion of right kidney.

[1] Britton, quoted by Jessett, *Lancet*, June 8th, 1889.
[2] Wheeler, *Dublin Journal Med. Sci.*, 1885.
[3] Mott's Case, *Amer. Journal Med. Sci.*, Phil., 1883.

Table of 290 Cases of Influenza.

Date.	Cases.	Police (52). Hammersmith.	Police (52). Shepherd's Bush.	Convent (91). Sisters.	Convent (91). Magdalens.	Convent (91). Penitents.	Post Office (36).	Private Patients (111).
1889.								
Dec. 8	1	—	—	—	—	—	—	1
,, 11	2	—	—	—	—	—	—	2
,, 20	1	—	—	—	—	—	—	1
,, 28	2	—	1	—	—	—	—	1
,, 30	5	—	—	—	—	—	—	5
,, 31	8	—	3	—	—	3	—	2
1890.								
Jan. 1	4	1	—	—	—	—	—	3
,, 2	5	—	—	—	—	—	—	3
,, 3	28	3	1	2	3	9	3	7
,, 4	10	5	2	—	—	—	2	1
,, 5	1	—	—	—	—	—	—	1
,, 6	21	2	3	—	—	—	7	9
,, 7	14	2	—	—	—	—	1	11
,, 8	28	5	—	4	—	8	2	9
,, 9	14	4	—	—	—	—	4	6
,, 10	24	1	—	—	4	16	2	1
,, 11	9	2	—	—	—	—	2	5
,, 12	6	—	—	—	—	4	—	2
,, 13	10	2	3	—	—	—	3	2
,, 14	13	1	—	2	—	4	—	6
,, 15	8	1	—	—	—	—	4	3
,, 16	12	2	1	3	—	5	—	1
,, 17	5	—	2	—	—	—	—	3
,, 18	3	—	—	1	—	—	—	2
,, 19	1	—	1	—	—	—	—	—
,, 20	2	—	—	—	—	—	2	—
,, 21	9	—	1	1	—	1	—	6
,, 22	4	—	—	—	—	—	1	3
,, 23	1	—	1	—	—	—	—	—
,, 24	4	—	—	—	—	3	—	1
,, 27	4	—	—	—	—	—	—	4
,, 28	2	—	—	—	—	—	—	2
,, 29	1	—	—	—	—	—	—	1
Feb. 1	1	—	—	—	—	—	—	1
,, 2	1	—	1	—	—	—	—	—
,, 4	1	—	—	—	—	—	—	1
,, 7	4	—	—	—	—	4	—	—
,, 8	4	—	—	—	—	2	—	2
,, 9	1	—	—	—	—	—	1	—
,, 10	6	—	—	—	—	5	—	1
,, 12	5	—	—	2	—	2	—	1
,, 15	1	—	—	—	—	—	—	1
,, 18	3	—	—	—	—	3	—	—
,, 21	1	—	1	—	—	—	—	—
	290	31	21	15	7	69	36	111

Private patients include 1 child of 9 months, 13 children under 12 years, the rest are from 12 to 75 years.

The sudden pressure of so many cases fell hardly upon me, for I was myself ill with influenza on December 28th, and before I had convalesced, I was pressed by as many as 28 new cases in one day, January 3rd, the first day of the eight above referred to.

The question of incubation and contagion is difficult, but I observed the Hammersmith police fell in quick succession, day by day; the Shepherd's Bush police and the Convent patients at intervals from 3 to 7 days. The Post Office cases are scattered in residence at long distances apart, but one telegraph messenger fell on January 6th, and his brother on the 13th.

In private practice I find:—

In 4 families, 2 cases in each, both ill same day.
,, 3 ,, 1 ,, ,, and another after 1 clear day.
,, 1 ,, 2 ,, ,, ,, two others ,, ,, ,,
,, 1 ,, 2 ,, ,, ,, another 2 ,, ,,
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After two or three days interval:
4 cases in 1 family, Jan. 7th, 9th, 12th, 15th.
,, ,, ,, 6th (2 cases) 9th, 11th.
,, ,, ,, 6th (2 cases) ,, ,,
,, ,, ,, Dec. 20th, Jan. 7th, 10th, 28th.

8 cases in 1 family, Dec. 30th (2), Jan. 1st, 3 (2) 12th, 18th, 28.
2 ,, ,, Jan. 3rd, 24th.
2 ,, ,, ,, 7th, 29th.
3 ,, ,, ,, 10th (2), 21st.

The general symptoms presented were chilliness, frontal pain, prostration, fever coming on suddenly. In 40 cases (or more) red skin, red eyes, red throat; in nearly every case pain in ears, eyeballs, face, legs, arms, back. Some fell down faint in the execution of their ordinary duty, and all presented a characteristic appearance, obvious at first sight. The countenance was dull, heavy, listless, with flushed face, hot skin, and watery eyes. In posture and gait powerlessness was obvious. All complained of cold chills, frontal pain, heavy cold, and weakness of legs. In about twelve or twenty-four hours at most a copious diaphoresis set in with much relief, but rheumatic and neuralgic pains were now complained of, and a distressing paroxysmal cough with scanty expectoration of very thick clear mucus brought up with so much effort as to cause pain in the ribs for many days. Most cases recovered within a week or ten days, but in a few bronchitis, bronchopneumonia, pneumonia, and pleurisy, and in one case nephritis, retarded convalescence for more than a month. The cases presented endless variety; some began with sore throat (in one case abscess of tonsil), some with rheumatic pains and neuralgia (one complained much of the small joints of toes and fingers), some with bilious diarrhœa and vomiting, and others with nasal catarrh. One case began with epistaxis, two with hæmoptysis, one had all the salivary glands inflamed, and two had orchitis. The rash was peculiar in character, sometimes not unlike that of scarlet fever, but generally paler and brighter in colour, more like an erythema, and the forehead and face were often œdematous. It was frequently followed by desquamation, especially about face, neck, and wrists. It was not universal, but covered head, face, neck, chest, and arms, and in only one instance the abdomen, where it was mottled like measles. The temperature in uncomplicated cases did not exceed 102°, except in one case (105°) occurring three or four days after delivery. The prostration was considerable, and in many cases there was tendency to syncope on slight movement, and in a few deathlike coldness of legs and feet. In some cases there were drowsiness, dry brown tongue, and delirium. Some were completely helpless and unable to move from pain in the back.

As regards treatment, I sent all my patients to bed in a warm room, with gruel, beef-tea, and from one to four tablespoonfuls of brandy daily where the cold extremities, or syncope, or dyspepsia appeared to indicate its use. In one case only I gave antipyrin for severe headache, and with good success, but I am doubtful about this drug in prostrating sickness. I gave all cases carbonate of ammonia early, with citrate of potass and liq. ammon. acetatis, followed quickly or even accompanied with quinine pills in one-grain doses three times a day. I found, however, most cases do better with carbonate ammonia and compound tinct. cinchona and chloric ether. For rheumatic symptoms I gave salicylate of soda and ammonia (occasionally two- or three-grain doses potass. iodid. with ammonia). For the bilious cases two grains calomel ½ grain opium, followed in two hours with haust. rhei and a mixture containing sodæ bicarb., ammonia, and chlorodyne. For the cough liq. morphiæ in ♏v or ♏x doses; spongiopiline and laudanum and mustard poultices to painful parts. I found also a liniment of chloroform and belladonna very valuable.

THE INFLUENZA EPIDEMIC AT THE "CAPE."

By WILLIAM C. SCHOLTZ, M.D.,

Member of the Colonial Branch of the British Medical Association, Cape Town.

Numerous cases have developed here, presenting symptoms indistinguishable from "Russian influenza." The character of the symptoms varies somewhat, but generally the muscular pains throughout the body are most marked, headache of a very severe and excruciating nature being the most prominent feature, also pain behind the eyes. Later on catarrhal symptoms set in; prostration in all cases very extreme. In my own practice children were very lightly visited. The symptoms generally are developed very suddenly. In my own person I felt perfectly well in the morning, except a slight sore throat; by 2 P.M. I was obliged to take to my bed, and by the evening I felt as if I had been in bed for a week or more. By next evening most of the prominent symptoms had passed away, leaving me utterly weak and prostrate. It was only the following day that running from the nose and eyes set in.

I do not know of one case among hundreds that developed serious bronchial or pneumonic symptoms. Of course the weather is warm, but somewhat depressing just at present. A large number of the convicts working at the breakwater have suffered severely. I know of several instances where the father and mother have been attacked, and the children—coming in daily and close contact with the parents—have escaped.

I am of opinion, from observations here in Cape Town, that though undoubtedly "feebly contagious," yet the influence of the contagion was largely "miasmatic," the emanation distributing itself more rapidly through the air, personal contagion being a subordinate factor in the diffusion of the disease.

The first cases appeared here early in January. There can be no possible doubt that the introduction of the epidemic by importation from Europe was by means of the passenger boats, as well nigh every steamer arriving here bears a history of having had pretty nearly all the working portion of the individuals down with the influenza. A rather curious point noticed in the last arrival was that, though only one passenger suffered (a naval officer, who, by the way, was a martyr to bronchitis) from the epidemic, with a few exceptions every one of the ship's crew were down.

In Cape Town quite half a dozen of the medical men suffered from the epidemic, a curious contrast to our terrible small-pox epidemic of 1882, when thousands of the public were attacked and not one medical man.

I had one interesting case of a lady, who, at the eighth day after confinement, suddenly took the influenza, with a temperature of 105°, in fact, had all the symptoms of puerperal fever. In two days from the first onset she was entirely well except a slight hacking cough.

As my own case may possibly throw some light on the length of the incubation period, I mention the following dates:—I had very slight sore throat on Wednesday afternoon, January 22nd. On Thursday morning still felt quite well except more marked soreness about the throat. Thursday afternoon I was absolutely down with the attack. By the following Tuesday every symptom was gone. I had very severe coughing and excessive flow from eyes and nostrils. My wife, who had nursed me and had seen no one in the interval, developed head symptoms, pain about the body, and bad cough, on Wednesday and Thursday, January 30th and 31st. On Friday and Saturday her symptoms were most severe. On Tuesday, February 4th, she had lost every symptom. As mentioned before, up to this date (February 12th) my daughter, aged 7, and my son, aged 4, are still perfectly well, and show no sign of the fever.

Through the kindness and courtesy of my friend, Mr. Robert Pett, Senior Assistant Cape of Good Hope Royal Observatory, I am in a position to give you some valuable information in regard to our climate since the beginning of 1890:—

"The instruments are read at 8 A.M. and 1 P.M. The results are: 1. Mean height of barometer during January, 1890, 29.88 in., or 0·05 in. below average. 2. Mean temperature, 68.5° (about the average). 3. Absolute maximum for month, 92°, and absolute minimum for month, 53° (both about the average).

"Prevailing wind, S., but occasional light breezes from N.W. The barometer has been unusually low during January.

"In connection with astronomical work it was noticed that there was an unusual prevalence of cloud accompanying the S. wind at night. The observatory work was much impeded by the presence in the atmosphere of masses of vapour forming between the S. horizon and the zenith, and occasionally extending to the W. horizon. This was noticeable during the afternoons and evenings."

Our weather since the new year has certainly been most trying, especially to people of a nervous and easily excitable temperament. South-east winds are very prevalent at this time of the year, blowing with great fury towards evening, the direction being over Table Mountain across the town into the bay.

In my opinion the incubation period of the influenza is very short, and frequently none can be traced. This would rather favour the impression stated above, that the atmosphere plays an important part in conveying the poison vapour, rather than the supposed growth and development of a microbe.

A Pasteur Institute, on the lines of the parent establishment in Paris, was opened in New York on February 16th. The director is Dr. Paul Gibier, who was for many years one of M. Pasteur's assistants. Dr. Gibier will be assisted by Drs. Van Schaick and Lieutard.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

AGUE AFTER INFLUENZA TREATED WITH BELLADONNA.

I was called a few weeks ago to see a young married woman, said to have been suffering from influenza for several weeks. She had been under the care of a homœopathic practitioner, but was dissatisfied with the prolonged convalesence, which was obstructed by the fact that febrile paroxysms, of the character of quotidian ague, supervened when the cough, sneezing, and pains in the limbs left her. I administered quinine, both in the form of ammoniated tincture and the sulphate, but it exerted no apparent effect on the rigors and sweating. I then administered 10-15 minim doses of belladonna tincture in combination with two-grain doses of sulphate of quinine. The effect on the rigors and sweating was immediate, and the patient, within two hours of the first dose, said she felt better than she had done for weeks before. I continued the belladonna three times a day for four days, and then discontinued it, as it began to affect the pupils. On doing so the ague symptoms immediately returned, and the patient reproached me for altering her medicine. Replacing the belladonna the effect was precisely as before, and no bad symptoms appeared for another week, when I deemed it advisable to withdraw the belladonna. On doing this the sweating returned, though not with the previous violence, and I am now gradually diminishing it, with no ill effect. I have found belladonna on other occasions useful in reducing night sweats in rheumatic cases in convalescence, but I never before observed so marked an effect on a disease of a paludal character.

EDWARD BERDOE, M.R.C.S., L.R.C.P.

Victoria Park, E.

TRIPLETS: HYDRAMNIOS.

In connection with the article "Triplets, Hydramnion, and Acardiac Monster," in the JOURNAL of January 25th, p. 199, the following particulars of a case recently under my care may be of interest:

M. J., aged 36, married, the mother of eight children, the youngest aged 3, consulted me on October 31st, 1889, for distressing cough and shortness of breath. She stated that she was three months pregnant, but she thought herself a great size for the time. The abdomen was very much distended, and dulness reached to a level much above the umbilicus. The distension continued to increase rapidly during the next few days, and the breathing became more and more laboured, with great pain all over the abdomen. By November 14th the dulness reached to the ensiform cartilage; a loud uterine *souffle* could be heard just below and to the right of the umbilicus, but no fœtal heart could be made out. Examination *per vaginam* showed the os to be patulous, and the bag of membranes could be felt by the finger introduced into the uterus. Labour pains came on at about 8 o'clock on the morning of November 14th, and I asked Dr. Walter, of Manchester, to see the case with me. We arrived about 6 P.M., by which time the os was almost fully dilated, and the conical bag of membranes could be felt presenting through it. The latter was ruptured by Dr. Walter, and five quarts of amniotic fluid, to the great relief of the patient, escaped into the vessel placed to receive it. A couple of hours afterwards the pain increased, and a fœtus was born apparently about five months old, and perfectly developed. The umbilical cord was no thicker than a stout piece of whipcord. A couple of minutes afterwards a second fœtus was born, rather larger than the first and also perfectly developed, the umbilical cord being of great size, quite an inch and a quarter in diameter. The uterus did not retract, and it was quite impossible to grasp it in the hand. The placenta, however, was expelled in a few minutes, to which both the cords were attached, the first to its edge and the second to its centre. I was still unable to grasp the uterus through the abdominal wall, but there was no hæmorrhage to speak of, and after waiting a little time the pains came on again, and a third fœtus was born with the placenta and membranes entire. This fœtus was larger than either of the other two, and like them was perfectly developed, and between five and six months old. The patient made a good and rapid recovery, and there was very little hæmorrhage.

I had not previously come across a multiple pregnancy complicated with excess of liquor amnii, and the occurrence seems to be of sufficient rarity to render it worth recording.

Rochdale. WALTER O. STEINTHAL, L.R.C.P., M.R.C.S., L.S.A.

CASE OF MULTIPLE PREGNANCY.

AT 10 A.M. on February 3rd I was summoned by a midwife to Mrs. J., aged 38. She was a strongly-built woman, and told me that this was her thirteenth pregnancy, and that she had had four miscarriages. The last three children had been born at the eighth month, but had been reared. No previous multiple pregnancies, but her mother had had three twin pregnancies. I found that she had been delivered at 8 A.M. of a male fœtus of about six months. She considered herself to be about 6½ months gone. There had been no difficulty; but the midwife at 10 A.M. thought the placenta was adherent, and sent for me. On external inspection I found that there was another fœtus *in utero*. Examining *per vaginam*, there was a fleshy mass adherent to the wall of the uterus about half way between the os internum and the fundus, and almost blocking the uterus up. This had no doubt been mistaken by the midwife for the placenta, but the cord could be traced up beyond the mass towards the fundus. On the far side of the fleshy mass a second bag of membranes could be distinctly felt. I put the patient under chloroform, and with my hand removed the fleshy mass, which was a matter of considerable time and patience, as it was intimately adherent to the wall of the uterus. I found that at the area of insertion of the fleshy mole the wall of the uterus was only about a quarter of an inch thick. There being only moderate hæmorrhage, and the uterus contracting upon the second fœtus, I ruptured the membranes, and having seized a knee easily delivered a female child, about the same age as the male child. After waiting half an hour, and being unable to express the placenta, I examined again, and found it to be adherent to the fundus. I managed to detach it fairly easily with my hand, and to my great relief the operation was followed by immediate and powerful contraction of the uterus. The hæmorrhage was almost infinitesimal. The placental mass consisted of two separate placentæ joined at one edge, with the "battledore" insertion of the cords at the free edges. The children lived for twelve hours; the mother has made an uninterruptedly good recovery, with normal temperature and natural discharge.

The woman is very healthy, has never suffered from any wasting disease, and has had no accident to account for the premature birth.

FRANCIS C. SERVAES, M.A., M.B.Cantab.

Liverpool.

SCARLET FEVER AND PUERPERA.

THE notes which have appeared in the JOURNAL on the above subject and the tone adopted by their authors as to the smallness of risk incurred by the recently-confined mother from exposure to contagion, in my opinion, demand the most serious thought, and I trust will call forth an expression of opinion, based on experience, which may determine the question, Does scarlet fever when brought in contact with a puerpera render her liable to great risk of becoming the victim to what is known as puerperal peritonitis, uterine phlebitis, or the more general name puerperal fever? My experience tells me that it does. I have seen too many sad instances in my own practice, as well as that of my neighbours, to doubt it. At the same time I must add, that was before antiseptics were heard of—in those days I simply declined attending midwifery, in spite of threats and entreaties, when I had cases of scarlet fever on my list.

I have also seen the same fatal results when the puerpera was exposed to the contagion of measles, and regret to have to record a case which has just taken place in my practice. On December 19th last a youth came home from a public school where measles was prevalent; he sickened of it on the 21st; a brother and sister followed on the 26th—cases were so mild no advice was deemed necessary. On January 2nd I was sent for to another member of the family on account of something else. I then learned that there were three cases of measles in the house. The mother, who expected to be confined on the 24th, had attended them; nursed them herself. She showed the disease on the 7th; on the 11th another child had it, and the mother got out of her bed to nurse her. All the cases ran a mild course, and convalescence was complete by the 16th, when I discontinued attendance.

I gave orders that the children were to be removed into lodgings at once, that the whole house was to be thoroughly disinfected, and that the carpets and hangings were to be removed from the bedroom about to be occupied by the mother, and that from

its ceiling to its floor it was to be purified; all this was done. The confinement took place on the 21st, before I got to the house. A skilled nurse did all that was needful, and showed me the placenta, etc. The infant was born with the measles fully out and desquamating in some parts. All went well till the 24th, when after a slight rigor, fever set in; pulse 130; temperature 104.2°; headache, sickness, pain over abdomen, restlessness, lochia natural. I gave 10 grains of antipyrin and 1 drop of tincture of aconite every hour, applied turpentine stupes to body, and in seven hours found my patient relieved from all her unpleasant symptoms, and quite cheerful. She passed a good night, had refreshing sleep, and next morning I fancied that the attack had been what in Yorkshire is called "a weed,"—a passing febrile wave which in a few hours leaves the patient as well as before. On the 25th felt quite comfortable, on the 26th the same; on the 27th I noticed a marked change; countenance pinched and anxious, pulse 130; tongue parched, veins of left arm swollen painful; womb tender, full; veins of thighs and legs hard, very painful; temperature 98.2; discharge nearly ceased, but nothing offensive. I telegraphed at once for Mr. Scattergood, of Leeds; we did all we could, all we knew, but she sank in twenty-four hours, after the appearance of phlebitis. The lowness of the temperature in conjunction with the severity of the symptoms was the worse feature in the case; now the question comes, did this lady's blood, after having got rid of the original attack of measles, ten days before her confinement, become a second time poisoned by the child in utero whilst suffering from the same disease. A. S. MYRTLE, M.D.

Harrogate.

A few weeks ago I attended a case of a woman in labour in a house where scarlet fever had attacked all her children. They were peeling at the time I attended her, consequently the rooms must have been charged with the poison; and being a person in humble circumstances, she nursed the children up to the time of her accouchement. She has done remarkably well, and although I was a little anxious at the time, she never showed the slightest sign of the dreaded fever. This case is in Dr. Thursfield's district, and he also knows the particulars, because as soon as the outbreak occurred I reported the fact to him, and also sought his advice as to the probabilities of the risk with regard to the mother. This particular case seems opportune at the present time, and certainly tends to corroborate all that Dr. Thursfield has written upon the subject. T. P. THOMSON, M.B.

Shrewsbury.

RAPID CURE OF ERYSIPELAS BY ERGOTINE.

FOR erysipelas, like most other painful diseases, hosts of remedies have been suggested, and ever since Hueter discovered cocci in this particular ailment all sorts of germicide applications have been tried, with and without success. The most recent favourites are carbolic acid, ichthyol, and creolin. Without wishing in the slightest to underestimate the value of these agents, I would like to call attention to what has been my invariable treatment for at least five years. In every case I have used ergotine applied with a camel's hair brush to and around the affected area, and have found it a painless, rapid, and almost certain cure; in fact, I cannot recall a single case in which it has disappointed me. It is best used in the form of a 50 per cent. solution in distilled water, painted on frequently. Generally one or two applications suffice to diminish all feeling of tension, and it is rarely that the pain is not quite conquered in twenty-four hours, leaving the patient comparatively well. In many cases I have relied solely on the ergotine, not prescribing any internal medicine.

In writing this note I have no desire to be thought original, for I saw the treatment recommended in some medical paper of about the year 1884 or 1885, but I cannot lay my hands on it now, and fear the treatment has not had a fair trial, as I never hear of its being adopted. Neither do I pretend to explain the action of the ergotine, but the effective way in which it cuts off the excessive blood supply to an over-vascular area naturally suggests its trial in other passive congestions, and in these also I have found it very useful.

In the *Year-Book of Treatment* for 1890, p. 255, I find it stated that Dr. F. Nesterovsky describes two cases in which he has used a mixture of "extractum secalis cornuti" and glycerine with success, the temperature becoming normal in six days. This encourages me to ask for a fresh trial of ergotine, which I have found in not fewer than thirty cases to practically cure in one day.

Blackpool. GEO. C. KINGSBURY, M.A., M.D.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LONDON HOSPITAL.

TWO CASES OF EXTRAUTERINE GESTATION.

(Under the care of Dr. HERMAN.)

[Reported by Dr. F. H. TAYLOR, Resident Accoucheur.]

CASE I.—*Tubal Gestation: Rupture Towards the End of Second Month: Intraperitoneal Hæmorrhage: Operation during Collapse: Recovery.*—E. C., aged 26; admitted July 30th, 1889. The patient was not very intelligent, and her account of her previous history was confused. She came to the hospital on the evening of July 29th, and was seen by Dr. F. H. Taylor. She then complained of pain in the lower abdomen. She said that menstruation had been regular, and had last occurred, at the proper time, a week ago. While she was menstruating she got her feet wet, and she thought her illness was the result of this. She looked pale, and her face expressed pain. On examination the hypogastrium was found tender, and a resisting mass could be felt about as large as a tennis ball. *Per vaginam* nothing abnormal was felt, except pain on moving the uterus. The patient was advised to come in, but refused to do so.

July 30th. Early in the morning the patient had renewed pain and slight vaginal hæmorrhage. She started to come to the hospital, but on the way she fainted. She was found and brought to the hospital by a policeman about 10 A.M. She was then in a state of collapse, and the hypogastric swelling felt the previous evening could no longer be felt. She was seen by Dr. Herman soon after 2 P.M. The patient was then blanched, extremities covered with cold sweat, pulse small, quick, feeble. The abdomen was slightly distended. Nothing marked could be made out by vaginal examination. No physical signs of disease elsewhere. It was plain that the patient was suffering from internal hæmorrhage, and that the abdomen was its seat. Although there was no clear history pointing to extrauterine pregnancy, yet nothing could be elicited from the patient or her friends pointing to any other disease, such as gastric ulcer or enteric fever, likely to have occasioned such hæmorrhage. Operation was therefore advised, and performed about 3 P.M. As soon as the peritoneum was opened dark fluid blood welled up. The uterine appendages on the right side were healthy. On the left side the tube was dilated and ruptured, and among the clots of blood removed from its neighbourhood was found a fœtus about seven-eighths of an inch long and its chorion. The left tube and ovary (which was enlarged) were tied and removed. The abdominal cavity was washed out with warm water till it was thoroughly clean, abundance of recent clot being removed by this means. Keith's drainage-tube was put in, and the usual dressings applied. Enemata of ℥j brandy, ℥ij beef-tea, and ♏xx tr. opii. were given every three hours after the operation.

The patient's condition rapidly improved. The pulse was much stronger in the evening. Convalescence went on without any bad symptoms. The temperature never exceeded 100.2°. She left the hospital on Sept. 6th, and presented herself in October, quite well.

[Reported by Mr. E. A. WADESON, Clinical Clerk.]

CASE II.—*Subperitoneo-pelvic Gestation: Death of Fœtus about end of Third Month: Operation: Cure.*—J. G., aged 27; admitted July 20th, 1889.

Family History.—One brother, a sister, and some of father's relatives were consumptive. A sister was under Dr. Herman's care for spasmodic dysmenorrhœa twelve years ago, and was cured by dilatation; sterility, also present, was not cured.

Previous Health.—Always lived in comfortable circumstances, but was never strong; suffered from headaches, fainting fits, cold extremities, deficient appetite, constipation, and uncertain sleep. First menstruated at 17. Between 18 and 19 was under Dr. Herman's care for chlorosis with amenorrhœa, and was cured by iron. Menstruation usually lasted one day, was scanty, preceded by some hours' hypogastric aching, which passed off when the flow became established.

Patient was married at 24, but was never before pregnant. At nine months after marriage she did not menstruate, and was treated as if pregnant by her medical attendant. She last menst

ated three months ago. Nine weeks ago she was seized with sudden pain in the hypogastrium, so bad as to oblige her to go to bed; this lasted about a day. Since then she has had four attacks of pain of a similar character. In the intervals between these attacks she has been free from pain. About five weeks ago (during the third attack of pain) a "fleshy substance," with a little blood, came from the vagina. She has been sick in the morning, and lately her feet have swelled slightly. Has lost a good deal of flesh, but the breasts have enlarged.

On examination, the breasts contain milk; a rounded swelling rising out of the pelvis, and reaching to within two fingers' breadth of the umbilicus. *Per vaginam*, cervix uteri displaced forwards; behind cervix an elastic fixed swelling, continuous with the abdominal swelling.

The diagnosis was made of extrauterine gestation, and expectant treatment was at first advised, as there were no urgent symptoms, and it was possible that the child might be dead, and absorption going on.

July 25th. The patient had another severe attack of pain, like those she had formerly experienced. This appeared to indicate that the case was not tending to spontaneous cure, and, therefore, operation was advised.

August 3rd. The operation was performed. On opening the abdomen some bowel was found fixed by old adhesions beneath the abdominal wall. On separating these and holding the bowel aside, the tumour was seen bluish in colour behind the uterus. It was opened, and found to contain a quantity of old dark clot, amongst which was a macerated fœtus of about three months' gestation. The sac was cleared out, and it and the abdominal cavity washed out with warm water. The sac was underneath the pelvic peritoneum, which it lifted up over it. Its wall was for the most part very friable. Such parts of it as could be readily broken away were removed, the tougher parts stitched to the abdominal wall, and a Keith's drainage tube inserted down to the bottom of the sac. No bad symptoms followed. The temperature never exceeded 100.2°. Patient left the hospital well on August 31st. She has since reported herself, and remains well.

REMARKS BY DR. HERMAN.—The first case illustrates one common course of tubal gestation. No symptoms important enough to attract attention till rupture. First a rupture with slight hæmorrhage, on July 29th. The tumour then felt by Dr. Taylor was probably a mass of clot surrounding the burst sac. Then another rupture, with profuse hæmorrhage and collapse. In the second case, the repeated attacks of pain probably indicated repeated hæmorrhages from rupture of the sac, which may have been tubal in the beginning, the blood being effused under the peritoneum. The fœtus had died, and recovery would probably have taken place without operation; but the tumour was larger than the period of pregnancy which the patient's history pointed to, and this, with the persistence of pain, led to the inference that the pregnancy was going on. It is difficult to see how the death of the fœtus could have been diagnosed without waiting for a length of time which would have appreciably increased the risk if the fœtus had been living. The history of the patient is suggestive. Spasmodic contraction of the tube has been proposed as an explanation of those cases, more numerous in old than in recent literature, in which extrauterine gestation has been supposed to be due to some emotional disturbance about the time of conception. More recent investigators have traced, not only tubal gestation to catarrh of the tube, but many anomalies in pregnancy to abnormal conditions—deficient development or inflammation—of the endometrium. In this case we have late menstruation, then chlorosis followed by scanty menstruation, a period of amenorrhœa, and absolute sterility during nearly three years of marriage; and in a sister, spasmodic dysmenorrhœa and sterility. May the failure of the ovum to travel to the uterus have been due to deficient development of the tubal mucous membrane, or to spasmodic contraction, or perhaps deficient contraction, of the tube?

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 11TH, 1890.

TIMOTHY HOLMES, M.A.Cantab., F.R.C.S., President, in the Chair.

Analysis of 964 Cases of Operation for Calculus in the Bladder by Lithotomy and Lithotrity, with Remarks.—Sir HENRY THOMPSON commenced his paper by referring to his first record of 500 cases of operation for stone in the bladder in the adult male, presented to the Royal Medical and Chirurgical Society in 1878 (*vide Transactions*, vol. lxi, p. 159). He now brought forward an additional series of 464 cases, making a total of 964, including cases of women and children. Of these, 101 cases occurred in hospital practice (University College), and 863 were treated in private. Besides these were a few cases of foreign bodies, etc., removed by operation. The total number of children was 17, of women 14, leaving the number of operations on the adult male by all methods 933. Of every one of these the author possessed full notes made at the time, and exhibited every calculus (with very few exceptions) in a cabinet with numbered cells. A catalogue corresponding thereto contained a brief epitome of facts relating to the case, and the name of the medical men who sent it, with the subsequent history when obtainable. A brief account of the progress of lithotrity from the author's earliest case (1854) until the present time, and the influence of it on his practice was given, commencing with the method of Civiale at that time, the introduction of the aspirator for *débris* by Clover in 1865, and the gradually increased use of it during the next twelve years. Then followed the introduction (1878) of the great and important principle by Professor Bigelow of employing one sitting instead of several, and removing the whole of the *débris* at the same time, which the author at once adopted. The results of this practice were shown, on comparing his own 325 cases of the operation by a single sitting with the 475 by multiple sittings prior to the date named, to have reduced the mortality nearly one-half. The first remarkable fact obtained by analysis of the entire series was the following, namely, that stone in the bladder was not more common in children than in adult patients, as formerly supposed, due to the experience of the malady met with in hospital practice. Probably it might be so among the poorest class of the population, but it was far otherwise among those whose circumstances permitted a dietary unlimited in kind and quantity, as regarded both food and drink. The following table affords warrant for this assertion: Ages of male patients in private practice only: Below 16 years, 3; 16 to 24 years, 8; 25 to 50 years, 89; 51 to 70 years, 565; above 70 years, 184; total, 849. The mean age of the entire adult male cases was about 62½ years. The greatest age at which an operation had been performed was 91 years (lithotrity). The largest calculus was of uric acid, weighing 14 oz. The next important observation affirmed the value of the principle, long ago insisted upon by the author, of finding the calculus at the earliest date possible, for the elderly adult male, in whom it so frequently occurred. Two cogent reasons existed for this: first, the stone when small was easily removed, and very little risk attended the operation; secondly, at that stage of calculus production the re-formation of an acid calculus (uric or oxalic) could almost invariably be prevented by strict dietetic precautions. A strong array of evidence was adduced in support of the foregoing. Another topic treated at length related to the choice of operation, whether by knife or by lithotrite. In the entire adult series of 933 cases, 800 were by lithrotity, 115 by perineal lithotomy, and 18 by suprapubic lithotomy. The last important subject related to the nature and causes of fatal issue following operation, and these were given in a tabular form under ten separate heads. A brief section closed the report, pointing out the most unusual cases met with, such as exfoliations of bone from the hip into the bladder as a nucleus of stone, etc. Examples of encysted calculus, of remarkable size and structure, besides curious foreign bodies introduced by accident or design, were exhibited.—Mr. BRYANT said there was no doubt that the mortality from stone operations had been reduced by performing lithotrity at one sitting. He would like to ask Sir Henry Thompson's opinion as to the relative merits of lithotrity and suprapubic lithotomy in elderly persons and children. He quite agreed that it was most important to detect and remove calculi in their early stages.—Mr. BUCKSTON BROWNE, as an old pupil of the author, and having nearly completed a series of 200 cases of stone himself, ventured to make a few remarks. Owing to advances in surgery he was at a loss how to classify certain of his cases. For some time an intermittent controversy had been going on as to what was and was not a stone in the bladder. Sir H. Thompson, with special reference to the constant formation of phosphatic concretions in some conditions of prostatic disease, had with the best intentions, with reference to the value of statistics, fixed an arbitrary limit of 20 grains, below which calculous matter was not, in his opinion, to be considered as stone. On the other hand, Surgeon-Major Freyer, in recording his Indian experiences, had grouped together stones weighing 3 and 4 grains, and stones weighing an ounce or more,

and had drawn results from the figures thus obtained. Mr. Browne exhibited 300 uric acid calculi weighing 167 grains, which he had removed from a patient who had symptoms of stone; the stones were removed through a tube, and the lithotrite was not used. He asked how he was to classify such a case, if they classed the surgery of stone under the two heads of lithotomy and lithotrity. Before 1878 they spoke of cutting and crushing. After Bigelow's paper the word introduced by him, litholapaxy, had been largely used to designate operations other than cutting operations, and since then for twelve years the terms lithotrity and litholapaxy had been struggling for pre-eminence. He would put it to Sir H. Thompson and to Professor Bigelow, whether the time was not come for them to accept all three terms, and speak of cutting, crushing, and washing out. As the term litholapaxy was originally applied by Bigelow, it was as equally applicable to lithotomy as to lithotrity, since it signified merely evacuating the bladder without implying any particular procedure. It appeared to him to be a suitable word to add to their nomenclature, and he suggested that they should class their stone operations as lithotomy, lithotrity, and litholapaxy, meaning by the last term the removal of stones without the knife or the lithotrite. In that way they would get over the disputed point as to what was to be described as stone in the bladder. Any calculus in the bladder requiring for its evacuation the use of instruments, would then be "a stone in the bladder," and its importance for the purposes of statistical comparison would depend upon whether it required for its removal the knife, the lithotrite or the tube. He would not compare operations for the removal of stones weighing 3 or 4 grains, and others weighing ounces, but at the same time he was not prepared to accept an arbitrary limitation, seeing that there was no strict line of demarcation.—The PRESIDENT referred to a case in which he removed a stone by suprapubic lithotomy, and at the same time a considerable portion of an enlarged prostate, the patient, an old man in a weak state of health, recovering satisfactorily from the operation. He thought it was satisfactory to find that lithotrity was not as dangerous as it was formerly supposed to be.—Sir HENRY THOMPSON, in reply, said that it was impossible to lay down absolutely exact rules for guidance in deciding between lithotrity and suprapubic lithotomy. Many circumstances, special to each case, had to be considered. Much depended not only on the condition of the patient and the nature of the passages, but on the surgeon's own peculiar view. The higher the development of art the greater the qualifications needed in the artist. For children he preferred suprapubic lithotomy for large stones, but had employed lithotrity for small ones at a very early age. In elderly people the urethra was capacious and insensitive, and hence such patients were usually good subjects for lithotrity. On the other hand, adults from 25 to 40 years bore distension of the urethra badly. In the adult crushing might be carried to stones of four ounces if one chose, provided a large evacuating tube could be passed. If an evacuating tube as large as No. 18 could be passed, a three-ounce uric acid stone when crushed could be removed with great facility. If he found an irritable passage with a rigid prostate admitting only 13 or 14, he preferred to employ the suprapubic operation for a large calculus. His experience with children was small, but in them lithotomy had given good results. He looked upon the case Mr. Browne had alluded to as one of operation for gravel; he thought, however, the nomenclature suggested by him a good one. He objected to the term "lithopaxy" being used as synonymous with lithotrity, for the former word overlooked the crushing, which was the most important part of the procedure. In what he said he did not wish to be understood as undervaluing the method introduced by Bigelow; he had, indeed, been accused of this, as he thought, without any grounds whatever, and he wished now to make an ample *amende*, if that were necessary. He looked upon the modification introduced by Bigelow as the most important and valuable ever made in that branch of surgery. He considered it misleading to apply the term "stone" to a case in which only small gravel had been removed. It seemed necessary to draw a line somewhere, and he was glad to find that Mr. Bryant was disposed to agree with his suggestion that the 20-grain limit was a good one. The difficulty of evacuating the bladder completely had practically disappeared since the introduction of powerful aspirators; but there might still be a re-formation of deposit in cases of enlarged prostate; this was only to be prevented by frequently washing out the bladder, while the reappearance of uric acid calculi could only be insured against by careful attention to diet.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 5TH, 1890.

A. L. GALABIN, M.D., President, in the Chair.

The Change in Size of the Chest and Abdomen during the Lying-in Period, and the Effect of the Binder upon them.—Dr. G. E. HERMAN read a paper on this subject. He said three reasons were commonly given by medical men or by the public for the use of the "binder" during the lying-in period: 1. That it gave comfort. 2. That it counteracted the injurious effect of the sudden lowering of the intra-abdominal pressure consequent on the evacuation of the uterus. Dr. Herman pointed out that it was not usually applied till after the time at which the lowering of pressure took place. 3. That it kept the waist measurement small, and so preserved the "figure" of the patient. To judge of this it was necessary to know what changes normally took place in the lying-in period. He adduced measurements made at the General Lying-in Hospital, which showed that during the first ten days of the lying-in the circumference of the lower part of the chest (at the level of the ensiform cartilage, and also midway between this point and the umbilicus) diminished by rather more than an inch. This diminution was practically the same in primiparæ and multiparæ, and was not modified by age. The effect of the "binder" was ascertained by comparing different classes of patients: (1) with a binder as ordinarily applied; (2) without a binder; (3) with a binder to the continued tightness of which special attention was given. It was found that the diminution in size of the lower part of the chest was practically the same in each class. The author, therefore, concluded that the ordinary binder had no effect on the waist measurement of the patient, although he did not doubt that by the use of an unyielding bandage, tightened by straps, deformity of the chest might be produced and maintained. The sole utility of the ordinary binder was as a means of comfort to the patient.—Dr. GERVIS said it had not seemed to him in practice to find that patients were wishful for a belt from any idea that it would influence the size of the waist, but for the support it gave to the lower abdomen and its effect in checking any tendency to undue fulness there afterwards. He thought, also, that if the belt was adjusted at the beginning of labour, and tightened from time to time during its progress, it had a distinct influence in promoting uterine action and lessening any tendency to subsequent hæmorrhage.—Dr. CHAMPNEYS said that the method of binding in use at the York Road Hospital was that described by Dr. Matthews Duncan, and was most efficient and simple. He considered that the non-use of the binder led occasionally to the "pendulous belly," with all its ill consequences. The binder assisted, also, in promoting the involution of the soft parts. He thought a binder should not extend so high as to compress the hypochondria. Binders were not used in Germany, and, in his experience, English hospital patients recovered with better figures than German women, while private patients who had experienced English and German customs preferred the former. He agreed that the binder did not prevent flooding.—Dr. BRAXTON HICKS said it was clear that the base of the thorax was expanded by the pregnant uterus. This being so the abdominal walls, after delivery, were unable by so much as they were elevated to apply their pressure on the abdominal contents. Blood, therefore, flowed into the abdominal cavity, and was ready to flow into the uterine cavity should the walls of this organ become atonic. He thought that if the thorax were brought to its natural size by a slight bandage it would be beneficial.—Mr ALBAN DORAN remarked that at different periods different interpretations had been put upon the term "waist," and that it was the unsightly enlargement of the abdomen that women objected to, because it suggested mature years, and gave rise to much physical discomfort.—Dr. R. BARNES also made remarks.—Dr. HERMAN, in reply, said that his statements only applied to the binder in ordinary use, put on, as was usual, after labour, and not to the abdominal bandage as an adjuvant to labour. By "waist" he understood the smallest circumference of the trunk. Women were discharged from German lying-in hospitals sooner than they were in this country, which might account for the more frequent condition of pendulous belly. He could have understood the effect of a belt worn after the patient got up in preventing "pendulous belly," but that was not here under consideration. He thought the comfort a binder gave was a sufficient reason for using it. But it was not necessary, was not a safeguard against any subsequent trouble, and he thought that medical men might be guided as to its use entirely by the wishes of their patients.

Apoplexy of the Ovary: Cystic Dilatation without Rupture.—Mr. ALBAN DORAN related a case. The patient was 34 years old, and had borne eight children. The abdomen was unusually distended during her seventh pregnancy (1886). It remained large till the conclusion, at term, of her eighth pregnancy in the summer of 1888. The abdominal distension continued. In April, 1889, she was suddenly attacked with severe pain over the right side of the abdomen. Four weeks later the abdomen was found distended by a globose, elastic, and freely-movable tumour, which pressed downwards into Douglas's pouch. Early in September the tumour suddenly diminished in size, shrinking into the pelvis. On October 23rd Mr. Knowsley Thornton operated. The tumour was removed; it proved to be the right ovary converted into an oval body, two and a half inches in its longest diameter, and with an irregular surface of a uniform dull drab colour. The uterus and left ovary, the abdominal viscera, and the peritoneum showed no signs of disease, old or recent. The ovary formed a cyst filled with a yellow mass, which was found to be an old clot. A large well-formed corpus luteum opened out into the cavity containing the clot. The cyst wall, one-eighth of an inch thick, consisted of normal ovarian tissue bearing a few follicles. The patient made a good recovery. The attack of pain in April, 1889, probably represented the rupture of a mature follicle into the stroma. The ovary then gradually distended till the hæmorrhage ceased, and diminished in bulk as the clot contracted. The varieties of apoplexy of the ovary were described. The case related was an example, not of hæmorrhage confined to the cavity of a dilated follicle, or of hæmorrhage originating in the stroma, but of hæmorrhage into the stroma through rupture of a follicle.—Mr. AMAND ROUTH said that he could not agree with Mr. Doran's explanation of the case, because in May the tumour was a palpable cyst, extending from Douglas's pouch as high as the level of the umbilicus, and in September it burst, and in the early part of October it was only the size of a small orange. Hence he believed it to have been an ovarian or broad ligament cyst, and that the changes described by Mr. Doran had taken place subsequently to the bursting.—Dr. P. HORROCKS considered apoplexy a good name, although not defensible etymologically, but in adopting it one should make it quite analogous to its meaning when applied elsewhere. He thought that hæmorrhages into Graafian follicles and into the stroma of the ovary were not so uncommon as one might have supposed from *post-mortem* research only.—Dr. CULLINGWORTH preferred the term hæmatoma to apoplexy. He thought the history was one of rupture rather than of gradual absorption. The fluid poured out might easily have been absorbed, leaving no trace behind. He described a case in his own practice in which an ovary had been removed by abdominal section. It was wrapped up in and adherent to the omentum, and was a mere shell filled with dark brown pultaceous material, evidently altered blood.—Mr. W. DUNCAN also made remarks.—Mr. ALBAN DORAN, in reply, said that small extravasations of blood into the follicle and substance of the ovaries were probably frequent. The big swellings full of blood often seen on the surface of the ovaries of healthy young subjects were probably normal. He considered the absence of signs of rupture in the peritoneal cavity conclusive against recent rupture. Extravasations of fluid into the substance of the ovary, inflammatory or otherwise, caused great pain, as in orchitis and intra-ocular inflammation, where organs with tough capsules were involved. He thought Dr. Cullingworth's case similar to one he had published in the *Medico-Chirurgical Transactions* for 1885. The walls of the ovary exhibited by him (Mr. Doran) were solid ovarian tissue; they bore no resemblance to the walls of a true cystoma which had partly collapsed, as in Dr. Duncan's case.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 10TH, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

Presidential Address.—The PRESIDENT, on taking the chair for the first time, thanked the Fellows for having selected him. He appealed to Fellows to contribute practical papers and "typical" clinical cases. He expressed the hope that one or two meetings might be devoted to discussions on abdominal surgery. On one such occasion he hoped that Dr. Senn, of Chicago, would be able to open a discussion on intestinal surgery.—The usual votes of thanks were then agreed to.

Paroxysmal Hurry of the Heart.—Dr. SAMUEL WEST read a paper on an affection characterised by extremely rapid action of the heart, sometimes accompanied by pain and varying in duration from a few minutes to several hours. The presence of a heart lesion was not constant. This affection might not incapacitate the patient, except during the attacks. Some appeared to recover, but others died of cardiac failure; hence the existence of a cardiac lesion could not be altogether excluded. He mentioned several cases of the kind. One, a man, aged 33, came complaining of palpitation. The heart was found to be beating over 200 per minute, respirations 24, temperature 99.6°. No dyspnœa, cyanosis, or murmur. On the following day a loud systolic murmur was audible, probably due to dilatation. The patient had had rheumatic fever seven years before, when he suffered from precordial pain. The attacks were relieved by nitrite of amyl, and gradually became less frequent. The patient left the hospital at the end of three months, and had since been free from attacks. The second case, a man, aged 32, was admitted in a condition of collapse, and with a pulse of 300 per minute. The attack had been sudden, and was associated with pain. The respirations were only 18 per minute. The heart's apex was slightly displaced outwards. Nitrite of amyl was given, and the pulse fell to 88, when a mitral murmur became audible. This attack was the third of its kind. There was a history of alcoholic indulgence and possibly of syphilis. The man was discharged apparently well at the end of a fortnight. The third case was that of a nurse, aged 26, who was suddenly seized, while hurrying home, with very severe palpitation and pain in the region of the heart. The pulse was too rapid to be counted, and respiration was rapid and panting. Under brandy, opium, and ether, the attack slowly passed off. The patient was in the hospital for about two months, during which she had several other attacks which, however, were less severe than the first. Three months later she had returned to her duties. Dr. West suggested that possibly this case might come under a different category. He mentioned that Dr. Bristowe regarded the disease as functional, any cardiac lesions being secondary to the attack of palpitation. There appeared, however, to be some evidence of the probable existence of cardiac lesions in these cases. If there was a lesion it was probably of the myocardium.—Dr. GILBART SMITH observed that such cases were more common than was supposed, but were generally ascribed to angina pectoris, from which they differed materially. He thought that in many cases there were organic lesions, and he mentioned the case of a man who was admitted into the City Road Hospital for Diseases of the Chest with extremely rapid action of the heart, for which no obvious cause could be detected, except a suspicious sound over the aorta. The condition did not yield to the usual remedies, and a distinct aortic regurgitant murmur became audible. They diagnosed a ruptured aortic valve, and when the man died, three weeks later, this was found to be the case, due to the rupture of an aneurysm of one of the sinuses of Valsalva involving the valve. He also mentioned the case of a burly Irish farmer, who suffered from severe attacks of "palpitation." In this case there was a history of syphilis, and iodide of potassium gave very great relief. Other cases were probably of purely neurotic origin.—Dr. PERCY KIDD asked whether any cases had been met with in which the cause might have been reflex disturbances—pregnancy, for instance. He observed that in certain of these cases distinct lesions of the vagus nerve and cardiac ganglia had been made out.—Dr. JAMIESON mentioned the case of a woman, aged 32, who had a first attack of rapid heart beat after a severe fright. The first attack rapidly subsided, but others supervened subsequently, and at the end of two years the eyes became prominent. Iodide of potassium had relieved her at first, but later on belladonna proved most beneficial. He remarked on the facility with which the pulse could be counted notwithstanding its rapidity. He had seen two other cases in stockbrokers during a period of crisis. Most of the cases ended badly.—Dr. WEST, in reply, said they must draw a sharp line between cases of persistent rapidity of heart beat or those merging into exophthalmic goitre, and the cases to which he wished to draw attention, the essential feature of these being the ephemeral character of the symptom.

Treatment of Lateral Curvature of the Spine.—Mr. RICHARD BARWELL read a paper on the treatment of lateral curvature of the spine by "rachilysis." He pointed out the changes undergone by the spine in the course of the deformity, resulting in the spine being bound down in its vicious position by ligamentous contraction. To remedy this, he proposed to apply force, with the object of

stretching the shortened ligaments. He demonstrated his *modus operandi* on two lads from the Cripples' Home in Kensington, and showed, during the use of the power in one case, an increase of length of three-quarters of an inch, and in the other a gain of an inch and a half. He mentioned cases in which very rapid amelioration had taken place under this treatment.—Mr. KEETLEY said that if Mr. Barwell's conclusions were correct—and he supposed they were—his plan was a valuable contribution to the treatment of a very intractable variety of bodily deformity. He suggested that the matter should be referred to a subcommittee.—The PRESIDENT promised to consult with his colleagues in reference to Mr. Keetley's suggestion in time for the next meeting.

HARVEIAN SOCIETY OF LONDON.

CLINICAL EVENING.

THURSDAY, MARCH 6TH, 1890.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Cases.—Dr. LEES showed a case of Myxœdema of seven years' duration. He also exhibited a case of Neuralgic Headache in a girl, who presented such severe symptoms that it was at first feared that a cerebral tumour might be growing. The patient made a complete recovery after the extraction of three teeth.—Dr. CLEVELAND and Mr. D'ARCY POWER commented upon the case.—Mr. JACOBSON showed a case of Popliteal Aneurysm, which was cured by six hours' digital compression. The patient was a man, aged 47, who had suffered from syphilis thirty years ago. Mr. Jacobson said rhagades, popliteal aneurysm due to syphilis, and very extensive gummatous ulcers were now less frequent than they used to be.—Remarks were made by Dr. NORMAN KERR, Mr. J. E. LANE, and the PRESIDENT.—Mr. JOHNSON exhibited a child, aged 3 months, who had a very fairly developed Supernumerary Leg, with an additional portion of pelvis. Mr. Johnson accounted for the additional limb by supposing that the case was one of modified posterior dichotomy.—Dr. MAGUIRE showed a young man who was said to be unable to move his left arm freely, and who appeared to present many of the symptoms of a patient suffering from paralysis of the deltoid and biceps muscles. He also appeared to have some stiffness of the lower extremities.—Dr. SAVILE, Dr. EWART, Dr. LEES, and Dr. NORMAN KERR discussed the case.—Dr. SAVILE brought forward a man with a Cerebral Tumour, which he localised as involving the upper end of the right fissure of Rolando. The patient had hemiplegia of the left side after a severe fit, with the signs of a descending lesion. He had lately suffered from attacks of Jacksonian epilepsy.—Dr. CAGNEY and the PRESIDENT discussed the case.—Dr. SAVILE also exhibited a case of Elephantiasis Telangiectodes in a girl, aged 16, who had many subcutaneous tumours on the backs of her thighs and legs. The swellings were increasing so rapidly that she had been compelled to give up her occupation in consequence of the sense of weight and fatigue caused by standing.—Mr. J. E. LANE thought that in these tumours fat predominated over the vascular and fibrous elements.—The PRESIDENT was inclined to think that the tumours were degenerating nævi.—Dr. CAUTLEY showed two adults who had each marked shortening of one humerus. This deformity he considered was consequent upon long antecedent inflammation of the cartilage between the head and shaft of the bone.—The PRESIDENT said that he had seen several similar cases, and he thought the explanation given by Dr. Cautley was undoubtedly the correct one.—Dr. LEES thought that such cases were nearly always associated with a syphilitic taint, and that they were not unlikely to be mistaken for the results of infantile paralysis.—Mr. LOCKWOOD sent a boy, aged 7 years, whose left hip he had excised a year ago by the anterior incision. The boy was able to walk well without supports.—Mr. D'ARCY POWER showed a boy with Advanced Rickets of a somewhat unusual form.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, FEBRUARY 26TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Epithelioma on Site of Specific Ulcer.—Mr. SPANTON related the case of a married woman, aged 33, who had first consulted him in June, 1889, with an ulcer on the anterior lip of the uterus, which, as she had an undoubtedly specific sore throat, was diagnosed to be syphilitic and treated accordingly. It healed up in a week or two, but about two months since an ulcer, with every appearance of malignancy, was seen on the site of the previous ulcer. It was removed, and microscopic examination showed the characteristic "nests" of epithelioma. In reply to Mr. REEVES he added that the diagnosis of malignancy was based exclusively on the sections which he had produced.—Mr. REEVES declined to accept microscopical appearances and the presence of "nests" as conclusive evidence of the ulcer being malignant.—Remarks were made by Dr. BARNES, Dr. BEDFORD FENWICK, and Dr. HEYWOOD SMITH; and Mr. SPANTON replied.

Removal of Uterine Fibroid.—Mr. REEVES showed a tumour which he had at first taken to be ovarian, as the sound showed the cavity of the uterus to be of normal size. On operating it turned out to be a fibroid tumour undergoing cystic degeneration. A fortnight before, he had diagnosed the tumour in another case to be uterine because the sound showed the size of the uterine cavity to be much increased. In both these cases he had been misled by the indications afforded by the uterine sound, which he regarded as useless, when not positively misleading, in the differential diagnosis of pelvic tumours. Mr. Reeves also mentioned the case of a woman, 28 years of age, on whom he had performed amputation of the uterus above the cervix. The principal point to which he called attention was the ligature of the uterine arteries as a means of preventing hæmorrhage from the stump when returned to the peritoneal cavity.—Remarks were made by Drs. BANTOCK, BEDFORD FENWICK, MACNAUGHTON JONES, HEYWOOD SMITH, and INGLIS PARSONS; and Mr. REEVES replied.

Epithelioma of the Uterus.—Dr. MACNAUGHTON JONES raised the question as to the frequency of epithelioma of the uterus. He said that the cervix had always been regarded as the site of election for this variety of carcinoma. He expressed his surprise at Mr. Reeves's remarks to the insignificance of the epithelial nests.—Mr. REEVES pointed out that he only alluded to the nests themselves and not to the arrangement of the connective tissue stroma.

A Long-retained Pessary.—Dr. MACNAUGHTON JONES showed a pessary which had been allowed to remain *in situ* for upwards of nine years, from May, 1880, to October, 1889, and he urged that directions should always be given for the periodical removal of pessaries.

Laparotomy followed by Fæcal Fistula and Tetanus.—The SECRETARY read notes, contributed by Dr. STEVENSON, of Cape Town, of a case in which laparotomy for the removal of an abdominal tumour was followed by the establishment of a fæcal fistula, and subsequently by tetanus. The author suggested that the fistula might possibly have been due to the inclusion of the small intestine when suturing the abdominal wound.—Dr. BANTOCK suggested that the fistula might have been caused during the process of healing.—Dr. FANCOURT BARNES made some remarks.

Treatment of Pelvic Abscess.—Dr. R. T. SMITH read a paper on pelvic abscess, in which he discussed the question of the diagnosis and treatment of this condition. A paper is to be read at the next meeting on the same subject by Mr. Mayo Robson, of Leeds, and the discussion was postponed until then.

ABERDEEN, BANFF, AND KINCARDINE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WEDNESDAY, FEBRUARY 19TH, 1890.

JOHN URQUHART, M.D., President, in the Chair.

Cases.—Professor OGSTON exhibited a patient on whom Professor Iversen, of Copenhagen, had performed Arthrectomy of the Knee-joint for tubercular disease, and demonstrated the methods employed.—Dr. BLAIKIE SMITH exhibited a young woman with Double Ophthalmoplegia of a few months' duration. All the muscles of the eyeballs, extrinsic as well as intrinsic, were involved. Ptosis was present on both sides, and there was also partial anæsthesia of both fifth nerves, with impairment of smell, taste, and hearing on the left side. The discs were normal, and the range of vision as determined by the perimeter was but little affected. The patient suffered from attacks of headache, accompanied by vertigo, and occasionally from double vision. From the combination of symptoms detailed, Dr. Blaikie Smith considered it probable that the patient was the subject of tumour of the pons Varolii.

The Aberdeen Dispensary.—Dr. MACKENZIE BOOTH read a paper on the dispensary as a charity and field of clinical study, in which he advocated the desirability of longer hours of attendance by the students, extension of the present buildings, an increase in the number of districts, a more thorough supervision of the m

vifery department, and the payment of a larger fee for attendance n the practice of the institution.

Atropine Poisoning.—Dr. Rose gave an account of a child, aged ½ years, who swallowed half a drachm of solution of sulphate of tropine. He saw the child three hours after, and found the face ushed, the conjunctivæ congested, the pupils dilated, the pulse alloping, and the child delirious, tossing from side to side, lutching with its hands, and twisting its face into grotesque rimaces. He injected one-tenth of a grain of pilocarpine, and a ew minutes later another one-tenth, and an hour after another imilar dose without sweating resulting. The child, however, ecame quieter, and six hours after it was much improved. Next ay it was quite well.

MANCHESTER MEDICAL SOCIETY.

Wednesday, March 5th, 1890.

James Ross, M.D., LL.D., President, in the Chair.

Loose Bodies in the Knee-joint.—Mr. Whitehead showed a oman, aged 24, from whose knee he had removed three "loose odies." Symptoms had existed for two years, but upon no ccasion could the bodies be detected outside the joint. The gamentum patella was divided and the joint completely opened ut. Two of the bodies were found upon the surface of the rtilage, but the third was contained in an excavation upon the wer surface of the inner condyle. The cavity involved both rtilage and bone. The ligamentum patella was sutured with atgut and the rest of the wound with silver wire. The operation nd dressings were conducted on antiseptic principles. There was o rise of temperature, and the patient made a perfect recovery, ith the wound having been only once disturbed during con-alescence.

Two Cases of Defective Mental Development.—Mr. Coates owed these cases. The first was a boy, aged 3 years, the bject of acquired idiocy. At birth he was apparently healthy, ut during the earlier months of life he exhibited signs of con-enital syphilis. Between the ages of 6 and 18 months the child ppeared perfectly well. He was playful, intelligent, and able to y a few words. When 18 months old he had a very acute attack meningitis, which lasted four weeks. Since this illness there ad been no sign whatever of intelligence, and the child was nable to articulate. He had a habit of inducing almost constant rection of the penis. The second case was one of congenital diocy, with aphasia, in a boy aged 6 years, in whom, however, here were many signs of dormant intelligence.

The Sphygmograph.—Dr. Colley March showed a collection sphygmograms. One pulse-tracing in a case of mitral stenosis as indistinguishable from one of aortic stenosis, showing the ight diagnostic value of sphygmography. A tracing in a case of itral incompetence, taken during an attack of pericarditis in the ourse of rheumatic fever, was probably unique in its extremely yperdicrotic character. Recalling the fact that whenever stasis the cerebral circulation was produced, as by ligature of arteries, ressure on veins, hæmorrhage, or suffocation, convulsions oc-urred, he exhibited some sphygmograms, taken in 1881-2-3, on an pileptic, whose fits, numbering about ten yearly, had come on after attack of enteric fever five years previously, at the age of 40. All ese pulse-tracings were strictly healthy with one exception, hich was taken by chance just an hour and a half before the tient fell into a typical epileptic convulsion. The indication forded was one of extremely high tension, with a tendency to rdiac arrest, giving some support to the view that a stoppage of e heart was the first event in an epileptic seizure. The question ose, where was the capillary or arteriolic check that caused the pertension and embarrassed the heart? On the following orning, twelve hours after, the pulse-tracing was again normal.

Brain Disease in Hereditary Syphilis.—Dr. Judson Bury read paper on this subject. He gave an account of the morbid atomy and symptomatology, the former based on an analysis of ty-two *post-mortem* examinations, the latter on ninety clinical cords. He pointed out that, while every lesion and every sym-om met with in brain disease due to acquired syphilis, also curred in brain disease due to inherited syphilis, the most fre-ent lesions in the former were central softening from arterial ease and gummata, giving rise to hemiplegia, with or without pileptic attacks; whereas in the latter, the common lesion was a ffuse cortical one, expressing itself in convulsions, and, in at st 40 per cent. of the cases reported, in a varying degree of de-ntia.

MIDLAND MEDICAL SOCIETY.

Wednesday, February 26th, 1890.

Lawson Tait, F.R.C.S., President, in the Chair.

Congenital Infantile Laryngeal Stridor.—Dr. Suckling showed an infant one week old suffering from persistent laryngeal stridor, which had existed from birth. The mother stated that it was worse when the child was asleep and when it was made to cry. There was no sign of syphilis. Dr. Suckling had met with several such cases at the Children's Hospital. He attributed the stridor to some congenital abnormality in the larynx, possibly a recurved epiglottis, as in the case described by Dr. Lees. Such cases were unaffected by treatment, and the stridor disappeared as the child grew older.

General Paralysis of the Insane.—Dr. Suckling showed a man, aged 43, suffering from general paralysis. There was marked tremor of the facial muscles, lips, and tongue, and also of the extremities. His memory was defective and his speech slurred. The pupils were unequal at times, but responded normally to light and accommodation. He had suffered from delusions and hallucinations of sight. He was first observed to be altered two years ago. He was a musician, and the conductor of the band noticed that his playing was faulty and that he often "came in when the others had finished." He was depressed, and collected rubbish at times. No cause for his illness could be discovered. His writing was characteristic of the complaint.

Melon Seed Bodies from Sheath of Tendon.—Mr. Augustus Clay showed melon seed bodies removed from the sheath of the flexor tendon of the index finger. They were 173 in number, of average size, and were all contained in the portion of the sheath corresponding to the phalanges. The swelling simulated a whitlow, for which the patient—a washerwoman—had been previously treated for many weeks by poulticing. There had been a weakness in the finger for two years, but the swelling had only been noticed for a few months, and had increased rapidly. A creaking sensation could be felt on applying pressure, but the bodies could not be made to alter their position, as in the case of a compound palmar ganglion.

Specimens.—Mr. M. A. Messiter showed an Upper Jaw that he had removed from a woman, aged 40. Four years previously she had some nasal polypi removed. Eighteen months ago she complained of pain and neuralgia of the right side of the face; this increased, and when seen in October, 1889, the right side of the face was protruded, the right eye was prominent and turned outwards, the nostril and nasopharynx were blocked, and the antrum was perforated anteriorly. The superior maxilla, together with the tumour, was removed, the latter being attached to the base and pterygoid plate of the sphenoid and growing forward into the antrum. Mr. Messiter pointed out the difficulty of distinguishing fibroid from sarcomatous growths in the nose; the latter, however, generally grew from the ethmoid or sphenoid. He regarded the prognosis as good unless there was perforation of the antrum. On section the growth was found to be a fibrosarcoma; and the patient so far had done well.—Mr. Messiter also showed a large Gallstone that had caused fatal obstruction by impaction in the small intestine.—Dr. C. Martin showed a large Œdematous Myoma that had successfully been removed by Mr. Lawson Tait.

Paper.—Dr. Foxwell read a paper on Typhlitis.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

Thursday, February 27th, 1890.

T. F. Hopgood, M.R.C.S., President, in the Chair.

New Member.—Dr. R. E. Beveridge was elected.

Specimens.—The following specimens were shown: By Dr. Beattie: Anencephalous Fœtus.—By Dr. Collie: Photographs of a Patient before and after Macewen's Operation for Genu Valgum.—By Mr. Larcombe: Two Intrathoracic Aneurysms.—By Dr. Semfield: Aural Polypus.

Papers.—The following papers were read: By Mr. Whitehouse: On Shock.—By Mr. Burns: Notes on a case of Membranous Conjunctivitis.

Influenza.—The President introduced a discussion upon the prevailing influenza epidemic.—Remarks were made by Dr. Brady, Mr. Robinson, Mr. Larcombe, Dr. Beattie, Dr. Collie, and Mr. Legat. Three of the speakers had suffered from sharp attacks of the disease, and thought that it closely resembled ague fever.—The President replied.

REVIEWS AND NOTICES.

ENGLISH SANITARY INSTITUTIONS, REVIEWED IN THEIR COURSE OF DEVELOPMENT AND IN SOME OF THEIR POLITICAL AND SOCIAL RELATIONS. By Sir JOHN SIMON, K.C.B., Member of the General Medical Council, Consulting Surgeon to St. Thomas's Hospital, and formerly Medical Officer of Her Majesty's Privy Council. London: Cassell and Co., Limited. 1890.

[SECOND NOTICE.]

THE appointment in 1855 of Mr. Simon to be the medical officer of the Board of Health, though the fact could not have been perceived at the time, really marked a new epoch in the history of sanitary administration. Throughout the many vicissitudes of the Government department, he continued to hold under various titles the Central Medical Officership, and it devolved upon him to define and consolidate the duties and influence of the medical advisers and officers of the central department. For three years the position of this department, and more especially of its medical officer, was most precarious; the temporary arrangement of 1855 was continued from year to year, but one obstacle after another prevented the adoption of a permanent measure. Finally, in 1859, when the Bill giving permanence to the Act of the preceding year had been read a second time in the House of Commons, and suspense seemed to be over, an opposition arose, led by the eccentric Mr. Slingsby Duncombe, and for a few anxious hours it was feared that the Bill would be abandoned. Mr. Robert Lowe, the Minister in charge, however, stood to his guns, and the Bill was read a third time by a small, and it would seem chance, majority. Sir John Simon states that just after the division, a member who had taken part in it (a former President of the late Board) told him that when the division bell rang, he, being at the time outside, had carried in with him to the Government lobby six members who would otherwise have been absent, and whose votes made the majority (101 to 95) for the Bill. The Bill thus saved was the Public Health Act of 1858.

During this period of doubt, the work of the Central Health Department had not stood still, but the uncertainty, though it had not prevented the gathering together of much valuable information, had yet very seriously interfered with administrative action. In 1858 the General Board of Health ceased to exist, and its medical functions devolved upon the Lords of the Council. During the next thirteen years (1858-71), the Central Medical Officer was an officer of the Privy Council, and his duties had mainly to do with the administration of the vaccination laws and with the investigation and inquiry into matters concerning the public health in various localities. Under both heads valuable experience and information had been gained. As to the methods and efficacy of vaccination, there was Mr. Simon's encyclopædic report and papers relating to the history and practice of vaccination presented to the General Board of Health in 1857. As to general inquiry, there was Dr. Snow's report on the water carriage of cholera, and Dr. E. H. Greenhow's report on the sanitary state of the people of England, in which the broad facts as to the incidence of preventable disease in certain localities were for the first time boldly outlined.

The first inspectorial work undertaken was a minute survey of public vaccination in England and Wales. This survey, which was conducted by Drs. E. C. Seaton, Stevens, Buchanan, and Burdon Sanderson, occupied nearly five years, and the information and experience thus obtained led to the drafting of a Bill to amend the vaccination laws, which came into force at the beginning of 1868. The system of making grants for successful vaccination was established by this Act. The short account which is given of the evidence heard and the recommendations made by Mr. Forster's Select Committee to consider the Vaccination Acts will be read with special interest at the present time. The report "gave the Committee's unequivocal verdict against the accusers who had challenged the inquiry. It proclaimed afresh to the world the powerful protective value, as well as almost certain innocuousness, of properly performed vaccination, and expressed approval of the principle of the Act which had made infantine vaccination compulsory." It ought also to be remembered that this Committee advised that the system of penalties should not be cumulative, but the House of Commons refused to accept this advice.

In contemplating the proceedings which could be taken for general sanitary purposes the medical department had first of all to endeavour to give to public hygiene a greater exactitude than it had hitherto had. An exact knowledge of local "excesses of disease," and of the distribution of the common necessaries of life in various districts, and among various classes, was the basis upon which alone an exact science could be built up. It will not be necessary to follow the interesting sketch of the inquiries into epidemics conducted during this period. Another class of inquiries was of equal if not greater, importance; they were begun in 1859, and were concerned with the habitual predominance of certain diseases, or groups of diseases, in particular districts. The prevalence of diarrhœa in certain large towns; of pulmonary diseases in towns where certain trades were largely followed, and the high mortality of infants in certain town and country districts were the subjects first submitted to investigation. The other great class of inquiries was directed to ascertain the condition as to food supply, house accommodation, physical surroundings, and industrial circumstances of large sections of the population.

Upon the facts brought to light by these investigations it was possible also to found an appeal for amendment of the sanitary law. Defects had been proved to exist as to the power of abating nuisances dangerous to health, as to the absence of any approach to an effectual system for preventing the spread of infectious diseases by personal intercourse, and as to the need of regulations to check the terribly excessive rate of mortality among large industrial populations. The fact that the great Sanitary Act of 1866, "which," writes Sir John Simon, "represented such a stride in advance as virtually to begin a new era," was introduced by a Liberal Minister, survived a ministerial crisis, and was carried into law by a Conservative Minister, is the most striking proof that this appeal to hard facts had produced a deep impression on the public mind. The new legislation very greatly strengthened the hands of the medical department in dealing with defects in local administration. Its inquiries were more and more directed to ascertaining when the provisions of the law had been carried out, and in pointing out the connection between unfulfilled law and existing local excesses of disease.

The interest of the narrative from this point will, for the general reader, somewhat diminish. It is no longer the history of a struggle for great principles—they had been firmly established—but rather an account of the gradually working out of details of administration. To the specialist, however, this sketch of the work of the Royal Sanitary Commission of 1869-71, of the organisation of the Local Government Board, and more especially the criticism of local government legislation of 1888-89, will be of the utmost value.

This notice, however, would be very imperfect if no reference were made to a distinct branch of the work of the medical department, which had small beginnings in 1865, and was put on a secure footing in 1870, when Mr. Robert Lowe, then Chancellor of the Exchequer, obtained the sanction of Parliament to an annual grant of £2,000 to defray the cost of auxiliary scientific investigations. "This grant," writes Sir John Simon, "comparable in principle to those which have been annually voted to the Admiralty for the promotion of astronomical and meteorological science, was first separately voted to us in 1871, and the vote is significant, not merely in its relation to the immediate uses of the medical department, but as expressing a national contribution to the world-wide general interests of medical research." The investigations carried out with this grant have year by year grown in value, and the plan of reinforcing the results of the inquiries of inspectors by subsequent experiments in the laboratory has recently been more frequently followed with most striking and valuable results.

One other subject which is brought into special prominence throughout the work is the importance to the State of the organisation of the medical profession. We could almost have wished that the subject had been treated as a whole in a single chapter, but it is characteristic of the author's method that he prefers to deal with it as a part of the great sanitary movement of the time. In describing the influences which led to the passage of the Medical Act of 1858, Sir John Simon does not fail to indicate the important part taken by the British Medical Association. As to the very great importance of this Act there can hardly be two opinions, and Sir John Simon admits that it was "a very important beginning of reform in a previously chaotic state of things," but he critisises somewhat severely the Act of 1886, which no doubt falls short of the aspirations of the profession.

The two concluding chapters of this work will afford much ood for reflection. The one deals with the "politics of poverty" -a topic to which we shall hope to recur—the other is a houghtful review of the past half century's progress and the tage now in course. One great lesson of the book for sanitary dministrators and reformers is clear: it shows that a small knot f earnest men who have a good cause and good courage will end y inducing even legislators to legislate. It illustrates once more ie truth of Lord Palmerston's favourite doctrine, that in this ountry reforms are only to be achieved by patiently "pegging way." For some inexplicable reason the average Briton has an nate suspicion of a complete and symmetrical scheme. It is ll very pretty on paper, he admits, but will it work? Even if ie hydra could be slain at one blow, he would prefer to lop off ch head separately, having previously convinced himself by olonged and special inquiry that the amputation was neces- ry. The method is a little tantalising to the zeal of earnest formers, but it has its advantages; it enables administrators to come acquainted with their new duties, and it familiarises the opular mind with the change before it comes. This process of lucation is an absolute essential element in future progress. Sir ohn Simon sees that this work of "popular education in sani- ry knowledge and in the art of sanitary government will pend to an incalculable extent on the personal influence of the alth officers throughout the country, each of whom is virtually thorised to be the sanitary educator of his district."

The educational influence of the medical department of the ocal Government Board must make itself felt mainly through ese officers; "the foremost local officers of health in the country e those most conscious of habitual indebtedness to the advanced ientific teaching of the central publications." But this influence not so limited as the sentences here quoted might be held to fer; if for "local officers of health" in the last quotation we ad teachers of medicine and pathology the sentence is equally ue. The whole *corpus* of medical literature has become per- eated by the principles of preventive medicine. Sir John Simon, deed, believes that "for the further development of our sanitary stitutions and their working, the educational onward impulses ay be expected to come pretty continuously from members of e medical profession, and are perhaps not in any essential sense be expected largely except from them." Not only must vance in the science be looked for from our profession, but also administration. "Whether for kingdom, or for county, or for strict, the organisation or procedure which purports to prevent sease must sooner or later be judged from the medical stand- int—from the standpoint of question, whether it has attained, can attain the disease-preventive good which is its professed n."

We shall have failed altogether to give a true idea of this book it has not become clear to the reader that Sir John Simon has eated his subject not merely with the accuracy of one who has intimate knowledge of the growth of English sanitary institu- ns, but also with a philosophic insight into the nature and stiny of the great intellectual and moral movement of which ey are one great and tangible evidence. This notice cannot be tter ended than by quoting the eloquent words with which the thor concludes his self imposed task. "More and more, as the cles are trodden," man, he writes, "rises to the religion of tual helpfulness. Stronger now than ever in the history of the rld, and of wider range than ever in that history, thoughts of alty to his kind are gaining sway with him. And surely in the rs to come, so far forward as man's moral outlook can reach, y who shall be in the front will more and more have to count in and shame for themselves, if their souls fail of answering to t high appeal, and they strive not with all their strength to fil the claims of that allegiance."

E Mortality of Acute Lobar Pneumonia. By C. W. ownsend, M.D., and A. Corlidge, jun., M.D., Boston, U.S.A. hiladelphia: W. J. Dornan.

is is an interesting series of statistics of 1,000 cases of acute ar pneumonia admitted into the Massachusetts General Hos- al from 1822 to 1889, analysed with considerable skill by (we sume) two of the medical staff.

is might be expected, the clinical records of the earlier cases not so complete as the later ones, as temperature observations re often wanting, but the duration of the disease and the iod of greatest mortality seem to have been fairly established. Of the patients, 724 were males, and 276 females. The duration of the fever varied from four days to twenty-one and upwards, and the day of death in most of the fatal cases was the eighth.

The conclusions of the authors are so remarkable that we cannot do better than quote them in full.

"1. In the 1,000 cases of acute lobar pneumonia treated at the Massachusetts General Hospital from 1822 to 1889, there was a mortality of 25 per cent.

"2. The mortality has gradually increased from 10 per cent. in the first decade to 28 per cent. in the present decade.

"3. This increase is deceptive for the following reasons, all of which were shown to be a cause of a large mortality. *a.* The average age of the patients has been increasing from the first to the last decade. *b.* The relative number of complicated and delicate cases has increased. *c.* The relative number of intemperate cases has increased. *d.* The relative number of foreigners has increased.

"4. These cases are sufficient to explain the entire rise in the mortality.

"5. Treatment, which was heroic before 1850, transitional between 1856 and 1860, and expectant and sustaining since 1860, has not, therefore, influenced the mortality rate.

"6. Treatment has not influenced the duration of the disease or of its convalescence."

We are not surprised that the writers "cannot but admire the regular and uniform manner in which pneumonia—that type of self-limited diseases—has run its course in all these years was influenced by the varying treatment it has received," but we must confess the therapeutics in the present series of cases, are not sufficiently set forth to enable us to judge of the correctness of the authors' conclusions. Undoubtedly acute pneumonia has a definite course like any continued fever, which no treatment will shorten or modify, but the condition of the patient at the close of the attack, and his power of surviving the crisis of the septic fever, can be largely influenced by judicious nursing and by the skill and care with which appropriate nourishment, stimulants, and medicine are administered.

NOTES ON BOOKS.

Electricity in Facial Blemishes. By Plym S. Hayes, A.M., M.D. (Chicago: W. T. Keener. 1889.)—The literature of the medical applications of electricity increases apace. We have now before us a small manual on the employment of electricity in the removal of facial blemishes. This includes the removal of superfluous hair, warts, moles, nævi, port wine stains, etc., by electrolysis. The author, Dr. Hayes, is Professor of Gynæcology and Electro-therapeutics to the Policlinic at Chicago. In an interesting chapter he deals very fully with the histology and anatomy of the skin and the production and construction of hair. The method described for the removal of superfluous hair appears to be rather clumsy, chiefly because the author does not use a needle holder possessing an arrangement for completing the circuit. He therefore has to get the patient to complete the circuit for him when he is ready. For some reason or other when operating he holds the depilatory forceps and needle holder in the same hand. It is not clear what he is doing with his second hand; he cannot be all the time manipulating the battery by adding to or reducing the number of cells. He does not appear to use a galvanometer, but to estimate the strength of the current by the amount of froth that oozes up by the side of the needle. His arguments against the use of an ampère-meter do not seem to be of sufficient weight to justify the neglect of it. The description of the relative value of large and small cells is not very clear. There are several useful hints on the removal of portwine stains, moles, warts, and nævi, but in the case of the latter exception must be taken to some of his conclusions; for instance, the warning not to "attempt the removal by electrolysis of a rapidly growing vascular nævus of more than one-third of an inch in diameter," and "Don't attempt electrolysis in young children." If we were to obey these injunctions one of our most potent means for attacking growing nævi would have to be abandoned. With these exceptions the work is worthy of commendation. It adds to our knowledge of the treatment of facial blemishes, and might well be consulted by all those who are interested in the means for enhancing personal beauty. The author has evidently taken great pains and gone deeply into the subject.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 15TH, 1890.

BILLS IN PARLIAMENT RELATING TO PUBLIC HEALTH.

NOTWITHSTANDING the comprehensive character of the Public Health Act, 1875, those who have to take measures for protecting the health of the community are frequently encountering checks to their efforts through the insufficiency of their powers—sometimes in consequence of flaws in the existing law, at other times owing to absence of any statutory provisions dealing with the particular points in question. To pass a new Public Health Act would be a large undertaking, and there seems to be but little prospect of such a measure being brought forward for some time to come. Meanwhile we must be content with piecemeal legislation on the various questions as they arise and as occasion offers until such time as the accumulation of separate Acts becomes so complex that their consolidation can be no longer delayed. The evils of piecemeal legislation have been well demonstrated in the metropolis, where at the present time the statutory provisions relating to sanitary matters are scattered throughout upwards of a score of separate Acts. Happily the Government have promised to push forward during the present session a Bill for consolidating and amending the metropolitan sanitary law, and thus remove a long-standing and prejudicial anomaly.

As regards the country generally, the insufficiency of the Public Health Acts on certain points is shown by the action hitherto taken by the large provincial corporations to obtain further sanitary powers by means of local Acts. But this is always a very expensive process, and the Select Committee on Police and Sanitary Regulations, to whom the Bills of these local authorities are annually referred, have recognised the hardship of requiring a local authority, desirous of having fresh powers, to incur an expenditure of several hundreds of pounds in promoting a private Bill for the purpose, and they have year after year with increasing impatience urged the enactment in a general measure of the model clauses which they drafted so long ago as 1882. No general measure has, however, been proposed by Government, but some of the principles in the clauses have been embodied in the Local Government Act, 1888, and in the Infectious Disease (Notification) Act, the Prevention of Cruelty to Children Act, the Indecent Advertisements Act, and the Weights and Measures Act of last session. During the present session a further effort is being made by private members to embody the remaining recommendations of the Select Committee in general Acts, and three separate Bills have been introduced with this object.

One cannot avoid feeling that as the subject is altogether one of public health it would have been more convenient, both for present consideration and for future reference, if these three Bills had been amalgamated, but possibly, if they had been, the result would have been too cumbrous a measure to allow of its becoming law during this session.

The first of these Bills is the Infectious Disease (Prevention) Bill, which was introduced by Mr. Lees Knowles, and incorporates those of the Select Committee's model clauses which relate to infectious diseases, except the clauses as to compulsory notification. The procedure adopted is that of the Infectious Disease (Notification) Act, local sanitary authorities being empowered, if and when they choose, to adopt the Act by simple resolution and public advertisement. The Bill provides that if the health officer certify to the local authority that he suspects an outbreak or spread of infectious disease is due to a particular milk supply, the dairyman shall be required to supply lists of his customers; that on reasonable cause the medical officer of health shall have power to inspect dairies beyond his district and secure the prohibition of the sale of milk from such dairies; that persons engaged in washing and mangling may be required to supply lists of customers; that the local authority shall have certain wider powers in relation to disinfection than are given by the Public Health Act; that a person ceasing to occupy infected premises, without previously disinfecting the same or giving notice to the owner, shall be liable to penalty. It also prohibits the retention of dead bodies of infectious cases elsewhere than in a mortuary; provides that bodies of persons dying in hospital shall be removed only for burial; empowers justices to order burial in certain cases; requires that notice shall be given to the owner when a public conveyance is used for carrying a corpse, and that the conveyance shall be disinfected; authorises justices to order detention in hospital of a patient who has not proper lodging or accommodation; and enables a local authority to provide temporary shelter, nursing, etc., for members of an infected family.

The Bill is at present in the Committee stage, and several important amendments have been placed on the notice paper by Dr. Farquharson, Mr. Lawson, and Mr. Powell. "Shall" is to be substituted for "may" in several instances. The vexation and delay which have frequently in practice been caused by the presence of "may" instead of "shall" in existing statutes fully justify the proposal that, in cases of suspicion "the local authority, or in their default the County Council, shall" require dairymen and laundrywomen to furnish lists of customers; that local authorities "shall" make compensation for property injured or destroyed during disinfection, etc. Further, the proposal to give the medical officer of health power, on reasonable cause, to inspect farms and dairies "and the cattle therein," both within and beyond his district, and to authorise local authorities and County Councils to prohibit the sale of milk in certain circumstances are specially important in view of the frequent spread of infection by milk. An amendment proposed by Mr. Lawson that defaulters should be liable to "one month's imprisonment without hard labour," in lieu of a fine of £5, is also no

ithout its justification, but it is very doubtful whether Parament will adopt so severe an alternative. A somewhat milar proposal was made by the Select Committee which xamined the Margarine Bill of 1887, but the House hesitated o legalise it.

There is one other point worth noting. The Bill would be ade more convenient and certain if it were more independent f other Acts. As framed, it refers to the Infectious Disease Notification) Act, 1889, for interpretation of terms, method f procedure, etc. Very little is, as a rule, gained by the ractice of referring to other Acts in this way, whilst the risk f thereby incorporating conflicting provisions has been well lustrated by recent lawsuits under the Local Government ct.

The Public Health Acts Amendment Bill is backed by Mr. . S. Powell, Dr. Farquharson, and other sanitary reformers, nd embodies, as general law, various clauses "which the anitary and Police Regulations Committee usually sanction n local Bills, or for which a sufficient precedent is found in cent local legislation." These clauses relate to the control f telegraph and other overhead wires; they seek to prohibit ne discharge of certain refuse, steam, etc., into sewers; they ive powers for the provision and regulation of public sanitary nveniences; they make compulsory the provision of a proper ater supply and ventilation to water closets; they give owers of dealing summarily with houses unfit for human abitation; they very properly extend Sections 116-119 of the ublic Health Act, 1875, to include "all articles intended for ne food of man"; they contain further provisions against nfection than those already embodied in Mr. Knowles's Bill; ney would give urban sanitary authorities wider powers respecting streets and buildings, the means of ingress to and gress from places of public resort, and as to street traffic; they rovide for the issue of music and dancing licences; and they ould empower urban authorities to issue stock. Speaking enerally, the Bill would very materially strengthen the hands f local authorities, and give to all the powers which can now nly be obtained by the few who can afford to promote local cts.

The Urban Sanitary Authorities (Further Powers) Bill, prooted by Mr. H. Fowler and others, contains the clauses in Mr. Knowles's Bill and many of those in the Public Health cts Amendment Bill. But it is not so far-reaching or satisctory as the latter. It has been referred to the same elect Committee as the Public Health Acts Amendment Bill, nd probably the two drafts will be advantageously amalgaated. The Bills will doubtless undergo considerable revision the hands of the Committee, but it is to be hoped that the ilk of their clauses will become law during the present ssion.

SUPPURATION AND SEPTIC DISEASE.

R. WATSON CHEYNE, in his reprint of his lectures on Suppution and Septic Disease,[1] gives us the same lectures, but the me lectures brought up to date. It is scarcely necessary to very fully over the ground again, as most of the readers of the JOURNAL are well acquainted with the scope and matter of these admirable lectures.

The whole question, however, is so fully and so thoroughly gone into that it is well worth the while of any one interested in the subject to resume his acquaintance with Mr. Watson Cheyne's work.

In the lectures now before us there is given, after a very brief introduction, a description of the various pyogenic organisms. This section is specially worthy of perusal, as we have here set before us, in a concise and lucid fashion, the forms, characters, life history, and virulence of these organisms and the different manners in which they can affect the tissues and the individual. In connection with the latter part of the description, the question of the influence of micro-organisms, upon suppuration is fully discussed. The anatomy of an abscess is described, and the author's own experiments with croton oil on the production of abscesses, which are full of interest, are given. It is pointed out that in true suppuration (and this is a point which is usually neglected) the peptonising power of the products of micro-organisms plays a most important part in the digestion of the devitalised tissues. From the croton oil experiments it may be gathered that the tissue cells have the same power as micro-organisms, but to a far less degree, so that where micro-organisms are not present the pus is but slowly formed, and is absorbed as rapidly as it is produced. Ogston's and Rosenbach's experiments accord well with such a theory.

In the second lecture it is insisted that pathogenic micrococci may be present in the human or animal body without giving rise to either suppuration or septic disease. Mr. Watson Cheyne points out that these organisms are very rapidly destroyed when introduced into the circulating blood of a healthy animal, and, although the spleen is mentioned as being one of the organs in which the micro-organisms are probably destroyed, we think that he scarcely gives it sufficient prominence in this respect. In connection with the fact that micro-organisms are found in the kidney after they have left all other organs, may it not be that the kidney has not the same power of destruction as the liver and the spleen?

Mr. Watson Cheyne is evidently not a blind follower of Metschnikoff and his school, but believes that the fixed tissue cells have a far more important part to play in the destruction of micro-organisms than the leucocytes, and he maintains that it is not necessary that the living micro-organism should be taken up by the leucocytes, as Metschnikoff holds, but that digestion can go on just as well outside as within the cells.

It is interesting that Mr. Watson Cheyne should have taken up this position, because from recent papers it is evident that Metschnikoff himself cannot meet all the objections to his old position.

It may be pointed out that on page 44, in the last line but two of the last paragraph, "un" is left out before the word inoculated; this entirely alters the meaning, but it is evidently a printer's error.

In dealing with the conditions necessary for abscess formation, it is suggested that there must be impaired general vitality or diminished local vitality, and that along with these there must be, practically, an embolic condition. Without

[1] Three lectures delivered at the Royal College of Surgeons of England, in bruary, 1888, reprinted from the BRITISH MEDICAL JOURNAL. London and dinburgh: Young J. Pentland. 1889.

these, the pyogenic organisms may remain for some time in the circulation without giving rise to any very definite symptoms. The part that inflammation plays is very fully described as regards the action of the tissues, and under the heading "Inflammation" it is pointed out that an inflammatory zone acts in stopping the spread of the micro-organism. In such conditions as erysipelas, this inflammatory zone is not sufficiently rapidly formed to interfere with the spread of the organisms, and, as a result, we find that the organisms precede the inflammatory zone. The indications for the treatment of erysipelas are therefore evident. The effect of warmth in stimulating the tissues to interfere with the activity of the organisms is well brought out in the record of Grawitz's experiments on page 50. The other predisposing causes of suppuration—injury, irritating chemical substances, products of bacteria, and products of pyogenic organisms—are all fully discussed, as are also the effects of the seat of inoculation and the anatomical arrangement of the parts. The differences between injection into the peritoneal cavity under the skin, as well as the different results obtained from injection into the veins and into connective tissues, are set forth. In the third lecture these subjects are further considered, and the subject of suppurative peritonitis is very exhaustively examined. The more indefinite characters are then mentioned, such as age, sex, digestion, state of the blood, tissue tension, diseases, etc., and their effect on abscess formation. Lastly, the dose and concentration of the organisms are spoken of, and we have in this portion of the lecture one of the first attempts that have been made in this country to discuss logically and scientifically some of the biological problems associated with the virulence of infection, in connection with the species of micro-organism and the species of animal experimented upon, the dose of the virus, the susceptibility of the tissues, mixed infection, antagonism of certain bacteria, and the like.

The chapter concludes with a practical summary, in which the accounts of the life history of micro-organisms outside the body, the mode of entrance into wounds, and the methods of combating them and their entrance into the body, are briefly but most satisfactorily discussed.

The value of this work is not to be measured either by its size or by the number of facts recorded. It contains a summary of what is at present known about suppuration and its causation. The best authors have been consulted, and in some cases abstracted, and with the list of references given at the end, the book forms one of the best handbooks to the study of suppuration that even a busy man could wish to have. It is well printed, and such illustrations as there are are satisfactorily reproduced.

MR. STANHOPE AND THE ARMY MEDICAL DEPARTMENT.

MR. STANHOPE, in his reply to Dr. Farquharson,[1] observed that the reason why he declined to sanction several of the recommendations made by Lord Camperdown's Committee was the increased expenditure which would thereby be incurred. He referred to these objections under six heads, as follows :

1. "That the fifty brigade-surgeons should be the fifty senior surgeons-major (or surgeons lieutenant-colonel, as they are called in the report)." If, however, the report of the Committee be referred to, it will be found that the recommendation under this heading is as follows : "The first fifty surgeons lieutenant-colonel should have the pay and allowances now attached to brigade-surgeons. The remainder of the surgeons lieutenant-colonel should have the pay and allowances now attached to surgeons-major ranking as lieutenant-colonel." The title of the existing fifty brigade-surgeons was to disappear from the army, and the fifty officers to be called surgeons lieutenant-colonel were to take their place ; the proposal was merely a change of title, and involved no increase in pay. It is probable that this recommendation as it stands in the report was inserted at the suggestion of War Office officials, so as to make it plain that no increased expenditure was contemplated by the Committee under this head.

2. Mr. Stanhope objects to the following recommendation of the Committee as a cause of increased expenditure : "That medical officers should be attached for a definite period to regimental corps,"—a recommendation which it will be seen from Section 4 of the report is strongly advocated by "His Royal Highness the Commander-in-Chief, and other military witnesses." The Medical Department believes the plan unworkable ; it was no child of theirs. But surely, to be consistent, Mr. Stanhope should accept this recommendation, because he states that he declined to grant medical officers expressed army rank at the instigation of his military advisers ; when these gentlemen, however, urge him to attach medical officers to corps, he refuses to accept their advice !

3. Mr. Stanhope also stated that the Army Estimates would be increased if the recommendations of the Committee were adopted, so "that the tour of foreign service should be decreased." But why was this recommendation made ? Because "medical officers complain that the proportion which foreign service bears to home service has a constant tendency to increase. The tour of foreign service has been lengthened recently by a year, being now six years in place of five years," and it is well known that the death-rate of medical officers is nearly double that of any other branch of the service. They rightly attribute this high death-rate to the length and arduous nature of their foreign service. Officers in other branches of the British army in India are off duty the greater part of the day, and can get frequent leave to the hills ; but the medical officers are never off duty day or night, and in consequence of their numbers having been so greatly reduced of late years it is often impossible for them to obtain a day's leave to the hills throughout their service in India. Mr. Stanhope sees in all this "no sufficient grounds" to keep the tour of the foreign service of medical officers within the limits recommended by the Committee ; if they die off rapidly, their pensions are saved to the Government, and there are plenty of men in the profession to fill up their places in the service.

4. The Committee advised that once in every seven years medical officers shall be allowed three months' extra leave. Last year, in answer to Sir William Crossman, Mr. Stanhope promised, in a very sympathetic tone, to give consideration to this subject, which he admitted was new to him, and it is much to be regretted that his reflections have been so fruitless. Increased expenditure is the assigned reason but he omits to mention that the Committee made

[1] JOURNAL, March 8th, p. 567.

this proposal on the distinct understanding that these three months were to be utilised by the medical officers in "attending a properly approved course of lectures, or in attendance at some large civil hospital." The object of the proposal was obviously to allow medical officers to brush up their knowledge, and thus render them capable of bringing the latest improvements in science to the advantage of our soldiers. Let us consider for a moment the case of the other scientific branch of the army—the Royal Engineers. The officers of this service in India are not only at a stated period of their service allowed to come home on special leave for a year to study at Chatham, but while in England we believe that they draw their full Indian pay and allowances, and have their passage home and out to India provided free of expense. Lord Camperdown's Committee recommend that medical officers should be allowed three months' leave out of every seven years to study the latest advances in their profession; but it cannot be allowed; it is not worth the cost.

5. The Committee recommended that the commissions of medical officers should date from the time they enter Netley; Mr. Stanhope refuses this because, during the three months the medical officer is at Netley he does not now receive full pay as a surgeon, and these three months are deducted from his period of service for retirement. On the other hand, medical officers entering Netley for the Indian Medical Service get their commissions dated from the day of their appointment to Netley; officers entering the medical department of the navy are also commissioned from the time of their appointment to the service; the only exception to the rule is in the case of army medical officers, and the Committee recommended that this invidious distinction should be done away with. At the same time, the Committee advise that half the appointments to the Army Medical Service should be made by selection, without competitive examination, and without the necessity on the part of the medical officer of entering the Army Medical School.

6. Mr. Stanhope states that the Committee recommended "that higher pay shall be given in India to certain ranks" of medical officers. If we turn to their report, however, we find that their recommendation on this point runs as follows: "It is advisable that, as far as practicable, the regulations which obtain as regards pay and allowances at home should extend to medical officers serving in India," as they do to every other class of officers in the British service. We question if this recommendation of the Committee had not the support of every one of the witnesses examined by the Committee; at any rate, if we are in error on the point, Mr. Stanhope can easily set the doubt at rest.

The Government in India doubtless object, as Section 6 of of the report states, to Royal Warrants being issued from the War Office affecting the pay of officers in India without the Government of India having been consulted in the matter. But an act of the kind having been perpetrated, as Sir T. Crawford remarks—and every one appears to agree with him—"it is a pity to make these financial distinctions, that is, between all the other officers of the army and those of the medical department. The small financial saving to the Government of India is no compensation for the dissatisfaction which this distinction creates."

There are far more cogent reasons than those referred to which have enabled Mr. Stanhope to decline the recommendations of Lord Camperdown's Committee. He wisely held his hand until the result of the late competitive examination for admission to the service was known. He finds that for every appointment there were four candidates; does not this demonstrate the truth of Mr. Bartley's remarks in the report that "the service is gaining in popularity with the profession?" Unfortunately, it is the consequence of the crush of young men into the profession, the ones behind trampling down those before them, for bread they must have at any cost. As we have so often said, we can but show the defects and remedial measures necessary to make the service one of the finest and most effective departments of the army, but the officers of the service, as a whole, must help us, and be true to themselves, if the necessary reforms are to be effected; nor is there now any reason to throw up the sponge, although they appear to have been badly beaten by Mr. Stanhope and his military advisers.

Mr. J. Gadesden Wainwright, who has held the position of Senior Almoner for the last 14 years, is also a candidate for the office of treasurer to St. Thomas's Hospital.

At the Kidderminster Town Council on Wednesday it was stated that there had been 5,000 cases of influenza in the borough, but no death directly traceable to the disease.

The Royal Commission upon Vaccination held another meeting on March 12th, Lord Herschell presiding. Mr. Wallace was examined at great length upon the points contained in his former evidence.

Mr. Richard Cadbury, of Moseley Hall, Birmingham, has offered to the Birmingham and Midland Sanatorium Committee the sum of £30,000 for the purchase of Moseley Hall, his present residence, and 20 acres of land, to form a Children's Sanatorium.

Dr. Savage will open a discussion upon General Paralysis of the Insane at the Harveian Society on March 20th, at 8.30 p.m. Mr. Marsh, Mr. Cripps, and others will take part, and it is hoped that patients will be exhibited.

A largely attended special meeting of the Ophthalmological Society of the United Kingdom was held on March 8th, in the Physiological Class Room of the University College. Professor Schäfer described the results of his experiments on the ocular movements produced in the monkey by electric stimulation of different parts of the occipital lobes and the frontal lobes. Professor Schäfer gave a diagrammatic representation of his views of the projection of the retina on the occipital lobes.

THE "PROVIDENT SYSTEM" AT HOSPITALS.

In a paper on "The Provident Principle in relation to the Out-patient Question," read by Sir Edmund Hay Currie at a meeting of the Hospitals Association on March 12th, he described the manner in which the provident department of the Metropolitan Hospital, Kingsland Road, was conducted. Dr. Bristowe, who presided, remarked that City clerks and curates were often most deserving of free medical relief, but they would be excluded by the rules of the provident system of relief. Dr. Gilbart Smith

said the present abuse of the out-patient department might be great, but the abuse of the provident system was greater still, people who were well-to-do not scrupling to take medical relief for small sums per week.

INFANT LIFE PROTECTION.

THE Infant Life Protection Bill will, it is stated, meet with a certain amount of opposition. It is thought that the provision requiring a person to be licensed before receiving pay for taking charge of a child will, in its present form, bear hardly on poor parents, especially in cases where a child is left for a time with relatives, and a small sum given for the expenses of its keep. Exception is also taken to other provisions of the Bill.

LEGISLATION FOR THE DEAF AND DUMB.

THREE separate Bills have been drafted to carry out the recommendations of the Royal Commission on the Deaf and Dumb. The Bills relating to England and Scotland are ready, but pressure of business at the Irish Office has prevented the completion of the third measure. Mr. Woodall intends to take an opportunity early next week of eliciting some definite information from the Government as to their intentions in the matter.

MEDICAL OFFICER TO THE LONDON SCHOOL BOARD.

AT a meeting of the School Board for London on March 6th, Dr. W. R. Smith, F.R.S.Edin., Professor of Forensic Medicine, King's College, London, was, on the recommendation of the Committee, appointed Medical Officer of Health to the School Board for London, at a salary of £400 per annum. It was stated that there were 144 candidates for the post. The medical officer will be required to give his whole time to the Board and to report on candidates for permanent offices, and generally to advise the Board on any medical matters on which he may be consulted.

NATIONAL PENSION FUND FOR NURSES.

MR. WALTER H. BURNS, who presided at the third annual general meeting of this fund, said in all departments there had been a regular increase of business, and the contributions of the public to the donation bonus fund had been very considerable. The fund amounted to upwards of £38,000, making, with the annuity and sinking funds and other contributions, over £60,000 contributed to the purposes of the association. The sum of £762 represented the expenses of management from the time they commenced issuing policies, about July 1st, 1888. He concluded by expressing their thanks to the Princess of Wales for the active personal interest which she had taken in the association. Mr. Henry C. Burdett seconded the motion, which was unanimously adopted.

THE WATER SUPPLY OF LONDON.

A CIRCULAR of considerable interest to the ratepayers of London was recently issued by the vestry of Westminster, calling serious attention to the probability that the forthcoming quinquennial reassessment of house property in the metropolis will afford the water companies an opportunity of increasing their current charges, and, by possessing themselves of a considerable unearned increment, of increasing the value of their undertakings against the day when they will have to be bought up by the ratepayers. The companies undoubtedly possess the power of doing so under the Waterworks Clauses Act of 1847, although it may fairly be doubted whether Parliament, when passing that Act, contemplated the use that would, in the course of forty years, be made of its provisions. The Westminster Vestry are of opinion that the companies have enjoyed their privilege in this particular matter quite long enough, and they have also resolved to "address a communication to the Local Government Board, suggesting that Her Majesty's Government should introduce a short Bill in the present session of Parliament to provide that when once the rateable value of a house or tenement has been assessed, the water companies in the metropolis shall not be entitled to any higher rate of charge thereon, unless where an additional consumption of water follows the increase in the rateable value; and to provide, also, that the public shall be able to demand a supply by meter at a small quarterly minimum charge." Sir J. C. Lawrence announces that the Corporation of London have appointed a County Purposes Committee, which is instituting an exhaustive inquiry into the question of the water supply, to be conducted without any charge to the ratepayers. He is not without hope that the report of the committee will furnish a basis for legislation, and bring about a satisfactory compromise as between the water companies, the consumers, and all classes of the community.

SIR RICHARD OWEN, K.C.B.

THE condition of Sir Richard has improved a little during the last three days, but Dr. Frederick Palmer informs us that he continues weak. There is a marked change in his habits of life; he is unable to fix his attention upon his favourite books and newspapers, and he expresses no desire to rise from his bed. An attack of acute gout developed on Wednesday in his left foot, which is giving him a certain amount of discomfort; with this exception, Sir Richard has not complained of any pain since the beginning of his illness. There is no loss of sensation or motion in his limbs; his articulation is perfectly distinct, and his mental faculties continue clear. On Sunday last, symptoms of failing strength were observed, indicated by feeble cardiac action, drowsiness, and loss of appetite. Since then he has taken a fair amount of liquid nourishment. At his advanced age (85 years) the prognosis is necessarily doubtful.

ALLEGED INJURIES FROM VACCINATION.

FOR many years we have been familiar with the allegations of anti-vaccinators as to injuries which are said to have resulted from vaccination. One of the most absurd is that vaccination is the cause of blindness. A few weeks ago the Principal of the Royal Normal College for the Blind at Upper Norwood was summoned before the Croydon Borough Bench in respect of the non-vaccination of his child. In answer to the proceedings relating to this matter, he justified his non-compliance with the vaccination law by pleading that it was due to his knowledge of so many cases in the College in which blindness had resulted from vaccination. This was rightly deemed to be a statement of sufficient importance to warrant an inquiry by the College Committee of Management. The investigation which the Committee caused to be made by their medical officer, Dr. Hetley, shows that out of the 140 pupils in the Institution eight attributed their blindness to vaccination, but that seven out of the eight were conclusively proved to owe their blindness to other causes than vaccination, while in the eighth case there was, in the opinion of the local medical officer and of Mr. Hulke, no reason whatever for believing that the assertions of a violent anti-vaccinationist were really trustworthy. The inquiry incidentally showed that two children in the College are marked with small-pox. One of them shows no signs of vaccination, and the other has admittedly not been vaccinated. In both these cases the loss of sight has been entirely due to small-pox. We think that the Committee of the Royal Normal College has done well to institute this inquiry. The opposition to vaccination is chiefly based on the unfounded statements of anti-vaccinators, and the best way of counteracting it is by instituting inquiries by competent and impartial persons, in

every case in which injury is alleged, on apparently good authority, to have resulted from vaccination. The process is tedious, and many would think unnecessary, but in the present state of public opinion with regard to vaccination, we think such a course is, on the whole, to be recommended.

THE LIBRARY OF THE OBSTETRICAL SOCIETY.

THIS library, shortly to be removed from Berners Street to Hanover Square, will be closed throughout next week. Due notice will be given of the date at which it will be reopened in the new premises. The future meetings of the Obstetrical Society will be held, as already announced, in the Royal Medical and Chirurgical Society's rooms, 20, Hanover Square, the next meeting taking place on Wednesday, April 2nd.

CLINICAL INSTRUCTION IN PUBLIC ASYLUMS.

IN answer to a letter of inquiry and objection to the admission of clinical students to the asylums of the Metropolitan Asylums Board received from the Local Government Board, the managers decided at its last meeting to send the following explanation: "That the managers, in deciding to make their imbecile asylums available for clinical instruction, were led to such decision (*a*) by the opinion frequently and forcibly expressed by the Commissioners in Lunacy that the medical staffs at the asylums were of insufficient strength, having regard to the number of patients under treatment; and (*b*) by the terms of a resolution adopted by the Royal College of Physicians on January 10th, 1889, that beneficial results would be likely to accrue from the appointment of clinical assistants at the imbecile asylums, provided such assistants were fully qualified persons under the Medical Act."

ENGLISH PRACTITIONERS IN FRANCE.

THE French Minister of Foreign Affairs (M. Spuller), at a recent meeting of the committee appointed to study and report on various questions connected with the practice of medicine in France, is reported to have expressed his approval of the proposition that foreign doctors wishing to settle in France should be compelled to provide themselves with a French diploma, though he thought that the examinations might be modified in their favour by the Minister of Public Instruction. On the other hand, M. Spuller was of opinion that an exception might be made for the benefit of the foreign practitioners practising in the different health resorts patronised by their fellow-countrymen, in so far that they might be authorised to attend the latter, the necessary permission being renewable every year, and thus being capable of withdrawal from one twelvemonth to the other.

THE HOSPITAL QUESTION IN BIRMINGHAM.

IT may be remembered that after the discussion at the conference held in Birmingham between representatives of the hospitals, medical practitioners, the board of guardians, and the provident dispensary on January 15th, the Mayor of Birmingham was requested to appoint a committee to inquire into the question of the medical treatment of the poorer classes, and to make suggestions as to any desirable reform. The proposed arrangements for this Committee have just been announced. It is to consist of nine members, four lay representatives of the hospitals, three representatives of the medical profession, one representative of the Hospital Saturday Committee, and a chairman. For the last named important office the Mayor has secured the service of Mr. M. Chalmers, judge of the Birmingham County Court. Judge Chalmers has, we understand, had experience in the administration of charities before his appointment to Birmingham, but has not taken any active part in the administrative work of the Birmingham charities, so that he approaches the inquiry with an unbiassed mind. He has gained in Birmingham the reputation of a very acute observer, and his judicial decisions are always received with respect; his selection, therefore, seems to have been most fortunate. As to the hospital representatives, the General Hospital will appoint one, the Queen's Hospital one, the General Dispensary one, and the Children's, Eye, and Women's Hospitals acting together one. The first meeting of the Committee, which will be for the purpose of arranging the modes of procedure, will be private, but representatives of the press will be admitted to subsequent meetings.

M. PASTEUR AND THE RABBIT PEST IN AUSTRALIA.

IN respect to a statement alleging that the Australian Government had refused to allow M. Pasteur the reward of £20,000 offered to the person who should suggest the best plan for the destruction of the rabbits that infest that colony, M. Pasteur is reported to have said that this was not so, for the simple reason that he had never sought it, and that, owing to circumstances over which he had no control, he could not claim such a reward. He had sent M. Loir, his nephew, and another of his assistants to Australia in order to try the experiments which he had made in his laboratory on a more extended scale. The assistants returned to France after a few months, discouraged. According to M. Pasteur, they were not allowed by the Commission appointed by the Australian Government to make any important experiments. This Commission permitted the assistants to inoculate a few rabbits, and the experiments were successful enough to warrant a further extension of the authorisation; but all sorts of delays and adjournments were caused, until the assistants abandoned all hope of being able to carry out the purpose for which they had undertaken the voyage to Australia.

TOILET SOAPS.

IN the presence of the multitude of soaps for toilet purposes that are just now being pressed upon the attention of the public, the information contained in a communication from Dr. B. H. Paul, on "Toilet Soap, considered from a Chemical Point of View," published in the March number of the *British Journal of Dermatology*, will be found very timely. Dr. Paul points out that for some purposes a soap containing surplus alkali, uncombined with fat acid, would be unobjectionable, but that when a soap is intended for bodily ablution the caustic and irritating action of free alkali upon the skin renders its presence most undesirable. For all practical purposes it may be stated that a perfectly neutral soda soap, made with an ordinary fat, in which oleic and stearic acids preponderate, does not contain much more than 11 parts of soda for every 100 parts of fat acid; but a neutral soda soap, made from cocoa nut oil, of which palmilic acid is the chief constituent, would contain a larger quantity of alkali. An examination upon this basis of 17 samples, representing the products of all the principal manufactures of high class toilet soap, showed that in five of them the proportion of soda to fat acid was nearly that indicated for a neutral soap, but that in some of them there was also potash present, the greater part of which would be uncombined with fat acid, and communicate to the soap an abnormal alkalinity.¶ [The general result went to show that among toilet soaps, as usually met with, a perfectly neutral soap is the exception, and that a trustworthy soap of that kind is still a desideratum. Three of the five soaps already specially referred to were described as "superfatted" soaps, one of them being alleged to have been prepared according to Unna's formula. But in fact they all were found to contain the full proportion of alkali required for the saponification of the fat, besides some additional potash, which in one of them was considerable. Moreover, it is worth noticing that although Unna's formula has been hitherto supposed to yield a soap contain-

ing 4 per cent. of unsaponified fat, the proportions of soda and potash ordered to be used in it are, according to Dr. Paul, quite sufficient for the complete saponification of the fat. The formation of acid stearates and oleates would, of course, considerably diminish the quantity of alkali acquired, but these acid salts have none of the properties for which soap is applicable, and would therefore be useless if present. Dr. Paul is, however, of opinion that if the difficulties attending the manufacture of a true superfatted soap, which was not greasy when used or too much reduced in detergent power, could be overcome, such an article would be a boon to many, and the discomfort of chapped hands and excoriated faces might by its use be at least considerably mitigated.

THE INSANITARY CONDITION OF BILLINGSGATE.

UNDER the above title the *Sanitary Record* of February contains an article which, from the great importance of the subject of which it treats, is worthy of special notice. Our contemporary points out that at the present time a population of ten million persons draw their fish supply from the metropolis, and that the central market from which this enormous food supply is distributed covers "only an area of 39,000 square feet, or considerably less than an acre." In describing the insanitary condition of the market, the *Sanitary Record* says: "In addition to its inadequate size and inconvenient situation, the structure and internal fittings are nothing more nor less than a disgrace. Instead of all of the internal fittings being made of glazed, varnished, non-porous, non-absorbent materials, most of them are substances highly absorbent, which breed every form of germ bacteria or microbe, specially active in starting and ulcerating the decomposition or putrefaction of any dead fresh fish which may be in the market. The stalls, too, are bacterial traps, for they are of unvarnished, porous, soft wood, rough and uneven from wear and tear, and the walls are of porous bricks, instead of being of glazed bricks or tiles. The present floor is composed of a porous, soft stone, so worn and uneven that its pavement is a honeycomb of filth pools, and here may be seen not only fish heads and bits of fish, but often the fish full of blood and entrails, more or less decomposed and decomposing, as well as fish on sale totally unfit for human food." Billingsgate Market is a disgrace to the metropolis, and its present condition tends, by putrefactive bacterial contagion, to spoil any unspoilt dead fish which may chance to be on its premises. The wholesale waste which thus occurs adds materially to the cost of fish, and often makes it dearer than butchers' meat. Fish is an invaluable article of diet, and it should be within the reach of all to have it as often as possible and as fresh as possible. If the apathetic Londoner will for once bestir himself, and insist on having a greatly improved central fish market, he will not only reap the benefit of his action in having cheaper fish for his table, but will also confer a benefit of like nature on millions of his countrymen, to whom fish is distributed from the central market of the metropolis.

THE MEDICAL SOCIETY OF LONDON.

THE annual dinner of the Medical Society of London on Saturday, March 8th, was most successful. Among the guests were the Presidents of the Royal Colleges of Physicians and Surgeons, and of the other medical societies of the metropolis. The chair was occupied by the retiring President, Dr. C. Theodore Williams, who was able to congratulate the Society on a remarkably successful year's work; during it many interesting papers have been read and discussions held which have been reported from time to time in the JOURNAL. The financial position of the Society is satisfactory, and the roll of Fellows is larger, it was stated, than that of any other metropolitan medical society, with one exception. This enviable position is largely due to the good fortune of the Society in securing the services of a succession of able and energetic Presidents, who have infused new life into this, the oldest of medical societies. To one of these past Presidents—Sir Joseph Fayrer—fell the pleasant duty of acknowledging the toast of the evening, which he did in a few well chosen words, tracing the recent growth of the Society. The toast of "The Army, Navy, and Reserve Forces" was acknowledged by Dr. Dick, Director-General of the Medical Department of the Navy. He observed that, when addressing the Society last year, the department was about to undergo the ordeal of Lord Camperdown's Committee. This it had now passed through, and, with the exception of one or two minor recommendations, the Committee had left the department exactly where it was, which was what the service wanted. He hoped that it might be possible to arrange that a certain number of medical officers, if the exigencies of the service admitted, would be allowed to spend some time after the tour of foreign service in attending some of the great teaching hospitals. In very happy and eloquent terms the health of the retiring President was proposed by Sir Andrew Clark, and acknowledged by Dr. C. Theodore Williams, who concluded by proposing the health of his successor, Mr. Knowsley Thornton.

"PARTICULARS" OF ADULTERATION.

A QUESTION of considerable importance in reference to food adulteration has just been decided by a Divisional Court, in the case of "The Queen *v.* Wakefield." The matter in dispute was as to whether a prosecutor is bound to give particulars of the adulteration of which he complains when taking proceedings under the Sale of Food and Drugs Acts. The local authority of Kendal prosecuted the vendor of a sample of milk, which on analysis by the public analyst was certified by him to have been adulterated, and the only particulars given in the summons were that the milk was not of the "nature, substance and quality" demanded by the purchaser. The justices before whom the case was heard convicted the vendor and refused to state a case. The contention on behalf of the appellant before the Divisional Court was to the effect that the prosecutors were bound to give "particulars" of the adulteration complained of, that is, whether a certain percentage of water had been mixed with the milk, or a certain percentage of some constituent such as fat, abstracted from it; and that the giving of such particulars was necessary in order that the appellant might prepare his defence. It is, upon the whole, satisfactory to learn that the court held the conviction to be right, and that the appeal was dismissed with costs. The existing difficulties in the way of a proper administration of the Act relating to adulteration are very great, and it would be highly inconvenient if in all cases where proceedings are taken against vendors of adulterated articles, it was incumbent upon the prosecuting authority to give "full particulars" of the adulteration in the summons issued by them. As a general rule it may be admitted that there are no special objections to stating in a summons relating to adulterated milk whether such milk was watered or was deprived of fat, and to stating percentages, so long as those percentages are not made to appear absolute, and are given as minimum percentages. This remark will no doubt apply to a great many forms of adulteration. But having regard to the fact that all kinds of interpretations may be given to the phrase "particulars of the adulteration," it is plain that there are many cases where doubt could be introduced, and where guilty persons might in consequence escape. In the present state of our knowledge of the composition of many natural products, and in view of the difficulties attending some methods of analysis, it would be unwise rigidly to bind down local authorities to the making of absolute statements as to percentages of adulteration, and even as to the exact nature of any particular adulterant. It ought, in fact,

to be quite sufficient in certain instances to show that the article complained of was not of the "nature, substance and quality" demanded; and not to be forced to undertake unnecessary labour, at great expense, for the sole benefit of persons who profit by adulteration, or again to discuss obscure technical points before those who are not trained to deal with them.

PROPOSED STUDENTS' UNION.

THE efforts which are being made just now for the establishment of a teaching university in London are not confined to the teachers and governing bodies of the London colleges; we are glad to hear that the students also at University College are attempting to form a Union, which, if successfully carried out, can do a great deal towards the formation of that *esprit de corps*, that community of feeling and aspiration, which is distinctive of a university. This experiment will be watched with great interest. The formation of such a society in London is fraught with difficulties that are not present in a university in a provincial town. The homes of the students are in London widely scattered; residential colleges are still few in number; the students in the Arts and Science departments are as a rule constantly changing; they attend lectures for a term or a session, and then all their connection with the college ceases. The mainstay of a Union of the kind suggested must be found in the medical students, for it is they alone who make a prolonged attendance on courses of instruction. Students and teachers alike often lament the want of the fellow feeling so necessary for hearty, earnest, and sympathetic work. Attempts to originate similar societies in the past have at University College been failures; debating societies exist, but, with the exception of the Medical Society, they are languishing, feeble, or moribund. The University College Society, which came into existence with a great flourish a few years ago, and which sought to establish an *esprit de corps* through the medium of frequent *conversaziones*, died out quietly last year, when its promoter, Professor Henry Morley, resigned his chair. Dr. Ramsay, the Professor of Chemistry, is the leading spirit in the new enterprise, and though it is as yet in a merely embryonic condition, the proposed Union will apparently strive to imitate and combine the features of the Union of Oxford or Cambridge with that of the Students' Representative Council of the Scottish Universities. The project is being taken up most actively by large committees of all classes of students.

SCOTLAND.

THE winter session of the medical classes of the Edinburgh University and the Edinburgh School of Medicine terminates on Friday, March 21st. Thereafter the professional examinations of the University and of the Royal Colleges will be conducted. The summer session is announced to open on Thursday, May 1st.

IN connection with the approaching International Medical Congress at Berlin, it is announced that the following Scotch Committee has been appointed to co-operate with the President and the General Secretary:—Mr. Joseph Bell, Mr. George A. Berry, Mr. John Duncan, Professor T. R. Fraser, Professor W. T. Gairdner, Mr. G. A. Gibson, Dr. P. M. Bride, Sir George H. B. Macleod, Dr. Keel Ritchie, Professor A. A. Simpson, Professor Grainger Stewart, Mr. J. B. Tuke, and Sir William Turner.

IT has been determined by the Public Health Committee of Edinburgh Town Council that the supply of beer to the nurses and servants of the Edinburgh City Fever Hospital be discontinued, except in special instances, where advanced years may suggest the desirability of its use.

PUBLICITY AT ORAL EXAMINATIONS IN MEDICINE.

IT will be remembered that at the last meeting of the General Council of the University of Edinburgh, a resolution was adopted, on the motion of Dr. Alexander James, in favour of publicity at oral professional examinations, and suggesting that graduates of Scotch Universities should be free to visit such examinations in the same way as Fellows of the Royal Colleges have access to the examinations of the Associated Boards. The subject was referred to the Edinburgh University Court, which has given full consideration to the proposal. At the meeting of the Court on Monday last the following decision was come to:—"The University Court approve of a well-regulated publicity in the case of the professional oral examinations, and, while they cannot accept the proposal of the General Council in its present form, they are prepared to consider any further suggestions that may be laid before them by the Council."

THE SALE OF UNSOUND MEAT IN EDINBURGH.

AN important resolution has been passed by the Public Health Committee of Edinburgh, to the effect that there were good grounds for supposing that further seizures of ham unfit for human food could be made, and recommending that the inspectors be instructed methodically and systematically to inspect provision warehouses, with a view to putting an end to this illegal and dangerous traffic. It was stated in discussion that in one warehouse sufficient unsound ham had been discovered to poison 7,000 persons. Dr. Littlejohn stated that 12,218 lbs. of diseased meat had been seized or delivered up during the month of February.

THE TEACHING OF FEVERS IN GLASGOW.

IN consequence of the controversy which arose owing to Dr. Allan, of Belvidere Fever Hospital, withdrawing his name from the list of lecturers at St. Mungo's College and intimating his intention to discontinue altogether teaching on the subject of fevers, the Health Committee of the Town Council took up the question, and have been considering how best the material for clinical instruction of students at Belvidere may be utilised to the advantage of the public. Professor Gairdner and Drs. Gemmell and McVail have been asked to state their views to the Committee. The Committee has now decided to report to the Town Council that the clinical teaching on the subject of fevers should be left in the hands of Dr. Allan, and should be open to all medical students without fee; and that outside teachers may on occasion be granted permission to visit the wards, application being made to Dr. Allan or the Health Committee. This decision, so far as it goes, is fair enough in appearance to everyone. But the University is fully three miles from Belvidere, and if the result of the controversy be to deprive the students at the University of the benefit of the teaching which Dr. Allan, at the request of Professor Gairdner, has given there for some years past, it will be a result much to be deplored.

IRELAND.

DURING the past year there were 92,621 successful primary vaccinations performed; while for the December quarter of 1889, 2,948 cases were postponed, and 178 children were reported as insusceptible of vaccination.

SIR JOHN NUGENT.

LAST week we referred to the retirement of Dr. Nugent from the Inspectorship of the Lunatic Asylums in Ireland, after a service of

over forty years. His Excellency Lord Zetland on Monday last conferred on him the honour of knighthood in recognition of his work. The distinction has been very worthily earned. Several of the boards of governors have passed resolutions regretting Dr. Nugent's retirement.

DEATH OF DR. THOMAS KANE, J.P., OF LIMERICK.

Dr. Kane died at his residence, George Street, Limerick, last week at an advanced age. The deceased gentleman was an able practitioner, and enjoyed a large practice. Dr. Kane was a Justice of the Peace, and was elected Mayor of Limerick in 1852, and again in 1857, and also acted as High Sheriff. His funeral took place on Saturday, March 8th, and was largely attended.

COUNTY MEDICAL OFFICERS OF HEALTH.

Mr. Dundas, of Arniston, Convener of the Mid Lothian County Council, has addressed an important circular letter to County Councillors, dealing with the question of the appointment of medical officers of health. He is of opinion that if the County Councils appoint medical officers of health without permission to engage in private practice "special arrangements will have to be made for placing under each officer's supervision an extent of country calculated to give him full employment. This result," he adds, "can only be obtained by several counties combining to employ the same medical officer. It is believed that were Scotland divided into six combinations the work in each would not be more than one man could overtake." In special cases an assistant might be employed under him, but "this would seldom be required, however, if the sanitary inspectors, as they ought to be, were experienced men and up to their work. But, as under Section 52, the County Council and District Committees are empowered to make arrangements for rendering the services of the County Council officers available for district work, the County Council medical officer and his assistants might discharge the entire work connected with the public health over a group of counties. Under such an arrangement the District Committees would be relieved from the obligation of appointing medical officers of their own." The six districts suggested are as follows: 1. Centre, Edinburgh: *Counties*, Berwick, Roxburgh, Selkirk, Peebles, East, Mid, and West Lothian (population, 210,000). 2. Centre, Ayr: *Counties*, Dumfries, Kirkcudbright, Wigton, Ayr, Renfrew, Bute (population, 313,000). 3. Centre, Glasgow: *Counties*, Lanark, Dumbarton (population, 260,000). 4. Centre, Stirling: *Counties*, Perth, Stirling, Clackmannan, Argyle, Fife, Kinross (population, 281,000). 5. Centre, Aberdeen: *Counties*, Aberdeen, Kincardine, Forfar, Banff (population, 276,000). 6. Centre, Inverness: *Counties*, Inverness, Nairn, Elgin, Ross, Sutherland, Caithness, Orkney and Shetland (population, 279,000). An alternative suggestion is made, namely, that the medical officer appointed by the County Council should likewise be medical officer for the District Committees; in this case, sixteen combinations of counties might be desirable. The areas under each officer would then be much smaller, "and the officers would receive corresponding salaries." The sixteen districts suggested are: 1. Mid Lothian and Linlithgow (population, 104,000). 2. East Lothian and Berwick (population, 59,000). 3. Roxburgh, Selkirk, and Peebles (population, 47,000). 4. Dumfries, Wigton, and Kirkcudbright (population, 99,000). 5. Ayr (population, 137,000). 6. Lanark (population, 222,000). 7. Renfrew, Bute, and Dumbarton (population, 115,000). 8. Stirling, Clackmannan, Fife, and Kinross (population, 147,000). 9. Argyle (population, 56,000). 10. Perth (population, 78,000). 11. Forfar and Kincardine (population, 98,000). 12. Aberdeen (population, 130,000). 13. Banff, Elgin, and Nairn (population, 83,000). 14. Inverness (population, 70,000). 15. Ross (population, 72,000). 16. Caithness, Sutherland, Orkney and Shetland (population, 102,000). Mr. Dundas dwells on the financial difficulties, and on what he describes to be the strong feeling that "no adequate advantage will accrue to the country from the large expenditure which is being forced upon" local authorities. He regrets the division of authority which must result from the exclusion of the small burghs and police burghs, from the control of the district authorities, and however much it may be necessary to dissent from some of his views with regard to the relative functions of medical officers of health, and sanitary inspectors, many will heartily sympathise with his hope that the town councils and magistrates of the burghs will see it to be for their own advantage to come to an agreement with the adjoining District Committee for the employment of the district medical and sanitary officers. Any agreement which would lead to joint action between the burghs and rural districts without interfering with the independent position of either would be, as he says, an unmixed advantage to the country.

ROYAL COLLEGE OF SURGEONS.

An ordinary meeting of the Council of the College was held on March 13th. The minutes of the last meeting were read and confirmed.

The Laboratories Committee reported that they had now under consideration the arrangements of the internal fittings of the various new rooms, and in order to proceed with the work with as little delay as possible they recommended the expenditure of a sum not exceeding £2,000 on fittings, apparatus, and instruments. This report was approved and adopted.

A letter from Dr. Liveing, Registrar, was read, reporting the proceedings of the Royal College of Physicians in reference to the "University for London" question, and seeking a conference thereon with the College Committee. It was stated that the Joint Committee would meet shortly.

A letter was read from Mr. Wilde, stating that the plaintiffs in the action of Steele *v.* Savory had obtained the usual order for an affidavit to be made, declaring what documents the College have in their possession or control relating to matters in question in the action.

A letter from Mr. C. P. Edwards, general secretary of the Protest Committee, was received, forwarding a memorial in reference to the experiments and proposals of Dr. Brown-Séquard. It was resolved that the memorialists be informed that their circular had been laid before the Council.

A letter was read from Dr. G. S. Woodhead, thanking the two Colleges for having appointed him Director of the Laboratories.

INTERNATIONAL MEDICAL CONGRESS, 1890.

Obstetrics and Gynæcology.—The Committee of Organisation for the Section of Obstetrics and Gynæcology consists of Professors Fritsch (Breslau), Gusserow (Berlin), Hegar (Freiburg), Hofmeier (Würzburg), Kaltenbach (Halle), Löhlein (Giessen), Martin (Berlin), Olshausen (Berlin), and Winckel (Munich).

The Committee cordially invite British obstetricians and gynæcologists to take part in the proceedings of their section. The programme of the section is as follows, and it is requested that any further proposals for addresses, papers, or demonstrations may be sent as soon as possible.

For the work of the Section three full days are allowed, and also, on the days of the second and third general meeting, a few hours in the forenoon. The morning hours will be devoted to the exhibition and explanation of preparations, instruments, etc., and possibly also to the performance of operations. The time from 10 to 1 o'clock on the three days, on which there is no general meeting, will be devoted to papers and communications on the subjects named below, which will be followed by a free discussion and by such addresses on matters connected with the subject in hand as have been announced and accepted by the Committee. In the hours from 2 to 4 o'clock the other papers and addresses offered and accepted will be heard in the order fixed by the Committee of the Section.

The following subjects are proposed for the morning meetings (10 to 1): 1. *Antisepsis in Midwifery.*—Introduced by Galabin (London); discussed by Stadfeldt (Copenhagen), Slavijanski (St. Petersburg), Fritsch (Breslau). 2. *Artificial Premature Labour*, its indications and methods.—Introduced by T. Parvin (Philadelphia); discussed by Calderini (Parma), Macan (Dublin), Dohrn (Königsberg). 3. *Vaginal Extirpation of the Uterus.*—Introduced by Williams (London); discussed by Pozzi (Paris), Schauta (Prague), Olshausen (Berlin). 4. *Electrolysis of Myoma.*—Introduced by Apostoli (Paris); discussed by T. Keith (London), E. Cutter (New York), Zweifel (Leipzig).

All communications concerning the Section for Obstetrics and Gynæcology are to be addressed to the managing member, Dr. A. Martin, Berlin, N.W., Moltkestrasse 2, who will also be glad to hear from those desirous of exhibiting instruments or appliances in the Scientific Exhibition of the Congress.

The subscription is £1, to be paid to the Treasurer, Dr. M. Bartels, Berlin, S.W., Leipzigerstrasse 75.

NOTES
ON
SOME GERMAN UNIVERSITIES.

By WALTER K. SIBLEY, M.B., B.C.Camb.,

II.—THE UNIVERSITY OF BERLIN.

The University Buildings.—The Hospitals.—Libraries.—The Hygienic Institute; its Laboratories.—Professor Koch, Drs. C. Fränkel, and R. Pfeiffer.—Microphotography.

The Royal Friedrich-Wilhelm's University was opened in 1809; the building, which is situated at the east end of Unter den Linden, was formerly the palace of Prince Henry, brother of Frederich II, and was built in 1754. It can now accommodate 5,000 students. Space will not permit a detailed description of the building beyond mentioning that it contains numerous lecture theatres, a zoological museum, especially notable for its collection of birds, and a mineralogical museum, which, after the British Museum, is stated to be the most complete in Europe.

The hospitals of Berlin are numerous, and may be divided into two sets: those where lectures are given, that is, the clinics or medical schools; and those where there is no regular teaching. Of the former, the most important is the Charité, which comprises clinics of medicine, surgery, nervous diseases, midwifery and gynæcology, children's diseases, syphilis, skin, eye, etc. In addition to the Charité are the University Surgical Clinic, the Royal University Clinic for Women, the University Medical Policlinic (out-patients), and the University Policlinic for Throat and Ear. The most important of the other hospitals are Friedrichshain (620 beds), Moabit (900 beds), Dalldorf Asylum (1,200 beds), and Augusta (190 beds). There are also libraries from which students can take out books, on obtaining a card from the University. The principal one, the "Königliches Bibliothek," is situated opposite the University building. The whole of this is open daily, with the exception of Sundays and public holidays, from 9 to 3, the large reading room attached to it being open from 9 to 7.

In the same neighbourhood is the journal room where all foreign periodicals of note are taken in. In addition to these there is the Königliche-Universitäts Bibliothek, in the Dorotheenstrasse, which has a reading-room attached. From this library books can be taken home and kept for a month. In the same street is the Bibliothek der Medicinischen Gesellschaft. This belongs to members of the Medical Society, and is, therefore, comparatively private. There is also a library of hygienic literature, and in the Friedrichstrasse is one for the use of military surgeons.

It will be convenient to begin the description of the organisation of the medical faculty in Berlin with the Institute of Hygiene. This building is situated in the Klosterstrasse; the Hygienic Laboratory, which was opened in 1885, is housed in the building which was formerly the academy for civil engineers, and occupies the first and second floors, with the exception of some rooms in which animals are kept for experimental purposes. The laboratories consist of two distinct parts, those for chemistry and those for bacteriology. On the first floor to the right of the staircase is the lecture theatre, with 119 seats. It is provided with a digestorium, and various arrangements for the suspension of diagrams and plates. In connection with it is a preparation room for the lectures, and behind this three rooms with collections of apparatus, charts, and instruments for lecture purposes.

The chemical department, which is also on the first floor, consists of the private laboratory of Dr. Proskauer, one of the assistants; behind this is a dark room for the optical and spectroscopical examination of substances for analysis. Then follows the larger chemical laboratory, with places for twenty-five workers, in which are carried on the examinations of air, soil, water, and various articles of diet. Each worker's place is provided with a water-jet aspiration apparatus, consisting of a combination of tubes dilating or compressing air by the aspirating power of a water jet. On the walls are sterilising and digestive chambers; under these apparatus is a large water bath with several openings, in which vessels containing the substances to be analysed are kept at a temperature of 100° C. The steam from this passing through a cooling medium is condensed, and supplies the distilled water for general use. Under the water cistern is a drying chamber. For heating to higher temperatures a sand bath is used, which also contains a drying chamber.

On the first floor is also the library of the institute.

On the second floor is the bacteriological department, with two rooms which form the director's private laboratory. In the same section are the rooms of Dr. C. Fränkel, the first assistant, together with his laboratory, and also the large laboratory corresponding to that for chemistry beneath. In the large bacteriological laboratory, which can accommodate fourteen workers, the important work is done, and from time to time courses of instruction are given in it. In a cross building are four smaller laboratories, in which other investigations are carried on. Adjoining these is the laboratory for students. Another building forms a courtyard, which contains a small auditorium.

The fittings are much the same in the various laboratories. They consist of microscope tables, which are placed in the windows, each serving for two workers. In the middle of the room stand tables on which is placed the requisite apparatus for bacteriological work, as for cooking, making of nutrient gelatine, cultivations, etc. Sterilising apparatus, incubators, drying chambers of various construction, together with digestors, steam sterilising apparatus, and incubators for the cultivation of micro-organisms, are also provided. There is also an apparatus, which is provided with a gas flame day and night, for the constant maintenance of a given temperature within one or two degrees. An ingenious arrangement of metal springs, which naturally expand with heat, is attached to the gas burner, so that if by any accident the flame should go out, within a few seconds the springs contract, and by this mechanism the gas cock is turned off, and all escape prevented.

In connection with the bacteriological department is a photographic studio, in which the photographic appearances of various cultures, with their characteristic development, are preserved.

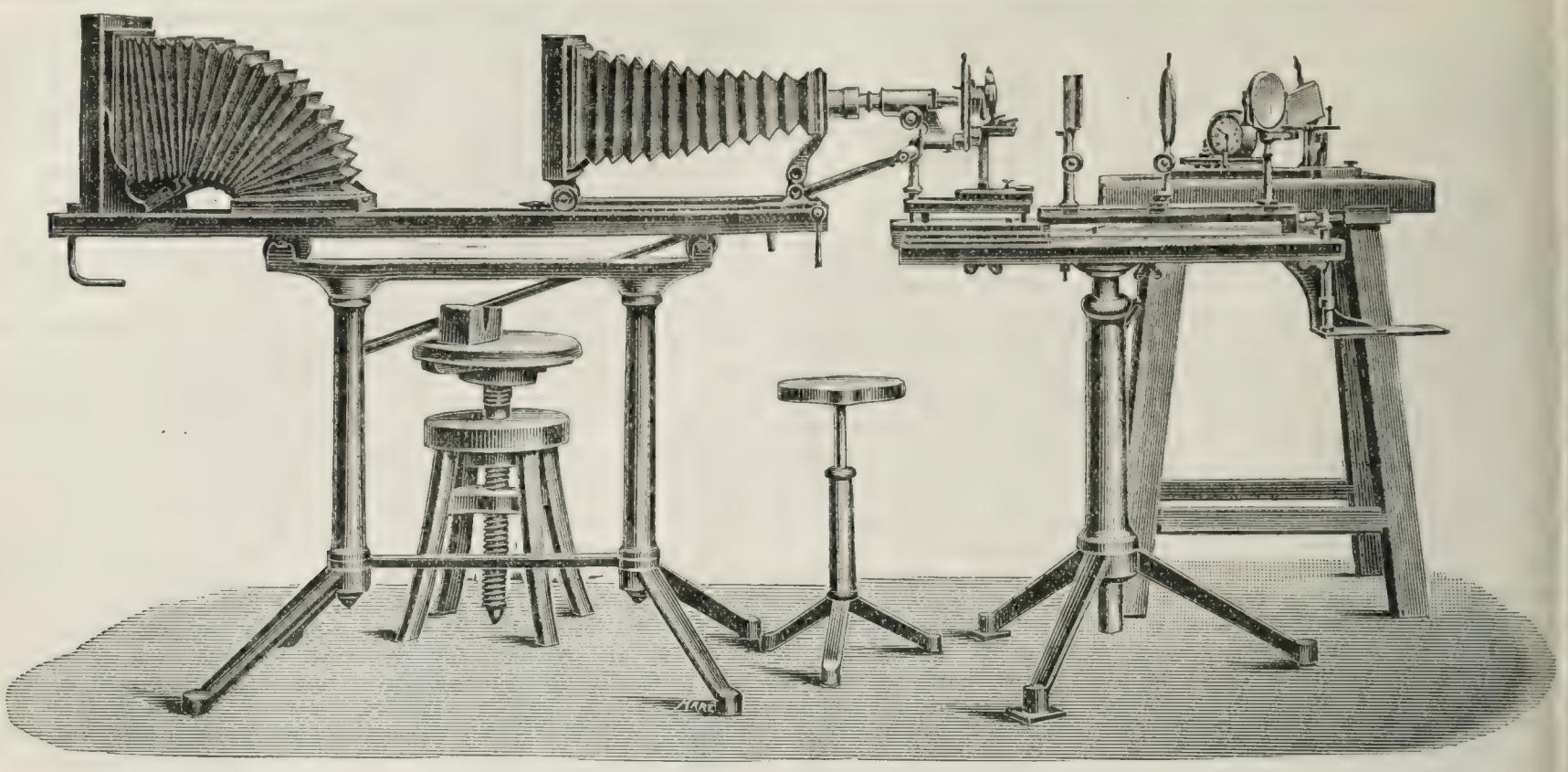
Medical men are admitted to the practice courses as well as to the other important work as far as space allows. The chemical and bacteriological departments go hand in hand. and the greater part of the work done—as, for instance, the examination of drinking water—is carried on in both departments at the same time. The laboratory is open on weekdays from 9 to 5, and on Saturdays from 9 to 2.

The arrangements for work in these laboratories are as follows: (1.) A daily four hours' course, which lasts a month. (2.) A place for work during a whole term. The fee for the course is 65½ marks (£3 5s.), and for the use of a place in the laboratory 115½ marks (£5 15s.). Workers have to provide all their reagents and small pieces for manipulation, but are provided with the main collection of bottles and glasses upon paying a deposit, which is returned, with deductions for breakages, at the end of the course.

Professor Robert Koch, the Director of the Institute, was born in 1843, and from 1872 to 1880 was a coroner at Wallstein in Bamst. There he commenced his bacteriological investigations, which were published in Ferdinand Cohn's biological memoirs. These were shortly followed by his paper on the Investigation of the Etiology of Wound Infections. In 1880 he was called to Berlin as a member of the Royal Hygienic Department. The following papers appeared in the first volume of the *Mittheilungen:* Investigation of Pathogenic Micro-organisms; The Etiology of Anthrax; On Disinfection; Investigation on Disinfection by Means of Hot Air (in conjunction with Wolffhügel); The Convenience of Steam for Disinfecting Purposes (in conjunction with Gaffky and Löffler). In the second volume appeared: The Etiology of Tuberculosis; Experimental Study on the Artificial Attenuation of the Anthrax Bacillus by Cultivation (in conjunction with Gaffky and Löffler). In 1883 Koch was sent as principal of the German Cholera Commission to Egypt and India, when he discovered the comma bacillus. Besides these important works he has published many papers in the various medical journals. In 1882 he startled the scientific world by the literally "epoch-making" discovery of the bacillus of tubercle. In 1885 he was made Professor and Director of the Hygienic Laboratory and Museum in Berlin, where he has continued his investigations ever since. He is a man of few words and of quiet retiring manners, and in addition to his great ability as a scientific investigator, he shows much mechanical ingenuity in the invention of apparatus for bacteriological research.

A considerable proportion of the work done in the hygienic laboratory proceeds from the assistants. The chief of these, Dr. C. Fränkel[1] is the author of a complete textbook of bacteriology

[1] Since this account was written, this gentleman has been appointed Professor at Königsberg.



ZEISS'S MICROPHOTOGRAPHIC APPARATUS.

(*Grundriss der Bakterienkunde*) and of numerous special treatises on the various branches of that science. More recently, much has been done by Dr. R. Pfeiffer on the micro-photography of micro-organisms. This gentleman, in conjunction with Dr. Fränkel, is bringing out a very complete atlas of photography of micro-organisms, several parts of which have already appeared. Some of the special points in the structure of the micro-photographic apparatus of Drs. Fränkel and Pfeiffer are that the microscope can lie in a horizontal position, and the camera with the plate is placed not over, but behind the microscope, and so is placed on a second support in the horizontal prolongation of the same.

Placed in front of the microscope, and in the same plane, is a contrivance to regulate the amount of light for the object, and act as a substitute for the mirror, which in the prone position of the instrument is not applicable. The three most important parts of the micro-photographic apparatus, namely, the illumination contrivance, the microscope with its appurtenances, and the camera are all arranged in one plane, and are all in immediate connection and placed in a most convenient manner. Various kinds of artificial light, such as limelight, lamps, magnesium, etc., are employed, but for very high powers and stained preparations sunlight is far superior.

THE MANDRAKE.[1]

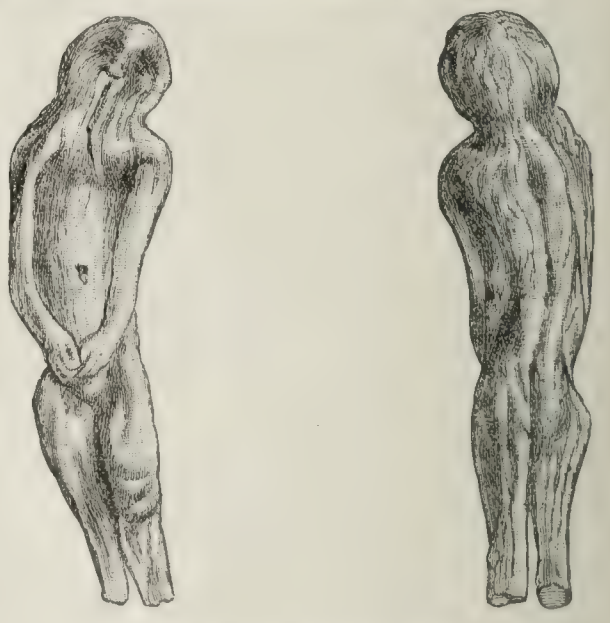
BY WILLIAM WYNN WESTCOTT, M.B.LOND.

THE true mandrake plant, *Mandragora officinalis* or *Atropa mandragora*, was used to prepare a medicine by many of the peoples of the ancient world; notably by the various races dwelling in Asia Minor, by the Greeks and Egyptians. In mediæval times the nations of Europe recognised its medicinal properties. The plant is indigenous to Palestine and Syria, and is occasionally found in Eastern Turkey and Asia Minor.

The root represented in the accompanying drawing is several years old, and is quite dry. It exhibits very well the curious resemblance to the human form, which has made a further interest in the plant, and which gave rise in remote ages to the assertions of magical power and virtues in sorcery. The ancients laid much stress on the doctrine of correspondences, and they argued that this human-like root must have special attributes as regards man, and hence this root became used as an amulet or talisman, and ladies valued it as a love philtre.

The Hebrew name is *dudaim*, or "love fruit," and the reference to Genesis, cap. xxx, where Reuben, the son of Leah, finds mandrakes in a field at the time of harvest (April) is known to all. Rachel consents to resign Jacob in exchange for the mandrakes, and Leah said to Jacob: "I have hired thee with my son's mandrakes." The birth of Issachar follows, a name which means in Hebrew hire or wages.

This root comes from Damascus, and is a very striking example of how much the plant may represent a man's form. Of course, all roots are not like this one, but there is a curious tendency to send off two lateral branches above and to end in two limbs below. There are often, also, the constrictions suggesting the neck and waist. The root of the white bryony of England, a cucurbitaceous plant, is sometimes fudged up by dealers to imitate the mandrake root; but I guarantee the genuineness of this sample, which is not carved out, but when green it may have been pressed a little into shape before being allowed to dry.



From a specimen lent by Mr. Martindale.

The plant belongs to Solanaceæ, and is a near connection o the potato; the root is perennial; there is no stem; from th crown springs a cluster of radical leaves which are entire, wavy ovate; among them there springs up a flower-stalk, or severa each with one bell-shaped five-lobed corolla. The fruit is a berry nutmeg-sized and of orange colour. The flowers are mostly white and have a full scent, but there are varieties with dusky flower and unpleasant smell.

[1] Read at a meeting of the North London District of the Metropolitan Counties Branch.

The plant is mentioned by several of the classical authors; by Pliny, A.D. 100; by Theophrastus, *History of Plants*, B.C. 350; by Ælian, Columella, Isidorus and Serapion, and by Dioscorides. The celebrated Sir Thomas Browne, M.D., 1650, the author of *Religio Medici*, wrote a long essay upon the mandrake, and repeats all the old traditions concerning it, such as the danger of pulling it up, the use of a dog for the purpose, the shriek which it gives when uprooted, and its aphrodisiac virtues. Shakespeare mentions it in *Romeo and Juliet*, *Cleopatra*, *Macbeth*, and *Othello*. Gerard, in his well-known *Herbal*, 1597, refers to the use of the plant in olden times. The ancients used the leaves as a poultice to relieve pain and swelling; they boiled them with milk; they made a wine of mandragora, and also administered the powdered root as a narcotic to relieve pain, and to produce a stupor for the performance of surgical operations.

Dr. B. W. Richardson, in his *Asclepiad* for the second quarter of 1888, claims to have recently made some wine of mandragora, and that for the first time since the thirteenth century. The old wine was prepared from half a pound of root bark digested in nine gallons of wine, and is reputed to have a very similar effect to that of chloral hydrate. Dr. Richardson made some experiments on animals, and obtained anodyne effects, and some local anæsthesia; when tasted, a numbing effect is produced on the tongue. He noticed the peculiar fact that alcohol takes up less virtue from the root than water does.

Some years since, a crystallised alkaloid was separated, and named "mandragorina."[2] The sulphate is a mydriatic, and has narcotic action; it has a close relation to atropine and hyoscyamine, but it has never come into general use, and has only very rarely been experimented with.

THE PROPOSED HOSPITAL FOR THE STUDY OF INSANITY.

At the meeting of the London County Council on March 11th Mr. R. Brudenell Carter, Chairman of the Special Committee on a Hospital for the Insane, submitted the following recommendations of the Committee: "1. That an adequately-equipped hospital, containing 100 beds, for the study and curative treatment of insanity in pauper lunatics of both sexes be established in the metropolis, and that it be under the direction and control of the Council. 2. That the staff and general organisation of the hospital should be in accordance with the principles laid down in the preceding report. 3. That a committee (which should be a subcommittee of the Asylums Committee) be appointed in order to carry the foregoing recommendations into effect, and to report their proceedings to the Council from time to time as may be required."

Dr. Cooper moved as an amendment: "That the consideration of the report be adjourned for six months, and that it be referred to the Asylums Committee for consideration and report. He urged that before embarking on what was at the best but an experiment that would cost £5,000 per annum—some competent persons said £10,000—it should be proved that the medical authorities had not other means of educating medical students than by a hospital paid for out of the rates. The report stated that 'medical students have practically no place to study diseases of the brain." But there were two large hospitals in London—Bethlem and St. Luke's. Bethlem had a pathologist and a visiting staff of specialists. St. Luke's had a visiting staff composed of the assistant physicians of St. Bartholomew's. They had 300 and 100 beds respectively. A hospital of 100 beds would not be large enough, as the number of students who ought to attend would be 250. The Committee claimed that the building of the hospital would enable them to treat the disease in its incipient stages. It was also said that the use of the word hospital instead of asylum would enable the patients to be visited by their friends. But the Lunacy Act compelled them to call it an asylum, the term hospital being only applicable to institutions which were endowed or supported voluntarily. Patients could only be admitted to an asylum by certificate, and no one would dare to sign such a certificate unless the patient were really insane. Patients' friends, too, strongly opposed their removal until they were dangerous, or, at least, very troublesome. The report attacked the administrative functions of the management and of the medical officers of the asylums, yet it afforded no remedy. Out of all the eminent gentlemen the Committee consulted, only two—Sir C. Brown and Dr. Batty Tuke—had had any real connection with asylums.

Dr. Bott seconded the amendment, and contended that there was universal dissatisfaction by medical men at the manner in which the Committee had selected their witnesses. Although it was said that the cost would be £350 per bed, he did not think it would be less than £700 or £800.

Mr. Austin urged the absolute necessity of the proposed hospital. There were about 10,000 pauper lunatics in London for whom nothing medically was being done.

Dr. Parker Young said the important question of the locality of the hospital had not been discussed.

Mr. Carr-Gomm spoke generally in support of the recommendations. It was generally felt throughout the country by the medical profession that the science with regard to lunacy was to a considerable extent at a standstill. And it was to remove that—to make the science, if it possibly could, advance—that it was proposed to establish, by the Council, a hospital.

Mr. Martineau stated that the evidence of fifty-five superintendents had been taken by the Committee in writing, and they were mainly in favour of the scheme.

Mr. Brudenell Carter, in reply, said that if the report of the Committee could not be accepted, it would not be strengthened by being referred to the Asylums Committee. They were selected without any knowledge of their opinions, but as representative members of the medical profession. Among them was the President of the General Medical Council, the President of the Royal College of Physicians, and the President of the Royal College of Surgeons. He asked the Council to approve the recommendations for the sake of the poor unfortunate persons who were subject to the greatest misfortune which could befall mankind. He entirely repudiated the idea of making any charge against the asylum superintendents, who had worked well under most difficult circumstances—circumstances which absolutely precluded them from attaining the object the Committee had in hand.

The amendment was submitted and carried, and afterwards agreed to as a substantive resolution.

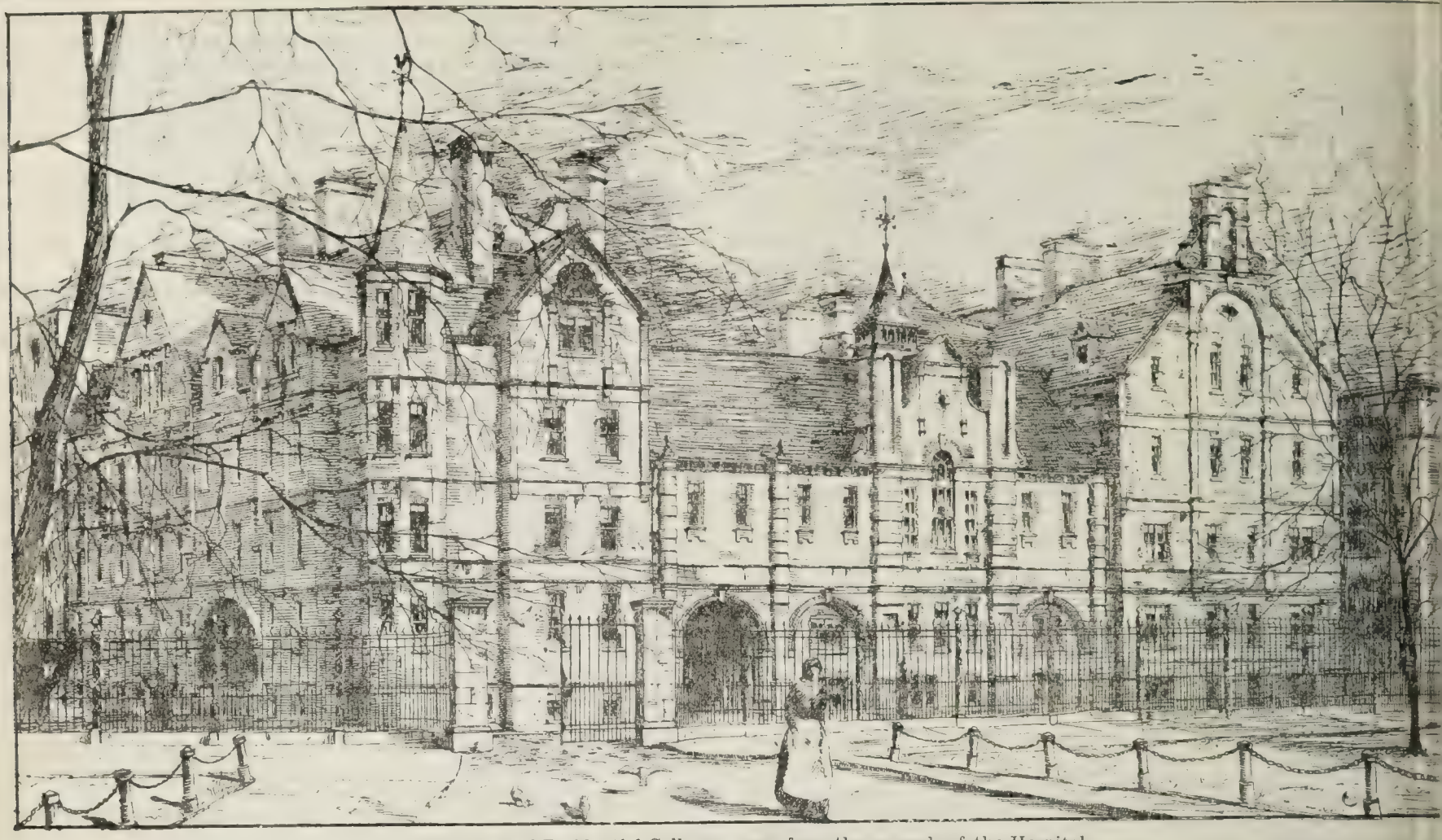
GUY'S HOSPITAL RESIDENTIAL COLLEGE FOR STUDENTS.

The project of establishing a college in connection with Guy's Hospital and its medical school has been more than once under consideration. Dr. Wilks lately quoted from an introductory lecture given by Dr. Addison, in which it was stated that the erection of a college was then only waiting for the completion of certain legal technicalities. That lecture was given fifty years ago. Again in 1877 the project was discussed between the governors and the staff, and plans were made by the hospital surveyor, but the matter fell into abeyance.

In the winter of 1887 a committee was appointed to consider in what way the number of house-surgeoncies, dresserships, and house-physicianships at Guy's could be increased, for it had long been felt that those holding these offices had been overworked, and that, although the importance and responsibility attached to the dresserships were as great or greater than are often at other hospitals associated with the office of house-surgeon, the dressers, after they had left Guy's, often found themselves at a disadvantage when compared with house-surgeons from other hospitals, because they could not claim the latter title. The Committee reported that both for the sake of the patients and for the sake of the students it was desirable to appoint a house-physician and a house-surgeon, attached to each physician and surgeon, and to arrange for a larger number of dresserships.

The Committee learnt from the treasurer that it was impossible to find accommodation for the increased number of residents in the existing hospital buildings, and such being the case, they recommended the erection of a college to lodge the residents, together with other students; and, as the empty wards occupied by the Students' Club might, it was hoped, shortly be required again for the reception of patients, it was thought expedient to find premises for the club in the college. Fortunately the hospital was in possession of a piece of ground close to the east gate, and it was found that a college built on that site could, by the construction of a short subway, be put in communication with the wards at any hour of the day or night. It was thus rendered possible to use the college for the residence of the house-physicians, house-surgeons, and the obstetric residents.

[2] This has been included in the last two editions of Martindale and Westcott's *Extra Pharmacopœia*.



1. Guy's Hospital Residential College as seen from the grounds of the Hospital.

As to the advantages which such a college would bring to the hospital and school, the Committee reported as follows: To the hospital it will afford the opportunity of increasing the number of residents without extra expense, while the removal of the resident staff to the college will give more accommodation for the nursing school. As regards the medical school, it is hoped that the inducement of placing their sons in the college will prove attractive to those parents who desire closer supervision for them than a lodging-house affords. The existence of a college will obviate, to some extent, the increasing difficulty which students experience in finding suitable lodgings within easy access of the hospital. It may be added that the students living in the college will have valuable opportunities of witnessing the operations that take place at night.



2. First floor plan of the Guy's Hospital Residential College. S. students' sitting-rooms; B. students' bed-rooms; A. students' combined bed and sitting-rooms; W. warden's rooms; D. buttery and serving-room; L. lavatory.

The report of this Committee was approved by both the school and the governors, and a joint committee, consisting of some of the governors and some of the staff, was formed to carry it out. This Committee easily raised enough capital, by the issue of debentures, and leased from the hospital a suitable site. The college is thus, financially, quite distinct from the hospital. Excavations were begun in August, 1888, the first brick was laid on November 26th, 1888, and the first student went into residence on March 1st, 1890. Dr. Perry, the dean of the medical school, has been appointed warden. The architects have been Messrs. Wood and Ainslie.

The illustrations show the exterior of the college as it appears from the end of the colonnade nearest Hunt's house, and a plan of the first floor. The rooms for the students' club comprise a large dining hall with an open-timbered roof, a reading and smoking room, and a gymnasium, formed by excavating the courtyard of the college. The residential portion consists of a house for the warden, with rooms for the house-physicians, house-surgeons, obstetric residents, and externs; and there is the following accommodation for other students: Thirty-four sets, each set comprising a sitting-room and bedroom; four sets, each set comprising a larger sitting-room with two bedrooms; and ten combined rooms consisting of a sitting-room and bedroom in one. The rents vary from 20s. to 9s. weekly, and the rooms are very comfortably furnished.

The building will be opened on Wednesday, March 26th, by Mr. Gladstone; he will be entertained at luncheon by the governors and staff, who will afterwards hold a reception, at which all medical men who desire to see the college will be welcome.

THE festival dinner of the Hampstead Home Hospital and Nursing Institute will be held on March 20th, at the Hôtel Métropole, when the Lord Mayor will take the chair.

THE LEEDS INFIRMARY AND THE YORKSHIRE COLLEGE.

We note with great pleasure the laudable effort that is being made in Leeds for the advancement of hospital accommodation for the sick poor, and, coincidently, for the increase and furtherance of medical education. It is little more than twenty years since the magnificent hospital—now one of the ornaments, not of Leeds only, but of Yorkshire—was opened for the use of the public, and it is already found to need enlargement. At the time the hospital was opened a great effort was also made by the Council, the then proprietors and directors of the Leeds School of Medicine, to place the school in a condition of equally perfect equipment, and, when the erection of the hospital was completed, it was found that a medical school which, as compared with its two predecessors, appeared to leave nothing to be desired had arisen in its immediate proximity.

Hospital and school alike are now found to be altogether inadequate to the requirements of the time; and, as with the one so with the other also, an effort is being made to bring them up once more to the high standard of excellence they had always hitherto occupied. The additions to the hospital will be of great importance, and will consist of a magnificent out-patient department, planned and arranged on the lines which European experience has proved to be the best; a modern pathological department; a suite of rooms devoted to the latest developments of ophthalmic, aural, and laryngeal medicine and surgery; new children's wards; a fully developed and equipped gynæcological department; and an "isolation block," to which any case arising in the hospital to which a suspicion of infection attaches may be at once removed, or into which it may be received if when—as unfortunately now and then happens—an infectious case has been incautiously or ignorantly sent to the hospital.

With a view to carrying out these additions subscriptions were a short time ago solicited, and a sum of between £30,000 and £40,000 was promptly placed at the disposal of the treasurer. All preliminaries having now been arranged, it is hoped that during the coming summer great advance will be made with the new buildings.

Leeds is, further, fortunate in having placed the management of its hospital in the hands of a board to whom its requirements have only to be made clear, and no stone is left unturned to develop all that is needed. This board is further presided over by an enlightened chairman, who has been able to appreciate at its proper value the intimacy that should exist between every large hospital and a medical school in which the work done in the hospital may be carried to its full fruition, and be rendered available as knowledge to be borne to the remotest corners of the world for the good of mankind at large; so it has come about that, coincidently with the increasing opportunities to be afforded by the hospital, the needs of the medical school have also been brought prominently before the public.

A few years ago the old Leeds School of Medicine was incorporated with the Yorkshire College as its Medical Faculty, and the Yorkshire College, in its turn, has been affiliated to the Victoria University, and thus the medical school—which originally the outcome of the zeal of a few earnest men for the spread of medical and surgical knowledge, has been carried on in Leeds since about 1832—has, with the Owens College at Manchester and the Liverpool School of Medicine, become conjointly the Medical Faculty of the great northern University.

To enable the school to take its place becomingly in the new arrangement would have been beyond the power of the original individual proprietors, and a few years ago it was offered, with its library, museums, and all its appliances, to the Council of the Yorkshire College, and was purchased by that body.

Up to that transfer, and during the whole of its long previous existence, no help from without had ever been asked for or given to it; it had been entirely and purely the work of the medical men of the town, and will ever be remembered as a monument of their zeal in the cause of the advancement and spread of professional knowledge and science; and in the breasts of many of the practitioners, not of the district only, but all the world over, the memory of the old school holds, and will continue to hold, a very warm and venerated place.

But, *tempora mutantur;* and before the scythe of time things old must go down, and give way before newer and fresher developments. Thus it comes about that the medical school as well as the hospital is also to be rebuilt, and on a scale of magnificence which could never have entered into the heads of the most sanguine of its original promoters.

An admirable site, in close proximity to the hospital, has been retained for its location; a subscription list has been opened, and already some £29,000 has been promised or collected, and before the additions to the hospital on its east side are completed it is hoped that an equally imposing block of buildings, replete with every necessary for perfect teaching, will be seen arising on its west.

Leeds may well, indeed, be proud of her medical institutions, and we most heartily wish her success in her ambitious efforts.

THE RUSSIAN GOVERNMENT AND THE CHOLERA.

Official Report on the Outbreak in Persia and Turkey.—In the *Pravitelstvennyi Vestnik*, February 21st, 1890, the Russian Government has published a report on the cholera, based on the statements of the Russian consul at Bagdad. The total number of deaths from cholera in Mesopotamia from June, 1889, to December, 1889, was 7,261; of these, 1,018 occurred in Bagdad, 577 in Bassora, 529 in Kerkuk, 402 in Kerbell, 228 in Khaznmi, 193 in Suleimanië, 109 in Mendelï, 103 in Kannekin, and 149 in Mossul. About the end of 1889, the epidemic in Mesopotamia ceased, but the consul felt sure that the disease may break out again at any moment, as the "sanitary condition of the above-named localities is simply terrible (*iijasno*)." With regard to Persia, cholera was raging especially in Kermanshakh, Hamadan, Melaïr, Asadabad, Khoremabad, in each of which towns there were dying, on an average, about twenty persons a day, while in the Melaïr district every village was losing three or four inhabitants daily. The epidemic still continues to spread in Persia, though to a somewhat lesser extent in comparison with October and November. The localities in which the disease exists at present are situated a few hundred versts (1 verst 1,066 mètres) from the Russian frontier. The Russian Government has adopted the following measures:—1. General measures to improve the sanitary condition of the Transcaucasian region. 2. The medical departments of all governments (Gübernias) lying along the Russo-Persian frontier are ordered (*a*) to take all steps necessary for the prompt detection and isolation of cholera cases; and (*b*) at once to report by telegram every such case to the Imperial Medical Department. 3. The Caucasian population are to be made acquainted with prophylactic measures against cholera by means of special pamphlets, instructions, etc., written in Russian, Armenian, Georgian, and other languages used in the region. 4. All products transported from cholera districts (in Persia and Mesopotomia) are to be subjected to a ten-day's quarantine, and a thorough disinfection at Batüm and Fëodosia. 5. All travellers arriving from the cholera localities are to be detained in Batüm, Bakü, and Djülfü for a ten-day's observation, and their luggage to be disinfected. 6. The Russian cordon stationed along the Persian frontier is to be increased in strength, so as to cover the whole boundary line. 7. Russian Mussulman subjects are to be henceforward prohibited from undertaking any pilgrimages into Persia or Turkey.

Persian Cholera and the Question of Quarantine.—Referring to some official statements on cholera recently published in the *Pravitelstvennyi Vestnik*, February 21st, 1890, Professor V. A. Manassein says in the *Vratch*, February 27th, 1890: "It is obvious, therefore, that the chief hopes of our Government rest on quarantines. Meanwhile, as is known only too well, all quarantines must be relegated to oblivion, since it would be hardly possible nowadays to expect any good coming from measures of the kind. Of course, we are perfectly aware that medical authorities alone are utterly powerless to adopt any radical measures fit to make this or that locality cholera proof. Still, we should think it were better to frankly admit the fact, and to cease wasting money and labour on arranging quite useless quarantines."

Precautions in Caucasian Russia.—According to the *Voljsky Vestnik*, 1890, February 21st, the Caucasian governor-in-chief has issued an order of the day *(prikaz)* in which, while pointing out that cholera still prevails in Mesopotamia and Persia, and that it is very possible that the disease may spread to the Caucasian military district, he lays down a series of precautionary measures to be immediately adopted all over the district. The chief measures are as follow: Strict sanitary supervision of barracks, hospitals, and lazarettes; the formation of military sanitary commis-

sions; arrangements for opening cholera wards and infirmaries; special courses for army surgeons and medical assistants *(feldshers)* in connection with the first aid to cholera patients, and so on.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 16th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 12th, 1890.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 27th, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Town Hall, Hackney, on Thursday, March 20th, at 8.30 P.M. Dr. F. de Havilland Hall will read a paper on the Causes and Treatment of Asthma. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above District will be held at "The Hospital," Gravesend, on Thursday, March 20th, at 4 P.M. Dr. C. Firth in the chair. The dinner will take place at The Old Falcon Hotel, at 6.15 P.M. Charge, 6s. 6d. exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, Dr. C. Firth, 196, Parrock Street, Gravesend, not later than March 18th. All members of the South Eastern Branch are entitled to attend this meeting and to introduce professional friends. Communications.—Dr. V. D. Harris: The Treatment of Pleural Effusion. Mr. C. B. Keetley: The Treatment of Caries of the Spine and its Complications. Dr. C. Firth: A Case of Strangulated Obturator Hernia.—A. W. NANKIVELL, Honorary Secretary of the District, St. Bartholomew's Hospital, Chatham.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.—A meeting of this district will be held at Loughborough, on Wednesday, April 16th. Members desirous of reading papers or showing cases or specimens, will please communicate with the Honorary Secretary, FRANK M. POPE, M.B., Leicester.

GLOUCESTERSHIRE BRANCH.—The next ordinary meeting of this Branch will be held on Tuesday, March 18th, at 7.30 P.M., at the General Infirmary, Gloucester, under the presidency of H. E. Waddy, Esq. Agenda: A discussion on Diet in Acute Disease will be opened by Dr. G. B. Watters, Stonehouse.—G. ARTHUR CARDEW, Honorary Secretary.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—An ordinary meeting of this Branch will be held in 198, Union Street, Aberdeen, on Wednesday, March 19th, at 8 P.M., the President, Dr. Fowler Woodside, in the chair. Business:—1. Minutes; Nomination of new members, etc. 2. Ballot for the admission of Dr. A. Rudolf Galloway, Aberdeen. 3. Dr. MacGregor: Case of Rupture of Kidney. 4. Dr. McKenzie Davidson: Exhibition of Dr. Lang's Twin Needle for the treatment of Anterior Synechia. 5. Dr. Beveridge: Case of Lumbar Hernia, with exhibition of patient.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting of this Branch will be held at the Royal Surrey County Hospital, Guildford, on Thursday, March 27th. Members desiring to bring forward papers or cases are requested to communicate with the Honorary Secretary, J. P. A. GABB, M.D., Guildford.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICT.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 26th. Mr. Cresswell Baber will preside. Meeting at 3.30 P.M. Dinner at 5.30 P.M. Charge 6s., exclusive of wine. Dr. Samuel West will introduce for discussion the subject of Influenza. Members or others desirous of contributing papers or cases are requested to communicate with T. JENNER VERRALL, Honorary Secretary, 97, Montpellier Road, Brighton.

THAMES VALLEY BRANCH.—The next meeting of the Branch will take place at Kingston on Wednesday, March 26th. Members willing to read papers or exhibit cases are requested to communicate with CHARLES C. SCOTT, Honorary Secretary, St. Margaret's, Twickenham.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.

A MEETING of this Branch was held at the Crown Hotel, Alloa, on Thursday, March 6th, Dr. STRACHAN in the chair. Letters of apology for unavoidable absence were received from Drs. Haldane, Leslie, Spence, Linton, and Mackintosh. The minutes of the last meeting were read and confirmed.

Dr. Rentoul's Scheme.—This subject was discussed, and resolutions were passed, which will be found at p. 634.

Exhibition of Instruments.—Messrs. J. GARDNER and SON, of Edinburgh, exhibited a large collection of Electrical, Gynæcological, and Surgical Instruments.

CEYLON BRANCH.

A COUNCIL meeting of this Branch was held at the Colonial Medical Library on Saturday, October 5th, 1889, at which the following gentlemen were present:—Drs. Rockwood and Macdonald, and Messrs. Weinman and Johnson. Dr. ROCKWOOD was in the chair.

Election of Secretary.—A letter was read from Dr. Brito, the Honorary Secretary, resigning his office. It was proposed by Dr. MACDONALD, seconded by Dr. WEINMAN, and carried that Dr. Brito's resignation be accepted. It was proposed by Mr. WEINMAN, seconded by Mr. JOHNSON, and carried, that Dr. Macdonald be appointed to act as Honorary Secretary till the general meeting in December.

Proposed Resignation of President.—A letter was read from the president, Dr. Anthonisz, resigning his office on account of press of business, and his frequent and long absences from Colombo. It was proposed by Dr. MACDONALD, seconded by Mr. WEINMAN, and carried that a deputation, consisting of Drs. Rockwood and Vanderstraaten, be requested to wait upon Dr. Anthonisz and induce him to remain in office to the end of the present year, and to report at next meeting.

A COUNCIL meeting was held on December 7th, 1889. Drs. Vanderstraaten and Macdonald, and Messrs. Schokman, Hallock, and Roberts were present, Dr. VANDERSTRAATEN being in the chair.

New Members.—Messrs. de Silva and Passe were elected members of the Branch.

THE annual meeting of this Branch was held on December 7th, 1889. The following gentlemen were present:—J. L. Vanderstraaten, M.D.; J. D. Macdonald, M.D.; W. G. Rockwood, M.D.; S. Fernando, M.B.; E. N. Schokman, L.C.M.C.; S. Hallock, L.R.C.P. & S.; E. Roberts, L.C.M.C.; C. A. de Silva, M.R.C.S.; A. E. Weinman, L.C.M.C.; James Loos, M.D.; G. J. Woutersz, M.R.C.S.; H. Huybertsz, L.R.C.P. & S.; The Honourable P. D. Anthonisz, M.D.; and W. A. Passe, L.R.C.P. & S.

Election of Officers.—The following office-bearers were elected for

next year:—*President:* W. R. Kynsey, F.K.Q.C.P., C.M.G. *President-Elect:* James Loos, M.D. *Vice-Presidents:* J. L. Vanderstraaten, M.D., and W. G. Rockwood, M.D. *Honorary Secretary:* J. D. Macdonald, M.D. *Honorary Treasurer:* Solomon Fernando, M.B.

A COUNCIL meeting was held on January 4th, 1890, the PRESIDENT in the chair. The following gentlemen were present:—W. R. Kynsey, F.K.Q.C.P., C.M.G., President; J. L. Vanderstraaten, M.D.; W. G. Rockwood, M.D.; J. D. Macdonald, M.D., Honorary Secretary; E. N. Schokman, L.C.M.C.; A. E. Weinman, L.C.M.C.

New Member.—Mr. C. Heynsberg, L.R.C.P., was elected a member of the Branch.

Rules of Procedure.—The following rules of procedure were read and approved of:—I. Order of procedure to be followed at the ordinary monthly meetings:—1. The president shall take the chair, in his absence one of the vice-presidents, and in their absence the meeting shall elect a chairman. 2. The secretary shall read the minutes of the preceding meeting, and in his absence the president or chairman shall appoint a secretary for the day. 3. The minutes of the previous ordinary meeting having been read and confirmed shall be signed by the chairman. 4. The minutes of the last council meeting shall be read and discussed. 5. Donations that may have been made shall be acknowledged. 6. Correspondence shall be read. 7. Notices of motion to be brought before the Association at the next ordinary meeting shall be given. 8. Demonstrations of objects, patients, etc. 9. Papers read and discussed. II. Order of procedure to be followed at annual meetings:—1. The president shall take the chair. 2. The secretary shall read the general report for the year. 3. The treasurer shall read the financial report for the year. 4. Nomination and election of office-bearers for the ensuing year. 5. The president shall introduce the president-elect and the office-bearers to the meeting. 6. The president shall deliver an address.

AN ordinary meeting was held on January 4th, 1890, at which the following gentlemen were present:—W. R. KYNSEY, F.K.Q.C.P., C.M.G., President; J. D. Macdonald, M.D., Honorary Secretary; J. L. Vanderstraaten, M.D.; W. G. Rockwood, M.D.; E. N. Schokman, L.C.M.C.; and A. E. Weinman, L.C.M.C. The minutes of the last council meeting were read and discussed, and were adopted.

Paper.—The HONORARY SECRETARY read a paper on a case of Herpetic Eruption by H. Huybertsz, L.R.C.P., Medical Officer of Calutara, which gave rise to a discussion on herpetic eruptions in general.

GLOUCESTERSHIRE BRANCH.

AN ordinary meeting of the Branch was held on Tuesday, February 18th, 1890, at the General Hospital, Cheltenham.

In the unavoidable absence of Mr. Waddy, Dr. BATTEN was voted to the chair.

Influenza.—Dr. BATTEN opened a discussion on Epidemic Influenza, which proved to be both interesting and useful. The following gentlemen took part in it: Drs. ROOKE, WILSON, S. W. SMITH, SOUTAR, WALTERS; Messrs. MASON, CARDEW, and others. Dr. BATTEN followed to close the discussion.

Proposed Public Medical Service.—A special meeting of this Branch was held on January 21st to consider Dr. Rentoul's resolutions. An account of the proceedings will be found at p. 635.

BRITISH MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 3, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Physician, General Hospital, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women, Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HENRY BROADBENT, M.D., Physician to St. Mary's Hospital, London.

The scientific business of the meeting will be conducted in twelve Sections, as follows, namely:

A.—MEDICINE AND THERAPEUTICS.

President: Sir DYCE DUCKWORTH, M.D.
Vice-Presidents: E. RICKARDS, M.B.; D. DRUMMOND, M.D.
Hon. Secretaries: ISAMBARD OWEN, M.D., 40, Curzon Street, Mayfair, W.; C. W. SUCKLING, M.D., 103, Newhall Street, Birmingham.

B.—SURGERY.

President: T. H. BARTLEET, F.R.C.S.
Vice-Presidents: BENNETT MAY, F.R.C.S.; J. G. SMITH, M.B.
Hon. Secretaries: F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingham; H. G. BARLING, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

C.—OBSTETRIC MEDICINE AND GYNÆCOLOGY.

President: T. SAVAGE, F.R.C.S.
Vice-Presidents: C. J. WRIGHT, M.R.C.S.: J. MURPHY, M.D.
Hon. Secretaries: J. K. KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, M.D., 192, Broad Street, Birmingham.

D.—PUBLIC MEDICINE.

President: A. HILL, M.D.
Vice-Presidents: J. B. WELSH, M.B.; A. S. UNDERHILL, M.D.
Hon. Secretaries: L. C. PARKES, M.D., 61, Cadogan Square, S.W. S. BARWISE, M.B., Clough View, Blackburn.

E.—PSYCHOLOGY.

President: F. NEEDHAM, M.D.
Vice-Presidents: S. H. AGAR, L.K.Q.C.P.; E. B. WHITCOMB, M.R.C.S.
Hon. Secretaries: J. WIGLESWORTH, M.D., Rainhill, near Prescot; E. LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

F.—ANATOMY AND PHYSIOLOGY.

President: D. J. CUNNINGHAM, M.D.
Vice-Presidents: W. H. GASKELL, M.D., F.R.S.; B. C. A. WINDLE, M.D.
Hon. Secretaries: W. F. J. ALLEN, M.B., Mason College, Birmingham; W. P. HERRINGHAM, M.D., 13, Upper Wimpole Street, W.

G.—PATHOLOGY.

President: D. J. HAMILTON, M.B.
Vice-Presidents: C. A. MCMUNN, M.D.; G. SIMS WOODHEAD, M.D.
Hon. Secretaries: S. DELÉPINE, M.B., 6, Chapel Place, Cavendish Square, W.; G. F. CROOKE, M.D., Edmund Street, Birmingham.

H.—OPHTHALMOLOGY.

President: D. C. LLOYD OWEN, F.R.C.S.
Vice-Presidents: H. EALES, M.R.C.S.; J. B. STORY, M.B.
Hon. Secretaries: H. E. JULER, F.R.C.S., 77, Wimpole Street, W.; E. W. W. WHITE, M.B., 72, Newhall Street, Birmingham.

I.—DISEASES OF CHILDREN.

President: A. H. CARTER, M.D.
Vice-Presidents: W. THOMAS, M.B.; W. PYE, F.R.C.S.
Hon. Secretaries: H. HANDFORD, M.D., 14, Regent Street, Nottingham; A. FOXWELL, M.B., 47, Temple Row, Birmingham.

J.—LARYNGOLOGY AND RHINOLOGY.

President: J. ST. S. WILDERS, M.R.C.S.
Vice-Presidents: C. J. SYMONDS, F.R.C.S.; A. E. GARROD, M.D.
Hon. Secretaries: E. H. JACOB, M.D., 12, Park Street, Leeds; SCANES SPICER, M.D., 28, Welbeck Street, W.

K.—OTOLOGY.

President: C. WARDEN, M.D.
Vice-Presidents: G. W. HILL, M.D.
Hon. Secretaries: R. K. JOHNSTON, M.D., 22, Lower Baggot Street, Dublin.

L.—DERMATOLOGY.

President: JONATHAN HUTCHINSON, F.R.S., P.R.C.S.
Vice-Presidents: MALCOLM A. MORRIS, F.R.C.S.; H. RAICLIFFE CROCKER, M.D.

Hon. Secretaries: E. G. SMITH, F.R.C.S., 93, Bristol Road, Birmingham; T. COLCOTT FOX, M.B., 14, Harley Street, Cavendish Square, W.

Honorary Local Secretaries:

R. SAUNDBY, M.D., 83A, Edmund Street, Birmingham; JORDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham; A. HARVEY, M.B., 358, Wheeler Street, Lozells, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.

9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.

9.30 A.M.—Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. WALTER FOSTER, M.D., M.P.

THURSDAY, JULY 31ST, 1890.

9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 1ST, 1890.

10.30 A.M. to 1 30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.

SATURDAY, AUGUST 2ND, 1890.

Excursions.

SPECIAL CORRESPONDENCE.

PARIS.

Guyon on Retention of Urine.—Chloralamide.—Hydrastis Canadensis.—The Transmission of Rabies.—Hydrophobia after Two Years' Incubation.—Water Analysis during a Typhoid Fever Epidemic.—Analysis of Rhône Water.—Reports on English Hospitals.—Health of the Army.—Medical Sanitation.—General News.

M. F. GUYON has arrived at the following conclusions from his experimental researches concerning the pathological anatomy and physiology of the retention of urine. This affection invariably develops in an aseptic and non-febrile form. It is only after septic intervention or in patients previously infected that fever appears. In human beings, retention of urine is always accompanied by polyuria; this symptom is determined by the repletion of the bladder. Another result of retention is the inflammation of the entire urinary apparatus. The prostate and the kidneys are increased in size; their volume is diminished by the repeated use of the catheter. M. Guyon determined inflammation of the bladder, kidneys, pelvis, ureters, and prostate in animals. The bladder and kidneys were principally affected. There was stasis of the blood vessels and interstitial hæmorrhage. The muscular layer of the bladder was detached by the sanguinolent effusion; the epithelium was also detached in parts; there were extensive patches of ecchymoses on the interior surface; the urine was mixed with blood. The kidneys were increased by one-sixth of their normal volume; there was hæmorrhage; hæmatic or epithelial cylinders were detected in the urine. When the bladder suffered sustained tension, the urinal secretion was diminished instead of being increased. The kidney was directly threatened. The protection afforded by the uretero-renal current, which in a normal state isolates it from the bladder, is suppressed when the retention of urine is prolonged. The introduction of inert particles or micro-organisms becomes possible in a stagnant medium, where the normal currents of the ureter and bladder are suspended, and the microbes, instead of being repulsed or relegated to the bladder, ascend to the kidney. The distension suppresses the contractile power, first of the bladder, and subsequently of the ureter. The degree and intensity of the tension determine the anatomical lesions and physiological disturbance. From the bladder it spreads to the ureter and kidneys. When the bladder is completely filled, the urine which continues to be secreted passes into the ureter, renal pelvis, and canaliculi, but these do not relieve the bladder from the excess of urine it contains. There is no reflux in acute retention. The bladder is first affected in the retention of urine. The immediate or remote results of this affection depend on the moment intervention is effected, whether before or after the upper urinary apparatus is attacked.

M. Eloy considers that chloralamide might be employed with benefit in treating the insomnia of phthisical patients. In the case of cardiac patients it should be employed with reserve. He recommends it when the insomnia of cardiopaths is accompanied by arterial hypertension. It should be administered in sweetened water, to which a portion of alcohol or red wine is added, or in a potion, sweetened with fruit syrup. The dose varies from 75 centigrammes to 2 grammes for men. A third less should be given to women. M. Eloy considers that on the whole the use of chloralamide offers much the same danger as chloral.

M. A. Cabanès, in his doctoral thesis on the different preparations of hydrastis canadensis, comes to the following conclusions: These preparations deserve to take their place among the therapeutical remedies for uterine hæmorrhage, and certain affections of the digestive passages. The root of hydrastis canadensis, which is the only part of the plant employed medicinally, contains sugar, albumen, extractive and fatty substances, volatile oil, and three alkaloids—hydrastine, berberine, and xantho-puccine. The preparations he most recommends are fluid extract of hydrastis, administered in doses of 60 to 80 drops per diem (20 drops at a time), the alcoholic tincture at 20 per cent., the decoction of the root at 60 per cent. Hydrastis canadensis is a vasoconstrictor. In moderate doses it paralyses the vasomotor centres and diminishes blood pressure. The aqueous extract is not toxic. The extract of hydrastis determines contractions in the uterine blood vessels. It may be employed with considerable benefit in different forms of uterine hæmorrhage, utero-ovarian inflammation, and dysmenorrhœa. It should be administered during the intermenstrual period. It modifies certain forms of dyspepsia; it does not exercise any action on the development of fibromyomata.

At the Biological Society M. Chauveau read a note by M. Galtier on the means of transmitting rabies, in certain rare cases, by the digestive, respiratory, and genito-urinary passages. The buccal mucous membrane of thirty rabbits was painted with an emulsion of rabic medulla oblongata. Four of the animals contracted rabies. Thirty others absorbed the same substance; two became mad. Instances have been known of children contracting rabies through applying objects soiled by the saliva of a dog to their mouth. The Pasteur method of vaccination should then be employed. Eleven rabbits out of thirteen were killed by intralaryngeal injections. Inoculation in the conjunctival *culs-de-sac* will also determine rabies. M. Nocard has administered to a fox in six weeks eight brains and medullæ of rabid foxes and five or six brains of mad dogs. The animal acquired neither rabies nor immunity from it, for after trephining and inoculation it contracted the disease.

Dr. V. Desguin reports the following case of rabies after two years' incubation and treatment by M. Pasteur. In March, 1887, a young man, aged 24, was bitten in the face and neck by a mad dog. The wounds were cauterised with nitrate of silver two days afterwards. On the following day the patient went for treatment to the Pasteur Institute, where he remained about three weeks. On May 18th, 1889, the first symptoms of rabies appeared. On the 20th M. Desguin was called in; he observed all the usual symptoms of rabies. On the 22nd spasms, nervous excitement, and expectoration were only calmed by numerous subcutaneous injections of morphine and atropine. The patient, who preserved his consciousness throughout, expired in convulsions on the following afternoon.

MM. Doyen and Lajoux analysed seven samples of water sent from Pont Faverger, where a typhoid fever epidemic had appeared. Five samples obtained from contaminated wells contained 25,000,000 bacteria to a quart of water; of these, 15,000,000 to 20,000,000 were typhoid bacilli. The seven samples of water and tubes containing charbon, typhoid, cholera, etc., bacilli were frozen at 100° C. for a few minutes. After a quarter of an hour the thermometer marked 96°, and after eight hours 30°. All these cultivations remained sterile. The contaminated waters contained the ordinary proportion of ammoniacal and organic substances. These had undergone nitric fermentation in the soil. MM. Doyen and Lajoux conclude that the posology of the organic substances and nitrate of ammonia are of secondary importance in the analysis of suspected water, but that the posology of the chlorine and nitric acid corresponds exactly to the degree in which the water is contaminated by the organic substances of

animal origin which have undergone the action of nitric fermentation.

MM. Sortet and Despeignes have gathered the following facts from their researches on the pathogenic microbes of the Rhône water. The drinking water at Lyons is brought from the Rhône through long galleries, being previously made to filter through a quantity of gravel fifteen yards deep. Before this process the Rhône water contains over 51,000 germs per quart, and after it only 7,000. If after being passed through the gravel it is placed in a Chamberland filter, it leaves a slimy deposit rich in bacteria. If this deposit is diluted in sterilised water and injected into guinea-pigs, these animals succumb to simple septicæmia, pyæmia, intense pulmonary inflammation, etc. MM. Sortet and Despeignes consider the Lyons system of filtration as insufficient to retain the pathogenic bacteria. Whenever the Rhône rises the force of the water detaches an innumerable quantity of germs from the gravel.

M. Variot, who has been studying the organisation of English hospitals for children affected with contagious diseases, has made a report to the French Minister of the Home Department, in which he states that these hospitals have not given the hoped-for results, and that it would be advisable to adopt a more effective system for the isolation of the patients and those attending them.

Since April, 1888, the Minister of War has ordered the substitution of proper drains for cesspools, as far as possible, in the French barracks. Since the same date spring water has been laid on in 2 barracks, containing 42,937 men; in 36 other barracks, lodging 9,317 men, spring water is brought in barrels; 64 barracks, where 39,912 men are quartered, have been supplied with filters constructed on the most improved system. About 80,000 men have profited by these improvements. Thirty quarts of water are allotted for the personal use of each foot soldier, and 35 quarts for that of each cavalry soldier. During the last two years the deaths from typhoid and continued fever in the French Army were 285 less than during the two preceding years.

M. Letulle proposes that the following regulations should be adopted in hospitals, and by doctors treating infectious diseases. Every patient brought to the hospital suffering from a contagious affection should be immediately placed in an isolated ward, so that all contact between infectious cases and surgical cases should be avoided. The clothing of each patient should be disinfected on its arrival at the hospital. A hot bath and subsequent cleansing with a solution of corrosive sublimate at 1 in 1,000 should be practised. The hospital furniture should be made of iron and easily taken to pieces, so that it may be disinfected at the departure of each patient. The different rooms should be thoroughly aired and disinfected, and all cases of contagious disease isolated. In his hospital practice the physician should avoid importing or carrying away any morbid germ. He should therefore wear a blouse in the wards and disinfect his clothes daily. The same rules apply to his private practice when he has cases of contagious affections to attend.

The French Chamber of Deputies has at length adopted a measure, declaring the necessity of undertaking the necessary works for utilising the springs of La Vigne and Verneuil, and for conducting the water to Paris.

VIENNA.

Discussion on Influenza.—The Last Illness of Count Andrassy.

A DISCUSSION on influenza was opened by Professor Kahler at a meeting of the Imperial Royal Society of Physicians on February 21st. He recognised three forms, or rather courses, of the affection. The first of these, which, fortunately, was not frequently observed, was the formation of abscesses in the lungs, and concomitant, occasionally independent, purulent pleurisy. This form of influenza might cause death in four days. Such a case had occurred in his clinic. In two other cases an abscess developed in the centre of a pneumonic hepatisation of the lungs. In other instances, the purulent pleurisy was the most prominent symptom. The lecturer had seen three such cases, which all had a rapidly fatal course, though in two of them thoracocentesis was performed. Considering the great rarity of primary pulmonary abscess and primary purulent pleurisy, the frequent occurrence of such processes in patients who had shortly before presented distinct symptoms of influenza, seemed to show that we had to deal with a specific cause of disease, standing in a close connection with influenza. The second question was whether these severe pulmonary disturbances were the expression of a direct effect of the pathogenic virus of influenza, or whether they should be looked upon as being secondary infections. One of his cases, in which the formation of an abscess in the lungs was proved to have begun on the second day, seemed to be in favour of a direct influence of the pathogenic virus. The second form was lobular pneumonia and pleuro-pneumonia. The patients fell ill with severe fever and more or less intense bronchitis. The fever ran its course, the bronchitis diminished, but the patients were no better; they complained of "stitches" in the sides of the chest, palpitation of the heart, disturbed sleep, and after an interval of from eight to ten days fever again occurred, and tympanitic dulness was found over a circumscribed region, with crepitant *râles*, and slight bronchial breathing. This condition lasted for some days, then disappeared, but only to show itself in a new place. In the further course of disease the process was frequently complicated with pleurisy, with serous or sero-sanguineous exudation. The sputum was in most cases muco-purulent, sometimes bloody, but seldom pneumonic in character. The third form was severe bronchitis, which frequently caused death without any further pulmonary complication. These cases could often hardly be distinguished from miliary tuberculosis. Professor Gruber said that during the epidemic, and after its subsidence, he had seen numerous cases of purulent inflammation of the middle ear. The affection was very severe, and could only be compared to the severe purulent inflammations observed in infectious diseases, particularly in scarlet fever and pneumonia. In influenza, however, the aural disease was bilateral. Great hyperæmia of the surrounding parts was seen at the outset, and diffuse extravasations of blood were observed on the membrana tympani. Owing to the severe hyperæmia, more blood than exudation matter escaped for some days after perforation of the membrane. The symptoms were very severe. In six cases the mastoid had to be trephined, and in one very free incisions had to be made in the soft parts. Professor Politzer said that he had observed eighteen cases of purulent inflammation of the middle ear with abscess in the mastoid process, as the result of influenza. Usually there was copious "quasi-hæmorrhagic" discharge, with severe swelling of the posterior and upper wall of the auditory apparatus, and pain, swelling of the mastoid, and high fever. While these symptoms in ordinary cases yielded to antiphlogistic treatment, this took place in only three of the eighteen cases; in the rest incision was necessary. The operation was very easy, as pus was "struck" at a depth of from one-quarter to one-half centimètre. A cavity was invariably found with rough walls covered with granulations. After using the sharp spoon and applying an iodoform dressing, the suppuration was checked, and after some days the opening in the membrana tympani became cicatrised, and normal function was restored. Perfect recovery took place in all cases, except that of a woman suffering from chronic Bright's disease, who died of meningitis twenty-four hours after the operation. The *post-mortem* examination, however, showed that the meningitis had been present before the operation. The diplococcus of pneumonia was found in the pus. Dr. Bergmeister stated that in connection with influenza he had seen one case of paresis of accommodation and ten cases of atrophy of the optic nerve, the result of retro-bulbar neuritis. Dr. Königstein remarked that catarrh of the conjunctiva was not frequent, but he had frequently observed ecchymosis of the conjunctiva, keratitis dendritica, paralysis of the rectus externus and trochlearis, and erythema of the eyelids, which also spread over hands and arms. He had, in many cases, seen severe neuralgia, and a case of paresis of accommodation, and one of retro-bulbar neuritis. Professor Fuchs said he had seen some cases of tenonitis after influenza. Inflammation of Tenon's capsule was very rare, and this complication was therefore all the more interesting.

In the last number of the *Orvosi Hetilap*, the leading Hungarian medical journal, Professor Friedrich v. Korányi gives details as to the last illness of Count Andrássy. He had suffered from nephrolithiasis nine years ago, and renal calculi of the size of poppy seeds or millet grains occasionally escaped during attacks of renal colic. The Count's diet was very moderate; he drank wine only when hunting or travelling, and chiefly lived on meat. He disliked taking medicine; his appetite, which was usually excellent, and his digestion were very easily disturbed when he deviated from his ordinary course of life. He had a particular aversion to mineral waters, and waters containing carbonic acid had an irritating effect on him. It was striking how half a glass

of Vichy or Ems produced considerable disturbance in the action of his heart and his digestion. He refused to take the Ofen waters until Professor Korányi succeeded in persuading him to try the water of the "Hungaria-quelle" of Ofen, which at that time was little known. This water had a good effect, and after two weeks the nephrolithiasis and renal colic had disappeared. On September 1st, 1889, Professor Korányi was sent for, and found the Count suffering from considerable ascites, which reached as far as the umbilicus; there was considerable œdema of the lower extremities, and the patient's appearance was very bad. Professor Korányi learned the following details from the late Professor Géza v. Antal, who had also attended on the Count: In 1881 renal calculi had again been passed. These, according to the late Professor Ultzmann, consisted of urates until 1886; from that date only phosphatic concretions escaped. These occurrences were occasionally associated with pains in the back and vomiting, so that the late Professor Ultzmann diagnosed pyelitis, and on one occasion even pyelonephritis. Moreover, there was eccentric hypertrophy of the bladder, and as the result of this also slight functional inefficiency of that organ. From four to five years ago there was occasional hæmaturia; it was not, however, considerable, and was attributed to the renal calculi. At the end of 1888 the Count for the first time consulted Géza v. Antal, who soon convinced himself that the hæmaturia was not of renal but of vesical origin, and recommended an examination of the bladder with the cystoscope. This the Count would not consent to, as he had an aversion to surgical manipulations. In June, 1889, when the hæmorrhages became more frequent, Professor Antal, suspecting the existence of a papilloma, urged that the bladder should be examined with a view to possible operation. In August the Count submitted to cystoscopic examination, which was made by Antal in the presence of Professor Dittel, of Vienna. Antal's suspicions were confirmed; the phosphatic calculi proved to be incrustations of the papilloma, and the hæmorrhages and the catarrh were the results thereof. The examination of the other organs showed slight ectasia of the lungs, slight endoarteritis of the aorta and the radial artery, but no valvular lesion was found. Count Andrassy would not consent to the operation recommended to him by Antal, and his condition became gradually worse. The hæmorrhage, indeed, yielded to washings with chloride of iron, the appetite improved after the internal administration of iron, and the dropsy almost disappeared. Washing of the bladder, however, caused severe pain and bronchial, gastric, and intestinal catarrh soon supervened. These difficulties were still further increased by the patient's aversion to medicine, particularly morphine and cocaine. Moreover, the discharge of pus from the bladder and the pelvis of the kidney considerably weakened him, and the continual discharge of phosphatic calculi produced such an irritation of the urethral mucous membrane that the washing out of the bladder had to be discontinued owing to the excessive pain which it caused. Professor Antal urged a further examination, to be followed, if necessary, by operation. The result of this examination, which was also made in the presence of Professor Dittel, was to show this. The papilloma had increased, and there were disseminated neoplasms, which made it probable that the disease was malignant. The chances of operation were most unfavourable; cystotomy could now only be recommended as a means of saving the patient's life in case of severe hæmorrhage. Death finally occurred, after much suffering, from dysentery and uræmia.

MANCHESTER.

Local Government Board Inquiry.—Hospital Sunday.—Anti-vivisection Society.—Influenza.—Owens College Medical School Extension.—St. Mary's Hospital.—Royal Infirmary Donation.

THE Local Government Board has been holding an inquiry in Manchester relative to an application of the Corporation of Manchester to extend the municipal boundaries of the city. Manchester has a large number of districts adjoining it, which geographically and in some other respects form part of the city, but so far they have not been incorporated with the city itself. The present population of Manchester is 374,164; but if these districts were included the population of the larger Manchester would be over 520,000, with a corresponding increase of its area.

The amounts received from the Hospital Saturday and Sunday collections is about £7,400, although all the donations are not yet to hand. Last year the total receipts exceeded £8,000.

At a recent meeting of the Manchester Anti-vivisection Society, which was not largely attended, it was stated that the funds were restricted and the friends of the cause few.

Reports from various centres in Lancashire, and also from Manchester itself, show that the influenza epidemic is increasing in a large number of districts. A considerable number of medical men have suffered from the disease.

At the half-yearly meeting of the Court of Governors of Owens College, held last week, it was stated that the number of students in the medical school was 339. It was also stated that plans are in course of preparation for the extended provision required for the medical department. For this purpose the College has acquired a very considerable plot of land in the rear of the present medical buildings whereon to erect new pathological and physiological laboratories.

The annual meeting of the subscribers to St. Mary's Hospital for Women and Children was held this week. The annual report states that during the past year there were 762 in-patients, 1,773 home patients, 9,681 out-patients, and 2,738 maternity patients, making a total of 14,954 compared with 14,104 in the preceding year. The board of management have determined to build a new hospital, to contain 30 beds for lying-in women and 70 for the diseases peculiar to women and children.

The Manchester Royal Infirmary has received £3,000 under the will of the late Mr. Samuel Fielden.

SHEFFIELD.

The Kendray Hospital for Infectious Diseases, Barnsley.—Chesterfield Sanitary Authorities and the Lead Question.—Nursing for Paupers.—Deaths of Medical Men.

THE Kendray Hospital at Barnsley has been opened for the reception of patients. The Town Council, in view of the increased work thrown upon the medical officer of health, Dr. Sadler, have decided to increase his salary, but appeared very much afraid of the interference of the Local Government Board, and decided to adhere to their intention of not accepting any aid in the payment of the salaries of its medical officer and inspector. Patients are to be allowed to choose their own medical attendant. The scale of charges in certain cases gave rise to a good deal of discussion. A medical member argued that all patients were admitted for the public safety, and that patients who were able to pay were able to procure their own isolation. The original proposal was, however, carried.

The Chesterfield Rural Sanitary Authority, who have been using limestone at the inlets of the reservoirs for the prevention of lead poisoning, have decided to await the result of the investigation at Sheffield before proceeding further.

Some of the Sheffield guardians of the poor have been sorely troubled as to certain expenses which it is proposed to incur in furnishing the nurse's sitting-room. It has been determined to do away with pauper labour, and it is hoped that in future the nursing will be done by women of intelligence. The money expended in providing such accommodation as will help to secure nurses of a good class will not be uselessly spent.

There has been an unusual amount of sickness in Sheffield of late. Influenza has been rife, and to it and to pneumonia, which is particularly prevalent in Attercliffe, medical men have fallen victims in disproportionate numbers. In Attercliffe last week, two young practitioners, Mr. M. A. Otley and Mr. Percy Priestley, living close to each other, died on consecutive days, after brief illnesses, of pneumonia. The deaths of two such men in the very outset of their promising careers have cast a gloom over the profession. Mr. Percy Priestley, except for a time spent at St. Thomas's Hospital, received his education at the Medical School and General Infirmary, and latterly he filled the office, at the latter, of assistant house-surgeon. From the outset he succeeded in winning the esteem of his teachers, and formed friendships which lasted through his life. When he left the infirmary, eighteen months ago, to begin private practice, he did so with the hearty good wishes of all, for the success which his talents, experience, and straightforward honesty entitled him. Last October he changed to a partnership at Attercliffe. He was laid to rest on March 10th, in presence of many surrounding friends, including most of the staff of the General Infirmary, and many other professional brethren. Not often has a man snatched away so early left more friends to regret his loss. Quite recently, another medical man, Mr. Weddell, also died of pneumonia.

CORRESPONDENCE.

THE UNIVERSITY OF LONDON AND DEGREES FOR LONDON MEDICAL STUDENTS:

A Practical Scheme.

Sir,—The correspondence which has recently appeared in the columns of the Journal has been mainly occupied with a criticism—in many respects a most interesting and instructive criticism—of the past and present aims and methods of the University of London. The moment appears opportune for a short constructive contribution to the discussion of the subject.

It is an open secret that the Committee of the Royal College of Physicians appointed to report on the draft scheme of the Senate of the University has, while criticising the propositions made on behalf of the University, recommended that the College should express its willingness to accept assessor examiners, provided that the University consented to accept the final examination of the College in the case of candidates who had in other respects followed the course laid down by the University.

The scheme which I have to propose has the approval of several of my colleagues, who are also members of the Senate. It may be very briefly sketched as follows: Let there be a special curriculum for students seeking a pass M.D. degree. Let such students be required to pass a matriculation examination, fulfilling the requirements of the General Medical Council, but so modified in character as to render it a more reasonable test of real education. Having passed this modified matriculation examination, let such students then be required to pass a preliminary scientific examination, so modified as to be a real test of their acquaintance with such branches of preliminary science as will be of true use to them in their subsequent career as students of medicine. These two examinations would be university examinations, conducted by university examiners.

Let these students, then, after a suitable interval, be permitted to present themselves for the first and second examinations of the Conjoint Board, and let there be associated with the examiners of the Conjoint Board Assessor Examiners, appointed by the University to assist in the examination of students passing through the special course. After passing the final examination of the Conjoint Board, these students would receive, as now, the double diploma L.R.C.P. and M.R.C.S.

Then, after an interval—say of one year as incumbent of a hospital appointment, or of two in general practice—let these students be eligible to present themselves for a special examination conducted by the University for the pass M.D. degree.

This plan would meet the objection felt by many members of the Senate to the University granting a degree except upon an examination conducted by the University. It would leave the present curriculum of the University unaltered for the advantage of those who might still desire an M.D. upon the old terms. It would place students of the provincial medical schools upon the same footing as those of the metropolitan medical schools, an advantage which they already enjoy as regards the examinations of the Conjoint Board as well as of the University. Finally, it would entirely remove the disabilities under which medical students educated in London now labour, as compared with those who attend the Scotch Universities.—I am, etc.,

A Fellow of the College of Physicians.

*** We have reason to believe that a scheme on the lines indicated by our correspondent has some chance of being carried out. It has the approval of several well-known and influential members of the Senate of the University, and of some leading Fellows of the Royal College of Physicians.

Sir,—The heading to the correspondence on the proposed reform of the London University—"The Relations of the Graduates and Convocation to," etc.—was, I think, misleading, as implying that these bodies only are dissatisfied with the proposed change. Permit me to point out that the medical undergraduates also feel very strongly on the subject, and have almost to a man signed the petition praying the Senate to reconsider their scheme of lowering the standard.

It is indeed a disappointment to men like myself, who have expended extra time and money in passing their first three examinations, and who have looked forward to starting in life with a first class degree—or what (*pace* Dr. Barnes) has always been considered as such—to find that probably they will, when their final is passed, obtain only a second rate one.—I am, etc.,

St. Bartholomew's Hospital. Harold Austen.

DEFECTIVE HEARING IN SEAMEN.

Sir,—*Apropos* of Mr. Bickerton's most interesting and practical paper on "colour blindness" in the Journal of March 8th, may I direct your attention to another sense—that of hearing—which, if defective, is a source of extreme danger to ships at sea. The sense of hearing in seamen has hitherto been overlooked by all concerned. In these days of multiplying fast and prospective faster ocean racers, encountering fog for long times and long distances, it is of the utmost importance that captains, officers, and crews should possess normal hearing. In fog, the safety of ships is frequently depending on the sense of hearing alone to detect the approach and position of other vessels, the presence of sounding buoys or shore signals, the noise of breakers on a coast, and the correct recognition of sudden orders. Any defect or inequality of hearing from the numerous affections of one or both ears may cost life, property, and money. If then, it is of importance that proper practical and efficient tests be applied to the eyesight of seamen, is it not equally or even more important that proper practical and efficient tests should be enforced in the matter of their hearing?

I do not know of any statistics regarding the hearing of seamen, and I would therefore suggest that a collective investigation be set on foot among surgeons afloat and medical officers in charge of seamen's dispensaries. Mr. Bickerton points out the hardships of rejecting men for defective vision, who have been years at the mariner's calling. Would it not be wise and useful to establish insurance benefits for officers and sailors rejected through deficiency or failure of vision or hearing? Some such protective provision would be a boon to seamen and a profit to any insurance company enterprising enough to take it up.

I may here point out that the system of watch and watch, or four hours on and four hours off duty, at present adopted by most shipping companies, is not a system calculated to ensure the best vision or hearing on "turning out," or generally. An examination of the times when accidents have happened at sea will show that a considerable percentage have occurred about the time of changing the watch, when the men just coming on duty are not yet more than half awake after certainly not more than three hours' sleep.

May I also direct your attention to the old fashioned, ridiculous, and absolutely dangerous system of holding one captain continuously responsible for the safety of his ship. It is a common occurrence for a captain in dangerous circumstances, such as fog or approaching the land, to go thirty-six, forty-eight, or more hours on duty without sleep. A man twenty-four hours without sleep is not fit to take charge of a railway signal box, a locomotive, or a steamship. How can he trust or use his wearied senses? There should be two captains, each absolutely responsible during his time of duty, on every steamship. Vessels, lives, and property would then be more secure, and we would hear less of captains being called from sleep, or rushing on deck just too late to be of service.—I am, etc.,

Francis Edward Cane, L.R.C.P. and L.R.C.S.Edin.

Liverpool.

TRANSVERSE LESIONS OF THE SPINAL CORD.

Sir,—I am sorry I was unable to be present at the meeting of the Royal Medical and Chirurgical Society, at which the important paper of Dr. Bastian on the above subject was read, and to take part in the discussion which followed it. I shall therefore feel obliged if you will allow me to state that I have during the last few years met with two cases which bear upon the points raised in that communication.

The first was that of a youth, aged 19, whom I saw in consultation with Dr. Giffard, of Egham, on December 5th, 1883. The lad, when playing football, was thrown heavily on his back, with the result of becoming immediately completely paralysed and anæsthetic from the waist downwards, but not insensible. There was complete paralysis of the bladder and bowels, and a moderate degree of priapism. He was unable to change the position of his body, while a feeble degree of motion and sensation existed in the arms and shoulders. He was unable to cough, to clear his throat, to sneeze, or blow his nose, but could masticate, swallow, speak, and put out his tongue. I found that all the superficial and deep reflexes of the limbs and body were completely lost. This showed that there was a crushing lesion of the cervical portion of the spinal cord, and that the grey centre of it had been most gravely injured. I therefore predicted the occurrence of rapid muscular atrophy in the paralysed limbs, provided the patient were to survive the injury. When I saw him again, on January 30th, 1884, extreme atrophy of the muscles of the body and all four extremities had become established, while the few remaining muscular fibres were in a state of rigidity, and showed increased tendon phenomena. The patient was eventually transferred to the Hospital for Epilepsy and Paralysis, under my care, and he died there at the end of March of bronchitis. The *post-mortem* examination revealed the existence of a crushing lesion of the cervical cord, at the level of the sixth cervical vertebra, which had nearly, but not completely, severed the continuity of the organ.

The second case was that of a retired tradesman, aged 34, married, and father of four children, whom I saw in consultation with Dr. Grogono, of Stratford, on January 18th, 1889. Six weeks before he had had some trouble in the circulation of one of the lower extremities, the femoral artery being blocked, and no pulse being discoverable below the groin. This gradually ceased under treatment, and he went on fairly well until six days before I saw him, when he was engaged in his garden working in thin slippers, the ground being soaked with rain. He felt chilly when he came in, and next morning, when he wanted to get out of bed, he found himself unable to do it, as his legs would not move properly. He scrambled back into bed as well as he could, and shortly afterwards complete paralysis of the lower limbs set in.

When I saw him there was complete paraplegia and anæsthesia of all parts below the nipple, on the left side a little higher than on the right. The prick of a pin was nowhere perceived; the superficial reflexes were almost completely extinct; yet pricking of the sole of the left foot induced a slight localised contraction of the vastus externus of the thigh, but no movement of the limb. The tendon phenomena were completely gone, and there was paralysis of the bladder and the bowel. The patient had full force in both arms and hands, the dynamometer showing 180° in the right and 160° in the left side. The pulse was 112, the temperature normal. Four days later there was evidence of cystitis and a bedsore on the sacrum, yet the anæsthesia appeared to go not quite so high up, and the superficial reflex in the left vastus externus was more considerable, and there was also a slight similar reflex in the right side. The tendon phenomena remained lost. Five days later he had had a rigor, with vomiting, and a large quantity of blood was drawn off from the bladder. The patient died two days afterwards, but I believe that no *post-mortem* examination was made. The condition was probably one of acute softening of the whole transverse section of the dorsal cord from thrombosis.—I am, etc.,

Harley Street. JULIUS ALTHAUS, M.D.

THE DISSOLUTION OF BODIES IN OCEANIC DEPTHS.

SIR,—The question of "putrefaction in the depths of the sea" has been raised by Dr. Regnard, a summary of which is in the JOURNAL of February 8th.

I consider the two chief factors in preventing putrefaction or retarding dissolution in oceanic abysses to be, first, the low temperature, and secondly, the abundant supply of oxygen at such depths; and the two prime factors in aiding dissolution are, first, the rich supply of carbonic acid, and secondly, the great pressure at such depths.

The results of the *Challenger* expedition would lead one to infer that corpses undergo some peculiar process of disintegration in the oceanic depths, for throughout their voyage they did not succeed in bringing to the surface any bones of man, fish, or whale, or other animal constituents. Sharks' teeth and otoliths of whales they brought to the surface in great numbers, and that probably owing to the fact of their ivory consistence, whereby they resisted all efforts at dissolution (or disintegration).

Micro-organisms doubtless exist on oceanic beds, because there are no barren regions in the ocean, as the older naturalists supposed, and probably participate and are participators in the dissolution. At any rate, this we know, that microscopic organisms termed Radiolarians were found in countless numbers at a depth of $5\frac{1}{4}$ miles, a little to the north of the Caroline Islands, in the western part of the Pacific Ocean. Pteropods and Foraminifera with their shells were not found at depths greater than 1,500 and 2,500 fathoms respectively, because of the action of the carbonic acid in the water upon them. The organic matters in the shells are oxidised in their passage through the submarine strata, and form carbonic acid, which, being itself a liquid at all depths over 200 fathoms, forms a concentrated acid solution, and attacks the shells with vigour. This, therefore, accounts for the disappearance of some of the lower forms of animal life (Foraminifera) at depths greater than 2,500 fathoms. There are, besides the above method of CO_2 production in the ocean, carbonic acid springs in the oceanic beds which shoot up their acid liquid into mother ocean, not, however after the Apollinaris fashion.

Secondly, the tremendous pressure at great oceanic depths has an important *rôle* in the disintegration of animal bodies, as the deep-sea thermometers and other scientific gearing frequently were hauled up shattered to atoms during the voyage of the *Challenger*, and this could in no other way be accounted for except by the stupendous circumambient pressure.

From the above, we learn that we should hesitate in staking our opinion upon the antiquity of a geological stratum or of the non-existence of higher animals, including man, in former periods, from the absence of these remains in the abysmal depths of the present seas.

One factor that would undoubtedly prevent decomposition in bodies at such tremendous oceanic depths is the low temperature of bottom waters. At the great depth alluded to above, the bottom temperature of the sea water was 35.2° F., while the surface temperature was 80.2°. The protected thermometer, water bottle, and sounding machine were the instruments used in ascertaining the temperature and procuring a sample of the bottom water, and in hauling up the mud, ooze, or deposit from the bottom.—I am, etc.,

JAMES MONTEITH. M.B., C.M., M.P.C., Assistant Medical Officer to the Dorset County Asylum, Dorchester (late Naturalist on the *Challenger* Commission).

THE LEPRA HOSPITALS IN THE BRITISH ISLES DURING THE MIDDLE AGES.

SIR,—In the JOURNAL of March 1st (p. 466) a map of the lepra hospitals is published which I prepared, with but few alterations, from a table given by Archdeacon Wright in his interesting book on leprosy. The list, as the Archdeacon himself states, is by no means complete, and many more leproseries existed of which he had no record. My friend Mr. Musson, of Clitheroe, informed me of one near Clitheroe, and Mr. W. D. James, of Sheffield, of one in Truro. To complete the list I should feel obliged for any further information on this interesting topic.—I am, etc.,

325, Oxford Road, Manchester. JULIUS DRESCHFELD.

A PARADISE FOR STRONG-MINDED WOMEN.—Ladies ambitious of academical distinction should betake themselves to Belgium, where Napoleon's maxim, *La carrière ouverte aux talens*, without invidious distinction of sex, has now received the sanction of the Legislature. On January 30th the Chamber of Representatives, acting in concert with the Ministry, passed an enactment that henceforth all university lectures and courses of instruction, together with all academical degrees, shall be open to women. Moreover, whereas they have hitherto only been allowed to practise certain branches of the healing art, both medicine and pharmacy are now thrown open to them without restriction. It is not clear why legislators of such advanced views should have expressly protected the legal profession from the intrusion of forensic-minded ladies, but this inconsistency may not be altogether unconnected with the fact that the majority of the members of the Chamber of Representatives are lawyers. Nothing is said as to the Church, but if women may become Doctors—that is, teachers—of Divinity, it would be unfair to exclude them from the pulpit

RELATIVE RANK.

MR. STANHOPE AND THE ARMY MEDICAL STAFF.

We are enabled to lay before our readers the following official statement of the Government's intentions with regard to the recommendations of Lord Camperdown's Committee :

Recommendations.			*Steps taken.*
	I.—Army.		
1. Ranks to be—	Constitution, Rank, etc.		1. As at present.
	Present Title.	Relative Rank.	
urgeon-General	Surgeon-General	Major-General.	
urgeon-Colonel	Deputy Surgeon-General	Colonel.	
urgeon-Lieutenant-Colonel.	Brigade-Surgeon, and Surgeon-Major ranking as Lieutenant-Colonel.	Lieutenant-Colonel.	
urgeon-Major.....	Surgeon-Major	Major.	
urgeon-Captain	Surgeon (after 3 years' service) ...	Captain.	
urgeon-Lieutenant	Surgeon (under 3 years' service) ...	Lieutenant.	
[Sir W. Crossman, Rear-Admiral Hotham, and Mr. Bartley dissent.]			
2. The medical rank and relative Army rank of an Officer to be stated on his commission.			2. Approved, wherever possible.
3. Relative rank to hold for all purposes except military command.			3. Approved. "Ranking with" being substituted for "Relative rank."
4. The first 50 Surgeons-Lieutenant-Colonel to have pay and allowances now given to Brigade Surgeons; but to lose their right to retire after 20 years' service.			4. Not approved.
Appointment.			
5. Candidates producing the diploma of the Society of Apothecaries not to be required to produce a second diploma.			5. Approved.
6. Some appointments to be given, without examination, to House Surgeons or House Physicians at Hospitals recognised by the General Medical Council.			6. Approved, when necessary.
7. Commissions to date from the time of entering the service, not from that of leaving Netley.			7. Not approved, but will be further considered with India.
Promotion.			
8. Examination for rank of Surgeon-Major to be conducted by a mixed Board; the Examiners in Medicine and Surgery to be chosen from outside the Medical Staff.			8. Approved.
9. Examinations for ranks above Surgeon-Major to be dispensed with.			9. Approved.
10. In promotion to Brigade-Surgeon and higher ranks, a preference to be given to Officers who have distinguished themselves.			10. Approved.
[This seems not to agree with No. 5.]			
11. Promotion to highest ranks to be by very careful selection.			11. Approved.
Retirement.			
12. Retirement on gratuity of £500 after six years' service *not* recommended.			
[Lord Camperdown and Mr. Macnamara dissent, and recommend that such optional retirement be allowed.]			
[Mr. Bartley recommends the substitution of 30 for 20 years' service for voluntary retirement.]			
14. Surgeons-General to serve till 62 years of age.			14. Carried out so far that power is taken in the Warrant to allow of it.
[Mr. Bartley would add that Brigade-Surgeons should serve till 57.]			
15. Two years' service in the rank of Surgeon-General and Deputy Surgeon-General and three years in that of Brigade Surgeon, to be required before allowing an Officer to retire on the retired pay of the rank, except in a case of permanent ill-health contracted in and by the Service.			15. Carried out, with three years all ranks
[Mr. Bartley would require three years in every rank.]			
Service, Duties, etc.			
16. Tour of foreign service not to exceed five years, except in case of emergency.			16. Not accepted.
17. On first appointment, a Medical Officer to be attached for a definite term to a regiment or other administrative unit.			17. Not accepted.
18. Once in seven years an Officer to have three months' special leave, to improve himself in professional knowledge.			18. Not accepted.
19. A Medical Officer on leave [*query*—on half-pay?] on account of illness contracted in and by the Service, to have the same privileges as a combatant Officer.			19. Not accepted.
20. Advantages as to pay and allowances given at Home also to be given in India.			20. A matter for India.
21. Employment of Retired Officers to fill medical appointments at Home is condemned.			21. Not accepted.
22. Officers in charge of Station Hospitals to take a fair share of executive duty.			22. Approved, where possible.
23. A careful inquiry to be made into establishments of Station Hospitals.			23. Approved.
24. At small Home Stations Civil Practitioners to be employed where practicable.			24. Approved, when practicable.
[Dr. Balfour dissents.]			
II.—Royal Navy.			
25. Inspectors of Hospitals and Fleets not to be compulsorily retired before age of 62.			
26. Officers to have opportunities from time to time for improving themselves by professional and scientific study.			
27. Yarmouth Hospital to be utilized more fully.			

THE *Army and Navy Gazette*, referring to the reply given by Mr. Stanhope to Dr. Farquharson's further question in the House of Commons on March 6th, says: "The reply of Mr. Stanhope may be an exceedingly simple way out of a difficulty, but we doubt whether the service will be perfectly satisfied with it. Lord Camperdown's Committee recommended several changes. Mr. Stanhope, to save himself trouble, ignores them all. Some of them were undoubtedly undesirable, but there was one which the whole service approved of; we refer to the proposal to attach a medical officer to each regiment of cavalry and battalion of infantry. Whatever this change might have cost, it ought to have been carried out. It is a reform that the army has been demanding for years past, and it is one that is urgently required in the interests alike of individuals and the service."

MAJOR-SURGEON writes: While questioning the expediency of demanding a purely military title, and since the Secretary of State for War refuses to carry out the recommendations of the Committee, I beg to suggest the following, which it appears to me would be sufficient for the medical department and unobjectionable to fair-minded combatant officers. The military to precede the medical title, thus: Lieutenant-Surgeon on to General-Surgeon. The rank of the present Deputies to be Brigadier-Surgeon, superior to all Colonels. Especially is the title Surgeon-Major objectionable from liability to confusion with Sergeant-Major.

*** The above has often been advocated, and is practically the American system; we fear it would find scant favour among the clique of so-called combatants, whose objection is not to one kind but to any military titles simple or compound, being given to medical officers.

ARMY MEDICAL REFORM.

ROYAL MEDICAL CORPS sends the following heads of reform, which he suggests each member of the British Medical Association should tear out of the JOURNAL and send to their respective M.P.'s as the only way to bring the matter prominently forward. 1. Consolidation of Medical Staff and Medical Staff Corps into "Royal Medical Corps." 2. Substantive rank for the officers, to be commissioned as Lieutenants and Surgeons, etc., consecutively upwards to Lieutenant-General and Director-General. 3. Command limited to own corps and officers and men in hospital or attached. 4. To serve on boards and courts-martial (if necessary) according to army rank. 5. Regimental pay to be made up to present pay by the addition of departmental pay. 6. Foreign service five and three years as before. 7. Recognition of rank and pay in India; brigade-surgeons there to have Rs. 250 *per mensem* additional, consolidated. 8. The corps to be recruited from line regiments, of soldiers of good character, and of one year's service, except in special cases of clerks and chemists who could be directly enlisted.

THE OLD CONTROL.

K. writes: The following quotation from Henty's *March to Coomassie* made with reference to the commissariat is so exceedingly *apropos* to the present condition of the Medical Department, that we have only to substitute *medical department* for *control* to make the parallel complete.

"As long as one department is civil and the other military there will be an absence of unity, an absence of cohesion, and a host of mistakes, jealousies, rivalries, and breakdown. The officers of the army and the control are alike opposed to the system, and the latter are always ready to confess and deplore the weakness of the present state of things. In peace it discharges duties essential to the army, and more intimately connected with it than the greater portion of the duties of the Royal Engineers, and yet no one urges that because the latter are engaged on topographical work, perhaps for years, they should therefore have no right to be looked upon as military men. The responsibility thrown upon them is enormous, their work unceasing, and yet they are looked upon as civilians, and their difficulties immensely increased by the fact that they have no military rank. They have, indeed, a relative rank assigned to them, but as they are not called by it is altogether useless in giving them authority or influence. A soldier hears a person spoken of as Mr. Irvine, and consequently this "Mr." has in his mind a far less authority than Sergeant Thompson, although Mr. Irvine is a lieutenant-colonel with enormous responsibility. As long as the position is looked upon as civilian, and therefore in the eyes of military men an inferior one, so long will it be impossible for the department to carry out its duties efficiently. In time of war it is crippled and hampered by its want of definite position, by its civilian status, and by the consequent want of co-operation and sympathy from the purely military branch of the service. If it is ever to be an efficient branch of our army a thorough change is required. To be effectual it must be made a military instead of a civil department, and its officers must have a substantial rank."

Could anything more plainly describe the present position of the Medical Department? The remedy here so effectively pointed out by Mr. Henty was stoutly resisted by the military, and it took sixteen years to convince them of their error. Will it take so long to convince our present obstructives, or will Mr. Stanhope rise equal to his opportunities?

*** We thank our correspondent for drawing attention to the above; nothing could be more to the purpose in the present army medical controversy. Once more the obstructive jealousies of a clique have wrongly influenced the War Minister against, we cannot but think, his better judgment. Time fights on the side of the Medical Department, and the reform must come, but the question is how long? We will venture to prophesy it will be sooner than with the old control or commissariat branch.

AN ANOMALY.

RESERVE writes: The volunteer surgeon who joins the Army Medical Reserve counts every day as if full pay service for promotion, whilst the regular army surgeon on the reserve list, as liable to be recalled to service till 55 years of age, and shown on the active list like his volunteer *confrère*, is apparently treated as if no longer in the service. Why so? And if both are called out for service, will not some very considerable friction result?

ADMINISTRATIVE TENURE.

THE following table has been sent to us from India, showing the anomalous position of the Medical Staff in the tenure of its administrative appointments as compared with the rest of the army. The age limit by itself works in a very haphazard and uneven manner, and gives to specially promoted officers, if young, a sort of monopoly of these appointments which cannot be defended in equity, and is probably neither good for individuals nor the service. Why cannot a tenure as well as an age limit be adopted, as in all other army staff appointments?

Promotion in the Administrative Grades of the Medical Staff.

The Senior officers of the Medical Staff are invited to consider their position as regards promotion, and for this purpose the accompanying table has been drawn up:—

Surgeon-Generals.	Date of Promotion.	Number of Years in Rank under 60 Years of Age Rule.	Number of Years Years in Rank if Age be Extended to 62.
Sinclair	27-3-82	X	XII
Madden	7-5-82	XI $\frac{3}{12}$	XIII $\frac{3}{12}$
Thomson	3-3-86	IV	VI
Hanbury	14-6-87	IV $\frac{8}{12}$	VI $\frac{8}{12}$
Fraser	21-6-87	IV $\frac{7}{12}$	VI $\frac{7}{12}$
Webb	31-12-87	VI	VIII
Reade	15-2-88	IV $\frac{8}{12}$	VI $\frac{8}{12}$
Ferguson	29-11-88	II $\frac{3}{12}$	IV $\frac{3}{12}$
Meadows	10-89	II $\frac{10}{12}$	IV $\frac{10}{12}$
Tarrant...	28-10-89	$\frac{11}{12}$	II $\frac{11}{12}$

It will be observed that under the 60 years of age rule the two senior Surgeons-General can serve in the grade for X and XI $\frac{3}{12}$ years respectively, while, if the age be extended to 62, these officers will have XII and XIII $\frac{3}{12}$ in the rank; under the 60 years rule one other Surgeon-General can serve VI years as such, while, if the age be extended, one can serve for eight years, and four others from six to nearly seven years.

It must be evident that such a system is unjust to the junior administrative and senior executive officers as it delays promotion for some, and causes others to retire very soon after obtaining the rank of Surgeon-General.

If the age be extended to 62, much hardship must be inflicted, and many deserving officers will be cut out of all chance of further promotion.

In no other branch of Her Majesty's service is such a system permitted. General and all other Staff Officers have to vacate commands or appointments at the end of five years.

Commissary Generals have also to retire after five years in the rank, and the same rule is in force in the Indian Medical Service.

In the Medical Staff alone is an officer, ranking as Major-General, permitted to hold rank, pay, and position for a period terminable only by age (60). If this age be extended, how much worse must it become for all below?

The question is, how is this to be remedied?

The War Office Actuaries have declared that the extension of the age rule to 62 will cost the public £25,000, so this proposal will probably be dropped, except in special cases where it may be distinctly to the advantage of the service that an extension of one or two years should be given.

The important question now is, how to remedy the present block, and this might partly be done by introducing a rule that the appointment of Surgeon-General should only be tenable for five years, or terminable on attaining the age of 60, whichever occurs first, except in special cases as noted above.

The present senior Surgeons-General should certainly be retired on the pension of their rank, but should receive compensation for loss of pay and allowances for the number of years they might have served on, as was done when the age of administrative officers was reduced from 65 to 60, some years ago.

Every Deputy Surgeon-General and Brigade-Surgeon is directly interested in this question, and it is to be hoped each one will bring to bear all the interest in his power to get the present rule modified.

There is no desire to inflict any injury or hardship on the senior officers concerned, and they should receive full compensation; at the same time they could not complain, if fairly compensated, at being retired after so many years of high rank and pay as Surgeons-General.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION.

THE following officers, who have been under instruction from Surgeon Walter Pearce, M.D., and the staff of the school, have recently passed the proficiency examination for volunteer medical officers, which is now compulsory for all acting-surgeons of the volunteer force, and is required before promotion as well as for commissions in the Army Medical Reserve:—Brigade-Surgeon J. P. Giles, Welsh Border Brigade and 1st Herefordshire R.V.; Surgeon-Major W. T. Colby, M.D., 2nd V.B. Princess of Wales's Own (Yorkshire) Regiment; Surgeon W. Chalmers-Cowan, 1st Forfar Artillery Vols.; Surgeon A. C. Bateman, M.B., Army Medical Reserve and 16th Middlesex R.V.; Surgeon W. H. Bull, F.R.C.S.Ed., 3rd (Bucks) V.B. Oxfordshire Light Infantry; Surgeon A. R. F. Evershed, 20th Middlesex (Artists') R.V.; Acting-Surgeon J. A. Adams, M.D., 1st (Lanarkshire) V.B. Scottish Rifles; Acting-Surgeon M. J. Fox, 3rd Lancashire Artillery Vols.; Acting-Surgeon W. Nettle, 2nd V.B. Duke of Cornwall's Light Infantry; Acting-Surgeon G. J. Eady, 1

V.B. Queen's Royal West Surrey Regiment; Acting-Surgeon R. Pollock, M.B., 3rd V.B. Highland Light Infantry; Acting-Surgeon D. Macphail, M.D., 5th V.B. Scottish Rifles; Acting-Surgeon J. Adams, M.B., 1st V.B. (Prince of Wales's Volunteers) South Lancashire Regiment; Acting-Surgeon H. G. Roberts, 2nd V.B. Royal Welsh Fusiliers.

The next class will be held in May. The convenience of officers residing at a distance from London will be studied. Further information can be obtained of the Honorary Secretary, S. R. Sleman, 7, St. Benet Place, Gracechurch Street, E.C.

CHANGES OF STATION.

HE following changes of station among the officers of the Medical taff of the Army have been officially notified as having taken lace during the past month:—

		From		To
rigade-Surgeon	A. F. Preston, M.B. ...	Bombay ...	...	Portsmouth.
,,	J. R. Murray, M.D. ...	Chatham ...	...	Bermuda.
urgeon-Major	R. N. Mally	— ...	...	Belfast.
,,	A. A. Macrobin, M.D. ...	Curragh ...	...	Bengal.
,,	R. Drury, M.D. ...	Bengal ...	...	Curragh.
,,	W. Donovan	Woolwich...	...	Bengal.
,,	N. Leader, F.R.C.S.Ed.	Waterford ...	...	,,
urgeon	T. B. Moffitt	Exeter ...	...	,,
,,	R. O. Cusack	Newc'stle-o.-Tyne...		Madras.
,,	W. D. A. Cowen	Portsmouth ...		,,
,,	T. F. W. Fogarty, M.B. ...	Horfield ...	...	Bombay.
,,	R. W. Ford	Dublin ...	...	Waterford.
,,	L. W. Swabey	Aldershot...	...	Bengal.
,,	T. Moynihan	Belfast ...	...	Dundalk.
,,	J. C. Haslett, M.D.	Devonport	...	Exeter.
,,	F. H. M. Burton, M.B. ...	Burnley ...	...	Lichfield.
,,	R. Kirkpatrick, M.B.... ...	Edinburgh	...	Leith Fort.
,,	T. R. Morse	Dublin ...	...	Curragh.
,,	R. R. H. Moore	Bombay ...	...	Dublin.
,,	J. R. S. Robertson, M.B. ...	Clonmel ...	...	,,
,,	A. E. Tate	— ...	..	Woolwich.
,,	H. J. Wyatt	Dublin ...	...	Athlone.
,,	A. Y. Reily, M.B.	Aldershot...	...	Bermuda.
,,	J. G. Deacon, M.D.	Sierra Leone	...	CapeCoastC'stle

NAVAL MEDICAL SERVICE.

IE following paragraph appears in Lord George Hamilton's statement, explanatory of the Naval Estimates, 1890-91:

"The experience of the Naval Medical Department during the past year has been most satisfactory.

"The competitions for the entry of surgeons have been productive of gratifying results.

"It has been thought desirable, in the interest of the Naval Service, to establish a board of examiners, to be under the immediate control of the Admiralty, and independent of the Army, for the examination of candidates for entry into the medical branch of the Navy. The Admiralty accepted the generous offer of Sir Andrew Clark, the distinguished President of the Royal College of Physicians, to undertake gratuitously the presidency of this Board, which is composed of the following eminent members of the medical profession:—Sir Dyce Duckworth, Lecturer and Physician to St. Bartholomew's Hospital; Sir W. Mac Cormac, Professor of Surgery at St. Thomas's Hospital; Mr. George Makins, Assistant Surgeon and Lecturer at St. Thomas's; and Dr. Shore, Lecturer at St. Bartholomew's Hospital.

"This change has necessitated the discontinuance of a system which had been in force for some years, and under which these examinations had been held conjointly with those for the Army and Indian services."

THE MEDICAL STAFF.

E leave to England on private affairs granted to Surgeon A. L. H. Dixon, o is borne on the strength of the Madras Establishment, is extended by one nth.

Surgeon R. T. McGeagh, M.D., serving in the Madras command, is, on urn from Burmah, directed to do duty in the Belgaum and Bangalore dis-cts.

Surgeon-Major G. Laffan, M.D., serving in the Madras command, has leave England for 182 days, on medical certificate.

Surgeon-Major William Walter Webb died in London on March 5th. He ered the service as Assistant-Surgeon, January 20th, 1843; became Surgeon, rch 3rd, 1854; and Surgeon-Major, January 20th, 1863; on July 10th of t year he retired on half-pay. He was with the 47th Regiment in the stern campaign of 1854-55, and was at the siege and fall of Sebastopol (medal h clasp, and Turkish medal).

INDIAN MEDICAL SERVICE.

RGEON-MAJOR G. R. Daphtary, M.D., Bengal Establishment, has retired m the service, which he entered as Surgeon, March 30th, 1872, becoming rgeon-Major twelve years thereafter. He served in the Afghan war of 1878-80, eiving the medal granted for that campaign.

he services of Surgeon F. F. MacCartie, Bombay Establishment, a proba-ner in the Assay Department at Bombay, have been replaced at the disposal he Government of Bombay.

he services of Surgeon W. H. B. Robinson, Bengal Establishment, are re-ced at the disposal of the Military Department.

urgeon G. S. Robertson, Bengal Establishment, on special duty under the eign Department, is granted privilege leave for three months.

urgeon H. W. G. Macleod, Bengal Establishment, is transferred from the ciating medical charge of the 1st Battalion 2nd Goorkhas to the officiating dical charge of the 13th Bengal Lancers, *vice* Surgeon D. M. Moir, who has ceeded on field service with the Chin-Lushai Force. Surgeon F. W. Thom-, Bengal Establishment, is appointed to the officiating medical charge of the Battalion 2nd Goorkhas, *vice* Surgeon Macleod.

he second Christian name of Surgeon-Major H. P. Jervis, Bombay Establish-nt, is *Pruce*, and not as notified in the *London Gazette* of December 10th,).

ARMY MEDICAL RESERVE.

Surgeons Henry Wright and Edmond West Symes, M.D., are promoted to be Surgeon-Majors, ranking as Majors.

THE VOLUNTEERS.

Acting-Surgeon M. J. Fox, 3rd Lancashire Artillery, is promoted to be Surgeon.

Mr. John Francis Haswell, M.B., is appointed Acting-Surgeon to the Tynemouth Artillery (Western Division Royal Artillery).

Acting-Surgeon D. Macphail, M.D., and J. Blair, M.D., of the 5th Volunteer Battalion Scottish Rifles (late the 7th Lanarkshire), are promoted to be Surgeons.

Mr. Richard Greene is appointed Acting-Surgeon to the 1st Volunteer Battalion Northampton Regiment (late the 1st Northamptonshire).

MEDICO-LEGAL AND MEDICO-ETHICAL.

LIBELLING A SURGEON.

A dressmaker, named Jane Boston, aged 37 years, was charged at the Manchester Assizes on March 6th with having written and published a scandalous libel on Thomas Henry Pinder, a surgeon, of Manchester. The prisoner wrote letters to friends of Mr. Pinder accusing him of serious crimes. She was found guilty and sentenced to six months' imprisonment without hard labour.

MEDICAL OFFICERS AND FRIENDLY SOCIETIES.

Mr. Frederick T. Pearson, Solicitor (New Shoreham, Sussex) writes: I have been shown a case reported in the Journal of February 15th under "Medico-Legal" in which a medical officer to a friendly society recovered damages in the Cardiff County Court for wrongful dismissal. I should be glad to know whether the case of *in re* Alfred Hoit (4 Q.B.D. 29) and the Friendly Societies Amendment Act, 1879 (or 80) were brought to the notice of the learned judge. I think that if such had been the case, the doctor would have been referred to his remedy under the rules of the society, and that the judge would have held that he had no jurisdiction to try the case. The point is of considerable interest to country practitioners, and I should like to see it fully discussed.

*** The point in question was raised in the case and settled by the judge. As it is of some importance, it may be well to quote the section of the Friendly Societies Act relied on. This reads as follows:—

"Section 22.—Every dispute between a member, or person claiming through a member or under the rules of a registered society, and the society or an officer thereof, shall be decided in manner directed by the rules of the society, and the decision so made shall be binding and conclusive upon all parties without appeal, and shall not be removable into any court of law or restrainable by injunction; and application for the enforcement thereof may be made to the county court."

A copy of the rules of the Society was handed in, stating that all disputes between members must be referred to arbitration, and it was contended therefore, that the judge had no jurisdiction, the counsel for the society arguing that one of the duties of the surgeon was to look after the interests of the society, and that this brought him within the arbitration clause. The judge disposed of this argument by saying: "Surely, you don't say that all disputes between members must be referred to arbitration. The plaintiff is suing not as a member, but as surgeon. According to your argument, every tradesman who had an account against a friendly society would have to submit it to arbitration. He did not require to hear further on that point, as it must be apparent at once that the arbitration clause did not apply. There had been many cases decided to that effect." The objection was then overruled, and the case taken on its merits. This decision is certainly in accordance with equity and common sense, and should induce practitioners who may have disputes with friendly societies to resist any attempt to deprive them of their right to go to the law courts for settlement. Such attempts are obviously based on a strained interpretation of the arbitration privileges of the societies.

FEES TO EX-ASSISTANT.

M.R.C.S. writes: I carry on a general practice, and keep a doubly qualified registered assistant, whose written agreement states "that during the said term of his assistancy, all monies received by him on my behalf shall be handed over to me." The agreement is terminable at any time by one calendar month's notice on either side. Notice was given on February 1st, 1890, and accepted. On Saturday, March 1st, a message was received about 9 A.M. that a woman, who up to February 13th had been attended by my assistant, was dead. He went at once and found such to be the case. An inquest was held on March 3rd; he gave evidence. To whom does the fee for giving evidence belong?

*** The assistant is, in our opinion, entitled to the fee, the engagement having been determined before the inquest was held.

ILLEGAL PRACTICE.

Practitioner.—The Society of Apothecaries will, in suitable cases, undertake proceedings to enforce the penalty for illegal practice under the Apothecaries Act. If our correspondent will write to the Clerk of the Society, Blackfriars, E.C., stating the grounds of his complaint, he will hear whether the case is such as the Society will take up.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, March 6th.

The Defaulting Official of the Dublin Hospitals.—The ATTORNEY-GENERAL FOR IRELAND, in reply to Mr. P. M'DONALD, said that every effort has been made to bring the defaulting official of the Dublin Hospitals to justice.

Friday, March 7th.

Pupil Teachers and Vaccination.—Sir W. HART DYKE, in reply to Mr. PICTON, said every candidate for the office of pupil teacher was required by the Code to produce a medical certificate in a form prescribed by the department. If that certificate, which had now been in use several years (since the spring of 1885), and had been approved by successive administrations, did not show that the candidate had been successfully vaccinated, it was the practice of the department to refuse to sanction the engagement, and he knew of no reason why an exception should be made in favour of a particular town.

Monday, March 10th.

Admiralty Condemned Meat.—Lord G. HAMILTON, in replying to a question by Mr. PICKARD, said that owing to the possibility of meat sold as "unfit for human food" being brought into the market for sale as suitable for human food, the Admiralty decided last year that all salt meat and salt suet condemned as unfit for the service should be in future sent to soap boilers, and not sold by public auction. Before being sent to the soap boilers the meat would be chemically treated, so as to make its use as food impossible.

Tuesday, March 11th.

Typhoid Fever among British Troops in India.—In reply to Sir W. FOSTER, Mr. E. STANHOPE said that enteric fever had been very prevalent in India during the last three years, and was especially fatal last year. The deaths from this disease were 247 in the year 1887, 267 in the year 1888, and 429 last year, as to which year, however, the figures must be regarded as approximate only. The deaths had been most numerous among young soldiers. All possible precautions were taken to prevent the insanitary conditions which were believed to induce this disease. Cantonments and barracks, with the neighbouring towns and bazaars, were strictly supervised, and the purity of water, milk, and food generally was secured by all practicable means. During the last year a Special Commission investigated the sanitary state of Lucknow and Meerut with particular reference to enteric fever. The liability of young soldiers to this disease was a principal reason for not allowing men under 20 years of age to proceed to India.

The Removal of Sewage Sludge.—In reply to Major RASCH, Mr. RITCHIE said he was informed that the London County Council did not contemplate that the sludge should be discharged into the sea at points nearer to the shore than the places where it had been discharged hitherto from the vessels belonging to the Council.

The Cattle Disease.—Mr. CHAPLIN, in reply to a question from Mr. BARCLAY, said that it was the intention of the Government to proceed with legislation on this matter, which it was hoped would be carried this session, with a view to eradicating the disease altogether from this country.

OBITUARY.

RALPH FAWSETT AINSWORTH, M.D.BERLIN, F.R.C.P.EDIN., M.R.C.S.ENG.

THE death on March 6th of Dr. Ainsworth at his residence, Cliff Point, Higher Broughton, removes from Manchester one of its oldest and most respected citizens, who from an early date has been associated with many of its public institutions, and filled with credit a number of its public offices. Ralph Fawsett Ainsworth was the only son of Mr. James Ainsworth, a well-known surgeon. Born in 1811, and educated at the Manchester Grammar School, he early evinced a taste for chemistry. In 1828 he became a student at the infirmary, and subsequently proceeded to London to study medicine. From London he proceeded to Berlin, where he took the degree of M.D., and he gained a wide experience by travelling in France, Norway, Sweden, Finland, Russia, Denmark, Austria, and Italy.

He returned to Manchester, and commenced practice in his father's house, where he resided until his removal to Broughton in 1839. He became a Member of the Royal College of Surgeons of England in 1837 and Fellow of the Royal College of Physicians of Edinburgh in 1839.

He was consulting physician for several years (some time senior) of the Manchester Royal Infirmary Fever Wards, Lunatic Hospital at Cheadle, and Lunatic Asylum at Blackley; for many years was consulting physician to the Salford and Pendleton Royal Hospital and Dispensary, and the Manchester Union Workhouse.

Dr. Ainsworth was a Fellow of the Linnean Society, a Fellow of the Royal Medical and Chirurgical Society, and a member of several literary and scientific societies. He was lecturer at the Pine Street School of Medicine and a prominent member of various societies and institutions in the city.

Like his father, who was one of the first promotors of the Manchester Natural History Society's Museum and the Botanical Gardens at Old Trafford, he was a lover of flowers, and became a proprietor of the Royal Botanical Gardens in 1852. He was an original member of the Cheetham Society, and well acquainted with the literary men of Manchester of his time. The deceased, who was never married, was cousin of William Harrison Ainsworth, the popular novelist, and of William Francis Ainsworth, the traveller. His illness was of short duration. He was known in private life as a genial and entertaining companion, and his death removes one of the few remaining links with the citizen life of the past.

MARCELLANO GÓMEZ PAMO, M.D.MADRID.

DR. MARCELLANO GÓMEZ PAMO, one of the leading surgeons in Spain, died of influenza at Madrid on February 6th. He was born at Arévalo in 1835, and after graduating in Arts at Salamanca, studied medicine at Madrid, obtaining the degree of Licentiate in 1856, and that of Doctor in the following year. In 1859 he received the "Epidemic Cross" from the province of Segovia for distinguished service during an outbreak of small-pox. In 1861 he was appointed surgeon to the Hospital de la Princesa, at Madrid, and in 1863 he was elected corresponding member of the Madrid Royal Academy of Medicine, and was awarded a silver medal for an essay entitled "Origin and Vicissitudes of the treatment followed by Spanish Surgeons in Gunshot Wounds."

Though busily engaged in the practice of his profession throughout his career, Dr. Pamo's literary activity was considerable. He translated Gosselin's *Clinical Surgery*, and several other standard treatises from the French, enriching the works with original notes of great value. He was the editor of the *Anales de Cirugía*, and contributed largely to other Spanish medical journals. All his work was marked by painstaking accuracy as to facts, and judicious caution in inference. He excelled in all the practical details of surgical art, and was at once brilliant and careful as an operator. But, though skilful with the knife, his best title to fame is that in the words of an appreciative Spanish writer, "he never placed the interests of his self-love before those of his patient."

HOSPITAL AND DISPENSARY MANAGEMENT.

ABERDEEN SICK CHILDREN'S HOSPITAL.

THE annual meeting of the Sick Children's Hospital was held in the Music Hall Building, on Thursday, March 6th. Lord Provost Stewart presided. The annual report was read, which described the institution as being satisfactory in all departments. In the general wards there were treated 458 cases, and in the infectious wards 30, a total of 488—an increase of 29 on last year's numbers. The daily average number of patients in the hospital during the year was 56. The average length of stay of each patient was 42 days. The results were as follows: Cured, 295; improved, 78; removed at desire or unfit, 30; died, 29; remaining at December 31st, 1889, 56; total, 488. In the outdoor department there were treated during the year 835 cases. The dental operations were 29. The number of operations performed during the year was 143, and the mortality from them was *nil*. During the season from May to October 58 children were received at the various convalescent cottages in the country. The financial state of the hospital, owing to an increased liberality, is now in a satisfactory state. The total income during the year was £1,719 14s. 3d., the expenditure was £1,696 9s. 10½d., surplus, £23 4s. 4½d. The whole of the floating debt has now been cleared off, and a sum of £500 has been set aside to reduce the mortgage debt of £1,200, which was borrowed on the hospital buildings at the time they were originally purchased, and owing to legacies, of which intimation has been received, the directors have resolved to pay off the whole bond of £1,200 at Whitsuntide. The directors expressed their appreciation of the services given to the hospital by the medical officers, namely Professor Stephenson, Dr. Garden, Dr. MacGregor, and Dr. Gordon and also by Mr. De Lessert, dental surgeon.

PROPOSED PUBLIC MEDICAL SERVICE.

AT a meeting of the Stirling, Kinross, and Clackmannan Branch of the British Medical Association held at Alloa on Thursday March 6th, Dr. PEAKE introduced the discussion on the resolutions regarding the reform of the out-patient departments of medical charities, brought forward by Dr. Rentoul at the general meeting of the Association last year, and in doing so referred

more especially to the advantages of the provident dispensary system, illustrating his remarks by reference to the success of the Coventry Provident Dispensary. The resolutions were considered *seriatim*, and the following motions were carried in regard to them: 1. That this Branch declines to support this resolution. 2. That this Branch considers the formation of a public medical service unnecessary. 3. That the members of this Branch approve of the formation and working of a provident system, whereby wage-earners receiving up to 45s. per week per family, and single persons receiving up to 30s. per week, may, by making periodic payments during health and sickness, provide themselves, their wives, and children, with efficient medical and surgical treatment and medicines. 4. That this Branch approves of the adoption of the principle of a wage limit in connection with medical attendance on members of friendly societies and provident dispensaries. 5. That this Branch cordially approves of this resolution.

At a meeting of the Gloucestershire Branch, held at the General Infirmary, Gloucester, on Tuesday, January 21st, 1890, under the presidency of Mr. H. E. WADDY, it was proposed by Dr. BATTEN and seconded by Dr. SOUTAR, that: "There being a very general impression that there is an abuse of the out-patient department of medical charities, it would be desirable that the subject of out-patients be referred to a committee of this Branch, consisting of an equal number of hospital and non-hospital medical men with the President as Chairman, which committee shall report to the Branch with a view of bringing the matter under the notice of the managers of the hospitals." Carried.

It was proposed by Dr. BATTEN, and seconded by Mr. SYDNEY-TURNER: "That this committee shall consist of a chairman (the President), two gentlemen from Gloucester on the hospital staff, and one not on the hospital staff; two from Cheltenham, one hospital and one non-hospital; two from Stroud, one hospital and one non-hospital, and the Secretary of the Branch." Carried.

It was proposed by Dr. BATTEN, and seconded by Dr. SOUTAR: That the adoption of a public medical service as suggested by Mr. Rentoul is impracticable and undesirable." Carried.

GLASGOW OPHTHALMIC INSTITUTION.

THE annual report of this Institution states that during the year 750 new cases came under treatment, of whom 531 were taken to the house. Of the total, 3,462 were cured, 153 improved, and 35 dismissed as incapable of further benefit. The income amounted to £1,367, or £425 in excess of the expenditure. The income shows an increase owing to a rise both in the general subscriptions and in the contributions from public works. Not much short of two-thirds of the whole income are made up of contributions from working men. The number of operations performed was 556.

ABERDEEN GENERAL DISPENSARY, VACCINE AND LYING-IN INSTITUTION.

THE annual meeting of this institution was held in the Town Hall on March 7th, Lord Provost Stewart presiding. The yearly report was submitted to the meeting. The medical report stated that the total number of cases treated during 1889 was 10,543—a decrease of 22 on the previous year. The number of ordinary and zymotic cases was 8,529; midwifery cases, 244; vaccinations, 7; special cases of ear and throat, 295; dental operations, 878. The number of patients visited at their own homes was 2,764. The treasurer's accounts show a balance for the year of £416 15s. 4½d. There was an increased number of medical students attached to the institution, and they fully availed themselves of the large fields of clinical work, the dispensary being practically the out-door department of the Royal Infirmary; and of late there has been a marked tendency on the part of the students to devote longer time to the practical work at the institution than formerly. The medical staff suggest to the careful consideration of the directors the establishment of a maternity hospital in connection with the dispensary; and the directors, while admitting its claim, point out the lack of funds for this purpose. The need of such a department is greatly felt in connection with the practical teaching of the University, as well as from the benefits it could confer on the poorer classes; and it is not too much to hope that, were the merits of such a department made fully known to the charitable, the requisite funds would speedily be forthcoming.

The directors recommended to the annual meeting that the rule which provides for the compulsory retirement of the medical officers after twelve years be rescinded, and that they should hold their appointments for two years after election, and be eligible for re-election unless the Committee of Management shall see cause to the contrary.

NATIONAL HOSPITALS AND A CIVIL MEDICAL SERVICE.

DR. J. B. HUNTER (Paisley) writes: Regarding the necessity for a civil medical service, every feeling-hearted medical man having had much to do with the industrial classes must have often observed after a protracted attendance how difficult, and often impossible, their even moderate charges could be met, and what a demoralising, almost pauperising, effect comparatively small medical bills produce at such a time. No doubt clubs and other friendly societies ameliorate these matters somewhat, but nearly everyone will admit that they are very unsatisfactory and also very unremunerative to medical men, and unremunerative work is often imperfectly performed. Were a civil medical service properly organised, the State would examine all those seeking admission to that service, and, if found eligible, would appoint them first assistants, then, as openings occurred, to the position of medical officers to a division or district, and then, by a competitive examination or by the manifestation of special talents in the superiority of their work or otherwise, to be supervising consultants over several districts, and by a higher competitive examination, or by having devoted their whole attention to particular subjects, and by thereby having become an authority thereon, to be appointed teachers and examiners in said subjects. Then the supply and demand for medical men would be better regulated than at present, and excessive competition would be thereby avoided, and medical men would have their work more at hand, and would not require to waste so much time and energy in walking and driving over great distances to visit their patients. They would also be very efficient sanitary officers in their respective districts, as they would be sure to use their very best endeavours to keep their districts as free from diseases as possible. Then civilians, like their military *confrères*, could have a record of all their illnesses and the treatment adopted, which would be of great service to those when removing from one medical district to another.

Many medical men would not then, perhaps, make such large incomes as they now can do, but they would live happier and more useful lives, have assistance in their night work, have more leisure for study and reflection, have more holidays, and, provided that their salaries and retiring allowances were similar to those obtained in the army and navy, they would all be at least in comfortable circumstances, and, being thoroughly independent of fees, they would be wholly devoted to their patients, and to the science and art of their profession.

PENNY A WEEK MEDICINE.

DR. HUGH WOODS (Highgate) writes: When two dangerous antagonists are both simultaneously attacking a single individual, there is at least one way in which he has a prospect of saving himself from destruction. He may suddenly step aside, and allow the blows of his antagonists to fall upon one another, and continue in quiet to watch the conflict which his skilful move has engendered. The general practitioners of medicine are attacked on one side by charitable institutions, and, on the other, by cheap dispensaries and the like. At present their position appears precarious in the extreme, but if the worst should happen they can still resort to the above stratagem. The hospitals for a penny a week offer a chance of partial medical attendance, but the Bethnal Green Medical Aid Society offers full attendance and medicine for the same sum. The hospitals, if they give attendance, do so out of charity, and at the expense of the charitable. The Bethnal Green Society gives it as a legal right, and boasts that it does so without charitable aid. Some hospitals provide coffee stalls for their out-patients; the Bethnal Green Society offers £20 in prizes, and bonus at Christmas, £10 being offered to the one who introduces most new patients. The hospitals are not deterred by their cost from using the rarer drugs, but the Bethnal Green Society in its handbills professes to use "no common drugs."

If general practitioners should take to methods (which are becoming commoner every day) by which they can undersell the hospitals, I firmly believe that they could carry the day against the hospitals. I trust that such degrading competition will go no further than it has done; but if it does so, it will be the hospitals that are to blame. At present the attitude of very many practitioners towards these rival establishments indicates a strong tendency to stand at a convenient distance, and utter those significant sounds which are so apt to induce hostility between individuals of the canine species.

MEDICAL STAFFS ON MEDICAL CHARITY COMMITTEES.

DR. ROBERT R. RENTOUL (Liverpool) writes: If the medical staff at the German hospital are so deficient in business qualities that the lay members of committee cannot associate with them, would it not be much better if the staff sent in their resignation, having first been assured that none of their professional brethren would fill up the vacancies thereby caused? Thus a deadlock would be produced, and ultimately the committee must yield. For a good time back the lay committees have been quietly excluding medical practitioners. They have been trying to do so in a quiet way, namely, by forming a "medical committee." In this way they are quietly shunted. No doubt we have ourselves to blame for all this. We began by excluding Scotch and Irish practitioners from hospital appointments, and now the committees exclude English, Irish, and Scotch.

The next move is the appointing of working men to the committees, and the selling of charity—much after the fashion of the sixpenny dispensary—with the result that the "penny hospital" and the "sixpenny dispensary" are engaged in a policy of underselling which is reflecting discredit on us as a body of men, while it affords huge amusement to business men. If it be true that 20,000,000 of weeks' work are lost yearly in this country through sickness, how many weeks are saved by the action of those doctors who give their free services to medical charities, and who do all in their power to send back the wage-earner to his employer at the earliest possible date?

There are over 800 medical charities in England, and over 17,000 practitioners. It is not too much to suppose that 4,000 of the latter are daily giving their free skill to the employer's workmen. Supposing each of these 4,000 do an equivalent of free work equal to £300 a year, here is a saving of £1,200,000 a year; that is, supposing each practitioner working in a hospital

wished to put a money value on his services. And the men who object to associate with these likely give a paltry two to ten guineas a year! The old doctrines of payment and right and payment and representation, however, seem to be ignored at the German hospital. Certainly if the staff are excluded from all management, and are treated as *employés* by the committee, they should ask to be paid for the work done by them.

WORKING MEN AND THE NEWCASTLE INFIRMARY.—At a meeting of working men governors of the Royal Infirmary, Newcastle, on March 8th, nine governors were elected members of the House Committee. The workmen's subscriptions were stated to amount to £3,180, which was the largest total yet recorded.

CARLOW UNION INFIRMARY.—On account of increased duties and length of service, the Board of Guardians of Carlow Union have unanimously recommended that the salary of Dr. Macdowell, physician to the Union and Fever Hospital, be raised from £150 to £200, the latter being the stipend which his predecessor received. The number of admissions to the infirmary are half as numerous again as they were previously to Dr. Macdowell being appointed. The increase is mainly attributable to the improved system of nursing lately adopted in the institution by the nursing staff of Infirmarian Nuns.

HOSPITAL FOR INFECTIOUS DISEASES AT BARNSLEY.—The Kendray Hospital, given to the town by Mrs. Lambert, in memory of her father, was formally opened on February 27th. It is designed for infectious diseases. It has cost a little under the amount given by the donor (£5,000), but the remainder has been used in furnishing. It is in Queen Anne style, of brick with stone dressings, and consists at present of an administrative department, a block of buildings for the purpose of isolation, convalescent wards for small-pox patients, laundry, etc., together with rooms for surgeons, matron, nurses, store rooms, and bedrooms—second floor. The isolation block has four wards, containing accommodation for five males and five females. The small-pox ward is fitted for five of either sex, and has its own kitchen, etc.

UNIVERSITY INTELLIGENCE.

OXFORD.

MR. MARCUS SEYMOUR PEMBREY, B.A., Fell. Exhibitioner of Christ Church, has been elected Radcliffe Travelling Fellow of the annual value of £200, tenable for three years. Mr. Pembrey was placed in the first class in Physiology by the examiners in the Final Honours School of Natural Science in 1889.

CAMBRIDGE.

MEDICAL EXAMINATIONS.—The following table has been published by the Registrary:—

	Fees and Names sent in.	Certificates received.	Examination begins.
Third M.B., I and II ...	April 30	May 8	May 13
M.C.	,,	,, 13	,, 16
First M.B., I	May 19	,, 29	June 3
,, II	,,	June 1	,, 6
Second M.B., I... ...	,,	,, 4	,, 9
,, II ...	,,	May 29	,, 3

DEGREE.—C. E. Shelly, M.B., of Sidney Sussex College, has performed the exercises for the degree of Doctor in Medicine (Thesis: On the Liability to Infection during School Life, and its relationship to Sanatorium Accommodation). Dr. Shelly is the Medical Officer to Haileybury College.

SCHOLARSHIPS AND EXHIBITIONS.—The following awards in natural science will be made in the spring and summer of 1890:—

College.	Value.	Subjects.	Time of Examination.
Peterhouse... ...	£40 to £60	Chemistry and physics	October
Clare	£40 to £80	Natural science	March 13
Downing	£50	,, ,,	April 15
Cavendish	£30	,, ,,	July 8
Non-ascripti ...	£52 10s.	Physical science	July

Details may be learned on application to the tutors of the respective colleges. At the larger colleges the examinations for entrance scholarships and exhibitions are held in December and January.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE EPIDEMIC OF MEASLES IN THE STAFFORDSHIRE POTTERIES.

THE report which has just been issued by the Local Government Board, of the investigation by their medical inspector, Mr. Spear, into the circumstances connected with the epidemic prevalence of measles in the Staffordshire pottery districts in 1888-89, contains some points of more than local interest and importance. The epidemic was one of somewhat exceptional extent and severity, embracing the almost contiguous towns of Hanley, Stoke, Fenton, Longton, Tunstall, Burslem, and Newcastle-under-Lyme, with an aggregate population of about 187,500, and causing in these towns some 684 deaths between July, 1888, and May, 1889. Of these towns, Hanley was not the earliest invaded by the disease, but it is the central town of the potteries, and was apparently the centre of the epidemic. Mr. Spear's inquiry related chiefly to the prevalence of the disease in that town.

The influence of school attendance was one of the points to which inquiry was specially directed, and in a series of carefully prepared tables and diagrams Mr. Spear clearly shows that influence to have been a most important factor in the extension of the disease. The growing prevalence of measles largely interfered with school attendance, but in the majority of cases the closure of the school was only effected after the disease had made great progress, the voluntary schools being for the most part only closed when it seemed to the managers no longer worth while to keep them open. In one instance the figures created a strong suspicion also that the incidence of infection was largely determined by school attendance. On the whole it would appear that the closure of schools had a material influence in Hanley in controlling epidemic spread of the disease, whilst the evidence obtained from individual schools, and the histories of family invasions, strongly indicates that the schools were centres of infection.

Referring to the sanitary condition of the schools, and the amount of air space and ventilation provided—a most important point in considering their influence on the spread of infection—Mr Spear states that it is an admitted fact that school accommodation in Hanley is insufficient for the wants of the town, and the natural result has been considerable overcrowding, especially in certain voluntary schools. In one case the school buildings are much hemmed in by houses of a poor class, and the air around is contaminated by foul privies, whilst inside the buildings the great-coats, caps, etc., of the children are hung up in the schoolrooms. In another case the schools were found to be throughout most imperfectly ventilated, and the rooms were exceedingly close, the "Tobin" tubes that had been provided having been allowed to become inactive through accumulated dust, etc. This is a common defect in the Hanley schools.

Apart from the schools, however, many of the private houses invaded were well calculated to become most active centres of infection. Sick children were usually nursed in the living rooms of the family, and neighbours, often with children in their arms, freely congregated there.

In respect of the fatality of the disease, the experience of Hanley was unusual. Mr. Spear estimates that the number of cases of measles in Hanley during the epidemic did not far exceed 3,000, and upon this estimate the fatality, equal to 9 per cent. or rather more, of those attacked was enormous for measles. There are three possible contributory factors in the production of this excessive fatality: the type of the prevailing disease; the meteorological conditions prevailing at the time; and the predisposition of the infant population to fatal illness. There was at first some doubt as to the character of the disease, but Mr. Spear asserts that although a certain number of cases of rötheln occurred, the epidemic, as a whole, was one of true measles.

So far as clinical observation showed, the type of the prevailing disease differed only from the normal in presenting some unusual general severity of the ordinary symptoms of measles. The fever was high; the eruption generally profuse and vivid, and the implication of the mucous membranes of the air passages and of the conjunctivæ severe. True hæmorrhagic cases were not heard of, although the eruption was sometimes spoken of as livid, discoloured, or purplish. Aphthous ulceration in the mouth was

bserved in some cases, and in a few more considerable ulceration, otherwise the mucous membrane of the digestive tract was seldom nvolved and diarrhœa was uncommon. Convulsions were apparently somewhat apt to occur in very young subjects. Occaionally cases of measles were met with amongst relatives and eighbours that appeared to be as a group characterised by xceptional severity and by early death, but more often severe ases and others of moderate severity were seen side by side. light, inconspicuous cases were, it seemed, relatively rare, at east during the early stages of the epidemic; as the spring dvanced they became, it was believed, more common. The ttacks were distributed in exactly equal proportion between he two sexes. As to age, the classification of the 274 deaths is s follows: under 1 year, 59; 1 to 2 years, 96; 2 to 4 years, 78; to 8 years, 36; above 8 years, 5. As regards duration of the lness, in 23 per cent. of those cases respecting which particulars ere obtainable death was stated to have occurred during the rst week of illness; in 40 per cent. during the second week; in 5 per cent. during the third; and in 12 per cent. at a later eriod.

As to concurrent meteorological conditions, it can only broadly e said that in a general and incidental way the winter weather oubtless exerted an influence on the fatality of the epidemic.

Upon the question of susceptibility Mr. Spear observes that the ase of Hanley is certainly not one of those in which severe idemics have followed long-continued immunity from the isease, for epidemics of measles have followed each other in mewhat quick succession, and the mortality has been for many ears above the average of the country. Amongst the medical en of the town, however, there was a consensus of opinion that ildren of debilitated constitution succumbed to the disease uch more readily than the previously strong and healthy. From is evidence—and it is in accord with general experience—the roblem of the high fatality would seem largely to resolve itself to one of the general condition as regards health of the youthful opulation. Here, as elsewhere, some 85 per cent. of the deaths ere of infants under 4 years of age.

One of the most striking features in the sanitary history of anley is the persistent high general mortality amongst young ildren. In 1863 the subject was discussed by Dr. Arlidge in a per in the *Medico-Chirurgical Review*, in which he adduced much idence of the injurious influence of the conditions of employment the earthenware manufacture upon the workmen and workomen—the parents of a "feeble progeny." These conditions are ill to some extent in operation in Hanley, but Mr. Spear thinks ere are other more controllable injurious sanitary conditions exting in this town. The atmosphere of the place is habitually urky, and the sanitary authority takes no effective measures to ntrol the emission of the densest fumes from the large works of rious kinds. The older parts of the town are closely built, and e yard space of much of the cottage property is close and coned. The dwellings are, as a rule, small, and rooms inadequately ntilated. Dampness of walls is a not uncommon cause of comaint in the older property; some of the houses are ill-lighted, lapidated, and dirty, and the surface about dwellings is often lapidated and ill-drained. There are a number of houses that, om defects such as these, should be dealt with as unfit for habition. The town is well sewered, but the private drainage needs nsiderable improvement. Means of ventilation are generally inequate or altogether wanting; direct connections between the terior of houses and the public sewers, especially by cellar llies, still exist in many cases; and privy vaults are stated to occasionally connected by an overflow pipe with the sewers. large number of these privy vaults still exist in the town, and e a source of much nuisance. They are often situated in the coned yards close by the dwellings; they are very foul, and there leakage from them, no doubt, into the soil. There is a prevaice of ordinary filth nuisance. These conditions exert a powerful luence on the vitality of the youthful population and its capacity resist disease, and the local authorities will do well to deal with em without delay.

INFLUENZA IN LARGE PROVINCIAL TOWNS.

CORDING to returns from many of the large English provincial vns, influenza appears to be very generally prevalent, and, as s the case in London during January, has caused a marked rise the mortality. This is the more noticeable, as while the epinic was principally confined to London a high death-rate preled in the metropolis, while the mortality in the provincial towns was then unusually low. Towards the end of January influenza began to be generally prevalent in the provinces, and the death-rate of many provincial towns rose rapidly, while the mortality in London was much below the average. Thus in London, during January, when the epidemic was there at its height, the death-rate was equal to 28.1 per 1,000, while in twenty-seven of the largest provincial towns, in but few of which influenza was then prevalent, it was only 23.7 per 1,000. On the other hand, the death-rate in London in February, with the subsidence of the epidemic, fell to 21.2 per 1,000, and was much below the average, while in the provincial towns it rose to 27.7 per 1,000, a rate considerably higher than in the corresponding period of any year on record. This marked rise in the rate of mortality in our large country towns was doubtless due to influenza, which is reported to be very prevalent in Bolton, Bradford, Leicester, Manchester, Nottingham, Oldham, Preston, Salford, and Sheffield. Among the smaller provincial towns in which the epidemic has recently shown marked prevalence are Burton-upon-Trent, Cambridge, Darlington, Dover, Exeter, Kidderminster, Leicester, Macclesfield, Rochdale, Weymouth, and Wigan. The remarkable rise in the mortality during February in some of the large provincial towns may be best pointed out by stating that the death-rate from all causes, as compared with the average rate in the corresponding month of the five preceding years, showed an excess of 52 per cent. in Leeds, 51 in Bolton and in Bradford, 43 in Wolverhampton, 37 in Sheffield, and 33 per cent. in Manchester and in Oldham.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, March 8th, 5,964 births and 4,955 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 25.1 and 25.6 per 1,000 in the two preceding weeks, further rose to 26.6 during the week under notice. The rates in the several towns ranged from 19.2 in Cardiff, 20.7 in Brighton, 21.9 in Nottingham, and 22.2 in Derby, to 38.8 in Blackburn, 39.4 in Wolverhampton, 40.1 in Bolton, and 45.6 in Manchester. In the twenty-seven provincial towns the mean death-rate was as high as 30.2 per 1,000, and exceeded by 7.9 the rate recorded in London, which was only 22.3 per 1,000. The 4,955 deaths registered during the week under notice in the twenty-eight towns included 170 which resulted from whooping-cough, 68 from measles, 52 from scarlet fever, 33 from diphtheria, 25 from "fever" (principally enteric), 24 from diarrhœa, and not one from small-pox; in all, 372 deaths resulted from these principal zymotic diseases, against 371 and 379 in the two preceding weeks. These 372 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic death-rate was equal to 2.1, while in the twenty-seven provincial towns it averaged 1.9 per 1,000, and ranged from 0.0 in Derby and in Leicester, and 0.5 in Birkenhead, to 3.2 in Salford, 3.3 in Norwich, 4.1 in Bolton, and 4.2 in Sheffield. Measles showed the highest proportional fatality in Liverpool, Manchester, and Norwich; whooping-cough in Sheffield, Salford, Bristol, and Bolton; and scarlet fever in Sunderland and Sheffield. In none of the towns was "fever" fatally prevalent. The 33 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 19 in London, 2 in Liverpool, 2 in Bolton, 2 in Sheffield, and 2 in Newcastle-upon-Tyne. No fatal case of small-pox was registered during the week, either in London or in any of the provincial towns, and 4 small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, March 8th. These hospitals contained 1,139 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,172 in the ten preceding weeks; 49 cases were admitted during the week, against 62, 77, and 80 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 6.0 per 1,000, and slightly exceeded the average.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns 795 births and 690 deaths were registered during the week ending Saturday, March 8th. The annual rate of mortality in these towns, which had been 28.3 and 26.9 per 1,000 in the two preceding weeks, further declined to 26.7 during the week under notice, but slightly exceeded the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Perth and Paisley, and the highest in Glasgow and Aberdeen. The 690 deaths registered in these towns during the week under notice included 104 which were referred to the principal zymotic diseases, equal to an annual rate of 4.0 per 1,000, which exceeded by 2.0 the mean zymotic death-rate during the same period in the large English towns. Among these Scotch towns the highest zymotic death-rates were recorded in Dundee, Glasgow and Leith. The 300 deaths registered during the week under notice in Glasgow included 17 from measles, 17 from whooping-cough, 5 from diphtheria, and 2 from scarlet fever. In Edinburgh 8 fatal cases of measles, 8 of whooping-cough, and 2 of diphtheria were recorded; and 4 deaths resulted from scarlet fever in Leith. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.1 per 1,000, against 6.0 in London.

THE SCALE OF FEES.

M.R.C.S. AND L.S.A., who is acting as an assistant, writes to ask whether his principal, who is a Poor-law medical officer, can claim an extra fee for attendance on a patient who, when under treatment for pneumonia, miscarried at the fourth month of pregnancy.

*** To entitle a district Poor-law medical officer to an extra fee, the child must be born at a viable period of pregnancy; hence, at the fourth month no extra fee is payable.

UNQUALIFIED ASSISTANTS AND DEATH CERTIFICATES.

MEMBER.—The second clause of Section 40 of the Births and Deaths Registration Act, 1874, declares that "Any person who wilfully makes any false certificate for the purpose of this Act, shall for each offence be liable on summary conviction to a penalty not exceeding ten pounds." A certificate is certainly false, within the meaning of the Act, if the medical practitioner certifies that he attended a certain deceased person in his last illness when the deceased had only been attended by his unqualified assistant. As this is an offence against the Registration Act, a prosecution is ordered by the Registrar-General in any case in which the evidence seems to afford reasonable chance of a conviction. Such cases should clearly be reported to the Registrar-General.

UNCERTIFIED DEATHS.

E. C. C. asks: 1. What number of deaths occur in each year which are uncertified by any medical man, and into which no inquiry, coroner's or otherwise, is held?

2. Is it illegal for the registrar to register a death where no medical certificate has been given nor any inquiry held?

3. What is the law on this point?

*** 1. The last published annual report of the Registrar-General shows that during the year 1888, the causes of 15,747, or 3.1 per cent., of the total deaths registered in England and Wales were not certified by a registered medical practitioner, or by a coroner.

2. It is not illegal (indeed, it is the duty of a registrar) to register even uncertified deaths, but it is also his duty to refer to the coroner previously to registration all deaths due directly or indirectly to violence, or attended by suspicious circumstances, or in which the cause of death is "unknown."

3. The law directs that all deaths shall be registered, but makes no special provision for the information of coroners concerning deaths respecting which inquests should be held, although the above-mentioned instructions are given by the Registrar-General to his local registrars.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations were, at an ordinary meeting of the Council on March 13th, admitted Members of the College.

Bristow, George Hamilton, L.S.A., 34, St. George's Square, Belgravia.
Logan, Roderic Robert Walter, L.S.A., Holmston, Harrow Road, Harlesden.

A CENTENARIAN.—Mrs. Kilham, of Mexborough, attained her 103rd year on March 2nd, having been born in 1787.

AN inquest was recently held at Sheffield on the body of an infant, aged 6 months, which was killed by falling from its mother's lap whilst the latter was in an epileptic fit.

A COMPLETE medical and surgical staff equipment for a force of 10,000 men in actual warfare has recently been received from England by the Defence Department of New South Wales.

DR. FERRIER, of King's College Hospital, has been appointed honorary member of the Imperial Leopold Charles Academy of Science in Halle.

THE late Mr. Michael Beveridge, who was Provost of Kirkcaldy, has bequeathed to its inhabitants the sum of £50,000 for the purchase of a public park and library.

IT was stated at the last meeting of the Metropolitan Asylums Board that there were at present only four small-pox cases under treatment. The admission of fever cases showed an increase, being 185 as against 163 in the previous fortnight.

IT is stated that the *Centralblatt für Nervenheilkunde*, which was discontinued last year, will appear again in April in an enlarged form, under the provisional editorship of Dr. Kurella, of Allenberg (East Prussia).

PROFESSOR VON NUSSBAUM, of Munich, has so far recovered from an attack of influenza, which recently endangered his life, that he hopes to be able to resume the duties of his chair in the forthcoming summer semester.

CREMATION IN PARIS.—The practice of cremation is so largely on the increase that it has been decided to build a new furnace at the cemetery of Père-la-Chaise, Paris. The furnace at present in use is kept burning night and day, a system which permits of the complete destruction of the corpse in less than an hour. It is hoped that with the new furnace the same result may be obtained in three-quarters of an hour at the most.

CORONERS' COURTS.—A motion made by Mr. Smith at a recent meeting of the London County Council to the effect that all coroners having jurisdiction within the administrative county of London be instructed, as far as it is practicable and accommodation is available, to cease holding inquests or coroners' courts in publichouses, was remitted to the Sanitary Committee for their consideration.

PRESENTATION.—At a meeting of the General Committee and medical staff of the Warneford, Leamington, and South Warwickshire General Hospital, held on March 5th, Dr. Bernard Rice was presented with a silver salver and tea and coffee service, value 50 guineas, in commemoration of his valuable services to the hospital during his occupancy of the office of house-surgeon for the past eight years. He was previously presented by the officers and nurses of the hospital with a handsome oak writing-table.

CRIMINAL LUNATICS IN BELGIUM.—The Brussels Academy of Medicine has expressed itself in favour of the establishment of a special asylum for criminal lunatics in Belgium. In this asylum they advise that all insane persons recognised to be dangerous to their fellow men should be confined, whether they have actually committed a crime or not. Lunatics whose mental derangement manifests itself in outrages on public morality, attempts at rape, etc., are classed as "dangerous."

SOME weeks ago a collective investigation of the influenza epidemic was organised in Germany at the suggestion of Professor Leyden, of Berlin. A table of fifteen questions relating to the etiology, symptomatology, course, and sequelæ of the disease was issued to all medical practitioners in the Empire. Answers are said to be pouring in in numbers beyond all expectation, and the committee is now considering how best to deal with the enormous material which has been collected.

PROFESSOR HENOCH.—Professor E. Henoch, of Berlin, a translation of whose great work on the diseases of children has just been published by the New Sydenham Society, celebrates his 70th birthday on July 16th. A committee, chiefly composed of Berlin practitioners, has been formed for the purpose of having a bronze bust of the venerable teacher executed, which it is proposed to place in the Children's Clinic of the Charité Hospital. Professor Henoch has been head of that department for the last 32 years.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.—The annual general meeting of this Association will be held at 11, Chandos Street, W., on St. Patrick's Day, March 17th, at 5 P.M. In the evening the members and their friends will dine at the Holborn Restaurant at 7 P.M., Dr. George H. Kidd, president, in the chair. Dinner tickets may be obtained from Dr. W. H. White, Honorary Treasurer, 43, Weymouth Street, London, W., or from Dr Phineas S. Abraham, Honorary Metropolitan Secretary, 11, Nottingham Place, London, W.

PROFESSOR PRITCHARD, speaking at the annual meeting of the Lincolnshire Veterinary Medical Society, at Peterborough, on March 3rd, said the outbreak of influenza in horses in London commenced at the end of November. Where the treatment was prompt in a large number of cases the animals quickly recovered. The losses, however, had been very considerable. It was a fact no doubt that the influenza we had been suffering from closely followed that of the horse, but he did not think there was any connection between the one and the other.

PROFESSOR L. HERMANN.—Dr. L. Hermann, the distinguished Professor of Physiology in the University of Königsberg, celebrated his silver jubilee as a teacher on March 3rd. Professor Hermann was a pupil of Professor Dubois-Reymond, and began his teaching career at Berlin. In 1868 he was appointed Professor at Zürich, and in 1884 he succeeded Professor von Wittich at Königsberg. Professor Hermann is well known to English students of physiology, through Dr. Arthur Gamgee's translation of his textbook.

LARGE BEQUESTS.—The will of John N. Shoenberger, of New York, has been filed for probate. After providing liberally for his widow and a number of relatives, he bequeaths nearly 1,000,000 dollars for the establishment, at Pittsburg, of the St. Margaret Memorial Hospital, as a memorial to his wife. He also bequeathed a plot of ground and a sum of 550,000 dollars for the erection of the buildings. Other large bequests to religious organisations were made. It is also announced that Mr. Henry Shaw has bequeathed to the Botanical Gardens School of St. Louis, in Missouri a sum of nearly one million sterling. With this munificent gi

the administrators propose, it is said, to adopt an extensive educational scheme as well as to extend the botanical resources of the establishment.

THERE seems to be a general tendency at present among civilised nations to put their pharmacopœial houses in order. The last edition of our own *Pharmacopœia* is hardly five years old, and already an Addendum is required. Germany, Holland, Russia, and the Scandinavian countries are busily overhauling their formularies. Our Transatlantic cousins are determined not to be left behind in the race for medicinal perfection. It is announced that a meeting of the various incorporated and pharmaceutical bodies of the United States will be held at Washington in June of this year, for the purpose of revising the *United States Pharmacopœia*.

SPANISH MEDICAL JOURNALS.—With one or two exceptions Spanish medical journals seem to have rather a frail hold on life. Often indeed they are only shown to the world, like Marcellus, for a brief moment to be forthwith reabsorbed into the Infinite. The death-rate has been exceptionally heavy among these publications of late, no fewer than three, the *Medicina Pratica*, the *Revista Cientifica* and the *Archivos de Medicina y Cirugia de los Niños*, having come to a premature end since the beginning of the present year. Nothing daunted, however by these melancholy precedents, Drs. Benito Alcina and J. Luis Höhr of Cadiz, have just brought out the first number of a new periodical entitled *La Revista Medico-Quirúrgica*.

A CHEMICAL JUBILEE.—If the ceremonial observance of "Jubilees" on all sorts of occasions can do anything to promote the gaiety of nations, "your Almain" must be the most festive of the sons of men. Every event in a man's life, from his wedding to his appointment as police-surgeon, is commemorated in Germany at intervals of a few years with solemn rites, of which libations of beer seem to form an important part. A particularly interesting "function" of this kind is arranged to take place at Berlin on April 11th, when the twenty-fifth anniversary of the discovery of "the structure of the benzol molecule" by Professor Kekulé, of Bonn, will be celebrated with appropriate pomp and circumstance.

PROPOSED SUBSTITUTE FOR QUININE.—Dr. Valude, of Vierzon, presented last year to the French Academy of Medicine a paper entitled "A New Specific for Intermittent Fever and Malarial Affections." The Commission appointed to examine it (MM. Dujardin-Beaumetz and Léon Colin) have now given in their report, which is, however, a somewhat guarded one. The new drug is the bark of the Calliandra Houstoni (Leguminosæ) a shrub growing in the warmer parts of Mexico, and known as panbotano. It is an ornamental plant which has been cultivated in England for many years in greenhouses, and which in some parts of Europe can be grown outdoors. An analysis of it has been made by Dr. Villejean, who has been unsuccessful in isolating either an alkaloid or a glucoside. The bark yields its active principles, whatever they may be, both to alcohol and water. Dr. Valude gave 70 grammes of the bark to adults in four doses during twenty-four hours, either in the form of a concentrated decoction or of an extract made with alcohol. Fifteen cases in all were treated, but only eight of these were intermittent fever of malarial origin. According to Dr. Valude, one or two days' treatment cut short the fever in every case. The medicine was given on an empty stomach, and was found to be apt to excite nausea and vomiting. The Commission was of opinion that the number of observations was too small to establish the value of panbotano, and that a definite opinion could only be given after much more extended observation and experience.

MEDICAL VACANCIES.

The following Vacancies are announced:

LNWICK INFIRMARY.—House-Surgeon (unmarried). Salary, £120 per annum, with furnished apartments, attendance, coals, and gas, but without board. Applications up to March 22nd to the Honorary Secretary.

ALLINASLOE UNION (Killaan Dispensary).—Medical Officer. Salary, £115 per annum and fees. Applications to Mr. Francis Egan, Honorary Secretary, Kilconnell. Election on March 18th.

ERKS ROYAL HOSPITAL.— Assistant House-Surgeon, fully qualified. Salary, £40 per annum. Applications before March 18th to the Secretary, Reading.

IRMINGHAM CITY ASYLUM.—Clinical Assistant. Board, lodging and washing, no salary. Applications to E. B. Whitcombe, Medical Superintendent.

BOROUGH OF SOUTHAMPTON INFECTIOUS DISEASES HOSPITAL.—Medical Officer. Salary, £300 per annum, and restricted from private practice. Appointment subject to approval of the Local Government Board. Applications, properly endorsed, to be sent in by March 19th to R. S. Pearce, Town Clerk, Municipal Officer, Southampton. Election, March 26th.

COMMERCIAL TRAVELLERS' SOCIETY OF SCOTLAND.—Medical Officer. Applications on or before Monday, March 17th, to the Secretary, J. C. Reid, C.A., 217, West George Street, Glasgow.

COUNTY COUNCIL OF LANCASTER.—Medical Officer of Health for the County Palatine of Lancaster. Salary, £800 per annum, with travelling expenses. Applications to the Clerk, Fred. C. Hulton, County Offices, Preston, before March 22nd.

COUNTY COUNCIL OF WORCESTERSHIRE.—Medical Officer of Health for the County of Worcester, Commencing salary, £600 per annum, with travelling expenses, with an increase of salary if district duties be added. Applications must be made not later than March 15th on forms to be obtained of W. Nicholas Marcy, Clerk of the County Council, County Hall, Worcester.

DRIGHLINGTON LOCAL BOARD.—Medical Officer of Health. Salary, £25 per annum. Appointment to be made on March 19th. Applications to the Clerk to the Board, George Furniss.

DURNESS, Sutherlandshire.—Medical Officer. Salary, £150 (with practice, population 1,000) and free house. Applications to the Inspector of Poor up to April 2nd.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Assistant Physician. Applications to the Secretary by April 9th.

GENERAL HOSPITAL, Birmingham. — Assistant House-Surgeon; surgical qualification. No salary; board, lodging, and washing provided. Applications to the House-Governor, Dr. J. D. M. Coghill, by March 29th.

H.M. PRISON SERVICE.—Dispenser, must hold diploma of the Pharmaceutical Society, age 20 to 40. Salary, £83, rising to £103 per annum. Applications to the Governor of H.M. Prison, Wandsworth.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square, W.—Resident Medical Officer; must possess the qualification of the R.C.S., and be familiar with the use of the laryngoscope. Salary, £50 a year, with board and rooms. Applications to the Secretary by March 31st.

KENSINGTON DISPENSARY.—Honorary Medical Officer. Applications to the Honorary Secretary, F. Leach, Esq., 7, Stanford Road, Kensington Court, by March 28th.

KETTERING LOCAL BOARD.—Medical Officer of Health. Salary, £50 per annum. Appointment to be made on March 20th. Application to Henry Lamb, Clerk to the Board.

KING'S COLLEGE, London.—Professor of Physiology. Applications to the Secretary.

METROPOLITAN ASYLUMS BOARD SOUTH-EASTERN FEVER HOSPITAL, New Cross Road, S.E.—Assistant Medical Officer. Salary, £15 per month, with board, furnished apartments, and washing. Age not exceeding 35 years; double qualification. Applications, on prescribed form, to W. F. Jebb, Clerk, Norfolk House, Norfolk Street, by March 18th.

MORPETH DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, coal, and gas. Applications to G. O. Wright, Honorary Secretary, by March 17th.

PARISH OF BIRMINGHAM WORKHOUSE INFIRMARY.—Medical Clinical Clerk. Double qualification; must devote his whole time. Appointment for six months. Honorarium £15 15s., with rations (not alcoholic liquors), coals, gas, apartments, washing, and attendance. Applications (on forms obtainable) to Walter Bower, Clerk, Parish Offices, Edmund Street, Birmingham, by March 17th.

PARISH OF MUTHILL, Perthshire.—Medical Officer. Salary not less than £40 per annum (with practice, population 2,300). Applications to H. Curr, Pitkellony House, Muthill, not later than March 15th.

PAROCHIAL BOARD OF FETTERCAIRY.—Medical Officer. Salary, £13 per annum, including medicines. Applications to the Clerk by March 22nd.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon, Salary £40 per annum, with board and lodging. Appointment for six months Applications to the Secretary, John T. Hugo, Secretary, by March 18th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Junior Resident Medical Officer. Appointment for six months Board and residence in the hospital. Applications to the Secretary, Conrad W. Thies, by March 19th.

ST. GEORGE'S HOSPITAL, S.W.—Curator of the Pathological Museum. Salary, £50 a year. Particulars of the Dean, to whom applications must be sent by March 15th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Physician.—Particulars of St. Leger Bunnett, Secretary, to whom applications should be addressed by March 22nd.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Surgeon. Must be Fellow or Member of the Royal College of Surgeons, England. Applications to St. Leger Bunnett, Secretary, by March 22nd.

ST. PETER'S HOSPITAL FOR STONE, Henrietta Street, Covent Garden.—House-Surgeon. Appointment for six months. Honorarium, 25 guineas, board, lodging, and washing. Must be M.R.C.S., and held position of House-Surgeon. Applications to the Secretary by March 22nd.

SOUTH DEVON AND CORNWALL HOSPITAL, Plymouth.—Assistant House-Surgeon; double qualification. Appointment for six months. Residence, board, and washing. Applications to the House-Surgeon by March 29th.

TRURO UNION (District of Probus, comprising parishes of Probus and Ladock).—Medical Officer and Public Vaccinator. Salary, £25 per annum, exclusive of fees of Local Government Board. Applications to the Clerk by March 18th. Election on March 19th.

TRURO UNION RURAL SANITARY AUTHORITY.—Medical Officer of Health for the Eastern District. Salary, £45 per annum, inclusive. Applications to the Clerk by March 18th.

UNIVERSITY OF LONDON.—One Examiner in Surgery. Salary, £150 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

UNIVERSITY OF LONDON.—One Examiner in Obstetric Medicine. Salary, £75 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

UNIVERSITY OF LONDON.—One Examiner in Materia Medica and Pharmaceutical Chemistry. Salary, £100 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

WALLASEY DISPENSARY.—An Assistant or Junior House-Surgeon, unmarried. Salary, £80 per annum, with furnished apartments, coal, gas and attendance. Applications by March 20th to the Honorary Secretary, Elm Mount, Penkett Poad, Liscard, Cheshire.

WEST LONDON HOSPITAL, Hammersmith. — House-Surgeon. Duties to commence April 1st. Applications to the Secretary-Superintendent not later than March 20th.

WOLVERHAMPTON UNION.—Medical Officer for the District of Willenhall. Salary, £140 per annum. Applications to the Clerk.

WREXHAM INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £80 per annum, with furnished rooms, board, gas, coal, and attendance. Applications to the Secretary, J. Oswell Bury, 9, Temple Row, Wrexham.

MEDICAL APPOINTMENTS.

ASKIN, Thomas Cuming, B.A., M.D., appointed House-Physician to the Liverpool Northern Hospital.

BAILEY, J. Johnson, reappointed Medical Officer of Health to the Marple Urban Sanitary District.

BENNET, Charles John, M.R.C.S.Eng., reappointed Medical Officer of Health to the Rural Sanitary District of the Chapel-en-le-Frith Union.

BLAKISTON, A. Alex., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Glastonbury Borough.

CAMERON, R. W., B.A.Lond., M.R.C.S.Eng., L.R.C.P.Lond., appointed House Physician to the North Staffordshire Infirmary, *vice* Dr. A. Knight Holt.

DANIELLS, G. H. S., M.B., B.C.Cam., appointed Resident Obstetric Physician to Guy's Hospital.

DAVIES, Thomas, M.R.C.S.Eng., L.R.C.P.Edin., appointed District Medical Officer and Public Vaccinator to the Parish of the United Parishes of Whittlesey, *vice* C. F. Harding, M.D., resigned.

DURRAN, David, M.B., C.M., appointed Medical Officer of Health to the Parish of Olrig.

GEDDIE, William, C.M., M.D.Aberd., appointed Medical Officer and Public Vaccinator for No. 2 District (north-west and south-west wards) of the Borough of Accrington.

GILL, J. McD., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant House-Physician to Guy's Hospital.

GOODALL, E., M.D.Lond., B.S., M.R.C.P., appointed Pathologist to the West Riding Asylum, Wakefield.

GOODALL, J. Kenaz, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Whittington Urban Sanitary District.

GORMAN, Thomas, M.B., B.Ch.Roy.Univ.Irel., appointed Assistant Surgeon to the Liverpool Dispensaries.

GRANGER, Edgar B., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Kettlewell District of the Skipton Union, *vice* P. P. Johnson, M.B., resigned.

GREEN, Arthur, M.B., M.R.C.S., appointed Medical Officer to the East District of the Gateshead Union.

HARRIS, Spencer C., L.F.P.S.Glasg., L.M., L.S.A., reappointed Medical Officer of Health to the Ely Urban Sanitary Authority.

HEHNER, Otto, appointed Public Analyst for the county of the Western Division of Sussex.

HERRON, James, M.D., appointed Medical Officer of Health to the Board of Works for the St. Saviour's District, S.E., *vice* Robert Bianchi, deceased.

HESLOP, Wm. J., L.K.Q.C.P., F.R.C.S.Edin., reappointed Medical Officer of Health to the Stretford Urban Sanitary District.

HICKMAN, H. V., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Obstetric Physician to Guy's Hospital.

JAMIE, R. Wyatt, reappointed Medical Officer of Health to the Ashby-de-la-Zouch Rural Sanitary Authority, Hugglescote District.

KING, H. W., M.D.Edin., M.R.C.S.Eng., elected Honorary Physician to Chester Infirmary.

KYLE, T. W., M.D.Qu.Univ.Irel., L.M., M.Ch., reappointed Medical Officer of Health to the Ashby-de-la-Zouch Rural Sanitary Authority, Measham District.

LANSDOWN, R. G. P., M.B., B.S.Durham, appointed Resident Obstetric Physician to Guy's Hospital.

MONAGHAN, Thomas Joseph, L.R.C.S., L.R.C.P.Edin., appointed Medical Officer and Public Vaccinator to No. 1 District (north-east and south-east wards) of the Borough of Accrington.

MUDGE, T. H. Tracey, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Paignton Urban Sanitary District.

NASH, Vincent, M.D., elected Resident Assistant Medical Superintendent to the Richmond District Asylum for Lunatics.

RIVERS, W. H. R., M.D.Lond., M.R.C.S.Eng., appointed Junior House-Physician to the National Hospital for Paralysed and Epileptic, Queen Square, Bloomsbury.

SMITH, W. R., M.D.Aberd., M.B., C.M., etc., appointed Medical Officer to the School Board for London.

SMITH, Wm. Tonge, M.D., M.R.C.S., appointed Resident Medical Assistant to the City Hospital for Infectious Diseases, Newcastle-upon-Tyne, *vice* James Hindhaugh, M.B., resigned.

TAYLOR, James, M.B., M.S.Edin., appointed Senior House Physician to the National Hospital for Paralysed and Epileptic, Queen Square, Bloomsbury.

THOMAS, Alfred, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Cottage Homes, West Derby Union.

WATERS, Alfred J. G., L.R.C.P.Edin., appointed Medical Officer of Health to the March Local Board, *vice* W. S. Johns.

WILSON, George, M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Clutton Rural Sanitary District.

WOODWARD, William, M.D.St.And., L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Malvern Link Urban Sanitary District.

DIARY FOR NEXT WEEK.

MONDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart: On Phosphorescent Organs and Colour in Nature. Lecture VII.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.; Clinical Evening.—Mr. William Rose: 1, Case after Colotomy; 2, Case of Ligature of the Carotid for Aneurysm. Dr. de Havilland Hall: Case of Unusual Aortic Diastolic Murmur. Dr. Sidney Phillips: Case of Aortic Disease presenting Unusual Features. Mr. D. H. Goodsall: Two Cases of Horse-shoe Fistula cured without division of Sphincters. Dr. Beevor: Case of Athetosis after Injury affecting the Face. Mr. Keetley: Two Cases of Hip Excision, presenting points of Special interest. Dr. Colcott Fox: Case of Stenosis of the Lower Part of the Pharynx, from Hereditary Syphilis. Mr. Ballance: Hemi-hypertrophy of the Head and Hypertrophy of certain Toes. Dr. Acland: Case of Symmetrical Trophic Lesion of the Nails. Mr. Bruce Clarke: Result of Plastic Operations on the Face after Removal of Anthrax. Mr. Hurry Fenwick: Cystoscopic View of a Saccule in the Bladder; and other Cases by Mr. Paget, Dr. Montague Murray, etc.

TUESDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. G. Newton Pitt: The Goulstonian Lectures on Cerebral Lesions. Lecture III.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Dr. Samuel West: Bronchial Casts from Bronchitis Crouposa. Mr. A. Bowlby: Three Cases of Coccygeal Tumours, Two in Living Patients. Mr. Jonathan Hutchinson, jun.: Paget's Disease of Nipple with Psorospermiæ. Mr. J. Bland Sutton: Half Vertebra in a Rabbit. Mr. Stephen Paget: Two Cases of Imperforate Rectum. Mr. E. Hurry Fenwick: Spontaneous Fracture of Urinary Calculus. Dr. W. J. Collins: Cancer of Œsophagus Invading Trachea. Card Specimens.—Mr. Stephen Paget: Proliferating Cyst of Breast. Mr. G. R. Turner: Fracture of Both First Ribs. Mr. J. W. Targett: Carcinoma Vesicæ Secondary to Scirrhus of the Mamma.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart: On Phosphorescent Organs and Colour in Nature. Lecture VIII.

ROYAL MICROSCOPICAL SOCIETY, King's College, W.C., 8 P.M.—Mr. A. D. Michael: On the Variations of the Female Reproductive Organs, especially the Vestibule, in different species of Uropoda.

THURSDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. J. Hughlings Jackson: The Lumleian Lectures on Convulsive Seizures. Lecture I.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Dr. Savage: On the Warnings of General Paralysis in the Insane. Drs. Broadbent and Hughlings Jackson will take part in the discussion.

FRIDAY.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Professor Charles Stewart: On Phosphorescent Organs and Colour in Nature. Lecture IX.

METROPOLITAN POLICE SURGEONS' ASSOCIATION, St. Thomas's Hospital, 8 P.M.—Mr. J. R. McIlraith: On the Present State of English Law with Regard to Drunkenness and Inebriety. After which a discussion will be opened by Dr. Forsyth: On the definition of the term "drunk."

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

EDWARDS.—On February 26th, at Beechwood, Rochdale, the wife of E. H. Edwards, M.B., of China, of a daughter.

MARRIAGE.

GRANT—FRITH.—On January 16th, at St. Stephen's, Wandsworth, J. Dundas Grant, M.A., M.D., of 17, Finsbury Square, to Helen, daughter of the late Edward Frith, Esq., of West Hill, Putney.

DEATH.

O'NEILL.—On Sunday, March 9th, at Yew Tree, Tabley, Cheshire, Dr. S. L. O'Neill, of Wisbech, late Army Medical Staff, aged 39.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W, 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W, 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

SOHO, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

VENTILATION OF STEAMERS AND SHIPS.

DR. P. MURRAY BRAIDWOOD (Shirehampton, Bristol) asks to be referred to sources of information as to the methods used at present in the ventilation of steamers and ships in the mercantile, naval, and emigration services.

D.P.H.R.C.S.I.

MR. EDWARD T. THOMPSON (Brailes, Shipston-on-Stour) writes to ask any members in possession of the D.P.H. of the Royal College of Surgeons, Ireland, kindly to inform him what books he ought to read for the above diploma, and also the style of examination it is, whether oral, etc. He would feel deeply indebted for any information respecting the above, and if anyone would be good enough to send him some of the examination papers he would be still more obliged, and will return them after perusal.

ANSWERS.

NURSING SISTER.—The lectures by Dr. Wallace Anderson on *Medical Nursing*, and the *Notes on Surgery for Nurses* by Dr. Joseph Bell, are among the best books published for the use of nurses. Mr. Laurence Humphry's *Manual of Medical and Surgical Nursing* is also excellent, and contains chapters on disease in children, and on the management of childbed.

CONVALESCENT HOME FOR SCARLET FEVER PATIENTS.

A CORRESPONDENT writes: "H.B." may obtain the information he requires as to home for convalescent boy by writing to "Medicus," care of Mr. Dale, chemist, Barwick Street, Scarborough.

NOTES, LETTERS, ETC.

PROVIDENT DISPENSARY REPORTS.

DR. RENTOUL (Hartington Road, Liverpool) will feel much obliged if readers would forward to him the last issued annual reports of those provident dispensaries with which they are connected, or of which they know.

WE have received from Mr. E. Luke Freer, Honorary Surgeon of the Birmingham Royal Orthopædic Hospital, a letter in which he calls attention to a passage in a review published on March 1st, which appears to reflect injuriously on the moral rectitude of specialists as a body. The passage was not intended to bear this interpretation, and we can only express our regret that it should have been so interpreted.

CUMULATIVE CHARGES.

MEDICUS writes: A lady has just informed me that recently her family of six children have all had measles, and on the doctor's account being rendered each little patient was individualised, and honoured by a special charge at each visit of 5s., amounting to 30s. at each call of the doctor. The family is in strictly moderate circumstances, and the attendant an ordinary suburban practitioner, while less than five minutes' distance intervenes between the dwellings. I should be much interested to know from your readers if this charge is in accordance with professional usage in England. If it be so, we may cease to wonder at the desire on the part of even well-to-do members of society to take advantage of gratuitous hospital services.

"BRITISH," NOT "ENGLISH."

SCOTUS ET BRITANNICUS SUM writes: Let me remind "Scotsman" that these specks on the ocean, Albion and Ierne, were termed the Britannic or British Isles long before an Angle set foot on our island's shores. "British," therefore, includes Irish, which with "English" is utterly impossible. And the use of the term "English" instead of "British" is not the more convenient; it is wanting in the ring of true brotherhood; it is contrary to the Union treaties; and by the term of lesser denotation including the greater, it is wrong alike in logic and in fact.

An Unusual Distribution of the Radial Artery.

H. Goodwyn, L.R.C.P., L.R.C.S., writes: I believe the distribution of the radial artery which occurred in a patient of mine to be sufficiently rare to be worth recording.

The artery in the forearm, instead of following its usual course, became at the junction of the middle and lower third of the radius quite superficial, passed over the tendon of the supinator longus and other posterior aspect of the bone, and thence continued downwards in a somewhat tortuous manner to the space between the tendons of the extensor ossis metacarpi and extensor secundi internodii pollicis, where it disappeared. There was no vessel following the usual course, and the superficialis volæ appeared to be absent. The artery in the other arm was normal. Gray's *Anatomy* mentions that such an abnormality does occur occasionally.

Army Doctors and Civil Practitioners.

Hope writes: Some practitioners complain of the opposition of (ex?) army and navy surgeons in private practice. But why should not the Association induce the Government to give those of their medical brethren who have spent the best years of their lives in naval or military employ the preference for suitable billets in the gift of the Admiralty and War Office? The Naval Medical Regulations of 1885 (paragraph 22) give a distinct promise to the above effect. Is this done, or is it only intended as a lure to catch the "wily" candidate? The late committee on army medical matters, *au contraire*, actually advises Government to give the preference to civil surgeons for charge of troops at home stations; but surely retired army surgeons, who have borne the heat and burthen of the service, are entitled to as much consideration at least as retired naval surgeons. Were "good" ex-naval and military "doctors" who have done their duty encouraged by being given some of the many billets in the gift of the Government for which their training and experience especially suit them, we would hear far less of this competion in private practice, whilst being a distinct gain to both services by keeping men in suitable employ, preventing them from getting rusty.

The Moon Fund.

Dr. Horrocks, Treasurer (26, St. Thomas's Street, Southwark, S.E.) sends the following further subscriptions to the above fund received since the publication of the last list. The list will close on March 31st.

	£	s.	d.
G. G. Bothwell, L.R.C.P.	2	2	0
W. Nicholson, M.D.	1	1	0
S. L. Dobie, L.R.C.P., Secunderabad, India	1	1	0
	4	4	0

Case of Congenital Syphilis with Arrested Development.

Dr. W. F. Grant (Mile End Road, E.) writes: The patient was a boy, 3 months old. The right side of the face was curiously malformed. The ascending ramus of the lower jaw was absent, the right ear being represented by an imperfect auricle, with a small dimple to mark the site of the external auditory meatus. The child while under my care developed an attack of pemphigus, and died soon after from exhaustion.

Life Assurance and Medical Examination.

Mr. J. Cornbill, M.R.C.S., L.A.C. (Ilfracombe) writes: As proposals are now being made to modify in some way the method of life assurance, may I suggest, through the Journal, that while it would be most undesirable to dispense with a medical examination, it would be well to stipulate in the policy that the amount insured would not be paid if death resulted from phthisis within a given time, say eighteen months after the insurance was effected; the premiums paid being simply returned with interest in such cases. I mention this because a family history of phthisis is sometimes concealed from the referee. A most strict inquiry should be made by companies' agents into the habits of the insurer, as in cases of intemperance much information may be withheld.

To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the Journal brevity of style and conciseness of statement greatly facilitate early insertion We are compelled to return or hold over a great number of communications, chiefly by reason of their unnecessary length.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, etc., RECEIVED.

Micro-organisms with Special Reference to the Etiology of the Infective Diseases. By Dr. C. Flügge. Translated from the Second Thoroughly Revised Edition by W. Watson Cheyne, M.B. London: The New Sydenham Society. 1890.

Lectures on Children's Diseases. By Dr. E. Henoch. Volume Second. Translated by John Thomson, M.B., F.R.C.P.Edin. London: The New Sydenham Society. 1889.

Browning's Message to his Time. By Edward Berdoe, M.R.C.S.Eng., L.R.C.P. Edin. London: Swan Sonnenschein and Co. 1890.

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THE

GOULSTONIAN LECTURES

ON

SOME CEREBRAL LESIONS.

Delivered before the Royal College of Physicians of London.

By G. NEWTON PITT, M.A., M.D., F.R.C.P.,

Assistant Physician to, and Demonstrator of Morbid Anatomy at, Guy's Hospital.

LECTURE I.

ANALYSIS OF FIFTY-SEVEN FATAL CASES OF EAR DISEASE, AND OF THE COMPLICATIONS WHICH LED TO DEATH.

:ORRHŒA is but too frequently looked upon as a troublesome mplaint that must be endured, and when patients have had a scharge which has persisted for many years in spite of all eatment, they, at any rate, if not their medical attendant as ell, are apt to consider that they have done with it, that it is peless for them to trouble any more about it, and that it will ver alter. Yet there can be no greater mistake, for occasionally, ıder some exciting condition, the inflammation spreads to the anial cavity, the patient rapidly becomes mortally ill, and in any instances dies after an illness of a few days', or it may be me weeks', duration.

The unexpected onset of grave symptoms, the agonising head- he which too often forms one of them, the state of mental torpor coma into which so many of the patients pass, and the utter elessness of medical treatment in the more severe cases, must ı various occasions have impressed themselves deeply on every- ıe here.

Of late years improved methods of surgery, and especially the ore effective means that are adopted to sterilise foul and septic ntres of infection, have led, in a few instances, to more success- l results. Now that attention is being directed to the matter, e may look for a much greater measure of success; and here, as ıs so frequently been the case, the pathologist is able to indicate the surgeon the lines on which the treatment should be laid)wn.

For my purpose I have examined the *post-mortem* records Guy's Hospital for the years 1869 to 1888, a period twenty years, and have found 57 inspections in which r trouble has set up disease in the cranial cavity, which timately proved fatal. I desire to express my appre- ation of the kindness of my colleagues in placing their ses at my disposal, and thus providing me with a large number valuable records, the majority of which have not been pre- ously published. I am more particularly indebted to Dr. Good- ırt, who made a large number of the *post-mortem* examinations. uring this period there were nearly 9,000 inspections. Death as, therefore, traceable to ear disease in 0.66 per cent. of the ses. Further examination shows that 27 of the cases had oc- ırred during the last four years, which would raise the ratio for at period to 2 per cent. I am quite unable to offer any explana-)n of this very greatly increased frequency. An examination the reports fails to throw any light on the matter, and there is) reason to suppose that it was due to any great difference in the eatment.

No case of simple otitis media, with or without disease of the astoid cells, was fatal during the whole of this period; and only vice was the complication that led to the fatal result outside the anial cavity, and even then it was in contiguity with it

In one there was a retropharyngeal abscess, and in the other e patient bled to death from rupture of the internal carotid artery. eath from ulceration of the carotid is a very rare event, only urteen cases having been recorded, according to Politzer.

It is worth remembering that when pyæmia occurred in ear disease, the onset was preceded in all cases by thrombosis of the lateral sinus. The difficulties of diagnosis in ear disease are much increased by the fact that, not only may a patient die without any otorrhœa having been noticed (this occurred in nine, that is, in one-sixth of the cases), but in two instances the membrana tympani was found intact at the inspection. These patients died with meningitis and lateral sinus thrombosis respectively. The possibility of the otorrhœa being secondary to the meningitis may be the explanation of these cases.

Of the 57 cases, 34 were males and 23 females. The right ear was the source of the mischief rather less frequently than the left. Seventeen of the patients were under 10, the same number between that age and 20; 14 in the next decennial period, and only 9 over 30. The only patients over 50 were the man aged 65, who died from hæmorrhage from ulceration of the carotid, and a woman aged 66, who died with meningitis. Three of the 4 babies who died under 3 years of age succumbed from meningitis.

The acute symptoms in ear disease appear sometimes to come on spontaneously (24); at other times they have followed exposure to cold (4), a blow on the ear (6), mastoid suppuration (13), the introduction of foreign bodies into the external meatus (3), or the removal of a polypus (1). Any of these causes may start acute inflammation in the mastoid cells, or antrum, or the middle ear; especially if the ear be already diseased. Rapid swelling of the mucous membrane takes place, and a discharge of sero-pus or pus ensues from the surface. Should there be a sufficient outlet, this is evidenced by a great increase in the otorrhœa; but when the swollen mucous membrane blocks up the outlet, the chronic external discharge will cease entirely. This cessation is really a symptom of the acute inflammation, and not a cause thereof, as has been sometimes assumed. Every accession of fresh symptoms is due to the imperfect drainage of the contents of the middle ear, the mastoid antrum, or of the mastoid cells. The discharge was increased in 13 cases, and absent in 10.

As long as no pus is pent up under tension no evil symptoms ensue, but with an increase of tension, earache and a more or less severe headache will develop. With the retention of pus in the petrous bone, or in the mastoid cells or antrum, patients may suffer intense pain, their temperature may be high, and they appear extremely ill, but only those cases proved fatal in which the inflammation spread outside the petrous bone. The majority of these cases, if they are freely drained by opening up the mastoid cells, recover and lose their severe symptoms, and many of them ultimately discharge their pus externally without surgical aid; but the risk is diminished by skilful surgical interference.

Toynbee, in his papers in 1851 and again in 1855, attempted to prove that the seat of the complications could be determined to a great extent by the spot in which the pus was collected in or about the petrous bone. His careful papers did much to elucidate the matter, but it is generally held that further facts have not corroborated his conclusions. He thought that (1) affections of the external meatus and mastoid cells produce disease in the lateral sinus and cerebellum, (2) affections of the tympanic cavity produce disease in the cerebrum, (3) affections of the vestibule and cochlea produce disease in the medulla oblongata. As is shown later on, thrombosis of the lateral sinus often has originated from caries of the posterior wall of the tympanic cavity, and mastoid disease sometimes spreads to the middle fossa of the skull; still the usual sequence is that indicated by Toynbee. Disease of the internal ear appears usually to set up meningitis in the posterior fossa of the skull.

In an adult the mastoid cells may be divided into two groups, a set arranged vertically, which form the mastoid process and which do not exist during the first years of life, and another lying

between the mastoid and the tympanum, arranged horizontally. During the two first years of life even these horizontal cells are but little developed, and the external meatus is separated from the middle fossa of the skull by a lamina of bone, continuous with the roof of the tympanum, which is often extremely thin, and is liable at this age to share in any attack of inflammation affecting the mastoid cells. At a later age the layer of bone separating these parts from the middle fossa is often more than a twentieth of an inch thick. Toynbee, therefore, thought that disease of the mastoid cells at an early age produced disease in the middle fossa, while later in life the disease spread to the lateral sinus. In the cases of mastoid disease which were examined, it was found that the lateral sinus was thrombosed in two children under 10 years of age, whereas in eleven patients above 10 the lateral sinus was thrombosed in 6, there was a temporo-sphenoidal abscess in 4, and a cerebellar abscess in 2.

The roof of the tympanum is formed by an elongated plate of bone, the thickness of which varies so much even in health that it may be dense, and a line in thickness, or a mere shell of translucent bone, parts of which are often deficient. The experience of the *post-mortem* room shows that the situation of the groove for the lateral sinus is liable to great variation, and that it may excavate the bone deeply, so as to be separated from the mastoid cells and the cavity of the middle ear by a thin layer of bone, in which lacunæ may be found when there has been old-standing caries, but rarely otherwise. When, in trephining, the lateral sinus is found more anterior than usual, it suggests that the posterior wall of the middle ear and the inner wall of the mastoid cells are thinner than normal, and that therefore disease is more likely to have spread into the posterior fossa rather than forwards. The development of the mastoid cells and the density of the bone round them are equally variable.

The anatomical and *post-mortem* evidence therefore lead me to the conclusion that the condition of the mastoid cells and of the roof of the tympanum, and the situation of the lateral sinus, play the most important part in determining the direction in which the disease shall spread; and that too great stress should not be laid on the presence or absence of disease of the mastoid, although it may be somewhat of a guide to the seat of the mischief.

As far as can be judged from our records, nothing can be learnt which will be of assistance in diagnosis, from the condition of the wall of the middle ear. There was no complication which was not in some instances accompanied by caries or necrosis. The most convenient arrangement of the complications to be discussed will be according to their site: 1, dura mater; 2, cerebral tissue; 3, sinuses; 4, pia-arachnoid.

Owing to the thinness of the roof of the tympanum, the dura mater over the anterior surface of the petrous bone is rather more often inflamed (in 16) than that over the posterior wall of the middle ear, but less often if we include the part bounding the mastoid cells as well (18). The parts may be discoloured merely, or they may be sloughing and fœtid, or pus may collect beneath the membrane, whence it may rupture into the arachnoid cavity, setting up a meningitis (3), or it may be let out by operation.

In these cases the otorrhœa is of old standing, and generally the bone beneath is inflamed, discoloured, carious or necrosed, and in some of the cases caries had produced fair-sized apertures in the bone, through which the infection had spread directly.

I wish to emphasise the occurrence of inflammation or sloughing of the dura mater over the roof of the tympanum, which was present in 10 out of the 12 cases of temporo-sphenoidal abscess, and probably 7 of these could not have recovered unless the dura mater as well as the abscess could have been allowed to drain. In extradural abscesses the inflammation has probably spread along the lymphatics round the veins. An extradural abscess may produce optic neuritis, as is proved by the following case which was under Mr. Lane's care:

Optic Neuritis due to Extradural Abscess.—E. T., aged 12, under Mr. Lane. October 4th, 1888. Received a blow on her ear five years ago; no history of otorrhœa till four weeks ago, after a cold. Headache on September 28th. Drowsy on October 2nd. On admission, October 4th, double optic neuritis, headache, retraction of head, vomiting. Trephined at once; on right side half an inch of bone was removed above posterior root of zygoma, the anterior surface of the petrous bone was exposed, and some drops of offensive pus let out. Temporo-sphenoidal lobe was explored with a needle, without result. On gouging further back the lateral sinus was exposed, the dura mater was found separated from the bone, and 1½ drachm of foul pus welled out. The mastoid process which contained pus had been previously gouged so as to communicate with the middle ear, and a few drops of pus near the sinus let out. The wound was frequently syringed out and dressed antiseptically. October 8th. Temperature 105°; pulse 165; drowsy. She improved very much in every way; at first the optic neuritis diminished; still headache and drowsiness increased till her death, on October 14th. *Post mortem* there was abundant pus in the posterior fossa bathing the cerebellum. The brain, etc., normal. No pus between the dura mater and petrous bone, which was necrosed. The softened dura mater behind the petrous bone was perforated, and the abscess had discharged on to the surface of the brain.

The neuritis cleared up considerably after the operation, and the meningitis from which the child died only came on at the end.

Besides this case, which was verified *post mortem*, we have had other cases of otorrhœa with optic neuritis which have recovered; one under Dr. Moxon's care some years ago recovered without operation, the three following recovered after trephining.

Mastoid Suppuration; Optic Neuritis; Trephining; Recovery.—A. K, aged 13, under Mr. Bryant in 1872. Two years' right otorrhœa; two weeks' earache; one week mastoid pain; failure of sight in the right eye. Admitted with bleeding from the right ear, with right optic neuritis, drowsiness, and drawling speech. The mastoid was trephined. Four days later intense optic neuritis, blind with the right eye, perception of light with the left. The right pupil was dilated and insensitive. After a fortnight an abscess broke at the back of the ear. Almost blind. Two weeks later she could see objects, and after a time the sight improved somewhat. The local trouble disappearing.

Mastoid Suppuration; Optic Neuritis; Trephining; Recovery.—E. B., aged 20, under Dr. Pavy. October 10th, 1885. For the last month she has had earache, for two weeks severe pain in her neck; she often screams with pain. She has lost flesh considerably. On admission she was constantly moaning; takes but little notice of anything; answers questions slowly. On the 13th the mastoid was trephined; ℥ij of foul pus let out. The pain at once decreased. The temperature for the next three weeks was 98° to 103°. Well-marked optic neuritis. On November 14th an abscess was opened below the mastoid. On the 19th another abscess was opened, and again on December 2nd. She left on January 8th, after an attack of erysipelas, feeling quite well.

Mastoid Suppuration; Optic Neuritis; Recovery.—G. W., aged 13, under Dr. Taylor. February 3rd, 1887. After exposure to cold sixteen days ago he had earache, followed by otorrhœa in four days' time. He has been laid up for the last ten days with pain in the head and neck, with rigors. The discharge is offensive, and there is slight œdema over the mastoid. Temperature 104.6°. Early optic neuritis, best marked in the left eye. Mr. Jacobson trephined, and let out some offensive pus from the mastoid cells. By March 2nd the discharge was sweet, and the operation opening was almost healed. Temperature normal. Soon after the operation the optic discs had reached a stage of pronounced neuritis, and they have not varied materially since. He went home again feeling quite well. In May, 1888, the discs were still swollen, but in June they had cleared up; the outline was sharply defined, and the veins were not tortuous. It is difficult to be certain what was the lesion; possibly a pachymeningitis, or even a thrombosis of the sinus, with certainly retention of pus in the bone. It is improbable that the sinus was thrombosed, as with so offensive a discharge it is unlikely that the mischief would have cleared up at once as soon as the ear was drained. I incline to the view that the optic neuritis was due to the condition of the dura mater. This was certainly the explanation in the first, and very probably in the other two.

Of 18 cases of cerebral abscess, 9 occurred on each side of the brain, and the preponderance which Gull and Sutton found in their

cases in favour of the right side of the brain was probably acci-ital. In the cases under consideration, 11 of the patients were n, and 13 of the cases occurred between the ages of 10 and 29; only case over 40 being one of pontic abscess. Only twice had otorrhœa lasted less than a year, and in these the duration was en and four months respectively. This agrees with the general erience that otorrhœa does not set up cerebral abscess until it lasted months or years.

hree of the abscesses were in the cerebellum, one in the pons, two the centrum ovale, and the remaining twelve in the temporo-enoidal lobes, within a very short distance of the roof of the panum.

n only 2 of these 12 cases of temporo-sphenoidal abscess was dura mater over the anterior surface of the petrous bone lthy, in 8 it was sloughing, in 2 inflamed, and in 1 there was a alised extradural abscess. On two occasions the dura mater on posterior surface was also diseased.

he exact mode in which the brain becomes infected in these tem-o-sphenoidal cases has long been a moot point. Where there is lthy brain tissue between the abscess and the bone it is pro-le that the infection has been spread by the veins which empty the superior petrosal sinus, from the temporo-sphenoidal lobe he one hand, and the tympanum on the other, by means of a ic phlebitis, or more probably by means of the perivascular phatics. Other veins run direct from the brain into the dura er over the petrous bone. It is worthy of note, however, that ot a single case is there a statement that the superior petrosal is was thrombosed; it was certainly examined in many of the s, though possibly not in all. If the mischief had usually ad by the veins and not by the lymphatics, we should have ected thrombosis to have been occasionally noticed. Frequently brain adheres to the anterior surface of the petrous bone, over ch the dura mater is inflamed, and thence infection spreads by act to the cerebral tissue.

he two abscesses in the centrum ovale originated the one from mbosis of a vein from the Sylvian fissure to the dura mater, the other from pyæmic infection due to an old septic thrombus he lateral sinus on the opposite side. An extradural abscess nd the petrous bone started one of the cerebellar abscesses, and her had originated near the torcular Herophili from an old mbus in the lateral sinus.

nly five of the abscesses were less than an inch in diameter, le ten exceeded two inches. Death was preceded by coma in majority, and in seven cases the duration of the coma varied a few hours to three days, and in only three instances was limit exceeded.

ne symptoms of cerebral abscess are often very vague for a iderable time, which may be called the latent period, the tion of which is very variable. In one instance the symptoms lasted over a year; in three over two months; in nine over month, and in five under a month. During this period head- (15), vomiting (10), and a slow, dull, mental condition are lly present. Among the other symptoms which were noted restlessness (4), lethargy, drowsiness (5), irritability, delirium convulsions (4), earache (4), emaciation (2), noisiness (2), and cerebration, the patients often taking a long time before they ed to questions. The headache is usually only of moderate ity, and the vomiting is occasional and causeless. In only cases were rigors noticed; in two they were probably due to companying lateral sinus thrombosis. The other cases were licated by broncho-pneumonia and an extradural abscess. It d therefore appear that rigors are infrequent with cerebral sses, and are rarely directly due to them. Among the sym-s which are of great significance when present with old dis-of the left ear are failure of memory and aphasia (2); and disease of either ear, paresis of the face (2), or of the face rm (2), or tremors and twitchings of the hand. The aphasic ition, when present, was characterised by the loss of some s, and was probably directly due to the destruction of the oro-sphenoidal auditory centre, producing word-blindness.

only five (28 per cent.) of the cases was there an accompany-neningitis, and in each instance it was secondary apparently e abscess. One abscess had invaded the cortex, two had burst the surface (one of them the day after an exploratory opera-in a fourth the meningitis followed the drainage of a fœtid ss, and in the last case it was limited to the base and was bly secondary to the discharge of the contents of the abscess he ventricle. Hence in none of the cases did the meningitis r to have spread directly from the petrous bone. Only three times was there more than one abscess; in two of these instances there were one and two adjacent secondary abscesses respectively; and the remaining case, which alone of all these five abscesses lay on the opposite side to the affected ear, consisted of two adjacent abscesses, which appeared to be secondary to a thrombus of some date in the opposite lateral sinus. Four times (22 per cent.) there was suppuration about the mastoid. In none were there any pulmonary abscesses or a general pyæmia. Once there was a recent sinus thrombosis, and twice old clots of seven and twelve months' date, in the lateral sinus. When the abscess was situated rather higher in the centrum ovale (twice) there were attacks of tremors, with loss of power in the right arm, without loss of consciousness, but associated with facial paralysis in the one case, and with paresis of the face and arm in the other. Facial paralysis; was caused in one patient by an extradural abscess round the internal auditory meatus, and associated with crossed hemiplegia, in another patient it was due to an abscess in the pons.

In seven cases, in which a note of the condition of the optic discs was made, they were found swollen in two, in which the abscesses were large; there was optic neuritis in two (both having also old sinus thrombosis, which was probably the cause of it), and in three they were normal. In all but two the patients were fully examined, and probably therefore in the majority of the remaining cases, in which no note is made of the condition of the discs, they were normal, It would appear that changes in the optic discs are not frequent, and that when present they are often not advanced.

Pflüger has once recorded optic neuritis in connection with a cerebellar abscess. Neuritis was present in one case, but was very probably due to the sinus thrombosis.

Lateral Sinus Thrombosis; Cerebellar Abscess; Optic Neuritis.—J. S., aged 23; under Dr. Fagge, 1878. A year ago the patient was weak and ill, giddy, and had occipital headaches; otorrhœa since childhood, dragging left leg in walking; rigors for six months. Five weeks ago he lost the use of his legs; he sweats profusely. October 2nd. Right otorrhœa. Incisions made over the right mastoid. Double optic neuritis. Temperature 98° to 105° up to November 1st; normal later; relieved by quinine. Rigors, vomiting for last fortnight of life, but feeling fairly well. On December 22nd he suddenly woke up with a scream, became collapsed, and died four hours later. Severe pains at the back of the neck if moved. *Post mortem:* Healed scar over occipital bone external to the lateral sinus; the dura mater and bone for an inch and a half near the torcular Herophili were thickened and inflamed; a dense decolorised adherent clot extended from torcular in right sinus for half way; a second less dense decolorised clot extended in outer part, leaving a space between; the external surface of the skull was healthy. The right tympanum contained pus; the left very indurated roof, but free from pus. An abscess three-quarters of an inch in diameter, filled with greenish pus, was situated in the upper part of the right posterior or semilunar lobe of the cerebellum; the surface tore on removal where it was adherent to the right side of the torcular Herophili. The cerebellar abscess was probably secondary to the lateral sinus thrombosis.

After a variable period, the acute stage is entered upon, which may last less than a week. At this period an agonising headache was the most marked symptom in nine of the patients, but was not noticed when the patient was very lethargic. The patient may scream with agony, may rock himself to and fro, holding his head between his hands; he may be considered hysterical, or he may bury his head in the pillow and pay no attention to what is going on. A state of stupor passing into coma is not infrequent, and is generally fatal in less than three days, but in some the sudden onset of coma may be the first indication that the illness is a serious one.

In some of the cases in which the pain was agonising during life, it was found at the inspection that the abscess had burst into the ventricle (5); in two others the lateral ventricles contained turbid fluid, but the pus was separated by a thin layer of cerebral tissue from the cavity.

The temperature is rarely high with uncomplicated cerebral abscess. It was not above the normal in six cases; in eight it was high; three of these had meningitis, two thrombosis of the lateral sinus, and in one of the others it was noted that the dura mater was thickened and greenish, and in another it was black and sloughing, with a collection of cheesy pus outside it.

In only one or two, therefore, was the pyrexia due to the cerebral abscess. The pulse is often increased in rate, but when the

abscess is large the pulse may become slow and irregular. The dura mater, especially in the region of the fifth nerve, is acutely sensitive when inflamed; hence the intense severity of the headaches associated with abscess in connection with ear disease. Tenderness of the scalp was not especially noted in these cases. Death was due either to coma, from the pressure of the abscess; to meningitis, from the pus reaching the surface of the brain; or to sudden respiratory failure.

The three cerebellar abscesses presented no very characteristic symptoms; one patient died the day he came up; another man having had thrombosis of a sinus for a year, developed further clotting in the vessel, and after ten weeks died suddenly; but the symptoms all through were referable rather to this mischief than to the abscess; in the third case the symptoms were those of abscess, but there were no symptoms which indicated the locality of the pus, except that there was a partial facial paralysis (5).

One Case of Abscess of the Pons.—M. T., 46, under Dr. Taylor. June 7th. Partial left hemiplegia. Three weeks ago her face was drawn to the left. She suddenly lost the use of her hands. June 12th. Paralysis of the right side of the face, weakness of the left leg, gait drunken, right otorrhœa. The left hemiplegia gradually increased till her death, on July 2nd. Optic disc normal. *Post mortem:* Foul greenish pus in the right tympanum. An abscess was found one inch by three-quarters of an inch on the right side of the pons, towards its upper part, occupying the motor tract; it had thick greenish walls, with acute softening round it; the inflammation was diffuse.

There is no evidence, pathological or other, that these cases ever recover without the aid of a surgeon; and although a few successful cases have been drained, even now almost every case is fatal.

The following conclusions may be drawn from the present series of cases:—

(1). Abscesses in the temporo-sphenoidal lobe, which is by far the most common situation, are often associated with an inflamed or sloughing dura mater over the anterior surface of the petrous bone, or with a collection of pus beneath it.

(2). Other complications are infrequent, except meningitis, which is generally due to the extension or to the rupture of the abscess.

(3). These abscesses are almost always situated very close to the roof of the tympanum.

(4). A foul discharge is often a source of danger, and frequently, if not invariably, the spread of the mischief is due to imperfect drainage of the middle ear.

(5). Mastoid suppuration often infects the posterior surface of the petrous bone, but it may be associated with disease limited to the middle fossa of the skull.

(6). Cerebral abscesses only occur when the otorrhœa has lasted for months or years.

(7). The symptoms usually come on insidiously.

(8). Rigors, pyrexia, and optic neuritis are all infrequent in uncomplicated cases, but they all occur occasionally.

(9). A headache of intense severity, and a dull, sluggish mental state are the two most characteristic symptoms.

(10). Cerebellar abscesses are less common, and will probably be associated with disease of the dura mater behind the petrous bone, or with thrombosis of the sinus.

The objects to be aimed at in treatment are:

a. In every case to improve the drainage of the ear, by gouging away or trephining the mastoid sufficiently to open up the horizontal cells or antrum, where pus is often found, and to break a hole through the deeper part of the posterior wall of the external meatus, so as so allow no secretion to be retained. The cavity should be rendered sweet and aseptic as soon as possible. In a case of otitis media it is often desirable to carry out this treatment as soon as there is evidence of a fresh accession of severe mischief; should further exploration be necessary later on, the risk of infection from the septic otorrhœa will be very much reduced. It is always desirable that the external ear should be dressed apart from the other openings, if any are made.

b. To expose the anterior surface of the petrous bone, so as to allow free drainage for any pus or *débris* which may have formed in connection with the dura mater, which is often inflamed or gangrenous. This is best reached at a point half an inch above the anterior margin of the external meatus. Should there be any pus retained, some will often be found in the diploë of the bone removed, in which case the bone should be broken away to a quarter of an inch above, and just in front of, the meatus, so as to expose the most dependent part of the anterior surface.

c. To drain the abscess from below when possible. Messrs. Horsley, Macewen, Barker, Bergmann, and others, have discussed the best methods of attaining this result. In the case of a temporo-sphenoidal abscess, the area beneath which the pus will almost universally be found may be said to be bounded anteriorly and posteriorly by curved lines drawn through the temporo-maxillary joint and the middle of the mastoid, running at right angles to the sagittal suture, and to extend from half an inch to 2 inches above the meatus. The lower part of this area should, therefore, be explored with trocar and cannula, after breaking the bone away or trephining a fresh hole, and opening the dura mater, unless special symptoms indicate that the abscess is higher up. If the attempt to find pus is unsuccessful, the lateral sinus should be exposed and examined half an inch directly behind the meatus; if necessary the bone may be further broken away, and the outer and under part of the cerebellum explored for abscess.

By this method all the seats where pus is likely to accummulate can be systematically examined, and we give the patient the best chance. It is necessary to examine all these seats in doubtful cases, because, although in some uncomplicated cases we may be able to determine the lesion fairly definitely, yet, where two or more lesions are combined, the uncertainty in the diagnosis is so great that the best method is to explore all probable spots.

Thrombosis of the Lateral Sinus.—This occurred twenty-two times. The condition both of the wall of the vein and of its contents varied. In some there was well-marked phlebitis, but not in all. In considerably more than half the thrombus was suppurating; but several of those in which the clot showed no evidence of breaking down had set up a pulmonary pyæmia, demonstrating that they were none the less septic, and would probably have broken down if the patient had lived longer. The thrombosis had spread in nine cases directly from inflammation or necrosis of the posterior wall of the petrous bone, the dura mater over it being inflamed or sloughing; in three there was a collection of pus outside. In the remainder infection had spread from disease of the mastoid cells or of the posterior wall of the tympanum by means of the veins which empty into the sinus—for example, the vein from the cochlea—without having infected the dura mater.

This fact that in almost half of the cases of thrombosed sinus the disease had spread directly from caries or necrosis of the posterior wall of the tympanum is of the greatest importance; in one case there was an aperture bringing the middle ear directly into contact with the wall of the lateral sinus; in others suppuration had already occurred on the surface of the bone. If any treatment is to be successful it must deal with the condition of the bone and dura mater as well as with the sinus.

It is obvious that in these cases the thickness and density of the lamina of bone separating the middle ear and the mastoid cells from the sinus is a main factor in determining whether the disease shall spread backwards or not. In only one-third of the cases of sinus thrombosis did we find that the disease had originated in the mastoid cells; and, on the other hand, in some cases pus was found in the mastoid cells, but the cerebral disease was limited to the middle fossa (six times). Still, the rule holds good that whenever the mastoid vein—which perforates an inch and a quarter behind the meatus, on a level with it—is found thrombosed the sinus should always be explored.

The thrombus may be a small one consisting of only a few clots, or it may occupy the whole of the sinus, and in 11 cases it extended into the internal jugular vein, in all of which there was also pulmonary pyæmia, and in only 4 did this occur with a healthy jugular vein. The clotting four times extended into the longitudinal and three times into the opposite lateral sinus. In one instance very extensive clotting was found throughout the lateral, both the petrosal, the cavernous, and the circular sinuses and the jugular vein; in another, in the ophthalmic vein. One clotting occurred in the cerebral veins, and another time in a vein to the tentorium, which set up meningitis. Four times suppuration took place round the jugular vein.

In over 70 per cent. of these cases the mode of death was by pulmonary pyæmia (abscesses in 15, empyema alone in 1). Two of these had also general pyæmia, 3 meningitis, and 1 a cerebellar abscess. The causes of death in the remaining 6 were: general pyæmia, 2; meningitis, 2; retropharyngeal abscess, 1; and cerebral abscess, 1.

All these complications were directly due to the thrombosis in the sinus, with the exception of the retropharyngeal abscess and four of the cases of meningitis, of which two had spread from the dura

ater and the third through the internal auditory meatus, and robably the fourth also. Thrombosis is, therefore, a very fatal sion, but there is some evidence that patients with the typical mptoms appear to recover, at any rate for a time; and among ese cases are 3 which showed that the patients had recovered—ly, however, to succumb to the secondary effects after intervals a year, six and two months.

In the first a man, aged 23, with old otorrhœa, had been ill, ddy, and had had occipital headaches a year previously, his left g had dragged in walking, and for the last six months he had gors. He sweated profusely. He died with a cerebellar abscess, hich was secondary to an old thrombus, which was adherent id decolourised, occupying the inner part of the sinus. A second ot of more recent date was in the outer part of the sinus.

The second was a girl, aged 8, who six months previously had ckness, vomiting, headache, and inflammation of the brain, fol-wing a blow on the head. Mastoid suppuration followed. She ed with three cerebral abscesses in the centrum ovale on the op-site side. The lateral and the posterior half of the longitudinal nus contained old organised clot.

In the third a child, two years old, caught cold, became ill, naciated, and was drowsy, finally dying two months later, with-it otorrhœa. A thin veneer of old clot was found lining the all of the longitudinal and the lateral sinus on one side, where e tympanic cavity was filled with pus.

As with cerebral abscess we found that the otorrhœa had always sted for months or years, the same is usually true for throm-sis. In only five had the otorrhœa lasted less than seven weeks. e shortest duration was three weeks, which occurred three nes. The duration of life after the first symptoms of thrombosis as six to eight weeks in six cases, three to six weeks in three, ss than three weeks in ten. The most acute cases lasted a week id a week and a half respectively. The most constant symptom as pyrexia (16), of which only one report fails to make mention. eadache (11), and rigors (10) were also very frequent. (Only six-en of the cases have full clinical reports.)

In no other complication are erratic pyrexia and rigors so con-antly present, and it will always be justifiable to assume that ey probably indicate thrombosis in any patient in whom freely ening the deeper mastoid cells and draining the ear has not en followed by their subsidence. In such a case prompt action necessary, remembering that in half of the cases death occurs ithin three weeks from the onset of the symptoms. Earache (9), distinct from headache, is more common than with meningitis abscess. The other symptoms which were noted were vomit-g (7), coma (5), listlessness, giddiness, delirium, and convulsions, ch twice; diarrhœa, emaciation, acute nephritis, and paraplegia, ch once.

The patient often passes into a typhoid state, and may waste nsiderably; the tongue may be dry and the pulse rapid, the mptoms being essentially those of septicæmia. Locally sub-taneous œdema over the mastoid, and in some mastoid tenderness, ere noticed, but these were only occasionally present. Some tients complained that their pain was at the back of the head, n down the neck, and was made much worse by movement, so at the neck was kept stiff and the head as still as possible. hen the clotting extended into the internal jugular vein it was equently associated with a local fulness, a diffused inflammatory udation, or an abscess along its course.

Only once were the optic discs stated to be normal. In six in-ances there was optic neuritis. In two the thrombosis was of o weeks', and in two of three weeks', date. In these there was other complication, and the neuritis was secondary to the con-tion of the vein and the petrous bone. In the two remaining ses the thrombosis was of old date, and was, at the time of ob-rvation, associated with suppuration in the brain and cerebellum spectively. Neuritis is not common with abscess, having curred in only two other instances, and it is probable that in l the six above mentioned the neuritis was due to the throm-sis.

We may conclude that, on the whole, optic neuritis is more sug-stive of sinus thrombosis than of the other lesions. As a further ample we may giye this case of Mr. Lane's, which recovered:

Thrombosis of the Lateral Sinus; Optic Neuritis; Removal of e Clot; Recovery.—G. S., aged 10, under Mr. Lane and Dr. Perry, August, 1888. He has had otorrhœa for years. Admitted with rache, tenderness, and œdema; temperature 102.2°. A week ter inattentive, rigor, optic neuritis on the right side. The mas-id was explored without result. The rigors and pyrexia con-tinued. Two days later, the lateral sinus was explored, a mass of foul clot was removed, and the jugular vein was tied. The boy made an uninterrupted recovery, and is now well.

As in three-quarters of the cases death ensues from pulmonary pyæmia, and in more than a third there are no other lesions, even at the time of death, it is clear that if thrombosis ensue in a case of otitis media, more especially if the discharge be foul, the only treatment that is of any value must be directed to the prevention of the pyæmia. When such a danger has to be combated we must be willing to run great risks in order to save some of the patients.

The internal jugular vein should be ligatured in the neck, the lateral sinus should be opened, and, if the clot be very foul and septic, if it may be scraped out, rendered aseptic as soon as possible, and, if be thought desirable, the sinus may be irrigated. It may, in some instances, be desirable to ligature the jugular vein low down in the neck, and to seal the wound; then, higher up, the vein may be again ligatured and divided, and the upper end brought out, so that if septic material passes down it may escape exter-nally. This line of treatment, which may seem too heroic, has been recommended by some surgeons, and some such can alone avert the pulmonary infection which carries off these patients.

This same treatment deals with the dura mater over the poste-rior surface of the petrous bone, which also, if neglected, is a source of danger to nearly half its victims. If the lateral sinus, after it has been punctured, whether purposely or accidentally, be found to be healthy, thrombosis need not necessarily ensue. I have seen this happen three times, and no evil results followed, the patients dying from other causes.

The deductions to be drawn from the cases of lateral sinus thrombosis are that: 1. The disease more often spreads from the posterior wall of the middle ear than from the mastoid cells. 2. The otorrhœa is generally of some standing, but not always. 3. The onset is sudden, the chief symptoms being pyrexia, rigors, pain in the occipital region and in the neck, associated with a septicæmic condition. 4. Well-marked optic neuritis may be pre-sent. 5. The appearance of acute local pulmonary mischief, or of distant suppuration, is almost conclusive of thrombosis. 6. The average duration is about three weeks, and death is generally from pulmonary pyæmia.

EXTRACTS FROM

THE MILROY LECTURES

ON THE

ETIOLOGY AND PREVENTION OF PHTHISIS.

Delivered before the Royal College of Physicians of London.

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Lecture IV.—The Prevention of Phthisis.

Preventable Causes: a. *Inherited;* b. *Acquired;* c. *Sources of Infection:* d. *Favouring Conditions.—Deterrent Measures against Marriage.—Treatment of Children of Phthisical Parents: Hygienic, Educational, Medicinal.—Choice of Work.—Ventilation and Warming of Schools.—Selection of Subjects of Acquired Predisposition from Chest Diseases.—Prevention of Dusts from Work.—Change of Climate.—Legislative Enactments respecting Tubercular Cattle, Flesh Meat, and Milk.—Combination of Sanitary Authorities.—Measures respecting Buildings; Compulsory Clauses.—Measures against Atmospheric Impurities.—Healthy Homes Societies.—Treatment of Excreta, Sputum.—Disinfectants.—Combustion.—Measures after Death.—Notification of Phthisis.—Isolation or Supervision.—Special Hospitals.—Principles of Treatment of Incipient Phthisis.*

We are now in a position to consider what is possible to be done, and what should be attempted, to prevent the disease from attacking both human beings and animals associated in some relation or another with human beings.

With regard to inherited tuberculosis or inherited vulnerability by the virus, if we were to accept Professor Baumgarten's theory of the chief mode of origin of the disease, namely, by spores, that, like the pangenetic "gemmules" of Darwin, are implanted in us by our ancestors, and that may or may not remain latent all our lives, we should, indeed, despair of ever casting out this plague from our midst; for, even supposing that it were possible either to prevent all consumptives from marrying, or to keep their offspring under such conditions that the disease could not develop, it might still be transmitted through the second or third generation, and might break out at some subsequent period. But it is quite otherwise with regard to inherited predisposition, if this consists, as we believe it does, mainly in a vulnerability only.

A father or a mother whose partner has died of phthisis, and who has been left with children to bring up, may certainly hope to save them from the fatal inheritance, especially if the children have not been suckled by a consumptive mother; a well drained, high, and airy site for the dwelling; entire cleanliness of house, clothing, and person; fresh air and light; abundance of good food; due exercise and rest; care during illness, and so on. I would, however, especially emphasise certain details of the hygienic code: thus, that milk and easily digested fats should form an adequate part of the dietary, and that the milk in every case where there is a tendency to tubercle should be scrupulously boiled, and in some cases peptonised or used as koumiss or junket. Free ventilation is especially needed in apartments occupied by persons, whether children or adults, with a tendency to consumption.

Exercise should be such as to develop the chest as much as possible, not only by games—though this is the best method—but also by carefully graduated and adapted gymnastic exercises. It should also, as much as possible, be carried on in the open air, and with as little dust in the atmosphere as practicable.

Especial care must be taken during and after the illnesses to which childhood is liable. After measles and whooping-cough thorough examinations should be made to see that there is no lingering affection of the lungs, and that the chest is not left deformed in any way. The attendants should not rest satisfied with anything short of complete recovery, if this can by any means be attained, either by medicinal agents or gymnastic exercise, or by change of climate, and equal care must be exercised after any of the exanthemata. Where enlarged lymphatic glands are left they must be regarded as a possible source of danger, especially when they are the sequel to some external eruption or sore.

Where the parents are rich care should be taken with regard to education; that it should not be overpressed, and that it should be carried on in well ventilated rooms; and if a boarding school has to be selected, it should be one on a high and dry site, and not only the schoolrooms, but the dormitories, should be inspected to see that there is sufficient cubic space.

If it should be necessary to choose a business or profession, let it be one in which there will be but little office work, and as much outdoor employment as possible.

Something more needs to be done for children of the poor by various public bodies, especially in the direction of securing better methods for the warming and efficient ventilation of schools.

With regard to chest affections, however, I think we may use some discrimination in selecting cases that must be submitted to the restrictions it is needful to impose upon those most prone to phthisis. Thus, it is necessary that, during attacks of acute bronchitis, pleurisy, broncho-pneumonia, and other inflammatory complaints, care must be taken to secure the complete resolution of the disease.

After all these complaints, and especially after pleurisy, there is undoubtedly danger so long as there remains any contraction of the chest and want of full expansive power. It is well known how frequently phthisis follows pleurisy, and although this may in some cases be due to the fact that the pleurisy itself is of tubercular origin, in others the tubercular infection is grafted upon the injured organ at a period too remote from the original disease for it to have been its immediate precursor.

I have been in the habit of testing the movements of the chest with the stethometer in most forms of pleurisy, and in all cases where these movements are impaired by the attack I have formed an unfavourable prognosis, an opinion that has only too often been confirmed by the result, though in several cases the supervening phthisis has been some years before it has made its appearance. There seems to be less reason to dread the occurrence of phthisis in chronic bronchitis, asthma, emphysema; but I cannot altogether share the opinion of Rokitansky as to the immunity enjoyed by sufferers from the latter complaints, as I have several times seen their association with phthisis. I should imagine also that in the partial emphysema that arises from atelectasis or impairment of certain portions only of the lung a deposit of tubercle is only too likely to take place in the portions thus injured.

Still greater danger is also acknowledged to arise from accidental hæmorrhages into the lung tissue. Although hæmoptysis is frequently only a sign of incipient tubercular disease, I am convinced that it is also sometimes simply its precursor, and the resulting phthisis has in my experience been more acute in its course. In this class of cases the stethometer has been of no assistance in prognosis. I may remark here that as an additional precaution against infection in this class of cases, and in all in whom there is a predisposition to phthisis, and when its subjects are obliged to attend crowded assemblies of any kind, I have been in the habit of recommending the temporary use of respirators charged with eucalyptol so as to minimise the danger of inhaling tuberculous material.

I need not linger over the precautions that should be taken in the case of dusty work, especially such as involves the production of sharp irritating particles. It is probably still hopeless to expect that workpeople will use respirators to catch the dust on its way to the mouth, but fans are now almost universally employed to sweep it away from the worker. It would, however, be a good thing if these people could be more frequently warned of the necessity of attending to the first beginnings of lung trouble, as we know that in their first inception many of these cases are not tuberculous.

With regard to the ingestion of tuberculous food, it is probable that too great laxity prevails in the inspection of butchers' meat, and that its sale should be subject to more stringent regulation than it now has in our large towns. In France, by a decree passed in July, 1888, it is provided that "wherever the tubercular process affects the lining membrane of the chest or abdomen the entire carcass shall be condemned." But in most other countries it is considered sufficient, when the disease is entirely local, and not generalised, to cut out the diseased parts and suffer the meat to be sold if otherwise sound and the beast well nourished. Professor Koch himself thinks there is no danger in this practice, and this opinion is shared by Cornil and Dujardin-Beaumetz in France, by Nosotti in Italy, and by von Wesener in Germany. But most of these opinions are based upon the idea that the meat in question should be well cooked; and it seems to me desirable that the Prussian practice should be followed of plainly labelling meat that is regarded as in the least degree suspicious by the inspector, who should not suffer it to be sold without a caution to the buyer. Still more decided precautions should be taken with regard to milk from tuberculous cows. Its power of conveying tubercle is fully proved, and its sale should be prohibited. Probably many more cases of infection from this source would occur in towns if it were not for the fact pointed out by Bollinger, that the mixing of the milk of many cows diminishes by dilution the risk of conveying the disease.

By Section 9 of the Contagious Diseases (Animals) Act of 1886 (amending the Act of 1878), the powers of the Privy Council respecting the inspection of cattle and sanitary precautions relating to milk are transferred to the Local Government Board, and local authorities are empowered to make regulations respecting these points. Unfortunately, tuberculosis is not included in the definition of disease in the Act, and the Departmental Committee on Pleuro-pneumonia and Tuberculosis report in 1888 that, "although in England and Ireland, under the provisions of the Nuisance Removal Act (as embodied in the Public Health Act, 1885), the medical officer of health or inspector of nuisances may seize tuberculous animals, yet such seizure is rarely performed." The case with regard to milk is even more unsatisfactory. It is doubtless now the duty of rural sanitary authorities to supervise all dairies and cowsheds, and to prevent the export of possibly tainted milk; but again, there is no direct provision against the supply of the milk of tuberculous cows; moreover, the local boards of places where milk is produced are not necessarily in union with the authorities of the places where it is consumed, and the members of the rural local boards are often unwilling to offend the farmers and others by whom they are elected, and are not likely to take much care in the matter.

It is urgently necessary, therefore, that the laws relating to the le of the flesh of tuberculous cattle, and the milk supplied from em, should be amended without delay, and also that some con-rted action should be taken by health authorities with reference the sale of milk in towns.[1]

The next, and I believe the most important, media for propa-ting consumption, are the houses people dwell in and the rooms which they congregate together. Architects and builders of all asses of dwellings have been in the past, and are still, largely re-onsible for a very large proportion of preventable mortality. It only right that we should look to them in the future to rectify e mischievous modes of construction, both of mansions and cot-ges and public buildings of all kinds, that have proved such a rtile source of disease, and especially of consumption. They ust see to the exclusion of noxious ground air from houses, to e prevention of the harbourage of dust, to giving sufficient pious streams of air without draughts, to the extraction of ul air as soon as it is produced, and to the provision of abund-ce of light. They are not left without help in this regard. In r D. Galton's excellent work on *Healthy Houses*, there are ample d detailed instructions as to how these several objects may be complished.

Local authorities, also, cannot plead ignorance in excuse for glect. The model by-laws of the Local Government Board, fully carried out, would, to a great extent, do away with the erely structural causes of phthisis. The whole of these by-laws e useful, but those relating to the width of streets (4-8); height of ildings (19); space round houses (53-55); concreting of cellars d foundation (9-10); damp proof courses (17); quality of materials d fireplaces (11) (58); drainage (60), are of especial value in re-tion to our subject.

Much greater care should be exercised in respect to the arming and ventilation of public buildings. The openings for the ter purpose are, for the most part, quite inadequate, and the eans of extracting foul air are often futile. It is a question also hether the methods used for introducing warm air do not nerally devitalise it, and make it unfit for healthy respiration.

Numerous Acts of Parliament have been passed since the first bouring Classes Lodging Houses Act of 1851; one in 1866 and other in 1867, and in 1868 a very stringent measure was passed, mmonly called Torrens's Act, but unfortunately it proved un-rkable, owing to the absence of clauses giving sufficient com-nsation to owners of property. Then, in 1875, came the most portant effort in this direction in Sir Richard Cross's Improve-nt Act, and it must be a source of no small satisfaction to the embers of this College to know that this and other subsequent easures are mainly due to the representations made by them to e Legislature as to the need for such improvement.

Thorough as this Act was, however, it also was not found to rk well in practice, and several large towns, notably Edinburgh d Glasgow and Manchester, preferred to obtain private Acts of eir own to using the rather cumbrous machinery provided for em in it. Accordingly, amending Acts were passed in 1879, nedying defects both in Torrens's and Sir R. Cross's Acts, and in 81 further efforts were made in this direction. Finally, in 1885, er a Royal Commission had sat upon the subject, and had orted that local authorities really possessed now ample powers, ich, for the most part, they did not use, for improving cottage vellings, a most important clause was introduced into the Hous-g of the Working Classes Act, 1885, which made compulsory all at was only left permissive before in previous Acts.

This clause runs as follows: "Section 7. It shall be the duty of ery local authority entrusted with the execution of laws relat-g to public health and local government to put in force from ne to time, as occasion may arise, the powers with which they intrusted, so as to secure the proper sanitary condition of all emises within the area under the control of such authority."

If the local authority does not carry out this law, then any com-inant may apply directly for a *mandamus* to compel them to so, without the necessity of appealing to the Local Govern-nt Board.

In the matter of atmospheric impurities, cleanliness, light, d ventilation must be our chief resources.

[1] I am informed that several towns have obtained private Acts by which it rovided that their medical officers of health may inspect any dairies, etc., ond their boroughs from which milk is supplied to them, and these pro-ons are included amongst the "model clauses" which may hereafter be the ject of general legislation; but it is not apparent from these clauses that power is given to inspect the cows themselves, in order to judge whether y are tuberculous or not.

It is interesting to note, as a result of Professor Carnelley's experiments,[2] that the influence of dirt as a fosterer of micro-organisms in the air has now been placed on a scientific basis. His conclusions are shown in the following table:—

Effect of Cleanliness.

		Space per Person.	Carbonic Acid.	Organic Matter.	Micro-organisms.
		Cubic feet.			
One-roomed houses	Clean ...	295	7.99	2.34	18
	Dirty ...	200	9.87	3.23	41
	Dirtier ...	221	10.66	2.42	49
	Very dirty ...	220	10.01	2.69	93
Two-roomed houses	Very clean ...	273	12.20	1.93	10
	Clean ...	264	9.34	1.37	22
	Dirty ...	233	9.40	2.03	69
Unventilated Board Schools	Clean ...	167	19.68	3.25	91
	Average ...	166	14.17	2.90	125
	Dirtier ...	191	22.47	2.73	198
Ventilated schools	Very clean ...	194	12.50	2.26	3
	Clean ...	155	12.81	1.48	16
	Less clean ...	152	10.78	1.75	30

It will be seen that cleanliness produced a difference of 18 to 93 in the one-roomed houses, 10 to 69 in two-roomed houses, 91 to 198 in unventilated, and 3 to 30 in ventilated schools. And yet want of cleanliness is not solely responsible for the presence of organised germs. In badly ventilated schools micro-organisms increase up to a certain point with increase of wall and door space, whereas in mechanically ventilated schools where the air is quickly renewed the micro-organisms decrease with increase of cubic space. The total effect of scrubbing also was found to be *nil*. The scrubbing would remove the loose dirt but not the dirt ingrained into the wood of the floor. Another reason against the loose dirt being a main source of contamination is the fact that the infection of a school with micro-organisms takes place very gradually, new schools having much fewer than old ones, and similar results have been obtained by Miquel in new and old houses in Paris. Probably nothing short of total destruction would clear some of the older buildings from micro-organisms. Even if we suppose that all the precautions so far mentioned could be strictly carried out, much still remains to be done before we can exorcise the demon of tuberculosis. People must be educated to take advantage of the arrangements that we may hope will be made for their comfort and well-being.

Hitherto we have been mainly occupied with the external precautions to be taken against absorbing the tubercular virus. We must turn now to those relating to the sufferer from consumption himself. Both the urine and fæces have been found to contain bacilli, and should, therefore, be disinfected, or otherwise safely disposed of. But we have seen that the most fertile source of infection in phthisis is probably the sputum of such patients expectorated on to the ground, on to floors, or into handkerchiefs, allowed to dry up, and in the form of dust permitted to lodge on the walls or in nooks and corners of dwellings, or to float about in the air of all kinds of public assembling rooms. Englishmen are rather inclined to sneer at the abundant provision made on the Continent for the reception of expectorated matter, but it might be well for us if we were more cleanly in this respect in this country.

But all such receptacles should be filled preferably with some liquid disinfectant or with sawdust that has previously been charged with some efficient disinfectant, and their contents, like those of the dustbins, should be scrupulously burnt, either on kitchen fires or in a furnace provided for the purpose by town authorities.

It would be well also if all phthisical patients would carry with them and use small portable spittoons that could be worn in the pocket. They can be made for a few pence, and can be lined with paper charged with disinfecting substances, and their contents could readily be consigned to the fire at convenient intervals.

Disinfectants.—Numerous experiments have been made to determine the best means of disinfecting tuberculous material. In Verneuil's *Etudes sur la Tuberculose*, Dr. P. Villemin gives the results obtained with a prodigious number of different chemical substances. It would be useless to name the hundred and one of

[2] Sir H. Roscoe's *Lecture on Ventilation in Schools*, p. 12.

these bodies that have either given negative results, or that have only somewhat retarded the development of the bacillus. He found, however, that the following ingredients mixed with the cultivating medium completely sterilised it in the proportions which he employed; they are: hydrofluoric and silicic acids, fluosilicates of potassium, sodium, and iron; ammonia, naphthol (α and β), polysulphuret of potassium, tartar emetic, and sulphate of copper.[3]

Dr. de Souza found that the following substances prevented all development: mercuric ethyl in the proportion of 1 in 35,000; benzoate of ethyl, 1 in 3,000; benzoate of methyl, 1 in 12,000; but menthol and iodoform had only a retarding influence. Schill and Fischer[4] found corrosive sublimate most efficient; Somani and Brugnatelli[5] brom-ethyl, palladium, and mercuric chlorides, carbolic acid, creasote, naphthol, and saturated solutions of camphor in alcohol; lactic acid and turpentine.

Unquestionably tuberculous material cannot be left to take care of itself. The various natural disinfecting agents, with, perhaps, the sole exceptions of fresh air and light, seem to be wholly inadequate to deal with it.

M. Galtier[6] has succeeded in inoculating tubercle with the juice of muscle from tuberculous animals after it has been raised for twenty minutes to a temperature of 60° C., and for ten minutes to a temperature of 71°, temperatures which, he says, are not exceeded in the centre of a large piece of meat cooked on the grid-iron.

Desiccation, putrefaction (for ten to twenty days), freezing at temperatures from 3° to 8° below zero, C., alternate freezing and thawing—none of these conditions destroy the infective power of tuberculous matter. He found, also, the urine of tuberculous animals was virulent, and he draws the conclusion "that it is indispensable to insist upon the disinfection of all objects soiled by tuberculous animals, of their excretions, of places they have occupied, of the dungheaps, etc., in order to prevent the dissemination of the disease, and its transmission to man."

At the Manchester Hospital for Consumption we have been in the habit of using for the spitcups a solution of mercuric chloride, 1 in 500, and I have also used "salufer," a fluosilicate introduced by Mr. W. Thomson, of Manchester.

If the stools and urine of the phthisical patients have to be disinfected, probably the best agents would be sulphate of copper, or sulphate of iron, or carbolic acid, but where water-closets are used there is probably not much danger from this source.

It is recommended by Dr. Cornet and others that after the death of a phthisical patient, the rooms and bedding and clothes should be thoroughly disinfected, as after a death from a contagious disease, and a thorough cleansing of the whole premises. There can be no doubt that this practice—at present, so far as I know, limited to Italy and Spain—ought to be universal.

It becomes a serious question for the public and for the State, whether persons suffering from consumption, if they are "without proper lodging and accommodation" for preventing infection, should not be provided with asylums and hospital accommodation until the disease is either cured or ends in death.

Enormous sums have been spent in the past in the isolation of persons suffering from leprosy, a disease strictly analogous to phthisis, only still more chronic and less easy to control by such a method. It would certainly be far easier to cleanse away and destroy phthisical sputum than to prevent contamination from leprous sores.

If a poor country like Norway can provide asylums for a large proportion of its lepers it is not too much to ask Great Britain to make the attempt to segregate those consumptives who are likely to be a source of danger to the community.

At the present time the accommodation for cases of phthisis is very small. They are entirely shut out from most general hospitals, although they are admitted as out-patients to all dispensaries, and are thus free to scatter abroad the infective material in places where many persons peculiarly prone to the disease are seen to congregate.

The special hospitals for consumption are very few in number; they may almost be counted upon one's fingers. Thus there are in the metropolis four such institutions, including the great Brompton Hospital, and together containing 615 beds. At Bournemouth also there is the Ancillary Sanatorium with 62 beds. At Torquay (48), Ventnor (140), and St. Leonards (18) there are special hospitals with an aggregate of 206 beds. Possibly, also, at some of the numerous cottage hospitals cases may occasionally be taken in. The only manufacturing towns in England to which such hospitals are attached are Liverpool (with 50 beds) and Manchester (with 37). The workhouse hospitals are the chief refuges for destitute consumptives, but Dr. Bridges informs me that there are no data from which to ascertain how many of them are thus accommodated.

I would ask that phthisis should be placed in the same list with other diseases requiring special measures to protect their spread. Although, as before said, phthisis is not directly contagious, I venture to contend that there would be nothing unreasonable in thus classing the disease.

My proposition briefly would be this—that phthisis should be classed with other infective disorders; that every case as soon as it is discovered should be notified to the medical officer of health. If necessary, it should be visited to ascertain whether proper care is, or can be, taken to prevent injury to the public health. Where the case is that of a poor person, the local authority should see to the regular cleansing and whitewashing of the premises, to the disposal of excreta, including especially the expectorated material. They should also inquire into, and rectify if necessary, the drainage and ventilation of the dwelling; and after death, special measures should be taken for the cleansing and disinfecting of house, bedding, and clothes. After all this had been done for the safety of the non-phthisical portions of the family, there would next come the question of the propriety or possibility of removing the sick person to hospital. So long as he (or she) could work, and so long as he would consent to use the necessary means for destroying the infective material, it would be unnecessary to do more than I have already indicated; but when the patient becomes unable to follow his employment, and the family are obliged to seek for assistance from the parish, he has a claim to be received into the workhouse hospital, and such an asylum should be offered to him, and should be made as little humiliating and as free from ignominy as possible. When such a hospital is efficiently administered—as it should be, and often is now; when the nursing is performed in a kindly fashion, on Miss Nightingale's principles, and the patient is not left to the ministrations of any able-bodied pauper, as is sometimes the case; and when appropriate care is taken for the cleanly disposal of excreta of all kinds, then there could probably be no better fate in store for the poor invalid, and he might even soon be restored to his family, and be able to return to his work.

And I would also put in a plea for those who are not reduced to pauperism, but who could be removed to hospital to receive appropriate treatment in its wards. But there would still remain a wide field open to private benevolence, in the provision of sanatoriums or homes for those unfortunates.

I can conceive few objects better calculated to excite the compassion of all humane people than the condition of many of these poor sufferers who are shut out from the benefits of general hospitals. I can scarcely think that there would be much difficulty in raising the funds necessary for the care of such cases as are not yet reduced to pauperism, but who are really destitute of the appliances and comforts so necessary to a slowly fading life.

I do not hesitate to say that at present the hospital accommodation for cases of phthisis is most inadequate, and that in place of the half-dozen of such institutions outside the metropolis, there ought to be hundreds of them scattered about the country in suitable localities, and attached to all the chief centres of the population. The map of the distribution of leper houses in England shows what large provision was made for leprosy at a time when the population was not much more than one-tenth of its present amount, and it is possible that advantage might be taken of some of the funds left for that purpose, to apply them in the treatment of a strictly analogous and closely allied form of disease.

In conclusion, perhaps I may be allowed to say a few words as to the principles that should guide us in endeavouring to check the disease at its onset.

1. May I point out the unsatisfactory results that have arisen so

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[3] Amongst the class of substances that greatly retard the development of the bacillus, he places arsenious, boric, picric, pyrogallic, and sulphurous acids; benzoin, chloroform, creasote, hyposulphite of soda, iodoform, menthol, phenate of soda, salol, and toluene; and he places in a third category those substances in which growth took place, but with some difficulty. Amongst these we find acetone, aldehyde, biniodide of mercury, bromides of potassium, sodium, and ammonium, caffeine, camphor, chlorhydrate of ammonia, turpentine, eucalyptol, iodide of potassium, naphthalin, resorcin; sulphates of soda, magnesia, quinine, and zinc; thymol, and tungstate of soda.

[4] *Mitt. aus dem kk. Gesundheitsammte*, Band 11.

[5] *Ann. Univ. di Med. e Chir.*, xxvii.

[6] *Comptes Rendus*, 105, p. 231, July, 1887.

far from the various researches that have been made for the purpose of killing the bacillus *in situ?* Of late years, the efforts of many physicians have been directed to this object, and the treatment, whether by inhalations, by sulphuretted hydrogen injections, or by germicide medicines, has had the one principle of endeavouring to destroy the bacillus after its entrance into the lungs. I was myself at one time beguiled into making attempts in this direction, but I have long been convinced of the extreme improbability of our ever reaching the organisms in their hiding places in the lung.

Let us have "war to the bacillus," by all means, but it must be war carried on outside the body, and not within it. When once it is entrenched behind its barrier of exudative material, its individual existence, so far as we know, is safe against all our attacks.

2. What we have to do, after preventing reinforcements from being poured in from the outside, is to combat the irritation and inflammation caused by its presence by ordinary antiphlogistic measures, and then by all the means in our power so to strengthen the bodily forces as to enable them to deal with the invaders. If these receive no accession from without, and if they can be prevented from generating poisonous matters more powerful for evil than themselves, they will generally succumb, either by starvation or by being dried up, or got rid of by ordinary necrosis and suppuration.

3. At the same time I would by no means discourage attempts to preserve adjacent structures and the rest of the body from attack. Certain of the inhalations most commonly used, such as carbolic acid, creasote, eucalyptus, oil of pine, menthol, iodine, etc., are probably of service in this direction, and some of them serve to control excessive secretion, and to render the mucous surfaces generally more healthy.

At the Manchester Hospital for Consumption a series of observations have been carried on for some years upon the action of different drugs, such as iodoform, the hypophosphites, guaiacol, creasote, tannin, and latterly upon the inhalation of pure ozonised oxygen; but it has been somewhat difficult to discriminate between the action of these substances and the general good influence of the hospital itself. Other workers in this field have also contributed evidence on this subject, but it is scarcely within the scope of this inquiry to attempt to sum up the results of these observations.

It may, however, be of some service if I remark again upon the inhalation of ozonised oxygen, which, so far as I know, has only been used as yet in the Manchester Hospital, so far with encouraging results. It was first tried in consequence of the well-known beneficial action of pure mountain and sea air, and it was thought possible that some of this benefit might be due to the ozone contained in such air. After ascertaining that pure oxygen, when ozonised up to 9 or 11 per cent., might be inhaled in considerable quantities without exciting inflammatory action, it was administered regularly to fifteen patients in all stages of the complaint, and results were very marked in procuring improvement in general health, better appetite, sounder sleep, freedom from fever, and consequent gain in weight.[7] And yet it certainly had no obvious germicidal action in many of the cases; though the amount of expectoration was diminished, there was but little difference to be noted in the number of bacilli on the microscopic slides.

4. So far as I know all the attempts that have been made hitherto, chiefly in France,[8] to discover an antibacillary vaccine, with which to render the tissues antagonistic to the bacillus, have finally failed, and although I would not object to further researches in this direction, it appears to be hardly likely that they will be successful against a complaint in which one attack confers no immunity against a second.

5. Hitherto the best results that have been obtained in the case of consumption have been due to abundant supplies of fresh air and light,—to good food with a large allowance of fat in an easily assimilated condition, and to medicines that have assisted the general nutrition of the body.

But if the question were to be addressed to medical men as to what single measure has done most towards the cure of consumption, I believe the answer would be almost unanimous in favour of change of residence. In many instances, no doubt, the improvement would be ascribed to change of climate, and sometimes Egypt or Algiers, sometimes Davos or Canada, or the Riviera would receive the praise. Much good must undoubtedly arise from the favourable conditions to be found in these places, but I venture to ascribe a large proportion of the cures to the simple fact of removal from an infected area to places where the air is free from active virus; and hence I am at one with those who believe that healthy homes for consumptives may be found in this country.

From a review of the course of the complaint in the past, and of its affinities with other preventable disorders; from our knowledge of its pathology, and of the influences most favourable to its spread; from our experience of its steady diminution in the last thirty years, and from the brief summary of the measures that may be taken to arrest its course—from all these points we may surely learn to regard it as a preventable disease, and may look forward to its further diminution, if not to its ultimate extinction as a cause of death.

[7] See Reports in *Med. Chron.*, May, 1889.

[8] See especially papers by Gosselin, Jeannel, Laulanié, and Martin, in Verneuil's series of *Etudes Experimentales sur la Tuberculose.*

NOTES
ON
LEPROSY IN VARIOUS COUNTRIES.

By JONATHAN HUTCHINSON, F.R.S., LL.D.,
President of the Royal College of Surgeons.

THE following fragments on the subject of leprosy are notes of conversations or extracts from letters (to myself) or in one or two instances from books. Most of them are of value, as proceeding from skilled observers who spoke or wrote from personal knowledge. In many instances information bearing upon the fish hypothesis had been especially asked for and is given. Important statements will also be found as to the real extent of the influence of caste rules as to diet upon the conduct of the different races inhabiting India. I have found it exceedingly difficult to get at the truth on this matter. Thus some non-believers in the fish hypothesis think it sufficient to assert that the disease prevails amongst those who are by their religion forbidden to eat flesh of any kind.[1] Others of equal experience have assured me that it does not necessarily follow that because fish is forbidden therefore none is eaten. I have not been careful either on this point or on others to conceal discrepancies in the statements of those who have kindly assisted me to obtain facts. It seems, indeed, most desirable to enforce caution in the reception of evidence on this matter. It is only when confirmed by the independent testimony of two or three witnesses that any statement contrary to ordinary experience should be received. Nothing is easier than to make mistakes, especially when, as must often be the case, we speak from memory, and with but imperfect information in the first instance. The love of being definite often leads minds of a certain class to credit their impressions far too implicitly, and to state them much too confidently.

An intelligent man, who had been giving me a good deal of information respecting a certain out-of-the-way district in which he had lived, and whom I had rather closely cross-questioned, concluded his answers by saying with emphasis: "And now the next man you talk to from —— will very likely tell you something quite different from what I have done. Don't believe him." I replied that he might make himself easy, for that I had long ago adopted the rule to believe only what I thought likely to be true. It is more or less in this spirit that I venture to commend to the attention of the reader the following items of evidence.

I give the extracts for the present without comment. In some instances it will be seen that they seem to bear strongly against the fish hypothesis; more especially the last in my list is, if trustworthy, subversive of it. I reserve for another occasion my criticisms on this and other opposed statements, and still avow my firm conviction that in some way fish food, and especially

[1] I quote the following from a recent book of travel by Mr. W. S. Caine, M.P.: "Fish have a poor chance in this Buddhist country. A Cingalese won't take life so he never tastes butcher's meat; he has, however, no scruple to help a fish on to dry land and let him die if he can't get back to his native element, and by this amiable quibble he is able to add fish to his mess of rice without any breach of conscience. Your Buddhist is a true Pharisee."—Caine, p. 375.

when either salted or decomposed, either supplies the bacillus of leprosy, or, what perhaps is equally probable, stimulates into specificity a bacillus which is common both to tubercle and leprosy.

Leprosy in Madagascar.—I obtained from Mr. William Johnson, a missionary who had long resided in Madagascar, the following facts: Leprosy is exceedingly common, much more so, he believes, than is generally supposed. The people are great fish eaters, and even inland procure, in large quantities, a small gold fish from the streams that water the rice plantations. They also eat prawns and shrimps largely, and are very careless as to the quality of their fish and its state as to freshness. Mr. and Mrs. Henry Clark, intelligent missionaries, who had long resided at Antananarivo to whom I read Mr. Johnson's statment, said that they could fully confirm it and added they thought the fish hypothesis very probable as regards Madagascar.

Ceylon.—Dr. Haydon White writes me:—A man recently returned from Ceylon tells me that there the disease is generally ascribed to the eating of rotten fish, which the natives curry and eat freely. (See Mr. Caine's statement above).

Palestine and Syria.—The evidence respecting the Palestine district, given by Dr. Langerhaus, agrees well with that in the College of Physicians' report. The following items are taken from the latter. "The disease is evidently all but extinct in this region *so poor in fish.*" Mr. Finn, Her Majesty's Consul at Jerusalem (not a medical man), reports that it is found only in the native population—Mahommedans—with rare exceptions. There was, at the time of his report, a single case, in which the subject was a Jew (a boy). He states that the leper huts accommodate about a dozen, and I gather, although it is not expressly stated so, that this number includes most of the lepers now in Jerusalem. A few lepers are stated to be found at Nablus and Jaffa.

Mr. Sandwith, vice-consul at Caiffa, reports that there have been within his knowledge but three cases of leprosy in his district, which includes the towns of Tiberias, Safed, and Nazareth. They all occurred in one family in Caiffa, and consisted of, first, a woman who died of the disease at 40 years of age; her brother, who is in a leper house in Damascus; and her son. Her husband and another son are healthy. No provision is made for the disease in that part of the country, since, adds Mr. Sandwith, "it is hardly known."

Australia (Sydney).—From a medical friend, resident in Sydney, I received (in 1877) a very alarmist letter, stating that leprosy was becoming common there, and that the fish theory would not hold as little or no fish was eaten. From his letter I quote the following:—"Can you give me any hints as to the treatment of leprosy? I am quite sure it is going to be a disease of this colony, though fish is never used as an article of food. I have seen half-a-dozen well-marked cases of leprosy in natives (i.e., whites born in the colony)..... I saw one this morning exactly like a woman you had under your care in Moorfields, in 1870, with both eyes affected. The severer forms of the disease are as yet rare, but none of my cases ever touch fish." Within a few hours of the receipt of his letter two very intelligent Sydney residents called on me, and from them I gleaned the following facts:—Mr. and Mrs. H. said that fish was fairly plentiful, but eaten almost solely by the better classes. Much of it was notoriously unwholesome, and they had known of many cases of fish poisoning. Decomposition changes set in very early, and unless cooked directly the fish soon became bad. Lobsters were especially liable to become poisonous, and many persons would not touch them. Salt fish (imported) was much used, but less than formerly. They had not heard of leprosy in Sydney, except in connection with the Chinese.—July, 1879.

I have quite recently (1890) been told by friend Dr. Maclaurin, late President of the Board of Health for New South Wales, that there has been no spreading whatever of the disease in Sydney. He reports at present twelve cases in Sydney: ten Chinese, one Javanese, and one Englishman. Thus it is clearly, as in so many other places, almost exclusively a disease of Chinamen.

Antigua: Facts supplied to me by Dr. Jenkins, who had long resided there.—The better classes almost always eat salt fish and egg sauce to breakfast. Fresh fish cannot be easily got, and is not much eaten to dinner; not more than in England. The poor eat salt fish very largely. All the salt fish is imported, chiefly from Newfoundland, salt mackerel and salt cod. The poor eat fresh fish more than the rich, but not very largely. Many fish are poisonous, and some are poisonous only at certain seasons. The baracouta is the fish principally eaten and is an excellent fish. It is unwholesome in certain places. Dr. Jenkins (my informant) believes that it rarely does more than disagree with the stomach and induce urticaria. The yellow-billed sprat and the toad fish are both virulently poisonous at times; the latter is never eaten. The yellow-billed sprat is as poisonous as prussic acid at certain times and at others a delicacy.

Nicaragua: Bogota.—The following facts were supplied to me by my late friend, Dr. Fergusson, of Clermont Square. Our conversation had begun by Dr. Fergusson telling me that there was leprosy at Bogota, although it was far above the sea and out of the way of sea fish. He had lived there some years. Bogota is the capital of New Granada, and is 8,000 feet above the level of the sea, three days' journey from the River Magdalena, on the banks of a small stream, Bogota; a large inland lake supplies fish in plenty. They eat a peculiar fish, "like an eel but swims as a fish," which is believed to be unwholesome. It tastes like an eel if fresh. They eat also largely salted "vagra," a large flat fish, very coarse; especially during Lent this is what they live on. There are a few cases of leprosy. Dr. Fergusson had seen "a few cases, perhaps half-a-dozen, during two years." The natives consider it hereditary. It is in a few families only. The population consists of Europeans (very few), descendants of the Spanish, once numerous occupiers of the country, and some of mixed race, Indian and Spanish. In one of the Spanish families leprosy occurs. There is no leper house. In Ambelama, on the banks of the river, a tropical climate, they eat immense quantities of fish, and leprosy is much more common.

Bahia, Brazil.—For the following items I was indebted to Dr. Paterson, who had lived in Bahia: In the Leper Hospital no case was known to have occurred from contagion. The populace believe it contagious. It is also believed to be due to fish too exclusively used. Salt codfish from Newfoundland is much used. Salt codfish and salt meat are almost the only kinds of flesh food. Fresh fish, from the sea, is also much eaten. In a great measure dependent on fish, Brazil is only populated along the coast. Fish will only keep a few hours; it is often stale before it can be got to the house. A kind of shark is much salted and eaten. Brazilians never eat tainted fish or highly kept articles of any description. Leprosy occurs inland somewhat. It is equally common in the wealthy and poor.

Brazil.—Facts communicated by Dr. Hall:—"London, April 19th, 1873. I have seen during many years' residence in the Brazils numerous cases of elephantiasis of the Greeks. It occurred in all ranks, at almost all ages, from childhood to old age, in both sexes, and in most of the races inhabiting that country, the aboriginal Indian, the African, the Brazilian-born black, the coloured or mulatto, and even in the Portuguese; so that neither sex, race, age, nor social status gave exemption from the disease. The Brazilians universally and very firmly believe that the disease is contagious, although to my mind there is not a vestige of scientific evidence to prove this—quite the reverse. My experience, however, makes me believe that this disease is hereditary. Of the causation of the disease it is difficult to speak, for the disease, as above stated, is known to attack all grades, all ages, and differing races—that is, its victims seemed to be placed in very different hygienic and dietetic conditions. Thus the diet of the lower orders consists chiefly of cassava flour (*Jatropha manioc*, I think); they often eat a species of shrimp or prawn, preserved by being dried in the sun, and which is highly indigestible; but they by no means live much on fish, which is rather dear and scarce; nor are any fasts kept when only fish is eaten, except Passion Week. The Portuguese certainly use salt cod fish freely as an article of diet but they are by no means more attacked by the disease than others. The upper ranks have a diet somewhat similar to the European using, as a rule, more spices and condiments with their food, which is true of everyone else in the Brazils, particularly red and black pepper; they use, also, sweet oil in their thickening more than is customary with us. Maranham—of the inhabitants of which I speak—is a town in the north of Brazil, of 40,000 inhabitants, about 3° S. The city is clean, houses large, well built, and constant sea-breeze modifies the heat greatly; it is very healthy, escaping the epidemics that desolate the other Brazilian towns. The water drank is excellent, few as soft and good, none perhaps better—at least, so have seafaring people, who have been to all parts of the world to water their ships, said to me. The extreme heat forces ventilation of the houses, and invites the frequent use of the cold bath; the few clothes used are frequently washed; the people, as a rule, never suffer the extreme wretchedness and privations so common in this country, and are sober, wages high, the few absolute necessaries of life cheap; *yet in Maraham this disease is*

mmon. It is true that, as far as I have been led to believe, the sease is more prevalent in Pará, the hygienic conditions which are bad, and where they do use very deleterious fish food, but about Pará I cannot speak from personal observaon. It may be interesting to remark, when thinking of the rability of the disease, that one of my grandfathers, a very rge slave-owner, a believer in the contagion of the disease, used banish all slaves attacked to the heart of the forests, as far possible, of course, from his plantations. After the lapse of any years, I believe that this leprosy colony was visited, and was then found that some lepers had recovered, and also that ere had been healthy progeny from leprous parents. This was ld me; I cannot, of course, vouch for its accuracy; there may ve been sources of fallacy independent of wilful deception the part of the person telling me, whose statement I could ll believe. I think that I already spoke to you about my n idea that there was some connection between syphilis and is disease."

Brazil.—The following notes were kindly written out for me by . J. L. Paterson, now of Edinburgh, who formerly resided in azil: "I am sorry all I can communicate is in itself so meagre, d mostly of a negative character. In tracing back the many ses I saw to their origin, the one only positive fact I could make t was the hereditary transmission of the disease, or, to speak re correctly, the greater liability of certain families to suffer m it. What I mean by this distinction will appear from the lowing history: There was in Bahia a household, all Portuguese birth—two brothers, married to two sisters, their cousins. e of these sisters, after her marriage and long after having rne children, manifested symptoms of tubercular leprosy, urned to Portugal, and three years after died of the comaint. Two of her daughters from early girlhood suffered from e anæsthetic or musculo-atrophic form of the disease. The ner sister never manifested any symptoms of the disease; d yet two of her daughters, from about ten years of age, began suffer from the blotching of the skin that generally preludes e breaking out of the tubercular form, and, though sent at ce to Portugal, the disease pursued in them a course as rapid ever I have seen it do. Now, these children's mother had never nifested any symptoms of the disease, and their aunt—so I s even assured—was the first in their family, as far as they ld trace it back, that had been afflicted with the malady. is family was healthy, living on the best of food and in the st hygienic surroundings. Knowing that in other countries e disease had been attributed to improper diet—abuse of fish, trid fish, etc.—as also to filthiness of habits, I looked in vain these as having any appreciable influence on this develop-nt in Brazil. It was certainly as common among the wealthy d well-fed as among the poor, as frequent inland as among the ellers by the sea; and filthiness of habit is, as you know, known in Brazil. Clothing is of the scantiest—by the well- changed every day, by the poorest twice a week—and no e, from the Emperor on the throne to the maid-servant that behind the mill, is without at least one bath a day. I not suggest the slightest explanation of its origin in any en family. Thus, I know a Brazilian family consisting of e brother and four sisters, all married and all having large nilies. The brother was married to a Brazilian lady; of the r sisters, one was married to an Englishman, one to a Portuguese, d two to Germans, brothers. In none of all those families was re any antecedent history of leprosy, and yet one of the rman children, two years after leaving Brazil and while studyg in Hamburg, showed signs of the anæsthetic form of the ease, accompanied by wasting in the muscles of the hands. e disease was unrecognised in Europe, and the poor boy got ny a flogging at school for want of tact in his hands. On return to Brazil, when about 18, the case was at once recoged, with what horror to his family you may surmise, it ving by this time passed into the tubercular form. I left a still suffering from the disease, in a gradually progressing gree, he alone of all his brothers, sisters, or cousins the one icken. I have often sent children to Europe immediately on e first appearance of symptoms of the disease, but have never in y case seen the progress of the case in the slightest stayed that measure. How different from beri-beri! I know of no nedy that has any permanent effect on the progress of the ease. *I have never known a single case in which contagion ld be supposed to have given rise to the disease.* In the ar hospital at Bahia no attendant has ever caught the complaint; nor the women who wash the linen of the patients. So far from the *libido inexplebilis* spoken of by some, I have invariably found the sexual passion dulled or extinct. Such is all the information I at present remember."

India.—Dr. Chunder Roy, when in England, gave me the following facts: In Calcutta all classes of the population eat fish, but the Hindoos do not eat salted fish or fish in any way cooked or preserved by others. They will eat it fresh. Some portions of the Brahmin caste abstain absolutely from fish—the Mahratta Brahmins and the Brahmins of the North-Western Provinces. Dr. Roy added: Strange that among the Brahmins you scarcely can see a case of leprosy. The Bengal Brahmins will take fish. Dr. Roy told me that the worst cases of leprosy that he had seen were amongst the Naghpoor weavers, who, he said, eat fish largely.

India.—I received the letter, from which the following are extracts, from a very able surgeon in the Indian Civil Service about ten years ago. I omit his name only because I have no permission to print it. I shall have to dissent from some of his opinions, but at the same time I entertain the utmost respect for the intelligent zeal which characterises his letter:—"Dear Sir,—I have seen in the *Lancet* a report of your paper on a case of leprosy, read before the Royal Medical and Chirurgical Society. In it you express the view that a fish diet or a small quantity of fish eaten under certain conditions is sufficient to produce leprosy. I picked up the same idea myself some years ago, and had opportunities of investigating it. When Civil Surgeon of Etawah, in 1870, a station on the river Jumna, in the North-West Provinces, I had numerous cases of leprosy under observation, but in none of them could I trace the disease in any way to a fish diet. Two years afterwards I was in charge of a Central prison, where there were about twelve lepers always in confinement, but could get no proof to support the fish theory. I am now stationed in the Himalayas, in the district of Kinnam, contiguous to Nepaul, the country referred to by Dr. Macnamara, in the discussion on your paper. Leprosy is so prevalent in the district, that special leper hospitals have long been established for the reception of cases. These hospitals are at some distance from here, and are not under my charge, so that I cannot speak of the cases from my own experience, but I wrote to Sir Henry Ramsay on the subject. He has ruled the country for the past thirty years, and is personally acquainted with every soul in the places. He writes: 'I believe very few in the leper asylums have tasted fish a dozen times in their lives. Leprosy is hereditary beyond all doubt, and is accelerated or aggravated by poverty, and is clearly connected with syphilis. I have known it in men who never tasted fish or any other flesh in their lives, and who lived fairly well—high caste Brahmins.' In the course of my inquiries I found two things frequently present: a poor unvarying diet, almost invariably; a history of syphilis very commonly. The whole diet consisted, month by month, of the cheaper pulses, or a species of millet, if it happened to be cheaper than the pulse, little or no salt, no oils, and no vegetables. The class corresponding to the agricultural labourer at home is even, in the best of times, on the verge of starvation. Their one object in life is to fill their stomachs with some kind of food which does not affect their caste. Perhaps it may be that an unvarying diet containing only one constituent of the alimentary principles in sufficiency may produce the changes resulting in leprosy; that diet may be fish, pulses, or even one containing a preponderance of starch and a minimum of other constituents. Fisher people in Scotland nowadays don't live exclusively on fish; they, in fact, eat fish comparatively rarely; it pays them better to sell their fish and buy other food with the proceeds. In the olden times, when leprosy prevailed, there was no market for their fish, so they lived on the produce of the sea and a little oatmeal. The same is the case at the present day among the poor fisher people of Norway. The rich, there, you say, do not suffer. Do they in other countries, except by hereditary transmission from poor ancestors? I was struck with the resemblance that leprosy has, in certain of its stages, to syphilis. I have seen cases returned as syphilis which subsequently turned out to be leprosy. I do not think the fish diet theory is sufficient to account for the disease in all places. A fish diet may produce leprosy, but so may other diets."

Madeira.—"The exciting causes appear to be such as poverty and its attendant evils engender. There is at present one person labouring under the disease who is a clerk in a wine store. He is quite the aristocrat of leprosy here, and I have never heard of its occurrence in a more exalted situation; it seldom rises above the

Chronological Schedule Respecting the Prevalence and Decline of Leprosy in Europe.

Date.	Facts as to Leprosy in Europe.	English Kings.	Contemporary Events.
10th Century. 950.	Leprosy had for long been prevalent throughout Europe and in England. Leper houses had existed in Palestine for nearly a thousand years. Leper houses had existed in Ireland for more than a century. Hoel Dha, Welsh king, made laws as to leprosy. An act passed making leprosy a valid cause for divorce.	Edward succeeded Alfred (901). Athelstan, Edmund, Edred. Edwy, Edgar, Edward II. Ethelred II.	The Normans were now established in France. The Danes in England. The more strict observance of fast days may have led to a great increase in the consumption of salted fish, especially in inland places.
11th Century. 1000.	Leprosy prevalent. Several English leper houses existed before the first Crusade. Lanfranc (who died 1089), had founded a leper house at Canterbury. (It is doubtful whether Lanfranc's hospital was exclusively for lepers.)	Ethelred King. Edmund Ironside. Canute (1017). Danish conquest. Harold. William the Conqueror. 1066. William II, 1087.	Time of Hildebrand, 1073-1085. More strict observance of catholic ritual. The first Crusade was begun by Peter the Hermit, 1095. Newcastle-on-Tyne was built by Malcolm Canmore, 1097. It must be remembered that it was at this time that the first hospitals and pest houses were also built. We must not assume that leper houses implied a new or even increasing disease.
12th Century. 1150.	Leprosy prevalent. A leper hospital established at Ripon, and another at York. The earliest mention of leper houses in Scotland. Leper hospital instituted at Sherburn, Durham, by Hugh Pudsey for 65 lepers. One also at Ilford. (1180-3). Baldwin IV, King of Jerusalem, himself became a leper, and ten years later resigned his crown, being disabled. The testament of Louis VIII mentions 2,000 leper houses in France.	Henry I, 1100. Stephen, 1135. Henry II, 1154. Richard, 1189. John, 1199.	The third Crusade, 1189, under Richard I.
13th Century. 1200.	Leprosy prevalent. It is supposed that there were more than a hundred well-endowed leper houses in England. Probably they were not exclusively for lepers. First mention of leper houses at Bergen in Norway, (1266).	John. Henry III, 1216. Edward I, 1272.	The Norwegians invaded Scotland (unsuccessfully), 1263. Death of Louis IX and end of last Crusade (1270). If the returning Crusaders did really cause increase of leprosy, it was probably by altered habits of diet, and not by contagion. Time of Dante.
14th Century. 1300.	Leprosy on the decline. 1346. Baldock, Bishop of London, made rules for the Leper Hospital at Ilford, Essex. Edward III issued a proclamation that all lepers should leave London.	Edward I. Edward II, 1307. Edward III, 1327. Richard II, 1377. Henry IV, 1399.	Time of Wycliff and Chaucer. The real beginning of the Reformation. Gunpowder invented, 1320. Guy de Chauliac, Glanville, John of Gaddesden, Bernhard Gordon and Gilbert, wrote on Leprosy.
15th Century. 1400.	Numerous new leper houses provided in Switzerland. It was now almost extinct in Italy. Leper Hospital at Sherburn, Durham, in want of lepers, the foundation was reduced from 65 beds to 15, and of the latter two were to be kept for lepers, "if such can be found," and the rest used for other cases (1434).	Henry IV. Henry V, 1413. Henry VI, 1422. Edward IV, 1461. Richard III, 1483. Henry VII, 1485.	Discovery of America. It is not improbable that there was increasing laxity in the observance of fast days long before the Reformation was established. This would lead to disuse of salted fish. Henry VIII, on account of the rapidly declining use of fish, passed laws to compel householders to put it on their tables.
16th Century, 1500.	Leper houses were still being founded in the Netherlands and parts of Germany. A commission (Edward VI) reported most of the lazar houses in England empty (1547.) 1589, six lepers in the Glasgow lazar house. No lepers in the Ilford Hospital. No lepers being forthcoming in Durham, the leper hospital at Sherburn was privily diverted from its original purpose and arrangements made to receive "old, blind, lame, and otherwise impotent" (1585.) 1598, Edinburgh (Greenside) Hospital founded.	Henry VII. Henry VIII, 1509. Edward VI, 1547. Mary, 1553. Elizabeth, 1558.	Linacre died, 1524. Paracelsus died, 1541. Reformation begun in Germany by Luther, 1517. Reformation established in England, 1534. Potatoes introduced into England. There can be no doubt that leprosy declined very rapidly after the Reformation and the abolition of fast days.
17th Century. 1600.	1604. There was a leper in the lazar house at Aberdeen, and one in that of Kingscase, at Ayr. 1652. An order made to dismantle the lazar house at Greenside, Edinburgh.	Elizabeth. James I, 1603. Charles I, 1625. Commonwealth. Charles II, 1660. James II, 1685. William and Mary, 1689.	Shakespeare died, 1616. Harvey discovered the circulation of the blood, 1619. East India Company established. The English settle in Madras, 1620. First English settlement in West Indies and Barbadoes, 1625. Great Plague in London, 1665. The culture of potatoes common.

18th Century.	Still present at some places in France, (Upper Auvergne, Belle Isle au Mer still used as a refuge for lepers).	Anne, 1702.	Time of Louis XIV, 1643-1715.
1700.	Public thanksgiving in the Shetland Isles on account of the disappearance of leprosy. A few cases however still continued to appear, (1742).	George I, 1714. George II, 1727. George III, 1760.	
	1798. A man named John Berns, a leper, and descended from a family known to be leprous, admitted into the Edinburgh Infirmary.		French Revolution.
19th Century.	Not yet quite extinct in Germany. Still occurs in isolated places in Portugal, Spain, Italy, Sicily, and various other places on the Mediterranean. Prevalent in Crete.	George III.	Many lepers still in Norway and Iceland.
1800.	The Truro Infirmary received the revenues of the Leper Hospital, St. Laurence de Ponteboy, and bound itself to take in lepers should such be forthcoming.	George IV, 1820. William IV, 1830. Victoria, 1837.	
	Unknown as an indigenous disease throughout the British Isles.		
	Still very prevalent in Norway, India, China, and the West Indies.		
	Of recent increase in the Sandwich Islands, Australia, and a few other places.		

THE FOLLOWING NOTES RECORD SUCH FACTS AS WE POSSESS RESPECTING THE PREVALENCE OF OF LEPROSY IN TIMES EARLIER THAN THE TENTH CENTURY, AT WHICH THE ABOVE CHRONOLOGICAL SCHEDULE BEGINS.

IT is highly probably that leprosy has prevailed extensively in Egypt, China, Japan, India, and in many other places, from time immemorial. There are neither records nor traditions as to its commencement. The present inhabitants of Norway, Iceland, the Orkneys, etc., probably suffered from the time of their settlement. That there was a definite increase of the disease over Europe during the first fifteen Christian centuries is highly probable, with some exacerbation during the eleventh and twelfth, and a steady decline in most parts during the last five.

Leprosy is not mentioned in the Bible prior to the sojourn of the Israelities in Egypt.

To the earlier Greek and Roman writers it was known as a disease endemic in Egypt, and possibly by the name also of the Phœnician disease.

Lucretius writing B.C. 95, says "There is the disease called Elephas, which has its rise on the river Nile in the middle of Egypt, and in no other country." This remark illustrates Lucretius' ignorance of medical geography, for it had long prevailed in Palestine, India, China, and probably in many other places.

It became known in Italy in the last century B.C. Celsus speaks of it as "ignotus pene in Italiâ.

In the seventh century the Hospital of St. John was founded, and in the eighth that of St. Lazarus at St. Gallen on Lake Constance.

In 759 an Act issued by Pépin provided that leprosy in a husband or wife should be cause of separation. Charlemagne in 789 re-enacted similar laws.

Rothar, King of the Lombards in the seventh century, made laws to prevent the marriage of lepers. The first law on the subject in England was in 950. There were leper houses in Ireland in 869.

lowest class of peasantry. With a predisposition to the disease, however acquired, poverty, insufficient shelter and clothing, spare, unwholesome diet, great and sudden alterations in temperature, and filth, in their various combination, appear to be necessary for its production. Separately, not one of these would produce it, nor the whole combined, unless co-operating with a predisposition, for they are combined in eight-tenths of the peasantry, and yet the lazaretto contains eighteen persons only out of a population of 100,000."

(I have unfortunately lost the reference for the above. It may be from conversation or it may be extracted from a printed work.)

Leprosy in Assam.—Surgeon-Major White, in a letter to Mr. James Startin, which has been kindly shown to me, states that he believes leprosy to be produced by improper and unwholesome food, and filthy habits generally. He says that in 1858 leprosy was common in Assam, "at least 5 per 1,000," now "not 1 per 1,000 could be found." This diminution he attributes to improved wages, etc. He asserts that the better class of Hindus in Assam eat fish once or twice a day, and that leprosy is rare amongst them. That the Miris, a nomadic hill race, now settled in the plains are, after the Dunis, the largest fish eaters. Leprosy is very common amongst them. The Dunis, or fishermen caste, live mainly on fish, and prefer it semi-putrid. He believes them more exempt from leprosy than other castes in Assam of the lower classes. That the Marwame traders in Assam are natives of central India, settled in Assam and belong to the very strictest sect of Hinduism. They do not take life, or eat anything that has lived. Yet he "has known many cases of leprosy" among them. They do not intermarry with other tribes, so that the leprosy is not so introduced. Leprosy is very common among the hill tribes bordering the Assam valley; notably the Khasias and Nagas, although they rarely if ever eat fish. He found many lepers amongst tribes in the hills, who being Ishmaelites as regards others, and always at war, "had no means of even occasionally obtaining fish."

The Punjab.—Dr. Burton Brown, writing from the Punjab, states that he sees but very few cases of the disease. It is evident from his remarks that leucoderma is often confused with it ("white patches without anæsthesia"). He states that the genuine leprosy is considered hereditary, occurs very seldom amongst the rich, and is supposed to be connected with a poor diet. He adds in reply to a question that "though insufficient food predisposes to it, yet it can seldom be traced in the Punjab to a fish diet, since very few persons eat fish frequently, as it is scarce and dear.

Madras.—Dr. J. Garrett, a well-trained observer, who visited India in 1873, was good enough to send me notes of an inspection of the Leper Asylum at Royapostrum, Madras. I extract the following items as of interest:

"*Notes of a Visit to the Leper Asylum, Royapostrum, Madras, on August 18th, 1873.* J. Garrett.—There were about seventy in the asylum, men, women, and children; the youngest was about 10 years old. Some had been there ten years; in fact, they had a home for life if they liked to remain. There were no Europeans, but they usually had a few in the asylum. The patients stated that their diet had been chiefly curry and rice, with fish about once a week, and the attendant told me that they came chiefly from the sea coast, and that no case had occurred of any attendant catching leprosy from an inmate."

Japan.[2]—"Fish, which figures next to rice on their diet list, becomes, under some circumstances, a fruitful source of disease. It is prepared too often so as to be unfit for the stomach, as the above-mentioned rice cake. And in some very poor communities the people eat it after it has become half decayed; nay, they scarcely can consume it at all except thus damaged, since their poverty does not permit them to purchase the more expensive fresh and sweet article. I am convinced that to it must be attributed in a great measure the production of so much leprosy found in those very places. In my inquiries after the existence of leprosaria I could only learn of one, at Miaco, the great city of Nipon, where the supreme Mikado resides. This institution is supported by the people, independent of the government. There the lepers receive medical treatment. These miserable beings are very numerous in Miaco, very scarce in Nagasaki, but count largely again in Amakura, in Omara, and Ch'Kngo. In the latter place, built upon the low, marshy banks of a river, which, in its frequent inundations, leaves constant large pools of water standing between and underneath the houses, the people live on nothing else but this cheap, because damaged, dried fish, and hardly a single family can be found there free from leprosy. In Nagasaki leprosy is only sporadic; in all the other named places it is decidedly endemic."

Bombay.—From a Resident: "The Parsees, or Zoroastrians, both sexes alike, as a class are notorious fish consumers in the Bombay Presidency. They get the best fish in the market. I do not know whether they consume much salt fish. The people living in the Concan[3] (Alibagh, Tauna, and Rutnagherry districts) eat great quantities of fish. The inhabitants are chiefly Hindus. The lower caste Hindus are not prohibited from

[2] By H. Ernest Schmid, M.D., *Medical Record*, July 1st, 1869.

[3] In the Concan leprosy is exceedingly prevalent.

eating animal food of any kind, but the women dine separately from the men and very often have to rest satisfied with whatever their lords and masters choose to leave them after satisfying their own appetites. The strictest observers of caste are perhaps the Janis or Baninas, and they rarely, if ever, touch animal food of any sort.

Return of Lepers in the Leper House of T-arn Táran, India.

SIR,—I beg to submit a statement showing the result of my inquiry. I have stated what has been ascertained from lepers present in the asylum at this date. I made an inquiry after the lepers residing in the city of T-arn Táran, and I found that altogether 88 lepers (52 Hindus, 25 Mohomedans, and 11 Sweepers) are residing there, but all of them have gone out to beg, excepting 4; 2 belonging to higher classes and 2 to lower classes. They allege to have never touched fish. With reference to the rest, 84, I cannot give any accurate data, whether they belong to higher classes or lower ones, and whether they used fish or not. There is no evidence to prove that leprosy is caused by fish-eating. Leprosy is most commonly met with in the lower classes of Hindus and Mohomedans, and among the Mehters (at an equal rate). Leprosy is seen particularly in persons who use unwholesome food and keep themselves dirty, hereditary taint being the principal cause, the details of which are not asked and need not be mentioned therefore.—Yours obediently, LACHMAN DOP, I.M.S., Assistant-Surgeon. March, 1875.

"Total number of lepers in the Leper Asylum at T-arn Táran, 113. Of those, 37 were Hindus, 67 Mohomedans, and 9 Sweepers; 30 belonged to the higher classes, 83 to the lower classes; 77 never used fish, 6 used fish but seldom, 30 often used fish."

Comments.—Mr. Dop's statistics, if trustworthy, are obviously conclusive against the fish theory. I am, inclined, however, after some experience of similar ones, to take them with much reservation. The patients told him that they had not eaten fish, so would, in an English hospital, most women suffering from alcoholism have assured him that they had never touched spirits. Religious character was to some extent at stake. I never heard anyone doubt that Indian natives, unless restrained by caste, would, if it could be got, eat fish. Mr. Dop's facts prove that in the district concerned fish was to be had. The Mohamedans would, of course, have no scruples, nor would most of the Hindus. I find, therefore, the statement that so large a proportion had abstained incredible, and must leave the matter for more critical investigation on the spot.

ON SOME FACTS AS TO THE HISTORY OF LEPROSY.

It becomes of much importance in the search after the cause of leprosy, to get correct impressions as to its history. I have therefore ventured to compile the appended schedule[4] which comprises, in chronological order, some of the principal facts as to its prevalence in Europe during the Middle Ages, and its decline during the last five centuries. I have not gone further back than the tenth century, as our facts in earlier times are but few and vague.

We can state nothing with certainty as to the prevalence of leprosy in England during the Roman occupation or for some centuries later. The same remark applies to the nations who in succession immigrated to our land. Concerning the medico-social history of the Danes, Saxons, and Normans but little is known. It may be conjectured, however, that the evidence is simply wanting, and the probability is great that the disease existed amongst all these from the earliest times. In the tenth century it was a subject of legislative enactment in Wales, one of the laws of Hoel Dha providing that a wife might claim separation from a leprous husband. Such a fact makes it probable that the malady had long been known.

In England leper homes were founded in the tenth century, and from this date onwards their institution was frequent. Through the eleventh, twelfth, and thirteenth centuries the disease was certainly common, and with the end of the thirteenth there begin to appear signs of its decline. During the first half of the fifteenth it is recorded that various leper houses were in want of inmates, and in the middle of the sixteenth a commission appointed by Edward VI reported most of them empty. The decline began before Luther's Reformation, but appears to have been much accelerated by it.

In Scotland leper houses began to be instituted after many had been formed in England, and there are records of several new ones being formed at a date when those in England were ceasing to obtain inmates. These facts are probably to be explained in part by the slower progress of the custom of hospital building in the northern counties, and by the fact that leprosy prevailed there at a later period than England. It lingered last, as is well known, in the Shetland and Faroe Islands, and it was not till 1742 that the Shetlanders were able to hold a thanksgiving service for its final disappearance. It had lingered in Cornwall almost to the same date.

In England and Scotland leper houses were at one time abundant. They were found chiefly at seaports—King's Lynn and other Norfolk towns had many—but were also met with inland, as at Canterbury, York, St. Albans, Ilford, Northampton, and Ripon.[5]

I am indebted for many of the dates in the text and accompanying schedule to the admirable antiquarian articles on Leprosy, by Sir James Simpson, *Edinburgh Medical and Surgical Journal*, 1841.

Amongst the conclusions suggested by the historical facts are the following:—

Leprosy was probably indigenous or of spontaneous origin in many parts.

No proof is forthcoming that the Roman armies spread it over Europe. The Roman arms never reached Sweden or Norway. It is certain that leprosy prevailed to a considerable extent over Europe and in the British Isles before the Crusades. There is no doubt that leper houses were founded in large numbers soon after the Crusades, but what relation they had to them is doubtful. But few hospitals or charitable institutions of any kind had existed earlier.

It is not improbable that leprosy increased with the spread of Christianity in Europe, and it certainly was at its height during the most flourishing period of mediæval Catholicism.

It began to decline in the fourteenth or fifteenth century, and its very rapid disappearance was coincident with the Lutheran Reformation.

Since it is certainly not contagious in any degree which would account for its spreading, and since it is also an utter mistake to believe that efficient segregation was practised, no explanation either of its increase or decline is forthcoming, unless we accept the hypothesis that the compulsory use of fish on ninety fast days in each year had something to do with it.

The effect of the compulsory fasts would be to send salted fish into inland districts and one of the very remarkable peculiarities of leprosy in the Middle Ages as contrasted with our own is that it occurred at a distance from the sea.

The development of agriculture, the increased supply of fresh food and of cereals were also coincident with the decrease of leprosy.

Henry VIII so far recognised the decline in fish eating that he passed a law in the interest of fishermen, to compel its more liberal use. This was precisely at the time that leprosy was vanishing.

That the leper houses did not effect segregation and were not indeed designed to do so, is shown by the fact that when lepers become scarce, other objects of charity were admitted in company with them.

(To be continued.)

[4] The schedule is arranged on a somewhat novel method, to which I give the name "space for time arrangement," and which is, I venture to think, a great improvement on the ordinary plan. To each century the same space is allotted so that the eye easily appreciates the periods of time which have passed.

[5] In a map showing the position of leper houses in England, in the JOURNAL March 1st, in connection with Dr. Ransome's lecture. It is desirable that I should state that the whole of my paper was in type before I saw Dr. Ransome's. As regards a possible relationship between leprosy and tubercle we have arrived at similar impressions.

NEW SERIES OF THE KLINISCHE VORTRÄGE.—It is announced that the periodical which has earned for itself so honourable a reputation under the name of *Volkmann's Sammlung klinische Vorträge*, will be continued under the editorship of Professors Leyden von Bergmann of Berlin, Erb of Heidelberg, and Winckel of Munich, representing the three great branches of the healing art. Professor Erb will have charge of the medical, Professor von Bergmann of the surgical, and Professor Winckel, of the obstetrical and gynæcological department. Six numbers are to be published in the course of the year; the first three will appear in May.

DR. P. SONSINO, well known for his valuable contributions to medical helminthology, some of which have appeared in our own columns, has recently been appointed as a teacher of parasitic diseases in the University of Pisa.

AN ADDRESS ON THE SURGICAL ASPECT OF IMPACTED LABOUR.[1]

By LAWSON TAIT, F.R.C.S.,

Professor of Gynæcology in Queen's College, and President of Mason College, Birmingham; President of the Midland Medical Society, etc., etc.

MR. PRESIDENT AND GENTLEMEN,—I feel much the honour you have done me in asking me to deliver your annual oration, but when I first received the communication from your secretary I had, as usual, much difficulty in the selection of a subject of which to speak, for although the triumphs of abdominal surgery are always fresh, yet the constant reiteration of points as to which the minds of most men are made up is apt to pall upon the taste. At the same time there are many points upon which it is impossible to make up one's mind till those who supply the material on which to form a judgment have taken us into their confidence, and till, by outside criticisms, we have been led into a correct line of practice.

I have first of all to observe that the progress of modern abdominal surgery has influenced surgery in general throughout its entire extent, a fact which may be abundantly illustrated, but which will be shown in one striking instance, namely, that the use of short ligatures, now universal, was distinctly the result of the practice arrived at first within the abdomen, and completely established only within the last ten or twelve years. You must have seen, as I have, the tedious manœuvres formerly in use which necessarily accompanied the use of the long ligatures, causing much anxiety to the house-surgeon, who had to go from bed to bed, pulling gently at the ligatures till they came away, and sometimes they would not come away, but remained for years, with the fistulous tracts, attached to important structures like nerves, frequently causing distress to the patient.

Of course the converse is also true, that general surgery has largely influenced the progress of abdominal surgery, but I think it is more true that the influence is exerted in the direction I first indicated. The influence of the recent practice in abdominal surgery has also had a very considerable effect on the practice of medicine, even to the extent of withdrawing large groups of cases from medical treatment into the realm of surgery. I need not recall to you how hopeless the treatment of a suppurating kidney used to be; how the case was kept month after month in the medical wards, where useless treatment by drugs was employed. This is now dealt with successfully by nephrotomy or nephrectomy.

In the third great division of the practice of medicine, obstetrics, the prospect of the interference on the principles laid down by abdominal surgery is less striking; but even here it is to be hoped that our progress will not be without effect. The medical and surgical aspect of obstetrics is sharply defined, and one, who practise purely as a surgeon, is but little of obstetric work, and, save for the incidental occasional conduct of a case in which there could be any question as to the possibility of relieving a parturient woman by an opening through the abdominal wall, any association with obstetrics is absolutely negative.

I come before you this evening to risk a question before a body of men likely to give me suggestions distinctly trenching upon the department of practice with which I have just confessed myself as having nothing to do. It is certainly more than twenty years since I have seen a case of normal labour, and I ask your indulgence, therefore, if, upon purely obstetrical grounds, I should make a slip. I have done my best to bring myself up to date upon the matter by the consultation of all the authorities within my reach, but no man can indicate an exact knowledge of obstetrics unless he is in full association with its object. My purpose in this new inquiry is to examine whether our methods of dealing with impacted labour are not capable of improvement. I of course am not speaking about impactions that can be relieved by the forceps or by turning, but of cases in which the impaction is due to some deformity of the pelvis, or similar cases of an extreme kind. Such cases are met with in remote districts of the country, where the accurate measurements of pelvic diameters, as recommended by skilled obstetricians, are not practicable. It might be possible, under favourable circumstances and in highly-skilled hands, to say, before labour has begun, or during the early stages of the process, that the diameter of the pelvis is, or is not, less than three inches, but, as a matter of fact, such a pronouncement is not within the skill of the ordinary practitioner; and, moreover, in the great bulk of the cases of which I am about to speak, labour would be too far advanced, and they may have already made tentative efforts at relief, so that an accurate measurement and knowledge of the real condition of the pelvis may become impossible; or they might, by the previous experience of the patient, by the knowledge of the fact that she had a previous impacted labour, which required the most serious means for overcoming the obstruction, have a knowledge which would guide them in the proper treatment of the case. If by any reason they came to the conclusion that the least diameter of a given pelvis was not less than three and a half inches, the authorities were agreed that it was a case in all probability by which delivery could be effected by the forceps, and if not less than three inches then podalic version would be successful. When, however, they came upon cases, more especially when they were unexpected, where the diameters of the pelvis were restricted below this, the difficulties became greater and greater.

I am not here to speak to skilled obstetricians, nor indeed am I prepared to accept their verdict upon the point, for ninety out of a hundred men who had to make their living by extending the practice of midwifery are not skilled obstetricians, are not under circumstances in which, had they even been skilled obstetricians, their skilled knowledge of the art could be maintained. They did not live with the full association and stimulus of hospital appointments and teaching engagements, with all the resources of skilled aid, and the most recondite costly appliances at their call. Men who existed under these favourable circumstances could maintain their high level of the science of the obstetric art, but with the majority of practitioners, the conditions of their life rendered this impossible. I find that the skilled obstetricians speak with authority on the one side as they themselves occupy it, but I wish to have the authority of another and a far more influential and, I venture to say, generally useful person, the general practitioner, and upon his decision, I think the future practice of obstetrics upon this vexed question must depend, whether it should remain what it is or whether it should be altered for the better.

I have to point out that impacted labour may arise in one of two ways: first, that impaction may be due to causes intrinsic to the fœtus, such conditions being very rare and for my purpose, they may be almost dismissed. Within this class is comprised hydrocephalus, a very rare condition; distension of various parts of the abdomen or of the body generally; anasarca—one of the very rarest—or perhaps distension of one kidney from obstruction of the ureter, resulting in enormous hydronephrosis. So rare are these cases that it is indeed hardly worth while speaking of them even as exceptional conditions. In the great majority of instances the impaction results from causes intrinsic to the mother. We have therefore to deal with two groups of cases, one infinitely small and exceptional, so small as to be practically undeserving of attention—and that group might be dismissed with a remark that if the diagnosis were made of the true cause of impaction, the destruction of the child is a matter of necessity, for no one would advocate surgical interference with the mother on account of a fœtus subject to any of the diseases or deformities I have just alluded to. I therefore pass on to the consideration of impaction due to the defects of the mother, and I say it is necessary here to mark out into subdivisions all cases in which the line of practice would be distinctly divergent, possibly not so much in the course to be followed as in the reasons for the proceeding which would have to be adopted. Thus the impaction might be due to cancer of the cervix or vagina, conditions in which there could be no doubt as to the propriety of interference with the mother and not with the child, for the reason that the mother was suffering from a disease which had already doomed her to a certain death whilst the fœtus was not in any way affected, and consequently it would be far graver to be concerned with it than with the mother, if there be any choice of opposing interests.

You know, of course, as a matter of history, that embryulcia in such a condition for the mother is a very risky and a very deadly operation.

Next we come to the most important class of cases of impaction, where the difficulty arises from pelvic deformity, tumours of the uterus, or of the ovaries; generally speaking, indeed, the most frequent cases of impactions due to conditions in the mother. Here, again, there is a qualification which almost subdivides the

[1] Delivered to the Southampton Medical Society.

line of treatment to be followed, not as a matter of choice, but as one of necessity, and that is as to whether you know the exact condition of the mother before labour has advanced to the position of impaction. If you are a skilled obstetrician and can assign the precise condition which will be found, your gifts will undoubtedly be a great help; or, better still, if you have an accurate knowledge of the condition of the patient in a previous labour, you will be still better able to elect the line of treatment which will be most to her interests. If you know, for instance, from your own experience or from knowledge received from your patient or her medical attendant, that the first labour has been terribly protracted, and had to be terminated at last only by evisceration of the child, your desires would be certainly considerably lessened to have the conduct of the labour in any case, but such information would be very useful to enable you to make use of one alternative which, without that previous knowledge, would never enter into your mind—you would in fact have no alternative—I mean the induction of premature labour. The great majority of cases of this kind, however, that come under observation, have not this illumination thrown upon them, I mean that of the preliminary investigation or the information which previous experience of the case has secured. There is no knowledge of the exact condition of the pelvis, and as a rule the knowledge that there will be serious impaction is only derived by its actual occurrence. As a rule the men who practise midwifery in this country and are called to attend the patients in the labouring classes in their confinements, are not asked and are not permitted to make a preliminary examination, which would enable them to determine the condition of the pelvis, and they are frequently kept entirely in ignorance of the facts of a previous labour which would have put them on their guard, and they knew nothing of the possibilities of the serious impaction in the case where it does occur till they are face to face with it.

No condition more trying can be placed upon the medical practitioner than the conduct of a case of serious impacted labour in an outlying district, far from the skilful aid of a skilled obstetrician; indeed, it may be far enough from the help or advice of his nearest medical neighbour. I have seen terrible instances of the results of prolonged efforts to overcome the impaction by the routine systems laid down in the books—first, the application of the forceps, then an attempt made to turn, then a prolonged, deadly, horrible operation for the evisceration of the child. I have seen cases in which the posterior wall of the bladder and the anterior wall of the rectum have been torn and destroyed by pressure, and the patient escaping, as the saying is, by the skin of the teeth after an operation in which one life has been lost, another nearly sacrificed, and the reputation of a third human being probably greatly injured. The whole thing is horrible, especially when we bear in mind that it is not the worst cases that survive in whom we see this terrible mutilation—in the worst cases, the mother shares the fate of her child—such cases are indeed deplorable. They are, however, by no means uncommon, for not a year passes in which I do not see cases of such damage to the maternal tissues resulting in dreadful fæcal and urinary fistulas after long impacted labour, that I feel sure, in the interests of humanity, some reconsideration of our position is called for. I never get into conversation with a practitioner advanced in life, and with prolonged experience, from whom I do not gather in conversation that he has met with a number of such cases, the great majority of whom die.

On the other hand, I have been strongly impressed with the belief that the facility with which a perforator will relieve the head of a child of its contents, so that its diameter may be reduced half an inch to an inch, together with the reduced sense of the responsibility with which modern skill in obstetrics has induced us to regard the life of the child, has led to the perforator being more frequently used than it ought to be.

In conversation with a practitioner some forty or fifty miles from Birmingham, who had reached his three score years and ten, he told me that he had only twice had to eviscerate children to overcome impacted labour, in a practice which had extended over forty years in the one neighbourhood, whilst next day I heard from the lips of a general practitioner, who had not lived quite six years there, that he had, in that short experience, effectually employed the perforator no less than seven times. I cannot help thinking that in this instance—and my experience in this direction is not confined to it as unique—there was displayed a far too slight regard for the interests of the child.

In discussing the rules for our practice at this point we bring in discussion the treatment of impaction at some point or other within the pelvis where the diameter is below three inches, perhaps below two and a half. In such a case, according to Simpson, the induction of premature labour would be indicated, but this would certainly not apply to the case of a primipara, for I assume that in the great majority of such, the practitioners are called in to women already well advanced in labour, or in whom at least labour has begun before they know anything at all of the complication which they are to overcome, where they find, in fact, the impaction already taken place in face of greatly reduced pelvic diameter.

It is clear, of course, that where a previous knowledge of the condition has existed, the choice of induction of premature labour is one which ought to be fairly discussed, and probably, in the majority of instances, accepted; but in those instances where this is not the case, the good regulation practice, according to the books and the teaching of the schools, leaves nothing but the adoption of an eviscerating operation for the destruction of the child; and it is possible also that doubt may be expressed even in cases where the notice has been given, and where the induction of premature labour may be adopted, for authorities differ upon the value to be placed upon this proceeding, even to the extent of a rendering of its mortality from 5 to 50 per cent. If the mortality be found not to exceed 5 per cent., I think there is nothing to be said against it, but if it approximate anything towards 50, or even 30, then I say most emphatically the proceeding is to be condemned, and now I am speaking of maternal mortality.

Of the mortality amongst the children thus prematurely removed, all authorities must admit that it is high; and then when we come to deal with cases in which the reduced pelvic diameter is still more a matter of distortion, the induction of premature labour must be so advanced as to come within range of the induction of abortion at the third or fourth month in order to remove all risks of the necessity for evisceration. Upon this point, therefore, we may with justice narrow down the theme which I wishto discuss, and that is when a practitioner is face to face with a case of impacted labour at the full time, in which he has had no previous knowledge of the possibility of complication, in which efforts at delivery by long forceps and podalic version are evidently unlikely to prove effectual, or actually have done so on trial, what is to be done?

The routine treatment advised by authorities is that of evisceration. I propose to offer the alternative, which I think has greater and stronger arguments in its favour, and it is to test the validity of these arguments by the opinion of men who have the best means of discussing them and the best knowledge of the real state of the facts that I appeal to my professional brethren who are in general practice under such circumstances as to relieve them from the charge of being skilled obstetricians; for I do not think the skilled obstetrician ever has the experience or the knowledge which justifies a verdict upon the question. At any rate, it is perfectly certain that his verdict would be one that could not be applied to the general practice of obstetrics throughout the country.

Then passing on to discuss the operations at present in vogue, I have to enumerate evisceration, generally beginning with perforation of the head or one of the large cavities of the body, and removing the child piecemeal. As I have seen this operation performed, and had in one or two instances in my early life to perform it myself, I cannot imagine anything more repulsive and horrible. It is open to a great many objections, as in the first place it involves the investment of a considerable amount of money in an extensive and costly armamentarium, which usually lies rusting in a corner year after year, until the rare occasion presents itself for its use. Such an armamentarium must necessarily be possessed by comparatively few men, and there would be always a tendency, as I have already illustrated, for timid men to resort to the destructive operation under less severe conditions than altogether justified it. The operation is an extremely complicated and difficult one occupying in the majority of instances a very long period of time for its accomplishment, necessitating, in those instances where it is most required, great bruising and injury to the maternal passages it involves of necessity the death of the child, and, finally, it leaves the mother, if she recovers, exactly where she was, to undergo a similar risk again.

As an alternative to such an operation, I have to offer a modification of our old friend the Cæsarean section; but it must be borne in mind that there is great difficulty and no small danger by reason of the constant want of precision in modern nomenclature concerning operations. The operation as at present known by that term

onsists in principle of the preparation of an artificial channel etween the uterus of the living or dead mother and the outer orld. The original meaning of the operation was restricted to the moval of a living child from a dead mother, and the conditions f the operation were stringently limited by the canons of the atholic Church. It was the duty of the obstetrician to wait till ie mother was dead before performing the operation. In the iterests of the child being in eminent danger from any cause, it as imperative to have the child baptised as long as indications of fe remained in it; and it is well known that the canons of the atholic Church lay a far greater stress upon the duty attached to reserving the child than is recognised as part of the ethical code modern obstetrics. Whether we have rightly or wrongly departed om this is a matter for individual opinion; but I am strongly sposed to believe that we have too little considered the cogent ar- iments of the fathers of the Church, through which have descended ie Christian doctrines for many centuries uninterruptedly.

A large number of new operations have been suggested as modifi- tions of the Cæsarean section to which the names of persons ve become unfortunately attached, but in none of these, with ie exception, is there any detail of a new kind of sufficient im- rtance to be lifted into the position of a particular item of menclature. None of these details, with the exception of the ie about which I am about to speak, have proved of sufficient portant in practice to justify us in believing that they are in y way essential to success. The great majority of proposals are mply encumbrances of needless details; and I dismiss them, erefore, as proceedings which are altogether unsuited and un- itable for the daily practice of men who are neither scientific stetricians nor practised abdominal surgeons.

The exception of which I desire to speak is that principle of mputation of the pregnant uterus introduced by Professor Porro, nich in my experience and in my belief will revolutionise the art obstetrics in those conditions in which the relations of mother d child are of the most serious kind.

In the old Cæsarean section, no matter whether applied to the ving or the dead mother, the uterus was not removed. Professor rro's proposal is to perform a Cæsarean section, and then to re- ove the uterus by a simple process of amputation, and this con- tutes a most essential difference to all other proposals. The dif- rence may best be expressed by figures, for it seems to me that cases operated upon by the adoption of Professor Porro's prin- ple, the mortality need not exceed 5 or 6 per cent., whilst we ow that the Cæsarean section gives a mortality of no less than or 95 per cent. Sydney Smith used to say that no one ought to rform the operation of Cæsarean section unless he were infallibly tain that he was infallible. It used to be a byword in Scotland at the operation was never successful unless it was performed a cow, an allusion to the fact that in cases in which acci- ntally a cow had ripped open a pregnant uterus, several coveries had taken place, whereas hardly a patient was known have recovered even when the operation was performed by a cial surgeon.

The reasons for the want of success attending the performance Cæsarean section are not far to find. In the first place, the eration has to be performed in the great bulk of instances by n who have had no kind of special training, not only in abdominal gery, but in surgery generally. Most of the operations fall to lot of men in outlying districts, and this was undoubtedly a tor of great importance in the consideration of the mortality. e cases were not operated upon in their earlier stages, but only, a rule, after a tremendous amount of ineffectual effort had been rcised to effect delivery in other ways. In other words, the ration was only practised as a *dernier ressort* and in *articulo rtis*. The maternal parts were extensively lacerated or con- ed, and the mother was in the worst possible condition for h a serious undertaking. No wonder the mortality was high. n a third and important factor in the mortality was the reten- n of the uterus, occupied by a large wound, through which bably the hæmorrhage was in a large number of cases fatal, even when this objection was obviated an organ was left suffer- from serious traumatism, the inflammation following which is of the deadliest perils a woman has to undergo. You all w very well that there is no region in which the inflammatory cess is so uncontrollable as in the parturient uterus. So ngly have I been impressed with this that I am prepared to ertake, in the treatment of the so-called puerperal fever, oval of the suppuration uterus as probably the only treat- nt which we shall apply of a really satisfactory kind.

When we open the bodies of women who have died after confinement from inflammation of the uterus, we find a suppurating peritonitis, which is only a feature of the case. The real trouble is that the enormous venous sinuses of the uterus are filled with decomposing and purulent blood. This would therefore of necessity constitute a large element in the mortality of the old Cæsarean section. Removal of the uterus would obviate it. Finally, the removal of the uterus would entirely relieve the patient from the risks of again being placed in a similarly dangerous position. This question, of course, is an ethical one upon which considerable difference of opinion may be expressed, but I, for one, have no hesitation in arguing for the view that if on the one hand we have a means of relieving a patient for the time, and on the other hand a means of permanent cure, we are bound to accept the method of permanent cure instead of one of mere temporary relief. My thesis is therefore contained in this question: Whether, when you have before you a case of impacted labour arising from causes which you have been unable to ascertain beforehand and in which neither the forceps nor turning are available for relief, it will not be better to put all eviscerating operations on one side, and proceed to remove the fœtus through the abdominal walls of the mother?

Arguments for such a proposal must, of course, be largely statistical, and are apt to be made more or less misleading for the simple reason that mere statistical returns cannot comprise the whole history of the cases, and the most dissimilar cases are apt to be grouped together. Statistical investigations must therefore, to be of any value, comprise a very large number of instances in order that they may be qualified, or they must consist of a small number in which the conditions are most rigidly defined; in fact, the total record must be so comprised as practically to annihilate what may be called statistical display. It would thus be nonsense to consider in the same group cases in which impaction had been found beforehand, and those in which amputation of the pregnant uterus had to be performed upon patients only after a tedious suite of useless efforts of other kinds. In the former state, the patient would recover, and in the other there would be a risk of an immense mortality. In the latter series, it was the mauling previous to the surgical operation and not the operation which killed the patient.

We might, therefore, draw some conclusion from the material which is available. In this way all statistics of the kind are liable to mixed qualifications; but even qualified as they have to be, we may draw some conclusion from instances where statistics of a very extensive kind are obtainable. Thus, according to Ramsbotham, the simple application of the long forceps has a mortality of something like 15 per cent., and Simpson, with all his advocacy of podalic version, could not claim to be more successful.

All the modern authorities on craniotomy are nearly agreed that this operation has a mortality of at least 20 per cent., and this would probably be very much emphasised if we could get hold of the return only of the cases in which the operation was really necessitated by a small pelvic diameter, and had to be carried out to the piecemeal removal of the child. Even the mortality of the induction of premature labour is said to approach nearly 15 per cent. for the mother, whilst for the child it is certain that not more than half a chance is given; but even these statistical statements are, I think, only one side of the question. In forceps application the mortality of the fœtus is well known to be about 1 in 7 or 8, whilst in turning it is 1 in 3 or 4. In craniotomy, of course, the child dies practically to the extent of 100 per cent. On the other hand, in cases of amputation of the pregnant uterus, the mortality for the child is almost nothing, certainly not 5 per per cent. as against premature labour, in which half the children are lost, and the question therefore narrows itself down to the diminution of the mortality for the mother.

I am perfectly well aware that the ethical view upon this question will be immensely modified by the accident of the particular school in which any particular writer has been brought up. Upon such a question every man is entitled to have his own individual opinion, but it is hardly right to extend this opinion into a pronouncement from a school unless there be a semblance of critical authority to back it. The old discussion between the application of the forceps and the operation of podalic version was an illustration of this. When it was discussed between the Dublin and the Edinburgh schools, many present must remember how fiercely this battle was fought, and upon the point chiefly of the right of the child to a consideration when the mother was in danger. The teaching of the Dublin school was, of course, strongly

tinctured with the teaching of the Catholic Church, whilst that in Edinburgh was not less strongly coloured by the school of Calvin.

Authorities dating from Rome hold very stringent views in respect to the propriety of saving the child if possible, and I have to urge that views promulgated by a church which was the only one that had given the matter a special and distinct consideration are entitled to respect from an ethical point of view. One result of the discussion that I am speaking of between Edinburgh and Dublin was an effort of compromise—which, like most compromises, was highly unsatisfactory—under which a rule was adopted that the obstetrician was to wait till the death of the child before proceeding to an eviscerating operation. The only result of this could be the certainty of destruction for the child and the enormous increase of the hazard for the mother. Personally, I am disposed to endorse the view that the child is eminently entitled to serious consideration, and I think that there has slipped into our training a lamentable tendency to disregard the rights of the child.

I would not go so far as to say that the child has equal rights with the mother, but certainly its life ought to be the subject of a far more serious consideration than is at present given to it. This is one of the reasons why I have taken upon myself to advocate an operation which involves vastly less risk to the mother and gives a thoroughly good chance of life to the child. My thesis is that eviscerating operations ought to be entirely discarded in favour of amputation of the pregnant uterus, except in the small and exceptionally insignificant group of cases in which the impaction is due to causes intrinsic to the child, and where the life of a deformed or diseased fœtus is really a *quantité négligeable*. I believe that the operation which I advocate is simpler in its performance than the application of the long forceps, and that any man who could do the one could certainly do the other as I propose to lay it down before you.

Eviscerating operations are always of the most protracted and terrible kind, absolutely fatal to the child, largely destructive to the mother, and may possibly be fatal even to the operator himself, who runs no small risk of injuring himself in the removal of the sharp fragments of bone. In advocating the performance of abdominal section in such cases it becomes perfectly evident that simplicity must be the order of the day. We must have no rival incisions nor complicated kind of sutures, but a simple, straightforward method of proceeding which may be understood by anyone and practised by the least competent amongst us.

You must bear in mind that in the abdomen containing a pregnant uterus the conditions must always be alike, and that therefore this operation will always differ from all other instances of abdominal section, where, almost without exception, variety is the order of the day. Given an abdominal tumour, it is but seldom that its exact conditions and nature can be defined before the proceeding for its removal be undertaken. Complications of endless variety and extent are met with from case to case; but in the respect of a pregnant uterus the conditions and relations of parts are subject to variations of only infinitely little importance, and which, for the purpose of any large number of operations, may be entirely disregarded.

The arguments, therefore, for the proposal that I have to make are that Porro's principle of amputating the pregnant uterus has reduced the maternal mortality of these operations so enormously that we may well hope to see it reach the point at which ovariotomy has arrived, so that not more than 3 or 4 per cent. of the women subjected to it may die; but, even allowing a somewhat higher average for men less practised than those like myself in abdominal surgery, we may concede 5 or 6 per cent., and I ask, therefore, whether it would not be a brilliant result to save some sixty or seventy more of the mothers in every hundred than we do at present and 95 per cent. of the children. Then there is the strong ethical question that for the women who survive a cure has been effected, and the absolute prevention of the recurrence of the terrible position in which they have been once placed is secured; and this risk of recurrence is not a vain one, as everyone must know who has had in his practice instances where craniotomy or even premature labour has been necessitated time after time in the same patient. Far above all the demands for such an operation as this lies the demand for simplicity, and therefore I deprecate the introduction of any complicated detail into such an operation as this—indeed, I deprecate the introduction of any detail into any operation—which in the least degree tends to complicate its performance, or renders more cumbersome and less intelligible the instruments required for its performance. The less elaborate and complicated the instruments are, and the less tedious and difficult the manœuvres, the greater the chance of any surgical proceeding becoming popular as well as successful.

It was practically impossible for every practitioner to be provided with all the numerous instruments which are wanted to make up the paraphernalia of the scientific obstetrician, while he would inevitably have at hand the few simple instruments required to perform the operation for which I am now arguing that it ought to be substitute for all the destructive and mutilating operations on the fœtus in impacted labour. In enumerating what is required, let me first of all say that they are what you may carry in your pocket case: two or three pairs of catch forceps for arresting bleeding points, a small sharp scalpel, two or three bayonet pointed suture-needles, some silk, a piece of india-rubber drainage tube, and two needles of steel wire, and none better than the ordinary stocking knitting needle can be found. If you wish to be very scientific, you may add a *serre-nœud* such as was originally invented by Koeberlé, or as modified by Bantock or myself but it is not in the least degree necessary.

The first step in the operation is the abdominal incision, four inches in length, involving first the skin and then the muscles down to the sheath of the rectus, all of which ought to be divided by a sharp knife at one blow; then the tendon of the one or other of the recti is opened, the muscular tendons fall aside, the posterior layer of the tendon is nipped up by two pairs of forceps and divided between them. The extraperitoneal fat is treated similarly, then the peritoneum raised again by two pairs of forceps, a slight notch being made between them; and the moment this is effected air enters, and all behind falls away. No director is required, nothing but an observant pair of eyes, lightly-applied forceps, and a delicately-applied, sharp-cutting knife. The finger is then introduced into the peritoneal cavity, and the relations of the uterus and bladder exactly ascertained. The peritoneum is then opened to the full extent of the four-inch incision, and the cut edges of the peritoneum are seized on each side by a pair of forceps and are pulled severally to the respective sides. No better retractors can be employed.

The piece of india-rubber drainage tube about eighteen inches or two feet long is now held as a loop between the fore and middle finger of the left hand, and is by that means slipped up over the uterus and pulled down over the cervix, passing the fingers behind the cervix to see that coils of intestine are not included in it. One hitch is then made on the tubing when it has been got as far down as possible, and it is pulled as tight as is consistent with safety. The second hitch may be made in it, but what is far better, an assistant keeps the tube on the strain, so that the one hitch will be quite enough to effect the most efficient clamping.

A small hole is then made in the uterus, just large enough to admit the finger; if it is possible, the position of the placenta may then be ascertained; if not, the right forefinger follows its colleague, and between the two, by gentle rending, an aperture is made in the uterus, and the leg of the child is seized. The fœtus is then carefully delivered feet first, and this, despite all the authorities to the contrary, is by far the best proceeding; less blood is lost, and it requires but very gentle manipulation to relieve the head.

As soon as the fœtus is removed, the placenta is sought for, and removed similarly; the uterus itself, being then completely contracted by this time, is pulled out of the wound, and the elastic ligature is tightened once more, and finally arranged round the cervix, and the second hitch is applied. The main details of the operation are now completed; all that is required is to pass the needles through the flattened tube and through the uterus, and out at the other side, forming a St. Anthony cross or two parallel bars to support the weight of the uterus and the stump, and to keep it outside the wound. A complete toilet of the peritoneum is then made, not forgetting the anterior vesical *cul-de-sac;* stitches are passed in the ordinary way to close the wound accurately round the uterine stump.

The uterus is now removed close down to the needles and strangulating rubber tube, so as to leave a little tissue above. It does not do to run any risk of the ligature slipping off, though this is hardly possible after the needles have been placed carefully through the structure of the tube. A little perchloride of iron is then rubbed gently over the surface of the stump; it is dressed with dry lint and some dry cotton gauze, an ordinary obstetric

rapper is put on, and the operation is at an end. The operation eally takes very much less time to perform than it takes to escribe, and, as I have said before, because the details must ıust always be the same it is an operation in which there never an arise any unforeseen or unexpected difficulty.

Only one other suggestion I am disposed to lay before my bstetric brethren for the further extension of this operation, ıat is, the case of placenta prævia, a condition which is one of ıe most fatal that can affect a parturient woman. My belief is ıat the fatality—and it is entirely confirmed by my experience—of a twofold nature. First of all by the terrific hæmorrhage volved by laceration of the enlarged sinuses in the lower uterine ne at the time of labour, no matter how slowly that may effected; and secondly by the suppuration of the same tvities and the consequent systemic infection. The foreign hools here again differ materially in their directions as to how e displacement is to be dealt with. Those who regard the safety the child as of paramount importance, direct that the child ould be delivered immediately upon complete separation of e placenta. Those who have less regard for the living child rect that the placenta should be removed and the delivery left nature, so as to run as little risk for the mother as possible, d, from this point of view, there can be but little doubt that the cond scheme of treatment is by far safer for the mother, but it volves almost certain death for the child, and even under this heme the maternal mortality is terribly high. If I had to deal with ase of complete placenta prævia from the beginning of labour, and uld carry out what I believe would be the ideal of surgical atment of this condition, I should amputate the pregnant erus. I should thereby save the child with certainty. I should lieve the mother with perfect safety from death by hæmorage; and, by removing all the tissues in which large suppurat- venous sinuses were present, I believe I should relieve her with nost equal certainty from the secondary risks. There is, of urse, here not an argument which obtains in the case of deformed lvis that you relieve the patient from immediate risk, but the rible nature of the disaster, and the fearful mortality involved it, is, I think, justification enough for the careful consideration any suggestion likely to reduce the mortality.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

THE ECBOLIC ACTION OF PENNYROYAL.

om what Dr. Marshall states in the JOURNAL of March 8th it pears that the therapeutic action of pulegium as an emmenague is very imperfectly known. The drug is used very freely many married women to hurry on delayed periods. One lady d me that she always kept a supply, and took large doses if the nses did not come on. She was much distressed to find that drug failed to have the desired effect on the occasion I saw , and added: "My sister-in-law takes it regularly when she sses her time, and invariably finds the period to come on in ee days." I made some inquiry regarding the practice, and l that among many classes it is recognised as a tolerably cern abortifacient, and esteemed as less hurtful than aloes, savine, tharides, ergot, elaterium, croton oil, black hellebore, squills, even borax. At the same time it is very questionable if any of se drugs can be regarded as absolutely certain to interrupt tation. Given a healthy embryo in a healthy and normally ced uterus, it is by no means easily injuriously affected. But y causing irritation or congestion of the uterus an early abora is once procured, it is very probable that the process may be eated indefinitely. I cordially agree with Dr. Marshall's suggtion that greater precautions should be enforced regarding the of such drugs. A. D. LEITH NAPIER, M.D., F.R.S.ED.

Grosvenor Street, W.

ON MUMPS.

RING the present epidemic of influenza, I do not read in the dical journals that it has been associated with inflammation of parotid glands (mumps). In my practice I have had numerous es of Russian influenza, four of which at the end of a week have terminated in parotiditis. In one case that I was called into in the latter stage of the disease, one gland suppurated; the others rapidly yielded to salicylate of quinine. I gave the salicylate of soda in a mixture, and the quinine in milk in alternate doses.

Some cases of Russian influenza that I have treated have left a persistent cough, with pain between the fourth and fifth ribs on the right side; the region of the pain could almost be covered with the tip of the finger: over the region I have applied a liquid blister, and the patients have found great relief in Burroughs and Wellcome's tablets of chloride of ammonium.

Hull. THOMAS JACKSON, M.D.

FÆCAL EXTRAVASATION INTO THE PERITONEAL CAVITY.

BETWEEN two and three years ago a case of this nature occurred in my hospital practice. An elderly woman suffering from a large mass of rectal cancer was admitted into the London Hospital for obstruction. Her abdomen was much distended, her face pinched, and pulse thready. Operation being urgently needed, and as our house-surgeon, Mr. Haslip, was anxious to have one of these cases, I superintended while he operated. The sigmoid was pulled out as far as we could get it, the patient turned on her left side, and after packing sponges on either side of the gut, this was opened, the contents flowing into a porringer while the abdomen was gently massaged. By some accident the gut partially slipped, and liquid fæces ran freely into the peritoneal cavity. The opening in the bowel was then temporarily plugged, and the peritoneum well washed and cleansed, and the gut secured in the manner I usually adopt.

This *contretemps* to an otherwise excellently executed operation had no ill effect, as the patient made a rapid recovery, and left the hospital much relieved. This case shows that temporary contact of fæces with the peritoneum is not necessarily harmful, and Mr. H. Cripps's instructive case goes still further, as it demonstrates the tolerance of the peritoneum to the contact of fæces for some hours. The cases also teach another important practical lesson, and one which I have inculcated for several years, namely, that in inguinal colotomy, or sigmoidostomy, as I prefer to call it, the gut should be opened at once, as this can usually be done without risk of extravasation if the bowel be pulled out and the patient placed on the left side before opening the bowel. I have adopted this plan in several cases with entire success. The relief demanded in these extreme or late cases is so urgent that it is well to know how to avoid peritoneal extravasation, and also how to deal successfully with it should it occur.

Grosvenor Street, W. H. A. REEVES.

URETHRAL CALCULUS ATTACHED TO AN OLD LITHOTOMY SCAR.

R. G., a Mussulman boy, aged 13, had had lateral lithotomy performed on November 29th, 1881. He was admitted into the Bannu Dispensary on February 16th, 1890, with a recurrence of calculus. On passing a sound, a calculus could be detected in front and below the neck of the bladder, and on examining the perineum a large amount of cicatricial tissue was found to exist in connection with the old lithotomy scar, causing an enlargement of about the size of a pigeon's egg. At the deepest part of this tissue the calculus could be felt. A lithotrite was passed in the hope of pushing the stone into the bladder and crushing it there; but as only a portion of it was dislodged I performed lateral lithotomy; by this means I removed a portion from the bladder, the remaining fragment I had to dissect from the scar tissue in the perineum. For the sake of description, the stone may be said to consist of two portions, namely, one measuring half an inch, ascending from the scar tissue upwards and backwards, and joining the second or horizontal portion, which bears a mould of the urethra, and measures an inch and three-eighths in length, the vertical and lateral diameters being about one-third of an inch. The weight of the calculus is 26 grains.

Edwardesbad, Punjab. L. J. PISANI, Surgeon, I.M.S.

THE Chair of Surgery in the University of Halle, left vacant by the death of R. von Volkmann, has at last been filled up by the appointment of Professor Mikulicz, of Königsberg. It is said that Professor Bramann will probably succeed Professor Mikulicz at Königsberg.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BRISTOL ROYAL INFIRMARY.

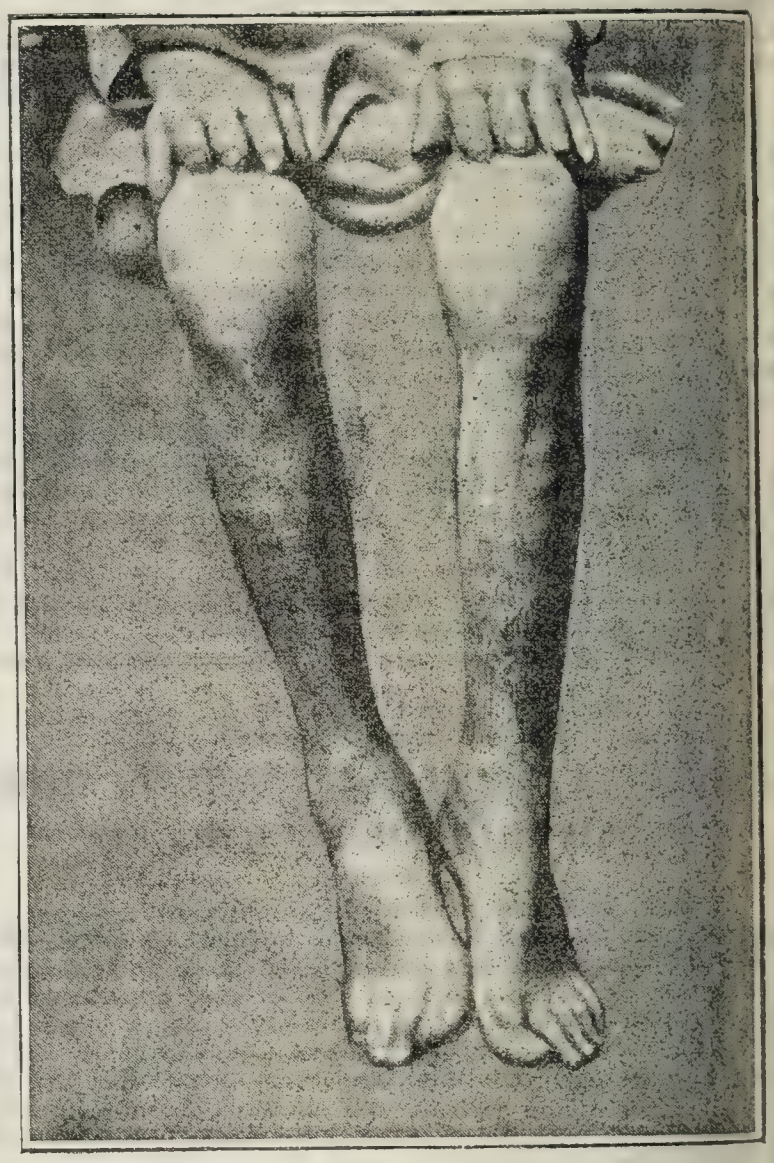
ACROMEGALY.[1]

(Under the care of HENRY WALDO, M.D., M.R.C.P.Lond., Physician to the Infirmary.)

W. R., aged 54, draper's assistant, was admitted on November 26th, 1889. Father and mother dead (cause unknown); no brothers or sisters; usual health good; no serious former illness. Six months ago, patient found that his legs were getting weak and that his knees were swollen. He also complained of great stiffness in his legs. He had difficulty in getting on his boots, and was obliged to procure a larger pair. Soon after this his hands and fingers began to get large. He found he could not do all his work, and had to give it up altogether a fortnight before admission on account of weakness. Four days before admission he had a fit;



he was noticed to be twitching all over; he then foamed at the mouth, and had a general convulsion; he slept for twenty-four hours after this. The patient is sallow and cachectic looking; face thin, with skin shining and as if stretched over it. Zygomatic processes and orbital margins very prominent. Both hands appear to be too large for the man; they are enlarged in width and thickness, and they are clumsy-looking or paw-like. The fingers are all enlarged and thickened, all the structures of them appearing to participate in the enlargement, and the joints are not more affected than the other parts. The thenar muscles are somewhat atrophied. He cannot close his hands, or indeed get his fingers beyond a right angle with the palm. His grasp is most feeble, and he cannot button his clothes. The clavicles are both enlarged; the bones at the wrist appear thickened. On percussion of the upper region of the thorax, there is nothing corresponding to the triangular dulness of Erb to be made out. There is considerable enlargement of the knees, the left being the larger, and there is very little extra effusion, the enlargement being due to increase in the size of the patellæ and the ends of the long bones. The iliac crests are markedly thickened; there is no œdema anywhere. The veins of the arms and of the left knee are enlarged, and the finger and toe nails are more convex than usual. There is no enlargement of the head bones or lower jaw. The heart's impulse is in a line with the left nipple and one inch and three-fourths below it. No thrill. A systolic murmur is audible all over the front of the chest. Cough with slight mucous expectoration. Pleuritic friction with signs of fluid at base of right lung. The skin at top of sternum was very loose, and the laryngeal cartilages were voluminous. The left lobe of the thyroid gland could be felt, but not the right. Very little headache or other pain was complained of, and giddiness only when he sits up. The plantar reflexes were increased, the knee-jerks almost absent; pupils equal, act to light and accommodation, optic discs normal. His memory is very defective and has been so for six months; his mental processes are very slow, he is always drowsy, and his utterance drawling and monotonous. Latterly he had delusions—thought people were going to kill him, and was suspicious about his food. He also developed symptoms of bulbar paralysis; he could not put out his tongue, he swallowed with the greatest difficulty (was fed *per rectum*), and he lost power of expectoration and of retaining urine (which was not albuminous). He had many attacks of retching and vomiting during the time he was in the infirmary. Of the special senses that of taste seemed lost. There was no numbness and the general cutaneous sensibility was normal. The temperature was subnormal throughout. He died on December 13th, 1889. The *post-mortem* appearances were an oval cavity in the brain substance, three-quarters of an inch by one inch and a half at the posterior extre-



mity of the right hemisphere; a cavity half an inch in diameter three quarters of an inch from the posterior part of the second left temporo-sphenoidal convolution; a cavity in the anterior portion of each lateral cerebellar lobe, the left one inch by three-quarters, the right a little smaller.

The heart shows well marked aortic stenosis, all the cusps being calcareous. The left ventricular walls are hypertrophied. The right lung presented a large caseating mass of its lower lobe which was breaking down. The kidneys contained many small cavities in the cortex, varying in size from a pin's point up to a holly berry—some contained pus and others a gummy material. The liver was nutmegy. The left lobe of the thyroid gland was present, the right lobe was absent. There were no signs of a thymus gland. The pituitary gland was normal in size and appearance. No examination of the bones was made. In published cases, hypertrophy of the spongy parts, with exaggeration of their porosity and enlargement of their nutrient foramina, has been found. The antrum of Highmore and the frontal sinuses have also been found greatly dilated, and the inferior maxilla elongated and thickened.

As this disease of acromegaly is by no means common—it is, I believe, the first case brought before this Society (Bristol Medico

[1] Reported to the Bristol Medico-Chirurgical Society.

Chirurgical Society)—I may perhaps be allowed to make a few remarks respecting it. The disease was first described and named "acromegaly" by Dr. Pierre Marie, of Paris, in 1886, and so the name is only about three years old. The disease received its name from the characteristic enlargement of the hands and feet, but the bones of the face become hypertrophied, as also the cartilages of the nose, ears, and eyelids. Hypertrophy of the lower jaw is often a marked and striking deformity. Dr. Wilks speaks of a case seen by him in 1869 of a young lady, aged 28, a tolerably good-looking girl, but her face had become frightfully distorted. She had been ailing six years with amenorrhœa, pain in the face and back of head, and gradual loss of sight. Her appearance was so disfigured that people would stop in the street to look at her; her ears, nose, and lips having become enormously enlarged, and the whole face elongated. Her hands and feet also had become gigantic, so that she could with difficulty get gloves to fit her. She died, shortly after going into the country, in a state of coma. He believed she had an intracranial tumour. Dr. Wilks considers that these cases have rather a physiological than a pathological bearing, and by their very exceptional occurrence emphasised the great fact, so well enforced by Paget, of the necessary exact relation of the different organs of the body for the due fulfilment of the natural functions. These overgrowths showed that from some unexplained cause this relationship might be broken up, so that the bony skeleton might grow enormously, or the fat of the body increase until the patient became of preposterous size, or the lymphatic gland tissue develop to an extraordinary extent, or a sudden sprouting of the extremities take place. The thyroid gland has been found hypertrophied in some cases, atrophied and absent in others, and in one other case described by Dr. Adler, at the New York County Medical Association in 1888, the right lobe was, as in my case, absent.

The cause of the disease has more than once been put down to an enlarged pituitary body—in one case it was the size of a hen's egg, in another it had caused enlargement of the sella turcica and compression of the optic nerves. Sir William Gull, many years ago, had been struck with the similarity of structure between the pituitary body and the suprarenal capsules, but they are not affected in this disease. Dr. Wilks says he considers it very interesting to remark on the possibility of acromegaly being associated with the pituitary body, since it has a structural resemblance to the suprarenal capsules and to the thyroid, both of which organs being admitted to have a marked influence on nutrition.

Cases of acromegaly appear at very different times of life. The commencement of the morbid change has been observed at 40 to 50 years of age, and in other cases the commencement occurred at the time of puberty, and one at the age of 11 years. The disease attacks men and women; when it attacks women it is usually accompanied by various menstrual disturbances. Acromegaly has been recorded as occurring in a father and daughter, and there are the cases of two brothers, so that there is a certain amount of heredity in the etiology of the disease.

One case of acromegaly has been recorded as myxœdema; but the resemblance between the two conditions is only superficial, the osseous changes and the absence of cutaneous lesion in acromegaly, together with the wholly different physiognomy, sufficiently marking the difference. In Virchow's leontiasis ossea there is no such disproportionate enlargement of the extremities, and in Paget's osteitis deformans the long bones and cranial bones are chiefly affected, whereas in acromegaly the facial and not the cranial bones are involved, and the distribution of the changes in the limbs is invariably symmetrical.

The aortic stenosis from this man is an interesting specimen. It is, in my experience, very rare. There is a good deal of hypertrophy, and little, if any, dilatation of the left ventricle. In aortic regurgitation, dilatation takes a larger share. There was a loud systolic murmur present, which was audible all over the front of the chest; a clear second sound was also audible. A systolic aortic murmur, in the majority of cases, indicates a dilated aorta above the valves, or else mere roughening, or anæmia. The pulse in aortic stenosis is said to be slow. I have specimens to hand round, and microscopical slides under the microscope.

The cavities in the brain substance and also in the kidneys are necrosed parts, I imagine, the result of embolism. With such aortic valves this seems to be the only explanation, and it is borne out by the microscopical examination.

I think in most of the recorded cases of acromegaly, there has been some cerebral lesion found *post mortem*, or there have been very good grounds for suspecting a cerebral lesion.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 18TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

Bronchial Casts from Bronchitis Crouposa.—Dr. SAMUEL WEST showed some specimens of casts which had been expectorated from bronchial tubes. In one case they were from a woman, aged 40, who had suffered for two years from asthma. The attacks commenced at 2 A.M., lasted for about two hours, when she used to expectorate some of these casts, and immediately gained relief. The condition was not relieved by treatment, and though under observation for a considerable time, the patient did not improve, and was ultimately lost sight of. The second specimen was coughed up by a man, about 40, who had lived in Jamaica, and had been a free liver, and originally came under the care of Dr. Gibson, of Russell Square, for symptoms of delirium tremens. This he recovered from, but shortly after spat up some blood, and in it were several casts; this he continued to do for some days. During this time there were no physical signs in the chest. The patient ultimately recovered, and was finally lost sight of. The third specimen was taken from the body of a man who had been under Dr. West's care for rheumatic fever with pericarditis and hyperpyrexia, which proved fatal. At the *post-mortem* examination the lowest part of the trachea and the first parts of each bronchus were lined by a membrane very like that found in diphtheria, but there were no other evidences of diphtheria in this case, and there was no membrane in the larynx or pharynx. Until recently physicians used to believe that there could be two kinds of false membranous deposit along the respiratory tract, one due to diphtheria and the other of a non-diphtheritic origin. He thought that recently there had been a tendency, though without any new facts having been brought to light, to consider all membranous exudations of the larynx, trachea, and bronchi as being of diphtheritic origin. He thought that it was important to place all cases with membrane in which there was no suspicion of diphtheria on record; as if undoubtedly non-diphtheritic exudations could form in the trachea, there was no inherent impossibility of exudation in the larynx being also occasionally non-diphtheritic.—Dr. LUBBOCK described a case of plastic bronchitis which had been in Charing Cross Hospital.—Dr. HADDEN asked on what grounds Dr. West excluded the last case from being one of diphtheria.—The PRESIDENT thought nobody would suggest that all membranous exudations were of diphtheritic origin. Some were undoubtedly produced by the action of an irritant, and he mentioned the case of a lady in whom a membranous exudation had formed in the larynx from the irritation of eau-de-cologne.—Dr. SIDNEY COUPLAND said that the diphtheritic membrane and bronchitic exudation certainly differed pathologically, the latter probably being a simple exudation from the blood.—Dr. WEST, in reply, said that he knew no way of distinguishing the different membranous exudations, chemically or histologically, though he believed that plastic bronchitis and diphtheria were perfectly different diseases.

Three Cases of Coccygeal Tumours.—Mr. A. BOWLBY showed an infant with a tumour of this description, and also a dissected specimen, and gave the details of another living specimen. CASE I.—A female child, aged three weeks, was admitted into St. Bartholomew's Hospital on February 27th, 1888, with a large gluteal tumour. The growth had existed since birth, and had twice been tapped. It was situated in the gluteal region, and was attached chiefly to the left side, protruding posteriorly, and hanging in a pendulous manner between the thighs. It measured 14½ inches in circumference. Its shape was globular, and it displaced the anus forwards, so that the latter and the orifice of the vulva looked like openings on the front of the growth. The tumour was hard and fluctuating, except at the base, where there could be felt several irregular hard masses of solid growth attached to the pelvic bones. The skin over it was normal, and there were no associated deformities. Tapping of the growth gave exit to 13 ounces of red viscid fluid, and after a second tapping the cyst was injected with Morton's fluid. From this time the child was sick and ill, and died a few days later. *Post-mortem* examination showed that the growth was a large cyst with a solid fibrous base attached to the lateral aspects of the sacrum and coccyx and to the adjacent innominate bones, and extending into the pelvis behind the rectum, as high as the sacral promontory. In addition to fluid

the cyst contained masses of soft friable red tissue, looking like mucus polypi. The spinal column was normal, except for some tilting backwards of the coccyx by the growth. Microscopical examination showed that the intracystic growth was composed of tissue-like neuroglia, in which were embedded numerous small cylindrical tubes, which were embranched, not collected into bundles nor arranged in any definite manner, with definite nucleated walls and a central clear cavity. CASE II.—A female infant, aged three days, was noticed to have a large swelling in the left gluteal region. The tumour was smooth and globular, and covered by normal skin. It measured 15 inches in circumference, and although fluid for the most part, it was solid in its base of attachment to the pelvic bones. There was a considerable extension of the growth into the pelvis behind the anus. No treatment was undertaken for a year later, and then tapping and pressure resulted in a gradual shrinking of the growth. CASE III.—A female child was noticed to have a large gluteal swelling at birth. This did not increase in size and when seen, at the age of six months, was found to be a globular swelling, measuring 12 inches in circumference. It fluctuated freely, but was hard at its base of attachment to the pelvic bones. There was no extension of growth into the pelvis.—Mr. JONATHAN HUTCHINSON, jun., related a case which had terminated fatally, in which the tumour was found to consist of a collection of cysts with intervening fibrous tissue. The contents of the cysts varied. In one a miniature sternum with abortive cartilages was found, in another blood, and this cyst resembled a ventricle with a valve attached, and another cyst was filled with undoubted brain substance. The tumour also contained striped muscular fibres. He considered this tumour to be a second fœtus. —Mr. BLAND SUTTON referred to the interest of these tumours. The differences between them was due to the fact that four or five different kinds of tumours originated in this region which had been confounded together. There were at least four different sorts of tumours: 1, dermoid cysts; 2, tumours arising from the postanal gut; 3, forms of spina bifida; 4, teratomata with the remains of suppressed embryos. The forms brought forward to-night were probably tumours of the postanal gut. These lie anterior to the coccyx, though they may pass up on to the back, and they were always limited above by the levator ani muscle. The case that Mr. Hutchinson had mentioned was one of dichotomy of the lower extremity of the axis of the trunk, in which the limbs might be either suppressed or developed, but there were always present two pelvic arches, and it was interesting to note that in these cases, when the lower extremities were present, the functional ones were the right leg of the one pelvis and the left leg of the other.—Mr. BOWLBY, in reply, said that in bringing his specimens forward, he had not intended to discuss the classification of these tumours, though he agreed that tumours in this region could be divided into at least three groups: dermoid cysts, mesoblastic cysts, and coccygeal tumours originating in front of the coccyx. His cases neither gave support to nor negatived the theory of the postanal gut.—The specimens were then referred to the Morbid Growths Committee.

Paget's Disease of Nipple with Psorospermiæ.—Mr. J. HUTCHINSON, jun., showed specimens illustrating the presence, in what was known as "Paget's disease," or eczema of the breast, of psorosperms or coccidia. The parasites, of oval or rounded shape, and one-thirtieth of a millimètre in length, were found in the thin layer of epithelium which covered the florid surface of the diseased patch of skin. Each coccidium had a shell which in sections gave it the appearance of a double contour or outline. Often a small knot or aperture at one end, the micropyle, could be distinguished. In the interior one, a more granular and globose mass could be seen, and sometimes the psorosperms might be made out. In the coccidium oviforme of Leuchart, each coccidium developed four psorosperms inside the shell, which subsequently became free. Mr. Hutchinson believed that he had detected these amongst the epithelial cells. The case from which the specimens were obtained was a woman, aged 46, who for four years had had a patch of inveterate "eczema" round the nipple, measuring four inches in diameter. The development of a scirrhous tumour in the breast led to the removal of the latter. M. Darier, who discovered the parasites in cases of Paget's disease in 1889, pointed out that the easiest method of demonstrating them was to scrape the surface, and treat the scraping with iodine solution or bichromate of potash. The best way, according to Mr. Hutchinson, was to soak the scraped epithelium with liquor potassæ, and to mount it in glycerine jelly. By this means the coccidia were differentiated, and their number could be estimated by using a five-eighths inch power; as many as 100 coccidia were counted in a single field. A case of eczema around the nipple, in which the skin became affected subsequent to the development of the cancer, was examined for the parasite with negative results. Attempts at inoculation on animals had hitherto failed. The parasite which produced Paget's disease of the breast appeared to be precisely the same as that which infested the liver or the intestines of rabbits, mice, etc. One or two similar instances had been observed in men. Mr. Eve had demonstrated them in the ureters in one case, and it was possible that some supposed examples of cancer of the liver might prove to be due to the same cause.—Dr. CROCKER hoped that psorospermiæ would not be found too universally. He then gave the details of a case of Paget's disease of the scrotum which he had brought before the Society last year.—Mr. SPENCER did not agree with Mr. Hutchinson's interpretation of his sections. He was inclined to consider that the bodies shown were the nuclei of degenerated epithelium cells in one section, and in a specimen of surface scrapings which had been treated with liquor potassæ they were possibly the spores of some fungus and not coccidia. He thought it advisable that the specimens should be referred to the Morbid Growths Committee.—Dr. THIN discussed the use of the term Paget's disease, and of eczema of the nipple, and of the origin of the eczema, whether it was due to an irritative secretion, or to the presence of parasitic coccidia. With reference to molluscum contagiosum, which had been attributed to the presence of coccidia, no real proof had established that the bodies in question were zoosperms at all, and not merely products of cellular degeneration.—Dr. DELÉPINE felt sure that Mr. Hutchinson's specimens did contain psorosperms identical in appearance with those that he had recently shown to the Society from rabbits' livers. He then referred to a case of cancer of the bile ducts, in which he had found coccidia in the new growth.—Mr. BOWLBY had never seen any appearances like those shown by Mr. Hutchinson in eight cases that he had examined of Paget's disease of the nipple, though he might have overlooked them. As healthy gland tissue usually intervened between the eczema of the nipple and the deeply seated cancer, even supposing that coccidia were present, he did not see how the cancer could be attributed to their presence in the eczematous nipple.—Mr. BALLANCE said that he had, with Mr. Shattock, examined sections from a very large number of cancers, including a case of cancer of the breast with Paget's disease, and had been unable to find any coccidia. He agreed with Mr. Spencer that the bodies in Mr. Hutchinson's sections were the nuclei of epithelial cells.—Dr. WASHBOURNE asked Mr. Hutchinson if he had succeeded in staining the coccidia with logwood in the scrapings from the surface, and if they had been found more numerous in one part than in another.—Mr. SHATTOCK thought that coccidia were undoubtedly present in Mr. Hutchinson's specimens.—Dr. SIDNEY COUPLAND, referring to what Mr. Spencer had said, stated that the objects were not the least like the spores of microsporon furfur, nor was there any mycelium present.—The specimens were then referred to the Morbid Growths Committee, and Dr. Croker's specimen with them.—Mr. HUTCHINSON, jun., in reply, stated that he had examined several normal nipples without finding any such bodies. He then referred to a second case of eczema of the nipple, which had commenced in the nipple of a breast which already contained a cancer. In this case he had been unable to detect any psorosperms. The question was an important one, because, if the eczema was due to the presence of these parasites, it might be possible to control it by attacking them, as they appeared to flourish mostly on the surface. The smaller coccidia were extremely difficult to distinguish from the nuclei of epithelium cells. He remembered some time ago having examined sections of the nipple in the case of Paget's disease, in which he had found the corium vacuolated. This was due, he now suspected, to the presence of coccidia.

Half Vertebra in a Rabbit.—Mr. BLAND SUTTON showed a portion of the spinal column of a rabbit, in which there was half a vertebra between the second and third lumbar vertebræ. Several specimens of half vertebra in man had been described; but, excepting those and a half vertebra in a snake, this was the only specimen that had been found throughout the whole range of the vertebrata.

Cases of Imperforate Rectum and Imperforate Anus.—Mr. STEPHEN PAGET showed specimens of the above conditions, and gave the following details. In the first case, the *cul-de-sac* was

out an inch long; no impulse was felt. Left inguinal colotomy as done on the third day after birth; ten days later, a director as passed down the bowel, and the *cul-de-sac* was everted over ie director, pushed out at the anus, incised, and dilated. The ifant died from exhaustion when five weeks old. The specimen owed a smooth lower bowel, free from any sign of inflammaon. The second specimen was from a male infant. There was *cul-de-sac;* but a deep dimple over the sacrum, and a soft outowth of skin behind the scrotum, and a very small pelvic outt. At the operation a free incision was made, and the bowel was ached at the depth of an inch. The baby died with suppression urine three days later. At the *post-mortem* examination, the ght kidney was found to be rudimentary, and weighed only a w grains. There was no ureter. The descending colon ran raight down the middle line of the body, with no sigmoid flexe. The lower end of the bowel, for the last half-inch, was eatly thickened by acute œdema of the submucous tissue with ll proliferation; there was also ulceration of the mucous membane. Mr. Paget referred to Mr. Curling's paper in vol. 43 of the *edico-Chirurgical Transactions.* According to Mr. Curling's ble of 100 cases, failure to reach the bowel by a perineal incision as just as frequent in cases where a *cul-de-sac* was present as in ses where there was no *cul-de-sac.* Mr. Paget called attention the chances of doing a second operation after an inguinal colomy, and to the occurrence of malformations elsewhere in the dy in these cases.

Card Specimens.—Mr. STEPHEN PAGET: Proliferating Cyst of east; Mr. G. R. TURNER: Fracture of both First Ribs; Mr. RGETT: Carcinoma Vesicæ secondary to Scirrhus of the Mamma; . EVE: End of Penknife projecting through Calvaria; Injury ne time before death.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 14TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Living Specimens.—Dr. SAVILL showed a case of Abductor resis of the Vocal Cords in a woman, aged 45, who showed no lication of phthisis or local tumour.—Dr. WALTER PEARCE owed a case of Paresis with Anæsthesia, in a pregnant woman. ortion was induced, but this had not relieved the symptoms, d they subsequently discovered that she was in the habit of nking several bottles of brandy daily. It was therefore classed a case of alcoholic paresis.—Mr. TURNER showed a case of eous Growth in the Supra-clavicular Region on the left side in a man, probably of the nature of a cervical rib. Mr. Turner also owed a man, aged 50, with a large Tumour, which had been wing for eight years, and which was supposed to be a cystic endroma of the pelvis.—Mr. SPENCER showed a woman, aged 26, subject of acute Syphilitic Necrosis of the Superior Maxilla in antrum of Highmore opening into the mouth.

Abdominal Nephrectomy for large Sarcoma of the Capsule of the ft Kidney or of the Suprarenal Capsule: Recovery.—Mr. J. OWSLEY THORNTON read notes of this case. The patient, a rried lady, aged 36, with one child, aged 13, was placed under Thornton's care by Dr. Black, of Halifax, Nova Scotia, suffer- from a large abdominal tumour, which had been diagnosed Dr. Keith as an enlarged spleen, and treated by him during the vious twelve months by electricity, with supposed benefit. She returned home with the tumour decidedly larger and increas- and was anxious, if possible, to have it removed. Mr. Thorns diagnosis was tumour in connection with the kidney, proly sarcoma of the capsule, and he undertook its removal. The ration was performed on April 11, 1889, and was a very forable one, owing to the enormous size of the vessels in the esions and mensentery, the renal vessels which supplied the our being also enormously enlarged, so that the renal vein as large as an ordinary vena cava. There were adhesions to spleen and pancreas, the latter being very troublesome. The our weighed about 20lbs., and had a large healthy kidney ched to its lower border. The patient was much troubled r operation by accumulation of flatus in the descending colon, ch had necessarily been much separated from its meso-colon; he third week, however, the temperatures were generally nal, pulse about 80. Later some symptoms arose which sug- ed lung trouble, but as they always subsided during sleep and n the patient was amused or interested, they were thought to ysterical, especially as no physical cause could be detected. Thornton, therefore, allowed her to leave town six weeks after the operation, and at Harrogate she passed under the care of Dr. Myrtle. In October, 1889, she was at home again, had gained 32lbs. in weight, could walk a mile without fatigue, and was practically well. In conclusion Mr. Thornton called special attention to two points, the absence of renal symptoms and of any recurrence of the tumour.—Dr. S. MACKENZIE spoke as to the differentiation between a tumour of the suprarenal body and one capsule of the kidney. He mentioned the case of a child, aged 6, with a globular tumour in the right hypochondrium, which appeared just after a fall, four months before the child came under Dr. Mackenzie's care on November 15th, 1889. The tumour moved with the descent of the diaphragm, and was elastic; the child was not anæmic, and had no constitutional symptoms. It was thought to be a tumour of the kidney, possibly a hydatid, and was aspirated, when a few ounces of blood escaped. The child died the same evening. At the *post-mortem* examination the kidney was found intact at the back of the tumour. A microscopical examination confirmed the opinion that it was a tumour of the suprarenal body. The colour of the tumour was peculiar, being like *café au lait,* not like brain substance. There was no hæmaturia nor any other symptom of kidney trouble.—Dr. T. BARLOW had seen two cases of suprarenal tumour at Great Ormond Street Hospital. The *post-mortem* appearance of the tumour was of a buff colour in each case. Both children had dark rough skins and harsh rough voices. He believed both had a profusion of hair. There was a complete absence of renal symptoms in each case.—Mr. CROFT asked Mr. Thornton what was the situation of the suppuration in his case. Was it outside the peritoneum? or encysted in the peritoneal cavity? or did it occur from the escape of the elements of putrefaction from the site of the tumour?—Mr. THORNTON, in reply, said he believed the colour of the two tumours of the kind which he had seen removed was that of sarcoma in other parts of the body, with no red or purple tint about them. These five cases mentioned there that night all had an absence of renal symptoms, which was a very important point. Occasionally after removal of the ovaries, the hair on the face grew. Possibly that was the cause of the growth of the hair in his patient. These suprarenal tumours seemed to be of very slow growth, and were possibly of congenital origin. He had three times removed the ovaries and tubes from patients for supposed ovarian symptoms, which from the subsequent progress of the cases he was now disposed to regard as due to renal trouble. He thought the suppuration was possibly due to the fact of some germ from the intestine escaping into the clot. He left in a drainage tube for twenty-four hours.

Ruptured Small Intestine.—Mr. CROFT read this paper. After introductory reference to the case already described in the Society's *Transactions* for 1888, in which case life was saved for a time by the formation of an artificial anus, he gave the particulars of a second case of ruptured small intestine without external wound, in which peritonitis was abolished and life permanently saved by excision of the injured bowel, enterorraphy, and purification of the peritoneum, after laparotomy. A boy, aged 14, was admitted into St. Thomas's Hospital on May 21st, 1889, at 10.30 P.M., for an injury to the abdomen. He had been kicked in the abdomen by a horse about three hours previously. The shock was not severe. Symptoms of acute peritonitis ensued during the night. Mr. Croft saw the case on the following morning, and diagnosed acute peritonitis, and thought it probably due to ruptured intestine. He decided to explore the abdomen immediately. Median laparotomy was performed $15\frac{1}{2}$ hours after the accident. A small rupture and a small ecchymosis of small intestine were discovered in the midst of inflamed omentum and coils of intestine. The injured segment of ileum was excised by a V-shaped incision. The mesentery and bowel were carefully reunited by forty Lembert's sutures. The soiled omentum was cut away. The peritoneum was carefully irrigated with a warm boracic solution of about 20 per cent. strength. The operation was completed antiseptically. Full details were given. The patient made a speedy, feverless, and painless recovery. Mr. Croft discussed the symptomatology of such cases, and laid much stress upon the value of the symptoms of muscular rigidity and tension of the abdominal wall as indicating subjacent peritonitis. He repeated the reasons which he had before laid down for attempting an immediate radical cure in such lesions as the one under consideration, namely: 1. That existing peritonitis, although it be septic, may be abolished, and the parts may be rendered aseptic. 2. That the existing peritonitis does not essentially prevent union of the peritoneal surfaces, for experience has now amply shown that

these soiled parts may be purified and rendered fit for union. 3. That the empty and paralysed state of the recently ruptured or contused bowel (small intestine) is favourable for the *technique* of the operation. 4. It saves the patient from the consequences of an almost incontrollable anus in the small intestine, such as general irritation and debility, and the local irritation which spreads around the unnatural orifice. 5. It saves the patient from the very serious risks, immediate and remote, of a second long and dangerous operation. And after observations on suturing, he gave a table of cases which strictly belonged to the category of ruptured intestine without external wound. This table included fourteen cases. The only permanently successful case was the one now presented to the Society. The only temporary recovery was the one already described by Mr. Croft in the Society's *Transactions*. The remaining cases were all fatal. The portion of bowel removed was exhibited, and the patient himself was present for inspection.—The PRESIDENT thought the members would all agree with the conclusions advanced by Mr. Croft at the end of his paper, and that antiseptic precautions in abdominal surgery had permitted the enormous advance in that department which had occurred in recent years.—Mr. TREVES considered the case a brilliant one, and thought that it came at an opportune time in this respect, that no case could have better met the arguments advanced by Senn (Chicago), according to whom such an operation as that of Mr. Croft was not justifiable. But Senn's experiments had been performed upon animals—the carnivora chiefly, dogs and cats—which were perfectly useless if used as a parallel for operations upon the human subject. He (the speaker) doubted if Senn's manipulations should be applied to the human subject. Mr. Croft's case showed that if care were taken with the mesenteric border of the gut in the wound success might result. He hoped Mr. Croft would modify his opinion in one point, that as resection of the bowel for disease was almost hopeless if done all at one time, he would allow that it was best to establish an artificial anus at first, and to close it at a subsequent operation. The treatment of artificial anus of the small intestine was very successful. He mentioned the case of a girl with a tumour thought to be ovarian, but which turned out to be a fæculent deposit in the small intestine. Her medical attendant, acting too boldly, made an incision into it, which allowed it to empty externally, and the small intestine subsequently became adherent to the wall of the abdomen. Through this external opening the intestine emptied itself for a year; the artificial anus was then closed by an operation without bad effect. He commended this double operation to Mr. Croft's special attention, and hoped he would adopt it.—Mr. THORNTON also congratulated Mr. Croft. He inquired how one was to know that there was a wound in the small intestine. Abscesses close to the bowel constantly had a fæcal odour, though their contents were as aseptic (if one might employ such a term in respect of an abscess) as it was possible for them to be. He thought the contents of a healthy small intestine were scarcely septic, for they nearly always sank if mixed with water, whereas the contents of the rectum, which had become septic, floated upon water. Had the extravasated contents of the small intestine in Mr. Croft's case been septic, the mere washing out of the peritoneal cavity with a 20 per cent. solution of boracic acid would hardly have sufficed to ward off inflammation. In such another case he thought the surgeon should wash out the peritoneum, and leave an artificial anus for a time, and then subsequently close it; though if the patient were strong, and not collapsed, one might do the entire operation at once. He thought it advisable to keep a glass drainage tube in the peritoneal cavity for twenty-four hours after the operation, to see if there was any serum going to be poured out in the cavity.—Mr. BRUCE CLARKE asked whether it was advisable to resect a wounded intestine at once or not. He mentioned a case of supposed femoral hernia in a woman in which a nipped piece of intestine gave way, and the peritoneum was flooded with fæces. The wounded bowel was brought out, the peritoneum well washed out, and a glass drainage tube introduced (and kept in for three or four days), the intestine was then fixed to the wound in the abdominal wall, and an artificial anus established. The patient quite recovered from the operation, but, unfortunately, died at the end of a fortnight of acute pneumonia. *Post mortem* no trace of peritonitis was discovered. He thought an artificial anus to be made at first, and to be subsequently closed, was the proper course to pursue.—Mr. TOM SMITH also thought the evidence was rather in favour of the old plan of procedure, namely, to make an artificial anus first, and close it at a second operation; in fact, to divide the operation into the two stages. But the great question was to discover whether the intestine was wounded or not. For this purpose, one could wish that the symptoms could be as clearly defined at the bedside as they were on paper. He related two cases. One was that of a schoolboy who fell on a lath, and rammed it into his bowel, *per anum*, for some nine inches. The surgeon's finger passed into a wide rent in the peritoneal cavity. The wound was washed out (it was before the days of antiseptic surgery), the boy was kept under the influence of opium, and recovered without a bad symptom. Again, recently, a man who had received a severe blow on the abdomen was admitted to St. Bartholomew's Hospital pulseless, and apparently dying. He complained of great thirst, and was allowed a little brandy and some soda water. To the intense surprise of everyone he did not die, but in three weeks' time walked out of the hospital. Now that man had every symptom of ruptured intestine, and his abdomen would have been opened had be been less collapsed.—The PRESIDENT remarked that in that case the injury was possibly behind the peritoneum. It was so in one case he (the speaker) had seen and the patient died three weeks after the accident from the effects of an injudicious purge whilst Nature was repairing the wound.—Mr. CROFT, in reply, said that experiments made on the intestines of healthy dogs ought not to be taken as a guide to operations on injured human intestine. From his experience in his former case he quite determined to cut out the injured intestine at once, and finish the operation at one sitting. If an artificial anus were made high up in the small intestine the patient almost died of inanition before the second operation was done. In the case mentioned by Mr. Treves the wound was decidedly low down in the small intestine. As to whether fæces were septic or not he could not decide, but he acted on the assumption that they were so. He put no drainage tube into the wound in his case.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 17TH, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

CLINICAL EVENING.

Carotid Aneurysm.—Mr. WILLIAM ROSE sent a man, aged 2[illegible] on whom he had successfully operated for carotid aneurysm. He was a long distance walker with an alcoholic and specific history and was admitted into King's College Hospital with an aneurysm of the right carotid artery at bifurcation the size of a small hen's egg. On November 23rd, the common carotid was exposed above the omohyoid muscle; two ligatures consisting of four strands of fine sulphuro-chromic catgut were passed around artery three eighths of an inch apart, and artery divided between. The drain tube was removed the next day, and the wound was healed on the fourth day, when the stitches were removed. The patient made an uninterrupted recovery, without any cerebral or other bad symptoms, and the aneurysm had now almost entirely disappeared.

Inguinal Colotomy.—Mr. WILLIAM ROSE also sent a man, aged 60, who had suffered from malignant stricture of the rectum. He had had trouble with his bowels for fifteen months. Strict antiseptic precautions being employed, an incision about four inches long was made at right angles to an imaginary line from the umbilicus to the anterior superior spine of the ilium, rather nearer the spine than to the umbilicus. On opening the abdomen, the descending colon was found, and a thread of catgut passed through one of the longitudinal bands, the bowel put back, while the parietal peritoneum was stitched to the skin with fine catgut. The descending colon was then pulled out with guiding thread and in order to insure the whole coil of intestine remaining outside the abdominal incision, two strong catgut stitches were passed through the mesocolon and both edges of the wound in such a way as to bring the parietal peritoneal surfaces into apposition behind the protruding intestine. By this means Mr. Rose hoped to effect a complete separation between the upper and lower openings when bowel was subsequently opened. The colon was then sewn to the peritoneal cutaneous margin with fine catgut sutures. The wound was dressed on the fourth day, and again on the seventh day, when the bowel was opened. The temperature had never been above 99°, and beyond a little griping pain, the patient had been very comfortable. A note made on March 17th was to the following effect: "He is now free from pain, and there has been no fæcal matter by rectum during last four weeks, so effectually is the lower opening shut off by spur

icous membrane."—Mr. ALLINGHAM suggested that there was ore prolapse than was necessary.

Unusually Loud Systolic Murmur.—Dr. F. DE HAVILLAND HALL hibited a porter, aged 52, with an aortic diastolic murmur of usual loudness. It was audible all over the chest, the point of eatest intensity being on the right of the sternum opposite the rth interspace. It was also distinctly heard at a distance of ht inches from the chest. A soft systolic murmur was audible the right base. He had suffered from ague and syphilis, but re was no history of rheumatic fever.—Mr. SEYMOUR TAYLOR ggested that the symptoms were due to rupture of the aortic lve.

Operation for Horse-shoe Fistula.—Mr. GOODSALL showed three n, one to demonstrate the result of the usual method of operat- for horse-shoe fistula, namely, loss of sphincter power. The ier two he had operated upon on the principle that it was suffi- nt to lay open that portion of the fistula between the external l internal openings, thus leaving the internal sphincter intact. Mr. H. ALLINGHAM and Mr. JAMES BLACK made remarks, and . GOODSALL replied.

Athetosis after Injury.—Dr. BEEVOR showed a man, aged 27, o fell downstairs ten years since, striking the left side of his ad. He lost consciousness for some minutes, and on coming to nself he noticed movements of the right thumb. In the course the following four weeks the movements involved the fingers, elbow, the shoulder, and then the hip and the knee, the foot ng involved last. There was no aphasia or anæsthesia, but tial paralysis with movements on the right side of the face, ecially of the upper lip. Dr. Beevor pointed out the interest ich this patient presented in respect of the order in which the tex centres were attacked, which coincided with the results the investigation on monkeys carried out by himself and Mr. rsley.

Hip Excision.—Mr. KEETLEY showed a child aged 5 and a girl d 14 upon whom he had performed excision of the hip, one by ap incision including the top of the great trochanter. Both e drained posteriorly, and healed by first intention.

Symmetrical Trophic Affection of Nails.—Dr. ACLAND showed a ng man, a hat blocker, whose nails on the hands and feet wed a tendency to peel off the matrix. The case was difficult diagnosis, but he suggested that it might be Raynaud's disease. Dr. COLCOTT FOX said the affection resembled what was formerly med psoriasis of the nail. This was often due to syphilis. He in- ed to the diagnosis of Raynaud's disease.—Dr. SEYMOUR TAY- pointed out that the absence of pain and the persistence of affection contradicted that view.—Mr. BALLANCE said he had a case of Raynaud's disease in which pain was not perceived. r. ACLAND, in reply, denied that the absence of pain contrain- ated Raynaud's disease.

Necrosis of Pharynx.—Dr. COLCOTT FOX showed a girl, aged 14, h button-hole constriction of the lower part of the pharynx, to hereditary syphilis.

Plastic Operation.—Mr. BRUCE CLARKE showed a worker in hides who was admitted to St. Bartholomew's suffering from ignant pustule. At the time of admission his face was so swollen the features were almost unrecognisable, and he was almost pletely comatose. The pustule was excised, and he made a l recovery, the deformity being remedied by several subsequent rations. Photographs of the patient were shown, illustrating various stages.

Congenital Hemi-hypertrophy of the Knee and of certain Toes.—BALLANCE showed a lad, aged 17, the subject of a curious hy- rophy of the left side of the head and face, first noticed a few s after birth. His mother said he was decidedly "simple." condition involved the lips, nose, pinna, tongue, tonsil, and rnal auditory meatus. The second and third toes of the left and the third and fourth toes of the right foot were also hy- rophied.

Cystoscopic View of a Bladder Diverticulum.—Mr. HURRY WICK brought forward a patient, aged 52, who had applied relief of symptoms characteristic of enlarged prostate, atony hæmaturia, but in whom upon rectal examination no enlarge- t of the prostate could be discovered, and in whom the ian lobe of the prostate was proved to be normal in size. By ns of the electric cystoscope, a deep diverticulum was dis- red on the left side of the trigone, by the left ureteral orifice, sharp edge of the deep recess was ulcerated, covered with phatic *débris* and muco-pus. It contained no stone, and the of the bladder was found to be in a state of chronic cystitis. The bladder was illuminated, and these conditions were demonstrated to the Society. Mr. Fenwick alleged that such cases of pseudo-prostatic disease were not uncommon. Since suprapubic prostatectomy had come into fashion, bladders had been opened and no prostatic outgrowth had been found—a mistake which the cystoscope would have prevented. The lesson taught by this saccule was careful irrigation and systematic sounding.

Lupus (?) of Gums and Lips.—Mr. S. PAGET showed a young woman who presented an ulceration of the gums and lips, which he was disposed to diagnose to be tuberculous.

Abdominal Surgery.—The PRESIDENT announced that arrangements had been made for a debate on Abdominal Surgery, to be brought forward by Mr. Meredith on April 14th, the discussion being then adjourned to the following meeting. Dr. Keith had promised to take part in it, and Sir Spencer Wells would probably assist. Moreover, invitations would be issued to the best known London and provincial surgeons to attend, in order to make the debate as complete as possible. Intestinal surgery and operations *per vaginam* would be purposely excluded from discussion.

HUNTERIAN SOCIETY.

WEDNESDAY, MARCH 12TH, 1890.

STEPHEN MACKENZIE, M.D., President, in the Chair.

Gumma of the Heart.—Dr. TURNER showed a heart, in the wall of which was an extensive syphilomatous growth with a necrotic central tract. It surrounded and considerably contracted the infundibular part of the right ventricle, three-quarters of an inch from the pulmonary valves, and projecting into the left ventricle. The right coronary artery was patent, but the left was occluded by a thrombus, its wall being also much thickened. There was a nodule the size of a large pea in the testis, but no other signs of syphilis were discoverable. There was, however, a history of infection ten years previously. At the apex of the right lung, which was firmly adherent to the chest wall, was a fibroid tract enclosing a small cavity. The specimen was obtained from the body of a potman, aged 37. He had for some years suffered from præcordial pain, palpitation, and giddiness, increased four days before admission, when he was nearly run over. His pulse was 52, becoming slower until his death from syncope four weeks later, being 40 on the day preceding. A rough systolic *bruit* was heard at the base, and cardiac dulness extended to the right.

Cancer of the Liver.—Mr. TATHAM showed a specimen of cancer of the liver from a sailor, aged 61, who had complained of dyspeptic trouble, vomiting, etc., for six months. Mr. Tatham found large cancer cells in the vomit; there was occasional pain, and later on a tumour was manifest. The portion of the organ adjacent to the pylorus had become adherent to the latter, and its substance was there much broken down. A sloughy ulcer was formed, and dark offensive matter from the liver was vomited. About three-fourths of the entire organ was found to be infiltrated with cancerous growth. The primary growth was at the pylorus.

Puerperal Nephritis.—Dr. COTMAN showed the kidneys from the body of a plethoric woman, aged 40, who had puerperal eclampsia, and died comatose seven days after the birth of her tenth child. A condition of recent inflammation in an early stage was shown, the pyramids being dark and the cortex swollen and soft. She had apparently recovered from the convulsions, and albumen had nearly disappeared from the urine, when the fatal coma supervened.

Sebaceous Cyst of Umbilicus.—Mr. BIDWELL showed a sebaceous cyst of the umbilicus, the size of a large cherry, removed from a boy, aged 12; the swelling had been noticed for two years. The skin was not adherent; there was fluctuation, but no impulse on coughing. It was irreducible, but not translucent. On microscopic examination it was found to be sebaceous.—Mr. POLAND queried whether the cyst could have been formed by involution of the epidermis during cicatrisation.

Tubercle of Thyroid.—Mr. BIDWELL also showed a thyroid gland with tubercular deposit. The gland was not enlarged, but there was a caseating tubercle the size of a large pin's head in the centre of the right lobe. The specimen was taken from a child, aged $5\frac{1}{2}$ years, who died from acute general tuberculosis.

Hydatid of Liver.—Dr. FOWLER showed a large hydatid of the liver from a woman aged 26, who died suddenly from pressure upon the vena cava or right side of heart. The patient had also

a suppurating sinus in the left loin, for which she was in Guy's Hospital at the age of 6 years, an abscess having been opened there. The sinus was evidently kept open by some nodules of calcareous matter. The abscess might possibly have been a suppurating hydatid cyst. The cyst in the liver, which was evidently of old duration, had given rise to no symptoms until the last two days of life.

Myeloid Epulis.—Mr. J. HUTCHINSON, jun., showed figures and microscopic preparations from a case of myeloid epulis, which had recurred after excision ten months previously. The structure was that of typical myeloid sarcoma, with giant cells. In the microscopic slide, nodules of bone were observed in the growth. It was commonly said that these tumours did not ossify, but he had found the reverse to be the case. The plum colour of the tumour was very characteristic.

Salivary Calculus.—Mr. HUTCHINSON, jun., also showed a small salivary calculus from a woman, aged about 35, who was sent into the hospital as a case of epithelioma of the side of the tongue. There was a hard mass, and as it was in the situation of Wharton's duct, he thought it might be due to a calculus, and on cutting into it he found it was so. A hard fibrous structure of about half an inch in thickness surrounded the calculus, and the glands in the neck were enlarged.

Paget's Disease of Nipple.—Mr. HUTCHINSON, jun., also showed some microscopic slides from a case of Paget's disease of the nipple.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MARCH 13TH, 1890.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Case of Primary Glaucoma at the Age of 22.—Mr. SPENCER WATSON read notes of this case, in a woman, the subject of microphthalmos and hypermetropia. The patient was engaged in needlework for sixteen hours daily. When she came under observation both eyes were glaucomatous, the right eye being more affected than the left. Operation was advised, but was not consented to till four weeks later, when double iridectomy was performed. The left eye improved, and tension remained normal. A second iridectomy was performed on the right eye, but not much improvement in vision resulted.—Dr. W. J. COLLINS asked if Mr. Watson had measured the corneæ in his case.—Mr. BRAILEY mentioned the case of a girl, aged 18, under his care, in whom glaucoma had supervened on microphthalmos; in this instance, there was almost complete irideremia. The tension had been relieved by an equatorial scleral puncture.—Mr. SPENCER WATSON replied that he had not measured the corneæ; there was no doubt about the microphthalmos.

A Case of Spontaneous Purulent Hyalitis Nine Months after Successful Cataract Extraction.—Dr. BERRY communicated this paper, which was read by the SECRETARY.—The patient, aged 53, a glass-blower by trade, was operated on for cataract of the left eye on March 19th, 1889. Everything went well, and he left the hospital on the eleventh day, the wound being then soundly healed. Vision with + 11 D was $\frac{2}{40}$. Patient resumed work a month later. On December 20th he was readmitted with intense pain in, and almost complete loss of vision of, the left eye. He had left work at 4 P.M. the previous day, and was reading until 9 P.M. At midnight he was awakened with severe pain in the globe, and on presenting himself twelve hours later there was acute purulent iritis with hypopyon; T + and vision reduced to counting fingers with difficulty. No improvement took place, and the eye was enucleated on January 2nd, 1890. Immediate examination of the eyeball showed extensive purulent infiltration of the vitreous, with abundant hæmorrhages in the retina, the choroid being to all appearance healthy. Microscopic sections showed that there had been accurate apposition of the lips of the corneal wound. The iris was nowhere adherent to the cicatrix, but there was a slight flat attachment to the cornea in front of it. The suppuration appeared to have commenced behind the margin of the cornea, where a few cocci were found scattered among the cells. The choroid and deeper layers of the retina appeared healthy. Dr. Berry said that the possibility of a sudden violent septic hyalitis taking place spontaneously so long after an extraction was new to him, and the case was all the more astonishing in that, not only with respect to the acuity of vision, but also from an operative point of view, it had been completely satisfactory. A somewhat similar case had occurred in Dr. Argyll Robertson's practice. Nearly eleven months after a successful cataract extraction, the eye had to be removed for suppurative panophthalmitis. This case further resembled the writer's in that the patient was exposed to great heat. The sudden onset and malignant nature of the inflammation left no doubt that it was the result of septic infection; but as it was quite impossible that micro-organisms introduced at the operation could retain their vitality so long without showing signs of activity, there must have been some recent inoculation of the cicatricial tissue. This explanation was that adopted by Mr. Swanzy, who in 1871 published three cases in which peripheral prolapse of the iris had been followed after a prolonged interval by a spontaneous and incontrollable purulent iridocyclitis. The presence of micro-organisms in such cases was demonstrated by Leber in an article in *Graefe's Archiv*, 1878, on "The Intercellular Spaces of the Corneal Epithelium;" he stated that the bursting of an attenuated portion of a peripheral anterior synechia took place either spontaneously or as the result of a trifling lesion, and infection began at this point. Dr. Berry had lately been able to confirm this supposition by the discovery of micrococci in the vitreous in a case in which purulent hyalitis took place a long time after a perfectly normal iridectomy for glaucoma simplex. Mr. Priestley Smith had recorded a case of purulent hyalitis occurring spontaneously in an eye two years after cataract extraction. In this case there had been a slight encleisis of the iris. In one mentioned by Arlt there was a prolapse of iris the size of a pea incorporated in a cystoid cicatrix, from which, after fifteen years, a sudden panophthalmitis originated.—Mr. BRAILEY cited a case of spontaneous, bilateral, purulent hyalitis, which was associated with obstinate constipation; and suggested the possibility of autogenetic septicæmic infection as having a share in inducing the condition.—Mr. MARCUS GUNN mentioned a case belonging to the same category in which purulent iritis and hyalitis occurred three weeks after cataract extraction, without any prolapse or adhesion of the iris, the cornea remaining clear.—Mr. NETTLESHIP spoke of the importance of these cases both from a clinical and pathological standpoint. He was familiar with cases in which an eye, blind from old corneal affection or glaucoma, suffered from violent inflammatory attacks similar to that mentioned, though, whether this occurred in the absence of any previous perforation, operative or otherwise, he could not say. Though spontaneous iritis, not following operations (for example cases of pseudo-glioma), might be due to septicæmia, the supposition did not aid the explanation of the present cases. It was remarkable that in both the instances cited the eyes had been exposed to great heat.—Mr. BRAILEY said there was no doubt that some eyes suppurated without local wound, as after glaucoma which had not been operated on. Between pseudo-glioma and the present cases there was the marked distinction that in the former suppuration was limited to the vitreous and retina, the choroid escaping; so that the globe, though soft, retained its bulk, whereas in panophthalmitis it quickly shrunk.—Mr. WAREN TAY mentioned a case of purulent hyalitis or panophthalmitis in one eye following the arrest of discharge from an abscess in the side. After enucleation the vitreous was found full of pus. There was no local inoculation. He also mentioned the case of a woman who lost both eyes by a condition resembling pseudo-glioma after confinement. There was shrinking of the globes; the septic disease was probably embolic.—The PRESIDENT alluded to an observation made by him long ago, that there appeared to be swelling of the discs in pyæmia; this might also be the case in the surgical disease.

Note on the Metre Angle in Latent and Manifest Muscular Deviations.—This paper, by Dr. BERRY, was read by the SECRETARY.—Dr. Berry thought that the employment of Nagel's metre angle notation as a standard of measurement in muscular deviations was not largely in vogue. If it was worth while to measure deviations at all, it was only consistent that, having adopted the metrical system of measuring refraction, we should note the deviation in metre angles, especially as the measurement of latent squint could be made in metre angles or fractions of them as quickly as the determination of the visual acuity in the ordinary way. This was not the case with manifest deviations, but it could be said that no more time was necessary to estimate the angular deviation in metre angles than in degrees. Dr. Berry pointed out that in Nagel's notation the degree of convergence, and not merely of deviation, had to be determined, and showed that the former was in any case of squint only half the latter. The proper existing association between accommodation and con-

rgence in the case of a squint was given by the measurement in etre angles of half the angular deviation.

On the Immediate Effect of Tenotomy on the Concomitancy of Squint.—This paper, by Dr. BERRY, was read in his absence r the SECRETARY.—Dr. Berry first explained that he referred to mplete tenotomy, and not to the so-called "partial" tenotomies, to the justification of which he was more than sceptical. He d been in the habit of measuring not only the amount of the viation of the squinting eye, but also the accuracy of the con-mitancy—that is, determining the amount of error in con-rgence (positive or negative), not only in the primary position, t also when the object of fixation was carried about 30° to her side. As soon as the scleral attachment of one of the oti had been divided, the concomitant character of the squint as lost and the degree of effect produced by the operation ried according to the direction of fixation. For instance, after vision of the right internal rectus, the effect of the operation ould be greater as the fixing eye was removed from the middle e towards the left, and less when moved in the opposite direc-n. The greater effect to the left was obviously due to insuf-iency of the right internal rectus, resulting from the operation; t why should the effect continue to diminish after the axis of e deviating eye had crossed the middle line and was directed twards?—Mr. DOYNE spoke of the benefit often derived in ses of migraine by correction of errors of refraction, and asked e President if migraine might not be considered as a species of ilepsy.—The PRESIDENT said that, scientifically considered, he d no doubt migraine was a species of epilepsy, but that practi-ly they were widely different, and rarely if ever interchange-le.—Mr. BRAILEY and Dr. JAMES ANDERSON referred to cases which full correction of ametropia had had no curative effect on attacks of migraine.

Card Specimens.—Mr. MARCUS GUNN: Two cases of Superficial nctate Keratitis.—Mr. BEAUMONT: A case of Neuro-retinitis.—. REDMOND (Dublin): An Electric Drill for discission of tough osule after extraction.—Mr. MACKINLAY: Traumatic Irideremia d Aphakia with retention of good vision.—Mr. DOYNE: (1) A se of (?) Tuberculosis of Choroid; (2) a case of Paresis of both ternal Recti.—Dr. W. J. COLLINS: Cast of an Eyeball, with uatorial staphyloma following complete glaucoma.—Mr. STAN-RD MORTON: Fibrous Changes at the Optic Disc.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MARCH 12TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Case of Rokitansky's Tumour.—Mr. REEVES showed a large nour which he had removed. It was composed of a number of ts with only the cell wall in the way of solid matter. Roki-sky's tumour was generally bilateral, but in this case it only sted on one side.

Laparotomy in Pelvic Abscess.—Mr. MAYO ROBSON read a paper this subject. He defined pelvic abscesses as having nothing to with the ordinary forms of abdominal abscess, but secondary some condition the essential feature of which was the presence us dependent on inflammation in or near the uterus. After iewing the measures generally employed for the relief of this dition, and pointing out that the indiscriminate use of the irator was not unattended by danger, he read brief notes six cases of pelvic abscess in which he had performed ominal section. All were successful. They were all serious es, and without active treatment must have succumbed. e of the cases was a tubercular abscess. Mr. Mayo Robson ed that, no matter how foul the contents of the abscess, re need be no apprehension of the result of pus, etc., escap-into the peritoneum if proper precautions were taken by care-cleansing. Once the presence of pus within the pelvis had n diagnosed, it ought to be evacuated, the vaginal method being ted only when fluctuation could be clearly made out from that ation.—Dr. BARNES said that if the real nature of these abscesses ever to be made out, it was assuredly by laparotomy. He ex-ined the accumulations usually taking place on the left side by fact that the peritoneal pouch reached down lower on the left n on the right side. He preferred laparotomy as a rule, but the ue of the exploratory puncture was too great to be overlooked. he PRESIDENT, Mr. REEVES, Dr. BANTOCK, Dr. BEDFORD WICK, Dr. HEYWOOD SMITH, Dr. FENTON, and Dr. MANSELL-ULLIN also took part in the discussion.—Mr. MAYO ROBSON, in reply, pointed out that the grattage of the walls of the cavity in tubercular abscesses would be dangerous when, as was usually the case, those walls consisted of matted intestines. He observed that he had intentionally omitted giving any opinion as to the probable source of the mischief, though he had made up his own mind as to this. Two were probably due to hæmatocele, one to pyosalpinx, one possibly to ulceration of the vermiform appendix, and one to dermoid cyst suppurating into the bladder. Dilatation of the sinus opening into the rectum had been tried in one of the cases, and failed to relieve. With regard to cellulitis, they were in the same position as they were formerly with respect to the so-called peri-typhlitis, which was now recognised to be localised peritonitis running on to suppuration. He was of opinion that the so-called cases of cellulitis were also localised peritonitis for the most part. In stitching the parietal to the visceral peritoneum he included at least a quarter of an inch, so as to get a good grip, the sutures being introduced by means of a fully-curved needle, having first of all separated the parietal layer from the parietes. He was not prepared to offer any opinion as to how a chill which was credited with the power to suppress menstruation, could bring about effusion, nor as to whether the "chill" was the result, instead of the cause, of the affection.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, MARCH 5TH, 1890.

Professor A. R. SIMPSON, M.D., President, in the Chair.

The Influenza Epidemic.—Dr. BRAKENRIDGE introduced a discussion on the late epidemic. There could be no question that it had been present in conspicuous degree in Edinburgh. So early as the end of October he had met with cases, with so unusual clinical symptoms, that he had expressed the belief more than once that a new disease was present in their midst. He had come to that conclusion before learning that apparently similar cases were present in Russia. Apparently "influenza" cases had appeared in several places almost simultaneously. There had been a gradual increase in his cases through November and December, till the maximum was reached in January, when at one time he had as many as fifty cases under treatment. Altogether he had seen more than 200 cases in private practice, while, curiously enough, practically none in hospital practice. This fact seemed to suggest that the wealthier classes had suffered most, a view which received further support from the fact that the hospital accommodation specially arranged by the Town Council for the reception of influenza patients had not been once called into requisition. After discussing the symptoms, Dr. Brakenridge drew attention to the complete absence of coryza in his cases, to the occurrence of a peculiar variety of patchy pneumonia, with accompanying hæmoptysis, to the absence of any characteristic rash (though erythematous, urticarial and herpetic rashes were seen in many instances) and to the frequent occurrence—often during convalescence—of neuralgia and hyperæsthesia. Of special importance he thought was the fact that in a number of cases there seemed to be a distinct, initial fever, lasting for 24 to 48 hours, which abated, only to be succeeded after a short interval by the more characteristic symptoms he had described, which lasted for a varying length of time. In support of this view he cited the facts of his own illness, which he had reason to study with extreme accuracy. It was not easy to fix the duration of the disease in individual cases. The period of convalescence varied endlessly. Some patients got rapidly well, others were for a long while invalided. There often was pronounced loss of body weight, and this occurred rapidly. Further, he had noticed that females were apparently more liable to attack at or about the menstrual period. In more than one instance the patient had suffered from paralysis of the bladder. Relapses had occurred in some, but none of his cases had proved fatal. He thought the neurotic element in the disease worthy of especial note and believed that a large number of the symptoms were best explained in that way. From the fact that cases had appeared simultaneously in Russia and Edinburgh, and other places far removed from each other, it was evident that they had to deal with an ubiquitous germ. The overheating of houses and rooms might have had something to do with its spread. While a number of symptoms usually associated with influenza were absent, or not conspicuous, he inclined to the view that it was truly influenza, and that its spread was by atmospheric agencies. He did not think the disease, as seen in Edinburgh, highly contagious. The treatment had been largely symptomatic, with ex-

treme care during convalescence.—Other speakers followed, who expressed varying views as to the degree of frequency of the disease among certain classes, and other points.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Pathology.

Friday, February 14th, 1890.

E. H. Bennett, M.D., President, in the Chair.

Corneal Tumours.—Mr. A. H. Benson brought forward two corneal tumours; and Dr. W. Graves exhibited lantern illustrations of microscopic sections from the growths. Dr. Graves regarded one as a lymphoma, and the other as a fibroma.—Drs. Story, Patteson, M'Kee, and Scott commented on the rareness of corneal tumours in general, and expressed doubts as to the correctness of the diagnosis. The specimens were referred to the Committee of Reference for examination and report.

Rectal Neoplasms.—Dr. C. B. Ball and Dr. J. Alfred Scott gave lantern illustrations of rectal neoplasms.—Dr. Scott explained the apparatus with which he had worked.—After remarks from Drs. M'Kee, M'Weeney, and Patteson, Dr. Ball, in reply, said that, as to the formation of these fibrous polypi from ordinary internal piles, which he had put forward, most of the points which had suggested that idea were clinical rather than pathological. They found ordinary internal piles in the first instance soft and brightly vascular, consisting of very loose connective tissue covered with mucous membrane, and containing a large number of very dilated veins, thrombosed with laminated clots, and very frequently arteries of moderate size. But if they examined sections of piles which had existed for many years they would find that the connective tissue element had greatly increased, while the vascular element was not at all a noticeable feature, and, as they went still further on, the formations became pedunculated. With regard to Professor Symington's theory, that the anus was a canal, and not an opening, it explained many things that he (Dr. Ball) had been unable satisfactorily to account for before—one being the height at which, under ordinary circumstances, the mucous membrane was to be met with; and another, that tumours which were perfectly reducible were found within the rectum, and not appearing externally, and still covered with squamous epithelium.

Columnar-celled Epithelioma of the Lower Jaw.—Dr. E. J. M'Weeney exhibited a specimen of columnar-celled epithelioma of the lower jaw, with metastatic deposit in the portal fissure.

Section of Medicine.

Friday, February 28th, 1890.

Lombe Atthill, M.D., President, in the Chair.

The Influenza Epidemic in Dublin.—Dr. J. W. Moore read a paper, in which he said that from an analysis of the Registrar-General's return, it might be concluded that:—1. The epidemic of influenza was more pernicious to the population of Dublin than the extreme cold of January, 1881. 2. It slew its victims chiefly by complications and sequelæ affecting the breathing organs and the heart. 3. It was less fatal to children of tender years than to the adult and elderly. 4. Its effect upon the death-rate was sudden and pronounced, and lasted throughout the month of January and the first half of February. Dr. J. W. Moore argued that it was an acute specific infective disease of the miasmatic rather than the miasmatic-contagious class. Its virus acted primarily on the nervous system. It was pandemic rather than epidemic, and its prevalence was independent of season and weather, a fact which distinguished it from epidemic bronchial catarrh. There was often an interval of one or more days between the reception of the poison and the development of the symptoms; but this pseudo-incubation period might be explained on the supposition that in certain individuals an intact condition of the mucous membranes might present an obstacle to the entrance of the virus into the blood. He had observed several cases of apparent communication of the disease from person to person, but without being able to calculate the duration of a supposed period of incubation. The symptoms and complications were then described; among the latter Dr. J. W. Moore had observed epistaxis (one case), facial neuralgia (several cases), profuse sweatings (several cases), skin rashes (four cases—three were examples of papular sweat rashes, with sudamina; one was an erythema fugax), herpetic eruptions (several cases); cystitis, followed by mild orchitis (one case). Dr. Moore believed that in contrast to dengue fever influenza was a non-eruptive fever. Rashes were accidental, and resulted from hyperpyrexia, or profuse sweating, or from the ingestion of such drugs as quinine, antipyrin, or salicylate of sodium. In the epidemic of 1847, the death-rate was estimated at 2 per cent. of the cases observed in London; it had certainly not been higher in the present one. There was no specific for influenza, but the most useful drugs were (1) quinine, (2) antipyrin, except in young children and the weakly, (3) salicylate of sodium, especially in effervescence, (4) phenacetin, and (5) effervescing citrate of caffein.

Dengue Fever at Kells, Co. Meath.—Dr. Ringwood read a paper on dengue fever, which, he stated, had been endemic in the neighbourhood of Kells for the last five years, the disease having appeared soon after the return of troops from Egypt. The character of the disease for the first six months was that of bilious relapsing fever. It was not till June, 1885, that he met with cases of pure dengue fever, six months having elapsed after the introduction of the disease into the neighbourhood before it assumed its real type of pure dengue—exactly a similar time as had elapsed on board H.M.S. *Agamemnon*, stationed at Zanzibar, no case of pure pure dengue having appeared on board till six months after the introduction of the disease, 170 of the crew having in the meantime suffered from bilious fever, before the appearance of the dengue eruption. Dr. Ringwood described a typical case, and the complications which followed the illness. He held that the present form of influenza was a very mild form of dengue, generally free from eruption. — In the discussion which followed, Dr. A. W. Foot expressed some scepticism as to the claim of influenza to be looked upon as a serious disease, and spoke highly of the virtues of rum punch in the treatment thereof. —Dr. C. J. Nixon referred to the great increase in the Paris death-rate during December and January, and said that only some very unusual cause could have produced so serious a result. He was unable to identify the disease described by Dr. Ringwood as influenza.—Dr. J. Bellew Kelly (Drogheda) said he had had three hundred cases, and in all these he had not treated one pregnant woman.—Mr. Cox found that the respiratory dulness was out of proportion to the pulmonary mishief. He regarded the disease as a specific fever of two or three days' duration, and he did not believe in its infectiousness, while it seemed to be pandemic.—Mr. Tobin, who was quartered in Madras in 1871-72 when dengue was prevalent, and had seen a great number of cases of it and some twenty or thirty cases of influenza in Dublin, said there was very little likeness between the two, and he should never think of identifying one with the other.—Mr. Croly said that in treatment he started with stimulants, kept up the stimulants, and finished off with stimulants.—Remarks were also made by the President, Dr. Finny, Dr. McSwiney, and Dr. Donnelly, and Drs. J. W. Moore and Ringwood replied. The latter gentleman to set the question as to the existence of dengue in Kells at rest invited a deputation from the Section to come down, undertaking to show forty cases under treatment.

Section of Surgery.

Friday, February 21st, 1890.

Edward Hamilton, M.D., F.R.C.S.I., in the Chair.

A Series of One Hundred Cataract Extractions.—Mr. Swanzy read a paper on a series of 100 cataract extractions, which was published in the Journal of March 8th.—Mr. Story said that even if the series consisted of 100 selected cases, the results were admirable. In the *Dublin Medical Journal*, 1880, he himself published a series of his first 47 cataract extractions, showing a loss of 7 or 8 per cent., recording as loss or failure where the patient could not count figures at a yard or two yards off, and he found that the records of 11,000 or 12,000 extractions disclosed a similar percentage of failures. He agreed as to iridectomy, being of opinion that it facilitated the removal of the lens, and prevented the danger of prolapse of the iris. He also agreed as to the importance of antiseptic precautions. In St. Mark's Hospital a different plan was followed. The eye was washed with a solution of hydronaphthol, and the instruments were boiled in the same, while the operation was done under cocaine. He did not, however, take the trouble Mr. Swanzy advocated, of inserting a iris forceps afterwards to search for pieces of capsule. He dusted over the surface of the wound and eyeball with finely powdered iodoform. As regards irrigation proposed by Dr. M'Keown, c

elfast, for washing out the cortex, he had not found it useful. ne cortex was injured by nearly all the substances employed to ash out the anterior chamber, even by pure water. In his paper had advocated the three-millimètre flap extraction in opposi-on to the linear extraction of von Graefe, which was then in gue.—Mr. FITZGERALD said the operation which he had been the habit of doing was identical with Mr. Swanzy's up to a ort time ago, when he determined to try extraction without dectomy. He made his puncture a little outside the clear rnea, and brought the upper part of the flap well into the ear cornea. For comparison he was anxious to give statistics—cases of extraction without the iridectomy in hospital prac-e, and also 56 in private practice, and then going back and king 26 with iridectomy in private practice; but the 26 hos-tal cases with iridectomy he had been unable to procure. He dged his results more hardly than Mr. Swanzy, who seemed ntent to take as "good" if he could procure the counting fingers a few metres off. Up to the present he had no loss of a case to plore, and he recollected no case of suppuration: therefore, as r as he had gone, the results from the simple operation proved mensely superior to those obtained by iridectomy. As regards tiseptic treatment, he carried it out more in the way Mr. Story scribed than in Mr. Swanzy's. He used hydronaphthol, but he d not use atropine or eserine before the operation. In the dress-gs, his bandage was the same as Mr. Swanzy's.—Mr. MAXWELL ould perform iridectomy where the cataract was large and hard, t would dispense with it where the cataract was soft and small. Mr. SWANZY, in reply, said his 100 cases were not selected. ith regard to antiseptics, he had found more satisfaction from e use of 1—5,000th solution of sublimate than any other. had no idea about hydronaphthol; but he abominated iodo-m in every respect.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 7TH, 1890.

H. CAMPBELL POPE, M.D., President, in the Chair.

CLINICAL EVENING.

Cases.—Dr. P. S. ABRAHAM exhibited several cases of Skin sease, on which remarks were made by Dr. C. FOX and Mr. NHAM.—Mr. LUNN showed a woman, aged 75, on whom he had rformed a successful operation for the radical cure of a large moral Hernia of twenty-five years' duration.—Remarks were made Mr. KEETLEY, Dr. MALLAM, and Dr. VENN.—Dr. SCHACHT showed ase of Scleroderma of the Breast in a single woman, aged 18. Remarks were made by Dr. C. FOX and Mr. LLOYD.—Mr. R. F. NHAM showed a case of Unreduced Dislocation of the Hip in rly childhood. There was arrest of development, with consider-le shortening. A novel method of mechanical support was em-yed. It consisted of a concealed crutchpiece and a boot with-t a raised sole, and of the same size as the opposite one.—marks were by Mr. KEETLEY, the PRESIDENT, and Mr. HENRY KER, and Mr. BENHAM replied.—Mr. BENHAM also showed a ild, aged 3 years, with Contraction and Closure of the Mouth ing to severe ulceration of the skin. He regarded the case as e of cancrum oris, followed by contraction of the tissues. He ended operating on the case the following day.—Mr. BALLANCE owed a patient from whom he had removed a large Tumour of Thyroid Gland. The tumour was exhibited.—Dr. VENN owed a Polypus, weighing 2 lbs., which he had recently re-ved; also a Dysmenorrhœal Membrane passed by a young lady. Mr. WEISS showed a man on whose abdomen there was Ex-sive Superficial Contraction of the Skin following an eruption ich commenced three and a half years before. The patient gave lear history of syphilis.—Mr. MACKINLAY exhibited a patient th Complete Traumatic Irideremia with good vision and no otophobia. No lens could be detected, nor was there a vestige the iris to be seen.

Specimens.—Pathological specimens were exhibited by Messrs. P. DUNN and J. R. LUNN.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, MARCH 12TH, 1890.

J. DIXON MANN, M.D., M.R.C.P., President, in the Chair.

Specimens.—Dr. HUTTON showed the Heart of a Man, aged 30, o died suddenly, apparently of syncope. The mitral valve was ensively involved, and large vegetations projected from the wall of the auricle just above the valves. There was some athero-ma of the aorta. Dr. Hutton also showed Casts of the Bronchi, from a case of Plastic Bronchitis, under the care of Dr. Hayward, of Haydock.—Dr. WILD showed the Sigmoid Flexure from a case of Acute Intestinal Obstruction due to Volvulus. Abdominal pain had come on suddenly, followed by constipation and stercoraceous vomiting. There was complete obstruction for one week before death. *Post mortem*, the abdomen was found greatly distended, the diaphragm pressed upwards to the level of the fourth rib, the stomach contained fæces, the intestines as far down as the commencement of the rectum were much distended by gas and fæces, the rectum completely collapsed and empty. The sigmoid flexure filled up nearly the whole left half of the abdomen and was enormously distended, the mesocolon of the sigmoid loop was much narrowed at the base, and also thickened by bands of firm fibrous tissue, so that the two limbs of the flexure were drawn close together forming a narrow pedicle, which had twisted on its axis in such a manner that the commencement of the sigmoid flexure passed in front of the first part of the rectum; the latter tube being compressed between the brim of the pelvis and the distended large intestine. The obstruction seemed to be complete; the twist was easily reduced, there being no sign of adhesion, or inflammatory exudation on the peritoneal surfaces.—Mr. HARE showed a specimen from a case of Isolated Fractures of both Vault and Base of the Skull; and mentioned several other cases of isolated fractures in various parts of the base, bearing out the views expressed by the late Professor von Wahl, of Dorpat, that the line of fissure was parallel to the direction of the force producing it.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 13TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Specimens.—Dr. PEARSON showed some microscopic specimens: (1) a section of Lung from a case of "Lobular Pneumonia" complicating Typhus Fever; (2) the Bacillus Anthracis, cultivated in the blood of a mouse by inoculation from the blood of a sheep which had died of the disease in Siberia.

Excision of Ankle.—Dr. SINCLAIR WHITE showed a girl, aged 3 years, on whom he had performed excision of the ankle-joint and astragalus seven months previously for strumous disease of twelve months' duration. The patient was now able, with laced-up boots, to walk almost perfectly. The joint was opened by an anterior incision, and the divided tendons were reunited by sutures. Dr. White preferred this method of exposing the joint, as giving a complete view of the diseased parts.—Dr. MARTIN, Mr. PYE-SMITH, and Dr. GWYNNE took part in the discussion.

Radical Cure of Hernia.—Dr. SINCLAIR WHITE read a paper on this subject, and showed two cases in which he had successfully operated. The first was a boy, aged 6 years, who had a large congenital hernia on the right side, which could not be kept up with a truss. He was operated on in September, 1889, by Macewen's method, and was apparently cured. The second case was that of a baby only four months old when operated on. He had a very large right congenital hernia, which was not amenable to a truss. He was badly nourished, always crying, habitually constipated, had had repeated attacks of thrush, and would have soon succumbed to the irritation set up by the hernia. He was operated on in December, 1889, by Macewen's method, and appeared to be cured. Since the operation his health had improved wonderfully. Dr. White alluded to the remarkable strides made in reference to this operation within the last decade. The procedure was now a recognised part of the operation for the relief of strangulation when the vitality of the displaced bowel was intact. It had proved to be of much value in dealing with irreducible herniæ and very large herniæ that could not be kept up by external support. Opinions were still divided as to the expediency of the operation in cases capable of being relieved by a truss. Before it could be accepted as a substitute for the inconvenience of wearing a truss it must be conclusively shown that the operation involved little risk to life, and that the majority of the cures effected were permanent. The first condition was an established fact, and the operation might be considered to be one of the safest in surgery. The second condition could only be determined by following up the cases operated on, and this had not as yet been done sufficiently to allow of definite conclusions being drawn, although the accumulated facts were very promising. Dr. White then described the causes of hernia, and dwelt upon the importance of studying these in every case when the operation was contem-

plated. The various methods of performing radical cure were next alluded to, and preference given to Dr. Macewen's plan. Drawings and models were shown to illustrate the subject of the paper.—Dr. GWYNNE, Mr. PYE-SMITH, and Dr. PEARSON took part in the discussion.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 7TH, 1890.

A. F. MCGILL, F.R.C.S., President, in the Chair.

Abdominal Hysterectomy.—Mr. R. N. HARTLEY read a paper on two cases of abdominal hysterectomy for large myoma. In one a considerable portion of the tumour had undergone calcification. Both patients made a good recovery.—Mr. MAYO ROBSON, in discussing the relative advantages of hysterectomy, oöphorectomy, and electrolysis, deprecated dogmatic statements that any one of these methods was universally applicable, and thought that each case should be treated on its merits and indications. He had been disappointed with electrolysis, having had several cases where it had signally failed to relieve. He now thought it wise in cases of myoma requiring treatment to mention electrolysis as a possibly successful method, but rather to recommend removal of the appendages, having permission to go on to hysterectomy if necessary.—Mr. R. HAGYARD commented upon the embarrassment caused to practitioners by the dogmatic and directly opposing statements of such eminent authorities as Sir Spencer Wells, Mr. Lawson Tait, and Dr. Keith, and mentioned his own experience in six cases where he had tried electrolysis. One got perfectly well; one was relieved of her symptoms and the hæmorhage was arrested, but the tumour continued to grow. In four the treatment failed. He thought that electrolysis was of greatest value in cases where the hæmorrhage was severe, the negative pole being introduced into the uterus.—Dr. BRAITHWAITE considered it very important to distinguish between what he should call ordinary myoma and the œdematous or fibrocystic form, the latter not being amenable to treatment either by electrolysis or oöphorectomy. He regarded Tait's clamp as by far the best. He did not think the intraperitoneal treatment of the pedicle would even be safe, owing to the fact that hæmorrhage always recurred in about thirty minutes, in consequence of slackening of the ligature or clamp from shrinking and contraction of the stump of the pedicle. He was of opinion that electrolysis was inapplicable in tumours of the posterior wall, for in such cases the current either did not pass through the tumour, or could only be so passed by inflicting a hazardous puncture.—Mr. LITTLEWOOD, after mentioning the great advantages of Mr. Teale's tourniquet, said that up to the present the desideratum was a wire, in which one could have confidence, there being great liability to break at the twist. Perhaps an aluminium amalgam might give the required ductility with sufficient tensile strength.—Mr. HARTLEY replied.

Pyæmia in the Puerperal State.—Dr. HELLIER read a paper, the object of which was to show how many different conditions had been crowded together under the terms "milk fever" and "puerperal fever." There were as many cases of pyrexia in the puerperal state as in the non-puerperal state. In speaking of non-septic pyrexia, he insisted on the varying causes, physical and mental, which could cause rise of temperature after labour, and which were certainly not "milk fever." In the study of puerperal pyrexia, the questions to be decided were: (1) what different germs could cause septic puerperal pyrexia? It was known that there were many; (2) how did the various known germs behave in patients in the puerperal state? In briefly discussing those questions, Dr. Hellier dwelt on the strong likeness which the lesions caused by various germs bore to one another, and the difficulty of diagnosing the cause from the pathological conditions; yet this did not negative the theory of plurality of cause, but was analogous to the strong likeness between various inflammatory conditions seen in other parts, for example, the fæces. The varying results of treatment in puerperal pyrexia, especially as regards the use of the uterine douche, were in accordance with that view. It was also supported by the incalculable benefit which accrued from the discovery of each new cause of septic infection, by preventing its access to the bodies of puerperal patients.—Dr. BRAITHWAITE thought the danger to puerperal women of scarlet fever was much overrated. He had seen many women delivered with scarlet fever in the house without harm. Erysipelas, on the other hand, was most virulent.—Dr. ALLAN regarded the causes of puerperal pyrexia under the heads of "ordinary" and "specific." In the first there was generally no marked rigor. The second was allied to erysipelas, began with a rigor, and was very difficult to treat. For treatment he preferred quinine and cold effusion, except when peritonitis was present. The temperature after parturition was generally subnormal, and a comparatively slight degree of pyrexia indicated mischief. Milk fever was really incipient inflammation of the mammæ.—Dr. SWANN related the case of a young lady who, in a healthy house, was seized after confinement with severe febrile symptoms with delirium, and later, sore throat. On investigation it was found that the nurse had undoubtedly recently suffered from mild diphtheria, and that she had a very offensive condition of teeth. The same nurse shortly after attended another case, in which there was long-continued pyrexia and phlegmasia dolens.—Dr. BAMPTON had seen severe fever from syringing the uterus with mercuric chloride, with rigor, vomiting, and diarrhœa. In one case infection seemed to have followed the use of a bedpan which had been recently used by a patient suffering from hip-joint disease with considerable discharge.—Dr. RABAGLIATI was strongly in favour of the use of cold (ice applied to the abdomen over flannel) in puerperal pyrexia, and related cases. He doubted the effect of quinine, and preferred sodium salicylate.—Dr. JACOB thought the instability of the thermal centres in women, especially after parturition, was insufficiently appreciated. He related instances in which very high temperatures were recorded in persons of neurotic and excitable temperament, with very little objective cause.—The PRESIDENT thought scarlet fever was very dangerous to the puerperal woman. He related a case in which a surgeon, suffering unconsciously from a very mild attack, attended within a short period ten cases of midwifery. All these patients became affected, and several died. He thought the classification adopted in surgical cases was most applicable to cases of puerperal fever, namely, sapræmia and septicæmia, according as the infecting agent was external to or in the tissues.—Dr. HELLIER replied.

Specimens.—Mr. NUNNELEY: Infiltrating Sarcoma ("Chloroma") from Orbit, with Secondary Growths in Kidneys and Mediastinal Glands.—Dr. JACOB: Microscopic Sections of the Growth.—Dr. CHURTON: Cancer of Pylorus, with Contraction and Hypertrophy of the Right Half of the Stomach.—Mr. HAWKINS-AMBLER showed a boy who had recovered from Diffuse Suppurative Peritonitis after Operation.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, FEBRUARY 19TH, 1890.

JOSEPH WHITE, F.R.C.S.Ed., President, in the Chair.

Prevention of Abortion.—Dr. HUNTER read a paper, giving details of several cases in his own practice where rest, hygiene, and careful supervision had been successful in terminating a long-continued habit of miscarriage.

Influenza.—Dr. TRESIDDER read notes on cases under his charge in the General Hospital, and drew attention to the fact that there had been apparently no extension of the disease in that institution by personal contagion.—Dr. BOOBBYER also gave an account of two cases of influenza complicating scarlet fever, in both of which herpes zoster and albuminuria had occurred. These cases were in the general ward of the Isolation Hospital, surrounded by other scarlet fever cases, and yet no extension of the disease had taken place. The returns from factories and workshops, however, showed an extreme rapidity in the spread of influenza among operatives in confined and vitiated atmospheres. Dr. Boobbyer also drew attention to the apparently uniform extension of the present epidemic, notwithstanding the occurrence in its course of extreme meteorological variations. He further said that, as a result of recent inquiries in Nottingham and its neighbourhood, he could not learn that there had been of late any unusual prevalence of sickness among animals. With the exception of scarlet fever, which had been epidemic for the past six months, there was no undue amount of zymotic disease in Nottingham.

Specimens.—Dr. TRESIDDER showed a specimen in which a Cancerous Growth involved the whole of the lower lobe of the right lung, where it appeared to have originated. It had extended into the mediastinum, and had involved the walls of the right ventricle and auricle, there being prominent masses of the growth within the auricle. There was also recent extensive pericarditis. Dr. Tresidder also showed the organs from a case of Ulcerative Endocarditis. The heart was hypertrophied, and there was endocarditis within the auricle. On the auricular surface of the mitral

valve were prominent granulations, and one small, deep, and recent ulcer. The spleen and kidneys contained recent infarctions. The patient when first seen was suffering from acute rheumatism, which became complicated thirty-six hours before death with hyperpyrexia, the temperature on three occasions registering respectively 107.6°, 106.4°, and 105°. Cold sponging reduced it on three occasions. The last high temperature was registered just before death.

WEDNESDAY, MARCH 6TH, 1890.

CLINICAL EVENING.

Stricture of Rectum: Puncture of Intestine.—Dr. HANDFORD showed a malignant stricture of the rectum, from a woman aged 34. It was associated with a second stricture of the colon, and with multiple polypi of the whole of the large intestine. There were secondary growths in the liver (which weighed 7½ lbs.), and nowhere else. The tympanitic condition of the abdomen was much relieved by puncturing the colon in two places and drawing off flatus. A small quantity of liquid fæces sputtered out of the cannula. The patient died forty-eight hours afterwards from the general disease, but there was no peritonitis, and no punctures could be detected on the inner surface of the abdominal wall. The intestine was again distended and airtight; no puncture being visible.

Bronchiectasis.—Dr. HANDFORD showed from the same case a cylindrical dilatation of the lower branches of the left bronchus. The patient had suffered from cough and abundant purulent sputum for several years. A surgical operation was contemplated, and the question of tubercle was raised. No bacilli were found, and a confident opinion was expressed against the tubercular nature of the lesion, and bronchiectasis was diagnosed.

Ovarian Cyst.—Mr. ANDERSON read notes on a case of ovarian cyst with twisted pedicle, treated successfully by operation.

Cases.—The following cases were shown:—By Dr. HANDFORD: Aortic Aneurysm and Cardiac Disease.—By Mr. TRESSIDER: (1) Tumour of Thorax, probably Aneurysmal, in a woman aged 43; (2) Paralysis of the Third Nerve and Optic Atrophy in a Syphilitic Woman.

Specimens.—Dr. HANDFORD showed the following specimens:—(1) Multiple Aneurysms of the Aorta; (2) Perichondritis of the Larynx with Subglottic Abscess, of tubercular origin; (3) Perichondritis, the result of enteric fever; (4) Tubercular Laryngitis; (5) Œdematous Laryngitis from a Syphilitic Subject.

CORK MEDICAL AND SURGICAL SOCIETY.

WEDNESDAY, FEBRUARY 12TH, 1890.

ULICK JENINGS, M.D., in the Chair.

Cases.—Dr. W. ASHLEY CUMMINS showed a Calculus which he had removed from a female child by the suprapubic method.—Surgeon-Major WALKER, from his experience in India, spoke in favour of the lateral mode of extraction.—Dr. DALY exhibited a patient from whom he had removed 3½ inches of the Tibia for compound fracture, with great protrusion of the bone. The limb was kept in a semiflexed position with an outer splint. The result was most satisfactory, the limb being only a quarter of an inch shorter than its fellow.

Empyema.—Dr. W. ASHLEY CUMMINS read notes of a case he had treated by resection of ribs and drainage. The patient was a labourer. An incision obliquely made over seventh and eighth ribs, and removal of an inch of both ribs gave free exit to about four pints of pus. No injection was used to wash out the pleura, but a large-sized drainage tube was retained by sutures. Antiseptic dressings, iodoform, and carbolic tow were continued till recovery three months after the operation.

Fever.—Dr. W. JACKSON CUMMINS read a paper on fever, commencing it by tracing out facts pointing to the phenomenon of two fevers of different type existing in the same patient. Amongst other examples, he mentioned an experience of his during a malignant epidemic of yellow fever in the West Indies. The ordinary endemic bilious remittent fever assumed so virulent a type that the "black vomit" became one of its prominent symptoms. To illustrate his views more forcibly, he read notes of a case in his practice where typhus and enteric fever were present, showing markedly the distinctive characters of each. The case was an unusually severe one, the delirium of the wildest, with a temperature of 105.6° and tongue dry and brown. Paraldehyde had at the first trial the effect of producing sleep, but subsequent trials gave no result. Sulphonal seemed to increase cerebral excitement without having any hypnotic effect. Antifebrin almost immediately lowered the temperature and calmed the cerebral disturbance. During a long illness, whenever the temperature rose it was used with unvarying results, and never had the effect of producing subnormal temperature. In this case, the rash presented the characters of typhoid and typhus fever, with other undoubted signs of both. Dr. Cummins did not recommend antifebrin generally, but it had seemed specially suitable to the case in point. Sulphonal he believed more efficacious in pure typhoid than in fever of a mixed variety.—A discussion followed as to the nature of such cases (whether they were due to a hybrid germ, or should be considered as a pathological entity), and as to the treatment of fevers.

STAFFORDSHIRE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, FEBRUARY 27TH, 1890.

T. VINCENT JACKSON, F.R.C.S.ED., President, in the Chair.

Popliteal Aneurysm.—Dr. BLUMER related the case of a labourer, aged 37, who had a firm ill-defined swelling in the left popliteal space. There was no history of injury. Later deep fluctuation appeared, but there was no pulsation or *bruit*, nor was it distinct. An aspirating needle, passed on the outer aspect, drew nothing but blood. This fact, with the appearance a few days later of a small patch of gangrene on the little toe, and a slight feeling of distension in the swelling on compressing then relaxing the femoral, pointed to diffuse aneurysm. An incision was made into it, the coagula turned out, and the artery tied with silk at the bleeding point. There was no appearance of a sac, and the lower end of the popliteal could not be found. The cavity was plugged with oiled lint. The man made a good recovery.

Epithelioma of Tongue.—Dr. BLUMER also related a case of epithelioma of the tongue in a man, aged 64. The disease involved the whole of the right side of the organ, with pus infiltrating the left half. The growth had been rapid, and was caused by the irritation of a jagged tooth. The whole tongue was removed by scissors from the cavity of the mouth, to facilitate which an incision was carried through the angle of the mouth on the right side, as the tongue was much bound down. Hæmorrhage was arrested by pressure forceps. The man made a rapid recovery, and could articulate sufficiently well to make himself understood.

Pseudohypertrophic Paralysis.—Dr. WOODHOUSE showed a boy, aged 8 years, the subject of pseudohypertrophic paralysis. There was no history of heredity. The first symptoms had come on after an attack of measles at the age of 3½ years.

Neurological Instruments.—Dr. MCALDOWIE showed a case fitted with neurological diagnosis instruments designed for use in hospital wards.

Suprapubic Lithotomy. — The PRESIDENT exhibited three phosphatic calculi removed from the bladder of a man, aged 65, who had long suffered from cystitis and retention of urine, for the relief of which perineal cystotomy had been performed nine months previously. By means of suprapubic cystotomy the three calculi were removed, as well as the projecting lobe of the prostate, and immediately afterwards the neck of the bladder was forcibly dilated with the left forefinger. Recovery was rapid and complete.

Pyrosis.—Dr. CARTER (Birmingham) read a paper on pyrosis, and dealt with its probable pathogeny and treatment.

Retention of Urine.—Dr. LOWE read notes on the treatment of two cases of retention of urine—one from prostatic enlargement, the other from atony of the bladder. In the former, attempts to pass a catheter having failed, the bladder was punctured over the pubes with a small trocar; a piece of drainage tubing, of the size used in tapping ascites with Southey's trocar, was passed for four inches through the cannula into the bladder; the other end of the tubing was conducted into a receptacle underneath the bed; a syphon action was established and the bladder was thoroughly drained. The tubing was left in the bladder for ten days; a catheter was then passed with ease, and the tubing was withdrawn. The patient had afterwards occasionally to pass a catheter, but could usually pass urine without it. In the other case a similar line of treatment was adopted owing to a severe attack of febrile disturbance; temperature 103°; pulse 120; a dry tongue and grave signs of constitutional disturbance supervening on passing the catheter. Immediate amelioration of the symptoms followed the thorough drainage of the bladder. The tubing

was left in the bladder for some weeks, then withdrawn, and the bladder relieved by catheterism without ill effects. The advantages of the treatment were (1) that, in spite of the small size of the tubing, the bladder was thoroughly drained; (2) there was no escape of urine by the side of the tube; (3) the aperture caused by the tube was so small as to heal up without any difficulty or escape of urine through it. The success of the treatment in at once relieving the severe constitutional symptoms in the case of atony was very marked and complete.

SOUTHAMPTON MEDICAL SOCIETY.

TUESDAY, FEBRUARY 4TH, 1890.

CHAS. G. BEAUMONT, M.D., President, in the Chair.

The Surgical Aspects of Impacted Labour.—Mr. LAWSON TAIT read a paper on this subject, which is published at p. 657 of this JOURNAL.—The PRESIDENT tendered to Mr. Tait the hearty thanks of the Society for his interesting and instructive paper, and for the practical hints he had thrown out. He said that the suggestion to remove the uterus in cases of puerperal fever had been borne out by recent views on the pathology of that redoubtable affection. He thought, too, that they were indebted to Mr. Tait for insisting, as he had done, upon the ethical rights of the child to life. He admitted that they were, perhaps, too apt to put such considerations on one side. The operation itself, though it seemed very complicated when described in print, appeared to be one which could be performed with an ease which was delightful.—Dr. WADE said he had seen a good deal of operative labours, and he mentioned a case. It was the first child, and the surgeon in attendance thought the delay was due to rigid cervix. As after a long time it showed no sign of dilatation, he sent for assistance to a neighbouring town. The consultant diagnosed cancer of the cervix, and performed Cæsarean section. The woman recovered, and subsequently had a child, which was delivered easily through the so-called cancer. The patient, however, subsequently died from stricture of the intestines caused by the sutures of the section. With regard to the proceeding suggested by Mr. Tait, the chief difficulty seemed to be to get an authoritative dictum as to what was the proper thing to be done in certain cases. If a man were to perform the operation without a strong expression of opinion in its favour by the profession generally, there would be considerable risk of his getting into trouble. With regard to the ethical question as to the rights of the child, he said that it was a question as to whether to save the child or the mother. Another question was as to how far patients and their friends would reconcile themselves to the loss of the uterus, though, for his own part, he thought it was a very desirable thing to prevent the possibility of the recurrence of the mischief.—Dr. THOMAS pointed out, with respect to the suggestion to remove the uterus in cases of placenta prævia, that this did not of necessity recur, and, therefore, it seemed hard to deprive the woman of the chance of having children subsequently. — Mr. TAIT pointed out that the mortality in cases of placenta prævia was very great, both as affecting the mother and the child. For the mother it had been put at 60 per cent., and it was almost as largely fatal for the child. He would not trouble himself about the prospect of future children if he thought that by clamping the uterus below the seat of the hæmorrhage he could save the life of the mother, and possibly that of the child. There was also the lessened risk of septic mischief, which was always a danger in such cases, even when the primary hæmorrhage was recovered from. It really was not a question of saving the mother or the child, the desire and result was to save both. He would not hesitate were the patient his own wife. As to the pins, he left them to come away of themselves, and he employed no antiseptic.—Dr. THOMAS asked whether, in cases of placenta prævia, early intervention did not do much to lessen the danger to the mother. Personally he thought the mother was the principal person to be considered.—The PRESIDENT said that the difficulty of taking accurate measurements of the pelvis was very great.—Dr. WADE said that in many cases Mr. Tait's operation would doubtless come to be looked upon as the right thing. A man's hand was a good enough guide to the size of the pelvis, and if the diameter were less than three inches, then Mr. Tait's operation would be usefully resorted to. Spiegelberg was much of the same opinion that it gave a better chance to the mother, to say nothing of the child. At the same time he thought with Dr. Thomas, that the life of the mother was the one thing to look after. If the practitioner could save the child so much the better, but the mother would have to be considered first. He thought that, before the suggestion could be acted upon generally, they should wait to hear the results obtained at some lying-in hospital. He asked whether the proposal had been considered by the staff of any lying-in institution. He concluded by proposing a vote of thanks to Mr. Tait for his very interesting paper, and this was agreed to by acclamation.—Mr. TAIT said that when a man recognised an impacted labour, and he was unable to get the hand into the pelvis, he was called upon to decide the course he would pursue. The crucial point was whether the practitioner, being unable to deliver the child by forceps or turning, would make an abdominal incision and take it out. Many of the cases in which Porro's operation had been done were living under the most insanitary conditions, which had not prevented a happy termination. He admitted that the objection with respect to public opinion was valid, but if any improvement were to take place someone must begin. He thought that public opinion would endorse his suggestion as soon as the real facts of the case were made known. He pointed out that while the ordinary course of abdominal surgery required very great experience, seeing that the operator never knew beforehand what he was going to meet with, the operation he had brought before them was always and and invariably the same in its veriest details.

REVIEWS AND NOTICES.

THE FLOWERING PLANT, AS ILLUSTRATING THE FIRST PRINCIPLES OF BOTANY. Especially adapted for London Matriculation, South Kensington, and University local examinations in Botany. By J. R. AINSWORTH DAVIS, B.A., Lecturer on Biology and Geology in the University College of Wales, Aberystwith. 8vo., pp. 180, with 60 woodcuts in the text. London: Charles Griffin and Co. 1890.

This little book exhibits the blemishes of so many of its kind, namely, inadequacy of explanation and generalisations from insufficient material. But when we add that it treats of the anatomy, physiology, and classification of plants, and contains an appendix on practical work and a long list of examination questions, these defects are not surprising. It reminds us of a lecturer who does not understand teaching and pours out facts and possibly fallacies in a continuous stream, to the utter bewilderment of his audience. The attempt to include so much in the book before us has resulted, in many instances, in obscuration rather than elucidation. Even where the author is right—and he usually is, we suppose, though we have not time to test his work, except here and there—he is too often content with stating a fact instead of demonstrating it as well as words or figures will permit.

At page 19 we find the following passage: "It is comparatively seldom that reproduction [propagation] is effected by the root, and when this is the case it is always vegetative, that is, by development of ordinary leafy shoots, and not of special reproductive organs.....Another case is that of the dahlia, which can be propagated from its root-tubers." As a fact, there is nothing special in this, as hundreds and thousands of perennial herbs are similarly propagated.

At page 87 we are told that "the terms hypogynous, perigynous, and epigynous are applied to the corolla specially, as well as to the flower as a whole." Considering that these terms indicate the relative positions of the floral envelopes and the stamens and the gynæcium, this statement is, to say the least, obscure.

On the subject of self-pollination, Mr. DAVIS says "that the fact that the majority of flowers are bisexual leads one to suspect that this process occurs not unfrequently;" forgetting, apparently, what he elsewhere has to say respecting proterandry and proterogyny.

In the definitions of the natural orders, the flowers of the Chenopodiaceæ are described as bisexual. So they are in Chenopodium, but unisexual in Atriplex. The gynæcium of the Onagraceæ is inadvertently described as superior; and the stem of the Labiatæ generally as fistular; the Compositæ as often having a milky juice—whereas both of the latter characters are exceptional in the orders referred to. In the definition of the Primulaceæ, the important character of the position of the stamens with respect to the lobes of the corolla is omitted; and to such a comprehensive order as the

Rosaceæ, less than three lines of description is given, and the gynæcium is said to be superior.

We have been rather severe, perhaps, in our criticism of this elementary book, but more because too much is attempted than because it contains no good; and classbooks that are inadequate and inaccurate on points of fact are not commendable, however high their merit.

INTRODUCTION TO THE TREATMENT OF DISEASE BY GALVANISM. By SKENE KEITH. London: Truslove and Shirley.

THE multiplication of books upon medicine and the kindred sciences is the necessary result of progress, but it does not tend to simplify knowledge. A book which can claim to do so is the more valuable for its comparative rarity. The merit belongs in an uncommon degree to the volume before us. It is what it purports to be—an elementary treatise on galvanism. The application of the science to the treatment of disease is not directly touched upon, but the ground is cleared for a thorough understanding of the special processes of electro-therapeutics.

The earlier notions about electrical properties are set forth in a few brief paragraphs.

The definition of terms is made more precise by tracing them to their origin, and by showing how far the analogy holds between frictional and voltaic electricity. The observations of Galvani and Volta are the subject of a brief historical sketch, which illustrates the transition stage of the science, and the theory of the voltaic cell is very clearly expressed. The phenomena of polarisation are represented in a most intelligible and attractive form, and in the chapters on cells the principles laid down are made the basis of sound criticism and practical suggestions. The questions of electromotive force, current, strength, and resistance are dealt with in a manner that leaves nothing to be desired. The principle of the galvanometer and the measurement of currents necessarily find their place in a work of the kind, and they are treated with the same judgment and lucidity of expression that characterise the book throughout.

Finally, there is a description of the apparatus used in Apostoli's method of treating fibroid tumours. This is aptly chosen, as involving the highest development of *technique*. The book is of the character of a science primer, and answers the best purposes of its class. It contains in sixty-two largely printed pages all that is absolutely necessary, and there is nothing that could be omitted without loss. The style is clear and impressive, and the matter and the language equally well chosen. It would be understood by anyone, and might be read with profit by all. It is well illustrated, and contains several admirable diagrams.

NOTES ON BOOKS.

Prize Essay on the Suspension of Carriages. By WILLIAM PHILIPSON, Newcastle-on-Tyne. Revised Edition. (New York: The Hub Publishing Company of New York, 39-41, Gold Street. 1889.)—That science would ultimately thoroughly control the design and construction of carriages has been long apparent; but rule of thumb and unintelligent experimentation have been slow in disestablishment, even in the factories renowned for technical constructive skill. The small book before us exhibits a perfect mastery of the subject, theoretical and practical. It is crammed with facts, and the drawings are most clear and thoroughly illustrative of the text. Mr. William Philipson has produced an exhaustive and highly valuable treatise on a branch of manufacture hitherto neglected by highly-trained minds.

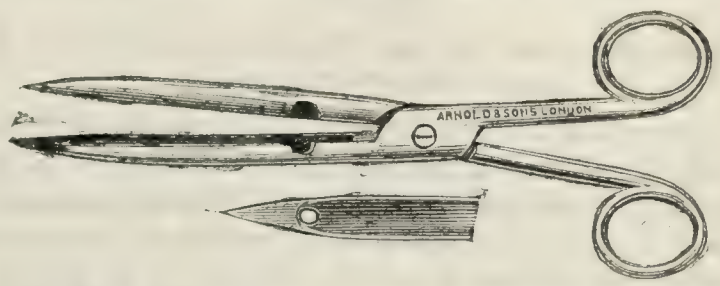
The Johns Hopkins Hospital Reports. Vol. II. Nos. 1 and 2. Baltimore: Publication Agency of the Johns Hopkins Hospital. 1890.)—The medical staff of the Johns Hopkins Hospital are displaying remarkable activity in the production of literature. The issue of a weekly *Bulletin* was recently commenced, and we now have before us the first two numbers of a monthly series of hospital reports. It should be explained, perhaps, that Volume II has begun to appear while Volume I, which is to contain "studies from the pathological laboratory," is still in preparation. The first two fasciculi, in quarto, printed on good paper, with a cover of dark apple-green, appeal pleasantly to the eye with an indescribable air of old-fashioned sedateness. Of their contents we shall probably have opportunities to say more on future occasions.

For the present it may suffice to state that the volume opens with an elaborate paper by Dr. William Osler on fever of hepatic origin, and that the same author also contributes a voluminous article on tubercular peritonitis. Dr. John N. Mackenzie has some remarks on anomalies of the uvula, with special reference to double uvula. There are also notes on pyrodin by Dr. Lafleur, and a number of reports of interesting cases by various hands.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS

NEW EXPANSION TROCAR.

I WISH to draw the attention of the profession to an instrument which I think will be found very useful in suitable cases. I have named it the "New Expansion Trocar" (see illustration). It is sharp-pointed like a trocar, with an opening near the point. The body of the instrument is hollow, and is introduced into a swelling with the blades closed. Should there be fluid or pus there it

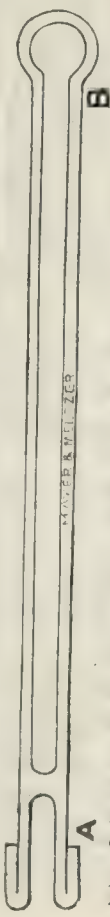


will enter the opening near the point, run down the hollow portion of the instrument, and come out at the opening near the hinge. In this way an abscess may be tapped, or any fluid removed. If an extra opening is required the blades may be divaricated, and thus cutting and loss of blood avoided.

My best thanks are due to Messrs. Arnold and Sons for the way they have carried out my suggestions. They can supply it in different sizes.

R. C. G. DURDIN.

INDEX REPOSITOR FOR CLINICAL THERMOMETERS.



THIS simple and inexpensive contrivance is the invention of Dr. James H. Aveling, who writes: By its use the difficulty which is not infrequently experienced in shaking down the index of a clinical thermometer is removed, and the breakage which results from the instrument slipping through the fingers during the attempt is avoided.

The index repositor, here represented in section, is four inches long. It is made of india-rubber tubing, closed at one end, A, which has a knob to prevent slipping; and open at the other, B, into which the non-bulbous extremity of the thermometer is thrust for about half an inch. The repositor is held between the finger and thumb at A and the thermometer whirled rapidly round for a few seconds, when the index will be found replaced. Anyone may try this experiment with a piece of drainage-tube.

Centrifugal force may be made to act upon the mercury in other ways. The thermometer, or its case, may have a ring at the end, to which a piece of string may be tied and the necessary whirling effected, but the plan now suggested seems the most simple as it can be applied to any clinical thermometer. No fear of the thermometer slipping out of the tube need be entertained. The tube ought not to be pulled, but peeled off when removed.

This repositor may be obtained from Messrs. Mayer and Meltzer, Great Portland Street.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 22ND, 1890.

MR. STANHOPE AND THE ARMY MEDICAL STAFF.

A BRIEF ANALYSIS OF THE RECOMMENDATIONS OF LORD CAMPERDOWN'S COMMITTEE.

We understand that Mr. Stanhope has now consented to lay on the table the evidence taken before the Committee on the Army Medical Department and to supply copies to those members of the House of Commons who are specially interested in the subject. It is stated that expense is the only objection to the general distribution of the Blue Book, and that after fifty copies had been printed the type was broken up. Mr. Stanhope has done well to yield in this matter, for ugly rumours were about, and strained relations might soon have sprung up between the doctors and their combatant brethren. The impression was pretty general that harsh and unfriendly things had been uttered about the department by highly-placed officials, and that it was necessary to keep what they had said "private and confidential." A glance over the *ipsissima verba* has convinced us that a good deal of misapprehension exists on this score. Arguments were undoubtedly used against the concession of relative rank, but they were usually qualified by cordial recognition of the services of medical officers, and of the social status which they have frequently won for themselves, and it is, therefore, best for all parties concerned that there should no longer be any mystery surrounding the evidence, but that the profession should be able to judge for itself how the matter stands.

Passing from this part of the subject, we turn to a brief analysis of some of the most important recommendations of the Committee, numbered as given at page 631 of the JOURNAL of March 15th.

1. Army rank to be relative, as at present; that is, the proposal to give substantive military rank is refused.

2 and 3. The medical rank and relative army rank are to be stated on his commission "wherever possible," and the rank to hold for all purposes except military command.

5. The War Office approves of the recommendation which proposes that candidates producing the diploma of the Society of Apothecaries are not to be required to produce another diploma. This we conceive to be a grave mistake. An army medical officer should be, before all things, a surgeon, and this qualification should only be accepted from one of the Royal Colleges of the kingdom.

7. Is refused, and most unjustly; it simply recommends that the medical officer for the British army should have his commission dated when he enters Netley, as is done in the case of those for Her Majesty's Indian army. Why this most invidious difference in treatment?

8. Is approved, which recommends that the examination for rank of surgeon-major should be conducted by a mixed board. This should silence all whispers about favouritism, which we believe to be without foundation.

9. Is approved, which abolishes all examinations for ranks above that of surgeon-major. It is believed that this will have retrospective effect, and let in all those who failed to pass the examination for the rank of brigade-surgeons—a more than doubtful measure as regards its retrospective action.

10 and 11. Are also approved, recommending a preference to be given for promotion to men of distinguished service. About this there can be no dispute.

14. Is carried out so far that power is taken in the Warrant to allow of it; under this surgeons-general can serve till 62 years of age.

15. Which recommends that two years in the rank of surgeon-general and deputy surgeon-general and three in that of brigade-surgeon be required before allowing an officer to retire on the retired pay of the rank, except in a case of permanent ill-health contracted in and by the service, is sanctioned with three years for all ranks. If this rule is made applicable in the army all round, no objection can be offered; if it is applied to medical officers alone, it will be invidious and unjust.

16. Which recommends that tours of foreign service shall not exceed five years, is not accepted by the War Office. This additional year of foreign service will tell severely on the health of medical officers, who even now are the greatest sufferers from foreign service.

17. This recommendation is not accepted, although it has always been a pet scheme of the "military advisers" of the War Office. It is to the effect that every medical officer on first appointment should serve for a definite period with a regiment or other administrative unit. It is refused presumably on the score of expense, which is to be regretted, as if carried into effect it would to some extent have restored "touch" between the combatant and medical officers so disastrously broken by the operation of the unification system, in other respects so admirable.

18. This recommendation is also refused; its object was to give medical officers three months' leave once in seven years, to improve themselves in professional knowledge. Here we have one rule for the combatant and another for the medical officer, who is never to be placed on a footing of equality with his brother officer, even when it is so obviously for the good of the service.

19. Shares the same fate. Medical officers when suffering from illness contracted in and by the service are not to have the same privileges as combatant officers. Comment on this flagrant injustice is not needed: it is simply shameful.

The above are the most important of the recommendations of the Committee, and Mr. Stanhope's judgment on them. We commend this brief analysis to the attention of intending

candidates for commissions in the medical staff of the British Army. If with such information before them on the conditions of service, and the hostile animus that prevails in high places against the department, they accept service in it, they cannot in after years say with truth that they took a leap in the dark.

PAGET'S DISEASE OF THE NIPPLE.

Mr. Jonathan Hutchinson, jun., showed at the meeting of of the Pathological Society on Tuesday evening a series of preparations illustrating the minute anatomy of the disease of the nipple, which is, as Sir James Paget showed in 1874, associated with cancer of the breast. The point to which Mr. Hutchinson called the attention of the meeting was the presence of certain bodies in the epidermis, which, following several French observers, he considers to be psorozoa. According to this view, the remarkable affection which has occupied more or less the attention of surgeons and pathologists—more particularly in England and America—is a parasitic disease dependent upon the growth of an animal parasite in the superficial layers of the skin. It is unnecessary to enlarge upon the importance of a view of this kind. Its mere suggestion opens up possibilities as regards probable acquisitions in the future respecting the nature of this particular form of disease, and in regard to the pathogenesis of cancerous affections generally. Any fresh acquisition to our knowledge regarding the nature of this puzzling and mysterious affection is especially welcome, as not only the pathology of the affection but even some of the clinical points connected with it are still subjects of dispute.

An excellent account of the literature of the subject will be found in a paper by Louis Wickham in Nos. 1 and 2 of the *Annales de Dermatologie* for the present year. M. Wickham does well to call attention to the fact that Sir James Paget, in his paper in the *St. Bartholomew's Hospital Reports* for 1874, did not prejudge the nature of this skin affection. Of this the title of the paper itself, "On Disease of the Mammary Areola, preceding Cancer of the Mammary Gland," is the best proof. A chronic inflammation of the skin of some kind, not necessarily an "eczema" or a "psoriasis," was described as being associated with cancer of the gland.

In Mr. Butlin's excellent papers on the minute anatomy of the disease, published in the *Medico-Chirurgical Transactions*, 1876-77, we find that the areola is described as having been the seat of long standing "eczema," and that carcinoma of the breast was preceded by "eczema of the nipple and areola." Dr. Thin, who subsequently investigated the anatomy of the disease, published in the Journal of May 24th and 21st, 1881, the results of his microscopical investigations under the title "Malignant Papillary Dermatitis of the Nipple and the Breast Tumours with which it is found Associated." He arrived at the conclusion that the affection of the skin was not of the nature of eczema, basing his opinion upon the differences between what was known of the minute anatomy of eczema and the appearances which he had found in the skin examined by him. At the same time he called attention to certain clinical points of difference between eczema and Paget's disease, these points being chiefly the well-defined and sometimes even overlapping margin of the diseased skin, and a peculiar infiltration of the cutis which could be appreciated when the diseased surface was pinched by the fingers "as if a penny was laid on a soft elastic surface and grasped through a piece of cloth." These clinical points of difference between the affection of the skin and eczema were confirmed by Dr. Duhring, Dr. McCall Anderson, and others. Dr. Duhring, who published two typical cases of the disease, considered it to be a special affection, having a tendency to develop malignant disease, and essentially of a chronic and insidious nature. He distinguishes it from eczema by the rare itchiness, which is at first almost *nil* and then capable of becoming increased to an intolerable point, by the well-defined limits of the disease, by the raised margin of the border, by its more brilliant colour, by its progressive course, by the absence of periods of remissions and exacerbations which eczema presents, and finally by the characteristic hard and superficial infiltration of the parts affected.

In Vienna, Paget's disease does not appear to have been studied or detected.

No suggestion had been made to account for the peculiar nature of this obstinate disease until recently a remarkable communication was made in Paris by M. Darier. The first case observed and recognised there was a case of M. Vidal's, in 1886. In this case the disease had existed for three years. When M. Vidal first saw the patient it occupied nearly the whole of the surface of the breast. Other cases were soon afterwards observed in Paris.

In the Journal for June 1st, 1889, in our Paris correspondence, attention was drawn to the observations of M. Darier, by which he had been led to conclude that Paget's disease of the nipple is a new form of cutaneous psorospermosis. It is there briefly stated that Paget's disease is distinguished from ordinary eczema by the fact that it is limited by well marked edges, and that the skin becomes parchment-like and that the affection is incurable, and is invariably followed by cancer. M. Darier found in epidermic scales and in sections of the skin the bodies which he recognises as psorospermiæ, and he considers it clear that Paget's disease of the nipple is caused by these parasites, which determine the budding of the galactophorous ducts.

The appearances described by M. Darier are supposed, by the French observers, to be referred to by the English writers in their descriptions, and even to be figured in their drawings, but to have been differently interpreted. M. Darier does not consider that they are cells in process of endogenous transformation (Butlin), nor degenerated elements in process of proliferation (Thin and Butlin), but that they are special parasitic forms in different stages of encystment. His method of demonstration is as follows :

If we take from the level of the diseased surface some epithelial scales, and after having teased them out in a drop of water, or better in a solution of iodine, place them under the microscope without any other preparation, we can prove the existence, in the midst of the epithelial cells, and often even in their interior, of round bodies surrounded by a refracting double border. The diameter of the round bodies varies slightly. It is usually greater than that of normal epithelial cells, so that the cells which contain them are more or less distended. The membrane contains a mass of granu-

lar protoplasm which is sometimes contracted, or more often instead of a single mass there are two or a greater number of corpuscles.

These bodies are not always round. Some are oval and others are somewhat irregular in form. Their presence in the scales is characteristic of Paget's disease, and nothing similar is to be found in affections which might be confounded with it. This character is supposed to have for the diagnosis a pathognomonic value. In the sections round bodies are found in varying numbers in all the strata of the epidermis. Sometimes the isolated parasite is clearly detached from the cells which surround it, sometimes (in the second or third degree of the lesions) it completely infiltrates the rete mucosum, and constitutes, by increasing, shapeless masses, where each individual body is with difficulty distinguished.

It is considered that independently of the notion, demonstrative in itself, of distinct forms and of their presence in the scales, many reasons arise to assert the character of these bodies.

They are not vacuolated cells, for the protoplasm, instead of being centrifugal and of leaving the isolated nucleus in a clear zone is retracted around the nucleus, which it envelopes. Moreover, even at those points where these forms are accumulated in great numbers, a fusion between the clear zones is never observed.

The characters of the divisions which correspond to those of a cyst, the absence of uniting filaments, the facility with which the central nuclear bodies are coloured, the number even of these nuclei, the frequent sporulation of the protoplasm, lastly the presence of these bodies in the corneous layer, are, added to other characters, so many signs, the combination of which corresponds to no known alteration in cellular pathology. The parasites are again found in quantity (this is an important point) in the prolongations of the epidermis which constitute the galactophorous canals, the excretory canal of the sudoriferous glands, that of the sebaceous glands and the sheaths of the hair follicles.

The consecutive epithelioma in the different lesions which accompany the psorospermiæ may arise in the superficial epidermis as well as in the canals and in the glands. In the midst of the epithelial cells which constitute the epithelial growths numerous coccidia in various stages of development are seen. They are found equally in the preparations obtained by teasing, or simply on examining the products of scraping the surface of a section of the tumour.

On the strength of these observations and methods M. Darier has concluded that :—

1. Paget's disease is a chronic affection of the skin which is due to parasites of the order of the psorospermiæ.

2. These parasites appear to have in this affection a direct influence upon the consecutive development of epithelioma.

In estimating the bearing of M. Darier's observations and of Mr. Hutchinson's preparations on the pathogenesis of Paget's disease with the subsequent cancer, there is an important consideration which must not be lost sight of. Professor Neisser, of Breslau, published in the *Viertelj. f. Derm. u. Syphilis*, 1888, a paper on "Epithelioma (Molluscum) Contagiosum," in which he showed that there are present in the epithelial cells certain appearances which he considered to be amœboid in their nature, and that in fact this disease was due to psorozoa. No better proof can be had of the difficulty of this investigation than the fact to which attention is drawn at page 681, that Drs. Török and Tommasoli had, after a most laborious and painstaking investigation, come to the conclusion that Neisser's bodies are not parasitic, but are in reality products of degeneration of the cells, products which have a close relationship to colloid substance. They arrived at this conclusion after an exhaustive study of their behaviour when subjected to different chemical and staining agents, and it must be borne in mind that both Dr. Neisser and Drs. Török and Tommasoli, who do not accept his conclusions, have brought to the study of the subject competency of the highest kind. Still further must it be borne in mind that M. Darier has described similar psorozoa as being the essential cause of a very rare skin disease described by Dr. White, of Boston, as "Keratosis Follicularis," and in Paris as "*Psorospermosis Folliculaire Végétante.*" M. Darier considers that the coccidia to which the forms in question are claimed to belong inhabit almost exclusively the epithelial tissue of vertebrates. Dr. White, who identified the French case with those he had seen in America, on his return to Boston had a further opportunity of investigating this disease. He subjected the tissues and the appearances described as psorozoa to very competent judges in America. Professor Leidy, of Philadelphia, wrote him that "he had examined the preparations of the skin, and observed the large nucleated cell bodies in the epidermal layers, but felt uncertain as to their true character." He believes they bear a resemblance to psorosperms, but he is not satisfied that they are such.

Dr. Bowen, who made an examination in Dr. White's case, and who found the same appearances as those described by Darier, cannot admit that their parasitic nature has been proved. Cultures on agar, in water, and in *bouillon* had no result. Inoculation experiments on animals were failures, and he was not able to produce a differentiation or distinctive staining. We cannot therefore, he remarks, "accept their parasitic nature as beyond all doubt until some positive proof is offered by culture or inoculation, or at least until some fresh analogy with the psorozoa can be shown."

Our report of the Pathological Society meeting will show that the opinions of those who gave expression to their convictions regarding the nature of the preparations differed widely. Some speakers were prepared at once to admit that the bodies were psorozoa, whilst others could see nothing in them but the products of cell degeneration. It is abundantly evident, therefore, that the subject is one which urgently demands further research. Probably in no centre is material for this investigation more likely to be forthcoming than in London, and the interest shown in the subject at the meeting is sufficient evidence that workers will not be wanting. We look forward, therefore, with confidence to further communications on this important subject in continuation of Mr. Hutchinson's interesting communication.

A COMMITTEE has been formed at Berlin, under the presidency of Professor Virchow, for the purpose of having a bust of Traube placed in the Charité Hospital, which was the scene of his scientific labours.

HEADS AND HATS.

The relation of the size of the head to the intellectual capacity of individuals in races is a subject of great interest, and has both attracted and received much attention. The number of factors which have to be taken into account in determining whether or not any correlation exists makes the investigation extremely difficult, so that it is not surprising to find many able investigators dubious of the feasibility of obtaining even approximately accurate conclusions on the subject. The researches of Mr. Francis Galton and the observations made at Cambridge University and at several public schools are beginning to supply the information necessary to study the question in a scientific way, particularly with respect to skulls of younger persons, but it is not likely that sufficient data will be forthcoming for many years yet to trace the actual conditions through adult and advanced age. During life the size of the head can be measured only very partially in relation to the size of the brain cavity. All measurements of height are only approximate owing to the muscles of the neck precluding actual measurements from the base. The circumference and the length and breadth diameters of the cranium are obtainable with moderate accuracy. The variations of the structures between the epidermis and the inner surface of the cranium at different periods of life introduce factors which have to be considered in making deductions from these measurements. That these are not imaginary, but actual causes of error, will be evident if we contrast the appearance of a patient after illness from a wasting disease with his aspect in health when the temporal region is filled with the temporal muscles, the occipito-frontalis muscle is well developed, and over both the subcutaneous fat gives a smooth, well-filled appearance to the outline of the skull. After illness the wasted condition of the muscles often causes the frontal and temporal ridges to stand out prominently, and the temporal regions to be hollow, thereby reducing the circumference. After many investigations, M. Le Bon came to the conclusion that the volume of the head cannot be inferred from its circumference or diameter in individual cases, and that only when a series or group of crania is dealt with can approximately accurate results be got from those measurements. It may be well to notice here that what has just been stated with regard to the head measurements scientifically made applies with greater force to any deductions made from statistics as to the size of the head supplied by hatters. These statistics, while very valuable when based upon a large number of records, are subject to many errors, since the size of the hat worn will depend on the condition of body, as in the instance previously given after illness. Again, the length and thickness of the hair notably affect the size of hat worn at different times by the same individual. The age of the person has also to be reckoned with. When young the hat is worn, as a rule, higher up on the head than at a later period of life, when it is pressed down to form a better covering, and thus requires to be larger, the circumference of the head being greater nearer the brow and occiput than higher up. To this cause, for the most part, may be attributed the not infrequent observation of elderly persons in good condition of body regarding the apparent growth of the size of their heads as judged from the size of hat worn at different periods.

In considering the question of correlation of size of the skull and intellectual development, it is necessary to consider the growth and development of the brain—the acknowledged organ of intellect—before entering upon that of the skull, its covering. During the early years of life the brain grows rapidly both in size and weight, and at a comparatively early age it seems to attain its full size according to most observers, but there is a considerable amount of evidence to show that it goes on increasing in weight to a much later period of life; indeed it does not reach its maximum weight till about the fortieth year of life. During the fourth decade the growth in weight is slower than at any other time of life. It may be surmised that the full size is not attained till this period, but that owing to our means of making very accurate measurements being defective, a small increase in size is not so easily detected as a small increase in weight. That this is not impossible or improbable will be readily admitted by those most cognisant of the difficulty which attends accurate measurement of the volume of the brain or encephalon, nor is it contrary to what is known of the capabilities of growth or increase in size of the skull itself.

The increase of the diameters and circumference of the cranium is appreciable by absolute measurement, according to the researches of Quetelet, up to the twentieth year; after that it is inappreciable. But although these measurements cease to increase perceptibly, it does not follow that the basilar suture is united at that age; indeed, it is frequently later, from the twentieth to the twenty-fifth year, before the basi-occipital and sphenoid are united; and at this period the sutures between the other bones of the cranium are open. As a general rule, it is not till about the fortieth year that these sutures begin to become ankylosed, and the process is not completed till much later in life. So long as the intersutural fibrous tissue is present, the cranium may increase. It is also possible that continued increase of the brain pressing from within may delay the closure of the sutures, but on this point information is still wanted. In the higher races it is usual to find some sutures more complex than in the lower races; this would tend to prevent the stretching of the cranium at the sutures to some extent, so that increase would most probably take place when the serrations are least pronounced. There are, however, other ways in which the cranium and its interior increase; the thickness of the cranium increases till about middle life, changes also take place constantly in its molecular constituents, and the size of the bones and brain cavity may increase by what may be called interstitial growth, as the bones of the extremities do. Again, the flat bones of the heard are formed of two laminæ, with the softer diploë between; the constant pulsations of the vessels of the brain and its membranes against the sides of the inner table exerts a certain pressure against it, and the deposits of osseous molecules in the course of nutritive repair takes place more easily externally than internally. According to some authors this, in course of time, leads to increase of the cranial cavity from within outwards. Thus, it will be seen that by various means the cranium may enlarge both externally and internally, so as to meet the requirements of the brain for increased accommodation, so long as the latter continues to grow. These changes necessarily take place very slowly, and

are probably imperceptible in the living person. Having traced the relation between the brain and skull with respect to growth, we are now in a position to consider the subject of intellectual capacity in respect to size of brain and skull.

From the study of the brains of men of superior intellect, it has been shown by the Wagners and others that the convoluted surface is frequently much more tortuous, and that the superficial area of the convolutions is considerably greater than in the average European brain; but men of undoubted intellectual ability have been found to possess brains in which the convolutions had no unusually complex arrangement, so that the depth of the sulci, the thickness of the grey matter, and the quality of the tissue of which the convolutions are composed have also to be taken into account. Presumably the grey matter is the most active part of the brain in relation to intellect, and the grey matter which contains the greatest proportion of nerve cells in a given area is the most efficient. Investigations have also shown that as a rule the brains of men of superior intellect are the heaviest or largest, though this is by no means constant, since large and heavy brains have been found in idiots.

Examination of the cranial capacity, from which a fairly accurate approximation of the size of the brain may be drawn, has shown that in the civilised European the size of brain is considerably higher than in savage races, not only as an average but in individual cases, and that the variations in the former races are much greater than in the latter. A series of observations on the size of head of students at Cambridge University recently published are of great interest, and show that the size of head of those who obtain high honours is considerably larger than that of the ordinary students at the same age, while the remainder of the honours men occupy an intermediate position as regards size of head. M. Le Bon, in a very valuable paper, has been able by means of examinations of the registers of a hatter to ascertain the size of the head for hats of a large number of persons in various social positions in France. These he divided into five classes, and found that the relative position occupied by each class with respect to size of head was as follows, beginning with the largest: 1, men of science and letters; 2, merchants; 3, nobles of ancient family; 4, domestic servants; 5, peasants. These various and independent observations show that there is a direct relation between the size of head and brain on the one hand and intellectual ability on the other when applied to a number of persons collectively, but in the present state of our knowledge trustworthy deductions cannot be arrived at with respect to individuals.

THE UNIVERSITY OF LONDON AND DEGREES IN MEDICINE.

THE negotiations between the Senate of the University of London and University and King's Colleges have, we hear, recently made considerable progress. It will be remembered that the draft scheme adopted by the Senate on November 28th was early taken into consideration by these Colleges. Certain modifications suggested by them were the subject of a conference held on February 25th. As a result of the discussion which then took place, the Senate has, we understand, now adopted a modified scheme which it is believed will pave the way for a complete understanding. The Senate has expressed its readiness to enter into an arrangement with constituent colleges for granting degrees in Arts and Science. This arrangement would be upon the basis that the Senate should approve the syllabuses of the courses of instruction to be given in the Colleges to the candidates for matriculation and all subsequent examinations in Arts and Science; that the candidates should produce evidence of diligent attendance at the College courses for prescribed periods, and that examiners appointed by the Senate should share with the professor or lecturer the duty of examining the candidates. The negotiations with regard to degrees in medicine are not in so forward a state, as at present no reply has been sent to the University. There is much reason to desire that there should be no unnecessary delay on the part of the two Royal Colleges, as it is an open secret that other rival schemes are being pushed with activity, which, if adopted, would materially prejudice the probability of a satisfactory arrangement between the University and the Royal Colleges, such as is much to be desired in the interests of the whole profession, and especially of these Colleges themselves.

THE Royal Commission on Vaccination met on March 19th; Lord Herschell in the chair. Mr. Alexander Williams, of Darlington, an opponent of compulsory vaccination, gave evidence and produced statistics in support of his case.

A TELEGRAM from Dunedin, New Zealand, dated March 19th, states that influenza has appeared there and is spreading with great rapidity. Four hundred cases had occurred in that city within the previous two days. The epidemic is, however, so far of very mild type.

A MOVEMENT is, we learn, on foot among the governing body of St. Bartholomew's Hospital to procure a full-length portrait, to be painted by Professor Herkomer, A.R.A., of Sir Sydney Waterlow, who, since the year 1874, has discharged the duties of treasurer of the institution.

LORD GEORGE HAMILTON stated in the House of Commons on Wednesday, in reply to a question from Dr. Tanner, that the proposal made by Lord Camperdown's Commission to give medical officers, returning after a tour of foreign service, a period of leave to attend teaching hospitals, was under consideration.

WE have received an account of the gallant conduct of Surgeon T. Burt, of the Army Medical Staff, at a fatal boat accident in Cork Harbour. Seeing that a boat occupied by five men belonging to the Manchester Regiment had capsized, he rapidly divested himself of his outer garments and swam to the rescue. Before, however, he had time to reach the men two were drowned, the other three saving their lives by swimming to the rocks.

DR. W. D. HALLIBURTON has been elected Professor of Physiology in King's College, London, in the place of Professor Gerald Yeo, whose resignation was recently announced. Dr. Halliburton, after a distinguished career at the University of London, was appointed Assistant Professor of Physiology in University College. He has made many important contributions to physiological chemistry, especially in reference to the proteid constituents of the blood. His appointment to this important post has been hailed with satisfaction by working physiologists in this country.

In the House of Commons on Thursday, Sir Michael Hicks-Beach stated, in reply to Dr. Farquharson, that he had been in communication with the Royal Society in regard to the question of colour blindness, and that that Society had undertaken to appoint a Scientific Committee to investigate the whole question.

CHOLERA IN TURKEY.

To judge from the latest bulletin of the Turkish Sanitary Board, the news about a fresh outbreak of cholera in Mesopotamia and Arabia which have been recently circulating in the daily press is without foundation.[1]

SEWER GAS IN HOSPITALS.

The Ingham Infirmary, South Shields, has been closed owing to the indisposition of the medical and nursing staff, who are suffering from illness, apparently due to the escape of foul air from the drains connected with the infirmary. Both the resident medical officers, the two nurses, the matron, and two servants are reported to be incapacitated, and the patients, numbering eight or nine, have been removed from the building, some to their own homes, and others to the hospital at the Harton Workhouse. The services of the North-Eastern Sanitary Association have been enlisted with a view to a thorough arrangement of the drainage system.

SIR RICHARD OWEN.

We are glad to be able to report that Sir Richard Owen's condition is undoubtedly considerably improved since the acute attack of gout. We are informed by his medical attendant, Dr. F. S. Palmer, that on March 13th he appeared to be a good deal better, and, for the first time since his illness, he rose from his bed, and with very slight assistance walked into his library—the next room. Since then he has been steadily improving. He has risen early each day, and remained up for a considerable time, amusing himself with his books and newspapers. He takes a fair amount of nourishment, and does not appear to suffer any pain or inconvenience.

MOLLUSCUM CONTAGIOSUM.

Professor Neisser, of Breslau, published in the *Vierteljahresschr. f. Dermat. u. Syph.*, 1888, the results of a series of careful observations, from which it appeared to him that the essential cause of molluscum (or epithelioma) contagiosum is a psorozoon. This psorozoon was supposed to develop within the epidermic cells, and to give rise to a peculiar change which constituted the pathological histology of the disease. In the *Monats. f. prakt. Derm.*, vol. 10, No. 4, Drs. Török and Tommasoli have published an account of a very exhaustive study of this affection, chiefly made in the dermatological laboratory of Dr. Unna, of Hamburg. Having stained sections through the diseased epidermis by various dyes and chemicals, they have satisfied themselves that the so-called cytoblastæ of molluscum contagiosum are not organised bodies at all, but are the products of degeneration of the substance of the cells, and that these products are chemically related to colloid substance.

LEPERS IN THE LEEWARD ISLANDS.

The Governor of the Leeward Islands, in his opening address to the Federal Council, stated that the Secretary of State would not sanction the establishment of a leper asylum for the whole colony as requested by the Council. This decision, it is said, has given rise to much dissatisfaction. The medical profession in the colony declare that the disease has greatly increased, and the only satisfactory explanation of the spread of the disease is that under certain conditions it is communicable and contagious. A local newspaper states that in Trinidad the bread sold to the lower classes is baked by a person afflicted with the disease, and a similar state of affairs is said to exist in many of the West Indian Islands. The Governor of the Leeward Islands (Mr. Haynes Smith) has asked the permission of the Secretary of State to permit the appointment of a commission of inquiry into the spread of leprosy.

[1] *Vratch*, No. 8, 1890, p. 199.

A HOSPITAL COMMISSION FOR LONDON.

On Thursday afternoon Lord Sandhurst asked the Government whether they would agree to an inquiry, by a Select Committee, with regard to all hospitals, provident and other public dispensaries and charitable institutions within the metropolitan area, for the care or treatment of the sick poor, which possess real property or invested personal property in the nature of endowment of a permanent or temporary nature, the Committee to receive, if they think fit, evidence tendered by the authorities of voluntary institutions for like purposes, or with their consent, in relation to such institutions; and further to inquire and report what amount of accommodation for the sick is provided by rate, and the management thereof. Lord Cranbrook said that the form in which the notice had been put on the paper was one the Government would entirely assent to, and that if Lord Sandhurst would move for a Committee he would receive the heartiest support of the Government. Lord Sandhurst gave notice that upon an early day he would move for the appointment of a Select Committee.

SOLDIERS' RATIONS.

Major Rasch has revived the old charge that recruits on enlistment are deceived on the matter of rations; but we believe the truth is that it is rather misapprehension on the part of the recruit than wilful deception in the recruiter, which, indeed, is strictly forbidden. We think it came out in the recent discussion in the press on the rations question, as well as before the Committee appointed to investigate it, that, provided the bread and meat ration was of good quality and up to weight, it was sufficient, if properly applied. The chief defect in the soldiers' feeding is the long hiatus between the dinner and breakfast meals next day. This Colonel Burnett and others have shown could be bridged over, without additional expense to the State or the soldier, by a light supper meal, and the abolition of the so-called "tea." But the broad fact against the theory of insufficient food is, that recruits almost invariably increase in weight, chest measurement, and general condition during drill. This is well brought out in the lecture on "Recruits and Recruiting," delivered last year before the Royal United Service Institution, by Deputy Surgeon-General Don, in which he showed that the average gain in fifty militia recruits during training was 5 lbs. in weight, and about 1 inch in chest measurement.

THE VALUE OF TRICHLORACETIC ACID AS A TEST FOR ALBUMEN IN THE URINE.

The practical value of trichloracetic acid as a test for albumen in urine has been further investigated by Dr. D. M. Reese,[1] since the publication of a note on the subject in the Journal last November. Dr. Reese fully confirms the statement that trichloracetic acid precipitates, not only the albumen ordinarily found in urine, but also an albumen occasionally present which is dissolved by acetic acid. In fourteen out of eighty-seven different specimens of urine he obtained a precipitate with trichloracetic acid, and not with nitric or picric acids, or heat and acetic acid. What gives his paper special interest is, that in eleven of these fourteen cases granular, epithelial, or hyaline casts were found, and in three of these eleven cases the necropsy showed distinct changes in the kidneys. He concludes that trichloracetic acid is a most delicate test for albumen in urine, prompt in action, easily applied, and worthy of extended use.

[1] *Johns Hopkins Hospital Bulletin*, No. 3.

THE NEW HOSPITAL CONVALESCENT HOME.

THE munificent donor who recently announced to Sir William Savory his intention of making a gift of £100,000 for the purpose of building a convalescent home for receiving patients direct from those London general hospitals hitherto unprovided with such an essential auxiliary institution, now announces a further munificent contribution of £50,000 to the fund from another donor, who "especially deprecates any inquiries into his personality." The founder of this proposed hospital convalescent home points out again that at least £300,000 or £400,000 will be required to make suitable provision for all those patients from the London hospitals who on their discharge sorely need, for the perfecting of their recovery, the invigorating effects of a few weeks' country air, combined with good nursing, generous diet, and comfortable repose He once more deprecates any appeal to the general public for subscriptions, but urges that wealthy capitalists, and others commanding large funds, might follow on a similar scale in assisting to establish this home on a large and comprehensive basis, and to help forward the speedy accomplishment of so beneficent a work He desires that the institution shall be conducted, as far as possible, on an entirely self-supporting basis, and its finances managed, like those of every prudent individual, in such a way that the annual expenditure shall be regulated and controlled by the annual income. He mentions that arrangements have just been provisionally made to purchase an eligible property, 50 acres in extent, in a healthy neighbourhood, 17 miles from London, for the purposes of the institution.

MIDWIVES IN THEIR RELATION TO MEDICAL MEN.

MR. F. R. HUMPHREYS writes to us upon this subject, and expresses his belief that it would not be injurious to the medical profession to have a body of midwives, properly educated and restricted in their action; and that they would only compete with and supplant the rough, too often drunken, and wholly incompetent "cheap doctor." In support of this opinion, it may be remembered that many years ago the South-Eastern Branch of the British Medical Association most carefully considered this question, and came to the conclusion that a class of educated midwives would be of great advantage to poor women, and would relieve medical men of a large amount of hard and unremunerative midwifery practice. With regard to the registration of midwives, our readers are familiar with the work of the Parliamentary Bills Committee in this direction, and with the clauses of the draft Bill which it prepared. The whole profession may be said to be in favour of the licensing and registration of midwives, and nothing but Parliamentary plethora prevents the passing of an Act which public safety so urgently demands. The question of restricting the action of midwives is an important one. Their function is to attend natural labour, and to know in what cases it is their duty to send for medical help. The Obstetrical Society of London has printed regulations describing exactly all the conditions before, during, and after labour, which render it necessary for a midwife to seek assistance. In fact, it may be confidently stated, that every detail connected with the amelioration of the present condition of midwives has been thoroughly threshed out, and that the whole subject is over-ripe for action.

THE NOTIFICATION OF CASES OF PUERPERAL FEVER AND ERYSIPELAS.

THE passing of the Notification Act and its adoption by many sanitary authorities throughout the country bring into prominence many of the practical difficulties connected with its operation. Some of these might naturally be expected by all who have more than a superficial knowledge of the practice of medicine. For example, it must frequently occur that practitioners recognise cases which, strictly speaking, come within the definition o "puerperal fever" or "erysipelas," and yet the notification o which can serve no useful public purpose. Many cases of puer peral fever are of no sanitary importance—that is to say, if sligh and temporary pyrexia in the puerperal state constitutes th disease which medical practitioners are required to notify i accordance with the provisions of the Act. We should also fin it difficult to give reasons why cases which, strictly speakin come under the definition of "erysipelas" should be notified public authorities. The Act has evidently been drawn up witho proper consultation with medical authorities, and, as a natur consequence, it has many imperfections. Still, on the whole, it likely to be very useful in the hands of good local sanitary autho ties, of which there are not a few, and these, at the worst, w have to pay for rather more information than can at present applied to the public advantage. The questions here referred as we have already pointed out in the JOURNAL of February 15 under the heading of "Expenses and Uses of Notification," are very small importance as compared with that which we have o selves raised. Many of the urban and rural authorities, whi have been so hasty in adopting the Act, are totally unprepared make proper use of the abundant information which they m receive from medical practitioners respecting the existence fevers, some of which may certainly be controlled by the action public authorities. This information must, of course, be paid and the amount to be paid is sometimes larger than the authorit anticipated, while at the same time there is frequently no res to be shown for the expenditure. We are informed that in con quence of this awkward state of things, some of the authori have expressed a desire to rescind the resolutions adopting Act. But this, it appears, they are powerless to do, for, hav once adopted Mr. Ritchie's measure, they are bound to it for

THE INFECTIVITY OF PHTHISIS.

ACUTE tuberculosis is an uncommon disease in infants; occas ally it manifests itself so soon after birth that it must certa be congenital; more usually the disease appears when the fant is six months old and upward. Probably in a large pro tion of such cases the disease is contracted by the ingestion of milk of tuberculous cows. A very interesting case has been ported by Dr. Harry Toulmin,[1] which certainly suggests strongly another source of infection. The patient was a fe child, the third in a family of healthy children, born to hea parents, and nourished entirely at its mother's breast. Up to age of 9 weeks, the family had lived with friends at Washing but they then removed to a house in Baltimore which, up date three weeks before their arrival, had been inhabited woman who was attending the Johns Hopkins Dispensar account of pulmonary phthisis; tubercle bacilli had freque been found in her expectoration. That the infection of tubercu can cling for prolonged periods to rooms which have been pied by patients suffering from tubercular phthisis is well kn When 9 weeks old, this breast-fed infant, of healthy paren began to live in a house thus infected; when less than 4 m old it was found to be suffering from fever and conso tion of the right lung. Its illness quickly ended in death, the necropsy showed tuberculosis of the pleura on the side, caseous masses in the upper lobe of the right side middle and lower lobes stuffed with tubercles, many of cheesy; the left lung was uniformly studded with tubercles, as large as peas; the spleen contained innumerable tubercle liver and kidneys many. The intestines, large and small, tained tuberculous ulcers; the mesenteric glands were large, cheesy masses at their periphery; tubercle bacilli were fou the pus of a lung abscess, and in stained sections of the

[1] *Johns Hopkins Hospital Reports*, Vol. ii, p. 51.

Without seeking to make the evidence to be drawn from a single case prove too much, it will be well to bear in mind that the lesions found after death in this case would, taken without the history, at least suggest that the infection had entered the system through the lungs. As Dr. Ransome has truly said, in his last Milroy lecture, "tuberculous material cannot be left to take care of itself," and such cases as the one here quoted afford striking evidence of the justice of his demand that "phthisis should be classed with other infective disorders," and that "special measures should be taken for the cleansing and disinfecting of house, bedding, and clothes."

THE PRICE OF FOOD AND THE AGE OF MARRIAGE.

A PAPER on marriage-rates and marriage-ages was read at the last meeting of the Statistical Society by Dr. W. Ogle. He showed that the statement commonly made to the effect that the fluctuations in the marriage-rate were in relation to the price of food were not correct for this country. Not only is it not true that the marriage-rate goes up when corn is cheap, and goes down when it is dear, but for many years at any rate the very opposite has been the case, and the rate has varied directly and not inversely with the price of wheat. An explanation of this apparent paradox, Dr. Ogle suggests, is to be found in the fact that the price of wheat is largely determined by the cost of transport from abroad, and that freights go up when the export trade is active, this activity implying more employment and higher wages. This view was found to be confirmed by an examination of the returns of certain trade unions, which showed that the fluctuations in the proportion of men out of employment in a very limited group of trade unions, or even in a single one, are a very faithful index of the fluctuations in the marriage-rate of the whole population of England and Wales. Further, an examination of the ages at marriage showed that in prosperous times marriages are both more numerous and contracted early, while in adverse times marriages are fewer and also retarded to later ages. Some curious facts were given as to ages of marriage in different classes; the mean age at marriage in the professional and independent classes is seven years more advanced for men and four years more advanced for women than in the class of miners; and, generally speaking, the higher the class the later the age at which marriage is contracted. Moreover, more persons remain permanently celibate in the upper than in the working and artisan classes.

DRAINAGE OF THE PERITONEUM.

M. DELBET discusses this subject at great length in the *Annales de Gynécologie* for February. He compares drainage by means of glass tubes with capillary drainage, effected by iodoform gauze or some similar agent. As the result of clinical and anatomical experience, he concludes that capillary drainage alone can ensure the escape of liquids secreted during the first hours after operation. All forms of drain, tubes or gauze alike, become rapidly surrounded by adhesions, and thus, as in the case of *tamponnement*, they may cause a dangerous focus of infection to become practically extraperitoneal. To that result he believes the efficacy of drainage to be principally due. The capillary drainage of Mikulicz is effected by packing Douglas's pouch with iodoform gauze. That authority specially recommends his method in cases where a large cavity is left, at the lower part of the abdominal wound, not to be closed by sutures. The gauze, he believes, acts as a hæmostatic plug, prevents the entry of septic germs, drains best efficaciously by capillary attraction, and, by promoting adhesions in the surrounding structures, cuts off the cavity from the rest of the peritoneum. M. Pozzi combines the two methods of drainage. He packs the cavity with the gauze, in the centre of which a drainage tube is inserted, and prevents the retention of liquid too thick to filter through the gauze. Dr. Delbet finds that by drainage with a glass tube very little fluid can be evacuated even by aspiration by means of a syringe. If a litre of water be poured into Douglas's pouch into which a glass drainage tube of the usual form is inserted, hardly a drop of the water can be removed by means of a rubber tube attached to a glass syringe and introduced into the glass drain. In fact, according to this experiment, drainage after the manner practised and advocated by so many well known British operators is useless. Yet the system of Mikulicz is little practised in the United Kingdom, whilst results prove that glass tube drainage is admirably efficacious. However aspiration by tube and syringe may fail in experiments, it succeeds in removing ounces of fluid after operations.

SCOTLAND.

THE late Mr. Thomas Hope, merchant, of New York, has bequeathed the residue of his estate, valued at upwards of 400,000 dollars, to his native town of Langholm, Scotland, to found a hospital for the benefit of aged and infirm persons belonging to the district.

AN attempt, which ought to appeal to great numbers of Edinburgh graduates in all parts of the world, is on foot to acquire a field for the Athletic Club of Edinburgh University within the city. A unanimous feeling has been expressed that until a field in the immediate vicinity of the city is obtained athletics cannot take their proper place in the University. An influential committee has been nominated with the view of giving practical shape to the movement.

CLOSE OF THE MEDICAL SESSION.

THE winter session of the various departments of the Edinburgh Medical School—the University, Edinburgh School of Medicine, Edinburgh School of Medicine for Women, and the Medical College for Women—was brought to a close this week. The professional examinations of the different boards commence at once. The winter session of the Medical Faculty of Aberdeen University was completed on Friday, March 14th. The examinations for the degrees began on Monday, March 17th, and will continue for about the next two weeks. The summer session begins on Monday, April 21st.

THE PREVENTION OF CRUELTY TO CHILDREN.

THE Scottish National Society for the Prevention of Cruelty to Children has been doing excellent work. From the report of the labours of the eastern division it appears that during the past year the cases of 273 children have been carefully investigated, and the Society has been the means of exposing some shocking cases of cruelty to children. Thirteen convictions were obtained. Their success, unfortunately, stimulated certain individuals to engage in a less laudable enterprise, called the "Stockbridge Mission," and for some two years the attempt was made to identify the work of the Society with that of this so-called mission. Fortunately, the very unsatisfactory character of the latter has been now exposed by the public press. But the exposure ought to afford a powerful warning to the benevolent public, that it is a mistake to subscribe indiscriminately to charities without taking the trouble to sift the credentials offered, or to personally visit the institutions.

EDINBURGH HEALTH STATISTICS.

THE Edinburgh mortality still continues markedly above the average. The returns of the medical officer of health for the month of February show a mortality of 490, as compared with 367 in February, 1889, and 404 in February, 1888. Deaths from

diseases of the chest amounted to 31.63 per cent. of the whole, and zymotic diseases 21.02 per cent. The number of infectious diseases reported was high, being 1,037, of which, however, the largest proportion (898) was represented by measles.

CONTAMINATION FROM GAS WORKS.

An action has been raised before the Court of Session, Edinburgh, by Messrs. George Mackay and Co., brewers, Edinburgh, against the Edinburgh and Leith Corporations Gas Commissioners, whereby the pursuer seeks declarator that the defenders are not entitled to manufacture or store gas on their premises in Canongate, Edinburgh, in such a way as to foul, contaminate, or pollute the water in or going into a well situated in St. Margaret's Brewery, Edinburgh, the property of the pursuer, and that the defenders are bound to take effectual means to prevent the escape from these works of gas, steam, vapour, gas washings, or noxious substance, matter, or thing whatsoever, whereby the water in or going into the well may be rendered foul or contaminated. The pursuer concludes for damages in respect of loss and injury to business, in consequence of his being deprived of the use of the water for brewing purposes.

THE TEACHING OF CHEMISTRY IN ABERDEEN.

Professor Carnelley recently addressed a meeting of citizens, connected with the manufacturing interests, regarding the extension of laboratory accommodation for the teaching of practical chemistry in Marischal College. Professor Carnelley indicated that, in view of the recent advances in chemistry, practical instruction was very much more needed now than formerly, and that, in this respect, the older universities stood behind the newer colleges because they had been, for the most part, content to go on with the old limited laboratory accommodation, whereas the newer colleges had laboratories fully equipped in accordance with the varied needs of modern science. He also stated that Aberdeen was practically the only important centre of education which had not a chemical department worthy of the University. The urgent need for extension in Aberdeen was shown by reference to the following points:—1. The recent institution of a science degree in the University rendered it absolutely necessary that further accommodation be provided, since a science degree, to be of value, should mean not only theoretical work, but sound practical instruction in the laboratory. 2. The Committee of the Council on Education had recently granted the privilege to the University whereby science teachers in Aberdeen and district were enabled to attend the lectures and laboratories of the University on payment of one-fourth of the fees, the Science and Art Department paying the other three-fourths. Unless further accommodation were supplied there was little opportunity of giving the necessary instruction. 3. For research work alone such extension was needed if students as well as the professor were to undertake advanced work in chemistry. 4. As things were at present, there was no opportunity for giving technical instruction in the higher branches of chemistry as applied to the arts and manufactures. Professor Carnelley held that the University should be the source of the highest instruction in all branches of knowledge, and that it was just as necessary that it should give instruction in the branches of science applicable to arts and manufactures as in those relating to medicine and law. The gentlemen present expressed themselves in favour of, and in sympathy with, the movement; and Professor Carnelley was deputed to draw up a circular indicating the scope of the improvements required. It is to be hoped that this scheme may be heartily taken up and liberally supported by the local manufacturers, and that the chemical laboratories may soon be worthy of the city and the University.

IRELAND.

INTERNATIONAL MEDICAL CONGRESS, BERLIN.

An Irish Committee has been nominated in connection with the approaching International Medical Congress, to co-operate with the Organising Committee in Berlin. The members of the Committee consist of Sir William Stokes (Chairman), Professor Bennett, Sir John Banks, K.C.B., Professor D. J. Cunningham, Professor Purser, Dr. Gordon, Dr. Nixon, Dr. William Thomson, Professor Fraser, and Dr. McKee.

PRESENTATION TO DR. G. P. COPE.

Dr. G. P. Cope, late Assistant Superintendent of the Richmond Lunatic Asylum, has been presented by the staff with an address on his leaving the institution to fill the appointment of Dispensary Medical Officer in Dublin. The address testifies to his courtesy and zeal, and predicts for him in the future larger success.

HOSPITAL SUNDAY FUND.

The sixteenth annual meeting of the subscribers to the Dublin Sunday Hospital Fund was held on March 12th, when the Provost of Trinity College presided. It appeared from the report that the total amount of the contributions to the fund for 1888 was £4,155 5s. 4d., being an increase of £58 15s. 11d., as compared with 1888. The total amount to the credit of the fund for the year 1889 was £4,339 8s. 4d., including a balance from the previous year of £166 19s. 1d., and £17 3s. 11d. interest allowed by the bankers. Applications for participation in the fund were received from the following institutions, all of which had received grants in former years: Sir Patrick Dun's, City of Dublin, Doctor Steevens's, Meath, Whitworth (Drumcondra), Coombe, Rotunda, St. Mark's, National Eye and Ear Infirmary, Convalescent Home (Cork Street), Adelaide, Monkstown, the Dublin Orthopædic (Brunswick Street), and the National Children's Hospital (Harcourt Street). All these institutions were admitted to participate. Applications from Mercer's Hospital for readmission to share in the fund, and from the National Lying-in Hospital, Holles Street, were referred to the Council, with the result that the application from Mercer's Hospital was granted, and that from Holles Street refused. Mercer's Hospital is, therefore, included in this year's distribution of the fund. The Committee, having ascertained that a sum of about £4,086 was available for distribution and for current expenses during the year 1890, determined to distribute the sum of £3,960 amongst the participating institutions, in consideration of subscriptions received and work done. The number of participating hospitals for the year 1889 is sixteen.

BANQUET TO THE LORD LIEUTENANT.

The banquet given to His Excellency Lord Zetland on Saturday night by Dr. Meldon, President of the College of Surgeons, was a brilliant affair. The hall was beautifully decorated, the dinner itself was perfect, and there was in addition excellent music. The total number of guests was 120, and amongst those present to meet His Excellency were the Marquis of Drogheda, Sir John Banks, K.C.B., Sir West Ridgeway, Sir George Porter, Bart., Sir John Nugent, Sir George Owens, Sir W. Stokes, Sir R. Jackson, Sir Andrew Reed, Sir C. Cameron, Sir Percy Grace, Bart., and representatives of all branches of the profession. His Excellency briefly responded to the toast of his health, and alluded to the distinguished services of three members of the College—Surgeon-Major Reynolds, V.C., Surgeon Crimmin, V.C., and Surgeon Parke, who accompanied Stanley across Africa. Dr. Meldon, in replying to the toast of his own health, referred to the "boycotting" of Irish degrees in England, and declared it to be an insult to the country as well as to the Colleges. Subsequently there was a concert, when a large number of ladies were assembled in the galleries.

"THE NEW DISEASE."

We have just been informed by telegraphic despatch that an official report to the Italian Government denies the existence in Mantua and the Italian provinces of the disease spoken of as *La Nona*. There were four cases which gave rise to the report; three were cases of coma and delirium following typhoid, the fourth was a case of influenza.

LIST OF AUTHORS AND OTHERS WHO HAVE PRESENTED BOOKS TO THE LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

SEVENTH LIST.

Presented by F. ATKINSON, Esq., M.D., Surbiton.

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Presented by T. B. BALDING, Esq., F.R.C.S., Royston.

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LEHRBUCH DER PATHOLOGISCHEN MYKOLOGIE. 2 vols. 1890.

Presented by H. BEHREND, Esq., M.R.C.S., London.

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SENN (N). A Plea in favour of Early Laparotomy for Catarrhal and Ulcerative Appendicitis. 1889.
——— The Surgical Treatment of Volvulus. 1889.
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THE German Public Health Society will hold its annual meeting this year at Brunswick from September 13th to 16th. The following are the subjects which up to the present have been put down for discussion: Hospitals for Small Towns and for Country Districts; Filterbeds for the Water Supplies of Towns; Cold Chambers for Slaughterhouses; Disinfection of Dwellings; Workmen's Dwellings; Flower-planting and Gardens in Towns.

THE Congress of German scientists and medical practitioners will meet this year at Bremen on September 18th.

DR. ACHILLE SACCHI, Garibaldi's "fighting doctor," died at Mantua a few days ago.

REFORM OF THE OUT-PATIENT DEPARTMENT OF MEDICAL CHARITIES.

At the meeting of the Liverpool Medical Institution, held on February 27th, Dr. R. R. Rentoul moved the following resolution:—

"Recognising the fact that medical charity as given by the hospitals is open to abuse unless an inquiry into the social circumstances of applicants is made, this meeting of the members of the Medical Institution instruct their Council to write to the Hospital Committees asking each to appoint one of their number so as to form a central committee; and that such committee decide what class of the community are eligible for out-patient hospital relief. That such committee have power to add to their number."

He said:—According to official hospital reports, 19 of our local medical charities treated 267,047 out-patients during the year ending 1889. At 14 medical charities, 10,264 received indoor relief. Therefore, 277,311 persons received treatment. It has been stated—but so far without any proof—that some of the patients are counted twice over. To meet this objection I shall deduct 67,047 patients from the total.

The population of Liverpool city, for the year ending 1889 was estimated at 599,321. Therefore, if we supposed all the hospital patients came from the city the conclusion would be arrived at, that 1 in every 2.8 of the citizens received free medical relief. But as a number of patients come from the out-townships, we must take the population of Liverpool, West Derby, and Toxteth, which is estimated at 800,000. Taking this number, and dividing into it the above number of patients, we find that 1 in every 3.8 receive free medical relief, even after deducting 67,047 from the number of hospital cases.

If the 21 medical charities were the only places at which the public were invited to receive free medical relief, matters might not be so bad. But we have to remember that the three Poor-law unions gave medical relief to over 25,576 persons last year. Nor do these include all the gratuitous relief given, for we must remember the number treated at the non-medical charitable institutions (over 60 in number), at the municipal fever hospitals, convalescent homes, State vaccination depôts, and the large amount of medical benevolence given privately to the poor, to many of the clergy and relatives, to nurses, medical students and the relatives of doctors; not to mention that large percentage of patients who will not pay their bills. Put it as we may, the deplorable fact comes out that about half of the people of Liverpool say they are unable to pay for their medical treatment.

As 17 of our medical charities are in debt to the extent of £11,594, it is necessary to ask: Is there any practical way by which hospital expenditure can be lessened? And here one may ask: Have the managers of the medical charities any right to carry on their work, year after year, when they know that the hospital income and expenditure are so out of proportion?

If it be true that a medical charity ceases to attract public attention when it is not in debt, then I suppose an adverse balance sheet will always be published. But if hospital managers wish to effect a saving, then they can do so by restricting the number of out-patients; a great economy may thus be effected. Few medical practitioners have any idea how much out-patients cost. If anyone will take the trouble to read Mr. Burdett's book, *Hospitals and the State*, they will find that the total cost of an out-patient varies from 2s. to 11s. At the London Hospital the house governor, Mr. Nixon, finds that each out-patient costs 4s., it being calculated that each out-patient makes on an average five visits during twenty-eight days.

Now, supposing we say that in Liverpool—if a wage limit were decided upon and an investigation into the social circumstances of patients by a trained inspector took place—25 per cent. of the 200,000 out-patients were ineligible, this would give a reduction of 50,000 out-patients; and if each out-patient costs on an average 4s., this would give a yearly saving of £10,000.

I do not think anyone qualified to judge, and working from the Manchester wage limit, will say that an abuse rate of 25 per cent. is too high an average to calculate from. The proportion of the population of Liverpool who go to the hospitals is about 1 in 3.8; in London, 1 in 3; in Birmingham, 1 in 2.6; and in Glasgow, 1 in 4. Then in those places in which an investigation into the social circumstances of applicants for hospital relief has been carried out, it has been found in Manchester that, of every 100 who offered, 42.32 were ineligible. At the Royal Free Hospital, 61½ per cent. were ineligible; and at the Children's Hospital, Great Ormond Street, 57 per cent. were ineligible, although their wage limit was 30s. per weekly wage. At the London Hospital the number of out-patients in one year was reduced by 6,900, thus effecting a saving of £1,466. At St. Bartholomew's the number of out-patients was reduced by 25,349 in five years. At Leicester and Devonport the out-patient departments were found to be so greatly abused that they were converted into provident dispensaries. It is difficult to obtain any information regarding the number who are refused treatment at the Liverpool medical charities, but there is no reason to suppose the public here offer any exception to the ordinary run of humanity, who, if they can, deal in the cheapest market. At the Ladies' Lying-in Charity last year relief was refused to 212 applicants out of a total of 2,451—that is, 8.6 were found to be ineligible—the investigation having been made by the Charity Organisation Society, who, however, do not state what qualifies an applicant for relief. I do not think any other of the charities have any practical inquiry—except to find how much they can extract from each applicant for relief. There are two at which it is arranged that "ineligible" applicants are drafted into the private practice of the practitioner on duty that day. Here it is very unlikely that any help will be obtained in bringing about hospital reform from these—in fact, they will oppose it.

Naturally, some practitioners connected with hospital will say there is little or no abuse in their particular hospital. Such a statement must be taken for what it is worth, for unless they give us their ideas as to what constitutes an abuse of charity, what class they think should have hospital relief, and what system of inquiry they have made so as to find out the social circumstances of applicants, their statements must be of little practical value.

Granting something must be done in order that the medical charities may rid themselves of their present abuses, and so carry on their glorious and magnificent work untrammelled by doubts in the public mind as to the genuineness of the mission of mercy, and recognising the painful fact that year after year the subscriptions to the hospitals are becoming less and less, we may, by looking over the schemes and failures of the past, be able to draw some help for the future.

The following plans have been tried, and have failed:—

1. The payment by the patient of an entrance or registration fee, varying from 1s. to 1d.
2. The payment of 1d. for each article of medicine supplied to the patient.
3. The presenting of "tickets of recommendation" to subscribers who generally recommend either their own friends, relatives, or household. The statistics of St. George's Hospital bear this out, as there were admitted: 7 housekeepers, 16 ladies' maids, 56 cooks, 29 butlers, 37 grooms, 16 potmen, 73 coachmen, and 53 general servants.
4. The plan of admitting only a certain number of patients each day.
5. Issuing "priority tickets," so that the patient who pays most is treated first.
6. Closing the hospital doors at a certain hour.
7. Opening the hospitals at evening hours; and
8. Placing a levy of 1d. per week on wage earners.

I wish to draw your attention to the fact that all the above plans have been failures, and for this reason—that they have each gone on the plan of making whatever money they could out of charity patients. In other words, no "wage limit" has been adopted. Every other charitable institution tells the public to what class of the community it gives aid; but the majority of medical charities prefer to use the very misleading phrase: "Free to all." Now I wish to point out that a "wage limit" must of necessity be adopted, for if a charity says, we sell you our charity at 2s. 6d. a visit, or offer a bed for one guinea a week, we must define what class of society are eligible for admission, else the half-guinea and guinea patient will soon learn—like his humbler brother—to buy his medical relief from the hospital.

In 1871 a committee of London doctors, presided over by Sir William Fergusson, passed the following resolution: "The Committee believe that many masters and employers of labour contribute to hospitals with the object of providing medical assistance for their servants and workmen at a cheap rate. Men, whose ordinary income is £2 to £3 per week, expect to have letters of recommendation given them to neighbouring institutions. They are thus relieved of the necessity of joining provident dispensaries

nd friendly societies, and the tendency of the masters' liberality to destroy habits of forethought and independence."

I hope the time is not far distant when the out-patient hospital vacancies will be filled by candidates passing competitive examinations, when such appointments will be held for five or eight ears, and when salaries of at least £100 a year shall be paid to ch doctor.

Having called attention to the fact that the in 3.8 receive free edical relief, that a saving may be effected in hospital manageent, and to our pauperising influences on the public, it is well inquire into the means by which the out-patient departments ay be reformed. Those who have read the motion standing to y name will have noticed that the main issue is, first to decide hat circumstances made a person eligible for out-patient treatent. For my part, I have not found any system so practical as at carried out at Manchester. I have proposed that a modificaon of the Manchester system be accepted. Briefly stated, the an carried out at the Manchester Royal Infirmary is as llows:—

In 1875 the Provident Society—a body similar to the Charity rganisation Society—asked the various hospital committees each appoint one of their number; these to meet and decide the portant question, What are the circumstances which qualify a rson for the receipt of hospital relief? They agreed that a verty scale or "wage limit" would afford them a sufficiently curate basis to work upon. Their "wage limit" is: when a single an or woman is in receipt of 12s. per weekly wage, man and wife s., and an allowance of 1s. 6d. for each child—these are eligible for ee medical relief. Thus the question was decided as to what class of rsons should be eligible. That a margin of 1s. 6d. opposite each ild was made showed the fact was recognised that a wage-rner and wife with say eight children, were more in need of free edical relief than a wage-earner and wife who have no family. y the above "wage limit" a man and wife with eight children, though in receipt of a total or combined weekly wage of 30s. e eligible for free out-patient hospital relief. When a wage-rner is out of work, from sickness or other cause, and not earng over 14s. per week, he is entitled to hospital relief. If he ove destitution he can secure Poor-law relief; but if he be out work and the wages of the entire family are still above the vage limit," then he is not eligible for hospital relief. The adssion of applicants for out-patient hospital relief is carried out the following plan:—

Every morning all new applicants take their place on forms vided for them in the entrance hall of the out-patient departnt. These are called up in turn to the inquiry window by the spital clerk, who interrogates them as to their circumstances; er this they are admitted to the out-patient room, and from this passed on to the medical staff who are on duty that day. vice weekly a list of all those applicants who reside within the vident Dispensaries districts is given to the Provident Society, ose inspectors visit the patients at their homes. These inspecs, if they find the patient's weekly wage above the wage limit, hdraw their hospital card and inform them that they are not gible for hospital relief. At the same time they are advised to the nearest Provident Dispensary. The inspectors are paid at rate of 25s. to 30s. per week. Each hospital pays a small ual sum to the Provident Society, by which to defray the cost nspection. As the hospital abuse rate at Manchester in 1875 found to b 42.32 per 100, and as it is now reduced to about er cent., it will readily be seen that the saving on the expendie of patients more than provides for the wages of the inspectors. accident cases are admitted at once by the hall porter, and ted by the medical staff. No list of such accident cases is nished to the Provident Society.

ranting that a number of patients are refused treatment some em must be put into force by which those of the wage-earning ses making over the above wage limit shall have the power of viding themselves with efficient medical treatment. Such a em can be found in a well-conducted provident dispensary, by medical practitioners agreeing to take small cash fees for k people. The mere fact that the so-called sixpenny dispen- exists shows, in principle at least, that it is wanted. e of the hospitals have followed its plan of management, only onstitute themselves into a penny hospital instead of a sixny one. At the same time they speak all the evil they can of "sixpenny doctor."

feel, that if we as a body of practical men carried the by-laws of the Royal College of Physicians already read; if we plainly stated for whose use the out-patient department existed, and took care that a proper system of inquiry were carried out; and if we had a plan by which those wage earners making up to 35s. or 40s. per week per family could obtain good medical treatment, either by insuring against sickness or by paying small cash fees, then not only would the public look on us as a class of men able to manage our own affairs, but they would think more of us. It is really lamentable to note how the number of applicants for medical relief is increasing year by year, and this at a time, too, when the wages of the working classes are improving, and when their position is much better than formerly. I fear we as a profession have much to answer for in not encouraging habits of thrift and self help among the wage earners. Next to the Poor Law we are the greatest pauperising agency in the country. I often think that if hospital staffs were paid for their work, hospital abuse would be much lessened. It has been asked, Do the Poor-law medical staff encourage well-to-do persons to throw themselves on the parish for medical relief? I do not think they do. I can understand why a doctor who will not accept a smaller fee than 7s. 6d. should advise people who cannot pay his fee to go to the hospital. I can understand why those doctors who do not believe that anyone should take a fee of 2s. 6d. recommend such persons to obtain hospital relief. I can understand why a doctor who has contracted to treat club patients at 3s. 6d. or 4s. a year should try to push them on to the charity. I can understand why a surgeon, to accumulate his 100 cases, should wish for as large a number as possible from which to gain his supply. I can understand why a doctor wishing to injure another, and save his patient the consultation fee, should send the patient to the hospital for such. I can understand employers of labour dealing in the cheapest charity market, and so gain treatment from the hospital for their *employés;* and I can understand how some well-to-do but mean persons claim hospital relief, and so practically steal the money subscribed by a charitably disposed public for the benefit of the sick poor. But, knowing all this, I do not see why we should lend ourselves to such practices. If we could sink our petty jealousies, and make our cause one for giving the greatest good for the greatest number, we should soon succeed. There is no reason why Liverpool should not have three efficient medical services: 1, a Poor-law medical service for those who are in receipt of either in- or out-door relief; 2, a medical charity service for the sick poor and those wage earners making up to 14s. and 18s. per week; and 3, a public medical service for the benefit of those making up to 35s. or 40s. per week per family. There is room for all these, and there is no reason why they should not work harmoniously. A selfish and stupid policy will do its best to prevent progress.

The resolution led to a debate, which was adjourned to the meeting on March 13th. In the meantime notice was given by Mr. ROBERT JONES that he would move an amendment to Dr. Rentoul's resolution, its precise form as it was ultimately presented to the meeting being as follows:—

"That this meeting appoint a committee of medical practitioners to draw up a report on the following points:

"(*a*) The best means of checking the abuse of public medical charities.

"(*b*) What classes should be eligible for charitable medical relief.

"(*c*) By what means such classes as are not eligible may be provided with efficient medical treatment; and

"(*d*) To make suggestions regarding the general working of medical charities.

"That the Report of the committee be presented to a meeting of the medical institutions."

On the adjourned meeting proceeding to the consideration of Dr. Rentoul's resolution, Dr. RENTOUL expressed his desire to withdraw it in favour of Mr. R. Jones's amendment.

Mr. R. JONES, in moving the adoption of his amendment, said that he did not intend to argue whether or not there was an abuse of medical charity; its existence was conceded by every committee and every meeting. The question was, Who should remedy the evil? Should it be the general public or the medical profession? There were obvious disadvantages in leaving it to the general public. It would merely mean endless letters in the newspapers—of which enough had already appeared—and a multitude of reformers, mostly irresponsible, each weighted with his own pet scheme and not to be inclined towards any other. This would only lead to one result, namely, a falling off in the

subscription lists to the charities, as many subscribers would gladly avail themselves of the apparent justification for withdrawing their support. The public very naturally looked to the profession for guidance in a matter of this sort, and it would come better from a committee appointed by the medical institutions than from individual members. A committee could impartially consider all rival schemes, and its conclusions would carry an authority that those of individuals could not; while the staffs and committees of the hospitals would be conciliated and not excited to opposition, a point of great practical importance. Mr. Jones held the majority of hospital committees in high esteem, for they were composed of men who willingly gave up much valuable time to the public good. If it were argued that this committee would prove as useless as its predecessors had done, he would represent that committees generally failed because they rested content with merely tabulating general principles without pointing towards remedies. The committee he now proposed would have distinct aims and would be tied to no preconceived notions. After marking off those who were ineligible for charitable relief, it would enter on its constructive labours, which would be to attempt to prevent these persons from falling into the hands of sixpenny doctors and prescribing chemists. This would be to the advantage of medical men, whether attached to hospitals or not, for the present abusers of the charities would have to pay fees, and the result would be of advantage to all. Apart from professional grounds, reform was desirable on the ground that it would encourage thrift and discourage pauperism. Charity was often better exemplified in withholding than in giving. He appealed to those who were opposed to him not to force the discussion into the hands of others, perhaps less considerate of their interests. Mere differences of opinion as to method ought not to be allowed to weigh, as the committee, when appointed, would be able to round off any crude corners the propositions might at present show.

Dr. WILLIAM CARTER, in seconding the amendment, said that he had met no one who denied that abuses existed. All had expressed the hope that a remedy might be found, but there was endless variety of opinion as to its form. In some institutions simple rules were already in action with more or less success, and these would be carefully considered by the Committee. The proposed committee would have the great advantage that it would comprise both those who had hospital experience and general practitioners, and would therefore be animated by a conciliatory spirit towards those concerned in the management of these institutions. In common with Mr. Jones, he believed it was absurd to suggest that the staffs and committees of hospitals were actuated by other than the highest motives, and to charge them with being otherwise would be to stamp the whole medical profession as itself of low standard. Perfect schemes might be drawn up on paper by theoretical reformers, but in practice absolute perfection was not attainable, and it was not to be hoped that any system could be devised that would be altogether proof against attack. One point he would emphatically insist on, namely, that if the matter was to be left to a responsible committee it must be independent, and not hampered by free lances airing their private views in the newspapers or revealing the proceedings of the committee to the public.

Dr. LOGAN thought that the meeting should state clearly what was the main object of the present movement. To improve the financial position of medical men was in itself a just and laudable object, and there was no occasion to give a fictitious prominence to side issues such as the encouragement of thrift and the prevention of pauperisation among the working classes. He had very little confidence in provident dispensaries.

Dr. BURTON thought that an inquiry by a committee of medical men would have weight with the Committee of the Hospital Sunday and Saturday Fund, as the latter would not countenance any misappropriation of the money they collected. At the Hospital for Women, the Committee of Finance inquired into the circumstances of applicants.

Dr. WIGLESWORTH, while supporting the appointment of the committee, suggested the omission of Clause (*c*). He thought the present inquiry should be limited to the prevention of abuse, and hat when this was accomplished, another committee might be selected to carry out the provisions of this clause. He feared that the amount of labour involved in the settlement of this clause would lead to the failure of the whole inquiry.

Mr. RICHMOND LEIGH thought that all the charities should work together to check the acknowledged abuse; a great obstacle was the eagerness of each of them to show an increase in the numbers treated.

Dr. MACFIE CAMPBELL proposed that a vote should be taken on the main question that a committee of medical practitioners should be appointed, with power to add to their numbers, to consider certain points.

This was unanimously agreed to. Clauses (*a*) and (*b*) were also carried.

Dr. MACFIE CAMPBELL moved the omission of Clause (*c*) on the ground that its retention would make the investigation of the Committee too wide.

Dr. BARR supported the clause. He said he was prepared for sweeping reforms. A man who could pay a small fee could get better advice from a young practitioner than he could expect to get as an out-patient in a hospital. The establishment of some such system as was aimed at by the clause in question would be a great advantage to the younger members of the profession, and it would be a great hardship to the better classes of the poor if by the closing of the charities against them they were driven to the sixpenny dispensaries and prescribing chemists.

Dr. STOOKES supported the clause. The higher classes of the poor went to hospitals because they believed they were a guarantee of the ability of the doctors there to treat them. He believed that, with the enormous attendances at out-patient departments, it was impossible for the medical officer to give the cases the attention that either he desired or they deserved. One view of the question that had not received due attention was that the superficial performance of the work, which was unavoidable on account of its immensity, of necessity degraded the most skilful medical man to a low level.

Dr. MACDONALD thought that the ineligible classes were already well provided for. He deprecated the establishment of any form of cheap dispensary.

Mr. R. JONES explained that the adoption of the clause did not necessarily involve the establishment of cheap dispensaries.

On a vote being taken, the clause was carried by a large majority

The remaining clauses were also carried.

It was further agreed that the Committee should be limited to forty, that some practitioners not members of the Medical Institution should be invited to join, and that the report should be presented by October 31st.

The following names have already been placed on the Committee:—The President (Mr. Mitchell Banks), Drs. Alexander Bradshaw, Burton, Barr, Carter, Finnegan, Grossmann, Hope Harvey, Joll, Kelly, Logan, McVee, McGeagh, Nevins, Rentoul Stookes, Sharp, Westby, and James Wilson; and Messrs. R. Jones Richmond, Leigh, Charles Lee, R. Pughe, and Richard Williams.

STRUCTURE AND CONTRACTION OF STRIPEI MUSCLE.

AT a special meeting of the Royal Society of Edinburgh, held o February 28th, Professor Rutherford, F.R.S., gave an account c his investigation of the structure of striped muscular fibre, an of the phenomena of its contraction, so far as determinable b the microscope. He has devoted his attention more especially t the striped muscle of the crab and lobster because of the compar tively large size of the structural elements in these animals an the readiness with which the sarcous matter can be fixed an otherwise prepared in different conditions. He is entirely op posed to the opinions expressed by Melland and, more recently, l Gehuchten regarding the structure of the sarcous matter, ar maintains, as he did at the International Medical Congress in 188 that the sarcous matter essentially consists of contractile fibri with an interstitial substance between them.—an opinion pr viously expressed by Kölliker and others, and recently support by Rollett. Fibrils are the contractile elements in non-stripe muscle. Fluid is contained in the interstices of the invisible m cellar network of their seemingly homogeneous protoplasm. Th shortening of the fibrils doubtless implies a change in the rel tive positions of the micellæ in the networks, but the is no evidence of any shifting of fluid from one part the fibril to another. The fibrils of striped muscle are se mented, and one of the events of contraction is the shifting fluid from one segment to another. Each fibril consists of se ments arranged in linear series in a regular alternate order. Bo man's element is the longest segment, and appears to be the on one that is really contractile. Its dimness is due to a substan

resembling myelin contained in a contractile tissue. There is a node in the equator of Bowman's element, the position of which is sometimes marked by a dim line, described by Hensen, but Rutherford finds no evidence of any transverse membrane there. Between the ends of Bowman's elements there is always an intermediate segment about half the length of Bowman's element. It is a tissue containing a watery fluid, and there is a globule of myeloid substance definitely located in the equator of the segment, and marking the position of a node; Rutherford finds no evidence of a transverse membrane there, such as Krause and others have described. Myeloid substance is also sometimes found throughout the shaft of the intermediate segment, but always in smaller amount than in Bowman's element. The lateral coaptation of the central globules in neighbouring intermediate segments produces the line to which attention was first particularly directed by Dr. Dobie, of Chester. The intermediate segments do not appear to be contractile, and probably serve as elastic buffers between the ends of Bowman's elements when they approach each other during contraction. A third segment, termed by Rutherford the proper clear segment, is seen between Bowman's element and the intermediate segment, when the uncontracted fibril is stretched to its full physiological length. It is almost quite clear, and appears to consist of a thin envelope containing a watery fluid, and a granule of myeloid substance belonging to the granule line described by Flögel. The whole fibril has a thin envelope. The first event of contraction consists in a shortening of the interval between the ends of Bowman's elements, which in their approximation come close to the globule of Dobie's line. The shortening appears to result from an active absorption of fluid from the clear and intermediate segments by Bowman's elements. In the second stage of the contraction the fibril seems "homogeneous" unless it is suitably stained and sufficiently magnified. In this so-called "homogeneous" stage, the ends of Bowman's elements are in close proximity to the globule of Dobie's line, which is now somewhat flattened; the myeloid substance has not yet begun to shift its place in Bowman's element. In the third stage of contraction, the myeloid substance moves away from the shaft on each side of the equatorial node in Bowman's element, accumulates in the ends, and the element shortens owing to a real contraction of its tissue. There is a "reversal of the stripes" in the contracted fibre, as Flögel first pointed out. The dim stripe of the contracted fibril consists of the approximated ends of two Bowman's elements with the myeloid globule of the intermediate segment between them, now much flattened owing to lateral extension. The light stripe of the contracted fibril consists of the shaft of Bowman's element that has become clear owing to shifting of the myeloid substance to the ends of the element. The myeloid substance appears to be completely moved to the ends of Bowman's elements only when their shafts contract and squeeze it out; but it begins to move out of the shafts before they contract. The fluid absorbed by the element doubtless passes into the interstices of the micellar network; the myeloid substance appears to be contained in a special set of spaces. The contraction of the micellar network does not express the absorbed fluid, which does not escape from Bowman's element until the contraction is over. The elasticity of the intermediate segment and of Bowman's element causes them to return to their normal length after contraction, but does not lead to the appearance of the proper clear segment, which is only seen when the fibrils are forcibly pulled out to their full physiological length. The phenomena of contraction are essentially due to vital changes in the interval between the equator of Bowman's element and the equator of the intermediate segment. In a previous communication to the Scottish Microscopical Society Professor Rutherford gave an elaborate summary of the leading views expressed by others regarding the structure of striped muscle, and indicated the points at which his own views coincided with or diverged from those of other investigators.

INTERNATIONAL MEDICAL CONGRESS, 1890.

THE Organising Committee of the forthcoming Congress at Berlin, at the head of which are Professors Virchow, von Bergmann and Waldeyer, together with the energetic General Secretary, Dr. Lassar, are sparing no pains to make the gathering a success in its social as well as its scientific aspects. The Cultusminister, Dr. von Gossler, who has always shown the most enlightened zeal for the furtherance of medical science, takes the greatest interest in the Congress, and it is said to be due to his influence that the Government has consented to make a grant of £4,000 towards the expenses of the meeting. It is expected that the Emperor will receive the members of the Congress at Friedrichskron, and that the San Souci palace, with its relics of Frederick the Great, will be thrown open to their inspection. The famous fountains of Potsdam will play in their honour. The city of Berlin has voted £5,000 for entertainments, etc., in honour of its scientific visitors. The various learned bodies will not be behindhand in organising festivities, nor will private hospitality be wanting.

A special feature of the meeting will be the presentation of literary *souvenirs*. One of these, as we announced some time ago, will be the new edition of Professor Virchow's *Cellularpathologie*. Others will be a history of the development of medical societies in Germany presented by the German Medical Association, and an account of all the institutions established in Prussia for the cultivation of medical science presented by Dr. von Gossler. The City of Berlin will also contribute a *Festschrift* of a corresponding kind.

The arrangement of the scientific work of the Congress is being actively pushed forward. In addition to the programme of the Gynæcological Section which was published last week, the following particulars can now be given. In the Pathological Section the subjects already fixed for discussion are:—1. Lesions of the myocardium; 2, the part played by leucocytes in the formation of tissue; 3, tuberculosis. In the Section of Neurology and Psychiatry a discussion on the surgery of the central nervous system will be introduced by Mr. Victor Horsley, one on traumatic neuroses by Dr. Schultze of Bonn, and one on the pathological anatomy of dementia paralytica by Professor Mendel of Berlin. In the Section of Hygiene Dr. E. Roux, Director of the Pasteur Institute in Paris, and Professor Löffler of Greifswald will introduce a discussion on the means of preventing the spread of diphtheria; Professors Thiry of Brussels and Kaposi of Vienna, one on the sanitary and moral dangers of prostitution and the means of repressing it; Professors Max Gruber of Vienna, Erismann of Moscow, and Dr. Baer of Berlin, one on hygiene in reformatories, houses of refuge, foundling hospitals, etc.; Professor Sormani of Pavia and Dr. G. Cornet, of Berlin, one on international measures for the prevention of tuberculosis; Drs. H. P. Walcot, President of the Massachusetts State Board of Health, von Fodor, of Budapest, and E. Almguist, of Gothenburg, one on the increased prevalence of typhoid fever in a number of districts which had been more or less free from it for several years; Professor Forster, of Amsterdam, one on the nourishment of the people in time of war and epidemic; Professor Franz Hofmann, of Leipzig, and Dr. Petri, of Berlin, one on the tenability of the views now commonly held as to the injurious effects of cemeteries on the public health; Professor Flügge, of Breslau, one on infant mortality and infant feeding. Addresses will also be delivered by Professor Sormani, on the etiology and prevention of tetanus; by Dr. Ludwig Czatary, of Budapest, on the hygiene of railway travelling; and by Professor Neisser, of Breslau, on venereal disease and the medical control of prostitutes.

Exhibition.—A "Medico-scientific Exhibition" will be held during the session of the Congress (August 4th to 9th). The objects exhibited, which must be of a scientific nature, will be classified under the following heads:

1. New or improved scientific instruments for biological and special medical purposes, including apparatus for photography and spectral analysis pertaining to medicine.
2. New pharmacological chemical substances and preparations.
3. New pharmaceutical substances and preparations.
4. New food preparations.
5. New or improved instruments for internal and external medicine, and allied specialities, including electrotherapy.
6. Plans and models (new) of hospitals, houses for convalescents, disinfection, and general bathhouses.
7. New appliances for nursing the sick, including the methods of transportation and baths for the sick.
8. New sanitary appliances.

The Exhibition Committee consists of Herrn Paul Dörffel, H. Haensch, Drs. J. F. Holtz, L. Loewenherz, J. Petri, H. Windler, and the Secretary General, Dr. O. Lassar, to whom all communications should be addressed at Carlstrasse 19, Berlin N.W.

The official languages of the Congress are English, German and French. The regulations and programme for the day will be printed in all three languages. The subscription is 20 marks (£1). Tickets may be obtained from Dr. M. Bartels, Bureau des Hauses

der Abgeordneten, 75, Leipzigerstrasse, Berlin. An attempt will probably be made to induce the Minister of Railways to grant some reduction of fares on the Prussian lines to foreign practitioners wishing to attend the Congress.

THE Hamburg American Packet Company has agreed to reduce, for the members of the Medical Congress, the saloon fare from Southampton to Hamburg to £2 5s. for single tickets and £4 for return tickets, available for fifty days, but not after November 1st. The rates include all meals on board the steamers. The steamers call at Southampton on their way from New York to Hamburg, generally on Thursday. For further particulars apply to the Company's agents, Smith, Sundius and Co., 158, Leadenhall Street, E.C., and 22, Cockspur Street, S.W.

THE THREATENED VISITATION OF CHOLERA.

THE prevalence of cholera in Persia and Mesopotamia during the summer and autumn of 1889, has created considerable alarm in the adjoining countries of Russia and Turkey. No doubt it has to a great extent subsided during the winter months, but the experience of former epidemics has taught us that it has frequently halted during the cold months at the partial obstacles presented by the Transcaspian and Syrian deserts, with the intervening and at that season almost impassable mountain ranges at the Caucasus and Armenia, until the resumption of intercourse in the following spring and summer.

The accounts received through official sources from St. Petersburg and Constantinople are absolutely contradictory, the Russian consul and agents describing its progress northwards and westwards as steady though slow, and the French Consul at Bagdad expressing his conviction that the epidemic is in but temporary abeyance, while the Sanitary Board at Constantinople assert that it is wholly absent or extinct in the regions in question.

To our mind there can be little doubt as to which reports are more worthy of credit. The Russians are indisputably the more intelligent observers, and do not indulge, like officials of Oriental races, in self deception, while the lessons of former years, coupled with their desire to foster, and, as far as possible, to monopolise, the trade with northern Persia, makes them naturally anxious to obtain the fullest and most accurate information. The main routes of commerce between Persia and Europe are those of the Russian steamers plying between Astrakhan and Resha, and to a less extent, Giz, on the southern shores of the Caspian, and two overland routes converging at Tabrizone, *viâ* Tiflis, from the Russian port of Poti, and the other *viâ* Erzeroum, from Trebizond, which is still in the hands of the Turks, and through which German, Austrian, and much British goods find their way into Persia. But comparatively little danger need be apprehended from ordinary commerce, the imports enormously exceeding the exports, and goods being infinitely less likely to convey infection than persons. It is in the pilgrimages by which cholera is brought from India to the Hediaz, and then carried from Mecca to Egypt and the Levant; or to Bussorah, and thence up the Euphrates valley: and lastly from the Meschids, or shrines of Hossein, Ali, and Reza ranking in sanctity only second to that of the Prophet himself, that it is carried by the Mussulman subjects of the Czar into Russia. While on the other hand the traders of Afghanistan, though not from religious motives, avail themselves of the great Hindu fairs and festivals at Hurdwar, the largest of all foci for the dissemination of cholera on a gigantic scale, well described by Sir Alexander Burnes as an elaborate arrangement for the purpose of conveying epidemics.

Every invasion of Europe by cholera, prior to 1865-66, was conducted overland from Persia to Rusia, or *viâ* Trebizond; that and the more recent ones of 1872-73 and 1884-85, only having come by the Red Sea. But though the disease is almost constantly present in and always derived from India, it is not by the well appointed lines of passenger or merchant steamers, but by the horribly overcrowded and insanitary pilgrim ships that the importation is effected. Bad however as those plying between Bombay and Jeddah, or Bussorah may be, the condition of the Euphrates river boats conveying the pilgrims from Bussorah to Bagdad, *en route* to the three Meschids, is incomparably worse. The victims of the disease on the ocean vessels are thrown overboard, but on the latter the dead and the living, packed closer than cattle in a railway truck, are conveyed together to their destination in the height of summer; the miserable fanatics being firmly convinced that the salvation of their souls is alike secured whether their bodies reach the holy places during life, or in a state of advanced decomposition.

THE IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE annual general meeting of this Association took place on March 17th, 1890, at 11, Chandos Street, Dr. RICHARD FEGAN, the retiring President, in the Chair. Among the members present were Sir Thomas Crawford, K.C.B., Deputy Inspectors-General Davis and MacClinton, Drs. Gilbart-Smith, Macnaughton Jones, W. H. White, Mapother, Davison (Bournemouth), Waring (Brighton), Staff-Surgeon Dickson Smith, R.N., and the Hon. Secretaries, Drs. Stewart and Abraham, etc. A telegram was read from Dr. George H. Kidd (Dublin), the newly-elected President, regretting his absence.

An alteration of Rule viii. was proposed, seconded, and adopted, by which past Presidents of the Association would become *ex officio* members of Council.

The thirteenth annual report was then read and adopted, on the motion of the Chairman of Council, seconded by Sir Thomas Crawford. The report alluded to the loss the Association had sustained by the deaths of Dr. Robert McDonnell, F.R.S. (President-Elect), of Dr. R. J. Daniell (formerly Hon. Metropolitan Secretary), and of seven other members during the year. Sixty-four new members had joined since last March, and the numerical strength of the Association was now 637. The proposed formation of branches was mentioned, and it was stated that with the help of Dr. Kidd, who had recently introduced 60 new members, a branch was about to be established in Dublin. Amongst other business transacted by the Council during the year the action taken with reference to the question of the exclusion of Irish diplomates from hospital appointments in England was particularly noted. The question had been recently raised in connection with the Derby General Infirmary, where the injustice of the exclusive rule had been ably and with good effect pointed out by Dr. Murray Lindsay. The Council had helped in this matter, and had also taken part in a correspondence relating to the subject in the Dublin daily press. The financial statement was read by the Hon. Treasurer, and showed a substantial balance to the credit of the Association. The following were elected to the five vacant seats on the Council:—Deputy Surgeon-General Elkington, Drs. W. Carter (Liverpool), Cullimore, Skipton, and Waring, R.N.

In the evening the evening the members and their friends dined together at the Holborn Restaurant, Sir Walter Foster, Senior Vice-President, taking the chair, in the absence of the President. Among those who attended were Sir Thomas Crawford, K.C.B., Sir W. Mac Cormac, Professor Macalister, Dr. Fegan (late President), Dr. Gilbart Smith (President-Elect), Dr. Macnaughton Jones (Chairman of Council), Drs. Mapother, Davison, W. H. White, Gavin, W. H. Bourke, Douglas Lithgow, C. Wells, Todhunter, D'Arcy Power, Lough, Barter, Crampton, Hartt, Dixon, L. Lawson, Gasteen, MacSwiney, Roper, Ross Todd, F. M. Davis, and the Honorary Secretaries, Drs. Abraham and Stewart. The guests included Lieut. Stairs, R.E., Dr. Murray Lindsay, Sir Somers Vine, Mr. Du Chaillu, Mr. Langton, Dr. Campbell Pope, Mr. Groome, Mr. W. B. Martin, Captain Caldbeck, Mr. Patrick Hayes, Mr. Worsfold Mowle, and some others. Several glees and songs were contributed by Messrs. Martin, Groome, Hayes, etc., and added much to the success of the evening.

THE Baroness Burdett-Coutts, Lady Lucy Hicks-Beach, and other ladies are assisting the "Santa Claus" Society to found, in a high and healthy suburb of North London, a Home for convalescent children. This society has already done much useful and benevolent work in visiting and helping the children in union infirmaries and hospitals after their discharge to homes, the insanitary and wretched condition of which are too often the reverse of favourable to their recovery.

A TEMPERANCE PRIZE ESSAY.—The French Temperance Society has received from Madame Lunier the sum of 1,000 francs (£40), to be awarded to the author of the best essay on the following questions: "What are the hereditary consequences of alcoholism and drunkenness? What means should be taken to prevent these consequences or lessen their effect?" Candidates are advised to take Lunier's writings on alcoholism as a guide. The Society does not limit the field of research, and wishes the studying of preventive measures to include moral, social, thereapeutic and other means. Works printed less than two years before January 1st, 1890, as well as manuscripts, will be received. Essays should be sent in on or before December 3rd, 1890, to M. Motet, general secretary of the "Société Française de Tempérance Contre l'Abus des Boissons Alcooliques," 161, Rue de Charonne, Paris.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 16th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 12th, 1890.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 27th, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.—A meeting of this district will be held at Loughborough, on Wednesday, April 16th. Members desirous of reading papers or showing cases or specimens, will please communicate with the Honorary Secretary, FRANK M. POPE, M.B., Leicester.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting of this Branch will be held at the Royal Surrey County Hospital, Guildford, on Thursday, March 27th. Members desiring to bring forward papers or cases are requested to communicate with the Honorary Secretary, J. P. A. GABB, M.D., Guildford.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICT.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 26th. Mr. Cresswell Baber will preside. Meeting at 3.30 P.M. Dinner at 5.30 P.M. Charge 6s., exclusive of wine. Dr. Samuel West will introduce for discussion the subject of Influenza. Members or others desirous of contributing papers or cases are requested to communicate with T. GARNER VERRALL, Honorary Secretary, 97, Montpellier Road, Brighton.

THAMES VALLEY BRANCH.—The next meeting of the Branch will take place at Kingston on Wednesday, March 26th. Members willing to read papers or exhibit cases are requested to communicate with CHARLES C. SCOTT, Honorary Secretary, St. Margaret's, Twickenham.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 17th, at 5 P.M. Dinner at 6. The subject, as settled by the Council, for discussion after dinner is the Influenza Epidemic. Members having any case or communication to bring before the meeting are requested to send the title thereof as soon as possible to W. KELLY, Honorary Secretary, Taunton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this Branch will be held at Croydon on Thursday, May 8th.—P. T. DUNCAN, M.D., Honorary Secretary, Croydon.

SOUTH-WESTERN BRANCH.

AN extraordinary meeting of the South-Western Branch was held at the Rougemont Hotel, Exeter, on Thursday, March 6th. The meeting was summoned by the President, Mr. William Pearse, upon requisition:—

To discuss a certain letter signed by two members of the Branch (with others); and to determine on the following resolution: "That this meeting of the South-Western Branch of the British Medical Association regrets the action taken by certain of its members regarding the occurrence of ringworm in one of the schools of the city of Exeter, and in the opinion of this meeting it is very detrimental to the best interests of the profession that such a letter should be sent."

The Branch Council met at 10 o'clock, Mr. WILLIAM PEARSE, President, in the chair.

After the election of six new members, and the transaction of other routine business, Mr. PAUL SWAIN (Plymouth) moved the following resolution: "That the resolution, of which notice has been given, to be proposed at an extraordinary meeting of the Branch, called under Rule 10,[1] is one that is not within the province of any meeting of the British Medical Association to discuss; that this Council is of opinion that the President of the Branch should not allow such resolution to be put to the meeting, but that the whole question be referred to the Council."

This resolution was seconded by Mr. L. Mackenzie (Tiverton), and adopted.

The general meeting, held at 2.30 P.M., was attended by between forty and fifty members.

The PRESIDENT first called on the Secretary to lead letters from several members unable to be present. These were all to the effect that the course taken in summoning a meeting of the Branch was undesirable.

The PRESIDENT then reported to the meeting the resolution which had been come to by the Council.

Whereupon Mr. SWAIN moved: "That the resolution of the Council be approved and adopted."

The resolution was seconded by Dr. DAVY (Exeter), and, being put from the chair, was declared by the President to be carried unanimously.

It was afterwards resolved, on the motion of Dr. SLADE-KING (Ilfracombe), the President-Elect, seconded by Mr. L. MACKENZIE (Tiverton), that the last clause of the resolution, referring the whole question to the Council, be not acted upon, but that the matter be allowed to drop.

Mr. GOULD (Hatherleigh) proposed a cordial vote of thanks to the President for his conduct in the chair. This was seconded by Dr. DEAS, and carried by acclamation.

SOUTH EASTERN BRANCH: EAST SURREY DISTRICT.

THE spring meeting of this District was held at the Queen's Hotel, Upper Norwood, on Thursday, March 13th, Mr. W. SOLTAU ECCLES, of Upper Norwood, in the chair.

Communications.—Dr. BUZZARD read a paper on some forms of Peripheral Neuritis, describing the clinical features of cases resulting from alcoholism, diabetes, etc.—Mr. LOCKWOOD described the curative treatment of Hernia, pointing out the distinctions between cases suitable for operation and those which are not suited, and discussing the views as to the causation of hernia from weakness of the abdominal walls and elongation of the mesentery.—Dr. DUNCAN opened a discussion on Influenza.

Dinner.—After the meeting ten members dined together.

STAFFORDSHIRE BRANCH.

THE second general meeting of the present session was held at the North Western Hotel, Stafford, on Thursday, February 27th. Mr. VINCENT JACKSON, President, was in the chair, and twenty-two members were present.

New Members.—The following gentlemen were elected members of the Branch:—Mr. John Temperley Gray, Stafford; Dr. Hosegood, Cannock; Dr. Jordan Lloyd, Birmingham; Dr. John Wilkinson, Penkridge.

A report of the scientific work of the meeting will be found at page 673.

[1] Rule 10 is as follows: "That the President, Secretary, or any three members be empowered to call an extraordinary meeting of the Branch, for the purposes of business: but that at least seven days' notice of the same, and its object, be communicated by circular to each member,

SPECIAL CORRESPONDENCE.

EGYPT.

The Influenza.—New Appointments Kasr-el-Aini Hospital.

THE epidemic of influenza which lately visited this country is now happily dying out, but not before it had committed severe ravages. In Alexandria the death-rate for the period from January 17th to February 6th, when the malady was at its height, amounted, according to the official returns, to 65 per 1,000 per annum; whereas during the corresponding periods of the preceding four years it was 47.4. The deaths from all causes were 683, and of this number 180 are ascribed to pneumonia and other diseases of the respiratory organs, not including phthisis; a proportion considerably greater than is usual in Egypt. In Cairo the death-rate during the same period was 45.8, against 44.2, the average of the previous four years; but out of a total mortality amounting to 934, no fewer than 292 deaths were owing to affections of the respiratory organs. In 19 towns of Lower Egypt, including Cairo and Alexandria, the death-rate for the same period was 48.7 per 1,000; in the preceding four years it was returned as 42.4. The total deaths were 2,316, and of these 648 were caused by pneumonia, bronchitis, and other allied diseases.

The Commission on the Medical School has not been entirely without fruit. Although effect has not been given to the radical reforms recommended by the English members, still a commencement has been made, inasmuch as two new appointments have been sanctioned by the Council of Ministers, the nominees being in each case British subjects. Dr. F. M. Sandwith is to be physician to Kasr-el-Aini Hospital, and Dr. Kenneth Scott ophthalmic surgeon. This is without doubt a step in the right direction; for though the hospital and the school are independent of each other, being attached to different administrations, still, as all the students have to attend at Kasr-el-Aini, the advantage of having medical officers there capable of imparting practical instruction cannot be too highly estimated.

BIRMINGHAM.

The Cadbury Convalescent Home.—The Medical Institute.

Mr. Richard Cadbury has promised a most welcome gift to Birmingham in a convalescent home for women and children, which is easy of access from the centre of the town. He proposes to expend £30,000, which will purchase the building and twenty acres of land, provide the necessary alterations, and leave a sum of about £10,000 to be used practically as an endowment fund. The Home will be administered by the Committee which now controls the Blackwell Sanatorium, and this latter will be reserved for male patients, instead of being used as it is now for both sexes. Mr. Cadbury makes some stipulations as to the management of the Home. Amongst them are (1) that ladies be permitted to share in the management; and (2) that no stimulant of an intoxicating nature be used as a beverage, and that as a medicine such should be administered only under the prescription of a duly qualified medical man.

The annual report of the Birmingham Medical Institute is just issued. It shows a slight increase in members and subscribers, and a steady growth in the library, which now contains over 13,000 volumes, exclusive of duplicates. During the past year considerable expenditure has been incurred in connection with necessary repairs and alterations in the structural arrangements; the Committee acknowledge a very generous donation from Mr. Lawson Tait towards these objects. To increase the advantages offered by the institute to its members, it has been decided to establish a register of assistants, dispensers, and nurses, and to provide a loan collection of surgical instruments, such as are not in common use, which can be borrowed by members on payment of a small fee.

PRESENTATION. — On relinquishing his practice at Bishop's Castle, Mr. W. Laird-Cox was entertained at luncheon, and presented by a few of his friends and patients, as a mark of their esteem and slight appreciation of his services, with a solid silver bowl and two *compotières*. The Ancient Order of Sydbury North Foresters had on the previous evening presented him with a case of handsome carving and game knives and forks, together with an address on vellum.

CORRESPONDENCE.

THE UNIVERSITY OF LONDON AND DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—The "scheme" which appears in the letter signed by a Fellow of the College of Physicians in the JOURNAL of March 15th will seem to many of your readers to combine most of the objections which have been urged against the many other schemes for improving the University. But whether good or bad, I write to assure you that there is no reason to believe that it will be carried out, until at least it has been submitted to the Senate of the Royal Colleges; and this, I venture to say, has not yet been done.—I am, etc.,

ANOTHER FELLOW.

SIR,—One of the things which most need altering in the London University is, in my opinion, that rule which compels a man to go through his whole professional course subsequent to matriculation. There are many men who are quite equal to the London degree who yet cannot see their way to remaining five years at hospital, so content themselves with an ordinary qualification. They have not passed the "Matric.," and so they are debarred from the degree for ever. Were it enacted that dissections, lectures, etc. done and attended at any time by a man already qualified should count, and that he could come up for his examinations when he was ready, I cannot see why the University should lower the standard in any particular.—I am, etc.,

Ashford, Kent. R. A. BREMNER, M.R.C.S., L.R.C.P.Lond.

SIR,—The letter in the JOURNAL of March 15th, signed by a Fellow of the College of Physicians, has certainly the one merit of crude—I had almost written rude—simplicity.

The utility of the matriculation examination as a reasonable test of general education is admitted by many competent authorities. It is an examination which may be passed (*pace* Dr. Barnes) by an intelligent youth on leaving school, without permanent danger to his immature brain. The Preliminary Scientific examination was formerly open to the objection of being too theoretical in some of its subjects, but in its present form it seems a fair trial of rudimentary scientific knowledge of a useful kind. The intermediate M.B. examination is thoroughly practical and fair; no industrious student need fear it. As regards the final M.B., the period over which the whole examination extends seems too long, and the time for writing the separate papers short, but it is on the whole a good test of medical knowledge. I write from personal experience as a graduate, who has also passed other examinations. Of course it is possible by continuous cram to pass any examination with a modicum of advantage, but London University examinations are no more or less open to this objection than other examinations. The graduates of London University have always been sadly wanting in *esprit de corps*, and the University seems now in danger of being wrecked by apathy within and jealousy without.

It is strange that the plan is careful to retain for the writer college the entire control of the examinations, only introducing sufficient London University influence to give their diploma the veneer of a degree.

I would ask if it is not possible to found a separate university for the Fellows of the Colleges to experiment with, and not depreciate a known and respected degree. Dublin supports two universities, which do good work side by side; London, with its numerous students, could easily support similar institutions.

Lastly, does your correspondent really think that anyone would go through the present curriculum of London University to obtain a degree which would be identical with the one granted after a modified (? simplified) examination by the Conjoined Boards?—I am, etc.,

M.B., F.R.C.S.

M. PASTEUR AND THE RABBIT PEST IN AUSTRALIA.

SIR,—Though one may excuse the persistence with which M. Pasteur's delegates continue to give their inaccurate version of the action of the Commission, a simple statement of facts will be enough to bring home the conviction to everyone that the actions of the Commission in conducting the scientific investigations necessary to prove the practical value of M. Pasteur's method merit unqualified approval. As Chairman of the Executive Committee at Sydney I am in a position to state facts enough to enable everyone to form

an accurate opinion on the matters of dispute between M. Pasteur's delegates and the Commission.

It will be granted at the outset that the success of M. Pasteur's proposal can rest upon one simple scientific fact, and upon this fact alone, that the microbes of chicken-cholera produce in rabbits a disease that is infectious—that is to say, a disease that, like scarlet fever or small-pox in human beings, spreads readily from infected to healthy rabbits. The simple, natural, and only possible request of the Commission was that M. Pasteur's delegates should give satisfactory proof of the infectious nature of this disease, when communicated to rabbits. The whole question upon which the dispute hangs resolves itself thus: What constitutes proof of infection?

M. Pasteur's delegates consistently maintained that they could not deviate one hair's breadth from the specific instructions laid down in writing for their guidance by M. Pasteur himself. Therefore, one may fairly conclude that M. Pasteur framed the instructions with the view of testing scientifically the infectious nature of the disease. These instructions were:

(1). To feed rabbits with broth cultures of the microbe of chicken-cholera.

M. Pasteur's delegates need not have travelled to Australia to make this elementary and unnecessary demonstration. This experiment told the Commission no more than was known already, and in no sense showed the disease to be infectious. The microbes acted as a direct poison, and a sufficient dose of phosphorus would have done the same.

(2). To feed ordinary domestic animals in a similar way.

All the scientific members of the Commission anticipated the result. This experiment cannot be held to prove that the disease is infectious among rabbits.

(3). To make an experiment within an enclosed area of about 00 acres in a district thickly infested with rabbits. In this area he food of the rabbits was to be sprinkled from day to day with ultures of the microbes of chicken cholera.

These are the experiments that constitute, acccording to M. asteur, a scientific demonstration of the infectious nature of the isease among rabbits. The Commission declined to consider the eries of experiments to be a scientific proof, holding, rightly nough, that no experiment would be satisfactory that did not iminate the risk of poisoning the rabbits by the direct feeding f them with microbes. If M. Pasteur's method was to be of any alue, it would be necessary to prove that the introduction of a mited number (hundreds or thousands, it matters little which) of bbits infected with the disease by feeding or inoculation would use the disease to spread to a large number of healthy rabbits the same area. This method is very different to experiment) of M. Pasteur. It must be remembered that in Australia the ague of rabbits can be grappled with in small areas, say, of ,000 acres. It is when the sheep runs cover a larger area that e great difficulty begins. It may be a new fact to M. Pasteur, d to many Englishmen, that in the western districts of New uth Wales a sheep run is scarcely considered very large if it es not exceed half a million acres. There are some single runs over a million acres. It is in these large runs that all methods grappling with the plague have prodigiously failed. Hence ises the supreme importance of proving that the disease, prosed for investigation by M. Pasteur, would spread among rabs by infection, as distinguished from feeding or inoculation. the very beginning of their proceedings, the Commission had d special stress on this point, and had drawn up their own edule of experiments for the set purpose of proving the comnicability of the disease by infection. M. Pasteur's delegates uld have nothing to do with this schedule, for they could not beyond the letter of the experiments prescribed by M. Pasteur nself. The Commission, always anxious to avoid a rupture, de- ed to appeal directly to M. Pasteur by cablegram for permission make an experiment that would prove the disease to be capable spreading from rabbit to rabbit. M. Pasteur telegraphed his ly, and I leave it to others to estimate the value of the experint thus conceded. After many troublesome but futile negotia- ns, and the consequent tedious delay, this concession was granted as, and is best described in M. Pasteur's own terms:

Place five infected rabbits with twenty healthy rabbits in an losed area of one square metre (three feet three inches) for six 's, and wait before you hand over to the Commission any robes of the dead rabbits."

Merely for the sake of courtesy, this experiment was made, with result that the five infected rabbits died in less than fifteen hours, and of the twenty healthy rabbits five died within seventy-one hours, and from that time till the end of seven days no more died. At the same time a control experiment had this result that, of twenty-five rabbits placed in a similar enclosure, under similar conditions, three rabbits died, though no infection was introduced. The Commission, naturally enough, condemned the whole system of experimentation proposed by M. Pasteur as unsatisfactory, and even useless.

An earnest appeal was also made to M. Pasteur's delegates in the form of a question, put by myself as chairman in the following terms: "Will you allow a further experiment to be made under less favourable conditions, say, in artificial burrows, or in a larger space, or with fewer rabbits?" They answered "No."

The Commission, therefore, had nothing left for them to do but to refuse permission for M. Pasteur's experiment in the open, seeing that the experiment was not of a kind to prove the infectious nature of the disease.

The Commission, however, subsequently performed a series of experiments in accordance with the schedule that they had originally framed. These experiments led the Commission to the following conclusions:

(1). That the disease did not spread readily from rabbit to rabbit.

(2). That the danger to birds by disseminating the disease had been exaggerated, while there was no practical danger to animals other than rabbits and the bird tribe.

(3). That the vitality of the microbe would be so seriously affected by moderate heat and desiccation, that all chance of infection would soon be at an end in the hot and arid districts where the plague of rabbits existed.

Yet, even after all the difficulties that had arisen, the Commission recommended to the Government—they had no power to do more—that, inasmuch as the danger to animals other than rabbits and birds could not be proved to exist, permission should be given to M. Pasteur's delegates to make an experiment in the open country, provided that the experiment was made in such a way as to eliminate the chance of poisoning the rabbits by directly feeding them with the microbes, and so put to the test the infectious nature of the disease. The delegates objected to the conditions, although the conditions were fair and reasonable, having in view the one all-important purpose of proving the communicability of the disease from infected to healthy rabbits.

Was this treatment unfair? Was it discourteous? The delegates of M. Pasteur were strangers in a strange land, and, as a matter of fact, were treated with an amount of consideration and courtesy that would not have been extended to any English delegates. Courtesy is a very good thing in its way, even in scientific investigations; but it is courtesy misnamed and misplaced, if it interferes with the wisdom of our judgment or action.—I am, etc.,

W. CAMAC WILKINSON, M.D.Lond., M.R.C.P.,
Chairman of Executive Committee of Rabbit Commission.
Manchester Square, London.

THE CLINICAL STUDY OF INSANITY.

SIR,—In your report of the meeting of the London County Council in last week's issue of the JOURNAL the following statement is said to have been made by Dr. Cooper, in moving an amendment:—"Bethlem had a pathologist and a visiting staff of specialists." I write to correct this statement, which is liable to be misunderstood. The pathological work of the hospital is done by the resident staff and clinical assistants, and not by a specially appointed pathologist. There is no visiting staff of specialists, but whenever it seems desirable to the resident officers, who are solely responsible for the treatment of the patients, that it would be beneficial to have the opinion of a specialist, one is called in in consultation.—I am, etc.,

R. PERCY SMITH.
Bethlem Royal Hospital.

ANÆSTHETIC AND TUBERCULAR LEPROSY.

SIR,—With your permission I would briefly refer to one statement in the interesting Remarks on some Facts Illustrating the Early Stages of Leprosy in the JOURNAL of March 8th.

Mr. Hutchinson states: "Every case of leprosy commences macular, becomes anæsthetic, and terminates as tubercular." I have stated, as the result of considerable experience of this disease, that both forms of leprosy, the anæsthetic and tubercular, commence differently; that the eruption is not the earliest sign; that they run separate and distinct courses; and terminate differently.

Last year I revisited the Guiana Leper Asylum for the purpose, among others, of completing the life-histories of some of the cases mentioned in *Leprosy in British Guiana*; for example: 1. Digrooch (Case xxi, pl. ix, p. 84), a man, admitted into the leper asylum in 1869. The notes of his case were taken by me in 1877. He remained under observation till 1886. When I last saw him, in February, 1889, he was in the last stage of anæsthetic leprosy, the symptoms presented being those detailed in my work (p. 90). In this instance anæsthetic leprosy had lasted twenty years without changing into the tubercular form.

2. I can also refer to Callychurn and Peter Martin (Cases xxii and xxiv), who are still at the asylum, running their course as cases of the anæsthetic form of the disease.

3. Francis S. Whitfield (Case xxvi, pl. x, p. 89) I found confined to his bed in the infirmary, evidently not having long to live. Anæsthetic leprosy in his case had lasted twenty-four years without changing.

4. James Watson (Case xxix, pl. xiii, p. 94) is a typical case of anæsthetic leprosy. I believe the man is still alive, and never likely to leave the asylum. The disease had existed in the same form for twenty-eight years when I saw him in March, 1889.—I am, etc.,

JOHN D. HILLIS.

Dublin.

ON THE DISSOLUTION OF BODIES IN OCEANIC DEPTHS.

SIR,—In the JOURNAL of March 15th, your correspondent, Dr. James Monteith, states that he considers the two chief factors preventing putrefaction in oceanic depths are low temperatures and the abundant supply of oxygen—neither of which, I believe, has practically anything to do with the question at issue. Nor does the "fact" brought forward by this gentleman that "the results of the *Challenger* expedition failed to bring to the surface any bones of man, fish, or whale, or other animal constituents" show that "corpses in oceanic depth undergo a peculiar process of disintegration."

I respectfully submit that the whole question of alleged putrefaction at abysmal depths has practically no chance of ever seriously commencing. At these depths various numerous animals, in their hideous struggle for food or for existence, eat up every carcass in all its parts, and, as many marine animals also greedily devour bone, of course the *Challenger* scientists, experts, and professors were not likely to discover such skeletons in the ocean, which they seem to have expected was just like a land cemetery, where every burial would be indicated by bony remains.

In no part of the globe is the scavenging so complete and speedy as that which is carried on at abysmal depths. Though it would be most repugnant to sentiment, yet perhaps the most rational and economic method of human burial would be to throw the corpses with sinking weights into abysmal depths, where all the flesh and bone would rapidly disappear and tend to feed various marine animals. I do not advocate this system, and for many reasons which I need not now touch upon.—I am, etc.,

Brighton. J. LAWRENCE HAMILTON, M.R.C.S.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE USES AND ABUSES OF CORONERS' INQUESTS.

MR. JUSTICE WILLS, in charging the grand jury at the Chester Assizes, referred at some length to the conduct of the coroner's inquest in the case known as the Crewe murder. He observed that a coroner had one advantage from a certain point of view—namely, that being fettered by no precise rules of evidence, and bound to collect as far as he could all information and knowledge of disasters from neighbours and others who could throw any light upon the cause of death, where death had taken place under suspicious circumstances—he could oftentimes collect evidence, facts, and statements which, whether or not they might ultimately be capable of being turned into evidence against the parties who were to be put upon their trial, were often very valuable as supplying material for investigation by the police, and as affording clues which might lead to successful inquiry. If the coroner rejected evidence which lay before him, on the supposition that he was in the position of a judge who had to try the prisoner, and that the same wide rules of exclusion of evidence which might act against a particular individual in the dock he also could exclude upon legal grounds, he would throw away a good deal of the remaining usefulness of that institution. The coroner's inquisition could not be too thoroughly understood. It amounted to nothing more than the finding of a true bill by a grand jury. It put individuals who ought to answer in suspicious circumstances for what they had done, or were supposed to have done, upon their trial, and led to proper investigations, preventing the hushing up of matters of this kind.

AN inquest was held lately held in Bethnal Green by Dr. R. Macdonald on the body of a widow, aged 65, who had been found dead in her bed; the only evidence tendered was to the effect that she had been in very reduced circumstances, and that she had complained of a pain in her stomach the day before her death. The medical man who was called in, but did not see her during life very properly declined to give an opinion as to the cause of death, which led to the following conversation, as reported in a local paper:

"The Coroner: Well, can't you give an opinion as to the cause of death in this case? Witness: No; it might be syncope, or it might be apnœa. If I had opened the body I could have seen if there was any disease of the lungs or heart. The Coroner: If you had asked for a *post-mortem* examination in this case, I should not have given you one. I don't think it necessary. (To the Jury): If you like to say that death was due to apnœa, I will enter it, but if not we must adjourn for a week. The Foreman of the Jury: We find it was a natural death. The Coroner: You must state a cause. I'll put down apnœa if you like to say so. The jury returned a verdict that deceased died from apnœa and that such death was natural."

We may well ask why the inquest was held. There seems to have been no clear evidence as to the nature of the deceased's malady or the cause of death, nor does the evidence, such as it was, by any means exclude the possibility of a violent cause of death. If the coroner had plainly said that it was not necessary to go to the expense of a *post-mortem* examination, and had advised the jury to return a verdict of "Found dead," it would have been a less unsatisfactory course than the one he adopted.

M.D. writes with reference to coroners' inquests: We in the medical profession have much to complain of, the treatment we receive in many instances being extremely discourteous. I remember several cases where no inquest was held because the coroner (a lawyer) did not consider it necessary. One in particular: A woman aged about 45 years lived with her brother, both unmarried individuals, and given to drink. The man, in the course of the usual Saturday night's quarrel, struck the woman a violent blow on the side of the head with a poker. She was rendered unconscious at the time, recovered somewhat the following day, but died in a week with all the symptoms of compression of the brain.

I was quite aware that she was the subject of aortic disease, but that was certainly not what killed her. However, the matter was reported to the coroner, who ordered an ordinary police constable to make inquiry of the neighbours, the result being that the woman was buried on the strength of the coroner's certificate to the effect that she died from natural causes (!) without so much as an intimation to me that he did not consider it necessary either to hold a *post-mortem* examination or an inquest.

I know there were more inquiries instituted in the days when coroners were paid so much for each case instead of a yearly salary.

ADVERTISING IN NEWSPAPERS.

MELBOURNE.—With reference to the three grossly unprofessional and self-eulogistic advertisements issued by "Dr. B., L.R.C.S. and L.R.C.P.Edin., "Dr. J. D. L., L.R.C.P., M.R.C.S., L.S.A.Lond.," and "Dr. G. J. W., L.R.C.P. and S.Edin.," which appear in the *Melbourne Evening Standard* of January 6th willingly as we would assist in suppressing such derogatory devices, past experience leads us to the conviction that practitioners who have recourse thereto are insensible to reproof, in view of which fact we would recommend our Australian correspondent to carry out the advice tendered in the JOURNAL of March 8th under the heading of "Advertising Surgeries and Dispensaries," p. 574.

SPECULATION IN PROVIDENT DISPENSARIES.

IN a report published in the *Manchester Guardian* we read that at the recent assizes Mr. E. Stanley Jones, Secretary to the Manchester and Salford Dispensaries Association, sued Dr. Raitt to recover £50 promised by way of commission. It was stated in evidence that in 1889 a scheme was set on foot by Mr. Jones for the formation of a provident dispensary for Stockport and district, and it was agreed between him and Dr. Raitt that, if he secured the latter the appointment of medical officer, he should receive £50. In the event, Dr. Raitt was nominated to the appointment, but refused to take it up. The judge held that the commission was not earned, adding, "and I am not sorry to be able to come to this decision." Judgment was accordingly given for the defendant.

*** The case is interesting as disclosing a system which cannot be commended. There is, of course, nothing illegal in parties agreeing for a commission on introduction to a new berth; but the Dispensaries Association might very properly prohibit their servants from being concerned in such matters.

THE Hungarian Minister of the Interior has refused to sanction the establishment of a crematory at Pressburg, on the ground that such a step is opposed to "important public interests."

LEPERS IN NATAL.—The latest advices from Natal show that steps for the segregation of lepers are being strongly urged in Natal, and the matter will be impressed upon the Legislative Council during next session. Dr. Allen recommends that a healthy locality, with land to cultivate and room for grazing purposes, should be set apart as being probably more beneficial than an asylum.

NAVAL AND MILITARY MEDICAL SERVICES.

THE BARRACKS BILL.

We may congratulate Mr. Stanhope on deciding to tackle in a comprehensive spirit the question of barrack accommodation, which has long pressed for settlement. The general bad condition of a large portion of our barracks has for years been an opprobrium to our military system. Both the buildings themselves and their surroundings, instead of being made attractive, as good policy would dictate, are not merely uninviting, but absolutely repulsive to civilians and the better class of recruits. Many of these old barracks now occupied date from the earlier Georgian epochs, a period when the linked sciences of architecture and house-building were at the lowest ebb in this country; and of those even comparatively recently built few have fully shared in late great advances made in sanitary appliances and materials for construction. It may truly be said, from our present point of view, that most of our old barracks appear veritable triumphs of ugliness, inconvenience, discomfort, and insanitation. The one idea of bald utility upon which they were constructed usually found expression in a mass of gaunt buildings on three sides of a square; divided into blocks, with wooden stairs, from which opened right and left cold comfortless rooms; the floor of wood and the walls of bare brick, or stone whitewashed. The rooms would be ventilated by a shaft carried to the roof, down which, in a high wind, raged a cruel cold draught; or even rain, hail, or snow descended. The lighting at night just sufficient to make darkness visible, while an ill-constructed grate and fireplace sent the little heat generated with a maximum waste of fuel up the chimney; each room formed the dormitory, refectory, and place for cleaning arms and accoutrements of from ten to twenty men. We merely recall the sloppy latrines, wash and cook houses attached to the barracks, as well as the miserably inadequate quarters assigned to the married men, to show how urgently reconstruction of all such is needed. Most of our workhouses and prisons have already shared in modern building improvements, and it is high time our barracks followed suit; surely our gallant soldiers ought to be housed at least as well as paupers and criminals.

Mr. Stanhope urged the necessity of his scheme on three grounds: economy, efficiency, and health; but the last, which primarily concerns us, should, we think, have been placed first, because the other two largely hinge upon it. However, he had no difficulty in establishing his tripartite thesis; he showed that economy and efficiency could be summed up in the single word concentration, which was a necessity in modern military training; besides, in these days of rapid intercommunication, there was no longer the old political or social need for the dispersion of troops in small bodies over the country. Henceforward, therefore, our troops will be chiefly massed in camps of instruction, and, except in a few towns, will no longer be cramped up in the overcrowded regions of our large cities.

The scheme involves not only the removal of dilapidated barracks, such as at Manchester and Galway, but the replacement of the rotten huts of Aldershot, the Curragh, and elsewhere. The notoriously unhealthy Royal Barracks in Dublin, and others at home and abroad, are to be specially treated.

We cannot at present offer any detailed comment or suggestions on the all-important matters of sites, places, and structural materials, but Mr. Stanhope seems fully alive to their importance, and promises that each and all shall have the most thorough and independent consideration. With this view he proposed to call in the aid of civilian expert architects, contractors, and surveyors, who will examine plans and specifications submitted by the War Office. This is right, for while we fully recognise the great ability of our Royal Engineers in the multifarious duties they undertake, they cannot pretend to have the special knowledge of men who make house-building their sole business, and need not therefore be indisposed to accept civilian criticism.

But it is with special pleasure we note Mr. Stanhope's emphatic declaration that the highest sanitary knowledge must also be brought to bear in the erection of new barracks and camps; without it, we affirm, the large outlay would probably be grievously wasted. He proposes to revive and reconstruct from the best sanitary experts in the country Sir Sidney Herbert's Sanitary Committee. This will be a material guarantee that our soldiers will be placed in the best conditions of health and comfort. The services of experts will cost money, but it will in the end prove a wise and economical expenditure.

The Barracks Bill is full of interest not merely to the military body, but the public at large, and, not least in its sanitary aspects, to our own profession. We will recur to it as the subject develops.

THE NAVY.

The following appointments have been made at the Admiralty: Nicholas C. Ridley, Surgeon to the *Goldfinch*, March 13th; William M. Craig, M.B., Surgeon to the Hong Kong Hospital, March 17th; John Dowson, Surgeon to the *Victor Emanuel*, March 17th.

THE MEDICAL STAFF.

Brigade-Surgeon W. H. B. Clapp, M.D., has succeeded Brigade-Surgeon J. R. Murray, M.D., as Principal Medical Officer of the Thames District, the latter officer having proceeded to Bermuda in relief of Deputy Surgeon-General F. W. Wade.

Deputy Surgeon-General N. Norris, who went on retired pay June 24th, 1885, has taken over the medical duties at Purfleet.

Brigade-Surgeon Joseph Fleming, M.D., F.R.C.S.Edin., has gone on retired pay. He entered the service as Assistant Surgeon March 31st, 1864; became Surgeon March 1st, 1873; Surgeon-Major April 28th, 1876; and Brigade-Surgeon October 24th, 1888. He served on board the hospital ship *Victor Emanuel*, and on shore at Cape Coast Castle during the Ashanti war of 1873-74, and was appointed Pathologist to the expedition (medal). Served in the Afghan war of 1878-80, first with the Koorum Field Force, and afterwards with the Northern Afghanistan Field Force (medal). Served in the Soudan campaign in 1885, and was present in the engagement at the Tofrek zerebra (mentioned in despatches, medal with two clasps, and Khedive's star).

Surgeon Hartwell Woodhouse James, whose commission is dated January 31st, 1885, has retired on temporary half-pay on account of ill-health.

The undermentioned Surgeons on probation are appointed Surgeons, ranking as Captains, from February 1st: Matthew Louis Hughes, William Thomas Mould, Alfred William Bewley, Charles Alfred Stone, M.D., Hardress James Waller, M.B., Herbert Edmond Winter, Samuel Guise Moores, and Lewis Way.

Surgeon-Major W. C. Gasteen, on the Retired List, has succeeded Surgeon-Major J. Walker in medical charge of the Royal Military Academy, Woolwich.

Surgeon A. O. Fitzgerald, serving in the Bengal Command, has leave for six months on urgent private affairs.

Surgeon C. R. Kilkelly, M.B., serving in the Bombay Command, has leave to England for six months on private affairs.

ARMY MEDICAL RESERVE.

Acting-Surgeon William Nettle, 2nd Volunteer Battalion Duke of Cornwall's Light Infantry (late the 2nd Cornwall), is appointed Surgeon, ranking as Captain.

Surgeon Henry Hammond Smith, 1st Volunteer Battalion South Staffordshire Regiment (late the 1st Staffordshire), is appointed Surgeon, ranking as Captain.

THE VOLUNTEERS.

Acting-Surgeon T. S. Kirkland, M.B., 8th Volunteer Battalion Royal Scots (late the 1st Linlithgowshire), has resigned his appointment, dated March 10th, 1888.

Acting-Surgeons W. J. Morris and H. J. Roberts, of the 2nd Volunteer Battalion Royal Welsh Fusiliers (late the 1st Flint and Carnarvon), are promoted to be Surgeons.

Acting-Surgeon J. Adams, M.B., of the 1st Volunteer Battalion South Lancashire Regiment (late the 9th Lancashire), is also promoted to be Surgeon.

The undermentioned gentlemen are appointed Acting-Surgeons to the corps specified: John William Rigby, 1st Volunteer Battalion Loyal North Lancashire Regiment (late the 11th Lancashire); Harry Charles Costello Shaw 5th (West) Middlesex; Frederick Enos Fenton, 6th Middlesex (St. George's).

Acting-Surgeon H. P. Tayler, of the 1st Wiltshire, is promoted to be Surgeon.

A MANUAL FOR MEDICAL OFFICERS.

Surgeon-Major W. E. Riordan has in the press, and will shortly publish with Messrs. Eyre and Spottiswoode, a *Manual for the Army Medical Services*, especially adapted to meet the wants of medical officers of the army, reserve, and volunteers.

MEDICAL TITLES.

One in Doubt asks: Will you kindly answer the following? The present official titles of medical officers never being used in ordinary daily intercourse in society, the ball room, cricket field, etc., how should one address a medical officer so as to make a distinction between seniors and juniors, without undue stiffness or familiarity? Should the title "doctor" be applied to all medical officers, senior and junior alike?

*** Our correspondent propounds a conundrum which we at once "give up." We know of only one set of titles used in the army and society when addressing officers, the purely military, which the medical, in common with all officers, should clearly possess; but even with these the title Lieutenant is never, and that of Captain frequently not used in military circles or the best society. The term "doctor" has unfortunately become indiscriminately applied in society to all medical men, whether holding a degree in medicine or not; this is wrong, and many medical men not holding degrees will not allow themselves to be so addressed.

"THE COCKADE."

T. asks: Is a surgeon of the Royal Naval Artillery Volunteers legally entitled to use the cockade? If so, of what kind should it be?

*** All officers bearing Her Majesty's commission are entitled to use the cockade, but we know of no official regulations on the subject. There is only one service cockade in use, the familiar black one.

REJECTED.

A. M. S. writes: In bald terms Mr. Stanhope announces the rejection of the Camperdown Committee recommendations, and the Medical Staff remains *in statu quo ante*. Allow me to show that the Medical Staff must ultimately gain by this rejection; it will enable hands to be shown. The "military clique" have been obliged to disclose their hostility, not on details of administration, but on the social and personal aspects of the question. Let the medical profession, with no uncertain voice, drag these men before the bar of public opinion.

NETLEY.

COR.—The rules and regulations in force at Netley are those set forth in the section, "General Hospitals," in the Army Medical Regulations. Of course, there are local "Standing Orders" governing details peculiar to the hospital, and these, no doubt, could be had from the Secretary.

MILITARY JUSTICE (?).

WE have read the communication of "Audi Alteram Partem," and in reply think arbitrary decisions by the military authorities on medical questions, of which they can have no professional grasp, are much to be deprecated. Serious and stupid injustice may thus result to individuals. No censure on medical officers in professional matters should certainly be passed, except through the head of the medical department.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, March 17th.

Lunacy Consolidation Bill.—On the motion of the LORD CHANCELLOR, this Bill was read a third time.

Open Spaces Act.—The EARL OF MEATH presented a Bill entitled the Open Spaces Act, 1890, to amend the Metropolitan Open Spaces Acts, 1877 and 1881, and the Open Spaces Act, 1887. The Bill was read a first time.

HOUSE OF COMMONS.—Thursday, March 13th.

Relative Rank.—On going into Committee on the Army Estimates, Dr. FARQUHARSON said: Now that the motions on the paper have been disposed of, I presume I shall be in order in making a few remarks on a different subject. My text will be the present condition of the Army Medical Department. I quite admit that it is a great deal more convenient to raise matters of this sort on the vote relating to them, and I will not deal with any point of detail; but I think it well that the right hon. gentleman (Mr. Stanhope) should know at this early stage of the proceedings the great dissatisfaction and disappointment which have been expressed, not only in the Army Medical Department, but in the medical profession outside, at the decision he has arrived at in regard to the recommendations of the Departmental Committee. I think the right hon. gentleman has missed a very valuable and perhaps unique opportunity of settling these questions once and for all. If he had adopted the report of the Committee he would have entirely settled all the dissatisfaction which has been seething around the Army Medical Department for years—dissatisfaction arising from the unsettled state in which medical officers have been left, and from the condition of perpetual change to which they are subjected. One reason why the right hon. gentleman was unable to adopt the report was the expense it would have involved. He has stated that that expense would be £100,000 a year. I should have thought that a heavy estimate; but, of course, I must admit that on a question of this sort he is better informed than I am. I think it unfortunate that he could not have put an end to the perpetual changes in the duties of the army medical officers, and that he has been unable to see his way to make some return to the old regimental system, with the destruction of which has disappeared so much of the domestic comfort, peace, and happiness of the army medical officers. I think it also a pity that he could not have consented to proposals which would cost nothing. It is a common thing to say that doctors in these days do not want titles. That is all very well for civilians, but in military life there are a great many questions, such as that of the choice of quarters, in which some kind of rank is absolutely necessary. The Army Medical Department, by a very large majority, have said that they want some kind of compound title. I know that a few of the old medical officers do not desire to have such a title, but they have had no experience of the rank-and-file life of the doctor of to-day. I do not know why the Government should be so much afraid of giving some kind of title to the doctor if he wants it; it cannot do them any harm, and it may do him some good, You have something of the kind in the title of Surgeon-General and Surgeon-Major. I do not know why, when the medical officers want these titles, they cannot have them. Two or three countries have already adopted them, notably America, and I think that feeling in France is now tending in that direction. In America the system works uncommonly well, and has placed the Army Medical Department on a firm and satisfactory basis. I am afraid there is still too much jealousy on the part of the combatant branch of the service towards doctors. The hostility of the right hon. gentleman's advisers to the medical department seems to be so great that I believe he has not ventured to place on the table the evidence on which the report of the Committee was based.—Mr. E. STANHOPE: I think it better that I should reserve my remarks until the hon. gentleman raises the question in Committee. I may, however, just refer to one point. He says I have not put the evidence on the table. Anyone can have the evidence, and I believe the hon. gentleman himself has got it; but I did not think it necessary to put the House to the expense of printing it.—Dr. FARQUHARSON: The right hon. gentleman has kindly given me the evidence, but it has been given to me in strict confidence. The information on which my remarks were based was derived from other sources.—Dr. CLARK wished to ask whether the evidence before the Departmental Committee did not justify the medical officers in the army in complaining that they were unjustly used compared with the other officers, inasmuch as their term of foreign service was longer and that their sick leave was insufficient, owing to which the mortality among them was 33 per cent. higher than that of other officers in the service. It was quite time that this unnecessary expense of life among this class of officers should be put an end to. The second point, which he admitted was one of sentiment, was whether the present position of the medical officers in the army was not a degrading one, which involved the deprivation of many privileges which were accorded to other officers. The right hon. gentleman's Committee had reported in favour of the medical officers' claim in this respect, and unless some steps were taken to place the position of the medical officers upon a proper footing, only the riff-raff of the medical profession would enter the service. He hoped that the right hon. gentleman would consider the points which he had indicated.

Soldiers' Rations.—Major RASCH drew attention to the subject of the private soldiers' rations. On joining the service the recruit was informed that his rations would be provided free, but he soon discovered that the free rations were limited to one pound of bread and three-quarters of a pound—which was practically half a pound—of raw meat a day. The work of the recruit was extremely severe, he having to get up at 5 in the morning and perform several hours of duty each day. The consequence was that by the time he had had his breakfast and his dinner all his rations were eaten, and he had to go without food from 2 P.M. until half-past 7 the next morning. The free rations, therefore, were not sufficient to keep a man in health, and the consequence was that the soldier endeavoured to satisfy his craving for food by drinking quantities of indifferent beer, and had to suffer the penalties which drunkenness entailed. The best way to keep a soldier from drink was to feed him well, and that course would be found to be the cheaper in the end. He was the more tempted to bring this matter under the notice of the right hon. gentleman because since he had been in office the right hon. gentleman had done his best to improve the position and to add to the comfort of the private soldier.

Mining Accidents.—The HOME SECRETARY, in reply to Mr. KENYON, said he was unable, within the limits of an answer to a question, to state how far the recommendations of the Royal Commission on Accidents in Mines had been adopted in recent colliery disasters in South Wales. All that the Government could do by the machinery of special rules for particular collieries, by prosecutions for breaches of them, and by suggestions and advice, had been done to avert these disastrous explosions. He would gladly welcome any suggestion that would give greater security to the mining population.

Friday, March 14th.

Royal Commission on Vaccination.—Mr. S. SMITH gave notice that on that day four weeks he would call attention to the report of the Royal Commission on Vaccination, and move a resolution.

Monday, March 17th.

Infectious Diseases (Prevention) Bill.—The House went into Committee on this Bill, which was partially considered when progress was reported.

The Lunacy Laws.—Mr. MATTHEWS, in answer to Mr. W. CORBET, said he was informed by the Lunacy Commissioners that the number of single patients mentioned in the report for 1889 included all the single patients at that date known to the Commissioners. The Commissioners had no power to visit a house suspected of containing a lunatic in illegal charge—that is, of whom charge is taken for payment. When they received the information which led them to suppose that a person was being detained as a lunatic illegally, they caused inquiry to be made through the police by means of an order to visit issued by the Lord Chancellor or otherwise; and if evidence could be obtained establishing an infringement of the law they prosecuted the offender. The Commissioners had also published in the medical and other journals cautions against breaches of the Lunacy Laws.

Navy Estimates.—The vote under the Navy Estimates of £125,200 for the medical establishment and medical stores was agreed to.

The Infant Life Protection Bill.—On the motion for the second reading of this Bill, Mr. J. R. KELLY expressed the opinion that the measure would certainly not have the effect of putting an end to the iniquities of baby farming while it would bear harshly on those the Act was not intended to touch.—Mr. MCLAREN urged the Government to undertake that the objectionable features of the Bill should be removed. He sympathised with the desire to put a stop to the evils of baby farming; but did not desire to see working men prevented from leaving their children with relatives. The Bill would have this effect, for it would prevent anybody from taking charge of a baby unless registered as a baby

farmer. Again, the measure would inflict great hardships on the mothers of illegitimate children.—Sir R. FOWLER suggested the reference of the Bill to a Committee.—Mr. STUART WORTLEY explained that the Bill was aimed solely at malefactors, and the necessity was shown by certain classes of cases made known to the Government at inquests. Women were proved to have received children under certain circumstances, and were careful to evade the Act by never retaining more than one child at a time. They also took with a child a lump sum, and asked no further questions. No doubt there would be room for amendment of the Bill in Committee.—Colonel NOLAN objected to the extension of the Bill to Ireland.—Dr. CLARK doubted the necessity for registering every person who took a child to nurse for a longer period than twenty-four hours. If such a provision were passed there would be a great many criminals in Scotland and other places.—The Bill, after further discussion, was read a second time and referred to a Select Committee.

Tuesday, March 18th.

Public Heal h Act's Amendment Bill.—On the motion of Mr. AKERS-DOUGLAS, the following members were nominated on the Select Committee on the Public Health Acts Amendment Bill: Sir A. Campbell, Dr Farquharson, Mr. H. Fowler, Dr. Fox, Mr. E. Hardcastle, Mr. Hastings, Mr. Kenrick, Mr. Long, Mr. F. Powell, Sir A. Rollit, Sir H. Roscoe, Mr. J. Talbot, Dr. Tanner, Mr. Wharton, Mr. Whitmore, Mr. H. Wilson, and Mr. Woodall.

Education of the Blind and Deaf.—Mr. WOODALL asked the Attorney-General for Ireland when the Irish Bill for the education of the blind and deaf would be in the hands of members.—The ATTORNEY-GENERAL FOR IRELAND said the subject had the careful attention of the Irish Government. He was, however, unable at present to state when it would be possible to propose legislation in the matter.—In reply to a similar question with regard to England and Scotland from Mr. WOODALL, Sir W. HART DYKE said that he hoped that a Bill dealing with the subject would be introduced at no distant date, probably in the House of Lords.

NOTICE OF MOTIONS.

The following notices of motion have been given:—

Mr. H. H. FOWLER.—That the Select Committee on the Public Health Acts Amendment Bill, and the Local Authorities (Further Powers) Bill, have power to consolidate the two Bills into one Bill.

Mr. H. H. FOWLER.—That it be an instruction to the Select Committee on the Infant Life Protection Bill that they have power to insert clauses dealing with the insurance of infants' lives.

OBITUARY.

CHARLES OSWIN, M.R.C.S.

THE deceased gentleman, who died on March 3rd, at the age of 8, was the son of a West Indian merchant. As soon as he left school he was apprenticed to Sir John Chapman, Surgeon Apothecary to the Household of George IV, at Windsor Castle, and finished his pupilage under Mr. Rumsey, of Beaconsfield. He then entered St. George's Hospital as house-pupil of Sir Benjamin Brodie.

In 1824 he became a Member of the Royal College of Surgeons, and a few months later a Licentiate of the Apothecaries' Hall. He started in practice in London, and resided in Harley Street until 1848, when he removed to Little Pix Hall. In 1855 he determined on leaving England, and volunteered for active service in the Crimea. On the outbreak of the American War, he joined the American service as Surgeon, with the rank of Major. He served through the war, having charge of military hospitals, and also of the small-pox hospital at Madison. He had a small farm near Madison, Dane County, Wisconsin State, where he resided for six-teen years, until he lost his wife, when he returned to England. He was an ardent sportsman, and at the age of 72 pursued his favourite sport of riding to hounds, in Berkshire.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

PATHOLOGY.—Professor Roy announces two extra courses in advanced pathology for next term. The first is by the professor, the Pathology of the Heart; the second, by Mr. J. G. Adami (Christ's College), On Bacteriology of Disease; Dr. William Hunter (St. John's College), On the Ptomaines; and Mr. E. H. Hankin (St. John's College), On Biology of Bacteria.

EXAMINATIONS FOR THE ORDINARY DEGREE.—The Senate has confirmed the principle of maintaining the general examination for the ordinary B.A. degree, with the addition to the present subjects of English History and some more advanced mathematics; while the special examinations in Botany, Zoology, Geology, and Logic are to be abolished, their places being taken by certain papers in the Natural and Moral Sciences Triposes. It has also been agreed to establish special examinations in Classics and Mathematics respectively. A proposal to make Greek or Latin alternative subjects in the general examination was rejected.

DEGREES.—The following degrees were confirmed at the congregation held on Thursday, March 13th:—

M.B. and B.C.—C. C. Heywood, M.A., Trinity (thesis, Pneumothorax); H. Low, B.A., Caius (thesis, Typhlitis and Perityphlitis); W. Duigan, B.A., Christ's (thesis, Etiology of Purpura); H. Stanley, B.A., Peterhouse (thesis, Ulcerative Endocarditis).

PHYSIOLOGICAL SOCIETY.—The Physiological Society visited Cambridge on Saturday, March 15th, and, after a meeting of unusual interest at the Pathological Laboratory, dined in the Combination Room of Caius College.

VICTORIA.

THE examinations for the degrees in Medicine and Surgery conferred by Victoria University were commenced last week. There is a large number of candidates for the several examinations.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 6,081 births and 4,401 deaths were registered during the week ending Saturday, March 15th. The annual rate of mortality in these towns, which had risen from 25.1 to 26.6 per 1,000 in the three preceding weeks, declined to 23.6 during the week under notice. The rates in the several towns ranged from 14.4 in Birkenhead, 19.2 in Oldham, 19.4 in Nottingham, and 20.3 in Leicester to 33.4 in Sheffield, 35.9 in Manchester and in Blackburn, and 37.8 in Bolton. In the twenty-seven provincial towns the mean death-rate was 25.9 per 1,000, and exceeded by 5.0 the rate recorded in London, which was only 20.9 per 1,000. The 4,401 deaths registered during the week under notice in the twenty-eight towns included 141 which were referred to whooping cough, 66 to measles, 59 to scarlet fever, 41 to diphtheria, 40 to diarrhœa, 19 to "fever" (principally enteric), and not one to small-pox; in all, 366 deaths resulted from these principal zymotic diseases, against 379 and 372 in the two preceding weeks. These 366 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic rate was 2.2, while it averaged 1.8 per 1,000 in the twenty-seven provincial towns, and ranged from 0.3 in Leicester, 0.4 in Portsmouth and in Nottingham, and 0.5 in Birkenhead to 3.0 in Liverpool and in Blackburn, 3.3 in Sheffield, and 3.6 in Bolton. Measles caused the highest proportional fatality in Derby and Norwich; scarlet fever in Sheffield and Sunderland; and whooping-cough in Plymouth, Liverpool, Bolton, and Bristol. Of the 41 deaths from diphtheria recorded during the week under notice in the twenty-eight towns, 25 occurred in London, 3 in Liverpool, 3 in Sheffield, and 2 in Manchester. No fatal case of small-pox was registered, either in London or in any of the provincial towns; and 8 cases of small-pox, of which 4 were admitted last week, were under treatment in the Metropolitan Asylums Hospitals on Saturday, March 15th. These hospitals contained 1,109 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,139 at the end of the ten preceding weeks; 73 cases were admitted during the week, against 77, 80, and 49 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 5.3 per 1,000, and was below the average.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, March 15th, 831 births and 652 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had declined from 28.3 to 26.7 per 1,000 in the three preceding weeks, further declined to 25 2 during the week under notice, but exceeded by 1.6 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Paisley and Edinburgh, and the highest in Glasgow and Leith. The 652 deaths in these towns during the week under notice included 103 which were referred to the principal zymotic diseases, equal to an annual rate of 4.0 per 1,000, which exceeded by 2.0 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Aberdeen, Glasgow, and Leith. The 286 deaths registered in Glasgow during the week under notice included 18 from whooping-cough, 12 from measles, 4 from "fever," and 3 from diphtheria. In Edinburgh, 10 fatal cases of measles and 3 of diphtheria were recorded; 5 deaths from measles and 3 from "fever" occurred in Leith. The death-rate from diseases of the respiratory organs in these towns was equal to 6.0 per 1,000, against 5.3 in London.

HEALTH OF IRISH TOWNS.

DURING the week ending Saturday, March 8th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 32.8 per 1 000. The lowest rates were recorded in Wexford and Sligo, and the highest in Lurgan and Galway. The death-rate from the principal zymotic diseases averaged 3.5 per 1,000. The 191 deaths in Dublin during the week under notice were equal to an annual death-rate of 28.2 per 1,000 (against 37.8, 35.3, and 30 7 in the three preceding weeks), the rate for the same period being 22.3 in London and 23.1 in Edinburgh. These 191 deaths included 17 which resulted from the principal zymotic diseases (equal to an annual rate of 2.5 per 1,000), of which 8 were referred to whooping-cough, 5 to measles, 2 to "fever," and 2 to diarrhœa.

FIRES IN HOSPITALS.—Since the disaster at the Forest Gate School the St. Pancras Board of Guardians have directed their attention to the means of escape in the event of fire at the parochial infirmary, and have decided on constructing an external iron staircase at each end of the building, at a cost of £815.

HOSPITAL AND DISPENSARY MANAGEMENT.

REORGANISATION OF THE GRIMSBY AND DISTRICT HOSPITAL.

At the quarterly meeting of the Managing Committee of this hospital, held on January 31st, a committee was appointed to report on measures to bring the expenditure of the hospital within its income. This report was recently presented to an adjourned meeting. The hospital was originally founded as an accident and emergency hospital, but has gradually outgrown the objects of its founders; if the statement that the annual cost for each bed has been in recent years £100 can be accepted as absolutely correct, there is no doubt that the committee were fully justified in describing its management as extravagant. The committee took the advice of three matrons of other hospitals (Leeds Infirmary, Beckett Hospital, Barnsley, and Stamford Infirmary), and recommended that the nursing and domestic staff should be considerably reduced, and that the office of dispenser should be abolished. The last recommendation is undoubtedly a retrograde step, but the alterations in the nursing department seem to be in the right direction. The average number of beds occupied in the hospital is 21.5, and the proposed nursing staff, which is to consist of a matron, a day nurse, a night nurse, and two probationers, appears to be sufficient, provided that the two nurses are fully trained, and the arrangements of the wards are such as to permit one person to exercise a general supervision. The out-patient department, as usual, presents special difficulties; hitherto all out-patients have in theory been required to contribute 1s. a month, but in practice this fee has hardly ever been paid. It is now proposed to make "a fixed charge of 4d. for the first and 2d. for each succeeding bottle of medicine." Experience has shown in the past, and will doubtless show once more in Grimsby, if this unfortunate proposal is carried out, that the plan of making charges of this nature is objectionable in many respects; it bears hardly on the really necessitous poor, and it has an injurious effect on the interests of the medical practitioners in the district. The committee do not appear to have taken advice upon this point, otherwise there can be little doubt they would have arrived at a different opinion. The recommendations of the committee have, however, been accepted as a whole, and the resignation of the house-surgeon and matron have been tendered and accepted; the nurses and servants also are to be requested to resign, so that an entirely new staff may be obtained in order that the new scheme of internal administration may be started with a clear field.

HOSPITAL ACCOUNTS.

A large meeting, convened by the Council of the Charity Organisation Society to consider the report of a special committee of the Society which had been appointed to discuss the question of the preparation and audit of the accounts of charitable institutions, was held at the Hotel Victoria, Northumberland Avenue. Mr. J. Biddulph Martin presided. The report stated that, after an examination of the existing modes of the presentation of accounts by charitable institutions, the Committee had become impressed with the incomplete way in which many such accounts were presented, the divergent methods adopted by institutions of similar functions, and the desirability of reform. The Committee presented a long series of sample accounts, in which the different institutions were divided into three groups—small charitable institutions without property or trading or indebtedness at the end of the period; charitable institutions having property but not carrying on trading operations; and charitable institutions having property and carrying on trading or manufacturing operations for the purpose of earning money or supplying the wants of the institution. As to legal provision for the audit of the accounts of charitable institutions, the Committee drew attention to the distinction between endowed charities and so-called voluntary charities, and remarked that the former were possessed of land or other property producing annual income, were not dependent for continued existence upon securing the continuous favour of subscribers, and could not properly apply to current purposes any part of the capital or *corpus* of their endowment. They were, moreover, under the jurisdiction and subject to the supervision of the Charity Commissioners.

On the other hand, the characteristic of voluntary charities was that they lived, so to speak, from hand to mouth; that their income was supplied, not from interest, dividends, or rents, but from subscriptions and donations which might be forthcoming one year and be withheld the next, and that if they carried over a surplus from one year to the account of the next they were at liberty, as occasion arose, to spend that surplus for the ordinary or extraordinary purposes of their institution, even if it had been placed in a state of investment. The Charity Commissioners had power at present to compel endowed charities to send in yearly copies of their accounts to the office in Whitehall. They had no power to insist on these accounts being audited; their staff was not sufficient to enable them to undertake anything more than a cursory examination of the accounts; and if such examination should disclose irregularities or malfeasances they had no readily effective or summary means at their disposal for compelling restitution, or in any other way for seeing that justice was done. The Committee expressed the opinion that it was desirable that in the case of endowed charities further legislation should take place, so that where they thought it advisable the Commissioners should have power to require that the accounts rendered to them should be audited and certified as correct by a chartered accountant or some other competent and independent auditor.

Mr. Bond moved the adoption of the report, which was seconded by Mr. Knox. Mr. Michelli, the secretary of the Seamen's Dreadnought Hospital, Greenwich, and Mr. Ryan, the secretary of the St. Mary's Hospital, Paddington, criticised the scheme, and maintained that in many details the general hospitals had long ago adopted the proposals. On behalf of the special hospitals, Mr. Sharp, of the Throat Hospital, Golden Square, made a similar assertion. Mr. Bowen, Mr. Gerald Van de Linde, Sir Orfeur Cavenagh, and Mr. Martin joined in the further discussion which ensued, and the report was finally unanimously adopted.

It has been decided by the South Shields Guardians to add a new wing to the workhouse hospital, providing accommodation for about sixty patients, at a cost of £1,600.

A Thank Offering.—Lady Howard de Walden has expressed her intention of endowing, at a cost of £10,000 or £12,000, a ward at the West Kent Hospital at Maidstone as a thank offering for her recent recovery from a serious illness.

A Convalescent Home for Children has been opened by Lady Hillingdon at The Wilderness, Lord Hillingdon's place in Kent. It is intended for patients from London. A sister from one of the metropolitan hospitals has been appointed matron.

Several of the London hospitals were last week visited by members of the Royal Family. On Thursday H.R.H. Princess Beatrice visited the General Lying-in Hospital, York Road, Lambeth, and the Duke and Duchess of Fife paid a visit to Middlesex Hospital. On Saturday H.R.H. Princess of Wales, accompanied by Princess Victoria and Prince George, visited the Royal Hospital for Children and Women, and distributed flowers to the patients.

MEDICAL NEWS.

A leper asylum is about to be established at Gatomba, in Japan, where leprosy is common.

According to the *Times of Cyprus*, nearly every village in Cyprus is suffering from an epidemic of influenza, which in many cases has taken a serious form.

Dr. Debove has been chosen to succeed the late Professor Damaschino in the Chair of Internal Pathology in the Paris Faculty of Medicine.

The outbreak of influenza among the labourers of Kent during the last four or five weeks has cost the Labourers' Union in sick pay at the rate of £600 a week.

Preachers of temperance seem to be badly needed at Odessa. In that city, which contains 240,000 inhabitants, there were over 300 deaths from alcoholic poisoning last year.

The "Pharmacie Centrale," of France, has established a bacteriological laboratory for the study of micro-organisms irrespectively of their relation to diseases.

The University of Basle, the only one in Switzerland which still refused to admit women, has now, in response to an influentially-signed petition, thrown open its doors to them.

A COMMITTEE has been formed in Paris, under the presidency of Professor Fournier, for the purpose of erecting a monument to the late Dr. Philippe Ricord.

THE Swiss *Pharmacopœia* is among those that are now undergoing revision. The new edition will be published in the three vernacular languages of Switzerland—German, French and Italian.

WE regret to announce the death of Mr. C. Stewart Pollock, student at St. George's Hospital, second son of Mr. Baron Pollock, and nephew of Dr. Arthur Julius Pollock.

THE London Temperance Hospital has received the sum of £5,000 on account of its share of residue under the trust deed executed by the late Mr. George Sturge, of Sydenham Hill.

THE *Medical Record* of New York states that the case of the so-called Medical College of Rutland has come before the Supreme Court, and that "the legality of diploma-selling in Vermont will now be settled."

THE Artisans' Dwellings Company have, we understand, made an offer to the Government for the whole of the prison site at Millbank for the purpose of erecting workmen's dwellings upon it.

LOVERS of Italian wines may be interested to hear that a Viticultural Congress will be held at Rome at the end of this month. The means of destroying the *peronospera viticola* and some other parasites which infest the vine will form the chief subject of discussion.

THE Board of Trade have received a copy of a despatch, dated February 27th, from Her Majesty's Consul at Madeira, stating that as small-pox, which had recently broken out in the island, had now resumed its normal sporadic condition, clean bills of health will be issued from the Consulate on and after March 3rd.

BEQUEST.—The Board of Management of the Blackburn Infirmary have received from the executors of the late Mr. James Pilkington a letter stating their intention to hand over £1,000 to the infirmary, which it was the deceased gentleman's intention to have given during his life, though no mention of it was made in his will.

GLASGOW EAR HOSPITAL.—As the result of the examination in connection with Dr. Barr's winter course of lectures and demonstrations at this hospital the following gentlemen have taken the first positions, and are entitled to the prizes awarded by the directors: Mr. James A. Scott, Australia, and Mr. Arthur W. Miller, Glasgow.

YELLOW FEVER IN BRAZIL.—A telegram received from Rio de Janeiro states that an epidemic of yellow fever has broken out in the town of Campinas, in the province of San Paulo. Hitherto it has not been of a severe character, and it is believed that it will remain localised. All the necessary precautionary and hygienic measures have been taken.

PRESENTATION.—At the conclusion of his lectures on "First Aid and Nursing," in connection with the St. John Ambulance Association, the ladies at Stoke Coventry presented Mr. W. Richardson Rice, B.A., M.D., with a very handsome marble timepiece, as an acknowledgment of his services as lecturer. About 75 ladies attended the two courses of lectures.

A REPORT recently presented to the General Council of the Faculties of the University of Paris states that during the year 1889 the number of students was 10,355. The library of the Faculty of Medicine contains 250,000 volumes, which, however, as can be gathered from complaints in a French contemporary, are somewhat imperfectly catalogued.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of the Medico-Psychological Association of Great Britain and Ireland was held last week at Owens College, and was presided over by Dr. Hayes-Newington, President of the Association. Professor Ross gave an address on the Psychical Disorders of Peripheral Neuritis. The members of the Association afterwards dined together.

THE RUSSIAN CHOLERA COMMISSION.—According to the *Russkaia Meditzïna*, No. 7, 1890, p. 110, a special commission, appointed by the Russian Government to draw up a code of prophylactic measures against cholera, has just finished its labours and presented a memorandum to the Imperial Medical Council, in which particular attention is drawn to the Transcaucasian Railway as a principal and natural way for the inroad of cholera from the Persian frontier.

TYPHOID FEVER AT JOHANNESBURG.—The outbreak of typhoid fever at Johannesburg during the month of February seems to have been due to the impurity of the water supply. Dr. Matthews, who recommended that the Sanitary Board of the town should take the water supply into their own hands and bring water from the Vaal, a distance of thirty miles, declares that in every 75,000 gallons of the present supply there is a ton of solid matter, to which fact he attributed the abnormally high death-rate from typhoid fever.

THE CATHOLIC TOTAL ABSTINENCE LEAGUE.—The Council of the Catholic Total Abstinence League of the Cross, of which Cardinal Manning is the President, are forming a "medical section" for the promotion of the objects of the League; and all Catholic medical practitioners will be asked to assist in the spread of the principles of total abstinence. It is stated that the Cardinal-President of the League will invite the co-operation of Catholic doctors, both in the metropolis and the provinces, in order that the "medical section" of the organisation may be both strong and influential.

THE forty-third anniversary festival of the Earlswood Asylum was held recently, under the presidency of Mr. Alfred L. Cohen. It was stated that 20 per cent. of the inmates left the institution, and were earning their own living. Occupation was one of the chief means for the development of the defective intellects of the patients, and out of 602 patients, 288 did work other than in school. Cases to the number of 150 were applying for admission, and funds were much needed. Subscriptions to the amount of £6,536 were announced in the course of the meeting, of which £1,000 was from an anonymous donor.

THE FLOATING POPULATION.—So much has been said of the insanitary conditions under which the nomad population and those who inhabit canal boats and barges exist that it is satisfactory to hear from the report of Dr. Collingridge, the medical officer of health for the Port of London, that 624 boats inspected by him, plying on the River Lea and the Regent's Canal, though registered for the accommodation of about 2,300 individuals, were actually occupied by only about 1,500, and the instances were far from few where males were the only occupants.

DEFECTIVE PECTORALIS MAJOR.—Dr. Stintzing, of Berlin, describes a series of congenital and acquired cases of this condition in the *Deutsches Archiv f. klin. Medicin.* The congenital form is generally unilateral; the acquired form, from progressive muscular atrophy or other diseases of the nervous system, appear to be always bilateral. In the congenital variety an atrophic condition of the neighbouring skin and fat, involving the nipple, is present. Dr. Stintzing considers that men with defective pectoralis major are unfit for military service. They are, indeed, often capable of performing work which demands strength of arm and shoulder, but the deformity makes them clumsy and unfit for more delicate movements necessary for the use of guns and sabres.

IODOL.—Dr. David Cerna, in a short paper in the *Medical News*, gives his experience of a trial of this somewhat new remedy. He has found it to give most satisfactory results in the local treatment of ulcers, and also internally in cases of syphilis, and in one instance in diabetes mellitus. It owes its properties to the iodine it contains, and seems to act much in the same way as iodoform, but it presents an immense advantage over this drug in that it has no odour. Locally he employs it either in powder solution or ointment; solutions can be made in alcohol (1 part in 3) or in ether (1 part in 4); for the ointment he recommends vaseline (1 in 5). Internally he has given as much as 20 grains in a day, but some writers give much larger doses. Iodol has been recommended for such various disorders as eye affections, adenitis, blenorrhagia, vaginal catarrh, tubercular laryngitis, and in most stages of syphilitic and scrofulous affections.

TREATMENT OF INEBRIETY IN ENGLAND.—The Dalrymple Home for the Treatment of Inebriety, at Rickmansworth, has now admitted upwards of two hundred patients. Of these, 183 have been discharged. Though no information has been obtained of the after-career of 15 per cent. of the discharged, every effort has been made to follow up the subsequent history. The outcome has been most promising, more than one half having done well, in

addition to those who have improved. This substantial success is the more marked that the average duration of the inebriate habit before admission was eight and a half years, in some cases that period having extended over twenty years. The records still confirm the preceding experience that the greatest liability to the disease of inebriety falls between 30 and 40 years of age, fully one-half of the total number having entered between these terms. The married and unmarried seem to be affected in nearly equal proportion. The medical profession figure largely, some 7½ per cent. of the patients having been medical practitioners. This preponderance, however, may have arisen from the profession being more alive to the presence of a diseased condition in such cases, and to the need of therapeutic treatment under conditions favourable to cure. Law and divinity are not far behind. Opium, morphine, and chloral were responsible for 7 per cent., while very nearly that proportion were subjects of beer and wine inebriety. The report of the work done at this institution ought to be an encouragement to all who seek to treat this disease on sound principles.

MEDICAL VACANCIES.

The following Vacancies are announced:

ALNWICK INFIRMARY.—House-Surgeon (unmarried). Salary, £120 per annum, with furnished apartments, attendance, coals, and gas, but without board. Applications up to March 22nd to the Honorary Secretary.

BETHLEM HOSPITAL.—Two Resident Clinical Assistants; doubly qualified. Residence in the hospital for term not exceeding six months, with apartments, rations, and attendance. Applications to John Baggally, Esq., Bridewell Hospital, Blackfriars, by April 12th.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.– Dispenser (minor exam.); non-resident. Commencing salary, £70 per annum. Applications (on forms to be obtained) to A. C. Davis by March 31st.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist; must be registered and not engaged in practice. Salary, 100 guineas per annum. Applications by April 16th to the Secretary, T. Storrar-Smith.

COUNTY COUNCIL OF LANCASTER.—Medical Officer of Health for the County Palatine of Lancaster. Salary, £800 per annum, with travelling expenses. Applications to the Clerk, Fred. C. Hulton, County Offices, Preston, before March 22nd.

DURNESS, Sutherlandshire.—Medical Officer. Salary, £150 (with practice, population 1,000) and free house. Applications to the Inspector of Poor up to April 2nd.

GENERAL HOSPITAL, Birmingham. — Assistant House-Surgeon; surgical qualification. No salary; board, lodging, and washing provided. Applications to the House-Governor, Dr. J. D. M. Coghill, by March 29th.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Assistant Physician. Applications to the Secretary by April 9th.

GENERAL INFIRMARY, Leeds.—Resident Surgical Officer. Applications, etc., to be sent in to the Secretary of the Faculty by March 31st.

GLAMORGAN AND MONMOUTHSHIRE INFIRMARY, Cardiff.—Assistant House-Surgeon. Board, lodging, and washing provided. Applications before April 5th to Geo. T. Coleman, Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—House-Physicians. Applications before April 9th.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square, W.—Resident Medical Officer; must possess the qualification of the R.C.S., and be familiar with the use of the laryngoscope. Salary, £50 a year, with board and rooms Applications to the Secretary by March 31st.

INFIRMARY FOR CHILDREN, Liverpool,—Assistant House-Surgeon. Appointment for six months. Board and lodging; no salary. Applications to C. W. Carver, Honorary Secretary, by March 24th.

KENMARE UNION (Tuosist Dispensary).—Medical Officer Salary, £135 per annum, and fees. Applications to Mr. John Lyne, Honorary Secretary, Letterfineen. Election on March 27th.

KENSINGTON DISPENSARY.—Honorary Medical Officer. Applications to the Honorary Secretary, F. Leach, Esq., 7, Stanford Road, Kensington Court, by March 28th.

LEICESTER INFIRMARY.—Honorary Surgeon Dentist; must be a Licentiate in Dentistry of one of the Royal Colleges of Surgeons of London, Dublin, or Edinburgh. Applications, etc., to the Secretary, 24, Friar Lane, Leicester, by March 31st. Election on April 9th.

METROPOLITAN ASYLUMS BOARD.—Clinical Assistant (registered medical man) for the South-Western Fever Hospital, Ladnor Road, Stockwell, S.W. Residence and rations. Applications to the Medical Superintendent at the Hospital.

PARISH OF BRIGHTON.—Medical Officer for the Northern District. Salary, £125 per annum, inclusive of all charges, except operations and midwifery cases. Applications to the Clerk, Parochial Offices, Church Street, Brighton, by March 25th.

PAROCHIAL BOARD OF FETTERCAIRY.—Medical Officer. Salary, per annum, including medicines. Applications to the Clerk by March 22nd.

RADCLIFFE INFIRMARY, Oxford.—House-Physician; doubly qualified. Salary, £80 per annum, with board, lodging, and washing. Applications by April 5th to the Secretary.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, by June 1st.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.—Superintendent of the Research Laboratory. Salary, £200 per annum. Applications to the Secretary of the College by March 31st. Further particulars on application to Dr. Tuke, Curator, 7, Lauriston Lane, Edinburgh.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo Bridge Road. Registrar and Chloroformist, age 25 to 30. Honorarium of 20 guineas. Applications by March 25th to the Secretary.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Surgeon; Fellow of the Royal College of Surgeons. Applications to the Secretary, T. Beattie Campbell, by April 9th.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Assistant Surgeon; Fellow of the Royal College of Surgeons. Applications to the Secretary, T. Beattie-Campbell, by April 9th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Physician.—Particulars of St. Leger Bunnett, Secretary, to whom applications should be addressed by March 22nd.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Surgeon. Must be Fellow or Member of the Royal College of Surgeons, England. Applications to St. Leger Bunnett, Secretary, by March 22nd.

ST. PETER'S HOSPITAL FOR STONE, Henrietta Street, Covent Garden.—House-Surgeon. Appointment for six months. Honorarium, 25 guineas, board, lodging, and washing. Must be M.R.C.S., and held position of House-Surgeon. Applications to the Secretary by March 22nd.

SOUTH DEVON AND CORNWALL HOSPITAL, Plymouth.—Assistant House-Surgeon; double qualification. Appointment for six months. Residence, board, and washing. Applications to the House-Surgeon by March 29th.

TRINIDAD.—Government Analyst and Professor of Chemistry. Salary, £600 per annum, and private practice allowed. Special knowledge of toxicology and agricultural chemistry. Applications to Private Secretary, Colonial Office, Downing Street, S.W., by March 24th.

UNIVERSITY OF LONDON.—One Examiner in Surgery. Salary, £150 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

UNIVERSITY OF LONDON.—One Examiner in Obstetric Medicine. Salary, £75 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

UNIVERSITY OF LONDON.—One Examiner in Materia Medica and Pharmaceutical Chemistry. Salary, £100 per annum. Applications to the Registrar, Arthur Milman, M.A., by March 25th.

WANDSWORTH AND CLAPHAM UNION INFIRMARY, New Wandsworth.—Junior Assistant Medical Officer. Appointment for six months. Board, lodging, and washing, and honorarium of £10. Apply to Medical Superintendent.

WEST LONDON HOSPITAL.—Surgeon Dentist, with a medical or surgical qualification. Applications to R. J. Gilbert, Secretary Superintendent, by March 31st. Election April 14th.

MEDICAL APPOINTMENTS.

ABBOTT, Charles Edward, L.K.Q.C.P.I., M.R.C.S., reappointed Medical Officer of Health for the Braintree Urban and Rural Sanitary Districts for one year.

BATE, R. F., M.R.C.S., L.R.C.P., appointed House-Physician to the Charing Cross Hospital.

BOASE, W. G., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant House-Surgeon to the Rotherham Hospital, *vice* Martin J. Richardson, M.B.

BROSTER, A. E., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Wirksworth Local Board.

BURMAN, W. Maxwell, L.R.C.P., M.R.C.S., reappointed Medical Officer for the Wath District of the Rotherham Union.

CHEESEWRIGHT, J. F., L.R.C.P.Edin., reappointed Medical Officer of Health to the Greasbrough Local Board.

CORKERY, Dr., reappointed Medical Officer of Health to the Alfreton District of the Belper Union.

CLARK, M., M.B., appointed Medical Officer to the Belford Union.

CLEGG, Walter, M.R.C.S., L.S.A., reappoint Medical Officer of Health to the Boston Rural and Urban Sanitary Districts and Port.

DEAN, H. P., F.R.C.S.Eng., appointed Assistant Demonstrator of Anatomy to the London Hospital Medical College, *vice* Mr. Collier.

DEANE, S. Robert, L.R.C.S., L.A.H.Dub., appointed Medical Officer for the 8th District of the Lincoln Union.

DE'ATH, George Hanby, L.R.C.P., M.R.C.S., reappointed Medical Officer of Health of the Buckingham Rural and Urban Sanitary Districts.

DYKE, Thomas Jones, F.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health of the Merthyr-Tydvil Urban and Rural Sanitary Districts.

FAUSSET, Herbert J., M.D., M.Ch.Dub., reappointed Medical Officer of Health to the Tamworth Rural Sanitary District.

FISHER, J. B., M.B., C.M., reappointed Medical Officer of Health to the Whitehaven Union Rural Sanitary Authority.

FLUX, George Belben, M.R.C.S., L.R.C.P., L.S.A., M.D., appointed Medical Officer and Public Vaccinator to the Highworth and Swindon Union.

FORD, Joseph, M.R.C.S., reappointed Medical Officer of Health to the Wedmore District of the Axbridge Union.

GARMAN, Walter C., M.B., C.M., appointed Medical Officer and Public Vaccinator for No. 1 Wednesbury District of the West Bromwich Union, *vice* W. C. Garman, M.R.C.S., resigned.

GODSON, A., M.A., M.B., reappointed Medical Officer of Health to the Cheadle and Gatley Local Board.

HALLIBURTON, W. D., M.D., B.Sc., M.R.C.P., appointed Professor of Physiology, King's College.

HARRATT, Henry, M.R.C.S., L.R.C.P., appointed Medical Officer to the 8th District of the Battle Union, and Medical Officer and Public Vaccinator to the 2nd District of the Rye Union, *vice* Charles Harris, M.D.St.And., deceased.

HASLETT, Robert Woods, B.A., M.B., M.Ch.Roy.Univ.Irel., appointed Assistant Medical Officer to the Parish of Liverpool, *vice* J. J. Hanly, resigned.

HODGSON, Isaac C., M.B., C.M., reappointed Medical Officer to the Workington Port Sanitary Authority.

HOOPER, M., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer and Public Vaccinator to the Codnor Park District of the Basford Union.

JAY, Frederick Fitzherbert, M.D.St.And., L.R.C.P.Lond., M.R.C.S.Eng., appointed Resident Physician to the West of England Hydropathic Establishment, Limpley Stoke, Bath, *vice* James Atkinson, M.D., deceased.

LLOYD, K. M., M.R.C.S., reappointed Medical Officer of Health to the Holywell Urban Sanitary Authority.

MITCHELL, Robert, M.A., M.B., C.M., appointed Medical Officer to the new Relief Hebburn District, South Shields Union.

ORMSBY, Lambert H., A.B., T.C.D., M.D., Surgeon to the Meath Hospital, appointed by the Lord Lieutenant Governor of the Westmoreland Lock Hospital, Dublin, *vice* Dr. Hatchell, deceased.

POPE, Edward, M.R.C.S., L.S.A., reappointed Medical Officer for the Oldbury District of Berkhamsted Union.

POWER, Dr. Daniel, appointed Medical Officer to the Kildare Dispensary District of the Naas Union, *vice* Dr. Watson, deceased.

PRIDIE, J. F., M.B., C.M., appointed House-Surgeon to the Southport Infirmary and Local Dispensary, *vice* Dr. J. J. Weaver.

SERS. Robert Hanslip, M.R.C.S., L.S.A., reappointed Medical Officer and Public Vaccinator to the Calverton District of the Basford Union.

SKINNER, R. V., M.R.C.S., L.S.A., reappointed Medical Officer to the 3rd District of the Rye Union.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Percy Kidd: Subacute Indurative Pneumonia. Mr. William Adams: Further Observations on the Treatment of Dupuytren's Finger Contraction.

TUESDAY.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. J. Hughlings Jackson: The Lumleian Lectures on Convulsive Seizures. Lecture II.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Sir William Roberts: On the History of Uric Acid in the Urine, with reference to the formation of Uric Acid Concretions and Deposits.

WEDNESDAY.

HUNTERIAN SOCIETY, 8 P.M.—Dr. Horrocks: Observations on Puerperal Fever, with cases.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. J. Hughlings Jackson: The Lumleian Lectures on Convulsive Seizures. Lecture III.

BRITISH GYNÆCOLOGICAL SOCIETY, 20, Hanover Square, W., 8.30 P.M.—Specimens by Drs. R. T. Smith, Bantock, Fenton, etc. Dr. W. H. Fenton: A Case of Myxoma of the Uterus.

FRIDAY.

CLINICAL SOCIETY, 8.30 P.M.—Dr. Claude Wilson: Some cases showing Hereditary Enlargement of Spleen. Mr. H. W. Allingham: Obscure case of Acute Abdominal Obstruction in a Boy, aged 10. Laparotomy, removal of Suppurating Appendix Vermiformis: Recovery. Dr. Myrtle: A case of Double Ovariotomy, 1882; Removal of Left Kidney with portion of Mesentery, 1889, followed by Abscesses finding vent through Left Lung; Recovery. Dr. Finlay: A case of Rheumatic Pericarditis with Delirium.

BIRTHS, MARRIAGES, AND DEATHS.

e charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTHS.

LMES.—On March 19th, the wife of Dr. W. Reid Holmes, of 3, Clifford Street, W., of a daughter.

CNAMARA.—On February 15th, at 8, Conduit Street, W., the wife of Hugh Macnamara, surgeon, R.N., H.M.S. *Imogene*, of a son.

RGAN.—On March 6th, at The Larches, Black Torrington, North Devon, the wife of A. Lucas Morgan, of a daughter.

CDONALD.—On March 17th, at the High College, Kirkoswald, Cumberland, the wife of Alexander Macdonald, L.R.C.P., L.R.C.S.Edin., of a daughter.

DEATH.

EN.—On March 18th, at Birkenhead, Essex Bowen, M.D., F.R.C.S., in his 61st year.

LER.—On March 13th, at Eye, Suffolk, in his 72nd year, W. W. Miller, M.D., J.P. for Suffolk.

LIS.—In London, on March 3rd, of thrombosis following influenza, Randolph Owen Willis, M.B., aged 24, youngest son of George Willis, M.D., of Monmouth.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W, 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W, 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2 30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C , London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

ENTERING MEDICAL SCHOOL IN SUMMER SESSION.

FRATER writes: 1. What are the relative advantages and disadvantages of entering a hospital medical school in May? In other words, the time-honoured custom was entry in October—is it now considered to be more beneficial to enter in May? 2. Can a man who has lost the use of the left hand obtain a double qualification?

*** 1. At the beginning of the winter session the student should set to work at osteology and dissection as soon as possible. If he has only just entered his school of medicine, the novelty of hospital life will probably interfere with his work for a few weeks. If, on the other hand, he happens to have joined his school in May, he will be quite used to his hospital in October, and will have already found out how to set to work at anatomy. The Conjoint Board also favour the commencement of studentship in May, although, on this point, it is best to consult the Dean or Secretary of a medical school. 2. An infirmity of that kind might not prevent qualification, but it would certainly disqualify a man for the active practice of the medical profession.

THE D. P. H.

A COUNTRY MEMBER would be glad to know the best way of taking a course of instruction to enable him to obtain a sanitary science certificate; two days a week being only at his disposal for that purpose.

*** Courses of instruction in hygiene are given in laboratories at University College, at St. Mary's Hospital, and at some of the other medical schools. The course usually includes instruction in methods of analysis of water, air, and foods, and practical demonstrations are given at the Parkes Museum on the various sanitary appliances. The fee for a month's course at University College is £5 5s., but arrangements can be made by which the time is extended if daily attendance is impossible. For further information consult the Secretaries of the Colleges.

ANSWERS.

GREEK ATHLETICS.

E. S. K. probably refers to Mr. R. L. Nettleship's essay on "Plato" in the volume called *Hellenica*. There is something in that essay about Plato's views on gymnastics as an educational instrument; but any good dictionary of antiquity would give information under the article Gymnastics.

NOTES, LETTERS, ETC.

THE MEDICAL PROFESSION AND PREVENTION OF DISEASE.

DR. F. P. ATKINSON (Surbiton) writes: I and most medical men will agree with you that among the members of our profession are to be found some of the strongest advocates of sanitary reform, but this statement does not necessarily carry with it the admission that officers of public health engaged in private practice, and those altogether free from its responsibilities, are equally energetic in seeing to the correction of sanitary defects. If a medical man engaged in private practice has an income sufficient for his support independent of his profession, then it is not at all unlikely he will be found a thoroughly determined sanitary reformer; but if he be altogether dependent upon practice, then there is, to say the least of it, an inducement for him to allow sanitary defects to remain uncorrected, especially where the person implicated happens to be one of his patients. It is all very well to say a man ought not to undertake any duty unless he means to carry it out faithfully, but, unfortunately, personal interest cannot help exerting its influence sooner or later. The necessity of living is paramount, and hence it often happens that the interest of the wealthy landlord is more studied than the health of the unfortunate tenant.

I hope you will allow the matter to be discussed by the profession generally, as it concerns more or less every individual member of it.

COMMUNICATIONS, LETTERS, etc., have been received from:
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THE LUMLEIAN LECTURES ON CONVULSIVE SEIZURES.

Delivered before the Royal College of Physicians of London.

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LECTURE I.

Definition of Terms.—Classification of Convulsions.—The Three Evolutionary Levels in the Nervous System.—Middle Level Fits. "Epileptiform."—Highest Level Fits: "Genuine Epilepsy."—Lower Level Fits: "Ponto-bulbar."—Varieties of Lowest Level Fits.—Abnormal Affections of Consciousness in different kinds of Fits.—The Discharging Lesion in Epileptic and Epileptiform Fits.—The Interconnecting Fibres.—The Kinetic Route.—Representation of Movements.—The Right Motor Region.—The Cerebellar System.

THERE are two pleasant preliminaries, the sole parts of my address I can enter upon with a light heart. The first is most earnestly to thank you, Mr. President, for the honour you conferred on me in asking me to deliver the Lumleian Lectures. There is one thing for which I cannot blame myself. I have, as was my duty, taken all the pains I could over the task you were so good as to assign to me. The second preliminary is to mention my great obligations to Dr. Ferrier. There are very few men of the day by whom both the art and science of medicine have been so greatly helped. It is only since his remarkable researches that medical men in this country have studied convulsions in a thoroughly realistic way. Without further particular acknowledgments I make the general one, that all over the field of neurology I am profoundly indebted to Ferrier.

Convulsions and other paroxysms are owing to (1) sudden, (2) excessive, and (3) temporary nervous discharges.[1] The term "nervous discharge" (used before me by Spencer) has been much objected to; when I say that it is used synonymously with "liberation of energy by nervous elements," it will mislead no one. There are nervous discharges in all the operations of health. I should use the term "explosive discharge" for the abnormal liberation of energy in convulsions were it not that physiologists speak of "explosive decomposition of the muscle's substance" which gives rise to contraction of the muscle in health; and thus it may be that normal nervous discharges, those in the operations of healthy people, are "explosive." So then I use the word "excessive" for the discharges which have the three characters mentioned, the words "sudden" and "temporary," or the word "paroxysmal," being understood; when dealing with convulsions, it will not be always necessary to add the term "excessive." I shall, however, occasionally use "explosive" for states of cells of a discharging lesion, qualifying it by the word "highly," and sometimes the term "high instability." I do not speak of "disorderly discharges," for if in some ways the expression be correct, it hides from us the fact that the most brutal-looking convulsion is only the sign of a departure by a vast excess and by a caricature from normal nervous discharges.

I have always assumed, and shall continue to suppose, that convulsion results from excessive discharges of nerve cells, meaning, of course, liberation of energy during rapid decomposition (katabolism) of some matter in, or of part of, those cells. I shall frequently speak of cells concerned with excessive (primary) discharges as constituting a "discharging lesion," and sometimes of them as making up a "physiological fulminate," or occasionally, using Horsley's term, of their being together an "epileptogenous locus." Some material of the cells which make up the discharging lesion has, by morbid nutrition, become of very high tension and of most unstable equilibrium (briefly of high instability), and occasionally discharges excessively. I do not assert that excessive (primary) discharges producing convulsions always depend on a persistent state of high instability of cells; to give but one example to the contrary, excessive discharges beginning in a healthy rabbit's respiratory centres are induced by rapidly bleeding the animal to death, or by quickly asphyxiating it.

The discharging lesion, though I speak of it as persistent, meaning that it is of the same locality throughout each case, yet varies in its condition.[2] The discharges are occasional. After their excessive discharge the cells are no doubt far below the degree of stability (properly comparatively slight instability) of normal cells; they will reattain a highly abnormal degree of instability—again become highly explosive—by further morbid nutrition. These qualifying remarks should be borne in mind, and especially when the discharging lesion is spoken of as a fulminate—it is occasionally fulminant.

I make three classes or kinds of convulsions. Convulsions, or I will say, fits, differ in kind, according as centres discharged differ in rank; or, speaking more definitely, as the centres first engaged in paroxysms make up different evolutionary levels of the central nervous system. I have several times suggested that there are three levels of the cerebral (central) nervous system; each is sensori-motor, and each represents impressions and movements of all parts of the body. I speak briefly of what I suppose to be the hierarchy of centres of the nervous system as a basis for the classification of fits.

(1) The lowest or first level is roughly and incompletely defined as consisting of cord, medulla, and pons,[3] and more completely, and yet still roughly, as being that sensori-motor division of the central nervous system, to and from which pass nerves (all cranial and all spinal nerves) for every part of the body. This level, speaking of its motor elements, represents simplest movements of all parts of the body by a series of lowest motor centres (lowest motor centre being a proper name for a centre of the lowest level) from those in the aqueduct of Sylvius for simplest movements of the ocular muscles to those of the sacral cord for simplest movements of the muscles of the perineum. This universally representing level is cerebro-cerebellar; it is at once the lowest level of the cerebral system and of the cerebellar system. For the present I ignore the higher levels of the cerebellar system, and go on to speak of two higher levels of the cerebral system. These levels are, as the lowest level is, sensori-motor, but I find it possible to illustrate by motor centres only, not, however, believing that these so-called "motor centres" are purely motor. (2) The middle or second level (its motor province) of the cerebral system is composed of centres of the Rolandic region (so-called "motor region" of the cerebral cortex), and, possibly, of the ganglia of the corpus striatum also. It represents complex movements of all parts of the body from eyes to perineum (re-represents). (3). The highest or third level (its motor province) of the cerebral system is made up of centres of the prefrontal lobes (highest motor centres, motor division of the "organ of mind"). It represents most complex movements of all parts of the body from eyes to perineum (re-re-represents). The highest centres (sensory and motor divisions of the highest level)—the "organ of mind," or anatomical substrata of consciousness—are the acme of the evolution; they have the same kind of constitution as lower centres; they are sensori-motor as certainly as the lumbar enlargement is. (Of course each level is bilateral).

That the lowest level is a very distinct division of the central nervous system will, I think, be granted. The separation of the frontal lobe into middle motor centres ("motor region"), making up the motor province of the middle level, and highest motor centres (prefrontal lobe) making up the motor province of the highest level, is, of course, hypothetical; there is no obvious morphological separation. I do not suppose that the evolutionary distinction is so abrupt or so decided as that between the middle and lowest levels. I will mention some differences in the two regions of the frontal lobes. (*a*) It seems certain that the middle motor centres ("motor region") are those cerebral centres directly connected with the lowest motor centres, as the facts of "Wallerian wasting" show; there is, however, possibly some "wasting" of fibres from the prefrontal lobes as low as the pons. This wasting has been differently interpreted. (*b*) The middle motor centres contain most large cells. (*c*) The middle motor centres are experimentally "excitable," and the prefrontal lobes are not.

[1] A term introduced by Dr. Edward Liveing in his masterly work *On Megrim* "nerve storm." This term has met with much favour, and the conception it stands for has been of great value in elucidating some very complex problems in neurology.

[2] The rapid reader must not take "persistent discharging lesion" to be "persistently discharging lesion."

[3] I have spoken briefly on what I believe to be the importance of reckoning the cord, medulla, and pons, or, rather, certain elements of these morphological divisions, as one, the lowest level—I believe it is the "spinal system" of Marshall Hall—(JOURNAL, July 14th, 1888). I do not pretend to be able to define the upper limit of this level.

This is a very important difference; it may be taken to mean that the præfrontal lobes are not, as I suppose, motor. The distinction currently made is vastly greater than the one I have submitted. Believing that the whole central nervous system (the organ of mind included—the mind, of course, not included) is a sensori-motor mechanism of three levels, the distinction I make is not of kind but merely of degree—it is that the præfrontal lobe is only greatly more complex, etc., than the "motor region.' But, according to the received doctrine, whilst the latter alone is motor, the former differs from it in two ways; the præfrontal lobe has no motor constitution, and is part of the "intellectual centres." Distinguishing the psychical from the physical, I would say that psychical states are not functions of any centre, but are simply concomitant with functioning of the most complex, etc., sensori-motor nervous arrangements—those of the highest level ("organ of mind") of which level the præfrontal lobe is the motor division.

There are, I submit, three kinds of fits corresponding to the three evolutionary levels. It is convenient to speak of the three kinds in an order different from that used in stating the levels. (2) I mention epileptiform seizures first because their localisation is not doubtful. (They were first described by Bravais in 1824.) They are "middle level fits"—that is, they are produced by excessive discharges beginning in parts of the middle level (motor province) of the cerebral system ("motor region"). My hypothesis is that (3) fits of epilepsy proper ("genuine epilepsy" of some nosologists) are "highest level fits," and that many of them, not all, are produced by excessive discharges beginning in parts of the præfrontal lobes, highest level (motor province) of the cerebral system. Although the præfrontal lobes are not experimentally excitable, I suppose it will not be denied that their cells katabolise and liberate energy in their normal activities, and it is not unreasonable to suppose that cells of parts of them may, by pathological changes, become highly explosive, so that they occasionally discharge excessively. So that, if the præfrontal lobes are divisions of the "intellectual centres," as no doubt they are, and not, as I think, motor too, excessive discharge beginning in parts of them may produce epileptic fits.

Of course, this is speculative. I am not aware that anyone pretends to know the seat or the pathology of cases of "genuine epilepsy." I do not use the term "cortical epilepsy," because both epilep*tic* and epilep*tiform* seizures are, to my thinking, cortical fits. (The difference in meaning assigned to the two terms epileptic and epileptiform must never be lost sight of.) (1) I think that there are "lowest level fits." These are fits produced by excessive discharges beginning in parts of the lowest level, a level which is common to the cerebral and the cerebellar systems. I suppose that most of them are owing to excessive discharges beginning in centres of the bulbar and pontal regions of the level, hence I sometimes use the term "ponto-bulbar fits." With regard to epileptiform and epileptic fits, I deal almost exclusively with cases of patients subject to fits—with, so to speak, "chronic cases."

I have so far spoken only of three Kinds of fits. No doubt there are Varieties of each kind. Whilst the kind answers to the level, the variety of each kind answers to the particular part of the level in which the excessive discharge begins. It is certain that there are varieties of (2) epileptiform seizures; each is marked by a particular place of onset of the convulsion. There must be at least as many varieties of (3) epilepsy proper as there are different "warnings" of the paroxysms. Presumably there are varieties of (1) ponto-bulbar fits.

Then, of course, there are Degrees of each variety dependent directly on degree of the primary discharge, and indirectly on that of the secondary discharges. (2) For example, there are degrees of that variety of epileptiform seizures marked by the first spasm being of the thumb. There are many ranges of it, from convulsion almost limited to a thumb, thence onward to universal convulsion. (3) Everybody recognises that epileptic attacks occur in two vastly different degrees, *les petits maux* and *les grand maux*, and there are sub-degrees of each of these degrees. (1) There are degrees of convulsion in lowest level fits produced by Brown-Séquard's method in guinea-pigs. There are, no doubt, degrees of respiratory fits produced in certain lower animals by rapid bleeding, by ligature of the great arteries of the neck, and by sudden stoppage of respiration.

To repeat, "fit" is a term used to include convulsive paroxysms of all kinds dependent on excessive discharges beginning in any part of any one of the three levels, the epileptic and epileptiform beginning in one half[4] of a level. There are three kinds of fits (1) ponto-bulbar, (2) epileptiform, and (3) epileptic. There are the supposition is, varieties of each kind, and degrees of eac variety of each kind.

I have used the wide term "fit" advisedly because my metho is not merely an empirical or clinical one. It is not only an en deavour to find out whether a convulsive paroxysm a patient ha is like or unlike that of the type "genuine epilepsy" of nosolo gists or any other type, but is also an endeavour to discover hov it shows a particular departure from normal states of his nervou system.

Is there any difficulty in recognising the difference in the tw mental attitudes, or, as I shall now say, the distinctness of th two view-points? From the empirical or clinical view-point w look to see how this or that fit approaches this or that nosologica type. From the scientific view-point we look to see how these o those paroxysmal manifestations are produced, asking ourselves "What is the level and what is the particular part of it in whic the excessive discharge producing this or that set of manifesta tions begins?" or, regarding all kinds of fits, the more genera question, "What different effects can an excessive discharge 'ge out of' the different levels?"[5] The use of the general term "fit," compels careful segregation of kinds and analysis of individua cases. In this frame of mind we note the manifestations whethe they have "the characters of an ordinary epileptic fit" or not Whilst for purely scientific purposes I care very little for a answer to the question, "Do excessive discharges beginning i ponto-bulbar centres produce paroxysms resembling those of th epilepsy of nosologists?" I care very much for one to the ques tion, "What effects do excessive discharges beginning in ponto bulbar centres produce?" This question is, as yet, only to be re plied to by experimenters who artificially produce fits in lowe animals. I should be very much astonished if it turns out tha excessive discharges beginning in any centres of the lowest leve do produce convulsions having the same characters as those pro duced by such discharges beginning in centres of the higher levels It would be marvellous if excessive discharges beginning i centres lowest in rank produced fits like those (epileptiform seizures) which are produced by excessive discharges beginning i parts of the more evolved centres, the middle motor cerebra centres ("motor region")[6].

As I shall not have time to deal with lowest level fits, I wi here mention what I think are some fits of this kind, not classify ing them, but making a rough arrangement into three groups 1. *Respiratory fits* (respiratorily beginning from primary dis charge of the main (medulla) respiratory centre.[7] I think tha fits of laryngismus stridulus come in this category, but Semo thinks they are cortical seizures.[8] Respiratory fits are easily in duced in animals, and are described in all works on physiolog when asphyxia is considered. Kussmaul-Tenner fits are respira tory fits.[9] It is said that convulsions occur in newborn anima

[4] It is convenient to use the word "half" (lateral) for nervous system a "side" for body.

[5] I formerly used the term epilepsy generically for all excessive discharges the cortex and their consequences. At that time I did not think there we any fits in depending on excessive discharges beginning in any part the ponto-bulbar centres. Using then the term epilepsy generically, I sub mitted that any part of the cerebral cortex might become highly over-unstab and discharge excessively. So that under the term epilepsy used generall there were epilepsy proper, epileptiform seizures, and migraine (the last me tioned being then spoken of as a sensory epilepsy), and, indeed, any paroxysm symptoms attributable to sudden excessive discharges of any part of the cortex I now use the term epilepsy for that neurosis, which is often called "genuine or "ordinary" epilepsy, and for that only. Of course in all quotations I pr serve the term epilepsy when used regarding any class of fits.

[6] Long ago (*St. And. Med. Grad. Trans.*, vol. iii, 1870) I had the same menta attitude. After speaking of observations of the local onset and march of spasm in cases of fits from cerebral tumour, at a time when the cortical "motor region had not been defined, I wrote: "We do not care to say that a tumour of th brain (or minute changes near it) had 'caused epilepsy,' but that changes in particular region of the nervous system—say in the region of the middle cer bral artery—led to convulsions in which the spasm began in the right han spread to the arm, attacked next the face, then the leg, etc."

[7] *Brain*, April, 1886.

[8] See an able paper by Dr. Gay in *Brain*, January, 1890, for much valuabl information on laryngismus stridulus, and for arguments against the view take of the causation of the paroxysms.

[9] The fits produced in lower animals by rapid bleeding, by ligaturing th great arteries of the neck, and by asphyxia, are alike respiratory fits; they a depend on stimulation of the respiratory centres by lack of oxygen. Asphyxi experimentally produced in animals does not produce cerebral convulsions, bu on the contrary, renders the cortex inexcitable, whilst at the same time it in creases the excitability of the ponto-bulbar centres. Again, as Franck say (*Fonctions Motrices du Cerveau*, pp. 86, 87), "l'anémie soit totale, soit partielle l'encéphale, n'est nullement la cause des convulsions épileptiformes." Arrest the heart by excitation of the vagus stops these fits.

after division of the cord below the medulla when they are asphyxiated; if so, these are certainly lowest level fits if not respiratory; it is possible that they are owing to discharge of subordinate (spinal) respiratory centres. 2. *Fits produced by convulsant poisons* (fits from nitrous oxide and curara are respiratory fits). Fits are experimentally produced in animals by absinthe and camphor. According to Magnan, convulsions are produced in animals by absinthe when the cerebrum has been removed. Many years ago Dr. George Johnson showed that convulsions occur in man from poisoning by camphor. Possibly some fits in renal disease (some so-called uræmic fits), and, it may be, fits occasionally part of a constitutional disturbance after urethral lesions, are ponto-bulbar fits from home-made poisons, as those just mentioned are supposed to be from foreign poisons. 3. *A condition for fits consequent on certain injuries of the cord or sciatic nerve* in guinea-pigs (Brown-Séquard). These are so well known that mere mention will suffice. There are often fits attending the onset of infantile paralysis; these are very difficult of explanation. I submit the hypothesis that they are lowest level fits produced by action on the ponto-bulbar centres of ptomaines, the result of disintegration of nervous matter of anterior horns; if so, they come in Group 1.

In all severe lowest level fits it is supposed that the primary discharge of ponto-bulbar centres not only induces discharge of other lowest motor centres, but also that by intermediation of sensory ("ascending") fibres it discharges centres of higher levels. I never thought of implication of higher centres in these or any other fits by intermediation of sensory nerves until after consideration of the researches of Victor Horsley and Binswanger).[10]

It is necessary now to speak of abnormal affections of consciousness with regard to kinds of fits. I presume that there is loss of it in severe fits of all kinds. Consciousness is not a function of the highest cerebral centres; it is simply concomitant with their functioning. There is no physiology of the mind any more than there is psychology of the nervous system. On the basis of mere concomitance, mental symptoms (synonymously abnormal states of consciousness) are, strictly speaking, only signs to physicians of what is not going on or of what is going on wrongly in part of a patient's material organisation. Thus cessation of consciousness at, or close upon, the onset of an epileptic fit is of value to physicians as a sign that the correlative physical process, the excessive discharge, begins in some part of the "organ of mind," or equivalently, highest centres of the cerebral system; the physical process in these and all other kinds of fits is our proper concern as medical men. Consciousness is lost late in epileptiform seizures, and in those of but little range there may not be even defect of consciousness; this agrees with the empirical evidence that the excessive discharge begins in lower (middle motor) centres; probably excessive discharges are induced (upwards) in the highest sensori-motor centres by intermediation of sensory fibres when consciousness begins to cease in an epileptiform seizure. Availing ourselves of abnormal affections of consciousness as signs of states of the central nervous system, we next, so to speak, put them on one side in order to study the process in fits in a purely materialistic manner.

We must bear in mind that not only is consciousness absent in negative functional states of the highest centres, but also that it ceases during the diametrically opposite functional state, excessive discharge beginning in those centres; there is loss of consciousness not only during, but also for some time after, a severe epileptic fit; in post-epileptic states there is temporary exhaustion of elements of the highest centres, and, corresponding to that exhaustion, there is absence of consciousness. There are, however, degrees of negative affection of consciousness. There are degrees from that slight defect in some fits of epilepsy (*les petits maux*) to seemingly entire loss of it in severe epileptic paroxysms; and there are degrees from that existing with trivial confusion of thought after a very slight epileptic fit to seemingly loss of all consciousness in deep coma after a very severe one. I now return to the physical process in fits.

It will be observed that I have spoken of the excessive discharge as productive of fits beginning in this or that level; further, of its beginning in some part of a level. In recapitulation, the primary discharge in all kinds of fits is of some part of but one of the levels. And now I add that in epileptic and epileptiform seizures, of which alone I speak in the remainder of this lecture, the excessive discharge begins in some part of one half (lateral) of a level; thus, so to say, in these two kinds of fits the discharging lesion is "doubly local." If the discharging lesion be, as I suppose, of but a few cells, very little of a convulsion is directly due to it. Most of the convulsion is produced by intermediation of fibres between the cells of the discharging lesion and other cells of its own level and of other levels; there are induced, consecutive discharges of normal stable cells. Hence the interconnecting fibres of each level and the fibres connecting the several levels with one another, and the fibres connecting the lowest level with all parts of the body (lowest level of the whole organism), have to be considered. (I am straining the meaning of the word fibre, making it stand for any kind of nervous pathway ensuring physiological union, definite or indefinite.) Consideration of these connections is essential for clear ideas of the full process in fits, the only visible part of which is convulsion; it is especially important with regard to the way by which in epileptiform seizures a very local (a "doubly local") discharging lesion causes wide-spreading and even universalisation of convulsion. Again, the study of the interconnections of the levels is a necessary preliminary to the comparison and contrast of the effects of "discharging lesions" and of "destructive lesions," an essential thing in the scientific investigation of diseases of the nervous system, as I urged in my Gulstonian Lectures (1869). I speak only of connections of motor centres of the levels.

Each level being bilateral is a twin series (right and left) of centres. There are connections (commissures) between "identical" centres and between "non-identical" centres of its two halves—presumably between centres of the two halves as they correspond for co-operation of the parts of the body they represent in joint operations by the two sides of the body. There are also connections between the centres making up the lateral half of each level. The fibres of the two connections spoken of are Intrinsic fibres of levels. I speak next of Extrinsic fibres—that is, of those interconnecting levels. Considering for a moment all the levels, the motor path,[11] or, as I shall say, kinetic route, extends from the highest motor centres to the muscles, which in a certain regard, being dischargeable, are centres too. This route (strictly the three series of motor centres are parts of the kinetic route) is in three segments: from highest to middle centres, first segment; from middle to lowest, second segment; and from lowest to muscles, third segment. I can, however, consider in detail only the second segment of the kinetic route, that connecting the middle and lowest levels. I shall, for convenience, speak of the motor centres of the right half of the middle level. There are three sets of motor fibres, kinetic lines of the second segment, uniting all right middle motor centres to all lowest motor centres—at least to all motor centres of the left half of the lowest level, if not, as I imagine, to those of the right also.

First Set of Fibres of the Second Segment.—Those which have been traced (on the Wallerian method by Charcot and others) from the right "motor region" along the right corona radiata, right internal capsule, through the right crus cerebri, right halves of pons and medulla into the (left) lateral column of the cord as low, Sherrington has found in one case, as the origin of the coccygeal nerve roots. These fibres are (and so are the second and third sets) extrinsic of the levels; they belong to neither level, and yet they belong to both in the sense of interconnecting the two.

Second Set of Fibres.—Those of the direct pyramidal tract. They have been said to be traceable no lower than the mid-dorsal region. Tooth has traced them by the Wallerian method in one case as low at least as the second lumbar; these are fibres of the inner part of the right anterior (Turck's) column.

Third Set of Fibres, comparatively recently (1884) discovered by Pitres, and seen by Schäfer, Sherrington, Hadden, Tooth, France, and others.[12] These fibres have been traced, on the Wallerian

[10] Horsley (*Lancet*, December 25th, 1886, abstract of Brown Lectures) believes that "all the convulsive, tonic, and clonic phenomena may originate from the ordinary bulbo-spinal centres such as exist for carrying out normal mechanisms. Tonic or clonic spasm, then, may be produced by any motor centre, but the combination and sequence of tonic-clonic could originate only from the cerebral motor cortex." This is important with regard to the question of ponto-bulbar fits.

[11] Dr. Gowers (*Dis. of Nervous System*, vol. i, p. 116) gives a diagram of the "motor path." He makes two segments, "cerebro-spinal" and "spino-muscular." The kinetic route is a modification of his scheme.

[12] Mr. E. P. France (*Phil. Trans.*, B. 48, 1889) has not found after lesions of the marginal convolution in monkeys (made in some very important researches by Schäfer, Horsley, and Sanger-Brown, *Phil. Trans.*, B., 1888), nor in any other case in these animals degeneration of the direct pyramidal tract; but in all cases in which the degeneration in the crossed pyramidal tract was well marked he found degeneration much less in amount, but in the same position, in the other half of the cord (side of lesion). Horsley and Schäfer have, so to say, completed the "motor region" by their discovery of trunk centres in the marginal convolution.

method, into the right lateral column.[13] The degeneration in the (right) lateral column in cases of (left) hemiplegia is recognised by Charcot. So we see that the interconnection of the middle and lowest motor centres is very complex.

Some years ago[14] I inferred from the then known connections of the right corpus striatum (internal capsule) with both halves of the cord (by the first and second set of fibres) that both sides of the body are represented in the right half of the brain (I still say "right" for convenience), but the degenerated fibres being of different columns (the left lateral and the right anterior), that the left and right sides of the body were differently represented in the right half of the brain. (This, I have since stated, seems to me to be but an expansion and modification of the principle of Broadbent's well-known hypothesis as to the double representation of the bilaterally acting muscles.) I should have thought the discovery of the third set of fibres rendered my hypothesis more tenable. But there are serious difficulties. The second set of fibres (those found in the right anterior column) are supposed by some great neurologists to cross to the left half of the cord.[15] The same has been said of the third set of fibres found in the right lateral column. So that it may be that all three sets of fibres pass from the right middle to the left lowest motor centres. It is, however, not really known where the second and third sets of fibres end. No wasted fibres are found in the anterior commissures. Hence, I provisionally keep to the hypothesis mentioned, and now say regarding it that the three sets of fibres may show that the right middle motor centres are connected with lowest motor centres of the left and right halves of the lowest level, and thus that the right middle motor centres represent, by intermediation of the twin lowest motor centres, movements of muscles of both sides of the body. The expression "movements of muscles" introduces a matter which must be considered before I can illustrate the hypothesis.

Having considered the whole central nervous system with the rest of the body represented by it to be a sensori-motor mechanism, I now wish to urge that the motor centres of every level represent movements of muscles, not muscles in their individual character. The same muscles, that is, all the muscles, are represented in Simplest, in Complex, and in Most Complex movements by respectively the lowest, middle, and highest motor (better "movement") centres. If so, it is possible, as I believe happens in hemiplegia, to lose one series of movements of muscles, and to retain another series of movements of the very same muscles. Thus, to take a case of left hemiplegia in which the right middle motor centres, if not destroyed, are cut off from lowest motor centres (to neglect the second and third sets of fibres), the condition is not properly described as "loss of power of the muscles" of the left arm and leg, but as loss of complex movements of the muscles of those limbs. The simplest movements of the very same muscles remain represented by the left lowest motor centres. The muscles certainly are unaffected, and when rigidity comes on the simplest movements of them are developed by over-activity of their lowest motor centres. To repeat, there are, in cases of hemiplegia with rigidity, the double opposites, loss of complex movements and over-development of simplest movements of the very same muscles. The fixed rigid state of the left arm and leg, which clinically we speak of as a symptom, as if it were something *sui generis*, is only the algebraical sum of the co-operating and antagonising "pulls" of the simplest movements of the muscles of these limbs. If the hemiplegia be very slight, we may say that the muscles of the left arm and leg "are only a little weak," but the strict description is that there is then loss of but a very few complex movements of all the muscles of these limbs, with persistence of the rest of the complex and of all of the simplest movements of those same muscles. Similarly, convulsion is not to be looked on as convulsion of muscles; in an epileptiform seizure the convulsion is a contention of complex, and also of simplest, movements. In this contention the individuality of each movement is lost. I will consider a more complex case, that of a man imperfectly hemiplegic permanently, and yet subject to occasional epileptiform convulsion of the region paralysed; the paralysis is loss of but some of the complex movements of all the muscles of the arm and leg, and there is persistence of the whole of the simplest movements of all those muscles; when the fit comes there is a temporary contention of the remaining complex movements and of the simplest movements of all those muscles.[16]

The distinction between muscles and movements of muscles is exceedingly important all over the field of neurology; I think the current doctrine of "abrupt" localisation would not be so much in favour if it were made. The occurrence of convulsion of a muscular region which is already imperfectly and yet permanently paralysed, is unintelligible without that distinction. And without it we shall not understand how it can happen that there is loss of some movements of a muscular region without obvious disability in that region. This bears closely on the realistic study of the physical conditions in aphasia and insanity. We are concerned with both these morbid affections in this inquiry. The anatomical loss in cases of aphasia is of certain complex movements of the tongue, palate, etc.; there is a paralysis in that sense. In cases of insanity (post-epileptic states, for example) there is, I submit, corresponding to the negative element of the psychical symptomatology, paralysis in the sense of loss of some of the most complex combinations of impressions or of most complex movements, or of both; for one example of those most complex, etc., movements of the hands, which are represented in the anatomical substrata of tactual ideas. In brief, a negative lesion of any part of the nervous system ("organ of mind" included) causes, and always causes, paralysis in the sense spoken of, sensory or motor, or both, and causes nothing whatever else.

It may seem absurd to say that when there is no obvious disability in a muscular region, there may be loss of some movements of that region. This is, however, what I do affirm confidently. We shall be particularly concerned with this dictum when dealing with post-epileptiform aphasia. An eminent physician, referring to a previous statement I made[17] of the dictum, described my aim as being to prove two things — that a motor centre does and also that it does not represent movements. I never consciously attempted that very marvellous feat. Then, as now, I am content with the supposition that the non-disability of a muscular region when some movements of it are lost by destruction of part of a centre is accounted for by that muscular region being represented by other movements in other parts of the centre or in other centres. On this supposition of Compensation, we can explain recovery from hemiplegia (without relying altogether on the hypotheses of subsidence of "shock" or diminished pressure) dependent on very small destructive lesions; there is recovery when a few movements are permanently lost. That the seeming paradox holds for some cases is undeniable, as the experiments of Semon and Horsley on the cortical representation of the vocal cords show. These experiments give a crucial verification of Broadbent's well-known hypothesis for one case. Moreover, France[18] has found degeneration in the lateral column of the cord after lesions of the gyrus fornicatus in monkeys. This shows, by the way, that that gyrus, although no doubt (Horsley and Schäfer) mainly sensory, is not purely sensory. Although in the monkeys mutilated as mentioned, there is no discoverable disability in any muscular region, I submit that the degeneration France describes is proof of loss of some movements, skeletal or visceral, or possibly of negative movements (inhibitory). It would be remarkable if there were any conspicuous disability, considering the enormous compensation given by the intact "motor region." I can now return to the question of representation of both sides of the body in each half of the brain.

I suppose that the right "motor region" represents complex movements of muscles of both sides of the body (1) as they serve in bilateral actions, (2) as they serve in alternate actions (or, I should

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[13] They were called by Sherrington "re-crossed fibres;" but he now thinks (*Journal of Physiology*, January, 1890) that this name is unsuitable. Sherrington, in a case of small and superficial lesion of one-half of the brain at the lower end of the fissure of Rolando has traced degenerated fibres into both halves of the pons and medulla.

[14] *Med. Times and Gaz.*, October 23rd, 1869. In the abstract of one of my Gulstonian Lectures (1869), after reference to Broadbent's hypothesis, there appears: "Taking one side of the brain, the right, the lecturer thinks the muscles acting unilaterally, both of the left and of the right side of the body, are represented in the right side of the brain, but that the muscles of the left side of the body are especially represented there. 1st. More in quantity, for they are more affected when the hemisphere discharges. 2ndly. First in time (instability), for they are affected before those of the right side."

[15] Gowers, *Diseases of Nervous System*, vol. i, p. 114.

[16] The distinction between movements and convulsion is of extreme importance, and is not always made. In some slight epileptic fits there are mixed up, so to say, with convulsion movements properly so called, as those of chewing, spitting, clutching the throat, etc. It is very necessary not to mistake writhing movements of the arms with suspended respiration for convulsion of those limbs. I regret that time will not allow me to consider this part of my subject, for the question raised bears closely on the interpretation of post-epileptic mania, and thus indirectly on the study of insanity in general.

[17] JOURNAL, May 10th, 1873.

[18] *Phil. Trans.*, B. 41, 1889.

say, with preponderance of activity on one side), and (3) as they serve in unilateral actions. But I suppose, too, that those movements which are "bilateral" are represented most nearly equally in right and left halves; that those which are "alternate" are represented less equally in the two halves (those of the left side more in the right half), and that those which are "unilateral" are represented most unequally in the two halves (those of the left side most in the right half). We must bear in mind that movements are spoken of, for the so-called alternate muscles may serve in bilateral movements; they may serve with a great degree of preponderance on one side approaching unilateral movement; and the most unilateral muscles may serve in bilateral movements.

It may, however, be asked, Where is the paralysis corresponding to abrogation of the second and third sets of fibres from the right "motor region?" The existence of some weakness of the right side (the so-called non-paralysed side) has been urged by Brown-Séquard, Pitres, Friedlander, and Gowers; but when in the difficult circumstances attending investigation of the state of the right side no disability is demonstrable, there may yet be loss of some few movements of the muscles of that side. The loss of these few movements is masked by the compensation given by the left half of the brain, which represents most numerous movements of the right side. If we take the case of excessive discharge beginning in some part of the right middle motor centres, we find that, in severe epileptiform fits, both sides of the body are convulsed. In this case compensation is "inverted," that is to say, centres which would compensate a loss are compelled to co-operate in an excess. The comparison and contrast of hemiplegia and an epileptiform seizure are, however, by no means simple, as we shall see when the process of universalisation of an epileptiform convulsion is considered.

Although when speaking of the hierarchy of nervous centres I excluded from consideration the higher divisions of the cerebellar system, it is necessary to say something of them. There are in some cases of tumour of the median lobe of the cerebellum, seizures very like, if not quite like, those of ordinary surgical tetanus. I have suggested that the convulsion of surgical tetanus is owing to cerebellar discharges; but no doubt the poison causing that morbid affection affects lowest centres too. It has been suggested that the tetanus-like seizures in the cases of cerebellar tumour mentioned, are owing to pressure upon, or to changes induced in, the corpora quadrigemina or medulla oblongata, or both. But surgical tetanus is, at all events, in order of development of spasm over its regional distribution the "complementary inverse" of epileptiform seizures. And when we consider nervous diseases, each as a flaw in a whole nervous system, the study of "corresponding opposites" is most important. There is a more direct reason for taking note of the cerebellum in the present inquiry. What the structures are connecting the cerebellum with the lowest motor centres I know not. If there be a connection—if the lowest level is at once the lowest level of the cerebral and of the cerebellar system—we may expect the higher levels of the cerebellar system to be concerned in post-epileptiform states; the question is important, especially with regard to increased tendon reactions in post-epileptiform paralyses. I have suggested[19] that the cerebellum is concerned with the rigidity and exaggerated tendon reactions of (left) hemiplegia[20] when that paralysis is the result of a destructive lesion of the (right) internal capsule, that there is not only exaltation of function of the (left) lowest motor centres from loss of control, but also that the cerebellar influx upon them is no longer antagonised. This hypothesis has been objected to on the ground that in transverse lesions of the upper dorsal or cervical cord (the cerebellum being thus excluded) there is nevertheless rigidity of the legs with exaggerated knee-jerk and foot clonus. I was obliged to admit that the cerebellum is not necessary for the production of the exaggerated jerk and rigidity.[21] But Charlton Bastian,[22] who has advanced proof where I only speculated, has found that, in man, on complete transverse lesion of the regions of the cord mentioned, the muscles of the legs are flabby and the knee-jerks absent; what is very striking, he finds that the condition of rigidity of the legs and exaggerated knee-jerk in cases of incomplete transverse lesions changes to one of flaccidity with no tendon reactions when that lesion becomes completely transverse. If Bastian be correct, as I think he is, the hypothesis of cerebellar influx, on which we are in fundamental agreement, is supported.

[19] *Medical Examiner*, April 5th, 1877, and March 29th, 1878.

[20] Not rarely both knee-jerks are exaggerated; this perhaps helps to show that the third set of fibres ends in the right lowest motor centres.

[21] *Medical Times and Gazette*, February 12th, 1881.

[22] Quain's *Dictionary of Medicine*, p. 1481.

THE TREATMENT OF SUPPURATIVE INFLAMMATION OF THE MASTOID PROCESS ASSOCIATED WITH DISEASE OF THE MIDDLE EAR.

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My object in writing this short paper is to advocate no very novel mode of treatment, but to illustrate by a few cases the advantage of adopting as early as possible such radical surgical measures as not only remove the patient from the risk of septic infection and intracranial suppuration, and prevent the possibility of a recurrence of the inflammation in or about the mastoid process, but also serve to cure the inflammation which has become chronic in the middle ear and probably influenced the function of the internal ear, and in a very considerable proportion of cases to restore to the patient an amount of hearing power so great as to render any deficiency imperceptible to a non-professional observer. This last advantage has impressed me very greatly, imbued as I was with the belief that the presence of the small bones of the middle ear and the membrana tympani were necessary for fairly acute hearing. Over and over again, as the following cases will show, patients have, after the removal of the mastoid antrum and the contents of the middle ear and the subsidence of the inflammation, recovered very good hearing power. These cases will also serve to illustrate the frequent presence of a large antral cavity in such as suffer from chronic abundant middle ear discharges, and especially when associated with inflammation of the mastoid process.

Given a large antrum filled with foul caseous and purulent material, and discharging its overflow of extremely irritating material into the sensitive mucous lining of the middle ear, it is perfectly obvious that this condition cannot subside or disappear if left to Nature, while its presence is not only a source of great danger to the life of the individual, but also to the integrity of the internal ear. This antral cavity, when well developed, is of considerable size, and is in immediate relation with the posterior and middle fossæ of the skull, the lateral sinus, the middle ear, the external auditory meatus, and the outer surface of the skull, in all of which directions pus may make its way through an aperture in the bony wall of the cavity, or it may determine the development of an acute suppurative periostitis between the cartilage of the auditory meatus and the bone or over the outer aspect of the process, or between the dura mater and bone in the middle or posterior fossa, and associated or not with the last it may produce thrombosis of the lateral sinuses. I am convinced that it is this antral distension which forms the chief source of the above, and that it is comparatively rarely that the penning up of pus in the middle ear is the chief factor, for the reason that the external auditory meatus is not easily completely occluded.

The mastoid antrum varies within very wide limits, not only in form and size, but in its relation to adjoining surfaces. It would appear, as one would expect, that suppuration in and about the mastoid process takes place more readily in such subjects as have well-developed antral cavities, and this is especially the case in those who are affected by recurrent attacks of inflammation. Pathologists appear to be unaware of the importance and the anatomy of the mastoid antrum. How rarely does one see its condition described in the record of a fatal case of intracranial mischief. Usually the observer is satisfied with opening the roof of the middle ear and finding pus, or with exposing the mastoid cells in the apex of the process. My experience would lead me to conclude that the antrum is a much greater source of danger to the cranial contents than are the mastoid cells.

As I have already stated, by no means the least advantage of the operation to the patient is the opportunity it gives of removing a *cul-de-sac*, which without operation could never be drained, and without the removal of whose foul and irritating contents the inflammation of the middle ear, and the absence of function of the internal ear, could never be removed. It also enables the middle

ear to be flushed by a thorough stream frequently, its secretions to be removed, and its inflammation to disappear.

I feel so strongly that the overflow from a foul distended mastoid antrum is so frequently the cause of a chronic inflammation of and an abundant foul discharge from the middle ear, that if I find such discharge associated with a history of pain or tenderness about the mastoid process, I do not hesitate to open up the mastoid antrum and establish a thorough drainage for perfect irrigation. As regards the operation, I think no instrument is so safe as a sharp gouge. The great variation in the form and position of the antral cavity and the vicinity of the lateral sinus makes the trephine a most dangerous instrument for this purpose, and I think it should never be used. With a gouge one can remove a layer of bone of extreme thinness, and by means of this instrument, with moderate skill, it is impossible to do any harm.

The chief difficulty in this operation consists in establishing a communication of sufficient calibre between the middle ear and and the antrum (should, as is usually the case, the communication be insufficient), and in doing this great care must be exercised in avoiding any damage to the facial nerve and to the inner wall of the tympanum. I have as yet avoided any injury to these structures, though from the report of case W.A. it is obvious that the risk is a considerable one. The most moderate care would render it impossible to injure the lateral sinus, though remembering the great variations in the antrum one cannot be too careful in the gradual removal of bone.

If there is any suspicion of intracranial mischief, the subdural spaces of the middle and posterior fossæ, any portion of the brain likely to present suppuration in consequence of disease of the ear, and the lateral sinus can be thoroughly explored through the limited surface of bone exposed, which need not exceed an area larger than a halfcrown.[1]

H. V., a boy, aged 12½ years, had foul discharge from the right ear for more than four years. Some months ago an abscess formed behind the right ear and burst. It healed up, but the place has been tender since. The discharge from the meatus became more foul and profuse. He was admitted under my care on August 7th, 1889, with great pain and tenderness on the right side of the head, and especially about the mastoid process, over which the skin was red and inflamed and fluctuating. Temperature 102°. There was a profuse discharge from the meatus, and the boy appeared to be quite deaf in this ear. He stated that this deafness had been noticed for some time.

The same day the boy was put under chloroform and the middle ear examined. The membrana tympani was almost absent. The soft parts were raised from the mastoid process, which was bathed in foul pus which continued to escape from a minute aperture in the bone situated about half an inch behind and a little above the external meatus. On removing a thin layer of bone which formed the whole outer wall of the antrum, into which the minute aperture opened, together with its foul caseous contents bathed in pus, the cavity was found to be about the size and shape of a large cherry. A channel of suitable calibre was then cut from the antrum into the middle ear, which was then carefully scoured out. A perforated silver drainage tube, capped with rubber externally to prevent an irritation of the external ear, was fixed in what was the antral cavity, and the middle ear was irrigated several times during the day with a through current of lotion.

As the antrum was a large one, in order to allow it to fill up from the bottom the tube was not removed till February, 1890, and within a week the sinus which it occupied closed. There was then no discharge from the meatus, in which the lad wore one of Dr. Ward Cousins's artificial drums, which improved his hearing considerably, while it prevented cold air from entering. He could hear a low conversation readily and a watch ticking at a distance of three inches.

G. V., boy, aged 3 years, had a foul purulent discharge from the right ear for the last year. A month ago a swelling formed and burst behind the right ear. This had continued to discharge since.

He was admitted under my care on October 2nd, 1889. There was offensive discharge from the meatus and from the sinus. The child was apparently deaf in that ear. On exposing the mastoid process a minute aperture in the bone was seen situated a little behind the meatus, and corresponding in level to its upper border; it led into a cavity of considerable size. The whole outer wall of this cavity was completely removed with a gouge, and it was then found to be filled with foul smelling caseous material. It was a smooth walled cavity, as in the last case, and about the size of a small marble. As there was not a sufficient communication with the middle ear, a channel was cut into the latter cavity, which was then thoroughly cleaned out. A perforated silver tube was then fixed into the floor of the antral cavity, and frequent irrigation was pursued.

The child left the hospital on November 20th with only a very slight discharge. When seen last on February 15th, 1890, he could hear ordinary conversation with his right ear, and had for some considerable time ceased to have the slightest discharge from the meatus, or from the sinus left by the tube. This had closed a few days after the tube was removed.

W. A., boy, aged 9 years, for two years has suffered with otorrhœa and pain in the right ear with exacerbations, accompanied with pain and swelling behind the right ear. At times he was "light headed" with the pain and fever.

On September 22nd he had an unusually severe attack, and on the 28th he was admitted under my care. There was an extensive fluctuating swelling covering the right mastoid process, and extending for two inches around. There was very little discharge from the meatus, which was swollen. The cervical glands on the right side were swollen and tender. The ear was apparently quite deaf. There was much headache, especially on the right side; no optic neuritis. The mastoid process was freely exposed, and a quantity of foul pus evacuated. It was apparent that the pus had escaped between the cartilage of the meatus and the bone. The antrum was exposed fully with the gouge, and a cavity more than half an inch in diameter, and filled tensely with foul smelling caseous material and pus was exposed. A small channel was then cut into the middle ear, which was also found to contain cheesy material. This was removed, and the cavity cleared out. A silver tube was fixed in the antral cavity, and daily irrigation pursued.

On the third day after the operation, some paresis of the right facial muscles was observed. This became more marked, then subsided and disappeared within ten days of its onset. It was obviously due to inflammation set up by the operation, and not to any injury of the facial nerve in the bone.

On November 3rd the boy left the hospital wearing the tube, and with only such discharge from it as would be caused by the irritation of its presence.

When last seen on February 18th the boy could hear ordinary conversation with his damaged ear. The father said: "He is now a different boy, and is not stupid as he used to be before the operation." There was no trace of the facial paralysis.

As an instance of the less frequent condition of mastoid suppuration, where there is no definite antrum but a larger number of mastoid cells extending upwards beyond their usual limit and filled with foul pus, I would quote the following case, but before doing so I would point out that in mastoid suppuration the mastoid cells may be perfectly free of pus, while the antral cavity is filled with it in its foulest condition. On more than one occasion I have, on finding the mastoid cells apparently healthy, felt disinclined to proceed further, but in these cases a more extended operation was rewarded with complete success.

R. W., boy, aged 3½ years, had a discharge from the left ear since teething. On September 4th, 1889, the child was attacked with pain and swelling behind the affected ear, and on the 10th he was admitted under my care, with a large fluctuating swelling covering the mastoid process and extending around it. The mastoid process being freely exposed and much pus evacuated, it was obvious that the pus had escaped from between the mastoid process and the cartilage of the meatus. A probe passed between the mastoid process and cartilage of the meatus did not enter the middle ear. The membrana tympani was practically absent, and there was no obstacle to the free escape of pus through the meatus. On removing the outer wall of the mastoid process many small cavities were exposed. They were tensely filled with foul pus, which welled out freely from them. These spaces were completely removed with a gouge and sharp spoon. No definite antral cavity was found. A channel was cut into the middle ear, which was cleared of its purulent contents, and a silver tube was inserted. Frequent irrigation was adopted, and the child left the hospital on September 24th with a very slight discharge from the meatus.

When last seen on February 15th the child had long ceased to have the slightest discharge, and could hear with his left ear ordinary conversation without any apparent difficulty.

[1] Five Cases of Complicated Disease of the Middle Ear, *Trans. Clin. Soc.*, 1888.

TREPHINING IN A CASE OF ACTINOMYCOSIS OF THE BRAIN.

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During three years' clinical work at the German Hospital I had the opportunity of diagnosing and observing two cases of actinomycosis hominis. The first case was of a comparatively simple nature.

C. H., aged 45, a German teacher of music, suffered from a periosteal abscess on the left side of the lower jaw. I opened the abscess. The incision soon closed, but swelling and hard infiltration remained and simulated malignant tumour. A fortnight afterwards I again let out some pus, and in it discovered the characteristic yellowish grains of actinomyces, which, under the microscope, showed both mycelium and clubs. A drainage tube was inserted into the wound, which, after two months, completely healed. I saw the man again one year afterwards. He was then in perfect health, no recurrence of the disease had taken place, and a hardly visible scar was all that was left of the former affection.

The second case, which more especially forms the subject of this communication, was of a more complicated and serious character, and is, as far as I am aware, the first and only case up to this date in which actinomycosis of the brain was recognised as such during life, and also the first case in which trephining was resorted to for such an affection.

E. H., a married woman, aged 40, suffered from pleurisy in the autumn of 1885. At the commencement of the following year an abscess appeared over the cartilage of the sixth rib; another large abscess appeared over the eleventh rib on the left side. Both abscesses were opened, drained, and the thick hard walls were thoroughly scraped; they did not communicate with the pleural cavity, nor were the ribs found bare of periosteum. I had in the meantime seen the case above related, and at once suspected that these peculiar abscesses might be of actinomycotic origin. This was confirmed by the microscope, which revealed the typical club-shaped fungi attached to plots of thick mycelium.

The abscesses healed, only a small fistula remaining, and the patient was not heard of for over two years. In February, 1888, she was again admitted, complaining of gradually increasing weakness of the left arm. I expressed the opinion that we had to do with an actinomycotic lesion of the motor regions of the brain, and suggested the advisability of an early operation. Dr. Port, under whose care and medical treatment the patient remained during the whole of her stay in the hospital, carefully examined her and fully confirmed my views. I am greatly indebted to him as well as to Dr. Burger for having most kindly allowed me to report the case.

The patient and her relations at first would not hear of any operation. Convulsions of the left arm soon set in, several times taking the typical course of cortical epilepsy. Gradually the paresis extended from the left arm to the left lower extremity and left side of the face. Headache, vomiting, and complete loss of consciousness followed. At last she fell into a deep coma, and was apparently moribund when the operation was consented to.

Dr. Burger, surgeon to the hospital, performed the operation of trephining. No anæsthetic was necessary. He removed a portion of the skull over the middle of the right ascending parietal convolution, incised the dura mater and the discoloured brain substance, and removed two ounces of thin, green pus, which contained great quantities of actinomyces grains. When the abscess was opened the patient (still on the operation table) awoke from the deep coma and called out for water. On the next day she had regained her consciousness; eight days afterwards the facial paralysis had disappeared, and she was able to move her leg. Six weeks after the operation she began to get up and walk about. The paralytic lesions materially improved during the next few months, but there still remained a weakness of the left arm, and slight contraction of the fingers.

The wound healed in two months, and the patient felt very well. Towards the end of the year grave symptoms of increasing paralysis, convulsions, and vomiting returned. Dr. Burger removed the brain and removed a considerable quantity of pus; the patient's condition, however, was not materially improved after this second operation, and she died a few days afterwards (January 4th, 1889).

On *post-mortem* examination the heart was found normal. The left lung was adherent to the diaphragm. A small blind fistula led into the supradiaphragmatic tissue. The left lobe of the liver was adherent to the abdominal wall near the fistula. The middle third of the right frontal and parietal convolutions was occupied by a large mass of newly formed tissue protruding over the surface of the brain (hernia cerebri) reaching down into the brain substance to the depth of about one inch. Underneath it, deeply buried in the white substance, an unopened encapsuled abscess of the size of a nutmeg was discovered.

Actinomycosis of the brain is a very rare disease, only two cases being on record. In one reported from Munich a large actinomycotic abscess was, on *post-mortem* examination, discovered near the base of the brain. Another case[1] with several cortical abscesses was shown at the Pathological Society.

With regard to treatment, we ought not to shrink from trephining as long as the symptoms clearly point to one particular region of the brain. In the case of E. H. the thoracic affection was practically arrested. Life was prolonged by the operation for eight months, and even on *post-mortem* examination the disease proved to be pretty well localised. If anything we ought to proceed more radically in future, removing if possible the abscess wall by scraping, with a view to eliminate all germs. In the present case some fungi had probably remained, and caused the formation of a new abscess, from which the patient ultimately died.

ABSCESS OF THE CEREBELLUM: TREPHINING: DEATH.

By R. J. BRYDEN, M.R.C.S.Eng.,
Gravesend.

Having seen a case of abscess of the cerebellum, following on chronic otitis media, reported by Messrs. W. Milligan and A. W. Hare, in the Journal for February 1st last, I thought it very similar to one that occurred in my practice some time since, only that the abscess was placed in the left lobe of that structure instead of the right side. Unfortunately, I did not take many notes of the case at the time, consequently my remarks are somewhat rough and short in detail.

A. M., aged 23, an electrical engineer, well-built, healthy and strong in appearance, came to consult me on November 7th ult. He complained of pain in his left ear, and said there had been a discharge from the same ear for the past two weeks. He had been living in London, busily engaged in his occupation of electric engineering, when the pain and discharge appeared, but he took very little notice of it until the pain became so severe that he began to lose his appetite and his strength failed him. He came down to Gravesend, where his parents resided, and put himself under my care. On examination there was a purulent but not very offensive discharge from the left ear; there was no appreciable deafness, and after washing out the external meatus with some warm water, I could observe with a speculum that the tympanic membrane was looking dull, and contained a small perforation at its posterior part. There was no tenderness whatever on pressure over the mastoid process nor anywhere in the neighbourhood of the auditory meatus. The right ear was quite normal. The tongue was furred. The temperature was 100.6°. Patient looked rather worn out with pain and want of sleep. I ordered his ear to be syringed out every four hours with some warm boracic lotion, and then to be plugged with iodoform wool, warm fomentations at the same time to be constantly applied to the side of head, and I gave him an aperient mixture to take internally. His past history showed that he had had a good deal of trouble with this ear for the past seven years, as evidenced by discharge off and on, noises in the head, and at times considerable deafness. He had never suffered much aural pain previously. With this exception his health had been generally good since birth, but when a small boy he suffered from tonsillitis, and the left tonsil was removed when he was ten years of age. About five years ago he had been under the care of Mr. Laidlaw Purves, when he was treated for catarrh of the drum of the ear with much benefit. The patient attributed his ear affection to cold. His family history was good, there being no consumption, rheumatism, gout, or nervous disease amongst his relatives. The day after I saw the

[1] Journal, May 25th, 1889, p. 1172.

patient I was asked to call at the house, and found him in great agony, complaining of pain all over the left side of his head, although there was no tenderness anywhere on palpation. There was complete anorexia and want of sleep, but there was no vomiting. He was ordered to bed, and a morphine draught given him. The local treatment of the affected ear was carried out every four hours until the discharge entirely ceased within a week's time. The ear was then syringed out night and morning.

On the third day of attendance severe rigors and shivering set in, followed by profuse perspirations, and these lasted for nearly a week off and on. Evidently meningitis had manifested itself, and for six weeks the temperature varied from 102° to 104° every day. There was general and intense headache, great throbbing in the blood vessels, much photophobia, restlessness, occasional sickness, and foul tongue; the pupils were normal. There was one particular symptom to be observed, and that was a constant twitching, although very slight, of the muscles on the left side of the face, and especially about the left nasal group, which evidently betokened some deep-seated irritation of the facial nerve. The patient was sensible, but got no sleep, except upon a strong hypodermic injection of morphine, which at first I gave night and morning; ice was applied to the head, and an occasional dose of calomel was taken. His symptoms began to improve, so that by November 22nd his temperature became normal; the skin was rather dry, the pulse rather tense and slow, but his tongue was still furred though more moist. The temperature remained normal night and morning, and he expressed himself as feeling very much better as regards the pain and throbbing in the head. I was in hopes that he might recover, and allowed him to leave his bed; but on the evening of November 26th he did not seem nearly so well, although his temperature was only 99°. He complained of violent pain at the back and left side of the head, also of giddiness. He wandered rather in his speech, and amongst other things he asked me "to send a message for him to the Queen." The morphine injection had been discontinued for three days, and I did not feel myself justified in administering any just then.

I called to see him early in the morning, and found him perfectly unconscious and breathing stertorously, which state had commenced and continued ever since 2 A.M. Thinking that probably the formation of a cerebral abscess was the cause of this sudden coma, I asked Mr. Richmond to see him in consultation with me, and we both agreed that although there were no distinct symptoms present which could point to the exact site of an abscess, yet still an exploration by means of trephining was the only remedy left, and was perfectly justifiable.

The parents consenting, and as their house was close by the local hospital, the patient was removed on a stretcher direct to the operating room, and trephining was performed at 2 P.M. by Mr. Richmond, surgeon to the Gravesend Hospital. The skull being exposed on the left side, the trephine was applied posterior to and a little above the external auditory meatus. The piece of bone being removed, the dura mater, which was normal but a little tense, was incised, and a hypodermic syringe was directed immediately downwards, when the point struck the petrous portion of the temporal bone, but without any result. The needle was then inserted directly inwards, when a small quantity of cerebral fluid escaped from the ventricle. An exploration being next made inwards, downwards, and a little backwards, a negative result ensued, and as the patient seemed in a very low state, operative measures were suspended. Dressings having been applied, he was removed to a ward, but died in the evening at 10 P.M., having never regained consciousness.

Next day a *post-mortem* examination was made at 2 P.M., the head only being examined. There were a few adhesions on removing the skull cap, and several nodules of fresh lymph were to be seen scattered along the superior longitudinal sinus, and especially about the torcular Herophili. There was no evidence of phlebitis.

On removing the brain, it was observed that there was no caries of the petrous bone present. Sections of the cerebral lobes showed them to be quite healthy. On making a section through the left hemisphere of the cerebellum, a small abscess cavity, containing about half an ounce of fœtid pus, was discovered at its anterior and outer part. There was no very distinct lining to the cavity. The rest of the cerebellum was perfectly healthy.

REMARKS.—This case affords another example of an intracranial abscess, where it was difficult to diagnose its exact site, and even as to whether it was a cerebral or a cerebellar one. There was no paralysis, and the only prominent feature present was the constant twitching of the left facial muscles. In Dr. M Foster's *Physiology* it is stated by Nothnagel that mechanica stimulation of even the surface of the cerebellum gives rise, with out signs of pain being felt, to movements chiefly of the trunk and extremities of those muscles which are governed by the facial, hypoglossal, and fifth nerves. It might therefore be tha the slight vibratory movements of the muscles in this patient' face were brought about by the formation of a small abscess i the left hemisphere of the cerebellum, and so causing irritation o that organ. What seemed to me curious in the symptoms wa the decline of temperature during the last few days, as, with th presence of a presumable foul abscess, one might have expecte high fever, but, nevertheless, the "dirty" tongue and high tensio pulse pointed to some active mischief proceeding somewhere. gather, in this particular case, that the ear trouble led to septi meningitis, and the latter tended to the formation of abscess; an it again shows the oft-repeated and frequently neglected neces sity of treating all local discharges from the ear.

A CONTRIBUTION TO THE STUDY OF SULPHONAL.

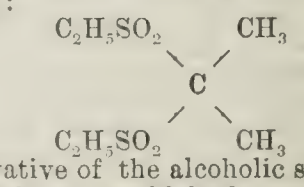
By JOHN GORDON, M.D.,

Physician, Aberdeen General Dispensary; Assistant-Surgeon, Sick Children's Hospital; Assistant to Professor of Materia Medica, University of Aberdeen.

THE discussion which was opened by Professor Leech, of Man chester, at the annual meeting of the British Medical Associatio at Leeds in August, 1889, "On Recently Introduced Hypnotics an Analgesics," showed that sulphonal—one of the group—was on it trial. As might be expected, the results of the observations wer conflicting, some having obtained good results, while others ha been unable to obtain any marked benefit. It was elicited that i some cases a series of cerebral symptoms, such as giddiness, los of co-ordination of the upper and lower extremities, states of ex pression and movement like those produced by alcoholic intoxica tion, sometimes followed the administration of the drug. Havin recently undertaken a series of observations on the action of par aldehyde and urethane, which were published in this JOURNAL I have made a like series of observations on the pharmacology o sulphonal.

Owing to the extreme insolubility of the drug in any neutra medium, considerable difficulty was experienced in some of th observations, and in the series of experiments on its action o muscle and nerve the solutions employed were saturated.

Sulphonal occurs in colourless crystals or as a white crystallin powder almost without taste or smell. It is comparatively insolubl in cold water, more soluble in boiling water, easily soluble in alcoho or ether, and it is not affected by acids or alkalies. Its solubility is slightly increased in the presence of sodium chloride; it ca readily be given in hot tea or coffee, on thin bread and butter, or sus pended by mucilage; but as it is nearly tasteless little or no aversio is offered to its exhibition. It is an oxidation product of the unio of ethyl-mercaptan with acetone, its chemical nomenclature bein diethyl-sulphon-dimethyl-methane, and its graphic formulæ ma be represented thus:



It is thus a derivative of the alcoholic series from which othe hypnotic agents, such as paraldehyde, methylal, etc., have bee obtained. It was admirably demonstrated by Dr. Lauder Brunton in his fascinating and suggestive Croonian Lectures, that the pos sibilities of new therapeutic agents from this group by the proces of substitution are infinite, and that it may be confidently ex pected that the series will yield a potent substance free from th disadvantages of those already discovered. Some of the objection to sulphonal are its insolubility, on which may depend its deferre hypnotic action, the time that elapses before the hypnotic actio takes effect, the prolongation of the hypnotic action into the suc ceeding day, the giddiness, the loss of co-ordination of upper an lower extremities, depression of spirits, and cutaneous eruptions.

Action on Reflex Functions of the Spinal Cord.—A series of ex periments were performed on frogs, to ascertain the action of th drug on the reflex functions of the spinal cord. The method em

ployed was to decerebrate a frog, waiting till the shock of the decerebration had been so far recovered from, to ligature the iliac artery of one limb, to suspend the frog by the head, allowing the hind limbs to depend, to immerse the hind limbs at the same moment in a solution of sulphuric acid (1 in 600), to record by a metronome the time of movement or withdrawal of the limbs from the acid solution, and to well wash the limbs in water after each withdrawal; when the time of withdrawal or movement was fairly equal in both limbs, to inject below the skin of the thorax a dose of sulphonal in a very fine state of subdivision, or to inject into the stomach of the frog the drug in a fairly divided condition, to wait for an hour or two, and to proceed with the immersions as before the administration of the drug. The result of a large number of these experiments proved that a longer period of time took place between the application of the stimulus and the reflex action after the administration of the drug. Sulphonal thus diminishes the excitability of the spinal cord, as also do paraldehyde and urethane. That sulphonal had an effect on the peripheral endings of the sensory nerves was shown by the elongation of the period at which the non-ligatured limb was either moved or withdrawn from the stimulus after the administration of the drug. Thus, as an example:

Decerebrated frog 32 grammes in weight: Left iliac artery and vein ligatured. Stimulation in $\frac{1}{5}\frac{1}{0}\frac{1}{5}$ H_2SO_4. Two decigrammes of sulphonal, in fine trituration, inserted into posterior lymph sac, and moistened with $\frac{3}{4}$ per cent. salt solution.

Before Administration of Sulphonal.

Ligatured Limb.	Unligatured Limb.
8 seconds, limb withdrawn.	7 seconds, limb withdrawn.
5 " " "	6 " " "
5 " " "	6 " " "

Three Hours after Administration of 2 decigrammes of Sulphonal.

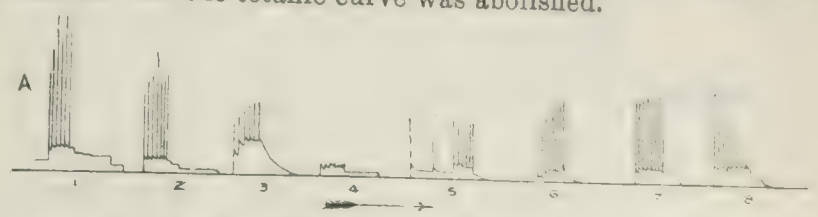
Ligatured Limb.	Unligatured Limb.
15 seconds, limb moved.	8 seconds, limb moved.
30 minutes later:	
8 seconds, limb moved.	6 seconds, limb moved.
30 minutes later:	
8 seconds, limb moved.	No movement.
30 minutes later:	
15 seconds, limb moved.	No movement.
30 minutes later:	
15 seconds, limb moved feebly.	No movement.
30 minutes later:	
15 seconds, limb moved.	No movement.
30 minutes later. H_2SO_4 $\frac{1}{300}$:	
8 seconds, limb moved.	No movement.
30 minutes later:	
8 seconds, limb moved.	No movement.
30 minutes later:	
12 seconds, limb very feebly moved.	No movement.

Action on Motor Nerves.—In these experiments the sciatic nerve of the frog was used to test the action on the conductivity of motor nerves. The solution employed was a saturated solution in $\frac{3}{4}$ per cent. solution of sodium chloride, and the apparatus employed was that devised by Professor Cash, and figured in the JOURNAL of November 2nd, 1889, in my paper on "Urethane." The result of a large number of experiments showed that the nerve trunk slowly lost its conductivity, and that subsequent washings with salt solution tended to recover it.

Action on Muscle Substance.—The experiments were performed on the gastrocnemii of the frog. The muscle was immersed in a solution contained in the muscle chamber invented by Professor Cash. Two sets of experiments were performed, namely, (1) the immersion of the muscle in a saturated solution, in a $\frac{3}{4}$ per cent. salt solution and single stimulations employed to test the irritability of the muscle substance, and (2) the immersion of the muscle in a saturated solution, in $\frac{3}{4}$ per cent. salt solution and the application of the faradic current to test the irritability of the muscle. The solubility of the drug at ordinary temperature in salt solution was but limited, the strength of the solution operated with being about 1 in 220. In all the experiments on muscle substance this saturated solution was employed, weaker solutions not seeming to offer any inducement to experiment with them. Since the action of salicylate of soda on frog muscle is negative, it was considered advisable to test the solubility of sulphonal in a solution of it, but it was found that its solvent power was not greater than that of sodium chloride.

(1) *Result of single stimulations* showed (*a*) that the solution slowly diminished the irritability of muscle substance; (*b*) that after the muscle was washed in salt solution and immersed for a short time in it irritability was so far recovered; (*c*) that it was only after repeated poisonings and washings and immersions that the muscle failed to respond to electrical stimulation.

(2) *Result of Faradic Current.*—A saturated solution was employed for this method, and the experiment showed (*a*) that there was a gradual lowering of the normal tetanic curve; (*b*) that subsequent washings and immersion in salt solution recovered so far the muscular irritability, and it was only after prolonged treatment that the tetanic curve was abolished.



A, stimulation series. S. S. sulphonal in normal salt solution. Coil = 7.5 centimètres.

I = normal stimuli.
II = 5′ later in sulphonal.
III = 5′ later in sulphonal.
IV = 5′ coil at 3.5 centimètres.
V = 5′ imm. coil 3.5 centimètres, after washing in salt solution.
VI = 5′ coil 3.5 centimètres.
VII = 20′ coil 3.5 centimètres.
VIII = 30′ coil 0.0 centimètre.

Coil at 0.0 centimètre remained for 90′ with gradual loss of irritability, till at 180′ no response was obtained, coil being still at 0.

Sulphonal thus resembles paraldehyde and urethane, so far as its action on muscle substance is concerned. All three drugs abolish temporarily the irritability of muscle substance. All allow of considerable recovery of the irritability of the poisoned muscle, if the muscle so poisoned be speedily washed in salt solution. It must be noticed, however, that the solutions of sulphonal employed in these experiments were far weaker than those of either paraldehyde or urethane. No initial rise in irritability was observed to follow the application of sulphonal; in this the drug resembled urethane and differed from paraldehyde.

Clinical Observations.—A number of experiments were conducted with the object of ascertaining the action of sulphonal on the excretions by the kidneys, comprising the increase or decrease of the fluid constituents of the urine, its action on urea, its influence on the excretion of phosphates, as well as its effect on the reaction of the urine.

Here let me thank the courtesy of a number of friends who willingly placed themselves at my service for these experiments. The experiments in all cases were fairly perfect and complete, and, as the results in each were much the same, one case has been selected and given complete. One case detailed is that of a boy aged 10, who was suffering from a slight attack of chorea, and on whom it was thought advisable to try the therapeutic action of the drug. The therapeutic action of the sulphonal on this case of chorea was negative. As it was evident from other observations that sulphonal had a marked hypnotic influence on persons in ordinary health, and as the object in this set of experiments was simply to ascertain its action on the excretions from the kidneys, the subject of the experiment was not confined to bed, but was allowed a moderate amount of exercise, the nature of which was fairly constant. The diet was regulated in regard to solids and fluids, and kept constant during the whole time of the experiment. The solids were weighed and the fluids measured, and the experiment was continued till the subject indicated that he was tired of it. In the case in which the drug was tried as a therapeutic agent in chorea, observations were also taken as to the action of the drug on the pulse, respiration, the skin, temperature, and digestion. When a fairly fixed average of excretions was reached a small dose of the drug was given for three consecutive mornings. This was followed by a like period of freedom from administration of the sulphonal, then three other days succeeded in which an increased dose was given, and so on, until the observations were concluded. A like method was employed while the chorea case was being treated. The total urine passed in twenty-four hours was collected, and its measurements are expressed in centimètres. The reaction was always noted on litmus paper immediately after the urine was passed. All the estimations of the urea and phosphates were checked by control experiments.

Diet.—The diets of the two recorded cases are given in full; the one, J. M., is that of the boy suffering from chorea, the other, J. C., is that of a healthy young man who placed himself at my disposal for the experiment.

Diet of J. M.—Case of Chorea.

The diet, which continued essentially the same during the whole experiment, was the following:

		Fluids. Cubic centimètres.	Solids. Grammes.
Breakfast	Porridge	—	150
	Bread	—	60
	Milk	350	—
Dinner	Soup	250	—
	Bread	—	50
	Pudding	—	150
	Beef	—	75
	Potatoes	—	50
Supper	Egg	—	50
	Bread and butter	—	125
	Milk	350	—
	Water	300	—
	Total	1,250	710

Diet of J. C., aged 25.

		Fluids. Cubic centimètres.	Solids. Grammes.
Breakfast	Porridge	—	224
	Bread and butter	—	56
	Milk	280	—
	Tea	168	—
Dinner	Soup	150	—
	Bread	—	56
	Beef	—	112
	Pudding	—	84
	Potatoes	—	168
	Milk	280	—
Supper	Bread and butter	—	112
	Tea	336	—
	Water per day	560	—
	Total	1,774	812

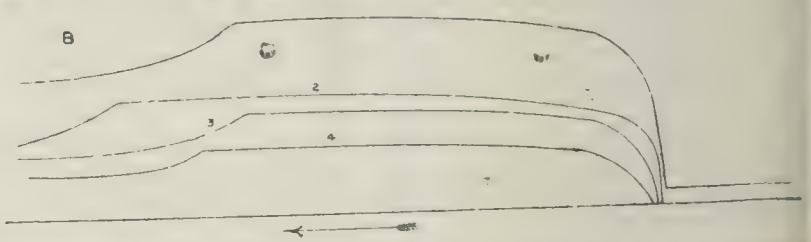
Estimation of Urea.—The method employed was that of Russell and West, that is, by decomposing the urea and calculating from the measured nitrogen the amount of urea present in the sample. This method, when employed with freshly prepared sodium hypobromate, is ready of application, and sufficiently accurate; care, however, should always be taken to allow a definite time for the nitrogen to pass into the graduated tube of the apparatus after the bulb has been warmed. This space of time was the same throughout the experiments, so that the result was equal in them all. The result of these observations showed that with small doses (5 to 10 grains) there was an increase in the excretion of urea, but that with large doses (30 to 40 grains) there was a decrease in the excretion.

CASE I.—*Daily Journal:* J. M., aged 10; Chorea.

Date.	Sulphonal Dosage.	Urine Passed in 24 Hours.	Reaction.	Specific Gravity.	Urea.	Phosphates.	Pulse. 9 A.M.	Pulse. 10.30 A.M.	Pulse. 12 P.M.	Respirations. 9 A.M.	Respirations. 10.30 A.M.	Respirations. 12 P.M.
1889.	Grs.	c.c.			Grms.	Grms.						
Sept. 29	—	800		1022	12.6	2.2						
,, 30	—	1040		1020	11.4	2.9						
Oct. 1	—	840		1022	12.6	2.1						
,, 2	5	1100		1020	11.0	2.8	84	82	82	26	28	26
,, 3	5	1000		1021	12.5	2.4	82	80	80	26	26	25
,, 4	5	1360		1019	24.2	2.0	86	84	84	24	24	24
,, 5	—	1030		1020	18.5	2.3						
,, 6	—	1180		1022	25.9	2.3						
,, 7	—	1000		1019	14.0	2.4						
,, 8	10	880		1023	11.4	2.4	78	78	80	24	24	24
,, 9	10	1120		1020	13.4	2.0	80	80	80	24	26	24
,, 10	10	1220		1021	13.4	2.4	80	80	80	26	26	24
,, 11	—	1000		1019	10.0	2.4						
,, 12	—	840		1021	11.3	2.0						
,, 13	—	1120		1020	16.8	2.2						
,, 14	20	1270		1022	11.7	2.2	84	84	80	26	26	24
,, 15	20	1050		1021	14.3	2.0	84	84	84	26	26	26
,, 16	20	900		1018	11.7	1.8	80	80	82	26	26	24
,, 17	—	1000		1020	16.0	1.6						
,, 18	—	560		1026	6.7	1.9						
,, 19	—	760		1023	9.8	1.8						
,, 20	30	800		1020	9.6	2.8	80	80	80	24	22	18*
,, 21	30	670		1021	8.7	1.3	80	80	80	26	24	16*
,, 22	30	640		1022	10.2	1.5	80	82	82	24	24	18*
,, 23	—	660		1022	7.9	1.5						
,, 24	—	1050		1019	11.5	2.1						
,, 25	—	900		1020	7.6	2.1						

* Sleeping.

Taking the results obtained from the case of chorea, it was observed that with 5-grain doses there was an increase in the excretion of urea; thus the total excretion of urea for three days before the administration of the drug was 36.6 grammes; when, however, 5 grains were given for three consecutive days, the urea excreted amounted to 47.7 grammes, an increase of 11.1 grammes. Three days before the administration of 30-grain doses the total urea excreted was 32.5 grammes; when this dose was given daily for three consecutive days the total amount fell to 28.5, a decrease of 4 grammes. Again, the three days prior to the administration of 20-grain doses, the total urea excreted was 38.1 grammes, and, with daily doses of 20 grains, the total urea excreted in three days was 37.7, a decrease of 0.4 gramme. It was noticed that the controlling influence of the drug on the excretion of urea continued more or less for the three days succeeding the last administration of 30-grain doses, the total amount of urea excreted being 27 grammes.



B. Faradic stimulation.—30′ between each stimulation. S. S. sulphonal in normal salt solution.
Tracings show I = normal tetanogram after 10′ in norm. salt. solu.
,, II = lowering after 30′ in sulphonal.
,, III = lower curve 30′ after last.
,, IV = still greater lowering 30′ after III.
30′ after IV = no response to repeated stimulation.

CASE II.—*Daily Journal:* J. C., aged 25 years.

Date.	Sulphonal Dosage.	Urine passed in 24 hours.	Reaction.	Specific Gravity.	Urea.	Phosphates.
1889.	Grains.	c.c.			Grams.	Grams.
Nov. 10	—	1400	Acid	1023	29.4	5.0
,, 11	—	1429	,,	1024	32.8	5.3
,, 12	—	1299	,,	1019	25.9	3.6
,, 13	20	1392	,,	1020	27.8	3.9
,, 14	20	1789	,,	1025	33.9	4.5
,, 15	20	1136	,,	1020	24.9	3.9
,, 16	—	1820	,,	1026	47.3	4.7
,, 17	—	1420	,,	1023	34.0	4.4
,, 18	—	1560	,,	1023	32.7	4.6
,, 19	40	1420	,,	1022	31.2	3.5
,, 20	20	1372	,,	1021	28.1	3.7
,, 21	20	1566	,,	1022	26.0	4.6

In the case of J. C., aged 25, for three days without the administration of sulphonal, the total amount of urea excreted was 88.1 grammes, and on three consecutive days, under the influence of sulphonal, with a dose of 25 grains daily, there was excreted 86.6 grammes, a decrease of 1.5 grammes. Again, in three days without sulphonal, there was excreted 114 grammes, and in three days with sulphonal in 30-grain doses daily, there was excreted 85.3 grammes, or a decrease of 28.7 grammes. It is thus evident that with doses sufficient to produce a hypnotic effect there is a decrease of the excretion of urea.

Estimation of Excretion of Phosphates.—The phosphates were estimated by a volumetric solution of uranium acetate, and in all these estimations control experiments were performed. The reaction on which the experiment depends is as follows:—Uranium acetate with a soluble phosphate forms uranium phosphate, which is insoluble, and in a warm solution readily precipitated. Immediately on the whole of the uranium phosphate being precipitated, the termination of the reaction is indicated by means of potassium ferrocyanide, which gives a chocolate colour with soluble uranium compounds, this colour being due to the formation of uranium ferrocyanide.

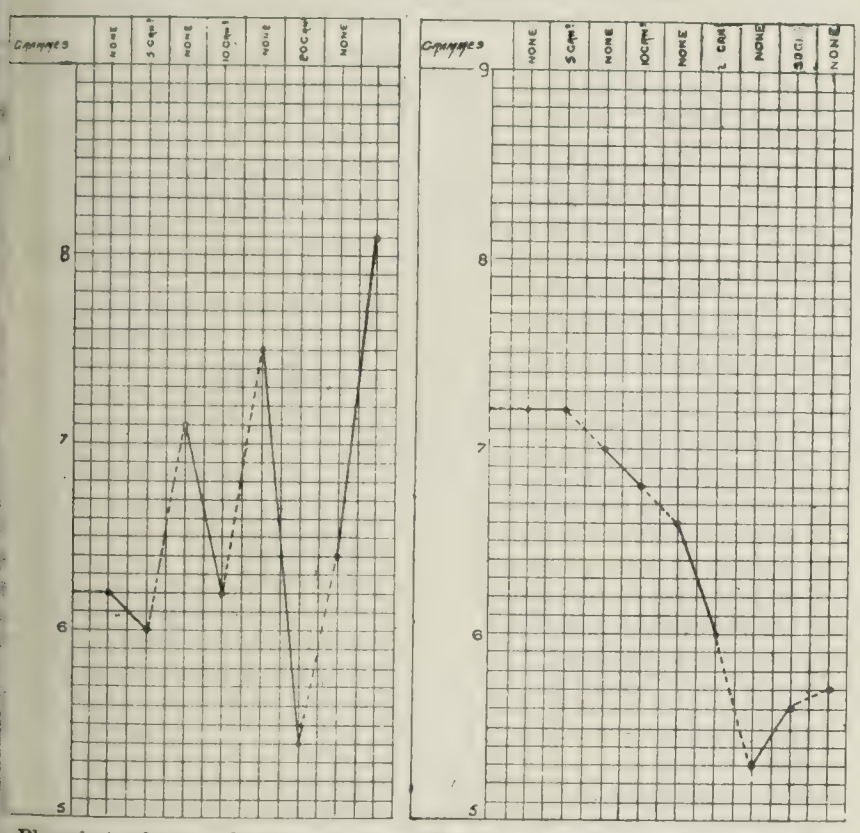
The result of the experiments on the excretion of phosphates showed that sulphonal had a tendency to reduce their excretion. Thus, in the case of J. C., the total amount of phosphates excreted in three days without sulphonal was 13.9 grammes, while in the three succeeding days, with sulphonal in doses of 25 grains daily, the excretion of phosphates was 12.3 grammes, or a decrease with sulphonal of 1.6 gramme. And again, in three following days, no sulphonal having been given, the excretion of phosphates returned to 13.7 grammes, but when doses of 30 grains were given

on the three succeeding days the excretion fell to 11.8, a decrease with sulphonal of 1.9 grammes.

Putting this another way; during six days during which no sulphonal was given, the total amount of phosphates excreted was 27.6 grammes, and in six days, with daily administration of sulphonal, the total amount of phosphate excreted was 24.1 grammes, showing a decrease of 3.5 grammes in six days, which is a decrease of fully 0.5 gramme *per diem*. In another case, of which there are full records, the results are as follows:—

	Phosphates excreted.	Increase.	Decrease.
Three days without sulphonal	6.2 grammes	—	—
,, with sulphonal, doses of 5 grs...	6.0 ,,	—	0.2
,, without sulphonal	7.1 ,,	—	—
,, with sulphonal, doses of 10 grs...	6.2 ,,	—	0.9
,, without sulphonal	7.4 ,,	—	—
,, with sulphonal, doses of 20 grs...	5.4 ,,	—	2.0
,, without sulphonal	6.4 ,,	—	—
,, with sulphonal, doses of 40 grs...	8.1 ,,	1.7	—

With regard to the last three days, it must be noticed that the average is increased by the extraordinary excretion that took place on the first of these three days during which the 40-grain doses were given. This exceptional excretion of phosphates is difficult to account for, the subject being quite quiet, and showing no indication of restlessness. During the three days succeeding the administration of the 40-grain doses, the total excretion of phosphates was 5 grammes, indicating that the action of the drug in diminishing the excretion of phosphates still lingered.



Phosphate charts.—Sulphonal given three consecutive days followed by three days' freedom. Phosphates expressed as total of three days (continuous line represents days on which drug was administered, interrupted line the days of non-administration). Quantities of phosphates expressed in grammes, doses of sulphonal in grains.

Excretion of Fluid Constituents of Urine.—No definitely marked influence was observed to follow the administration of the drug as regards the fluid constituents of urine. With the smaller doses there was occasionally noticed a tendency to an increase, and with larger doses a decrease. Thus, in the case of J. M., the total quantity of urine passed in three days before the administration of sulphonal was 2,680 cubic centimètres, and the total quantity passed when 5 grains daily were being administered was 3,460 cubic centimètres, or an increase of 780 cubic centimètres with sulphonal. The total quantity of urine passed in three days without sulphonal was 2,320 cubic centimètres, while under influence of daily doses of 30 grains the total quantity excreted in three days was 2,110, or a decrease with sulphonal of 210 cubic centimètres. The case of J. C. shows a like result. The total urine passed in three days before the administration of the drug was 4,128 cubic centimètres, and, under influence of 25-grain daily doses of sulphonal, the excretion was 4,317 cubic centimètres, or an increase with sulphonal of 289 cubic centimètres. Again the total urine passed in three days without sulphonal was 4,800, and in the three days, with daily doses of 30 grains, the total excretion of urine was 4,358 cubic centimètres, or a decrease with sulphonal of 442 cubic centimètres. But the fluctuation of the fluid constituents of urine was too irregular to allow of any definite statement.

Reaction of Urine.—When the subjects were under the influence of the drug, it was noticed that the reaction which was taken immediately after micturition was normally acid.

Colour and Odour also remained normal during the experiment, but with larger doses there were occasionally present urates in moderate quantities.

No *albumen* was ever detected during any of the experiments.

Pulse, which was recorded before administration and at intervals of one, two, four, and sometimes six hours, or until the action of the drug seemed to have exhausted itself after administration, yielded negative results.

Respirations, which, like the pulse rate, were recorded at intervals, did not with the smaller doses show any alteration, but with large doses sufficient to produce the full hypnotic action there was a slowing of the respiratory acts to the extent of 2 to 6 per minute.

Action on the skin, both with small and large doses, was negative.

Temperature, which was taken during the experiment both in axilla and rectum at stated intervals, was also negative.

Effects on Digestion.—Contrasted with paraldehyde and urethane, the action of sulphonal on the gastro-intestinal tract is distinctly favourable. It was only at the end of the most prolonged experiment that in two or three cases any evidence of irritation was noticed. As in some cases the patient was on the same diet for a month, certain reservation has to be made as to whether the drug was the entire cause of the disturbance two or three times noticed. The subject complained of sickness along with headache and vomiting, which took place once or twice after a dose of 40 grains. It was noticed that, although emesis took place in both cases about six hours after dinner, the food was only very slightly digested. In another case it was observed that while the patient was having large doses there was a tendency to diarrhœa, the motions being large and loose. In none of these cases, however, did the subject complain of pain, nor was tenderness elicited by pressure on the stomach or bowels. In the majority of cases there was no interference with the action of the stomach or bowels, and the appetite remained perfectly good till the end of the experiment. This comparatively neutral action of the drug on the alimentary tract was still further confirmed by its exhibition in those cases of insomnia where its use was indicated. None of the cases showed any tendency to have their gastric functions interfered with. No thirst was observed to follow administration.

Hypnotic Action.—Although the primary object of this section of the experiments was not to investigate the value of the drug as a hypnotic, still observations were noted regarding this action in some of the cases. In the case of chorea the drug was given in the morning, the patient being kept in bed in a quiet room, so that if sleep should supervene there would be as few disturbing elements as possible. Until doses of 20 grains were given, there was no hypnotic influence noticeable, but when this dose was reached the subject began to feel drowsy, and generally slept for an hour or two. When doses of 30 grains were given, the hypnotic action became still more marked, the patient remaining drowsy for most part of the day, with occasional sleeps intervening. On the third administration of 30 grains the boy slept most of the day, apparently pleasantly and contentedly, and there was no interference with his usual nightly sleep. The sleep was tranquil, refreshing, and only once did this patient awake with slight confusion of mind, and this was following the third 30-grain dose. Along with this confusion of thought there was giddiness and slight inco-ordination of the lower extremities. There can be no question that the drug has a valuable hypnotic action.

Clinical Observations in Cases of Insomnia.—From observations already recorded there cannot be any doubt that the drug is a valuable addition to the list of hypnotics. In the great majority of cases the sleep which follows the administration of the drug is free from presomnial excitement, the sleep induced is tranquil,

prolonged from six to ten hours, and the awakening is free from unpleasant sensations. There are cases, however, in which the administration of the drug produces certain sets of cerebral symptoms and distinct feelings of depression. No marked period of tolerance has been noticed, even after considerable exhibition of the drug, and no distinct evidence of craving for the drug follows. As might be expected, the patient frequently desires a readministration of the dose where the insomnia has been overcome; but this feeling was more in apprehension of passing a sleepless night than from a morbid craving for the drug.

Owing to its insolubility many different methods have been proposed for its administration. Of the many methods probably the best is that the drug should be given in a state of the finest possible trituration in some warm inert fluid. In asylum practice it is common to give the drug in hot coffee, tea, or beer, and this, no doubt, is a distinct advantage, as the patient can be induced without suspicion to take what he considers is the ordinary beverage. It seems, however, from these observations that tea or coffee very considerably counteract the hypnotic action of the drug. For in the case of J. C., who was under observation, he was always able to modify the intense desire for sleep, which at times was very oppressing, by a cup of strong tea, and as a rule he stated that the sleepy feeling, once overcome by the tea, did not recur before the administration of another dose. It should be remembered, following its insolubility, that the drug must be given a considerable time, at least an hour, before it is desired to produce sleep, and that the patient should be placed in the most favourable conditions possible to receive the greatest benefit from the drug. Contrasting its reliability with urethane and paraldehyde, it probably is the most valuable hypnotic. At any rate, over paraldehyde it has the great advantage of being tasteless and causing no after disagreeable odour of the breath. My friend Dr. George Duffus, of Parkside Asylum, Macclesfield, who kindly at my suggestion undertook a series of clinical observations, reports as follows: "An extended experience of sulphonal only confirms my early favourable impressions regarding it. It does not affect either respiration or circulation. I have used it in all sorts of cases, the weak and decrepit of 70, and the robust of 25. In a few cases sickness has come on, probably owing to some idiosyncrasy of the patient. A dose of less than half a drachm has never done any good; usually I give 40 grains, and in acute cases if the patient be fairly nourished a drachm is given. It acts more satisfactorily, and so far as my experience goes is the best hypnotic we possess." Dr. William Reid, of the Royal Lunatic Asylum, Aberdeen, who also kindly undertook a series of clinical observations for me, reports that the "effect of sulphonal as a hypnotic is eminently satisfactory," and he also regards it as the "best hypnotic we at present possess in insomnia of the insane." In cases of wasting diseases, such as phthisis and tubercular disease of the joints, and also in some cases of hysteria, it was observed that occasionally a condition of depression more or less marked followed the dose, the patient frequently even complaining that he felt as if he were going to die. That this depression was cerebral was evident because the pulse kept quite good, and that it was due to the drug was fairly certain, since a repetition of the same dose produced a similar condition.

The drug being comparatively new, it is interesting and useful to notice that, in some cases at any rate, it produces symptoms which point to a distinct action on the cerebral functions, and it is well that these symptoms be carefully considered, so that a continued use of the drug may not lead to interference with mental coordination. In one case in which a dose of 40 grains had been given one night, and when only an hour or two of sleep was secured, a similar dose being given the night following, the patient slept for nearly sixteen hours. The sleep was tranquil, the patient could be easily roused, and made to answer intelligently; the pulse continued normal. Respirations slowed 2 to 5 per minute. On getting out of bed on spontaneously awakening, he was unable to control his lower extremities, and could walk only with support. His limbs seemed to double up underneath him, and he complained of being very giddy. On being helped to walk, there was a tendency to fall to the left side. The patient, indeed, presented all the physical appearances of one who, in a state of profound alcoholic intoxication, had retained intelligence. This condition of loss of power of the lower extremities and giddiness continued in a modified degree for another day, and then gradually subsided without leaving any deleterious effect. Other cases akin to this were noticed, although not to so marked a degree, giddiness and incoordination of the lower extremities being usually complained of. In another case the inco-ordination was marked in the upper extremities alone. In this case the subject was unable to completely fulfil volition with his hands: for example, when he wished to lift his teacup, he unconsciously let it drop in the act of conveying it from the saucer to his mouth; and when this occurred several times, he was intensely surprised why it should happen. In some cases, again, complaint was made of confused sensations on awakening, the patients being unable to understand who they were and where they were. So marked was this in one case, that the patient preferred not to take another dose. This feeling of confusion in most cases speedily passed away, but in one case it continued for about an hour and a half.

Its action on cases of acute alcoholism, sleeplessness being a prominent symptom, was tried, and the results in most of the cases were highly satisfactory. The dose given was from 60 to 80 grains; and although the action of the drug as a hypnotic was somewhat delayed, still the sleep which supervened was markedly refreshing. It was noticed in one case especially in which a combination of chloral hydrate and bromide of ammonia in large doses had not only failed to induce sleep, but was repeatedly vomited, a dose of 60 grains of sulphonal had the desired effect, producing eight hours of pleasant sleep.

SUMMARY OF RESULTS DETAILED IN THIS CONTRIBUTION.

1. It reduced the excitability of the reflex function of the spinal cord.
2. It diminished peripheral sensation.
3. Clinical observations showed that large doses slowed respiratory acts.
4. It did not affect the pulse rate.
5. That it slowly destroyed the conductivity of motor nerves, and that subsequent washings with salt solution tended to restore it.
6. Saturated solutions slowly diminished irritability of muscle, but subsequent washings with salt solution tended to restore the irritability.
7. That small doses, 5 to 10 grains, increased excretion of urea.
8. That large doses diminished excretion of urea.
9. That under the influence of the drug the excretion of phosphates was diminished.
10. That it had no marked influence on the excretion of the fluid constituents of urine.
11. That in none of these experiments was any cutaneous eruption observed.
12. There was no flushing or perspiration markedly observed.
13. That its influence on temperature was negative.
14. That it occasionally caused vomiting, but there was no marked loss of appetite.
15. That diarrhœa was noticed occasionally.
16. That in good health a hypnotic effect was distinctly produced.
17. That in cases of insomnia it was reliable.
18. That the sleep which followed its administration was generally tranquil and refreshing.
19. That sometimes the patient woke with a feeling of confusion.
20. That inco-ordination of the upper extremities occurred occasionally.
21. That inco-ordination of the lower extremities occurred occasionally.
22. That a feeling of depression occasionally supervened.
23. That giddiness was observed.

In conclusion, I have pleasure in expressing my sincere thanks to Professor J. Theodore Cash for the use of his apparatus and laboratory.

NEW METHOD OF EXAMINING NERVOUS TISSUES IN THE FRESH STATE.—Kronthal (*Neurologisches Centralblatt*, No. 2, 1890) has described a method for examining in a fresh state the microscopical characters of the central nervous system. A piece—about as big as a pin's head—of brain or spinal cord, as the case may be, should be taken quite fresh and placed upon the object-glass. It is then covered with a cover-glass and pressed out flat. A drop of a 0.5 per cent. solution of methyl blue is placed at the edge of the cover-glass, which is raised to let the stain run in. After from thirty seconds to a minute the superfluous stain is removed with blotting-paper. The cover-glass is then raised; the preparation is allowed to dry in the air. This takes five or ten minutes. A drop of Canada balsam is then added, and the preparation is ready for examination.

ON A PECULIAR OBSTRUCTIVE FORM OF LARYNGEAL TUBERCULOSIS WHICH SIMULATES BILATERAL ABDUCTOR PARALYSIS.

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STENOSIS, though not one of the commonest, is yet, perhaps, the most important result of tubercular disease of the larynx.

In most cases this complication is the outcome of a massive infiltration, with or without œdema, of some part of the mucous membrane situated above the vocal cords.

In the form which is the subject of the present communication, stenosis occurs primarily at the rima glottidis, and depends not on the amount of swelling, but on mechanical fixation of the vocal cords in the position of phonation. I shall now give a short account of two of the six cases of this affection that I have met with.

CASE I.—J. S., aged 60, messenger, admitted under Dr. Reginald Thompson, April 20th, 1887.

History.—Gradual onset of cough and "tickling" in the throat six months ago. Two months later he noticed pain in the throat, followed by dysphagia and shortness of breath. A few weeks ago he began to spit up a little phlegm. No marked wasting.

Present Condition.—Patient is fairly well nourished. Voice clear. Marked inspiratory stridor and dyspnœa. Larynx hardly moves at all with respiration. Tracheal breathing over manubrium sterni, faintly heard also at the apex of each lung. Breath sounds generally weak.

Laryngoscopic Examination.—Much swelling of both ary-epiglottic folds. On the internal aspect of the right arytenoid cartilage a small pinkish pea-sized outgrowth. Vocal cords slightly congested and in the median position, being separated by rather less than one-eighth of an inch. No movement of the cords with inspiration. On phonation closure of the glottis ensues. (? Paralysis of the dilators or fixation mainly affecting these muscles.)

Diagnosis.—Laryngeal new growth (?)

The next day tubercle bacilli were found in the sputum. "Laryngeal and probably pulmonary tuberculosis," were then diagnosed.

April 27th. Increased swelling of ary-epiglottic folds. Left edge of epiglottis swollen and irregularly ulcerated. Right arytenoid cartilage and vocal cord now completely fixed. Left cord still moves slightly towards the middle line during phonation. No movement outwards.

The dyspnœa gradually became more severe and paroxysmal. Tracheotomy was accordingly performed on May 1st, and the dyspnœa was at once relieved.

The patient's general condition, however, gradually deteriorated after the operation. The swelling of the epiglottis and ary-epiglottic folds became so great that the glottis could no longer be seen, subcrepitant *râles* were heard at the apices of both lungs, and he died on June 5th, five weeks after the tracheotomy.

Summary of the Post-mortem Examination.—Small cavities and fibro-caseous patches at the apices of both lungs. Miliary tuberculosis of the intestine and kidney. Tubercular ulceration and infiltration of the larynx and trachea.

Recurrent laryngeal nerves quite free from pressure or disease of any kind.

The mucous membrane of the larynx was extensively infiltrated, and irregularly but superficially ulcerated, both ary-epiglottic folds and the left ventricular band being especially swollen. The apex of the left arytenoid cartilage was exposed by the ulceration. A small reddish sessile tumour of the size of a pea projected from the internal aspect of the right arytenoid cartilage. Vocal cords in the median position lying almost in contact, right cord unaffected, the left superficially ulcerated, and more or less fused with the swollen ventricular band. Both arytenoid cartilages fixed, the right more than the left. Crico-arytenoid joints healthy. Crico-arytenoidei postici muscles thin and pale, their fibres being interspersed with yellowish lines; this condition much more evident on the right side.

Microscopical Examination.—The muscular fibres of the crico-arytenoidei postici were very indistinctly striated, some fibres being almost devoid of striation, and containing coarse granules. In places large groups of oil globules were seen lying between the fibres. These changes were much more pronounced on the right side. The fibres of the laterales showed fairly distinct striation as a rule, but some of them were very thin and imperfectly striped. The small tumour had a well-marked tubercular structure containing giant cells and tubercle bacilli. The right ary-epiglottic fold exhibited a marked fibro-tubercular structure.

CASE II.—T. W., aged 42, admitted under Dr. Douglas Powell, April 23rd, 1888. The patient had been ailing for about ten months with cough, expectoration, and debility. Seven or eight months before admission he lost his voice, and for the last two months he had suffered from increasing dyspnœa, for which he was admitted.

Present Condition.—Slight inspiratory stridor and dyspnœa while lying still, much increased by movement. Respiratory excursion of the larynx does not exceed a quarter of an inch. Aphonia complete. At the apices of both lungs slight dulness (more marked behind), weak tubular breathing, and sonorous rhonchus. Tracheal breathing over the manubrium sterni.

Laryngoscopic Examination.—Vocal cords slightly congested and completely fixed in the median position about one-eighth of an inch apart, their surface being coarsely granular and uneven. Both ventricular bands deeply congested, the right much swollen, the left only slightly so. Slight swelling in the right arytenoid and inter-arytenoid regions without ulceration. Tubercle bacilli were found in the sputum. The dyspnœa steadily increased, and tracheotomy was performed on May 13th. Rapid improvement followed. The patient gained 10 lbs. in weight, his temperature gradually fell, and he was discharged, wearing his tracheotomy tube, on July 23rd.

In four other cases a similar condition of the glottis existed during life, tracheotomy being performed in three of them. In one case a necropsy made three months after tracheotomy showed that both cords and arytenoid cartilages had been destroyed by ulceration. In a second case the vocal cords had been separated from the arytenoid cartilages by deep ulceration extending from the ventricles, and had become attached to the cricoid cartilage in the middle line. In the two remaining patients tracheotomy was followed by death in periods of two and three months respectively, and no necropsy was obtained.

These cases prove the existence of a form of laryngeal tuberculosis in which the danger to life is out of all proportion to the degree of infiltration of the larynx or lungs. The severity of the disease depends on the persistent approximation of the vocal cords in the position of phonation. This condition of the glottis can only be explained in one of two ways, either by paralysis of the crico-arytenoidei postici muscles, or by mechanical fixation of the vocal cords. The former supposition is met by the objection that although the cords lay close together, as in cases of bilateral abductor paralysis, their movements to and from the middle line were almost equally impaired.

Again, if the loss of movement were due to complete bilateral paralysis both of abductors and adductors, the vocal cords should be placed further apart, in the so-called cadaveric situation. Unequal paralysis of the two antagonistic groups of muscles, affecting the abductors to a greater degree, would supply a somewhat more probable explanation. But it must be stated that in every case the laryngoscope gave evidence of more or less infiltration in the neighbourhood of the arytenoid cartilages, and, sooner or later, of structural changes in the vocal cords themselves, facts suggestive of mechanical interference.

In Case I, the *post-mortem* examination was made five weeks after tracheotomy, and the destruction of tissues was not too advanced to allow of some insight being obtained into the causes that led to the peculiar condition of the glottis. Both arytenoid cartilages were found to be fixed, the right especially, by a firm tubercular growth which extended down to the perichondrium, without invading the cavity of the crico-arytenoid joints, which were perfectly healthy. In the presence of so obvious a mechanical hindrance to the free movement of these joints, we need hardly go any further to explain the immobility of the vocal cords. The condition of the muscles, namely, the degenerative changes in both crico-arytenoidei postici, preponderating on the right side, and the less diseased condition of the crico-arytenoidei laterales are important points, and deserve special attention.

It is not easy to see why the cords should have taken up the median position, for there was no appearance, either in the patient's lifetime or after death, of any dislocation of cartilages,

neither was there any cicatricial or other distortion of parts. A consideration of the relative appearances presented by the abductor and adductor muscles suggests that the effects of the peri-arytenoid infiltration were at first mainly felt by the crico-arytenoidei postici, impairment of function of these muscles, aided possibly by contraction of their antagonists the adductors, leading to approximation of the cords, which became permanently fixed in their new situation in consequence of the increasing infiltration around. This sequence of events would harmonise with the clinical history, which shows that obstructive symptoms had existed for at least three months before any distinct loss of voice occurred. Horsley and Semon's experiments with the freshly-excised larynx of animals have demonstrated that the crico-arytenoidei postici lose their direct electrical excitability before the laterales, and the former may therefore be considered to be the more vulnerable muscles.

Without venturing to assert that the lesion was precisely the same in every case, there can be little doubt that the want of mobility of the vocal cords was due in each instance to some interference with the crico-arytenoid articulations. The hypothesis that the affection began as an arthritis or perichondritis in the first place, seems less probable than the explanation that has been suggested, from a consideration of the symmetrical nature of the process. At the same time, however, it cannot be denied that intra-articular lesions may have existed in some of the cases where no necropsy was obtained, though the relatively slight degree of swelling, the absence of œdema in the early stages, together with the progress of the disease, would appear almost to exclude the existence of a suppurative arthritis. A non-suppurative, adhesive arthritis, on the other hand, would perfectly well account for the fixation of the cords, even if it failed to explain their close approximation, without the intervention of some such unequal muscular derangement as has been contended for in Case I.

I am not aware that the existence of such an adhesive form of arthritis has yet been demonstrated in laryngeal tuberculosis, although its occurrence seems by no means improbable.

It may be mentioned that in none of the cases was any evidence of syphilis obtained.

Severe and abiding stenosis, the distinguishing clinical feature of all six cases, is readily explained by a consideration of its situation and method of production. In the ordinary form of obstruction resulting from massive tubercular infiltration, the degree of accompanying œdema varies considerably, and in a great measure determines the possibility of spontaneous diminution of the swelling. In the last stages of phthisis laryngeal œdema, once established, is practically always persistent; but where the disease is less advanced, inflammatory œdema complicating lesions that are not very extensive may undergo complete or very considerable absorption.

The distinction drawn between these two forms of tubercular stenosis is, therefore, of some practical importance. Paroxysmal dyspnœa occurred in several cases, and is probably to be explained by accumulation of secretion below the glottis, owing to the interference with the mechanism of cough entailed by the rigidly fixed condition of the vocal cords.

An analogous explanation of the paroxysms of dyspnœa which are apt to occur in cases of tracheal stenosis was suggested several years ago by Dr. Bristowe. Spasm of the sphincter muscles of the larynx was, in all probability, also concerned in a minor degree in the causation of these paroxysmal attacks.

The effect of the laryngeal obstruction was to mask the condition of the lungs more or less in every case, and in two instances it rendered auscultation for a time quite valueless. In both cases, however, the detection of tubercle bacilli in the sputum removed all doubt as to the nature of the disease, showing the extreme importance of examining the sputum in all doubtful laryngeal affections, especially where the existence of stenosis prevents us to a great extent from investigating the state of the lungs.

A recognition of the severe and abiding character of the obstruction points clearly to the necessity for some operative interference.

Tracheotomy was performed in five of the cases, and possibly in the sixth case the patient's life might have been prolonged for a brief period by this means. At the same time, when we regard the results of the operation, it cannot be said that they are satisfactory, though in all five instances in which tracheotomy was performed it was undeniably called for, and prolonged life. The longest period that any patient survived was six months. (This patient was still living when he was last heard of.) The other patients lived from six weeks to three months after the operation.

In one case the question of thyrotomy and excision of the posterior parts of the vocal cords was considered, as the man's general condition at first was fairly good. Destruction of the posterior extremities of the cords by means of the galvano-cautery was also suggested; but the fear of exciting inflammatory œdema and spasm with such a narrow glottis negatived this idea. Intubation appeared to offer slight hopes of success owing to the rigidly fixed state of the vocal cords. In consequence of the patient's objection to any operation whatever, valuable time was lost, and, when impending asphyxia rendered tracheotomy imperative, the man's condition had deteriorated to such an extent that all notion of a radical operation was abandoned. Enough has been said to prove that tracheotomy was inevitable in the cases described; but, at the same time, it must be allowed that serious objections exist to the performance of this operation for the relief of laryngeal tuberculosis if it can by any means be avoided. I have endeavoured to draw attention to this subject in a paper published in the *Lancet* in 1888.

Where stenosis of the larynx is caused mainly or entirely by fixation of the cords near the middle line thyrotomy and excision of parts of the rigid cords would be a justifiable procedure, if we could satisfy ourselves that there is comparatively little disease of the lungs. The danger of necrosis of cartilages is, no doubt, very great in tuberculous patients, but this complication is less likely to be produced by simple splitting of the thyroid cartilage than by the persistent irritation of a tracheotomy tube.

Whether thyrotomy or tracheotomy be preferred, there can be little doubt that, as soon as this affection is recognised, some operative interference is urgently needed. We have, in fact, to deal with a condition similar to that existing in bilateral abductor palsy with this exception, that, in the case with which we are now concerned, stenosis of the glottis is due, not to paralysis, which may possibly be temporary, but to permanent mechanical causes. The indications for the operation of tracheotomy, so well expressed by Dr. Felix Semon, in vol. xii of the Clinical Society's *Transactions*, apply, consequently, with even greater force to the present affection.

Until quite recently, I was unaware that any similar observations had been recorded. I find, however, that Messrs. Cornil, Hérard, and Hanot, at page 587 of the second edition of their work, *La Phthisie Pulmonaire*, published in 1888, mention a case, communicated to them by Brissaud and Ruault, in which double tubercular crico-arytenoid arthritis simulated bilateral paralysis of the dilators of the glottis.

The laryngoscope showed a very marked œdematous swelling of the arytenoids and of the ary-epiglottic folds, the vocal cords lying close to the median line, and being quite devoid of movement. Auscultation of the lungs gave a negative result. Death occurred during a suffocative attack, just after tracheotomy had been commenced.

At the necropsy a few tubercular granulations were found at the apices of the lungs, and the examination of the larynx, conducted by Ruault in the presence of Professor Cornil, revealed a diffuse tuberculous infiltration without ulceration. The vocal cords occupied the median position. Both crico-arytenoid joints were diseased, and were filled with pus.

Histological examination proved that the disease was a tubercular arthritis.

This observation is most interesting, as it supplements those that have already been narrated. In this case it is not improbable that the mechanical effects of suppuration within the crico-arytenoid articulation were associated subsequently with a direct myopathic paralysis or paresis of the crico-arytenoidei postici and arytenoideus from extension of the inflammatory process to these muscles, which, from their close proximity to the affected joints, would be specially exposed to such an accident.

The general effects of loss of function of these muscles would be to contribute to the median position of the vocal cords, for, although paresis of the arytenoideus and crico-arytenoidei postici would, to some extent, neutralise each other, the more important adductors, the crico-arytenoidei laterales, being uninjured, could hardly fail, in virtue of their muscular tonus, to approximate the vocal cords when unopposed by the action of their antagonists, the abductors.

On reference to Dr. Semon's excellent and exhaustive article on "Mechanical Impairments of the Crico-arytenoid Articulation,"[1]

[1] *Med. Times and Gaz.*, 1880, p. 5 of reprint.

o which I am very much indebted, it will be seen that he says of his joint: "Even minor degrees of mechanical impairment of its nobility might produce serious troubles in phonation, whilst the complete bilateral true or spurious ankylosis of the artenoid cartilages in that position which they occupy in phonation might directly cause the death of the patient, by the complete occlusion of the glottis which results from juxtaposition of these cartilages." This shows that Dr. Semon fully recognised the possible occurrence of stenosis of the glottis under conditions similar to those with which we are now dealing, though he does not connect this lesion with the tuberculous process.

On the other hand, Case I of the present series actually demonstrated the existence of a secondary adhesive perichondritis, and consequently supports Dr. Semon's contention, arrived at on other grounds, that perichondritis is not invariably suppurative, but may assume a plastic or adhesive character.

Koch[2] says that complete ankylosis of the crico-arytenoid articulations may show the same laryngoscopic appearance as bilateral abductor paralysis. M. Schmidt[3] hints at the possibility of a similar occurrence in phthisis. But none of these authors give particulars of a case, and it remains uncertain whether they have actually observed this condition of the glottis in laryngeal tuberculosis themselves.

It appears, then, from the cases that form the subject of the present communication, as well as from the observation of Brissaud and Ruault above quoted, that fixation of the vocal cords in the median position, simulating bilateral abductor paralysis, may occur in tubercular disease of the larynx, as the result of three different causes:—

1. Plastic infiltration around the arytenoid cartilages leading to adhesive perichondritis and spurious ankylosis.
2. Ulceration, followed by morbid adhesion of the altered vocal cords.
3. Suppurative crico-arytenoid arthritis.

To these causes it may be necessary to add a fourth, if, as is not improbable, further investigations should demonstrate the existence of a non-suppurative adhesive arthritis.

In all cases of this description the performance of tracheotomy, or some other surgical measure, is indispensable, and should not be long delayed; consequently the early recognition of this condition is a matter of no small clinical importance.

CASE OF SUPPURATIVE LARYNGEAL PERICHONDRITIS, WITHOUT ANY ANTECEDENT DISEASE IN THE LARYNX.

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Surgeon to the Department for Diseases of the Throat, Glasgow Royal Infirmary; and Surgeon to the Outdoor Department, Western Infirmary, Glasgow, etc.

SO-CALLED primary laryngeal perichondritis, or, more correctly, perichondritis without any previous affection of the larynx, is so rare that I think it right to place on record the following case, which came under my notice a few months ago at the Glasgow Royal Infirmary.

Mrs. B., a Greek, aged 45, was admitted to the throat ward on October 19th, 1889, complaining of hoarseness, inspiratory dyspnœa, and cough. On inquiring into the history of the case, it was discovered that about three weeks previous to admission the patient had several rigors, and shortly afterwards she experienced slight pain in the throat. This illness she attributed to having slept in a damp bed while residing in the country. A week after the first rigor she noticed that her voice was not so clear as usual, and she suffered from difficulty in breathing. The hoarseness and dyspnœa gradually increased till she applied for admission to the hospital, and for two days previous thereto these symptoms were associated with a moderate cough and expectoration. In respect of personal history, nothing of any importance could be made out. She has always been strong and healthy, and never suffered from any throat or chest affection.

On admission, the patient was seen to be suffering from great difficulty in breathing, associated with noisy stridulous inspiration, but expiration was comparatively quiet. The respirations were twenty per minute. Cough was not very troublesome, but there was considerable and profuse frothy mucous expectoration. At this time an examination of the chest was impracticable on account of the extremely noisy breathing. When I saw the patient next morning I found her sitting up in bed, her pulse weak, and temperature normal; the inspirations were very noisy, but to all appearance the patient was receiving into her lungs a sufficient supply of air, the voice was very hoarse and high pitched, and the cough somewhat stridulous. A laryngoscopic examination could not be made satisfactorily till October 21st, two days after admission, when the following condition was noted. "There is a marked œdematous swelling of the mucous membrane covering the arytenoid cartilages and the false cords, so that only a narrow chink is left between them. During inspiration this opening is apparently not, but must in reality have been, more than one-twelfth of an inch wide, and its edges are thrown into vibration by the ingoing current of air. Upon expiration the opening becomes wider, and permits of free exit of air. This change is most marked upon the left side, the false cord being drawn away from the middle line, so that a view is obtained of the left vocal cord. The left vocal cord is seen to be fixed in the middle line, but no view can be obtained of the cord on the right side."

On November 1st the respiration, although still noisy, was considerably improved, so much so indeed that the patient was very anxious to go home. An examination of the larynx showed the œdema of the mucous membrane to be greatly reduced, but still there was considerable swelling on both sides of the larynx. The patient was therefore strongly advised to remain in the ward; but, notwithstanding this advice, she left the hospital in the afternoon.

A physical examination of the chest made during her residence in the ward showed her lungs to be normal, but the heart was very weak, the area of cardiac dulness increased, but no murmur was present.

On November 25th, a daughter of the patient came to the throat dispensary and informed me that her mother had been very ill for the last three days, and from her description the patient must have had several severe attacks of paroxysmal dyspnœa, probably due to laryngeal spasm. I therefore asked my assistant, Dr. D. McKellar Dewar, to see the patient at her own home for the purpose of ascertaining if the patient was in a fit condition to be removed to the hospital, which he kindly did on the same day. Dr. Dewar, on making a careful examination, found the patient too weak to be disturbed, and he was also satisfied that the obstruction to respiration was not greater than when she left the ward, but it was evident to him that the cardiac weakness had become more threatening.

The patient died suddenly on November 28th, and her friends said that she passed "quietly away" without manifesting any signs of dyspnœa. The friends objected to a *post-mortem* examination, and with considerable difficulty Dr. Dewar got permission to examine the larynx only. The following is his report:—"The appearance of the larynx before cutting open confirms the laryngoscopic view, but adds nothing to it. On splitting up the cricoid cartilage from behind and opening the larynx the posterior surface of the cricoid cartilage is seen to be distinctly eroded a little to the left of the posterior middle line. The right cord is nodular, and immediately below it there is an opening into an abscess cavity of small dimensions, which reaches down the trachea for about half an inch. In addition to the œdema, the mucous membrane of the whole larynx is injected."

REMARKS.—The case just described is peculiar (1) in the obscurity of the disease, the symptoms not being those usually met with in perichondritis, and (2) in so far that there was no apparent cause for what might, by some observers, be regarded as a spontaneous suppuration between the perichondrium and the cricoid cartilage.

(1). In perichondritis of the cricoid cartilage the presence of pain on deglutition is usually complained of by the patient, owing to the irritation produced by substances swallowed. The lymphatic glands in the neck generally enlarge early in the course of the case; there is swelling in front of or around the larynx; and, as a rule, external palpation of the cartilages with the hand produces crepitation, and causes the patient considerable pain; the expectoration contains pus, or purulent mucus may be seen occupying the larynx. In this case none of these symptoms were present. On the other hand, the inflammation of the cricoid cartilage evidently impaired the movement of

[2] *Annales des Mal. de l'Oreille et du Larynx*, No. 6, quoted by Semon, p. 14 of reprint.

[3] *Deutsch. Arch. f. kl. Med.*, Bd. 26.

the abductor muscles of the left vocal cord, as ascertained by laryngoscopic examination, but whether the movements of the right posterior abductors were normal could not be determined during life. The alteration in the voice, the great œdema, and the characteristic cough certainly led one, in the absence of any disease in the mucous membrane, to suspect some serious deep-seated inflammation; but the absence of pain on deglutition or on palpation, the absence of swelling over the larynx and of enlargement of the lymphatic glands, and the circumstance that no abscess could be discerned either by the escape of pus or by the presence of an opening, tended towards the formation of a more favourable diagnosis.

According to Gerhardt,[1] when there is immobility of the vocal cords, clearly not due to paralysis, and associated with marked thickening of the wall of the larynx, particularly of the ventricular bands, then perichondritis should be suspected if a primary disease of the larynx exists which is likely to cause inflammation of the perichondrium. Dr. F. de Havilland Hall goes even further, and says:[2] "Now I accept Gerhardt's conclusions, but would extend them to cases in which the causes of secondary perichondritis are absent."

The case I have just reported demonstrates that perichondritis does occur independently of any antecedent disease in the larynx, and it appears to me that with the facts before us, at the time it was impossible to say definitely that the cartilages were diseased, although I think I was justified in assuming that there was serious deep-seated inflammation.

One of the difficulties we have to contend with is that so-called primary perichondritis is so rare that we seldom think of it in forming a diagnosis, and the symptoms of the disease are so mild, being less severe than those of secondary perichondritis, that death seldom occurs, and an opportunity is not afforded of verifying the diagnosis by a demonstration *post mortem*.

Two other cases of perichondritis have come under my notice, one in hospital, the other in private practice, in which considerable difficulty was experienced during the early stage of the disease in determining whether the lesion was primary laryngeal tuberculosis or inflammation of the perichondrium. Under treatment (on the assumption that the latter condition was the one I had to deal with) by rest, leeching, and the application of cold, followed by administration of iodide of potassium, both cases made a good recovery, and, with the exception of some occasional feebleness of the voice, they are practically well. These, I presume, were examples of perichondritis without suppuration.

2. In almost all cases of so-called perichondritis the disease can be traced to some definite cause. Thus cases have been recorded where it has resulted from injuries such as gunshot wounds, stabs, and incised wounds, or other traumatic lesions. The way in which such causes produce necrosis can easily be understood. On the other hand, in necrosis of the laryngeal cartilages, just as in other forms of necrosis, the disease may be due to deficient nutrition, which may arise from an incomplete or vitiated supply of blood, general marasmus, or hydræmia. Thus in old persons who have suffered from long-standing disease of the heart and arteries, necrosis of the extremities is liable to appear after slight injuries. In the same way in emaciated and bedridden patients necrosis of the cartilages of the larynx may occur. According to Dittrich, in such cases pressure upon the laryngeal cartilages, by reason of decubitus, the pharyngeal muscles being extremely relaxed (the posterior surface of the cricoid is pressed by reason of its own weight against the vertebral column), may cause trophic changes, which give rise to inflammation of the perichondrium, followed by what might be called senile or decubitus necrosis of the œsophagus and of the laryngeal cartilages. In the case under my care no such cause could be detected, nor could it be shown that the patient suffered from any of the diseases most commonly associated with secondary necrosis of the cartilages, such as rheumatism, gout, syphilis, tuberculosis, or any acute and chronic infectious, or infective disease, likely to give rise to the formation of metastatic abscess. There seem, therefore, to be only two possible explanations of the case: either we must believe that this is an example of spontaneous suppuration under the perichondrium, or we must seek for some cause of septic infection. Spontaneous suppuration properly so called, that is to say, the formation of an abscess without local injury or septic infection, is inconsistent with our present views of the pathology of inflammation. But that localised suppuration may occur without any very clear explanation of the mode of infection is willingly admitted. In cases of perichondritis following upon syphilitic, tubercular, or carcinomatous ulceration, the morbid process is easily studied. Septic or specific micro-organisms penetrate the perichondrium from the mucous or ulcerated surface of the larynx and there set up inflammatory changes, at first characterised by thickening of the fibrous tissue of the perichondrium, and followed by the formation of pus, which accumulates so as to dissect from the cartilage its source of nutrition, in the same way as in necrosis of bone the periosteum is separated, and leads to death of the part. The morbid process is generally confined to one cartilage—the cricoid—to begin with, but it may in severe cases extend to others. As the pus accumulates, the perichondrium softens and ruptures, and the inflammation spreads to the surrounding parts through which the pus burrows, and, according to the situation of the disease, an abscess may rupture into the œsophagus, pharynx, larynx, or trachea, or it may discharge externally, and produce a laryngeal fistula. The dead or necrosed cartilage becomes eroded and is slowly separated from the living. When complete exfoliation has taken place, the abscess collapses, and, as a rule, leads to great deformity of the larynx.

In the case of Mrs. B., the disease is only in its early stage, the abscess having evidently just evacuated itself. We have here a disease very closely related to acute periostitis. The disease has probably been induced by some slight injury which escaped observation, and under ordinary circumstances would not have caused harm, but when associated with the accidental presence of septic microbes in the blood the injury otherwise trifling has been sufficient to reduce the vitality and resisting power of the part, and determine the colonisation of the micro-organisms in the perichondrium. When it is remembered that the cartilages of the body, except those of joints, are covered with perichondrium, it is a circumstance worthy of note that with the exception of the cartilage of the septum nasi the laryngeal cartilages are the only ones liable to perichondritis. The perichondrium of the nasal and laryngeal cartilages behaves more like periosteum, a structure which in certain situations is very liable to acute inflammation. Why this is so is difficult to explain. In almost all instances where cartilage shows active inflammatory changes, these are due to secondary processes extending from other parts, not starting in the cartilage itself. For example, chondritis or perichondritis very rarely attacks the costal cartilages, or the cartilages of the ear, and inflammation of the articular cartilages, although very common, is invariably produced by an irritant being brought in contact with one of its surfaces, either by direct infection of the joint, or by disease of the underlying bone. One reason which may be advanced in explanation of the laryngeal cartilages being liable to inflammation is that in breathing, and swallowing heated food, they are more exposed to sudden changes in temperature and during deglutition the bolus of food may injure them. This explanation is supported by the circumstance that the posterior aspect of the cricoid cartilage is more liable to attack than other parts of the larynx. Taking all the circumstances associated with the disease into account, I think it must be admitted that while perichondritis may be met with independently of any previous affection of the larynx, and may arise without any very clear explanation of the mode of infection, still the inflammation cannot be regarded as spontaneous. The pathology of perichondritis is probably similar to that of acute periostitis, the disease being due to septic influences exercised upon a structure whose resisting power has been impaired.

[1] *Berlin klin. Wochenschr.*, 1887, No. 24, p. 439.
[2] JOURNAL, 1889, vol. ii, p. 589.

PASTEURISM IN CUBA.—At the Medical Congress recently held at Havana Dr. Acosta read a paper in which the results of M. Pasteur's preventive treatment in Cuba were set forth. The inoculations were made in the Bacteriological Laboratory of Havana, which was the first place in the tropics where the method was tried. From April 15th, 1887, to December 31st, 1889, 306 persons were treated by the "double intensive" plan; of these, only 5 died after going through the full course. The mortality was therefore, only 1.63 per cent. The first death occurred in 18[illegible] after 105 patients had been treated without any fatality. All the persons submitted to treatment were bitten by dogs proved experimentally and clinically to be rabid, or at any rate "suspect." Seven hundred persons in all had applied for treatment, but only the 306 referred to had been inoculated. Dr. Santos Fernandez, the founder of the laboratory, proposed that a telegram should be sent to M. Pasteur in the name of the Congress, expressing its endorsement of his teaching on the prevention of rabies. This was agreed to.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

SCARLET FEVER AND PUERPERÆ.

RE expression of Dr. A. S. Myrtle in his notes on the above subct, that "scarlet fever when brought in contact with a puerpera nders her liable to great risk of becoming the victim to what is own as puerperal peritonitis, uterine phlebitis, or the more neral name, puerperal fever," is quite in accordance with my perience, and I am at the present time in attendance on such a se.

I was called on March 7th to see Mrs. H., aged 26. On arriving the house, which is a small farm-house, I found the patient had en confined on the previous Monday, March 3rd, of her first ild. There was nothing unusual about the confinement, which s not of long duration, and performed by a midwife without dical aid.

She was then suffering from great pain in the abdomen, which s greatly distended and very tender to the touch, especially er the region of the uterus, which was contracted to the size of fœtal head. The lochia had ceased, and there was no milk in breasts; the tongue was dry; the bowels had not been opened ce her confinement. Pulse was 120; temperature 102.8°. She s also covered from head to foot with a scarlet rash, and had a e throat, which, her attendant told me, came out on the day vious (Thursday). I ordered turpentine stupes to be applied the abdomen, and the vagina to be frequently washed out with dy; and gave her a quarter of a grain of opium and half a grain of omel every four hours; but she got rapidly worse during the next enty-four hours. Her temperature went up to 106°, and I could count her pulse at the wrist. The mouth and throat were so that she could swallow nothing; in fact, she seemed *in extremis*. I then injected a quarter of a grain of pilocarpine under the n, which acted like a charm. It produced a profuse perspiran, brought the temperature to 102°, but it had no effect on the se, which remained uncountable; and she fell into a comfort- e sleep for nearly three hours. After that she could swallow a le, although the tongue was still dry and brown. I then put on a mixture containing sp. am. ar. ℥xx, tr. digitalis ℥x, pot. mid. ℥v, aquam ad ℥i, every four hours, together with alter- e meat and milk suppositories and small quantities of milk l brandy by the mouth, and continued the vaginal washing; l, since the hypodermic injection, she has steadily improved. Her se is now 80, and temperature 98°, and she is desquamating ly. Her urine contains a large quantity of urea, but, as yet, no umen.

n this case I found, on inquiry, there had been two children in same house who had recently had sore throats and red rashes, the mother did not think them ill enough to call in the doctor. infant has had, as yet, no sign of scarlet fever.

think this case is worth recording as the subject is being dis- sed through our valuable JOURNAL, and also it fully endorses Myrtle's opinion, and not Dr. Thursfield's that the risk of let fever to lying-in women is not so great as is made out. re is no doubt my patient had been infected with the fever e week or ten days before her confinement, as she was com- ning of having caught cold and feeling out of sorts some time r to her going to bed, and also she had been exposed to the ction.

he action of the pilocarpine is also worthy of note, for to its on I certainly owe my success with this case.

JOHN H. HARRIS, M.R.C.S., L.S.A.LOND.

odbury, South Devon.

ING the last few months I have attended three women at r confinements, with scarlet fever in the house at the time in of the cases; in the third case the mother developed scarlet r, evidently brought from without.

ASE I.—Four children were desquamating at the time the her was confined. She had nursed them up to labour com- cing. Mother and child did remarkably well; not a bad ptom.

ASE II.—Three children were down with the fever when the her lay in. Three or four days after labour the mother developed fever, with sore throat, rash, and finally peeled. Had no uterine trouble.

CASE III.—A primipara was attacked on the fourth day with fever, then sore throat and rash; she subsequently peeled. She, like the previous case, recovered perfectly, having no uterine trouble. Her husband and nurse also had mild attacks, the nurse having to leave her duties.

All these cases occurred in the same village, where scarlatina has been raging for some time.

Mablethorpe. J. IREDALE, L.R.C.P., L.R.C.S.

THE case quoted by Dr. Thomson in the JOURNAL for March 15th, under the above heading, is well exemplified by my own experience, which I enunciated about ten years ago in a communication to the JOURNAL of February 1st, 1879, "Relation of Puerperal Fever to Erysipelas," in which I showed that these complaints—namely, scarlatina and erysipelas—can be present not only in the same house and same room, but even in the same bed, as the puerperal woman, and yet no harm arise; this particular case alluded to was one in which I attended a patient in her confinement who had been suffering for some days previously from severe phlegmonous erysipelas in the arm, so much so that her life was despaired of, but she nevertheless made a good recovery. This led me to the conclusion that in "puerperal fever," so-called, the *materies morbi* is, as a general rule, within the patient and not external, constitutional and not induced.

Perhaps it would be more scientific to say that, although there is doubtless a great risk in introducing "catching complaints," such as scarlatina, erysipelas, etc., into the lying-in room, and that therefore the obstetrician cannot be too careful in the use of antiseptics, strict cleanliness, etc., yet that if such complaints are already in the house, in the room, nay, in the bed, of the lying-in woman, she gradually becomes acclimatised to the disease, and so passes through the furnace of contagion safely.

Leicester. W. L'HEUREUX BLENKARNE.

A CASE OF IDIOPATHIC TETANUS FOLLOWING RUSSIAN INFLUENZA.

THE following case, from its rarity, may be of some interest at the present time:

K. S., aged 16, a strong healthy-looking girl, had been nursing a patient with "Russian influenza," which was very prevalent in the village at the time. I did not see her until Sunday, March 9th, but the village nurse, who has seen a great number of cases, tells me that for a week previously she had all the symptoms of a well-marked mild case of influenza, but it did not entirely confine her to the house. On Thursday, March 6th, when attempting to eat some rice pudding, she found she could not open her mouth as well as usual, and was obliged to help open it with her fingers, and push the food off the spoon into it; this difficulty of taking food gradually got worse, but she was out for a short time in the garden on Friday. On the afternoon of that day, when attempting to get up from her chair, she fell, and could not raise herself, and complained of stiffness in her back, and her father carried her to bed; she could get no sleep on Friday night, nor take any solid food; during Saturday she continued to get gradually worse, and her friends, getting alarmed, called me in on Sunday morning. I found her with all the symptoms of tetanus, temperature 100°; trismus, risus sardonicus, and opisthotonos well marked; the nostrils distended, breathing quick, pulse rapid and feeble, bowels constipated; she was able to take a little fluid nourishment through her teeth. Once or twice between that time and her death she had well-marked spasm of the glottis, and the least attempt at moving her brought on spasms of the voluntary muscles. On Tuesday, March 11th, the menses appeared, but they were quite natural and at the proper time, and did not appear in any way to affect the disease, which ran the usual course, and death occurred, apparently from exhaustion, in the early morning of Thursday, March 13th, seven days from the first appearance of the symptoms.

I may add that there was nothing beyond the influenza to account for the attack. I carefully inquired for any trivial wound or injury of any kind, but there was not the least sign of anything of the sort. W. J. FRANKLIN CHURCHOUSE, L.R.C.P.ED., etc.

Long Buckby.

STRANGULATED OBTURATOR HERNIA.

THE unusual occurrence of obturator hernia makes the following case of interest:—A poor woman, aged 63, of very feeble consti-

tution and subject for many years to constipation, had taken a dose of Epsom salts, after which, when the bowels had acted on the morning of November 8th, she was suddenly seized with acute pain in the inner side of the right thigh and groin, which gradually extended to the abdomen, and by the following day this region was the chief seat of pain, and continued so to the end. Frequent vomiting now came on, but as she was somewhat accustomed to such attacks she did not seek medical help till the next day (10th). When first seen, abdominal pain and vomiting were the chief symptoms complained of, for which a few moderate doses of chlorodyne were given, and by the next day the symptoms had in a great measure subsided. Relief of her bowels was then sought by giving a dose of castor oil, and subsequently an ounce and a half of Epsom salts in drachm doses every two hours, both of which failed to act and did not cause any return of sickness or increase the pain. On the 13th an enema of castor oil was given, also without effect, and soon after vomiting of a stercoraceous character came on. On careful examination no local evidence of hernia could be found, but it was evident that there was acute obstruction, and the coils of intestine becoming distended were distinctly discernible through the abdominal wall. On examination *per rectum* no passage could be made out leading into the colon, the way appearing to be obstructed by some tumour, so that an attempt to pass a long tube quite failed. With the help of my assistant, Mr. E. D. Shirtliff, who had had the chief care of the case, I placed the patient on her back with her hips raised on a doubled up bolster placed against the footboard of the bedstead, hooking her knees over the top of it, protected by a pillow. In this position she remained for the greater part of twenty-four hours and in comparative comfort, but troubled occasionally by the flowing of fæcal fluid into her mouth. During this time she was able to take and retain pretty well milk, brandy, and gruel, and her pulse decidedly improved. On the evening of the 15th, thinking there was now no advantage to be gained by keeping her thus raised, I released her and put her straight, leaving her then fairly comfortable. Soon after, however, the abdominal pain returned, and she gradually lapsed into a state of coma, and died about 9 A.M. on the 16th.

Post-mortem examination the same day revealed a hernia through the obturator foramen on the right side about as large as a horse chestnut, so tightly constricted that it could not be withdrawn till the stricture had been divided. The intestine was not at all gangrenous, and consisted of a portion of the ileum near the middle of its length. The colon was very much contracted in calibre. The tumour which had been noticed pressing on the rectum was found to be the right ovary in a state of cystic degeneration, weighing $2\frac{1}{2}$ ounces. The other was similarly affected, but smaller.

Though it only afforded temporary relief in this case, I cannot but commend the treatment of strangulated hernia, in its earlier stages, by elevation of the pelvis. Four cases have come under my hands in which this treatment succeeded after taxis had failed. In three of these reduction occurred spontaneously within twenty-four hours, and in the other it was effected by taxis applied in that position after prolonged taxis alone had failed. The success of such treatment is, I believe, due not only to the way gravitation of the intestines is made to favour reduction, but also and chiefly to the effect it has of reducing the circulation in the affected parts and draining them of their fluids.

Cirencester. W. R. COSSHAM, M.D.

COMPLETE TRANSVERSE LACERATION OF THE WOMB.

MRS. H., aged 30, a negress, who had always enjoyed good health, and had previously on different occasions given birth to four children in a normal manner, was taken in labour at the full time under the care of a midwife. The pains were stated to have been regular, and the membranes ruptured early, but at no time could the midwife feel the presenting part of the child. The pains continued for twenty-four hours, and then became weak and irregular, the midwife following this up with 10 minims of ammoniated tincture of ergot, which had the effect of stimulating the uterus for a brief period. Still the abdomen remained as large as ever. Again the midwife resorted to 10 minims of am. tinct. ergot, which brought the pains on rapidly, and ended with one specially severe pain. This occurred on the evening of the second day of labour. Another similar dose of ergot a few hours later failed to excite contractions. I was summoned to the patient on the evening of the second day of labour, and found her in a state of collapse, her abdomen tender, and the appearance o pregnancy at full time.

On making a vaginal examination I could make out nothin definitely with my finger, but on introducing my hand along th vagina I found it had entered the abdominal cavity, and on man pulation the womb was found to be completely torn through its neck, the laceration extending round the uterus, thus dividin the neck from the body, the latter part lying high up in the abd men, with an irregular gaping mouth, through which I cou introduce my hand, and containing nothing beyond a few clots blood. Lying alongside the uterus I could easily make out fœtus of large size. I seized a foot and turned, but the head locked at the brim, and I was obliged to perform craniotomy. T child was well formed, of large size, and of the male sex. Aga I introduced my hand into the abdominal cavity to remove th placenta, and could easily lay hold of the body of the womb, m fingers repeatedly gliding off the slippery serous membranes. I passed my hand round the organ I could make out that th vesico-uterine ligaments were torn through and the left broa ligament partially torn. The pelvis was small, though not a normal. No history of syphilis or cancer could be obtained. T woman never rallied, and died a few hours after delivery.

PETER GARDINER, M.B., C.M.GLASG.,
Acting Government Medical Officer.

Antigua, West Indies.

POISONING BY BELLADONNA LINIMENT.

ON December 21st, 1889, M. M., aged 61, at half-past three in th afternoon swallowed by mistake half an ounce of liniment belladonna, with which was mixed a small quantity (12 per cen of liniment of chloroform. Though aware of the mistake he r fused to allow medical advice to be called in. At half-past fou he began to feel drowsy, and at five he was carried to bed in an u conscious state by his friends. I arrived at half-past five, a found him lying stretched on his back perfectly unconscious; co junctivæ insensible to touch, pupils medium, not reacting to ligh breathing regular, but deep, 16 per minute; skin dry, pulse 7 temperature 98.6°; slight convulsive movements of the extremitie

The stomach pump was used at once, but the water returne clear, with the exception of a little mucus. At the end of th operation half a grain of morphine was injected hypodermicall At half-past six a fine punctate rash made its appearance over th chest, abdomen, and upper arms. Pulse 120; temperature 102° otherwise condition unchanged. At eight o'clock a quarter of grain of nitrate of pilocarpine was given hypodermically, and small quantity of brandy was with difficulty got down his throa When called by name loudly the eyelids were raised for an insta and closed again, but the conjunctivæ were still insensible to touc Rash disappearing, convulsive movements the same. Pulse 124; tem perature 102.4°. Profuse sweating came on three-quarters of hour after the pilocarpine was administered without making a material change in the condition. In this state he remained all nig till six o'clock next morning, when the pulse fell to 104, and t temperature to 100°. A hypodermic injection of a quarter of a gra of morphine and one-sixth of a grain of pilocarpine was give Sweating followed almost immediately, and from this time began to improve. Brandy was given in small quantities, and slept all that day and night, awaking the following morning pe fectly well, but remembering nothing from the time he took th liniment. The pupils were never dilated, remaining of mediu size and unaltered throughout.

A specimen of the same liniment was analysed, and found contain nearly 2 grains of atropine in 2 fluid ounces, being ther fore fully up to strength. It is calculated that M. M. took a quanti equal to 160 grains of powdered belladonna root, or half a grain atropine. Taylor, in his *Medical Jurisprudence*, records a fat case of poisoning by 80 grains of the root, so that the rapid r covery in an old man after taking twice that quantity may regarded as remarkable.

The absence of dilatation of the pupils would also show th what we are inclined to regard as an infallible symptom of bell donna poisoning may be altogether absent.

Townsville, Queensland. WALTER B. NISBET, M.B.

THE Medical Faculty of the University of Vienna has recor mended Dr. Sigmund Exner as the successor of Professor Brüc in the Chair of Physiology. Dr. Exner has been Professor Brück chief assistant for many years.

REPORTS

ON

EDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

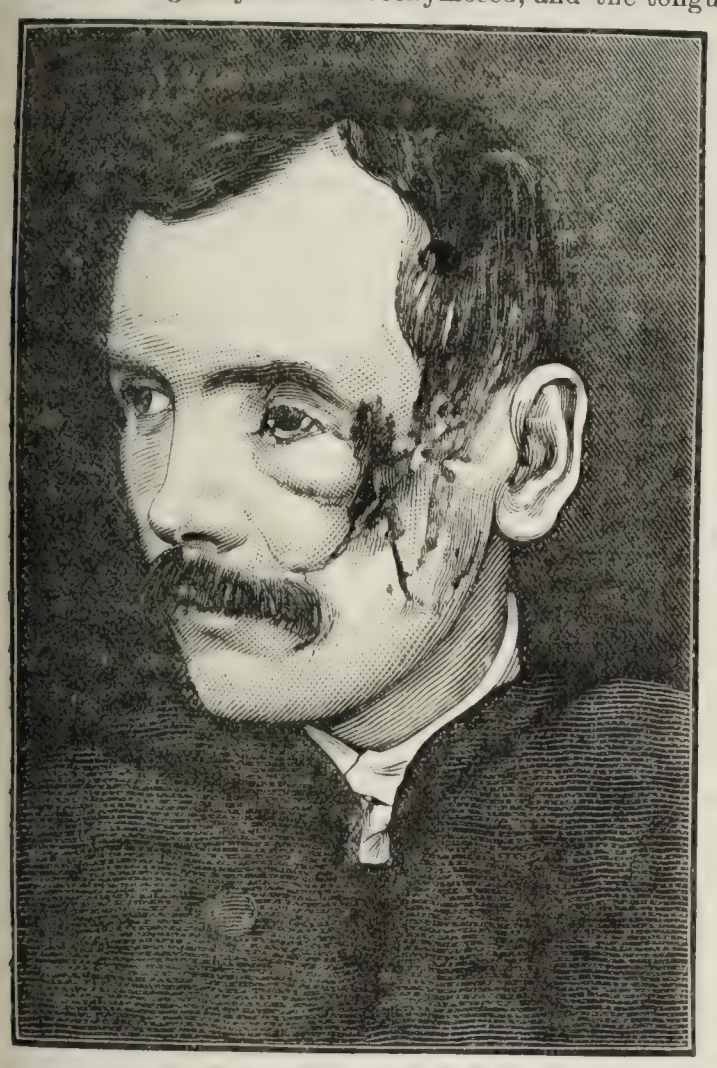
STATION HOSPITAL, NASIRABAD.

CASE OF GUNSHOT WOUND (SUICIDAL).

(By Brigade-Surgeon J. M. D. O'FARRELL, F.R.C.S.)

November 9th, 1889, while on the line of march from Nasira- d to Neemuch, Private P. M., of the Royal Dublin Fusiliers, ced the muzzle of his rifle (which was loaded with ball tridge) in his mouth, and pulled the trigger with the great toe his right foot. He was unconscious for a short time, but rallied ost immediately. The medical officer in charge of the detach- nt stitched the wound up, and sent the man by the next train the Station Hospital, Nasirabad.

On examination it was found that the superior maxilla, the onoid process of the inferior maxilla, the malar bone, and the omatic arch of the left side of the face were shattered, and rly altogether blown away, and the cheek was also blown open m the left eye to the corner of the mouth. The sight of the eye was destroyed, and the eyeball sunken in the cavity of orbit. The right eyelid was ecchymosed, and the tongue and



whole of the inside of the mouth were burned and blackened he powder. The stitches which had been inserted had given , the wound was gaping, and the whole of the cavity of nouth exposed. The wound was syringed out with a weak ion of perchloride of mercury, and the edges brought together r as possible with silver wire sutures; a drainage tube was ted, and the parts dressed with iodoform and lint soaked in ution of perchloride of mercury.

November 15th the stitches gave way, and as it was evi- ly useless to try to keep the edges of the wound together itures, they were approximated as much as possible by strap- and bandages, and the same dressing continued. The wound cicatrised by granulations, which have now so far filled it up that the aperture left is so small that the tip of the little finger can only be with difficulty introduced into the mouth. The patient can speak and open his mouth to the extent of about half an inch.

Considering the nature of the injury, the amount of shock appears to have been very slight. As the muzzle of the rifle was placed against the roof of the mouth one would have expected the whole of the cranium to have been blown away, but the entire force of the explosion appears to have spent itself upwards and forwards, which was probably the direction in which the rifle was pointed at the time.

The above engraving shows the present appearance of the man.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 25TH, 1890.

TIMOTHY HOLMES, M.A.Cantab., F.R.C.S., President, in the Chair.

On the History of Uric Acid in the Urine, with Reference to the Formation of Uric Acid Concretions and Deposits.—Sir WILLIAM ROBERTS, who read this paper, said the presence of uric acid in human urine was somewhat of an anomaly. As a vehicle for the elimination of nitrogen it was not needed. Its place was taken by urea, which by its easy solubility was better adapted to the mammalian plan of a liquid urine. The conjecture was hazarded that uric acid should perhaps be regarded as a vestigial remnant, as a memory of some far distant link in the chain of mammalian descent. But, although physiologically insignificant, uric acid was pathologically the most prominent component of the urine. This was due to its clumsy behaviour in liquid media, and its tendency to form concretions. The subject was considered under the following headings: 1. Spontaneous precipitation of uric acid in normal urine. All acid urines tended inevitably to deposit their uric acid sooner or later. The time of onset of precipitation varied from a few hours to five or six days, or even longer. The inference was drawn that pathological gravel was due to an exaggeration of conditions which existed in a less pronounced degree in health. To get an explanation of this spontaneous precipitation it was necessary to examine the states of combination of uric acid in urine. 2. Composition and reactions of the amorphous urate deposit, and of its natural and artificial counterparts. Uric acid ($H_2\bar{U}$), the author said, was a bibasic acid, and formed two regular orders of salts, namely, neutral urates ($M_2\bar{U}$) and acid urates or biurates ($M\bar{H}\bar{U}$). But in addition to these it formed a series of hyperacid combinations, first discovered by Bence Jones, and termed by him "quadrurates" ($M\bar{H}\bar{U},H_2\bar{U}$). The neutral urates were never found in the animal body, and were only known as laboratory products. The biurates were only encountered pathologically as gouty concretions. The quadrurates, on the other hand, were specially the physiological salts of uric acid. They constituted the exclusive combination in which uric acid existed in solution in normal urine, and they became visible sometimes as the amorphous urate sediment. The urinary excretion of birds and serpents was composed exclusively of quadrurates. The quadrurates could, moreover, be formed artifically under conditions which prevailed in the animal body. The special and characteristic reaction of the quadrurates was that they were immediately decomposed by distilled water into free uric acid and biurates. 3. Chemical explanation of the spontaneous precipitation of uric acid in urine. There was proof that uric acid existed in normal urine exclusively as quadrurate. It existed in acid urine in the presence of water and of superphosphates. These conditions necessarily involved the ultimate liberation and precipitation of uric acid. The first step was the breaking up of the quadrurate by the water of the urine into free uric acid and biurate according to the following equation:

$$\underset{\text{Quadrurate.}}{(M\bar{H}\bar{U},H_2\bar{U})} + Aq. = \underset{\text{Free uric acid.}}{H_2\bar{U}} + \underset{\text{Biurate.}}{(M\bar{H}\bar{U})}.$$

This explained the liberation of half the uric acid. But the biurate thus formed was forthwith changed in the presence of superphosphates into quadrurate. Thus:

$$2\,\underset{\text{Biurate.}}{(M\bar{H}\bar{U})} + \underset{\text{Superphosphate.}}{(MH_2PO_4)} = \underset{\text{Quadrurate.}}{(M\bar{H}\bar{U},H_2\bar{U})} + \underset{\text{Dimetallic phosphate.}}{(M_2HPO_4)}.$$

By these alternating reactions all the uric acid was at length set free. 4. The ingredients in the urine which inhibited or retarded the precipitation of uric acid in the normal state. Seeing that uric acid existed in acid urine (that is, for some sixteen hours out of the twenty-four) amid conditions which, if they stood alone and uncontrolled, would lead to its immediate precipitation; and yet that in the normal course no such early precipitation occurred, it was obvious that the urine must contain certain ingredients which inhibited or greatly retarded the water of it from breaking up the quadrurates. These inhibitory ingredients consisted, chiefly at least, of (1) the salines, (2) the pigments of the urine. 5. Summary of the history of uric acid within the urinary channels (*a*) in the normal state, (*b*) in the subjects of gravel. 6. The factors which determined the occurrence of uric acid concretions and deposits. The general results of this part of the inquiry were summed up in the following propositions: The conditions of the urine which tended to accelerate the precipitation of uric acid were (1) high acidity, (2) poverty in salines, (3) low pigmentation, (4) high percentage of uric acid. The converse conditions tended to retard precipitation. On the interaction of these factors the occurrence or non-occurrence of uric acid gravel appeared to depend, and probably the most important of these factors was the grade of acidity.—Dr. GEORGE HARLEY said that he regarded the excretion of uric acid in much the same light as he regarded the elimination of carbonic acid from the lungs, that is to say, as a waste product resulting from tissue changes. Two-thirds more uric acid were excreted under an animal than under a vegetable diet, and twice as much under a mixed as under a non-nitrogenous diet. He had known a man upon a spare diet pass large quantities of uric acid. He could not quite agree with Sir William Roberts as to uric acid being a vestigial remnant. He did not believe that the consumption of sugar in large quantities had any marked effect in increasing the excretion of uric acid.—Sir ALFRED GARROD believed in all Sir William Roberts had stated. He thought that the most interesting point was the part played by the salines and colouring matters in retarding the deposition of uric acid. He had never held the belief that sugar increased the quantity of uric acid excreted. With regard to the influence of food, he had found that, roughly speaking, the uric acid excreted by man in twenty-four hours was about one ten-thousandth of the body-weight; in the lion and tiger, living on raw meat, not more than one hundred-thousandth part of the body weight; and yet in birds fed on canary seed it might be as high as one eighty-fifth of the body weight.—Dr. JAMES JOHNSTON said that he had met with a large number of cases of uric acid calculus in the natives of Southern China; and, in answer to a question by Mr. REGINALD HARRISON, further stated that considerable difficulty was often experienced in some parts of China in obtaining salt.—Sir WILLIAM ROBERTS, in reply, said that the quality of the food taken had probably but little to do with the excretion of uric acid except in the case of the poorer classes whose diet usually consisted of substances deficient in saline ingredients. The prevalence of uric acid calculus in the natives of Southern China, most of whom lived on rice, which was very deficient in saline constituents, was doubtless due to the nature of their diet.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 24TH, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

Subacute Indurative Pneumonia.—Dr. PERCY KIDD read a paper on this subject, in which he considered the group of cases in which fibrous changes in the lung were the direct sequel of a more or less acute pneumonia. Two illustrative cases were described in which this sequence of events was beyond doubt. The onset was well defined and acute, but the constitutional depression was less severe and later in its development than in the classical form of pneumonia. Pyrexia was moderate in degree and of irregular type. The sputum was not rusty, a characteristic of pneumonia; in one case it became putrid towards the close. In each instance a fatal termination was reached within four months from the commencement of the illness. In one case death was due to cardiac failure; in the other it depended on septic broncho-pneumonia and nephritis. *Post-mortem* examination disclosed a lobar consolidation in each instance, with cavities of varying size and character, and an absence of any tubercular lesion. Microscopically the induration was found to be due to organisation of a fibrinous intra-alveolar exudation in the first case, in the second the connective tissue growth was interstitial. The conclusion was drawn that these cases represented a special variety of pneumonia distinct from the classical sthenic type, and it was suggested tha this form of disease, to which attention had lately been directe by Heitler and others, was best described as "indurative pneu monia."—The PRESIDENT asked whether it was the lung or th pleura that was punctured in the second case.—Dr. THEODOR WILLIAMS agreed that such cases did really exist, though the strikingly resembled the condition commonly described as "in terstitial pneumonia." He pointed out that in both the case mentioned there was evidence of pleural disease, which he sug gested might have been the starting point of the mischief. I patients of ordinary recuperative powers, an acute pneumoni rapidly cleared up.—Dr. SIDNEY COUPLAND said the paper thre some light upon a singular form of pulmonary consolidation, which he had shown a specimen twelve years ago before the P thological Society. In that instance the distribution closely r sembled that of ordinary croupous pneumonia, though th microscopical appearances were totally different. Addison ha described something very like it under the name of grey or slate induration.—Sir HUGH BEEVOR thought this condition of ver contracted lung and a pleura filled with fibrinous effusion, laye upon layer, might occur as a consequence of indurative pneu monia. In such a case the subacute, indurative pneumonia woul progress to a chronic condition, and the appearance seen in th specimen could no longer be obtained.—Mr. TAYLOR spoke highl of the needle as an aid to differential diagnosis, and said that it wa used largely at Brompton. The only cases in which it could b attended with possible danger were those of fœtid bronchiectasi It was the pleura and not the lung that was punctured.—D KIDD, in reply, said he did not believe that these cases invariabl went on to a fatal termination, but he had limited his remarks t cases of short duration. He thought the theory of pleuritic ci rhosis had been overdone.

Treatment of Dupuytren's Finger Contraction.—Mr. WM. ADAM read a paper on this subject. He mentioned that Dr. Abbé, New York, had published two papers in support of the view tha these contractions were neurotic in nature, and a number of case were alleged in which the contraction was associated with remar able neurotic symptoms. Dr. Keen, of Philadelphia, however, d clined to accept this view, except, perhaps, in so far as gout an rheumatism were possibly nervous in their remoter origin. M Adams had not met with any cases associated with neurot symptoms, and adhered to the view that the contraction was du to gouty thickening of the palmar fasciæ. With regard to trea ment, he preferred the subcutaneous division of all the contract bands of fasciæ that could be detected by as many punctures might be necessary, followed by immediate extension or retenti as rapidly as it could be carried out without causing pain. No withstanding the success of this operation, some English an American surgeons had shown a disposition to return to the o method of open wounds. Mr. Macready, in a recent artic had ably compared the relative merits of the operations. T open wound operation was totally inapplicable to the cases phalangeal contraction, and when this operation was performe if relapse should occur from cicatricial contraction, the case becam hopeless. The subcutaneous operation could be repeated with much success as the first operation. In the after-treatment M Adams still used the steel instrument fitted to the dorsal aspe of the hand with prolongations along the contracted finger fingers, having joints corresponding to the phalangeal articul tions, movable by rack and pinion joints in all cases of phalange contraction. In cases of simple palmar contraction this might dispensed with, and a padded metal splint capable of being be to any curve and altered from day to day might be applie Mechanical extension should be maintained for three weeks, nig and day, allowing only a little passive movement, and th gradually discontinued during the day but maintained at nig for several months, by a simple form of retentive splint.—M NOBLE SMITH said he had rallied to the view that gout did co duce to these contractions, and he approved of the multip punctures practised by Mr. Adams.—Mr. LOCKWOOD mentioned case in which a gouty deposit of urate of soda was well marke not only in the joints but also on the site of the contraction. T specimen was in the museum at St. Bartholomew's, but the ura of soda had dissolved out. He thought that if the joints were al the seat of a deposit no operation would be likely to be perm nently successful. He quite concurred that if judiciously carri out the subcutaneous operation was likely to afford permane relief.—Mr. ADAMS briefly replied.

[1] JOURNAL, February 22nd, 1890.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MARCH 14TH, 1890.

HENRY E. ARMSTRONG, M.R.C.S., President, in the Chair.

Influenza.—Dr. FRANK G. CLEMOW, who had recently returned from St. Petersburg, read a paper on epidemic influenza, with special reference to its etiology as illustrated by the history of the present and previous epidemics. Undoubted records existed of a large number of epidemics from 1510 to 1847, when last it visited this country; but Dr. Th. Thompson was not disposed to attach much value to older accounts, and even Hirsch did not carry his enumeration further back than the year 1173. Dr. Clemow, however, considered that when we found a description of a pest which attacked nearly everyone with fever, cough, catarrh, and pains in the head and limbs, but of which very few died, we were justified in recognising it as influenza. One such was referred to by Hippocrates and Livy about 412 B.C., but more explicit descriptions had been handed down by Gregory of Tours in A.D. 591, and by others in the ninth and tenth centuries; during the next three hundred years only one epidemic seems to have been noticed—namely, that of 1173, which extended over Germany, Italy, France, and England, but from 1327 onwards they appear to have recurred more frequently. While we were so much in the dark as to the true pathology and etiology of the disease, Dr. Clemow considered the name influenza—that is, some unknown influence—given to it by the Italians of the sixteenth century, as at least unobjectionable, and better than "catarrhus contagiosus," or others which assumed its nature or implied as essentials what were only accidents of the disease. He then describes the origin and spread of the present epidemic in Europe, showing that its progress was from east to west, modified or diverted by mountain ranges and seas, and in no relation, if not actually opposed, to the direction of the prevailing winds. Accounts, however, have recently been received of its existence in Greenland, Saskachewan, and Hudson's Bay Territory, as long since as last spring, whence it would seem that it might have been carried to Siberia, and thus to have made the entire circuit of the globe. With regard to meteorological conditions, it was not possible to arrive at any certain conclusion as to any relation of the nature of cause and effect; if anything, mild weather in winter seemed to favour it. The rapidity, almost suddenness, with which large numbers of persons, or entire communities, were attacked seemed to suggest aërial conveyance of some kind. As examples, he cited one which came under his personal observation, of 220 out of 260 men employed in a Government establishment at Cronstadt being attacked within a few hours, and the historical instances of half a million persons being seized in a few days in London in 1847, and of 40,000 in St. Petersburg in 1782, while the thermometer rose between 2 A.M. and 6 P.M. from 47° below to 45° above Farenheit's zero. But whether ordinary personal intercourse could or could not wholly explain these phenomena, the records of the exemption or otherwise of the inmates and attendants respectively of asylums, prisons, etc., and other observations of a like kind, left no doubt as to its contagiousness, while they also served to determine the incubation period at about two days. On two propositions that had been put forward in connection with influenza—that it secured the temporary disappearance of other diseases, and that it stood in some causal relation, either as a precursor or a consequence of other epidemics, of which cholera most closely concerned us—he stated his belief that they were merely the expressions of bare impressions, the former being opposed to actual experience, and the latter having no real basis in fact. Two of the European cholera epidemics, indeed, happened to follow on or to accompany those of influenza, but in the other three no such relation had existed, and there was no reason to think that it would again, except as a simple coincidence.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 12TH, 1890.

SIR T. CRAWFORD, K.C.B., M.D., President, in the Chair.

Eucalyptus in Scarlatina.—Mr. J. B. CURGENVEN, in introducing the subject of the treatment of scarlatina with oil of eucalyptus, which he had practised for the last twelve months, and which he believed to be equally applicable to other infectious diseases, claimed for it that it was capable of superseding all other curative and preventive measures, and of rendering unnecessary all attempts at isolation of the sick; disinfection, beyond what itself effected, of clothing, bedding, furniture, and rooms; and, except so far as better nursing accommodation, etc., were concerned, the costly establishment of special hospitals for infectious diseases. Quoting Dr. Lauder Brunton's belief that a germicide which might circulate in the blood without injury to the living body, though still unknown, was not inconceivable, he maintained that the essential oils of eucalyptus, thymol, and others were such. Reviewing previous attempts at superficial or local corporal disinfection, he insisted on the inefficacy of carbolic acid except so concentrated as to be caustic, on the danger of absorption from the use of sublimate solutions over extensive surfaces, on the action of fixed oils and fats in neutralising the germicidal properties of chemical bodies and their injurious influence in checking the functions of the skin, which more than counterbalanced the lessened dispersion of the cuticle or disease germs which was aimed at in their use, first proposed by the late Dr. W. Budd twenty years since. Permanganate of potash, though not poisonous, was objectionable, and Sanitas ineffective. But oil of eucalyptus was perfectly innocuous, a powerful germicide, and extremely volatile, thus possessing every advantage, positive and negative; while on the principle advanced by Dr. Paris, that a number of drugs of like properties combined in small proportions were more effective than larger quantities of one of them alone, he preferred "Tucker's eucalyptus antiseptic," which contained in addition menthol and several essential oils and camphors, to the eucalyptus oil itself. He gave it internally in frequent doses of a few drops shaken up in water; he saturated the clothing, sheets, pillows, etc., and sponged the entire surface of the body twice a day with it, besides sprinkling the floor, furniture, walls, etc., till the air of the apartment was impregnated with the not unpleasant odour. He had not practised spraying of the throat, but, in reply to a member present, said that in severe cases, and certainly in diphtheria, he would consider such a procedure advisable. The results he had invariably obtained were the immediate arrest of the eruption, which did not extend further, the speedy relief of angina and subsidence of enlarged glands, rapid defervescence of the fever, the temperature falling from 104° or 105° to 100° or even to normal within a few hours, and the entire absence of albuminuria due to the elimination of such oils by the kidneys; in short, the immediate arrest and cure of the disease. Further, it was, he maintained, no less effective in aborting the disease if the treatment were commenced when the symptoms of invasion had appeared, but the eruption, etc., had not been manifested; and lastly, in protecting the most susceptible persons against infection, even though they remained exposed to it, adducing the case, among others, of five young children who could not be supposed to be all of them insusceptible, none having had the fever before, in a small room where a sixth lay ill, the mother refusing to part with her sick child, and being unable to send the others away, or even to remove them from what was her only apartment. He believed his cases to be numerous enough to exclude fallacies of natural early subsidence of the fever, great resisting power or insusceptibility on the part of other children, and in fact all elements of chance.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY

THURSDAY, MARCH 6TH, 1890.

E. CRESSWELL BABER, M.B., President, in the Chair.

Case.—Mr. CALVERT exhibited a young man with an anomalous eruption; he had run through a severe attack of syphilis in spite of antispecific treatment. He showed scars of rupial eruptions and coppery stains from other syphilitic ulcerating eruptions. The spots which were remarkable were seen mainly over the back, were white, raised, the size of small herpetic vesicles, but solid, though not shotty to the touch; one series clearly followed an intercostal nerve; they observed no symmetry of arrangement.—Dr. BLACK doubted any connection between the eruption and the syphilitic taint, and Dr. MENZIES said he had seen many cases of such eruption in patients with malarial poisoning, from which the man had suffered.

Specimens.—Dr. MACKEY showed the Thoracic Organs of a child 3½ years old, dead of pulmonary hæmorrhage. There were physical signs of pneumonic phthisis after measles twelve months ago, with consolidation at the left apex, pyrexia, and diarrhœa. After slight improvement the child sat up in bed, and there was very copious hæmoptysis, proving rapidly fatal. On *post-mortem* examination the left pleural cavity was found obliterated by adhesions, the right natural; the left lung contained a few grey

tubercles, the right caseating yellow tubercles. A softened caseating gland had produced a cavity, which had caused ulceration into the left branch of the pulmonary artery, from which the blood had filled the trachea and bronchi, producing asphyxia. The abdomen was full of tubercle.—Mr. CALVERT showed for Dr. HOLLIS a specimen of Aortic Aneurysm, in which the physical signs were almost negative. The patient died of hæmoptysis after rupture of the aneurysm into the left lung and the left pleural cavity, which contained 3½ pints of blood.

Locality of Lesions.—Dr. A. J. RICHARDSON read a paper on this subject. He said many factors helped to determine the site of a lesion, but one was often dominant; for example: 1. Embryology. A table showing the relative prevalence of abnormalities would be useful. The position of dermoids, possibly of carcinomata, of bone lesions, of rickets, and of infantile syphilis depended on entogeny. 2. Macroscopic anatomy led to the frequency of fractures in the radius (33.7 per cent. of all fractures in the upper extremity) and clavicle (31.2 per cent.) as compared to the scapula (0.015). Difficulty in return of blood against gravity led to varices in the legs, but to angiomata on the head of the fœtus. 3. Histology. The rheumatic poison affected only fibrous tissue, hence the microscope determined which organs were obnoxious to it. The difference in resistance to malarial poison probably rested on histological differences correlated with different external appearances. 4. Peculiarities of function. The skin and mucous membrane, alone in contact with the external universe, were peculiarly liable to the results of irritation; thus in them arose 42.3 per cent. of all tumours. 5. Predilection of particular virus, as exemplified by the sites of the exanthemata, easily changed, however, by extraordinary conditions. 6. Previous disease or injury, keloid and horny growths after operations. 7. Peculiarities of environment altered the usual site. In England 8.8 per cent. of hydatids occurred in the lungs; in Victoria, 17 per cent.; this was comparable to the differences seen in tuberculosis artificially and naturally arising.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, MARCH 12TH, 1890.

NELSON C. DOBSON, F.R.C.S., President, in the Chair.

Cases of Myxœdema.—Dr. G. PARKER exhibited two female patients the subject of this disease. They showed the characteristic puffiness of the face, loss of expression, and drawling speech. No thyroid could be felt.

Pulsating Exophthalmos.—Mr. ARTHUR PRICHARD showed two patients in whom he had ligatured the common carotid for pulsating exophthalmos with marked improvement. The first case was that of a boy who received a wound of the conjunctiva from an umbrella wire, which was soon followed by prominence of the globe and pulsation, with a *bruit*. The second case was a man, aged 30, who fell and struck the back of his head violently. Two weeks later he felt something "snap" in his head, and immediately perceived a loud whizzing noise in his left ear; prominence of the eyeball, pulsation, and double vision followed. Ligature of the carotid much diminished but did not cure the symptoms.—Mr. RICHARDSON CROSS reported two cases of pulsating exophthalmos, one in a woman aged 42, another in a boy aged 7. The first was caused by a violent attack of vomiting, the second by a blow on the eyeball with a stone. In the latter there was no *bruit*, and the lesion was probably some damage to the orbital veins or sphenoidal sinus impeding the return flow of blood.

Osteitis Deformans.—Dr. MICHELL CLARKE showed a woman, aged 65, with osteitis deformans. She had marked kyphosis, thickening of the cranial vault, and enlargement and bowing of left femur and tibia.

Specimens.—Dr. MICHELL CLARKE showed a specimen of Ruptured Aorta, about one inch above the semilunar valves. The part was atheromatous, and the rent, which was transverse, was an inch and a half long. Blood had effused into the pericardium, death occurring suddenly whilst the patient was supposed to be in good health.—Mr. C. A. MORTON exhibited a specimen of Dislocation of Vertebræ. There was no fracture, but a pure dislocation between the fourth and fifth cervical vertebræ, causing severe injury to the cord. Mr. Morton also showed a Lumbo-sacral Meningocele after injection of Morton's fluid. The opening between the spinal canal to the sac was partially obliterated by bands of lymph, the result of the injection. Mr. Morton also exhibited a specimen of Tuberculosis of the Choroid from a case of general tuberculosis in a child. Small masses were found in the choroid, a large one in the valve of Vieussens, and there was general tubercular meningitis.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 12TH, 1890.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Carotid Aneurysm.—Mr. JORDAN LLOYD showed a woman, aged 49, in whom he had tied the left common carotid below the level of the omo-hyoid twenty-five days before. The aneurysm was of nine months' duration, and had doubled in size during the last five or six weeks. It was as large as an adult fist, and extended from the parotid region to below the level of the cricoid cartilage. There was ptosis of the left eyelid, with contracted pupil, dysphagia, and neuralgic pains over the shoulder and clavicle, with all the classical symptoms of aneurysm. The vessel was exposed through a straight incision below the level of the cricoid, no muscles were divided, the artery was easily found, and tied with ordinary medium-sized catgut ligature. Dry boracic dressings were employed, and the wound healed entirely in three or four days. Slight pulsation returned on the day after operation, but had now entirely disappeared. The tumour had shrunk to one-fifth of its original size, and was hard and pulseless.

Tubercular Testes.—Mr. JORDAN LLOYD also showed both testes removed from a child, aged 5 years, for chronic tubercular disease. The malady had existed for eighteen months, and had proved intractable to milder treatment. Both glands were found converted into fibrous tissue. The operation was followed by rapid recovery.

Congenital Dislocation of Hip.—Mr. HASLAM showed a girl, aged 7, who had a congenital dislocation of the left hip. There was shortening to the extent of one inch, but the movements were quite free, and, beyond the necessary limp and some fatigue after much exertion, the child was in no way inconvenienced by the condition. Labour had been normal, and the child was born before the doctor arrived.

Chronic Phthisis with Unusual Dislocation of the Heart.—Dr. FOXWELL exhibited a man, aged 21, with unusual dislocation of the heart. There were the usual evidences of advanced fibroid phthisis of the left lung, the amount of disease at the base being extreme. He had had a cough for four years, with debility, but had not been obliged to give up his work as an iron-turner. The absolute cardiac dulness towards the right did not reach the left edge of the sternum by an inch. The apex beat was in the fifth space, and an inch to the left of the left nipple line. There was thus not merely a displacement of the heart by the tilting of the apex upwards and outwards, but a dislocation of the heart *en masse* for more than an inch towards the left side. These signs were not due to the overlapping of a dilated heart by a hypertrophied right lung; 1, because the right lung retreated to the left edge of the sternum above the fourth cartilage (which was the level of upper cardiac dulness in the case); 2, because there was no evidence of cardiac enlargement, either from the sounds or the symptoms; 3, because the præcordium was markedly flattened and retracted, as well as the whole of the base of the left chest. Another interesting point was the prominence and rigidity of the eighth, ninth, tenth, and eleventh dorsal spines, though there was no evidence of any disease of the vertebræ. This condition the patient had noticed for one year, and Dr. Foxwell concluded it was due to the pleural and peripleural thickening which had occurred during the course of the fibroid phthisis. A similar result had taken place in the case of a young girl whom he had shown to the Society a month previously, with a spine rigid from inflammatory thickening, which had arisen in the course of an empyema of several years' duration.

Recurrent Palpitation.—Dr. T. STACEY WILSON showed a patient who exhibited the condition termed by Dr. Bristowe "recurrent palpitation." The patient had, during the last eighteen months, had three attacks of palpitation, each lasting several weeks, in which the cardiac pulsations were seldom below 150, and sometimes exceeded 200, but which were unaccompanied by dyspnœa except early in the morning. These early morning attacks came on "almost to the minute" at 4 A.M., and were so severe that he had to get up. They usually lasted about half an hour, and he was then free for the rest of the day. There had never been any signs of organic cardiac disease except a certain amount of dilatation accompanied by slight anasarca and some cyanosis due apparently to his continuing to work hard in spite

of his condition. He had been completely relieved by digitalis in both his previous attacks, but as he could not give up working, and had become rather addicted to alcohol, he was again suffering from nocturnal palpitation, and had also had an intercurrent attack of bronchitis.

Hysterical Laryngismus.—Dr. SUCKLING showed a girl, aged 11, who a few days previously had been seized with peculiar convulsive attacks. The eyes were turned upwards, and the respirations became stridulous, the attack ending with sobbing. An attack could be brought on by sternly ordering the girl to go off into one, and an attack could be cut short by a similar method. The girl was anæmic, and had been overworked at school. Her mother stated that any emotional disturbance at once caused an attack. There was no loss of consciousness.

Paper.—Dr. STACEY WILSON read notes of two cases of Cerebral Disease.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, MARCH 13TH, 1890.

D. C. LLOYD-OWEN, F.R.C.S.I., President, in the Chair.

Amputation of the Hip-Joint for Sarcoma of Femur.—Mr. VINCENT JACKSON exhibited the upper half of the left femur with an attached subperitoneal round-celled sarcomatous tumour for which the left lower limb had been amputated at the hip-joint in a young man. The tumour was situated at the extreme upper portion of the outer and upper surfaces of the limb, and as it was difficult to obtain a sufficiently long flap by the ordinary methods of amputation, the common femoral artery was first tied immediately below Poupart's ligament, and the necessary covering was then secured from the inner and posterior aspects of the limb by cutting from without in. Recovery was uninterrupted. A photograph of the patient before operation was shown.

Punctured Fracture of Skull.—Mr. HASLAM showed a circle of bone that he had removed by a trephine from a punctured fracture. The patient, a man, aged 46, had received seventeen wounds with a coal pick—nine on the head, four on the back, and four on the right forearm. There was a groove in the bone over the left parietal eminence, but no depression or evidence of injury to the internal table. On the right side, two inches behind the mid-point between the external occipital protuberance and the root of the nose, and an inch and a half external to this, there was a circular perforation of both tables of a diameter of about one-fifth of an inch. A circle of bone around this was removed with difficulty, the skull being five-twelfths of an inch thick, and the dura mater was found to be punctured. The perforation in the bone was peculiar, there being but little splintering of the inner table. There were no symptoms of brain injury at the time of admission. The various wounds healed rapidly, and now, twelve weeks after the injury, there was only a very slight discharge from the incision over the trephine wound, and the patient seemed quite well.

Nephrotomy or Nephrectomy.—Mr. LAWSON TAIT showed a kidney which he had removed which illustrated the evidence by which the surgeon had to make up his mind upon a very important point concerning renal surgery, namely, whether the opening and draining of a kidney as a preliminary proceeding to complete nephrectomy would give more satisfactory results than nephrectomy as a preliminary operation. He had already expressed his views in favour of the preliminary opening and draining as being a reasonable undertaking, likely to cure some cases and to benefit others by the delay. Some authorities had given very arbitrary rules to the contrary on the subject, but as Mr. Tait's experience in renal surgery was by far the largest yet known, he had only to say that upon the matter he was still in doubt. The case in question being a failure was one of seven such that indicated the possibility that he might have to change the view which he regarded up to the present time as being the better of the two alternatives. In the present case, eight months ago, he opened and drained the kidney; but, in spite of the skilled supervision of Dr. Sykes, of Cleckheaton, the drainage did no good, and the kidney had to be removed.

Papers.—Mr. EDGAR UNDERHILL read a paper on Spontaneous Fractures, and Mr. BENNETT MAY one on Sarcoma of the Femur.

La Farmacia, the organ of the Italian Pharmaceutical Association, published at Naples, has ceased to appear.

SOUTH INDIAN AND MADRAS BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

FRIDAY, JUNE 7TH, 1889.

Deputy Surgeon-General S. B. ROE, C.B., Vice-President, in the Chair.

Orbital Tumours.—Surgeon-Major E. F. DRAKE-BROCKMAN exhibited three patients suffering from orbital tumour: (1) An example of orbital gumma in a man, aged 45. This patient rapidly improved under mercurial treatment, and was eventually discharged cured. (2) A bony tumour of the roof of the orbit in a lad, aged 8, leading to ptosis, proptosis, and pulsation of the eyeball, without impairment of vision. (3) A case of malignant tumour apparently originating in the neighbourhood of the inner canthus in an elderly woman.

Congenital Cataract.—Surgeon-Major E. F. DRAKE-BROCKMAN also exhibited two Hindu lads, twins, aged 10. Up to the age of three years both boys had been able to move about, but since that age the sight had rapidly deteriorated. The cataracts were removed by Teale's suction method on May 25th and June 1st respectively. [They made excellent recoveries without an unfavourable symptom, and were discharged from hospital on June 8th.]

Enterectomy.—Surgeon-Major BROWNE reported a case of strangulated hernia complicated by rupture of the bowel, and successfully treated by enterectomy, which will be published in full.

Varix of the Femoral Lymphatics.—An interesting case of varix of the femoral lymphatics was reported by Surgeon-Major J. MAITLAND, M.D. The patient was a Hindu, aged 24. His illness had commenced eight years previously with rigors, fever, and the appearance of a small lump in the right groin. Since that time he had been subject to similar attacks, during one of which a second swelling appeared in the right femoral region. The feverish attacks had recently been recurring every three or four months; they were accompanied by severe pain in the tumours, and at times in the scrotum. When admitted to the hospital there were two irregularly shaped, soft, tender tumours, about the size of kidneys, situated one above the other in the right femoral region. When the patient lay down the swellings almost entirely disappeared, as if emptied of their contents, but the sac of the tumours could still be felt, as well as the dilated lymphatics around them. There was no impulse on coughing. The patient's general health was fairly good, but examination of his blood at night time revealed the presence of embryo filariæ. Fluid extracted from the tumours was examined on two occasions, but no embryos nor ova were detected in it. The tumours were excised; during this operation some of the deeper glands were ruptured, and gave exit to large quantities of dark-red lymph; an attempt to close the rent by ligatures failed, producing fresh laceration. The flow of lymph was eventually stopped by passing a number of catgut ligatures deeply beneath the glands. The operation was followed by rigors, fever, and inflammatory œdema of the scrotum, just as in an ordinary case of elephantiasis of the scrotum. Some suppuration took place in the wound, but when he left hospital, twenty-seven days after the operation, it was quite healed. During this time there were one or two sharp attacks of fever, and when he left there was some thickening of the scrotum. Dr. Maitland observed that the case had been diagnosed by the first medical man, as femoral hernia, a mistake which was, he said, not unnatural, though a little experience of lymphatic varix would prevent such a mistake, as the feel of the tumour was almost characteristic, the history was unmistakable, and the presence of embryo filariæ in the blood would point to the cause of the disease. A point of interest in the case was that the operation was followed by an initial attack of elephantoid disease of the scrotum. The converse had frequently been observed, elephantiasis of the leg ensuing soon after removal of the diseased scrotum.

Hydatid of the Liver.—Surgeon F. C. REEVES exhibited a specimen of hydatid of the liver from the body of a male native, aged 40, and commented on the curious fact that though hydatid disease was very prevalent among animals in India, it was rare among natives. If uncleanliness and close proximity to dogs, he observed, were the cause of the prevalence of hydatid disease, it was difficult to understand how the natives of India escaped.

PRESENTATION.—Dr. W. J. Smyth, late of Shipley, near Bradford, has been entertained at Southport at a complimentary dinner, and presented with a handsome illuminated address with 150 signatures.

REVIEWS AND NOTICES.

DIPHTHERIA, ITS ANTISEPTIC TREATMENT. By Dr. J. RENOU (Saumur). Paris: O. Doin. 1889.

THE book keeps well to its text, and, while there are many evidences that the author is writing from experience, it is satisfactory to notice an entire want of anything like specialism. Although some statements are made which will not be generally accepted in England, the main faults are those of omission; yet, on the whole, the text will repay the physician, if not the surgeon, for its perusal. The chapters are arranged methodically, the first five being devoted to general diphtheria and its treatment, and the next five to croup, while a very valuable paper upon the use of antiseptic vaporisation, and one on prophylaxis follow these.

The view advanced is that diphtheria is from the onset entirely a systemic, and in no sense a local, disease; always due to the entry of a specific germ, "the seat of whose introduction varies little; it is almost always the lung." Auto-reinfection from expired air frequently explains a prolonged case, or one which originally mild becomes toxic. Recurrence is only what is met with in all the zymotic maladies (*sic*, p. 68), measles, scarlatina, typhoid, and variola being quoted as examples. The false membrane is to be entirely disregarded except as a means of diagnosis, its extent being no criterion of the gravity of the attack. It may be absent, and many cases of severe broncho-pneumonia, of croup, of nephritis, and of paralysis are met with which are only recognised *post mortem* to be diphtherial. Albuminuria is stated to occur in 50 per cent. only. Permanent kidney change is rare, and when it does occur is the result of vasomotor nerve paralysis rather than active microbic inflammation. Endo- and myocarditis are very rare, and are never the cause of sudden death in convalescence.

Three varieties are described, according as the main incidence of disease is upon mucous membrane, kidney, or nervous system. It is held to be wrong to speak of any cases as benign; all are toxic. The differential diagnosis of pharyngeal diphtheria is very insufficiently discussed.

For treatment the writer pins his faith to quinine and alcohol. The former, he argues from its action in malaria, arrests microbic development; the latter is antiseptic in its action as well as tonic, and is to be pushed, its only limit being sobriety. Carbolic acid vapour is to be freely inhaled, as it acts upon the diseased blood by its absorption. It is very strongly recommended as providing warmth, moisture, and antisepsis. A tent is generally required, the temperature to be kept at 20° to 22° C., and "one gramme of acid for each cubic metre of space to be consumed in twenty-four hours," the urine being watched, and the quantity of acid lessened at the first sign of darkening. The writer has not found the acid harmful to young infants, and he has subjected to the treatment infantile cases of all varieties and degrees, with and without croup and broncho-pneumonia. Mercury is stated to be harmful, perchloride of iron is barely named, and chlorate of potassium not named at all. Locally, cauterisation is strongly condemned as cruel, useless, and unscientific; painting and syringing are for like reasons objected to. No methods of mechanically acting upon the membrane by softening or digestion are mentioned. The treatment is finally summed up in: (1) Absolute indifference to the false membrane; (2) most careful attention to the general strength; (3) alcohol and quinine; (4) warmth, humidity, and antiseptic quality of inspired air, not only for its local action, but to work upon the infective process through the pulmonary alveoli.

In laryngeal diphtheria food and stimulants are to be used to the exclusion of expectorants and all remedies of local action. The feeding tube is required in (1) absolute refusal to eat; (2) inability from throat ulceration; (3) in palatine paralysis.

Croup is defined as the sum of the symptoms produced by inflammation of the larynx in children when this is sufficient to produce reflex closure of the glottis. The inflammation, however, is more often diphtherial than not. The diagnostic point of croup is *tirage*[1] (*apnée visible*), which is produced only by glottic obstruction, this in turn being the result of two conditions only, namely, croup or foreign bodies. None of the conditions which produce laryngosternal whistling, such as peribronchial pressure, asthma, and capillary bronchitis, produce *tirage*, and *tirage* alone justifies tracheotomy. The author opens the trachea by dividing the first three rings, unless œdema of cellular tissue or enlarged glands compel a lower opening. It is recommended to fix the larynx manually, the tracheal hook being quite disregarded, and the incision into the trachea is to be made from above downwards. No mention is made of the importance of keeping the left forefinger in the tracheal wound until the tube is introduced.

The accidents, complications, and after-treatment of tracheotomy are pretty fully discussed. Intubation of the larynx has not found favour with Dr. RENOU, and he believes that its accidents and dangers will be the reason of its being shelved once more.

The book closes with a chapter on prophylaxis. The author grieves over the insanitary state of France. He urges isolation in all cases, and even advises special diphtheria hospitals divided into small wards, with two to four beds in each. He impresses the reader with the portability of diphtheria by clothes, fingernails, and instruments. He relies entirely upon sulphurous acid gas as his disinfecting agent, and curiously omits to mention heat as having any anti-microbic powers.

[1] *Anglice*, "drawing in of the lower end of the sternum and the adjacent costal cartilages."

FAITH CURES; THEIR HISTORY AND MYSTERY. By AURELIUS J. L. GLIDDON. London: *Christian Commonwealth* Publishing Co. 1890.

THE prevailing impression left upon the mind by the perusal of this book is that the generality of faith healers attempt to prove too much. The author has traced in an interesting manner the history of "curious cures in ancient times" at the temples of Isis and Osiris, in those of the gods of Rome and Greece, and by the Magi at Babylon, cures by witches, kings, medicine men, and mesmerists—the one thing demanded of the patient being faith. When he tells us of the miracles of the "faith healers" and "peculiar people," it would seem that a faith in no wise different from that of the Egyptians, Greeks, and Romans is all that is requisite for a cure. The evidence adduced in support of the heathen miracles of healing is apparently as worthy of credence as that which is tendered for those of Bethshan.

In Mr. GLIDDON'S preface he says: "It is probable that some theologians will find this book too scientific, and that some scientists will find it too theological. For the writer is a strong believer in scientific theology and theological science." For our own part, the most scientific statement we find in the book is the quotation from Dr. W. Moxon's article which appeared in the *Contemporary Review*, where he says: "The faith of the sick is not fair game for the sport of healthy religious enthusiasm. Healing is everything to the breadwinner stricken with disabling disease. Sickness is too serious to be trifled with by fanatics." Those who stand by the bed of a patient suffering from diseases which it is well within the power of medicine to cure or relieve, and do nothing but "pray and believe," are as cruel and as heartless as if they refused the sick man food, because God sent ravens to feed Elijah in the desert. Coleridge told De Quincey "that the act of praying, that is with the total concentration of the faculties, was the very highest energy of which the human heart was capable," and it is possible that the development of this heroic energy may have a very large share of the healing influence in the cures recorded in this work. One of the chapters is headed, "Ought Christians to use Medical Remedies?" The Bethshanites say "No," and the motto of their house is "No means whatever are resorted to." There is no limit to human weakness and fanaticism, and it is probable that some of the Bethshanites actually believe in their own statements, but we feel pretty confident that all of them do not. One of the miracle workers offered us as a proof of her powers that if we would introduce her to any patient who had lost a leg or an eye she could guarantee the restoration of either if the patient had faith. It is difficult to believe in the *bona fides* of such persons. Mr. Gliddon very sensibly remarks that though he is a believer in the prayer of faith he "dare not imitate those faith-healers who claim healing." He thinks the day is not far distant when our doctors will pay more attention to the intellectual and emotional states of their patients, and will bring to bear upon these those forces which are best calculated to render them more healthful. The experiments at the Salpêtrière Hospital have given immense impetus to the study of psychological medicine, and have thrown more light on "miracles of healing" and "faith cures" than all the works on mental physiology, written before Dr. Charcot's classical investigations took place.

This is in fact the disentombment of a science with which the ancients must have had considerable acquaintance, if the stories in this book are worthy of credence. Mr. Gliddon says, "Behind all natural forces is the supernatural force." Doubtless. But with all our knowledge we are not yet in a position to make such distinctions. We have only just begun to understand "natural forces." *Faith Cures* will repay perusal, for the question is one which medical men cannot afford to ignore. Rather should every educated man do his utmost to assist in placing on a scientific footing a system that, if testimony be of any value at all, is very closely allied to the medical art.

NOTES ON BOOKS.

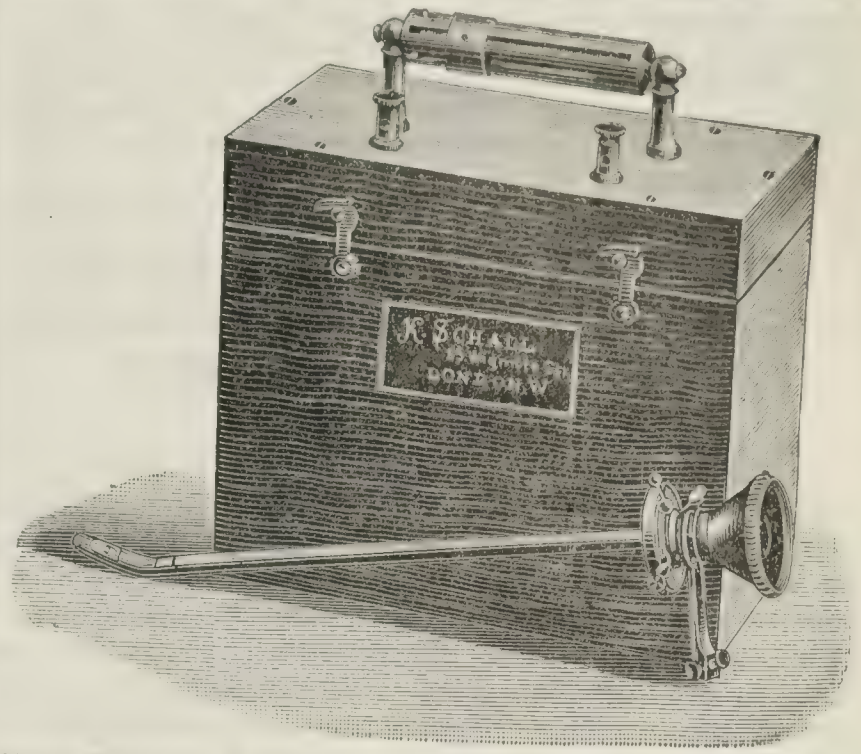
Electricity in Gynæcology. From the *Medical News.* (Philadelphia: Lea Brothers and Co.)—This pamphlet is a reprint of several papers read before the New York Academy of Medicine, Section of Obstetrics and Gynæcology, November, 1889. Dr. Lockwell's contribution is entitled, "General Observations on the Use of Electricity in Gynæcology." Dr. Augustin Goelet writes on "The Treatment of Certain Pelvic Tumours by Galvano-puncture, Drainage by the Vagina and Intra-uterine Galvanisation." Dr. McGinnis discusses in his monograph the "Galvanic Treatment of Uterine Fibromata." Dr. Buckmaster supplies "Notes on the Treatment of Fibromyomata by Electricity." Dr. Lapthorn Smith treats of "Bipolar Faradisation in Gynæcology." Next come "Remarks on Electricity in Gynæcology, and a New Portable Galvanic Battery," by Dr. Franklin H. Martin, of Chicago. Dr. Betton Massey, in his "Treatment of Chronic Metritis with Galvano-chemical Cauterisation," declared that "in simple endometritis or uterine catarrh, galvanic currents locally applied are practically infallible. I have never seen a case resist them." Dr. Skene, of Brooklyn, publishes "Remarks upon the Use of Electricity in the Treatment of Fibroid Tumours of the Uterus." The discussion which followed the reading of these papers is appended. But of fairness to the authors and to readers who may desire to study the different methods by which electricity has been applied to the same and to different forms of disease peculiar to women, we have given the names of the papers in full, therefore recapitulation of necessity occupies some space. It is clear that their contents are of such wide scope and importance as entirely to preclude even a cursory review. All the authors advocate at least some form of electricity. The titles of the papers show predilection for certain forms by certain authors, and the grounds of predilection, as laid down in these essays, are in themselves well worth consideration.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS

A NEW CHLORIDE OF SILVER BATTERY.

One of the great drawbacks to the use of electric light in surgery is that the size of the battery necessary for the production of the light renders transport a distinct inconvenience, often a difficulty. Primary batteries and accumulators do excellently for the consulting-room, but when the town surgeon needs the aid of electric light in the suburbs or in the country, he has hitherto been forced to place a reluctant reliance—often misplaced and disappointing—upon a small accumulator, or has had to convey with him a heavy primary battery. About four months ago a small battery fitted with chloride of silver elements was constructed by Mr. Schall, of Wigmore Street. It will undoubtedly prove of real value to those who need a portable electric light.

A correspondent who has tested these batteries severely (he has carried them on suburban and country visits, and has used them over fifty times) reports very favourably upon their capacity for giving a dependable, brilliant, and steady light. Chloride of silver elements are not innovations. Gaiffe's and De la Rue's batteries are fitted with them. Mr. Schall, however, has discovered an exciting liquid which does not deposit crystals on the zinc, and which gives an electromotive force of 1.8 volts per element. This latter statement means that a 9-volt lamp which would require six of Gaiffe's elements to get white hot, only requires 5 Schall elements. The original and maintenance cost is reduced by one-third, and procures for us a much smaller battery of higher and constant electromotive force. There is no plunging in of plates, no cleansing, and no leakage. The Schall batteries are made in two sizes, the larger used for the urethroscope and cystoscope, measures



$6\frac{1}{2}'' \times 3\frac{3}{4}'' \times 7''$, the smaller resembles a small cigar box. The handle is ingeniously constructed out of the rheostat. The figure will give a correct idea of the size and portability of the battery. The principle is being applied by Mr. Schall to constant and faradic batteries, lighting carriages, etc.

BRONCHITIS AND CROUP KETTLE.

We have received from the Jersey Company one of their bronchitis and croup kettles; the chief recommendations put forward being that it is made of the very best tin steel plates, the top stamped from one piece of metal; the joints, angles, and connections are of solid brass; each joint is a perfect fit, hence no leaking or dripping is possible. It is fitted with a glass gauge, which enables the nurse or the patient himself to ascertain the amount of water in the kettle. It is made in various sizes, at prices ranging from 10s. 6d. to 15s., or with extra charge for copper bottom.

"WHEAT COFFEE."

This preparation is obtained by allowing wheat grains to partially germinate, cleaning, and then roasting and grinding them. The product has very much the appearance of an ordinary finely ground coffee of light colour. The manufacture is carried out by special machinery. We find that the samples contain nothing besides the wheat. A strong extract is obtained with boiling water, which of course contains the soluble matters of the roasted wheat. The preparation may be useful as a substitute for coffee, but it is certainly undesirable to apply the term "coffee" to a coffee substitute. It is manufactured by Messrs. Heinemann, of Hamburg.

STANLEY'S SPIROMETER.

Dr. J. Farrar (Gainsborough) writes: I see it stated in your Reports and Analyses and Descriptions of New Inventions, when noting the handsome looking spirometer by Stanley, that a man of 5 feet 7 inches should have a vital capacity of 160 cubic inches. Surely this estimate is far too low. The usual capacity given for this height is 230 cubic inches, or a difference of 70 cubic inches. If a patient of mine, or a candidate for life insurance, standing 5 feet 7 inches, showed no more lung capacity than 160 cubic inches, I should be greatly disposed to think that there was something radically wrong with his chest, and would have great reluctance in the case of the life insurance candidate to certify him as a proper person for acceptance as a first-rate life. As I said, there is surely some error in your report, and as the matter is of great importance, I drop you this note either for correction or verification.

*** The table of lung capacity and height accompanying Stanley's medical spirometer, from which the quotation is taken, states that this spirometer gives lower results than Hutchinson's tables because the resistance of the instrument is far greater. The standard is altogether different from the ordinary one, and by numerous testings it has been shown that few tall strong men can expire more than 200 cubic inches at a time with this machine.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 29TH, 1890.

SHALL WE EAT TUBERCULOUS MEAT?

IN the history of law as in that of medicine there are, what may be called, in German fashion, "epoch-making" events. In the case of the now famous tuberculous meat trial at Glasgow we have an epoch-making event in the combined faculties, and the report of the proceedings at trial on the petitions, at the instance of the Glasgow Local Authority, against Hugh Couper and Charles Moir before Sheriff Berry[1], will afford authority and precedent on which to decide future cases.

The evidence contained in the report is interesting from the fact, that on the one side, that of the prosecution, we have ranged most of the authorities on tuberculosis in Scotland, whilst on the other there are, with one or two exceptions, no witnesses who can be considered to have a right to speak from a scientific standpoint. We say advisedly with one or two exceptions, as these exceptions have certainly a right to have their opinions heard from their undoubtedly high standing in the scientific world. The report of the evidence is *verbatim*, and there is in the pages before us a record of a most interesting character. We have the evidence of medical officers of health, of distinguished veterinarians, and of other scientific men all of whom hold with the French Congress that the flesh from tuberculous animals might be the cause of tuberculosis if ingested by the human subject. On the other hand we have for the defence such evidence as the following "that the principal cause is heredity"; "that another cause is inhalation of the specific germ"; that "this germ is the pabulum of the tuberculosis"; "that it is the pabulum along with the tuberculosis"; "that it is both"; that "the pabulum may do it in large quantities"; that "the pabulum alone will do it"; that the "pabulum is where the bacillus is situated—the environments of its animal food"; "the nidus of it"; "that a number of pabuli (*sic*) may be perfectly visible to ocular inspection"; "that you can perhaps see thousands of them with the naked eye"; "that they may be seen in generalised tuberculosis"; "that the pabulum or nidus which enters the animal produces the disease"; "that the pabulum alone might carry on the work of degeneration"; "that the bacillus alone will not do so, but that the two together always will"; and that the witness based his statements "on independent investigation and on the results of his reading." The above quotations will be read with no little astonishment, but they are taken from pp. 311 and 312 of the report above referred to.

There may undoubtedly be differences of opinion as to the necessity for condemning the carcasses of animals in which tuberculosis is comparatively localised; but such evidence as the above is certainly not sufficient to entitle any one to say that this witness for the defence had mastered his subject, and it certainly does not argue well for the strength of the defence that they should have relied upon evidence of such a character. It is but fair to say that this is scarcely an average specimen of the witnesses for the defence, but anyone who takes the trouble—a trouble which will be well repaid—to go through the evidence, the speeches of counsel, and the summing-up of Sheriff Berry, must feel convinced that in this instance, at any rate, the verdict for the prosecution was the only one that could have been given. It is exceedingly fortunate that this should have been the case, for so much attention was drawn to the reports at the time, and so much depended upon the judgment, that it would have been little short of a national calamity had it gone out as the legal decision on a public health question, that flesh from tuberculous animals, when taken into the alimentary canal of the human subject, is to be looked upon as innocuous.

There is already sufficient difficulty in obtaining adequate inspection and condemnation of tuberculous carcasses, and this difficulty would have been enormously enhanced had the technicalities of the law intervened between those concerned with the welfare of the community and those who have the power of bringing to our markets flesh which can only be characterised as containing organised poison.

[1] Glasgow: William Hodge and Co. 1889.

MEDICAL VIEW OF DRUNKENNESS.

A VERY interesting and important question was discussed the other evening at a meeting of the Police Surgeons' Association held at St. Thomas's Hospital, Mr. McIlwraith having called their attention to the difficulty of defining the condition indicated by the term "drunkenness," and the uncertainty as to a man's responsibility for actions committed while drunk. Strangely enough, the question was represented, even by an intelligent public writer, as a semi-comic one. It is far from comic, as no one knows better than a police surgeon. No one sees so much as he of the infinite complications which beset cases in which injury, exhaustion, and disease are mixed up with alcoholic poisoning in its various grades, so as sometimes to baffle all ordinary powers of diagnosis. But apart from these more difficult cases (which, however, are of very common occurrence) the everyday question for the police, "When is a man to be called drunk?" is one which becomes the more puzzling the more it is studied, and it is one which recent police legislation has made incumbent on medical men to answer, since now everyone charged at a metropolitan police station with being "drunk and disorderly" has a right to summon a medical man to pronounce on his sobriety; and of course in all cases where there is any reason to believe that a person is seriously ill, whether he be thought to be drunk or no, medical aid is at once summoned to decide

the question. There seems to be no particular reason for making the mere question of sobriety a medical one, since no definition of drunkenness appears to have been attempted by writers on medical jurisprudence; but, as it has been so ordered by the authorities, it behoves the surgeons called in by the police to have as clear ideas on the subject as circumstances permit. To this end, as it seems to us, the recent discussion will very materially contribute, and we would call especial attention to the following very practical and useful observations of one of the divisional surgeons.

Dr. Forsyth said "the term 'drunk' was applied to any case in which alcohol was supposed to be a factor, and he thought it was necessary that they should differentiate between the various states. He objected to the indefinite expression being so easily used and so easily accepted, and urged that drunkenness should be treated under at least three aspects—excitement, loss of control, and coma, and that in all cases where persons were charged with being drunk the magistrate should require a qualifying definition to be given, and should also demand the reasons of those making the charge for attributing the condition of the prisoner to alcohol. He would also insist upon a man who was unconscious from drink being in all cases treated as being in as great danger as an apoplectic patient, for one was in as great danger as the other. If this were done, the heading 'Drunk or Dying' would disappear from the newspaper reports."

It is obviously in some such rational discrimination of the various conditions produced by alcohol, as is here indicated, that safety is to be found for the liberties and lives of persons who are, or are suspected of being, "drunk;" and we congratulate the police surgeons on having taken up so interesting and so important a subject, and of having treated it in a way so likely to result in benefit to the public. Other useful remarks on diagnosis were made during the discussion, such as the following by Mr. Phillips:

Dealing with the tests for drunkenness, he pointed out that 'when the brain was poisoned by alcohol the pupils of both eyes were contracted alike, whereas in apoplexy it was noted in one or the other according as the effusion of blood affected one portion or another of the brain."

The Association is one capable of rendering much service to medical science, for many interesting points are copiously illustrated in police practice, which but rarely come before the general practitioner, and we are therefore glad to see that they are likely to be treated wisely and usefully by the newly formed Society.

LARYNGISMUS.

AN important paper on the subject of Laryngismus appears in the current number of *Brain* from the pen of Dr. William Gay. Agreeing in the main with the classic description of an attack given by West, he is unable to accept any of the theories hitherto propounded concerning the nature of the disease—and, indeed, most of them may be said to be self-condemned, and they are dismissed by Dr. Gay in a few lines. Amongst the theories thus brushed aside are those that connect it with an enlarged thymus, enlarged glands in the neck or mediastinum, craniotabes, or an enlarged liver impeding the descent of the diaphragm. Hughlings Jackson's theory that laryngismus is a perversion of the ordinary respiratory rhythm, owing to the effect on the medulla of a condition of supervenosis resulting from a collapsed and rachitic thorax, is treated to a more detailed consideration, but is none the less absolutely condemned as being neither in accordance with the known facts nor capable of offering a possible explanation of them, and the theory is dismissed in the following words: "Supervenosis initiates the paroxysm which increases the supervenosity, and laryngismus would consist of a single and necessarily fatal gigantic respiratory spasm."

The theory of Dr. Sturges, that what saves from the fatal result of laryngismus is an answering spasm on the part of the diaphragm, is met with the objection that there seems to be no reason why the convulsion of the diaphragm should not be simultaneous with that of the larynx, or almost so; and another objection might be made that it is very doubtful whether spasm of the glottis could be overcome in this forcible manner, and that in not a few instances the spasm terminates quietly without any crowing.

Two theories have been advanced in our columns since Dr. Gay's paper appeared to account for the phenomenon of laryngismus. According to Dr. Alfred Mantle, the attack may be sometimes due to an elongated uvula, and he quotes in support of his belief an interesting case of an infant, aged 8 weeks, in whom suffocative paroxysms were apparently due to an elongated uvula, and were cured by its removal. It may, however, be doubted whether the case should be classified as one of laryngismus. Mr. Lennox Browne, alluding to this paper of Dr. Mantle's, expresses the opinion that in cases of laryngismus, if sought for, adenoid growth would always be found—a view to which we certainly cannot subscribe. Both these writers allude to the recurved epiglottis first recognised and described by Dr. Lees, but cases of this rare affection have absolutely nothing in common with laryngismus.

To pass, however, to Dr. Gay's proffered explanation. He starts with the fundamental proposition that laryngismus is a respiratory convulsion, the point of departure of which is that portion of the centre which presides over the adductor muscles of the vocal cords. The respiratory centre taken as a whole, he tells us, is profoundly influenced by various emotional states, as is seen in "sighing," "heaving of the chest," "feelings of suffocation," and the "holding of the breath" on impending danger. The vocal cords seem particularly liable to be thus affected, in proof of which Dr. Gay refers to the "catch in the breath" on watching or reading of any thrilling scene; in making a sudden descent, as in going down the shaft of a mine; in facing a heavy wind, or at the moment of receiving a douche of cold water. Such spasm of respiratory muscles is even more common in children, especially under the influence of emotion, as seen when a child is in a fit of passion or when crying or sobbing.

All this goes to prove that the respiratory centre, and especially the laryngeal part of it, is not only reflexly excitable, but also unstable, owing to the influence exercised upon it by certain emotions; and, broadly speaking, the younger and more emotional the subject, the more marked the instability. Dr. Gay compares this tendency to laryngeal and respiratory spasm to other physical expressions of emotion, such as blushing,

desire to micturate through fear, etc., all of which are due to a deficiency of control of the centre or centres that are under the influence of the particular emotion. One of the less common and less well-known causes of laryngismus is swallowing; and Dr. Gay suggests that during this act the vocal cords tend to be adducted. This suggestion is corroborated by an experiment of Dr. Mount Bleyer, of New York, who opened the larynx of a dog, and whilst the animal was coming round from the anæsthetic watched the vocal cords being adducted during the process of swallowing. Some experiments of Dr. Semon and Professor Horsley, also quoted in the paper before us, tell in the same direction.

The well known frequency of laryngismic attacks during sleep Dr. Gay would explain on the hypothesis that the spinal centres are then less fully controlled and are therefore rendered more susceptible to reflex or quasi-reflex influences, a view which derives considerable support from the known facts concerning the genito-urinary centres; enuresis and spermatorrhœa are at first and in the milder cases always confined to the period of sleep, when the controlling arrangements are less active. Less powerful influences during sleep are required to break down the influence on the centres than during the waking state, and it is highly probable that this may apply to the respiratory centres and others belonging to the lowest level; if so, reflex and other influences would be more powerful, and slighter causes would be sufficient to induce laryngismic attacks at such a time.

According to Dr. Gay, at the time of its evolution no centre is fully controlled, and hence the instability of developing nervous structures and their ready response to reflex influences. Dr. Hughlings Jackson has already pointed out that of the three great organic functions—digestive, circulatory, and respiratory—the last will be the most actively developing during infancy, and it will be therefore the least fully controlled, and will be still further weakened as the child commences to experience emotion. Another factor that may have much influence is that the faculty of speech will be in process of development, and therefore the centres for the vocal cords will be in a state of active development, and consequently of deficient control. Defective control of the respiratory and laryngeal centres at an early age would, therefore, according to these views, appear to be abundantly provided for.

There are many other points in this most interesting paper which we have not space to notice, such, for instance, as the connection of laryngismus with rickets or with tetany, the meaning of facial irritability, the tendency of the affection to run in families, and the association with convulsions. Dr. Gay's remarks on treatment are concise and to the point, and are based on a clear understanding of the objects to be attained.

"BETTERMENT" FOR BARMAIDS.

MODERN philanthropists, like the knights errant of old, are ever on the outlook for wrongs to redress and victims of hardship or oppression to succour. A movement, which has already enlisted the sympathies of many benevolent ladies, is now being organised for the relief of a class of toilers who may at first sight appear to be in no very urgent need of it. Barmaids, as a rule, do not give a hasty observer the impression that they are distressed damsels kept in sore duress by cruel tyrants. Facts recently brought to light, however, by Miss C. M. Gough, the earnest Secretary of the Young Women's Christian Association, leave no doubt that these poor girls are too often overworked, underfed, and generally ill cared for, to the irretrievable damage of their health. They are usually on duty for fourteen hours a day with very short intervals for meals and rest. At one large railway station not far from the office of this JOURNAL the barmaids have to be at their posts from 9 in the morning till 1 o'clock the following night; of this period of sixteen hours only thirty minutes are allowed for dressing and for such amount of rest as can be squeezed into the time. In other bars the girls work fifteen and a half hours with only one hour off. One even hears of some who are frequently on duty twenty hours a day. Sunday brings rest to these "white slaves" only once every two months or so, and even then some portion of their holiday is filched from them.

It must be borne in mind that at many of the railway buffets the girls have to stand all the time they are on duty. No medical reader will, under these circumstances, be surprised to learn that most of them suffer from varicose veins, and that congestion of the pelvic organs, uterine displacements, etc., are extremely common among them. The food is in many places both bad and insufficient; at one important station it is described as "dreadful—not fit to eat." Even when it is good and abundant, however, there is no time to eat it.

The sleeping accommodation provided for the girls is often of the worst possible description, and overcrowding is the rule in some places. Thus, the barmaids at a well-known junction sleep in an eleven-roomed house which is tenanted by twenty people, and at one West End station eight girls sleep in one room, which is also their sitting-room. At some of the metropolitan stations the girls have to sleep literally underground, in rooms in which gas has to be burnt all day long, and into which no ray of sunlight ever penetrates.

It does not fall within our province to refer to the absurdly small wages on which barmaids are expected to keep up a smart appearance, nor to the temptations to drink and immorality to which they are ceaselessly exposed. We are here concerned solely with the effect which overwork and the other evils to which these girls have to submit must have on their health. Their lives are passed in an enforced violation of the most elementary sanitary laws; can it be wondered at that as a class they are very short-lived? No accurate statistics on the subject seem to be available; but we are informed that a person who has had exceptional opportunities of forming a judgment on the matter has estimated the average duration of life in barmaids at 33 years.

It must be understood that the statements here made do not apply to all restaurants, or even to all railway buffets. It is particularly one or two large firms of public caterers that show the utter disregard for the comfort, health, and morals of their barmaids which has been described. It is to be hoped that the outcry which has been raised in the Press will induce these persons to treat the girls in their employment with more humanity. If, however, they do not, of their own accord, put their houses in order in this respect, it is probable that they

will be compelled by *force majeure* to do so. A Bill will shortly be introduced into Parliament "to regulate the hours of labour, and to provide for the better accommodation and protection of women employed as barmaids and waitresses in hotels," etc. This Bill will contain provisions as to the sanitary inspection of premises, sleeping accommodation, and hours of work, which will remedy most of the conditions injurious to physical health under which the barmaid now has to spend her life. A meeting of ladies to discuss the terms of the Bill was recently held at Miss Morley's house in Grosvenor Street, and a further conference is to take place there on Monday, March 31st. We heartily wish success to the movement.

MR. GLADSTONE AND THE MEDICAL PROFESSION.

No living man possesses in a higher—if indeed in an equal—degree the power which Mr. Gladstone habitually shows of vivifying passing events and illuminating them by grave, eloquent, and penetrating discussion of the principles which lie beneath them, and the relations by which they are surrounded. Guy's Hospital has been somewhat tardy in creating a residential establishment for its medical students; it has done so by the self-denying method, of which more than one medical school has set the example, the annual fees of the professors being mortgaged to supply the capital with which the residences are built. As Mr. Gladstone truly said, medicine, however highly eulogised by statesmen, is the least regarded and the most seldom helped among all the professions.

Medical schools and colleges owe little to the State, and hardly more to enlightened munificence of private individuals, who have done so much for institutions connected with other professions. So that the eulogy which Mr. Gladstone eloquently pronounced both on the principle of a residential College and the methods by which this has one been erected, might as properly have been applied to many other institutions during many years past. It is only one more example of how much the medical profession have been accustomed to rely upon their own work and their own resources, and how little has been the public appreciation of that work and of those efforts, that when, for the first time, it is explained to the great statesman and financier, he finds in it the occasion of a warm public eulogium, and speaks of it as of some great and new thing. Mr. Gladstone's sympathy with the medical profession is well known, and he has never been slow to give public expression to his sentiments. His great speech at the last annual meeting of the British Medical Association in London was not the only occasion, although it was perhaps the most noble and the most public one, on which he put before the public mind the view, which he again expressed at Guy's Hospital this week, of the great and increasing influence of that profession and of the rapid and sure strides with which it is advancing to a foremost place in the State. Whether it be the better or the worse off for being absolutely unendowed is a question of which the solution depends very much upon the point from which we approach it.

If it owes little or nothing to the State, it is all the more independent, all the more unfettered, and all the more capable of shaping its own great destiny. It is strange indeed that a country which does not grudge £70,000 for a picture shrinks from the expenditure of sums relatively small for the creation of any great institute of public medicine; so that at this moment England alone of every country in Europe is destitute of any State institution for the encouragement of the collateral biological sciences, and when now it is sought to create an Institute of Preventive Medicine in connection with a great University, private munificence has almost solely to be relied upon to obtain even the first penny towards the expense. Under any circumstances, however, it is pleasant to record words so friendly and recognition so kindly from a statesman of such great intellectual stature and such vast influence on public opinion.

SURGEON-GENERAL T. GRAHAM BALFOUR, F.R.S., has been nominated by the Local Government Board to be a member of the Metropolitan Asylums Board.

AT a meeting of the almoners and governors of St. Thomas's Hospital on Tuesday last for the purpose of electing a treasurer in the room of Mr. Alderman Stone, the candidates were Alderman Sir Henry Knight and the senior almoner Mr. J. Gadesden Wainwright: the latter was elected by a large majority.

IT is proposed by the present rector of Mersham, near Ashford, Kent, to place in the parish church a stained glass window, dedicated to the memory of the great Thomas Linacre (or Lynacer), who, in 1518, founded the Royal College of Physicians, and who was both physician to Henry VII and Henry VIII and rector of Mersham.

AT a meeting of the Medical Committee of the Midland Institute on March 20th, Dr. Wade in the chair, the following gentlemen were chosen to represent the interests of the profession on the Select Committee appointed by the Mayor to inquire into the question of hospital abuse: Mr. Priestley Smith, Dr. Richards, Dr. Alfred Hervey.

SIR EDWARD BIRKBECK'S Bill dealing with labourers' cottages proposes to confer on the rural sanitary authority power to compel the provision in the erection of such cottages of proper accommodation and adequate means of drainage, and also, where practicable, of a garden in connection with the cottage.

THE friends and admirers in Germany of the late Professor Richard von Volkmann, of Halle, are proposing to erect, in the clinique where he laboured so long and successfully, a monument in marble or bronze to his memory. Sir William Mac Cormac is interesting himself in this movement.

A BRONZE statue of the late Dr. Marion Sims is now in course of production in Munich, and will, it is expected, be forwarded to America within the next year. The statue is 9 feet high, and will be mounted upon a granite pedestal 8 feet high. The *Medical Record*, from which we learn these particulars, states that it is proposed to erect the monument in the Central Park, New York.

IN spite of several more or less authoritative statements which have been made to the contrary, the chair of surgery at Halle, left vacant at the end of last year by the death of Richard von Volkmann, has been offered to, and accepted by, Professor F. Bramann, of Berlin. Fitly to replace such a man as Volkmann will be a

difficult task, but Dr. Bramann has won golden opinions from all those who have had the best opportunities of forming a judgment as to his capacity, and he goes to his new post with an excellent reputation both as a surgeon and a teacher.

THE HOSPITAL FOR SICK CHILDREN.

An interesting departure from the accustomed formalities was observed at the laying of the foundation stone of a new wing of the Hospital for Sick Children, Great Ormond Street, Bloomsbury, on Wednesday, March 26th, when the placing of the first stone was entrusted to John Hart, aged 11 years, one of the patients in the hospital. The new building will cost £21,000, which has already been raised, and will need £9,000 more for its full equipment. Of the money contributed, £6,000 was the "children's offering" to the Queen at the Jubilee year, generously handed over by Her Majesty to this undertaking.

INSPECTOR-GENERAL MACPHERSON.

We deeply regret to announce the death of Inspector-General Macpherson, an eminent Indian officer, for many years settled in London, and widely known and much respected. He had constituted himself a recognised authority of the first class on the subject of home and foreign health resorts. His care, exactness, impartiality, and kindliness gave great value to his work. For many years our readers have been indebted to his pen for much excellent service in these matters, and in recording his death we feel the deep regret which attends the loss of one of the oldest, most faithful, and most esteemed members of our staff.

THE ALLEGED DISCOVERY OF TYPHOID BACILLI IN MELBOURNE WATER.

Considerable excitement was recently caused in Melbourne by the announcement that M. de Bavy, a bacteriologist, had found the typhoid bacillus in the public water supply. An investigation, conducted by the official expert, Dr. Katz, has, we are informed, thrown considerable doubt on the correctness of this alarming statement. The bacillus, it is stated, very closely resembles the typhoid bacillus both in form, size, and mode of growth; but a careful study of pure cultivations in gelatine has revealed certain differences which are believed to be sufficient to prove that the bacillus in question is a distinct species.

THE SANITARY CONDITION OF THE LIVERPOOL POLICE OFFICES.

Our Liverpool correspondent writes: A report has found its way into various newspapers throughout the country that a policeman in Liverpool has died from the effects of the foul air and bad smells that pervaded the waiting-room of the police offices in Dale Street. It is true that the room in question, though formerly providing ample accommodation for the men, is inadequate for the wants of the force as the latter exists at present; but I am informed by the assistant medical officer of health that there is no reason to suppose that the officer's illness was in any way connected with the sanitary state of the building. The deceased had suffered for some time from repeated attacks of colic, and his death, which took place very suddenly, appears to have been due to peritonitis.

REGISTRATION OF NURSES.

At the last monthly meeting of this Association a paper was read by Mrs. Bedford Fenwick, who said that the nursing profession only sought to obtain for itself that which every other skilled profession had, namely, a register of its members, setting forth their qualifications and training; this step was now being forced upon it, because the work of a nurse was skilled labour, and because this registration would also be a means of protecting the public against charlatans and impostors. The British Nurses' Association had opened the register, and had already received many hundreds of applications from trained and certificated hospital nurses for enrolment. When the register was formed, the Association could go to the Privy Council and ask that a legal status and authority might be given to the work. Miss C. J. Wood (Honorary Secretary) and Miss Graham pointed out the great need there was for a system of registration as a guarantee of efficiency. Mrs. Fenwick, in answer to questions, referred to the low standard of nursing in America, where certificates were given at the end of two years' training.

THE GUINNESS BUILDINGS.

The Guinness Trustees received last week a communication from the Earl of Cadogan expressing his desire to assist in carrying out the objects of the trust and offering as a gift a plot of freehold land, upwards of an acre in extent, and of the estimated value of £40,000, in a central part of his estate in Chelsea, as a site for the erection of dwellings for the poorer classes in that district. The trustees, who thought the site specially suited for the purpose, at once accepted Lord Cadogan's munificent offer, and have given instructions for plans to be prepared forthwith for the erection of dwellings on this site, Lord Cadogan having purchased from the lessee the unexpired term of his lease, which has 14 years to run, so as to render the site immediately available. The trustees have also acquired by purchase sites in Columbia Road, Bethnal Green, and Brandon Street, Walworth, and have given instructions for plans to be prepared for these sites.

OCULAR COMPLICATIONS IN INFLUENZA.

In the February number of the *Recueil d'Ophthalmologie*, Dr. Galezowski describes two forms of ocular affection which have been seen by him. In the one the conjunctiva is alone attacked, and the symptoms usually come on at the commencement of the disease. There is pain around one eye, and the lids feel heavy, and tend to droop involuntarily, as if the patient were sleepy. Lachrymation and photophobia are frequently present, and the vision fails after a few seconds on attempting to read. In the morning the lids adhere, but there is not much secretion. The vessels of the sclerotic are distended, but the pupil acts perfectly. The author attributes these symptoms to neurosis of the fifth nerve. The other class of case presents a more serious complication, for in it the cornea becomes superficially ulcerated over a large area of triangular shape, the base being towards the circumference, and the apex reaching to the centre of the cornea. The ulcerated area becomes completely anæsthetic, while there is hyperæsthesia of the adjacent corneal tissue. The ulcer tends to increase in size but not in depth. The complication appears late, often during convalescence; the prognosis appears to be favourable. This complication would also seem to be due to some abnormal condition of innervation.

MR. WILLIAM CADGE.

At a largely-attended public meeting on March 21st, the honorary freedom of the City of Norwich was conferred upon Mr. Cadge, "in recognition of the eminent services he has rendered to the Norfolk and Norwich Hospital, and the noble gift made by him to its funds." The freedom was presented in a handsome casket of solid silver, enamel, and *repoussé* work, upon which was engraved a suitable inscription. The Mayor, in making the presentation, said they had assembled to render a well-merited tribute to one who had won the good opinion not only of his fellow citizens but of residents in the country at large. Mr. Cadge had

placed his fellow citizens under an obligation, not only by the princely munificence with which he had endowed the hospital, but by placing at the disposal of the poorest and humblest of the inhabitants of city and county his surgical skill, which was second to none in the kingdom. Mr. Cadge's pecuniary gift was a challenge which had been nobly responded to by persons of all classes, from the Lord Lieutenant to the humblest citizen. Mr. Cadge, who, in rising to respond, was very warmly received, said that he had taken an active part in urging the governors to build a new hospital rather than to enlarge and amend the old building. Hospitals were the schools wherein medical men were taught and reared, and without such schools he knew not how medical education could be perfected. In hospitals, too, those nurses who were so great a comfort and help to both rich and poor were instructed in, and fitted for, their important work. But over and above these objects, their main and most vital duty was the relief and cure of the dire diseases and accidents which occurred amongst the poor and needy. The list of freemen of Norwich included, no doubt, the names of great naval and military commanders, whose duties had necessarily been attended by the infliction of cruel suffering and loss of life. There might be this satisfaction, at all events, in knowing that in conferring the freedom of the city on a humble individual like himself they conferred it on one whose services had been in the direction of mitigating suffering and saving life. In conclusion he expressed his most heartfelt thanks to the Corporation for the honour they had conferred upon him. The loving cup having been passed round, the toast of "The Mayor, Sheriffs, and Corporation of Norwich" was given by Mr. Gurney Buxton, and seconded by Sir Peter Eade, who expressed the hope that an effort would next be made, by the provision of convalescent establishments, to relieve the hospital wards.

DIPLOMA MILLS.

An account was recently published in these columns, founded upon reports which had appeared in the American press, of the manner in which the trade of diploma selling is carried on in certain parts of America. From a paragraph in the *New York Medical Record*, it appears another "diploma mill" has been unearthed in the State of Vermont. There is a general law in Vermont providing for the organisation of corporations by voluntary association, for the purpose of establishing and maintaining "scientific, charitable, and benevolent institutions, and such societies as have for their object the promotion of moral, intellectual, and spiritual development." A certain Dr. Dutton and his wife sought to take advantage of this law to organise the "Rutland Medical College." No systematic instruction was given, and the "institution," our contemporary states, "was nothing but a diploma mill, pure and simple." The Judge of the State Court has decided that the so-called college has no authority to confer diplomas, so that this particular bubble is burst. Many others, however, still float. The *Boston Medical and Surgical Journal* states that there is in Buffalo a society calling itself the Druidic Banchoreion, which keeps within the letter of the law by giving certificates that mean nothing to people of education, but to the ignorant pass for medical diplomas. "The existence of such fraudulent institutions among us has," the *Journal* states, "long been known, but only of late has their number, and the wide circulation of their worthless diplomas, been comprehended." As has already been announced, the medical colleges in Baltimore have issued a circular to all medical colleges in the United States, suggesting a conference on medical education, to be held in Nashville during the meeting of the American Medical Association next May. The irreducible minimum to be proposed is: 1. A three years' course of six months sessions. 2. Graded curriculum. 3. Written and oral examinations. 4. Preliminary examinations in English. 5. Laboratory instruction in chemistry, histology, and pathology. It may be observed in passing that this circular letter is signed by six medical colleges all possessing the power of conferring medical degrees, and all located in Baltimore. According to a statement in an apologetic article published in the same number of the *Medical Record* as that from which quotation has already been made, "about one-half the 3,500 doctors annually graduated in this country go out from large and well-equipped colleges in New York, Massachusetts, Pennsylvania, and the West. These men have studied well under good conditions, and deserve recognition as members of a learned profession." Such recognition is readily and cordially accorded in this and every other country in Europe; but foreigners would like to know something more about the other 1,750 who do not "go out from large and well-equipped colleges," and who occasionally favour Europe and Australia with their professional presence.

AMBULANCE ORGANISATION.

The discussion in the House of Lords on ambulance organisation in this country has again brought this subject prominently forward. The Earl of Meath asked the Government for information regarding the most recent means adopted in our colonies and foreign countries for the transport of civilian sick and injured, and that a report on the subject should be laid before Parliament. In this country there is no organised system for the transport of civilian sick, as is found in even fourth-rate towns in the United States. In Boston (United States) a system is in operation by which a horse ambulance can, in two or three minutes, be summoned to any quarter of the city. At certain distances in the streets boxes, containing telephones, are placed, and the policemen, who possess the keys, can thus communicate with the central office without leaving their beats. In each district there is an ambulance station, with a horse ambulance always ready to start on the receipt of a direction from the central office. Through the efforts of the Hospitals Association, wheeled ambulances have been placed at all the principal hospitals in London, and the St. John Ambulance Association has established stations in the City and in Hyde Park. The police are also better provided with ambulances than formerly, but no horse ambulances are available for the public service except those of the Asylums Board for the transport of infectious cases. It is most desirable that the direction of street ambulances should be under one authority, which should have power to overcome the difficulties which have met the voluntary efforts of philanthropic bodies in this country. There are in London a great number of men and women who have been trained by the St. John Ambulance Association in giving first aid to the injured, and there is also a thorough system of ambulance instruction amongst Volunteers. When the report is laid before Parliament it is to be hoped that all branches of ambulance organisation may be combined to form one complete and efficient system.

DIPHTHERIA IN TREDEGAR.

For some years past diphtheria has continued to be fatally prevalent in the Tredegar urban sanitary district. After a few months' absence from the district, the disease reappeared in March, 1889, and continued to spread throughout the remainder of the year. Local inquiry into the matter was recently made by Mr. Spear on behalf of the Medical Department of the Local Government Board. From Mr. Spear's report it appears that, in this epidemic, the schools have been instrumental in widely disseminating the infection, and that, once disseminated, the infection fastened itself upon localities where soil and air were polluted by sewage. These observations accord with the experience in former years of diphtheria in the Tredegar district, as recorded in the reports of the medical officer of health. There is no proper system of sewerage. The sewage nuisances which exist about dwellings are often

so serious as to render the latter unfit for wholesome occupation; but in addition to this many of the houses in the older parts of Tredegar and in outlying localities are little more than hovels, in some cases mere cellars, and are unfit for habitation, owing to dilapidation, dampness, and absence of proper ventilation. The water supplies are also not in all cases satisfactory. Further, the sanitary authority possesses no hospital for the isolation of infectious disease. In many of the late family invasions of diphtheria such an institution would have proved of great value. The medical officer of health states, in fact, that any real isolation of the sufferer was in many, if not in most, cases impossible, and this accords with the information which Mr. Spear obtained personally as to family invasions. Tredegar is an important industrial centre, its population being estimated at 18,100; but its sanitary condition is far from being satisfactory. If diphtheria and other zymotic diseases are to be eradicated, cleanliness must replace filth. According to Mr. Spear, the three chief requirements of Tredegar are a proper system of sewerage and drainage, the general improvement of the dwelling accommodation in the district, and the provision of means of dealing with infectious and spreading disease.

MICROSCOPIC OBJECTIVES.

At the meeting of the Royal Microscopical Society last week, it was announced that Dr. E. Abbe, of Jena, had presented to the Society one of the new apochromatic one-tenth microscope objectives recently produced at Zeiss's optical works, Jena, under Dr. Abbe's superintendence. The speciality of the new objective is that the aperture is the highest hitherto attained, being designated of 1.6 N.A., whereas the highest point previously reached by Dr. Zeiss was 1.4 N.A., so that the clear gain of aperture is 20 per cent. The advantage following upon this increase of aperture has been remarkably shown by the perfection of the images obtained in photomicrographs produced by the new objective in the hands of Dr. Henri Van Hewick, Director of the Jardin Botanique, Antwerp, specimens of whose work were exhibited at the meeting. It was further announced that Dr. Dallinger, F.R.S., the well-known microscopist, had consented to join a committee appointed by the Council of the Royal Microscopical Society to make a special report on the new objective to the Society. It is understood that the new construction embodies the use of fluorite in place of crown glass in one or more lenses of the combination, by which a higher degree of achromatism is attained than that of ordinary achromatic objectives. The new objectives are hence designated "apochromatic," and their employment in photomicrography has demonstrated their great practical superiority over objectives of ordinary "achromatic" construction.

POISONS IN PROPRIETARY PREPARATIONS.

Having on many occasions called attention in the Journal to the unguarded manner in which poisons are distributed to the public in quack medicines sold under the cover of the medicine duty stamp, it is with satisfaction we observe that the authorities have at last been stirred up to put the existing law on the subject in force. It will be seen from a report on another page that on Friday, March 21st, a chemist and druggist was charged at the Mansion House with a contravention of the 17th Section of the Pharmacy Act, 1868, in selling a bottle of a so-called "cough linctus," containing 2 grains of acetate of morphine, without affixing to it a poison label. The case arose out of an inquest upon a child who died as the result of drinking a quantity of the linctus, the bottle containing which had been left within reach by the mother, who said she would have taken greater care of it had she known it contained poison. As a matter of fact, the label bore a caution that the preparation was to be kept out of the reach of children, as it was sweet and they might take too much. The defendant acknowledged the offence, but pleaded custom, and it was admitted by Mr. Gill, who acted on behalf of the Public Prosecutor, that the proceedings had been taken especially with a view to correct a prevalent misapprehension, and to impress upon all persons selling nostrums containing scheduled poisons that simply covering them with a medicine duty stamp does not do away with the necessity for using a poison label. The fine inflicted by the Lord Mayor was a small one; but no doubt it will be effective in directing the attention of many engaged in this business to their responsibility in this respect. It is satisfactory to learn that in future, "whenever the occasion does arise," and the sale of a nostrum containing poison insufficiently labelled is brought to the notice of the authorities, proceedings will be taken against the sellers. In addition, it may be useful to point out that proceedings under the 17th section of the Pharmacy Act can be initiated by any person, and that the death of a member of the public is not an essential preliminary to the demonstration of the presence of a poison in a particular preparation. It will be noticed that Mr. Gill expressed strongly the opinion that a proprietary preparation is not turned into a patent medicine by simply placing on it a medicine duty stamp. So far as the offence charged is concerned, we do not see that it is affected by the correctness of this opinion or otherwise, since the exemption in favour of "patent medicines" does not extend to the provisions relating to labelling, but only to what is "hereinbefore" contained in the Act, that is, to the provisions as to persons by whom poisons may be sold. It cannot be denied that popular usage has applied the term "patent medicine" to everything covered by a medicine duty stamp; but if the stricter reading of the term could be maintained, it would at least have the advantage of largely diminishing the number of hands by which a multitude of nostrums containing narcotic and other poisons are at present distributed to the public.

AN HONOUR TO ENGLISH SURGERY.

According to a notice which appears in the *Gazzetta degli Ospitali* for March 23rd, the governing body of the great school of practical medicine and surgery, the "Policlinico Umberto I," now in course of erection at Rome, invites sculptors to compete for the commission to execute two bas reliefs in Monte Alfilano stone. These bas-reliefs are to adorn the principal elevation of the medical and surgical departments respectively. The subject of the former is to be Morgagni teaching his pupils the investigation of the seats and causes of disease. He must be represented as the founder of the naturalistic method, and not as a mere dissector of dead bodies. The subject of the other design is to be Sir Joseph Lister in the act of demonstrating his system of dressing wounds, which the Committee calls "the greatest conquest of modern surgery." The sketches must be presented at the new school of Vittorino da Feltre, Via della Polveriera, at Rome, between 10 A.M. and 6 P.M. on May 15th, 1890. The artists whose sketches are selected will each receive 15,000 lire (£600) in four instalments. The jury will consist of Professor Baccelli as president, and Professors Durante and Bastianelli, with two sculptors, two painters, and two architects. We are sure that we are expressing the feeling of the whole profession in this country in congratulating Sir Joseph Lister on thus receiving while he is still among us an honour ordinarily reserved by mankind for the greatest of its departed benefactors.

GONORRHŒA IN THE FEMALE.

Professor Sänger read a paper of great value on this important subject before the Leipzig Medical Society in February. He admitted that, contrary to all teaching prior to a few years since the prognosis of gonorrhœa is graver amongst women than when it attacks men. The dangers begin when the specific infection

has reached the endometrium and the Fallopian tubes. On the other hand, fatal pyæmia from gonorrhœal inflammation of Cowper's glands is rare, nor is pyelitis or suppurative nephritis frequent under the same circumstances. But Sänger finds that the proportion of women who die prematurely from disease of the appendages and adjacent peritoneum through gonorrhœal infection is not small. Still more considerable is the number of women who become chronic invalids, or who are henceforward barren, through the same complications. Gonorrhœal urethritis, vulvitis, and inflammation of Cowper's glands are easily cured, and often disappear spontaneously. Specific vaginal catarrh is, on the other hand, according to Sänger, more obstinate to cure even than is generally supposed. It certainly lasts for several years in many cases, and Sänger has known it to last till old age. Gonorrhœal endometritis may be represented by a scanty, clear, mucous discharge. Yet both gonorrhœal endometritis and vaginitis are perfectly curable. The same remark applies to specific inflammation of the appendages, but these complications, even after cure, leave anatomical changes of a noxious character long after the last gonococcus has disappeared. Absolute physiological rest of the parts, and, more surely, the menopause, offer the best chances of perfect cure. To assert, as Noegerath did formerly, that gonorrhœa is all but incurable is as fallacious as to defend the old theory that the disease is relatively trifling when it attacks female subjects.

CAFFEINE.

Drs. Sée and Lapicque have made some valuable researches on the action of caffeine, the results being published in the *Bulletin de l'Académie de Médecine*. They find that, when given in small doses, the drug facilitates muscular labour by increasing the activity, not of the muscle itself, but of the corresponding cerebro-spinal centre. This diminishes the sensation of effort and keeps off fatigue. The drug certainly prevents, for a time, laboured breathing and palpitations due to effort. It is a mistake to suppose that it checks waste. There is no such thing as effort and action without corresponding waste; indeed, the one implies the other. More correctly, caffeine allows more exertion through a kind of physiological usury. The ingestion of aliment allows of a certain amount of exertion, but fatigue always comes on before all the assimilated products of digestion are used up. Thus a reserve is left. Caffeine uses up more or less of that reserve. Hence the drug is only of temporary benefit. When employed for too long a time, especially when no fresh food is at hand to make up for waste and to afford more reserves, caffeine is, as might be supposed, actually noxious.

MORVAN'S DISEASE.

Dr. Morvan, who is a physician practising at Lanilis, in Brittany described in the *Gazette Hebdomadaire* for 1883 what he called "Analgesic Paralysis, with Whitlows on the Superior Extremities." When his first patient, a man, came before him, before opening the abscess he told him not to flinch, and to his great surprise he found that the man did not move in the slightest, because he had not felt the knife. Morvan and others have published several other cases in French journals, and Jürgensen has described one in the *Berl. klin. Woch.* 1889. Charcot has collected all these references in an article in *Le Progrès Médical*, 15th March, 1890. It appears that the chief features of the disease are, first, pain in the fingers, and then paralysis with wasting of the muscles, first of the hand and subsequently of the forearm: the pain passes away, and is succeeded by anæsthesia and analgesia, then indolent abscesses appear scattered about on the hand and forearm. The last stage is necrosis and sloughing of the bones and soft parts, especially of the hand. The temperature of the affected parts is low. The disease begins sometimes in one hand, sometimes in another, but it always soon becomes symmetrical in the hands and forearms. It is extremely slow in its progress. Some of the patients have remained under observation for twenty years. No means of arresting its progress is known. It has to be distinguished from Raynaud's disease, from that form of scleroderma which affects the hands symmetrically, and from leprosy, but the diagnosis from all these is easy. Morvan's disease, however, much resembles the condition produced by some forms of syringomyelia and the resemblance is the more close because cavities in the spinal cord are much more frequent in the cervical region than elsewhere. In syringomyelia the muscular atrophy is more marked and more extensive than in Morvan's disease. The disturbances of sensibility are more widely distributed in the former, but all are not equally lost, for the patient may feel pain but cannot distinguish between hot and cold objects, and, lastly, in syringomyelia any trophic disturbance may occur; the presence of abscesses is accidental, but it is characteristic of Morvan's disease.

"MIDWIFE'S DISEASE."

Dr. Féré has published in the *Revue de Chirurgie* a "Note on a Professional Affection in a Midwife." In accordance with English nomenclature the affection may conveniently bear the name at the head of this paragraph. A midwife, aged 36, fatigued herself by supporting the perineum during labour for two hours, using the right and left hand alternately. A painful swelling of the wrists set in within a few hours, and on the next day marked tumefaction appeared along the outer border of the lower third of the forearms, somewhat posteriorly. This tumefaction corresponded to the course of the sheath of the radial extensors, as is well indicated in a drawing from a photograph appended to Dr. Féré's paper. The patient suffered great pain, and walked with her hands and wrists directed downwards, so that on superficial observation it seemed as though she was subject to lead poisoning or some other paralytic disease. After rest and occasional blistering the patient's malady was much relieved. At the end of two months all swelling had disappeared, and passive movements of the radial extensors or voluntary movement without any resisting force were painless. When, however, the patient attempted to lift any weight the local pain returned at once. The disease was due to a self-evident cause. When supporting the perineum, the patient kept the affected muscles contracted for a long time so as to extend the hand in order to favour the action of the flexors of the fingers.

SCOTLAND.

Building operations are proceeding with great activity at the Royal Infirmary and Marischal College, Aberdeen. The surgical block is now roofed, and great progress is being made internally.

The Aberdeen Students' Council have been invited to send a representative to the celebration of the sexcentenary of the University of Montpelier.

The Aberdeen University Court have fitted up offices for the Dean of the Medical Faculty near the Quadrangle entrance at Marischal College, which are sure to be very useful to students and other inquirers.

The "orals" for the professional examinations at Aberdeen University have been going on all this week. The "capping" will probably take place on Tuesday or Wednesday. It is expected that about the usual number will graduate this term.

TESTIMONIAL TO DR. WOODHEAD.

view of Dr. Woodhead's removal to London, it has been ranged by a large number of the profession in Edinburgh to entertain him at dinner in the beginning of May, when it is proposed to present him with an address expressive of the high esteem in which he is held, and the regret which his Edinburgh colleagues feel in the prospect of his removal. The Edinburgh University Athletic Club, of which Dr. Woodhead has been a member for close on seventeen years, entertained him at a "social" last week, and presented him with a silver reading lamp, together with a piece of jewellery for Mrs. Woodhead.

BAGPIPES AND TEETH.

At the annual meeting of the Odonto-Chirurgical Society last week a curious communication was made by Mr. W. Bowman Macleod, as to the injurious influence of bagpipe playing on the teeth. His attention was first drawn to the condition on observing that the teeth of a soldier belonging to the band of the Cameron Highlanders were worn in a peculiar fashion. He had no doubt that the unusual effect was due to the friction of the mouthpiece of the pipe. It was remarkable that so comparatively soft a substance as bone should be capable of producing so pronounced a change on the teeth, which were so much harder. In the case of clay pipe smoking, the grinding process had been long recognised, and was, of course, easily explained. But he was surprised to find so evident an effect from bagpipe playing. The observation was, however, confirmed by an examination of the teeth of other members of the band.

INCREASE OF FEES FOR PRACTICAL CLASSES AT ABERDEEN UNIVERSITY.

At the meeting of the University Court last week Professor Hay submitted a unanimous recommendation from the Senatus that the fees for the practical classes of Operative Surgery, Materia Medica, and Medical Jurisprudence should be raised from two to three guineas each. The question was before the Court shortly before it was reconstituted, but it was then deferred. Professor Hay stated that in two of the classes it was found necessary to charge a small additional fee for class expenses, so that this proposal was chiefly to get a fee that would include all possible expenses, and besides make the fees for the practical classes uniform. The Court was not inclined to deal with the question at once, and on it being agreed to consider at an early date the whole question of the relation of the systematic and practical classes, Professor Hay withdrew his motion. The Court also agreed to a temporary arrangement for the fees to be charged for extra hours in the chemistry laboratory.

GLASGOW AND THE UNIVERSITIES COMMISSION.

There is much activity in university circles at present from the University Court downward, in preparation for going before the ommission. The Court is finding it a herculean task to prepare ordinances for submission to the Commission within the statutory period, and members of the Senate, the University Club, the Council Association, and the Assistants' Association, are all busy preparing their cases. No public intimation has, however, yet been given of the views of any of these bodies, or the proposals they mean to make. It has been left to Dr. James Finlayson, Physician and Lecturer to the Western Infirmary, to be the first to make public the views he has seen fit, on his own behalf, to lay before the Commission. These views are published in a pamphlet, entitled "Plea for a Reform of the University Teaching in Scotland." The chief point of the plea is the urgency with which Dr. Finlayson contends for the supersession of courses of systematic lectures by courses of practical instruction. "Practical classes," he says, "ought to be the main care of the University authorities," and "the day is probably not far distant when systematic lecturing, in many subjects, will be almost abandoned, except in so far as required for practical instruction." He summarises his views in the following points: 1. Compulsory attendance on certain practical classes. 2. Attendance on systematic lectures voluntary. 3. Choice of teachers in each subject. 4. Attendance on systematic, practical, or tutorial classes of equal value in fulfilling the requirements of a prescribed course, except in the case of the compulsory practical classes. 5. Subjects for examinations for degrees to be specified, and the examining boards not to be dominated by professors or a group of teachers of any kind. 6. Utilisation of libraries and museums for teaching purposes.

IRELAND.

At a special meeting of the Council of the Irish Medical Association held at the Royal College of Surgeons, Dublin, on February 25th, the President in the chair, the following resolution was unanimously adopted: "That this Council having heard and approved a written statement from the prison surgeons, without casting the least reflection on any of the gentlemen appointed as medical commissioners to the Prisons Board, considers that a great and serious injustice has been done to the medical officers of Irish prisons, inasmuch as one of them, of whom several are able, competent, and specially suited, was not selected. This Council warmly protests against the well-recognised principle of promotion within the service having for the third time been violated with regard to that office."

PARLIAMENTARY REPRESENTATION OF DUBLIN UNIVERSITY.

A vacancy in the parliamentary representation of the University of Dublin is likely to take place this session by the elevation of the Attorney-General to the Bench. A large number of electors are dissatisfied with a custom which has made the University a rather close borough for law officers. Already Mr. J. Lowry, who is not a lawyer, has announced his intention to contest the seat, and the latest announcement is that Mr. W. J. Wheeler, surgeon to the City of Dublin Hospital, will be a candidate. Mr. Wheeler has already received many promises of support.

A STUDENTS' DEMONSTRATION.

For some time past there have been rumours of disorderly conduct in some of the classes at the College of Surgeons School. A few students led the way, and the nuisance has of late assumed somewhat grave proportions. It is stated that apparatus has been broken, and that on one occasion a professor was pelted. Appeals to the classes having proved of no avail, several students were summoned before the professors and were warned, while one was informed that he would not again be allowed to enter at the school. Later on, the roll-book of one class was abstracted. It is stated that the professor very properly declared that he would sign no certificate of attendance for the session, but subsequently relented, knowing that none of the class was "short." On Saturday last all the pupils were summoned to the College, when the professors were present, and Mr. Macnamara addressed the assembled classes, pointing out the impropriety of their conduct, and stating that the certificates would be issued in the class from which the roll had been taken. Subsequently, a procession of students was formed, and marched through the city carrying a flag and a broom. Their conduct does not appear to have been approved of by the police, who arrested

seven of them, and carried them before the police magistrate, by whom they were sentenced to pay a fine of 20s. each, or, in default, to go to gaol for fourteen days. The whole matter must now come before the Council of the College. If there are real grounds for complaint they ought to be removed; but it is intolerable that riotous behaviour should be allowed to prevail in any school. It is unfair to industrious students, and it must prove disastrous to the institution. The attempt to imitate the proceedings of other combinations by street demonstrations is unworthy of a body of young men most of whom will be members of the profession. The College Council has ample power to deal with irregularities and shortcomings, both on the part of the professors and the students, and an appeal ought to have been made to that authority long ago. Indeed, the Council is not blameless in the matter; some of its members must have been aware of what was going on, and they ought to have brought the subject forward.

THE PRESIDENCY OF THE COLLEGE OF SURGEONS.

A well-informed correspondent writes: The question of the biennial presidency of the College of Surgeons is about to be raised in a practical way. A large number of Fellows have represented to Dr. Meldon, the present occupant of the chair, their desire that he should again seek the office. Dr. Meldon has expressed his willingness to do so. Unhappily, there is likely to be a contest, as Mr. Croly, the Vice-President, has also declared his intention to seek the honour. The Fellows have at two annual meetings during the past few years declared in favour of the principle of the biennial presidency, and it would be a pity if it should not now be put into practice. Mr. Croly is certain to be re-elected to the vice-presidency if he will consent to postpone his claim to the chair for another year. The change is most urgently needed. A contest would be most unfortunate, especially when the *modus vivendi* is one which does no injustice, and is in accord with the views of the bulk of the Fellows.

DEATH OF DR. AQUILLA SMITH.

We have to announce with much regret the death of Dr. Aquilla Smith, at the age of 84. He died at his residence in Dublin on Monday, March 24th. He was for many years the representative of the College of Physicians on the General Medical Council, and he had been a Fellow of his College for fifty-one years. In 1864 he was appointed King's Professor of Materia Medica in the Medical School of Trinity College, an office which he held until 1881. He was also during that time one of the physicians to Sir Patrick Dun's Hospital. Dr. Smith was a most learned physician. He was greatly esteemed by his *confrères*, and it was only last year that the Fellows of his College presented his portrait to him, in recognition of the long and arduous services which he had rendered in the Medical Council.

HOSPITAL DISABILITIES OF IRISH AND SCOTCH DIPLOMATES.

The Ulster Medical Society held a special meeting at Belfast on March 26th, to which all the local practitioners were invited, to hear an address on the above subject by the Honorary Provincial Secretary of the Irish Medical Schools' and Graduates' Association, Dr. Stewart, of Clifton. The chair was occupied by Dr. M'Connell, President of the Society, who said they were glad to find that the great champion of the anti-monopolists in England was a native of Belfast. The lecturer drew attention to the fact that the restrictive rules confining honorary appointments in English hospitals, as a rule, to the holders of diplomas of two out of the six Royal Colleges granting similar diplomas, affected directly or indirectly some 1,500 practitioners resident in England holding diplomas or degrees obtained in Ireland, not to speak of perhaps an equally large number of those who had been educated in Scotland. He maintained that the Association which he represented was the best organisation through which to educate English opinion on the subject. The proceedings closed with a hearty vote of thanks to the lecturer, proposed by Dr. Whitla, J.P., and seconded by Dr. Henry Burden, both of whom said they were very glad to have had the subject brought so lucidly under their notice.

DEATH OF DR. JOHN NICOLLS, OF NAVAN.

This gentleman died from blood-poisoning on March 15th, after four days' illness, at the early age of 35 years. His death occurred in the following way: An inquest was to be held by the coroner for the county Meath on the remains of a woman whose death it was alleged was due to violence; and in carrying out the *post-mortem* examination, Dr. Nicolls unfortunately cut his hand, attaching at the time but slight importance to the injury. Symptoms of septic poisoning set in, and he succumbed, after a few days' illness, to the great regret of the residents of Navan and adjacent neighbourhood.

VACCINATION.

During the December quarter there were 21,980 persons successfully vaccinated in Ireland; in 2,948 cases the operation was postponed, and 30 children were reported as insusceptible of vaccination. The deaths of 1,513 unvaccinated children under 3 months old were registered during the quarter, making a total of 26,471 children with regard to whom particulars as to vaccination were ascertained.

ROYAL COLLEGE OF SURGEONS.

An extraordinary meeting of the Council was held at the College on March 27th, when the minutes of the last ordinary Council were read and confirmed.

A report was read, dated March 19th, 1890, from the Committee of Delegates of the Royal College of Physicians of London, and of the Royal College of Surgeons of England appointed to consider and report to the two Colleges on the scheme for the reconstitution of the University of London. This report was approved, adopted, and entered on the Minutes, and will be submitted to the Council of the Royal College of Physicians at their next meeting.

A letter was read from Mr. Walter Barwick, Secretary of the Library Restoration Committee, appealing to the College to assist the University of Toronto in forming a new library in place of that lately destroyed by fire. The subject was referred to the Library Committee of the College.

The teaching of medical jurisprudence is in nearly all German universities left in the hands of Extraordinary Professors and *Privatdocenten*. A proposal recently brought forward to establish regular chairs of forensic medicine has just been negatived on the ground that the subject is not of sufficient importance.

We are requested to state that Messrs. Sutherland, the lessees of Blackland's House, the lease of which has been acquired by Lord Cadogan for the purposes of his gift to the Guinness Trust, propose to acquire a house at Tooting Common for the cure and treatment of their insane patients.

Dr. Earle, the Bishop of Marlborough, presiding at the annual meeting of the Hospital for Epilepsy and Paralysis and other Diseases of the Nervous System, was able to announce that an anonymous gift of over £800 would, with the fund already raised by Miss Althaus and her friends, enable the Committee to purchase the lease and to save the hospital £130 a year for seven years.

ACCOUNT OF A *MS.* VOLUME, BY WILLIAM CLIFT, RELATING TO JOHN HUNTER'S HOUSEHOLD AND ESTATE; AND TO SIR EVERARD HOME'S PUBLICATIONS.

(In the Library of the Faculty of Physicians and Surgeons, Glasgow.)

By JAMES FINLAYSON, M.D.,

Honorary Librarian to the Faculty of Physicians and Surgeons, Glasgow; Physician to the Glasgow Western Infirmary, and to the Royal Hospital for Sick Children, Glasgow.

In 1886 the late Dr. W. A. M'Kellar, who was long well known on the West Coast of Africa, presented me with a MS. volume of considerable interest. It is in the handwriting of William Clift, the faithful curator of John Hunter's Museum. The volume relates partly to John Hunter's financial affairs after his death, and partly to Sir Everard Home's transactions and difficulties with various publishers. When I obtained the volume I hesitated as to whether I should give it to the Royal College of Surgeons in London, as the guardians of John Hunter's work, or whether I should put it in the Library of the Faculty of Physicians and Surgeons of Glasgow, which was under my own care. I could not make up my mind to send this little relic from Glasgow, especially as we claim in Glasgow a pretty close connection with the Hunters; although, no doubt, more especially with William Hunter. I thought, however, that some account of this volume in our Faculty Library might be of interest to the numerous students of John Hunter's life. The authenticity of the volume may be judged of not merely from the nature of its contents, but also from the two pages here reproduced by photo-zincography. Mr. Bailey, the librarian of the Royal College of Surgeons in London, kindly compared these, at my request, with Clift's writings in his possession, and he found the similarity complete.

The question naturally arises, How and where did Dr. M'Kellar obtain such a volume? Shortly before his death he made, at my request, the following memorandum, which was gummed into the volume:

"In 1872 I was resident at Free Town, Sierra Leone. In the autumn of that year the Company of African Merchants, represented by Mr. Brodie, gave up their trading establishment in the town. In the course of removing their property a heap of old books was brought together, and from it Mr. Brodie kindly permitted me to select what I wanted. Most of the books were cheap reprints of popular novels, but amongst these I found this manuscript volume.

* * * *

"I may add that Mr. Brodie had no idea how the MS. book had found its way into his establishment. W. A. M'Kellar,
3 April, 1886."

The volume opens with three pages and a half of preliminary matter, as it were. The first two of these are reproduced here by a photographic process, to represent exactly their appearance; the next page and a half are printed here in full, and follow the *facsimile.*

"Notwithstanding the very large eating and drinking establishment on the preceding Pages; and the Host of Tradesmen employed, as the Bills hereafter enumerated will show; together with the large outstanding Debts; and money borrowed at Interest, of Gawler; old Mr. Clarke, Cutler, of Exeter Change; of Hannah Apperley; of Mrs. Home; etc., and the great expense of increasing and supporting the Museum, and the large Prices he gave for individual Preparations;—and the large sum he expended in Building the stabling, Conversatione and lecture room, and Museum over them, with an immense Sky-light over the yard to protect the Whale's Skull—of perhaps 500 superficial feet of Glass—with Entrance Galleries &c.—and the expensive but ineffectual *Empyreal* warm Air-Stoves by Jackson & Moser—with the Great Draw-bridge and slope made to let the Chariot down from the Street, and consequent necessary great alterations of the House, in Windows and Doorways for that purpose,—at more than £6000,—on a lease of about twenty years.—Notwithstanding the expence of keeping up two establishments of Coaches and 6 Horses, Coachmen and Footmen, &c. &c.; Mr. Hunter was always on the look out for bits of Land adjoining to his previous possessions at Earl's Court:—and for Bargains; many of them of *little* use, as an enormous Electrifying apparatus—a splendid but unfinished Air Pump invented by the Earl of Bute, together with a grand Chemical furnace and apparatus by ditto—a magnificent and highly finished Turning Lathe which was made for the Great Duke of Cumberland; several beautiful and large Pieces of Tapestry;—Chinese Ivory puzzle-Balls: Armour of all sorts and kinds—an acre of Landscape and figures painted by Zucarelli as models for Tapestry, which covered the walls and doors of the Conversatione room; as well as a very fine collection of proof prints by Hogarth, Strange, Woolett, Sharpe;—of the latter artist several hundred pounds' worth: besides Chinese Josses and beautiful nodding mandarines; and several original Pictures by Zoffany, Vandevelde, Xuys, Ostade, Teniers, Stubbs, &c., &c.—The large number of Animals both tame and wild that were kept both in London and at Earl's-Court, which consisted not only of presents, but often considerably expensive purchases; serve only to make one Wonder that Mr. Hunter had not died more deeply involved; or that he should have left anything for the support of his family after all his Debts were liquidated."

After two or three blank pages we come to what seems the formal beginning of the volume with this entry only on the page:

JOHN HUNTER ESQ. FRS.
Surgeon General to the Army, and
Inspector General of Hospitals;
Surgeon to St. Georges Hospital;
Surgeon Extraordinary to the King;
&c &c &c
Died October 16th, 1793.
On the same day, and perhaps hour,
that the unfortunate Marie Antoinette
Queen of France was beheaded in
Paris. W. Clift.

With the next page, numbered as 1, the accounts begin. The first two pages are given as a specimen, in printed form however:

Dr. Everard Home, Esq. Per Contra. Cr.
Acting Executor of the late John Hunter, Esq.

1793					1793					
Octr. 16	To Cash, etc., found in the House ...	407	12			1	None (Old Bill) before Mr. Hunter's death.			
	Note of Hand of Mr. St. George	52	10		Octr. 21	2	By paid Hannah Apperley	21		
	Proof print ...	2	2		20	3	Shields Gardener vide his book	10	10	
	Lady Farnham ...	73	10		28	4	———, Half year's Rent	40		
	Mr. Fowler ...	10	10		30	5	House and Window Tax ...	14	15	3
	To a fee	2	2			6	Mrs. Hunter house account ...	31	10	
	Society, Lyceum Medicum ...	25	4		Nov. 6	7	Funeral expences —Weatherall ...	74	10	
	Hospital Settled	114	16	6	10	8	Gardener Peter Shieds vide his book	5		
Decr. 3	Hitchins, Earl's Court Rent ...	19	17	9	8	9	Probate of Will ...	26	18	6
	Haspenall's Rent	12			12	10	Messrs. Huger, Smith & Co. (money refunded to House Pupils)	275	14	
	Scotch Estate ...	11	10							
	Mr. Walsh ...	5	5							
	Mr. Tait a fee ...	15				11	A box	1	11	
	Mr. Baker do. ...	2	2			12	House account ...	10	10	
	Col. Paris Swords (Pimlico) ...	2	2		Nov. 20	13	Land Tax ...	3	2	2
	Found with memorandum about Miss Apperley's £800 (intended to pay off)	52	10		Oct. 21	14	Mrs. Hunter Lodgings at Brighton ...	32	14	
					Nov. 23	15	Charles Callard for Newspapers	1	6	8
					Decr. 3	16	House and Window Tax ...	22	2	
						17	Mrs. Hunter, Servants' Wages ...	15	15	
	Mr. Brande, a fee	1	1							

The accounts go on in this way to page 46, and both on it and on page 21, there is a general summation, after adding "Ballance of Mr. Booth's account closed May 23rd, 1808:"

In Leicester Square.

1. John Hunter Esq.: F.R.S.
2. Mrs Anne Hunter, his Wife; elder Sister to Everard Home Esq.
3. John Hunter the Son; from St. John's College, Cambridge.
4. Agnes Hunter the Daughter; (Now Lady Campbell.)
5. Everard Home Esq. (afterwards Sir Everard Home, Bt.)
6. Thomas Nicol. Esq.; - Son of the Revd. D.r Nicol, Articled Stud.t
7. Dr. Edward Bradley, of Alresford, Hants. House Pupil. 1 year.
8. Mr. Francis Kinloch Huger. N. Carolina. — Do. — 1 yr.
9. Mr. James Smith, of Ecclefechan N. Britn. — Do — 1 yr.
10. Mr. Henry Jenner, Nephew of Dr. Jenner, Berkeley — 1 yr.

Servants.

11. Robert Adcock, Butler (after Mr. Dewell -)
12. Ann Martin, from Southampton. House Keeper.
13. Elizabeth Roby. from Rochester. Lady's maid.
14. Mr. Hunter's Coachman, Joe. . . . .
15. Mr. Hunter's Footman, John. . . . .
16. Mr. Hunter's Coachman, James Goodall.
17. Mrs Hunter's Footman, — George Smith.
18. Mary Edwards, from Llanbeder; Cook & Asst. Do. Denny
19. Martha Jones. ——— House maid:
20. Little Peggy ——— Do. ——— agent Laugher.
21. Mrs Long. ——— Constant Needlewoman.

In Castle Street House.

22. Robert Haynes. Dissecting room and Lectures.
23. Elizabeth Adam. ——— House & Door-keeper.
24. William Clift. Museum & Amanuensis.

At Earl's Court, Kensington.

25. Peter Shields ——— Gardener.
26. Mrs Shields ——— Housekeeper & dairy Woman.
27. Betty . . . . Laundry-maid. Butter would not melt in her mouth - but somehow she became enciente by an equally bashful Kensington Sweetheart.
28. Tom Barton, Carter.
29. Scotch Willie. Half witted. Employed in the Fields.
30. Old David, Head Under-Gardener, Hothouses &c.
31. Alexander . . . . . Out-door Gardener, & Spring Gun.
32. Woman to Weed in Garden, & fetch the Cows.
33. Tom Barton's Wife, Assistant Laundress.

34. Monsieur St. Aubin, Draughtsman, in House 1 year.

35. Mr. Dupré Secretary for Surgeon & Inspector Genl.

36. Mr. Walker. Teacher of Elocution to John.

Out door Tradesmen nearly Constant employ.

37. Sawyer Carpenter in London.
38. . . . . Carpenter, at Earl's Court.
39. Piper: Bricklayer & Mason, Earl's Court.
40. Benjamin Harris. Blacksmith Castle Street.
41. Jn. Weatherall, Cabinet Maker & Joiner, Upholsterer.
42. Painter's & Glaziers. Hot & Green houses.
43. } Printers, nearly constant in Castle Street.
44. } John Richardson, Compositor. Long . . . . Pressman.
45. }
— Mrs Hunters' Livery-Stable Keeper. Mr. Rand, Golden Sq.
— Cart, Harness, and Collar-maker. Earl's court.
— Farrier, nearly Constant, from Under-ground Stable.
— Stewardson, an old Butler, a constant Visitor.

From the above List, which is but Imperfect, and several of the Master Tradesmen sending Two or more men; besides occasional helpers to the Coachmen, Gardeners, and in the Grounds, Viz; there were never fewer than 50 Persons daily provided for at Mr. Hunter's Expence, exclusive of the House-Pupils who paid for their Board.

Wm. Clift

Dr. side Brot. forwd.	...	...	...	20418 0 5½
Cr. ———————	...	...	...	18849 11 6
Ballance	...	...	...	£1568 8 11½

On page 21 we read :—

This is the last Corrected Account which was delivered May 26th, 1808.—

N.B.—The above Mr. Booth was an attorney who superintended the sale of Earl's Court, etc., and was a long time before he could be brought to book under various pretedces for delay—as, his not being able to get the money from Mr. Bain, and other Purchasers of Lots, of Fields, etc., etc., etc. He resided in Craven Street, Strand. See his Bill No. 279.

Full many a time did I after him trot.
And nought but an unsatisfactory answer I got.

W. C.

An examination of the accounts seems to indicate that in this book we have merely a copy of the official accounts, for there are no summations at the foot of the pages, and on pages 3 and 4 we have such summations in very small figures :

To this—1st. page 2618 . 14 . 0 Large Acct. 1st. page 729 . 15 . 3.

The humorous annotation about Mr. Booth, just quoted, likewise points to the non-official character of the account book; for although the book bears evidence of subsequent additions, with points of exclamation in the same handwriting, but in a later and blacker ink, this passage seems to have been written at the time the entry referred to was made.

Various entries in the accounts have some interest. We find:

1794, April 16, Mr. Hunter's pay as Surgeon General, £49 . 14 . 4
Mr. Hunter's pay as Inspector General, £546 . 9 . 6

Under the same date we find as received:

Gough for Vulture, ... 5 . 5 . 0
Sheep, ... 10 . 10 . 0
(Wolf Dog?) Great Dog... 15 . 15 . 0 } 31 . 10 *or "Lion."*

The words "or *Lion*" are evidently added later, probably by the same hand. About the very end of the entries of receipts (p. 19) we find the following entry, but in the words "to Mr. Home" and onwards, as also in the underlining (rendered here by italics) of "appraised," and the point of exclamation, the ink is obviously different, showing a later addition, almost certainly in Clift's handwriting however:

To furniture in Sackville Street *appraised !* by Mr. Weatherall and Mr. Dawson to Mr. Home (vizt. 3 writing Desks) worth 30£ or 40£. } 15 . 15 . 0

This addition is by no means a solitary instance in this volume of the indication of a hostile feeling towards Sir Everard Home on the part of the scribe.

Under date, January 10th, 1800, there is an entry of some interest:

Transferred as the Ballance of the Money paid by Govt. for Mr. Hunter's Collection } 1615 . 1 . 0

Entries in the receipts include numerous Exchequer Bills, various sums for sales by Mr. Christie, Pall Mall, Mr. Weatherall for "sale in Leicester Square," "Purchase money from Bain's Lots," payments from booksellers, and other similar entries, which probably are not of much interest now. At pages 75, 76, an account is given of the estimates for the various lots at the sale of Earl's Court, 28th May, 1794, with the biddings and the sums received. The following note appears on page 75—the underlining, the points of exclamation, and also the last six words are apparently added later, by the same hand:

"N.B.—Lot 5 was bought in by Mr. Norris but no doubt of fetching the sum of 1086 . 10 . 0 or upwards.

Mr. Norris's Valuation on the whole of the Premises at Earl's Court when he met the Executors was £10,300 . 0 . 0. Mr. Christie's estimate was £9,700.

It has *happened* that the amount of the Sales, (including Lot 5) has *just* amounted to Mr. Norris's *Estimate*——.!!! A good Judge, *if no Collusion.*—"

On the Cr. side of the Accounts we have the Exchequer Bills, the repayment of various loans to Gawler, Mr. Home, Hannah Apperley, and Mr. Clarke. On March 31, 1800, there is the entry of £524 . 0 . 9 repaid to Mr. Coutts, who had lent £500 to the executors on Jan. 29, 1799.

Of special interest is the entry of

1794, Oct. 8. Mr. Sharp, Engraver £50.
(for the small Head of Hunter to the Work on the Blood).

There is much interest also in the following :—

1795, Decr. 30. Willm. Clift. First Wages at £21 0. 0. a year } 5. 5.

The words between the name and amount are clearly a later addition by the hand of Clift.

The humour of the writer comes out again in the last entry, although the underlining, the points of exclamation, and the words following these are apparently subsequent additions.

April 1808 Mr. Weatherall *for various attendances and receiving the Rent Six years!!!* What you please! Symptoms of Liberality!! } 1. 1.

A few pages of the MS. volume are occupied with statements of the stocks and of the sale of Hunter's works. So far as I can judge, there are no points of special interest in these.

From page 80 to 150 we have "Account of Sir Everard Home's Publications with G. & Wm. Nicol, Pall Mall, 1817." In addition to accounts, there is much correspondence, some of it amusing enough, but scarcely worthy of reproduction. The letters did not reflect much credit on either publishers or author, and Mr. Clift's annotations and points of exclamation seem to indicate throughout a hostile feeling to Sir Everard Home. After much trouble the transfer of publishers was effected, as shown by the following note:—

The whole of Sir Everard's works, great and small, were then delivered up to me as stated in page 137, and immediately Carted across and delivered to Messrs. Payne and Foss, Booksellers. Pall Mall, July 12th, 1817.

Thus ended all communication with Messrs. Nicol; and W. Clift's *consarn* with the works.

The concluding entry in the volume is regarding Everard Home's works, and it again shows Clift as a humourist:—

Mem. by W. Clift.

In 1822, Messrs. Payne and Foss being *too polite* to pay any attention to advertising or encouraging the sale of the work, they were no more successful than poor Mr. Nicol; and moreover stating that *such works* were not exactly in their line of Bookselling, *the whole* once more took a trip (like the Temple of Loretto) to Messrs. *Longman, Rees, Hurst, Orme,* and *Brown,* Paternoster Row; and had *each* partner *taken a copy* and paid for it, it would have been a good lift.

They were also uncivil enough to refuse to undertake the printing of the 3rd and 4th volumes at *their* risk, but consented to *publish*, after Sir Everard had paid for the Paper, Printing, and altering and Printing the Copper Plates. So that they—God-rot-'em—are no encouragers of *Book making*, after all.

I think this short notice may suffice. It is possible that some hitherto obscure points in John Hunter's or Everard Home's affairs might be cleared up by the entries or correspondence, but I have indicated the nature of the volume sufficiently for this to be judged of by others.

PARLIAMENTARY BILLS COMMITTEE.

GOVERNMENT OF THE COLLEGE OF SURGEONS.

A MEETING of the Parliamentary Bills Committee of the British Medical Association was held on March 4th, at the offices of the Association, 429, Strand, to consider the draft Bill of the Association of Members of the Royal College of Surgeons, in furtherance of the following resolution passed at the annual meeting at Leeds:—

"Resolved: That it is the opinion of this meeting that the Members of the Royal College of Surgeons of England should have a voice in the management of that College and the election of its Council, and that it be an instruction to the Council of this Association to further this object through the action of the Parliamentary Bills Committee, or a special committee to be appointed for the purpose at this annual meeting."

The following members were present: Dr. Bridgwater, President of Council; Mr. Balding (Royston), Dr. Robert Barnes (London), Dr. J. W. Browne (London), Dr. Cameron (Huddersfield), Dr. Dickson (London), Mr. Galton (Upper Norwood), Mr. Brindley James (London), Dr. Robert Jones (Redhill), Mr. Rivington (London), Mr. Noble Smith (London), and Dr. Danford Thomas (London). The following gentlemen were also present by invitation: Mr. B. F. C. Costelloe (barrister-at-law), Mr. W. Ashton Ellis, Dr. Warwick C. Steele (Honorary Secretaries of the Association of Members of the Royal College of Surgeons), and Mr. J. Tweedy. Dr. BRIDGWATER (in the absence of the Chairman of the Committee through indisposition) presided.

The minutes of the last meeting were confirmed, and letters from Mr. C. Macnamara and Mr. Sibley were read.

Mr. FOWKE reported that a copy of the resolution passed at the annual meeting at Leeds had been forwarded to the Royal College of Surgeons, and that a letter had been received from Mr. Trimmer acknowledging its receipt, and stating that it had been laid before

the Council. Copies of the resolution had also been sent to the Councils of the Associations of Fellows and of Members.

The following is a copy of the Bill, copies of which had been distributed among the Committee:—

Whereas it is expedient to amend the constitution and government of the Royal College of Surgeons of England, and to declare and give effect to certain of the rights of the Members thereof, be it enacted, etc.

1. No Member of the said College shall hereafter be disqualified from being elected to, or holding any place or office in, the College by reason of his not being a Fellow of the College except as hereinafter provided.

2. The President, Vice-Presidents, and Council of the College shall be elected by the Members of the College, by means of voting papers, but the Council shall be empowered to provide by by-law that no Member who shall be of less than ten years' standing shall exercise the said electoral franchise unless he has been admitted to the Fellowship of the College.

3. The Members are, and shall be, entitled freely to meet together within the College at all reasonable times, to consider and resolve concerning the affairs of the College, and any such resolutions passed at any such meeting by a two-thirds majority of the Members, voting concerning the by-laws or the expenditure of the College, shall be binding on the Council.

4. Section 17 of the By-laws of the College, and all action taken or to be taken thereunder, is hereby declared to be invalid.

5. So soon as may be after the next annual election for the Council, the Council shall make such provision by by-law as may be necessary for fully carrying out the provisions of the Act, and shall have power therein to provide that no more than a fixed number of places on the Council (not being less than six) shall be filled by Members who are not Fellows of the College, and that such Members shall be of twenty years' standing, or of such less standing as the Council may deem sufficient, and the Council shall forthwith provide by by-law for voting at any election by voting papers, and shall have power from time to time, by by-law, to amend the manner of election of examiners, and to alter the said distribution of places on the Council, and to shorten the term of office of the members of the Council; provided always that no such by-law shall be binding until it shall have been adopted by a general meeting of the College.]

Dr. DANFORD THOMAS said he had just received a letter from Lord Dunraven, who thought it would be better to introduce the Bill into the House of Lords at an early date. It was at first thought by the Members that every Member of the College should, by virtue of his membership, have the privilege of voting; but, after consultation with the Association of Fellows, and in deference to their wishes and the position they occupied in regard to the College, it was decided to introduce the present modifications, namely, that no Member of less than ten years' standing should exercise the electoral franchise; that would lessen the electorate considerably, and would place the Members more on a par with the Fellows. They had left the Council to determine the number of places to be filled by members of the Council, such number not being less than six. That was not a very large proportion—one-fourth of the whole—so that the Fellows should at all times preponderate on the Council.

Mr. GALTON proposed the following resolution:

"That, in the opinion of this Committee, it is desirable that the Fellowship of the Royal College of Surgeons should continue to be a necessary qualification for a seat on the Council."

Mr. COSTELLOE, on behalf of those who drafted the Bill, pointed out that Clause 1 did not, as some Members seemed to suppose, commit the Bill, or the promoters of it, to the assertion that Members ought to be elected as a constituent part of the governing body. It merely proposed to do away with a perfectly, he might say, gratuitous disability which was imposed at the time when the order of Fellows was created in the course of the present century; a perfectly gratuitous and novel disability was then imposed upon the Members which was quite foreign to anything which could be considered as the actual or legal *status* of a Member of the College. If the College admitted only persons who were educated and competent persons, the fact of a Member not having proceeded to take the modern degree of Fellow ought not to disqualify him from holding practically any office in the College. The object of the Bill was frankly to produce a state of things by which the College should become a body more or less under a popular rather than a close autocratic government; and to leave it to the College, by by-laws to be drawn up, to provide all the safeguards and all the proper arrangements which no doubt the wisdom of the College itself would suggest. The last clause of the Bill, as they would see, provided a very large opening indeed for the insertion of by-laws which would be practically restrictive, so far as the governing body thought it wise to restrict the members of the Council. They could limit the numbers, limit the standing, and in many other ways if it was thought desirable to do so. He quite recognised that it should be safeguarded. It was not necessary to negative the general constitutional principle laid down in the clauses of the Bill, namely, that the fact of a Member not having taken the titular title of Fellow, ought not to disqualify him from being a member of the governing body.

Mr. RIVINGTON thought it would be possible to draft a simpler Bill.

It was proposed by Dr. DANFORD THOMAS, and seconded by Mr. BRINDLEY JAMES: "That Clause No. 1 stand part of the Bill."

This was carried.

Mr. ELLIS said the suggestion that had been much discussed by the Associations of Fellows and Members that there should be two distinct electorates, each of them to elect a certain proportion of the Council, had been abandoned as being perfectly impracticable and it was unanimously resolved by a joint committee of the two Associations that the electorate should be one for the Council.

Mr. RIVINGTON thought the election of the president and vice-presidents by the Members, as provided in Clause 2, would meet with serious objection.

Mr. TWEEDIE said the suggestion of the Association of Fellows was that the president should be elected by the Fellows present at the annual meeting. Personally, he felt that should be so. He knew that many Fellows attached great importance to the privilege of electing the president and the vice-presidents, and the majority of Fellows, he thought, would refuse to entertain the idea of Members taking part in the election. He was speaking only of those Fellows wishful to have some measure of reform; they would prefer to keep the election in their own hands.

Proposed by Mr. RIVINGTON, seconded by Mr. GALTON, and resolved:

"That in Clause 2 the words "president, vice-president, and" be omitted, the clause reading: "The Council of the College shall be elected by the Members," etc.

Mr. RIVINGTON suggested that the word "ten" should read "four" in the sentence "no Member who shall be of less than ten years' standing."

Mr. TWEEDY said this had been a point of some dispute between the Associations of Fellows and Members, and a basis of agreement was come to some years ago on the understanding that no Member was to be entitled to vote until he had been a Member of ten years, and the Members accepted that as a basis of agreement, and he was quite sure that if it were altered to any shorter period, or left at all vague, the Association of Fellows would contest the matter very warmly.

Clause 2 was approved as altered.

Dr. BRIDGWATER moved the following insertion in Clause 3:

"And the Council shall forthwith summon such meeting on any requisition signed by not less than 100 Members of the College, or such other less number as the Council shall by by-law from time to time determine."

It was moved by Mr. GALTON, seconded by Dr. DANFORD THOMAS, and carried that Clause 3 be adopted as amended.

Clause 4 was approved without alteration.

On the proposition of Mr. RIVINGTON, the consideration of Clause 5 was deferred, the meeting being adjourned till Friday, March 7th.

The adjourned meeting of the Committee was held on March 7th, when there were present: Dr. T. BRIDGWATER, LL.D., President of Council (in the chair); Dr. Robert Barnes, Dr. W. Dickson, Dr. Langdon Down, Mr. Ellis, Dr. Esler, Mr. E. H. Galton, Mr. Brindley James, Mr. Hugh Ker, Dr. Lowe, Dr. Mickle, Mr. Rivington, Mr. Sibley, Dr. Danford Thomas.

The CHAIRMAN stated that the clauses of the Bill had been redrafted in accordance with the amendments carried at the last meeting.

Dr. DANFORD THOMAS called attention to modifications which had been introduced into Clause 5, the effect of which was to ensure that the Members should have six seats out of the twenty-four, and gave them power to elect Fellows to represent them on the Council if they chose.

Mr. RIVINGTON proposed the following resolution:

"That in the opinion of this Committee the Bill to amend the constitution of the Royal College of Surgeons of England should be so drawn as to provide for the representation of the Members of the College separately from the Fellows, and that for this purpose the number of members of the Council of the College should be raised to thirty."

It was seconded by Dr. ESLER, and on being put to the vote was lost.

Dr. DANFORD THOMAS proposed, and Mr. BRINDLEY JAMES seconded: "That Clause 5 as drafted be approved."

Mr. GALTON wished to move an amendment "That the minimum of ten years, as originally suggested, be adhered to."

Dr. DANFORD THOMAS and Mr. ELLIS explained that the intention of the clause as drafted was to give the Council power to reduce the number of years, so that they might not have to get a fresh Act of Parliament.

Mr. GALTON'S amendment, "That the term of ten years provided as a minimum in Clause 2 be adhered to," was seconded by Dr. LOWE, and carried.

It was proposed by Dr. DANFORD THOMAS, and seconded by Mr. BRINDLEY JAMES:

"That Clause 5 be approved, with the alteration that the number of ten years shall stand, instead of giving the Council the option to reduce it to five; that the voting shall be by voting papers issued to every Member, in the manner provided for by Act of Parliament in the election of members of the medical profession to the General Medical Council, and with the omission of the word 'such' in the last line but one.'

This was carried *nem. con.*

Dr. DANFORD THOMAS said they had now dealt with each clause, and he begged to move "That this be the Bill which this Committee is prepared to support when brought into Parliament."

Mr. BRINDLEY JAMES seconded the above.

Mr. SIBLEY said, though he was quite ready to support any matter of moderate reform of the College of Surgeons, he felt that this Bill was entirely subversive of the present state of things, which a large number of the Fellows believed worked well for the good of the College and the good of the profession, but he felt he could not give any support to the Bill. He thought that, although a large number of Fellows would be quite willing that Members should be represented on the Council, still they were unwilling to give them the entire control of the affairs of the College. Moreover, this Bill not only took away the control out of the hands of the Fellows and Council, but made a most feeble executive. If the Bill became law the affairs of the College would at once pass into the hands of the general meeting. There were very few provisions in the Bill which he could at all cordially support beyond the principle of representation by Members sitting on the Council; to that he thought there could be no objection.

Mr. RIVINGTON said he was glad to hear Mr. Sibley's observations, and he was encouraged to propose, as an amendment, "That a Bill be drafted on the following lines:"—

Whereas it is expedient to amend the constitution and government of the Royal College of Surgeons of England by giving to the Members of the College a voice in the management of that College, and the election of its Council, and by restoring to the Members their ancient rights of meeting, etc., be it enacted:

1. The number of Members of the Council of the College shall be raised to thirty by the addition of six representatives of the Members not being Fellows of the College; such representatives to be either Fellows or Members of twenty years' standing, and holding office for four years.

2. The Members of the College shall be entitled freely to meet together within the College at reasonable times, and they shall be summoned by the Council to an annual general meeting at which the annual report of the Council shall be presented, and special meetings shall be convened on the requisition of fifty Members.

3. No alteration in the constitution, by-laws or relation of the College shall be effected without the consent of Fellows and Members convened to discuss such alteration.

4. So soon as may be after the next annual election for the Council, the Council shall make such provision by by-laws as may be necessary for fully carrying out the provisions of this Act, and shall forthwith provide by by-law for voting at any election by voting papers in the manner provided for the election of representatives of the general profession to the General Council of Medical Education and Registration, and shall have power from time to time by by-law to shorten the term of office of the members of the Council representing the Fellows to four years, and to provide that examiners shall not sit on the Council of the College, provided always that no such by-law shall be binding until it shall have been adopted by a general meeting of the College.

Dr. ROBERT BARNES seconded the above.

On the proposition of Mr. GALTON, it was decided to adjourn till Friday, March 14th—the two Bills in the meantime to be put into type and circulated.

The adjourned meeting was held at the offices of the Association on March 19th. There were present: Mr. ERNEST HART in the chair, Dr. Robert Barnes, Dr. Bridgwater (President of Council), Dr. J. W. Browne, Mr. B. F. C. Costelloe, Dr. Dickson, Mr. Ashton Ellis, Mr. E. H. Galton, Mr. James H. Hemming, Mr. Brindley James, Dr. Mickle, Dr. D. Nicolson, Dr. H. H. Phillips, Mr. Rivington, Dr. Danford Thomas, Mr. Tweedy.

The GENERAL SECRETARY read the minutes of the two previous meetings, which were emended and approved.

Mr. RIVINGTON explained the character and objects of his draft Bill, and proposed its adoption; the motion found no seconder.

Dr. DANFORD THOMAS moved:—

"That the various clauses of the draft Bill to amend the Constitution of the Royal College of Surgeons having been discussed, amended, and approved by this Committee, the said Bill as so amended be adopted, and that this Committee do now consider the best means of promoting and assisting its passage through Parliament."

Mr. BRINDLEY JAMES seconded the motion, which was carried with one dissentient.

Mr. TWEEDY was not quite clear whether the Bill assumed the constitution as it existed under the present charter, or whether it was also intended to amend the Act of George II, under which the old corporation of Surgeons was established. He thought the position they would occupy would very much depend upon what view they took of the relationship. He simply wished to call attention to the question that the Act still existed. A special point he wished to raise which brought the relationship more clearly to the front was that the Act of 1745 stated that the Arris and Gale trusts were originally left to the Company of Barber Surgeons, which trusts were now administered by the present Council of the College. He thought some reference should be made in the Bill to the Act of George II.

Mr. B. F. C. COSTELLOE thought such reference would best be made in the preamble of the Bill.

It was thereupon proposed and agreed to: "That the preamble of the Bill be amended by inserting a reference to the previous statutes regulating the College, and especially to the Act of George II, cap. 15."

The following is a copy of the Bill in its amended form as approved by the Committee:—

Whereas it is expedient to amend the constitution and government of the Royal College of Surgeons of England, and to declare and give effect to certain of the rights of the Members thereof, be it enacted, etc.

1. No Member of the said College shall hereafter be disqualified from being elected to, or holding, any place or office in the College by reason of his not being a Fellow of the College, except as hereinafter provided.

2. The Council of the College shall be elected by the Fellows and Members of the College, by means of voting papers, but the Council shall be empowered to provide by by-law that no Member who shall be of less than ten years' standing shall exercise the said electoral franchise unless he has been admitted to the Fellowship of the College.

3. The Fellows and Members are hereby declared to be entitled to meet together within the College at reasonable times to consider and resolve concerning the affairs of the College, and the Council shall convene an annual general meeting of the College to consider the annual report and matters arising thereon, on such day in November in each year as they shall decide, and shall at any time within fourteen days convene a special general meeting on receipt of a requisition signed by not less than one hundred Fellows and Members, and any resolutions passed at any such annual or special general meeting by a two-thirds majority of the Members voting concerning the by-laws or the expenditure of the College shall be binding on the Council, provided that at any special general meeting there shall not have been less than three hundred Fellows or Members present and voting thereon.

4. Section 17 of the By-laws of the College, and all action taken or to be taken thereunder, is hereby declared to be invalid.

5. So soon as may be after the next annual election for the Council, the Council shall make such provision by by-law as may be necessary for fully carrying out the provisions of this Act, and shall have power therein and thereafter to determine a maximum number of places on the Council (such maximum to be six or more, as the Council shall from time to time appoint) which may be at any one time filled by Members who are not Fellows of the College, and that such Members shall be of twenty years' standing, or of such less standing as the Council may deem sufficient, and the Council shall forthwith provide by by-law for voting at such elections by voting papers, in manner similar to that prescribed in the Medical Acts, 1886, for the election of representatives on the General Medical Council, and shall have power from time to time, by by-law, to amend the manner of election of examiners, and to alter the said distribution of places on the Council, and to shorten the term of office of the members of the Council; provided always that no by-law shall be binding until it shall have been adopted by a general meeting of the College.

Dr. BRIDGWATER proposed and Dr. DICKSON seconded: "That this Committee do petition the House of Lords and the Privy Council in favour of the Bill now adopted, and that the usual means be taken by communication with the Branches, and otherwise to further the course of the Bill in Parliament at the proper time. That the Lord President of the Privy Council be requested to receive a deputation to put before him the reasons in favour of the Bill."

It was suggested and agreed that the Chairman be empowered to invite official members of the Association and medical members of Parliament to attend the deputation.

A proposal from Mr. ERNEST HART, the Chairman, that he should, in the name of the Committee, address a communication to Mr. Matthews on the subject of the recent decision of Mr. Plowden that medical men should not be called in by the police

in cases of "drunk or dying" was approved; as was also a further proposal that a Committee be appointed, consisting of the Chairman (Mr. Ernest Hart), Dr. Danford Thomas, and Dr. Curgenven, to consider Mr. Matthews's new Infant Life Protection Bill, with power to take the necessary steps.

INTERNATIONAL MEDICAL CONGRESS, 1890.

A SHORT time since, in compliance with a request by the officers of the Berlin Congress, a committee was formed in London for the purpose of making known as widely as possible in England the object and arrangements of the Congress. On this committee the following gentlemen have consented to act:—Sir James Paget, President of the London Congress; Sir Andrew Clark, President of the Royal College of Physicians; Mr. Jonathan Hutchinson, President of the Royal College of Surgeons; Dr. Wade, President-Elect of the British Medical Association; Mr. Bryant, Vice-President of the Royal College of Surgeons; Sir Edward Sieveking, late President of the Royal Medical and Chirurgical Society; Dr. Dickinson, President of the Pathological Society; Dr. Theodore Williams, late President of the Medical Society; Sir Joseph Lister; Dr. F. Semon; Sir William Mac Cormac; and Mr. Makins, Under Secretary to the London Congress. The Committee met at the house of Sir James Paget on Friday, March 21st, and agreed to further as far as possible the success of the meeting by diffusing information regarding the business to be transacted. Mr. Makins (2, Queen Street, Mayfair, W.) was appointed Secretary, and he will furnish on the part of the Committee such details as may be arranged to any members of the profession who may apply for them.

TRAVELLING ARRANGEMENTS.

It may interest intending visitors to Berlin in August to know that Messrs. Thomas Cook, of Ludgate Circus, have very kindly undertaken to give every possible information and assistance. The most convenient routes are *via* Queenborough and Flushing, by which Berlin is reached under twenty-four hours, at a cost of:—

	First Class.		Second Class.	
	Single.	Return.	Single.	Return.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Queenborough and Flushing	5 2 11	7 14 6	3 14 11	5 12 4
Dover and Calais	5 19 6	9 14 0	4 8 0	7 6 0
Ostend	5 8 0	8 13 3	3 19 6	6 9 0

Via Dover and Calais takes 33½ hours. For those who like a longer sea voyage and shorter rail Berlin may be reached, *via* Southampton and Bremen or Hamburg, in one of the Great North American Liners. From Hamburg to Berlin is five hours' railway journey, and to Hamburg *via* Southampton about twenty-four hours. The steamship *Augusta Victoria*, 8,000 tons and 12,500 horse-power, will probably leave Southampton for Hamburg on Thursday, July 31st. She is a fine new steamer in the transatlantic service between Hamburg and New York.

SECTION OF ANATOMY.

The following subjects are proposed for discussion by the Committee of the Section of Anatomy:—1. The Convolutions of the Brain. 2. The Present Position of the Doctrine of Nucleus and Cell Division. 3. The Histogenesis and Interconnection of Nerve Elements. Gentlemen desiring to read papers, etc., are requested to communicate with the organising secretary, Professor Hertwig, 34, Maassenstrasse, Berlin.

SECTION OF OPHTMALMOLOGY.

The following subjects are down for discussion in the Section of Ophthalmology:—1. Sympathetic Ophthalmia. 2. Trachoma. 3. The Influence of the electric light on the Eye. Communications should be addressed to Professor Schweigger, 6, Roonstrasse, Berlin, N.W.

SECTION OF LARYNGOLOGY.

The following is the programme of the Section of Laryngology so far as at present arranged: An opening address on Laryngology since the last International Congress in 1887, by Professor B. Fränkel, of Berlin. A discussion on the Diagnosis and Treatment of Cancer of the Larynx will be introduced by Mr. Henry Trentham Butlin, of London, and Dr. J. Gottstein, of Breslau; one on Deviations and Ridges of the Nasal Septum, by Drs. J. Moure, of Bordeaux, and A. Hartmann, of Berlin; one on the Diagnosis and Treatment of Diseases of the Accessory Cavities of the Nose, by Drs. P. M'Bride, of Edinburgh, and Ph. Schech, of Munich; one on Syphilis of the Upper Air Passages, by Professor L. Schrötter, of Vienna, and Dr. G. M. Lefferts, of New York; one on Acute Infectious Inflammations of the Pharynx and Larynx, by Professor F. Massei, of Naples, and Dr. Moritz Schmidt, of Frankfort-on-the-Main. A discussion on Intubation, in which the Section of Diseases of Children will take part, will be introduced by Dr. O'Dwyer, of New York.

A EULOGY OF HOSPITALS AND MEDICAL SCHOOLS.

IN an admirable address by the Rev. H. Montagu Butler, D.D., Master of Trinity College, and Vice-Chancellor of the University of Cambridge, he dwells on the beneficent influence of the modern hospital and schools of medicine. He speaks with special reference to the Addenbrooke Hospital, Cambridge, and the school of medicine of that University. Dr. Butler points out not only how beneficent, how instinct with life and promise, and how powerful for good is such a hospital, but he dwells also on the point that it is not only a mere home of mercy but that it is also a magnificent school of medicine, and adds truly that this latter function is not always taken for granted. He gives an interesting anecdote in this connection of the late Lord Macaulay:—

"If ever a man was naturally predisposed to believe that good must come out of Cambridge, it was Macaulay, for he loved the very name of our city. Yet I find that in the January of 1851, when visiting the Queen at Windsor Castle, he had a short conversation with the Prince Consort, then Chancellor of the University, on the Regius Professorship of Medicine, which was just vacant. 'I remarked,' says Macaulay, 'that it was impossible to make either Oxford or Cambridge a great medical school,' to which the Prince replied that Oxford and Cambridge were larger towns than Heidelberg, and yet that Heidelberg was eminent as a place of medical education. Truly the foreign Chancellor showed greater foresight as to our destiny than the great Cambridge student. Knowing what we do of the position now attained by our medical school, we find it hard to believe that less than forty years ago the creation of such a school should have seemed an impossibility to one of our shrewdest and least-prejudiced statesmen."

Speaking of the functions of a medical school, he goes on: "Think of what is meant by a great medical school, or rather, let me say, of just a little of what is meant. It means that a band of our ablest men, the flower of their profession, are acting in concert with the definite ambition of exploring and fathoming the secrets of human suffering, and straining every nerve to relieve it. These men form a brotherhood; each knows that he can rely on his comrade. They contribute each his well-known stock of skill, and stimulate each other's enterprise. Further than this, these leaders are not alone; they have under them a staff and students—a staff of skilled officers competent at any moment to step into a post of chief command, and students of various ages, some of them among the picked men of our University, all proud to belong to a famous school, all animated by a strong corporate feeling, all eager to learn from what they see and hear. And what sights do they not see in that silent hospital! They see sufferers from almost every kind of disease; they see the treatment prescribed and carried out by the elders whom they trust. In grave cases of surgery they see the most delicate and difficult operations performed before their eyes by the masters of their profession."

Finally, he discussed how medical students learn in hospitals, and what is meant by a school of medicine. "They see consummate skill acting at a crisis of life and death. Further, they hear day by day each improvement in their art discussed by their chiefs; each new discovery first criticised, then tested, and then applied. They discuss also among themselves, with all the ardour and freedom of youth, what are the weak points still existing in medical science, what are the secrets which have still to be wrested from nature by patient thought, happy conjecture, careful experiment. This is how a hospital becomes a school. Knowledge is thus constantly advancing, and of this knowledge, remember, all classes have the benefit. If you, or I, or any of those we love, are struck down by any cruel accident; if, again, any organic disease attacks us and strikes us down in the midst of our days; whatsoever plague, whatsoever sickness there be, we have at once at our service the trained skill and the practised insight which have been called forth and matured by the accumulated traditions of these great medical schools."

So keen and sympathetic an insight into the mutual relations of a great hospital and the training which it gives to medical students is not perhaps often met with outside of our own profession; these true and sympathetic words have an increased

value coming from so eminent a divine and so distinguished an authority in one of our great universities. They contrast with the hard and unsympathetic views which are often taken of the character and aims of medical students, and of the relations of a medical school to a hospital, by writers whose humanitarian sentiments are misled and misguided by the anti-scientific bias of a numerous section of society, and of many eminent theologians.

THE OPENING OF GUY'S COLLEGE BY MR. GLADSTONE.

On Wednesday afternoon, March 26th, the Right Hon. W. E. Gladstone visited Guy's Hospital, to open the new residential College, a full illustrated description of which was published in the Journal of March 15th.

A luncheon was given in the dining hall. At its conclusion, after the toast of "The Queen" had been honoured, the President of the Hospital (Mr. Hucks Gibbs) proposed prosperity to Guy's Hospital. As one of those whose fortune it had been to establish this College, he said they owed it to the liberality and self-denial of the medical and surgical staff and others interested in the undertaking. They had been actuated by a desire for the prosperity of the hospital and the school which belonged to it as well as for the welfare of the young men who came there to be educated in the medical profession.

Mr. Gladstone said that he owed the invitation to attend that day to the fact that he was the senior governor of the hospital, having been appointed to that position in the year 1833. He regretted that the absorbing demands of other pursuits and occupations had for many years reduced him, in the capacity of governor of Guy's Hospital, to a condition of almost absolute inefficiency. In his opinion there were circumstances connected with the medical profession which gave it an extraordinary claim upon the attention of every observant man. The hospital was, in its first aspect, an institution for the care of the sick. It was also a nursery of the medical profession. He could not look back upon the history of the medical profession without being impressed with the extraordinary degree in which it presented to the mind certain special features. Two or three centuries ago—which was but little in the history of the race—the medical profession was almost without a recognised existence. It had luminaries in distant times, here and there, that stood out upon the waste as objects of great interest, but, as a continuing profession, filling a great part in society, enjoying respect in a high degree, recognised as a great member of the body politic, it could hardly be said to exist. He commented on the extraordinary change which had happened in the development of the medical profession in the competition with the other great professions. Until a comparatively short time back it was nowhere. There was the great name of Harvey; but as regards social position and influence the time of Dr. Mead and Dr. Friend, early in the last century, was almost the earliest in which the medical men of this country had assumed a position of influence and power with general recognition. Even at that time, as had been said in a most eloquent and striking lecture by Sir James Paget, the surgical branch of the profession—now elevated to a full equality with the sister branch of it—was in a position greatly lower: and he (the speaker) thought Sir James Paget stated that it was only from the time of Hunter that its equality with the medical branch of the profession had been rising steadily in power and in general respect from that day to this. New wants were arising in the medical sphere as everywhere else. Those wants were the opportunities of the medical man. He saw human nature at the point of junction between mind and body with a greater insight and on a larger scale than any other person; and, both from social considerations and likewise from the immense and steady advance which he made in that knowledge of his great science, he was from year to year, from generation to generation, becoming a more powerful and more important person as a portion of the great social machine. Even as regards mere remuneration, the medical profession was at the outset fortunate. It was not extravagant to say, taking the average entrants into those professions, possibly in the first few years it might be that members of the medical profession scattered over the country did better in the sense of self-support than either the young lawyer or the young clergyman. As to the headship of the profession and as to the pecuniary return it brought he knew very well what he had been told by Sir Prescott Hewett as to the enormous difficulty of obtaining a prominent position here in London, perhaps even in the other great social centres. But when it had been obtained he rejoiced to think that it might lead, among other advantages, to the possession of great fortune. They had all observed the very considerable fortune which was attained by a man respected by all who knew him, and whose eminence in his profession requires no word of testimony from me—he meant Sir William Gull. His name formed among the medical men, the mighty ornaments of this college, one of the very foremost. Another satisfactory point in the position of the medical profession was its independence. It was eminently self-supporting, and reliance upon that principle of self-support did much to maintain its honour and independence, and had enabled it to pursue its steady march in the past and would enable it to do so in the future, firm in its conviction to act upon those principles without fear and favour for the general benefit of mankind. Turning then to the special object of that day's meeting, he dwelt on the educational advantages likely to accrue to the students from residing within the precincts of the hospital, and observed that the gathering together of so many students under one roof would have a very powerful effect in making the neighbourhood attractive for a large number of students, which must be of the greatest importance in keeping men near their work and enabling them to fully profit by it. It would also, he said, have a part in a larger matter—the social elevation of the medical student, who had had great difficulties to contend with in former times, plunged into the great ocean of London population without guidance, without check, with all the temptations around him, without the advantages of domestic life—in fact, in a position which, for his moral and spiritual well-being, was a dangerous position. Having referred to the beginnings of the movement to supply residential colleges for medical students in London, he paid a warm compliment to the financial arrangements which had been made for the Guy's College. He was extremely struck with the financial skill which supplied without any danger to anyone the solid basis of credit upon which it had been possible to raise means for the erection of the College. From the beginning of his political life he did not think he had ever heard a more felicitous idea, combining boldness and enterprise with the spirit of self-denial and with financial safety, than in the proceeding of the medical and surgical staff in permitting the prospective fees of the future to be the basis and the guarantee of that financial operation. It was an enlightened benevolence that enabled them to discern the wisdom of the plan they adopted, and that wisdom would be verified and substantiated by the experience of the future. He earnestly hoped that that day might be regarded as a great and happy day in the history of Guy's Hospital—as a step onwards both in its professional and its moral position, as a day full of satisfactory reflection for the present and the past to all connected with it, and full of the happiest and most confident anticipations for the future.

Mr. Lushington (the Treasurer) briefly thanked Mr. Gladstone for his address.

The proceedings terminated by an inspection of the College, and a visit to the wards of the hospital.

Subsequently, the governors and the medical staff held a reception.

Sir William Gull's Will.—By his will, with a codicil dated November 27th, 1888, the late Sir William Withey Gull, of 74, Brook Street, M.D., who died on January 29th last, aged 74 years, leaving personalty valued at £344,022 19s. 7d., appointed as executors his wife, Dame Susan Anne Gull his son, Sir William Cameron Gull, of Gloucester Street, Portman Square, the present baronet, Mr. Edmund Hobhouse, and Mr. Walter Barry Lindley; and bequeathed to the acting executors £500 each; to Miss Mary Jackson £500; to two nieces £100 each; to Lady Gull's maid £200; to his amanuensis, Miss Susan Spratt, £50; and to his butler, William Brown, £52 10s. a year for his life. The testator makes heirlooms of his presentation plate and of the jewelled snuffbox given him by the Empress Eugénie, and bequeaths the remainder of his plate, his pictures, furniture, and household effects and £3,000 to Lady Gull, who is to have the use for her life of the house in Brook Street, and a life annuity of £3,000 to commence twelve months after the testator's death. He bequeaths £26,000 in trust for his daughter, Caroline, wife of Dr. Theodore Dyke Acland; and £40,000 to his son, Sir William Cameron Gull, upon whom he entails all his real estate, and leaves the residue of his personal estate in trust for the purchase of real estate in England or Scotland, but not in Ireland, to be held with the entailed estate.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 16th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 12th, 1890.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

NOTICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.—A meeting of this district will be held at Loughborough, on Wednesday, April 16th. Members desirous of reading papers or showing cases or specimens. will please communicate with the Honorary Secretary, FRANK M. POPE, M.B., Leicester.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 17th, at 5 P.M. Dinner at 5 30. The subject, as settled by the Council, for discussion after dinner is the Influenza Epidemic. Members having any case or communication to bring before the meeting are requested to send the title thereof as soon as possible to W. M. KELLY, Honorary Secretary, Taunton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this Branch will be held at Croydon on Thursday, May 8th.—P. T. DUNCAN, M.D., Honorary Secretary, Croydon.

SOUTH WALES AND MONMOUTH BRANCH.—The next meeting will be held at Neath in the third week in April. Members wishing to read papers, etc., are requested to send titles to either of the undersigned by April 7th.—ALFRED SHEEN, M.D., Cardiff, and D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

SHROPSHIRE AND MID-WALES BRANCH.—The half-yearly meeting will be held at the Salop Infirmary, on Tuesday, April 15th, at 3 P.M. Papers have been promised by Messrs. Stephen Paget (on Cancer of the Breast), Webb, and Dr. Charnley. Members having any communications to make or papers to read will kindly inform the Honorary Secretary as soon as possible.—J. A. BRATTON, Honorary Secretary, Shrewsbury.

SOUTHERN BRANCH.—The next meeting of the South Wilts District will be held at the Bath Arms, Warminster, on Wednesday, April 9th, at 3.45. Papers will be read by Mr. Manning, Mr. Hinton, and Mr. Willcox. Dinner at 5.45; tickets (not to include wine or ale) 5s.; gentlemen intending to be present to give notice to H. G. MANNING, Honorary Secretary, Laverstock, Salisbury.

NORTH WALES BRANCH.—The intermediate meeting will be held at Rhyl, on Tuesday, April 15th, 1890. Members having any papers to read are requested to notify the Honorary Secretary before April 5th.—W. JONES MORRIS, Honorary Secretary, Portmadoc.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE sixth general meeting was held in the Medical Institute on Thursday, March 13th, the PRESIDENT (D. C. Lloyd-Owen) in the Chair.

New Member.—The following member of the Association was elected a member of the Branch: William Arthur Payne, B.A., M.R.C.S., Selly Oak.

A report of the scientific work of the meeting will be found at p. 725.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of this district was held at the Hospital, Gravesend, on March 20th, Dr. C. FIRTH in the chair.

Next Meeting.—It was decided unanimously that the next meeting be held at Rochester in May, and that Mr. J. H. Jeffcoat be requested to preside on the occasion.

Representative for Kent on Council of Association.—Dr. C. Parsons, of Dover, the Branch Secretary, was nominated *nem. con.* as representative for Kent on the Council of the parent Association.

Election of Honorary Secretary of District.—A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, was re-elected for the ensuing year.

Papers.—The following were read and were followed by exhaustive discussions: Dr. V. D. HARRIS: The Treatment of Pleural Effusion.—Dr. C. FIRTH: A case of Strangulated Obturator Hernia.

Dinner.—Seventeen members and visitors subsequently dined at the Old Falcon Hotel.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE spring meeting of the above District was held on Thursday, March 13th, at the Esplanade Hotel, Dover; Mr. A. LONG in the chair.

Communications.—Mr. ASHBY OSBORN read notes of a case of Double Vagina and Uterus.—Dr. GOGARTY read an abstract of a paper calling attention to a form of Ascites in Childhood, terminating favourably, and with no signs of tubercular disease, or any other organic lesion. A case illustrative of the above was given in detail, and two others were mentioned as having come under the author's observation.—Mr. R. LYDDON read a successful case of Laparotomy for Intestinal Obstruction in a boy.—Dr. THOMAS EASTES read a paper on a case of Ovarian Cyst, with twisted pedicle. The symptoms had been severe for five days, commencing with severe pain, followed by tympanites, extreme tenderness, but with little vomiting. There was a history of eight or ten similar attacks in the previous twelve months. Ovariotomy was performed, and the cyst was in a condition approaching to gangrene. The woman sank in forty-eight hours. Dr. Eastes said urgent symptoms of pain, tenderness, and vomiting in the recognised presence of an abdominal tumour, which might be ovarian, should lead at once to abdominal section.—Drs. GOGARTY, EASTES, TYSON, and Messrs. COLBECK, OSBORN, ORMSBY, TAPLIN, WOOD, LYDDON, HULKE, and the CHAIRMAN took part in the discussion.

ABDOMINAL SURGERY IN CUBA.—At the Medical Congress recently held at Havana Dr. Barrena presented a communication containing statistics of abdominal surgery in Cuba up to that date. The operators were Drs. Cabrera Saavedra, Plasencia, Casuso, Horstmann, Menocal, R. Tovar, and himself. The following are the figures given by Dr. Barrena: Ovariotomies, 39, with 27 cures and 12 deaths; hysterectomies, 11 cured with 2 deaths; myomotomies, 3, all cured; exploratory incision, 4, with 3 deaths; salpingotomies, 3, all cured; vaginal hysterectomy, 1, fatal; ligature of the Fallopian tubes, 1, cured; total, 62 operations, with 37 cures and 25 deaths, showing a mortality of more than 40 per cent. One of the speakers in the discussion which followed said such statistics testified against the operators more than against the operations. He expressed gratification that what he called the *furor operatorio* was subsiding in Cuba.

SPECIAL CORRESPONDENCE.

PARIS.

Crime and Insanity.—Paris Medical Students.—Regulation of Prostitution.—Strophanthin and Ouabaïne as Anæsthetics.—The Microbe of Erysipelas.—Action of Caffeine.—Phthisis in the French Army.—General News.

THE *Temps* lately published an article showing the connection between crime and drunkenness, and quoted cases furnished by Dr. Garnier, Chief Physician to the Infirmary for Insane Patients. Statistics prove that from 1872 to 1888 insanity in Paris has increased 30 per cent. This, according to Dr. Garnier, is due to the rapid increase of *folie alcoölique* and general paralysis. The former is twice as frequent as it was 15 years ago. Dr. Garnier, by giving the history of several criminals, shows how alcoholism in one generation increases crime in another. The children of drunkards help to fill the prisons and give employment to the executioner. The question of the punishment of criminals born with a hereditary taint is one that will have to be settled in the near future. The *Temps* prophesies that before long hospital prisons will be established in which such criminals will be kept under control and proper treatment.

French medical students, as well as others, have felt the reforming influence of increased severity of examinations. Whatever they may have been in the past, they are now a hardworking, patriotic, and philanthropic set of men. It was medical students who gave the first blow to Boulangism, and M. Jules Simon who has lately done homage to the philanthropy of students in general, mentions a letter which a student addressed to him as President of the Society for Succouring Children who are ill-used or abandoned by their parents. The writer calls his attention to two poor little children who beg at the doors of the Sorbonne and the École de Droit, and suggests that the students should organise a society for the rescue and protection of children. The proceeds of a ball given by the medical students a short time ago were devoted to charitable purposes, and this good example was followed by the École Normale and the École Centrale.

Since the last discussion at the Academy of Medicine on the prophylaxis of syphilis, the resolutions passed have been freely criticised. M. Commenge furnishes statistics showing the number and nature of venereal diseases observed among registered and unregistered Paris prostitutes during the nine years from 1878 to 1887. Among 305,799 registered prostitutes holding certificates, 3.12 per 1,000 cases of syphilitic affections, 3.06 per 1,000 of non-syphilitic disease, and 0.36 per 1,000 cases of psoriasis were recorded. Among 503,712 registered prostitutes living in licensed houses, 2.70 per 1,000 cases of the first, 2.52 per 1,000 of the second, and 0.30 per 1,000 of the third category of affections were observed. Among 76,740 registered prostitutes *en dépôt* (prison), there were 23.96 per 1,000 cases of the first, 14.46 per 1,000 of the second, and 4.06 per 1,000 of the third category. Among 27,041 unregistered prostitutes, there were 166 per 1,000 cases of the first, 134 per 1,000 of the second, and 29 per 1,000 of the third category. The medical papers consider that these statistics show the necessity of vigilant supervision and strict regulation of prostitution.

M. Panas has investigated the action of strophanthin and ouabaïne. He instilled two drops of ouabaïne every two minutes into the left eye of a rabbit. Anæsthesia was produced in twenty minutes, whilst with cocaine the same result was obtained in the other eye in five minutes. The anæsthetic action of strophanthin was also more tardy than that of cocaine, besides causing inflammation and pain. Ouabaïne has no anæsthetic effect on the human eye. M. Gley, on the other hand, affirms that the anæsthetic action of both these substances is complete for all forms of sensibility. The thermic sensations are, however, the last to disappear and the first to return. Ouabaïne, like cocaine, causes a slight opacity in the cornea, and increases intraocular tension.

At a recent meeting of the Biological Society, a note by M. Leroy, of Lille, on the microbe of erysipelas was read. He found that, in cultivations, the pathogenic properties gradually diminish, but that, after a year or so, a complete reawakening of erysipelas takes place. Similar phenomena are observed in rabbits inoculated in the ear. After the first inflammatory symptoms subside, there is a remission followed by a new outbreak of erysipelas.

According to Professor Germain Sée, caffeine cannot, as hitherto believed, be used as a substitute for food. It furnishes only the primary tonic stimulation immediately resulting from taking nourishment. Small doses of caffeine (60 centigrammes a day) increased muscular action by the effect of the drug on the entire nervous system and the sensation of effort and fatigue is lessened. Palpitations following overfatigue are also prevented by caffeine.

In accordance with instructions from the Minister of War, the Director of the Health Service has addressed the following recommendations to the army corps, with the view of preventing the propagation of tuberculosis: Whoever presents symptoms of this disease shall be immediately withdrawn from the army. Those conscripts who appear to be of delicate constitution shall be examined by experienced physicians to ascertain whether they present certain symptoms of specific bronchitis. If they do they shall be exempt from service. If the onset of tuberculosis appears imminent, they shall be submitted to medical treatment for three months. These regulations, which have been partly acted on already, have given the following results: In 1867 phthisis caused 2.238 deaths per 1,000 in the army; in 1877 1.45 per 1,000; and in 1887 0.99 per 1,000.

The International Congress of Electricity, held last year in Germany, will this year take place in Paris. The Minister of Posts and Telegraphs will shortly propose to the Chamber of Deputies that a certain sum be voted to meet the expenses of this Congress.

The Archbishop of Paris has informed the *curés* of his diocese that the Pope has forbidden Catholics to cremate their dead, or to belong to cremation societies. Catholic priests are therefore directed to refuse the usual rites when bodies are burnt.

A pharmaceutical chemist in a small town in the north of France recently sold morphine to the wife of a medical man, without a prescription. In a short time this lady and her daughter had taken £24 worth of the drug. The husband, on becoming aware of this, forbade the chemist to supply the morphine, but this prohibition was disregarded, and one of the ladies died. The doctor brought the matter before the legal authorities, and the chemist was severely punished and deprived of his licence. He left the town and passed a fresh examination at Amiens, but the *Conseil d'Etat* refused to permit him to carry on his business in the department.

VIENNA.

Suspension in Tabes.—A New Expectorant.—Keratitis Superficialis Punctata.—Treatment of Laryngeal Tuberculosis.—Influenza in Horses.—Plasmodia Malariæ.—Bacillus of Rhinoscleroma.

PROFESSOR BENEDIKT recently showed two patients suffering from locomotor ataxy, who were considerably relieved by suspension. One was an old man in whom prodromal atrophy of the optic nerve and ataxy had been present to such a degree that he could not even be lifted out of bed. When Professor Benedikt saw him a year ago, he gave a favourable prognosis, as tabes which set in with prodromal atrophy of the optic nerve can certainly be benefited by treatment, particularly by nerve-stretching. Professor Benedikt stretched both sciatic nerves a year ago. The ataxy improved so far that the patient could walk well for long distances. The second case was that of an architect, whose affection was possibly due to syphilis, though Dr. Benedikt does not share the prevailing opinion that most cases of tabes or dementia paralytica are due to specific causes. The success obtained by suspension was the same as in the first case. Professor Benedikt cautioned his hearers against the prolonged use of antisyphilitic treatment in cases of tabes in which a venereal origin was suspected. Inunction and iodide of potassium, when continued for a long time, had an injurious influence on the tissues, and much harm was done by such treatment in cases of tabes.

Dr. Schoengut states in the *Centralblatt für Therapie* that a new expectorant, the tincture of naregamia, has been tried in the clinic of Professor Drasche, of Vienna, in twenty-four cases. The drug was used in doses of from 1 to 3 grammes daily, according to the following formula: ℞ tinct. naregamiæ 1.0—3.0 grammes; laurel water 10—20 grammes. D.S. 10 drops at every hour. The tinctura naregamiæ is derived from a plant which is found in Goa, the so-called "Naregamia alta." The drug has proved useful as an expectorant, particularly in those cases in which there was much coughing with little secretion, or when expectoration was made difficult by thick, tenacious mucus. In cardiac cases, in two of which the heart was fatty, complicated with catarrh of the air

passages, the tincture of naregamia proved very efficacious. This was also true of pulmonary emphysema, and only in the case of a woman suffering from marasmus, and who had been subject to dyspepsia, vomiting occurred on each occasion even after small doses. In cases of tuberculosis, expectoration was occasionally facilitated. In pneumonia the drug was used in the stage of resolution with copious crepitant *râles;* it was well borne, and favoured expectoration. The drug had no effect on the circulation, the digestion, or the urinary secretion, and no toxic symptoms were observed.

At a recent meeting of the Royal Society of Physicians of Buda-Pesth Dr. W. Goldzieher showed two cases of keratitis superficialis punctata. The disease was first observed in Vienna last year, and was called by different names. After acute coryza or bronchitis catarrhal ophthalmia came on, after the disappearance of which the patient complained of pain and dimness of sight. Nothing beyond ciliary redness could be detected with the naked eye. On focal illumination, however, the cornea was seen to be uneven, and there were small spots in the superficial layers. Except atropine, which relieved pain, and warm poultices no other local treatment was used. The epithelium became regenerated, but the spots disappeared only after a long time.

Dr. J. Neumann recently communicated to the same Society an account of his experience with regard to the treatment of laryngeal tuberculosis, as observed during three years in the clinic of Professor Navrati, of Buda-Pesth. A solution of $\frac{1}{2}$ per cent. of sulphate of zinc mixed with from 1 to 2 per cent. of cocaine was useful in catarrh of the larynx and trachea in tuberculous patients. Sixty cases of extensive tuberculous ulcers of the larynx were treated with insufflations of iodoform with the result that the ulcers became clean and partly covered with epithelium. No cure, however, was obtained owing to the general weakness of the patients. The anodyne effect of the iodoform on tuberculous ulcers was often surprising. A rather large quantity of the powder should be insufflated. Iodol mixed with equal parts of boric acid was a milder application which had proved serviceable in 300 cases. A 20 per cent. oily solution of menthol was not well borne, and had no great effect. In the final stages of the disease the application of from 5 to 15 per cent. of cocaine was useful, especially as enabling the patient to swallow with comfort. After the third brushing, they began, after eight minutes, with antiseptic insufflations in order to make the effect more complete. Morphine mixed with pulvis gummosus or iodol-boric acid was used more rarely. Ice poultices and ice pills also effectually relieved pain. Of fifty patients treated with lactic acid, three remained well for a long time, while about thirty were relieved to a certain extent, but relapsed and died. The lactic acid was never hurtful, but was only useful in ulcers. Circumscribed infiltrations must be scraped away with the sharp spoon, if the patient is strong enough to bear it. In advanced ulceration, severe treatment should not be employed. With regard to tracheotomy, Dr. Neumann shared the opinion of Schmidt that the favourable effect of the operation is due to the copious inhalation of oxygen and the rest given to the diseased organ. Of eleven patients operated upon, six died, four of whom were *in extremis* when admitted; five remained alive. The condition of the larynx was ameliorated, and the strength increased. One of these patients had now been under observation for two years, and another for one year. They no longer wore the cannula.

At a recent meeting of the Imperial Royal Society of Physicians of Vienna, Professor Csokor made a communication on influenza in horses. He said two morbid processes which were anatomically and clinically quite different from each other were comprised under this term. The true equine influenza, the so-called *Pferdestaupe*, was very infectious, and cases of transmission of this disease to dogs and even to man had been recorded. The infectious matter was still unknown, but it was probably in the excrements. It was volatile, and was transmitted by the air. The disease invariably set in with high fever (42° C.) and severe nervous disturbances; great depression and extraordinary muscular weakness were particularly noted. Occasionally intestinal symptoms, such as colic and diarrhœa were observed. The eyes were invariably affected by phlegmonous conjunctivitis, parenchymatous keratitis, and exudative iritis. All the symptoms disappeared in a few days, but the nervous depression persisted for several months. This depression *(Dummkoller)* was due to chronic hydrocephalus. Dr. Csokor had only twice had an opportunity of making *post-mortem* examinations of horses which had died of the uncomplicated disease. Multiple parenchymatous myocarditis, parenchymatous degeneration of the liver and the kidneys, and particularly of the skeletal muscles, were observed. The second form of equine influenza was the so-called *Brustseuche*, which was quite different from the *Staupe*. Its essential character was that of a contagious pneumonia. It had been known in Austria for about seventeen years, and had considerably increased during the last seven years. In the Vienna Veterinary Institute 30 cases were noted in 200 necropsies of horses from 1883 to 1887; 39 among 229 in 1888; and in 1889 46 cases. According to Schütz, of Berlin, the infective agent was a capsulated coccus, which, however, entirely differed from the pneumococcus of man. The inoculations with this pneumobacterium proved extraordinarily virulent, as all the horses and other animals inoculated died of gangrenous pneumonia. Hæmorrhagic pleurisy was a constant symptom. In some cases myocarditis came on, and death speedily ensued. The disease ran its course in from eight to ten days, the mortality being from 10 to 20 per cent. Preventive inoculations, performed a year ago at Berlin with cultures of the coccus, were partially successful.

At a recent meeting of the Prague Society of German Physicians Professor v. Jaksch read a paper on the plasmodia of malaria. Professor v. Jaksch, who had previously doubted the correctness of the views of Marchiafava and Celli, now quite shared the opinions of these investigators. The plasmodia of malaria were very polymorphous, and undoubtedly stood in a close causal connection with the clinical appearances of the intermittent fever, inasmuch as with the development of a new generation the fever set in. Hence, in the tertian form, the micro-organism required three days, in the quartan, four days, to complete its course. The microscopical examination of the blood could thus decide (1) that the case was one of intermittent fever, (2) its type. From the clinical point of view, the intraglobular non-pigmented forms were of most importance. These were colourless contractile clots, which, in fresh preparations, invariably changed their forms. Later on the colouring matter of the blood disappeared from the cells, which in the place thereof contained granular pigment, or pigment in the form of small rods; the cell was destroyed; the pigmented plasmodium became free, divided, and developed spores; the spores again penetrated into the coloured cells of the blood, etc. The class to which these parasites belonged had not yet been determined, and the name of "hæmatobium malariæ" was suggested.

At a recent meeting of the Imperial Royal Society of Physicians, of Vienna, Dr. R. Paltauf, assistant to Professor Kundrat in the chair of pathological anatomy, related his experiments respecting the bacillus of rhinoscleroma. Three years ago he made a communication to the same Society on investigations which he had carried on with Dr. von Eiselsberg, Professor Billroth's assistant. He had then reported that in six cases of rhinoscleroma a bacillus was obtained from the tissue juice in pure cultures which in form and size corresponded to Friedländer's pneumococcus. Though inoculations in animals gave no positive result, he looked upon the bacillus as the specific agent in producing rhinoscleroma. His recent researches had been directed to determine whether the scleroma of the larynx and the trachea were identical with rhinoscleroma, whether the same bacillus was its cause, and, finally, whether it was not possible to distinguish with certainty the bacillus of rhinoscleroma from the pneumococcus. He had examined fourteen cases during the last three years, and among these there were three common cases of rhinoscleroma with the usual changes of the exterior of the nose, the soft palate, and the pharynx; five cases of primary stenosis of the larynx and trachea owing to scleroma, in which either no changes in the pharynx and palate were observed, or were noticed only later on. There were two cases in which only ulcerating scars were first seen in the larynx; these had at first been looked upon as syphilitic, and it was only when ulcerating knobs occurred over the nose later on that the diagnosis was established. Lastly, there were three cases in which the changes were limited to the nasal passages without affecting the outer parts of the nose. In all these cases he had succeeded in cultivating the same bacilli out of little pieces removed from the knobs. In some cases bacteriological examination was used to clear up the diagnosis between syphilis, carcinoma, and tuberculosis on the one hand and rhinoscleroma on the other. He had also succeeded in discovering certain differences between the bacillus of rhinoscleroma and Friedländer's pneumococcus. The cultures of rhinoscleroma dried up more rapidly and lost their power of vegetation, and the cultures of the pneumococcus in a solution of sugar evolved much gas owing

to the decomposition of the sugar; whereas this was not the case with the cultures of rhinoscleroma. Finally, when an acid cultivation soil was chosen—for instance, gelatine of wort—the pneumococcus developed well, whereas the bacillus of rhinoscleroma did not thrive.

ROME.

La Nona, the so-called New Disease.

An occasional correspondent writes: Paragraphs of a more or less sensational character have been appearing for some weeks in the columns of the daily press of Rome relating to a new disease having broken out in the north of Italy. None of the profession here have, as far as I know, taken such rumours seriously. On inquiry, I found that men of light and leading in the profession, such as Il Deputato Professor Guido Baccelli and Il Commendatore Dottore Fedeli, have no knowledge of any such disease beyond the statements in the newspaper paragraphs.

I have not seen any allusion to the subject in the Italian medical press, nor have my medical friends been able to furnish me with any references to help me. In this state of helpless ignorance, armed with the necessary introduction, I presented myself at the Ministry of the Interior, and asked for access to official sources of information. I was received with great courtesy, and shown a report relating to *La Nona* that had just been received from the province of Mantua. A good deal of hesitation was manifested on my asking to be allowed to copy the document, but I was allowed to make a full *précis* of it. From the perusal of this report, I gathered that one or more previous reports had been sent to Rome apparently in response to instructions from the Central Government, referring to the newspaper paragraphs in question. One of these seem to have been dated as early as February 24th, so the investigations had not been hurriedly undertaken. The reports received by the central authority of the province of Mantua from all the communal authorities, unhesitatingly deny (*completamente negata*) the existence of such a special disease as *La Nona*. Four of the communes only have sent in medical accounts describing each one case of disease in which there were symptoms ascribable to the nervous system of a lethargic or delirious character. From these reported cases it is gathered that three of the sufferers had been attacked by influenza, while the fourth was labouring under typhoid fever. From the temperature chart of this last case it appears that during two weeks the thermometer had stood at 39.5° C. to 40° C. in the evening (103.1° to 104° F.). In the morning the temperature had fallen 0.5° C. (nearly 1° F.).

Such, then, are the facts I have been able to obtain, and they seem completely to demolish the idea that any new disease has broken out in the north of Italy. With the reports emanating from Vienna and the French Riviera, I have no concern in this letter; nor is it for me to speculate on what has occurred in northern Italy to serve as a foundation for rumours of a new disease having broken out. Among an excitable population invaded by influenza, a very little comatose condition would suffice to build up a superstructure of *La Nona*. In details, all the accounts do not agree. Some report that all the cases gradually return to a conscious condition, and that no one dies. Others render the recital more impressive by making their sufferers never recover, and after three or four days of trance die by the bursting up of the body. Another imaginative nosologist buries, I think, two of the victims in a state of trance.

In concluding my letter I may just allude to the derivation of the term *La Nona*. Neither the profession nor the laity in Rome seem to have any very definite information on the point. Rigutini and Fanfani, the Italian Webster's *Dictionary*, define *nona* as the name of the fifth of the canonical hours, and gives as an example "*Cantano la nona.*" They sing the *nona*. This would be from 3 to 4 o'clock, as they count from 6 A.M., *nona* meaning the ninth. I fail, however, to connect this explanation with the name of the new disease. The Italian Government and the special correspondent of the *Standard* at Rome adopt the spelling I have used above, but the correspondents of the *New York Herald* call the disease *La Nonna*, and translate it "going asleep" and "falling asleep." I can find no authority for either this orthography or translation. *Nonna* means literally grandmother, but may mean old woman or witch. This, again, carries one's thoughts back to stories of commencing illness prevalent in Russia, though also known in North Italy and elsewhere. This old tale has it that the victims of the attack saw a witch approaching with outstretched hand; if she succeeded in touching the person going to be ill with her finger, death was sure to follow; if she missed her aim, recovery was announced.

In the face of so much uncertainty, I may end by the observation that educated Italians in Rome know no more about the matter than you do in England.

Since closing my letter I have heard of a Neapolitan proverb which alludes to the drowsiness of a grandmother, which may be taken to justify the spelling and translation of the *New York Herald*.

EGYPT.

The Medical School.—Drainage of Cairo.—Nursing Sisters.—Enteric Fever and Sanitation.

It is to be feared that the present staff of the Medical School are not very competent to carry out their duties. A salient example of this has just occurred. The students of the two senior classes lately presented a petition to His Highness the Khedive, in which they prayed that their newly-appointed Director might be removed, inasmuch as he was not competent to teach them. This was true enough, but the poor students suffered. The matter being referred to the Minister of Public Instruction, five of the petitioners—the most advanced—were dismissed.

The scheme for the drainage of Cairo proposed by Mr. Baldwin Latham is still *in statu quo*, awaiting the arrival of the proposer from India, which should take place towards the end of this month (March). There seem to be no practical difficulties in the way, but all depends on the view taken by those who have the control of the public funds. To a sanitarian it would seem a crime of the deepest dye if Mr. Latham's reasonable proposals were allowed to remain a dead letter.

The nomination of two nursing sisters at Kasr-el-Aini Hospital has at length been approved by the Government, and the ladies proposed have been duly enrolled as servants of the State. In due time four more will be appointed, but suitable accommodation for them must first be acquired. Although not officially recognised, these ladies have now been at work for upwards of two years, and the marvellous improvement that has resulted from their labours should be seen to be appreciated. It is much to be desired that similar advantages should be conferred on the other governmental hospitals, notably at Alexandria, Port Said, and Suez, where the medical officers in charge are all Europeans.

So far not a single case of enteric fever has been reported from visitors in Cairo, though the disease continues to be rife amongst the soldiers of the garrison. The immunity of the former is no doubt mainly owing to the fact that a year or two ago, after lengthened opposition, a series of so-called drains in the European quarter were condemned and filled up, on account of its having been proved to demonstration that they were absolutely nothing but elongated cesspools. Since then a certain amount of inconvenience has resulted on rare occasions, when there happened to be an abnormal rainfall, but the slight discomfort thereby occasioned is not worthy of being named in connection with the inestimable advantage of having got rid of a permanent source of infection in our very midst.

The number of visitors to Egypt this year has been very great, including numerous members of Parliament. Some of these gentlemen are keen observers, but there are amongst them others who cannot see much further than their noses. An amusing instance, of which your correspondent was a spectator, took place at Shepherd's Hotel lately. It chanced that one of these itinerant legislators was seated at the luncheon table next to the head of the sanitary department, who was the guest of an eminent engineer who had come to Egypt to prepare a plan for the drainage of Cairo. During the progress of the meal the law-maker, turning suddenly to the sanitarian, with whose identity he was probably unacquainted, remarked, "Is there ever any scavenging attempted in this town?" Completely taken aback, the unfortunate administrator of a much abused service could only stare in reply, when the engineer, who knew his man, stepped gallantly into the breach. "I am acquainted," said he, "with all the principal towns in England, and with many on the Continent, and I have never seen one in which sweeping and watering are better carried out than in Cairo. If all sanitary matters were as well attended to as surface cleanliness, the city would leave little to be desired from a sanitary point of view." The M.P. said no more.

CORRESPONDENCE.

THE SURGICAL TREATMENT OF GENERAL PARALYSIS OF THE INSANE.

SIR,—In an article in the JOURNAL of January 4th, Dr. Batty Tuke enumerates the three conditions which I laid down as necessary to justify the proposed operation. They are: "(1) the theory of the pathological process to be remedied should be unassailable; (2) the mechanical means adopted should clearly be competent to produce the result which is attended; (3) the resulting improvement should be proved to be the indubitable consequence of the procedure adopted." Dr. Batty Tuke says that he is afraid that these propositions involve three errors, and he promises to "deal with them *seriatim*." Now I have failed to find that Dr. Tuke has discussed my third proposition at all. Certainly he is justified to this extent, that in the case he reports there was no improvement to be discussed. Let me quote Dr. Tuke's description of the patient trephined for general paralysis by his advice: "I saw the patient R. S. W. lately, found him much demented, with ataxic symptoms very well marked. He is showing progressive symptoms of a downward tendency." This, then, is the condition of a general paralytic whose disease is stated to have begun in March, 1889. The disease has made rapid progress, and we cannot be quite sure that the operation has not "modified symptoms" in a direction not expected by its originators. Certainly, so far from presenting any permanent improvement, the case seems to be in a worse plight than many a ten-month general paralytic with a sound skull. Dr. Batty Tuke must be indeed a sanguine man if he is content to take the improvement noticed for five days after the operation as worth much. I have rarely seen a general paralytic who did not vary to a greater extent than this—often, I may add, under the stimulus of a far milder operation, the operation of a brisk purgative. And yet Dr. Tuke proceeds to say "I should certainly have advised the removal of other discs in the neighbourhood of the longitudinal sinus." I think the speciality is to be congratulated that this sieve-making process has not been undertaken.

I pass now to my first proposition, which concerns the pathological basis of the operation. In this case, as in that just considered, Dr. Tuke does not discuss my proposition; he simply assumes what appears to be a new and original view of the pathology of general paralysis. Let me quote his own words: "Intracranial pressure.....is known to exist in general paralysis." "Thus obstructed lymph can make its way but imperfectly by natural channels to the pia-matral space, and becomes diffused through the tissues.....injuring and displacing cell and fibre, and impairing their functional activity. The cells are directly affected by this morbid process.....are bathed in a poisonous acid fluid." Further speaking of Dr. Claye Shaw's case, he says: "The operation was presumably followed by the same results as follow on diminution of tension in a pleura or peritoneum, and a reasonable hope may be entertained that as a consequence of healthy action of the lymphatics and blood vessels being now possible, *the process of sclerosis has been stayed.*" I think that I may safely say that the entire mass of pathological knowledge is absolutely contradictory of a theory such as this. I believe that I am expressing the views of the best men in the speciality when I say that the typical cell degenerations found in general paralysis are not such as might be expected to follow simple excess of fluid pressure. Fortunately, one of the highest authorities on brain pathology, Dr. Bevan Lewis, has lately published an important work. In his opinion, we see in general paralysis "a true degeneration, due to acute nutritional anomalies, and fail to observe any notable difference between the changes through which these cells pass and those of the cortex in senile atrophy." I may in passing note the marvellous insight of Dr. Clouston, who many years ago wrote, "I look upon general paralysis as being equivalent to a premature and suddenly senile condition." Dr. Bevan Lewis believes that there is no excess of fluid in the first stage, and the second is "a stage of extraordinary development of the lymph-connective system of the brain, with a parallel degeneration and disappearance of nerve elements, the axis cylinders of which are denuded." In this stage, degeneration has advanced so far, that even Dr. Tuke would hardly expect any good result from surgical interference, and it is in this stage that Dr. Lewis states that fluid first appears. It is also evident that Dr. Lewis regards the fluid as a secondary product which has no part in causing the cell degeneration, and he distinctly speaks of it as compensatory. He writes: "When atrophic changes occur in the cortex.....a great compensatory serosity of this region is established." Dr. Tuke asserts that I stated that "intracranial fluid of more than normal quantity is necessarily compensatory." My sentence ran thus: "It is most probable that the excess of fluid is a secondary and compensatory process." Dr. Tuke omitted the important word "secondary." It is quite unnecessary to delay further over this part of the question. I have shown that in the first stage, the only stage in which an operation could be justified, there is, in the opinion of the best authorities, no excess of fluid, and that in no stage is the excess of fluid of more than secondary importance. I may add that I have examined the brain in over 300 cases of general paralysis, of all ages, conditions, and varieties, and I have never seen any indications of extreme fluid pressure. I, of course, except the few cases of so-called pachymeningitis hæmorrhagica. I would suggest also that it is important that Dr. Tuke should show that there exist in general paralysis any clinical signs indubitably the result of fluid pressure.

I pass now to my second proposition, which is the last to be considered, and which concerns the mechanics of the operation. It is quite needless to discuss this question until it has been shown that there is a condition in the brain of general paralysis which can be remedied by any mechanical means, but I must say a few words as to Dr. Tuke's attempt to apply a formula which is founded upon most delicate experiments, where all the conditions are precisely calculable, to a question like the present, where some of the conditions are unknown and incalculable. The brain is not a homogeneous body, and the cranium is not a closed sac. The spinal canal must also be taken into account. How Dr. Tuke can suppose that the formula for the compressibility of water in the hermetically closed piezometer can be applied to the present question I cannot conceive. Dr. Tuke lays stress upon "the rapid production of fluid," but as the trephine wound is allowed to close immediately, the brain in a brief period would be *in statu quo*. Dr. Tuke, indeed, proposes "to keep the aperture in the dura mater open for some length of time." I am inclined to think that this would not be good surgery; it certainly would add considerably to the dangers of the operation, and, at all events, it is not the operation I criticised. I may mention the practical point that general paralytics are quite sufficiently apt to injure themselves, and to be injured by others without the additional facilities which a trephine hole in the skull would afford.

To conclude, I have shown that the results of Dr. Tuke's operation are quite insignificant, even by his own account, that the results of Dr. Claye Shaw's operation are most probably due to a remission, that the pathology upon which the operations were founded is opposed to all the best knowledge on the subject, and, finally, that Dr. Tuke's water argument does not apply to the question at issue. I may end by enumerating the three points of interest with which Dr. Tuke begins:—1. The condition of the brain was ascertained during life. 2. The results of surgical operative procedure were somewhat remarkable. 3. Its collation with another case warrants various suggestions for the treatment of "head cases." I can only say (1) that the knowledge of the condition of the brain, obtainable through the unbroken dura mater, can hardly be considered satisfactory; (2) that the results of the operations are quite insignificant; and (3) that the collation of the two cases warrants nothing so clearly as the opinion that little good can be expected from the operation of trephining in cases of general paralysis.—I am, etc., GEORGE REVINGTON, M.A., M.D.

Prestwich Asylum, Manchester.

THE PROPOSED HOSPITAL FOR THE INSANE IN LONDON.

SIR,—The London County Council have shown a wise discretion in dealing with the report of the Committee appointed to consider this question, and have very properly referred it to the statutory Asylums Committee to report upon six months hence.

The evidence called by the Committee to guide them in their deliberations was not sufficiently representative. This view was emphasised by the medical members of the Council, who opposed the adoption of the report. Dr. Bott, in seconding the amendment proposed by Dr. Cooper, contended that there was universal dissatisfaction throughout the country at the manner in which the Committee had selected their witnesses. At the quarterly meeting of the Medico-Psychological Association held at Manchester on March 13th the matter was referred to, and a strong protest was raised against the onesidedness of the evidence, and the manifest unfairness with which the medical superintendents of asylums had been treated by the Committee in their report.

A leading article in the *Times* of March 13th states that "this Committee has taken the evidence of a large body of eminent medical men," and that the Committee was itself composed of men "singularly qualified to deal with the question." That the witnesses called by the Committee were eminent medical men "goes without saying," but with the exception of two they had had no practical asylum experience.

Now, if it had been proposed to found an ophthalmic hospital, would not the Committee have consulted the most eminent ophthalmic surgeons as authorities upon the subject, and therefore likely to thoroughly understand the requirements of such an institution, and have endeavoured to obtain the services of some of them for the hospital? But in the present instance the Committee not only practically ignored the recommendations of the only two experts they called, but they brought forward eminent medical men who had no special knowledge of insanity, addressed to them a few leading questions, and, carefully refraining from calling any of the mass of expert evidence which was at their command, they proceeded to base suggestions upon their non-expert evidence, and proposed to hand over the care and treatment of the lunatics to a staff of visiting physicians who know nothing about lunacy practice, and pay them for performing duties concerning the details of which they are equally uninformed. Eminent as the witnesses are as physicians and surgeons in a general sense, they are not qualified, either by training or experience, to offer reliable opinions upon such matters as the care and treatment of lunatics and their maintenance, or upon the more complicated questions of lunatic asylums construction and administration.

It is curious the Committee do not mention any eligible site for their proposed hospital. It must have occurred to anyone reading the report that this is a serious omission. Beyond the statement of one of the witnesses that suitable premises might be secured in a London square within a mile and a half of Ludgate Circus, no clue is given as to the views of the Committee upon this point.

The estimates for construction and maintenance given in the report of the County Council Committee will assume very different proportions after a careful investigation at the hands of the Asylums Committee, who, it may be assumed, will be aided by the experts connected with the various lunatic asylums under their control. In the meantime, we need have no fear but that the 10,000 lunatics under their care will continue to be cared for and treated as successfully as heretofore.

The County Council do not seem aware of the fact that no building can be opened for the reception of lunatics without the approval of the Commissioners in Lunacy. The views of the Commissioners upon the question of licensing asylums in thickly populated districts are well known to those connected with asylums, and the new Lunacy Act contains provisions for the registration of lunatic hospitals which, we trust, will not be overlooked by the Asylums Committee in their inquiry.—I am, etc.,

ALIENIST.

MEDICAL INSTRUCTION AT FEVER AND SMALL-POX HOSPITALS.

SIR,—The President of the Local Government Board has, on more than one occasion of late, spoken with evident satisfaction of the measure intended to secure the early notification of infectious diseases to sanitary authorities, which was passed during the last session of Parliament. This feeling of satisfaction will probably have been considerably diminished if he should happen to have read a report of the Ambulance Committee of the Metropolitan Asylums Board.

Mr. Augustus Scovell, the Chairman of the Committee, made his annual report to the Board on Saturday last, and stated that of twenty-five cases of illness notified as small-pox, twenty—that is, 80 per cent.—were cases of mistaken diagnosis. In other words, the notification of infectious diseases had failed in its initial stage four times out of five. Facts such as these must make it evident to Mr. Ritchie that the Notification of Infectious Diseases Act will be worse than useless if it is not at once supplemented by a proper system of medical instruction at the fever and small-pox hospitals, which are indirectly under the control of the Local Government Board.

No intelligent person in our profession, who has observed the tendency of late years to segregate and seclude cases of infectious diseases in special hospitals can have failed to see that by such a policy medical students are deprived of opportunities, which they formerly possessed, of gaining experience in a class of diseases the distinctive features of which ought to be familiar to them before they enter practice. The natural consequence of this policy is that sanitary administration, so far as it is dependent on the correct diagnosis of infectious disease, is frequently misdirected, greatly to the disadvantage of the public. It was owing to the weakness of a former President of the Poor-law Board that about twenty years ago the design to make the infectious hospitals of the metropolis useful for the purposes of medical instruction was frustrated. Mr. Ritchie is not to be blamed for the faults of a predecessor, but I shall be surprised if he were now slow to perceive that, having been responsible for the introduction of the Notification Act, it is incumbent upon him to do all in his power to facilitate a branch of medical education which is of fundamental importance to efficient sanitary administration, and which cannot be neglected without in great measure destroying the utility of the Act for the Notification of Infectious Diseases.—I am, etc.,

A MEDICAL OFFICER OF HEALTH.

THE NOTIFICATION OF PUERPERAL FEVER AND ERYSIPELAS.

SIR,—In the JOURNAL of March 22nd, page 682, I read: "It must frequently occur that practitioners recognise cases which, strictly speaking, come within the definition of 'puerperal fever' or 'erysipelas,' and yet the notification of which can serve no useful purpose." When the Act was adopted here a short time ago, I was somewhat of this opinion, but having had two cases lately under my care I have somewhat altered it.

In No. 8 —— Street, consisting of about twenty good suburban residences, I was called, on January 13th, to see a gentleman suffering from a very obstinate attack of phlegmonous erysipelas of head and face, which lasted up to February 21st, 1890, when I sent him thirty miles away into the country. The case was notified, and during his absence the house was disinfected, whitewashed, papered and painted. He returned home on March 12th, looking healthy and well; on the 19th erysipelas of head and face broke out afresh, and, though now declining, has been very severe, with high pyrexia.

On March 1st, at No. 11, in the same street, I removed a secondary scirrhous deposit of the right breast, for a lady, whose history for the last twenty years had been one of general *malaise*. Up to March 17th excellent progress had been made, and the wound was filling up rapidly. On that day rigors set in followed by high temperature, severe headache, and in forty-eight hours the right side of the chest was one brilliant glow of erysipelas; the veins of the right arm too were large, hard from phlebitis, and the arm greatly swollen; from this she succumbed on the 21st instant. This case also I have notified, and on inquiry find that there have been so many complaints of the stench from the main sewers, that an attempt has been made to stifle (?) it by covering over the street manhole. In an interview with the medical officer, I have urged the frequent flushing of the main sewer, the erection of a high ventilating shaft, the testing the private drains, and a search for any old cesspool in the adjoining gardens. Do you suggest anything else? Whilst I agree with you that there are numbers of so-called transient cases of erysipelas and miscalled puerperal fever that do not require notification, yet the authorities have rightly included both these diseases in their nomenclature of infections, seeing that they are largely preventable; and after thirty-five years' practice I regard puerperal fever as being largely and highly infective.—I am, etc.,

T. EYTON-JONES.

Wrexham.

THE SURGICAL TREATMENT OF IMPACTED LABOUR.

SIR,—I hardly like to claim position as "a skilled obstetrician," for then Mr. Lawson Tait will not value my opinion. But, as until three years ago I belonged to the class which is "far more influential and more generally useful," and have had a fair experience of obstetric operations, and further, as a former university examiner, have learned something of the knowledge of young general practitioners, I may be allowed to protest against the pernicious absurdity of Mr. Tait's recommendations: "Amputate the uterus for placenta prævia!" Comment is superfluous. "Amputate the uterus for puerperal fever—the pathology depends on suppurative metritis." The mortality statistics after forceps and version are absolutely erroneous. I challenge Mr. Tait to find any reliable statistics, published within the last ten years, corroborative of the figures he gives. Unless Mr. Tait, with his wonderful mortality of 3 per cent. after Porro's operation, can arrange to be omnipresent, his suggestions are likely to share the same fate which equally impracticable suggestions made by

equally eminent men have met with—to be smiled at and ignored. There have been a few cases in which the dreadful results, so poetically depicted by Mr. Tait, might have been averted by a knowledge of how to measure the conjugate and ascertain the fœtal and placental positions—a knowledge necessary to all and and possessed by most practitioners; but this, as a fact, is evidently little realised by Mr. Tait.—I am, etc.,

Grosvenor Street, W. A. D. LEITH NAPIER.

SIR,—Professor Tait has either forgotten or ignores the anatomy of the uterus. I, of course, presume that the operation is taking place at full period of gestation and on a healthy subject. Professor Tait says, the first step in the operation is the abdominal incision, four inches in length, yet he does not say where this incision begins or ends! or in what direction! And does he expect a child of from 7 to 12 lbs. weight to be extracted through such an incision? After going on, he says, the piece of india-rubber drainage tube, about eighteen inches or two feet long, is now held as a loop between the fore and middle fingers of the left hand, and is by that means slipped up over the uterus and pulled down over the cervix. Perhaps he will kindly explain what has become of the broad ligaments, etc., and how he passes a loop over the uterus? Then he says, having passed the finger behind the cervix to see that no coils of intestine are included! (well, he may feel, but he certainly will not see!) one hitch is made on the tubing when it has been got down as far as possible, and it is pulled as tight as is consistent with safety (I suppose he means to the tubing). Still, just before this, he tells us this tubing is passed over the cervix. Then, having opened the uterus and removed the contents, and the uterus having by this time firmly contracted, it is pulled out of the wound and the elastic ligature is tightened once more, and finally arranged round the cervix, and the second hitch applied! How does this take place, as it has already been passed over the cervix and tightened, and therefore must be constricting the upper end of the vagina? In conclusion, would it not better and safer to excise the whole of the uterus, ligature and drop the stump into the abdomen, so there would be no danger of epithelioma, etc., attacking the os, if left cicatrised to the abdominal walls?—I am, etc.,

Milford Haven. J. W. LANE, M.D.

MR. STANHOPE AND THE ARMY MEDICAL STAFF.

SIR,—Paragraph 5 of "A Brief Analysis of the Recommendations of Lord Camperdown's Committee," which appears in the JOURNAL of last week, is a follows:

"The War Office approves of the recommendation which proposes that candidates producing the diploma of the Society of Apothecaries are not to be required to produce another diploma. This we conceive to be a grave mistake. An army medical officer should be, before all things, a surgeon, and this qualification should only be accepted from one of the Royal Colleges of the Kingdom."

Stated plainly, it is thereby asserted, or at any rate implied, that the holder of a diploma of the Society of Apothecaries granted since July 1st, 1887, for that of course is the recommendation of the War Office Committee) is not a surgeon, and should not be allowed to be a candidate for appointments, without producing a qualification from one of the Royal Colleges of the Kingdom.

I will pass over the last words of the paragraph with the remark that they must, in effect, mean that only such persons should be allowed to be candidates as have passed the Conjoint Board, because the terms of the arrangement between the Royal Colleges (from which they excluded the Society of Apothecaries) are that neither body is to examine separately.

But the vital point on which I join issue is, whether a Licentiate of the Society of Apothecaries, since July 1st, 1887, is a surgeon.

The writer must admit that he is by statute as good a surgeon as any person otherwise qualified, unless the writer does not recognise the Medical Act of 1886 as the law of the land.

But this undoubtedly is not his meaning. What he means is that the diploma of the Society carries with it no guarantee that its holder possesses the surgical knowledge which an army medical officer should possess. On this point I will ask you to publish, as an act of fairness to our body, the subjoined questions put by Lord Camperdown to me when under examination before his Committee, and my replies.

The best comment on them is the recommendation passed by the Committee, and its adoption by the War Office and the Admiralty, and with such a result I confidently ask for a verdict in the Society's favour on the point raised by the writer of the article.

In justice to the President of the Medical Council, who was the witness examined immediately after myself, I should like to add—if I am correctly informed—that Mr. Marshall confirmed my evidence, and of his absolute independence there can be no question.—I am, etc.,

JAMES R. UPTON,
Clerk and Solicitor to the Society of Apothecaries of London.

Q. 988. Then am I correct in gathering from your answers that at the present time the examination in surgery for the surgical part of the diploma which is granted by the Society of Apothecaries is conducted entirely by the examiners appointed by the Medical Council?—Most certainly, exclusively.

Q. 989. But I think you only grant one diploma?—We can only grant one diploma. It is, if I might be just allowed to say so, really the same thing as the Conjoint Board of the Royal Colleges so far as the examination is concerned. There are two practically separate boards sitting to examine our candidates. There are five gentlemen from the Medical Council examining our candidates in surgery, and I may add that they are prohibited by the Medical Council from examining those candidates in anything else.

1000. But supposing that it were contended that the possession of two separate diplomas argues a greater amount of professional knowledge on the part of the holder than on the part of a person who holds one only, is not that from the service point of view some guarantee of a higher class of men entering the service?—I venture most respectfully to say no. The assistant examiners from the Medical Council are all Fellows of the Royal College of Surgeons of England by examination; they are men of the highest position, and they take the place, if I may venture so to speak, of the examination held before by the Royal College of Surgeons. It is a Royal College of Surgeons examination, for it can only be conducted by gentlemen who are Fellows of that College.

1003. Then you contend that your licence really carries with it a certificate of the same amount of knowledge that the diploma of the Royal College of Physicians and also the diploma of the Royal College of Surgeons carries.—Absolutely.

SUBCUTICULAR SUTURE.

SIR,—I have read with special interest Mr. Franks's paper upon "subcuticular suture" published in the JOURNAL of February 22nd. I can commend the use of the buried animal (catgut or tendon) suture for the approximation of the skin with greater emphasis than the writer; and I have repeatedly called the attention of the profession to its value in various publications for some years.

The advantages of bringing the deeper layers of the skin into close approximation by a blind suture taken from side to side are important and radical improvements in the treatment of aseptic wounds, not only in securing, as Mr. Franks states, a scar scarcely noticeable, but that which is more important, securing a complete aseptic state during the processes of repair. Properly applied the stitch abscess never follows. A layer of iodoform collodion, reinforced by a few fibres of cotton, seals the wound, and it is rendered germ proof by it. Drainage and its attendant necessary secondary slow healing, with danger from infection, is avoided. No stitches are to be removed. It is now many years since I first began to use the buried animal suture for these purposes, and for several years I have closed all aseptic wounds in this way without regard to length or location, including even amputation of the thigh. A little careful attention in closing and sealing the wound, while the patient is yet unconscious, renders all subsequent dressing not alone unnecessary, but positively meddlesome and damaging. If the surgeon will use an aseptic animal suture, aseptically applied, in an aseptic wound, I am assured he will have no cause for regret, and when once tried he will never abandon its use.—I am, etc.,

HENRY O. MARCY.

Boston, U.S.A.

CORROSIVE SUBLIMATE IN GONORRHŒA.

SIR,—I notice that Dr. Salaboli in the *Raccoglitore Medico*, xiii, 1889, strongly recommends a solution of corrosive sublimate both in acute and chronic gonorrhœa. This is another illustration of how little new there is under the sun, and of the justness of the observation that the progress of medicine, and especially of therapeutics, is, to a great extent, circular.

In a paper on "Certain Points in the Pathology and Treatment of Gonorrhœa" by me, published in the JOURNAL of date April 23rd, 1870, the following sentences will be found: "Of late I have used the bichloride of mercury in the most obstinate cases of gleet with the best results. It would be extending these remarks to a greater length than I contemplated to cite cases. Suffice it, therefore, to say that over and over again I have succeeded in curing gleet with this remedy when the most usually employed agents had failed, both in my own hands and those of others."—I am, etc.,

D. CAMPBELL BLACK.

Glasgow.

NAVAL AND MILITARY MEDICAL SERVICES.

SCHEME FOR REORGANISATION OF THE MEDICAL STAFF.

A MEDICAL officer of high rank and long experience sends us the following outline scheme:—

Name: Royal Sanitary Department Army.

Administration and Designation:

1. Director-General, ranking Lieutenant-General.
2. Adjutant-General for Sanitation, ranking Major-General.
3. Deputy Adjutant-General for Sanitation, ranking Brigadier-General.
4. Assistant Adjutant-General for Sanitation, ranking Colonel.
5. Lieutenant-Colonel and Sanitary Officer, over 20 years' service.
6. Major and Sanitary Officer, over 12 and under 20 years' service.
7. Captain and Sanitary Officer, over 3 and under 12 years' service.
8. Lieutenant and Sanitary Officer, under 3 years' service.

Nos. 3 and 4 would correspond with present Deputies and Brigade-Surgeons.

The time has come when in the interests of the nation the War Office must be called upon to settle once for all the question of departmental service in the army. It centres in a single idea: everyone who serves in the field and whose duties bring him in contact with the enemy must be considered a soldier both in rank and name. Let all be uniformly paid as such, but receive extra pay according to the nature of their departmental duties. Let this principle be applied in every part of our empire in a uniform manner. The departments of the army would fall under the Quartermaster-General; and everything that bore upon the health of the soldier, such as not merely hospitals, but housing, clothing, feeding, and conservancy would fall to the sanitary department. At present the medical officer is generally the last consulted on these matters, although as an expert he should be the first.

SUPPLY OF CANDIDATES.

DISGUSTED writes: It is not surprising the War Minister should "sit upon" the Medical Department while candidates come forward to enter it under any circumstances. Had the eight vacancies offered (purely as a test) last year not been filled up, the report of the Committee would have received very different treatment. There will be no amelioration of the Army Medical Service while the supply of candidates continues.

NAVAL GOOD SERVICE PENSIONS.

ANTI-JUNKERISM points out that there are 10 pensions of £300 a year for flag officers; 12 of £150 for captains; 6 of £200 for general officers Royal Marines; and 2 of £150 for colonels and lieut.-colonels of Marines; yet the highest good service pension for medical officers is but £100 a year, and this is all the ex-Director-General of the Navy Medical Service receives. When will the democracy insist on equal treatment for equals in rank?

VOLUNTEER SURGEONS.

VÆ VICTIS writes: As the little game is undoubtedly to divide and conquer the medical profession by playing off volunteer surgeons against their regular brethren, would it not be well if the former claimed common cause with the Medical Staff, and insisted, as a condition of their serving, that *bonâ fide* military rank and titles be meted out to themselves as well as to their regular brethren. This would bring "my military advisers" to their senses, and show that the army belongs to the nation, and not to a factitious "fighting caste" clique. All branches of the medical service stand or fall together in matters of status.

MEDICAL TITLES.

ROYAL MEDICAL CORPS sends a cutting from the *Standard* of March 17th, giving an account of a speech by the Lord Lieutenant of Ireland, at a dinner given by Mr. Austin Meldon, President of the Royal College of Surgeons in Ireland, in which His Excellency is made to say "he observed that *Sergeant*-Major Reynolds, of Rorke's Drift fame, was honoured with the Victoria Cross, etc," alluding, of course, to *Surgeon*-Major Reynolds, V.C.

If such gross mistakes can occur in a well-edited paper like the *Standard*, what must be the condition of the average civilian mind in relation to medico-military titles? Surely this is another proof of the necessity of well defined titles for medical officers.

RANK RETIREMENT.

JUSTICE says: Appendix 6 of the Camperdown Committee Report states the period of home service for surgeons-major is over two years, and for surgeons three years. This is much less than other departments, and the severe amount of foreign service has much to do with the excessive mortality of medical officers, as shown in Appendices 13 and 15 of the report. Yet Mr. Stanhope ignores these facts, and exacts the three years' service in a rank to qualify for pension, as in more fortunate branches of the service. Justice demands that the House of Commons should be informed of these facts; and that one year and a half to two years in the rank to qualify for pension would be a fair proportion to exact from medical officers.

PROMOTION BY SELECTION.

PROGRESS suggests that every third vacancy in the ranks of surgeon-general and deputy surgeon-general should be filled by selection, without reference to seniority. In this way the ablest brigade surgeons and deputies would find their way into the administrative ranks while still comparatively young, and would be promoted in a similar way as colonels now are to the rank of major-general. The extension of the age limit to surgeons-general is a testimony to the fact that promotion to the rank at present occurs much too late in life.

MILITIA MEDICAL DEPARTMENT.

W.L.C. writes: In your able and much appreciated advocacy of the claims of the Army Medical Staff I think one matter has never been noted, and perhaps you may think it worth alluding to on some occasion. For many years no appointments have been made to the Militia Medical Department, and this department is being allowed to die out. There are 128 battalions of Infantry Militia, and 34 batteries of Militia Artillery, 162 in all, each of which in former days had their own medical officer, who went out with them for their month's training, for which month he was paid at a higher rate than the army medical officer; he also was paid so much a head for recruiting.

At the present there are only 57 out of 162 militia medical officers remaining; some of these, I know, do not now go out for the training. Probably in the course of a few years none will remain, and the entire of the work formerly performed by them will be performed, as it is at present to a great extent, by the army medical officers. Thus there must be a very considerable annual saving of money to the public, and there ought to be a proportionate credit given to the Army Medical Staff, who, though curtailed in numbers, leave, and home service are now medically attending to an army 10,000 stronger than it was a few years ago, doing the work of 162 abolished militia medical officers, as well as medically examining a very much larger number of recruits, owing to the increased number of men passing through the ranks with the short service system, a duty which is by no means either easy or pleasant.

THE NAVY.

STAFF-SURGEON JAMES DUNLOP, M.D., has been promoted to the rank of Fleet-Surgeon. His commission as Surgeon dates from November 9th, 1868, and that of Staff-Surgeon from August 13th, 1880.

The following appointments have been made at the Admiralty: JOHN K. CONWAY, Fleet-Surgeon to the *Trafalgar*, April 2nd; JOSEPH WOOD, M.D., to the *Eagle*, April 2nd; JOHN L. AHERNE, B.A., to the *Trafalgar*, April 2nd; ANGUS F. CROLE, to be Surgeon and Agent at Leven, N.B.; JAMES LE G. MACNAB, to be Surgeon and Agent at Dysart, N.B.

Fleet-Surgeon WILLIAM GEORGE HILL, F.R.C.S.I., F.K.Q.C.P., died at Bayswater on March 20th. His commissions were dated: Surgeon, October 4th, 1853; Surgeon-Major, April 16th, 1862; Fleet-Surgeon, June 14th, 1876. He retired from the service November 30th, 1876.

THE MEDICAL STAFF.

SURGEON-GENERAL HENRY KENDALL, M.D., M.R.C.S., L.S.A., died at Lee, Kent, on March 20th, aged 69. He entered the service as Assistant-Surgeon December 16th, 1845; became Surgeon October 6th, 1854; Surgeon-Major December 16th, 1865; Deputy Surgeon-General January 7th, 1875; and Surgeon-General August 2nd, 1880. He was granted retired pay January 19th, 1881. Surgeon-General Kendall (says *Hart's Army List*) served in the Eastern campaign of 1854-55 as Assistant-Surgeon 17th Lancers, at the affairs of Bulganac and M'Kenzie's Farm, battles of Alma and Balaklava, and as Surgeon of the 4th Light Dragoons at the battles of Inkerman and Tchernaya, siege and fall of Sebastopol, and operations with the Light Cavalry Brigade at Eupatoria under General D'Allonville (medal with four clasps and Turkish medal). Served as Surgeon of the 7th Hussars in the Indian mutiny campaign from February, 1858, to March, 1859, and was present at the repulse of the enemy's attack on the Alumbagh, siege and capture of Lucknow, affairs of Barree and Sirsee, action of Nawabgunge, occupation of Fyzabad, passage of the Goomtee at Sultanpore, throughout the Byswarro campaign, including the affairs of Daodpore, Kandoo Nuddee, and Hyderghur, pursuit of Benhi Madho's force to the Goomtee; also the Trans-Gogra campaign, including the affair near Churda

and pursuit, taking of the Fort of Mcejeedia, attack on Bankee, with pursuit to the Raptee, advance into Nepaul, and affair at Sitkagaat (medal with clasp).

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR E. PALMER, Bengal Establishment, Medical Officer of the Bengal Lancers, and lately in medical charge at Muridki Camp, has been laid up for some weeks at Lahore with typhoid fever, but is now happily reported out of danger.

Surgeon-Major H. W. HILL, M.B., Bengal Establishment, Civil Surgeon of Maunbhoom, is allowed leave for three months.

Surgeon-Major A. K. STEWART, Bombay Establisnment, in medical charge of the 4th Cavalry (Poona Horse), has leave of absence for 366 days on private affairs.

The undermentioned officers, having served twelve years as Surgeon, become Surgeons-Major from March 30th:—*Bengal Establishment.*—J. F. MULLEN, M.D.; E. CRETIN, M.B.; A. DUNCAN, M.D.; G. F. NICHOLSON, M.D.; G. A. JONES; S. F. BIGGER, M.B.; G. S. ROBERTSON; G. M. NIXON, M.B. *Madras Establishment.*—T. H. POPE, M.D.; R. PEMBERTON; D. P. WARLIKER; J. J. MORAN, M.D.; F. C. SMITH; W. A. QUAYLE, M.D.; H. ARMSTRONG. *Bombay Establishment.*—C. MONKS; P. J. DAMANIA; G. H. BULL, M.D.; F. F. MACCARLIE, M.B.

Surgeon W. G. THOROLD, Bengal Establishment, has passed the examination in Persian by the lower standard.

Surgeon-General JOHN FORBES, M.R.C.P., F.R.C.S., retired Inspector-General of Hospitals, Madras Army, died at Bath on March 17th.

THE VOLUNTEERS.

ACTING-SURGEON C. W. DEAN, of the 5th Lancashire Artillery, is promoted to be Surgeon.

The undermentioned gentlemen are appointed Acting Surgeons to the corps specified:—WILLIAM GAY, M.D., 1st West Riding of Yorkshire Artillery (Western Division Royal Artillery); WILLIAM COX, 1st Gloucestershire Engineers; EDWARD CHAMBERLAYNE, 4th Volunteer Battalion Cheshire Regiment (late the 4th Cheshire).

Lieutenant and Quartermaster H. SANDLAND, of the Maidstone Division Volunteer Medical Staff, has resigned his commission, which was dated April 1st, 1887.

Surgeon and Surgeon-Major C. DUKES, M.D., 2nd Volunteer Battalion Royal Warwickshire Regiment (late the 2nd Warwickshire), is appointed Brigade-Surgeon (ranking as Lieutenant-Colonel) to the South Midland Brigade Infantry Volunteers.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE APOTHECARIES' COMPANY *v.* WELCH.

THIS was an action against a herbalist to recover the penalty imposed by the Act of 1815 (35 George III, c. 194) for "acting as an apothecary" without a due certificate, the question being whether he had in fact acted as a herbalist or as an apothecary. According to the report published in the *Times*, the defendant is a person who professedly carried on business, under the name of "J. and W. May and Co.," in Birmingham.

A detective went to the shop, on which was the name "May and Co., herbalists," and in the window two bottles with coloured water—one red and the other yellow—and a dozen bottles in blue paper, labelled "May's Herbal Specific," and two placards alluding to medicines. The detective stated: "I went into the shop and a man came out, and I said I had come for advice, and asked, 'Are you the doctor?' and he said, 'No, I am the person who prescribes; what is your case?'" The detective told him he was nervous and had headache, and the man said, "The medicine I will make for you will put you right," and he shook up some medicine and brought it to the detective in a bottle and said: "I charge you 5s. for the first bottle and 2s. 6d. afterwards. You had better pay me a price for a cure—say £5, according to the nature of the case." The detective said he would rather take one bottle first, and he took it and paid for it; and afterwards went again, and the man said it was a tonic which he had given him, &c. Upon this the company sued in the County Court to recover the penalty imposed for acting as an apothecary without a certificate. It was objected that the company were bound to produce their Charter, but the Judge thought not. The defence was then set up that under the Act 34 and 35 Henry VIII the defendant, as a herbalist, was protected. But the County Court Judge held, upon the evidence, that the defendant had "acted as an apothecary," and not merely as a herbalist, and, as it was admitted he had no certificate, the Judge gave judgment against him for the penalty, against which the defendant appealed.

It was argued for the appellant that he had not acted as an apothecary did in making up prescriptions, but had acted only as a herbalist. The counsel for the Company pointed out that the Act of Henry VIII. only applied to external applications given gratuitously, and he cited the ruling of Mr. Justice Cresswell in a similar case ("The Apothecaries' Company *v.* Lotinga, 2, Moody and Robinson's *Reports*).

The Court, after a long argument, came to the conclusion that the County Court Judge was right, and that his judgment must be upheld.

Lord Esher, in giving judgment, said evidence was given on which the County Court Judge had to determine whether the defendant had acted as an apothecary, not having a certificate, and the Judge found that he had in fact done so. It was for him, therefore, to show that there was no evidence on which the Judge would reasonably come to such a conclusion. But the Court could not say that. It was urged that the defendant was a herbalist, and perhaps he was; but the evidence showed that he had not acted only as a herbalist but he had done something else, and acted as an apothecary. The statute did not say that the defendant must be shown to have acted as an apothecary in every way. It was enough if he had acted as an apothecary in any way. It would be monstrous to hold that a man was at liberty to make up and sell mixtures as medicines, and thereby do infinite mischief among the ignorant, and yet escape by showing that he had not done everything which an apothecary could do. That would be quite contrary to the ruling of Mr. Justice Cresswell in the case cited. In the present case it appeared that a person went to the shop of the defendant and there saw a man (who, it must be assumed, was there on behalf of the defendant) who said he was the person who prescribed, and who asked questions and then gave something as medicine and took payment for it, and did so on more than one other occasion. That was certainly evidence that the defendant "acted as an apothecary." As to the defence set up under the Act of Henry VIII., there was nothing in the Act to entitle a herbalist to act as an apothecary. And a man could not by calling himself a herbalist entitle himself to act as an apothecary and do things which even apothecaries could not do unless duly qualified and having a certificate of qualification. Some herbalists, said his lordship, emphatically, are honest and respectable persons, but some there are who carry on a most dangerous business—secret, criminal, abominable, and wicked—and they are to be guarded against. The County Court Judge in this case was quite justified in holding that the defendant had "acted as an apothecary," and so was liable to the penalty.

Lord Justice Fry concurred, and said the question was whether there was evidence that the defendant had "acted as an apothecary," and he thought there was, as the man had asked questions and made up and sold a medicine. The making up of medicine was the very function of an apothecary, though they generally made them up on the prescriptions of physicians. As to the Act of Henry VIII., it contained nothing to authorise herbalists to make up and sell medicines for internal complaints. There was evidence to sustain the judgment of the County Court Judge and it must stand. Appeal dismissed.

CERTIFICATES OF STILLBIRTH.

MR. R. CAMPBELL, surgeon, of 83, Virginia Row, Bethnal Green, was summoned last week to answer a charge of having given a false certificate as to the birth of a certain child. In February last the defendant was called in in his professional capacity of accoucheur to attend a Mrs. Cousins. The child was proved by Mary Ann Paxey, a nurse, and by a Mrs. Hodgson to have been born alive, and to have been alive three hours after its birth. It was not stated when it died, but the circumstances led to a coroner's inquiry, and then the defendant gave a certificate that the child was stillborn. Such certificate was sent in the usual way to the registrar of deaths for the district, who found on his books the entry of the child having been born alive. The nurse proved that the defendant gave her the particulars to register the birth. The giving of the certificate of the child as "stillborn" was therefore said to be a mistake. The defendant was ordered to pay a fine of £10 and £1 1s. costs.

POISONOUS DRUGS IN PROPRIETARY MEDICINES.

MR. JOHN JACKSON MATTHIAS was summoned before the Lord Mayor last week for having, on January 15th, unlawfully sold by retail to Henry Moon a certain poison—to wit, three bottles known as syrup of camphor or cough linctus, which contained a proportion to the fluid ounce of nearly half grain of acetate of

morphine, the bottles not being distinctly labelled with the name of the article and the word "poison." The defendant pleaded guilty to the summons.

Mr. C. F. Gill appeared in support of the summons on behalf of the Public Prosecutor, and said that steps were taken in this case in consequence of an inquest which was held on a child who had drunk a bottle of the linctus, which had been purchased at the shop of the defendant. The purchaser, thinking that it was an ordinary cough medicine, treated it as an ordinary medicine bottle and left it about, with the result that the child drank it. Dr. Stevenson discovered in the stomach traces of the poison in question. Mr. Braxton Hicks, the coroner, who held the inquest, thought it desirable that some bottles of this cough mixture should be purchased at the defendant's shop, and three bottles were purchased. The bottles were submitted to Dr. Stevenson, and as the result of the analysis it was ascertained that there were two grains of acetate of morphine in each bottle. It was sold with the cantion that it was to be kept out of the reach of children. The learned counsel pointed out that that kind of caution would not act in the same way as a label with the word "poison" on it. The defendant seemed to be under the impression that the fact of the bottle having upon it the Government stamp made it a patent medicine, but that was an error under which a number of people laboured. It was not a patent but merely a proprietary medicine. It was thought desirable that these proceedings should be taken in order that it should be understood that all persons selling proprietary medicines were bound to comply with the seventeenth section of the Act if the medicine contained any poison scheduled in the Act. No doubt the defendant had done what a great number of other persons were doing under a misapprehension.

The Lord Mayor pointed out that nothing was said in Section 17 as to any mixture which contained poison. The words of the section were: "It shall be unlawful to sell any poison, either by wholesale or retail, unless the box, bottle, vessel, wrapper, or cover in which such poison is contained be distinctly labelled with the name of the article and the word 'poison,' and with the name and address of the seller of the poison." It seemed to him to be a great defect in the Act. Mr. Gill submitted that the section would be construed to cover all mixtures containing poisons. The Lord Mayor said that this was a matter of great public importance, and he suggested that the Act should be amended by the insertion in the section of the words "any compound or mixture containing poison." He thought that a statute such as that should be so clearly drafted that any person could understand it. He must say that when his attention was called to it he was much struck by the omission of the word mixture from the statute. A man of business may read the section as meaning poison only. Mr. Gill said that in the Act there was a protection for chemists in making up prescriptions. The Lord Mayor said that if the words used in the Act were "or any mixture or compound containing poison," then it would be compulsory on the part of the seller to call the attention of the buyer to the fact that the bottle did contain poison. Mr. Gill said he had no doubt that his lordship's observations would receive the publicity and the attention which they deserved. No doubt this would be provided for if there were further legislation. The object of the prosecution was to clear away the misapprehension in the minds of the public and the owners of patent and proprietary medicines, and to make it known that in selling articles containing poisons the seventeenth section of the Act must be complied with. The defendant said he had been in the habit of preparing the preparation for over thirty years, and he was never aware that it required the word "poison." It was admitted that this was a test question. There were a number of similar preparations which had a very large sale. The Lord Mayor said that no doubt there were many who felt that they need not mark these preparations "poison," having regard to the fact that poison was only one of their ingredients. The defendant said that one of the largest druggists in the country had told him that it would be impossible to carry on business if the Act was so construed. The bottle in question was placed on the table, so that no label could have prevented the child drinking it. The Lord Mayor said that, having regard for the fact that this was a test case, he should fine the defendant 10s. and 2s. the cost of the summons.

ADULTERATION BY FARMERS.

A BUCKINGHAMSHIRE farmer, named Townsend, appeared a few days ago at the Marylebone Police Court in answer to a summons charging him with having sold watered milk. The defendant lives in a place which is rather inauspiciously named Water Stratford. He had entered into a contract with the West London Dairy Company to supply them with "milk."

Complaint having been made about the quality of the milk which the company were sending out, a sample was taken and submitted for analysis, with the result that it was certified to contain from 19 to 21 per cent of added water. An inspector of nuisances for St. Pancras subsequently attended at Euston Station, and on the arrival of the train from Buckinghamshire, took a sample of defendant's milk, which was submitted to the public analyst. This officer certified it to contain 14 per cent. of added water.

It was urged on behalf of the defendant that although he was legally liable for the offence he was not morally liable. He had undertaken to supply the London firm with from eighteen to thirty gallons of milk daily, and had made a private arrangement with another farmer named Simkoe, by which the latter was to supply him with a certain quantity, to be mixed with his own and sent up to London.

The defendant denied absolutely that he had tampered with the milk, and stated that Simkoe had diluted that portion of it which he had undertaken to supply. This person was called, and frankly admitted that he had adulterated the milk supplied by him to the defendant, but stated that "his conscience pricked him," when he heard that the latter had been summoned. In the result the defendant, Townsend, was fined £15 and costs.

Having regard to the inadequate fines usually imposed for adulteration, this may be regarded as a considerable improvement. In inflicting the punishment, however, the magistrate, Mr. De Rutzen, is reported to have made certain remarks which we cannot help looking upon as unfortunate, namely, that "for a long time past he had thought that people who supplied milk in London were very much more sinned against than sinning, and he was only too glad to see a case like this taken up in order that it might be ascertained where the wrong came from." It ought not to be necessary to point out that the persons who distribute adulterated goods in all directions can hardly be whitewashed in this manner. The "wrong" comes from them even if they are not themselves the actual adulterators, and the law very properly makes them responsible. The fact that the retail vendor can protect himself by a warranty under the Act of 1875 is too generally lost sight of by magistrates and others. If he does not choose to insist upon a warranty or to take the necessary steps to assure himself of the genuine character of the goods he sells, he must take the consequences. As pointed out recently by the public analyst for Kensington, retail vendors of adulterated goods are merely so many channels through which the wholesale dealers can distribute them at a profit over a wide area, and it is by no means an uncommon thing for wholesale dealers to pay the fines inflicted on their retailers when the latter are caught. At the same time, there can be no doubt as to the value of the provisions of the Amendment Act of 1879, which allows an inspector to take the action which was taken in this case, namely, to seize samples at the place of delivery. Such action, however, is taken very rarely, and there can be little doubt that if it were carried out more often a very good effect would be produced, not only in the direction of detecting and punishing such offenders as those who figured in this case, but also because it would afford additional protection to honest producers.

AN ADVERTISING PRACTITIONER.

DISGUSTED PRACTITIONER.—The name referred to is in the *Medical Register* for 1890—qualifications L.S.A. and M.R.C.S. The matter might be brought to the attention of the General Medical Council, of the Royal College of Surgeons, and of the Apothecaries' Society. The address of the Registrar of the General Medical Council is 299, Oxford Street, London, W.; that of the Clerk of the Apothecaries' Society is Apothecaries' Hall, Water Lane, Blackfriars E.C.

CORONERS AND THEIR DUTIES.

NEMO writes: My practice includes parishes in two counties; I have, therefore to deal with two coroners, or rather, I do so with one, and never with the other One gentleman, from holding inquests in all cases of sudden death (or wher I think it necessary), has reduced violent deaths amongst infants and children to *nil*, and in consequence has not often now to hold inquiries. The other hold no inquests in my district under any circumstances; in one village alone there have been ten or twelve sudden or violent deaths in as many years, one a clear case of starvation in an illegitimate infant, and two through accidents brought on by the carelessness of others; in fact, it is a saying amongst the women in the village that anyone can make away with a child with impunity, as no inquiry will be held.

Now, Sir, I ask you of what use is a coroner of the above description? His office is simply a farce, and I think it quite time something was done to place the inquiry into violent and sudden deaths on a better foundation, for I hear mine is not an isolated case.

MEDICAL AID SOCIETY.

DR. TAYLOR.—We have more than once expressed our opinion of the Medical Aid Society, and advised medical practitioners to have as little to do with it as possible. We have pointed out that the touting method adopted by this and some other societies is greatly to be condemned, as it tends to seriously impair the dignity of the profession in the eyes of the public.

We quite agree with our correspondent that very little pecuniary advantage is likely to be derived by practitioners in country places who are willing to give their professional services, and to supply medicines to members at the following rates, namely, 1s. 10d. per annum for all members under 14 years, and 3s. 4d. per annum above that age.

LUNATIC PATIENTS.

IGNORAMUS.—The inquiry appears to contemplate the reception of persons not altogether of sound mind, and as paying patients, "at the request of their friends," and, of course, to detain them by the authority of the friends' request. All the statutory requirements must be obeyed, under the present and the new Lunacy Acts, by anyone receiving as paying patient any lunatic or alleged lunatic, and under this head comes every insane person and every person being a lunatic or idiot or of unsound mind. No person can be legally so received, at the request of friends merely, if of unsound mind in any way. If persons are free from unsoundness of mind the Lunacy Acts no not apply to them at all as "patients," but in that case they are free agents, and cannot be consigned to charge and care by friends and kept by such authority.

X.Y.Z. having failed not only to confidentially authenticate his allusive communication in accordance with the universal and essential editorial rule, but further omitted all direct reference to the local surroundings of the practitioner in question other than a general hypothetical statement, it is scarcely necessary to remark that until a comprehensive exposition of the facts and incidents attendant thereon are confidentally communicated we must decline to express any opinion on the points submitted.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 20th.

Smoke Nuisance in the Metropolis.—Lord STRATHEDEN AND CAMPBELL introduced a Bill for the abolition of the smoke nuisance in the metropolis similar in its provisions to the measure brought in last session, except that it was proposed to give extended powers to the London County Council. He did not propose to move the second reading until the local bodies had had an opportunity of scrutinising its details.

Ambulance Organisation.—The Earl of MEATH asked the Government whether they were in possession of information regarding the most recent means adopted in our colonies and foreign countries for the transport of civilian sick and injured; and, if not, whether they would direct the representatives of Her Majesty to furnish reports on the subject, to be laid before Parliament. He wished to draw attention to the fact that in this country there was no regular organised system for the transport of the civilian sick or injured. In a recent visit to the United States, he had seen in even fourth-rate towns arrangements in this direction which would put to the blush the authorities of the largest towns in Great Britain. Some years ago the Duke of Edinburgh made some effort to obtain an ambulance organisation, and to the late Colonel Duncan and the St. John Ambulance Society belonged the credit of whatever arrangements did now exist. The only public body possessing ambulances in London was the Asylums Board. There were hospitals which had horse ambulances, but no horses, and the Charing Cross Hospital had a hand ambulance. Four of the largest London hospitals had no system of ambulance whatever; and though the police had stretchers, these were mostly used for refractory drunkards. In Boston, United States, a system was in operation by which a horse ambulance could in two or three minutes be summoned to any quarter of the city. At certain distances in the streets boxes containing telephones were placed, and the policemen who possessed the keys of the boxes could thus communicate direct with the central office, and without leaving their beats. In each district there was an ambulance station, with a horse ambulance always ready to start on the receipt of a direction from the central office. In this country voluntary effort was alone relied upon, and though this might be magnificent, it was not always most effective.—Lord KNUTSFORD said the Government had no information from the colonies on the subject. He saw no reason, however, why the colonial Governors should not be asked to supply such information, not with respect to every colony, but with respect to some of the leading towns in Canada and Australia. He would consult with the Marquis of Salisbury as to the places respecting which inquiry should be made.

HOUSE OF COMMONS.—Thursday, March 20th.

Lunacy Consolidation Bill.—On the motion for the second reading of this Bill, Dr. TANNER objected.—Mr. W. H. SMITH explained that the Bill must be read a second time in the interests of the community, as it was necessary that the law should be consolidated before May 1st.—Mr. MATTHEWS explained that the Bill was to be referred to a Select Committee.—The Bill was read a second time.

Infectious Diseases (Prevention) Bill.—Dr. FARQUHARSON moved that the House resolve itself into Committee on this Bill.—Dr. TANNER objected.—The House having resolved itself into Committee, Dr. TANNER moved to report progress, whereupon the Chairman immediately left the chair.

Friday, March 21st.

Tuberculosis.—Upon the motion to go into Committee of Supply, Mr. KNOWLES called attention to the subject of tuberculosis, and to the expediency of scheduling that disease under the Contagious Diseases (Animals) Act. After shortly sketching the general character of the disease, he pointed out that Mr. Stephenson proposed that all cattle intended for human food should be slaughtered in public abattoirs, and should be examined by properly qualified inspectors, and that records should be kept of the animals so slaughtered, and of the disease. Compulsory powers of slaughter should be given, and compensation should be paid in certain cases to the owners. Local authorities should enforce more strictly the inspection of cow-houses and sheds. Possibly nothing would be sufficient but a wholesale slaughter of the tuberculous animals. The President of the Agricultural Department had received memorials on the subject, but did not at present see his way to deal effectually with it. The Lancashire County Council had recently passed a resolution that the Board of Agriculture should institute an inquiry into the disease and the loss sustained by owners and dealers in consequence of it. He knew one instance where, if the owner of a particular herd had slaughtered the whole of them and began breeding again, he would be better off than he was at present. His right hon. friend might ask what was to be done in the case of valuable breeds? A shorthorned bull might cost 2,000 guineas, but he might impregnate the herd with tuberculosis, and spread the disease over the whole country. His right hon. friend saw a difficulty in granting compensation, but such a beast ought not to be allowed to exist. If he had pleuro-pneumonia he would not, but tuberculosis was more dangerous. The butcher, he contended, was very hardly dealt with in existing circumstances. Surely, if no compensation was to be given to him from local or Imperial funds, the dealer or owner—who, perhaps, had had the beast for two or three years, should bear at least a portion of the loss. In France the disease was treated as contagious, and it should be so treated in this country. The question was an Imperial one; it concerned all classes, and the meat trade particularly, seeing that that trade was at present very severely affected by the foreign competition in meat. If the Minister for Agriculture could not see his way to schedule the disease under the Contagious Diseases (Animals) Act, he hoped he would be able to devise some other means of dealing with it. If they could not altogether crush out the disease at once, they might devise some means of reducing it in the country.—Dr. FARQUHARSON said the matter was one of very grave, pressing, and, he might almost say, national importance, and it was right that the House should, from time to time, step aside from ordinary political work in order to consider questions like this of a sanitary nature which might seriously and prejudicially affect the health of the community. When, as they had been told, 150,000 persons died annually in this country from consumption, and that consumption was an increasing disease, it was quite time to look into the causes of it in the interests of the general community, so that they might check the disease if possible. It could be no longer said that the question was a mere doctor's fad. As the matter stood it seemed to him that the first thing to decide was whether consumption was a communicable disease, and next whether the bacillus in man and in the animal was the same creature. Investigation and experiment had proved it to be so, and that the disease might be communicated to man by the bacilli in the meat of the affected animal. It required a temperature of more than 100° to destroy the bacillus in meat, and seeing that a joint was very rarely thoroughly cooked it is probable that the creature was not destroyed by ordinary cooking. Moreover, it was an established fact that the spores of the bacillus required a greater degree of heat for destruction than the bacillus itself, and this was another and greater source of danger in respect to only partially-cooked meat. Again, it was also proved by experiment that consumption was communicable to man in milk, and evidence of a scientific nature could be brought forward to show that disease might be present in the udder of the animal without the fact being recognised during life. This made the matter all the more serious and pressing, for the milk might be affected though no disease had been detected or suspected in the udder. Consumption was increasing, especially among children, and he thought it was not altogether extravagant to suppose that the cause of this increase of a tubercular disease was the milk which children drank from tubercular animals. Every disease of that kind must have some kind of of proper soil in which to spring up, but, unfortunately, the condition of many of our poor people rendered them only too much disposed to catch such a disease as tuberculosis. One of the most prominent of the predisposing causes was starvation, while bad ventilation and the wretched housing of our working people were also causes, which might be grouped under the general term of deficient hygienic conditions. He thought that the case which had been brought forward by the hon. member was a very grave and threatening one, and that it was the duty of the Agricultural Department to try and find some remedy. He had himself brought the matter before the House last year, but then there had been no particular department to which to go, and his efforts had received very scant notice. Now, however, when they had a definite department, presided over by a Minister who took a sincere interest in everything that affected the agricultural community, he thought that they might appeal to him to try to find some remedy for this disease which was threatening the health of the community.—Mr. C. W. GRAY remarked that the subject was one of great interest to agriculturalists, to consumers of meat generally, and to consumers of milk. At the same time he thought the very characteristics of the disease showed that it would be impossible for any department to deal with it in a way that would give any hope of that department being able to stamp it out. But they could not go for stamping-out legislation without calling on the taxpayer for a great deal of money, and he did not think that the taxpayer would consent to pay a large amount of money simply to reduce a disease by killing 100 or so of diseased cattle out of tens of thousands which suffered from the disease.—Mr. M. STEWART did not consider that the plan of scheduling would be successful, but would create an unpleasant feeling. The Board of Agriculture should take every means in their power to inform themselves as to whether there was any remedy for the disease. He thought that by stringent measures of watching at the places where cattle were slaughtered much good would be done, and they would soon arrive at the point where the farmers would not sell these diseased cattle.—Mr. CHAPLIN said there could be no doubt as to the importance of the question raised by his hon. friend, and so far as he was concerned he would render every assistance in his power to arrive at full information on this question, but he was bound to say he found himself confronted with great difficulties in connection with this question. He understood that his hon. friend wished to get rid of this disease altogether, but he did not understand the means which, in the opinion of his hon. friend, they ought to adopt to accomplish this purpose. He doubted whether the Board of Agriculture had it in its power to accomplish what was proposed. His hon. friend had pointed out that the disease was not limited to cattle alone. He had read the report of the Departmental Committee which considered this question last year, and there it was set out that the disease affected man to a much larger extent than animals. It prevailed to

the extent of 10 to 15 per cent. among human beings, and in Paisley it was 17.5 per cent., but in Dublin, where there was a large number of dairy cows amongst which the disease was specially prevalent, the percentage among this class of cattle was 4.5. In Germany it was from 1 to 20 per cent. He felt bound to say, therefore, that the question was at present one more for scientists and experts than for the Board of Agriculture. After the experts had settled the question, then it would be for the Board, if necessary, to do their part. His hon. friend suggested that they might hope for the ultimate disappearance of tuberculosis. Well, it was perfectly possible to exterminate pleuro-pneumonia, and he hoped in a few days to ask the sanction of the House for more legislation with regard to the disease, but without wholesale human bloodshed he had no such hope with regard to tuberculosis. The extermination of that disease could only be achieved by the universal slaughter of human beings. He had replied to a Sheffield request for an interview, that he would be happy to receive a deputation after the experts had given their decision. He was very sorry not to be able to reply more hopefully, but he hoped he had said enough to show the House that this question, which was full of difficulties, had not arrived at a stage when he could deal with it as Minister of Agriculture. He could only add that he should lose no opportunity of obtaining information on the matter.—Sir LYON PLAYFAIR hoped that the Minister of Agriculture would inquire into the subject fully and minutely. The right hon. gentleman seemed to think that it was difficult to cope with the disease because it could be communicated by man to the lower animals. It must not, however, be forgotten that herbivora did not live upon man, but that man lived upon herbivora.—Mr. W. F. LAWRENCE suggested that strong measures should be taken to prevent wasting or pining animals from being exhibited for sale.—Mr. G. BALFOUR thought it would be well if the President of the Local Government Board and the Minister of Agriculture would consent to receive jointly a deputation representing the various classes specially interested in this question.—Mr. RITCHIE said that he and his right hon. friend would certainly take into consideration the suggestion of the hon. member who had just sat down. The question was undoubtedly one of great importance, and every department of State which could do anything in the matter ought certainly to render assistance in the endeavour to solve what was a very grave problem.

Monday, March 24th.

Infectious Diseases Prevention Bill.—The House went into Committee on this Bill, and after several amendments had been agreed to, progress was reported, on the motion of Dr. TANNER.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE COST OF AN OUT-PATIENT.

DR. HUGH WOODS (Highgate) writes: The cost of the out-patient departments of the hospitals is so hopelessly involved with the general cost of the institution, that any method of estimating it separately is, of course, extremely intricate. It seems to me, however, that it would be easy by comparison of different institutions, and especially by consideration of those which treat out-patients alone, to arrive at a fair average standard cost of a single attendance of an out-patient.

If such a standard average cost of a single attendance of an out-patient were once well established, we should merely need returns of the number of out-patients treated and their average number of attendances in order to estimate their reasonable cost. If there were any exceptional circumstances at any institution, it could be taken into account, of course; but such would be rare. If we took $2\frac{1}{2}$d. as the average cost of a single attendance of an out-patient, and the average number of attendances as eight, we should then have 1s. 8d. as the average cost of an out-patient. I think that this is about the actual fact.

The general public ought to be able to judge of the expenditure of the hospitals; and, in order to enable them to do so, they ought to know the proper average cost of an occupied bed, or the proper average cost per week (or month) of an in-patient, and the proper average cost per single attendance of an out-patient. These might be estimated once for all, subject to occasional revision. Any reasons for a deviation from such standard could be explained in the reports. Using these standards as a guide, we should want the following data:

a. The total ordinary cost of the institution.
b. The number of beds occupied and unoccupied.
c. The number of in-patients and average time of stay.
d. The number of out-patients and average number of attendances by each.

These data could be easily published in the daily papers every year. We should then use the recognised standard cost of one attendance on an out-patient, and so get the cost of the out-patients. Deducting this from the total ordinary expenditure, we should have the cost of the in-patients, and we could divide the remainder by the number of occupied beds, and get the cost of an occupied bed for comparison with the standard cost thereof. On multiplying the number of in-patients by their average time of stay, expressed in weeks or months (according to the above standard), and dividing the total cost of the in-patients by this, we should get the average cost per week (or per month) of each in-patient for comparison with the standard cost.

SANITARY ARRANGEMENTS OF THE LONDON HOSPITAL.

VERY serious defects have been discovered in the drainage and sanitary appliances of the London Hospital. Attention seems to have been first directed to the matter about six months ago by the occurrence of numerous cases of illness among the nurses, and of pyæmia and unhealthy conditions of wounds among the patients. A special committee was appointed, and secured the assistance of Dr. Louis Parkes, who immediately instituted an investigation which revealed an almost incredible degree of sanitary imperfection, to use no stronger term. Old brick drains, some disused and others blocked, were found in the basement of the building, and large quantities of foul deposit and sewage-impregnated earth will have to be removed. In the place of these old brick sewers a properly-constructed new drainage system will have to be constructed. The sanitary appliances, water closets, etc., are unhesitatingly condemned, and new turret blocks are to be erected, properly ventilated and separated from the wards, and provided with decent appliances. Those in use down to the present time certainly do not deserve to be called so. The report of the subcommittee now before us states that the water-closet accommodation is imperfect, that proper slop sinks are absolutely non-existent, that the present water closets are used for flushing bed pans, and that "the baths have to be used for washing the various bed sheets"!

The discovery in one of the most important hospitals in London of such serious defections from the ordinary and now almost universally recognised standards of sanitary construction and managements, to say nothing of ordinary cleanliness, is really an astounding revelation, and we are not surprised to read that the subcommittee have, acting on the advice of Dr. Parkes, recommended that alterations "ought to be undertaken at once in connection with the drainage," at an estimated cost of nearly £7,000.

We can well believe that these discoveries have come as a very unpleasant surprise to the Managing Committee, who have only fulfilled an obvious duty in determining to take the matter in hand without a day's delay. It would perhaps be as well if the lesson were taken to heart by the committees of other hospitals erected in pre-sanitary days; warnings have been given before by similar discoveries in other hospitals, and, if these have been neglected at a hospital managed by so public spirited a committee as that which directs the London Hospital, an uneasy suspicion arises that all may not be right elsewhere.

CONSULTING PHYSICIANS AT LUNATIC ASYLUMS.

AT a recent meeting of the Birmingham City Council, Alderman Lloyd, in moving the report of the Lunatic Asylums Committee, said there was a reduction of thirty inmates on the year and seventy-five on the half year. The reduction of seventy-five included forty-six patients from the parish of Birmingham, due probably to the increased infirmary accommodation at the workhouse, and therefore merely a temporary one. The suggestion in the report that two honorary consulting physicians should be appointed had not been considered by the committee. The tendency at the present time, it was said, was to regard insanity to a greater extent than formerly as a bodily disease, and rate-supported asylums were the only institutions where observations could be made on large bodies of patients. In New South Wales persons before being certified as insane were remanded to a hospital, and one-third of the cases were released at the end of the month—temporary cases, resulting from drink or temporary disturbance of health. It seemed to him a pity that in such cases the patients should be stamped as lunatics by being sent to asylums.—Mr. Beale seconded the motion, which was carried.

FREE MEDICAL RELIEF FOR CITY CLERKS.

DR. HUGH WOODS (Highgate) writes: At the meeting of the Hospitals Association on March 12th, Dr. Bristowe advocated free medical relief for city clerks and curates. As it is not customary to charge curates any fee, a new organisation for their benefit would be a work of supererogation. In the case of city clerks, however, it is far otherwise, and Dr. Bristowe's suggestion as to free medical relief for them will doubtless commend itself to the judgment of city clerks. As the tendency in the present day is, undoubtedly, in the direction of abolishing the degrading custom of accepting

payment for medical services, Dr. Bristowe's proposal seems quite practicable. I shall, therefore, make a few practical suggestions as to the method which ought to be adopted in order to provide complete medical relief to city clerks, and others, without any payment. If a city clerk is not too ill to continue his work, it is obviously unfair that he should lose his wages, or risk his position, by attending hospital during office hours; consequently, the hospital out-patient departments ought to be open to him between 8.30 and 10 P.M. This would not interfere with the dinner hour of the hospital staff. If the city clerk is too ill to go to work, it is certainly unkind to subject him to the delay and bustle of the out-patient rooms. In this case, then, or when he is too ill to come, he ought to be visited at his home by a hospital physician or surgeon, unless it is possible to admit him to hospital (and it often is not). Again, city clerks will occasionally need night visits. In view of this the members of the staff might arrange to take night duty in turns. Of course all this means an extra burden on the staff; but it is the only way in which free medical aid can be afforded to city clerks to any purpose. Admitting them to out-patient treatment during office hours, and letting them pay for all other medical treatment, is a mere mockery of free medical treatment. Has the eloquence of Sir Andrew Clark made the thread-bare coats of city clerks to shine brighter than before, and deepened the hectic which gives colour to their hollow cheeks, only in order to gain for them so small a boon? Surely not!

ABUSE OF THE CLUB SYSTEM.

PSIMATHÊS writes: In the North I find that there are men with salaries of from £3 to £7 and over per week who are paying only 1d. per week for unlimited medical attendance for themselves and their families. At least one man in receipt of £1,000 a year is doing this. Hence it follows that a population, which includes a body of workmen whose aggregate wages are £1,000 per day, provides only two medical men with a tolerable income.

"PENNY A WEEK MEDICINE."

I R.C.S. writes: I am sure that some of your readers will be equally astonished with myself to find Dr. Hugh Woods advocating a quiescent attitude towards the much abused hospitals and the Bethnal Green Bonus Society (for such it might be more appropriately styled), leaving them to fight out their own battles, in the vain hope that the one may be squashed by the other. Dr. Woods, however, has no reason to fear that there will be any lack of supporters to his suggestion, as these already exist, seeing that out of the great bulk of general practitioners scarcely ten righteous men could be found to save their profession, even if this could be done by the lifting up of a little finger.

Perhaps after all, however, there is some significance to be attached to the word "watch," as even this suggests a transitory state of activity "devoutly to be wished," compared to the somnolence and torpor which appear always to have existed. What the bulk of practitioners are about, or what they are not about, it is difficult to foreshadow, unless the state of things has become so desperate (which the "Bethnal Green Provident Medical Aid Society" would appear to indicate) that they are stricken down with the "general paralysis of the insane."

If we are called upon to seriously discuss the Society, I should like just to remark that the reasons "why you should join"—namely, "subscription smaller than any other society," and "because there is no distinction of class"—are the very reasons, amongst others, why such a society should never be allowed to exist. The Society, however, may probably think otherwise, as it announces in rather triumphant language and large type that there is to be "no more Bumbledom," whatever that classical phrase is supposed to mean.

OBITUARY.

JOHN GREGORY FORBES, F.R.C.S.

R. J. GREGORY FORBES died somewhat suddenly on March 19th, the age of 69. He was the son of Captain James Keith Forbes, officer in the East India Company's service, was grandson of r. John Forbes, of Blashford, Aberdeenshire, and grand nephew of e eminent Dr. George Gregory, Physician to the Small-pox and accination Hospital, London. He was apprenticed at the beginning of his professional career to Dr. William MacIntyre, of , Devonshire Street, afterwards of 84, Harley Street; and subsequently married the eldest daughter of that gentleman.

Mr. Forbes was a student of the Middlesex Hospital, of which stitution he was for some time house surgeon. In 1841 he obined the diploma of M.R.C.S. and that of L.S.A.Lond., and in 1850 became F.R.C.S. He was a Fellow of the Royal Medical and irurgical Society, and a Vice-President of the Society for the lief of Widows and Orphans of Medical Men, in which for many ars he took active interest. He conducted a large practice in ndon from 1844 to 1879, and in the latter year gave up his professional work in Paddington, where he was then living, and retired to Egerton, Kent. From Egerton he moved, in 1888, to Bromley, in the same county. His wife predeceased him by only a few months, and they have left a large family of sons and daughters, three of the sons being clergymen of the Church of England.

Last Tuesday week Mr. Forbes had come to London for the purpose of visiting his wife's grave, at Highgate, when he was seized soon after 12 noon, at Victoria Station, with apoplexy, but remained sufficiently sensible to send for his friend Dr. James E. Pollock, who advised his removal to St. George's Hospital. But as the deceased gentleman preferred going to his home, a vehicle was ordered and he was being driven to Bromley by road when he became insensible as the carriage was passing through the New Kent Road. He was there taken to the house of Mr. Alfred Pain, who gave him every attention until his death, at 3 A.M. on the following morning, in the presence of the members of his family, who had meanwhile been summoned to the deathbed of their relative. The funeral took place on Saturday last, at Highgate, in the presence of a large number of relatives and friends. Mr. Forbes was a high-minded Christian gentleman, and an exemplary family practitioner, cultured, courteous, unselfish, and benevolent. He never made an enemy, but had troops of friends, amongst whom the memory of his sterling goodness will endure.

ESSEX BOWEN, M.D., M.R.C.S., L.S.A., J.P., Birkenhead.

WE regret to announce the death of this esteemed member of the Association, which took place on March 18th. The deceased was 60 years of age, and was a native of Pembrokeshire. He became M.R.C.S. in 1850, L.S.A. the following year, and M.D.St.Andrews in 1858. When the Crimean war broke out he was attached as surgeon to the Royal Artillery; he went through the whole of the campaign, and was present at the siege of Sebastopol. At the end of the war he became house-surgeon to the Chester Infirmary; he went to Birkenhead in 1861 in a similar capacity at the Borough Hospital, and subsequently commenced practice in succession to the late Dr. Dixon. He was one of the surgeons to the Birkenhead Borough Hospital and to the Wirral Children's Hospital.

Dr. Bowen's professional position and reputation were acknowledged to be about the highest in the district. Socially he was much esteemed, and was a respected member of several learned and artistic societies. His sympathetic and kindly ways endeared him to a large circle of friends and patients, and his death leaves a void which it will be difficult to fill. In politics he was a Conservative, and was on the commission of the peace for Pembrokeshire. About a couple of months ago he suffered from an attack of acute rheumatism, but appeared to have recovered his usual health. On the day of his death he was suddenly seized with some cardiac disorder, and expired in about a quarter of an hour. Dr. Floyd, of Birkenhead, attended him during his last fatal attack.

JAMES WALTER CAVANAGH, M.R.C.S.ENG., L.R.C.P.ED., Liverpool.

THE announcement of the death of this well-known practitioner will be received with much regret. His life was by no means an uneventful one. He was born at Drimna Castle, in the County Dublin, sixty-three years ago, became M.R.C.S.Eng. in 1855, and accepted service for the Crimean war. He was assigned to the Turkish contingent at Scutari, where he remained most of the time, visiting the Crimea occasionally; and at the close of the campaign came to England. Among the first duties which he undertook in this country was that of surgeon to the Shropshire Militia, an office he held from 1857 to 1871. In 1865 he obtained a diploma from the Royal College of Physicians of Edinburgh. Subsequently he commenced practice in Great Howard Street, Liverpool, and afterwards removed to Islington. About six years ago he went to reside in Rodney Street. Besides being connected with a local volunteer and rifle corps, he held for twenty years the post of Surgeon to the Main Bridewell, the duties of which occupied most of his time, it being necessary for him to visit the prisoners morning and evening.

He was highly esteemed by the military officers with whom he came in contact, and also by the heads of the police and by the magistrates before whom he was often called to describe the mental state of prisoners. Of late his health had become very indifferent, and as he wished to be near his friend and medical adviser, Dr. Callon, who on many occasions undertook his duties at the Bridewell, he returned to his old home in Islington, only, as

it proved, to die. His death was, however, quite unexpected, as he had paid his last visit to the Bridewell only five days before. He was never married.

Mr. Raffles, the stipendiary magistrate, made the following allusion to the deceased gentleman, speaking from the bench: "I regret to notice in the papers that our friend Dr. Cavanagh is dead. He served the office of medical man at the Bridewell for twenty years, and procured and enjoyed the esteem of all who came in contact with him. He continued to do his work to the last, though he went about with tottering steps; but he did his work well, and we honour him accordingly."

JOHN MACPHERSON, M.A., M.D.ABERD., M.R.C.S.ENG.

DR. JOHN MACPHERSON, Inspector of Hospitals (retired), who died on March 17th, at the age of 72, had been for some time in failing health. He was born and partly educated at Old Aberdeen. After working some years at St. George's Hospital, he studied at Bonn, Vienna, and Berlin. He became a Member of the Royal College of Surgeons in 1839, and in 1840 entered the service of the East India Company as an assistant-surgeon.

After serving first with the Horse Artillery and subsequently with a native infantry regiment in Arracan, in 1843 he became civil surgeon of Howrah, in the neighbourhood of Calcutta, and three years later was appointed assistant-surgeon of the European General Hospital in Calcutta. In 1846, during the first Sikh war, he was suddenly ordered to the front, where there was a great scarcity of medical officers, but reached Ferozepore to find that the fighting was over and his services were required only in the field hospital. He returned to Calcutta, continuing there for the remainder of his stay in India, first in the General Hospital, and afterwards as Presidency surgeon and superintendent-general of vaccination. Throughout this period down to his retirement in 1864 he had an extensive private practice.

After twenty-four years of continuous service, Dr. Macpherson retired in 1864. During the whole of that period he was never away from his post on furlough; probably no Government servant ever remained continuously on duty for a greater number of years. On his return to England he took up his residence in Curzon Street, where he continued to practise up to a recent date. His admirable social qualities, his well-stored and cultured mind endeared him to many friends, who will long cherish his memory. He was the author of many useful and interesting works, among which may be mentioned *The Baths and Wells of Europe*, also *Our Baths and Wells*, besides various important papers on some of the more specially Indian diseases, for example, *Cholera in its Home*, *The History of Cholera*, etc.

Dr. Macpherson was for many years a highly respected member of our staff. His writings and opinions were always characterised by judicial impartiality.

JOHN HUNTER RUTHERFORD, L.R.C.P., L.R.C.S.EDIN.

MR. RUTHERFORD, a well-known citizen of Newcastle, died suddenly on March 21st, at the age of 64. He was born at Jedburgh, and received his education at the grammar school of that town, and subsequently at St. Andrews University. Having resolved on entering the ministry, he completed his education at Glasgow University. After an active career as an evangelist minister in the northern counties, he determined, although in middle life, to study medicine, and entered himself as a student at the Medical College, Newcastle. He obtained the diplomas of L.R.C.P. and L.R.C.S.Edinburgh, in 1867.

Mr. Rutherford identified himself with most of the leading temperance organisations in Newcastle. He also for many years took a keen interest in local sanitation, and in 1866 published a voluminous report on the public health of Newcastle, as the result of personal inquiry. He was for sometime a member of the local Board of Guardians, and was an educationalist of the most liberal type.

Mr. Rutherford was associated with much philanthropic work, and took an active part in many movements having for their object the amelioration of the lot of the working classes. The guardians decided to give him a public funeral.

A SUBSCRIPTION has been opened in Russia for a memorial of the late Professor von Wahl, of Dorpat, which is to take the appropriate form of the enlargement and endowment of the leper house which he founded. The institution will henceforward bear his name.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

ADDENBROOKE'S HOSPITAL.—The Committee of Selection have chosen Mr. Hubert Higgins, L.R.C.P., M.R.C.S., late house-surgeon at St. George's Hospital, London, for election to the House-Surgeoncy of Addenbrooke's Hospital in the room of Mr. Ashton Street, who has entered the Indian Medical Service. The formal election by the quarterly Court of governors takes place on Monday, March 31st.

HEALTH LECTURES.—Dr. Donald MacAlister has just completed a short course of lectures on "Germs and Disease," which he delivered to a mixed audience of University and Town in the Alexandra Hall, Prof. Humphry, F.R.S., presiding. It is hoped that this may be the beginning of a series to be given by other teachers connected with the Medical and Natural Science Schools on subjects which the current discussions concerning the drainage of the town have brought to the front.

CONGREGATIONS FOR MEDICAL DEGREES.—Congregations, at which candidates may be admitted to medical and surgical degrees, will be held next term on the following days: April 24th, May 8th, May 22nd, June 5th, and June 12th. The hour of meeting is 2 P.M.

LECTURES IN BOTANY.—Mr. A. C. Seward, M.A., of St. John's College, has been appointed a University Lecturer in Botany for three years, from Easter, 1890.

NATURAL SCIENCE SCHOLARSHIP.—J. F. Bryant has been elected to a Minor Scholarship of £40 a year in Natural Science at Clare College.

GLASGOW.

THE winter medical session at Glasgow closes this week, and the summer session opens on May 1st. In the interval the professional examinations will be carried on, beginning on April 1st. There are 118 candidates for the first professional examination, 82 for the second, and 67 for the third. At the same term last year the numbers were 130, 67, and 90.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

HEALTH OF THE CITY OF ABERDEEN FOR FEBRUARY.

THE medical officer of health, Professor Hay, has issued his report for February. The total number of deaths within the city during the month was 260, equal to an annual rate of 27.42 per 1,000. The death-rate for the month continued unusually high—higher than in January. The mortality was most marked in persons of the "post-mature" period, in fact, the death-rate in this class was amongst the highest on record. There was also a decided increase of mortality in the "adolescent" period, but a distinct decrease in the "school" period. With the exception of 1887, when the death-rate was 27.56 per 1,000, the month of February had the highest death-rate for the last ten years, and was one-third greater than the average.

The most striking feature was the high mortality from diseases of the respiratory system, which was substantially higher than in any year of the past decennium. The death-rates from nervous diseases, developmental diseases, and from miasmatic diseases (except in 1887, when there was a severe epidemic of measles) were also the highest in the decennium. But the death-rate from diarrhœal diseases, with the exception of 1884, was the lowest recorded. The mortality from tubercular, urinary, and digestive diseases was slightly under the average, and from diseases of the circulatory system rather above the average.

Dr. Hay states that the excessive mortality of February was thus due to miasmatic, lung, and nervous diseases, and that there cannot be a doubt that an important factor in this great fatality from these diseases was the presence of influenza. It directly raised the miasmatic death-rate, for about one-half of the deaths from zymotic diseases was due to influenza; and it, in all probability, indirectly increased the mortality from lung diseases. And when it is recollected that the disease exists in a nervous type

arity, its influence in increasing the mortality from nervous disease is not improbable. Sixteen deaths were certified as having been directly due to influenza, against 11 in January. The ages of the persons dying ranged from 20 to 84 years, the majority being about 50 years and upwards. This is in agreement with the experience of the previous month, and shows that this epidemic of influenza, unlike most of the zymotic epidemics with which we are familiar in Aberdeen, has almost exclusively affected grown up persons, or, at least, proved fatal to adults.

In the 16 fatal cases, the duration of the illness varied from 4 to 30 days, extending in the great majority of the cases from 5 to 14 days. Complications were certified as having existed in every one of the cases. In 10 cases inflammation of the lungs was the complication; in 3 it was syncope, cerebral apoplexy, and diarrhœa respectively; while in the remaining 3 cases it was given as "old age." The weather showed some exceptional features. Compared with that of the same month in the previous ten years, the barometric pressure was the highest recorded, while the daily range of temperature was the lowest recorded, as was the rainfall, except in 1882. The mean temperature was about the average.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

BEXHILL (Population, 4,550).—*Low Death-rate: Mild Prevalence of Measles and Chicken-pox.*—Dr. J. P. Wills makes a very favourable report for 1889. The death-rate was only 12.9 per 1,000, and the deaths from zymotic diseases comprised only 2 from diphtheria and 1 from typhoid, which had been contracted outside of the district. In the last quarter of the year, measles and chicken-pox were very prevalent, but there were no deaths. Dr. Wills attributes the low death-rate to the climatic advantages of Bexhill, there being practically unlimited air space both in front of and behind almost all the houses and streets.

HASTINGS (Population, 57,176).—*Low Death-rate: some Cases of Diphtheria, traced to Sewer Gas: Recorded Sunshine.*—This borough keeps up its reputation as a healthy health resort, with its annually decreasing death-rate, and the general freedom from zymotic sickness. Mr. Knox-Shaw reports most favourably on the health of the year 1889, and in virtue of the low death-rate (12.4 per 1,000), claims for it the foremost place among healthy towns. There was very little prevalence of scarlet fever during the year, and no deaths, nor were there any known cases of small-pox. Ten cases of diphtheria were reported, and 6 deaths registered. The cases were confined chiefly to one area, but no common cause of infection, such as food or water supply, was discoverable; but circumstances pointed to atmospheric infection arising from sewer gas. The total of deaths from zymotic causes was 36, yielding a rate of 0.63 per 1,000. As regards the climatic conditions of the year, Mr. Shaw reports a deficiency both of rainfall and bright sunshine, the former to the amount of $3\frac{1}{2}$ inches, and the latter to the amount of 81 hours. By the uninterrupted registration of the "sunshine recorder" for upwards of seven years, however, it has been shown that Hastings one of the sunniest places in the whole of the British Isles.

KIDDERMINSTER (Population 26,000).—*Extensive Epidemic of Measles.*—Mr. Corbet reports that the duties of the past year (1889) have been very heavy in consequence of scarlet fever and a severe epidemic of measles. The mortality was, however, comparatively small, for of 155 known cases of the former disease only one proved fatal; while of measles, there were only 18 deaths amongst 1,051 cases. Some cases of enteric fever were of mild type, but their origin was not traced. The same remarks apply to diphtheria. The general death-rate, 16.8 per 1,000, was lower than any of the previous five years, but the zymotic death-rate showed a slight increase.

TOWCESTER RURAL (Population 12,251).—Mr. A. P. Kingcombe, health officer for the Towcester district, gives a very favourable account of the public health during 1889. With the exception of a singularly mild outbreak of measles in December, only two cases of zymotic disease came under his notice, one of membranous croup, and one of diphtheria.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, March 22nd, 5,710 births and 4,051 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 26.6 and 23.6 per 1,000 in the two preceding weeks, further declined to 21.7 during the week under notice. The rates in the several towns ranged from 14.5 in Leicester, 16.4 in Norwich, 17.1 in Derby, and 17.7 in Brighton, to 28.0 in Sheffield, 28.3 in Blackburn, 28.8 in Wolverhampton, and 30.5 in Manchester. In the twenty-seven provincial towns the mean death-rate was 23.8 per 1,000, and exceeded by 4.5 the rate recorded in London, which was only 19.3 per 1,000. The 4,051 deaths registered during the week under notice in the twenty-eight towns included 366 which were referred to the principal zymotic diseases, against numbers declining from 379 to 366 in the three preceding weeks; of these, 141 resulted from whooping-cough, 79 from measles, 44 from scarlet fever, 43 from diphtheria, 34 from diarrhœa, 22 from "fever" (principally enteric), and not one from small-pox. These 366 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic rate was 2.1, while it averaged 1.8 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Leicester, Birkenhead, Huddersfield, and Halifax, to 3.4 in Bristol, 4.1 in Bolton, 4.5 in Salford, and 4.6 in Brighton. Measles caused the highest proportional fatality in Liverpool and Derby; whooping-cough in Salford, Bristol, Bolton, and Brighton; and scarlet fever in Wolverhampton. Of the 43 deaths from diphtheria recorded during the week under notice in the twenty-eight towns, 23 occurred in London, 3 in Liverpool, 3 in Birmingham, 3 in Manchester, and 3 in Salford. No fatal case of small-pox was registered, either in London or in any of the provincial towns, and 7 cases of small-pox were under treatment in the Metropolitan Asylums Hospitals on Saturday, March 22nd. These hospitals contained 1,076 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,109 at the end of the eleven preceding weeks; 78 cases were admitted during the week, against 49 and 73 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 4.5 per 1,000, and was considerably below the average.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns 836 births and 641 deaths were registered during the week ending Saturday, March 22nd. The annual rate of mortality in these towns, which had declined from 28.3 to 25.2 per 1,000 in the four preceding weeks, further fell to 24.8 during the week under notice, but exceeded by 3.1 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Aberdeen and Dundee, and the highest in Glasgow and Perth. The 641 deaths in these towns during the week under notice included 101 which were referred to the principal zymotic diseases, equal to an annual rate of 3.9 per 1,000, which exceeded by 1.9 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Greenock, Edinburgh, and Leith. The 278 deaths registered in Glasgow during the week under notice included 15 from whooping-cough, 12 from measles, 5 from diphtheria, and 2 from scarlet fever. In Edinburgh 12 fatal cases of measles, 11 of whooping-cough, and 4 of diphtheria were recorded; and 8 deaths were referred to measles in Leith. The death-rate from diseases of the respiratory organs in these towns was equal to 5.0 per 1,000, against 4.5 in London.

HEALTH OF IRISH TOWNS.

In the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, March 15th, were equal to an annual rate of 30.6 per 1,000. The lowest rates were recorded in Lisburn and Newry, and the highest in Dundalk and Waterford. The death-rate from the principal zymotic diseases averaged 8.9 per 1,000. The 196 deaths in Dublin during the week under notice were equal to an annual rate of 29.0 per 1,000 (against 30.7 and 28.2 in the two preceding weeks), the rate for the same period being 20.9 in London and 20.8 in Edinburgh. These 196 deaths included 18 which resulted from the principal zymotic diseases (equal to an annual rate of 2.7 per 1,000), of which 7 were referred to whooping-cough, 4 to different forms of "fever," 4 to diarrhœa, and 3 to measles.

MEDICAL NEWS.

THE Medical Faculty of the University of Kieff will celebrate the fiftieth anniversary of its foundation on December 4th of this year.

PRINCE ALBERT VICTOR laid the foundation stone of the Leper Asylum at Bombay on Wednesday last. Sir Dinshaw Manockjee Petit has given a lakh of rupees towards the cost of the building.

THE BIRMINGHAM MUSICAL FESTIVAL, 1891.—At a meeting of the Orchestral Committee, held last week, Dr. Wade was unanimously elected chairman of the committee, and consequently *ex-officio* chairman of the General Committee.

INFLUENZA is said to have made its appearance at Wellington and Christchurch, New Zealand, and to be increasing in Dunedin. The epidemic is reported to have broken out at Melbourne, being identical in character with the epidemic in Europe.

THE medical students of Bologna have opened a subscription for the erection of a bust of the late Professor Loreta in the clinical theatre of the University. A considerable sum has already been collected.

THE Treasurer of the Royal Southern Hospital, Liverpool, has received from the executors of the late Isaac Denton a legacy of £1,000, bequeathed by him to that institution. Mr. Denton had been for many years a generous supporter of the hospital.

Mr. William Gurslove Marshall, Medical Superintendent of the Female Department of Colney Hatch Asylum, has, after thirty-seven years' service, resigned his appointment, receiving from the London County Council a superannuation allowance of £633 6s. 8d.

Dr. E. Symes Thompson has just completed a second edition of the *Annals of Influenza* of his father, Dr. Theophilus Thompson, originally published by the Sydenham Society. The new edition is to be published by Messrs. Percival and Co., and will contain the record of the epidemic of 1847 as well as that of 1889-90.

Sir John Kirk, M.D., G.C.M.G., F.R.S., formerly Consul at Zanzibar, and Sir William Turner, M.B., D.C.L., F.R.S., Professor of Anatomy in the University of Edinburgh, have been elected members of the Athenæum Club under Rule II, which provides for the annual election of a certain number of persons of distinguished eminence in science, literature, or the arts, or for public services.

The new hospital for children which is now in course of construction in the north of Berlin, will be opened on June 1st. Professor Virchow has been the moving spirit in its establishment, and Dr. A. Baginsky is to be the medical director. It is built on the pavilion system, and will have a "Poliklinik" or out-patient department attached to it.

A petition has recently presented to the Austrian House of Deputies praying for the admission of women to the philosophical and medical faculties of the universities of the Empire. The petition was signed by 4,812 persons, among whom were many leading representatives of literature, art, science, and the teaching profession.

Influenza in Portugal.—According to the *Correio Medico*, the epidemic of influenza which was thought to have come to end in February has recently shown fresh signs of activity in Lisbon. Many horses have also fallen victims to the disease. At Chaves there has lately been a recrudescence of the epidemic, and in other parts of Portugal new cases are frequently reported.

The London University and Provincial Colleges.—At a recent meeting of the Queen's College, Birmingham, Medical Society, the following resolution was carried unanimously:—"That this Society condemns the proposed reconstitution of the London University on the lines laid down by the Special Commission for a University for London, as being unfair to the present graduates and undergraduates of the London University, and as tending to lower the standard of medical education and the value of the London degrees."

Medical Defence Union.—At a meeting of the Executive Committee of the Medical Defence Union, Metropolitan Division, held at 429, Strand, on March 13th, Dr. Felce in the chair, the report read by the Honorary Secretary (Dr. Campbell Pope), showed signs of very satisfactory progress. The members of this branch now number 353, of whom 192 have joined since January 1st. A cordial vote of thanks to Dr. Mead for his exertions in establishing this branch was carried with unanimity. It was stated that as yet no case had come before the branch for defence.

Medico-Psychological Association.—At the quarterly meeting held in Owens College, Manchester, on Thursday, March 13th, Dr. Regis, Professor of Mental Medicine, Bordeaux, and Dr. Ritti, Physician to Charenton, were elected corresponding members, and the following were elected ordinary members, namely: William Gilmore Ellis, M.D.Brux.; John Spence Law, M.B., C.M.Edin.; Alfred W. Campbell, M.B., C.M.Edin.; William Woodward, L.R.C.P., M.R.C.S.; Anton Hugh Syrée, M.R.C.S., L.S.A.; John James Pitcairn, L.R.C.P., M.R.C.S.; Walter Scowcroft, M.R.C.S.; George Findlay, M.B., C.M.Aberd.

The International Temperance Congress.—The following are the subjects which will be discussed at the Congress on Alcoholism which is to be held at Christiania on September 3rd-5th: 1. The measures which in Norway have been found useful in mitigating the evils of alcoholism. 2. The results of the Gothenburg system. 3. The drink question in relation to the development of the young. 4. The deterioration of savage tribes resulting from the sale of spirits. 5. Substitutes for alcoholic stimulants. In connection with the Congress there will be an exhibition of periodicals, books, statistics, specimens of non-intoxicating drinks, etc.

Foreign Students at Paris.—From recently-published statistics it appears that at the present time the number of foreign students in the various faculties of the University of Paris is about 1,000. Of these, 729 belong to the medical faculty, 150 of them being Russians, 66 Roumanians, 60 Turks, 71 Egyptians, and 139 Americans. Of the 729 foreign medical students, 107 are women. It is remarkable that England is not represented in the list at all. There is only 1 foreign student in theology, and he comes from the land of the "unspeakable Turk." The total number of students at Paris in 1889 was 10,375, of whom 3,894 belonged to the medical faculty. Roughly speaking, the foreign contingent forms about one-tenth of the whole body of students. If the medical faculty alone is taken, however, the foreigners amount to more than a fifth.

Muscular Atrophy in Tabes Dorsalis.—Dejerine (*Revue de Médecine*, 1889) has made an elaborate study of those forms of muscular wasting which accompany tabes dorsalis. Wasting is most common in the hands and feet. The interossei are the most affected, and that gives either the foot or the hand a claw-like aspect. Atrophy of other muscles leads later to pes equinus or pes equino-varus. Contraction of the muscles may lead to a loss of the capability for passive movement. The muscular atrophy is almost always symmetrical on the two sides of the body. There are no changes in the anterior cornual cells, but the nerves to the muscles are degenerated. The degeneration is most marked nearest to the muscle, and gradually decreases in intensity as it is traced upwards; only occasionally does it reach as far as the anterior nerve roots. The muscular fibres are simply atrophied without any increase of interstitial tissue.

Lost Dogs and Rabies.—The Battersea Temporary Home for Lost and Starving Dogs is an institution well worthy of the support for which the Duke of Portland, its new president, pleaded at its annual meeting this week. The total number of dogs received into the Home last year was 24,123, being an increase of 8,802 as compared with the previous year. Undoubtedly the institution has done much to prevent the spread of rabies by clearing the streets of dogs most liable to be bitten by rabid animals, and it has in this way benefited the community. The muzzling order, it was stated, had greatly augmented the number of dogs sent to the Home during the latter part of the year, and threatened to overwhelm the resources of the institution. The most drastic means were taken to prevent the spread of rabies, and among all the dogs received last year only thirty cases of the disease were detected.

The Riberi Prize.—At a recent meeting of the Royal Academy of Medicine of Turin the report of a committee appointed to consider the claims of the competitors for the Riberi prize of 20,000 francs (£800) was presented. The subject chosen was the Anatomy and Physiology of the Embryo, with special reference to the Development of Man. There were several competitors, both Italian and foreign, including many men whose names are well known in the scientific world. The committee placed the names of Professor W. His (of Leipzig), Van Beneden (of Liège), and Preyer (of Jena), at the top on the list, the prize being finally awarded to the first named of these gentlemen. Professor His, in acknowledging the honour done him, placed £200 at the disposal of the Academy, to be divided between two young Italian physicians who may wish to work for some time in laboratories of anatomy, physiology, histology, or embryology.

The Paralyses of Children.—It may not be uninteresting to compare notes of different observers as to the proportion of cerebral to spinal paralyses, and as to the ages when they occur, especially after the discussion in the Diseases of Children Section at Leeds last year. Dr. Osler says that in the Infirmary for Nervous Diseases, Philadelphia, there have been in the same length of time 500 cases of spinal to about 120 of cerebral origin. As to the ages of onset, out of 24 cases of Dr. Hillier's of acute anterior poliomyelitis, 8 were in the first year, 9 in the second, and 7 between the second and sixth. Dr. Gowers says that of cases occurring under the ages of 10, three-fifths are in the first two years and four-fifths in the first three. To contrast this with cerebral paralysis, out of 15 cases of Dr. Osler's, 45 were in their first year, 22 in their second and 14 in their third. Out of Dr. Gowers's 80 cases, 23 occurred in the first year, 23 also in the second, while three-fourths were attacked in the first three years of life.

The Medical Society of London.—The following is a list of officers and Council elected at the annual meeting to serve during the ensuing year 1890-91:—*President:* John Knowsley Thornton. *Vice-Presidents:* T. Gilbart Smith, M.D., J. Astley Bloxam, Stephen Mackenzie, M.D., Reginald Harrison. *Treasurer:* Arthur Edward Durham. *Librarian:* William Henry Allchin, M.D.

Honorary Secretaries: Charles Alfred Ballance, M.S., Thomas Colcott Fox, M.B. *Honorary Secretary for Foreign Correspondence:* Jean Samuel Keser, M.D. *Council:* Theodore D. Acland, M.D., Herbert W. Allingham, Robert Barnes, M.D., Charles Edward Beevor, M.D., James Black, Alban Doran, John Henry Drew, William F. Haslam (Birmingham), Charles Bell Keetley, Edmund Owen, Charles D. F. Phillips, M.D., Bernard Pitts, Sir William Roberts, F.R.S., William Rose, Arthur Ernest Sansom, M.D., George Henry Savage, M.D., Felix Semon, M.D., Arthur Marmaduke Sheild, Charles Theodore Williams, M.D., T. Outterson Wood, M.D.

PROLONGED GESTATION.—Dr. J. Armstrong, Physician to the Lying-in Hospital, Liverpool, relates an interesting case of prolonged gestation in the *Liverpool Medico-Chirurgical Journal.* The patient was "a most intelligent mother, who kept a diary." She had already borne four children. The second pregnancy, dating from the cessation of the last menstrual period, lasted 303 days; the fourth, 319 days. When 35 years of age and pregnant for the fifth time, she consulted Dr. Armstrong. She dreaded her approaching confinement, having suffered so much at the fourth, when she was delivered five weeks after the normal term of a stillborn child, with the aid of instruments. Dr. Armstrong, bearing in mind that gestation had been twice prolonged, that it might be prolonged again, and in the event of the child being a male the labour would probably be even more difficult than on the preceding occasion, expressed his opinion that the interests of both mother and child would be best considered by the induction of labour shortly before term. Labour was accordingly induced on about the 276th day of gestation. The presentation was transverse, necessitating version. The child, a female, was living and healthy, and the mother made an excellent recovery, being able to return home by the end of the month.

TOXIC PRESCRIPTIONS.—The *Pharmaceutical Journal* reports a case of poisoning by crystallised aconitine from Belgium, which once more illustrates the enormous toxic power of some preparations sent out under this name. A prescription ordering ten pills, each to contain 0.15 gramme of quinine sulphate and one-fourth of a milligramme of crystallised aconitine was dispensed, the directions being that five should be taken daily. The patient, a lady, after taking three of the pills, became indisposed, suffering from great nausea. Her uncle, a man aged 60, apparently with a view to encourage her in continuing to take her medicine, swallowed two of the pills, but he was seized with convulsions an hour afterwards and died. The remaining five pills seem to have been thrown upon the fire, so naturally some doubt exists as to whether the prescription was dispensed correctly, and even the Antwerp *Journal de Pharmacie,* while professing no doubt upon this point, asks whether it is a fact that half a milligramme of this alkaloid can act so powerfully. To this query M. Ferrand replies in the *Bulletin Commercial* that in 1887 the Paris Society of Pharmacy had this subject under consideration, and came to the conclusion that in some cases the absorption of a granule containing one fourth of a milligramme of crystallised aconitine by an adult has been sufficient to provoke extremely grave symptoms and endanger life.

FALMOUTH AS A HEALTH RESORT.—A meeting of gentlemen interested in the prosperity of Falmouth, and presided over by the mayor of that town, has been recently held to consider the best means of making known its attractions as a winter residence for invalids, and of providing suitable accommodation for them. The latter would appear to be the more important of the two, for the public press in general, and our own columns in particular, have freely and generously made known the claims of Falmouth to due consideration as a health resort. It is for the Falmouth people to see that proper accommodation is provided for invalid visitors when they come. Sir W. Aitken, who addressed the meeting, wisely spoke to this effect. "Falmouth," he remarked, "had a southerly aspect, but few houses were built facing the south. It was therefore highly essential to erect more residences in that position. He was staying at the Falmouth Hotel, which was not large enough, people being turned away every night." The Rector's remarks were also to the same effect: "The practical question was, what were they going to do with visitors when they came to the town? There were hotels and lodging houses which offered extremely good accommodation, but they were few. The principal requirements of Falmouth were increased accommodation, railway facilities, and attractive amusements." We counsel the Falmouth people to follow the advice of their Rector. Make the place attractive, provide good accommodation and such distractions as are to be had at other established health resorts, and visitors will be forthcoming, and railway facilities too, as soon as the railway authorities find it pays to provide them; but it is too much to expect that railway companies will run express trains for the purpose of bringing visitors for whom, at present, there is not sufficient accommodation.

MEDICAL VACANCIES.

The following Vacancies are announced:

ABERYSTWITH INFIRMARY, Aberystwith.—House-Surgeon and Secretary. Double qualifications. Salary, £150 per annum, with board, lodgings, coal, gas, and attendance. Thorough knowledge of Welsh essential. Applications by April 3rd to the Secretary.

BATH GENERAL AND ROYAL MINERAL WATER HOSPITAL.—Resident Medical Officer, unmarried. Salary, £100 per annum, with board and apartments. Applications before April 7th to Fred. W. Dingle, Registrar and General Secretary.

BETHLEM HOSPITAL.—Two Resident Clinical Assistants; doubly qualified. Residence in the hospital for term not exceeding six months, with apartments, rations, and attendance. Applications to John Baggally, Esq., Bridewell Hospital, Blacktriars, by April 12th.

CHELSEA, BROMPTON AND BELGRAVE DISPENSARY, 41, Sloane Square, S.W.—Surgeon. Applications to the Secretary by April 3rd.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.– Dispenser (minor exam.); non-resident. Commencing salary, £70 per annum. Applications (on forms to be obtained) to A. C. Davis by March 31st.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist; must be registered and not engaged in practice. Salary, 100 guineas per annum. Applications by April 16th to the Secretary, T. Storrar-Smith.

DURNESS, Sutherlandshire.—Medical Officer. Salary, £150 (with practice, population 1,000) and free house. Applications to the Inspector of Poor up to April 2nd.

EAST SUFFOLK AND IPSWICH HOSPITAL.—Assistant House-Surgeon (unmarried), double qualification. Board, lodging, and washing. Salary, £20 per annum. Applications by April 1st.

GENERAL HOSPITAL, Birmingham. — Assistant House-Surgeon; surgical qualification. No salary; board, lodging, and washing provided. Applications to the House-Governor, Dr. J. D. M. Coghill, by March 29th.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Assistant Physician. Applications to the Secretary by April 9th.

GENERAL INFIRMARY, Leeds.—Resident Surgical Officer. Applications, etc., to be sent in to the Secretary of the Faculty by March 31st.

GLAMORGAN AND MONMOUTHSHIRE INFIRMARY, Cardiff.—Assistant House-Surgeon. Board, lodging, and washing provided. Applications before April 5th to Geo. T. Coleman, Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—House-Physicians. Applications before April 9th.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square, W.—Resident Medical Officer; must possess the qualification of the R.C.S., and be familiar with the use of the laryngoscope. Salary, £50 a year, with board and rooms. Applications to the Secretary by March 31st.

KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Senior Assistant Medical Officer; fully qualified, unmarried, not over 30 years of age, experienced in asylum work. Salary, £250 per annum, with furnished quarters, attendance, coal, gas, washing, etc. Applications by April 9th to Dr. F. Pritchard Davies, Superintendent.

KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Second Assistant Medical Officer, fully qualified, unmarried, not over 28 years of age; experienced in asylum work. Salary, £180 per annum, with furnished quarters, attendance, coal, gas, washing, etc. Applications by April 9th to Dr. Pritchard Davies, Superintendent.

KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Third Assistant Medical Officer, fully qualified, unmarried, and not over 27 years of age, and had experience in asylum work. Salary, £150 per annum, with furnished quarters, attendance, coal, gas, washing, etc. Applications by April 9th to Dr. Pritchard Davies, Superintendent.

KING'S LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, £80, rising by annual increments of £10 to £100 per annum. Double qualifications, registered and unmarried. Applications to the Chairman of the Weekly Board by April 5th.

LEICESTER INFIRMARY.—Honorary Surgeon Dentist; must be a Licentiate in Dentistry of one of the Royal Colleges of Surgeons of London, Dublin, or Edinburgh. Applications, etc., to the Secretary, 24, Friar Lane, Leicester, by March 31st. Election on April 9th.

METROPOLITAN ASYLUMS BOARD.—Clinical Assistant (registered medical man) for the South-Western Fever Hospital, Landor Road, Stockwell, S.W. Residence and rations. Applications to the Medical Superintendent at the Hospital.

METROPOLITAN HOSPITAL, Kingsland Road, E.—House-Physician. Salary at the rate of £60 for the first, and £70 to the second, six months. Applications by March 31st, to the Secretary, Charles H. Byers.

METROPOLITAN HOSPITAL, Kingsland Road, N.—House Surgeon. Salary at the rate of £60 for the first, and £70 for the second, six months. Application by March 31st to the Secretary.

METROPOLITAN HOSPITAL, Kingsland Road, N. — Assistant House-Surgeon, tenable for six months. Applications by March 31st to the Secretary.

METROPOLITAN HOSPITAL, Kingsland Road, N.—Obstetric Physician; Fellow or Member of the Royal College of Physicians of London, and Graduate in Member of a University. Applications by March 31st to the Secretary.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Salary, £150 per annum. Applications by April 28th to the Registrar, Henry Wm. Holder, M.A.

OXFORD EYE HOSPITAL.—House-Surgeon. Board and lodging and £50 honorarium. Applications by April 2nd.

RADCLIFFE INFIRMARY, Oxford.—House-Physician; doubly qualified. Salary, £80 per annum, with board, lodging, and washing. Applications by April 5th to the Secretary.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, by June 1st.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to the Registrar, Edward Liveing, M.D. (of whom all particulars may be obtained), by April 9th.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.—Superintendent of the Research Laboratory. Salary, £200 per annum. Applications to the Secretary of the College by March 31st. Further particulars on application to Dr. Tuke, Curator, 7, Lauriston Lane, Edinburgh.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Surgeon; Fellow of the Royal College of Surgeons. Applications to the Secretary, T. Beattie Campbell, by April 9th.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Assistant Surgeon; Fellow of the Royal College of Surgeons. Applications to the Secretary, T. Beattie-Campbell, by April 9th.

SOUTH DEVON AND CORNWALL HOSPITAL, Plymouth.—Assistant House-Surgeon; double qualification. Appointment for six months. Residence, board, and washing. Applications to the House-Surgeon by March 29th.

STOCKTON-ON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon (non-resident), doubly qualified; to reside near the hospital and give whole time. Salary, £200 per annum. Applications to the Secretary, John Settle, by April 12th.

UNIVERSITY OF EDINBURGH.—An Additional Examiner. Salary, £90 per annum. Applicants to lodge sixteen copies of application with J. Christisson, W.S. Secretary, by April 7th.

WEST LONDON HOSPITAL.—Surgeon Dentist, with a medical or surgical qualification. Applications to R. J. Gilbert, Secretary Superintendent, by March 31st. Election April 14th.

MEDICAL APPOINTMENTS.

ABBOT-ANDERSON, W. M., M.B., B.S., M.R.C.S.Eng., appointed Honorary Surgeon to the Farringdon General Dispensary, *vice* Mr. Noble Smith, F.R.C.S.E.

ADAMS, J. Dixon, M.D., M.R.C.S., reappointed Medical Officer of Health to the Yeovil Union.

ALLDEN, John H., M.R.C.S., L.S.A., reappointed Medical Officer of Health for Shirley.

BELL, Dr., appointed Surgeon to the Leicester and Leicestershire Provident Dispensary (Newfound Pool District), *vice* Dr. Pemberton Peake, resigned.

BOND, Francis Thomas, M.D.Lond., A.B., M.R.C.S., reappointed Medical Officer of Health to the Gloucester Combined Districts.

BRAND, William Thomas, M.B., appointed Medical Officer for the Thornhill District of the Dewsbury Union.

BROADBENT, Reginald, M.B., appointed Surgeon to the Leicester and Leicestershire Provident Dispensary (Westcotes District), *vice* H. J. Blakesley, F.R.C.S., resigned.

BROWN, A. T., M.B., B.S.Lond., appointed a House-Physician to Guy's Hospital.

COLLINGRIDGE, W., M.D., M.R.C.S., reappointed Medical Officer of Health to the Port of London.

COLLINS, Frank, L.R.C.P., M.R.C.S., appointed Medical Officer to the Merchant Seamen's Orphan Asylum, Snaresbrook, and Divisional Surgeon to the Police (J) Division.

COWIE, John, M.B.Aber., C.M., appointed Medical Officer for No. 6 District of the Devizes Union.

DAVIES, Edward, M.D., M.R.C.S., reappointed Medical Officer of Health to No. 2 Rural Sanitary District of the Wrexham Union.

EASON, Alexander M., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Lytham Urban Sanitary District.

EVANS, Samuel, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer to No. 2 District of the Tendring Union.

EVERARD, W. P., L.R.C.P.I., L.R.C.S.I., appointed Medical Officer to the Brideswell Dispensary District, Athlone Union, *vice* Dr. P. B. White.

FAICHNIE, Norman, M.B.Durh., appointed Resident Clinical Assistant to the St. Marylebone Infirmary, Notting Hill, *vice* B. T. Johnson.

FLINN, John James, L.R.C.P.Edin., M.R.C.S., appointed Medical Officer of the Belmont Road Workhouse, West Derby Union.

FOSTER, Francis Wheldale, M.R.C.S., reappointed Medical Officer to No. 11 District of the Tendring Union.

GRIFFIN, Innes, M.R.C.S., L.S.A., reappointed Medical Officer to the Banbury Town Council.

HAGUE, J. L., L.R.C.P., appointed Assistant Medical Officer to the South-Eastern Fever Hospital.

HAILEY, Melville M., L.R.C.P., reappointed Medical Officer of Health to the Newport Pagnell Sanitary Authority.

HICKMAN, H. V., L.R.C.P., M.R.C.S., appointed Assistant House-Physician to Guy's Hospital.

HOLMAN, H. J., L.R.C.P., M.R.C.S., appointed a House-Surgeon to Guy's Hospital.

HUBBERSTY, R. R., M.D.Edin., M.R.C.S., appointed Resident Assistant to the Wolverhampton Eye Infirmary.

IVENS, A. S., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer and Public Vaccinator to No. 8 District of the Tendring Union.

JOHNSTONE, G. J. Waldron, M.D., appointed Surgeon to the Gainsborough Friendly Societies Medical Association.

JOHNSTONE, G. W., L.R.C.P.Edin., reappointed Medical Officer to the Upholland Urban Sanitary Authority.

JONES, W., L.R.C.P., M.R.C.S., reappointed Medical Officer of Health to No. 1 District of the Wrexham Rural Sanitary Authority.

JONES, W. M., M.R.C.S., reappointed Medical Officer of Health to the Swinton Urban Sanitary Authority.

KERSWILL, John Bedford, M.R.C.P.E., M.R.C.S.Eng., F.L.S., reappointed Medical Officer of Health to the St. Germans Rural Sanitary Authority for three years.

LEMON, E. H., L.R.C.P.Lond., M.R.C.S., appointed Assistant Medical Superintendent to the Infirmary of the Croydon Union.

LOVETT, Samuel R., L.R.C.P.Edin., L.M., L.S.A., reappointed Medical Officer of Health to the St. Giles's District.

MCCANN, F. J., M.B., appointed Medical Officer to the Queen Charlotte Lying-in Hospital.

MACKINTOSH, Angus, M.D., reappointed Medical Officer of Health to the Dronfield Urban Sanitary Authority.

MANNING, Harry Paul Owen, M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the Royal Surrey County Hospital, Guildford, *vice* Dr. Gordon.

MORRIS, Walter, L.R.C.P.Edin., L.F.P.S.Glag., appointed Medical Officer of the Workhouse, Bolton Union, *vice* J. H. Marsh, L.R.C.P., L.R.C.S.Edin., resigned.

MORTON, Richard John, M.R.C.S.Eng., L.S.A., appointed Medical Officer and Public Vaccinator to No. 6 District of the Aylsham Union, and Medical Officer to the workhouse, *vice* R. Kay Morton.

MUGFORD, S. A., reappointed Medical Officer to the parishes of Ardleigh, Great Bromley, and Wix, of the Tendring Union.

PARSONS, F. J. C., L.R.C.P., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Bridgwater Port Sanitary Authority.

PARTRIDGE, Thomas, M.K.Q.C.P., M.R.C.S.Eng., etc., re-elected Medical Officer to the Stroud Urban Sanitary District for three years, and to the Stroud Rural Sanitary District for one year.

PEACOCK, Edwin, M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Chilvers Coton Urban Sanitary District.

PEAKE, W. Pemberton, L.R.C.P.Lond., M.R.C.S., appointed Medical Officer to No. 4 District of the Leicester Union.

PENBERTHY, W., M.R.C.S., L.R.C.P., appointed House-Surgeon to the London Hospital.

PENDLEBURY, J. P., L.R.C.P., M.R.C.S., appointed a House Physician to Guy's Hospital.

PORTER, F. J., M.D., reappointed Medical Officer of Health to the No. 1 District Helmsley Rural Sanitary Authority.

RAIMES, Alwyn, M.B., reappointed Medical Officer of Health to York Rural Sanitary Authority.

REID, J. R., M.B., C.M.Aberd., appointed Medical Officer of the Oswaldkirk District of the Helmsley Union, *vice* F. Dowker, M.R.C.S.

REYNOLDS, Hubert S., L.R.C.P., F.R.C.S.Edin., appointed Medical Officer for No. 4 District of the Royston Union, *vice* L. M. Earle, M.D., resigned.

ROBINSON, J. Kirkup, M.B., C.M.Edin., appointed an Honorary Surgeon to the Doncaster Infirmary.

ROLLESTON, Humphry D., M.B., appointed Curator to the Pathological Museum St. George's Hospital, *vice* Dr. Sheridan Delépine.

SIEVEKING, Herbert, M.R.C.S.Eng., L.R.C.S.Lond., appointed Medical Officer to the Kimberley Bechuanaland Railway (British South Africa Company).

SMITH, G. W., M.R.C.S., L.S.A., reappointed Medical Officer and Public Vaccinator to the Gotham District of the Basford Union.

SMITH, J. W., L.R.C.P., M.R.C.S., appointed a House-Surgeon to Guy's Hospital.

SQUIRE, E. H., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of the parish of Elmstead District of the Tendring Union.

STEPHENS, Edward, L.R.C.P.Edin., and L.M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Chard Rural Sanitary Authority.

STUBBS, Henry, M.R.C.S., appointed Medical Officer of Health to the Madeley Union.

SWANN, Alfred, M.D., reappointed Medical Officer of Health to the Batley Town Council.

TONKS, H., F.R.C.S.Eng., appointed Assistant Demonstrator of Anatomy to the London Hospital Medical College, *vice* Mr. Openshaw.

TONKS, Joseph, M.R.C.S.Eng., L.A.H.Dubl., appointed Medical Officer of Health for the District of Willenhall, Wolverhampton Union, *vice* John T. Hanfill, L.R.C.P., M.R.C.S.

TWINING, A. Hughes, M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Kingsbridge Rural Sanitary Authority.

WAUGH, Alexander, L.R.C.P., M.R.C.S., reappointed Medical Officer of Health to the Midsomer-Norton Urban Sanitary Authority.

WAYN, E. R., M.R.C.S., appointed Medical Officer to the Bramley Union, *vice* Dr. Slesser.

WEIR, Alex. McCook, M.D.Qu.Univ.Irel., L.R.C.S.Edin., appointed Medical Officer to the Evershot District of the Beaminster Union, *vice* A. Butler L.K.Q.C.P., etc., resigned.

WETWAN, W. Albert, M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator to the No. 2 District of the Bridlington Union.

WHITCOMBE, Philip, M.R.C.S., L.S.A., reappointed Medical Officer to the Hospital at Gravesend.

WRIGHT, Frederick, L.S.A., reappointed Medical Officer to No. 3 District of the York Union.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Ballance: On the Removal of Pyæmic Thrombi from the Lateral Sinus. Dr. William Hunter, of Cambridge: A case of Pernicious Anæmia.

TUESDAY.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Dr. W. J. Collins: Cancer of Œsophagus Eroding Trachea. Mr. Watson Cheyne: Central Necrosis of Radius without Suppuration. Mr. J. Hutchinson, jun.: Lymphatic Nævus of Tongue. Mr. Arthur Barker: Macroglossia. Dr. W. K. Sibley: Tuberculosis in Fowls and other Birds, and the Resemblance of the Disease to Leprosy. Mr. Edgar Willett: Fracture-dislocation of Spine Successfully Treated by Operation. Dr. Little: Microscopic Sections of Enlarged Spleen from a Child. Card Specimens.—Mr. H. B. Robinson: Cyst of Forehead. Mr. Shattock: Congenital Atresia of Œsophagus.

WEDNESDAY.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Dr. Cullingworth, Dr. Dakin (Carcinomatous Uterus removed by operation), Mr. J. Bland Sutton, and others. Dr. Cullingworth: Four Cases of Vaginal Hysterectomy for Cancer of the Cervix, with remarks on the mortality of the operation, and on the alleged absence of tendency in cervical cancer to invade the body of the uterus. Dr. E. Sinclair Stevenson: Case of Spurious Pregnancy simulating Ectopic Gestation.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

SMITH.—On February 26th, at 30, Cavendish Road, Brondesbury, the wife of J. Anderson Smith, M.D., of a son.

MARRIAGES.

BURNELL—FISHER.—On the 18th of March, at Christ Church, Morningside, Edinburgh, by the Rev. A. T. Grant, incumbent St. Margaret's, Leven, assisted by the Rev. C. M. Black, incumbent Christ Church, Alfred Charles Burnell, M.B. and C.M.Edin., Newcastle-on-Tyne, youngest son of the late Capt. John Burnell, Asst. Commissary-General, to Elizabeth Binny, only daughter of Alexander Fisher, M.D., Deputy Inspector of Hospitals, R.N.

DUTT—PALME.—At the Registrar's Office, Cambridge, on the 24th instant, Upendra Krishna Dutt, B.Sc.(Lond.), M.R.C.S.(Eng.), D.P.H.(Camb.), of 27, Pulling Terrace, Cambridge, to Anna Palme, 2nd daughter of late Christian Adolph Palme, of Kalmar, Sweden.

PARKER—PEARSE.—On the 19th inst., at the Parish Church, Westoning, Beds, by the father of the bride, Herbert Parker, M.R.C.S., of Gray's Inn, to Lucy Pearse, eldest daughter of Rev. A. H. Pearse, curate of Westoning, Beds.

DEATHS.

ANSTIE.—March 16th, at Berachah, Kerley Road, Bournemouth, William Charles Anstie, L.R.C.P.Lond., M.R.C.S.Eng., aged 26, the beloved, most loving, and only son of Blanche Miller Anstie and the late Francis Edmund Anstie, M.D., F.R.C.P.Lond.

RUTHERFORD.—On the 21st inst., at Newcastle-on-Tyne, John Hunter Rutherford, L.R.C.P., L.R.C.S.Edin., aged 64 years.

SMITH.—On March 19th, at 30, Cavendish Road, Brondesbury, the dearly loved wife of J. Anderson Smith, M.D.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE "BRITISH MEDICAL JOURNAL."

Seven lines and under	£0	3	6
Each additional line	0	0	4
A whole column	1	15	0
A page	5	0	0

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Advertisements should be delivered, addressed to the Manager at the Office, not later than noon on the Wednesday preceding publication; and, if not paid for at the time, should be accompanied by a reference.

Post-Office Orders should be made payable to the British Medical Association at the West Central Post-Office, High Holborn. Small amounts may be paid in postage-stamps.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-Offices letters addressed to initials only.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

MEDICUS asks for information as to cost of outfit, etc., for a surgeon to a steamship company.

NEMO would be glad to know if there is any institution in which persons in poor circumstances can undergo the Weir-Mitchell treatment.

NOTES, LETTERS, ETC.

ERRATUM.—In Dr. Hellier's paper on "Pyrexia in the Puerperal State," in the JOURNAL of March 22nd, p. 672, col. 1, line 11 from bottom, for "fæces" read "fauces." The title should read as above, and not as printed last week.

THE FASTING MAN.

MR. G. N. ROBINS, M.R.C.S.Eng., L.R.C.P.EDIN. (Westminster) writes: Will you kindly publish enclosed chart of the first week of Signor Succi's 40 days' fast at the Royal Aquarium. The genuineness of the feat will be placed beyond doubt by my record of the amount of urea excreted, and by the very strict watch kept upon Succi by members of the press and myself from the commencement, and later by students of the Westminster Hospital Medical School.

Daily Record of First Seven Days of Succi's 40 Days' Fast at the Royal Aquarium, Westminster.

Date, 1890.	Day of Fast.	Pulse.	Temperature (axillary).	Respirations.	Weight.	Dynamometer (kilogrammes).	Spirometer (cubic centimètres).	Urine passed (fluid ounces).	Urea = (grains).	Water Consumed (fluid ounces).	Kaiser Brunner (fluid ounces).	Sleep (hours).
					lb. oz							
March 17th, 3 P.M.	After last meal	92	98.8°	23	126 3	49	2000	—	—	—	—	—
March 18th, 11.30 A.M.	1	76	98.0°	18	122 15	48	1700	(?) 35	(?)	20	—	9
March 19th, 11.30 A.M.	2	82	98.4°	18	120 15	46	1600	(?) 20	(?) 377.5	8	—	7¾ 3
March 20th, 12 noon	3	53	98.2°	22	118 13	49	1550	18¾	417.25	21	—	7½ 3
March 21st, 11.30 P.M.	4	68	98.6°	21	116 5	49	1500	19	397.0	11	—	8½
March 22nd, 12 noon.	5	57	98.4°	23	114 12	47	1500	21½	346.0	7	10	7½ 3
March 23rd, 11.30 A.M.	6	74	98.4°	28	113 9	49	1600	18	324.0	14	8	7½ 2
March 24th, 11.30 A.M.	7	63	98.1°	20	112 7	49	1600	18	283.5	8	12	4½ 5¾ 2½

TOOGOOD *v.* WILKES.

Wilkes Indemnity Fund.

THE following subscriptions have been received since last publication:—

	£	s.	d.
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	9	19	6
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The list will shortly close. H. J. MANNING, Hon. Treasurer, Salisbury.

TREATMENT OF INFLUENZA.

MR. A. HANBURY FRERE, M.B., C.M.Edin. (Wickham Market, Suffolk) writes: Having read the numerous reports, etc., of the influenza, and seeing that the remedies which have been employed in treatment are of so diverse a nature, it seems to me that much might be learned by a free discussion as to the relative merits of each.

The remedies most lauded seem to be antipyrin, antifebrin, salicylates, and ammonia compounds. Now, valuable as many of these undoubtedly are in suitable cases to relieve pain, it does seem to me that, as diminishing the fibrin-forming power of the already much impoverished blood, they are, where bronchial catarrh is a prominent symptom, distinctly contraindicated. Nay, further, the reports would indicate that the use of these drugs has been the means of precipitating and intensifying bronchial and pulmonary mischief by increasing effusion into the pulmonary tract. And yet Professor Fraser has lately asked us to "try" exalgine.

Comparing the results of treatment I find that the most rapid cures have been effected by combinations of iron with peripheral vascular stimulants, as sp. ætheris nitrosi, and that retarded convalescence and such sequelæ as bronchitis and pneumonia were the rule where such remedies as antipyrin and ammonia compounds had been used.

COMMUNICATIONS, LETTERS, etc., have been received from:

Surgeon-Major Vacy-Ash, Brighton; Dr. R. Saundby, Birmingham; Dr. H. O. Marcy, Boston; Mr. T. C. Boulton, London; Medicus; Dr. W. Sykes, Mexborough; Mr. H. Sieveking, Kimberley; Messrs. C. F. Boehringer and Sohne, Mannheim; Dr. Wm. Macewen, Glasgow; Mr. H. Peacock, Bath; Dr. G. F. Inglott, Malta; M.R.C.S.; Dr. A. D. L. Napier, London; Dr. J. F. Payne, London; Dr. J. A. Cunningham, Amritsar, Punjab; Mr. A. W. Nankivell, Chatham; Surgeon-Major J. A. Gormley, M.D., Rangoon; The Jersey Company, Stroud; Dr. A. Sheen, Cardiff; Dr. J. M. Granville, London; J. M. Clarke, M.B., Clifton; Mr. T. Cook, Toronto; Dr. D. E. Anderson, Paris; Truth; Dr. Mickle, London; Our Paris Correspondent; Dr. O. Wood, London; Mr. A. H. Frere, Wickham Market; Dr. Major Greenwood, London; Dr. F. Pollard, London; Naomi; Dr. G. N. Pitt, London; Army Medical Corps, Zululand; Mr. G. Munro Smith, Clifton; Dr. J. B. Hellier, Leeds; Dr. L. Shapter, Exeter; Dr. P. G. Lewis, Folkestone; Mr. W. L'Heureux Blenkarne, Leicester; Mr. William F. Haslam, Birmingham; Mr. D'Arcy Power, London; Dr. Revington, Manchester; Dr. Campbell Black, Glasgow; Dr. C. MacQuibban, Aberdeen; Mr. A. Morton, Bradford; Dr. G. Cadogan-Masterman, Stourport; Disgusted M.S.; Dr. T. F. Pearse, Southsea; Surgeon-Major Black, Edinburgh; Mr. A. C. Hamilton, North Walsham; Dr. Hale White, London; Mr. C. T. Kingzett, London; Mr. E. Kitto, Falmouth; X.Y.Z.; Dr. T. Buzzard, London; Mr. A. Ashby, Reading; Miss Gough, London; Dr. R. S. Hubbersty, Frome; Dr. E. Willoughby, London; Mr. T. H. Cheatle, Burford; Dr. H. Tizard, Weymouth; Mr. L. W. Pead, Dulwich; Dr. F. S. Palmer, East Sheen; Dr. H. F. A. Goodridge, Bath; Dr. A. E. F. Longhurst, London; Aliquis; Mr. J. E. Carter, Cookstown; Mr. H. R. Swanzy, Dublin; Mr. J. Iredale, Louth; Dr. G. H. Savage, London; Dr. L. Danion, Paris; Mr. W. Marriott, London; The Director-General of the Medical Department of the Admiralty, London; Dr. E. Klein, London; Mr. G. S. Johnson, London; Mr. W. E. E. Kershaw, Middleton; Dr. Maguire, London; Mr. G. Q. Roberts, London; Dr. H. Woods, London; Mr. E. G. Highton, London; Mr. Adams Frost, London; Dr. H. Sainsbury, London; Dr. Burney Yeo, London; Mr. J. H. Sproat, Birmingham; Dr. H. Sutherland, London; Mr. H. J. Manning, Salisbury; A. C. Burnell, M.B., Newcastle-on-Tyne; Mr. F. W. Dingle, Bath; Mr. J. Haysman, London; Mr. C. A. P. Osborne, Hythe; Mr. S. Daly, Manchester; Mr. J. L. Green, Salisbury; Our Birmingham Correspondent; Mr. J. B. Curgenven, London; Dr. Collingridge, London; Mr. J. Greig Smith, Clifton; Mr. W. Penberthy, London; Dr. J. A. Smith, Brondesbury; Dr. Ensor, London; Mr. J. C. Casden, Milnthorpe; Dr. Campbell, Carlisle; Dr. W. Scott Lang, Edinburgh; Dr. C. B. Taylor, Nottingham; F. Collins, M.B., Macclesfield; Dr. E. Seaton, London; Mr. Y. M. Jones-Humphreys, Cemmaes; S. E. Nuttall, M.B., Macclesfield; Mr. T. Percival, Knottingley; Mr. R. Green, Berry Wood; Cantab; Dr. C. S. Sherrington, London; Our Liverpool Correspondent; Mr. J. Silverlock, Elton; Dr. T. Eyton-Jones, Wrexham; Mrs. Smith, Boston Spa; Lieutenant-Colonel W. G. N. Burney, London; Mr. R. T. Huston, Tynan; Dr. C. Firth, Gravesend; Dr. F. E. Cane, Liverpool; Mr. G. Stone, Liverpool; M. E. Kenny, M.B., Ulverston; Mr. K. H. Hammersley, Leek; Dr. Rentoul, Liverpool; Mr. Harald Billberg, London; Mr. D. A. O'Sullivan, Burnley; Mr. C. O. Woodcock, Bradford; Mr. C. H. Wells, London; Dr. Willoughby, London; Dr. Fletcher Beach, London; Mr. Q. M. Wallace, Thornhill; Dr. Lane, Milford Haven; Messrs. Charles Griffin and Co., London; Mr. J. Philipson, Newcastle-on-Tyne; Dr. R. Wade Savage, London; Mr. G. N. Robins, London; Mr. T. A. Clifford, London; Mr. Wm. Powell, London; Dr. Robert Barnes, London; Dr. F. Tresilian, Enfield; Mr. B. Marrack, London; Sir William Mac Cormac, London; Dr. J. W. Hunt, Dalston; F. J. McCann, M.B., London; Mr. A. B. MacDowall, Crouch End; Mr. T. Holmes, London; J. A. Mackenzie, M.B., Balham; Mr. C. E. Abbott, Braintree; Mr. B. Blewitt, London; Mr. E. Somers, Pendleton; etc.

BOOKS, ETC., RECEIVED.

Le Massage et la Mobilisation dans le Traitement des Fractures. Par Dr. J. Lucas-Championnière. Paris: A. Coccoz. 1890.

School Hygiene. By W. Jenkinson Abel, B.A. London: Longmans, Green and Co. 1890.

Saint Thomas's Hospital Reports. Edited by Dr. Haddon and Mr. Anderson. New Series. Vol. xviii. London: J. and A. Churchill. 1890.

The Extra Pharmacopœia, with the additions introduced into the *British Pharmacopœia*, 1885. By William Martindale, F.C.S. Medical references, etc., by W. Wynn Westcott, M.B. London: H. K. Lewis. 1890.

Manual of Gynæcology. By D. Berry Hart, M.D., and A. H. Freeland Barbour, M.A., M.D. Fourth Edition. Edinburgh and London: W. and A. K. Johnston. 1890.

THE LUMLEIAN LECTURES
ON
CONVULSIVE SEIZURES.

Delivered before the Royal College of Physicians of London.

By J. HUGHLINGS JACKSON, M.D., F.R.C.P., LL.D., F.R.S.,
Physician to the London Hospital, and to the National Hospital for the Paralysed and the Epileptic.

LECTURE II.

Epileptiform (Middle Level) Fits.—Varieties.—Diluted Convulsions.—Crude Sensations.—Locality and Order of Convulsive Movements.—Degrees and Ranges of Fits.—Hyper- and Hypophysiological States.—A Discharging Lesion.—The "Buttoning Centre."—Physiological Fulminate.—The March of the Convulsion.—Compound Order.—Cells of a Discharging Lesion Quasi-parasitical.—Nutrition of Cells.—Summary.

I TAKE for most particular consideration the second kind of fits, epileptiform seizures (middle level fits); they were first described by Bravais in 1824. There are many reasons why we should study them first. (1) Their investigation is comparatively easy. We can, if present at a paroxysm, ascertain the place of onset and trace the March of the convulsion; and if we witness no attacks, since consciousness is not lost or is lost late in the seizures, the patient can tell us the place of onset and much more about his fits. (2) They have permanent paralytic counterparts in monoplegias and hemiplegias from destructive lesions of the "motor region." (3) There is after them, at least in many cases, temporary paralysis of the parts first and most convulsed. (4) There is not rarely permanent paralysis of the parts which are occasionally convulsed, this showing—a very important thing with regard to doctrines of localisation—that in the same case there is coexistence of a destructive lesion and a discharging lesion of different elements of the same centre. (5) Because there is after some seizures temporary defect of speech ("partial aphasia"). (6) Because, if we can find the condition of centres answering to paralysis and aphasia after these seizures, we shall be greatly helped in our investigation of the state of the highest centres in insanities after epileptic fits. (7) Because epileptiform seizures often depend on gross organic disease, such as tumour (syphilitic or non-syphilitic); hence, we may at *post-mortem* examinations obtain proof or disproof of any notions on localisation and gross pathology we had from a study of the patient's symptomatology during his life. (8) It is in epileptiform seizures that operations have been done by Macewen, Godlee, Horsley, Barker, and others. Hence, very precise study of fits of this kind is necessary. In this regard, as well as in many others, the minute investigations of the "motor region" by Beevor and Horsley are of great value.

It would be very unmethodical to begin the scientific study of the more complex (epileptic) kind of fits before the study of the epileptiform kind.

There are Varieties of epileptiform seizures. The convulsion begins in some part of one side of the body. Varieties are distinguished by the particular place of onset ("signal symptom" of Seguin) of the convulsion. The fit may begin in some part of either right or left side of the body; I call that on which it does begin the "first side," and the corresponding (opposite) half of the brain in which the discharge begins the "first half." If the fit begins on the left side, that is the first side, and the right half of the brain is the first half; suppose that the convulsion becomes universal, then the right side of the body is the second side, and the left half of the brain (if it discharges after the right) is the second half. Whether the onset be right or left sided is a very important matter, because there is often defect of speech after right-side-beginning fits; moreover, on account of the "speech centre," operations on the left half of the brain are more serious than operations on the right.

The three commonest Varieties of epileptiform seizures are—(1) Fits starting in the hand (most often in the thumb or index finger or in both). (2) Fits starting in one side of the face (most often near the mouth) or in the tongue, or in both these parts. (3) Fits starting in the foot (nearly always in the great toe). (Of course one always means convulsive development of movements of muscles belonging to the several parts mentioned.)

Of necessity the three Varieties depend on the fact that the local discharging lesion is of cells of different parts of the "motor region"—of hand, face, and foot centre respectively. The starting point is almost invariably the same in each patient, but not always. A patient whose fits commonly begin in the hand may sometimes have the face of the same side slightly and solely affected; or a patient may tell us that his fits "fly about"—that is, leaving the face for the hand, or *vice versâ*.

We sometimes meet with paroxysms of one-sided tremor—what looks superficially like tremor, really a "diluted convulsion"—dependent, I think, on discharges beginning in motor elements of the so-called sensory centres behind the motor region.[1] I do not call these epileptiform seizures.

Often enough there is "tingling" or some other crude sensation in the place of onset before convulsion starts; this is part of the proof that the so-called motor region, although mainly motor,[2] is not purely motor. Sometimes there is at or near to the onset of an otherwise ordinary epileptiform seizure excessive development of colour, or of sound; these also are Crude Sensations. Epileptiform seizures with crude sensations deserve very careful attention, but time will not allow me to consider these complications.[3]

It is worth mentioning that some patients have a feeling as if a part were convulsed when it does not really move; one of my patients subject to veritable convulsions beginning in his left thumb had sometimes what he called "convulsions not to be seen" of that part. Another patient had the feeling of convulsion of one side of his face, but looking in a glass he saw that it did not move. He died of brain tumour (necropsy), but its exact position I did not learn. A patient who has fits starting in the hand will say that he feels "it" in the face, when, however, the face does not move; this "it" may be owing to very slight discharges of sensory or motor elements, or of both.[4]

Epileptiform fits begin in the Animal parts of the body, and commonly in those of them which are the most animal. Thus the majority begin in the arm, and nearly all these in the most animal part of that most animal part, the hand, and most of them in the thumb or index finger or both—the most animal parts of the whole organism. Perhaps the term animal is awkward in this connection; it is convenient in contrast to organic. We can, however, use other terms, and say that epileptiform seizures most often begin in those parts which, speaking popularly, have the most "voluntary" uses; in those parts which have great independence of movement; in those parts which have the greater number of different and more special (definite) movements, at the greater number of different intervals. The foot in man has, however, few *different* movements; the hallux in him is much less specialised than in the monkey. It is, then, a very striking thing that epileptiform seizures beginning in the leg almost invariably start by spasm of the great toe, in the most, and yet but little, differentiated part of the whole lower limb.

It may be objected to the principle stated that, to take an example, convulsion in an epileptiform seizure may begin in the shoulder, the least "voluntary" part of the arm, and spread down the limb.[5] I have considered this objection in the JOURNAL of August

[1] I have never believed that any part of the cortex is purely motor or purely sensory. If the elaborate visual projections in some cases of migraine occur during discharge beginning in a "sensory centre," then the elements of that so-called sensory centre are only chiefly sensory; the fortification outline and the vibrations of parts of the migrainous visual spectre imply discharge of motor elements as certainly as the colours imply discharge of sensory elements.

[2] See remarks (Lecture I) on France's *Researches on Degeneration of Fibres of the Lateral Column of the Cord, consequent on Lesions of the Gyrus Fornicatus.*

[3] Of course crude sensations (psychical) and convulsion (physical) are in no way comparable: the comparisons and contrasts are of excessive discharges of sensory elements *during which* crude sensations arise, with such discharges of motor elements *from which* convulsion arises.

[4] When a healthy person thinks of doing something ("has an idea of a movement"), I consider that what occurs physically is slight discharge not only of sensory but also of motor nervous arrangements of his highest centres; there is "nascent movement"—slight discharge of the very same motor nervous arrangements of the highest centres which, if more strongly discharged, would, by intermediation of middle and lowest motor centres, produce the actual movement. It is probable that a similar explanation (the middle motor centres being here primarily concerned) applies to the "ideas of convulsion" spoken of in the text. No doubt if a man subject to fits beginning in his right thumb were to lose the right arm by amputation his fits would still *seem* to him to begin in his thumb—to begin in his spectral thumb, for some time at least.

[5] I have recorded a case of this kind, *Medical Times and Gazette*, June 5th, 1875.

17th, 1889. We have, as I continually insist, in strictness to speak not of representation of parts of the body (muscular regions), but of representation of movements. Movement of any part of the body done with intention is a "voluntary" movement. Evidently when a card-sharper shrugs his shoulder as a sign to a confederate to play a trump, that is his then most voluntary movement. In so far as any part of the body has a movement independent of the rest, in so far that movement has, I suggest, a degree of localness of representation in the middle and highest motor centres. Horsley and Beevor assign a point of the "motor region" for the primary movement of each segment of the upper limb. It may, however, be taken that epileptiform seizures most often begin in the most "voluntary" parts, and that admitting many varieties the three commonest are selected for comment.

Epileptiform seizures illustrate Dissolution—dissolution in process of being effected—in which the order is from "voluntary" towards automatic. *In normal development of movements the order is the opposite—is that of Evolution; it is from automatic to "voluntary."*[6]

The "motor region" (motor province of the middle level) presumably represents at least motorily the whole of the body, demonstrably nearly all parts organic as well as animal. Hence, as the discharging lesion may theoretically be of any part of the "motor region," it is a legitimate hypothesis that there are fits starting by excessive discharges of cells of nervous arrangements of the "motor region" which especially represent parts in the organic field, and that some fits called *epileptic* are such seizures. I do not hold that hypothesis. There are parts—for example, the vocal cords—which we may speak of as organico-animal.

Munk and Krause[7] in the dog, and Horsley and Semon in the monkey, have investigated the cortical representation of the movements of the vocal cords. Krause in the dog, Horsley and Semon in the monkey,[8] produced convulsive seizures by excitation of the cortical "laryngeal centre." Semon thinks that laryngismus stridulus in man (the infant human being) is a cortical fit; but if so there is not an exception to the statement that epileptiform fits begin in the animal parts, if we adopt Semon's views of, and inferences from, the kind of representation of the vocal cords in the motor cortex ("purposive or volitional, since it is adduction, that is phonation").

Although epileptiform seizures most often begin in the three most animal parts of the animal parts mentioned, yet as the fits go on the organic field becomes involved. In a dog poisoned by curara (respiration being artificially kept up) the animal parts are excluded, and then we see that by excessive discharges experimentally induced in its "motor region," effects are produced in, and are then limited to, the organic field.

There are Degrees of each variety corresponding to degrees of the "severity" of the excessive discharge. Degrees are to be considered with respect to two factors, (1) amount of convulsion, and (2) range of convulsion. I illustrate here quite arbitrarily by Range only, and take the case of an epileptiform fit starting in the thumb. Admitting that there are many ranges, it is allowable to make arbitrary divisions (they must not be taken for real distinctions) into four Ranges: (1) Terminal[9] fit—the spasm involves, say the hand, or some part of it only; (2) monospasm—the arm becomes involved; (3) hemispasm; (4) bilateral convulsion—the second side being gained, the fit becomes universal. Observe the use of the word "become." In the range (4) there is a March of spasm from the part first seized all over the body, answering to increased spreading of the central excessive discharge beginning in some particular part of the motor region of the first half, and may be extending to the second half, of the brain. The second side of the body (in 4) is affected later, and commonly less than, the first side.

From (1) to (4) there is but a single variety of epileptiform seizure in four different degrees. Otherwise stated, a man who has had convulsion of the range (1) or (2) does not become subject to another variety of epileptiform seizure when he has also fits which, beginning in the same terminal part (hand, we are supposing), have a more extensive range however much more extensive it is; so to speak, that patient is subject to *a* fit, and has it in different degrees on different occasions. However limited or however wide the range of convulsion, the corresponding discharge begins in the very same centre of the motor region of but one, the opposite half of the brain. This means that it is the place of onset ("the signal symptom" which localises)[10]; it points to the particular part of the "motor region" of the cells of which part the discharging lesion is made up. When a man's epileptiform fits "get worse"—when we are supposing they become of greater range—there is the same discharging lesion, but it has become of more cells, or the cells of it have become still more highly unstable, or perhaps there are both kinds of change; in consequence of this purely local ingravescence, the induced discharges (compelled discharges) of normal stable cells are more numerous.

Were A—and B—to be universally convulsed, they would have different varieties of epileptiform seizures if in A—the onset was by spasm of the hand, and in B—by spasm of the foot, however much alike the fits looked at the acme of each; the discharging lesion in A—would be of some cells of his "arm centre," in B—of his "leg centre." To note the "signal symptom"—to use Seguin's term again, and therefrom to infer the seat of the discharging lesion—is more important, obviously for "brain surgery," than anything else about the paroxysms.

It has been implied, but it may be well to say explicitly, that an epileptiform seizure does not, when become universal, turn into the other *kind* of fit—the epileptic. I mention this because I think a rapidly universal epileptiform seizure superficially resembles an epileptic one, and a slowly developed epileptic seizure superficially resembles an epileptiform seizure.

I have often urged that the Clinical Problem in every nervous malady is of three elements: (1) Anatomical, (2) Physiological, (3) Pathological. In other words, we have in every case to seek: (1) the seat of the lesion, the structure damaged, (2) to infer the kind of functional change of structure, and (3) to discover the nature of the abnormal nutritive process of which the alteration of composition of nervous matter producing the abnormal functional state of structure is effected (*vide infra*).

It may be properly said that structure, function, and nutrition never exist separately. It is quite obvious, taking for comment normal conditions, that there would be no persistence of function without continuous nutrition; that function is not conceivable apart from some structure, and that structure without function is nothing for an organism. It is, however, convenient, if not necessary, for clear exposition of nervous maladies, to consider for a time each of the three separately. It will, however, be impossible to consider one without frequent explicit and always implicit reference to the others. Perhaps I use the term Anatomy regarding the nervous system in an unusual sense; I do not use it convertibly with Morphology. A knowledge of the Anatomy of any Centre is *a knowledge of the parts of the body which that centre represents, and of the ways in which it represents them.*

Anatomy.—(Localisation.) I shall say very little under this head. The patient A. is subject to fits, every one of which begins in his right thumb; there is a lesion of the thumb centre of the left middle level ("motor region")—this is the anatomical diagnosis. (According to Beevor and Horsley, "the middle third of the ascending parietal convolution is the focus of representation of the movements of the thumb.")

Physiology.—Physiology deals with the dynamics of the organism—that is, with its function. I use the term "function" with regard to nervous diseases in a strict sense, and never in the way it or its adjective is used when applied to the symptoms of a hysterical woman, or to minute or transitory changes of structure.[11] I must now define the term. The function of organic matter and *par excellence* of nervous matter, to which I confine further remarks, is to store up energy,[12] to liberate that energy (nervous discharge) at different rates against resistances of different amounts; the energy liberated is dissipated or does work, or

[6] Properly from most automatic to least automatic in evolution; the opposite in dissolution. "Most voluntary movement" is objectionable because it is a mixture of psychological and anatomico-physiological language; it is a popular expression, equivalent to what is scientifically "least automatic movement."

[7] *Sitzungsberichte der Königlichen Academie der Wissenschaften und Archiv für Anatomie und Physiologie*, 1883.

[8] JOURNAL, December 21st, 1889.

[9] It may be well said that a fit beginning by spasm of the cheek does not begin in a *terminal* part; but the meaning of the word terminal may, for my present purpose, be used to include that onset. Peripheral would have too wide a meaning. I would suggest acro-epilepsy as a name for epileptiform seizures were it not that it might mislead some to think that there are epileptiform seizures which begin in the nose.

[10] The term aura is, I suppose, never used now in its original sense. When a medical man speaks of an aura in an epileptic fit starting from the epigastric region, he is understood to mean that some sensation is referred by the patient to that part of the body, and to believe that the sensation arises during the incipience of a discharge of some central sensory elements.

[11] See an able paper by Dr. Allchin, *Westminster Hospital Reports*, vol. ii.

[12] Assimilation of material having potential energy (anabolism); decomposition of material (katabolism) with liberation of energy.

there are both consequences according as the resistances encountered are or are not overcome, or are only partially overcome. We have here to deal with abnormalities of this function—that is, with abnormal physiological states (I need not always add the adjective abnormal).

There are two kinds of physiological or functional states in cases of disease of the nervous system. (1) Function may be exalted, and is, sometimes, as that of cells of a discharging lesion, very greatly exalted; these are superpositive functional changes—that is, hyper-physiological states. (2) Function may be diminished or lost; these are negative physiological or functional states—they are hypo-physiological states. Destructive lesions come in this category, although there is in them loss, not merely of function, but of functionable material also.

The two kinds of functional changes—the hyper- and the hypophysiological—are opposites; there are no degrees from one to the other; so to say, they depart from normal function, the one upwards, the other downwards. We shall have to speak later of a negative functional change in temporary post-epileptiform paralysis; that negative change (there is temporary exhaustion of nervous elements) is a direct result of the excessive discharge in the prior paroxysm; the two opposite functional states of the same nervous elements occur in immediate sequence.

Now I consider the inclusion of negative functional states in cases of mere temporary exhaustion of nervous elements in the same category with destructive lesions when nervous elements and function are gone together. I dare say the former would be called functional, because the alteration in the composition of the material of nervous elements, whatever its nature, is no doubt slight and is certainly temporary. But I call it a negative functional change, *because function is lost:* the slight and temporary alteration of composition is a pathological change. For the time being fibres exhausted are not in effect nerve fibres at all; with a morphological plenum there is a functional vacuum as certainly as there is when they are destroyed. Whether nervous elements are functionless or gone altogether, the situation *for the time being* is the same. I shall speak of both as "negative lesions." And saying that the exhausted fibres recover soon is recognising fully the vast difference in their condition from that of fibres destroyed—properly, absence of fibres.

There are degrees of negative function from defect to loss. Of these I will say nothing. There are two greatly different degrees, if indeed we may not say two kinds, of superpositive (hyperphysiological) function. We are concerned with both in this inquiry; it is imperative to distinguish them clearly.

There is (*a*) the vast exaltation of function of cells of a discharging lesion; this degree is always produced by some pathological process—that is, by morbid nutrition, a nutrition which alters the composition of nervous matter.[13] This, the first degree of functional change, is of a highly explosive character; it issues in paroxysmal discharges.

There is (*b*) a comparatively slight exaltation of function with which we shall be particularly concerned when we consider post-epileptiform conditions. In these conditions, besides paralysis answering to a negative functional state of fibres of the second segment of the kinetic route, there are increased tendon reactions answering to a hyperphysiological state of this degree (*b*) of cells of anterior horns (lowest motor centres). I believe that the second degree of superpositive functional state is not—certainly not in the case just alluded to—the direct result of a pathological process, but that it is the *indirect* result of a negative functional state of *other*, related nervous elements. (Here is, essentially, an application of a principle long ago put forward by Anstie and Thompson Dickson). This, the second degree of functional change, does not issue in paroxysmal discharges, but in continuous discharges; or discharge can at any time be evoked by appropriate slight excitations. Returning to post-epileptiform conditions, the negative functional state answering to the paralysis is alone produced by a pathological process; the abnormal condition of anterior horns implied by increase of the tendon reactions is one of over-activity of perfectly healthy nervous elements. There is simply the proper activity of certain lowest motor centres, which is manifested at its maximum when an obstacle has been removed, when control has been taken off. I think, too, that cerebellar influx is no longer antagonised (see Lecture I); and if so, the cerebellum is simply unhindered in its activity, and is doing, now that an obstacle is removed, what it was always "trying to do." Here, again, we come across the principle that parts of the symptomatologies of nervous maladies are owing to activities or over-activities of perfectly healthy nervous arrangements. If this principle be valid, it is evidently important to distinguish between the physiological and the pathological factor in nervous maladies. Of course increased activity of any nervous elements implies increased nutrition, but there is not, I submit, in the case of elements answering to the second kind of functional change, morbid nutrition. There is not, then, what I call a pathological process; the composition of the matter of the cells concerned is not altered. For the present I shall speak only of the first degree (*a*) of superpositive functional states—that which is of a highly explosive degree—and is produced by a pathological process.

The hyperphysiological state (degree *a*) in the case of A—(*vide supra*) is what I call a "discharging lesion." It is a crude hyperphysiological state just as its diametrical opposite, loss of function, is a crude hypophysiological state. I continue to speak of healthy cells as stable; they are naturally unstable, of course, but I mean by using the term stable that they are so *in comparison with* those of discharging lesions, which I speak of as being *highly* unstable. The discharging lesion is of a few cells which have got far above the rest of the cortical cells in degree of tension and instability of equilibrium. That lesion is made up of cells of nervous arrangements which represent some most special movements of a particular muscular region; the sudden and excessive development of these movements from discharge of those cells is the convulsion incipient ("signal symptom" of Seguin), or, if there be no spreading of the spasm, it is the convulsion total.

The hyperphysiology of epileptiform seizures is the element of the threefold clinical problem of which we are sure. We are quite certain that normal movements are the results of liberation of energy attending katabolism; thus the inference is irresistible that that sudden and excessive development of many movements at once, which we call convulsion, must be a result of an excess of the same physiological process—of a sudden and excessive energy-liberation attending great and rapid katabolism. I will give illustrations of the different effects of discharges of stable cells (cells of comparatively low tension and of comparatively stable equilibrium) in normal operations, and of those of cells of a discharging lesion (cells of very high tension and very unstable equilibrium) in a convulsion.

It would be most absurd to say that there is a Buttoning Centre, but for convenience of illustration we may imagine such a centre. I illustrate by motor elements only, although, of course, sensory elements are concerned in all operations. In the operation of buttoning there are slight and slow discharges of normal stable cells (fibres are understood) of different nervous arrangements of our supposed centre (lower centres and muscles being understood) simultaneously and successively; in consequence there is a harmony and a melody of the different movements of the hand and arm by which the button is got into its hole. There is Harmony by Contemperation[14] of different movements, and there is Melody in that the compound contemperated movements follow one another at proper time intervals; there is what is commonly called co-ordination, although the time element (melody) is not much considered in most accounts of the process of co-ordination. So much for the discharges of stable cells in the operations of health.

Now let us suppose that the cells of the buttoning centre become by some, any, pathological process, so highly unstable as to constitute a discharging lesion. (For the present we shall speak as if the excessive discharges of the highly unstable cells did not provoke similar discharges of stable cells of collateral centres.) The discharges are sudden and rapid,[15] and of all the cells nearly

[13] This is the definition I would suggest of a pathological process (morbid nutrition) or of its result. I suppose that such poisons as strychnine alter the composition of nervous elements, in consequence of which morbid nutrition (a substitution nutrition) there is a functional change of the degree (*a*). It seems more likely that strychnine enters into the very composition of matter of nerve cells than that it stands outside the cells and "irritates" them. When a rabbit's respiratory centres discharge excessively on withdrawal of blood, one must suppose that before that discharge there is an abnormal metabolism (pathological process) whereby matter of the cells of the centre becomes more explosive. Certain "pathological processes," such as cerebral hæmorrhage, are really injuries; hemiplegia resulting from clot is, so far as destruction of fibres goes, like that caused by the prong of a pitchfork; there is no real pathological process in either of these modes of destruction.

[14] Contemperation is, says the *Imperial Dictionary*, an obsolete word. One of its meanings given *op. cit.* is, "The act of reducing a quality by admixture of the contrary."

[15] I do not mean by using the word rapid, here or anywhere, that nerve impulses travel more rapidly in the case of excessive discharges, but that more occur in a given time than is normal—that there is a greater quantity of motion in a given time.

at once; they do not cause a speedy and vigorous act of buttoning, but a short, severe, and rapid contention of all the movements of that operation; this contention is convulsion of the hand and arm. There is no harmony and melody; on the contrary, in the tonic stage, all contemplation is lost and all time-intervals are merged, so that there is but one rigid state of the musculature of the hand and arm, and, in the clonic stage, there is but a succession of such rigid states. There are no movements properly so-called in this convulsion; but, if I may use the word for once, there is first but a single big useless movement, and next a series of such so-called movements which do nothing but "mark time."

The illustration, although the supposition of a buttoning centre is grotesque, may render clear what presumably occurs when A— is "attacked by his convulsion." The convulsion is a brutal development of that man's own movements. I make this odd remark because I do not think that it is always vividly realised that an ordinary severe epileptic "attack" (to take that kind of fit for a moment's illustration) is nothing more than a sudden excessive and temporary contention of very many of the patient's familiar normal movements—those of smiling, masticating, articulating, singing, manipulating, etc. A convulsion is not something altogether *sui generis*. Speaking figuratively and more generally, and still of an epileptic paroxysm, there is the mad endeavour of the highest centres to develop the maximum of function of every part of the body, animal and organic, and of all parts at once; the phenomena of a very severe epileptic fit show that this endeavour is nearly successful; the patient is almost killed by the paroxysm, and is nearly dead (deeply comatose) after it.

The cells of a discharging lesion are not to be thought of only as occasionally discharging excessively; we have also to consider their aspect of too easy dischargeability, otherwise their highly unstable equilibrium. In health the cells of the "buttoning centre" are made to discharge slightly on special excitations of definite force, so that their discharges are in particular relations, and in some degree of community with those of cells of other centres (I will call them "collateral stable cells") with which they are connected. The cells of the "buttoning centre," when they have become highly explosive, are still integral parts of the nervous system, and have the very same connections they had before some pathological process so altered their nutrition that they became highly explosive (and then, metaphorically speaking, "mad parts"). Their equilibrium can be upset, they can be made to discharge, and to discharge excessively, by less special excitations of less definite force coming to them from collateral stable cells—that is, their discharge depends on their own easy dischargeability rather than on the particularity of the excitation reaching them. Possibly their discharge is spontaneous when tension is very great, and equilibrium very highly unstable.

I repeat that the cells which have become very highly "explosive" (those of the discharging lesion) continue to be elements of the same nervous arrangements, and that these nervous arrangements are still connected in the very same ways with the remainder of the nervous system[16] as when their cells were stable. Hence I do not speak of the highly explosive cells as being *in* any motor centre, but as being *of* that centre. I submit that the highly "explosive" cells of a discharging lesion will on their fulminating discharge overcome the resistance of, and thus produce excessive discharge of, collateral stable nervous elements. The epileptiform fit (excepting, perhaps, some slight terminal fits) is not the result only of the discharge of the cells of the discharging lesion, as was supposed for a limited illustration, when speaking of the imaginary "buttoning centre." Making a purely arbitrary limitation, we may imagine that the primary excessive discharge, that of the fulminate of A.'s thumb-centre, only produces directly the initial spasm, that of his thumb (the "signal symptom"); all the rest of his convulsion will be indirectly produced by it, by *compelled* excessive discharges of stable cells. Of these compelled discharges I shall speak again later.

It will now be seen why the term physiological fulminate is occasionally used. I use it in almost a literal sense; the discharging lesion is supposed to be a detonator of collateral stable cells, just as a fulminate (in the artillerist's use of the term) is of the comparatively stable gunpowder in a cannon. I believe that the only thing persistently physiologically abnormal in A. is that some few cells of his thumb-centre have become fulminant. To speak figuratively, this "mad part" compels many collateral "sane" cells and cells of middle and lowest motor centres, and ultimately the muscles, to co-operate in its occasional and sudden excesses—makes them "act madly" for a time. If the few highly explosive cells, those of the discharging lesion, could be destroyed, the patient would be rid of his fits; he would lose nervous elements which are doubtless never of value for co-operation with the collateral stable cells in normal operations; he would lose cells of negative value and of positive injury—cells like those of an animal poisoned by strychnine, which, on their discharge, "run up" movements into useless contentions. The cells of A.'s fulminate, when called on to co-operate with normally stable cells in any operation, function excessively, and so as, after the manner of a detonator, to cause wide excessive discharges of many stable cells. It is a pity that A. cannot be rid of these worse than useless cells; but I know of no way of effecting this riddance. There is the surgical question of cutting out part of the cortex.

I have, in the foregoing, used, regarding hyper-physiological discharges, the term excessive, and, regarding the resulting convulsion, the term severe; the more excessive the discharge the severer the fit. I now use more precise terms, and consider this part of the subject as it was in effect, so it seems to me, long ago considered by Herpin. I regret greatly that my ignorance of physics renders me unable to deal with it adequately.

With regard to nervous discharges, or, as I shall here say, liberations of energy by nervous elements, we have to consider two aspects—quantity of energy liberated, and the rate of its liberation; the two varying factors both in normal and in "excessive" nervous discharges. With regard to the convulsion, we have to consider its degree, and the rate with which it is produced.[17] We have to study the amount of convulsion, the range of convulsion, and particularly the "deliberate" or "sudden" rate of onset. In two liberations of equal quantities of energy at different rates there is the same momentum or quantity of motion. But the force of the more rapid but shorter liberation of energy will be greater than that of the slower and longer liberation. Force only exists while it lasts; there is no doctrine of conservation of force. The more rapid the liberation of energy by a discharging lesion the greater resistances will be overcome, the more numerous collateral stable elements will be compelled to discharge, and thus the more the amount of convulsion and the greater its range.

I suppose that there are degrees of instability of the cells of the fulminates in different cases of epileptiform seizures and at different periods of the same case. When A.'s fits "get worse" (greater amount of convulsion and greater range of convulsion), more cells may have then become highly unstable, or those already highly unstable may have become still more so; his fulminate becomes more fulminant, but that fulminate is made up of cells of the same part of the "motor region," if not of the very same cells. I now consider it must be taken hypothetically, the differences of fulmination of discharging lesions. Let me suppose two cases, in each of which there is a discharging lesion constituted by cells of the thumb centre. In the patient A. the cells are (I am only able to distinguish vaguely) of lower degree of high instability (his fulminate is much less of a fulminate) than in the case of A. A. In both the first spasm is of the thumb. I shall mention the cortical discharges only; the sequent discharges of the lowest motor centres and of the muscles are to be taken for granted.

In A—the primary discharge, that of the fulminate, is deliberate, produces (secundo-primary) discharges of few collateral stable cells, and produces them slowly one after another; the corresponding convulsion sets in deliberately and spreads slowly; is of little range (very local; for example, of the arm only), is of long duration, and there is an easily traceable distinct sequence over the range (all this, of course, comparatively with what occurs in the next case). In A. A. the primary discharge is sudden, produces (secundo-primary) discharges of many collateral stable cells, and produces them rapidly and more nearly at the same time; the corresponding convulsion sets in suddenly and spreads rapidly; it is of great range, is of short duration, and there is a less easily traceable distinct sequence over the range.

The more rapid, though the shorter, of the two primary liberations by the discharging lesions—supposing an equal quantity of energy to be liberated by each—will overcome greater resistances and will thus compel discharges of a greater number of collatera

[16] There is the obvious qualification that some nervous elements may have been destroyed by the same pathological process which caused high instability of other elements, and thus that some connections of the latter are cut.

[17] Herpin, in his valuable work on *Epilepsy*, sums up several propositions as follows (italics in original):—"En résumé: *plus le début est long, moins la crise est violente, plus il est instantané, plus l'accès est intense.*"

stable elements; the convulsion produced will be both of greater amount and of greater range. Lines of many different degrees of resistance will be overcome by such a primary liberation more nearly at the same time; the convulsion will more quickly attain its maximum at every part affected, and will be more nearly of the same degree in all parts affected.

We have not only to note how much of the body is ultimately involved, but also the order in which the several parts involved are affected—the March of the convulsion. There is not a simple, but a compound sequence of spasm; the convulsion does not cease in one part when another is involved. To observe, to give a simple example, how much of the arm has been involved when convulsion appears in the face will, I think, help us to clearer notions of localisation of movements of those two separate parts of the body in the centre discharging (anatomical localisation); or if not, at any rate as to the time relations of different elements of different centres (physiological localisation). From increasing discharge of a motor centre there is a double effect; there is not simply "more convulsion," there is (1) greater amount of convulsion of the part first seized, and there is (2) extension of convulsion to the next part of the same muscular region, or to some other part represented in the centre discharging (or in another centre connected with the one primarily discharging by particular time relations). Most generally, the progress of the two dissolutions—convulsion from increasing discharge of a motor centre, and paralysis from increasing destruction of a motor centre—may be rudely (and without the least pretence at exact quantification) symbolised as (1) x, (2) x^2y, (3) x^3y^2z; the order x, y, z, implies the representation in the centre supposed of the time relations, and of the degree of speciality of movements of the three parts. Horsley and Beevor find Compound Order in their development of "simple movements" by very slight excitations of small parts of a monkey's "motor region." After developing what they call the Primary Movement of a part, say one of the shoulder, there follow, on increasing the excitation, secondary and tertiary movements—that is, there is produced a sequence of movements of segments of the arm. But when the secondary movement comes the primary has not ceased; on the contrary, it is intensified: the development may be roughly symbolised as p and then p^2s.

Returning to epileptiform seizures, Compound Order is observed on a small scale in fits involving limited regions of the body (very well seen in the face), and on a large scale when such seizures become universal. There is a very intricate compound sequence from the beginning of the fit to its universalisation. I shall, however, make artificial separations, and say a fit which becomes universal that excessive discharge beginning in some cells of a part of the right middle motor centres produces convulsion (1) starting in the left hand and spreading up the arm and down the leg (first side), (2) involving both sides of the trunk, and (3) finally gaining the limbs of the right (second) side when all parts of the body are in convulsion together. That the left limbs are convulsed from discharge of the right middle motor centres, by intermediation of the first set of fibres of the second segment, is not doubted. I used to suggest that convulsion of both sides of the trunk and of the right limbs is also produced by discharge of that half by the second and (or rather as I should now say) third sets of fibres. This was rash, for supposing that some convulsion of the second (right) side *is producible* by discharge of that one half (right), it does not follow that the convulsion which actually occurs *is produced* by it alone. For my hypothesis of representation of both sides of the body in each half of the brain, it would suffice if there were any degree of tonic or clonic convulsion of the right (second) side, for I only suppose that the right side is represented less than and subordinately to the left side, and also second in time in the right half. The subject is a difficult one. Horsley finds that when the corpus callosum is divided, excitation of the right (I continue to say "right" for convenience) middle motor centres produces epileptic convulsion of the left limbs only.[18] In the case of dogs, Franck and Pitres found that artificially induced discharges of the right "motor region" caused universal convulsion when the left motor region had been extirpated and the corpus callosum divided. I quoted them to this effect in my third Croonian Lecture.[19] They, however, as I then said, attribute the universalisation of the convulsion to the pons, medulla, and cord (which together I call the lowest level).

Considering, then, the opinions of those who hold that the second and third sets of fibres, as well as the first set (all the fibres of the second segment of the kinetic route interconnecting the right middle motor centres with the lowest motor centres), end in the left lowest motor centres, the researches of Franck and Pitres and those of Horsley, and also the great complexity of the subject, I ought not to be dogmatic as to the process by which universalisation of an epileptiform convulsion is produced. Most likely in severe seizures the left middle motor centres are discharged, as Horsley supposes, after the right by intermediation of callosal fibres, although possibly some slight convulsion of the right limbs is produced from discharge of the right half alone by intermediation of the second and third sets of fibres. And most likely, too, the anterior commissure of the pons, medulla, and cord (intrinsic fibres of the lowest level interconnecting left and right lowest motor centres) are concerned. Probably the loss of consciousness answers to excessive discharges of the highest centres caused by the medium of sensory (upward) fibres. The process of universalisation of epileptiform seizures is a very intricate one, and deserves more precise analysis than I am capable of making.

I stay here to say that, taking the case of A. in illustration, when we have located his lesion we have done anatomical work only; when we have noted all we can about his convulsion (therefrom inferring that the lesion is a "discharging lesion" and the effects of its discharge direct and consecutive), we have done physiological work only. The experimenters on animals do the anatomico-physiological work thoroughly well.

Taking up again the case of A., we have now the third element, pathology, to consider. Here is the great difficulty. Being sure that A. has a discharging lesion of this thumb centre, there may be no evidence to show whether that lesion is produced (indirectly) by tumour or not. Here I urge again the necessity of distinguishing between the physiology and pathology of cases of nervous disease.[20] Having urged that there is a degree or kind of functional change (*b*) which is not the result of any pathological process, I am all the more wishful to urge the distinction. I continue to speak of the first degree (*a*), and urge the distinction from this point.

It may be epigrammatically said, and with truth, that an epileptiform seizure is "only a symptom." Nevertheless, it is always symptomatic of one *physiological* thing, a "discharging lesion." Otherwise put, an epileptiform seizure is not a symptom of tumour, of "softening," or of meningitis; it is a symptom of the one thing—high instability of certain cortical cells, *however produced*—produced by any pathological process. Physiologically speaking, there is but one "cause" of epileptiform seizures, namely, high instability of some cells of some centre of the Rolandic region; but there are many "causes" of them if we mean pathological processes leading to that instability. So that in the case of A. (he being *subject to fits*), the question in pathology is not the vague one: "What is the *disease* of a certain part of his cortex"? but "What abnormality of the nutritive process has produced such an alteration in the composition of the material of cells in that part as to render them highly explosive, and how was that abnormality set up?" Or, more generally and regarding all cases of epileptiform seizures (and epileptic too), we put the question: "How are local persistent discharging lesions established and kept up?"

The first question is: "What is the most general nature of the abnormal nutritive process of cells of discharging lesions in epileptiform seizures?" This we ask ourselves, whatever the particular gross pathology or morbid anatomy, tumour, "softening," etc., may be in any case.

The cells of the discharging lesion, although *quasi*-parasitical, are not strictly parasitical; for another purpose I urged that the nervous arrangements into which they enter remain integral parts of the nervous system, and now I urge that they are nourished along with the rest of the body. Their nutrition does go on in some base fashion as certainly as that that of their stable neigh-

[18] In the abstract of "Brown Lectures," *Lancet*, December 25th, 1886, Mr. Victor Horsley is reported: "The conclusions ..... all round, therefore, were very emphatic, to the effect that convulsions due to cortical discharge are evoked in various groups of muscles by nerve energy proceeding from that centre in each hemisphere which is in relation to each group of muscles, and that in generalised epileptic convulsions both cerebral hemispheres are involved.

[19] JOURNAL, March 29th, 1884.

[20] I have urged this many times for at least twenty years. "Functional changes must not be confounded with pathological changes, although of course the two necessarily co-exist" ("Study of Convulsions," "St. And. Grad. Rep.," vol. iii, 1870). I mention this as I am said to have put forward the "theory of discharges" as the *pathology* of epilepsy—a thing I earnestly repudiate. In 1870 I did not make two degrees of functional changes, and spoke only of what I now call the first degree (*a*).

bours goes on in a proper way. By nutrition of some kind the cells of the discharging lesion attain high tension and very unstable equilibrium, and occasionally discharge suddenly, excessively, and temporarily; their stability is after their discharge below normal; by continuance of this abnormal nutrition they reattain high tension, or no more fits would ensue. What is the "base fashion" of nutrition of these cells? It does not follow that the cells are *more* nourished, although they are certainly *worse* nourished. So to put it, they may be less nourished in quantity and worse nourished in quality. The nutrition must be such that it alters the composition of nervous matter of the cells, and in such a way that it becomes more explosive.

I have so often spoken on this subject that I will only mention the hypothesis that the nutrient fluid bathing the cells is comparatively stagnant, and that in consequence there is inferior nutrition. I suggest that there is "substitution nutrition," phosphorus compounds becoming more nitrogenous, or nitrogenous compounds more nitrogenised. I may illustrate by the well-known case of glycerine becoming explosive (nitroglycerine) when some of its hydrogen is replaced by nitric peroxide. The Composition of this substance is altered, but its Constitution remains the same. It may possibly be that the mass of the explosion of nerve cells, both in health and convulsion, is of non-nitrogenous matter, as is the case in the normal discharges of muscle. But the suggestion is that a nitrogenous substance is the "pivot" of the metabolism of nervous matter both in physiological and in hyperphysiological states.[21] I suppose the greater nitrogenisation of the material of nerve cells makes it highly explosive, but that the constitution of that material and the morphological structure of the cells remain the same. If this hypothesis be valid, there are presumably degrees of substitution (as there are in the three chloracetic acids, for example), and consequently degrees of high explosiveness. It may be that when a patient's fits "get worse," the original fulminate becomes more fulminant by still greater nitrogenisation, as well as that more cells become part of his fulminate. The abnormal nutrition leading to change of composition is a pathological process, whilst the high explosiveness it produces is a functional change. Surely it is the change of function which should be called a functional change. Whether these speculations be valid or not, it is a warrantable inference that the nutrition of the cells of the discharging lesion goes on, that it goes on wrongly, and that some material of the cells does become highly explosive.

Now I consider differences in sizes of cells with regard to their normal and morbid nutrition.

For theoretical reasons, and after the observations of Betz and Mierzejewsky, I suggested [22] that those centres of the motor region which especially represent small muscles (eyes, face, and hands) will have a greater number of small cells than those which especially represent the large muscles of the limbs. I think this is generally true of the "motor region." And I suggest that it accounts for the great frequency of onset of epileptiform fits in the hand and face, for reasons to be given presently. The "leg" centre contains many large cells, but it also contains some small cells. Bevan Lewis's researches, to which I am very greatly indebted, show that the parts of the motor region representing small muscles have most small cells. He says—and this bears on the remark I made on the leg centre—"that alongside the largest pyramidal cells are numbers of others of the *smallest* dimensions" (italics in original) [23] so that the discharging lesion of the "leg centre" may be made up of small cells.

Although it is convenient for some purposes to say "small muscles," the expression is not exact. For I urge once more that nervous centres do not represent muscles, but movements. I will substitute the expression "small movements" for "small muscles," and that of "large movements" for "large muscles." As these terms, the best I can think of, are vague, their meaning must be taken as defined here. Most of the movements of the hand are "small" according to the definition I now give of "small movements." The parts moved have little mass, and in most of the operations they serve in there is little more added mass. The muscles are small and numerous, and in most operations by the hand their movements are of little excursion, of short duration, and rapidly changing. Short, prompt, and frequent liberations of small quantities of energy will be required for these successions of "small" different movements; I submit that the nervous arrangements for these movements of the hand have small cells, and very many small cells. Most of the muscles of the shoulder are "large movements," according to the following definition. The muscles are large and few; there is much mass to move, the whole arm to lift, and the added mass is often great in some of the operations they serve in, as in lifting weights the hand takes up. In most operations they serve in, the movements are of large excursion, of comparatively long duration, and are comparatively little changing. They will require persisting and slow liberations of large quantities of energy by, I suggest, comparatively few and large cells. We may have "large" and "small" movements of different parts of one limb in a single operation. When the arm is put forth there are "large movements" of the shoulder, upper arm, and forearm; and when the fingers, thus put forward, elaborately explore an object, there are "small movements" of the hand.

But although parts which most often engage in "large movements" have large muscles, yet there may be "large movements" of parts having small muscles. If we grasp an oar and pull a boat, the whole of the musculature of the arm serves in a succession of similar large movements (and then subordinately to other movements). For these, I suppose, will be discharges of large cells, even for the movement of the hands grasping the oar; there is, indeed, then but one unchanging movement of the whole hand, a large movement *as defined*, all the small muscles serving together as if one muscle.

A principle of representation is here in question; we have not only to do with sizes of cells, but also with numbers of cells, and therefore with the volume of different centres. Schroeder van der Kolk, illustrating by the case of the sturgeon, which has large muscles and few cells in its spinal cord, pointed out that there is not a mere relation between quantity of grey matter and size of muscles, but that the grey matter is greater in proportion to the complexity of movements of muscles. This shows that we have never to forget that centres represent movements of muscles, not mere muscular masses. I have several times drawn attention to Herbert Spencer's statements bearing on this question.[24] One remark he makes is: "In proportion to the number, extensiveness, and complexity of the relations, simultaneous and successive, that are formed among different parts of the organism, will be the quantity of molecular action which the nerve-centres are capable of disengaging." Spencer takes count of both impressions and movements; I am illustrating by movements alone. The much greater volume of the middle motor centres is in accord with the fact that they represent vastly more numerous different movements than the lowest motor centres do; the muscles represented by both levels are, of course, the same, being in each case all the muscles of the body; hence the middle motor centres contain many more cells and fibres than the lower centres do. Presumably the same principle applies in detail. According to Horsley and Beevor, the thumb and index finger, which have a great number of different movements, chiefly "small movements," have a large area of representation in the motor region. As to the trunk area of the cortex, I quote what Horsley and Schäfer say:[25] "It certainly is not a little remarkable that the numerous and powerful muscles of the spine should be governed from so small a portion of the cerebral cortex, *but it is to be remembered that the movements of which the spine is capable are comparatively few and simple*" (no italics in original). The supposition is that parts having many small and greatly changing movements are especially represented by small cells and by many small cells, and that parts having but few and little changing ("tonic") movements are represented by large cells and by few large cells.

The size of cells is a very important matter with regard to their nutrition. Both in health and in disease small [26] nerve cells will be nourished more quickly than large ones when both are bathed

[21] "Whether the chief product of the metabolism of any tissue be a proteid substance, or a fat, or a carbohydrate, proteid substance is the pivot, so to speak, of the metabolism, and nitrogenous bodies always appear as the products of metabolism." (Foster, *Physiology*, pt. ii, p. 828).

[22] *Medical Press and Circular*, August 23rd, 1876.

[23] *A Text-book of Mental Disease*, p. 106.

[24] *Psychology*, 2nd ed., vol. i, pp. 35, 55, 67.

[25] *Phil. Trans.* vol. clxxix, 1888, B.

[26] "Other things equal, the smallest cells will soonest become unstable. A mass of nervous matter in many small cells will 'present a much larger surface to the contact' of nutrient fluid than the same mass in a few large cells" (Harveian Lectures, *Med. Times and Gaz.*, January 11th, 1879). My attention was first directed to this subject on reading Spencer's *Biology*, where he expounds his theory of growth. A brief statement of Spencer's theory will be found on p. 220 of *The Evolution of Sex*, by Geddes and Thomson, from which I quote. "In spherical and all other regular units the mass increases as the cube of the diameter, the surface only as the square." I refer the reader to Ross's great work, *Diseases of the Nervous System*, vol. i, p. 13, where he deals with the significance of differences in sizes of nerve cells with regard to normal and abnormal nutrition and its consequences.

in the same nutrient fluid. (From diminished nutrient supply the small cells will atrophy sooner than large ones.) The smaller cells will become highly unstable sooner than large ones during morbid nutrition. It certainly is the fact that most epileptiform seizures begin in parts having "small movements," in parts represented by areas of the cortex having most small cells. As I have pointed out, they may begin in the large muscles of the upper arm; it would be begging the question to say that in these cases the smallest cells of the "shoulder centre" are those which first become highly unstable. The size of cells bears also on rates of discharge.

Four hot iron balls will become cold much sooner than the same mass of iron in one ball having the same quantity of heat as the four balls together have. From discharge of four small cells, which are together equal in mass to that of one large cell, there will be, I submit, a liberation of energy in a shorter time than by the large cell, supposing equal quantities liberated in the two cases. Hence another reason for fulmination of the highly unstable cells of discharging lesions if these cells are small. As being somewhat illustrative, I may refer to different sizes of grains of powder used as ammunition; slowly burning (pebble) powder is required for large cannons, quickly burning (fine-grained) powder for firearms.

To repeat the several hypotheses, Epileptiform seizures begin most often in parts of the body having "small movements;" these movements are represented by nervous arrangements having many small cells.[27] Small cells present a more extensive surface to nutrient fluid than the small quantity of grey matter in large cells, and will be more quickly nourished than large ones are. Nerve cells become highly unstable from an abnormal nutrition, such that, although their structure and the constitution of their material is unaltered, that material becomes of more nitrogenous composition, and thus more explosive. Small cells become highly unstable more readily than large ones do; thus discharging lesions are supposed to be especially of small cells. A rapid liberation of energy overcomes greater and more numerous resistances than a slower liberation of an equal quantity of energy. Small cells liberate their energy in a shorter time than large ones; hence the currents developed by fulminates of small cells overcome greater and thus more numerous resistances than would fulminates of large cells, and hence produce more convulsion and greater range of convulsion.

We have assumed that the nutrition of the cells of the discharging lesion is continuous, and have supposed in effect that the nutrient fluid is comparatively stagnant. But how is this comparative stagnation brought about? This brings us to pathology, commonly so-called. We have to distinguish between what I may call the coarse pathology of a case and its immediate pathology.

[In the remainder of the lecture the production of discharging lesions by tumours and by arterial occlusion was considered.][28]

[27] The movements, speaking most generally, represented by the cerebrum are, I suppose, numerous different punctuated movements (many and different "small movements"). Presumably those represented by the cerebellum are, in comparison, few and little different movements, movements as it were gliding into one another (few and similar "large movements"). It is interesting to observe that the structure of the cerebellum is more uniform than that of the cerebrum, and that those of the cells of the cerebellum which are presumably motor are large and of nearly equal size. The movements for bracing up the spine in standing or walking, and the separate movements of the legs and arms in walking, will require comparatively continuous supplies of large quantities of energy. (I believe, however, that the cerebrum and cerebellum are both engaged by contemperation in at least all extensive operations.)

[28] See JOURNAL, July 21st, 1888.

AFTER April 1st, Professor Curschmann, of Leipzig, will replace Professor Unverricht, of Dorpat, in the editorship of the *Fortschritte der Medicin*.

AT a meeting on February 24th, the Council of Public Health for the department of the Seine had under consideration a report from M. Alexandre, chief of the sanitary service, urging the establishment of a departmental laboratory, in which researches on the contagious diseases of animals could be carried out. It is proposed to ask the departmental authorities for a grant of money for the purpose.

THE Royal Medical Benevolent College has received a legacy of £400 from the late Mrs. Price, of Leamington; and also £250, assigned to it by the trustees of the late Mr. Daniel Procter, of Manchester, who left a large residue at their disposal for charitable purposes.

THE

GOULSTONIAN LECTURES

ON

SOME CEREBRAL LESIONS.

Delivered before the Royal College of Physicians of London.

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LECTURE II.

1. CASES OF MENINGITIS AND TUBERCLE SECONDARY TO EAR DISEASE. 2. CASES OF CEREBRAL ABSCESS AND SINUS THROMBOSIS DUE TO OTHER CAUSES THAN EAR DISEASE.

Meningitis (25 cases).—In patients under 10 this is the most fatal complication of ear disease, 8 out of 11 patients below this age dying from meningitis. The distribution as to age is under 9 years, 9; between 10 and 19 years, 6; between 20 and 29 years, 5—that is, the younger the patient the more frequently does meningitis occur. The meningitis was usually secondary to some other complication.

The following is a list of lesions which had preceded the meningitis: Pus outside the dura mater on either the anterior or the posterior surface of the petrous bone in 5 cases, a sloughing condition of the dura mater in 2, perforation of the dura mater by an extradural abscess in 1, thrombosis of the lateral sinus in 4, of a dura-matral vein in 1, cerebral abscess reaching the surface in 3, bursting into the lateral ventricle in 2, fracture of an abnormally thin petrous bone in 1, and the passage of pus along the internal auditory meatus from the ear in 3. Whereas cerebral abscess only ensues in cases of old ear disease, meningitis may come on within two days of the onset of otorrhœa, and is the probable lesion when there is a complication in the early days of ear trouble, as may be illustrated by two cases (XL and XLIX) of foreign bodies in the ear, in which death ensued within four and eight days respectively.

Another group of cases are those in which (3) suppuration spread through the internal auditory meatus from the internal ear. The exact course which the pus took inside the bone was not made out definitely, although in at least one case a minute dissection was made. Probably the course was not the same in all. These cases are of importance because they show that infection may travel from outside through the internal ear to the posterior fossa; in each instance a fatal meningitis was set up.

The symptoms which were recorded of the 23 cases of meningitis may be grouped as follows, bearing in mind that of 6 there are only a few brief notes, but the remaining 17 are fully reported. The onset was sudden and the course rapid. The temperature was raised in all (19); it averaged about 101°, but in some was towards the end very high. In 15 there was headache, which was not of extreme severity in most cases; earache, in addition, was noted in 8 cases. The patients were listless or lethargic in 9, drowsy in 8, and finally drifted into coma in 11 instances; 8 suffered with vomiting, and 6 were extremely restless. The optic discs were recorded as normal 6 times, while neuritis was only noted in the 3 following cases (XLVI, L, XIV).

Neuritis was found in a child a year old, ten days after a fit. At the inspection four days later there was found a general cerebro-spinal meningitis secondary to the ear disease. This is the only case in which the neuritis was due to the meningitis. In the second case double optic neuritis was found in a girl 12 years old, six days after the onset of the illness. Pus was let out from both surfaces of the petrous bone; the neuritis at first diminished and the girl improved, but she relapsed and ultimately died from meningitis, due to the rupture of an extra-dural abscess into the arachnoid space. The neuritis was probably due to this extradural abscess.

The third case was a girl aged 8, who had thrombosis of the lateral sinus, and there was an abscess in the centrum ovale, which burst on to the surface of the brain after an exploratory operation. The neuritis in this case was due to the thrombosis. Optic neuritis is, therefore, rarely due to meningitis, and the reason is not far to seek. Five or six days must elapse before neuritis develops, and still longer when the meningitis is limited

to the posterior fossa, but we have shown that 40 per cent. of the cases of meningitis are fatal in less than that time. Various motor troubles were recorded; convulsions in 4, tremors and twitchings of the limbs in 5, hemiplegia in 3, and paresis of the arms once. Ptosis, facial paralysis, strabismus, and dysphagia were each recorded twice. In several (7) retraction of the neck, with rigidity, was well marked. As occasional symptoms, aphasia, agraphia, impairment of memory, emaciation, and a slow pulse were noted.

The rapid course of the disease, and its association with other lesions, often render it difficult to arrive at a diagnosis before the patient is dying.

In Case XLV the first evidence that there was anything wrong was the development of agraphia, which was found at the inspection to have been due to meningitis.

When the meningitis is once set up, the disease usually runs a very acute course, and this is more frequently the case than with the other lesions. In 13 out of 18, the onset of acute symptoms was followed by death within a week; and in 9 within four days.

It does not seem probable that surgical interference, when meningitis has once thoroughly developed, will ever be of any use, but it is clear that at an earlier stage the lesions which precede the meningitis in almost all cases are such as are capable of treatment by free drainage, which may sometimes be successful. I would suggest that a fatal termination may more often be prevented than it is at present, when it is recognised that it is desirable to operate sooner than we have hitherto done in those cases of ear disease in which there are severe local symptoms.

The conclusions as to the cases of meningitis may be summed up as follows: (1) the onset is sudden, and the duration of life after the commencement of the symptoms is usually under a week; (2) the temperature is always raised, there is generally a headache, and in most cases the patient is lethargic, and often drifts into a comatose state at the end; (3) in a third of the patients the neck is held retracted, and in about the same proportion of cases there are symptoms of motor disturbance, such as tremors, paresis, or convulsions; (4) optic neuritis is very rarely due to meningitis; (5) the meningitis is almost always secondary to some other complication.

There is some evidence that otitis media, when of a tubercular nature, may be the means of infecting the brain with tubercular instead of with simple inflammatory products. I cannot offer a conclusive proof of this, but the following cases may be interpreted in this way (Cases LII, LIII, LIV, LV).

In the first there was a large tubercular mass in the cerebellum, which was adherent to the posterior surface of the carious temporal bone, the interior of which was affected with caries most probably tubercular.

In the second case, the tubercular meningitis was most marked in the region of the left Silvian fissure, near the ear disease; there were tubercles in the liver and spleen, but the only chronic tubercular source appeared to be the carious left temporal bone.

In the third case, there were no tubercular sources found, except the chronic ear disease; in the last case the mastoid cells were carious, and there had been an abscess behind the left ear for three weeks; the mischief in the brain was almost entirely limited to the region of the left Sylvian fissure, and the adjacent convolutions; here there were numerous tubercles, and the middle cerebral artery had become blocked, so that there was softening together with extensive hæmorrhage. Possibly other cases of a general tubercular meningitis, where there has also been otorrhœa, may have owned this as their source. It is certainly not a common centre of infection, but I would suggest that it is so occasionally.

CASE LII.—A. G., aged 7. Under Mr. Durham. 1881. The child had measles five years ago, which was followed by suppuration in the right hip. She has had left otorrhœa for two years, and right facial paralysis for one year. August 3rd. The leg was amputated below the right knee. Death ensued from secondary hæmorrhage. There was tubercular growth an inch and a quarter across and a quarter thick on the cortex of the cerebellum. This was adherent to the posterior surface of the diseased temporal bone. Five other small growths were found in the brain. Phthisis tubercles in the kidneys.

CASE LIII.—J. B., aged 7. Under Dr. Taylor. 1886. No history of otorrhœa. Two years ago the boy suffered from headache and drowsiness, constipation, and vomiting. March 30th. He was emaciated and purpuric; the pupils were equally dilated; there was right optic neuritis. He suddenly became comatose, and died the next day. There were caries of the left tympanic region. Tubercular meningitis was found over the left Sylvian fissure. The cerebellum was covered with lymph. The ventricles were dilated. Tubercles were found in the liver and spleen.

CASE LIV.—G. G., aged 4. Under Dr. White. 1887. She had measles and pertussis fifteen months ago; otorrhœa ever since. Symptoms of brain disturbance trephined without result. Died on August 2nd. *Post mortem:* A dumb-bell tubercular mass extended across the fornix into both of the optic thalami. The left tympanum contained thick yellow material. No tubercle elsewhere.

CASE LV.—J. K., aged 6. Under Dr. Pavy. 1888. February 9th. He had measles eight months ago. An abscess formed behind the left ear; has been ill three weeks. Semi-comatose for the last five days. He was admitted with right hemiplegia, and general *râles* in the chest. February 20th. The skull was trephined, and the left lateral sinus wounded. The child died the next morning. The mastoid, which was carious, had been scraped out. There was no otorrhœa. *Post mortem:* The middle ear was healthy. There were numerous minute tubercles in the meninges, and lymph round the vessels in the region of the left angular and supramarginal gyri. There were but very few tubercles, and no lymph at the base of the brain or elsewhere. There was an extensive extravasation of blood in a mass of softened brain tissue in the part of the brain supplied by the left middle cerebral artery, some branches of which were thrombosed. All the sinuses were normal. There was acute tuberculosis of the lungs, the kidneys, and the capsules of the liver and spleen, and the choroid. Some small caseating centres in the bronchial glands, near the bifurcation of the trachea.

The following general conclusions may be drawn from the whole series: Cerebral abscesses occur rather less frequently than meningitis or thrombosis. In two-thirds of the cases the abscesses occur close to the roof of the tympanum; when found elsewhere there is usually thrombosis or some other complication. An agonising headache usually indicates abscess; rigors, thrombosis of a sinus; and pyrexia, either thrombosis or meningitis. Optic neuritis is most frequently found with thrombosis of a lateral sinus. Recent otorrhœa may set up meningitis; abscess only occurs in chronic cases. The more insidious the onset the greater the probability that the complication is an abscess. Abscess and sinus thrombosis, with their associated diseased dura mater, are frequently unaccompanied by other lesions. Such cases are therefore suitable for surgical interference, with a prospect of some success if undertaken early. Meningitis is secondary to other lesions, and is beyond treatment unless it is very local.

The two groups of cases which I discussed in Lecture I were cerebral abscesses and thrombosis of the sinuses, secondary to ear disease. I now propose to examine the remaining cases of these lesions, which have occurred from other causes during the same period.

I have collected 56 cases of cerebral abscess from our records, between the years 1869 and 1888, and although the conclusions to be drawn from them do not differ materially from those generally accepted, yet a continuous series of fatal cases of such a rare lesion contain much that is worthy of being put on record. The cases may be classified as follows: Ear disease, 18; other cranial lesions, 17; pyæmia, 9; lung disease, 8; indeterminate, 4.

Cerebral abscesses occur much more frequently in men than in women, in the proportion of 4 to 1, 44 of the cases having been found in men and 12 in women. This is explicable in the cases due to pyæmia (7 to 1), and in cases due to injuries (9 to 1); but this series of cases throws no light on the cause of the great preponderance which is found in the other groups—in ear disease (11 to 7), in the remaining cranial lesions (6 to 1), and in lung affections (7 to 1). It is difficult to see what difference there can be in the abscesses secondary to pulmonary lesions in the two sexes to account for this great difference which has been noticed by all observers. The cases are distributed among the various ages as follows:—

Years	0-9	10-19	20-29	30-39	40-49	50-59	60-69	Total.
Ear disease	2	7	6	2	1	0	0	18
Traumatic	3	2	2	1	1	0	0	} cranial
Other local lesions ...	1	2	1	1	2	1	0	} 17
Pulmonary	0	0	3	3	0	1	1	8
Pyæmic	1	1	5	1	0	1	0	} 13
Indeterminate ...	0	1	0	1	0	2	0	}
Total	7	13	17	9	4	5	1	56

Half of all the cases occurred between the ages of 10 and 30. Injury is the most common cause of abscess before the age of 10. In two boys, aged 6 and 12, acute periostitis set up general pyæmia and cerebral suppuration. This is very unusual, for in none of the 232 cases collected by Gowers had pyæmia caused a cerebral abscess in anyone under 20. I have already fully discussed the 18 cases (32 per cent. of all the abscesses) in which the abscess had originated from disease of the ear.

2. *Seventeen Cases of Abscess secondary to Disease of or Injury to the Cranium.*—Ten of these were due to injury (9, 8)—that is, 18 per cent. of all the abscesses. In 9 of these there was a fracture of the vertex of the skull. In several the fracture was a depressed one; trephining was performed six times, and in every case there was inflammation of the bone. All the fractures were compound ones, and in some of them there were fragments of bone, brick, etc., which required removal from the injured brain. None of the abscesses had arisen from uncomplicated bruising of the brain which some authors have occasionally reported. In such cases it is most probable that there was an unrecognised fracture of the base of the skull by which infection was conveyed. The following (Case LXVI) is the one in which the bone was not fractured: A woman, aged 47, was brought in dead. Three weeks previously she received a wound on her forehead from a life preserver, and was comatose for the last week. *Post mortem:* the bone was bare and necrosed, the dura mater inflamed; general meningitis, with a large ragged walled abscess on the left side. This case emphasises the fact that the dura mater must be inflamed, sloughing (2), or adherent (4), or there must be a hernia cerebri (3), or some communication with the outside before an injury of the brain is likely to lead to suppuration. Injuries or disease of the aural, ocular, or nasal cavities may be overlooked very readily, and may furnish an explanation of the source of the abscesses which are looked upon as idiopathic.

The most chronic case was No. LXV. In this a bullet wound gave rise to two cerebral abscesses and death eight months later; the larger abscess was probably of some months' duration, and the chronic course of the abscess marks it off from the other traumatic cases, in which the course was generally rapid. The explanation is found in the fact that in this instance the wound was small and it was soon sealed from the air. The suppuration followed on the presence of a foreign body, which was not very septic, while in all the others there was an infective suppurating source in the inflamed dura mater. It is worthy of note that the only cerebral abscesses secondary to cranial injuries which we have had for the last three years are: this case of bullet wound, in which the bullet or some other foreign body carried in with it, was the sceptic source; and a compound fracture, in which some fragments of brick were embedded in the fractured bone. There can be little doubt that this cause for abscess will in future be even more infrequent. Meningitis was present in six of the cases as a complication, having usually spread from the seat of inflammation. The abscesses were all seated beneath the injured spot and were in the occipital region once, in the temporal twice, and all the others were in the frontal lobes.

The onset of symptoms in cases of cerebral abscess due to cranial injury or adjacent bone disease (omitting the ear cases, which we have already discussed), was always more or less vague and insidious. Often the wound was suppurating more than it had previously and did not look healthy. Frequently the patients developed headache (5), vomiting (3), and they became dull and drowsy, often restless and sleepless at night. In five there was pyrexia, but it was due to the condition of the wound and dura mater rather than to the abscess. In seven, that is in nearly half of the cases, there were convulsions. The symptoms closely resemble those of meningitis, but differ mainly in the fact that they do not come on till about the second week, or later, after an injury, and the course is not so rapid as that of meningitis. Only once was optic neuritis noticed. Half of the patients became comatose at the end (7).

When there are no adhesions of the meninges around the injured spot the opening of the abscess by the surgeon will seldom be successful, as meningitis is almost certain to ensue, on account of the condition of the dura mater, which is generally septic. The abscesses were solitary, except twice. The abscess which followed the bullet wound was accompanied by a more recent one, with grumous contents close to it. There were also two subsidiary abscesses in another case with hernia cerebri. Four times death seems to have been due to the abscess directly, in the others rupture of the abscess into the ventricle (2), meningitis (3), and pyæmia brought about the fatal result. Seventy per cent. of the patients died within a fortnight after the injury; the only one that died within the week had general pyæmia. On three occasions the cerebral abscesses were drained, but a fatal result was not thereby prevented, death occurring in two of them from meningitis.

In 7 cases the abscesses were due to local disease: periostitis, 3; nasal polypus, 1; congenital frontal tumour, 1; malignant disease, 2. The cases are briefly as follows: A man with pulpy joints had a sinus for a year, which led down to a chronic tubercular periostitis of the parietal bone; this gave rise to a large cerebral abscess beneath, but the man did not die for another three months. Twice periostitis of the frontal bone, after being opened, gave rise to abscesses, in one case multiple and scattered through the brain, and in the other to two, one in the frontal and the other in the occipital lobes. The patient with multiple abscesses died twelve days after the skin was incised, the frontal bone being infiltrated with pus, which had also collected outside the dura mater and in the arachnoid. In a fourth case a large abscess formed in the frontal region of a boy from whom a congenital tumour had been removed from immediately above his nose two months before his death, the mass had recurred again. Only once had nasal disease set up suppuration in the brain, and in this instance a large nasal polypus had absorbed the ethmoidal roof, and was pushing against the dura mater, setting up an abscess in the frontal region. The man was admitted with the polypus in a sloughing state, and he died convulsed directly after its removal. In two patients, aged 58 and 47 respectively, epitheliomatous growths had extended up into the floor of the skull, through the greater wing of the sphenoid, and through the foramen ovale respectively, both setting up diffuse suppurative meningitis and abscesses in the temporo-sphenoidal lobes.

3. *Nine Cases of Abscess due to Pyæmia.*—These had originated with periostitis twice, with dysentery twice, with stricture, thrombosis of the prostatic sinuses, cellulitis of the arm, purpura and ulcerative endocarditis each once.

There can be little doubt that in these cases the abscesses are due to emboli which come from these various sources of infection, yet it is but rarely that this can be proved.

A young man, aged 23, was under Dr. Pavy's care in 1883, on his return from India after an attack of dysentery, with a large hepatic abscess, which was drained through an incision in the abdominal wall. After some weeks he became drowsy, and finally hemiplegic. At the *post-mortem* examination two abscesses were found in the brain, containing grumous chocolate-coloured pus, identical in appearance with that which was found in the hepatic abscess. It is difficult to be certain, however, if this was more than a coincidence.

In several of the ear cases it was noted that a peculiar and offensive odour from the ear was reproduced by the pus in the cerebral abscess. There was more than one abscess six times, and in three they were numerous. The white matter is much more often affected than the grey, hence the symptoms are more vague, and convulsions are rare, while in the traumatic cases they are frequent. The cerebellum is more often affected than any other part of the brain (3), and the explanation may be found in the fact that a minute embolus passing along the vertebral arteries will probably lodge in the cerebellum, while one in the internal carotid may lodge in any part of the cerebrum (8), and is equally common in all parts.

Primâ facie it would have appeared very probable that cerebral embolism due to malignant endocarditis would often be followed by suppuration, as this is often the sequence of such emboli in other organs. There is an impression that this is the case, yet we have only had one such instance (Case LXXXII) out of 79 cases of cerebral embolism which have died during the last twenty years. In this instance the dura mater on both sides over the fissure of Rolando was adherent to the brain, where there were small collections of pus, on the right side confined to the cortex, but on the left the pus had extended deeper to the corpus striatum. They were both, however, rather collections of pus beneath the meninges than in the brain.

It is also a question of interest to determine if heart disease is a cause of abscess; the only other instances in which heart disease was present were the two following:—

CASE XCI.—A man, aged 59, who died from carcinoma and ulceration of the stomach, without any cerebral symptoms. At the *post-mortem* examination there was also found a large

temporo-sphenoidal abscess, the aortic valves were thickened, and there was a vegetation on one of them. The gastric ulcer was probably the cause of the abscess, the small vegetation on the valve not being friable.

CASE XCII.—A man, aged 32, who had a frontal headache and fits for a month preceding his death. Finally he died comatose, with right hemiplegia. There was a cerebral frontal abscess, the cardiac valves were thickened. This was the only case in which it was even suggested that the heart disease was the source of the abscess, and its causation is not clear.

4. *Eight Cases of Abscess, secondary to Lung Disease.*—Many years ago it was pointed out by the late Sir William Gull that there was another group of cases in which the source of the abscess could be traced to a distant suppuration usually in the lung. Since this time it has been excessively rare to find an abscess that could not be traced to one of the preceding causes. We have had at least 8 cases secondary to lung disease; in three the lesion was an empyema, in two dilated bronchial tubes with chronic pneumonia, in two a gangrenous cavity, and in one extensive scarring of the bronchi.

The abscesses were multiple in every case except one, in four being limited to one side of the brain. The centrum ovale was the part most frequently affected. The duration of the symptoms vary greatly, in three cases being one, four, and five days respectively, and in other cases varying from three to ten weeks, and in one case ten months. In most of the patients no exciting cause for the onset of the infection could be traced. In one, where hemiplegia followed the tapping of an empyema, the man died the same day. At the inspection it was obvious that the two abscesses had really been present for some time, but had given rise to no symptoms. In the majority an ulcerating surface was found in the lung, but not in all of them. The situations of the abscesses vary so much that there are but few symptoms that are common to the series. The most important are a dull lethargic state (6), headache (3), convulsions, unilateral or general (4), coma (3), vomiting (2), and hemiplegia (2). One patient became aphasic from a lesion apparently limited to the first and second left frontal convolutions, and there was another abscess in the inferior part of the right occipital lobes. For four days preceding his death he was blind. In most of the cases the abscess had been the determining cause of death.

5. *Four Cases of Abscess, Cause indeterminate.*—There remain 4 cases about which it was not possible to be certain as to the origin. One was the case I have already alluded to (No. 91), of a man with an ulcerated and carcinomatous stomach, which was probably the source. The second (No. 92) was one with thickened cardiac valves, and it would be difficult to decide whether this was the cause. There remain the two following unexplained.

CASE XCIII.—A man, aged 50, had suffered with headaches for years. He was feeble, and remained comatose for the last month. At the *post-mortem* examination a small abscess was found in the right centrum ovale. There was broncho pneumonia, with old and recent meningitis.

CASE XCIV.—A girl, aged 8, admitted in a typhoidal state, comatose for six days. Numerous small abscesses in the brain, bronchitis.

An abscess an inch in diameter can form within a week; in 3 cases the duration before death was seven, nine, and twelve days. These had no definite walls, but were unencapsuled. Several of the older abscesses were also without a definite capsule; we should, therefore, not be justified in assuming that an abscess without a well-marked capsule must be acute. The more foul abscesses had usually ragged walls. A capsule can be well-formed at the end of a month. In one case of eleven weeks' duration the wall was so tough that it was removed complete from the brain substance in which it lay. It was over a sixth of an inch thick. On microscopical examination it showed on the inner surface granulation tissue, then a layer of very elongated spindle cells, which were organising into fibrous tissue. There were numerous bundles of fibres arranged in parallel layers, and containing numerous capillaries. Outside this the tissue was infiltrated with small cells.

The conclusions to be drawn from the whole series of abscesses are as follows: Headache is more severe in the cases due to ear disease than in those due to other causes. In the cases secondary to cranial lesions the symptoms resemble those of meningitis, but they come on in the second week or later after an injury, and are less acute in their course. The abscesses are cortical, chiefly in the frontal lobes, and often give rise to motor disturbances. Abscesses due to pyæmia and to lung lesions are multiple usually, they occur in the white matter of the brain, and not infrequently in the cerebellum; the symptoms are often most obscure and the lesion is often unsuspected during life

Cerebral Abscesses. Fifty-six Cases.

Regions.	Ear.	Other Cranial Lesions.	Pyæmia.	Lung.	Indeterminate.	Total.
Frontal	0	12	2	3	1	18
Centrum ovale ...	2	0	1	6	1	10
Occipital	0	2	2	1	1	6
Temporo-sphenoidal	12	2	2	0	0	16
Cerebellum	3	0	3	2	0	8
Pons	1	0	0	0	0	1
Parietal	0	3	1	0	1	5

An Analysis of Forty-four Cases of Sinus Thrombosis.—Sinus thrombosis occurs under two conditions: 1. With a feeble cerebral circulation, associated with exhausting diseases. 2. In connection with adjacent diseases. These are generally spoken of as primary and secondary thrombosis.

Primary Thrombosis.—In this form, owing to the stagnation of the circulation, clotting tends to take place in the sinuses, the clot becomes adherent but seldom infects the blood or gives rise to emboli. Dr. Fagge was only able to find a record of one example at the hospital during the period he examined. During the last twenty years I find that we have had 8 cases. There were 3 patients between the ages of 39 and 46, 2 between 20 and 30, and the remaining 3 were under 2; three were women. In the infants, the thrombosis was secondary to empyema, suppurative pericarditis, and a scald. In the adults the thrombosis was associated with chronic Bright (2), phthisis, fæcal fistula, and old syphilitic stricture of the rectum. Thrombosis started in the longitudinal sinus 5 times, spreading into the cerebral veins in 4, and into the lateral sinus 3 times. In two other instances the thrombus was limited to the lateral sinus, and in one to a cerebral vein. Each group was therefore affected five times.

Case CII is of especial interest, because there is clinical evidence to suggest that thrombosis may start in the veins, but at present there is but little pathological evidence to support it, as the patients after these attacks seem rarely to come to the *post mortem* rooms; still it must be allowed that most of the cases in which thrombosis occurs in the veins are probably preceded by clotting in a sinus, as in four of these cases. In three of the five cases of venous thrombosis there was ecchymosis of the cortex, corresponding to the blocked veins, and in one instance there was an ochreous deposit; in the remaining case the patient probably died soon after the clotting took place. In one remarkable case (No. XCVII) the clotting extended into the right auricle down the jugular vein, and the superior vena cava, setting up pulmonary embolism and gangrene of the lung. In the majority of the cases there were no symptoms which were due to the thrombosis, the patients simply dying out from exhaustion. One baby had a convulsion and was unconscious for some time afterwards, but lingered on for a month, finally dying in a comatose state. Another had symptoms which during life was thought to indicate meningitis; the child was extremely feeble and was constantly moaning. It was admitted with a scald on its arm, and died six days later.

CASE CII.—A. G., aged 1½. Under Dr. Moxon. July 17th, 1885. He has had a cough since measles, six weeks previously. The child looks ill, respiration is rapid, there is dulness, with bronchial breathing at the right base. July 22nd. He was livid and collapsed. A hypodermic syringe was put in at the right base; the child died a short time afterwards. *Post mortem:* There was a large vein, running along the upper part of the right temporo-sphenoidal lobe, which was full of *ante-mortem* thrombus for three inches. The sinuses and the jugular vein were free, and the brain appeared perfectly healthy. Chronic broncho-pneumonia; localised empyemata.

A man with old pelvic suppuration and chronic Bright's disease was the only one that had meningitis (Case 100). In this instance the thombosis had started at the torcular Herophili and extended to the jugular foramen, but it was not clear whether it had produced the meningitis. The absence of symptoms, in most of the cases, makes it impossible to determine the age of the thrombus; in two it had lasted a month and in one a week, but death in

all cases was due to the original disease during which the thrombosis had ensued.

Secondary Thrombosis.—This occurred 36 times. Of these 22 were due to ear disease, and the infection had spread from the posterior wall of the petrous bone in nine, the dura mater being inflamed, sloughing, or suppurating. In 4 the clotting spread to the longitudinal sinus, and in 11 to the jugular vein. Three-quarters of the patients died with pulmonary pyæmia, which the breaking down thrombus had set up. Fourteen cases remain for consideration. Seven of the cases were traumatic, once the bone was exposed and inflamed, in six there was a fracture, three times it was compound, and in four it ran across the sinus. The sinus was lacerated twice. Of the remaining seven, three had spread from malignant pustules or carbuncles on the face, two from an adjacent pachymeningitis, one from compression by a growth, and only one from a distant source, namely, from pyæmia set up by a carbuncle on the back. The clot was found in the longitudinal sinus in three, in the lateral in nine, and in the cavernous in three [spreading from the facial and ophthalmic veins]. Once the clot had extended into the circular and into the inferior petrosal sinuses, and only once into a cerebral vein. The patients were all males; ten of them were between the ages of 30 and 60, the youngest (boys) were 7 and 9. Three times meningitis was set up, and six times pyæmic abscesses in the lung. The condition of the clot varied greatly; in eight cases it was suppurating, in four comparatively recent, and in the two associated with pachymeningitis it was firm and well organised.

In the majority of the cases the symptoms were mainly those of pyæmia, associated in some with physical signs of disease in the lung. In two cases in which the fracture ran across the groove for the lateral sinus, extreme difficulty in respiration came on at the end of two weeks, and rapidly proved fatal. Thrombosis had taken place in the outer part of the sinus, and had spread downwards to the foramen lacerum jugular. Probably the consequent distension at this spot had led to pressure on the vagus, and thus to the urgent respiratory symptoms. The cases of pachymeningitis had, the one, intense headaches worse during the last three months of life ending in coma; and the other, epileptiform convulsions; but it is not possible to determine to what extent these symptoms were due to the thrombosis. In two instances the optic discs were noted to be swollen.

The cases which could have possibly have been diagnosed during life, were those in which the clotting had spread from inflammation on the face, and from the ear, and some of those secondary to fractures of the base of the skull; but in more than half of the total series this was not possible.

Forty-four Cases of Thrombosis of the Sinuses.

	Primary.	Secondary.		
		Ear Disease.	Other Causes.	Total.
Longitudinal Sinus ...	5	4	3	12
Lateral sinus	5	22	9	36
Cerebral veins	5	1	1	7
Cavernous sinus ...	—	1	3	4
Circular	—	1	1	2
Inferior petrosal ...	—	1	1	2
Superior petrosal ...	—	2	—	2

SOCIETY FOR THE STUDY OF INEBRIETY.—At the annual meeting on Tuesday last in the rooms of the Medical Society of London, after a reception to Dr. F. R. Lees, the President (Dr. Norman Kerr), in his annual address, referred to the marked advance in public opinion on compulsory legislation for diseased inebriates, as evidenced by the fact that the Inebriates' Legislation Committee of the British Medical Association had, in response to circulars to Poor-law guardians, received five times more replies in 1889 than in 1882. The favourable returns were in much the same proportion. Scotland, through the legal, clerical, and medical professions, was asking for full power to compel inebriates of all classes to enter special homes, and for the treatment of the poor at the public charge. The records of the Dalrymple Home for gentlemen at Rickmansworth proved that scientific treatment of the disease of inebriety was very successful, more than one-half of the patients discharged having kept firm. The demand for compulsion was also growing on the Continent. A strong protest was made against the employment of hypnotism in the treatment of inebriety.

A CASE OF LOCALISATION OF A LIMITED LESION OF THE SPINAL CORD,

FROM PHYSIOLOGICAL DATA.

BY WILLIAM MACEWEN, M.D.,
Surgeon, Royal Infirmary, Glasgow.

THE following case is interesting from a physiological aspect, especially regarding the function of the anterior or direct tracts of the cord. It is therefore given *in extenso*.

H. R., aged 60, labourer, was admitted to Ward 29, Royal Infirmary, Glasgow, October 31st, 1889, suffering from an injury to the cervical region of the spinal cord.

He had fallen a distance of fifteen feet from a hayrick. He cannot describe the exact position he was in when he fell, and no one saw him fall, but the bystanders found him on the ground with his face downwards, and they considered him unconscious. He considered that he was unconscious for about half a minute, and afterwards he found himself lying on his face quite unable to move. When admitted, he complained of pain in the neck in the region of the fourth, fifth, and sixth cervical vertebræ, and Dr. Johnston (house-surgeon) believed he detected something like osseous crepitation, such as might be occasioned by separation of one of the cervical spines.

On admission, the patient, who was quite conscious, lay on his back with both arms abducted to nearly a right angle, the forearms fully flexed on the arms, and the hands lying on the chest. The wrist was flexed, as were the fingers, with the exception of the index, which was partially extended. The little finger was most flexed, the others less so. The right index finger, though extended, was found to be ankylosed in that position, but the left was normal in this respect. He had absolutely no grasp. He could not extend his arms, but when passively extended he could fully flex the forearm by the biceps and brachialis anticus. Occasionally this flexion was involuntary. He could raise his upper arm easily by the shoulder muscles namely, deltoid, trapezius, supraspinatus, but beside that there was a distinct adduction in his attempts to raise the arms which seemed to be occasioned by the coraco-brachialis and possibly the pectorals.

The muscles of the shoulder-joint were in very good form. The supra- and infra-spinati, the deltoid, biceps, and brachialis anticus contracting when he wished to raise the arm, though all were feeble in their action. He could not supinate his forearm. Several of the muscles in the upper arm, but especially the biceps, contracted on touch, and the latter also contracted automatically when the forearm was extended.

The breathing was distinctly diaphragmatic. The chest was extended and fixed, and the intercostal muscles were inactive. The ribs were fixed, and the intercostal tissues were blown out and sucked in on each expiration and inspiration, very much like pieces of inert membrane. In the lower limbs the power was good, as tested while the patient lay in bed. He could lift his legs right up from the bed, and flex and extend them with ease.

Sensations.—The sensation of the arms was slightly dulled, and in the forearm and hand the dulness was increased from the outer toward the inner side, and on the ulnar border of the right it was entirely wanting, while the sensation was present to a slight extent in the left.

The cutaneous reflexes were much impaired, with the exception of the plantar, which was normal. The cremasteric reflex was absent, as were likewise the patellar reflex and ankle clonus. The bladder emptied itself when full, but the urine did not dribble away. He knew when the urine was flowing, but could not restrain it. The motions were also passed in bed.

Eyes.—The palpebral clefts were narrow. The pupils were in a state of stabile myosis. There was paralysis to light and skin reflexes, but there was slight contraction to accommodation. On dilatation of the pupils by homatropine, the fundi were normal, possibly a little congested.

There were fibrillar twitchings all over the body, especially in the legs.

For the first twelve days, and especially during the last of them, there were considerable changes, which slowly occurred. First, the power of the shoulder muscles became greatly impaired, especially on the right side, so that he could not raise his right arm, and the power of doing so on the left was greatly lessened. The muscles of the upper arms had become rigid, markedly so on the right. The movements of the left leg were impaired, and were not under perfect control. Meantime he complained of great pain in the arms, especially in the elbows. This pain was not present at first when the arms were not touched, though he complained of a "stiffness" and uneasy sensation when they were forcibly extended.

There was no observed vasomotor disturbance, no unilateral flushings or sweatings. The temperature up to November 14th was about normal (98° to 98.6°). From November 14th the rectal temperature has been subnormal, running down to 95.6°, and on two occasions, on November 27th and 28th, the mercury would not rise to the level of the register, which commences at 95°. These latter observations were several times repeated, and with three thermometers to prevent mistakes. Several times this depression of temperature continued for at least some hours. From November 11th to 14th the temperature was taken every two hours in both ears. Although there was a difference of a few points, never reaching to a degree, it was not always lower on one side than the other. On the first day it was a little higher on the right side than the left; during the subsequent days it was a little lower on the right side than the left.



December 13th, 1889. Since last note there has been a gradual improvement. The deficiency of power in the left leg lasted only a few days, and the power of the lower limbs, as far as they can be tested in bed, is good. The power of the upper arms is still very deficient, but is not so limited as it was. He begins to move the fingers of both hands. His temperature has slightly improved, and the intercostals now take part in breathing, which is both thoracic and abdominal (massage and electricity have been used to the upper arms).

Eyes.—Nothing abnormal was detected in either fundus, except a posterior staphyloma.

State on Dismissal January 18th, 1890.—The patient left the infirmary on January 18th, 1890, seventy-nine days after admission. About the eighth week he was able to rise out of bed, and for three weeks before leaving he was able to walk round the ward. His left hand and arm he could raise to the back of his head. His grasp was fair, but his elbow could not be extended beyond a right angle, owing to the rigidity of the biceps and the flexor muscles. With his right arm, which was also flexed at a right angle, he had much less movement than in the left. His grasp was almost absent in the right. He could oppose his thumb very slightly, and move his distal phalanges slightly. The only movement in the rest of the arm was diminished adduction and abduction of the elbow.

There was considerable atrophy of some of the muscles of the arms; those most affected were the extensors of the forearm and hand with the interossei.

The breathing was both thoracic and abdominal; there was no rigidity or contraction about the neck. His appetite was excellent, and he was increasing in weight.

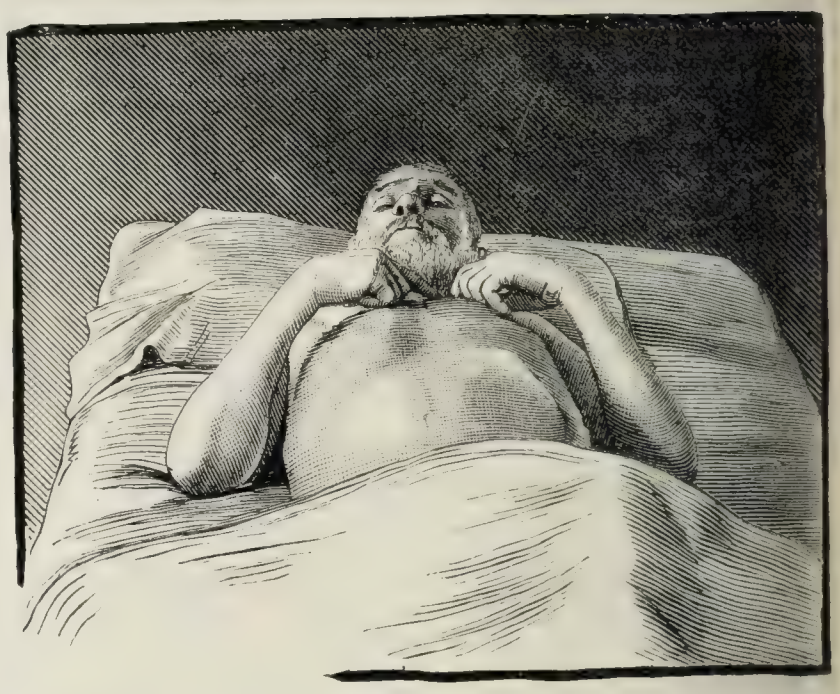
Some weeks before leaving his bladder and rectum were restored in function.

REMARKS.—This is a case of limited lesion of the cervical region of the cord concentrated at the lower part of the cervical enlargement. The diaphragmatic breathing, which was vigorous and well sustained throughout, while the action of the intercostals was in abeyance, showed that the lesion was under the fourth cervical and above the second dorsal.

The group of muscles involved in Erb's paralysis of the upper arm were here affected with paresis. These were the supra- and infra-spinati, the deltoid, biceps, brachialis anticus, and supinators. Paralysis of this group Erb attributes to a lesion of the sixth cervical, though Ferrier and Yeo deduce from their experiments that the fifth is also involved.

This group of muscles was in this case affected only to paresis, and it was evident that the chief lesion was below this point, as the intrinsic muscles of the forearm, wrist and hand were absolutely paralysed.

A destructive lesion or severe pressure upon the region of the seventh and eighth cervical would cause paralysis of the extensors and flexors of the wrist, while, if the region of the first dorsal was also implicated, the interossei and other intrinsic muscles of the hand would be likewise involved. This is exactly the phenomena



exhibited in this case, the chief force of the injury had expended itself on the region of the seventh and eighth cervical and first dorsal.

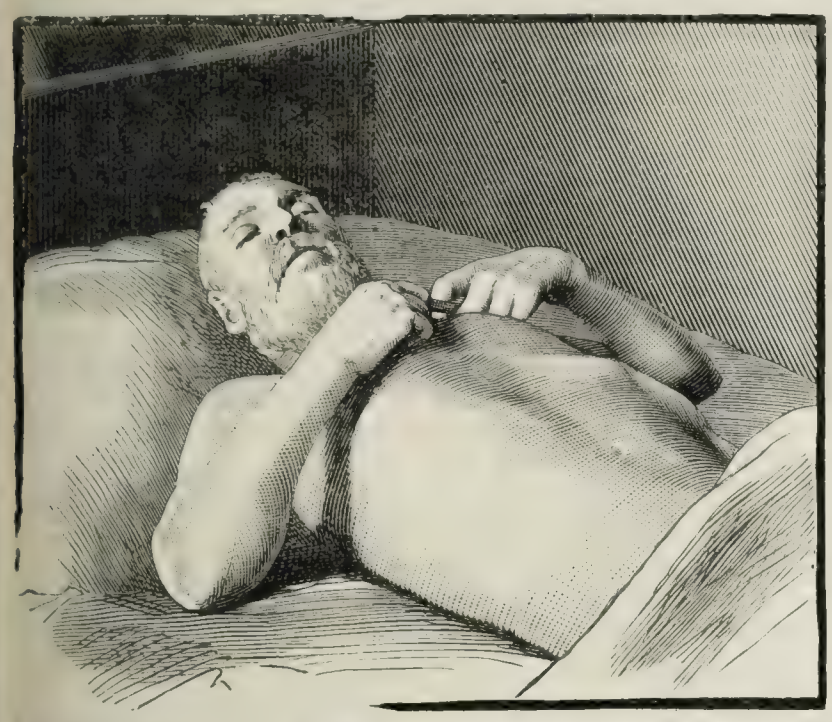
The sensory phenomena supported the deduction drawn from the motor. A lesion affecting all the brachial plexus below the fifth cervical would cause anæsthesia of the upper limb, except on the outer side of the arm and forearm and the radial border of the thumb, part of the region supplied by the musculo-spiral nerve. In this case the defect in sensation was most pronounced over the ulnar border of the arm and hand, while in the little finger sensation was in abeyance. This would again point to the eighth cervical and first dorsal, as they supply the little finger and the ulnar border of the arm and forearm.

It was also interesting to observe that the legs were free, while the intercostals were involved, though not by a destructive lesion, as they ultimately recovered their function.

The lesion was one which principally affected the anterior direct columns, and did not implicate the lateral crossed columns. It could have been produced by injury of the anterior part of the cord against the bodies of the vertebræ or the intervertebral discs, or probably by a hæmatomyelia. The region where hæmatomyelia most frequently occurs is that of the fourth, fifth, and sixth cervical vertebræ. Here it was a little lower, the seventh cervical and first dorsal missing the fourth cervical. When hæmatomyelia

is present it tends to affect the anterior cornua and the central canal. The case was looked on as one which probably was a bruising of the cord from over-extension of the cervical vertebræ, accompanied by hæmatomyelia. A crush at this region from displaced vertebræ would, in all likelihood, have resulted in more general spinal involvement, such as paralysis of the nerves of lower limbs.

Then, again, the lesion was unequal on the two sides, as the paralysis of the right arm was more severe than the other, while it was clear that the lesion on the right side was likewise destructive, as atrophic paralysis is now marked in the right hand and arm. It is possible that the last two cervical and the first dorsal



nerves may have had their roots specially injured, though both sides were here implicated at the same level, though not to same extent. The posture, as in the photographs, is typical of cord lesion about this region.

Trephining was not resorted to, as the diagnosis was that of over-stretching of the cord with consequent bruising and hæmatomyelia. There was no reason for trephining—no bone to elevate—and the blood was probably very diffuse and involving the central canal. In the cervical region, especially in the vicinity of the fifth and sixth cervical centres, one would not be disposed to expose the cord unless for very obvious reasons, especially when the intercostals are paralysed, as slight ascending myelitis might paralyse the phrenic and lead to death. Regarding the diagnosis, a difficulty presents itself in explaining why the lower limbs escape from motor paralyses when the intercostals are paralysed. If one accepts the view that the anterior or direct tracts are chiefly related to the innervation of the arms, then an explanation may be forthcoming. From sections made at various levels of the cord, it is seen that the anterior pyramidal tracts lessen from above downwards, so that under ordinary circumstances, when the bulk of these tracts are about their usual size, they disappear near the middle of the dorsal region; when they are small in the upper cervical region, they may disappear about the middle or more probably about the end of the cervical enlargement; and when very bulky in the upper cervical, they may continue down to the lumbar enlargement. The innervation of the arm is located almost exclusively in the opposite hemisphere of the brain. These so-called direct tracts decussate, not in the medulla, but in the cord itself, probably passing through the anterior commissure to the grey matter on the opposite side. On the other hand, the lateral tracts, however small they may be in the upper part of the cervical, always continue down to the lumbar, enlargement. Were we accepting this probable explanation, believing that the anterior tracts (which are crossed in the cord) contribute mainly to the innervation of the arms, then we might further ask whether the intercostals are not also innervated from the anterior tracts? Were this answered affirmatively, the peculiarity noticed here (and this case is by no means unique in respect of the intercostals being implicated without involvement of the lower limbs, the lateral tracts not being involved in the lesion) would be explained. This theory gains anatomical colouring from the fact that the direct tracts generally continue down the cord to the middle of the dorsal region, where the anterior tracts would terminate did they supply the principal respiratory intercostals.

THE WARNINGS OF GENERAL PARALYSIS OF THE INSANE.[1]

By GEORGE H. SAVAGE, M.D.Lond., F.R.C.P.,
Lecturer on Mental Diseases at Guy's Hospital; late Senior Physician and Superintendent Bethlem Royal Hospital.

Gentlemen,—I feel a great responsibility to-night in bringing before the meeting a subject so hackneyed as general paralysis, and yet if experience can justify my writing a paper, I have that plea at least. The gravity of the disease and its intractability make it intensely interesting, and as years pass on it seems to appeal to us more personally as one and another of our friends or patients fall out of rank, victims to this malady. I shall not go into the already well-described symptoms of the disease, but I must premise by saying that it seems to me to be the disease of civilisation, and that the ratio of general paralysis is nearly the ratio of the high pressure life of cities. It is rare in the wilds and highlands of Great Britain and Ireland, and was rare in the negro of the Southern States, but the Highlander, the Welshman, and the Irishman die of the disease in cities, and with freedom the slave has acquired general paralysis.

It is further necessary to say that for the purposes of this paper I shall treat general paralysis as one disease, and one diseased process, though the symptoms may be manifold. I am more and more inclined to look at it as a degeneration, a premature decay, and as frequently having a local origin. I am in the habit of saying that decay in a neglected house may fall on different lines according to the original structure of the house and to the surrounding causes of destruction; in the end, the four enclosing walls alone may remain to mark the site of former human life, with its passions and its interests. So with the nervous edifice, the containing walls of organic life may for a time alone remain as witness of the past; yet we must remember that there is a considerable difference between the waste and decay produced by age and that resulting from the changes of general paralysis, and this will be noticed as we proceed to trace the earliest signs of the disorder.

It is always dangerous to be free in the use of metaphors, but I feel that I must use similes to make my meaning plain; already I have spoken of ruin and of decay, and I have said that this may have a local origin. It seems to me that just as a pear may remain long ripe and not decay, yet a bruise or a slight superficial injury will start the process of decay, so the overwrought brain may but need a local injury such as a blow or a local change in nutrition due to syphilitic or other vascular changes to set up the necessary process. "And so, from hour to hour we ripe and ripe, and then from hour to hour we rot and rot," and in considering the warnings of general paralysis, I think one must not forget the conditions under which the disease is most commonly met with. The botanist knows that he is likely to find his British orchids chiefly on chalky downs, and the physician expects to meet his general paralysis in the middle-aged men of good physique, and though certainly the orchid may be transplanted and live under other conditions, these are not its habitat, and so general paralysis may arise in other than its common surroundings. It is necessary to point out rather more in detail as we proceed the predisposing causes of general paralysis.

It must be fully recognised that extreme difficulty is often found in distinguishing between causes and early symptoms, for in many cases what may be causes of general paralysis also are often signs of the disease. Possibly drink, extravagance, restlessness, and sexual excess alone or combined may start the degeneration, but it is certain that one and all of these may be early signs of loss of the highest self-control. I shall, as far as I can, distinguish between these causes. And now for my field of work.

For several years while at Bethlem Royal Hospital, as soon as the friends of the patients fully recognised the hopelessness of the state of their general paralytic friends, I asked them to fill in a printed sheet, such as is before you, and with very little difficulty I obtained nearly a hundred such; in addition, I have put

[1] A paper read before the Harveian Society of London.

together the results of my experience in consulting practice, and by this means I have a considerable number of facts which I believe are trustworthy.

Authors such as Mickle, Voisin, Mendel, Clouston, and others give an account of the prodromal stages of general paralysis, but I have thought it best rather to place before you my personal experience than to give you a dry digest of the opinions of authors in general; there may be less breadth but more vitality in my method.

General paralysis then is, in my opinion, a degeneration rather than a specific disease, which is most commonly met with in middle-aged married men, inhabitants of cities, flesh eaters, and drinkers of alcohol. It is not common among the congenitally deficient or among epileptics. It is a frequent follower of constitutional syphilis, especially if this disease has affected the higher nervous organs or their envelopes, and it is not uncommonly related to head injury or to causes of nerve tissue disease, such as those produced by lead.

I fear I cannot promise to make clear to you any means by which you will certainly detect general paralysis in its earliest stage, but I hope to provide the means which will enable you to detect the disease earlier than you would do so otherwise by piecing together small factors of evidence which apart might be neglected. As one becomes more and more experienced in the varieties of this disorder, the more general becomes the tendency to find general paralysis in all suitable cases, and my present experience is that whereas when inexperienced I missed general paralysis when it did exist, now I run the risk of finding it where it does not. I shall do my best to aid you to avoid both tendencies to err.

It is quite beyond the scope of a short paper to discuss all the possible warnings, and I shall therefore discuss in detail a few of these. There are two special forms of onset, which I would describe as the gradual and the sudden. In the former there is a steady and more or less regularly progressive degradation of mind and body, so that the highest faculties show the first signs of change and the special attainments fail before the more general; in these the finer social and the finer muscular adaptations fail and the changes and weaknesses in mind and body gradually show themselves. In the latter, or sudden onset, there is nothing to warn till a sudden storm arises, which may assume the character of a convulsive seizure, an attack of emotional excitement, or one of mania. Probably in both there were earlier changes going on but they were hidden, and it is, as it were, an accident of temperament whether a convulsion or a mental disorder makes manifest the change.

To start with the motor side, in many cases one meets with an account of early fatigue, so that a man who could walk 20 miles with ease finds himself done up at the end of five, or a lawn tennis player complains of his want of condition at the end of the first set. I believe that this fatigue is a really important symptom and is associated with indecision, doubt, a tendency to look on the dark side of things, and even hypochondriacal weakness. In such cases a patient will be emotional and complain that he feels he is getting very old. This feeling of fatigue may precede the common symptoms of general paralysis by a year or more, and may be replaced for a time by a morbid buoyancy. This symptom is only really valuable when found associated with predisposing conditions in which general paralysis is common and when one or more physical symptoms, such as inequality of pupils or loss of power of expression by speech or writing, can be detected.

This feeling of fatigue may be related to muscular tremor or to muscular paresis, and as I shall have to refer to the former under another head, I shall only here state that ataxic symptoms may precede general paralysis by an almost indefinite period.

Locomotor ataxy may be associated with other forms of insanity, and may, in no great degree, affect the duration of life, but in some other cases ataxy appears and is not complicated by mental disorder for several years, when other signs of nervous degeneration appear and general paralysis becomes manifest. It is to be carefully noted that ataxy may be the first symptom of general paralysis, or ataxy may be a symptom of the disease occurring at any period during its progress.

I have known ataxic symptoms to have been fully developed for several years before there was any suspicion of general paralysis. In these cases I have always found there was a history of syphilis. If the ataxy is part of general paralysis there will generally be muscular defect of hands and tongue, out of relation to the progress of the ataxy, and the symptoms will either be those of exaltation or of hypochondriacal melancholia; whereas, if the insanity be that of ordinary ataxy, it will be of the suspicious and "persecuted" type, the patient believing himself to be a martyr or a victim.

Probably one of the most striking, and by no means uncommon, warning symptoms of general paralysis is temporary aphasia. Dr. Bristowe has elsewhere discussed cases in which aphasia suddenly comes on and as suddenly passes off; the causes are not known, and have been variously explained. I must guard myself by saying that this temporary aphasia is not necessarily followed by general paralysis, but the cases to which I refer generally have a history that the patient has, without any real cause, or after slight excitement or fatigue, become aphasic. He may or may not have been faint at the same time—rest or stimulants have soon restored him—but in most cases it has been noticed that from that time there has been some speech defect; that the lips have been tremulous, or the expression faulty. It is common for these aphasic attacks to recur at very irregular intervals, and after several recurrences—it may be at intervals of a year or more—some other signs of disorder occur; but, in nearly all these cases, disorders of speech and writing are early and clearly evident. The centre affected earliest is the centre most deeply involved. I have known such aphasic attacks occur nine years before general paralysis was manifest, and in many cases they were two and three years in advance of any serious mental disorder. Aphasia is usually marked before change in the handwriting; but, in a few cases, there is great difficulty in writing, a dropping or isolation of letters, or fatigue in writing, long before general paralysis is suspected.

Nearly related to aphasia is this change in handwriting, and I would specially call attention to the fact that some patients give up writing, or alter their mode of holding the pen, for a year or more before signs of general paralysis are declared.

Facial expression is very early affected, and it is a common experience to hear friends say that the patient had appeared to have developed a "fat face." The wiping out of the lines of the face give the aspect of fatness, and, at the same time, the skin may become greasy, or there may be unilateral sweating.

Ptosis and external strabismus are rare as symptoms of general paralysis, but are very common as early symptoms of a diseased process, which ends in general paralysis. I have met dozens of patients with a history of syphilis, followed by treatment and recovery for years, succeeded by ill-health or worry, during which cranial nerve lesion has developed; this, in its turn, being cured by treatment, only to be followed by general paralysis. This group of cases is of very marked interest, and is one which, I believe, is often lost sight of by ophthalmic surgeons.

I will only emphasise my experience by saying that if, after a history of syphilitic cranial nerve lesion, there are any signs of nervous instability, there is real reason to fear that general paralysis may be the result. Any local intracranial nerve lesion, especially such as depends on syphilis, may originate general paralytic degeneration; and it may be well here to say that to this group belong many of the cases of traumatic general paralysis. I have met with instances in which a serious head injury has been followed by local paralysis, which has passed off only to be followed by a steady mental and physical degradation, which terminated as ordinary general paralysis. Whether surgeons will dare to interfere in these cases I cannot say, and I myself should strongly doubt the utility of surgical interference, for though general paralysis follows in some cases of syphilitic lesions and injuries, yet I have not seen it follow ordinary brain tumours.

Allied to aphasia are some slight and partial losses of power or of sensation. Such attacks are usually related to slight "fainting fits." A man, while at a meal, suddenly lets his knife fall from his hand, and feels giddy; he quickly recovers himself, and may make some excuse for his awkwardness, and may really have never lost consciousness. Similar attacks recur, and may induce him to seek advice, and yet his real danger may not be recognised by skilled physicians, unless they are keenly expectant of general paralysis.

I have met with a few cases in which temporary loss of sight or of feeling has been complained of. These states may fairly be compared to the attacks of *petit mal*, and lead to the consideration of fits as warnings of general paralysis.

It is remarkable that the epileptic insane provide very few cases of general paralysis, but that general paralysis follows epileptiform fits in many cases. So much is this my experience, that when I hear of the onset of fits of an epileptic type in a middle-

aged man, I at once look for other signs of degeneration. The occurrence of such fits in a patient who has had syphilis renders the probability still greater, but I must warn you against giving the diagnosis without careful consideration, for as you all know syphilis may cause local lesions leading to hemiplegia, from which general paralysis does not necessarily develop; but it is necessary to observe that if fits occur in an otherwise healthy middle-aged man at irregular intervals, and if with each fit marked mental changes, such as loss of memory, occur, and if expression is in any way permanently affected, general paralysis is all but certain. Fits of this kind may precede the ordinary symptoms of general paralysis by several years.

Along the sensory side the early defects are not so easily recognised as are those on the motor side, but yet they are sufficiently common to deserve notice. I was surprised to find, in looking through my notes of cases, that neuralgia, headache, sciatica, rheumatic pains, and the like were almost universally recorded as having been noticed a year or more before general paralysis was recognised. Headache or facial neuralgia was the most common, and with this complaints of tenderness or feeling of lightness in the head. This is noteworthy, for among the insane generally headache is very rare. I think double sciatica, too, is a symptom not to be overlooked, and if it is recurrent and associated with any change in habits or character, it is a warning not to be forgotten; it is of interest to remember that in the West Riding reports considerable changes were described in the sciatic and other peripheral nerves in general paralysis.

Loss of sight of a temporary nature may be present, and may or may not coincide with optic neuritis. Dr. Wiglesworth has pointed out recently, as did Clifford Allbutt formerly, that the state of the optic discs may give important information in some early cases of general paralysis, and in several instances of early mental instability I have given an unfavourable prognosis because of the abnormal state of the discs, though these were little beyond the possibly normal limit of redness.

Affections of hearing, too, are more common than I expected among the warnings of general paralysis.

Alterations in the senses of taste and smell are also not uncommon. Voisin pointed out that inability to detect the smell of pepper was a common and early symptom, and though I cannot say that I have found this to be a very common sign, yet it does occur in some cases; and I have records of several patients in whom there were profound alterations in smell and taste years before general paralysis was suspected.

In all these sensory disorders are to be noticed either pain which may be due to local nerve disease or defect which may be due to cortical lesion. Hallucinations of the senses have in my experience been of very rare occurrence. It is of importance to recognise that with the special senses progressive loss of the highest refinement is manifest. A general paralytic artist early loses the fine balance of tone, and his colours become bold and crude. I have in some cases noticed the colour defect precede the mechanical loss, bad painting being noticed before bad drawing, and, though not musical myself, I believe the same is true of musicians—that they lose some of the finer relations of time before they do those of tune.

In calling attention to the more intellectual changes which may occur as warnings of general paralysis, I must say that the gradual loss of power of social accommodation is one of the earliest and most marked of these; slowly and insidiously the patient falls out of step with his fellows, while he is quite unconscious of his failure, and frequently mistakes his position for one in advance rather than in rear. I have spoken of such cases already in the artist and musician, and I may here refer to the actor whose memory fails him or whose enunciation is no longer clear, the artisan who makes misfits, and the *danseuse* whose *pas* are faulty; judgment fails, and friends notice this before relatives. Memory for recent events and for engagements is defective, and this is specially marked if any fainting or other fits have occurred; loss of power of attention and want of persistence are very well marked, and restlessness, which may be motor or mental. In cases of general paralysis in which the mind suffers before the body, nearly all the defects just referred to occur in greater or less degree. Besides the above, moral weaknesses or faults are very common. There seems to be almost a special set of faults met with in early general paralysis: stupid stealing and thoughtless indecency; the general paralytic putting all sorts of useless but handy things into his pockets, and often when caught in the act protesting that they are not there; in the indecent cases assault is less common than exposure; this may be associated with lust or only be due to negligence, there being a distinct period when buttoning is a difficult action. There is not a single mental faculty which may not be early and specially affected, but certainly the higher and more purely social acquirements suffer earliest.

The next group of early symptoms, classed as Instability, can only be accepted as a provisional and convenient one, there being little else in common. This is evidenced both on the motor and mental side; in the former there are tremors of the finer muscles, uncertainty of gait, and tendency to falls; it is a very common thing to hear that a fall or falls have been the cause of this general paralysis, whereas they were the result of early paresis. Restlessness, again, may be a result of this instability, and mark a very important stage during which endless things are started only to be cast aside on the first fresh suggestion. The instability is marked almost always by a readiness to be affected by stimulants or drugs, the early general paralytic easily becoming drunk, and easily being poisoned. I have in some cases had my attention called to the case being one of general paralysis by the readiness with which serious symptoms have followed the use of hyoscyamine. I am inclined to think, too, that the effect of atropine on the pupils is more rapid and more persistent than in healthy persons. This evidence of weakness is practically of very great value. I have known a single glass of champagne cause intoxication in a young man who was not then supposed to be a general paralytic, and in such cases social trouble may often arise as a consequence; the damaged brain, whether the injury be from without as from a blow, or from within as the result of a growth, an apoplexy, or a vascular lesion, reacts abnormally to alcohol.

Change of temper and character are probably the most constant of all the changes which are noticed in early general paralysis, the quiet man becoming noisy and the saving one extravagant; on the other hand, the extravagant man may become penurious and the gentle man passionate. In health, we give evidence of our education, and in general paralysis we witness to our organic nature. Change in character, instability of purpose, occurring with some motor weakness, almost always point to general paralysis if met with in a middle-aged man. Self-feeling may be exaggerated and hypochondriasis may be one of the warnings of general paralysis. In such cases, as a rule, the morbid ideas are centred in the gastro-intestinal tract, and in addition there are physical signs, such as inequality of pupils or speech defect to aid us.

If general paralysis begin with hypochondriacal ideas, these rarely occur long before the more characteristic symptoms of the disease; but I have often been consulted by patients who, with alternations of buoyancy and depression, have at length told me with anxiety they feared they were general paralytics; and some few were true prophets. There is a very special form of weakness with a feeling of dread, which in these cases is the warning. (Probably most of my audience think they are general paralytics by now, but this feeling will pass.) I have already pointed out that the occurrence of epileptic fits in middle-aged men is cause for alarm, and in my experience the occurrence of marked hysterical or hystero-epileptic fits is even more alarming. I have met with several young married men who, without sufficient cause, became emotional, and later subject to true hysterical fits, during which consciousness persisted, and several men were needed to hold the patient on the bed to prevent him from injuring himself. In these cases, with time, other signs of loss of control developed, and the patient was then recognised to be a general paralytic.

The sudden outbreak of mania is a frequent precursor of general paralysis, and this is specially interesting when it assumes the form of acute delirious mania (grave delirium). In this, as in the cases of local lesions of the brain, there seems to be a process which lowers the vitality of the nervous system, and renders it liable to degeneration. Suffice it to recognise that after steering your case through all the perils of "brain fever," you may find the temporary improvement followed by all the signs of general paralysis which may run a rapid course. The process of degeneration as a rule follows closely on the heels of the acute disease.

In most cases of mania there is a stage, longer or shorter, of melancholia, but in some cases the explosion of maniacal excitement is quite sudden, resembling an epileptic seizure, and this form of mania may precede general paralysis; without any apparent cause a violent fit of mania occurs, to be followed by distinct signs of general paralysis.

But already I have more than occupied the allotted time, and yet have but glanced at the main points of my subject. I have not noticed the occurrence of vasomotor troubles, or gone into many of the details of decay and its threatenings, but before leaving the subject I would specially call attention to the fact that warnings of general paralysis may be present for years, and that almost certainly they are present for a year at least before the symptoms induce even the sensitive specialist to scent out the disease. This is but the measure of our present ignorance, and it is for others to fill up the gaps.

With a syphilitic history, or the history of brain injury, do not neglect early fatigue, fainting or other fits, loss of smell, vague optic disc changes, unaccountable knee phenomena, unusual headaches, neuralgia and sciatica, change of character, and progressive loss of the highest control; be observant and charitable to moral lapses, and do not forget the forms of instability I have described.

I began by saying that I believe general paralysis has a local origin in many cases, and it may be that the surgeons will learn how to scrape necrosed brain as well as necrosed bone. For my own part I am not very hopeful, for I believe the degeneration follows on the predisposing condition. The fungi grow on the dungheap, but do not form it.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

SCARLET FEVER AND PUERPERÆ.

THAT the proximity of scarlatina to a woman during the puerperium gravely alters the prognosis there is surely abundant evidence to show. The following is another case.

Mrs. P., aged 28, multipara, in good health, was confined in her own house on August 17th. Three weeks previously two of her children took scarlatina, of whom one was convalescent at the time of the confinement, and the other died five days before it. As fumigation and other means of disinfection were objected to, and only imperfectly carried out, I insisted that Mrs. P. should go for her confinement to a relative's house, which was only a few doors off, and quite at her disposal. Notwithstanding every argument and entreaty, she persistently refused to go, and since she was thoroughly unreasonable, I, as a last argument, declined to attend her. She was delivered of a healthy child by a midwife. Three days later, August 20th, I heard that she had severe pain and swelling of the left ankle. On the 21st I was called in and found arthritis of the ankle, tenderness over the uterus, and a temperature of 104°. Ordered sod. salic. 20 grains every four hours.

August 22nd. Delirium, abdomen blown up, very evident peritonitis. Sod. salic. stopped, and quinine, hydrobromic acid and hyoscyamus given.

August 23rd. Patient rational, arthritis of right elbow, lochia stopped. Opium given.

August 24th. Numerous bedsores and pericarditis.

August 25th. Pericardial effusion, which became extensive, and ended in death next day. No rash appeared.

A medical friend has told me that he had safely delivered a woman in the same bed with a child ill of scarlatina; the above case shall prevent me attempting such a thing. No doubt it might be safely done, especially in multiparæ, where only a medical man made the fewest possible vaginal examinations and with every antiseptic precaution; examinations by a midwife would greatly increase the risk of inoculating the poison. Even with the greatest care there must be risk to a parturient woman in any house containing scarlatina. The above case occurred during an epidemic of scarlet fever in a country district where I was compelled to attend both scarlatinal and obstetric cases; but I considered myself comparatively safe in attending the latter where there was no fever in the house, as I always changed my clothing and used every antiseptic measure before attending a labour. None of these cases deviated from the normal, although I had on several occasions to introduce my hand within the uterus.

Hamilton, N.B. JAMES ADAM, M.A., M.B., C.M.

SOME years ago I was attending two families with scarlet fever (rather severe). The mother of the first was about 38 years of age and in her last month of her seventh pregnancy, thinking the pains she was enduring were due to the fatigue of nursing. She was confined in the bed where the two children were lying. She made a rapid recovery.

The other case; aged 40. She was confined in the same room with four cases. Notwithstanding she had been nursing the children before her confinement, she recovered without a bad symptom. THOMAS WILSON, M.R.C.S.Eng.

Wallsend.

I FORWARD the two following cases: (1) Woman confined; two days afterwards developed scarlet fever and recovered; baby took it and died. (2) Woman found to have scarlatina when in labour. No particularly bad symptoms afterwards, and the disease seemed to run its usual course. The baby took it, and also recovered.

Knottingley. T. PERCIVAL, M.R.C.S.Eng.

IMPERFORATE HYMEN WITH RETAINED MENSES.

ON March 8th, 1882, I was called to see a tall, well-developed, but strumous housemaid, aged 17, who was suffering from retention of urine, with great lumbar pain. She had never menstruated, but had suffered from previous urinary retention, but this shortly passed off. She had always had a large body. I found the lower part of the abdomen distended by a prominent, even tumour, reaching as high as the umbilicus, in shape similar to a gravid uterus at five to six months. The swelling was very tender to the touch, with an indefinite sense of fluctuation. The vaginal orifice was closed by the hymen, which was extremely tense and very thin. The dark, purplish retained fluid was visible through the membrane, and looked as if it would soon burst through. One pint and a half of urine was drawn off with great relief, but the backache continued. On March 10th, under carbolic spray, and without an anæsthetic, an incision was made through the length of the hymen, about three-quarters of an inch. A large quantity of fluid escaped; 36 ounces were measured, but a good deal more ran over the vessels placed to catch it. A carbolised plug was placed in the orifice, and a pad and a light abdominal compress applied. The next day the uterus was syringed three times with weak Condy's fluid. Morphine was given and strict antiseptic treatment was used. On March 12th peritonitis set in. Her condition was extreme, and gave on March 18th apparently no hope. The washing of the uterus was continued throughout from twice to five times a day, sometimes with weak Condy, sometimes with carbolic. The first day that washing of the uterus was uncalled for was April 4th, after which she steadily rallied, and I last saw her in excellent health in 1887.

It is obvious that perfect antiseptic treatment in such a case and in such a region is almost impossible. I would suggest in a similar case, after evacuation of the contents, the injection of glycerine, with or without iodoform suspended. I can conceive no advantage from anæsthesia, unless complete removal of the membrane or forcible dilatation is contemplated. Either plan would render the treatment more difficult, and the case more prone to septic changes. After the operation, certainly before three days had elapsed, the aperture was so contracted that syringing could only be performed by means of the small elastic rectal tube of a Higginson's syringe.

I do not think, nor did the late Mr. Sweeting, who was with me, that in this case any advantage would have accrued by aspiration or a more limited incision; for such was the nature of the fluid that the largest-sized needle must have become blocked, and the *vis a tergo* was so great that the forcible ejection of the contents would in all probability have rendered the aperture as large as it was intentionally made.

H. CALTHROP ALLINSON, M.R.C.S., L.S.A.,
Surgeon West Norfolk and Lynn Hospital, Associate King's College, London.

A CASE OF CONCEALED ACCIDENTAL HÆMORRHAGE.

ON October 5th, 1889, a man came to my house, about twelve at night, and most urgently requested me to go and see his wife, who he said was dying. As the case was so urgent I advised him, while I was dressing, to see if he could find some medical man who had not gone to bed. As I got to the street I saw the man hurrying after me with someone else, for whom I waited, and we entered the house together: there we saw a woman lying in bed, icy cold, with a cold clammy sweat on her face, quite pulseless, restless, sighing, and in fact with all the symptoms of extreme

collapse from hæmorrhage, and yet on examination by the vagina no hæmorrhage stained the finger, and the os was not dilated. On examining the abdomen the uterus was found to be tense, with a very evident boss rather to the right side. Mr. Davis's assistant, who was with me, agreed that it was a case of concealed hæmorrhage, so we made another vaginal examination, and found that the finger could be introduced into the os uteri, and at this second examination there was just a show of hæmorrhage. I ruptured the membranes and waited to see the result; during this time I had secured a good trained nurse, a Mrs. Lee. The woman rallied, her pulse returned, her colour came back, and the extreme collapse seemed to pass away, and she expressed herself much relieved. I now waited to see if any uterine pains came on, but very soon signs of syncope and collapse returned. No external hæmorrhage' no pain; so I dilated the os, and having introduced two fingers, I pulled down the leg and extracted the child. The uterus contracted well, and the placenta and a large clot came away, one immediately after the other. There was no further hæmorrhage, and although the woman was extremely collapsed, I hoped with stimulants and warmth she might revive, but she never rallied, and died in about an hour.

The patient, C. J., was a feeble looking woman, aged 41, on a visit to Bath from South Wales, and this was her ninth pregnancy. The day before she was quite well, walking in the park, but in the evening received a telegram announcing the sudden death of a relative. Whether this caused irregular uterine action and separation of the placenta it would be difficult to say. Before anyone was sent for she awoke with dull, obscure pains in the abdomen, but these soon passed off, and no alarm was caused till the symptoms of collapse came on.

T. D. RANSFORD.

Bath.

INFLUENZA: DOUBLE ATTACKS.

ON reading Dr. Arthur Maude's remarks in the JOURNAL of February 15th—namely, "that it would be interesting to collect cases of double attacks of influenza in different countries"—I beg to send the following cases, as I think they will be of interest not only to my learned colleague of Westerham, Kent, but to the medical profession in general.

CASE I.—S. B., a carpenter, aged 42, on December 3rd, 1889, was seized with a violent attack of influenza. His illness commenced with severe shivering, loss of appetite, vomiting, backache, and fever; temperature 101°.

On December 6th he was convalescent, and on the 10th he returned to his usual work.

On January 3rd, 1890, at 6 P.M., I was called to visit him again, and I observed a second and more violent attack of influenza, complicated with catarrhal symptoms and great depression. The second attack lasted nearly twelve days, after which period he was completely cured.

CASE II.—A. B., labourer, aged 32, on December 10th, 1889, returned home from work complaining of violent pains in the head and back. I was called to visit him about 8 P.M., and found him labouring under a severe attack of influenza, with high temperature (103°), vomiting, pains in the limbs, and catarrhal symptoms. I applied mustard to the skin, and gave antipyrin and effervescent drinks. After four days the patient was able to leave his bed, and on December 16th he returned to work. After four days, at 10 o'clock in the morning, he left his work, and returned home complaining of violent headache. I saw him at 2 P.M., and found he had a second attack of influenza. The patient remained under my treatment for nearly two weeks, during which time he had a very troublesome cough.

I could mention other cases of the same kind, and I am sure that of the number of cases of influenza I had to treat during the last epidemic, about 6 per cent. had a double attack.

Malta. G. F. INGLOTT, M.D., D.M.O.

CARBOLISED OIL IN THE TREATMENT OF SCABIES.

I THINK it worth while recording the success of carbolised oil (1 in 15 of olive oil) as a local application in the treatment of scabies. Hitherto I had been using either the traditional ung. sulphuris or Vleminckx's solution. I have recently used carbolised oil in eight consecutive cases, in children and adults. In one case of severe scabies with most intense irritation, I tried ung. sulphuris for four days, with little or no effect, and in two days the eruption, which (in a boy) was almost universal, completely disappeared under carbolised oil. Again, in another extensive erruption on the hands, arms, neck, chest, and abdomen, with a severe dermatitis on hands, wrists, and arms, the eruption was almost completely gone in three days, leaving only slight stains in the scratch marks. The local anæsthetic effect of carbolic acid acts instantaneously in allaying the pruritus, for which the patients are extremely grateful. In cases of scabies, with severe dermatitis or eczema, sulphur may kill the acarus but it is apt to aggravate the dermatitis. I have found the oil, in the strength above indicated, a trustworthy application with a quick result, and therefore recommend it for trial to any who may be, as I sometimes have been, disappointed in sulphur ointment.

Enfield. FRED. TRESILIAN, M.D., M.S.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

KING'S COLLEGE HOSPITAL.

RUPTURED JEJUNUM: LAPAROTOMY.

(Under the care of Mr. WATSON CHEYNE)

[Notes by Mr. C. JACOMB HOOD, late Surgical Registrar.]

L. H., aged 18, was admitted at 9 P.M. on August 13th, 1889, with the following history. About 7.30 P.M. on the same evening he was pushing a costermonger's barrow by the back rail with the handles away from him. While he was running thus, the handles struck violently against something, and the back rail struck him across the upper part of the abdomen, causing him severe pain, but not causing him to faint. He was able to push the barrow a little further, and to walk about a mile. As the pain continued he was brought to the hospital on a barrow. He did not vomit before admission. Four hours before admission he had had a large meal of beefsteak pie and vegetables.

On admission there was no wound nor any bruising evident over the abdomen, and although he complained of great abdominal pain there was very little tenderness, and his breathing was not markedly thoracic. Temperature 97°. His pulse was 80 per minute and rather weak. He was drowsy, but answered questions well. He was put to bed and given tr. opii, and fomentations were applied to his abdomen. During the night he vomited several times, but only brought up partially digested food, no blood. He passed urine naturally, also free from blood. During the night he had no rigor, but his temperature rose to 103° at 4 A.M.

August 14th. At 9 A.M. symptoms of peritonitis became more evident, and tenderness could be found in the flanks, whereas at first it was only present over the front of the abdomen. His knees were also drawn up. During the morning he vomited; the vomited matter was free from blood, but was undergoing fermentation. At 3 P.M. Mr. Cheyne saw the patient for the first time, and as there was evident general peritonitis, and the probability was that the small intestine had been ruptured, he determined to perform laparotomy.

The patient was anæsthetised, and an incision was made in the middle line, from the umbilicus downwards. The intestines were partially matted together with lymph, and of a bright, crimson-lake colour, which was most marked towards the pouch of Douglas, where some turbid fluid was found containing half-digested food. The peritoneal cavity was washed out with warm water, but as no rupture could be found, and food kept coming down from above, the incision was continued upwards above the umbilicus for about three inches. The peritonitis was most acute at the upper part behind the liver and stomach, and a rent was found in a piece of intestine, evidently close to the duodenum. The abdomen having been well washed out, and thoroughly cleansed of blood and fluid and as much of the peritonitic lymph as possible, the incision was stitched up, except at the upper end, where the piece of ruptured intestine was brought out of the incision, and kept in position by stitches. In order to bring the ruptured part to the surface, it was necessary to make an opening in the gastro-colic omentum, through which the intestine was passed. The operation lasted forty minutes, and the patient was put to bed very much collapsed, his pulse being hardly perceptible, and his temperature having fallen from 102.6° to 98.4. He rallied gradu-

ally with the aid of stimulants, until, at 7 P.M., he could understand when spoken to. Temperature 100.8°. From 7 P.M. he gradually sank, and died nine hours after the operation, with a temperature of 99°.

Post-mortem examination thirty hours after death.—Thoracic organs normal. Acute general peritonitis, and a small quantity of blood-stained serum in the peritoneal cavity. There was much lymph on the intestines and other viscera; it was interesting to note, however, that where the lymph had been peeled off during the operation no fresh lymph had formed. The rupture was three inches below the upper end of the jejunum. It had apparently been a rent about one inch in length, oblique as regards the long axis of the gut, but from the escape of food, consequent peritonitis, etc., had become a circular hole, which would admit the finger. The edges of the opening in the gut were gangrenous.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 28TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Enlargement of the Spleen.—Dr. CLAUDE WILSON (Tunbridge Wells) read a paper on some cases in which enlargement of the spleen, accompanied by a sallow or subicteric complexion, appeared as an hereditary condition. Notes on six cases, extending over three generations, were read. Any single case would probably, in spite of some anomalies, be regarded as malarial. In looking at the group, it was very difficult to decide whether they were to be looked upon as inherited malaria, as hereditary predisposition to slight miasmatic influences, or whether they were not really examples of some hitherto unrecognised morbid condition.—The PRESIDENT remarked that in one of the cases cousins had married. Were there any other instances in which this had happened?—Dr. BARLOW had seen many members of the group. They seemed to prove the existence of an hereditary tendency to enlargement of the spleen, a fact that he believed to be unique. In two or three instances the splenic cachexia was apparently associated with a neurotic tendency, whilst in two children of the fourth line there were indications of rickets, with which, however, he did not consider the condition of the spleen had anything to do.—Dr. F. C. TURNER observed that the hereditary tendency seemed to fall on the elder children, whilst the younger ones escaped; and that in this respect the condition resembled syphilis.—Dr. WILSON, replying, said that there was no other instance of the intermarriage of cousins. The symptoms of rickets were very slight. It was not the elder children only who were attacked, for one certainly of the younger ones seemed likely to develop splenic enlargement in future years.

Double Ovariotomy in 1882 and Nephrectomy in 1889.—Dr. MYRTLE (Harrogate) gave notes of this case. After the operation in 1882 the patient continued well for five years. In 1887 she complained of pain under the left short ribs, and a tumour was discovered and thought to be splenic. For twelve months this was treated by electricity without benefit. In 1889 Mr. Knowsley Thornton pronounced it disease of the left kidney; and, after an exploratory examination, a sarcoma weighing twenty pounds, with the left kidney embedded in the mass, was removed on April 11th. The external wound healed readily, but convalescence was anything but satisfactory. Temperature kept high, nocturnal sweats were the rule, cough became troublesome, and pain in the left side continued; the patient lost flesh and spirits, and on May 22nd was sent to Harrogate for change of air. The journey nearly proved fatal. For three days the exhaustion was continuous and alarming; she could not be moved from the recumbent posture, the slightest attempt causing violent paroxysms of coughing. When strong enough to admit of partial physical examination, Dr. Myrtle found great and general emaciation, and, whilst the right thorax rose and fell freely, the left remained immovable. The right lung was healthy; the left gave no evidence of its presence either on percussion or auscultation. It was supposed that a branch of the phrenic nerve had been injured, causing paralysis of the diaphragm. June 12th. Double quotidian ague set in, which yielded to full doses of Warburg's tincture. June 16th. There was congestion of the liver, with vomiting of dark green bile and mucus for thirty hours. The patient was greatly relieved after the bowels were moved, when a lot of fœtid pitchy and offensive matter passed. July 2nd. She was improved in strength, but still had high temperature, night sweats, cough, and pain in the side. July 18th. After a severe protracted fit of coughing, the mouth became filled with thick offensive pus, and in one hour 10 ounces came away. In the following ten hours the discharge measured 11 ounces. From the time when the abscess burst till the night of the 25th the amount expectorated reached 20 ounces during each twenty-four hours. On the 25th, at 9 P.M., the patient fell asleep and slept for seven hours, and after that there was no more discharge whatever from the lung. She then gained health rapidly. On August 1st she was able to walk and drive, and on the 6th sailed from Liverpool for Nova Scotia. During the whole of the time she was under observation the action of the remaining kidney was carefully watched, and it proved equal to all the work required, the amount and character of the urine being normal. The character of the pain in the left side gave the patient the impression that a knife or a pair of scissors had been left behind. After the operation, whilst the superficial wound healed, deep-seated inflammation must have set in and a collection of pus formed, which made its way to the diaphragm; the muscle thus became of necessity inactive, and respiration in the left thorax impossible. Adhesions of the lung followed; the pus passed into it, and by-and-bye escaped through the bronchi. The case was the one brought before the Society by Mr. Knowsley Thornton at the preceding meeting, and described in the JOURNAL of March 22nd, page 665.—Mr. THORNTON observed that no portion of the mesentery was removed, nor was the tumour a tumour of the mesentery. Moreover, the operation performed by Dr. Keith was oöphorectomy, and not ovariotomy. He thought that the collapsed condition of the patient on her arrival at Harrogate seemed to point to some change in the position of the pus, especially as the absence of respiratory sounds on that side had not been observed before she left town. He remarked on the curiously rapid way in which what must have been a large cavity filled with extremely fœtid pus had closed, and this, he suggested, raised the question as to whether such offensive discharges were to be regarded as necessarily septic. Personally he was inclined to believe not. In reply to questions, Mr. Thornton said the kidney itself was quite healthy, the tumour being of the suprarenal capsule. He had never met with any other example of an abscess following a post-peritoneal operation.—Dr. MYRTLE replied.

An Obscure Case of Acute Abdominal Obstruction in a Boy, aged 10: Laparotomy: Removal of the Suppurating Appendix Vermiformis: Recovery.—Mr. HERBERT WM. ALLINGHAM gave details of this case. H. V., aged 10, was admitted to the Great Northern Hospital on January 1st, 1890, with the following history, namely, that he had fallen ill at school in the preceding September, and had been pronounced by Dr. Mason, of Maidenhead, to be suffering from typhoid fever, from which he soon recovered. On December 30th, 1889, he fell out of a "go cart," and complained of pain in the stomach. He was soon taken with sickness, and had to go home. Dr. Routh, of Hornsey, saw him with Mr. Allingham on January 1st. He was immediately removed to the hospital, being in the following condition: He was lying in bed on his back with the legs drawn up, the face flushed, expression anxious, tongue dry and red, pulse rapid and hard; the abdomen was generally swollen, with some fulness in the middle line, was extremely tender to the touch, and slightly tympanitic. The bowels had acted once very soon after the accident, but not since. He had vomited about five times; the temperature varied between 102° and 103°. Mr. Allingham thought from the history that the case was one of a twist or intussusception, or perhaps that a typhoid scar had given way. Accordingly he operated at once, opening the abdomen in the middle line, and carefully felt over all the intestines. Finding nothing wrong, he turned his attention to the cæcum, and found a distinct hardish mass there. This he pulled towards the wound, and then saw it was the cæcum covered with recent lymph, and the appendix quite free except at its apex, and very distended. While drawing the appendix to the surface it burst, and discharged about one ounce of fœtid pus. The appendix was therefore removed, the stump being ligatured, and the peritoneal surfaces sewn over it. The abdomen was then sponged out and sewn up with silkworm gut sutures. On examining the appendix after removal, he found a small, hard, laminated, fæcal concretion about the size of a cherry stone (specimen shown). The boy made an uninterrupted recovery, being quite well fourteen days after the operation (boy shown at the meeting). Had the

operation been delayed even a few hours, the pus in the very distended appendix must have been discharged into the general peritoneal cavity.—Mr. TREVES criticised the title of the paper, which he thought was misleading; there was no true abdominal obstruction, the case being a typical straightforward example of typhlitis or perityphlitis, with trouble in the appendix. In a large number of such cases there was an accident to which their beginnings might be traced. The seat of the mischief was best reached by an opening made over the part itself, not by a median incision. He pointed out that the appendix in a child or woman could be examined under an anæsthetic by the finger *per rectum*. Mr. Allingham's treatment was excellent, except that the tucking-in of the two sides of the peritoneal surface of the cut appendix vermiformis seemed to him almost an impossible procedure, though it would be valuable if practicable. He preferred stitching the stump of the appendix to an adjacent piece of healthy peritoneum. When an inflammation of the appendix was developed, he thought the abscess should be opened, not the appendix removed.—Mr. THORNTON said that the number of cases in which this operation had been successfully done was still very few. In the case of a young woman, aged 17, with intense pain over the appendix, who seemed likely to die unless something was done, he had opened the abdomen and found the appendix black, with the omentum and mesentery near it also black. He removed the appendix as close to the cæcum as possible. It was distended with ill-smelling pus, but had no concretion in its interior. The poison within it, however, was of so virulent a character that it had produced gangrenous inflammation. After doing well for some days, she had septic peritonitis, of which she had died. He had often removed the appendix in cases of ovariotomy, and in removing retroperitoneal tumours, and he usually cut it off. He did not know a single case in which such removal had led to harm. In two or three cases, after its removal, he had brought the serous edges of the cut peritoneum together, but he believed that by so doing pus might be closed in, and lead to an abscess after the subsequent removal of the drainage tube. For the future he should leave the stump of the appendix open. If there was a big abscess cavity, it was probably best to open it and drain the cavity; but the patients were then liable to a recurrence. In one such case he had had to intervene three times, the abscess being again as big as on the first occasion. If, therefore, one could remove the appendix in these cases, it was best to do so.—Mr. BENNETT said that Mr. Allingham's operation was very successful, and that he had been fortunate in finding the appendix could be removed, seeing that it was greatly inflamed. He himself had never come across a case suitable for removal of the appendix. It was best to approach the abscess from the side, and drain it as one would drain any other abscess. He asked Mr. Allingham why he had cut down in the middle line? Often the cases were so obscure that they could not be diagnosed except with the assistance of an anæsthetic, when the diagnosis could be readily made.—Mr. TREVES said his remarks applied only to diseased appendices, not to those removed during ovariotomy, etc.—Mr. PAGE asked if the appendix was healthy at the part cut through? He thought the best treatment was to cut down to the abscess at the point where it was forming. It was almost impossible to suture diseased peritoneum. Only that week he had had a case in which it was impossible to remove the appendix; he had, consequently, drained the abscess, and it was so far doing well. It was important that all cases of the kind should be published.—Mr. ALLINGHAM, in reply, said there was hardly any affection of the cæcum; though the case was supposed to be one of intussusception or of volvulus, hence the reason for the incision in the middle line. Notwithstanding what Mr. Treves had said, he had, as a matter of fact, tucked in the peritoneum, though he now considered it might be better practice to leave it open. There was very little inflammation of the part at which he had cut off the appendix, the inflammation being chiefly at the distal end of the appendix. If he had thought the case had to do with the appendix, he would have cut down upon it at the side instead of in the median line.

Living Specimen.—Mr. JOHN MORGAN showed a young Welsh miner, who had an enormous appendage of the nature of molluscum fibrosum, growing from the left side of the thorax on a level with the fourth rib, and hanging down to below the crest of the ilium. The growth was congenital and was then of small size, but of late years it had taken on rapid growth, and the rate of the increase had been accelerated as the size augmented. There was marked hypertrophy of all the structures involved, and the surface was nævoid in appearance.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 31ST, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

Operations for Septic Thrombosis of the Lateral Sinus Consecutive to Aural Disease.—Mr. BALLANCE read the notes of four cases in which the supervention of cerebral symptoms as a sequel to a long standing purulent discharge from the ear was held to justify the inference of thrombosis of the lateral sinus, for which an operation was in each case undertaken, in two of the four with complete success. The first case was that of a man, aged 21, who had had a discharge from the ear for fifteen years, and this had ceased suddenly some days before his admission to the hospital in May, 1889. There was pain in the ear, headache, giddiness, and, later on, shivering and vomiting. There was no tenderness or swelling over the mastoid, and no optic neuritis. In fact, the general aspect of the case was that of typhoid fever, and nothing but the marked and rapid oscillations of the temperature saved them from that diagnosis. They decided to trephine, and deep down the bone was found to be green and offensive. The groove of the lateral sinus was filled with stinking pus, which was also traced along the posterior aspect of the petrous portion of the temporal bone. He removed all the diseased bone he could get at, and then tied the internal jugular vein in the neck, dividing it between two ligatures. The effect on the condition of the patient was marked and immediate, and thirty-six hours afterwards he was bright and cheerful. The pulse and the temperature were normal. In the following days he had symptoms of pulmonary infarct, and pain in the ankle-joint and foot. A week later he had a large abscess in the buttock. At that time something projected from the wound in the mastoid region, which, on being withdrawn proved to be one inch and a half of the walls of the lateral sinus that had sloughed away. In order to cut short any further septic complications, Mr. Ballance injected some mercurial solution with a syringe into the distal end of the divided jugular vein, and thoroughly washed out the vein between that point and the lateral sinus. A quantity of pus escaped from the vein when reopened. The patient ultimately did very well, and recovery was complete by August. [The patient attended and was examined by the Fellows.] The second case was in a lad aged 18, admitted into the West London Hospital in August last, with the usual symptoms of headache and vomiting, going on to delirium, etc. There was a history of aural discharge since infancy. On admission he was dull, the temperature was 104° F., the tongue brown and dry, and there was swelling and tenderness over the mastoid, with optic neuritis. The same operation was performed, comprising the ligature of the internal jugular vein, and the same pathological changes were found. Death took place a day or two later from general pulmonary infarction, showing that the operation had been undertaken too late. The brain and membranes showed nothing wrong. The third case was that of a girl of 14, who had had a discharge from the right ear for two years. The external meatus was found to be blocked by a polypus. There was shivering, and there had been vomiting and delirium, but no œdema over the mastoid nor optic neuritis. Some slight albuminuria. Temperature 100° to 105° F. The same operation was performed, but after ligaturing the internal jugular vein it was found to include the clot, and an incision was therefore made lower down and another ligature applied. He then syringed through the vein into the lateral sinus, as before. The patient seemed to promise well, but succumbed unexpectedly to an attack of laryngeal spasm, due to the formation of a small abscess in the larynx. The fourth case was operated upon as recently as March 6th of this year, the patient being a young woman of 24. The symptoms and treatment were substantially the same, and in spite of slight pulmonary and gastro-intestinal signs of infarction she was at present practically well. The author insisted upon the difficulty of establishing an early diagnosis, especially in the absence of a history of otorrhœa, and upon the inutility of operative interference which did not comprise ligature of the internal jugular vein. The principal points which were to be relied upon to establish the diagnosis were (1) a history of a discharge from the ear; (2) the sudden onset of the disease; (3) the extreme and rapid oscillation in the temperature; (4) the repetition of rigors and vomiting; (5) optic neuritis and other cerebral symptoms; and (6) tenderness and swelling in the mastoid region, with stiffness of the neck. —The PRESIDENT suggested, in view of the results which accrued

from allowing cases of suppuration of the ear to go on unchecked, that it might be well to interfere at an earlier date, and so prevent the necessity for such operations as those so successfully carried out by Mr. Ballance.—Dr. MACNAUGHTON JONES pointed out that it was only of recent years that the pathological importance of these forms of ear affections had become fully recognised, and he mentioned several cases in his own practice to illustrate the desirability of early diagnosis and treatment. He called attention to the fact that extensive mischief might ensue without any ear symptoms of a nature to lead to a correct diagnosis.—Mr. PAGET showed a specimen from a lad of 13 whom he had trephined for similar symptoms. The lad died, and, *post mortem*, he had found pus on the posterior surface of the petrous bone and clots in the lateral sinus. There were minute hæmorrhagic infarcts in both lungs, but the case was hardly one of septic thrombosis properly so called.—Mr. BALLANCE then briefly replied.

Case of Pernicious Anæmia.—Dr. WILLIAM HUNTER read some carefully prepared observations on a case of pernicious anæmia of three years' standing, in a man, aged 54. The origin of the malady appeared to have been residence in an insanitary house, and the principal symptoms were gradually increasing weakness with inflammatory lesions of the gastro-intestinal tract, sickness and irregular diarrhœa. Febrile symptoms were not marked. *Post mortem* the subcutaneous fatty layer was preserved, but was of a lemon colour. The characteristic changes were found in the liver, kidneys, and spleen, the latter weighing 11½ ounces, and giving the iron reaction to the sulphide of ammonium test. He remarked on the high coloration of the urine, and other symptoms of abnormal destruction of the blood corpuscles, and he attributed the malady to the presence of a specific organism which had found its way into the alimentary tract. In support of this he mentioned that he had succeeded in isolating from the urine on two occasions a ptomaine which closely corresponded to putrescine. The only treatment which he thought likely to prove of avail in the early stage would be to wash out the stomach freely with some antiseptic substance such as naphthol.—The PRESIDENT suggested that it might be well to investigate the condition of the urine in the septic conditions following extensive abdominal operations. He had often noticed curious changes in the urine which he had been unable to explain.—Sir HUGH BEEVOR observed that the destruction of blood corpuscles which existed in this case was also said to be brought about by certain aniline derivatives.—Dr. HUNTER, in reply, urged that a great deal of confusion resulted from the diagnosis of pernicious anæmia being given in cases which in no sense came under that head. In reference to Sir Hugh Beevor's remarks, he pointed out that putrescine was a tetra-methyl-diamine.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 20TH, 1890.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Exhibit.—Mr. CRIPPS LAWRENCE showed a new Plug for use after Colotomy.

Warnings of General Paralysis of the Insane.—Dr. SAVAGE read a paper on this subject, which is published in this day's JOURNAL.—In the discussion which followed, Mr. HARRISON CRIPPS remarked upon the value of the early symptoms to physicians, but he felt disappointed that so far the physician was able only to diagnose the disease and prognose its course. *Post-mortem* observations rather than clinical work should bring light upon this subject. He himself believed that definite changes, namely, diminution in the size of the brain and increase of the intracranial fluid, were associated with general paralysis. Dr. Claye Shaw believed that the increase of fluid caused the atrophy of the brain, and therefore at Dr. Shaw's suggestion Mr. Cripps had attempted to relieve the patient by draining away the excess of fluid. He operated by removing a portion of the skull and the corresponding part of the meninges, then replacing the skin flap; this latter was left in contact with the brain substance. Thus the absorbents of the skin would be able to take up and remove any accumulation of fluid. His first case was operated upon last June, and its details had already been published. He had since operated upon a second case; no ill results had followed from the operation, and the immediate effect upon the mental state was markedly beneficial. In the first case, six months after the operation the patient was practically well, but since then he had had a relapse with fits. In the second case, similar good results as regards the mental state were observed, but the motor symptoms remained *in statu quo*. In further cases he would be inclined to remove a considerably larger area both of bone and meninges in order to obtain a larger absorbing surface. Antiseptically performed, the operation was free from risk, and he would advise the physicians present to allow an attempt at surgical interference if possible in the earlier stages of this hopeless malady. The operation would be useless in later stages. If even the benefit derived were only temporary, this treatment would be of at least some value.—Mr. BRUCE CLARKE agreed with Mr. Cripps that surgical interference in such cases was devoid of danger, and was likely to be of permanent benefit in the disease. Still, further experience was necessary before any conclusions could be drawn.—Dr. ALDERSON asked Dr. Savage how far the slight symptoms he described might be present without general paralysis of the insane. He related a case in which symptoms similar to those described had shown themselves in a lady, aged 65, who afterwards recovered perfectly.—Dr. BEEVOR remarked that the *post mortem* appearances of general paralysis of the insane were as yet unknown, and he doubted if the changes described by Mr. Cripps would be found constantly associated with the disease. He could bear testimony to the value of the early signs described by Dr. Savage from his own experience in the out-patients' room of the Queen Square Hospital. He doubted whether the local origin of the disease could be proved.—Dr. LEES referred to the description of the *post mortem* appearances of general paralysis, as given by Dr. Bevan Lewis, in his recent work on insanity. There, stress was laid upon opacity of the membranes and adhesion of them to the cortex. The cerebral fluid was found increased and the cortex itself was shrunken. Dr. Lees also remarked upon the association of ataxy with general paralysis of the insane, and he inquired from Dr. Savage what was the relationship between locomotor ataxy and this disease.—Dr. ORMEROD spoke of the connection of ataxic symptoms, such as uncertain gait, loss of knee-jerk, and the Argyll-Robertson pupil in connection with general paralysis of the insane. He believed that such symptoms might precede the development of general paralysis by a considerable number of years. He related several cases which instanced this, and one in particular in which ataxic symptoms supervened after a man had been discharged cured from an asylum. He inquired from Dr. Savage whether the prognosis of general paralysis was at all influenced by the additional symptoms of locomotor ataxy.—Dr. ROBERT MAGUIRE inquired how soon in the disease a man might die in a convulsive seizure. He was acquainted with the so-called congestive attacks of general paralytics as they were observed in asylums—attacks in which the patient became unconscious, his temperature rose, and in which he might die. He referred to a case which had recently occurred at St. Mary's Hospital. A man was found unconscious, and on examination had left spastic hemiplegia, with occasional clonic spasms. The head and eyes were turned to the left, the right pupil was contracted, the temperature rose to 108.5°, and the man died. On *post-mortem* examination Dr. Maguire had found no lesion whatever which could account for the symptoms. There were opacity of the membranes, excess of cerebral fluid, and a few calcareous plates in the falx cerebri; but he thought these appearances could not be associated with any definite nerve symptoms. He suggested that this and similar cases of death from functional nerve disease in which no lesion could be found were probably instances of undetected general paralysis, ending with a so-called congestive attack.—Dr. CAGNEY called attention to the fact that many of the slight symptoms described by Dr. Savage occurred during convalescence from acute fevers, and he asked Dr. Savage whether he had observed any relationship of general paralysis to the acute fevers.—Sir JOSEPH FAYRER inquired whether sunstroke had been observed as an exciting cause of general paralysis. It was undoubtedly overlooked as a cause of disease in this country.—Dr. SAVAGE, in reply, doubted whether any operative interference could produce permanent good results in general paralysis. In that disease, as in epilepsy, any treatment whatever might be followed by temporary improvement. Moreover, the general paralytic in the early stages was the most self-satisfied of men; he nearly always believed that nothing was the matter with him, and he most certainly would never consent to have his skull opened. He (the speaker) could give no definite opinion as to how far the presence of ataxy influenced the prognosis of general paralysis. He would remind physicians that they had yet to investigate an ataxy of cerebral origin. He considered that Dr. Alderson's case was not one of general paralysis of the insane. He agreed with Dr. Maguire that such cases as he had described

might well be instances of general paralysis. He had seen a general paralytic die in his first fit. He had not noticed an association of general paralysis with the acute fevers or with sunstroke.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 1ST, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

Cancer of Œsophagus eroding Trachea.—Mr. W. J. COLLINS gave the following account of a specimen of this nature, which he showed: The patient, aged 50, was admitted into the London Temperance Hospital on October 23rd, 1888. For two months he had suffered with dysphonia, and cough with dysphagia, and had lost 21lbs. in weight. On admission, his weight was 8st. 5lb. He was emaciated, aphonic, with a persistent cough, and with mucous but not sanious expectoration. The respirations were strident and his breath was foul. On trying to swallow, fluids were returned. The dysphagia was urgent. The vocal cords would not approximate. On October 30th rubber quarter-inch tubing to the length of twenty-two inches and a half was passed down the œsophagus, and left in until the next day, when it was removed as it became blocked. On November 2nd an œsophageal bougie was passed, but was arrested thirteen inches from the teeth. A catheter was then passed the same distance, and on its being withdrawn air escaped. On November 6th, a catheter was passed to twenty inches from the teeth; this passed the tracheal fistula, and the patient had milk through it. The patient died on November 8th. At the *post-mortem* examination the ulceration was found to begin two inches below the cricoid cartilage, and extended for two inches; there was little, if any, constriction. The trachea had been opened by the ulceration, and there was an opening one inch by three quarters. The rings stuck out like the ribs of an old wreck. The mediastinal glands were infiltrated, but there were no metastatic deposits.—The PRESIDENT asked if food had returned through the trachea, or if the expectoration had been thickened.—Mr. ROGER WILLIAMS asked what the duration of life had been after the onset of symptoms; this was, he said, a point of some importance as it had been stated that the duration of these glandular carcinomata was much longer than that of the ordinary epitheliomata of the œsophagus, in which the course was very rapid.—Dr. VOELCKER asked Mr. Collins if he had any explanation to give as to the presence of the growth at the point where it was. It was generally stated that carcinoma of the œsophagus occurred commonly in three positions, namely, in the upper, middle, and lower portions. It had been his fortune to see six *post-mortem* examinations of cases of this disease within a short period; in four of these the cancer was exactly opposite the bifurcation of the trachea, and at the time he had been struck with this, and thought that it might have had something to do with the exact position of the cancer.—Mr. COLLINS replied in answer to the President that there had been no evidence of any return of food through the trachea; though food material had undoubtedly reached the lungs by this channel, the expectoration had not been thickened. In answer to Mr. Roger Williams, he said death had occurred within four months of the first onset of symptoms, so the case was undoubtedly a very rapid one; as to the cause for the position of the growth, he said that he had no explanation to offer.

Central Necrosis of Radius without Suppuration.—Mr. WATSON CHEYNE showed a specimen of central necrosis of the radius without suppuration. The patient was a boy, aged 15, who had an acute abscess at the upper and anterior part of the forearm ten months before admission. This abscess opened, and healed in two months. The greater part of the radius continued to increase in thickness, especially at the upper and middle portions, and the patient suffered a little pain at night, but was otherwise in good health. Chronic osteitis was diagnosed, and Mr. Cheyne proceeded to gouge a trough in the bone. In doing so at the upper part he found a soft spot in the bone filled with granulation tissue, and on following this inwards he came on a sequestrum 2½ inches in length in the interior of the shaft. The sequestrum was loose and was embedded in granulation tissue, but there was no pus or fluid around it or in the neighbourhood. The sequestrum had evidently come from the inner part of the dense bone next the medullary cavity. Mr. Cheyne explained the occurrence by supposing that the acute inflammation in the first instance probably blocked the nutrient artery and the periosteal vessels, and thus deprived a considerable area of the bone of its blood supply. Part of this bone recovered, but a small portion died and was separated from the living in the usual manner. This dead piece was at a considerable distance from the seat of the abscess, and never became infected with the pyogenic cocci; hence the absence of suppuration around it. Mr. Cheyne thought that some of the cases described as "quiet necrosis" were in all probability instances of tubercular necrosis.—Mr. ROGER WILLIAMS had seen an analogous case. There was a doughy swelling in Scarpa's triangle in a young woman, which, on being opened, was found to contain a sequestrum of bone; it was fairly superficial, and no track could be found connecting the sequestrum with the femur, suggesting that it had in some way immigrated.

Lymphatic Nævus of Tongue.—Mr. J. HUTCHINSON, jun., exhibited sections illustrating lymphatic nævus of the tongue, obtained by excision from the dorsum of the tongue of a child. The condition could be recognised during life by the presence, at some point on the dorsum, of a cluster of large papillary processes, which showed here and there distinct vesicles. The latter were translucent, and if pinched allowed of the escape of clear fluid (lymph). They were usually largest close to the surface, and might easily by accident become full of blood. There was a tendency to recurrent attacks of inflammation in the area affected, as in the case of macroglossia, but apparently in lymphatic nævus the muscular substance of the tongue did not contain dilated lymphatics, or only in its most superficial part. On section the spaces were seen to have a distinct wall presenting endothelial cells, and were often full of lymph coagulum. There was probably new formation as well as dilatation of pre-existing lymphatics in this condition, which was allied to that figured by Mr. Hutchinson, sen., in the *Medico-Chirurgical Transactions*, vol. lxviii. Specimens of lymphatic nævus obtained from a young man under the care of Mr. Treves were also referred to. In this case the condition had existed as long as he could remember.—Mr. W. J. COLLINS had recently seen a case of lymphatic œdema which was not congenital. It occurred in a young woman, and gave rise to great deformity, as it caused the skin to bulge outwards and the mucous membrane inwards. So a plastic operation was performed. He asked Mr. Hutchinson why he considered that some of his cases were congenital.—Mr. BOWLBY thought that there might be some confusion about these cases owing to the fact that they were commonly known under the name of nævus of the tongue. They were really lymphangiomata, and it would, he thought, be advisable to drop the term lymphatic nævus altogether. He agreed with Mr. Hutchinson that the majority of the cases were congenital.—Mr. HUTCHINSON agreed that lymphangioma was a more appropriate, although a more clumsy, term. He had used the term "congenital" as the earliest conditions of the disease were almost undoubtedly present from the first, and in one of his cases the patient could remember the presence of an enlarged place on his tongue from his earliest boyhood.

Macroglossia.—Mr. BARKER described in detail the condition of a tongue, the greater part of which he had removed from a young child some years ago with complete relief. The diagnosis had been lymphangioma cavernosum and blue colouring matter was in readiness for injection of the lymph spaces immediately after operation. The tongue presented generally a lumpy papillated surface, the eminences on its surface having almost a translucent appearance, probably due to the presence of the distended lymph spaces underneath the papillary layer. These spaces were found to be quite irregular in shape and distribution in relation to the various components of the tongue. They penetrated everywhere except actually into the epithelial covering of the organ. The muscle bundles were to a certain extent separated by them, and by more or less exudation or lymphoid tissue. In most cases long branched lymphatic vessels extended up between the papillæ. The muscle fibres appeared normal in size but slightly irregular in arrangement owing to the new tissue between them. The condition was congenital, but had been greatly exaggerated by acute and subacute attacks of glossitis from time to time. There had been no recurrence since operation, and the shape of the tongue was excellent. An examination of the specimen simply confirmed the views expressed by the author of the paper in his article on the "Disease of the Tongue," in Holmes' *System of Surgery*, viz., that macroglossia is, in the majority of cases, due to lymphangiectasis alone with but little change in the other structures of the organ.

Tuberculosis in Birds, with Observations on the Relation of the Disease to Leprosy.—Dr. WALTER SIBLEY read a paper and showed specimens collected from several classes of birds as a continuation

of his former communication.[1] Giving first a more complete description of the histology, and then showing specimens illustrating the nature of the disease, among which were tubercular tumours connected with bone such as from the ribs and in connection with the knee-joint from a peacock, he next mentioned that in some birds the deposits in the viscera closely resembled the leprous bodies found in man. A remarkable analogy existed between tuberculosis in birds and leprosy in man in the extreme abundance of the bacilli, which for a long time exercised but little effect on the surrounding tissue, and multiplied to an enormous extent without causing sufficient inflammatory action to lead to breaking down and ulceration. Again there was the close resemblance of the early deposits to the leprous bodies, and the presence of the bacilli in the lymphatic vessels, and also the chronicity of the disease associated with the presence of nodules in various tissues, together with the rarity of pulmonary deposits, especially in the early stages. In snakes the disease often began as subcutaneous nodules crowded with bacilli, and for long periods without deposits in the viscera. The etiology of the disease was next dwelt upon. He believed that heredity played a very large part. The infection theory, namely, that the birds consumed bacilli with their food and so contracted tubercle, was not convincing. In the case of fowls, the disease was limited to certain broods, and other birds, such as pigeons, living on the same spot, continued exempt. The disease had been watched on one farm for six years, and it had apparently spread to a neighbouring one through the interchange of eggs for sitting. The direct experiment of feeding birds on tubercle bacilli had so far been negative. Reference was made to the experiments of Ribbert at Bonn, and of Straus and Wurtz in Paris, who had for a year fed hens on sputum from phthisical patients, and in no case did the birds become tubercular. While in Germany, he had fed pigeons on sputum rich in bacilli, also with negative results. Of the organs which suffered the most, the spleen stood first, and was often enlarged many times its natural size from deposit, when there was only microscropical deposit elsewhere. Thus far he had found tuberculosis in the following birds dying naturally in confinement, as demonstrated from the microscopical appearances and the presence of bacilli: Canaries, corncrakes, doves, finches, fowls, geese, guinea-fowls, peafowls, pheasants, pigeons, swans, and vultures. It did not appear that the carnivorous were more exempt than the graminivorous species.—Mr. ROGER WILLIAMS considered that the histological details of the tubercles in these cases differed from those present in tubercles in man.—Dr. LITTLE asked if it was possible to distinguish in birds those which were the subjects of tubercle during life.—The PRESIDENT asked Dr. Sibley by what means fowls and other birds acquired tubercle.—Dr. SIBLEY replied that he had never been able to satisfy himself that either man or animals ever had tubercle in a state of nature. In South Africa the natives never got tubercle until they came in contact with white men and their civilisation, The only ways of recognising tuberculosis in birds during life was by the extreme emaciation, with distension of the abdomen, unless (as occasionally, though rarely, happened) there were tubercular masses attached to the bones or elsewhere on the surface. He had not been able to follow Mr. Roger Williams's objection, as he considered that the epithelioid cell was an essential element in a tubercular granuloma.

Fracture Dislocation of Spine; Paraplegia; Operation; Death from Pneumonia two months later.—Mr. EDGAR WILLETT showed a specimen of fracture dislocation of the spine. The clinical history of the case had already been reported in the *Lancet* of August 17th, 1889, page 315, by Mr. Henry Thompson, of Hull, under whose care the case was. The facts as reported were as follows: In 1883 a portion of an old wall fell upon a boy aged 9, in consequence of which he was in the Hull Infirmary for three weeks with paraplegia. At this time no operation was performed. The paraplegia lasted thirteen months and then completely disappeared, leaving an angular curvature in the lower cervical region. During these thirteen months an abscess formed in the neck and discharged for six months. Complete recovery ensued, except for slight dysuria. Early in January, 1889, pain returned, with paraplegia, and he was again admitted into the hospital under Mr. Thompson. He rapidly got worse, and on February 13th the laminæ and spinous processes of the three upper dorsal vertebræ were removed. He made a good and complete recovery, and left the hospital on July 24th. He remained well until September 25th, when he caught cold bathing, and was admitted again on September 28th, and died on October 6th from acute pneumonia. The specimen showed the lowest six cervical and all the dorsal vertebræ in section, though the several bones were traced with difficulty at the old injury.—Mr. WATSON CHEYNE asked Mr. Willett if he was quite certain that it was a case of fracture of the spine, and not one of spinal caries. He also asked how soon after the accident the paraplegia came on, and how soon after that the child went to the hospital. The absence of one of the intervertebral discs, as well as other appearances in the specimen, led him to think that the case was one of spinal caries rather than of dislocation due to accident.—The PRESIDENT asked Mr. Willett for the details of the operation.—Mr. WILLETT said that he had not seen the child at the time, but from the published account he had gathered that the child was admitted into hospital immediately after the accident with the paraplegia which lasted for thirteen months, and then disappeared for five years, after which it recurred. The operation had consisted in an incision over the spines of the last cervical and upper dorsal vertebræ with the removal of the spinous processes and laminæ of the last cervical and the two upper dorsal vertebræ. A drainage tube was inserted, and ordinary dressings applied. The wound healed rapidly. He pointed out that in one of the vertebræ there was a small round cavity, which in the recent state contained pus. He was unable to ascertain whether this was of tubercular origin or due to the accident.

Microscopical Specimens of Enlarged Spleen from a Child.—Mr. J. FLETCHER LITTLE showed two slides from the enlarged spleen which he exhibited at a previous meeting. The enlargement was discovered when the child was five months old, and continued to increase until the death of the patient at the age of eleven months. The child was the eighth in the family. It was delicate from birth. There were no signs of rickets in the bony tissues, and no evidence of syphilis or of glandular enlargements. The spleen weighed 11 ounces, was equally enlarged in all its dimensions, contained no nodules, no gummata, showed no signs of capsulitis and no increase of fibrous tissue. The appearances under the microscope were those of normal splenic tissue. The hyperplastic enlargement had not been caused by leucocythæmia, as was diagnosed by all who saw the child during life. The case might be one of those rare forms of enlargement of unknown origin mentioned by pathologists, which awaited an explanation or might, as was suggested by the President, be caused by rickets attacking the internal organs. It was unsatisfactory in one sense that the microscope had revealed nothing more than normal tissue but he thought that in the absence of clinical signs of rickets and the *post-mortem* disproof of the presence of leukæmia it was advisable to place the case on record for future reference.—The PRESIDENT referred to the fact that greatly enlarged spleens were not uncommonly met with in young children, which, when examined microscopically, only showed general hypertrophic changes. He was inclined to think that the enlargement in the specimen under discussion was probably due to rickets, and in favour of this view were the facts that the child was the youngest of a family of eight, and that the mother's milk was known to have been poor in quality.

Card Specimens.—Mr. H. B. ROBINSON: Dermoid Cyst of Forehead. (This was referred to the Morbid Growths Committee.)—Mr. SHATTOCK: Congenital Atresia of Œsophagus.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY

FRIDAY, MARCH 21ST, 1890.

A. F. MCGILL, F.R.C.S., President, in the Chair.

Cases.—Mr. ATKINSON showed the following: 1. A Case of Compound Dislocation of the Wrist. The patient's right hand was struck by a fragment of rock, laying open the wrist-joint on the palmar aspect and displacing the hand backwards, with oblique fracture of the radial styloid process. The ulnar artery was torn across and was tied. Nerves and tendons uninjured. The limb was put up on a bent wire splint, applied on the dorsal aspect, the fingers being fixed at a right angle to the forearm. A fairly mobile wrist and useful hand resulted. 2. Myositis Ossificans. The case was shown three or four months ago; subsequently Mr. Atkinson removed one of the bony masses from the spinal origin of the latissimus dorsi, of which he now showed microscopic sections proving it to be true bone. In the position from which it was removed a new bony growth had appeared, four times the size of that taken away. Other muscles also were being invaded by the disease.—Dr. BARRS showed Nine Cases of Cerebral Palsy

[1] *Path. Soc. Trans.*, 1888.

Children. Of these, three were congenital and six acquired. They belonged to three types of hemiplegia, paraplegia, and diplegia. In the hemiplegic cases the face was not affected, probably in consequence of the association of movements of adult life not having been yet organised. He thought the prognosis of such cases was very bad, the causes being permanent lesions in the brain; but he recommended the parents to teach the children as much as possible, and not to neglect them. Some of the children showed considerable intelligence. Dr. Barrs referred to the causes mentioned by Dr. Gowers as producing these conditions, such as meningeal hæmorrhage, injury during birth, convulsions, and congenital syphilis, but in none of these cases could any history of difficult parturition be obtained. The theory which seemed to have most in its favour was that of an acute inflammation in the motor area of the brain, similar to that which took place in acute anterior poliomyelitis. The sequelæ, however, such as imbecility, epilepsy, rigidity of limbs, and tendency to athetosis, seemed to indicate a cause of wider extension.—Remarks were made by Dr. CHURTON, Dr. TREVELYAN, and Dr. JACOB; and Dr. BARRS replied.—Dr. CHURTON showed (1) two cases of Recovery from Peripheral Neuritis (alcoholic), of very pronounced type; (2) probable Gumma of the Cord, causing spastic paraplegia, and almost complete anæsthesia, recovering under treatment by potassium iodide; (3) Wasting of the Left Quadriceps Extensor Femoris, in an otherwise very healthy boy, a football player—probably subacute anterior cornuitis in second and third lumbar segments of the cord; (4) Clonic Spasm variably affecting Cervical Muscles, under treatment by hypodermic injections of a 2 per cent. solution of carbolic acid; (5) Crossed Paralysis in a Child 2 years of age, supposed to be due to tubercle in right half of pons; (6) Gumma of Left Prefrontal Region, causing slowness of speech, defective memory and intelligence, recovering under iodide; (7) Anorexia Nervosa.—Dr. EDDISON showed a case of very severe Lead Paralysis.—Mr. JESSOP showed (1) a case of Unilateral Lymphangeioma of the Tongue in a young girl. The growth was mainly on the surface of the organ, and had a certain superficial resemblance to a coarse papilloma. It was said to be congenital. (2) A case of Strumous Disease of the Calvarium, causing perforation of the bone and exposure of the dura mater. The patient was a youth who had several other undoubtedly tuberculous lesions.—The PRESIDENT showed (1) a case of Excision of half the Lower Jaw for Sarcoma; (2) a child from whom a Spina Bifida, about the size of a tangerine orange, had been excised. He alluded to a serious source of fallacy in the report of the Committee on Spina Bifida as to the relative frequency of the various forms, the report being based mainly, if not entirely, upon museum specimens, which for obvious reasons were largely obtained from the more serious and fatal forms, in which the nerve trunks or spinal cord were involved. (3) A case of Angular Curvature of the Spine at the Fourth Dorsal Vertebra, with Spastic Paraplegia and Herpes. The patch of herpes was anatomically interesting, from the fact that it was close to the vertebral spines and situate at the level of the anterior cutaneous distribution of the fourth intercostal nerve; that is, opposite the seventh and eighth spinous processes. (4) A patient from whom a large Villous Growth of the Bladder had been removed three weeks before. The growth, which was shown, was the size of a small orange, with a peduncle about the thickness of a No. 10 English catheter.—Mr. MAYO ROBSON showed a case of Successful Tendon Grafting. The patient was admitted with a severe machinery smash of the right hand, the dorsum and the two middle fingers being most injured. After a few days it became evident that the second finger was hopelessly damaged, and the extensor tendon of the forefinger had also sloughed over the back of the hand. The second finger was amputated, the long flexor being grafted into the gap in the extensor indicis, the whole of the skin of the palmar aspect of the second finger being utilised as a flap, and turned down to cover it. It was now firmly healed, with good movement and considerable power in extension.—Mr. WARD showed (1) a boy, aged 13, from whom he had excised the whole of the right clavicle six years ago, for Acute Infective Necrosis. There had been practically no attempt to reproduce the bone. The limb was hardly at all impaired in strength and usefulness, and there was considerable increase in range and freedom of certain shoulder movements. (2) A case of Traumatic Cephalhydrocele in a child of 3 years, caused by a fall on the head sixteen months ago. He had aspirated and applied pressure on two occasions a year ago, but without effect. There was well-marked hemiplegia with rigidity. (3) A case of Herniotomy for an enormous strangulated inguinal hernia. The whole of the great omentum, weighing 24¾ ounces, was excised. While waiting in hospital for a suitable truss, the patient suddenly developed during the night in bed a strangulated femoral hernia of the opposite side, for which herniotomy had been performed five days before he was shown.—Dr. W. GRIFFITH showed (1) a girl, aged 19, suffering for three years from a gradual Atrophy of Hands with Stiffening of the Joints, and a condition nearly resembling "local asphyxia. (2) A woman, aged 28, showing a somewhat similar condition, with gradual disappearance of the ungual phalanges. Both cases were very chronic, attended by no pain; the nails were affected, and there were trophic changes in the skin.—The PRESIDENT said there was a superficial resemblance between these patients and cases of leprosy he had seen in Norway, where the fingers were much clubbed.—Dr. ALLAN showed a case of Hæmatoma Auris in a man suffering from dementia.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 27TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Specimen. — Dr. ARTHUR HALL showed a specimen of Old Hepatic Abscess, from a female subject in the dissecting-room. The abscess cavity was about the size of a cocoa nut, and lined with a thick shell of calcareous material. It communicated above with the peritoneum, and below by a sinus with the exterior. There were numerous old peritoneal adhesions. The diaphragm on the right side was pushed up as high as the third right rib. The base of the right lung was adherent to the diaphragm. The liver was small, and the body much emaciated.

Cases.—Dr. SINCLAIR WHITE showed an unusual case of Locomotor Ataxy, in a man, aged 35. The disease had existed nine years. Ataxy and perverted sensibility were limited to the ulnar half of the left hand and forearm. There were very severe "gastric crises;" the right pupil was twice the size of the left, but in this respect the pupils alternated; both were inactive to light, but active to accommodation; the discs, especially the left one, were congested; the patellar reflex absent; sexual appetite lost. There was no history of syphilis. Dr. White also showed a case of Syphilitic Growth on the Dorsum of the Tongue, in a man, aged 38. The growth, which was about the size of a shilling, was made made up by hypertrophied papillæ.

Aural Complications of Influenza.—Mr. C. ATKIN read a paper on the aural complications of the late epidemic. After stating that middle-ear affections had been more prevalent than would seem to be explainable by simple "catarrhs and sore throat," he ventured an opinion that the inflammation was different in its character and course. The attack often came on without anything wrong with the throat being previously noticed. It was very acute in character, often accompanied by hyperæsthesia of hearing at first, rapidly followed by diminution, especially to the watch. Blood-stained lymph was in some cases effused into the tympanic cavity, being more of the fibrinous than of the corpuscular variety. The necessity for prompt treatment was urged: blisters, leeching, aconite, with instillations of warm anodyne drops. Syringing, warm oil, glycerine, and quinine, were regarded as positively harmful in these cases.—Mr. SNELL, Dr. SINCLAIR WHITE, Dr. GWYNNE, and Dr. MARTIN took part in the discussion.

Medical Societies in Sheffield.—Mr. SNELL read portions of a history, which he had prepared, of Medical Societies in Sheffield down to 1889, when he retired from the secretaryship. He pointed out how the present Society was the descendant of active and vigorous societies. The Medico-Chirurgical Book Society was founded in 1834, and became merged in 1861 into the Medical Library (established 1858), and this latter became amalgamated in 1888 with the Medico-Chirurgical Society. The most important ancestor of the present Society was the Medical Society of Sheffield and the neighbourhood, founded in 1841. For many years its prosperity was remarkable. Its proceedings were published regularly and fully in the *Provincial Medical Journal*, and this at a time when the number of societies (metropolitan and provincial) that did the same numbered two or three. The Medico-Chirurgical Society succeeded, after a brief interval, the Medical Society. It had a prosperous career, and it was pointed out how satisfactorily growth in numbers had been attended with a corresponding increase in attendance at the meetings.—Dr. GWYNNE, Mr. ARTHUR JACKSON, Dr. MARTIN, Dr. SINCLAIR WHITE, and Mr. C. ATKIN made remarks.

REVIEWS AND NOTICES.

HISTORY AND PATHOLOGY OF VACCINATION. By E. M. CROOKSHANK, M.B., M.R.C.S. London: H. K. Lewis. 1890.

[FIRST NOTICE.]

PROFESSOR CROOKSHANK has obviously devoted much time, labour, and money to the preparation and publication of his two ponderous tomes recently issued on *The History and Pathology of Vaccination*. The result, however, on the whole, must be disappointing to most of those who, like ourselves, have followed with pleasure and profit his bacteriological investigations, and have been led to regard him as one of the most zealous and promising of our younger workers in the fields of natural history and pathology. For, leaving the special subject to which he has devoted himself for some years past, and in which he is justly regarded as a high authority, he has (here following in the footsteps of Dr. Creighton) undertaken a historical inquiry into the origin and progress of small-pox inoculation and vaccination, and into the sources of our supply of vaccine virus, a line of research for which he had not previously shown any special aptitude; and on such historical grounds alone, without, so far as we can discover, having made any serious attempt to investigate the nature and symptoms of cow-pox and of small-pox respectively as they manifest themselves at the present day, and the affinities (if there be any) between these diseases, or any serious study of the abundant valuable statistical and other evidence which has recently accumulated in reference to the protective influence which cow-pox exerts against small-pox, ventures to proclaim that the general belief in vaccination is a delusion, and avows himself an uncompromising antivaccinator.

Of the second volume of Dr. Crookshank's work we can speak in terms of unqualified praise, and thank him very sincerely for it. It is a collection of selected essays relating to vaccination, most of which are very interesting and valuable, and have been practically inaccessible both to the public and to the profession. Among these are included Jenner's original papers, a careful perusal of which will, we think, satisfy most fair-minded men that, if he was not quite so great a philosopher or of quite so elevated a character as some of his followers have represented him to be, he was at any rate an honest searcher after truth, who, with a kind of desultory perseverance—the desultoriness of which may have been due partly to natural indolence of character, partly to the want of such scientific training as is now obtainable, and partly to difficulties connected with his position as a general practitioner in the country and the fitful occurrence of opportunities—pursued his inquiries and achieved results, the value and scientific importance of which were, with few exceptions, fully recognised by all the greatest physicians of his own time, and are still acknowledged by all the ablest and most experienced physicians of the present day.

Among them are also included Ceely's admirable writings, giving a full account of his investigations into the relations between small-pox and cow-pox; "a detail," by John Badcock, "of experiments confirming the power of cow-pox to protect the constitution from a subsequent attack of small-pox by proving the identity of the two diseases;" and the original papers of Pearson and Woodville.

The first volume, which Dr. Crookshank entitles "a critical inquiry," is an original history of inoculation and vaccination, in sixteen chapters, of which the first gives the history of small-pox inoculation in foreign countries; the second, its history in Great Britain and Ireland; and the third, a discussion of the various methods of inoculation which have been employed, including the improved methods of the Suttons and of Dimsdale. In the fourth chapter he discusses at length Haygarth's proposal to stamp out small-pox by the combined methods of general inoculation at stated intervals, and complete isolation of the sick. The next four chapters are devoted to an account of the "Traditions of the Dairymaids," and to a critical discussion of Jenner's work, claims, and character. None of these show Dr. Crookshank at his best; and the last especially is disfigured by much trivial and carping criticism, and by the introduction of Mr. Birch's "Serious Reasons for uniformly objecting to the Practice of Vaccination in answer to the Report of the Jennerian Society," which occupies nearly thirty-three pages of close print, and which Dr. Crookshank introduces with the remark that "it was by far the most temperate of the arguments against the new practice, and deserves to be quoted *in extenso*." It is, nevertheless, a singularly intemperate production, highly rhetorical and coloured, full of mere academical discussions and strong assertions, but giving no facts and no proof that he had ever really investigated the subject. The paper, in fact, is quite unworthy of notice as a contribution to the scientific study of the relation of vaccination to small-pox; and is only interesting as showing that prominent antivaccinators in the early part of this century were as petulant and unfair in their controversial methods as those of the present day.

The next ensuing six chapters are devoted severally to the subjects of "Human Small-pox as a Source of Vaccine Lymph," "Cattle Plague as a Source of Vaccine Lymph," "Sheep-pox as a Source of Vaccine Lymph," "Goat-pox as a Source of Vaccine Lymph," Cow-pox as a Source of Vaccine Lymph," and "Grease as a Source of Vaccine Lymph."

Dr. Crookshank adduces much evidence to show that small-pox is inoculable on cattle (although admittedly with difficulty), producing only a local papular eruption, or in rare cases local vesicles like those of cow-pox, and attended with little or no constitutional disturbance. He quotes the experiments of Chauveau and others, which prove that the inoculation of susceptible human beings with matter taken from the variolous inoculations of cows may give small-pox. It is noteworthy, however, that Chauveau never succeeded in raising vesicles in cows, but only obtained very small papules; and, notwithstanding the ridicule with which Dr. Crookshank treats the supposition, it is not impossible, therefore, that, as Seaton held, he "got from them the same stuff he had put in—stuff which had undergone no sort of transformation whatever, but which had lain where it was put, as in a pouch, quite inert, giving rise only to local irritation, without inducing any sort of general affection or disease." Dr. Crookshank refers to Ceely's investigations mainly to show that the vesicle he on one occasion undoubtedly produced on the vulva of a cow was variolous and not vaccinal; on the ground that Mr. Taylor, Ceely's assistant, who accidentally inoculated himself with its contents, presented resultant symptoms, which Ceely regarded as "evidently modified vaccine in a sanguine habit, with roseola and vesicular or vaccine lichen," but in regard to which Dr. Crookshank writes: "Chauveau also is of opinion that Mr. Taylor had an attack of small-pox," and then adds on his own account, "and no doubt this is the true interpretation of what occurred. But Ceely's eyes were blinded by Sonderland's seventh aphorism." It should be pointed out, however, that Ceely was not only an experienced practitioner in medicine, who was well acquainted with small-pox and cow-pox, but that, as his work proves, he was a man of cautious and scientific mind, not in the least likely to have been blinded by the views or aphorisms of other persons, and least of all by those of one whose method of investigation had wholly failed in his own hands. Dr. Crookshank also quotes Voit's more recent production of "variola vaccine," and its perpetuation by inoculation on successive generations of cows and human beings; and points out that, in the case of a child, lymph taken from the second remove produced marked fever after the sixth day, and acute eczema on the left knee, on the ninth day swollen glands in the axilla, and on the twelfth and sixteenth eruptions (*petites nodosités disseminées*), which, he remarks, "indicated its true variolous character." But he adduces no evidence to show that in any other case of inoculation from this source any general eruption followed which could in any sense be regarded as the eruption of small-pox. Yet he goes on to say, "From the mere resemblance which existed between late removes of 'variola vaccine' and ordinary vaccine, Voit believed that he had succeeded in transforming small-pox into cow-pox. Voit was misled by appearances in precisely the same way as Ceely and others who have succeeded in reducing small-pox to the appearance of a vaccine vesicle." Badcock's experiments receive due recognition at Dr. Crookshank's hands. "Badcock," commencing operations in 1840, "ultimately successfully variolated 37 out of 200 cows experimented upon. The vesicles were only perfect in 33, and these cases furnished lymph for 400 practitioners. In 1857 it was estimated that 14,000 people had been 'vaccinated' with Badcock's lymph, and subsequently it was stated that Badcock himself had 'vaccinated' upwards of 20,000 individuals." He then continues, "It is quite a mistake to speak of this operation as vaccination. The method was simply a modification of the Suttonian system of small-pox inoculation, in which, in the first remove, the cow was substituted for the human subject. I repeat that all those who have been in

oculated with Ceely's or Badcock's 'variola-vaccine' lymph have not, in the true sense of the word, been vaccinated; they have not been cow-poxed, but they have been variolated." He concludes the chapter devoted to this subject with the following paragraphs:

"But Chauveau was perfectly correct. The eruption which follows inoculation of bovines with small-pox, whether papular or vesicular, is still variolous. Ceely, Badcock, Chauveau, Voit, and others succeeded in engrafting small-pox in the cow, and when suitable lymph and suitable subjects were employed a more or less benign vesicle resulted. And they ought to have known that similar results had been obtained on the human subject by Sutton and Dimsdale, and identical results by Adams without transmission through the cow.

"I, therefore, agree with Chauveau, with the exception of his statement that the persons so variolated must necessarily convey infection. This is only partially true; it is not necessarily the case, as is amply borne out by the experience with Badcock's lymph. In this case there has been no tendency for the inoculation to spread variola by infection, proving that a strain of benign variolous lymph can be cultivated by judicious selection, and completely deprived of any infectious properties."

There is no doubt, of course, that the Suttons and Dimsdale in the last century, and Adams in this, and other inoculators besides these, were really successful in imparting by inoculation an attenuated form of small-pox; but, although they naturally aimed at the production of small-pox void of general eruption, and in some instances seem to have induced such cases, there is no evidence whatever, at any rate no evidence which can be regarded as trustworthy, that such attenuated attacks were of habitual or even common occurrence, or that the inoculated disease ever lost its infectious quality. All evidence, in fact, goes to show that most cases of this attenuated small-pox presented a greater or less amount of the specific variolous eruption, and that the spread of small-pox was largely promoted by the practice of inoculation. But the results of Badcock's vaccine-variolous inoculations were, as Dr. Crookshank himself acknowledges, absolutely different. There is no reason whatever to believe that, among the many thousands of vaccinations which have been made with lymph derived from Badcock's variolated cows, there have ever been eruptions or symptoms resembling those of small-pox, or ever any spread of small-pox from those who have been thus vaccinated. The phenomena, in fact, which have followed such inoculations have been absolutely indistinguishable from those which habitually follow ordinary vaccination. Dr. Crookshank, it is true, is at great pains to show that Ceely's, Badcock's, and Voit's inoculations produced variola in the cow, and perpetuated an attenuated form of variola in the human being, and insists that the disease thus given to the cow is not cow-pox, and that human beings inoculated therewith are not cow-poxed. But if the disease thus engrafted in the cow becomes indistinguishable from acknowledged cow-pox inoculated in the cow, and if the disease thence retransferred to the human being resembles accurately in all its phenomena the disease imparted by ordinary vaccination, and these resemblances become perpetuated, they must surely be the same disease; and there is no sense (except from a genealogical point of view) in endeavouring to attach the name of small-pox to the one whose pedigree is known, and that of cow-pox to the one whose pedigree has not been traced.

Dr. Crookshank's main, if not sole, reason for maintaining that cow-pox is not small-pox modified by transmission through the cow, is that he finds no evidence that epidemics of cow-pox have been traced to epidemics of small-pox. But, considering that cow-pox is conveyed from one cow to another almost exclusively by the hand of the milker, who is likely to suffer from it as well as the cow, it is not perfectly clear that it is to be regarded as a disease peculiar to cattle any more than a disease peculiar to man, or that it is in any true sense a special bovine disease. At any rate, Dr. Crookshank throws no light on its genesis. On the other hand, as we have already shown, and as Dr. Crookshank admits, Ceely, Badcock, and others have, by inoculating small-pox on cows, produced a disease which is absolutely indistinguishable from cow-pox, and which admits of ready transmission between human beings and cows while still retaining its specific characteristics. Surely this positive evidence is of far greater importance than all Dr. Crookshank's negative evidence, and his petulant observation on those which hold the view which he rejects. There is no doubt, indeed, that the evidence at present available is strongly in favour of the causative identity between small-pox and cow-pox, and we may thank Dr. Crookshank for setting forth this evidence—which, nevertheless, he misreads—clearly before us.

He next discusses Cattle Plague as a source of vaccine lymph. The history he gives of the subject is curious and interesting, but it requires much more close investigation than it has yet received before any definite and just conclusion can be arrived at. Dr. Crookshank points out that Baron was mistaken, as no doubt he was, in attributing cow-pox in this country to a former outbreak of cattle plague, which Baron, however, regarded as true bovine small-pox. The error of regarding cattle plague as small-pox in cattle has largely prevailed down to recent times. Dr. Murchison, at the time of the last epidemic of the disease in this country, was inclined to adopt this view, and advocated vaccination with cow-pox in order to prevent its spread. And, indeed, it must be admitted that cattle plague and small-pox have some degree of superficial resemblance. But the investigations made at the time of the outbreak above referred to, by order of the Commissioners appointed to inquire into and report on the disease, were conclusive as to the non-identity of the two affections. It was shown also that the eruption in cattle plague is in no sense pustular, and is absolutely different from that of any variety of small-pox. It is true that in one case a veterinary inspector was accidentally inoculated, and that a pustule, attended with much surrounding inflammation and constitutional disturbance, arose, which had a great deal of resemblance to the occasional effects of vaccination, but which (notwithstanding Dr. Crookshank's opinion to the contrary) was also not unlike the local results of ordinary septic poisoning. The inoculation took place in the course of a *post-mortem* examination. But the really interesting facts in relation to the question under consideration are the inoculations performed in Bengal by Mr. Macpherson, and by Mr. Furnell in Assam, with crusts obtained from cows suffering from a virulent and highly fatal febrile disorder, attended with a cutaneous eruption. These gentlemen regarded it as small-pox in the cow, and it is important to note in confirmation of their view, that children inoculated with the crusts developed cow-pox-like pustules at the seat of operation, much febrile disturbance, and in many cases, about the eighth day, an eruption which assumed the characteristic features of small-pox; and that similar phenomena continued to manifest themselves, at any rate for a time, in the later removes. It is stated that lymph derived from these sources was largely distributed throughout India. Dr. Crookshank says these cattle had the cattle-plague, and consequently assumes that cattle-plague inoculated in the human being causes symptoms identical with those of small-pox. His words are: "From all these independent observations, if we accept them as correct, there would seem to be no doubt that cattle-plague virus inoculated in the human subject will produce a vesicle with the physical characters of the vaccine vesicle, and succeeded occasionally by an eruption which appears to have the characters of the eruption of cattle plague!" But the generalised eruption of cattle plague, as Drs. Burdon Sanderson and Bristowe have shown, is not pustular and has no resemblance to that of small-pox. And, indeed, looking to the facts of the cases, as they are described by those who observed them, the explanation given by Messrs. Macpherson and Furnell (namely, that the disease in cows was really a virulent form of cow small-pox, and that, as in some of Ceely's and Voit's cases, there resulted, in those inoculated therefrom, local pustules like those of vaccinia or variola, and in some of the earlier cases a subsequent varioloid eruption) seems much more feasible than the view advocated by Dr. Crookshank to the effect that the disease in the cows was cattle-plague, and that it resulted in the production of a disease in man essentially different from itself. Dr. Crookshank, as usual, comes to a conclusion which the facts he adduces do nothing to support; nevertheless we are free to admit that the subject requires further investigation.

In the next two chapters Dr. Crookshank gives a brief account of sheep small-pox and of goat-pox, and of experiments in relation to them. Sheep small-pox appears to occur in an epidemic form, and then to be characterised by a general poxy eruption. It appears also that sheep-pox can be inoculated in cows, and cow-pox in sheep, and that in both cases the results are like those of ordinary vaccination; and that from either source, inoculation on the human being produces local effects which are identical with those of cow-pox. There is evidence, too, that such inoculations are protective against small-pox. The account of goat-pox is much to the same effect, but is mostly derived from remote sources, and is not so important or so trustworthy.

LECTURES ON CHILDREN'S DISEASES. Handbook for Practitioners and Students. By Dr. E. HENOCH, Professor in the University of Berlin; Director of the Department for Children's Diseases in the Royal Charité Hospital, Berlin, etc. Volumes I and II. Translated from the Fourth Edition (1889) by JOHN THOMSON, M.B., F.R.C.P.Edin., Extra Physician to the Royal Hospital for Sick Children; and Physician for Children's Diseases to the New Town Dispensary, Edinburgh. London: The New Sydenham Society. 1889.

LEHRBUCH DER KINDERKRANKHEITEN FÜR AERZTE UND STUDIRENDE. Von Dr. ADOLF BAGINSKY, Privatdocent der Kinderheilkunde an der Universität Berlin. Berlin: F. Wreden [Sammlung kurzer medizinischer Lehrbücher. Band vi.] 1889. (Manual of Children's Diseases for Practitioners and Students.)

A PRACTICAL TREATISE ON DISEASE IN CHILDREN. By EUSTACE SMITH, M.D., F.R.C.P., Physician to the East London Hospital for Children, etc. London: J. and A. Churchill.

HYGIENE OF THE NURSERY, including the General Regimen and Feeding of Infants and Children and the Domestic Management of the ordinary Emergencies of Early Life. By LOUIS STARR, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania, etc. Second Edition. London: H. K. Lewis.

THE rapidity with which the literature concerning disease in children continues to grow is really amazing; not only does this subject yearly claim a larger place in periodical literature, but the number of textbooks has now reached a very large total.

Dr. HENOCH'S work is well known, and an earlier edition had already received the honour of translation into the English language. It is in reality a collection of clinical essays arranged in systematic order. It is an exceedingly valuable work, reflecting as it does the very best clinical opinion in Germany. Useful hints may be gathered on almost every page; few authorities are quoted, the author relying mainly upon his own varied clinical experience, which has now extended over forty-five years. Dr. Thomson has done his work as a translator well, and has succeeded in producing a readable English version of a most valuable textbook. He has, in the interest of readers unacquainted with the German pharmacopœia, rewritten Professor Henoch's prescriptions, making use of preparations known to the *British Pharmacopœia*.

Dr. BAGINSKY'S manual is a somewhat bulky volume; it is very carefully planned, and the division and subdivision of subjects is carried to an almost unnecessary degree. The description of the morbid appearances is generally good, and this is especially the case in the sections on diseases of the upper air passages. We have noticed a few errors, however, one of the most striking being that sclerema neonatorum is confounded with œdema neonatorum. Symptoms and treatment are systematically discussed, but the author has all through these as well as other divisions of his articles attempted to found his descriptions, not on his own observations, but on published cases. Such a plan, to give a successful result, demands a very wide and extended acquaintance with the literature of pædiatrics, an acquaintance which Dr. Baginsky does not appear to possess. His authorities are, with very few exceptions, Germans, and as a very large proportion of the most important contributions to his subject have been written in the French or English language, this curious onesidedness very greatly diminishes the value of his laborious compilation. To specialists, unfortunately, the volume will be of little use, since no references are given.

The second edition of Dr. EUSTACE SMITH'S big book on disease in childhood will be welcome, for the original work was a most admiral clinical study. The practical value of the work, always great, has been enhanced by careful revision and by numerous additions, which the author has thought it well to make in the new edition.

The scope of Dr. STARR'S small handbook is pretty fully set out in his rather ponderous title. The advice given appears to be sensible throughout; the chapter on foods is distinctly above the average of popular works, and as this is certainly the most important chapter in books of this class its excellence will be a strong recommendation. Altogether the book is one which may be safely placed in the hands of intelligent parents.

DENTAL CHEMISTRY AND METALLURGY. By C. MITCHELL, M.D. Chicago: W. T. Keener. 1890.

THE title of this volume is somewhat a misnomer, since only a portion of the manual is devoted to either chemistry or metallurgy as it relates to dentistry. What there is appears to be accurate. The general chemistry of the book is fairly good, but endeavours to deal with too many subjects to enable a thorough knowledge of any one to be obtained if the book is to be the only handbook for a student. Of the chapter on physics, we may say the definitions are terse—perhaps too much so, the author endeavouring to over-define. The explanations of mechanical and electrical laws are too brief to make the subjects clear, while the description of electrical batteries could not without much supplementary teaching be understood by a student. In the second chapter nomenclature and symbols are well described, and the directions for recording chemical action and equations will be valuable if combined with practical work. Chapter VI is suggestive of useful experimental work; but here again there is too little to guide a beginner in chemical manipulation. There is one strange omission in the description of corrosive sublimate; no mention is made of its sublimation when heated. It would have been wiser for the author to have produced a book on dental chemistry and metallurgy with less general chemistry.

NOTES ON BOOKS.

The New Lunacy Act, 1889. By T. OUTTERSON WOOD, M.D., M.R.C.P.Lond. (London: J. and A. Churchill, 1889.)—This pamphlet is a reprint from the *Journal of Mental Science*, in which it appeared anonymously in October, 1889. It contains index and schedules complete, and is arranged for the use of medical practitioners and others. It forms an abstract of the Act, which is convenient for reference, and from which the busy practitioner will more readily glean the general bearings of the Act than from a study of the latter itself. It is difficult to avoid some ambiguity or inaccuracy of expression at times in condensing an Act of Parliament; but although the abstract under notice has not entirely escaped this danger, it will be found a useful guide to the practitioner, under ordinary circumstances, and thus fulfils the purpose obviously intended.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS

"VIVO BEEF JUICE."

THIS preparation, of which we have examined some samples, is a satisfactory one, and is likely to prove useful. It is a liquid extract of meat, free from excess of salt and from injurious additions, and a good and safe gravy soup can be made from it at once. The analytical results we have obtained show that the composition of the preparation is in accordance with the claims of the manufacturers, the Liebig's Wine Company of Liverpool.

ICHTHYOL CAPSULES.

ICHTHYOL is said to have remarkable effects in eczema, and is also given in rheumatism, gout, and sciatica; it has a most unpleasant bituminous odour and taste, which render its administration somewhat difficult. Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, London, prepare gelatine capsules, each containing four minims of ammon. ichthyol, which appear to be a good form for giving this disagreeable remedy.

SULPHONAL CAPSULES.

THESE capsules are made by J. Robertson and Co., 35, George Street, Edinburgh. The sulphonal contained in them is said to be partly in solution and finely amorphous, and is prepared by a process which has been patented. There is no doubt that sulphonal in a specially fine condition does more readily produce the specific action of the drug than when administered suspended in water with mucilage. The capsules are elegant in appearance and flexible, and consequently are easily swallowed.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 5TH, 1890.

THE AGRICULTURAL DEPARTMENT AND BOVINE TUBERCULOSIS.

Now that there is a responsible head of the Agricultural Department, the prospect of securing some legislative measures on the subject of tuberculosis is comparatively bright—brighter than a short time ago we should have dared to expect. France with mental alertness and decisive action has already adopted means of obtaining, not only accurate knowledge of tuberculosis, but some measures of protection against its ravages. Germany with scientific, though perhaps slightly ponderous and slow, preciseness, has adopted a system of compulsory public killing and systematic public inspection, which has not only revealed the enormous prevalence of tuberculosis in cattle, but has made it impossible for flesh consumers to eat tuberculous meat unwittingly. Similar measures have been taken in many other Continental countries and American States, and even a small Power like Denmark is far ahead of Britain in the precautions it takes against the spread of tuberculosis.

Mr. Knowles, in calling the attention of the House of Commons, in Committee, to the subject of tuberculosis, and to the expediency of scheduling that disease under the Contagious Diseases (Animals) Act, had certainly a very strong cause to plead; Dr. Farquharson and those who supported him certainly did not err by exaggerating the strength of the arguments which they brought forward; whilst those who objected to the "scheduling" could scarcely be satisfied with their own position after hearing the evidence adduced. The member who considered the plan of "scheduling" would not be successful, "but would create an unpleasant feeling," should by this time have had it borne in upon him that now that the matter has been brought so prominently before the public, there will be a far more "unpleasant feeling" should no steps be taken to determine the extent of tuberculosis amongst cattle, and to institute precautionary measures against the infection of human subjects through the meat and milk of such cattle. It was contended by those in authority that the matter was one to be left entirely for the present to "scientists and experts." It is thus that responsibility is evaded. Scientific men and experts long ago arrived at the conclusion that there are very appreciable and definite dangers associated with the consumption of meat and milk derived from tuberculous cattle. They have not perhaps been able to prove every point of the thesis for which they contend, and there are undoubtedly several links in the chain of evidence that have still to be rivetted. It may be admitted that certain experiments that have given negative results have been recorded; but the overwhelming bulk of the testimony of "scientists and experts" is to the effect that in tuberculous cattle there lies a real danger to the human species. Scientists and experts, however, are allowed only to arrive at conclusions. They have no executive powers, and until they are able to educate public opinion to the point at which it is convinced that pecuniary economy in sanitary and hygienic matters is the worst possible financial and national economy, they will have no power to make any impression in retarding the extension of tuberculosis. But now that they have provided a certain number of facts, it is absolutely essential that the Board of Agriculture, with executive powers at its back, should interfere and carry on the work that has been so well begun. It should surely not be necessary to be able to prove beyond a certain reasonable probability that a disease in cattle is dangerous to the community, in order that preventive measures should be taken. Such a policy would savour too much of "locking the door after the steed is stolen," and is one, if adopted, that would not tend to inspire the community with confidence in the Agricultural Department.

Let us put briefly a few points that might be considered by those interested in the matter in their discussion and actions in connection with this question. It may be taken for granted that the amount of pleuro-pneumonia amongst cattle in this country is only a fraction of a unit per cent., and an outbreak of pleuro-pneumonia appears in itself to be little dangerous to the public health. Nevertheless, because of the infrequency of its occurrence and the irregularity of its outbreak it is proposed, and very rightly so, to stamp it out by compulsory and compensated slaughter. In the case of tuberculosis, the information is vouchsafed that because human beings were affected by tuberculosis to a larger extent than cattle in the town of Paisley, for instance, and a comparatively small percentage of cases of tuberculosis occurred in adult human beings, that therefore without wholesale human bloodshed it was impossible to stamp out tuberculosis in the same fashion. It should be borne in mind, in considering these returns and others with which they were compared, that many tuberculous diseases in human subjects are never scheduled, or were not until quite recently, under the heading of tuberculosis, and we are quite prepared to find that in Dublin the proportion of deaths from tuberculosis of various forms is very much higher than that given in the official reports. As Sir Lyon Playfair pointed out in the debate on the subject, it is a significant fact that when tuberculosis in cattle increases, consumption of some form or other, but especially of the mesenteric and intestinal form, also increases amongst children. When we find that in one town 17.5 per cent. of the cattle are suffering from the disease, that in another 4.5, and that in others where the inspection is extremely inadequate, and where thousands of cases never come under the inspector's eye, the percentage is almost as great, it can be readily imagined how widespread is the disease. In Germany, where the inspection has gradually become more thorough, the number of cases of tuberculosis reported has rapidly increased from a very small percentage to 20 per cent. in some districts. The same has been the experience of other

Continental countries, and so we are convinced it will be in this country if the Board of Agriculture will but take adequate measures to bring about a proper and complete inspection. Such inspection must, with the knowledge we have at present, inevitably lead to a gradual diminution in the number of cases of tuberculous cattle kept on dairy farms and to a similar diminution in the purchases of such cattle to be slaughtered for consumption as human food. Such inspection and confiscation could never be detrimental to the interests of honest dairy farmers and butchers, especially if reasonable compensation were granted under well-defined conditions.

No doubt those who at present traverse the country looking for and picking up "wasters," on which they hope to realise large profits, will suffer, but where the public health is concerned, much sympathy cannot be expected for these persons. The loss to farmers and breeders is at present enormous, and though there might, and possibly would, be a very considerable initial loss, this would be far more than compensated for within a comparatively few years were all decidedly tuberculous cattle ruthlessly condemned to be slaughtered.

The Board of Agriculture, we are glad to learn, will lose no opportunity of obtaining information on the matter, but we hope that this information will not be called for from interested parties only. We hope that the first step they take will be to appoint, or give authority to County Councils to appoint, a thoroughly well-organised staff of inspectors who shall undertake the registration of cattle in all parts of the country, who shall inspect such cattle periodically, and who shall examine thoroughly every animal slaughtered within public or private abattoirs. To this end it would be well if there were no private abattoirs; there should certainly be none that are not fully registered and inspected. The inspection of dairy cattle should be as thorough and as full as the inspection of dead carcasses, and every animal suspected of being tuberculous should be at once isolated or even condemned. No flesh from any tuberculous animal should be sold under any circumstances without its being marked most distinctly to that effect, just as prominently as at present a keg of margarine is labelled. When all the inspectors' reports are examined and tabulated, there can be little doubt that the percentage of tuberculous cattle will astonish even those who have made a pretty complete study of the subject. The attention of those in authority has been called publicly to the subject of tuberculosis, and, it is sincerely to be hoped, not in vain.

MENIÈRE'S VERTIGO AND THE SEMICIRCULAR CANALS: A NEW THEORY.

THE influence of labyrinthine impressions on the maintenance of equilibrium of the body is now generally believed to have been demonstrated by the experiments of Flourens on the semicircular canals of pigeons, and to have been confirmed by the pathological researches of Menière. Indeed, all text-books contain the doctrine that destruction of these canals produces definite and special disturbances of equilibration, which render any proper co-ordination of locomotion impossible. Many years ago, however, Schiff protested against this theory, on the ground that section of the trunk of the auditory nerve did not cause any disturbance of equilibrium; while, more recently, Böttcher drew attention to the circumstance that in pigeons, on which these experiments have generally been made, the canals cannot, for anatomical reasons, be destroyed without injuring at the same time the cerebellum, thus giving a fruitful source of errors. The most serious objections to this theory have, however, now been raised by Professor Steiner, of Cologne, who has experimented on sharks caught in the Bay of Naples, in which class of fish the semicircular canals are particularly developed, and which are, therefore, most suitable for such experiments.[1] The skeleton of sharks being cartilaginous, laying bare the semicircular canals is very easy: they are superficially situated beneath the skin, and separated from the brain by a considerable mass of cartilage, so that injury to the brain can be easily avoided.

Steiner has found that when the membranous canals of sharks are laid bare and excised, and the wound is then closed and the fish put back into the water, not the slightest disturbance of locomotion ever follows. On the contrary, if after laying bare the labyrinth, the trunk of the auditory nerve, or the ossicles surrounding the same, are pulled and stretched, then there is invariably a disturbance produced in the form of rotatory or circular compulsory movements. If the latter operation be performed unilaterally, the direction which such movements take may in each case be predicted.

Such traction of the nerve-trunk need only be slight in order to produce motor disturbance. The same result follows if no section of the canals be made, but one of them is pulled and stretched so that the ossicles change their position. These experiments show that in sharks the semicircular canals have, by themselves, nothing to do with equilibration, and that when motor disturbances follow, they are owing to traction and irritation of the origin of the auditory nerve in the medulla oblongata, and are the same as are produced by other similar irritation of that portion of the medulla.

Steiner has shown that the same results, as in sharks, are obtained in frogs and lizards. In the higher vertebrates the anatomical relations of the parts concerned are so complicated that it has hitherto been found impossible to avoid sources of error in experimentation.

Ewald's recent experiments on pigeons likewise seem to lead to similar conclusions. In one experiment he removed the six ampullæ from a pigeon which survived the operation, and being very tame, followed him afterwards, in a straight line, through several rooms. The same animal, however, when left to itself, was apt to walk in a circle, sometimes to the right, and sometimes to the left side. Why should the animal walk straight when following its master and in a circle when left to itself? Steiner explains this by assuming that compulsory movements are produced by the loss of cutaneous and muscular impressions consequent upon the operation, and that this loss may be neutralised in the higher animals by the influence of the eye and the intellect upon movements. The pigeon, therefore, overcomes the tendency to compulsory movements by fixing its attention upon the movements of its master.

The vertigo of Menière's disease would, therefore, appear to have its source rather in lesions which affect the brain or

[1] Die Functionen des Centralnervensystems. Braunschweig, vol. ii, p. 112; and *Deutsche med. Woch.*, November 21st, 1889.

its membranes, or cause alterations of pressure. That the semicircular canals have nothing to do with it, is also shown by a case recorded by Politzer, in which there was congenital absence of all semicircular canals, yet no disturbances of equilibration had taken place during life; and another one of Lucae, in which the canals were found filled with blood clots, and where there had been before death no corresponding symptoms showing that this condition had interfered with equilibration.

MARKS FOR PHYSICAL EFFICIENCY.

MR. F. GALTON has lately published, in the *Times*, the following recommendations, emanating from the Council of the British Association, which have been submitted to the War Office, the Admiralty, the Secretary of State for India, and the Civil Service Commissioners:

1. That an inquiry should be held as to the best system of assigning marks for physical qualifications, on the double basis of inspection and anthropometry, with a view to its early establishment as a temporary and tentative system.
2. That the marks to be given under this temporary system should be small, so as to affect the success of those candidates only who would be ranked by the present examinations very near to the dividing line between success and failure, and whose intellectual performances would consequently be nearly on a par, though they would differ widely in their physical qualifications.
3. That a determination should be expressed to reconsider the entire question after the experience of a few years.

In commenting on this proposal, we regret to see that a leading newspaper adopts a depreciatory, and indeed somewhat jeering tone, which appears to us quite unsuitable to the importance of the proposition, as well as to the character of the proposer. Whatever may be said in criticism of the details of Mr. Galton's plan—which indeed are as yet to a great extent a matter for future discussion—we should have thought there would hardly have been much difference of opinion as to the desirability of its main object, namely, to give some weight to the physical, as well as to the mental, qualifications of persons who are candidates for employment in professions where physical strength and endurance are often of vital moment.

To say that strong men may break down under a stress which weaker but more "highly-bred" men may sustain unharmed, is probably true, but it is not much to the point. It is also true that any other test ascertainable by examination is liable to prove sometimes untrustworthy; but no sensible person would argue from this that there should not be any tests at all. Nor is it more to the purpose to trot out, as our contemporary does, once more "the hunchbacked dwarf who urged forward the fiery onset of France (at Neerwinden) and the asthmatic skeleton who covered the slow retreat of England." Commanders-in-Chief are selected not for their knowledge of "Urdu or the higher mathematics" any more than for their physical endowments; but surely a regiment would fare badly whose officers were largely composed of asthmatic skeletons and hunchbacked dwarfs. Men like Luxembourg or William may sometimes force their way by sheer strength of genius, in spite of bodily weakness, but they are not the material from which the bulk of the inmates of a military college ought to be formed. A very reasonable objection to the former plan, by which physical efficiency was to be tested by athletic performances, was that such athletic training added a new strain to candidates already heavily burdened, and necessarily took them away from their books. No such objection applies to the present proposal. It involves no training, nor any loss of time to the candidate. The necessary measurements are easy, and for their own purpose tolerably conclusive, as is shown by the comparative agreement of two medical men who examined thirty-two youths at Eton, on instructions supplied to them by the devisers of this scheme, and the caution with which the plan is being introduced is shown by the following extract from Mr. Galton's letter:—

> The Council beg to express the views at which they themselves have arrived, as follows:—It seems to them that the paucity of available *data* makes it scarcely possible at the present moment to elaborate as complete a system of assigning marks for physical qualifications as is desirable, and as, in their opinion, would be otherwise feasible. They therefore think it very important that suitable steps should be taken to obtain these *data*. For instance, if a temporary system of marks were tried, with the avowed determination of reconsidering the subject after some experience had been gained, the desired information would rapidly accumulate in the hands of the inspectors; the attention of schoolmasters would be strongly aroused, and it is probable that they would attempt a variety of experiments analogous to those alluded to at Eton and Marlborough, but on a much larger scale. In a very few years it might then become feasible to arrange a system that should be generally acceptable.

It seems to us that the plan is one eminently worthy of a trial, that it can do no harm, and may be the means of introducing a much-needed improvement into our examinations for the Army and Navy. All the world has been complaining of the absurdity of examining by merely literary tests for duties which are so largely dependent on physical efficiency. Here is a proposal marked by caution and common sense for attempting the removal of this anomaly, and we trust that its efficacy will soon be practically tested.

SPINAL LOCALISATION.

WITHOUT attempting to deal exhaustively with the remarkable case of localised injury to the spinal cord, related in another column by Dr. William Macewen, a few words may be devoted to one of the many features of interest which it presents both to the clinician and to the physiologist. The particular point in question, although somewhat abstruse, may be discussed here with all the more excuse, in that the able surgeon who places the case on record has not considered its discussion outside the pale of his own interesting report.

When, more than forty years ago, Türck discovered the descending degeneration of the pyramidal tracts, he noticed that besides the degeneration in the crossed pyramidal tract of the cord in the lateral column on the side opposite to the pyramid undergoing degeneration in the brain, there was in the cord, on the same side as the degeneration in the brain above, another smaller degeneration of a portion of the anterior column, close beside the anterior median fissure. This tract he named the direct pyramidal, and to-day this tract is universally known by that name. Compared with the crossed pyramidal tract, this is smaller, and does not extend so far down the length of the cord, not being, in most instances, traceable lower than the middle of the dorsal region. That it and the crossed pyramidal are to be considered of similar nature and intimately associated function is certain from various considerations. When degenerated, they are always found degenerated together. So far as evidence ob-

tained on the point carries us, there is nothing to show that as a result of, for instance, a cerebral lesion one of the two pyramidal tracts, crossed or direct, ever degenerates apart from the other. Further, too, when examined by the developmental method elaborated by Flechsig, that is to say, by the time of acquirement of the medullary sheath, the nerve fibres of the direct and crossed pyramidal tracts are found to attain complete development at one and the same time. The fibres of these two tracts are the fibres in the cord which receive latest the final investment with the full medulla of Schwann. These and other resemblances point to the two tracts being, in fact, but part and parcel of one and the same system of fibres.

As to their function, on the other hand, two views are held. According to one, the direct pyramidal tract is believed to contain the fibres of the pyramid which are destined for the motor mechanisms of the upper limb, the fibres for trunk and leg crossing in the pyramidal decussation at the top of the cord, and descending in the lateral columns as crossed tracts to those lower levels in the dorsal and lumbo-sacral regions which they have still to reach.

In the case recorded by Dr. Macewen, an injury to the cervical cord sufficed partially to paralyse for a considerable time both upper limbs, especially in their distal segments, and to paralyse also many of the intercostal muscles; but at the same time power of movement in the lower limbs remained perfect, so far as could be tested with the patient in bed, except for a transient later affection. Dr. Macewen is inclined to find in this complexity of symptoms evidence favourable to the view above mentioned of the constitution of the direct pyramidal tracts out of fibres for the arms, and would add fibres for the muscles of the upper intercostal spaces as well. He suggests that the main injury in the case was a lesion affecting chiefly the two direct pyramidal tracts of the cord.

A second view as to the constitution of the direct tract is one which looks upon it as merely made up of fibres from the pyramids, which at a considerable distance below the pyramids have still to decussate to their places in the lateral column of the crossed side. The pyramidal tracts, which in man attain enormous proportions, in him instead of decussating in a short region only, at the lower end of the spinal bulb, undergo a decussation which is spread out along a considerable length of the cord, although still in chief part remaining in the bulb at what is generally known as *the pyramidal decussation*. On this view, if there be any grouping together of pyramidal fibres according to their distribution to the musculature—and the existence of any such grouping is doubtful—the composition of the so-called direct tract might be supposed to be mainly out of fibres destined for the legs and the lower trunk muscles.

The arguments supporting the second of these two views will require some such evidence as Dr. Macewen believes to be found in the case he is now recording, before it can be dispossessed of the balance of probability in its favour. Extremely valuable as the case brought forward is, it is one in which the exact seat of lesion remains still, happily for the patient, unverified by necropsy, and the question must remain whether the symptoms have actually been due to a fairly restricted mesial interruption in the region of the direct tracts of Türck.

PARASITES OF FISH.

THE sight of a nematode worm emerging from a cod-steak at the dinner table is an unpleasant experience which may befall any one of us. Unfortunately, the general idea that a little cooking is sufficient to ensure that such unwelcome tenants of one's food shall be at least dead, is by no means justified in the case of thread- and round-worms; an instance of "many dozen filariæ" in a cooked cod, is quoted by Leuckart, and several letters to the same effect have recently appeared in the daily papers. These nematodes, of which *Oxyuris vermicularis* is most familiar to the practitioner, and *Ascaris megalocephala* to the veterinary surgeon, are extremely numerous in fish, the cod alone being the victim to no less than ten species. They derive their extraordinary powers of resistance to baking, freezing, and desiccation from the possession alike by ovum and adult of a thick chitinous cuticle. Nematodes may be seen, after twenty-four hours' immersion, still swimming about with apparent satisfaction in a saturated solution of corrosive sublimate, so that it is not surprising that they are able to resist a short exposure to the frying-pan.

It is not, however, to be inferred that the cod should be avoided as an article of food on account of its parasites. In the first place, prolonged and thorough cooking, such as boiling or baking, and not the slight browning of the surface produced in a frying-pan or gridiron, will kill any known parasite; for even a nematode is harmless when his protoplasm has coagulated; secondly, it is always doubtful whether, if introduced alive into the human intestine, a worm with these antecedents would live there. There are three great classes of parasitic worms, the trematoda or flukes, cestoda or tapeworms, and the nematoda. Of all three it is sufficiently true to be styled a "law" to which there are but few exceptions, that the life-history of the individual falls into two periods, passed in different hosts; the earlier is generally a resting-stage and is clinically often the most deadly, the latter, attained when the first host is devoured by the second, is generally characterised by a metamorphosis and by the assumption of sexuality. To this general statement may be added the rider, that, as a rule, every animal has its particular parasites, every parasite its specific hosts, and that at neither stage can the latter thrive, should it by accident find its way into an animal other than its specific host. The life-history of *Bothriocephalus latus* is a fair example, and is the more interesting in this connection as being, we believe, the only parasitic worm known with certainty to be conveyed to man through fish. The encysted stage is passed in either the pike or the burbot. These fish, moderately smoked and salted, are, or were till recently, almost the staple food in some districts on the Continent, notably round Dorpat in the Baltic Provinces; when eaten, the encysted worms, which of course are not killed by the processes of preparation, become in their new and appropriate environment, the sexual tapeworm, the "breiter Bandwurm" of German medicine; but, so far as is known, if eaten by other than the specific hosts, for example, by other fish, they die without assuming the sexual form.

To the "law" there are a few exceptions, and they are confined to the nematoda, so that it is not possible to say

without a long series of direct experiments that the worms noticed by our correspondent could not thrive in the human intestine; such a thing, however, is extremely improbable, and only one threadworm parasitic in man (*Eustrongylus gigas*) is even suspected to be derived from fish, in spite of the enormous number of species which pass their intermediate stage in various fishes. As examples of the opportunities of infection, von Linstow assigns to the cod nine species of nematoda, fifteen of cestoda, five of trematoda; the herring is credited with six nematodes, three cestodes, three trematodes; the salmon with five nematodes, nine cestodes, six trematodes. At the same time it is better by far not to tempt fortune by eating smoked cod or salmon, or the smoked cod roe so frequently to be seen in fishmongers' shops, without further cooking. It is remarkable, we may note in passing, that the trematode of the one "fish" which is eaten raw in England—the oyster—has never adapted itself to live in the higher animal.

If, as is probable, the worms which disturbed a correspondent, who has addressed to us an account of his experience, were *Filaria piscium* (Leuck.) *Ascaris capsularia* (Rud.), they lie coiled up in a connective tissue capsule in the cod, and attain maturity without metamorphosis when eaten by predatory fish. On one occasion they have been met with in the human subject, and under extremely remarkable circumstances, which may be read at length by the curious in medical literature.[1] A female patient in London, at the beginning of the century, passed, through catheters and directly, bodies of three kinds; two of these were described as new parasitic worms, the third as worm ova. Of these worms one was christened *Spiroptera hominis*, and as such held a place in helminthology, till Schneider in 1862, after examination of the specimens, showed that *Spiroptera* was only *Filaria piscium*, the other worm probably a shred of fish intestine, while the third set of bodies were undoubtedly fish ova. The patient had inserted them into the bladder before the medical examination.

With this exception *Filaria piscium* has not been met with in man. But our correspondent has omitted the last act of the tragedy. What has the domestic cat to say on the matter? Perhaps she can throw light on the possibilities of the transmission of filariæ to warm-blooded animals.

THE staff of the Manchester Royal Infirmary has arranged for the delivery (during the months of May, June, and July) of a course of post-graduate lectures, which will be open to any member of the medical profession. Particulars will be found in our advertisement columns.

THE Bill which Mr. Provand has brought in to amend the law relating to the employment of young persons and women in shops, etc., proposes to limit the employment of all women of whatever age, and of males under 18, in shops, restaurants, public-houses etc., to seventy-four hours a week, including meal times. It is proposed to incorporate the inspection clauses of the Factory and Workshops Act in the Bill. The existing Shop Hours Regulation Act, which applies to persons under 18 years of age, will expire this year, unless renewed.

[1] Lawrence, *Med.-Chirurg. Trans.*, ii, p. 385 (1811); Rudolphi, *Entozoorum Synopsis*, Berol. 1819, 8vo.; Farre, *Beale's Archives of Medicine*, i, p. 290 (? 1859); Schneider, *Müller's Arch. Anat. u. Phys.* 1862, p. 275.

THE Contagious Diseases (Animals) (Pleuro-pneumonia) Bill, the object of which is to confer on the Board of Agriculture further powers in relation to pleuro-pneumonia, was read a second time on Tuesday. Mr. Chaplin stated that he had arranged to receive a deputation of gentlemen desiring to wait upon him on the subject at the Board of Agriculture on Thursday, April 24th, at half-past one.

A RETURN moved for last year by Mr. Bradlaugh has been presented to the House of Commons, showing the number of persons who have been imprisoned or fined for non-compliance with the Vaccination Acts. In England 10,585 persons, and in Wales 75, have been fined, and in England 113 persons have been imprisoned on this ground. The imprisonment has in only one case lasted beyond fourteen days.

THE ETIOLOGY OF INFLUENZA.

DR. JACQUES BERTILLON (Chief of the Municipal Statistical Department of Paris) will read a paper on Epidemic Influenza in France at the next meeting of the Epidemiological Society, on April 23rd at 8 P.M., at 11, Chandos Street. Dr. George Rice will follow with a paper on An Influenza Outbreak in a Poor-law School. An important discussion on the Etiology of Influenza may be expected to arise.

ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR JAMES PAGET and the Council of the Royal Medical Benevolent College may be warmly congratulated upon the numerous and remarkably representative list of stewards, who promise to make the festival, which is to be held on April 17th, a great success. We learn that the Arrangement Committee have been compelled to close the list, in consequence of want of accommodation. We cordially wish the Council and the Chairman success, and hope that a substantial collection may be made for the fund to support the pensioners, and to clothe, educate, and maintain the foundation scholars of Epsom College.

THE PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

IT will be seen that at the last meeting of the Royal College of Physicians, Sir Andrew Clark was re-elected president for the third time. During the past year Sir Andrew Clark has shown the most unremitting and assiduous attention to the affairs of the College, and has not hesitated to make great sacrifices, both of time and labour, to fulfil the onerous duties of his office. The work of the year has been unusually laborious, and it is understood that both in committee and in public business the President has allowed nothing to stand in the way of his attending to the affairs of the College.

THE DWELLINGS OF THE POOR.

THE Mansion House Council on the Dwellings of the Poor has just issued its annual report for 1889, a record of good work, quite up to, if not beyond, that of former years. It is especially satisfactory to find that the working classes are waking up to the importance of sanitary matters, as is shown by the zeal with which they have co-operated with the Council during the past year, forming local working men's committees at Finsbury and elsewhere. Speaking generally, the Council conclude that the past year has been one of markedly increased activity and interest in all sanitary matters; but while much has been done to bring the metropolis up to a proper sanitary standard, much yet remains to be done. In matters of legislation they especially recommend the creation of a strong central sanitary authority.

ENDOWMENT OF THE CHAIR OF PATHOLOGY AT MANCHESTER.

THE rapid and continuous growth of the medical school and the urgent demands of one of the chief branches of medical study have for some time rendered the Council of the Owens College desirous of providing the professorship of pathology with an endowment, such as would allow its future occupants to devote themselves altogether to the duties of the chair. The residuary legatees of the late Mr. Daniel Procter—Messrs. William Beckham, C. R. Allen, and William Beckham, junior—recognising the importance of pathological studies and the necessity of securing the fullest facilities for their prosecution by the future students of the Manchester Medical School, have decided to contribute the sum of £6,000 for the endowment of the pathological professorship, which will henceforth be associated with the late Mr. Procter's name.

THE LATE BISHOP CALLAWAY.

WE regret to have to record the death of the Right Rev. Henry Callaway, D.D., M.D., the first Bishop of Independent Kaffraria. Bishop Callaway entered as a student of medicine at St. Bartholomew's Hospital in 1835, and for some time practised medicine with conspicuous success. He went as a missionary to Natal in 1854. We propose to publish a fuller notice of his career in a subsequent number. Meanwhile, we may record the opinion with which Sir James Paget (whose pupil he was at St. Bartholomew's Hospital) has favoured us: "He was an admirable student—quiet, modest; constantly at work, very clear-minded, studying everything, not as if for the mere love of knowledge or any desire for distinction, but as if for some future duty. He was a thoroughly good practitioner, and I think it certain that he would have been successful and very prosperous if he had remained in practice.....I have always thought of him as one of the best pupils that I ever had; one of the best in moral as well as intellectual power."

BIRMINGHAM MEDICAL INSTITUTE.

AT the annual meeting of the Institute it was reported that a sum of £300 has been given by Mr. Crompton towards a fund for the redemption of the leasehold, or the purchase of the freehold, of the site of the Institute. The President said that about £6,000 or a little more would be required at the end of the lease of the Institute to redeem the site or purchase the freehold. He proposed the following resolution: "That the committee be empowered to invest £500, including Mr. Crompton's £300, to form a sinking fund, and that they take such steps as they deem fit to raise the additional £200." Dr. Saundby seconded this resolution, and it was agreed to. Mr. Newnham proposed and Dr. Underhill seconded Mr. Lawson Tait's re-election as president. Dr. Underhill remarked that the current year would be an important one, inasmuch as the annual meeting of the British Medical Association was to be held in Birmingham. The resolution was carried by acclamation. On the proposition of Dr. Wade, seconded by Dr. Agar, Dr. T. W. Thursfield and Dr. Parkes were re-elected vice-presidents, and Mr. Gilbert Barling and Mr. E. Wood White were re-elected honorary secretaries.

SMALL-POX AT PLYMOUTH.

WE learn from the *Western Daily Mercury* that a case of small-pox has lately been discovered in the town of Plymouth. The person who made the discovery was a seaman's missionary, who, while passing along a street, observed a man with his head wrapped in a white cloth. On going over to the man he at once saw that he was suffering from small-pox in an advanced stage. He took the man, who said he had recently been paid off from a Portuguese ship, to the Central Police Station of the town. From here he appears to have been sent first to a private residence and then to the workhouse, where he was refused admission, and referred to the Infectious Diseases Hospital. Here there was an objection to admitting him without a certificate, and he was sent back again to the workhouse, where he was seen by a medical practitioner, who said the case was a bad one. Finally, after communication with several public officials, each of whom in turn referred the case to someone else, the sufferer was taken by the port sanitary officer on board the hospital ship in Plymouth Sound. The account of the case thus far does not appear at all creditable to the sanitary administration of Plymouth, though under the best management cases of vagrants suffering from small-pox are sometimes difficult to deal with so as to prevent the spread of infection. A great many persons may become exposed to infection before the poor vagrant suffering from this dreaded and loathsome disease comes into the hands of those who are considered responsible for his cure. No harm will result if the people who are thus brought in contact with small-pox are revaccinated, but otherwise a case of this kind may be the beginning of serious trouble.

THE USES OF NOTIFICATION.

WE have lately pointed out in the JOURNAL that the adoption of the Notification Act by itself by many sanitary authorities will be of little advantage to the public unless it is accompanied by increased activity in matters of sanitary administration, especially as regards the provision of suitable infectious hospital accommodation and the application of the powers of the Public Health Act for Preventing the Spread of Infectious Diseases. An instructive case has lately occurred at Nottingham, a town in which the notification system has been in operation for several years. It appears, from a report in the *Nottingham Guardian*, that on March 4th a notification of a case of scarlet fever was sent by a medical practitioner to the medical officer of health by whose directions certain inquiries were made at the house. It was then found that a milk business was being carried on by the occupier, the father of the sick child. The danger of carrying on a milk business in a house infected with scarlet fever is well known, and, as the milkman refused to have the child removed to the hospital and the premises disinfected, he was warned that his business must be discontinued. It seems that he paid no heed to the warning, but still went on selling milk, his wife, who was nursing her sick child, assisting him occasionally. Under these circumstances the authorities wisely determined to take proceedings under the special clause of the Contagious Diseases (Animals) Act relating to such cases. The facts having been proved before them, the Borough magistrates inflicted a penalty of £5 on the man, who, in spite of the warning of the sanitary authorities, had thus persisted in endangering the public health. The fine will, no doubt, be sufficient to prevent a continuance of the offence in this case, and the Nottingham Sanitary Authority will have accomplished that amount of good by means of notification. But their action in this case is of more than local importance, as it illustrates a method by which sanitary authorities throughout the country may turn to good account the information relating to infectious diseases which is officially given to them.

POST-MORTEM IMBIBITION OF POISONS.

MOST of our knowledge on this subject, the importance of which has only recently met with general recognition, is due to Professor J. J. Reese, of Philadelphia, to whom we are indebted for a further paper on the same topic presented at a recent meeting of the Medical Jurisprudence Society of Philadelphia. Orfila was the first to call attention to the possibility of the transudation of a

poison introduced into the body after death to neighbouring viscera and tissues, but it was reserved for Professor Reese and some of his pupils and fellow workers to demonstrate that all poisons, whether organic or mineral, that are capable of solution may undergo the process of imbibition or transfusion into the various organs and tissues of a dead body. This fact naturally raises the question whether there are any means by which we can distinguish, in the case of poison found in the tissues after death, whether that poison was absorbed during life or introduced after death. If we cannot find any satisfactory distinctions, it is obvious that in future the crime of murder by poisoning will be rendered very difficult of detection, as it will have to be proved entirely by *ante-mortem* evidence. It is not the chemist who will be able to solve this problem for us, but the pathologist, and especially the histologist. Amongst the considerations which, as Professor Reese suggests, may help to determine the question are the following points: First, in the case of poison absorbed during life, the poison will be evenly distributed throughout the organ affected, whereas in imbibition it will probably be deposited in larger quantity on the surface than in the interior. Another point is that poisons absorbed during life will produce histological changes, whilst no such results follow on imbibition; but there are, of course, manifold difficulties tending to interfere with the practical utility of this test. A third point would be the examination of the urine during life; of course, the discovery of poison in the urine at such a time would be absolutely conclusive, but in the great majority of cases no opportunity occurs of making such an examination. As a proof that the subject is one of practical importance, Professor Reese refers to one or two instances in which a body had been embalmed soon after death, the death having taken place under suspicious circumstances; and he suggests that it should be a law that no person may inject any poisonous or embalming fluid into a dead human body without proper authority. It appears that such a law is open to no valid objections, and would certainly block the road to one method of concealing crime.

INFLUENZA ON BOARD SHIP.

Letters from Malta state that on the arrival of the troopship, *Tamar*, the commanding officer, Captain Cochrane, was taken to hospital, suffering from a severe attack of influenza, contracted shortly after leaving England. When the *Orontes* arrived at Malta, from Hong Kong, she reported that influenza had been very rife on board, over 170 passengers being under medical treatment at one time. So great was the demand on the services of the medical officers, that they had to be reinforced by the staff-surgeon of H.M.S. *Cordelia*.

MEDICAL SICKNESS FROM INFLUENZA.

At the last monthly meeting of the Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society, held at 38, Wimpole Street, under the presidency of Mr. Ernest Hart (present Dr. F. De Havilland Hall, Mr. S. W. Sibley (Treasurer), Dr. Major Greenwood, Mr. F. Wallace, Mr. J. Brindley James, Mr. E. Bartlett, and Dr. R. Lord), the progress of the Society, it was stated, continued in a satisfactory manner; fifteen proposals having been received during February, the effective membership being now well over 1,000. An investment of £1,100 on the security of the district rates of a prosperous locality, at 3½ per cent. interest, was agreed to, the loan being contracted under the sanction of the Local Government Board. From a special report on the sickness it was shown that the claims continued heavier than usual, owing to epidemic influenza. Out of 50 new claims made during February, 39 were caused by influenza, this malady being responsible for 75 weeks' disablement out of a total of 124 weeks paid during the month, leaving only 49 weeks on account of ordinary complaints. The expectation of sickness for the period under the Society's tables was 91.14 weeks, and while this had been exceeded, the unusual pressure was entirely due to the exceptional circumstance of an epidemic by which medical practitioners were largely affected. The expenditure for sickness pay had, of course, been correspondingly heavy, averaging over 100 guineas per week, the number claiming each week being about 30, or nearly 3 per cent. of the members. This exceptional demand on the Society would be met out of the current contributions to the sickness fund, and it was likely that the quarterly report at the end of March would show that the large balance of reserve in the fund alone (£16,941) had been added to rather than decreased. Particulars of the Society's work, with documents, may be had from the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, S.W.

INFLUENZA IN INDIA.

The influenza epidemic appears likely to spread through India as widely and rapidly as through Europe. It has (Brigade-Surgeon J. B. Hamilton informs us) broken out at Lucknow (Oudh), and has attacked all European troops. It is probable that the disease was imported, but there is no direct evidence to this effect, and so far the epidemic is not stated to have appeared at Bombay or Calcutta, or in any of the intermediate stations. The history of the outbreak is as follows. Some six weeks ago a number of men of the Scottish Rifles were attacked with severe colds, and they at once concluded the epidemic was among them. The chief symptoms complained of were a general feeling of *malaise*, much headache, pains in back and legs, and in a few cases sore throat. The temperature was found to run from 100° to 101° or 102°, the tongue was coated, and in every case the throat was much congested, even though not complained of, the tonsils and uvula being swollen, and the latter pendulous. In some there were well-marked catarrhal symptoms affecting the larger bronchi, and in a few bronchitis. In a few cases pneumonia followed, but in no instance was there a fatal result. No ulceration of the throat was observed. The epidemic rapidly spread, and ran through the men of the Scottish Rifles. It then attacked the Royal Welsh Fusiliers, and is now severe in that corps, fifty to seventy men falling sick daily. During the past few days the 17th Lancers and Royal Artillery have been attacked, and the disease promises to run through them as well. Several officers and three of the apothecaries have been attacked, but, oddly enough, so far none of the native attendants, nor does it seem that the epidemic is prevalent in the bazaars. Most of the cases are treated as out-patients, only the severer ones being admitted to hospital. Dr. Hamilton has found that the local application of gr. xx sol. arg. nit., with gr. x of sulph. of quinine morning and evening, combined with an expectorant when required, the best treatment. Debility is a frequent sequel, and is treated with iron and quinine.

PROSECUTIONS OF CHEMISTS UNDER THE SALE OF FOOD AND DRUGS ACT.

Three prosecutions recently instituted at Sheffield against chemists and druggists for the sale of medicinal preparations not of the nature, substance, and quality demanded by the purchaser, raise several points worthy of the careful consideration of all who are engaged in the supply of medicines to the public. One of the charges against the first defendant was that an 8-ounce mixture, which according to the prescription supposed to have been followed should have been dispensed with 90 grains of citrate of iron and quinine, was supplied containing only 60 grains. This was not only a serious offence against the public, but it was also a distinct injury to other chemists and druggists, in that it favours the suspicion that medicines are too often supplied deficient in their most important constituents. The defence that if the mix-

ture only contained the smaller quantity it was the result of a mistake, was very properly considered insufficient, and the penalty imposed will be a warning that the dispenser who is detected in making such a mistake must be prepared to take the consequences, including the construction that will be put upon it by uncharitable people. Another charge against the same defendant was that he had supplied under the name "sal volatile" a preparation that did not correspond with the spiritus ammoniæ aromaticus of the *British Pharmacopœia*, "sal volatile" being one of the official synonyms. Here again the plea that the preparation was made according to the *London Pharmacopœia* failed to avert a penalty, it being held by the magistrate that the *British Pharmacopœia* must be taken as the standard for all preparations included in it. This decision is strictly in accord with precedent, and especially with the decision of Mr. Vaughan in a case heard at Bow Street last June, when exactly the same defence was made and overruled. In both the other Sheffield cases the defendants, who were also charged with the sale of defective "sal volatile," put forward a plea that seems singularly out of place in the mouth of a qualified chemist and druggist, namely, that they had ordered the *British Pharmacopœia* preparation from respectable wholesale firms, and had sold in good faith what had been supplied to them as such. It seems indeed difficult to imagine a defence more suicidal when made by a member of a class that is continually affirming as a justification for what is considered by many to be an excessive scale of charges that these include remuneration for the exercise of special skill and personal supervision in the purveying of medicines to the public. So far as these services are rendered they are no doubt worthy of recognition, but when, as in the cases under consideration, they are relegated to a wholesale manufacturer, any claim to a special remuneration as compared with that which satisfies the grocer or stores proprietor, who can obtain similar articles with an equal guarantee from the same source, becomes simply preposterous. Certainly the chemist and druggist cannot afford to figure too often as one who ignores the official standard, or who neglects to place himself in a position to give a personal guarantee that all medicines supplied by him are in accord with it.

THE TRADE IN DEGREES.

We have in recent numbers published several items of news in reference to the University of Toronto, lately destroyed by a disastrous fire, and to the prompt and generous aid which has been offered by English universities and colleges towards the restoration of its lost library. Nothing could better foster the friendly sympathy which ought to exist between the mother country and its colonial daughters than such spontaneous generosity in the face of a great calamity, and we shall always be ready to lend our support to steps of the kind. But of late ugly rumours have been abroad that another university in Toronto, in no way connected with the State University, has been offering to England a more than doubtful boon in the shape of degrees *in absentiâ*, such as once made certain German universities notorious, and such as are still dealt in by "diploma mills" in the United States. The "University of Trinity College, Toronto," was established by Royal Charter in 1852, "for the education of youth in the doctrines and duties of the Christian Religion as inculcated by the United Church of England and Ireland, and for their instruction in the various branches of science and literature which are taught in the Universities of the United Kingdom." Sums of money were freely subscribed in England, and especially in the English universities, for its endowment. But by the side of the noble University of the Province of Ontario, founded on broad and unsectarian principles, the Episcopal College has languished, and repeated begging in its aid would seem to have at length exhausted the charity of benevolent churchmen at home. The Council have accordingly thought fit to raise funds by offering degrees for sale, not in Canada, where the limits of their charter are probably well understood, but in this country. An English "registrar," whose address is given in some of our medical contemporaries, and a "Board of Referees" have been appointed, and degrees in music have been the first "article" in which these gentlemen have dealt. To obtain these coveted and commercially valuable distinctions, candidates who have been rejected by our universities as unqualified for graduation have only to apply to the "Registrar," a "Rev. Dr.;" no residence in Toronto is required; indeed, Trinity College seems to possess no teaching faculty in music; the small sum of £16, duly paid, is all that is necessary. The abuse has reached such dimensions that a deputation of persons representing the Faculties of Music in the English universities and colleges waited recently on Lord Knutsford, the Colonial Secretary, to ask that it might be stopped. His lordship gave a reassuring reply, and we may hope that ere long the "Registrar" and his "Referees" will be driven to take their musical wares elsewhere. But if a *communiqué* in two of the medical journals is to be credited, a new traffic in M.D. degrees is to be substituted. The same "Rev. Dr." may be consulted by qualified practitioners of five years' standing; the question arises whether he proposes to gratify their aspirations for a dignified title, without the irksome condition of further study or examination. We need hardly point out that the General Medical Council is not likely to admit to registration a degree of this nature, that it can add nothing to the reputation of any medical man who is inclined to accept it, that as the object of the University in selling it is frankly to gain money, the temptation to lower the five years' qualification limit will be strong; and lastly, that the sale of degrees without examination must undermine the efforts now being made in this country to raise the standard of medical education. The developments of this trade in degrees will be closely watched, and it is to be hoped that the opposition offered to it by the medical profession will be no less jealous and energetic than that raised by the profession of music.

DEGREES FOR LONDON MEDICAL SCHOOLS.

It may be remembered that the Royal Commission on University Education in London recommended that a year's grace should be given to the University of London in which to set its house in order and come to some arrangement with the teaching institutions and Royal Colleges. A recent writer in the *Times* broadly hinted that the University would be held strictly to this arrangement, and that as soon as the year was over the Commission would reassemble and proceed to take steps to prepare a report in the direction indicated by the rider signed by three members of the Commission, which foreshadowed the creation of a second university in London by an amalgamation for university purposes of existing colleges. As we have already pointed out, however, the negotiations with University and King's Colleges which have been in progress during the last six months are now in a very advanced stage, and a second and possibly final conference between the representatives of these two Colleges and the Senate will be held shortly after the vacation. The delay in coming to an understanding with the medical bodies is believed to be due to the two Royal Colleges. A committee of delegates, consisting of eight Fellows of the Royal College of Physicians, and four members of the Council of the Royal College of Surgeons, has at length been appointed, and it is expected that a conference with the Senate will be arranged shortly after the Easter vacation. The proposals submitted will then, in accordance with precedent, be referred to the Special Committee of the Senate for report, so that we must yet be a long way from the end of the negotiations. Under these circumstances it appears absurd to suppose that the Royal Commission will exact a precise punctuality from the University

On every ground it is desirable that the question should now be thoroughly threshed out, and that if the creation of a second university, or a one-faculty university, can be avoided, this desirable consummation should not be endangered.

AWARDS TO PUBLIC VACCINATORS.

A LARGE number of public vaccinators throughout the country have had just cause to complain of the delay which has taken place during the past year in the payment of the awards earned by them under section 5 of the Vaccination Act, 1867. In some cases the delay has been little short of twelve months. The cause of the delay has been explained in these columns on several occasions, and we are glad that at last the legal difficulty which has been the stumbling-block has been finally settled by the decision of the Queen's Bench Division of the High Court of Justice, on March 28th, in the test case, *ex parte* the County Council for the West Riding of Yorkshire. The question raised by the West Riding Council was as to the interpretation of section 24 of the Local Government Act, 1888. The County Council contended that as they were only liable for those charges (including the grants to public vaccinators) "as from March 31st, 1889," they were not liable for such charges as had accrued prior to that date, but only for such as then began to accrue. On behalf of the Crown, however, it was argued that the County Council were liable for those charges incurred between September, 1888, and March 31st, 1889, which became payable according to the course of payment after the latter date. Thus the County Councils would be liable for payment out of the exchequer contribution account of the awards which were earned by public vaccinators prior to March 31st, 1889, but which could not, according to the usual course of procedure, become payable until after that date. The judgment of the Court was in favour of the Crown. In consequence of this decision the Local Government Board issued, on March 31st, to the various County Councils, certificates directing the payment by the Councils to the public vaccinators in their respective counties of the awards outstanding. It is only fair to the Local Government Board to add that these certificates were prepared several months ago, but their issue had to be withheld until the law courts had decided the legal question which had been raised.

SCOTLAND.

GLASGOW UNIVERSITY ASSISTANTS' ASSOCIATION.

THE assistants of Glasgow University have lodged with the Universities Commissioners a memorial relative to their position in the university. They have had their memorial printed after the style of a Parliamentary paper, and, as a statement of their case, it would be difficult to imagine a more comprehensive, carefully arranged, or conclusive document. It gives in tabular form a complete list of the assistants, the date of their appointment, the body by whom they are appointed, their official duties, the length of their working year, the number of hours they are occupied per week, their emoluments, and so on. A very able analysis of this tabulated statement follows, showing that in a large number of subjects the work done by the assistants is not supplementary to, but co-ordinate with, that of the professors; that in connection with certain Chairs, the larger part of the work is done by the assistants; that the teaching provided by them is necessary for graduation in nearly every case; that many of them devote their whole time to the work; that they yet have no voice in the regulation of studies, and without a single exception receive no adequate remuneration, £100 being the utmost provided out of Exchequer funds, any addition made by the professor coming out of his private purse and at his own option. Having thus stated the present position of the assistants, the memorial goes on to indicate the changes that might be made in reconstituting the university staff. The suggestions are that there should be five classes of teachers: (1) professors; (2) junior professors; (3) university assistants; (4) scholars and fellows; (5) lecturers. No suggestions are made regarding the professors, but it is suggested that where the nature of the subject and the number of students in attendance justify it, a junior professor, with a tenure of office the same as ordinary professors and with an adequate salary, paid out of university funds, should be appointed. The chief duties of junior professors would be to manage practical classes, and to take such share in the work qualifying for graduation as might be decided on after consultation with the rest of the staff. The memorial recommends the appointment of junior professors in anatomy, physiology, public health, chemistry, and in several of the arts subjects. Lecturers would be appointed under such a scheme by the University Court to deliver lectures on special subjects not parts of a qualifying course, and in the medical faculty lectureships on gynæcology, diseases of children, diseases of throat, ear, and skin are recommended as additions to those already in existence in Glasgow University. The memorial goes on to make detailed recommendations as to courses of study in arts, science, and medicine for graduation purposes. It recommends in medicine a course of five years, compulsory attendance on a course of pathology, and classes of practical physiology and practical pathology. On the whole, the memorial is a very able contribution, from the assistants' point of view, to the suggestions for the reform of the universities; and it ought at least to secure for them fair consideration from the Commission.

IRELAND.

DEATH OF DR. A. B. KEARNEY.

THIS gentleman, who died recently after a lengthened illness, held the post of medical officer of the Carna and Roundstone Dispensary, Connemara, for twenty-four years. Dr. Kearney was greatly liked, and the large attendance at his funeral showed the esteem and respect in which he was held.

ALLEGED CASE OF LEPROSY IN ARMAGH WORKHOUSE.

A PARAGRAPH appeared in one of the Dublin papers to the effect that an inmate of the workhouse at Armagh was suffering from symptoms almost identical with those of leprosy. On inquiry, we learn that there is no foundation for the report.

PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

WE are requested to state that Mr. Croly, Vice-President of the Royal College of Surgeons, was not aware his candidature for the presidency would be opposed until quite recently. Mr. Croly will take the opinion of the electors in June next, as though a supporter of the two years' principle, he considers that when elected Vice-President in June he should have been informed that an attempt would be made to alter the usual practice of the Vice-President succeeding to the presidency. Mr. Croly is quite prepared to hold office for two years as President if elected next June, and we understand that both the candidates for the vice-presidency next June have also expressed their willingness to hold office for two years. In this way it is hoped that the principle of a President holding office for two years may be established with the concurrence of all the parties interested in the immediate future.

THE EVIDENCE TAKEN BY LORD CAMPERDOWN'S COMMITTEE.

MR. STANHOPE having laid the evidence taken by Lord Camperdown's Committee on the table of the House of Commons, arrangements have been made to reprint this document by the British Medical Association, by permission of the War Office.[1] We may therefore proceed to examine some of this evidence, and in the first place would draw attention to that part of it which bears on the question of rank and titles with limited command. It appears that it is principally the younger medical officers who suggest that purely military titles should be granted. The greater part of the evidence before us points to the necessity of compound titles, expressing first the profession, and, secondly, the rank of the medical officer.

Brigade-Surgeon Clark (Q. 1,866) observes that: "Many medical officers who had been on recent campaigns in Egypt have told me that they have had terrible difficulties in connection with transports and stores. They felt that, in fact, had they held a proper rank and definite titles, there would have been less friction and less difficulties."

Deputy Surgeon-General Don (Q. 864) said: "I think there is every reason to believe that the statement is practically correct that of 922 medical officers no less than 75 per cent. have expressed their belief that it is necessary for the efficient working of the medical service that military surgeons should be granted military titular rank."

This statement was confirmed by the late Director-General of the Army Medical Department, Sir Thomas Crawford (Q. 45): "I do still sympathise with the fact, which is made known to me, that the question of a medical officer having rank in the army is one which does materially affect his comfort socially as a public servant, and I do think that the denial that he holds such rank, even if it be only made by his brother officers or by the combatant officers of the army, is an injury to him and to the public service."

The present Director-General, Dr. Mackinnon (Q. 2,278), observes: "You have now Surgeon-General and Surgeon-Major, why not call them Surgeon-Captain and Surgeon-Colonel? There is no rank known to soldiers except that of military rank. The only rank in the army is military rank undoubtedly."

(Q. 680). Surgeon-Major Johnstone states that, according to the wording of their commissions, surgeons are directed to exercise authority according to the rules and discipline of war over junior officers and subordinates employed in the medical department, and over all soldiers and others attached thereto, and over all patients in military hospitals. Dr. Johnstone further observes: "At this moment I command men, not only of the rank, but with the titles of captain, lieutenant, sergeant-major, sergeant, corporal, private, and bugler, and I am the only man of them all without military rank." In a service governed entirely by rank and corresponding titles, it seems hardly possible to have a more hopelessly unsatisfactory condition of things than that above referred to.

Brigade-Surgeon Beattie, who was in charge of the military hospital at Cairo in 1882 and 1884, states (Q. 542) "he was working under the greatest possible difficulties," and that he would on no account accept similar responsibilities under like conditions of service; he attributes this unsatisfactory condition of things largely to the anomalous position in which medical officers are placed, from having no recognised military rank and titles.

Surgeon A. Mercer Davies, (Q. 490) observes that it is desirable to change the designation of the Medical Service to that of "Royal Medical Corps," because "if we were made into a corps on the lines of the corps of the Royal Engineers, more intimately uniting officers and men, I think a better class of men would be attracted socially, men who would not enter the service to make money, but in order to participate in the benefits, not pecuniary but otherwise, of service life, and who would be good medical officers, and would be better officers of the army."

In Q. 1,949 reference is made to a despatch of Lord Dalhousie, the eminent statesman and Governor-General of India, in which he writes regarding "the most galling and the most unmeaning regulations by which a sense of inferiority is imposed on medical officers by the refusal to grant them substantive rank."

As regards the status of medical officers in Q. 615, we are informed that according to Lord Harris's warrant, medical officers were to have a precedence and advantages of a corresponding substantive rank, except the proceedings of court-martial. "We were to have presidency of Courts of Inquiry, Boards, and Committees if we happened to be senior. Some of the officers of the army did not like this, so Boards were arranged so that medical officers would never be senior officers, and subsequently, 1869, they were no longer to be members of Boards except Medical Boards, but were detailed to attend them."

Q. 632. With reference to messes, we learn "that supposing another regiment is asked to dinner—it may be the Colonel and Major, we will say, are absent, and all the Captains for that matter, and only subalterns present at dinner, I might be a very old Surgeon-Major with twenty years' service, but one of the subalterns would take in the guests, and extend the hospitality of the regiment, and I, as the doctor, would have nothing to say to it. Medical officers are shy of going to mess now, as they are not certain of their position."

Turning from the medical evidence, it is important to consider what one of England's most trusted and distinguished generals has to say on this subject. There is no ambiguity in the answers given in this evidence by General Sir Donald Stewart (Q. 2,417). By the Chairman: "But in the *Army List* how would you style the medical officers? Surgeons and Captains?" Sir Donald: "I should put them down Royal Medical Staff so-and-so, Major-General; and so-and-so, Colonel, just as you do in the Royal Engineers. I would give them a position in the *Army List*, which would be extremely popular with them, and do no harm to anyone else."

We may now turn to the other side of the question, and refer to what the military advisers of Mr. Stanhope have to say on this matter. His Royal Highness the Commander-in-Chief (Q. 2,468) observes: "I have certainly no objection to what Lord Camperdown suggested to me in the earlier part of my evidence, but I object absolutely to medical officers being called by a military title." When pressed on this matter the Duke of Cambridge replied (Q. 2,466): "I cannot alter my opinion—my military instincts cannot carry it." The suggestions referred to as Lord Camperdown's are precisely those which now appear to have been promulgated by Mr. Stanhope.

The Military Secretary to His Royal Highness the Commander-in-Chief, General Sir George Harman (Q. 249), stated that according to his "experience of medical officers, or many of them, their great aim is to appear what they are not, affecting to be combatant officers instead of being proud of the profession to which they belong." Sir R. Buller observes on the same subject (Q. 1,546) that "he had never been able to get anyone to say or give the slightest inkling of any proof or reason or argument in favour of granting medical officers any kind of title." Evidently if Sir George Harman is right and the motives influencing medical officers in the Army as regards titles is simply a desire to ape the position of combatant officers, Mr. Stanhope was fully justified in refusing to sanction any such arrangement. But there is not one particle of justification throughout the evidence of the Committee which in any way substantiates ideas of this kind. The Government have by destroying the regimental system and by the creation of the Medical Staff Corps, in fact, by the reorganisation of the Army to meet the requirements of modern warfare, entirely altered the position of the medical officers, compelling them to perform duties and to accept responsibilities which can only be effectively carried out by their being granted military rank and titles.

We would urge Mr. Stanhope to reconsider this subject. It is not too late for him to make the Medical Service one of the most efficient departments of the army. In taking such a step he would have the support of the entire Medical Service, of many military officers of the greatest experience, and last, but not least, the decision of his own Committee. Surely with all this to back him he can safely brush on one side objections such as those to which we have above referred. Mr. Stanhope and the country have distinct warning that, unless the status of the officers of the Medical Department is placed on a sound footing, in the time of emergency they will be unable to carry on their duties efficiently. Armies in these days have to move rapidly, and it is the function of the Medical Service to have the men under their charge physically fit for any work they may be called upon to perform, and when sick or wounded to relieve the General of all care and anxiety as to the well-being of disabled soldiers. To perform

[1] Applications, accompanied by a remittance of two shillings, if by post two shillings and three pence, can now be received at the office of the British Medical Association, 429, Strand, W.C. See also page 6 of advertisement sheet.

his and many other duties, medical officers must have definite ank, and with that rank its corresponding title. In the scheme roposed by Lord Camperdown's Committee, the professional title s clearly stated; there can be no mistake as to the holder of such title being a doctor. At the same time, his rank is equally well efined, so that every officer and soldier in the army can clearly nderstand the status and the position of anyone possessing a itle of this description. And this seems to us the only satisfac- ory conclusion to which all unprejudiced persons must arrive fter reading the evidence and report of Lord Camperdown's Com- nittee.

ROYAL COLLEGE OF PHYSICIANS.

A SPECIAL comitia of the College was held on Friday, March 28th, ir ANDREW CLARK, Bart., President, in the chair.

A report, dated March 19th, 1890, of the Committee of Delegates ppointed by the Royal College of Physicians of London and the oyal College of Surgeons of England to consider and report to he two Colleges on the "scheme for the reconstitution of the niversity on the general lines indicated by the Report of the niversity for London Commission, approved by the Senate as a asis for conference," was received and adopted.

The following Fellows of the College, namely, Sir Andrew Clark, art., Sir Risdon Bennett, Dr. Andrew, Dr. Edward Liveing, Dr. orman Moore, Dr. W. H. Allchin, Dr. S. Coupland, and Dr. D. Mac- lister were appointed delegates, to join with delegates from the oyal College of Surgeons, in a deputation to the Senate of the niversity of London, taking the above-mentioned report as a asis for consideration.

The College then adjourned.

AN extraordinary comitia was held on Monday, March 31st, Sir NDREW CLARK, Bart., F.R.S., President, in the Chair.

A letter was read from Dr. R. J. Lee, offering a collection of rawings of the ganglia of the heart made by Dr. Perry and Mr. West or his late father, Dr. Robert Lee.

It was proposed by Dr. DICKINSON, and seconded by Dr. BARNES, hat the gift be gratefully acknowledged, and that it be referred o the Museum Committee to take steps to place them and other rawings by the late Dr. Bright belonging to the College in a abinet in the museum.

A letter was read from Dr. Balfour, who had represented the ollege on a committee respecting the status, etc., of medical men n the Army Medical Service.

Dr. BALFOUR was present, and added some details respecting he conclusions of that committee.

Dr. QUAIN proposed that the best thanks of the College be given o Dr. Balfour for his services on the committee, and this was econded by Sir J. FAYRER and carried by acclamation.

A letter was read from the College of Surgeons respecting the ew laboratories. Its recommendations were adopted.

A letter from the Secretary of the University of Toronto Library estoration Committee, appealing for help, was read.

Certain by-laws relating to the appointment of Examiners in ublic Health, and to the appointment of a vicarius for the resident, in consequence of the abolition of the office of vice- resident, were passed for the second time.

The PRESIDENT then delivered his annual address. During the ear the College had lost by death 10 Fellows, 10 Members, and 3 Licentiates, whilst 12 new Fellows, 32 new members, 477 icentiates, and 39 diplomas in public health had been added to he College roll.

The references to the character and career of the deceased Fel- ws—Dr. Owen Rees, Dr. C. B. Radcliffe, Dr. Thomas King Cham- rs, and Sir William Gull, Bart.—were distinguished alike by stice and liberality. Shunning unqualified eulogium, the too com- on failing of obituary notices, the President's sketches were ided by keen discrimination and fair appreciation; yet they ere true and generous. A more philosophical and more eloquent ation has rarely been heard.

Reference was made to the new by-law relating to the resigna- on of a Fellow, Member, or Licentiate of his diploma. Reference as made to certain alterations in regard to the Library. The ppointment of Dr. Edward Liveing as Registrar in succession to r Henry Pitman (nominated Emeritus Registrar) was alluded to most complimentary terms. The Censors' Board had been ainly occupied with questions of breaches of professional eti- uette. The Harveian Oration was delivered by Dr. James E. Pollock, and afterwards the Baly Medal was delivered to the representative of Dr. Heidenhain. In the evening the annual dinner was held in the College, when several distinguished public men were present. The work of the Fever Hospital Committee relating to the use of the fever hospital for clinical purposes was next described. With one serious exception the relation with the Government had been closer and satisfactory, the exception being the Home Office. A committee of the College had been appointed to consider the report of the commission on a university for London; their report had been adopted as the basis of negotiation with the Senate of the University of London. In the event of these negotiations falling through, Sir Andrew Clark sketched out a scheme of what might be possible in the future in the way of an amalgamation with the Royal College of Surgeons and all the medical schools in London as a Royal Faculty of Medicine. In May last the statue of the Queen had been unveiled by H.R.H. the Prince of Wales. A laboratories committee had been appointed, and had nominated Dr. Sims Woodhead as director.

Sir HENRY PITMAN moved a vote of thanks for this address. This was seconded by the Senior Censor, and carried by acclamation.

The ballot was then taken for the election of president, when Sir Andrew Clark was re-elected by a very large majority.

THE LUKE ARMSTRONG MEMORIAL FUND.

THE Committee of the Luke Armstrong Memorial Fund have presented to the subscribers a balance sheet and list of subscriptions showing the total amount subscribed to be £683 12s., of which sum £661 13s. 5d. has been invested in the purchase of £400 North-Eastern Railway consols in the names of trustees. The manner in which the proceeds should be appropriated was left to the members of the College of Medicine in Newcastle-upon-Tyne, who decided to found a scholarship to be known as the Luke Armstrong Memorial Scholarship. It was further resolved that the scholarship be awarded to the student who obtains the highest position in the honours division of the examinations of the University of Durham for the degree of Bachelor in Medicine, in the June and December examinations of the year, and that the recipient be termed the Luke Armstrong Scholar. That this arrangement continue for five years, and be then reconsidered. This resolution throws the scholarship open to all the candidates of the year, whether from the Newcastle College of Medicine or from other medical schools; and it may interest the subscribers to know that, on the first occasion of the scholarship being awarded, namely, for the examinations in June and December, 1889, the total number of candidates being 46, of whom 11 were from the Newcastle College of Medicine, and 35 from the principal schools of medicine in London and the provinces, it was gained by a student who had been educated entirely in the Newcastle College of Medicine, and who was the only candidate of the year who took first-class honours, Mr. A. E. Cope. The scholarship will be presented, with the other scholarships and prizes, at the public opening of the College of Medicine for the winter session in October next.

HYPNOTISM AS AN ANÆSTHETIC.

[FROM A CORRESPONDENT.]

A NUMBER of the leading medical men and dentists of Leeds and district assembled at the kind invitation of Messrs. Carter Brothers and Turner, Dental Surgeons, of Park Square, Leeds, on March 28th, to witness a series of surgical and dental operations performed in their rooms under hypnotic influence, induced by Dr. Milne Bramwell, of Goole, Yorkshire. Great interest was evinced in the meeting, as it is well known that Dr. Bramwell is quite a master of the art of hypnotism as applied to medicine and surgery, and is shortly to publish a work of considerable importance on the subject. Upwards of 60 medical men and dental surgeons accepted invitations. Amongst those gentlemen present were the following:—Mr. Thos. Scattergood, Professor Wardrop Griffith, Mr. Pridgin Teale, Professor Eddison, Dr. Jacob, Dr. Churton, Mr. Mayo Robson, Mr. H. Bendelack Hewetson, Mr. Nicol, Mr. Moynihan, Mr. Littlewood, Mr. Henry Gott, Mr. Cheetham, Mr. Edmund Robinson, Mr. William Hall, Dr. Braithwaite, Mr. Best, Mr. Wood, Dr. Light, Dr. Caddy, Professor McGill, Dr. Turner (Menston Asylum), Dr. Hartley, Dr. Hellier, Mr. W. H. Brown, Dr. Bruce (Goole), Mr. Dennison, Mr. Edward Ward, Mr. H. Robson, Mr. King, Mr. Glaisby, Mr. Sherburn, and Mr. Wayles. A letter, expressing his regret at his inability to be present, was read from Dr. Clifford Allbutt, in which he stated that he re-

membered the time, 35 years ago, when Liston performed several serious operations, using hypnotism as the anæsthetic applied by a scientific lay friend, in Lincolnshire. Mr. Jessop was also prevented at the last moment from being present.

The object of the meeting was to show the power of hypnotism to produce absolute anæsthesia in very painful and severe operations. The first case brought into the room was that of a woman, aged 25. She was hypnotised at a word by Dr. Bramwell, and told she was to submit to three teeth being extracted, without pain, at the hands of Mr. Thomas Carter; and further, that she was to do anything that Mr. Carter asked her to do (such as to open her mouth, and spit out, and the like) as he required her. This was perfectly successful. There was no expression of pain in the face, no cry, and when told to awake she said she had not the least pain in the gums, nor had she felt the operation. Dr. Bramwell then hypnotised her, and ordered her to leave the room, and go upstairs to the waiting-room. This she did as a complete somnambulist.

The next case was that of a servant girl, M. A. W., aged 19, on whom, under the hypnotic influence induced by Dr. Bramwell, Mr. Hewetson had a fortnight previously opened and scraped freely, without knowledge or pain, a large lachrymal abscess, extending into the cheek. Furthermore, the dressing had been daily performed and the cavity freely syringed under hypnotic anæsthesia, the "healing suggestions" being daily given to the patient, to which Dr. Bramwell in a great measure attributes the very rapid healing, which took place in ten days,—a remarkably short space of time in a girl affected by constitutional syphilis, and by no means in a good state of health. She was put to sleep by the following letter from Dr. Bramwell addressed to Mr. Turner:

"Burlington Crescent, Goole, Yorks. Dear Mr. Turner,—I send you a patient with enclosed order. When you give it her she will fall asleep at once, and obey your commands.

"J. Milne Bramwell."

"Order.—Go to sleep at once, by order of Dr. Bramwell, and obey Mr. Turner's commands.

"J. Milne Bramwell."

This experiment answered perfectly. Sleep was induced at once by reading the note, and was so profound that, at the end of a lengthy operation, in which sixteen stumps were removed, she awoke smiling, and insisted that she had felt no pain, and, what was remarkable, there was no pain in her mouth. She was found after some time, when unobserved, reading the *Graphic* in the waiting-room as if nothing had happened. During the whole time she did everything which Mr. Turner suggested, but it was observed that there was a diminished flow of saliva and that the corneal reflexes were absent, the breathing more noisy than ordinarily, and the pulse slower.

Dr. Bramwell took occasion to explain that the next case, a boy aged 8, was a severe test, and would probably not succeed; partly because the patient was so young, and chiefly because he had not attempted to produce hypnotic anæsthesia earlier than two days before. He also explained that patients require training in this form of anæsthesia, the time of training, or preparation, varying with each individual. However, he was so far hypnotised that he allowed Mr. Mayo Robson to operate on the great toe, removing a bony growth and part of the first phalanx with no more than a few cries towards the close of the operation, and with the result that, when questioned afterwards, he appeared to know very little of what had been done.

It was necessary in his case for Dr. Bramwell to repeat the hypnotic suggestions. Dr. Bramwell remarked that he wished to show a case that was less likely to be perfectly successful than the others, so as to enable those present to see the difficult as well as the apparently easy straightforward cases, "in fact," as he said, "to show his work in the rough."

The next case was a girl of 15, highly sensitive, requiring the removal of enlarged tonsils. At the request of Dr. Bramwell, Mr. Hewetson was enabled in the hypnotic state to extract each tonsil with ease, the girl, by suggestion of the hypnotiser, obeying every request of the operator, though in a state of perfect anæsthesia. In the same way Mr. Hewetson removed a cyst, of the size of a horse bean, from the side of the nose of a young woman who was perfectly anæsthetised and breathing deeply, and who, on coming round by order, protested "that the operation had not been commenced."

Mr. Turner then extracted two teeth from a man with equal success; after which Dr. Bramwell explained how his patient had been completely cured of drunkenness by hypnotic suggestion. To prove this to those present, and to show the interesting psychological results, the man was hypnotised, and in that state he was shown a glass of water; he was told by Dr. Bramwell it was "bad beer." He was then told to awake, and the glass of water offered him by Dr. Bramwell; he put it to his lips, and at once spat out the "offensive liquid." Other interesting phenomena were illustrated and explained by means of this patient, who was a hale, strong working man.

Mr. T. S. Carter next extracted a very difficult impacted stump from a railway navvy, as successfully as the previous case. Dr. Bramwell described how this man had been completely cured of very obstinate facial neuralgia by hypnotism, which had been produced by working in a wet cutting. On the third day of hypnotism the neuralgia had entirely disappeared (now some weeks ago) and had not returned. The man had obtained refreshing hypnotic sleep at nights, being put to sleep by his daughter through a note from Dr. Bramwell, or by a telegram, both methods succeeding perfectly.

At the conclusion of this most interesting and successful series of hypnotic experiments, a vote of thanks to Dr. Bramwell for his kindness in giving the demonstration was proposed by Mr. Scattergood, Dean of the Yorkshire College, and seconded by Mr. Pridgin Teale, who remarked that the experiments were deeply interesting, and had been marvellously successful, and said: "I feel sure that the time has now come when we shall have to recognise hypnotism as a necessary part of our study."

The vote was carried by acclamation.

Messrs. Carter Brothers and Turner were cordially thanked for the great scientific treat that they had so kindly prepared for the many to whom hypnotism had been first introduced that day, and for the further opportunity (afforded to the few who had seen Dr. Bramwell's work previously) of studying its application as an anæsthetic.

Mr. Henry Carter replied for the firm and the meeting closed, the patients looking as little like patients as persons well could, giving neither by their manners, nor expression the slightest suggestion (except when external dressings were visible) that they had suffered, or were suffering from, in some cases severe surgical interference.

AN EPIDEMIC OF DENGUE.

We hear so much more of dengue fever within the last year or two than was formerly the case, that it appears very likely we may have it in London before long. The following details well deserve record for their intrinsic interest.

During last summer an epidemic of this disease broke out at Constantinople, its nature being first recognised by Dr. Mordtmann. The disease spread to such an extent that the Imperial Society of Medicine of Constantinople held a series of extraordinary meetings for the special purpose of collecting information regarding the disease. Dr. von Dühring, Professor of Dermatology and Syphilis in the Imperial School of Medicine, has communicated to the *Monats. f. prakt. Derm.* a full account of the affection as observed at Constantinople, using for that purpose his own observations as well as those of other medical men in Constantinople who made reports at these meetings. He states that the fact that dengue fever, like some other Eastern epidemics, threatens Western Europe is now sufficiently apparent. It has already attacked the ports of the Black Sea, and considering the commercial relations between Constantinople, Smyrna, Alexandria and the Western ports, the possibility of its appearing amongst us can hardly be considered remote. Under these circumstances an accurate knowledge of this peculiar disease becomes of some practical importance. Dr. Dühring divides the symptoms into two, or better three, stages.

The first period is one of fever, with acute, violent, periarticular, and muscular pains, for the most part without exanthem. The second period is subfebrile or afebrile, and commences with the appearance of a characteristic polymorphous exanthem. A relapse sometimes occurs on the sixth day, which is febrile, and is accompanied by a second exanthem. Convalescence may be considered as the third period, for it is usually lingering, and is distinguished by gastric disturbances.

Fever frequently sets in with a temperature of 39° C. to 40° C., usually without a prodromal period, or with a short cessation, headache, slight shivering, but seldom severe rigors. Swellings of the joints occur very seldom; pains in the loins, on the contrary, are often extremely severe, and are almost always preceded by

eriarticular and muscular pains. On the third or fourth day a ighly polymorphous exanthem appears, accompanied by a fall of emperature. It lasts usually two or three days, seldom a shorter eriod, often longer.

A general prostration sets in, which bears no proportion to the emaining complex symptoms. The patients can scarcely move a imb, and feel extremely miserable. The pains in the head (which or the most part are circumscribed, and confined to the orbits, orehead, and back of the head) may slowly increase in severity ntil they become unbearable. Delirium, especially quiet delirium, requently sets in. The patients suffer much from uneasiness and leeplessness. A striking failure of the memory lasts for a longer eriod. In moderate cases there is frequently observed par-sthesia, hyperæsthesia, and anæsthesia of the skin.

The gastric disturbances are very significant. The tongue is nostly covered with a thick white layer, which has a sharp red order, or it looks as if stripped of epithelium. The sense of taste, ven in convalescence, is very disordered, and almost absent; the reath smells fœtid. There sometimes exists at the commence-ient constipation, and later on diarrhœa, but frequently diarrhœa s present from the beginning, and may assume dysenteric ap-earances. The appetite quite fails, and the patients, on account f the bad taste in the mouth, refuse to take any nourishment. omiting occurs seldom, but nausea, on the contrary, is frequently bserved. The patients often complain of having a desire to omit but of being unable to do so. The pulse is usually very uick; in convalescence it is frequently somewhat languid.

Heart complication was not observed, but the symptoms of reviously existing heart disease were, however, very often ggravated. The spleen was not enlarged. Swellings of the lands, especially in the neck and in the inguinal region, were rom time to time observed. Exacerbations, especially on the ixth day, were observed, though not frequently, accompanied by fresh exanthem. The same occurred in relapses.

Convalescence is very slow, and general weakness especially ontinues for some time, often from a fortnight to three weeks. he prognosis in the great majority of cases is good. Severe omplications occur seldom. The incubation period in this pidemic appeared to be usually of about forty-eight hours' ura'ion; the shortest incubation period is twenty-four hours, he longest four to five days.

The rash of dengue fever is characteristic and polymorphous to high degree, and begins with a fall of temperature about the ourth day. It occurred in at least half of the cases. It fre-uently extends over the whole body, and when not universal ie chief seat of it is the angle of the jaws, the forehead, the pper part of the breast, and the upper extremities. It is usually particularly when it is limited—of short duration. Sometimes disappeared after several hours, in the majority of cases after vo to four days; but sometimes it lasted a fortnight, and under ie influence of rubbing or excitement or heat was apt to relapse i all its previous intensity. It is associated with considerable ching and burning. It is mainly papular, but may resemble rticaria. Sometimes it is exceedingly like the rash of measles, ; other times like that of scarlatina. If an epidemic of scarlatina prevalent at the time the diagnosis is somewhat difficult. Most equently it is found in the form of small pale red papules, hich, however, may vary in degree to a dark brown colour and ie papules may be of a large size. In one case the eruption sembled closely a papular syphilide, and in another between ie pale papular rash were observed small petechiæ of a dark red lour. Several times von Dühring observed large wheals between e small papules.

When the rash lasts from two to three days and is universal, e redness and swelling and hyperæsthesia of the feet and hands, rticularly of the soles and palms, are striking. In the soles d palms the rash lasts longer and is specially troublesome. ter four or five days there is desquamation, which lasts four to e days longer, but may be prolonged for a fortnight.

THE PRICE OF QUININE.

HE February number of the *Kew Bulletin*, published under the thority of the director of Kew Gardens, contains an article on e manufacture of quinine in India, with reference to the recent port of the Lieutenant-Governor of Bengal on the "Government nchona Plantation and Factory in Bengal." Attention is drawn the article to the extraordinary low figure which during last ar ruled the price of this at one time costly alkaloid. In times of war, and when in great demand, it has commanded prices more than 12 times that at which it was often sold during the year 1889. In years gone by, before the cultivation of the cinchona was commenced in Java, India, and Ceylon, some fear was felt that, as its native forests in South America were becoming exhaustd, its extinction might be imminent. This would have been nothing short of a public calamity, But owing to its successful cultivation in the Dutch East Indian possessions and our own, cinchona bark, a short time ago, became a veritable drug in the market. The report before us attributes the exceedingly low price of cinchona bark, with quinine and its other alkaloids to the immense exportation from Ceylon. This was probably the main cause, but others have no doubt been contributory. Formerly the planters made a run on coffee, but this, on account of a disease which attacked the coffee tree, failed them, and cinchona was substituted for coffee and tea. Many planters were not so fortunate as the Dutch in Java in obtaining suitable varieties of cinchona for growth. It was also subject to attacks of disease and depreciation in the quality of its bark. It was therefore in many districts condemned, and the Ceylon growers turned their attention with such energy to tea planting that they cut down their cinchona trees to make way for tea bushes. The former were stripped of their bark, and this for some time has been forced on the London market for what it would fetch. During the season 1885-86, 15,000,000 lbs. arrived here from Ceylon, but this large importation has been gradually reduced, until last year, 1888-89, only 10,800,000 lbs. came from this source. The report further states that as planters will not go on planting cinchona trees to sell their produce at a loss the price of cinchona products must rise. Owing therefore to a more limited supply and lately an increased consumption during the influenza epidemic, this had to some extent, we understand, taken place, and quinine advanced quite 30 per cent. in value; but recently it has somewhat receded in price.

Another portion of the report refers to the fusel oil process of manufacturing quinine at Mungpoo, originated by Mr. C. H. Wood, late quinologist to the Bengal Government. This is practically the test process of the present *British Pharmacopœia* for cinchona bark, with the substitution of a mixture of fusel oil and kerosene or paraffin oil, for the fusel oil and benzol mixture there recommended. Kerosene being largely used in India for illuminating purposes, it is readily obtained for working the process. As yet only calisaya bark is worked in this manner; this contains a large amount of quinine and little cinchonidine, consequently it yields pure quinine sulphate without much difficulty. Succirubra bark can as readily be worked by this as any other process, and yields the mixed alkaloidal product known as "cinchona febrifuge." It is claimed that now the process works without a hitch the bark is entirely exhausted of its alkaloid, the quinine produced is professionally reported to be as pure in quality and as satisfactory in appearance as quinine of the best European brands, that as the whole process of extraction can be performed at common temperatures, and the appliances all of a simple character, it is well suited for plantations, and that a pure "quinine can be produced on the plantations at a cost not exceeding the unprecedentedly low market price of the valuable medicine." We are not prepared to accept this last statement, as we understand that, viewed commercially, the factory was worked with very unsatisfactory results when compared with the price at which quinine could be procured in Europe at the time. The keen competition in Europe keeps the manufacturers' prices down to the lowest margin of profit, and the heavy freight and carriage of acids and chemicals to India required for its manufacture there must be put as a set-off against the cost of importing the bark to Europe, where, no doubt, more skilled processes for working it can be adopted. There is besides a great advantage in having the alkaloids isolated and separated. Something definite can then be expected from them therapeutically, which is not the case when a substance like the "cinchona febrifuge" is administered.

Notwithstanding the unprecedentedly low price and immense export of quinine during the last year, we doubt whether in London there really was an increased consumption of it. We rather think that in the London hospitals there was not as much consumed as when a few years ago it was five times dearer. The practice of using the other cinchona alkaloids for the sake of economy still largely obtains.

BEQUEST.—Mr. John Shapland, of Cradley, Herefordshire, has under his will bequeathed £20 a year for twenty years to the Worcester Infirmary.

NOTES
ON
SOME GERMAN UNIVERSITIES.

By WALTER K. SIBLEY, M.B., B.C.Camb.,

II.—THE UNIVERSITY OF BERLIN.

(Continued.)

Koch's Bacteriological Course.—Non-Pathogenic Organisms.—Pathogenic Organisms.—Anthrax; Tuberculosis.—Disinfection.—Typhoid.

The practical bacteriological course for medical men is given about four times a year, and each course lasts a month, the work being daily from 9 to 5. The courses, which are under the direction of the chief assistants, are attended by medical men from all over the world, about twenty taking part in each course; at a recent one there were nineteen attending, seven nations being represented. Upon commencing in the morning the assistant gives a short lecture for twenty minutes or half an hour on the work for the day, describing the methods of procedure, together with important points in the life-history, methods of cultivation, and staining of one or more micro-organisms. He also gives demonstrations on the apparatus required to be used, after which each one works through the proposed methods individually, the demonstrators remaining nearly the whole day to give assistance to those in need of it.

It is quite out of place in a short paper like this to describe or even mention all the micro-organisms examined or preparations put up, therefore a few points of particular interest only will be mentioned. The series may be started with the non-pathogenic organisms, such as examples from the moulds; yeasts, the white, black, and rose; from the cocci, the prodigiosus; the yellow and orange sarcinæ; and from the bacilli, the subtilis or hay bacillus. Having prepared potatoes and gelatine in the recognised ways, cultures were made of all. Passing from these to the micro-organisms of milk—namely, the lactic acid bacillus, oïdium lactis, and the bacilli of blue milk, we were then shown the organisms in the atmosphere, and the methods of isolating and cultivating them; next those found in the dust of floors and roads, noticing especially the root-forming bacillus, at the same time learning how to make a pure culture of one form from a mixture containing many species; passing then to the bacilli of water, especially noticing the fluorescens, and the red and violet bacilli. Having studied for a few days the ordinary forms of micro-organisms, and learnt the various methods of cultivating them in gelatine placed in test tubes, either as streak or stab cultures, and also rolled round the sides of test tubes; also in gelatine on large square glass plates and on microscopic slides, and again in shallow pots or jars; in broth as a drop hanging to the under side of a cover slip placed on an excavated slide, the edges of concavity being surrounded with vaseline, and so rendered airtight; also on potato and bread; and the various methods for preparing and staining all of them for microscopical examination, we passed at once to the parasitic organisms, the greater number of which accompany specific diseases. The first of these we examined was anthrax; we proved how this bacillus grows at the ordinary room temperature, but never in acid mediums. It does not spore in the animal body, nor under a temperature of 16° C. or over 37° C.; it does not spore in gelatine, but on potato, or when grown in broth. When grown on gelatine it liquefies that substance very rapidly; growing artificially, it forms long interlacing filaments. When inoculated, it causes splenic fever and rapid death in guinea-pigs, mice, and man; so also in amphibia, as frogs, when these are kept warm. Finally it was demonstrated that animals fed on the bacilli without spores received no harm.

We then learnt the various and more complicated methods of staining, as those of Gram, Weigert, and Ziehl, and studied the bacillus of tuberculosis discovered by Koch in 1882, being shown how much greater propensity this bacillus has of retaining the colouring matter of the aniline dyes than any other known bacillus and so retaining the colour after subjection to dilute acids, etc. We also found out how difficult this bacillus is to cultivate, as it grows only on agar-agar when glycerine is added and on serum, and only between the temperatures of 30° and 42° C., and then very slowly. The characteristic point about the method of growth of tubercle on agar-agar is that it grows and extends over the fluid at the bottom of the test tube and then up the glass on the opposite side, thus differing from any other known bacillus culture; spore formation of this bacillus has never been actually demonstrated. Leaving these we worked through the bacilli of septicæmia in mice, which in appearance much resemble those of tuberculosis, being found both in the connective tissues and in the white blood corpuscles, and those of chicken cholera, common to all domesticated birds, also mice and rabbits, guinea-pigs being apparently insusceptible.

After these organisms we studied that which to the mind of a medical man is now of great interest and importance, namely, the various processes for disinfection, both thermal and chemical, proving by experiment that many bacilli (anthrax and subtilis) are not destroyed by being raised to a dry heat of 110° C.. or by being frozen, but that they are readily destroyed by being subjected to a moist heat. Thus a damp chamber of 100° C. is much more potent than a dry one of 150° C. in its destructive powers, and normal steam at 100° acts much better than steam under pressure at 130°. For chemical means carbolic acid 5 per cent. (1 in 20) and sublimate 0·1 per cent. (1 in 1,000) were used.

Again, it was shown that most organisms die when boiled in water for a few seconds, for instance, typhoid bacilli, and that heating in a moist chamber is a much more powerful destructive agent for these than a dry heat. Filtration, except through Pasteur's filter, does not prevent germs from passing through, and is therefore inefficacious. These various methods were tried, the bacillus and spores of B. subtilis being very serviceable; thus threads, dried after being soaked in a broth solution containing the spores, were subjected to moist and dry heat for a varying number of seconds and minutes and then placed in gelatine, and observations made as to which afterwards grew and which did not; and in the same way they were tested with chemical agents.

In staining for the spores of some bacilli (anthrax and subtilis) we appreciated how much more slower these are in giving up the colouring matter than the bacilli themselves, and also how much harder to stain. Thus the preparation on a cover glass or otherwise must be left in the colouring medium (carbolic acid fuchsin being especially serviceable) for an hour or two, and at the same time subjected to heat. After this procedure the colour is readily removed from the bacilli by alcohol, but remains in the spores; the specimen can then be doubly stained by methyl blue, and then we have the bacilli blue and the spores red. Attention was next given to the bacilli of malignant œdema, which are found by injecting a small quantity of garden soil into an animal, the beast rapidly succumbing with general œdema of its tissues, especially in the neighbourhood of the wound; the bacilli are not, however, found in the blood, nor can they be grown in the presence of oxygen, but when all oxygen is excluded they grow in gelatine, producing liquefaction of that substance with evolution of very foul bubbles of gas. After noticing briefly the bacilli of septicæmia of rabbits, which is very similar to chicken cholera, we investigated some of the organisms in connection with certain diseases of the air passages, as micrococcus tetragenes, which is found in diseased lungs and in many healthy people's mouths, and for man is not pathogenic, being often present on the walls of cavities in phthisis; it is, however, very fatal to mice, guinea-pigs, and rabbits, and is found in their blood. They occur like the sarcinæ in fours, but here only in one plane, and each group is encapsuled; they grow at the room temperature on the potato. When artificially cultivated the capsule disappears, so that the capsule is only found in specimens taken from an animal's body. Then we studied the common micrococci of pus from wounds, staphyloccus aureus and albus, streptococcus erysipelatis, and finally the bacilli of green pus.

Staphylococcus occurs in groups, growing at the room temperature on gelatine, agar-agar, serum, or potato. After inoculation into an animal, it is found sparingly in the blood vessels, abundantly in the kidney; if the endothelium from a valve of the heart be removed and the animal then inoculated with a pure culture ulcerative endocarditis is produced. The spores of this coccus, when dried on thread, continue capable of growth after two years. This coccus is, moreover, found everywhere, in the mouth, vagina and uterus in healthy subjects, and in all abscesses; it liquefies gelatine.

Streptococcus, occurring in threads is always present in pus, grows very slowly at the room temperature, and does not liquef

elatine. In pus it lies free and not in the corpuscles. Streptoccus erysipelatis is practically indistinguishable from the bove, and is found principally in the margin of a patch of inflamation lying in the lymph vessels, which are often full of these icrococci.

The bacillus of green pus is not pathogenic, is active, and grows ıpidly in gelatine, which it liquefies. In pus usually all three of ese organisms are found, but sometimes only one is present; which the most important is not yet known. In pus about the peritoeum and in internal parts, probably streptococcus plays the most nportant part. Leaving these, we passed on to study the bacillus glanders, pathogenic in horses, asses, man, guinea-pigs, and field ice (not in other mice), producing generally catarrh of the ucous membranes and nodules in the lungs very like tubercle; ıe bacilli also closely resemble tubercle bacilli. It does not grow the room temperature, but on agar-agar or potato in the incuıtor. In guinea-pigs, three to five weeks after inoculation, odules, especially in the spleen and liver, are found, together ith a general enlargement of the glands. The bacilli are only ound in certain stages, occurring in the tissues in groups; after out eight generations of artificial culture, the virulence disppears.

The moulds are mostly non-pathogenic; when, however, me are grown artificially in an incubator, and the spores parated and injected into the blood vessels of a rabbit, it rapidly ies, and small patches of the fungus are found in the liver and idneys. These fungi, when removed, will not grow at the ordiıry room temperature, but rapidly in the incubator, and especially ell on moistened bread which has been sterilised. The pathoenic moulds are aspergillus flavus and fumigatus, and mucor rymbifer and rhizopodiformis.

With regard to the intestinal bacilli, that of Emmerich may be ken first; in appearance it is very like that of typhoid, but is ot active, and is found in the fæces of some cholera cases. It ows on gelatine, producing a brownish yellow colour around, ıt forms much thicker processes than those of typhoid; it grows so in potato. When inoculated into an animal in large quantities ıd deep into the tissues, the beast dies, and the bacilli are ound in the organs after death.

Then the cholera or comma bacilli were studied. These are readily estroyed by drying; thus if a drop of broth containing them on a ver glass be dried in the air, they are found all dead in about three ours. Two other bacilli, namely those of Finkler and Deneke, e very similar to the cholera bacilli; these also are very tive, and slowly liquefy gelatine when grown in it, the latine appearing filled with holes or gas bubbles. The bacilli typhoid fever are found abundantly in the spleen, lymphatic ands, and intestines of patients dying from the disease. These, ke Emmerich's bacillus, are very active, and no spore formaon has been demonstrated. Growing on gelatine they do not quefy it, and have a very characteristic appearance when grown potato, the surface of the latter appearing covered with a oist pale-brown down. If injected into the veins of animals, some cases the same appearances are found in the intestine ıd spleen.

Lastly, we studied the bacilli of pneumonia, commencing with at of Friedländer, which is small and very like tetragenes, possing a capsule, but this only when grown in the animal body, ıd not in cultures. It grows at the room and blood temperatures, agar-agar, potato, or gelatine, forming white colonies. In older ltures it produces a brown coloration of the gelatine, especiy when sugar is added, and, later still, the formation of gas bbles; spores are not found. This bacillus is not always found pneumonia, and sometimes it is detected in healthy lungs. Then ere is the bacillus of Fränkel, which microscopically resembles the rmer, but grows only at the blood temperature, and only for a w days in artificial soil, and then dies. Spores are often found ich, if injected subcutaneously into an animal, cause death in o days. This bacillus is, however, not always to be found in eumonia, and often both this and Friedländer's are associated in ıt disease. Fränkel's occurs also in healthy mouths, but not in ery individual. Thus the saliva of some people, if injected into rabbit, causes death, and Fränkel's bacillus abounds on *post-rtem* examination. A bacillus we must not forget to mention its interesting physical properties is B. phosphorescens, which urrs in decomposing meat and fish, also in sea water, the osphorescence of which it causes; in appearance it is something e the hay bacillus, but is very active. It grows on gelatine, ich it liquefies when the weather is warm.

INTERNATIONAL MEDICAL CONGRESS, 1890.

THE following additional programmes of the work of Sections have been published:—

SECTION OF DERMATOLOGY AND SYPHILOGRAPHY.

(1) Pathogenesis of Pigmentations and Discolorations of the Skin; (2) Diagnosis, Prognosis, and Treatment of Chronic Gonorrhœa in the Male and in the Female; (3) Treatment of Syphilis: (A) Results (*a*) of excision, (*b*) of general preventive treatment; (B) Beginning, Duration (chronic, intermittent, or temporary?) and best method of Treating Constitutional Syphilis; (4) Treatment of Inflammatory Diseases of the Skin; (5) The Special Indications of the Different Modes of Applying Mercury in the Treatment of Syphilis; (6) On What Etiological Factors does the Outbreak of Tertiary Forms of Syphilis Depend? (7) The *Rôle* of Diathesis, Nervous Causes of Disease, and Pathogenic Parasites in the group of diseases designated as Eczema; (8) The Nature of Medicinal Eruptions; (9) Lupus Erythematodes, its Nature and Treatment. Communications should be addressed to Dr. Lassar, 19, Karlstrasse, Berlin, N.W.

SECTION OF OTOLOGY.

A discussion on the relations of Micro-organisms to Diseases of the Middle Ear and their Complications, will be introduced by Drs. Moos and Zaufal; one on Cholesteatoma of the Ear, by Drs. Kuhn and Bezold; one on the following question: Can opening the mastoid process from the external meatus be considered as equal to the more usual method? by Dr. Hessler. 4. One on the After-treatment of the Trephined Mastoid, by Dr. Kretschmann; one on the Indications of Excision of the Malleus and Incus, by Dr. Stacke; one on the Pathological Anatomy of the Labyrinth, by Dr. Steinbrügge; one on the Condition of the Organ of Hearing in Diseases of the Central Nervous System, especially in Tabes Dorsalis, by Dr. Morpurgo; one on Otitis Interna as a Sequel of Hereditary Syphilis, by Dr. Wagenhäuser; one on Statistics of the most important Ear Diseases, by Dr. Bürkner and Jacobson; one on Testing the Hearing and Notation of the Auditory Capacity, by Drs. Magnus and Schwabach; one on the Diagnosis, Prognosis and Treatment of Progressive Deafness in Chronic Non-suppurative Otitis Media, by Drs. McBride and Gradenigo. Communications should be addressed to Professor Lucæ, 9, Lötzowplatz, Berlin, W.

SECTION OF FORENSIC MEDICINE.

1. Are gonococci so thoroughly established that the finding of them in the vaginal secretion of a child can with certainty be referred to gonorrhœa in a supposed ravisher? 2. On impotence in the male, and the criteria in which it can be established in court. 3. Can Air drawn into the Lungs by Respiration disappear from them in Dead Bodies, so that the Lungs of Newborn Children may present the Signs found in those who have never breathed? 4. Can the Changes produced in the Anus by Passive Pederasty disappear after discontinuance of the Pederastic Acts, and in how long a time after? The discussion on this subject will be introduced by Professor Liman. 5. Can the Lungs of a Newborn Child that has never breathed present, owing to Schultze's Vibrations, the signs of having done so? 6. When Sepsis is found in a person who has secretly miscarried, can a strong suspicion or certainty be expressed that the Abortion was deliberately induced, or does Sepsis also occur after Spontaneous Abortion? 7. Is there an independent "Moral Insanity," or is that Complex of Symptoms one of the Manifestations of other forms of Mental Disease? 8. Is Mummification of a Corpse confirmatory evidence of Arsenic Poisoning, or is it quite without significance in that respect? 9. The significance of Proofs of Life. 10. On the Influence of the Recent Development of the Doctrine of Infection on Medico-legal Examinations in cases of Death occurring after Bodily Injuries? 11. The Significance of Ptomaines in Forensic Medicine. 12. What position must the Medical Jurist take up as regards the question of Auto-infection in Puerperæ? 13. Observations of Medical Jurists on the recognition of the Simulation of Neuroses, especially of Traumatic Origin. 14. Medico-legal Observations on the Occurrence and Significance of Rigor Mortis. Communications should be addressed to Professor Liman, 46A, Königgrätzerstrasse, Berlin, S.W.

SECTION OF MEDICAL GEOGRAPHY AND CLIMATOLOGY (HISTORY AND STATISTICS).

1. Influence of Tropical Climates on Immigrants from Higher Latitudes, the resistance of Immigrants to Diseases prevalent

in the Tropics, and the Possibility of the Acclimatisation of Europeans and North Americans in the Tropics. 2. Influence of Climatic, Telluric, and Social Conditions on the Occurrence and Course of Pulmonary Tuberculosis, with special reference to the Disease in the Torrid Zone. 3. Endemic and Epidemic Spread of Yellow Fever, and the Influence of Climate, Soil, and Trade thereon. 4. Beri-beri from the standpoint of Etiology and Treatment. 5. Leprosy, with special reference to its Transmission by Heredity and Contagion. 6. Malarial Diseases, with special reference to the Geographical Distribution of the Various Forms thereof: Are all forms due to one and the same or to different poisons? Communications should be addressed to Professor A. Hirsch, 113, Potsdamerstrasse, Berlin, W.

SECTION OF DISEASES OF THE TEETH.

1. Bromide of Ethyl as an Anæsthetic in Dental Practice. 2. Causation, Course, and Treatment of Pyorrhœa Alveolaris. 3. The Part Played by Micro-organisms in Caries of the Teeth. 4. Crown and Bridge Work. 5. The Bonwill Method of Articulation in Artificial Dentures. Communications should be addressed to Professor Busch, 8, Alexanderufer, Berlin, N.W.

THE INFECTIOUS DISEASES (PREVENTION) BILL.

DAIRIES AND LAUNDRIES.

THIS useful measure, having been considered in detail by the House of Commons in Committee, has passed safely through its most critical parliamentary stage, and there is therefore now a good prospect of its becoming law during the present session. Several useful amendments were introduced into the Bill in Committee. The clause which empowers a medical officer of health to inspect a dairy beyond his district, when he has reasonable cause to believe that any person in the district is suffering from infectious disease attributable to milk supplied from such dairy, or that the consumption of milk from the dairy is likely to cause infectious disease to persons residing in the district, has been extended to include inspection not only of the dairy, but also of "the animals therein." In view of the growth of our knowledge respecting the transmission of bovine and other diseases to the human subject through the medium of milk, this power of inspecting cattle is important. It is essential that health officers should have power to examine not only the sanitary circumstances in which the cows supplying milk live, but also the health of the cows themselves.

A new clause has been introduced giving power to a local authority who have adopted the Act, or any portion of it, to rescind their resolution. As the Act is not to be applicable throughout the country, but (except in the metropolis, where it is to come into force at once) is to be adopted at the option of each local authority, there is, perhaps, some force in the contention that local authorities should be able to rescind their adoption of the Act. But it is to be hoped that local authorities will not play "fast and loose" with the question, by adopting the Act hurriedly on the occurrence of an epidemic, and discarding it as soon as the danger has passed. Panic should always be avoided. The Act, if it is to be of full benefit, should, if adopted at all, become part of the permanent law of the district, and its powers should be immediately available to meet emergencies as they arise.

There was one suggested amendment, the rejection of which by the Committee we do not deplore, and that is the clause proposed by Mr. H. H. Fowler to extend the provisions of Section 132 of of the Public Health Act, 1875, as to recovery of the cost of maintenance of non-pauper patients in a local authority's infectious hospital. It is most important that no obstacle should be placed in the way of making full use of hospitals for infectious diseases. The public should be led to regard such institutions as part of the provision made out of the rates for their general protection against disease, and they should not be discouraged from availing themselves of the advantages of the sanitary hospitals by the fear of consequent individual expense. The experience of corporations that have tried the plan of demanding repayment of expenses in all cases is that it has prevented the very persons who most need isolation when suffering from an infectious fever from resorting to the hospital.

As Dr. Thorne has remarked in his official report on the Use and Influence of Hospitals for Infectious Diseases, "the plan which has come to be adopted in by far the majority of instances is to make no charge to the poorer residents in the district for which the hospital is provided, but to seek repayment, and, if necessary, to enforce it, under Section 132 of the Public Health Act, when it is evident that the measures of isolation have been resorted to, not for the protection of the public, but for the benefit, whether pecuniary or otherwise, of the person sending the patient in."

It is to be hoped that when the Act becomes law its provisions will be largely adopted by local sanitary authorities, who will thereby acquire some very valuable powers for protecting their district against epidemic disease. Mr. Lees Knowles has performed a useful public service by bringing the Bill before Parliament.

LIST OF AUTHORS AND OTHERS WHO HAVE PRESENTED BOOKS TO THE LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

EIGHTH LIST.

Presented by FELIX ALCAN, Paris.

ICARD (S.) La Femme pendant la période menstruelle. 1890.

Presented by DAVID BRODIE, Esq., M.D., Wandsworth.

THE EDINBURGH MEDICAL JOURNAL. 1866-1879.

Presented by HORACE DOBELL, Esq., M.D., London.

ANNUAL REPORTS ON DISEASES OF THE CHEST. 2 vols. 1875-1877.
DEMONSTRATIONS OF DISEASES IN THE CHEST. 1858.
ON DIET AND REGIMEN IN SICKNESS AND HEALTH. 7th ed. 1882.
LECTURES ON THE GERMS AND VESTIGES OF DISEASE. 1861.
LOSS OF WEIGHT, BLOOD SPITTING, AND LUNG DISEASE. 2nd ed. 1880.
ON WINTER COUGH. 3rd ed. 1875.

Presented by C. H. D. DRURY, Esq., M.D., Darlington.

THE LANCET. 13 vols. 1867-1873. (To complete series.)

Presented by GEORGE HERSCHELL, Esq., M.D.

HEALTH TROUBLES OF CITY LIFE. 2nd edition. 1890.

Presented by Surgeon-Major INCE, M.D., Swanley, Kent.

INTERNATIONAL MEDICAL CONGRESS, TRANSACTIONS OF THE NINTH SESSION. 5 vols. Washington. 1887.

Presented by Rev. D. Z. MASSON, M.A., M.D., Edinburgh.

DUPUYTREN (Baron). L'Opération de la Pierre. 1836.
EDINBURGH MEDICAL JOURNAL. 5 vols. (To complete series.)
LIZARS'S ANATOMICAL PLATES (A collection of.)
MONROE (A.). Description of the Bursæ Mucosæ of the Human Body. 1788.
MAINGAULT (M.) Traité des Diverses Amputations. 1822.
THOMSON (A. Todd). (Some Plates on Diseases of the Skin.) 1840.

Presented by H. G. MURRAY, Esq., L.K.Q.C.P., Prestwich.

THE LANCET. 6 vols. (To complete series.) 1876-1878.

Presented by Dr. MEINERT, Dresden.

INQUIRY INTO THE INFLUENCE OF THE TEMPERATURE OF THE AIR ON THE DEATH OF INFANTS FROM DIARRHŒAL DISEASES. 1890.

Presented by OSBORN, Esq., London.

OSBORN (The late Dr.). Fothergillian Essay on Bronchitis. MSS.

Presented by A. RANSOME, Esq., M.D., Manchester.

ON STETHOMETRY; ALSO AN APPENDIX ON THE CHEMICAL AND MICROSCOPICAL EXAMINATION OF RESPIRED AIR. 1876.
ON THE RELATION OF THE CHEST MOVEMENTS TO PROGNOSIS IN LUNG DISEASE. 1882.

Presented by JUKES DE STYRAP, Esq., M.K.Q.C.P., Shrewsbury.

A CODE OF MEDICAL ETHICS (Italian edition). 1889.
THE YOUNG PRACTITIONER, HIS CODE AND TARIFF. 1890.

Presented by FREDERICK TAYLOR, Esq.

THE PRACTICE OF MEDICINE. 1890.

Presented by H. TERRY, Esq., M.R.C.S., Northampton.

BRAITHWAITE'S RETROSPECT OF MEDICINE. 4 vols. (to complete series).

Presented by THOMAS WAKEFIELD, Esq., M.A., M.R.C.S. London.

ABERNETHY (J.). The Surgical Works of. 3 vols. 1819.
———— Observations on Tumours. 1811.
BELL (Charles). A System of Operative Surgery. 2 vols. 1809.
———— A Treatise on Diseases of the Urethra. 1820.
BELL (John). A Discourse on the Nature and Cure of Wounds. 1800.
———— The Principles of Surgery. 3 vols. 1815.
BUDD (George). The Diseases of the Liver. 2nd edition. 1852.
CHAPMAN (H. T.). The treatment of Obstinate Ulcers. 2nd edition. 1853.
COOPER (Sir Astley). A Treatise on Dislocations and Fractures. 7th edition. 1831.
COOPER (Samuel). First Lines of the Theory and Practice of Surgery. 7th edition. 1840.
DAVIS (D. D.). The Principles and Practice of Obstetric Medicine. 2 vols. 1836.
DAVIS (J. H.). Difficult Parturition. 1838.
HALL (Marshall). Principles of Diagnosis. 2nd edition. 1834.
HOME (Sir E.). A Short Tract on the Formation of Tumours. 1830.
JENNER (Edward). Variolæ Vaccinæ. 3rd edition. 1801.
LAENNEC (R. T. H.). A Treatise on the Diseases of the Chest, translated by John Forbes. 1829.
LISTON (R.). Practical Surgery. 4th edition. 1846.
MERCER (J. C.). Translation of Larrey's Surgical Memoirs. 1832.
PAUL (A.). Diseases of the Lower Bowel. 6th edition. 1853.
PROUT (Wm.). On Stomach and Renal Diseases. 5th edition. 1848.

RDAMORE (C.). The Nature and Cure of Gout and Rheumatism. 3rd edition. 1819.
ALSHE (H. W.). The Nature and Treatment of Cancer. 1846.

BOOKS NEEDED TO COMPLETE SERIES.

HE Honorary Librarian will be glad to receive from any member the Association copies of the following volumes needed to complete series in the Library.

ERICAN GYNÆCOLOGICAL SOCIETY TRANSACTIONS. Vol. 10.
ERICAN SURGICAL ASSOCIATION TRANSACTIONS. Vols. 4 and 7.
AITHWAITE'S RETROSPECT OF MEDICINE. Vols. 6 and 98 inclusive.
ITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW. October 1853 to October 1855 inclusive.
BLIN JOURNAL OF THE MEDICAL SCIENCES. All before 1879; 1st vol. for 1881; all since June, 1884.
INBURGH MEDICAL JOURNAL. Vol. 1; vol. 7 to 11, 1861; vol. 25 and 26; vol. 30, 1884, and upwards.
INBURGH OBSTETRICAL SOCIETY TRANSACTIONS. Vols. 1, 2, 3, 5, 7, 12, 14.
Y'S HOSPITAL REPORTS. Third Series. Vols. 2, 4, 5, 8, 11, 12.
DIAN MEDICAL JOURNAL. Nos. 2, 3, 7, 8, 9, 11, 21, 22, 35, 50, and since May, 1889.
NCET (The). 1879 to June, 1888, inclusive.
NDON MEDICAL RECORD. All since 1885.
DICAL SOCIETY OF LONDON (Proceedings). Vols. 5, 6, 7, 9, 10, 11.
DICAL TIMES AND GAZETTE. Vols. 1 to 20 before 1850.
DICO-CHIRURGICAL TRANSACTIONS. Vols. 1 to 30; vols. 71 and 72.
DDLESEX HOSPITAL REPORTS. Before and since 1886.
W SYDENHAM SOCIETY PUBLICATIONS. Vols. 1, 8, 9, 14, 17, 24, 27, 29, 34, 39, 40, 44, 48, 56, 60, 64, 69, 70, 77, 81, 83, 85, 87, 88, 89, 90, 91, 93 to 99, 101 to 104, 106, 107, 108, 110, 118, 120 to 125, 127 and 128.
STETRICAL TRANSACTIONS. Vols. 30, 31.
HTHALMOLOGICAL TRANSACTIONS. Vols. 3, 6, 7.
THOLOGICAL TRANSACTIONS Vols. 1 to 20.
ILADELPHIA COLLEGE OF PHYSICIANS TRANSACTIONS. Vols. 6, 7, and 10.
NKING (Dr.). Half-Yearly Abstract of the Medical Sciences since June, 1851.
YAL LONDON OPHTHALMIC HOSPITAL REPORTS. Any volumes.
. BARTHOLOMEW'S HOSPITAL REPORTS. Vol. 8.
. GEORGE'S HOSPITAL REPORTS. Vols. 1 to 5; vol. 10 and upwards.
. THOMAS'S HOSPITAL REPORTS. Vols. for 1872, 1876, 1888.
IVERSITY HOSPITAL REPORTS. All before 1885.
ARBOOK OF PHARMACY. 1888.
ARBOOK OF TREATMENT. 1884.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

EMBERS are reminded that the Library and Writing ooms of the Association are now fitted up for the accomodation of the Members, in commodious apartments, at the ices of the Association, 429, Strand. The rooms are open om 10 A.M. to 5 P.M. Members can have their letters dressed to them at the office.

COUNCIL.
NOTICE OF MEETING.

MEETING of the Council will be held in the Council Room of the sociation, at No. 429, Strand (corner of Agar Street), London, on dnesday, the 16th day of April next, at 2 o'clock in the ernoon.

FRANCIS FOWKE, *General Secretary.*

March 12th, 1890.

NOTICE OF QUARTERLY MEETINGS FOR 1890.
ELECTION OF MEMBERS.

ETINGS of the Council will be held on April 16th, July 16th, d October 15th, 1890. Candidates for election by the Council the Association must send in their forms of application the General Secretary not later than twenty-one days before h meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-w of the Association, who shall be recommended as eligible by y three members, may be elected a member by the Council or by y recognised Branch Council.

Candidates seeking election by a Branch Council should apply the Secretary of the Branch. No member can be elected by a nch Council unless his name has been inserted in the circular amoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.—A meeting of this district will be held at the Dispensary, Loughborough, on Wednesday, April 16th, at 3.30 P.M. The following communications have been promised: Mr. C. J. Bond: The Treatment of Enlarged Bursæ and Ganglia by Excision. Dr. H. Handford: Some Forms of Cardiac Dilation. Dr. F. W. Bennett: Recent Experiments on Nasal Respiration. Dr. F. M. Pope: Resorcin in the Treatment of Gastric Ulcer. Dr. J. Headley Neale: A case of Malignant Disease: Enormous and Rapid Enlargement of the Liver. Mr. R. Paul: A case of Compound Comminuted Fracture of the Leg. Dinner at the King's Head Hotel at 6 P.M.; tickets 5s. each, exclusive of wine. All members of the profession resident in the district will be welcomed. Notice of specimens or cases to be exhibited to be sent, before April 12th, to the Honorary Secretary, FRANK M. POPE, M.B., Leicester.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 17th, at 5 P.M. Dinner at 5.30. The subject, as settled by the Council, for discussion after dinner is the Influenza Epidemic. Members having any case or communication to bring before the meeting are requested to send the title thereof as soon as possible to W. M. KELLY, Honorary Secretary, Taunton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this Branch will be held at Croydon on Thursday, May 8th.—P. T. DUNCAN, M.D., Honorary Secretary, Croydon.

SOUTH WALES AND MONMOUTH BRANCH.—The next meeting will be held at Neath in the third week in April. Members wishing to read papers, etc., are requested to send titles to either of the undersigned by April 7th.—ALFRED SHEEN, M.D., Cardiff, and D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

SHROPSHIRE AND MID-WALES BRANCH.—The half-yearly meeting will be held at the Salop Infirmary, on Tuesday, April 15th, at 3 P.M. Papers have been promised by Messrs. Stephen Paget (on Cancer of the Breast), Webb, and Dr. Charnley. Members having any communications to make or papers to read will kindly inform the Honorary Secretary as soon as possible.—J. A. BRATTON, Honorary Secretary, Shrewsbury.

SOUTHERN BRANCH.—The next meeting of the South Wilts District will be held at the Bath Arms, Warminster, on Wednesday, April 9th, at 3.45. Papers will be read by Mr. Manning, Mr. Hinton, and Mr. Willcox. Dinner at 5.45; tickets (not to include wine or ale) 5s.; gentlemen intending to be present to give notice to H. G. MANNING, Honorary Secretary, Laverstock, Salisbury.

NORTH WALES BRANCH.—The intermediate meeting will be held at Rhyl, on Tuesday, April 15th, 1890. Members having any papers to read are requested to notify the Honorary Secretary before April 5th.—W. JONES MORRIS, Honorary Secretary, Portmadoc.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Town Hall, Walthamstow, on Thursday, April 17th, at 8.45 P.M. A paper will be read by Dr. Angel Money on Nocturnal Restlessness in Children. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston, N.E.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, April 25th, at 3.15 P.M., in the Radcliffe Infirmary, Oxford. Gentlemen are requested to send to the Honorary Secretary, W. LEWIS MORGAN, 42, Broad Street, Oxford, notice of any papers to be read, or cases shown, on or before April 14th.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital on Thursday, April 17th, at 4 P.M. Gentlemen who wish to read papers, show patients, exhibit specimens, etc., will kindly communicate as early as convenient with the Honorary Secretary, JOHN A. BYERS, M.D., Lower Crescent, Belfast.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE fifth meeting of the session was held at the Hackney Town Hall on Thursday, March 20th. The chair was taken by Dr. ADAMS, Vice-President of the District.

Paper.—After the usual formal business, Dr. DE HAVILLAND HALL read a paper on the Causes and Treatment of Anthrax. A discussion followed, in which Drs. ADAMS, WISE, GREENWOOD, SHADWELL, and HUNT took part.

Votes of Thanks.—The usual votes of thanks brought the meeting to a close.

PRESENTATIONS.—Mr. J. J. Weaver, M.R.C.S., L.S.A., has been presented by the nurses of the Southport Infirmary with a handsome marble clock, on the occasion of his severing his connection, as house-surgeon, with the Infirmary.—Mr. W. G. Bower, L.R.C.P., M.R.C.S., has been the recipient of a cut glass claret jug, silver mounted and elegantly chased, from the ladies' branch of the St. John Ambulance Association at Leyland.

BRITISH MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 27, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Senior Professor of Medicine, Queen's College, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women, Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HENRY BROADBENT, M.D., Physician to St. Mary's Hospital, London.

The scientific business of the meeting will be conducted in twelve Sections, as follows, namely:

A.—MEDICINE AND THERAPEUTICS.

President: Sir DYCE DUCKWORTH, M.D.
Vice-Presidents: E. RICKARDS, M.B.; D. DRUMMOND, M.D.
Hon. Secretaries: ISAMBARD OWEN, M.D., 40, Curzon Street, Mayfair, W.; C. W. SUCKLING, M.D., 103, Newhall Street, Birmingham.

B.—SURGERY.

President: T. H. BARTLEET, F.R.C.S.
Vice-Presidents: BENNETT MAY, F.R.C.S.; J. G. SMITH, M.B.
Hon. Secretaries: F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingham; H. G. BARLING, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

C.—OBSTETRIC MEDICINE AND GYNÆCOLOGY.

President: T. SAVAGE, F.R.C.S.
Vice-Presidents: C. J. WRIGHT, M.R.C.S.: J. MURPHY, M.D.
Hon. Secretaries: J. K. KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, M.D., 192, Broad Street, Birmingham.

D.—PUBLIC MEDICINE.

President: A. HILL, M.D.
Vice-Presidents: J. B. WELCH, M.B.; A. S. UNDERHILL, M.D.
Hon. Secretaries: L. C. PARKES, M.D., 61, Cadogan Square, S.W. S. BARWISE, M.B., Clough View, Blackburn.

E.—PSYCHOLOGY.

President: F. NEEDHAM, M.D.
Vice-Presidents: S. H. AGAR, L.K.Q.C.P.; E. B. WHITCOMBE, M.R.C.S.
Hon. Secretaries: J. WIGLESWORTH, M.D., Rainhill, near Prescot; E. LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

F.—ANATOMY AND PHYSIOLOGY.

President: D. J. CUNNINGHAM, M.D.
Vice-Presidents: W. H. GASKELL, M.D., F.R.S.; B. C. A. WINDLE, M.D.
Hon. Secretaries: W. F. J. ALLEN, M.B., Mason College, Birmingham; W. P. HERRINGHAM, M.D., 13, Upper Wimpole Street, W.

G.—PATHOLOGY.

President: D. J. HAMILTON, M.B.
Vice-Presidents: C. A. MCMUNN, M.D.; G. SIMS WOODHEAD, M.D.
Hon. Secretaries: S. DELÉPINE, M.B., 6, Chapel Place, Cavendish Square, W.; G. F. CROOKE, M.D., Edmund Street, Birmingham.

H.—OPHTHALMOLOGY.

President: D. C. LLOYD OWEN, F.R.C.S.
Vice-Presidents: H. EALES, M.R.C.S.; J. B. STORY, M.B.
Hon. Secretaries: H. E. JULER, F.R.C.S., 77, Wimpole Street, W.; E. W. W. WHITE, M.B., 72, Newhall Street, Birmingham.

I.—DISEASES OF CHILDREN.

President: A. H. CARTER, M.D.
Vice-Presidents: W. THOMAS, M.B.; W. PYE, F.R.C.S.
Hon. Secretaries: H. HANDFORD, M.D., 14, Regent Street, Nottingham; A. FOXWELL, M.B., 47, Temple Row, Birmingham.

J.—LARYNGOLOGY AND RHINOLOGY.

President: J. ST. S. WILDERS, M.R.C.S.
Vice-Presidents: C. J. SYMONDS, F.R.C.S.; A. E. GARROD, M.D.
Hon. Secretaries: E. H. JACOB, M.D., 12, Park Street, Leeds; SCANES SPICER, M.D., 28, Welbeck Street, W.

K.—OTOLOGY.

President: C. WARDEN, M.D.
Vice-President: G. W. HILL, M.D.
Hon. Secretary: R. K. JOHNSTON, M.D., 22, Lower Baggot Street, Dublin.

L.—DERMATOLOGY.

President: JONATHAN HUTCHINSON, F.R.S., P.R.C.S.
Vice-Presidents: MALCOLM A. MORRIS, F.R.C.S.; H. RADCLIFFE CROCKER, M.D.
Hon. Secretaries: E. G. SMITH, F.R.C.S., 93, Bristol Road, Birmingham; T. COLCOTT FOX, M.B., 14, Harley Street, Cavendish Square, W.

Honorary Local Secretaries:
R. SAUNDBY, M.D., 83A, Edmund Street, Birmingham; JORDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham; A. HARVEY, M.B., 358, Wheeler Street, Lozells, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.
9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.
9.30 A.M.—Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. WALTER FOSTER, M.D., M.P.
9 P.M.—Reception by the Worshipful the Mayor of Birmingham in the Council House.

THURSDAY, JULY 31ST, 1890.
9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 1ST, 1890.
10.30 A.M. to 1 30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.
9 P.M.—Reception by the President of Mason College and Mrs. Lawson Tait.

SATURDAY, AUGUST 2ND, 1890.
Excursions.

SPECIAL CORRESPONDENCE.

VIENNA.

Salicylate of Sodium in Cholelithiasis and Pleurisy.

Professor Stiller, of Buda-Pesth, has used salicylate of sodium as a cholagogue for five years, and has found it better than any other drug in rapidity and certainty of effect. He gives the following illustrative case, which is one out of many: A man, aged 50, had suffered for about four months almost daily from severe bilious colic, and had been jaundiced for about three months. Rigors, with a temperature of 40° C., frequently occurred. He was so emaciated that his appearance suggested cancerous cachexia. The liver was enlarged and resistant, but smooth. The gall-bladder could not be felt. After a week's treatment with salicylate of sodium the pains and fever disappeared, the icteric colour decreased, vomiting ceased, and after a four weeks' stay in the hospital he was dismissed cured. The details of the mode of treatment are as follows:—Half a gramme of the salicylate was given four times a day. It was given in half a glass of soda water, or any other alkaline water—never in wafers, as these increased the gastric irritation. Usually 0.01 gramme of the extract of belladonna was added to each dose, as a non-constipating anodyne

Linseed poultices were applied over the liver. The patient was kept on moderate diet for several days, and alkaline water, free from iron, was given as beverage. Occasional pains were relieved by injections of morphine. Carlsbad and Vichy water was ordered by way of after-treatment. The cholagogue properties of the drug had also been proved by experiments on animals. In cases of pleurisy, Professor Stiller had noted a very striking diminution of the effusion when salicylate of sodium was given. Absorption occurred in a surprisingly rapid way, and Dr. Stiller recommended the drug, even for diagnostic purposes, as excluding the purulent character of the exudation. From three to four grammes in solution were administered daily, a spoonful being given every hour or two hours. The primary effect, no doubt, was on the kidney and the increased secretion of urine favoured absorption. It was only recently that he had observed, in a case under his care, that the quantity of urine was increased from 650 to 2,000 and even 2,300 cubic centimètres under the influence of salicylate of sodium. The drug was also useful in sciatica.

SHEFFIELD.

The Tuberculosis Question.—Portrait of Dr. Law.—The Kendray Fever Hospital.—Children's Hospital.—Death from Pneumonia.

MR. CHAPLIN has promised to receive a deputation from the Sheffield Butchers' Association, after Easter, on the subject of tuberculosis. Many other towns and associations are acting with them in this matter. The three points to which they direct attention are the following: 1. That the Government should prosecute the inquiries they have already made, and ascertain at what stage tuberculosis renders meat fit or unfit for food. 2. That if it is determined that tuberculous meat at any stage is unfit for food, the Agricultural Department should be asked to schedule this disease under the Contagious Diseases (Animals) Act of 1878. 3. That uniformity of inspection throughout the kingdom should be ensured.

The portrait of Dr. Law, painted by a talented local lady artist, has been presented by several personal friends to the Weekly Board of the General Infirmary, to be hung in the Board room. The present has been cordially accepted. Dr. Law was house-surgeon from 1841 to 1853, and honorary physician from 1866 to 1887.

Mrs. Lambert, the generous donor of the Kendray Fever Hospital to Barnsley, has given further evidence of her philanthropic intentions. She has stated she has in her will bequeathed a further sum of £2,000 for the Hospital.

The report presented to the recent annual meeting of the Children's Hospital stated that the number of patients, both in and out, showed an increase on the previous year.

The death of another medical man, Mr. W. H. Collier, is recorded from pneumonia, in the Attercliffe district. It is pleasing to note that the epidemic, which in this district has been so fatal to the medical profession, is here, and in other parts of the borough, showing signs of waning.

NEWCASTLE-UPON-TYNE.

The late Dr. Rutherford.—The Pathological Society,—The Clinical Society.—Removal of Dermoid Tumour.

NEWCASTLE has lost many of its prominent public men during the last winter, but none will be more missed than Mr. J. H. Rutherford, L.R.C.P. and S.Edin., who died of apoplexy on March 21st. Mr. Rutherford came to Newcastle in 1849 as a dissenting minister, and soon gathered around him a host of friends. Subsequently he became a student at the College of Medicine, and, although late in life, obtained his diploma. He never very actively followed the pursuit of medicine, but devoted his time to his ministry, and more especially to the furtherance of education. An educationalist of the most pronounced type, Mr. Rutherford was the main instrument in the erection of the School of Science and Art in this town, over which he exercised a personal supervision. The Government officials connected with the Education Department have said that there was no institution in the country on the same lines that had been conducted with so much success from an educational point of view. The school is practically a people's college. Mr. Rutherford was a member of the School Board and Board of Guardians, and was also a useful member of the Infirmary Committee. It is proposed to perpetuate his memory by the erection of a college, to be called the Rutherford Memorial College, which will be attached to the Science and Art Schools, with which he has been so long connected.

At the last meeting of the Pathological Society, the office bearers for next session were nominated. I understand that there will be no ballot for the various posts, that Dr. Drummond will be President, and that the post of secretary, vacant by the resignation of Dr. Oliver, will be filled by the election of Mr. Morison.

At the March meeting of the Clinical Society, Dr. Ridley and Dr. Baumgartner showed two successful cases of trephining the mastoid cells for chronic otorrhœa. In Dr. Ridley's case acute meningitis had set in. Dr. Baumgartner also showed a broad ligament cyst, which he had removed by abdominal section ten days previously; his patient had had a normal temperature since operation, and was almost quite well. Dr. William Murray read a paper on "Starving into Health," in which he suggested absolute starvation as a means of treatment in those diseases requiring the exercise of the laws of Moses. There was a large meeting and a good discussion, and the members expressed the hope that as this was Dr. Murray's first visit to the Society he would soon come amongst them again.

Last week Mr. Page removed an extraperitoneal dermoid tumour at the infirmary. After removal the mass weighed over four pounds. The operation was done by means of a curved incision between the anus and point of the coccyx, and the growth was easily shelled out of its capsule. The diagnosis of the nature of the tumour was difficult, as it passed behind the rectum, pressing this forward and giving rise to rectocele. The case so far has done well.

CORRESPONDENCE.

THE UNIVERSITY OF LONDON AND DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—There are at the present time at least three official schemes for the reform or reconstitution of the University of London. First in order of time there is the proposal of University and King's Colleges that they should be admitted as constituent colleges to a share in the government of the University and in the conduct of its examinations; it is further also proposed to provide for the subsequent admission of other colleges, even one-faculty colleges, such as medical schools. This scheme has undergone many modifications, but in its last form the Senate has consented to give degrees in arts and science after a stated curriculum terminating in a collegiate examination, at which a university assessor would be present. For the moment the question of medical degrees is dropped.

Secondly, we have the scheme of the Senate of the University, which, so far as relates to medical degrees, has not been modified. To understand this scheme we must remember that the original contention of the metropolitan teachers was that the real stumbling block was the character of the Matriculation and Preliminary Scientific examinations. The scheme, in fact, is just such a one as a lawyer, becoming acquainted with the subject only through the evidence given by metropolitan teachers before the Commission and elsewhere, would devise. When confronted with this logical outcome of assertions made in evidence, however, the Royal Colleges recoil in amazement.

A third scheme, therefore, is evolved; it was adopted by the Royal College of Physicians and by the Council of the College of Surgeons last week, and is stated to amount to this: that for a pass M.B. degree the strictly professional examinations be conducted by a conjoint board of the University of London and the Royal Colleges, and that the University alone should continue to conduct the Matriculation and the Preliminary Scientific examination.

Now I do not propose to ask for space to discuss these three schemes, though I believe that Convocation would, as a body, prefer very much, or, perhaps, I ought rather to say, would dislike least the first of the three. My object in writing is to point

out that the time is opportune for the general body of the profession to give some expression of opinion, probably best through the Branches of the British Medical Association. The non-medical members of the Senate of the University may well be bewildered by the conflicting opinions of the teachers; a clear expression of opinion from the profession at large would surely have much weight with them, and ultimately with the Privy Council.

In conclusion, I would observe that it seems to many of us that the officials of the Royal Colleges are making a great mistake in attempting to keep the various steps in the negotiation secret. It may be that observations made or decisions taken during the transaction of private business or the discussion of questions of discipline ought to be regarded as confidential; but when the subject under discussion is one of general public importance the case is altered; it is not in accordance with the custom of similar bodies to regard deliberations on a subject of this character as confidential. Moreover, when we find the *secreta collegii* of to-day broadly outlined in an evening paper of to-morrow, the system of secrecy becomes a little ridiculous, and is almost an insult to the intelligence of the rank and file of the profession.—I am, etc.,

NOT A FELLOW.

SIR,—On referring to the report of the Royal Commissioners, I find it stated that "a large and important part" of the evidence "relates to the position and wants of the medical faculty and its schools in London," and the Commission was satisfied "that a great demand exists for medical degrees attainable in London more easily than at present, and that it may be desirable to provide for that want in some proper way." This decision of the Royal Commission, together with the other matter contained in their report, substantiate the correctness of the conclusions arrived at by the Metropolitan Branch of the British Medical Association in January, 1885, which were that there was a strong feeling throughout the profession that it should be within the power of all well-educated medical students to obtain a degree in medicine, which degree, while implying such general and scientific culture as befits men of education, should mainly indicate the possession of a good knowledge of the theory and practice of medicine and the sciences which are specially related thereto; that in Scotland and in Ireland, and in certain parts of England, all industrious and intelligent students educated at schools of medicine can obtain degrees at local universities, but in the metropolis the great bulk of London medical students are debarred from seeking, or obtaining, medical degrees, largely in consequence of the regulations enforced by the University of London with reference to the matriculation and the Preliminary Examination in science.

The Association urged, by petition and through conferences with the Senate of the University, that it should adapt its requirements to those of the medical profession of England, and, as a means to this end, proposed an alteration in the constitution of the Senate and the formation of boards of studies, the object being to obtain, on the governing body of the University, representatives acquainted with the existing feeling and standard of teaching in our medical schools. It was strongly urged that the Matriculation Examination should be modified, so as to cover such a range of knowledge as might reasonably be expected from boys on leaving any of our public schools, without compelling them to resort to the most objectionable system of cramming. And further, that the severity of the Preliminary Scientific examination might be considerably diminished.

The recommendations of the Association therefore anticipated those of the Royal Commissioners, who observe: "We also think that the University should have power to dispense with the Preliminary Scientific examination now required from candidates for medical degrees in favour of candidates who have passed the examinations of the Royal Colleges of Physicians and Surgeons in London, if satisfied that the examinations so passed are sufficient test of such competency in scientific subjects as it is the object of the Preliminary Examination to secure."

The Senate of the University of London, in their scheme for the reorganisation of the University forwarded to the Royal College of Physicians, proposed that the views expressed by the Commissioners on the subject of the Preliminary Examination, should form the basis on which the negotiations upon this matter were to be conducted. The delegates of the Fellows of the College of Physicians, however, seem to have raised a new issue, passing by the the real impediment to London students obtaining degrees, that is, the preliminary examinations; the College proposes to leave these as they are at present, but require their final examination to be accepted by the University in lieu of other tests in medicine. No one has complained of the final examination of the College of Physicians or of the University of London; on the contrary, they are both excellent so far as they go. It is of the matriculation and the preliminary examinations and the curriculum they involve that the profession have to complain, and their views on this matter seem to be confirmed by the decision of a Royal Commission. Supposing the College and the University were to amalgamate for examination purposes in medicine, it is possible that should the interests of the College thus become prejudiced, their representatives on the Board of Examiners might place an insuperable obstacle in the way of well-educated London medical students obtaining a degree, by raising the standard of the examinations to a point unattainable by young and comparatively inexperienced medical men. So that with the matriculation and the Preliminary Scientific examinations still in the hands of the Professors in Arts and Science, and possibly an additional obstacle in the final examinations, is it likely that the objects proposed by the Royal Commission for London medical students will be attained? The interests of medicine and the College would, so far as examinations go, appear to have been safe-guarded in the plan proposed by the University and the Royal Commission, which provides for a Board of ten members whose duty it shall be to nominate the examiners for the University in medicine, science, law, and so on. One of the members of this Board is to be chosen by the College of Physicians, consequently physicians approved by the College could alone be elected into the University Board of Examiners in medicine. Further, if the proposal of the College were conceded by the Senate of the University, the Society of Apothecaries and the members of other medical corporations throughout the United Kingdom would claim similar privileges.

The Commission rightly observe that they consider the charter by which the proposed changes in the Senate are to be effected "should come into operation on an early day;" it is now close on a year since the Commission issued their report, and it is to be feared that this most desirable end will be indefinitely postponed for, whatever the action of the Senate may be with reference to its reorganisation, it cannot be supposed that the Government or the profession, with the report of the Royal Commission before them, can sanction a new charter for the University on the lines above indicated. It would probably be wise, in existing circumstances, if the College of Physicians and the University were to acknowledge at once the almost insuperable difficulties in their way to arrive at a satisfactory conclusion on this subject; there should be room for them both to pursue their respective spheres of action without interfering with one another. They are bound to consider the interests of the corporations, but they have a still more important function, which is to advance the status and knowledge possessed by the rising generation of medical practitioners in this country.—I am, etc.,

N. C. MACNAMARA.

VACCINATION CERTIFICATES.

SIR,—The present form of vaccination certificate is open to improvement. The bare statement that the operation has been "successful" is certainly insufficient, since it makes no distinction between four or five well developed vesicles and one scarce deserving the name, although the protection afforded by such vaccination is very different. It not only permits of what are practically failures passing as successes to the serious discredit of vaccination itself, but it enables unscrupulous medical men to yield to the prejudices of parents, and without detection to give a warranty of protection, the hollowness of which is not discovered until too late.

The reports of the Statistical Committee of the Metropolitan Asylums Board exhibit in a very striking manner the relative mortality from small-pox among the vaccinated under each of the classes into which they are divided according to the number, foveation, and aggregate area of the cicatrices. To foveation I am not inclined to attach much value, since its perfection depends on the undisturbed progress of healing, and the experiment of Dr. Cory on vaccination of a superfluous finger, its amputation on the fourth day, with further vaccination of the arm when the latter vesicles were at their full development on their fourth day,

that is, the eighth from the primary operation, proves that the actual removal, and, *a fortiori*, mere damage to a vesicle does not impair the constitutional effect, and consequently protective power, of the vaccination.

Again, the area cannot be properly estimated on the eighth or day of inspection—indeed, not until the scabs have separated and the cicatricial tissue contracted, but it would be easy to require that the vaccinator should state the number of insertions and of successful vesicles by introducing a few more words into the certificate, thus:—"I hereby certify, etc., in ——— places, of which ——— have been successful," and it might be added that if not more than two vesicles were raised, the child should be presented for revaccination at the expiration of one year. Such imperfect success would confer a reasonable protection for that period, though the efficacy would rapidly lessen in course of time, leaving the child practically unprotected after the lapse of a few years.—I am, etc., D.P.H.

THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

SIR,—Will you allow me to direct the attention of your readers to the advertisement of the Biennial Festival of the Royal Medical Benevolent College, on April 17th? Sir James Paget has consented to take the chair, in the hope of aiding the fund for the support of the pensioners and foundationers of the college. The Council have each year to find not less than £4,000, to support 50 pensioners and to clothe, feed, and educate 50 foundation scholars. Towards this amount they have but a certain income of £600 a year. Can there be any cause more directly appealing to the medical profession, and through them to the public, than soothing the declining years of the aged and giving a sound and thorough education to the young? We ask for no money help for the school generally apart from the foundation. It is doing good work, which is steadily bearing fruit. The numbers are rising, but at present there is accommodation for more pupils.

It is with no little pride that we can point at this moment to as many as six Epsomians upon the teaching staff of our great metropolitan hospitals. This will sufficiently stamp the excellence of our scientific teaching. We offer immense benefits to the sons of medical men, but we do away with the evils of a class school by the admixture of the sons of laymen—sons of parents outside the medical profession. Each boy is under the special care of a house master, who is in close relation to him at all times, and he receives an education which will fit him in due course to go direct from the school to Oxford or Cambridge, to the London hospitals, or to enter the army or to go into a merchant's office.

It is the desire of the Council to extend the usefulness of the school and to increase the benefits it confers by attracting a larger number of pupils. They now appeal with confidence to the members of the medical profession for funds to carry on the benevolent side of their great work.—I am, etc., C. HOLMAN,

Reigate, March 31st. Treasurer of Epsom College.

MEDICAL INSTRUCTION AT FEVER AND SMALL-POX HOSPITALS.

SIR,—From a communication which appears in the JOURNAL of March 29th, upon the above subject from a Medical Officer of Health, it might be inferred that the infectious hospitals under the control of the Metropolitan Asylums Board are still legally unavailable for purposes of medical instruction. So far from this being the case I would point out that by section iv. of the Poor Law Act, 1889, the Managers may if they think fit allow the asylums provided by them for fever, small-pox, and diphtheria to be used for purposes of medical instruction, subject to any rules and regulations which the Local Government Board may from time to time make."

Acting under these powers the managers are now considering a general purposes committee the necessary regulations.—I am, etc., AUGUSTUS C. SCOVELL.

London, March 29th.

TORONTO UNIVERSITY LIBRARY RESTORATION.

SIR,—If my recollection from two visits to the University of Toronto serves me correctly, its library, which has recently been destroyed by fire, included a valuable collection of medical and surgical works. There are many authors and possessors of duplicate copies of such works in this country who have only to be reminded of the severe loss the colonial university has sustained to desire to be included in the list of donors to the new library.

I have no doubt that the Honorary Secretary to the Toronto University Library Restoration, 13, King's Bench Walk, Temple, will take charge of and acknowledge any donation that may be sent to him.—I am, etc., REGINALD HARRISON.

Lower Berkeley Street, W.

NAVAL AND MILITARY MEDICAL SERVICES.

"THE MEDICAL SERVICE IN MODERN WAR."

A CORRESPONDENT sends us the following remarks upon the lecture on the above subject by Surgeon-General Marston, C.B., before the Royal United Service Institution:

On reading over Dr. Marston's lecture, it seems to me he goes too little into detail to excite much discussion, yet there are some points I think should have been more criticised by those present when it was delivered. He says: "It has almost come to be an article of popular faith, if not of popular conviction, that you can by a very limited training convert an intelligent but uneducated individual into an expert and skilful dresser of wounds;" and further on, "that you can teach any number of men at once as a drill what must virtually be acquired as the result of personal experience." I may be wrong, but this seems to cast doubt on the possibility or utility of teaching any but the specially educated first aid to wounded, or bearer or ambulance drill; and indirectly, therefore, on the reliability of our Army and Volunteer Medical Staff Corps for the discharge of their important duties. I do not share these doubts, having had ample opportunities of judging of the capacity of our Medical Staff Corps for learning, and also for putting into practice in the field what they had been taught. They are not expected to discharge the duties of highly-trained medical officers, but to arrest hæmorrhage and adjust such appliances as will enable the wounded to be conveyed to the medical officer with a minimum of risk and suffering; this I have had ocular demonstration they can do in a most satisfactory manner.

In a further paragraph the lecturer appears to advocate that field hospitals should be pushed more to the front than at present. I cannot agree with him, and for the reason he says elsewhere, that it is a great object to get the disabled to the rear as speedily as possible, so as not to encumber the front. The bearer companies should always be in full touch of the fighting line; but the hospitals should not, I think, be advanced, especially in war with semi-savage people, who in the event of a reverse would not respect the Geneva flag. The lecturer talks of an army corps of 30,000 men in India wanting 30,000 "defenceless followers" to accompany it. A large number of these will be dhoolie bearers, and I maintain very many could be dispensed with. In the past, when there were no roads in India, dhoolies were a necessary mode of conveyance, but not so now in many cases. I recollect, in 1881, a large convoy of sick being sent from Kandahar almost wholly in dhoolies, when there was a very fair road for spring-wheeled carriage. I have seen dhoolies employed as the only sick transport along the Grand Trunk Road—the finest road in the world. In my opinion spring-wheeled sick carriage is not utilised in India as it might and ought to be nowadays; there are few places where it could not follow field guns. It would cut down the host of followers, of which Dr. Marston complains. We took with us in the Zulu and the Secocoeni expeditions in South Africa, in 1879, Woolwich ambulance and pharmacy and surgery waggons; and in 1881 Hawke's feeder ambulances went as far as Maiwand from Kandahar, and I witnessed their ability to get over bad ground. But why should the 30,000 camp followers be quite "defenceless?" Only the other day I listened to a most interesting discussion in the United Service Institution on naval affairs, and one of the points insisted on was that all so-called non-combatants on board ship should be taught to handle a pistol, cutlass, and rifle. Why should not the same be done with a large portion of these followers? It could certainly be done with the native army hospital corps. The men of the Medical Staff Corps have on more than one occasion had to act as guard and escort when in an enemy's country. I heartily agree with Dr. Marston in his strictures on the want of field hospitals and bearer companies organised and working as distinct units at any of our stations. I know that when fly columns were sent out from Aldershot fully equipped as for field service, the medical was the only branch not furnished with a properly equipped and manned unit. This is grievously unfair. How can defects be found out without trial? I further certainly agree that if in the new Queen's Regulations the principal medical officer of an army in the field is to be omitted from the list of officers on the general's staff, a very grave mistake will be committed. I do not envy the responsibility which the general who dispenses with the advice of his principal medical officer recklessly takes upon his shoulders. It is another attempt to make the medical department a mere civil body in the army.

REDRESS OF GRIEVANCES.

CANTAB writes: Will you allow me to suggest further considerations as to the methods which should be adopted for redress of grievances in a dignified and constitutional manner.

Is it certain that the attempt to close the schools, as in 1878-79, would now succeed? Competition in civil life is now more severe than then. To inferior men the solid advantages of the service will be likely to outweigh the more sentimental, though real enough, grievances. The entrance of this class will tend to further humiliate the service and the profession, and foster the class prejudices against medical men.

Let us in future concentrate our efforts on three points: First, rank pure and simple; secondly, the formation of a corps on the model of the Royal Engineers; thirdly, treatment as combatants in the matter of sick leave. Let us take our stand on the higher ground of "sentiment," and drop the smaller items that tend to obscure the main question. Let us bring Parliamentary influence to work, and if possible enlist the advocacy of the lay press. Let us work on, assured that our claims are not merely just, but necessary for the good of the army and the country, and the elevation of our liberal profession in the body politic.

THE "MILITARY ADVISERS."

TRUTH wants to know who are the "military advisers" who unanimously oppose the granting of military rank and titles to medical officers. Are they the same men who, on the plea of the "service going to the dogs," have persistently opposed every army reform?

MEDICAL TITLES.

A CORRESPONDENT sends us the following: "To the Editor of the *Irish Times:* Sir,—The gentleman who so gallantly attempted the rescue of the two soldiers of the Manchester Regiment drowned off Fort Camden yesterday is Surgeon Birt, of the Medical Staff, and not Sergeant Birt as stated in your issue of this date.—Yours, etc., R. D. LONGE, Captain 1st Battalion Middlesex Regiment, Fort Camden, March 17th."

The above speaks for itself. Our correspondent adds that a Surgeon-General informs him he often gets letters addressed "Sergeant-General." These newspaper mistakes arise from two causes, ignorant reporting and inefficient editing.

THE NAVY.

MR. WILLIAM S. ELLIOTT, M.B., to be Surgeon and Agent at Malahide; Mr. CHARLES J. FAHIE to be Surgeon and Agent at Rush Rogerstown, Lambay, and Portrane.

THE MEDICAL STAFF.

SURGEON E. LANDON, Colchester, has leave of absence pending retirement.

Brigade-Surgeon J. A. SCOTT, Chief Sanitary Officer at Aldershot, will assume the duties of Principal Medical Officer at Aldershot, during the absence on leave of Surgeon-General Tarrant.

Surgeon H. J. FLETCHER, M.B., who is serving in the Bengal Command, has leave of absence for six months on medical certificate.

Surgeon R. J. A. DURANT, serving in the Bombay Command, is transferred from general duty Bombay District, to general duty Poona District.

The *Civil and Military Gazette* of India says: "Officers of the Medical Staff will doubtless be glad to hear that the Government of India has now under consideration the question of allowing surgeons of the British Service to attend a course of practical surgery at Indian hospitals, in order that they may obtain the necessary qualification certificate for promotion. Hitherto they have had to obtain this certificate in England, simply, we presume, because no facilities existed in this country for attending a course of practical surgery. It seems, however, but right that they should be allowed to pass the course in India, as otherwise it is a discouragement to the prolongation of their service in this country."

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR T. F. MULLEN, M.D., Bengal Establishment, Agency Surgeon at Ulwur, and officiating Residency Surgeon in the Persian Gulf, is appointed Medical Officer of the Meywar Bheel Corps, *vice* Surgeon W. W. Webb, resigned.

Surgeon-Major W. E. B. MOYNAN, M.D., Bengal Establishment, is transferred from the medical charge of the 40th Native Infantry to the officiating medical charge of the 20th Punjab Infantry.

Surgeon-Major E. S. BRANDER, Bengal Establishment, officiating Civil Surgeon, Second Class, is appointed to the civil medical duties of the Minpoorie District.

Surgeon C. T. HUDSON, Bombay Estabiishment, is transferred from general duty Bombay District to general duty Poona District.

The undermentioned gentlemen have leave of absence as specified: Surgeon-Major E. SANDERS, Bengal Establishment, for 290 days on medical certificate; Surgeon-Major J. O'M. MCDONNELL, Bengal Establishment, Civil Surgeon, of Ferozepore, to Europe for one year; Surgeon-Major J. H. RITCHIE, M.D., Madras Establishment, District Medical and Sanitary Officer at Madura, privilege leave for three months; Surgeon W. P. CARSON, M.B., Bombay Establishment, in medical charge of the 1st Bombay Grenadiers, for one year out of India on private affairs.

THE VOLUNTEERS.

SURGEON and Surgeon-Major A. K. IRVINE, M.D., of the 1st Lanarkshire, has resigned his commission, with permission to retain his rank and uniform. His commission as Surgeon dates from December 16th, 1874, and that of Surgeon-Major from February 1st, 1889.

Acting-Surgeon A. H. SMITH, 5th (Ardwick) Volunteer Battalion Manchester Regiment (late the 20th Lancashire), is promoted to be Surgeon.

Surgeon and Surgeon-Major J. S. LEE, of the 3rd Volunteer Battalion West Yorkshire Regiment (late the 7th West Riding of Yorkshire), is appointed Brigade-Surgeon (ranking as Lieutenant-Colonel) to the West Yorkshire Brigade Infantry Volunteers.

Surgeon and Surgeon-Major J. W. TAYLOR, M.D., of the 2nd Volunteer Battalion Yorkshire Regiment (late the 2nd North Riding of Yorkshire), is appointed Brigade-Surgeon (ranking as Lieutenant-Colonel) to the East Yorkshire Brigade Infantry Volunteers.

MEDICO-LEGAL AND MEDICO-ETHICAL.

VISITS OF COURTESY.

M.R.C.S. writes: I have been in practice here three months. There is another practitioner who has a surgery here, but his residence is a mile and a half away. I had not as yet called upon him, though I fully intended to do so. I am, however, perfectly well known to him by sight, as he is to me. Two weeks ago I got an urgent message to go at once to the club-room, as a man there fell off his chair, and was supposed to be dying. When I got there I found that the man was already dead. In about five minutes the other practitioner came in, who, though seeing me, began to make the usual examination, and at last told the people that he was dead, and to have him removed. Was this gentleman's conduct towards me professional, seeing he was the second medical man to see the deceased?

Shortly afterwards a policeman called upon me with reference to the deceased, to whom I told I could not give a certificate, though I visited the deceased at his own home the very week on which he died; that most probably the cause of death was heart disease. The next morning the policeman saw the other practitioner, and very probably informed him of what I had said. The latter told him that he had better go and see the coroner, and tell him that he could give a certificate of the cause of death; that he attended him off and on for the last three years, the last time five weeks ago, and that the cause of death was apoplexy. The coroner, in the face of such positive evidence, did not hold an inquest.

Would you be so good as to inform me how to act in future towards this gentleman, who in the first instance ignored my presence, and in the second tried to discredit my opinion as to the cause of death?

*** The above case affords a practical illustration of the irritating annoyance not unlikely to arise from the omission to pay, with as little delay as may be, the customary visit of courtesy to the legitimate neighbouring practitioners, but for which the regrettable ignoring of "M.R.C.S." could not have taken place without a flagrant evasion of the amenities of professional life.

In reference to the divergent opinions as to the cause of death in the case in question, we are not, in the absence of exact knowledge as to the representation made by the policeman to the other practitioner, in a position to express a definite opinion on the point involved; but with a view to avert a possible recurrence of the undesirable act of non-recognition, we would counsel our correspondent, unpleasant though it be, to fulfil, at an early date, the recognised intraprofessional obligation which devolves upon members (young and old alike) of the faculty on commencing or changing the locality of practice.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 27th.

Open Spaces Bill.—Lord MEATH moved the second reading of the Open Spaces Bill, the object of which, he explained, was to extend the scope of existing legislation on that subject, and to afford further facilities for localities to acquire open spaces and recreation grounds for the public use.—Lord DE RAMSEY did not oppose the second reading; but as several of the clauses required very careful attention, he suggested that the measure should be referred to a Standing Committee.—The Bill was read a second time, and referred to the Standing Committee on Law.

Saturday, March 29th.

Lunacy Consolidation Bill.—This Bill received the Royal assent.

HOUSE OF COMMONS.—Thursday, March 27th.

Lunacy Consolidation Bill.—This Bill passed through Committee.

Infectious Disease (Prevention Bill).—The House went into Committee on this Bill, and, some clauses having been agreed to, progress was reported.

Friday, March 28th.

Infectious Diseases (Prevention) Bill.—This Bill passed through Committee.

The Medical Stamp Act.—Mr. BUCHANAN asked the Chancellor of the Exchequer whether his attention had been called to the varying decisions that had been given by the Inland Revenue Department as to what medical preparations needed the patent medicine stamp, and what did not; and whether he could take steps to amend the Medicine Stamp Act or to secure its more uniform administration, or otherwise endeavour to allay the dissatisfaction felt among chemists and druggists on the subject.—The CHANCELLOR OF THE EXCHEQUER replied that his attention had been from time to time called to complaints of varying decisions given by the Inland Revenue Department in this matter, but there appeared to be no general dissatisfaction, and the trade had manifested no general desire for the amendment of the Medicine Stamp Act. Every attempt, however, had been made to secure its uniform administration. In addition to issuing a summary of the medicine stamp law, with observations thereon for the guidance of chemists, the Inland Revenue Department had undertaken, at the request of the trade, to advise as to the liability involved by the use of labels. These labels numbered some thousands per annum, and it was almost unavoidable that varying decisions should occasionally be given, considering the many relaxations from the comprehensive charge imposed by law.

Monday, March 31st.

Insanitary Law Courts.—Mr. CHANNING asked the Home Secretary whether his attention had been called to the statement of Mr. Justice Denman, at Chelmsford, on March 21st, that the Assize Court was in such an insanitary state as to be a perfect disgrace and dangerous to judges, counsel, and prisoners; and, further, to the similar comments made by Mr. Justice A. L. Smith and Mr. Justice Wills on Thursday, March 27th, at Cardiff, as to the sickening smells in the Assize Court at Cardiff; whether attention was drawn by the Department's Committee two years ago to the insanitary condition of these courts; and whether he would take immediate steps, by representations to the local authority or otherwise, to have these and other courts which might have been similarly complained of put into a proper sanitary condition.—Mr. MATTHEWS said his attention had been called by the judge in question to the state of the Court at Chelmsford, but he had not seen the comments referred to as to the Cardiff Court. The duty of providing a proper court house and accommodation for prisoners awaiting trial rested with the local authorities. In consequence of the report of the Committee of 1886, he made strong representations to all the local authorities throughout the country, including those of Chelmsford and Cardiff. At Cardiff many improvements had been made. With regard to Chelmsford, he again in July last asked the justices to take the earliest opportunity of giving effect to the recommendations of the Committee. He was now making further inquiry with regard to both places.

Trinity College, Toronto.—Sir J. LUBBOCK asked the Under-Secretary for the Colonies whether the Royal Charter granted to the University of Trinity College, Toronto, gave it authority to examine candidates and to issue degrees in the faculties of arts, medicine, divinity, law, and music outside the diocese of Toronto.—Baron H. DE WORMS replied that the question was under reference to the law officers, and he therefore could not at present make any statement as to the powers of this University.

UNIVERSITY INTELLIGENCE.

VICTORIA.

FACULTY OF MEDICINE.—Second Examination.

First Division.—J. B. Carter, Owens College; A. J. Edwards, Owens College; C. E. M. Lowe, Owens College; E. C. McCarthy, Owens College; *C. R. Marshall, Owens College; ‡F. C. Scotson, Owens College; †J. Stephenson, Owens College; R. T. Turner, Owens College.

Second Division.—F. J. H. Coutts, Owens College; C. A. Davies, Owens College; C. C. Garfit, Owens College; A. Murgatroyd, Owens College; J. H. L. Tylecote, Owens College; W. A. Wilkinson, Owens College.

* Distinguished in Anatomy.
† ,, Physiology.
‡ ,, Materia Medica and Pharmacy.

Final Examination (Part I). The following have satisfied the examiners.

A. E. Ash, Owens College; R. A. Beaver, University College; E. M. Brockbank, Owens College; A. J. Chalmers, University College; H. Horrocks, Owens College; H. K. Ramsden, Owens College; C. K. Rawes, Owens College; P. Worley, Owens College.

Final Examination (Part II).

Second Division.—J. H. Green, Owens College; W. Nuttall, Owens College; H. Ramsden, Owens College; J. W. Shannon, University College; J. Teare, University College.

HOSPITAL AND DISPENSARY MANAGEMENT.

NEW INFIRMARY AT HALIFAX.

A NEW infirmary is shortly to be built at Halifax, and the Committee have invited five architects to send in competitive plans. The new building will be erected on a site in Heath School Lane, but it is not proposed to proceed at once with the building of the entire scheme, which comprises sixteen pavilions, an administrative block, and a nurses' house. At present nine pavilions only will be erected, together with a portion of the administrative block and of the nurses' house. The pavilions will all be one storey high, but with a basement under, and will be connected with the administrative buildings by corridors. Of the sixteen to be eventually built, thirteen will each contain one long ward for twenty beds and a separate ward for two beds. The cubical space in the long wards will be not less than 1,500 cubic feet, and the floor space not less than 116 square feet to each bed, the intention being apparently to allow a height of 13 feet to be reckoned in calculating the cubic space. These dimensions are in excess of the space in many old hospitals, but are less than have been assigned in some recent erections; they are probably a fair average allowance and sufficient for all general purposes. Each long ward will probably have to be about two and three-quarters times as long as it is broad, which is a convenient shape. The smaller wards in each pavilion will have a considerably larger allowance of cubic space to each bed, since the floor space is to be not less than 150 square feet. It may be assumed that these small wards will be used for cases of peculiar severity; this is a point which must be allowed due weight in estimating the amount of cubic space required in the long wards. Seven pavilions of this plan will be immediately erected. The complete scheme contemplates the erection of two pavilions of small wards, each containing one or two beds; one of these pavilions only will be built at present. One other pavilion is to be erected designed for infectious cases, and will contain at least four small wards to hold two beds each; it will be connected with the other portions of the infirmary by a corridor entirely open at the sides.

The interior walls and ceilings of all wards will be finished with a smooth surface, painted and varnished, and the floors will be laid with oak for wax polishing. In the isolation and infectious wards, corridors, bathrooms, w.c.'s, etc., glazed bricks or tiles will be used. The lavatories, w.c.'s, etc., will be connected with the wards by cross-ventilated corridors.

The above are the more important items in the "instructions to architects" which have been drawn up by the Committee, and there is every reason to hope that if they are faithfully adhered to the new Halifax Infirmary will be thoroughly adapted to its purpose.

The honorary secretaries inform us that the architects invited to compete are Messrs. Young and Hall, of London; Messrs. Worthington and Ellgood, and Mr. James Murgatroyd, of Manchester; and Messrs. Horsfall and Williams, and Messrs. Uttley and Gray, of Halifax.

BROADMOOR CRIMINAL LUNATIC ASYLUM.

THE annual report of this Asylum for 1888 states that the average number of inmates resident during that year was 567; namely, 419 men and 148 women, a difference between the proportion of the sexes which is striking in comparison with that which holds good in asylums generally. "The population included 308 inmates who had committed homicide (290 cases of murder and 18 of manslaughter);" 195 of these were males and 113 were females. In addition to these, "as many as 154 (139 men and 15 women) were under detention for attempt to murder, maim, etc." A truly dangerous and difficult class of patients to manage and take charge of. The admissions included 6 readmissions, of these 3 men had been transferred to their county asylums upon the expiration of the term for which they had been convicted as criminals. They had been discharged from the county asylums, and, committing some fresh crime, had been returned to Broadmoor. The history of these cases would be an interesting study, especially with reference to the conditions under which they had been discharged from the county asylums. Among the discharges we note several "Queen's pleasure" patients who had become demented or harmless, and "fit for removal to ordinary asylums." We infer from this that demented and harmless patients are not kept at Broadmoor to dilute the dangerous element among the inmates there.

The health of the patients was good, and the death-rate exceptionally low, namely, 3.35, calculated upon the average number resident, and we congratulate Dr. Nicholson and his staff that another year's record shows no death caused by violence, suicide or accident. Dealing as he does with a class of violent fanatics and murderous maniacs, it will surprise many to hear, with regard to mechanical restraint, that such means of treatment is practically unknown at Broadmoor.

Dr. Nicholson's words upon this subject are well worth quoting, for it has been the cause of much discussion, and grave misunderstandings during the last year or two. He says: "The comparatively numerous staff of attendants at this asylum enable unusual strength to be brought to bear when occasions require it; but my own feeling in the matter is that in a case of continuous and long sustained maniacal violence, with an activity avowedly and determinedly homicidal, it is possible to carry the non-restraint principle (so-called) too far and at too great a cost. Few people who have not been engaged in it are able to estimate the wear and tear of heart and nerve, which a tussle with a desperate lunatic of this sort means to the attendants, apart from the risk of positive injury either to patients or warders; and when this struggle has not only to be anticipated, but engaged in several times a day for a lengthened period, the justifiability and humanity of simple, effective and and safe mechanical restraint becomes apparent..... I would infinitely prefer mechanical restraint to the long continued manipulations, however skilful and friendly, of four or more attendants heaped together upon my prostrate form." Dr. Nicholson is strongly of the opinion that the medical superintendent should be the person to order mechanical restraint to be applied, and he adds: "When the restraint is applied by underlings, and its use afterwards sanctioned by responsible officers, we have the authorised abuse which is altogether wrong and reprehensible." Such is the deliberate opinion of one who is daily brought face to face with a collection of most dangerous and desperate lunatics, with many of whom the sole object in life seems to be to get the better of their attendants and break the back of discipline. We trust Dr. Nicholson will have the courage of his conviction, and publish the result in his next report.

THE DENTAL HOSPITAL, DUBLIN.—The recent *fête* held in Dublin for the building of a dental hospital was most successful. After payment of all expenses, there remains a sum of £2,573 5s. 9d., which it is believed will be sufficient for the excellent purpose of the promoters. Mr. Theodore Stack and his colleagues are to be congratulated on the result of their very arduous undertaking.

SIR PATRICK DUN'S HOSPITAL.—The annual report shows that 1,364 indoor and 19,078 outdoor patients were treated in this institution last year. The nurses earned £997 by attendance on private patients. The governors appeal for funds to enable them to increase the beds from sixty to seventy.

WOMEN'S HOSPITAL, BIRMINGHAM.—The report of this hospital shows a slight increase in the number of out-patients, and a decrease in the number of in-patients, treated. The death-rate

after abdominal section has been higher during the past year than for many years previous, it reaching to 10.3 per cent., a regrettable result, attributed to the insanitary condition of parts of the hospital, which, it is hoped, will shortly be remedied. The accounts show that the expenditure exceeded the income for the year by £260.

THE GENERAL HOSPITAL, BIRMINGHAM.—The annual report of this hospital again shows a large increase in the number of out-patients treated, the register showing an addition of nearly 4,500 cases, whilst, at the same time, the debt of the hospital has increased, the deficiency being about £6,000 at the end of last year. The Committee are still considering how best to utilise Miss Rylands's generous bequest of £25,000, but, in investigating the possibility of rebuilding the hospital on another site, as has been suggested, they have found the greatest difficulty in obtaining a central and adequate site. Reference was made to the inquiry promoted by the Mayor, and the opinion was expressed that little abuse existed amongst the in-patients, though possibly a number of the out-patients were frivolous cases, which need not fly to hospital for relief. At the musical festival next year, the proceeds of which are devoted to the funds of the hospital, some important changes were announced, the chief being the alteration of the date of the festival from August to October. The Duke of Westminster was elected President for the ensuing two two years.

OBITUARY.

AQUILLA SMITH, M.D., F.K.Q.C.P.I.

ONE of the best known and most distinguished members of the Irish profession, Aquilla Smith, died at Dublin, on Sunday, March 23rd. He had long been a prominent figure in the city in which he lived, where he held for many years the highest position as a teacher and a physician, but he was also well known in London, for he had served during many years as a representative on the General Medical Council, and had earned the good-will and esteem of all his colleagues in that body. Aquilla Smith was born in Nenagh, co. Tipperary, on April 28th, 1806. He graduated in the University of Dublin, and in 1839 he was made an honorary M.D. of that body. In the same year he was elected a Fellow of the King and Queen's College of Physicians, so that with the exception of Dr. W. C. Beatty, of Cheltenham, who received the Fellowship in 1829, he was the oldest living holder of that dignity. Dr. Smith was a first class financier, and he was appointed Treasurer of his College in 1872, an office which he held at the time of his death. He was Censor and Vice-President in 1846 and 1864.

His well-known business capacity and his knowledge of educational matters led his colleagues to make him their representative on the General Medical Council in 1858, and that most honourable position he filled for no less than thirty years, retiring in 1888 at the age of 82.

In 1864 he was made Physician to Sir P. Dun's Hospital and Professor of Materia Medica in the University of Dublin, and this chair he occupied until 1881, when he resigned, and was succeeded by his son, Dr. W. G. Smith.

In the *Dublin Journal of Medical Science* some valuable contributions from his pen have been published, amongst these being "Contributions to the Early History of Medicine" and "Some Account of the Origin and Early History of the College of Physicians in Ireland." On his retirement from the representation of the College on the Medical Council, the Fellows marked their high sense of his services by presenting him with his portrait and an address.

The death of this distinguished man has caused deep regret, both because of his personal merits and the loss which it inflicts upon many institutions. His great capacity for work, his far-reaching knowledge, and his general experience made him a most desirable friend and adviser, and these qualities he freely placed at the command of his University and the College of Physicians. No one has attained to higher respect among his professional brethren, and this was testified to by the large numbers who attended the funeral on Wednesday last.

PROFESSOR TRÉLAT, Paris.

ULYSSE TRÉLAT, one of the most distinguished French surgeons of the present time, died of pneumonia on March 29th, aged 61, after a few days' illness. For some months past his health had been indifferent, but there was nothing in his condition to lead to the belief that the end was so near.

Trélat was the son of Dr. Trélat, who for a short time in 1848 occupied the position of Minister of Public Works. He was born on August 13th, 1828, and took his doctor's degree in 1854. In 1857 he competed for the post of *Agrégé*. The thesis which he presented on that occasion on phosphorus necrosis is now a standard work. Trélat was successively surgeon at the Maternity Hospital, the Saint Antoine Hospital, and finally at the Charité Hospital. In 1872 he was appointed professor of surgical pathology, and in 1874 became a member of the Academy of Medicine. His principal medical works are *Hypertrophie unilatérale partielle ou totale du Corps*, and *Leçons de Cliniques chirurgicale professées à la Charité*.

The funeral, which took place on Monday, March 31st, at the Montmartre Cemetery, was preceded by a religious service at the Madeleine, which was attended by nearly 1,500 persons. A great number of medical and other societies were represented—the members of the Académie de Médecine wearing their robes of office—and MM. Rouvier and Ribot, both Cabinet Ministers, were among the mourners. At the grave side several funeral orations were delivered, the speakers included M. Jules Ferry, who eulogised the personal merits of the deceased.

HENRY SCOTT ANDERSON, M.D., F.R.C.S.EDIN.

SELKIRK has lost, by the death of Dr. Henry Scott Anderson, a respected and prominent citizen, the last of a line of medical practitioners of the name who have resided in Selkirk since 1775. At an early age he was called home to assist his father in the hard work of a widely extended practice. He took the degree of M.D. Edin. in 1832, and became a Licentiate and Fellow of the Royal College of Surgeons of Edinburgh in 1859. He was the first surgeon of the Selkirk Rifle Corps, and from 1868 to 1880 held the office of Provost; he was nominated Justice of Peace in 1882. In 1881 Lord Napier and Ettrick, on behalf of a large number of subscribers, presented him with his portrait, painted by Mr. George Reid, R.S.A.

Dr. Anderson retired from the active duties of his profession about twelve years ago. Apart from his popularity as a physician, Dr. Anderson is described as being a genial friend and ardent sportsman. His death was the result of a severe attack of pneumonia following a chill on March 8th. His brother-in-law, Dr. Peddie, was in attendance upon him.

CRAWFORD J. POCOCK, M.R.C.S.ENG., L.S.A.

THIS gentleman died at his residence, Hove, on March 26th, his delicate constitution having succumbed to a severe attack of influenza. Mr. Pocock was a native of Brighton and the son of a well- nown practitioner, Mr. Gavin Pocock. After studying as an out-pupil at the Sussex County Hospital he went as a student to Guy's Hospital. After leaving Guy's he was appointed House-Surgeon to the Brighton and Hove Dispensary. He was subsequently Honorary Surgeon to the same institution, Consulting Surgeon to the Brighton, Preston, and Hove Dispensary, and Surgeon to the Deaf and Dumb Institution. He also occupied the post of President of the Brighton Medical Society.

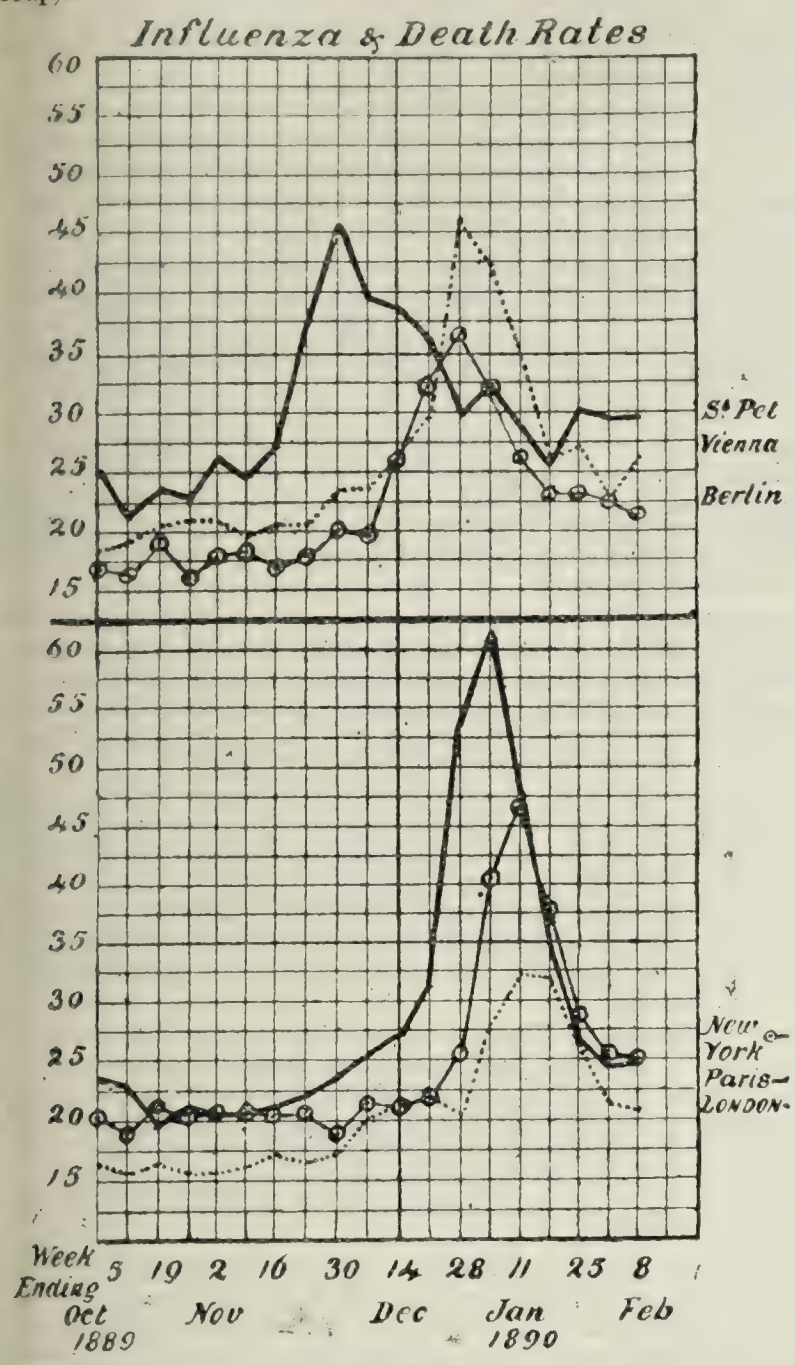
Mr. Pocock was an enthusiastic art connoisseur, and possessed a fine collection of engravings. He was an ardent admirer of the works of Turner, and numbered George Cruikshank among his personal friends. His bluff and hearty manner had rendered him a great favourite with his patients, and made lasting friendships. He was in his 50th year, and leaves a widow and daughter.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

INFLUENZA DEATH-RATES.

THE remarkable epidemic by which Europe has been lately visited has in various aspects attracted scientific study. With regard to the large increase in mortality due to it, the data of weekly death-rates now to hand afford a means of estimation and comparison. It may prove instructive to present some of these in graphic form, and we have selected for this purpose those of St. Petersburg, Vienna, Berlin (the upper group in the annexed

liagram), and those of Paris, London, and New York (lower group).



Assuming that the pronounced rise in these curves is chiefly ıe to the epidemic—and of course there is a normal rise in rly winter—one or two points may here be noted. The gene-lly westward course of the disease is indicated in these curves. e have the earliest maximum in St. Petersburg about the end November, then those of Vienna and Berlin towards the end of ecember, that of Paris a week later, and that of London a week ter still. That of New York appears to have been simultaneous ith that of London (week ending January 11th).

It is easy to see that Paris has been the greatest sufferer, her ath-rate having reached the high point of 61.7, which is about ree times as great as in the latter part of October. Next in der comes New York, then Vienna, St. Petersburg, Berlin, and st, London.

The figures of those maxima may be compared with the annual ath-rates. Both are given in decreasing series:—

Maxima.		Annual Death-rates.	
Paris	61.7	1. St. Petersburg	35.0
New York	46.5	2. New York	30.6
Vienna	45.9	3. Vienna	29.0
St. Petersburg	45.4	4. Paris	26.3
Berlin	36.5	5. Berlin	26.0
London	32.4	6. London	17.5

HEALTH OF ENGLISH TOWNS.

twenty-eight of the largest English towns, including London, which have estimated population of 9,715,559 persons, 5,852 births and 3,982 deaths were gistered during the week ending Saturday, March 29th. The annual rate mortality in these towns, which had declined from 26.6 to 21.7 per 1,000 in three preceding weeks, further fell to 21.4 during the week under notice. e rates in the several towns ranged from 17.9 in Nottingham, 18.5 in London, 19.1 in Bristol, and 19.4 in Birkenhead and in Bolton to 28.7 in Brighton, 28.8 in Newcastle-upon-Tyne, 29.3 in Sheffield, and 31.9 in Manchester. In the twenty-seven provincial towns the mean death-rate was 23.8 per 1,000, and exceeded by 5.3 the rate recorded in London, which was only 18.5 per 1,000. The 3,982 deaths registered during the week under notice in the twenty-eight towns included 424 which were referred to the principal zymotic diseases, against numbers declining from 379 to 363 in the four preceding weeks; of these, 164 resulted from whooping-cough, 97 from measles, 64 from scarlet fever, 46 from diphtheria, 33 from diarrhœa, 20 from "fever" (principally enteric), and not one from small-pox. These 424 deaths were equal to an annual rate of 2.3 per 1,000; in London the zymotic rate was 2.4, while it averaged 2.1 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 in Huddersfield, 0.3 in Leicester, 0.4 in Portsmouth, and 0.5 in Birkenhead to 3.2 in Bristol, 3.5 in Preston, 3.8 in Brighton, and 4.7 in Salford. Measles caused the highest proportional fatality in Liverpool, Birmingham, and Derby; scarlet fever in Salford, Sheffield, and Preston; and whooping-cough in Wolverhampton, Liverpool, Oldham, Bolton, Salford, and Brighton. Of the 46 deaths from diphtheria recorded during the week under notice in the twenty-eight towns, 30 occurred in London, 4 in Hull, 4 in Salford, 2 in Manchester, and 2 in Sheffield. No fatal case of small-pox was registered, either in London or in any of the provincial towns; and 7 cases of small-pox were under treatment in the Metropolitan Asylums Hospitals on Saturday, March 29th. These hospitals contained 1,035 scarlet fever patients on the same date, against numbers declining from 1,541 to 1,076 at the end of the twelve preceding weeks; 84 cases were admitted during the week, against 49, 73, and 78 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 4.4 per 1,000, and was considerably below the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, March 29th, 818 births and 627 deaths were registered in the eight principal Scotch towns. The annual rate of mortality, which had declined from 28.7 to 24.8 per 1,000 in the five preceding weeks, further fell to 24.2 during the week under notice, but exceeded by 2.8 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest rates were recorded in Perth and Paisley, and the highest in Leith and Glasgow. The 627 deaths in these towns during the week under notice included 83 which were referred to the principal zymotic diseases, equal to an annual rate of 3.2 per 1,000, which exceeded by 0.9 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Glasgow and Aberdeen. The 285 deaths registered in Glasgow included 16 from measles, 15 from whooping-cough, 3 from diphtheria, and 2 from scarlet fever. In Edinburgh, 10 fatal cases of measles, 5 of whooping-cough, and 2 of diphtheria were recorded. Three deaths from measles occurred in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 5.5 per 1,000, against 4.4 in London.

HEALTH OF IRISH TOWNS.

During the week ending Saturday, March 22nd, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 31.9 per 1,000. The lowest rates were recorded in Drogheda and Wexford, and the highest in Lurgan and Dundalk. The death-rate from the principal zymotic diseases averaged 4.0 per 1,000. The 209 deaths in Dublin during the week under notice were equal to an annual death-rate of 30.9 per 1,000 (against 28.2 and 29.0 in the two preceding weeks), the rate for the same period being 19.3 in London and 24.2 in Edinburgh. These 209 deaths included 14 which resulted from the principal zymotic diseases (equal to an annual rate of 2.1 per 1,000), of which 6 were referred to measles, 4 to whooping-cough, 2 to different forms of "fever," 1 to diphtheria, and 1 to diarrhœa.

NOMINATION OF SUBSTITUTE BY POOR-LAW MEDICAL OFFICERS.

Poor-law writes to ask what he is to do under the following circumstances:

He holds appointments both as workhouse and district medical officer, and is consequently required to name to the guardians a substitute to act for him in case of absence or illness. There is only one other medical man in the village, and he declines to act.

*** It is not necessary that the substitute nominated by the medical officer should reside within any specified distance; consequently, any practitioner legally qualified residing within a few miles might be nominated. The name and residence of the substitute is to be forwarded by the clerk to the relieving officer and overseers, so that they may apply to him when necessary. We suppose the master of the workhouse would be supplied with the same information.

Pure Beer.—Two Bills are at present before the House of Commons for securing the purity of beer. The Bill promoted by Sir E. Birkbeck proposes to make it incumbent on every one who sells by wholesale or by retail beer brewed from or containing any ingredients other than hops or barley malt to keep conspicuously posted at the bar or other place of sale a legible notice stating the fact that other ingredients are contained in the beer. In Mr. Quilter's Bill the notice is required to state not merely the fact, but what those other ingredients are. For infringing this regulation, the penalty under each Bill may be as a maximum £5, and for a second or subsequent offence £20. These fines may be recovered by any informer, and in each case half the fine is to go to him.

Miss E. Constance Stone has recently been registered by the Melbourne Medical Board as a duly qualified practitioner. Miss Stone is the first medical woman who has been granted registration in the Australian Colonies.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having passed the Qualifying Examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and were admitted as Licentiates of the Society in February, 1890:

Bradley, James Edward Campbell, St. George's Hospital and Cambridge University.
Cane, Herbert Du, Glasgow University.
Cargill, Lionel Vernon, King's College Hospital.
Cox, Arthur Brooke, Sydney University and Middlesex Hospital.
Dobbs, Matthew, Charing Cross Hospital.
Drake, Ernest Charles, St. Bartholomew's Hospital.
Dunn, Edwin Dacre, St. Thomas's Hospital,
Hawley, Frederick Hulme, Charing Cross Hospital.
Holt, James, Leeds.
Jones, Charles Ranald Handfield, St. Mary's Hospital.
Lewis, Albert Cornwal, University College Hospital.
Logan, Roderic Robert Walter, St. Thomas's Hospital.
McCormick, John George, Dublin.
May, Francis Hollingsworth, General Hospital, Birmingham.
Morris, Edwin Haigh Grant, Cambridge University and St. Thomas's Hospital.
Posnett, Edward, Yorkshire College.
Shillingford, Henry Bartlett, Guy's Hospital.

In March:

Anderson, Richard Walker, University College Hospital.
Beaver, Hugh Atwood, Victoria University, Liverpool.
Fyffe, William Kington, Cambridge University and St. George's Hospital.
Given, John Cecil Mackmurdo, Liverpool Royal Infirmary.
Levick, George Davick Baker, Middlesex Hospital.
Lightbody, John Henry, Liverpool Royal Infirmary.
Naylor, Maurice Craven, Sheffield.
Powell, Rhys, King's College Hospital.
Thomason, Richard Henry, King's College Hospital.
Wainwright, Lennox, London Hospital.
Wilkinson, George, Cambridge University and St. Mary's Hospital.

HIS Royal Highness the Prince of Wales has accepted the office of President of the College of State Medicine.

DR. A. GARROD THOMAS, of Newport, has been placed on the Commission of the Peace for the county of Monmouthshire.

IT is proposed to extend the Warrington Infirmary at an estimated cost of £3,000, so as to bring the number of beds up to thirty-nine.

SURGEON PARKE will accompany Mr. H. M. Stanley to Nice on April 7th, after which they go to Brussels, there to be the guests of the King of the Belgians.

PROFESSOR GRASHEY, Director of the Munich District Lunatic Asylum, is to succeed the late Professor Westphal in the Chair of Psychiatry at Berlin.

AN explosion, the cause of which has not, it is stated, been ascertained, occurred on Monday, in the Chemical Laboratory of the Westminster Medical School. A fire ensued, which was with some difficulty extinguished.

DURING the International Medical Congress at Berlin there will be a meeting of delegates from the various cremation societies throughout Europe, at which the steps to be taken to make cremation legal in different countries will be discussed.

DR. EUGEN HAHN, Director of the surgical side of the Friedrichshain Hospital at Berlin, and well known in this country as a successful operator in the domain of laryngeal surgery, has recently had the privilege of using the prefix of "Professor" conferred on him.

A SECOND meeting to discuss the grievances of barmaids and girls engaged in restaurants was held on March 31st at Miss Morley's house in Grosvenor Street. Mr. Caine's Bill was considered, and a number of amendments were recommended for embodiment in the measure.

THE SOUTHPORT BABY-FARMING CASE.—Pearson and his wife have been found guilty, at the Liverpool Assizes, of the manslaughter of the child Oldfield at Birkdale, Southport, on November 16th, and sentenced, the former to seven and the latter to five years' penal servitude.

THE number of deaths at Madrid during the month of December, when the influenza epidemic was at its height, was 3,109, being 809 more than in August, 1885, when the cholera epidemic was most severe. The influenza visitation lasted altogether three weeks in the Spanish capital.

DR. ERWIN VON ESMARCH, a son of the eminent surgeon of Kiel, has obtained a licence as *Privatdocent* of Hygiene in the University of Berlin. He has been for some time Custodian of the Museum of Hygiene at Berlin, and has published several essays on bacteriological subjects.

THE Lord Lieutenant of the County of Sussex has placed Dr. Withers Moore, a vice-president of the British Medical Association, on the Commission of the Peace for the Eastern Division of that county. Dr. Moore has also been elected, unopposed, a County Councillor for the Burgess Hill district.

PRIZE ESSAY.—The subject of the prize essay on Infant Hygiene, given by the Academy of Medicine for 1891, is to determine what are the best artificial forms of nourishment for newborn infants, the merits and effects of unboiled milk, boiled milk, and tepid milk. The essays should be sent in before March 1st, 1891. The prize is £40.

DURING the year 1889 the proportion of students "referred" at the examinations of the Paris Faculty of Medicine was 14 out of every 100 who presented themselves. This percentage was the lowest in any of the Faculties, the rate of mortality in that of Law being 27 per cent., in that of Letters 48 per cent., and in that of Science 71 per cent.

PROFESSOR E. LEYDEN, of Berlin, celebrates his twenty-fifth jubilee as a clinical teacher on April 6th. A bust of the professor by Schaper will be presented to him by Professor Nothnagel, of Vienna, and an appropriate *Festschrift* will be offered by Professor Jaffé, of Königsberg. The Verein für Innere Medicin will give a a dinner in honour of Professor Leyden on April 8th.

PASTEUR INSTITUTE AT BUDA-PESTH.—The establishment of a Pasteur Institute at Buda-Pesth, lately proposed by the Senate of the University, has been ratified by the Hungarian Minister of Education. The institute is intended not only for the treatment of persons bitten by rabid dogs, but for the improvement of the system of preventive inoculation and the study of its influence on other infective diseases. Professor Högyes is to be the director of the new institute.

REGISTRATION OF NURSES.—Mrs. Bedford Fenwick writes: In the annotation on the "Registration of Nurses" which appeared in the JOURNAL of March 29th it is stated that "Mrs. Fenwick, in answer to questions, referred to the low standard of nursing in America." Permit me to say that this is quite a mistake. On the contrary, I laid especial stress on the great improvements which have been, and are being, made in the education of nurses in American hospitals.

LEPROSY IN NEW CALEDONIA.—A French contemporary states that leprosy is spreading rapidly in New Caledonia. Of 40,000 Kanakas, 5,000 are already lepers. No measures to check the spread of the scourge were taken till lately, when two isolation refuges were established, one on Goat Island in Dumbea Bay, and the other in Canala at a place called the Pic des Morts. Every person pronounced by the Medical Commission to be suffering from leprosy is to be sent to one of these places. Three European have already fallen victims to the disease.

INFANT LIFE INSURANCE.—The Bishop of Peterborough, speaking on March 31st at Peterborough, in support of the Society for the Prevention of Cruelty to Children, said that he hoped that the Society would impress on the Legislature the cruelty that was practised through the present system of child insurance. He had been horrified recently at hearing from medical men the extent and form of this child murder, for it was nothing else. He thought that the person who in a fit of passion suddenly and swiftly terminated a child's life was innocent compared with one who let it waste away day by day until its miserable life was ended.

"GROWING PAINS."—DR. COMBY, of Paris, has paid much attention to diseases incident to the rapid growth so marked as the limiting period between childhood and youth. He dwells at length, in an article published in the *Archives Générales de Médecine*, on "growing pains." These symptoms are hard to localise, but they always affect most markedly the lower limbs, which bear the weight of the body and the chief fatigue of walking exercise. Careful medical exploration proves that the seat of these pains is invariably at the extremities of the long bones, in fact, at the epiphyses and the line of cartilage between them, and the shafts of the bones. A true

ever, followed by much exhaustion, sometimes ushers in this ondition of the bones. Indigestion, headache, or other symptoms re seldom absent in association with "growing pains," but they may e due to unhealthy habits, for when enjoying comparative liberty or the first time youths and maidens are very apt to consume nwholesome food and drink, and to discard warm clothing even in ad weather. A visible, objective symptom accompanies the ore severe cases of growing pains. Small bony tumours ("*exos-oses de développement*") form at certain points where the process f ossification of cartilage is most active, especially at the epi-hyses of the bones near the knee-joint, of the humerus at the oulder, and of the radius at the wrist, points where the process f lengthening is most active. A common variety of "growing ain," especially amongst the poor, is tarsalgia, a painful condi-on of the ankle, without swelling or redness, the precise charac-r of which is disputed. M. Gosselin believes it to be arthritis of the oint without effusion, while Duchenne holds that the neighbour-ng muscles, especially the peroneus longus, are at fault. All growing pains" require rest and good feeding in order to insure ure.

DEATH UNDER CHLOROFORM.—The death of a man named vans, aged 39, a commercial traveller, whilst under the influence f chloroform was the subject of an inquest held on March 22nd t the Swansea Hospital. Dr. Horatio Rawlings, resident sur-eon, is reported to have stated that two months ago the deceased nderwent an operation at the hospital for lupus, he administering ne anæsthetic; the operation was completely successful. On the ccasion of the further operation he (Dr. Rawlings) administered mixture of alcohol, chloroform, and ether, knowing deceased to ave been a heavy drinker. Deceased did not bear this well, truggling violently, and subsequently some chloroform was ad-ministered by Dr. Jabez Thomas (who performed the operation). ery shortly after his breathing ceased. Artificial respiration was esorted to, and other attempts at resuscitation made, without esult. Dr. J. Kynaston Couch, who made a *post-mortem* exami-ation, attributed death to asphyxia. The jury found that de-eased died from asphyxia, caused by the administration of an næsthetic at his own request, and that no blame attached to any ne.

MEDICAL VACANCIES.

The following Vacancies are announced:

ATH GENERAL AND ROYAL MINERAL WATER HOSPITAL.—Resident Medical Officer, unmarried. Salary, £100 per annum, with board and apartments. Applications before April 7th to Fred. W. Dingle, Registrar and General Secretary.

ETHLEM HOSPITAL.—Two Resident Clinical Assistants; doubly qualified. Residence in the hospital for term not exceeding six months, with apartments, rations, and attendance. Applications to John Baggally, Esq., Bridewell Hospital, Blackfriars, by April 12th.

IRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Double qualification. Salary, £100 per annum, and £30 for cab hire. Applications, with testimonials and certificates of registration, to the Secretary by April 17th.

HELSEA HOSPITAL FOR WOMEN, Fulham Road.—Resident Medical Officer, fully qualified. Salary, £80 per annum, with board and residence. Applications by April 16th to the Secretary, A. C. Davis.

ITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist; must be registered and not engaged in practice. Salary, 100 guineas per annum. Applications by April 16th to the Secretary, T. Storrar-Smith.

AST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Physiciancy. Board and lodging free. No salary. Applications to Ashton Warner, Secretary, by April 10th.

NNISKILLEN UNION (Ely Dispensary).—Medical Officer. Salary, £115 per annum and fees. Applications to Mr. John Trotter, Honorary Secretary, Mully Kevill, Derrygonnelly. Election on April 14th.

EMALE LOCK HOSPITAL, Harrow Road, W.—House-Surgeon. Candidates must be Members of the Royal College of Surgeons. Salary, £100 per annum, and board and lodging. Applications by April 14th to the Secretary.

ENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—Assistant Physician. Applications to the Secretary by April 9th.

ENERAL INFIRMARY, Leeds.—Resident Officer at the Ida Hospital. Appointment for six months, with honorarium of £25. Board, lodging, and washing in the Infirmary. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

ENERAL INFIRMARY, Leeds.—Two House-Physicians (one for six and one for twelve months). Board, lodging, and washing. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

ENERAL INFIRMARY, Leeds.—Two House-Surgeons. Board, lodging, and washing. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

LAMORGAN AND MONMOUTHSHIRE INFIRMARY, Cardiff.—Assistant House-Surgeon. Board, lodging, and washing provided. Applications before April 5th to Geo. T. Coleman, Secretary.

HOLBORN UNION.—Assistant Medical Officer at the Infirmary, Archway Road, Upper Holloway, N.—Salary, £100 per annum, with board, lodging, and washing. Applications to James W. Hill, Clerk to the Guardians, Clerk's Offices, Clerkenwell Road, E.C., by April 15th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House-Physicians. Applications to Henry Dobbin, Secretary, by April 9th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—House-Physicians. Applications before April 9th.

ISLANDS OF YELL AND FETLAR.—Medical Officer. Salary, £70 from parochial boards. Applications to the Inspector of Poor, Mid-Yell, Shetland.

KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Senior Assistant Medical Officer; fully qualified, unmarried, not over 30 years of age, experienced in asylum work. Salary, £250 per annum, with furnished quarters, attendance, coal, gas, washing, etc. Applications by April 9th to Dr. F. Pritchard Davies, Superintendent.

KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Second Assistant Medical Officer, fully qualified, unmarried, not over 28 years of age; experienced in asylum work. Salary, £180 per annum, with furnished quarters, attendance, coal, gas, washing, etc. Applications by April 9th to Dr. Pritchard Davies, Superintendent.

KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Third Assistant Medical Officer, fully qualified, unmarried, and not over 27 years of age, and had experience in asylum work. Salary, £150 per annum, with furnished quarters, attendance, coal, gas, washing, etc. Applications by April 9th to Dr. Pritchard Davies, Superintendent.

KING'S LYNN HOSPITAL.—House-Surgeon and Secretary. Salary, £80, rising by annual increments of £10 to £100 per annum. Double qualifications, registered and unmarried. Applications to the Chairman of the Weekly Board by April 5th.

LEICESTER INFIRMARY.—Honorary Surgeon Dentist; must be a Licentiate in Dentistry of one of the Royal Colleges of Surgeons of London, Dublin, or Edinburgh. Applications, etc., to the Secretary, 24, Friar Lane, Leicester, by March 31st. Election on April 9th.

MACCLESFIELD GENERAL INFIRMARY.—Senior House-Surgeon; must be doubly qualified. Salary, £100 for first year, an increase of £10 the second year, with board and residence. Applications to "Chairman House Committee" by April 12th. Election April 25th.

METROPOLITAN ASYLUMS BOARD.—Clinical Assistant (registered medical man) for the South-Western Fever Hospital, Landor Road, Stockwell, S.W. Residence and rations. Applications to the Medical Superintendent at the Hospital.

OWENS COLLEGE, Manchester.—Demonstrator in Materia Medica and Pharmacy. Salary, £100 per annum. Applications addressed to the Senate under cover to the Registrar, H. W. Holder, by April 15th.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Salary, £150 per annum. Applications by April 28th to the Registrar, Henry Wm. Holder, M.A.

PADDINGTON GREEN CHILDREN'S HOSPITAL, London, W.—House-Sur-geon. Salary, £50 per annum, with board and residence. Applications to the Secretary by April 22nd.

RADCLIFFE INFIRMARY, Oxford.—House-Physician; doubly qualified. Salary, £80 per annum, with board, lodging, and washing. Applications by April 5th to the Secretary.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, by June 1st.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to the Registrar, Edward Liveing, M.D. (of whom all particulars may be obtained), by April 9th.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Surgeon; Fellow of the Royal College of Surgeons. Applications to the Secretary, T. Beattie Campbell, by April 9th.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Assistant Surgeon; Fellow of the Royal College of Surgeons. Applications to the Secretary, T. Beattie-Campbell, by April 9th.

SHEFFIELD UNION.—Resident Assistant Medical Officer for the Workhouse at Fir Vale, Pitsmoor. Salary, £100 per annum, with apartments, rations and the usual allowances. Applications to Joseph Spencer, Clerk to the Guardians, by April 9th.

STOCKTON-ON-TEES HOSPITAL AND DISPENSARY.—House-Surgeon (non-resident), doubly qualified; to reside near the hospital and give whole time. Salary, £200 per annum. Applications to the Secretary, John Settle, by April 12th.

UNIVERSITY OF EDINBURGH.—An Additional Examiner. Salary, £90 per annum. Applicants to lodge sixteen copies of application with J. Christisson, W.S. Secretary, by April 7th.

WANDSWORTH AND CLAPHAM UNION INFIRMARY, New Wandsworth.—Junior Assistant Medical Officer. Board, lodging, washing, and honorarium of £10. Applications to the Medical Superintendent.

MEDICAL APPOINTMENTS.

BODY, H. Marten, M.R.C.S., L.S.A., reappointed Medical Officer to Tedburn St. Mary District of the St. Thomas Union.

BONAR, Thomas Mitchell, M.B.Glasg., C.M., appointed Medical Officer and Public Vaccinator to the Probus District of the Truro Union, and Medical Officer of Health to the Eastern District of the Truro Rural Sanitary Authority, *vice* Henry Caddy, M.R.C.S., L.S.A., deceased.

BONSALL, George R. E., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer and Public Vaccinator to the Aberystwith Workhouse and District.

BROWN, David, L.K.Q.C.P.Irel., M.R.C.S.Eng., appointed Medical Officer of the Workhouse, New Winchester Union, *vice* W. England, M.D.Edin., resigned.

BRUCE, Robert M., M.R.C.S., L.S.A., appointed Medical Superintendent of the Western Hospital of the Metropolitan Asylum District, *vice* Dr. Sweeting, resigned.

CAUTLEY, W. C., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Knaresborough Rural Sanitary Authority.

COLLINS, Edward Tenison, M.R.C.S., L.S.A., appointed House-Surgeon to the Jessop Hospital for Women, Sheffield.

FARQUHARSON, J. Malcolm. M.B.Edin., C.M., appointed Chloroformist on the staff of the Edinburgh Dental Hospital and School.

FOOTNER, J. Bulkley, F.R.C.S.Eng., appointed Honorary Surgeon to the Tunbridge Wells General Hospital, *vice* F. Manser, M.R.C.S., resigned.

FORREST, John G. S., L.R.C.P., M.R.C.S., appointed Medical Officer for the Finchingfield District of the Braintree Union, *vice* C. Jamieson, M.B.Glasg. and C.M., resigned.

FORSYTH, Robert, M.D.Glasg., M.B. and C.M., reappointed Medical Officer of Health to the Drighlington Urban Sanitary District.

GRAY, F. Archibald, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer to the Newton Poppleford District of the St. Thomas's Union.

GRIFFITHS, Herbert, M.D., appointed Honorary Medical Officer to the Kensington Dispensary, *vice* Dr. Sinclair Thomson, resigned.

HARRIS, A. Wellesley, M.R.C.S.Eng., L.S.A., D.P.H., appointed Medical Officer to the Borough of Southampton Infectious Diseases Hospital.

HIGGINS, Hubert, L.R.C.P., M.R.C.S., late of St. George's Hospital, appointed House-Surgeon to Addenbrooke's Hospital, Cambridge.

HOWELL, J., M.B., C.M., appointed Assistant House-Surgeon to the Infirmary for Children, Liverpool, *vice* A. C. Wilson.

IRVINE, John C. D., M.B., C.M., appointed Medical Officer for the Parish of Nuthill, *vice* Dr. Alexander Valentine.

LAW, Ed., M.D., C.M.Edin., M.R.C.S.Eng., appointed Physician to the London Throat Hospital, *vice* Coleman Jewell, M.B., resigned.

MCINERNEY, Thomas, M.B., L.S.Sc., L.R.C.S.I., L.K.Q.C.P.Irel., etc., appointed Medical Officer to the Killaan Dispensary of the Ballinasloe Union, *vice* W. B. Deely, L.R.C.P.Edin.

MACKEITH, Alexander A., M.B.Glasg., C.M., reappointed Medical Officer and Public Vaccinator to the Brampford Speke District of the St. Thomas's Union.

PUDDICOMBE, E. Leonard, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer to the Rewe District of the St. Thomas's Union.

RONALD, Arthur E., M.B. and B.S.Cantab., M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior Resident Medical Officer to the Royal Free Hospital, Gray's Inn Road, *vice* Mr. Herbert G. Cook, resigned.

TODD, H. Ross, L.K.Q.C.P., L.R.C.S.Irel., reappointed Medical Officer for the 10th District of the Croydon Union.

WARD, E., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the Royal Berks Hospital, Reading, *vice* S. Whitaker.

WETHERED, Frank J., M.D.Lond., M.R.C.P.Lond., appointed Assistant Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, *vice* Dr. Sidney Martin, resigned.

WHITCOMBE, C. H., F.R.C.S.Edin., appointed Medical Officer to the 1st District of the Sevenoaks Union, *vice* A. Young, M.R.C.S., resigned.

DIARY FOR NEXT WEEK.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Mr. A. E. J. Barker: On the Study of Fifty Cases of Operation for Radical Cure of Non-Strangulated Hernia.

WEDNESDAY.

BRITISH GYNÆCOLOGICAL SOCIETY, 20, Hanover Square, W., 8 P.M.—Council. 8.30 P.M. ordinary meeting. Specimens: Dr. R. T. Smith and Dr. P. Q. Hebert. Paper: Dr. W. H. Fenton: On the Removal of a Large Myxoma from the Pelvis.

HUNTERIAN SOCIETY, 8 P.M.—Clinical evening. Mr. F. R. Humphreys: Cases of Perityphlitis. Mr. Cotman: Congenital Nystagmus. Dr. Stowers: Cases of Skin Disease. Mr. John Poland: Rheumatoid Arthritis in a Child; and other cases.

FRIDAY.

CLINICAL SOCIETY, 8 P.M.—Living Specimens: Mr. Bilton Pollard: A Case in which Arthrectomy of Knee was Performed two years and a half ago; recovery with voluntary movement of joint through 90°. Mr. William Bennett: A Case in which a Sarcoma has been removed from the Naso-pharynx Three Times in Twenty-four Years. 9 P.M.—Papers: Mr. Lawford Knaggs: A Case of Hydatid Cyst of the Liver, causing serious displacement of viscera: operation: death. Mr. G. A. Hawkins Ambler and Mr. Lawford Knaggs: A Case of Acute Diffuse Suppurative Peritonitis, successfully treated by laparotomy and drainage, but without irrigation. Mr. W. H. Battle: A Case of Tubercular Ulceration of the Bladder: suprapubic cystotomy: recovery.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

PARSLOE.—On Saturday, March 22nd, 1890, at 124, Queen's Road, Peckham, the wife of H. Heath Parsloe, of a son.

DEATH.

SHEPARD.—On March 17th, at 2, Willes Road, Kentish Town, N.W., W. L Shepard, M.R.C.S., L.S.A., in his 61st year.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women) S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30 Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12 Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2 Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance*—Fistula and Diseases of Rectum, males, W 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3 Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electro therapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30 *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic) F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2 F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30 o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30 *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30 Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2 Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2 Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1 Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 29, Strand, W.C , London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

M. R. R. RENTOUL (Liverpool) asks for the names of any books referring to the history of hospitals and medical charities.

M. A. AMBROSE (Buckhurst Hill, Essex) asks to be informed of some cheap rudimentary book upon sanitary and hygienic matters suitable for schoolchildren.

M. T. H. CHEATLE (Burford, Oxon.) writes: Can any gentleman recommend a farmer who would take care for a few months of a patient who wishes to leave off spirits?

MEMBER would be greatly obliged if some correspondent would publish in the JOURNAL a good form of the "usual bond" required between principal and assistant.

DEPILATORY.

M. SHELTON DALY (Manchester) writes: A young lady, aged 26, a patient of mine, is desirous of having some hairs removed from her chin. I should be much obliged if any member can give me advice upon the matter. She is healthy, of good colour; hair crisp, curly, and dark.

CHLOROFORM IN DELIRIUM TREMENS.

C. D. asks for information as to the administration of chloroform in the acute stage of delirium tremens where the ordinary narcotics have failed to produce sleep. Having heard of a case where sound sleep followed the inhalation of chloroform in which other means had failed, he asks for the views of those who have had experience in the matter.

The question, of course, arises whether with the known tendency to heart failure in acute alcoholism, it is justifiable to chloroform the patient; the result in the above case was so satisfactory that it seems worthy consideration.

WOUNDS PRODUCED BY NEW MAGAZINE RIFLE BULLET.

R. writes: It would be interesting if any readers could give some particulars of a wound inflicted on a civilian some time ago at Aldershot by the new magazine rifle bullet.

ANSWERS.

M. T. S. ELLIS.—The title of the pamphlet referred to appears to be *The Treatment of Painful Flat-foot by Massage*, by Dr. A. Landerer (Leipzig); and an abstract is given of it in the *London Medical Recorder*, January 20th, 1890, by Dr. E. J. Edwardes.

M. WILLIAM MUIR (Glasgow).—Mr. Ernest Hart's letters on *A Trip to the Fortunate Islands* have, as we have before stated, been republished by Messrs. Smith, Elder, and Co., 15, Waterloo Place, London, S.W.

M. (Melton Mowbray).—Dr. Meymott Tidy's report appears to have consisted of two parts: first, a record of facts: no poison was found; and, secondly, an opinion founded on those facts. We do not appreciate our correspondent's contention that a professor of medical jurisprudence making such an examination is not entitled to form an opinion and to state it. As to how far that opinion should prevail is a question for others, but one for the solution of which the data are furnished in the report of facts.

NOTES, LETTERS, ETC.

M. LAWRENCE HAMILTON desires us to call attention to some articles which he has published in the *County Council Gazette*, in which he has given a considerable amount of information on the subject of the waste fish of Billingsgate Market, referred to in the article published in the JOURNAL of March 15th, page 616.

CHEYNE-STOKES RESPIRATION.

M. F. W. PILKINGTON, L.R.C.P.Lond. (Oxford), writes: The morbid appearances usually noticed lead us to conclude that it is caused by a lesion situated either in the vascular or cerebral systems, and in the following case the pathological appearances noticed point in a conclusive manner to the medulla as the "irritative centre," the lesion itself being secondary to extensive cardiac disease.

W. W., aged 62, a single and very intemperate man, was admitted with symptoms of dementia, characterised by restless excitement, sleeplessness, and dirty habits, with general loss of memory and of consciousness for his surroundings, so that he could give no information about himself or his former life.

The right pupil was dilated and uneven in outline, the tongue was protruded straight, speech slow and indistinct, gait tottering, arcus senilis and cording of the radial and temporal vessels were well marked, area of cardiac dulness increased, no *bruit*, urine normal.

Patient's general condition remained unchanged until an attack of facial erysipelas set in four days before death, and during which his physical condition became rapidly worse. Twelve hours before death the typical characteristics of Cheyne-Stokes breathing set in, the rise and fall taking exactly half a minute, and the pause also half a minute. Patient was unconscious, and the right arm was found to be motionless. During the period of rest the face assumed a deathlike stillness, and the pulse, which had been beating at the rate of 46 per minute, became imperceptible, but gradually increased in volume until the deepest inspiration, then decreased in the same ratio as the respirations. At the *post-mortem* examination two small patches of recent ulceration were found in the ascending aorta; the mitral and aortic valves were thickened. In the brain, a patch of recent softening, the size of a filbert, was found in the left cuneate lobe; a second smaller patch in the third temporo-sphenoidal convolution of the right side; and a third, of still more recent date, affecting the right anterior pyramid of the medulla.

THE FASTING MAN.

MR. G. N. ROBINS, M.R.C.S.Eng., L.R.C.P.EDIN. (Westminster) writes: The effect of the continuance of the fast upon Signor Succi's condition during the second week will be seen on reference to the appended chart. He has lost in weight 18 lbs. 12 ozs., yet his muscular strength is apparently unaltered. He sleeps soundly, and, except that he is getting very emaciated in appearance, is apparently none the worse for his experiment. The urea excreted is now considerably less than half the original amount, in itself a proof of the absence of nitrogenous food materials.

Daily Record of Succi's Condition during Second Week of his 40 Days' Fast at the Royal Aquarium, Westminster.

Date, 1890.	Day of Fast.	Pulse.	Temperature (axillary).	Respirations.	Weight.	Dynamometer (kilogrammes).	Spirometer (cubic centimètres).	Urine passed (fluid ounces).	Urea = (grains).	Water Consumed (fluid ounces).	Kaiser Brunnen (fluid ounces).	Hunyadi Janos (purgative) (fl. oz.).	Sleep (hours).
					lb. oz.								
March 25th, 11.30 A.M.	8	58	98.1°	20	111 2	49	1500	18	259.8	7	9½	—	5 2
March 26th, 11.30 A.M.	9	56	98.0°	20	110 7	46	1500	15¾	248.05	13	15	—	7 2
March 27th, 11.45 A.M.	10	55	97.6°	17	109 14	49	1500	16	234.9	9	19	—	5 2
March 28th, 12 noon	11	72	98.2°	20	109 8	48	1550	15⅜	215 245	9	19½	—	6 2
March 29th, 12 noon	12	60	98.0°	21	108 10	50	1500	16¾	227.01	9	17	—	5 2
March 30th, 12 noon.	13	56	98.0°	21	107 14	49	1550	14½	203.0	9	15	—	5½ 3
March 31st, 12 noon	14	58	98.0°	20	107 7	49	1500	18	196.77	18	4	5	2 5 3

A COMPLEX BLUNDER.

IN a recent number of the *Glasgow University Magazine*, conducted under the auspices of the Students' Representative Council, there is a short article on "The Medical Element in Shakspere's Plays." The author's recollections of his historical studies must have been in a state of most admired confusion when he wrote of the celebrated Dr. Caius that "he became President of the College of Physicians, and, by raising Gonville Hall into Caius College, was the real founder of the Royal College of Surgeons, London. The modern name—Guy's Hospital—must be familiar to every medical student." Are we to understand that Dr. Caius founded Guy's Hospital? or that the Royal College of Surgeons, Caius College, and Guy's Hospital are convertible terms? Thomas Guy was, perhaps, not in his private capacity a very estimable person, but he did one magnificently good action, and deserves that his name should be held in grateful remembrance, not only by the suffering poor, but by the medical profession.

DYSMENORRHŒA.

PUZZLED writes: A virgin, aged 21, consulted me in November last for menorrhagia and metrorrhagia. This was successfully treated by the sulphates of iron and magnesia, and at the subsequent December period there was a marked improvement in every way, with the exception of severe antecedent pain, which was a new feature. Both at the January and February periods this has increased, until the course of events is as follows:

In from thirty-six to forty-eight hours before the onset of the menstrual

discharge, besides ordinary aching pains, she is seized with severe paroxysms of pain, lasting from five to fifteen minutes, at intervals varying from ten minutes to an hour. At these times the pain is terrible, the patient biting her lips till the blood comes, and knocking her head against the bedstead. She is of a decidedly neurotic temperament, but not hysterical, and, as soon as the paroxysm is passed, will be cheerful, and make the best of it.

I shall be very grateful for any suggestions as to treatment, both preventive and of the attacks, having tried caulophyllin and pulsatilla, belladonna, opium, chloroform, hyoscyamus, nitrite of amyl, permanganate of potash, and the whole routine of hot enemata, foot and hip baths, sinapisms, etc., without avail; hypodermic injections of morphine being the only treatment that seems to control the pain. An examination is objected to.

Medical Appeal.

AID is urgently solicited on behalf of a medical gentleman in very reduced circumstances, through sickness and loss of practice, to enable him to carry out the suggestions of the hospital medical authorities and his private medical advisers of proceeding to a warmer climate.

Subscriptions gratefully received by Rev. Dr. Carter, LL.D., Rector of St. John's Church, High Street, Wapping, E.

Subscriptions already received from the British Medical Benevolent Association, £10.

The Moon Fund.

DR. PETER HORROCKS, Honorary Treasurer (26, St. Thomas's Street, Southwark, S.E.), forwards the following list of subscriptions to this fund. The list is now closed.

	£	s.	d.
William Carter, M.D.	5	5	0
J. C. Steele, M.D.	2	2	0
Roland F. Cox, L.R.C.P.	1	1	0
H. G. Rawdon, F.R.C.S.	0	10	6
Chauncey Puzey, M.R.C.S.	0	10	6
Robert Jones, F.R.C.S.	0	10	6
H. Harvey, M.B....	0	10	6

Toogood *v.* Wilkes.

Wilkes Indemnity Fund.

THE following subscriptions have been received since last publication:—

	£	s.	d.
Mr. T. H. Taylor, Clifton	1	1	0
Mr. E. C. Board, Clifton	1	1	0
Mr. F. J. Flower, Warminster	0	10	6
Mr. C. R. Straton, Wilton	2	2	0
Mr. A. F. Van, Cranborne	1	1	0
Dr. E. L. Fox, Clifton	2	2	0
Mr. C. Clay, Fovant	1	1	0
Mr. A. F. Shapland, Brighton	1	1	0
	9	19	6
Subscriptions already announced	47	4	7
	57	4	1

The list will shortly close. H. J. MANNING, Hon. Treasurer, Salisbury.

Rigid Os.

MR. W. A. GARRY, L.K.Q.C.P.I., etc. (Thornhill, near Dewsbury), writes: P. S., aged 39, second pregnancy; first child born eighteen years ago. Labour began on the morning of January 18th. I was sent for at 11 P.M. same date. On arrival, I found the os not quite the size of a five shilling piece. Waters had come away some hours before I was called to see the case; pains very feeble, and with long intervals between them, although I was informed by the nurse that they were both strong and frequent from 2 P.M. till 10 P.M. I gave her an enema, and got her to walk about for some time, in the hopes of bringing on the pains, but with little effect. After remaining an hour, and finding that there was little or no progress, I left, but went to see her again at 2.30 A.M., January 19th. This time the pains came on rapidly; and were exceedingly strong. Still no progress, pulse rapid, temperature high, tongue uniformly coated and dry; patient was becoming rapidly exhausted. I determined to deliver as speedily as possible, and with this view gave chloral, gr. 15, and intended to repeat the dose every half hour till she had taken a drachm, but was pleased to find, on making a vaginal examination half an hour after administering the second dose, that the os had dilated sufficiently to allow me to deliver by the forceps. Patient made an uninterrupted recovery, and was able to superintend her household duties on the ninth day.

From my experience, both in hospital and private practice, of the use of this drug in the treatment of the above condition, I am of opinion that it is vastly superior to any other pharmacopœial preparation, when properly administered and with due precautions (should not be given, or at least very cautiously, in a case where fatty heart or atheromatous arteries is suspected), and would strongly recommend my young medical friends to give it a trial before adopting extreme measures, which, in my opinion, are rarely if ever required.

Coffee and Cold Water.

A CURIOUS and amusing instance of the way in which pathological facts misinterpreted may be made to support a theory which is strongly held, is afforded by the following passage from a letter of the Princess Palatine, mother of Philippe d'Orleans, Regent of France, published in a life of that princess, recently isssued by Chapman and Hall. The princess, it should be said, had a rooted aversion to coffee, which she considered a most dangerous beverage:

"I am grieved to learn," she writes to a friend, "that you have taken to coffee; nothing is so unhealthy; and I have seen many who have had to give it up because of the diseases it has brought upon them. The Princess Hanau died of it in frightful sufferings. After her death they found the coffee in her stomach, where it had caused several small ulcers."

Madame d'Orleans had, however, an almost equal suspicion of cold water. Writing to a friend to announce his sudden death, she says:

"M. de Louvois's habit of drinking cold water has brought him no good, but I do not know whether it is mineral or spring water which hurt him." He had been recently taking the mineral waters of Forges. The Princess's own taste was peculiar, for she was very fond of beer-soup and black puddings, and prided herself on having "brought raw ham into fashion" at the Court of Louis XIV.

To Correspondents.

OUR correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the JOURNAL brevity of style and conciseness of statement greatly facilitate early insertion We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Walter Pearce, London; Mr. J. L. Hague, St. Lawrence-on-Sea; Dr. S Craddock, Bath; M.D., D.Sc.; Mr. O. E. Only, Llangefni; Dr. W. Muir Glasgow; Dr. Penrose, London; Dr. de H. Hall, London; Mr. T. Sick, Dublin; Mr. H. B. Warner, Sheffield; Mr. J. W. Dore, London; Dr. E. Long Fox, Clifton; Messrs. Arnold and Co., London; Dr. A. Tauber, Warsaw; Dr W. J. Collins, London; Dr. O. Wood, London; Mr. R. Freeman, London Mr. A. Bruce Payne, Walmer; Dr. Mickle, London; C.G.C.; Dr. W. L Morgan, Oxford; Mr. W. Molesworth, Bristol; Mr. A. Scovell, London Messrs. Evans and Wormull, London; Mrs. Smith, Boston Spa; The Secretary of the Sheffield Medico-Chirurgical Society; Mr. J. E. Bennett, Liverpool; T.; Dr. J. W. Ward, Halifax; Mr. E. Willett, London; Mr. W. K Sibley, London; Mr. F. C. Butt, Calcutta; Mr. J. L. Hamilton, London Rev. C. H. Middleton Wake, London; Dr. M. Tidy, London; Dr. J. S Bristowe, London; Dr. St. C. Thomson, Florence; Mr. T. Holmes, London Dr. T. C. Bulmer, Wapping; Messrs. Wright and Co., Bristol; Mr. A. Elliot Edinburgh; Mr. Lawson Tait, Birmingham; Mr. W. B. Hemsley, Chiswick Dr. Whitelaw, Portobello; Messrs. W. J. Bush and Co., London; Mr. J. M Farquharson, Edinburgh; Mr. E. W. Du Buisson, Tunbridge Wells; Mr. W W. Fenton, Kenton; Mr. R. Harrison, London; Dr. Aveling, London; The Secretary of the Bristol Hospital for Sick Children and Women; Dr. J Keser, London; Mr. W. J. Stephens, Brighton; Dr. N. Kerr, London; Our Australian Correspondent, Melbourne; Dr. J. Holmes, Radcliffe; Dr. C S. Woodhead, Edinburgh; Mr. V. Jones, London; Dr. Ward Cousins, Southsea; Mr. M. Hewetson, Clonmel; Professor J. Attfield, London; Dr. Renoul, Liverpool; Mr. W. R. Etcher, Clifton; Dr. L. Shapter, Exeter; Mr. J D. Campbell, London; Dr. Louis Parkes, London; Dr. A. Peddie, Edinburgh; Dr. MacQuibban, Aberdeen; Dr. C. B. Voisey, Chatham; Dr. J. P Lewis, Dalbeattie; Dr. V. A. Ellsworth, East Otto, New York; Mr. A. Ambrose, Buckhurst Hill; Mr. Jabez Hogg, London; Mr. Watson Cheyne London; The Principal of Owens College, Manchester; Our Paris Correspondent; Mr. H. H. Parsloe, Peckham; Our Newcastle Correspondent; Mr. H D. Stanistreet, Deptford; Mr. C. S. Loch, London; Mr. G. N. Robins London; Dr. W. Thorburn, Manchester; Brigade-Surgeon J. B. Hamilton Lucknow; Dr. G. H. Savage, London; Dr. P. Horrocks, London; Dr. I Prichard, Cardiff; Mr. E. E. Bowden, Warrington; Spes; W.K.C.; Mr. J M. Richards, London; Dr. H. Fox, London; G.R.; etc.

BOOKS, ETC., RECEIVED.

A Course of Ambulance Lectures. By J. Lionel Stretton, L.R.C.P. Kidderminster: Printed by W. Hepworth. 1889.

Nerves of the Human Body; with diagrams. By Alfred W. Hughes, M Edinburgh: E. and S. Livingstone. 1890.

The Workhouse and its Medical Officer. By Alfred Sheen, M.D. Second editi Bristol; John Wright and Co. 1890.

Chronic Urethritis and Other Affections of the Genito-Urinary Organs. M. Berkeley Hill, M.B. London: H. K. Lewis. 1890.

Physical Diagnosis. By G. A. Gibson, M.D., and William Russell, M.D. Ed burgh and London: Young J. Pentland. 1890.

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THE LUMLEIAN LECTURES
ON
CONVULSIVE SEIZURES.

Delivered before the Royal College of Physicians of London.

By J. HUGHLINGS JACKSON, M.D., F.R.C.P., LL.D., F.R.S.,
Physician to the London Hospital, and to the National Hospital for the Paralysed and the Epileptic.

LECTURE III.

After-Effects of Epileptiform Fits.—Paralysis due to Cortical Exhaustion.—Analysis of a Case.—Variations in Degree and in Range of Post-epileptiform Paralyses.—Hemiplegia, Post-epileptiform and from Destruction of Motor Part of Internal Capsule contrasted.—Post-epileptiform Defects of Speech.—The Negative and Positive Elements of these Defects.—The Psychical and Physical.—The Concern of the Right and of the Left Half of the Brain in Speech.

I HAVE now to consider the After Effects of excessive nervous discharges in cases of epileptiform seizures. This part of our subject is of extreme importance; the presumption is that from the study of the comparatively simple post-epileptiform conditions we shall obtain a basis for the interpretation of post-epileptic conditions. It is for this reason that I go into some detail as to the former.

There is not rarely after epileptiform seizures local temporary paralysis;[1] and sometimes aphasia with it. For the present I speak of paralysis only. In this inquiry we have no direct concern with paralysis, temporary or permanent, owing to destruction (by clot, softening, or any other pathological process) of any part of the brain, not even if the malady set in with a convulsion.

I must particularly mention cases in which there are both (1) permanent paralysis—for example, imperfect hemiplegia; and (2) occasional epileptiform seizures, the convulsion beginning in some point of the muscular region paralysed and involving part or the whole of it, and sometimes also parts beyond that region. In these cases the two opposite functional states—destruction of some nervous elements which represented complex movements, and high instability of some others which still represent other complex movements of the same muscles—are side by side in one part of the cortex (or the latter of cortex and the former of fibres passing down from it). After a paroxysm in such a case there may be temporary increase of the paralysis. For my present purpose, which is only an attempt to explain the nature of the sequence (paralysis after convulsion), I shall exclude these cases, and deal only with what I may call uncomplicated cases—that is, with those in which there is only paralysis immediately when epileptiform seizures have ceased, such paralysis being temporary (unless, of course, the fits recur at short intervals). Something has to be said, however, regarding certain of the so-called uncomplicated cases.

In some cases in which there is no *discoverable* paralysis in the intervals of the fits, except for a short time after one, there may be indirect evidence of a negative functional state of a few fibres of the second segment of the kinetic route. That evidence is foot clonus and exaggerated knee-jerk on the same side as that in which the convulsion occasionally starts. I mean, of course, cases in which these abnormal tendon reactions are producible at all times, although in a greater degree just after a fit. It may be that severely careful tests would show some *quasi*-trifling paralysis —loss of a very few complex movements. I shall here ignore this slight inferential paralysis, and speak of such cases as "uncomplicated."

The term post-epileptiform paralysis will be used to include all paralyses the immediate sequels of epileptiform seizures. Arbitrary divisions may be made, speaking of range only. (1) Terminal paralysis, as of a hand; (2) monoplegia, as of an arm; (3) hemiplegia; and (4) a range, which is not generally admitted—some degree of slight universal paralysis. I hold the hypothesis (essentially that of Todd and Alexander Robertson) that there is exhaustion of central nervous elements, including fibres of the second segment of the kinetic route, and that this is produced by the sudden and excessive discharge in the prior paroxysms. These nervous elements are exhausted, not otherwise injured, so that recuperation is prompt, and the corresponding paralysis is temporary. There is a sequence of two opposite functional states, superpositive of the first degree (*a*) in the paroxysm, and then, after the paroxysm, negative. But there is often more than a negative functional state in the post-epileptiform condition. We may find increased tendon reactions implying a superfunctional state of the second degree (*b*) of lowest motor centres. The duplex nature of these post-epileptiform conditions must be borne well in mind.

The term "exhaustion" has been objected to: general bodily prostration is, of course, not meant; but, as said, exhaustion of nervous elements in a particular part of the central kinetic route. There are, I suppose, degrees of exhaustion, and no doubt of different numbers of nervous elements of the kinetic route in different cases. But illustrating by the extremest degree, the supposition is that nervous elements of the route, after their excessive "exercise" in the fit, are left "fatigued" to the degree of utter impotence. The nervous elements exhausted in post-epileptiform paralysis are, I suppose, in the same state as are the motor nerve fibres of the sciatic nerve going to the cut-off leg of a frog after strong faradisation of that nerve trunk; the leg is convulsed by the faradisation (stage analogous to epileptiform seizure), and is next paralysed (stage analogous to post-epileptiform paralysis) because its motor fibres are exhausted by the unnaturally high functioning they have been artifically compelled into. A closer analogy may be stated, although the case to be instanced is a complicated one. The motor nerves of a frog, poisoned by a very large dose of strychnine, lose function partly by the direct action upon them of that poison, but partly (this is what is relevant) through exhaustion—"the exhaustion of over-use due to the intense activity of the nerve during the stage of spasm."[2]

Not only the term, but the hypothesis itself is objected to. I will consider other hypotheses. The paralysis has been ascribed to cerebral congestion consequent on arrest of respiration in the preceding seizure. It is difficult to see how cerebral congestion, even if we grant that it can produce paralysis, could be so exquisitely local as to produce what we sometimes observe, paralysis of one arm only, or even of but part of one. Again, absolute paralysis of a limb is found after seizures nearly limited to that limb, in which seizures there was no arrest of respiration and (if that is thought to bear on the question) no loss nor even defect of consciousness; the patient may talk throughout an attack in which an arm is involved, and after which it is temporarily paralysed. There is the hypothesis that the temporary post-epileptiform paralysis is owing to a small extravasation of blood in the brain, caused, I suppose it is meant, by congestion consequent on arrested respiration in the preceding seizure. I admit that very small clots may cause local paralysis, and that such paralysis may be transitory. But the post-epileptiform paralysis is—that is in my experience—always of the parts which were first and most convulsed in the prior fit; it would be marvellous if a small hæmorrhage happened locally in one-half of the brain, so as to produce temporary paralysis of the parts first and most convulsed, and happened in the same place in every fit the patient had. Besides, if arrested respiration could cause cerebral hæmorrhage by leading to sudden great congestion of the brain, we should find very local paralysis after fits of the epileptic kind, and we do not; according to current opinion there is no paralysis at all after seizures of this kind. I shall exclude the two hypotheses just dealt with.

Post-epileptiform paralysis has been ascribed to inhibition by some medical men whose hypotheses deserve respectful consideration. Gowers believes that discharges in epileptic fits sometimes inhibit; he thinks that temporary paralysis is found in some cases after a purely sensory discharge which does not next discharge motor centres, but inhibits them. In some cases of epileptiform seizures the patient tells us that his arm "falls dead," there being no spasm in it, whilst the face of the same side is being convulsed. This, so far as I can learn, is a paroxysmal, not a post-paroxysmal paralysis, but possibly it remains for a short time after the convulsion of the face has ceased. I express no opinion as to the validity of the inhibition hypotheses. It is possible that there may be discharge spreading slowly to a centre of the middle level, excessive enough to cause exhaustion of some of its elements, although not enough to overcome the resistance of lowest motor centres and thereby to produce actual convulsion. I have spo

[1] This paralysis was long ago described by Todd under the name "Epileptic Hemiplegia."

[2] See Wood's *Therapeutics*, 7th edition, pp

of convulsion" in which there is no actual convulsion, but do not know whether there was any degree of post-paroxysmal paralysis of the parts "ideally convulsed." I go on to consider how far the hypothesis I hold, essentially that of Todd and Robertson, accounts for the facts of different cases.

There is exhaustion of the cortex after artificially induced epileptiform fits in some lower animals, as Franck and Pitres[3] have shown; they use the term "épuisement cortical post-épileptique." They write:[4] "Le phénomène de l'épuisement cortical consécutif aux accès d'épilepsie partielle (what I call epileptiform seizures) est très facile à constater." The "épuisement" is transitory; it lasts a quarter or half an hour. By artificial excitation of the part of the cortex in question, as the exhaustion diminishes, simple movements are first producible, and later epileptiform seizures, but not, for some time, is an attack provoked so intense as before the "épuisement." I think that the researches of these distinguished physicians countenance the inference I have drawn that the exhaustion in post-epileptiform conditions, although local, is yet widespread in the "motor region;" that besides "running down" of the cells of the fulminate there is also running down of the collateral normal (stable) cells which were compelled by the fulminate to discharge excessively. Franck writes:[5] "Cet épuisement est tout *local*, non point qu'il se borne exclusivement à la portion circonscrite du champ moteur excité en premier lieu, mais il est limité à la zone motrice de ce côté." Exhaustion in the sense of general bodily prostration is not meant, for Franck and Pitres point out that excitation, without effect on the exhausted part of the motor region, when transferred to the motor region of the opposite hemisphere, produces severe convulsions.

I will here mention an objection to the hypothesis of exhaustion made to me by a physician whose opinion I respect highly, that during post-epileptic coma there may occur a convulsion affecting all parts of the body, which I say are then paralysed. But what I mean by paralysis in post-epileptic coma is loss of some most complex movements, represented by the highest centres of all or very many parts of both sides of the body; there is retention of other most complex movements represented by those centres; most of the complex (middle centres) and simplest movements (lowest centres) being also retained. Further, it is quite certain that an arm which the patient is quite unable to move in the slightest degree after an epileptiform seizure may be suddenly seized with another severe convulsion (I am supposing a case in which neither in nor after the paroxysm consciousness is lost). This, however, is only reasoning by analogy, and I admit that the interpretation of the last-mentioned case is to me most difficult.

I will now give an illustration of post-epileptiform paralysis. It may be taken to be an artificial one, but it is essentially that of a patient whose case I reported.[6]

A man, B., was *seemingly* (1) quite well when he arrived at my house after a walk of about a mile. (It is convenient to speak of this as the "first stage," not, of course, of the fit, but of the dramatic occurrence I am relating.) (2) (*a*) A fit began in the toes of his left foot.[7] (*b*) The whole leg was gradually involved, the spasm passing up the limb. In about eight or ten minutes the convulsion ceased, when (3) the leg was found to be (*a*) paralysed, and (*b*) there was exaggeration of its knee-jerk and clonus of the foot. (4) In six hours or less he was *seemingly* well again, certainly he was then rid of his paralysis; and next day (I did not test his tendon reactions before) his knee-jerks were normal and there was no foot-clonus. Let me consider the four acts of this drama.

(1) The patient was not really well when he arrived at my house. He had a persistent discharging lesion, presumably of a few cells of his leg centre (perhaps only of some of those of the fluxion centre); so to say, he always carried it about with him, or, to speak more precisely, it was a persistent *quasi*-parasitical ...er-functionable part of himself.

(2) (*a*) The discharging lesion did function and that excessively, ...ossibly produced the initial spasm (of the toes) by its sole dis... but (*b*) next, as a fulminate, by overcoming the resistance of ...ying) other cells of the leg centre it compelled these nor... cells to discharge—compelled them to co-operate in its excess.[8] So much for the discharges (primary and secundo-primary) of the cortex (middle motor centres). That there was a supernormal activity from cortex excessively discharging to and of the muscles of the leg convulsed is certain. The route of the numerous and rapidly succeeding nerve impulses from the hyperphysiological cortical process would be certain fibres of the corona radiata, of the internal capsule, of the crus cerebri, pons, and medulla of the right side, then of fibres of the left lateral column (possibly also of the second and third sets of interconnecting fibres, both of which I shall ignore here) up to the anterior horns (some lowest motor centres); so far the second segment of the kinetic route is concerned. The resistance of the cells of these lowest motor centres would be overcome (secondary discharges), and the impulses (presumably increased in number) would then be of fibres of the nerve roots from those centres, thence of the continuing fibres of nerve trunks and their branches to the end plates of the muscles (third segment of the kinetic route); the resistance of the muscles would be overcome, and there would finally be great "explosive decomposition" of muscle substance (tertiary discharges).

(3) The paralysis signified exhaustion of nervous elements previously excessively functioning in the paroxysm. There would be exhaustion of cells of the cortex, not only of those of the discharging lesion, but also of those collateral stable cells which it, as a fulminate, compelled to discharge excessively. There would be exhaustion, too, of the fibres passing down from both sets of cells. The hyper-kinetic route, or at least part of it, would now be a hypo-kinetic tract. There would be exhaustion as low down as certain lowest motor centres; these centres were therefore exalted in function (second degree of superpositive functional change), hence the increased tendon reactions.

(4) The paralysis had passed off; the patient could walk well. Next day the knee-jerks were normal. There was recuperation of the exhausted nervous elements. No doubt the cells of the discharging lesion (after the fit, stable below normal) began at once by gradual morbid nutrition to re-attain high tension and very unstable equilibrium—"began to prepare for the next fit."

So far as I have seen, post-epileptiform paralysis is always most of the parts which were first and most convulsed in the preceding paroxysm, as in the case of the patient B. This correspondence is denied by some eminent physicians; further observations will settle the matter. It is an important one, for, according to the view I take, post-epileptiform paralysis adds no evidence to that afforded by the prior convulsion as to the seat of pathological changes in the cortex. If, however, there is not the correspondence I suppose, the case is very different and the situation is a most difficult one.

I think there is a relation of proportionality between the severity of the epileptiform fit (severity of the discharge) and the subsequent temporary paralysis (amount of exhaustion). I should have thought this a truism if it had not been expressly denied. It is averred that whilst after the epileptiform kind of seizure there is often decided paralysis, there is not, as a matter of fact, any whatever after the severer fits of the epileptic kind. I demur to the "fact," believing that whilst after a limited epileptiform seizure there is often great *local* paralysis, loss of *many movements* of a small part of one side of the body, there is after a severe epileptic fit *widespread* paralysis, loss of *few movements* of most, if not of all, parts of both sides of the body. Indeed, I submit that the whole condition of bodily impotence after a severe epileptic fit is paralysis, and that, speaking gene...

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[3] *Arch. de Phys.*, 1883.

[4] *Op. cit.*

[5] *Fonctions Motrices du Cerveau*, pp. 90, 91.

[6] *Medical Times and Gazette*, February 12th, 1881.

[7] ...e real case (*op. cit.*) the patient said that in all his seizures ..." was to the outer side of the ball of the great toe; very ...y earliest stage, one possibly of spasm limited to the big

[8] In the real case (*op. cit.*) the left arm was slightly convulsed The curren... hypothesis would be that, in causing this part of the fit, the discharge sprea... from the leg centre to the arm centre. This I cannot disprove. Yet I think i... an equally legitimate hypothesis that the discharge causing the slight move... ments of the arm in this case was of those elements of the "leg centre" repre... senting subordinate movements of the arm. No doubt, of course, in a severe... fit other centres of the motor region would be discharged. As implied in severa... parts of these Lectures, I do not accept the current doctrine of Localisation... The minute investigations of the monkey's cortex by Horsley and Beevor g... strongly against it. To me the "leg centre" is only a part of the "moto... region" where most special movements of the leg are represented, and wher... subordinate movements of the arm and of other parts of the body are also repre... sented (the same, *mutatis mutandis*, for other centres). The researches of She... rington (*Journ. of Physiology*, vol. x, No. 5) seem to me to be counter to the cu... rent doctrine. He writes, "....after lesion in the leg area, encroaching littl... if at all upon the cortex of the arm area, the degeneration in the cord stoppe... short in great part in the cervical region, especially in the cervical enlargemen... Again, after lesion in the arm area, encroaching little if at all upon the corte... of the leg area, the degeneration in the cord extended down through the dors... into the lumbar and even throughout the sacral region of the cord." He su... gests, however, that the fibres descending from the arm area into the lumb... region are visceral.

rally, there is really more paralysis than is found after severe epileptiform seizures.

The relation of an epileptiform fit to the sequent paralysis, or, more exactly, the relation of the two opposite functional states, discharge, and subsequent exhaustion, is not a simple relation.

According to the hypothesis I hold, there should always be some, however little, paralysis after an epileptiform seizure, at least some in the parts first and most convulsed, however slight the attack may have been. Trifling degrees of paralysis are easily overlooked. This deserves remark. Once more I urge that more or less paralysis from negative central lesions is always loss of more or fewer *movements;* it is not to be thought of merely as *loss of power in muscles.* There may, for example, be loss of the most special (the most "delicate") movements of the muscles of the hand with retention of other, the next most special (the "coarser") movements of those muscles. I will illustrate by a case of imperfect post-epileptiform paralysis.

After a slight epileptiform seizure starting in the hand, the patient may have difficulty in picking up a pin, and may yet be able to grasp strongly. There is clumsiness of movement, or perhaps some may say "loss of muscular sense." These terms must not let us overlook the fact that the slightly abnormal motor condition of the hand is a double condition, one of two opposite elements. There is in the case supposed difficulty in picking up the pin, because a few most special movements of the hand are lost (so far paralysis, negative element); the pin has to be picked up by the next most special movements remaining, which are *now* the most special of the movements (positive element); they do not serve so well as the most special would have done; hence the operation is "clumsy."[9]

From such *quasi*-trifling paralysis as that indicated, loss of a few most special movements of the muscles of the hand, there are met with after severer epileptiform seizures beginning in the hand degrees of loss of next and next most special (or, equivalently, of the next and next more general) to loss of all movements of the muscles of it, and of some movements of the rest of the arm too; there is then no "clumsiness," for no movements of the hand remain to do anything.

The last remark introduces another part of our subject. It implies that post-epileptiform paralysis varies in a double way, (*a*) in degree (number of movements lost) and (*b*) in range (number of parts of which movements are lost). I think, in harmony with what was said in Lecture II, on compound order of spreading of convulsion, that degrees of difference between what may be called little and great paralysis after epileptiform seizures are not simple degrees of more or less amount of paralysis, nor simple degrees of more or less range; there are degrees of both, there are differences of Compound Degree. After the slight epileptiform seizure alluded to in the foregoing, there was slight paralysis limited to the hand. If that patient had had a somewhat severer fit, he would have had after it more paralysis of the hand (loss of more movements of it) and greater range of paralysis (loss of some movements of the next part, say the forearm).

That there was exhaustion lower than the cortex in B.'s case, exhaustion also of fibres of the second segment of the kinetic route, that is, up to the lowest motor centres, is signified by the exaggerated tendon reactions. I have spoken of the lowest motor centres and of the third segment of the kinetic route (fibres from them to the muscles) and of the muscles as not being exhausted in B. at the time when his leg was paralysed. It would, however, be remarkable if a few elements of these lowest parts of the kinetic route were not hypo-kinetic to some trifling degree after the hyper-kinesis during the convulsion—if there were not after their excessive exercise some exhaustion of a few of their elements. No doubt, being more strongly organised structures, the lowest motor centres and muscles are less easily exhausted by the discharge, and, if exhausted, recuperate soonest of all parts of the route. After some epileptic fits (Westphal, Gowers, Beevor) the knee-jerks are temporarily lost; in these cases some lowest motor centres, the lumbar nuclei (as Gowers suggests) are probably temporarily exhausted. For my part, I think it likely that during the post-epileptiform paralysis in B., although his knee-jerks were exaggerated, there was some trifling hypo-kinesis of the lowest part of the route, that the hypo-kinetic tract was from cortex up to and of the muscles, although, no doubt, elements of the cortex and of the first segment of the kinetic route were most exhausted. The muscles in such cases act to faradisation (I did not test B. this way) as well as do those of the fellow leg. But if we were to take a case of paralysis, such as that of a man a few years ago under my care who had nineteen hundred and forty-five fits—each beginning in his left thumb, involving the left arm, fixing his chest, and turning his head to the left—in about fourteen days, and whose left arm was absolutely paralysed in the intervals, we might find by fine testing (what we did not find in that patient by ordinary testing) some slight degree of reduction of faradic reaction of the muscles, or, if not, of reduction of faradic or galvanic reaction in their nerve-trunks, of the part paralysed. In B. the exaggeration of the knee-jerk would not show that *all* the cells of the anterior horn which is concerned with that jerk were intact; a few of the smallest cells may have been exhausted.

In a case of amyotrophic lateral sclerosis there is wasting of some cells of anterior horns (hence the atrophy of some muscular elements) and increased activity of other cells of the same horns (hence the increased tendon reactions of the same muscles). This case shows that the functional condition of different cells of the same anterior horns may be diametrically opposite, and that the symptomatology in the muscular region which the horns supply may be of two correspondingly opposite elements. I shall put aside the hypothesis of exhaustion of a very few elements of the lowest motor centres, and of the third segment of the kinetic route, and of the muscles in such cases as that of B. for the present, but yet do not abandon it. I shall speak of the hypo-kinetic tract in such cases as that of B., as if it extended no lower than fibres of the lateral column, and as not involving any cells of the lowest motor centres in which they end. It would be reasonable to grant that it was at least of that depth in B.'s case.

It will be well to draw attention to resemblances and differences between post-epileptiform hemiplegia and the hemiplegia which is the result of destruction of the motor part of the internal capsule; for the moment assuming that the explanation given of the former is correct, and that the statements accepted by most physicians as to the latter are accurate. I will call the former Hemiplegia E, the latter Hemiplegia D.

First, for resemblances, taking to begin with, for comparison and contrast, *recent* Hemiplegia D. The regional (paralytic) affection is the same as in Hemiplegia E, and in each depends on a negative state of the same strand of fibres, those interconnecting the right middle motor centres and the left lowest motor centres. (I shall speak only of what I called the first set of fibres.) Now for differences. In Hemiplegia E (as in the case of the patient B.) there is exaggeration of the tendon reactions, in Hemiplegia D they are, we shall suppose, normal. Correspondingly for the negative lesions; in Hemiplegia E the negative lesion is of the whole length of the interconnecting fibres mentioned (and spoken of before as the second segment of the hyper-kinetic route become a hypo-kinetic tract) up to, but not involving, the lowest motor centres. In recent Hemiplegia D the negative lesion is quite local, a breaking up of the capsular part of the interconnecting fibres; the rest of the segment, its whole extent below the capsular break, being normal,

Now for *old* cases of Hemiplegia D; in these there are increased tendon reactions; in them a negative lesion secondary to the capsular one has been established; there is then a negative state (destruction) of the fibres (lateral sclerosis) below, and added on to, the local capsular lesion;[10] that is to say, in the case of Hemiplegia E there is established at once the state of things which only occurs late in Hemiplegia D. So long as the exhaustion lasts (so long as the central kinetic route is hypo-kinetic) in Hemiplegia E, the situation is the same as in old cases of Hemiplegia D; it is the same for the time being whether the nervous elements in question are functionally dead, as in the former, or actually dead (broken up and wasted away), as in the latter.

In a popular use of the word cause, these negative conditions may be said to cause the increased tendon reactions, just as, popu-

[9] Here is an illustration of the principle of duplex symptomatology of nervous maladies, and that the positive element is often owing to activity or to overactivity of nervous arrangements untouched by any pathological process. The movements by which the pin is picked up are the outcome of activity of healthy nervous arrangements. To blame these, to speak figuratively, for the clumsiness of the operation is to ignore that they are doing their best in the evil circumstances. The principle is most important, if it applies, as I think it does, throughout the nervous system, from the symptomatology of a case of paralysis of an ocular muscle to that of cases of insanity; in the former case it is quite certain that most of the symptomatology answers to activity of perfectly healthy nervous arrangements of the highest centres; the negative mental symptoms in cases of insanity alone correspond to disease; they signify Dissolution of part of the highest centres; the coexisting positive mental symptoms signify evolution going on on a lower level of those centres. The very same principle is displayed in cases of aphasia.

[10] Sherrington has traced the "descending wasting" in the lateral column of the cord of the monkey as low as the coccygeal nerve roots.

larly speaking, opening floodgates is said to cause water to flow. But using the word cause properly, it is an impossibility that the negative functional state in either Hemiplegia E or D can cause anything; a nothing cannot cause the something, the superpositive condition for exaggeration of the knee-jerks. If Bastian be right in his conclusions as to the effect of absolutely complete transverse lesion of the dorsal or cervical cord (see Lecture I), the hypothesis of a change in the anterior horns, produced by any sort of pathological process, is no longer tenable, as he has pointed out. I shall, however, consider other arguments against that hypothesis, which are supplied by cases of post-epileptiform paralysis.

It is agreed upon that the increased tendon reactions in cases of hemiplegia depend on exalted "excitability" (a superpositive functional state) of nervous elements of some anterior horns. There are different hypotheses as to the process by which that exaltation is produced, and thus as to the exact state of the cells of the anterior horns concerned. Two questions may be asked. Is the abnormal condition of the cells the result of any pathological process involving the horns themselves, or are the cells healthy although in greater activity? I reply to the first question negatively, and to the second affirmatively.

I take, for further consideration, an old case of Hemiplegia D, one in which lateral sclerosis is established. And now I consider rigidity as well as increase of the knee-jerk (limiting illustration to that one tendon reaction), both of which superpositive phenomena it is agreed upon imply exaltation of function of cells of anterior horns. One hypothesis as to the production of exaltation of function of the anterior horns (some of the lowest motor centres) is that the same process which leads to destruction of fibres of the lateral column produces, when come to the horns with which they are in physiological union, increased "excitability" of their cells; the same process, on this hypothesis, produces loss of function (destruction) of fibres and its physiological opposite superfunction of cells. The hypothesis of Charcot deserves to be received with profound respect. Referring to the condition of the cells of the anterior horns, as it corresponds to rigidity in hemiplegia, he considers it the theory which best accounts for facts we daily witness in cerebro-spinal diseases, that there is a purely dynamic lesion of their ganglion cells—a state analogous to that produced by strychnine. If this state of the cells be produced by an extension to them of the same process as that which has destroyed fibres, it (however slight the alteration effected may be, and however insusceptible of microscopical demonstration the change may be) must be considered to be the result of a pathological process.

This hypothesis cannot apply to Hemiplegia E; in this case it is not likely that there are caused by the excessive discharge a negative state of fibres, and a super-positive one of cells. All the more that after some epileptic fits there is found exaltation of the knee-jerk, and after others loss of it; differences, explainable on differences, in the severity of the discharge in the paroxysm, and on the different "depths" of exhaustion after it; there is a negative functional state in both, but lower down in the kinetic route, of cells of anterior horns, when the knee-jerks are absent.

My hypothesis is that both in Hemiplegia E and in *old* cases of Hemiplegia D, the cells of the anterior horns are perfectly healthy. They are, I submit, untouched by the pathological process causing the lateral sclerosis or by any other, and are simply over-active, partly from loss of control, and partly from non-antagonised cerebellar influx (second degree (*b*) of superpositive functional change). But I do not state the hypothesis of loss of control as I used to do. There is sometimes exaggeration of the knee-jerk in recent cases of hemiplegia, and this may be owing to sudden loss of cerebral (middle motor centres) control. I shall, however, speak as if the current opinions were correct—that both the increased tendon-reactions and rigidity "wait for" the descending degeneration in cases of Hemiplegia D. I now adopt an hypothesis put forward by Gowers, which is to the effect that close upon the anterior horns there are small inhibitory centres, the anterior horns being, in his nomenclature, "muscle-centres."

In cases of recent Hemiplegia D, before the degeneration in the ateral column, these local inhibitory centres are intact, and the knee-jerks are not exaggerated. But I suggest that in such cases of Hemiplegia E as that of the patient B., they are exhausted as well as are fibres of the lateral column; after those epileptic fits, when the knee-jerks are lost, both the inhibitory centres and the muscle centres are exhausted. Now taking old cases of Hemiplegia D, and dealing with rigidity as well as with the exaggerated knee jerk, I would say that the "descending" process, when it reaches the anterior horns, destroys the small local inhibitory centres; the anterior horn proper, "the muscle centre" now bereft of its inhibitory centre, is uncontrolled. The cells of the "muscle centres" are not invaded by any pathological process; they are healthy, but yet over active from loss of control This hypothetis as to old cases of Hemiplegia D invokes but one mode of action—destruction. That hypothesis brings the facts of Hemiplegia E into harmony with those of long-standing cases of Hemiplegia D; it accounts for the absence of increased tendon reactions in recent cases of Hemiplegia D. Certainly cases of Hemiplegia E have to be considered as well as cases of recent and old Hemiplegia D in all hypotheses as to the nature of increase of the knee-jerk in cases of brain disease.

Of any degree of rigidity of muscular regions paralysed—during the paralytic stage or part of it I mean of course—after epileptiform seizures I know nothing. Possibly I have overlooked it. But Franck and Pitres have made very important observations on a muscular rigidity after epileptiform seizures produced in dogs and cats. Of course it might be said that this active muscular condition is owing to a slighter degree of the same cortical discharge which produced the obvious fit—that it is not post-paroxysmal, but a great attenuation of the paroxysm itself. But these distinguished observers tell us that the rigidity is altogether different from the convulsion in the attack itself. And what is decisive is that ablation of the whole motor zone does not cause disappearance of the rigidity.[11] It seems to me that the hypothesis I have taken from Gowers, exhaustion of inhibitory centres, and consequent over-activity of the muscle-centres of the anterior horns to which they belong, best explains these phenomena.

Although beyond mentioning it I have not in this Lecture spoken of cerebellar influx, I believe it to be a factor in the causation of the exaggerated tendon reactions in Hemiplegia E, and of these and the rigidity in old cases of Hemiplegia D—that in both there is loss of control and unantagonised cerebellar influx, and thus that the two positive symptoms are owing to the unhindered activity of perfectly healthy structures.

In some cases of epileptiform seizures at, or close upon their onset, there is loss or, at least, defect of speech with very little local spasm. (We have, of course, no concern in this inquiry with any cases of *le petit mal*). I shall, however, speak only of temporary abnormal affections of speech, not in, but after the paroxysms—of what is present when all convulsion is over.[12] I explain post-epileptiform defects of speech in the same way as I did post-epileptiform paralyses, supposing there to be in the former exhaustion of nervous arrangements of "Broca's region."

Just as there are cases of epileptiform seizures with permanent paralysis of the side of the body in some part of which the convulsion starts and in which there is more paralysis, temporarily, of that side after a paroxysm, so in some cases of epileptiform seizures there may be permanent defect of speech and a temporary increase of that defect after a paroxysm. I shall omit consideration of these important cases. So far as I have seen, abnormal affections of speech are found after fits with right-side "signal symptoms." They certainly occur after left-sided fits, as Dr. Hermann Weber has pointed out.[13]

I have only once known abnormal affection of speech to occur after a fit beginning in the foot (right); that case is of no particular value in localisation, as at the necropsy two large blood-cysts were found, causing extensive compression of each cerebral hemisphere. Temporary defect of speech after epileptiform seizure beginning in the (1) right hand or (2) right side of face or tongue or both, is not rare.

The "abnormal talking" after some eleptiform seizures has long seemed to me[14] not to be what could commonly be called aphasia it often sounds like a *mélange* of an articulatory defect and of speech defect. It may be that in these cases there is not only exhaustion of some elements of Broca's region, but also of elements of the corresponding lowest (bulbar) motor centres; if so, the situation is analogous to cases where, after epileptic fits, the knee-jerks are absent, from, presumably, exhaustion of (lumbar) lowest motor centres. I think the "abnormal talking" referred to most

11 *Les Fonctions Motrices du Cerveau*, by François Franck. pp. 88, 89.

12 "There is a peculiar class of cases of epileptic hemiplegia in which the exciting cause of the epileptic fit at the same time damages or greatly injures voluntary power and speech." (Todd, *Nervous Diseases*, lecture xv.)

13 *Trans.* International Med. Congress, 1881, vol. ii, p. 19.

14 "Study of Convulsions," *St. And. Med. Grad. Assoc.*, vol. iii, 1870; Reynolds's *System of Medicine*, vol. ii, second edition, p. 287; see also Gowers *Epilepsy*, p. 101.

ikely to occur after epileptiform fits beginning in the cheek or ongue. What may be distinguished as "pure aphasia" is itself, physically regarded, a paralytic affection in the sense of loss of complex ("articulatory") movements of the tongue, palate, lips, etc.; so the *mélange* spoken of, if the hypothesis suggested be valid, is physically a mixture of loss of some complex (middle level) and some simplest (lowest level) movements of those parts. The subject is not a simple one, because along with right hemiplegia from destructive lesions we sometimes meet with a difficulty of articulation (I used to call it "ataxy of articulation") when there is no obvious disability in the tongue, palate, lips, etc.[15] There is one thing which must be mentioned in this connection. We should not consider that the inability of a patient who is more or less aphasic after an epileptiform seizure to put out his tongue when told is evidence of implication of lowest motor (bulbar) centres; for in these cases the tongue moves well in other and simpler operations. Moreover, this inability is often found in cases of aphasia from destructive cerebral lesions, and lasts too long in those cases for the easy explanation of "shock;" in them implication of bulbar centres is out of the question. This curious symptom is loss of a most special movement from a cortical or sub-cortical lesion; in that sense it is paralysis. It is no way regarded a speech or articulatory defect. To put out the tongue when told is what is called a "voluntary" movement, just as lifting the arm when told, or the card-sharper's shrug (Lecture II) is.

I shall ignore the hypothesis mentioned, and deal only with cases which would be admitted by all to be defects of speech proper, that is to be "of an aphasic character"—cases in which much speech of an imperfect kind remains, the utterances being clearly articulated. In most of these the prior convulsion starts in the right hand, and, I have thought, most often, not in the thumb or index finger, but in the hand generally or in the ulnar fingers. Of course there are many degrees of abnormal affection of speech of this kind, and it varies according to the time elapsed since the cessation of the fit.

I have not observed post-epileptiform *loss* of speech, but only defect of speech ("partial aphasia"). I shall use the term Defect of Speech E, or Partial Aphasia E. The term "defect of speech" is equivocal, as is also the term "partial aphasia;" it really covers two opposite elements, negatively loss of some speech, and positively retention of the rest of speech.[16] The patient gets words out clearly, and may even get out simple appropriate replies, such as "Very well," and may answer correctly by "Yes" or "No," or both. This is the positive element: it is the inferior speech to which the patient is reduced. But he is *not* able to reply correctly except by "Yes" and "No," and by other simple and very general expressions; he is *not* able to converse properly on simple subjects; he is *unable* to explain anything at all complex. These statements give the negative element: the speech lost. It is of extreme importance to distinguish the two opposite elements of the symptomatic condition. It is plainly impossible that the post-epileptiform exhaustion (*vide supra*), which I suppose there is of part of Broca's region, can answer to the patient's utterances—to the positive element: that negative functional state of nervous elements of the region answers to the patient's loss of some speech. His utterances, positive element, however inferior as speech, answer to activities of nervous arrangement of Broca's region which are healthy—which are in all ways normal except possibly for slight "loss of control." Here is another illustration of the statement that part of the symptomatology of nervous maladies is the outcome of activity of healthy nervous arrangements.[17]

[15] Dr. Charles K. Mills, of Philadelphia, relates, *University Medical Medicine*, November, 1889, a very important case of "Softening of the Face-area with Oro-lingual Monoplegia."

[16] My present concern with aphasia is only a very limited one. I need not always supply the obvious qualifications to statements made in the text. The expressions "loss of some speech" and "retention of the rest of speech" must not be taken literally as if they meant that the patient had lost certain words or propositions of the (his) English language altogether, and had retained the rest of them intact. Such is an impossible condition of things when an aphasic patient corrects his mistakes. But the statements may be taken literally for the mere purpose of a limited illustration. I do not suppose that there are fixed nervous arrangements—some for these words or syllables (properly movements corresponding to syllables) only and some for those only. I would rather than hold this mechanical doctrine go to the other extreme, and say that there are no nervous arrangements for movements in any centres except at the time when these and those motor nervous elements are functioning together in a particular temporary grouping.

[17] It is one thing to locate the negative lesion which destroys speech (renders a person unable to speak aloud), and quite another thing to say that "speech resides" in any particular part of the cortex. Words, or some other symbols, serve us during thought; when a man is thinking "gold is yellow," words in propositions are as certainly concerned as they are when he says that aloud. I submit that the highest centres ("organ of mind") must be engaged during speech, whether external or internal, notwithstanding that a negative lesion of a part of the middle motor level produces aphasia. Not believing in abrupt localisations, I do not mean by using the term "Broca's region" to limit the negative lesion productive of aphasia to that part of the lowest frontal convolution which enters into the "motor region." As is the custom, I shall neglect the concern which the highest centres must have with speech.

We must bear well in mind that speech is a psychical process. Nowhere is it more important to distinguish the psychical from the physical. I say once more that psychical symptoms are to medical men only signs of what is wrong in a material system. Our task as physicians is to ascertain the nature of the physical process correlative with speech, or more exactly the nature of the anatomical substrata of words (syllables). No one denies that the physical basis is of cells and fibres, but this is a morphological account of it. The anatomical basis is, I submit, of morphological elements so grouped as to form certain sensori-motor nervous arrangements. These, I presume, are audito-articulatory—that is, they are nervous arrangements representing certain auditory impressions along with certain corresponding complex (articulatory) movements of the tongue, palate, lips, etc. We suppose the *motor* elements of these *sensori-motor* arrangements to be of Broca's region. In the case of Defect of Speech E our ultimate concern is with the two opposite functional states of these motor elements which answer respectively to the two opposite psychical elements of the double symptomatic condition, which is unfortunately named (defect of speech or partial aphasia) after the negative element only. The motor elements alone of the sensori-motor substrata of speech are damaged. I submit that in Defect of Speech E there is *correlative with* its negative psychical element exhaustion of some nervous arrangements of Broca's region, which is productive of loss of some of the complex movements of the muscles of the tongue, etc. ("articulatory muscles"). And I submit that the speech remaining possible is correlative with integrity of other nervous arrangements of that same region for other complex movements of the same muscles; these healthy nervous arrangements function during the inferior speech remaining possible to the patient, and produce the corresponding articulatory movements. I have now to support the conclusion that the inferred exhaustion of some elements of Broca's region in Defect of Speech E produces paralysis in the sense of loss of complex movements of the tongue, etc.

There is often with Defect of Speech E some temporary decided paralysis of (loss of many movements of) the right arm. This statement, however, although allowable clinically, is not a scientific one. We should not in a realistic inquiry group together a psychical symptom and a physical one as if when so considered they were symptoms of the same order. In harmony with what I have said, the things really comparable are respectively loss of some complex movements of the muscles of the tongue, etc. (corresponding to the negative element in the defect of speech), and loss of some complex movements of the muscles of the arm (in both of movements represented by the middle motor centres). In this sense the two co-existing things are paralyses. On this basis alone is their concurrence intelligible and their comparison and contrast possible. With regard to the defect of speech, it is to be vividly kept in mind that the fellow part of the right middle motor centres (centres of the left half of the brain) for other complex movements of the muscles of the tongue, etc., and that the right and left lowest (bulbar) motor centres for simplest movements of those muscles are intact.

Those who do not follow me in distinguishing the psychical from the physical will, perhaps, think that I am confounding difficulty of articulation, a physical symptom, with a mental symptom (with "aphasia"). The fact is that I am making an absolute distinction between speech, which is a psychical process, and its correlative anatomico-physiological process, which is purely physical. It is only the *physical bases* of words (or properly of syllables) which I assert to be sensori-motor nervous arrangements representing complex movements of the muscles of the tongue, etc., in association with complex combinations of auditory impressions. I only say that *correlative with* the negative psychical element in defect of speech there is the *physical loss* of some complex movements of the tongue, etc. Still, it may be thought that I have no clear ideas on the difference between aphasia, a mental defect, and, for example, "bulbar paralysis." In reality I have said that the "bulbar centres" (some lowest motor centres) are quite intact in Defect of Speech E. In bulbar paralysis there is loss of the

simplest movements of the tongue, etc., and the negative lesion is bilateral (of certain motor centres of both halves of the lowest level), whereas in all cases of aphasia there is loss of complex movements of the tongue, etc., and the negative lesion is of motor centres of but one (left) half of the middle level, and the lowest motor (bulbar) centres are intact. Is not this difference enough?

The objection may be made that, whilst in the case of post-epileptiform paralysis with partial aphasia there is obvious paralysis of the arm, there is, as a matter of fact, none of the tongue, palate, lips, etc. It will be well in further exposition to stop speaking of Defect of Speech E, and to take in illustration a simpler (although much more serious) case, one of *loss* of speech ("complete aphasia") from a destructive lesion, say from softening of Broca's region. I shall suppose, however, that there is retention of "yes" and "no."[18] Here the negative element is loss of nearly all speech; the positive element being only retention of "yes" and "no." I shall call this case Loss of Speech D, or Complete Aphasia D; but the word "loss" is to be taken as qualified by "except for retention of 'yes' and 'no.'" We shall suppose there to be, as there nearly always is, right hemiplegia.

To say that the patient Aphasia D is speechless because he has lost the memory of words is to give no explanation of his inability to speak, any more than it is an explanation of the paralysis of his right arm and leg to say that it is owing to loss of volition. All psychological explanations of physical inabilities are merely verbal. Admitting for the sake of argument only that loss of memory of words is a correct *description*, our concern as physicians is with the physical condition correlative with that psychical loss. A part of the patient's brain has disappeared, probably the hinder part of the lowermost (left) frontal convolution (and no doubt more brain adjacent) has been changed to defluent stuff which is brain no longer; we shall speak of this as "destruction of Broca's region." I repeat that the lesion causes paralysis. I admit that there is no disability in the muscles of the tongue, palate, lips, etc., in their commonplace services, as in eating, drinking, swallowing, etc.; I admit it readily, because I only mean that there is loss of the complex articulatory movements of those muscles. There is nothing discoverably wrong with these muscles except for the slight facial and lingual paralysis which is a part of hemiplegia, right or left. The case illustrates that we may have loss of some *movements* of certain *muscles* without discoverable disability of those muscles. The seeming paradox in the particular case under remark is easily explained by Broadbent's well-known hypothesis.

In our speechless patient, not only are the lowest most motor centres of *both* halves of the bulbar part of the lowest level for simplest movements of the muscles of the tongue, etc., intact, but also, what is most important, complex movements of these muscles of both sides remain represented in the right half of the brain (middle motor centres). Hence, on account of those remaining representations, there is no obvious disability of the muscles of the tongue, etc., in their commonplace services. Taking the simple representation by the lowest level for granted, the assumption is that the muscles of both sides of the tongue, palate, lips, etc., are represented by complex movements in each half of the brain, though no doubt more especially in Broca's region than in the fellow-region of the right. Here is an exemplication of Broadbent's hypothesis. Horsley and Schäfer write: "The *face area*, although we have so called it for convenience sake, actually gives rise to movements not only of the facial muscles, but also of the whole of the upper part of the alimentary tube (mouth, throat, and larynx)..... It is physiologically remarkable from the fact that many of the movements which result from its excitation are apt to be executed bilaterally, which is only exceptionally the case with excitation of the other areas (except that for the head and eyes)."[19] Hence destruction of neither Broca's region nor its fellow-part of the right middle motor centres produces disability in the commonplace services of the muscles of the tongue, etc., although beyond all question some movements of them are lost. But destruction of part of both halves does,[20] as some cases of double hemiplegia show, notably one recorded by Dr. Thomas Barlow.[21]

So that, so far from "confounding cases of aphasia with cases of bulbar paralysis," I am making a very definite distinction. So far am I from comparing loss of speech, considered as a negative psychical symptom, with the physical symptoms of bulbar paralysis, that I urge that there is not even a basis for any reasonable contrast of the two; psychical symptoms and physical symptoms are "not on the same platform." Regarding the physical condition correlative with the aphasia and that of the case of bulbar paralysis, the cases are alike in that there is in each loss of movements of the same muscles; on this basis I urge their resemblance as cases of paralysis. At the very same time I urge the differences between loss of complex movements of the tongue, etc., represented by certain *middle* centres of but *one* half (left) of the brain in cases of Loss of Speech D, and loss of simplest movements of those parts represented by certain *lowest* (bulbar) centres of *both* halves of the lowest level in cases of bulbar paralysis.

Furthermore, the tongue, palate, and lips not only act well in eating, drinking, swallowing, etc., in Loss of Speech D, but also when the patient says "Yes" and "No." He may have a stock utterance, as "Awful," "Oh, my God!" etc. He may when excited swear or get out other elaborate ejaculations; none of these are speech proper—they are not propositions, but compound interjections; the patient cannot repeat ("say") what he ejaculates. The articulation of all these utterances is perfect, and I presume that no one would deny that the articulatory movements are effected by perfectly healthy nervous arrangements. They are effected, I submit, by those of the undamaged right half of the brain, of course with subagency of lowest (bulbar) motor centres of both halves. Still neglecting, as everybody else does, the concern of the highest centres with speech and with morbid affections of it in disease, I submit that as regards speech the right half of the brain is the automatic half, and that the left is that half in which automatic action ceases into what we call voluntary action.

The positive condition of our patient, Loss of Speech D, is that he retains the propositional use of "yes" and "no," physically two complex articulatory movements of the tongue, etc.

Now I draw attention to the fact that the patient who never speaks, never does make (with the exceptions stated) the complex movements of articulation, which I say are lost. Instead of explaining that he does not do so *because* he has lost "the memory of words," I submit that he never makes them because the nervous arrangements for those movements have disappeared—that he has not got those complex movements. Once more I urge that what is psychically aphasia is physically paralysis.

Moreover, the part destroyed in the case of aphasia is motor; no one denies since the researches of Hitzig and Ferrier that the homologous part in lower animals is motor. Hence, there is nothing for destruction of it to produce in these animals except paralysis. Mark that although destruction of that part of the "motor region" on the left in man produces no disability of the muscles of the tongue, etc., of either side (beyond the slight right facial and lingual paralysis spoken of as part of hemiplegia), discharge of that part develops movements of these muscles of *both* sides; by subagency, of course, of certain lowest motor centres of both halves of the lowest level, develops a contention of complex and of simplest movements of those muscles. From discharge of the part on the left are revealed the movements, the loss of which, upon destruction of that part, is masked by compensation by the fellow part of the right half of the brain. Yet there may be discharge (impulses passing by *route* of the callosal fibres) of the fellow part on the right consequent on the primary discharge of the left. I mention again that Sherrington has traced degenerated fibres from a unilateral lesion of the lower end of the fissure of Rolando into both halves of the pons and medulla.

Hence I conclude that the patient hemiplegic and speechless (aphasic) has not only lost very many complex movements of the muscles of the right arm and leg, but that he has also lost many complex movements of muscles of both sides of the tongue, lips, etc.; the conclusion is that his whole physical condition is, and is nothing else than, paralysis *in the sense of loss of movements*.

The condition is fundamentally the same in the Defect of Speech E, but the negative element (loss of some speech) is less, and the positive element (retention of much speech) is greater. Here,

[18] To speak is not merely to utter words, but *to propositionize*. The patient spoken of in the text, although not absolutely speechless, is so, except that he has only the use of the two most general of all propositions; I say "the use of" supposing that in the case taken for illustration the patient can assent and dissent by them. If he only uttered them at random, or if they were only signs of emotion, they would not serve propositionally, they would then be of no speech value

[19] *Phil. Trans.*, 1888.

[20] Such cases are sometimes called cases of cortical bulbar paralysis; they are double cortical; the bulbar centres are intact.

[21] JOURNAL, 1877.

again, it will be well to illustrate by the case of a destructive lesion (a much smaller one than in Loss of Speech D), by softening, destroying but little of Broca's region; I will call this case Defect of Speech D. There is not rarely from such a pathological process a condition essentially like that in some cases of Defect of Speech E. Let us suppose that in the case of Defect of Speech D the patient frequently makes mistakes when he talks, either by using wrong words or by being reduced to very "automatic" utterances, such as "Very well," or that he often uses roundabout expressions such as "It won't come out here" (which, eked out by appropriate pantomime, meant "I can't make water"). And yet, to simplify exposition, I will take the patient's saying "hat" for "carpet" only, that to be a sample of the whole of his condition. Here we see the necessity of distinguishing the two elements, negative and positive. It is certain that the softened brain (really what is brain no longer; there is a hole filled with detritus of nervous elements) cannot be the cause of the patient's saying "hat;" that is the speech left, and is owing to activity of the part of Broca's region which remains perfectly healthy.[22] This, his positive condition in speech, is sampled by his saying "hat." His negative condition is alone owing to "disease," and is sampled by his inability to say "carpet."

The negative element in Defect of Speech D is a minor degree of that in Loss of Speech D; the positive element is a major degree of the positive element ("Yes" and "No" only) in Loss of Speech D; in the former the dissolution of Broca's region is shallow and the level of evolution high, whilst in the latter the dissolution is very deep and the level of evolution very low, if there be any in that region. The two cases differ in double degree. In the Defect of Speech D there is much speech left, and there are very many mistakes; in the Loss of Speech D there is very little speech left, and there are no mistakes, the patient correctly assenting to and dissenting from (by "Yes" and "No") all statements made to him.

Now for the physical condition in Defect of Speech D. Answering to the slight negative element, there is loss of but a few complex articulatory movements represented in Broca's region; answering to the positive element there is retention of many other such movements; or we may say, limiting illustration to the samples, there is loss of the complex movements answering to inability to say "carpet," and retention of the complex movement answering to saying "hat." If anyone says that a word (properly a syllable) is not a movement he is agreeing with me; for I am contending that activity of nervous arrangements representing certain complex movements (with, of course, corresponding impressions) of the tongue, etc., is only the anatomico-physiological process going on during the appearance of what are the psychical things—words. I need only say that the softening in Defect of Speech D is the negative lesion equivalent to the exhaustion in Defect of Speech E. The utterances both in Defect of Speech E and D are the outcome of activities of perfectly healthy nervous arrangements. The negative lesion in both is dissolution; in each the speech, however imperfect, as certainly signifies evolution going on on a lower level, as the speech of healthy persons does evolution going on on the normal level.

I have admitted that the patient in Defect of Speech E and D may correct his mistakes—that after saying the wrong word "hat" he may immediately say the right word "carpet,"—and I will here admit that when he says "hat" he knows that the word is not the right one. But this does not invalidate the principle of the explanation. For convenience of exposition I made the arbitrary assumption that there are fixed and unalterable nervous arrangements for particular movements, in this case for complex movements of the tongue, etc., corresponding to syllables. I think the seeming difficulties could be met if, abandoning that assumption, I were to go into detail as to the constitution of nervous centres. At any rate, the attempt is to give a materialistic explanation of the physical condition in aphasia, without confounding the concomitant psychical states with that physical condition. I submit that the explanation is, at any rate, as good as the psychological explanation. If we do invoke the latter so-called explanation, we have not only to account for, to take the samples again, "loss of memory" for "carpet," but also for the "over-memory" for "hat." When the patient cannot say "carpet," why does he utter anything? Why does "hat" come out instead? And admitting that the "loss of memory" for "carpet" is only temporary, and that next moment the patient can say "hat," we have to account for the temporary defect of "memory" and for its sudden restoration for that case. Moreover, if the patient says "hat" and knows that it is wrong, he can only know it by there being revived in him the word "carpet" at the very same time; certainly these two words must be revived mentally; there is then "verbal diplopia." If it is admitted that the psychological statements as to the aphasic conditions are correct descriptions, those who make them are just as much bound as anyone else to seek the abnormal material conditions of the several phenomena of "amnesic aphasia." And bearing in mind the proof given by Ferrier, Horsley, Schäfer, Beevor, Sherrington, and many others, that the region damaged is motor, a merely morphological account of the physical condition in aphasia will not suffice. If anyone says that he cannot understand how activities of motor nervous arrangements can correspond to words, I would remind him that, except the popular psychologist, no one pretends to understand how any material conditions correspond to any psychical states.

[22] To give another example, surely it is impossible that when the patient referred to in the text said, "It won't come out here," there was engagement of nervous arrangements which were "diseased" in any way whatever; the "disease" was the cause of his inability to say "I can't make water."

THE

GOULSTONIAN LECTURES

ON

SOME CEREBRAL LESIONS.

Delivered before the Royal College of Physicians of London.

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Lecture III.—On Cerebral Embolism and Aneurysm.

I propose considering to-day the cases of cerebral embolism and of cerebral aneurysm, which are for the most part included among them, that have died at Guy's Hospital, between the years 1869 and 1888, a period of twenty years.

In 79, that is, in 0.9 per cent., or nearly 1 per cent, of the inspections, cerebral embolism had occurred. In some of the patients two or more cerebral vessels contained clots; there were ninety-five blocked vessels found in the whole series of cases.

Forty-four of the patients were males and 35 females; there was nothing in the histories of the cases to indicate why men were more often affected than the women.

The youngest patient was aged 13, and the oldest 73; the remainder of the cases occurred between the ages of 13 and 66, the distribution being fairly uniform for the decennial periods from 10 to 60. Patients at both extremes of life seem to possess an immunity from this affection.

Cerebral Embolism.

	10-19	20-29	30-39	40-49	50-59	60-69	70-79
No. of cases	18	15	15	10	15	6	1

In only 6 cases was the source of the emboli not discovered. In 4 of them the vessel had been blocked for a long time (two years, two years, ten, and many months), and it is quite probable that in these, cardiac vegetations or thrombi may have given rise to emboli, and may yet have disappeared and left no trace at the *post-mortem* examination.

In most of the cases there was no difficulty in tracing the source of the emboli; in 68 it was found to be in the heart. The mitral valve was the most common seat, being affected in 46 cases, in 7 of which the aortic valve was also diseased. The vegetations were limited to the aortic orifice in 13; in most (46) of these 68 cases, there was chronic disease of the valves, on which had been grafted a fungating endocarditis, the vegetations were generally friable, and in many ulceration of the endocardium and valves was also present. In 18 of the cases, ulceration had led to rupture of the chordæ tendineæ. The mitral orifice was markedly stenosed in 26, and was generally associated with recent friable (VI), or fungating granulations; in 5 the valve was free from vegetations, and in 4 of these the embolus had come from *ante-mortem* clotting in the left auricle, while in 1 no clot or granulating surface was found (Case CLVIII). The embolus ori-

ginated in 5 from an atheromatous aorta, and in 2 from clotting in the left ventricle. The heart-disease was usually due to rheumatism originally, but the cause of the acute fungating disease was, as is generally the case, obscure.

Gonorrhœa was the starting point of the whole disease in the two following cases (Nos. CXLVIII and CXLIX). The first is that of a man aged 21, who came in comatose and died next day. There were red lymph-covered spots, with recent vegetations, on the mitral valves, multiple abscesses in the liver and kidneys, and a general pyæmic condition, which may have originated the endocarditis, or have been secondary to it; more probably the former.

The second was that of a girl, aged 18, who had been ill for some time, when she suddenly became hemiplegic and aphasic. She was found to have gonorrhœa, but her heart was healthy, and beyond a thrombosed iliac vein, no source was found for the emboli, lodged in her internal carotid and opposite middle cerebral arteries. A prostatic abscess had, in another patient, set up an abscess in the wall of the mitral valve, which had ruptured into the left auricle, and had also caused a malignant endocarditis of the pulmonary artery, as we have on other occasions observed from gonorrhœa and similar causes. The emboli which were found in the right anterior and middle cerebral arteries had come from the abscess on the mitral valve.

Of the 4 cases in which the mischief started from a clot in the left auricle, there were mitral stenosis in 2 of them, fibroid disease of the heart in 1, and bronchitis and emphysema with an incomplete mitral valve in the last. Twice the clot was caught in the carotid, once in the basilar, and in the last case in the middle cerebral artery.

The two cases in which there was thrombosis in the left ventricle were due to chronic Bright's disease and bronchitis respectively, and the hearts were hypertrophied and dilated. The patients were both about 50.

The aorta, the valves, and the cavities on the left side of the heart are all well recognised sources of emboli when they present an atheromatous surface, recent granulations, fungating endocarditis, or *ante-mortem* thrombosis. There remain for consideration 9 cases to be otherwise explained. In 2 of these in which the hemiplegia had lasted for two years the heart was found to be normal at the inspection. In a third case the patient had old mitral stenosis, and during an attack of acute rheumatism ten weeks previous to her death she became hemiplegic from middle cerebral embolism. At the inspection, the heart was free from any vegetations or *ante-mortem* thrombosis.

The explanation of these three cases is, doubtless, that the vegetations or clots in the heart which had given rise to the emboli had become absorbed in the interval (Cases CXXXIX, CXXXVII, CLVIII). Several similar instances are on record. In the two following cases in which thrombosis had occurred in the right ventricle (Cases CXXXV, CLXVIII) there were clots in the pulmonary arteries, in one if not in both of which they were embolic.

The first was a man, aged 38, admitted with chronic Bright's disease. On May 28th he had symptoms of pulmonary embolism. Four days later he had a fit, followed by aphasia and right hemiplegia, and died the next day. There was a firm, tough embolus at the bifurcation of the left Sylvian artery, with *ante-mortem* thrombosis in the right auricle and ventricle. The posterior part of the third frontal and the adjacent convolutions were softened.

The second was a woman with a uterine fibroid and metrorrhagia. She became hemiplegic, and died the next day. The internal carotid was found blocked at its bifurcation, and there was *ante-mortem* thrombosis in the right ventricle.

These cases are difficult to explain. They were considered to be examples of emboli by the pathologists who made the examinations; if so, we must conclude that the emboli were secondary to the thrombi in the right ventricle. That it is possible for embolism of a systemic artery to be secondary to a distant venous source is also suggested by Case CXXXVI, a man, aged 64, in whom emboli in the brain and spleen were found, for which no source but a large carcinomatous growth in the liver could be suggested. In the case of the girl with gonorrhœa alluded to above, it appeared that the infecting material must have passed through the pulmonary capillaries without producing any local mischief, and have ultimately lodged in the brain.

These four cases would suggest that very occasionally the only source for emboli is to be found in some distant local trouble beyond the pulmonary circulation. Possibly these set up some small local patches of mischief in the lung, from the veins in which the clot or emboli are liberated.

Micro-organisms can undoubtedly pass through the pulmonary capillaries, and set up mischief in the systemic arteries, which would explain the case due to gonorrhœa: but in the other cases it seems essential that local thrombosis should exist in the lungs, and that a small clot liberated from the pulmonary vein should be the source of the embolism. At the same time it might not be possible to detect the spot, especially if very localised, at the inspection. In two of the cases there was clotting in the pulmonary arteries. There remain two other cases, in which not even this explanation can be offered (Cases CXLIII and CXL). One was a case of chronic bronchitis and emphysema with a large dilated heart, and an embolus in the left Sylvian artery; and the other a woman of 56, with chronic bronchitis, who developed finally right hemiplegia and aphasia, in whom recent emboli were found in the kidneys with patches of softening in the brain, the heart was healthy, and in neither was any source for the emboli detected. It is always possible that in these cases of patients with feeble hearts, minute clots may have formed in the cavities and have been discharged, leaving no trace behind them in the heart. The presence of emboli in other organs, the situation of the clots and their character, show that in most of the cases the theory that they were thrombotic cannot be adopted.

The explanation of these exceptional cases is very obscure and demands further investigation.

In 75 per cent. of the cases the emboli were found in the middle cerebral vessels. The vessels which were embolised were:

	Right.	Left.	Both.
Middle cerebral	32	38	9
Internal carotid	7	4	1
Posterior cerebral	3	2	1
Anterior cerebral	3	0	0
Total ...	45	44	11

Basilar ... 5.

On the whole the two sides were affected with equal frequency. The cases in which the vessels on both sides were blocked are included also among those on each side.

The character of the embolus varied; it was white, decolorised, or yellow in 32, adherent in 18, non-adherent in 6, firm in 4, calcareous in 2, and softening in 3. In the two cases in which the mass was calcareous, the sources were a calcareous mitral and an atheromatous aorta (Cases CXLVI, CXIX).

In twenty cases the emboli could not be found. In all there was undoubted evidence that the patches of softening or the aneurysms were embolic, from the presence of emboli elsewhere, or from the presence of fungating endocarditis.

There appears to be no doubt that an embolus may cause a patch of softening and later on the clot may disappear through absorption, and leave no trace. Again, a clot may break up and be carried further on, into the smaller vessels, where it is almost impossible to detect it.

A clot may soften and break up into *débris*. This seems to be usually the case with septic clots, such as give rise to aneurysms, for an embolus was only found in 5 out of 18 cases. It is possible, also, that in some instances an embolus may be detained in the internal carotid and produce softening; yet it may be overlooked if the base of the skull be not opened up.

It is not unnatural, therefore, that in about a fifth of the cases the emboli are not found. The fact that the clots disappear from the vessels is an additional reason for believing that they may also disappear from the heart and lungs.

Cases of Embolism in the Middle Cerebral Arteries in Seventy-two Patients.—In 51 cases the emboli were found, and in 21 they were not found. Two-thirds of the cases were due to fungating endocarditis, and hence many of the patients were so ill that the symptoms of the embolism were often masked. In 14 of the patients there were no symptoms of embolism during life, and its presence was only discovered in the *post-mortem* room. In many others the symptoms were obscure, and varied much, as the following list, which gives their frequency, will show. Hemiplegia 32, aphasia (which was found only with left-sided lesions) 17, coma 8, convulsion 7, rigidity of limbs 4, stupor 2, hemianæsthesia 2, numbness on one side 3, onset of hemiplegia without unconsciousness 3, headache 2, pyrexia 2, drowsiness, paralysis of both arms and legs, delirium and erratic movements of the arms, 1 each. In 14, or a fifth of the cases, there were no cerebral symptoms to indicate the onset of the plugging.

Death was frequently due to the associated heart condition, or

to some other complication, rather than to the embolism directly; thus 25 patients died from cardiac failure and the sapræmic condition induced by the fungating endocarditis, 25 from the cerebral lesion (including 12 from rupture of a cerebral aneurysm and 7 from coma due to bilateral embolism), 2 died from gangrene of the leg due to embolic occlusion of an artery, 2 from general pyæmia, and in the remaining cases the causes were pulmonary disease 4, chronic Bright's disease 2, tubercle, cancer, drowning, and suppurative mediastinitis 1 each.

Only 40 per cent. of the patients, therefore, died from the cerebral lesion. The duration of life after the onset of the symptoms is also very variable, being in 12 cases less than twenty-four hours, in 17 less than a week. Twenty-one of the patients survived from one to three months, 1 lived five months, while 2 survived one year and 2 two years.

In the cases which had lasted two years the source of the emboli was not made out. In cases which had lasted a year and six months respectively the vegetations were calcareous; in cases which had lasted for even so long as five and three months, the emboli were found to be associated with fungating endocarditis, and it would appear that this condition must have lasted, without proving fatal, for that length of time.

The aphasia varied greatly; in some patients there was a misuse of words, in others their conversation was limited to merely "yes" and "no." In numerous instances the softening extended to several convolutions; in one case the third frontal, in another the temporo-sphenoidal, and in a third both of these parts were softened. In one case the softening lay outside the corpus striatum, and in three outside the lenticular nucleus. A clot of blood which had spread beneath the meninges over the third frontal had in one case produced aphasia.

The spot at which the clot became arrested varied. In 16 it remained in the trunk of the middle cerebral vessel, in 3 at its origin, in 18 at its first bifurcation, in 5 at its second division, and in 12 in one of the main branches. In 3 the branch was one of those that supply the white matter of the brain, and in 3 some of the cortical capillaries.

It is not sufficient to determine the locality of the occlusion of a cerebral vessel, as the amount of softening which may ensue is very variable. This is well shown by an examination of the amount of softening which was present in those cases in which an embolus was found at the first division of the middle cerebral artery. In 5 the brain appeared normal, in 6 there was extensive softening, in 2 the softening was limited to the nuclei, in 1 to the cortex, and in 2 there were small patches of softening in both. When death takes place within one or two days of the infarction, no change may be apparent in the brain; the short lapse of time in some of the cases explains partially, but not entirely, the great variation there is in the amount of softening. The relation between the symptoms and the situation of the infarction is rendered still more complex by the fact that there may be marked paralysis, and yet the change in the brain may be very slight; and, on the other hand, some cases gave but little evidence of brain mischief during life, in which *post mortem* there was marked softening. The former is well illustrated by Case CL. A woman, aged 61, died from intrathoracic growth. Two weeks before her death she had complete right hemiplegia, recovering power in her leg partially before death. The termination of the main middle cerebral artery was occluded by a clot; the only change in the brain was a barely appreciable diminution in the consistency of the ascending convolutions and in the tip of the temporo-sphenoidal lobe; yet in the woman's feeble condition this seemed to be sufficient to produce marked paralysis.

Only twice out of the whole series was optic neuritis noticed (Cases CL and CLXIII*a*). Patients occasionally complained of headache when softening had taken place. It happened (in one-seventh of the cases) that both middle cerebral arteries were blocked, and sometimes, curiously enough, the clots lodged at corresponding spots on the two sides. Very few such cases are on record.

Nine Cases of Emboli in Both Middle Cerebral Arteries.—A man, aged 18; œdema, cardiac failure, large spleen. October 4th. Headache, delirium, numbness left side. Ingravescent coma, death on 26th. *Post mortem:* On the right vessel, one inch along, a small aneurysm, from which blood oozed; on the left, an aneurysm further on, a blood-stained patch of softening on right side. Fungating endocarditis of mitral valve; ruptured chordæ tendineæ; embolism of brachial artery, with commencing aneurysm; infarcts in spleen, acute nephritis.

A man, aged 32; right hemiplegia and aphasia five weeks before death; he recovered his speech, but became comatose, and had convulsive twitchings the day before his death. *Post mortem:* Both vessels were blocked half an inch from their origin by yellowish softening thrombi; a small patch of softening in the left lenticular nucleus; fungating endocarditis of the aortic valves; infarcts in the kidneys and spleen.

A boy, aged 15; ten weeks before death sudden onset of left hemiplegia; the arm remained paralysed; three days before his death he had a fit, became stertorous, and his limbs were rigid. *Post mortem:* Diffused subarachnoid hæmorrhage over the brain; firm embolus in right vessel, with extensive softening into which hæmorrhage had taken place; only a small patch of softening was found on the left side; fungating endocarditis of mitral valve; infarct in spleen.

A man, aged 28; died shortly after admission. *Post mortem:* At the first bifurcation on the left side was an old embolus, and at the second on the right a recent embolus, at the termination of the basilar artery an old embolus had organised on to the wall; softening in left corpus striatum, and temporo-sphenoidal convolution; convolutions ochreous from old meningeal hæmorrhage; fungating endocarditis of mitral and aortic valves; infarcts in spleen; acute nephritis.

A woman, aged 24; admitted with dyspnœa and cardiac failure; left hemiplegia with unconsciousness; partial recovery; died two weeks later, after forty-eight hours' unconsciousness. *Post mortem:* On both sides the posterior branch was blocked; on the right side the vessel was dilated into a fusiform aneurysm, and round it there was purulent lymph and blood clot; there was extensive softening; on the left side there was only a small patch of softening; fungating endocarditis of mitral valve; infarcts in kidneys and spleen.

A man. *Post mortem:* Both vessels blocked at their bifurcation.

A boy, aged 14; admitted with cardiac failure, vomiting, and headache, April 18th; markedly aphasic, April 23rd; double optic neuritis, left radial and femoral pulses almost occluded, April 30th; intense headache, rigidity, and paralysis of the left side, deviation of eyes to right, May 14th; right facial paralysis, May 17th; right arm rigid; he became more drowsy and died on May 22nd. *Post mortem:* On the right side there was extensive softening of the whole tract supplied by the middle cerebral artery, but no embolus was found; in the softened mass three ounces of blood had been extravasated; emboli were found in the right anterior and in the left middle cerebral; the left frontal lobe was softened; fungating endocarditis of the mitral valve; infarcts in the spleen, kidneys, and right popliteal artery; acute nephritis.

A man, aged 27; laid up with cardiac failure and œdema, April 24th; he woke up with left hemiplegia; acute bedsores in three days; on May 20th he was found with right hemiplegia and speechless; he died thirty hours later. *Post mortem:* At corresponding spots in both vessels there were emboli, that on the right being old and adherent; extensive softening on the right side, only a small patch on the left; fungating endocarditis of mitral and aortic valves; mitral stenosis.

All the patients died from the cerebral condition, 6 being comatose, and the remaining one from rupture of a cerebral aneurysm. (Two other cases died before a report was made.)

After the first infarction, 1 patient survived ten weeks; 2, five; 2, three weeks; and 1, two weeks. They survived from one to three days after the second vessel was blocked, except in one case, in which the patient lived twenty days.

The 5 cases in which the posterior cerebral artery was found to contain an embolus do not require much notice; in 2 there were no cerebral symptoms, in 2 others the lesions were multiple, and in the remaining one the patient developed right hemiplegia the day before his death, although at the inspection the only embolus which was found was in the posterior vessel. The 3 cases of embolism of the anterior vessel were complicated, and presented no special symptoms. The 4 cases of embolism of the basilar artery presented no special features but unconsciousness, except in the following case (CLXIII*a*):

A girl, aged 24, with severe heart disease, was found unconscious, with paresis of the right limbs and the left side of the face. On the right side the third nerve was paralysed, and she was unable to look to the left or to raise the left eye. The right optic disc was choked. She became listless, partially anæsthetic, unintelligible, and comatose, dying a month later. The basilar artery was found to be plugged at its extremity with a decolorised em-

bolus. On 6 occasions an embolus was found in the right, and on 3 in the left internal carotid artery, besides 1 in which both the vessels were found to be plugged. In 2 there were no definite symptoms, in 5 anæsthesia, in 6 coma, in 8 hemiplegia, in 4 drowsiness, in 3 aphasia, in 2 convulsions, in 2 headache, and in 1 numbness, and in another no unconsciousness. It was also specially noted in 4 that there was a well-marked blush over the face, which persisted for some days, and in some recurred. In 1 there was ecchymosis and gangrene of the ears. In 2 cases there was inability to look to one side. There was softening in all the cases except one. Four patients died within a week, 2 survived only a month, and 3 from six weeks to four months.

Cerebral embolism is in the great majority of cases due to fungating endocarditis, and may be survived for many weeks. The patients are often seriously ill with their heart disease, and often the embolism gives rise to no symptoms at all. They die from their heart condition as frequently as they do from their cerebral lesion; the great majority of these latter cases being due to coma from multiple emboli or from ruptured aneurysm secondary to them. The symptoms are not definitely associated with the amount of softening visible, nor is this latter solely determined by the situation of the embolus. When the internal carotid is occluded there is almost invariably hemiplegia, and in some of the cases there is a well-marked recurrent blush on the face for a few days. Embolism gives rise to ecchymosis and congestion of the cerebral tissue at first, passing on to red and yellow softening, but in those cases which have lasted some weeks there is white softening. Aneurysm and hæmorrhage are not infrequent.

An Analysis of Twenty-three Cases of Cerebral Aneurysm.—Cerebral aneurysm is a very rare lesion, having been found only nineteen times out of 9,000 inspections, that is, in less than $\frac{1}{4}$ per cent. There were besides four cases in which rounded masses of clot were found in the cerebral tissue, which were thought to be aneurysmal, but the vessels with which they were connected were not definitely determined. The hæmorrhages were all associated with fungating endocarditis and occurred in young people, and, as is shown further on, the assumption that they were aneurysmal is not unreasonable. There are therefore 23 cases to be discussed. Of these, 15 were males and 8 females, that is, the lesion is twice as frequent with men as with women, a greater proportion than was found to exist in cases of embolism.

The distribution as to age is as follows: 0 to 9, one; 10 to 19, eight: 20 to 29, four; 30 to 39, three; 40 to 49, two; 50 to 59, two; 60 to 69, one. The youngest patient was only 6, and the aneurysm was an unusual one.

Case cxciv.—A boy, aged 6, was admitted with acute periostitis of the femur, which ultimately led to the hip being excised. He died a month later with symptoms of tubercular meningitis. At the inspection a small aneurysm, which had ruptured, was found on the right vertebral artery. There were old tubercular lesions in the lungs, intestines, and spleen, and it was thought that the aneurysm might have been tubercular, but there was no evidence microscopically that this was so.

The condition which had led to the formation of the aneurysm was obscure. It was thought that possibly it might have been due to tubercular changes in the wall, though there were no other local tubercular lesions in the brain. Another possible explanation is that it was due to some septic emboli, which had been derived from the acutely-inflamed periosteum a month previously.

The most interesting conclusion as to the age distribution is that nearly half (two-fifths) of the patients were between the ages of 10 and 20; and that of those cases in which the cause was an embolism exactly half were between these ages.

In 1 case there were two aneurysms, one on each middle cerebral artery (Case clxxxiii); in another there was an aneurysm on one side and hæmorrhage on the other. In 16 out of 21 cases there was fungating endocarditis, that is, in 75 per cent. In 3 there were granular kidneys and atheromatous vessels; and two of these cases were fusiform aneurysms of the internal carotid artery in the cavernous sinus. Putting these two on one side, there remain only three out of the whole series which were not associated with fungating endocarditis. One of these was the case which was thought to be tubercular.

The exact mechanism by which the aneurysms are produced is still under dispute. In the great majority of the cases the embolic plug is not to be found, and yet there can be no doubt, from a consideration of the whole series, that the formation of an aneurysmal dilatation is almost, if not always, preceded by an embolic plugging when the patient is young. Not only must there be an embolus, but probably it must be septic. This is shown by the association of a fungating endocarditis in all the cases, and in none of them was the source of the embolus an *ante-mortem* clot, an atheromatous aorta, nor any other non-septic source. The frequency with which the middle cerebral arteries are the seats of aneurysm (this being so in three-quarters of the cases) is in accordance with the liability of these vessels to embolism, and it is to be noted that the usual seat of an aneurysm is close to the bifurcation of a vessel.

Some light is thrown on the mechanism by which an aneurysm is set up by a septic embolism by the examination of their relative sites when the two are found together. This, as pointed out above, is a rare event, having occurred only five times.

In Case clxxxv, the middle cerebral artery was blocked by an embolus half an inch from its origin. Part of the clot appears to have broken up and passed along the vessel into the capillaries. There were ecchymotic spots in the cortex and fusiform dilatations of the vessels filled with puriform clot. It would appear in this instance that there had been local inflammation of the vessels at the point of arrest of the infective material, and dilatation had ensued in consequence.

Case clxxx.—In this instance also the artery had dilated at the seat of the blocking by the clot; around this there was some puriform lymph, showing that inflammatory changes had taken place. In other cases of emboli secondary to fungating endocarditis a local meningitis was found around the blocked vessel. There is therefore ample evidence that this cause is sufficient to set up inflammatory changes not infrequently around the wall of the vessel, and *a fortiori* in the wall itself. The reason aneurysm does not occur more frequently is because it is necessary that, not only should inflammatory changes take place in the wall, but the inflamed portion must not be cut off from the pressure of the circulation. In the two cases we have considered the aneurysm formed at the seat of the clot. In the two following the dilatation took place, in the one on the proximal side, and in the other on the distal side of the blockage.

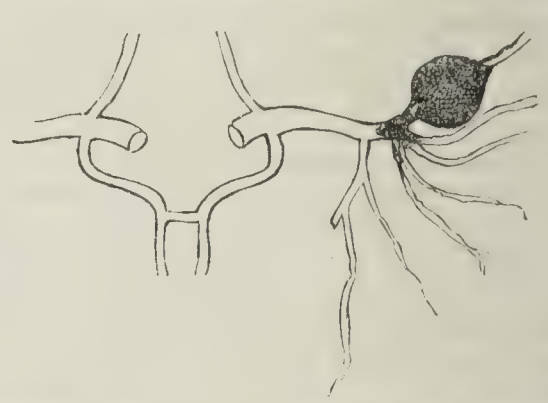


Fig. 1.—Case clxxxii. No symptoms previous to rupture; death in one hour.

Case clxxxii.—A man, aged 50, was found insensible an hour before death. On the third branch of the middle cerebral artery was an aneurysm which had ruptured into the ventricle and on to the surface. An embolism was found at the bifurcation of the vessel just before the third branch was given off. There was an atheromatous aorta, and the man had had syphilis (Case cxcix).

It has been suggested that the vessel gives way because the embolus is tough and calcareous, yet in the two instances in which they were calcareous this had not occurred, while in some the clot was markedly soft.

It can readily be understood that if the dilatation be due to inflammatory changes, these may sometimes take place at the spot, and sometimes on either side; this will, therefore, explain the differences in the relative sites. The more the clot softens and disappears the more will the inflamed vessel be exposed to the blood stream, and the greater the probability that an aneurysm will form.

We are, therefore, justified in stating that the cause of four-fifths of all cerebral aneurysms is the retention of an embolus from a patch of fungating or granular endocarditis at the bifurcation of a vessel. Inflammatory changes take place in the clot, which in most cases softens and disappears, the wall of the vessel also inflames and dilates; the dilatation may take place at the seat of the embolus occasionally on the distal, and at other times on the proximal side of the obstruction, which may be complete. The more common condition is probably disappearance of the clot,

with softening at the spot. In the great majority of the cases the middle cerebral was the vessel which was affected.



Fig. 2.—Case CLXXXIII. Three weeks' history; found ruptured.

CASE CLXXXIII.—A man, aged 18, was admitted with severe heart disease; he developed headache, delirium, and numbness, with coldness on the left side, dying three weeks later. On the right side there was a ruptured aneurysm of the middle cerebral artery, with a patch of softening in the temporo-sphenoidal lobe containing blood-stained fluid and clot. There was a small aneurysm on the opposite vessel.

The symmetry of the disease and the youth of the patient indicate the embolic nature of such cases. The wall of the sac is in most cases very thin, and it is rare for much thickening from organising clot to take place. In the following case (No. CLXXIX) the wall was thick, and there was a well organised layer of clot.



Fig. 3.—Case CLXXIX.

A man, aged 31, was admitted with advanced heart disease; he had a series of epileptiform attacks, with some unconsciousness, for twenty-four hours, but remained fairly well till his death two weeks later. On the right middle cerebral artery an aneurysmal sac was found pouching towards the brain; the outer part was formed by tough arterial wall, and the inner of blood clot. The whole of the external capsule and the claustrum were ploughed up, and the blood had extended down to the base of the brain, beneath the membranes; fungating endocarditis.

Cerebral Aneurysms.

	Right.	Left.	Both.
Middle cerebral	9	7	1
Posterior cerebral	1	0	0
Anterior cerebral	1	0	0
Internal carotid	2	1	0
Vertebral	1	0	0
	14	8	1

There were six cases of hæmorrhage, which were probably due to embolism, and four of them to aneurysm. The ages were between 12 and 26 (Cases CXCII, and CXCV-CXCIX).

The following conclusions may be drawn from the cases of aneurysm of the middle cerebral arteries: The size was in six described as that of a pea, four were oval sacs from a half to three-quarters inch in diameter, one was the size of a walnut, and one was a bilobed sac the size of two nuts. In twelve cases death occurred from rupture of the sac; in six of the patients death had occurred from other causes, and the aneurysmal sacs were found unruptured. Death in these had taken place from heart disease (2), from multiple patches of softening in the brain (2), from amputation, and from suppurative mediastinitis.

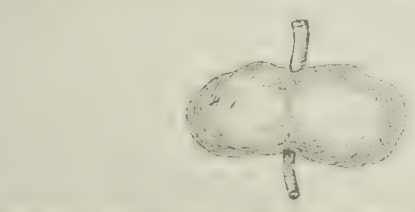


Fig. 4.—Case CLXXXI. Few weeks' history; found unruptured at *post mortem*.

CASE CLXXXI.—A girl, aged 16, was admitted with severe heart disease and left hemiplegia of five months' duration. She ultimately died from suppurative mediastinitis. At the bifurcation of the right middle cerebral artery was a bilobed aneurysmal sac, each being the size of a nut. There was fungating endocarditis, with suppuration around the trachea.

The hæmorrhage had these features: the aneurysm was situated on the surface in all but three, and two of these extended to the surface. The clot had extended into the cerebral tissue, and had ploughed it up in several, in five rupturing into the lateral ventricle, in eight on to the surface; in several of the cases it had extended in both directions. In consequence of the blood so readily reaching the surface death frequently took place rapidly. One, three, seven, and nine hours were the most rapid cases. In many of the cases there were no symptoms previous to the rupture, except a headache, which was a feature in some of them. In other cases in which the onset of the embolism could be fixed by the symptoms, the duration of the aneurysm after the blocking was shown to be three weeks in (CLXXXIII and CLXXXVI), two weeks in a third, and five months was the longest (CLXXXI). The onset of the embolism was marked by hemiplegia in six, and in several associated with a dull stupid mental condition, in others by a period of unconsciousness, and in some by fits. The onset of softening distinct from the embolism was well marked in the above case (CLXXXI).

The cases of aneurysm of the anterior and posterior cerebral arteries presented no characteristic symptoms to indicate the vessels affected. Three of the aneurysms were on the internal carotid artery; two of them were fusiform dilatations, occurring in men aged 66 and 56, and they differ entirely in their etiology from the other cases we are considering.

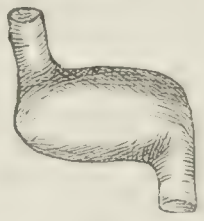


Fig. 5.—Case CLXXXIX. Carotid aneurysm; four months' history; chief symptom, paralysis of third nerve.

CASES CLXXXIX and CXCI.—In the first, the main symptom besides ill health was ptosis, due to the compression of the third nerve by the aneurysm in the cavernous sinus. The man had old kidney disease, and died with suppurative nephritis. The aneurysm was due to diseased vessels secondary to his bad kidneys. The second patient died with meningitis. In both the aneurysm set up suppuration round the pituitary body.

The third case was that of a boy, aged 17, who, six weeks before his death, was seized with right hemiplegia and aphasia, and died with heart disease. At the inspection there was fungating endocarditis, with an embolic plug at the bifurcation of the internal carotid, with the formation of a small aneurysm the size of a pea on the proximal side, which had not ruptured or given rise to any symptoms during life, except those due to the embolus.



Fig. 6.—Case CLXXVII. Gave no symptoms till rupture took place.

The main conclusions that may be drawn are:

1. It is most exceptional to find a cerebral aneurysm which is not associated with fungating endocarditis.
2. The lodging of a septic embolus is the starting point of the changes which take place in the vessel.
3. The clot inflames and in most cases disappears, the vessel dilating from the inflammatory changes in its coats.
4. An aneurysm may form and rupture in three weeks.
5. The onset of the embolism may not be marked by any symptoms, and the rupture of the aneurysm may be the first indication that there is danger.

Case clxxvii.—A man brought in dead, ill one hour. Aneurysm on middle cerebral had ruptured into lateral ventricle. The clot weighed 4 ounces. Fungating endocarditis.

The aneurysms are usually on the surface of the brain, and when they rupture they are more rapidly fatal than other forms of cerebral hæmorrhage. As the aneurysm increases in size it tends to spread inwards, ploughing up the cerebral tissue, and may rupture into the lateral ventricle, although it has originated on or near the surface. Cases of cerebral hæmorrhage in young people will generally be found to have originated in aneurysm.[1]

THE QUESTION OF OPERATION UPON FISTULA IN PHTHISIS.[2]

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In books of medicine I have scarcely been able to find any real, clear, and useful guidance as to the course which should be pursued in cases which fall under the heading of this paper—namely, patients who suffer from phthisis combined with fistula. Moreover, many of the books to which I have referred appear to me to be sadly contradictory one of the other; some say, "Do not on any account touch a fistula in a patient suffering from phthisis;" others state that it is advisable to operate. By far the greater number of the authorities give barely more than a single paragraph to the treatment of this combination of phthisis and fistula.

I must make exceptions. Dr. Theodore Williams, in his book, mainly alludes to the frequent alternation between the free discharges from the fistula and the activity of the phthisis, and adds that this circumstance has deterred many physicians from counselling and surgeons from performing operations in such cases, from the dread of the eruption of miliary tubercle that sometimes follows on a successful operation on fistula in phthisical subjects.

Dr. Douglas Powell, in the last edition of his book on *Diseases of the Lungs*, writes to the following effect: "Fistula in ano occurs in something less than 5 per cent. of cases of phthisis, and, in my experience, is almost limited to males. Amongst those afflicted with fistula, however, phthisis commonly supervenes or already exists." He then states two circumstances which should be borne in mind:

1. Fistula may arise from various causes, with no necessary connection with tubercle; but, having become chronic, it is very apt to become tubercular, and to lead to secondary tubercle in other organs, especially the lungs. Characteristic bacilli have been found in the indurated walls of most chronic fistulæ. In cases of this kind, timely operative treatment of the fistula may avert secondary tubercular affections of its walls and of other organs.

2. Fistula more commonly occcurs in cases of phthisis when the cachexia of that disease is already marked. It is then impossible to say whether the disease was tubercular from the first, but it soon becomes so. In the presence of decided chest disease fistula is of secondary importance, and, unless causing much additional suffering and exhaustion, should not be operated on.

He further remarks that "the observed alternation between the activity of fistula and of chest disease has deterred surgeons from operating with willingness. A more real objection is the risk of operations failing from the morbid character of the surrounding tissues, and the further danger of the activity of the chest mischief supervening on the breaking of the tubercular induration about the fistula, or upon the renewed febrile action attendant on operations in unhealthy persons." Dr. Douglas Powell adds that bad cases of fistula may require some operative measures.

In his book on *Phthisis*, published a quarter of a century ago, Dr. J. E. Pollock writes as follows on the question of operating on fistula in phthisical cases:

"The result of such cases as we have witnessed is that the operation is not ordinarily successful in healing the fistula; that, if successful for a time, the discharge almost invariably returns; that the phthisical symptoms always increase after the healing of the sinus; and that the discharge itself is a condition favourable to the quiescence of the irritation in the lung. In very frequent instances the aggravation of all the symptoms of phthisis has occurred almost immediately after the suppression of the discharge." (p. 317). On the next page he writes: "When the operation is successful the patient is commonly, as regards the phthisis, in a quiescent state; but generally, within one or two months, the lung disease assumes activity." He then gives an analysis of 31 cases of phthisis with fistula. "Of these, 10 were operated on with the following result: Fistula healed and chest symptoms became worse in 3 cases; phthisis commenced after the operation in 2 cases; the fistula returned in 3 cases; result doubtful in 2 cases. In 21 cases no operation was performed; fistula persistent, chest symptoms remained chronic, in 14 cases; fistula persistent, chest symptoms became worse, in 4 cases; fistula had existed before phthisis, the latter being of a periosteal form, in 3 cases." (pp. 319-320).

Just contrary to some of the above opinions is the following passage from the late Dr. Fuller's book on *Diseases of the Chest* (p. 441): "As long as the discharge from a fistula is insignificant and the patient's mind is not seriously disturbed by its continuance, so long is it advisable to confine our efforts to the treatment of the constitutional malady, and not to disturb the fistula. Any attempt at curing it by operation, under these circumstances, would probably be followed by an immediate increase in the cough and the pectoral symptoms, and therefore would be highly injurious. But I do not hold with those who maintain that a fistula occurring in the course of phthisis ought never to be interfered with. In some instances the discharge is profuse, and constitutes an important source of waste, and the patient is so distressed and alarmed at its continuance that no treatment can be of avail until his nervous apprehensions are overcome. He can neither eat nor sleep for thinking of it, and his whole system is depressed in consequence. In such a case I have known the greatest benefit result from an operation, combined with the formation of an issue in the arm, the use of a proper diet, and the administration of cod-liver oil, quinine, and other appropriate remedies. Not only has the fistula healed, but the general health has improved, the patient has gained in flesh, and the physical signs of pulmonary disease have materially decreased."

In the face of these contradictory opinions I think that, for the guidance both of physicians and surgeons, some fairly definite rules had better be laid down in fuller detail than has hitherto been the case. For what at present is the procedure too often pursued? If the patient comes to a surgeon, the latter perhaps at once says, "there must be an operation," without consulting a physician as to the condition of the lungs. On the other hand, the physician may refuse to allow an operation without consulting a surgeon as to the nature and extent of the fistula. It is absurd for either surgeon or physician to form a decided opinion without conferring one with the other, both as to the nature and extent of the fistula and the condition of the phthisis. Without such consideration, how can it be accurately determined whether the fistula ought to be treated or not, and, if so, in what manner?

Were such prior consultations universally held, it would be found that in patients who suffer from fistula combined with phthisis there are certain peculiarities of aspect to be observed in the fistula itself and in the surrounding parts. Most of these peculiarities were, I think, first recorded by my father; and, as they are of extreme importance from a surgical point of view, I have endeavoured to arrange the following tabulation:

Fistula in a Healthy Subject.—A fistula in the healthy occurs about as frequently in females as in males; the buttocks are plump, and the ischio-rectal fossæ well filled with fat; there is an average amount of crisp hair; the sphincters have good contractile power; fistula begins, as a rule, with an acute abscess, attended with great pain; the external opening of the fistula is small and pouting; the skin around the external opening and along the back of the fistula is healthy, or only slightly discoloured; the internal opening is usually small, barely admitting the probe; the sinuses

[1] It would have occupied too much space to publish here even the briefest abstract of all the cases with which these lectures deal. The lectures will be republished with the cases *in extenso*.

[2] Read before the Medical Society of London.

are hard, and feel like the stem of a clay tobacco pipe; the discharge from the fistula is healthy or thick pus.

Fistula in Phthisis.—Fistula in phthisis is most common in the male, being rarer in the female; the buttocks are thin, and the ischio-rectal fossæ depressed from want of fat; there is an excessive amount of hair, which is long and of a silky nature; the sphincters are weak, so that when the finger is introduced into the bowel little resistance is offered; fistula begins with a chronic abscess, frequently with no pain; the external opening is frequently large and ragged, and irregular in form; the skin around the external opening is blue and unhealthy of aspect; the internal opening is large, easily admitting the finger; the sinuses are boggish, and feel rather as a gutter or depression in the skin; the discharge is thin and watery.

From the above peculiarities, it is easy for the surgeon to diagnose, without examining the lungs, that the patient has phthisis or an extreme phthisical tendency.

It is scarcely necessary to remark that, though these are the general local peculiarities of phthisical, as distinguished from ordinary fistula, yet in a few cases some of these may be absent.

Now that we have accumulated sufficient data for the distinguishing of phthisical from ordinary fistula, I will endeavour to make some classification of this complication of complaints, and will place fistula in phthisical patients under the three following heads:

I. Fistula in conjunction with active tuberculosis.

II. Fistula in conjunction with chronic phthisis.

III. What I prefer to call "strumous fistula," which answers to what is often termed "scrofulous phthisis."

I will now describe these three kinds, and the treatment I consider to be advisable in each case.

I. *Fistula in conjunction with Active Tuberculosis.*—This occurs in patients who have distinct signs of acute tubercular disease, and probably have not long to live. In this class of cases the fistula commences with a tubercular ulcer of the rectum, and develops into a blind internal fistula. This has a large internal opening, and a cavity into which fæces readily find their way and accumulate, giving rise to great pain. In such cases, it is hardly necessary to say that no attempt should be made at cure, and as little as possible should be done; but to leave the sufferer altogether unrelieved is positively cruel. An incision should be made from the outside into the cavity of the fistula, so as to allow the fæces collected therein to escape, and thus mitigate the pain. If this operation be performed, much suffering may be saved, and the patient's life be rendered comfortable until the end.

II. *Fistula in conjunction with Chronic Phthisis.*—This comprises those patients who have had hæmoptyses, and may even still have the remains of a cavity or consolidation at the apices of the lungs, without any very active symptoms of phthisis. In this kind the fistula begins in the bowel or just at the entrance of the anus, and burrows outwards, undermining the skin. It has an internal and also a large external orifice, the latter of which has unhealthy, overlapping, livid skin. Judicious action is here called for; it is obvious that in order to give the lung a chance of recovery the discharging fistula should be cured, and a cessation be put to the drain on the system. In this variety of fistula the main sinus should first be laid open, but care should be taken to divide the external sphincter as little as possible. Fortunately, it is not usually necessary to cut deeply in these cases, for the sinuses are generally superficial. The edges of the unhealthy skin should be cut off and the base of the sinus carefully scraped.

III. *Strumous Fistula* occurs, I think, in patients with a family tendency to phthisis—that is to say, some of the members have actually had phthisis, and others have suffered from strumous joints or various forms of glandular disease; but in the patient himself the only evidence of a phthisical diathesis is the fistula. It usually commences as a chronic abscess, and may, or may not, have an internal opening. In my opinion (and this is fortified by Dr. Douglas Powell's remarks on his first kind of phthisis), this form of fistula should be promptly attacked; for if it is allowed to remain, it may become the focus of active tuberculosis which may invade other organs of the body. The operation should be performed in the same way as that on any traumatic fistula in the healthy subject.

I have now indicated the particular procedure which appears to me to be advisable in each kind of fistula with phthisis, and will next mention the general rules for preparation of the patient for operation and after-treatment.

When both physician and surgeon have decided that an operation is desirable, the patient should, if possible, be removed to some favourable place, such as one of the South Coast seaside resorts, Margate, Brighton, Bournemouth, and so forth. A good time of the year should also be chosen, say late spring or early summer; and, if the patient has a cough, it is highly important that this should be allayed, otherwise the straining caused by the cough will retard the healing of the wound. The ordinary routine of life, so far as regards diet, both before and after the operation, should be interfered with as little as possible.

The question of the anæsthetic to be employed requires the most careful attention. Chloroform should be administered in preference to ether, for chloroform does not irritate the air-passages, and reduces to the minimum the secretion of mucus; whereas ether irritates the respiratory passages, increases the secretion of mucus, and may cause cough, or even congestion of the lungs.

It is advisable to allow the patient to get up as soon after the operation as is prudent, say the next day, or at any rate for him to remain in a semi-recumbent posture, and not be kept strictly on his back (or side), as is wise after operating upon cases of ordinary fistula. This is recommended, because, in patients with a tendency to lung-trouble, the sudden subjection to an absolutely recumbent position may cause hypostatic congestion, or an aggravation of the existing lung complaint. With regard to the local treatment of the wounds, no more than is absolutely necessary should be done. Dry dressings are, as a rule, the most satisfactory to use.

Before closing this paper, I must once more insist on the cardinal point of my argument—the importance of both physician and surgeon making a thorough examination of the extent and nature of the fistula and the nature and condition of the phthisis. Upon this examination the treatment that is desirable entirely depends. No one will think that I recommend operation in all cases of fistula combined with phthisis; for a small fistula, which causes no pain and has little or no discharge, may very well be let alone. On the other hand, if there is great pain and a copious discharge, or if there is a tendency to burrowing, it is quite as necessary to treat the fistula as it is to treat the phthisis.

One grave consequence of this complication should be studiously borne in mind. Phthisical patients are usually very hopeful, and are constantly making plans for the future with a happy absence of despondency. But a strong, healthy man who suffers from fistula speedily becomes exceedingly despondent. *A fortiori*, then, if a phthisical patient is told that he has also a fistula which must not be cured or even treated, although he may scarcely worry about his phthisis, he may be thrown into a state of great perturbation and mental anxiety by the news that he has a fistula which cannot or ought not to be cured. The mental anxiety and profound depression thus occasioned may do the phthisical patient more harm than is likely to be attendant on an attempt to relieve, or perhaps cure, the fistula, the cause of his present worry.

FOUR CASES OF TIN POISONING CAUSED BY TINNED CHERRIES.

By ARTHUR P. LUFF, M.D., B.Sc., M.R.C.P.,
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AND
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THE following cases are of interest as indicating the definite toxic symptoms produced by tin introduced as a soluble salt into the system by means of cherries and their juice, which had been preserved by the ordinary process of being hermetically sealed in a tin. And since but little is known of the actual amount of a soluble tin salt required to produce serious and dangerous toxic symptoms, a useful feature in this communication is that the form in which the tin was carried into solution has been ascertained by analysis, and the amount of the soluble tin salt present in the cherry juice has been quantitatively determined.

On January 17th of this year, a tin of meat and a tin of cherries were opened, and the contents partaken of at the same time by four men, each of whom ate both meat and cherries and drank some of the cherry juice. One and a half to two hours later they were all attacked with the symptoms of irritant poisoning described below. Three of the cases were admitted into the North-

West London Hospital, and were diagnosed as cases of either tin or ptomaine poisoning, and were treated accordingly. The subsequent analyses of the contents of the two tins indicated that the toxic symptoms were due to tin, so that it will be perhaps as well to describe first the examination of the contents of the tins. The tin of meat, which was about one-third full, contained meat which from its appearance, smell, and, taste, appeared to be in good condition; it was found on analysis to be free from tin, and was also carefully examined for ptomaines by the ether and tartaric acid process described in the JOURNAL of last year,[1] but was found to be quite free from any of those animal poisons. It therefore seemed evident that the toxic substance was to be looked for in the contents of the tin of cherries. This tin (a large one) was about half full of cherries and juice. The juice was strongly acid, and the analysis of it showed that the acidity was due to malic acid with a small quantity of acid tartrate of potash. The juice contained tin in solution, a quantitative estimation of which showed that every fluid ounce of the juice contained the equivalent of 1.9 grains of the higher oxide of tin, which would be equal to 3.2 grains of the malate of tin in each fluid ounce of the juice, or to 60.4 grains in a pint of the juice. On examining the inside of the cherry tin, it was at once evident that the surface of the tin did not present any indication of corrosion, but that the solder was distinctly corroded. It would therefore appear that the tin did not get into solution by the action of the malic acid of the juice on the tinned surface, but that the solder (consisting of tin and lead) acted as a galvanic couple in presence of the malic acid, the tin taking the *rôle* of the negative element and passing into solution.

The following is a description of the toxic symptoms presented by the patients, together with the treatment. The first three cases were admitted as in-patients to the North-West London Hospital, under the charge of Dr. Donald Hood, the senior physician; but as they were not seen by him the treatment here given was prescribed by us.

CASE I.—A. B., aged 18, at 7.30 A.M. on January 17th ate twenty-two or twenty-three cherries, together with some of the juice. An hour and a half later he was attacked with nausea and abdominal pain, followed within a few minutes by vomiting and diarrhœa; he was very drowsy all the morning, but did not lose consciousness. The pulse was feeble, very irregular, and rapid. The patient suffered from severe abdominal pain all the afternoon, and at 4.30 P.M. was in a condition of extreme collapse, with marked cyanosis and a scarcely perceptible pulse at the wrist. He was placed in bed, with hot water bottles at his side and feet, a brandy enema was given every four hours, and a mixture containing the soluble biniodide of mercury, carbolic acid, and chloral hydrate was given with the view of relieving the intestinal irritation, and also, on account of the possibility (as considered at the time) of the symptoms being due to ptomaine poisoning, to act as an antidote to any such bodies (the soluble biniodide of mercury being an antidote to most toxic ptomaines). At 7 P.M. iced milk and soda water produced vomiting. At 9 P.M. he retained iced milk and soda water, and the diarrhœa had ceased. Evening temperature 100.8°. The next morning the temperature was normal, the urine contained a trace of albumen, and the patient was practically well.

CASE II.—J. C., aged 37, at 7.30 A.M. on January 17th ate twenty cherries, together with some of the juice. An hour and a half later he was attacked with nausea and abdominal pain, followed within a few minutes by vomiting with excessive retching; three hours after eating the cherries diarrhœa commenced. When admitted to the hospital, four hours after eating the cherries, he was unconscious, cyanosed, and the pulse was very feeble, irregular, and rapid. An emetic of twenty grains of sulphate of zinc failed to act, but mustard and water produced vomiting, the vomit containing portions of cherries. He was treated in a similar way to the first case. The diarrhœa ceased in the evening, and iced milk and soda water were retained. Evening temperature 100.5°. The next morning the temperature was normal, the urine contained no albumen, and the patient was practically well.

CASE III.—A. R., aged 25, at 7.30 A.M. on January 17th ate nine or ten cherries, together with some of the juice. Two hours later he was attacked with nausea and slight abdominal pain, followed an hour after by vomiting, which lasted for six hours. Five hours after eating the cherries diarrhœa commenced. The symptoms of this patient were similar to those of the two just described, but were decidedly less severe, as he had eaten fewer cherries. He was treated in a similar manner to the first case. The diarrhœa ceased at 2 P.M. the same day. Evening temperature 101°. The next morning the temperature was normal, the urine contained no albumen, and the patient was practically well.

(The fourth patient did not come to the hospital, but was seen and treated by Mr. F. R. Humphreys, of Queen's Crescent, Hampstead, to whose kindness we are indebted for the notes of the case.)

CASE IV.—J. R., aged 42, partook of the cherries (number not mentioned). He suffered from similar symptoms to the other patients, with the addition of cramps in the legs and the vomiting of a little blood in the evening. Sphygmographic tracings showed great irregularity of the pulse and low tension. The urine passed next morning contained a small quantity of albumen.

REMARKS.—As far as can be estimated from the accounts given by the patients of the number of cherries and the amount of juice they took, the alarming symptoms described above must have been produced by doses of the malate of tin, varying from 4 to 10 grains. The tin salt acts as an irritant and as a cardiac poison. Its irritant properties on the alimentary tract are indicated by the abdominal pain, vomiting, and diarrhœa, and in two of the cases its slight irritant action upon the kidneys is shown by the transient albuminuria that was produced. Its action as a cardiac poison is shown by the feeble, irregular, and rapid pulse, together with the marked collapse and cyanosis, which were prominent symptoms in all the cases. These cases serve to indicate the danger of eating fruits preserved in acid juices in tins; for the public safety it is desirable that such fruits should only be preserved in bottles.

[1] Report on the Relation of the Ptomaines to some of the Infectious Fevers, by Arthur P. Luff, July 27th, 1889.

THE EPIDEMIC OF INFLUENZA IN THE RURAL SANITARY DISTRICT OF MELTON MOWBRAY.

BY WILLIAM TIBBLES, L.R.C.P.E., M.R.C.S.ENG., L.S.A.LOND.,
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I AM now able to give more accurately, through the kindness of practitioners residing in the district, the dates of the first appearance of the cases in various parts of the district. Several centres appear to have been formed from which the disease spread to villages around.

(*a*) It made its appearance in Melton Mowbray, according to Dr. J. T. Tibbles, on December 18th. From this place it spread rapidly to many of the villages of my district, namely, Sysonby, Asfordby, Burton, Kirby, Frisby, Freeby, Great Dalby, etc.

(*b*) In the south of the district a centre seems to have been formed at Twyford, where it appeared on December 20th (J. Jackson).

(*c*) In the north-west of the district it appeared at Upper Broughton on December 18th (E. F. Trevor), spreading to Nether Broughton by the 23rd (Trevor), to Old Dalby by January 1st (Trevor), arriving also at Long Clawson on January 1st (J. M. Swain), and later at Stathern on the 20th (Swain), and by February 1st at Hose, Harby, and Wycombe (Swain).

(*d*) In the eastern side of the district it appeared at Eaton on December 30th (Swain), spreading rapidly to Eastwell and Branstone. It does not seem to have shown any great tendency to cross the marlstone ridge, as on one side of it the villages were attacked thus early, but on the western side of the ridge it did not appear until three weeks later at Stathern, and four weeks later at Hose, Harby, Scalford, and Holwell. Whether these villages have been thus favoured on account of their being more elevated or because the subsoil is a rocky one (ironstone) I do not presume to say, but probably both factors enter into the problem.

(*e*) At Wymondham it appeared on December 30th (H. Hamilton), and spread to Saxby, Garthorpe, Coston, Buckminster, Stonesby, Waltham, etc.

The first appearance of the disease was in every quarter of the district, in villages which lie low, have a clay subsoil (middle lias), and from these it has radiated in every direction, attacking villages on the ironstone last of all. By about the middle of January the epidemic was getting pretty general, and "the case

were very numerous and widespread" (L. L. Powell), but it was not general in the marlstone or ironstone districts until the middle of February.

Further experience of the disease confirms my opinion that it is due to a microbe or bacillus unknown; that it probably belongs to the miasmatic class of diseases, of which ague is the type, and that it is allied to dengue. The disease is directly infectious, though in varying degrees, for if one member of a family is attacked others soon follow; but the infection is not dependent upon animal tissues only for development, but thrives and multiplies in the atmosphere or other external media in a manner which renders the disease widely epidemic in a way which is independent of infection from person to person. It is probably not very contagious, as although many persons in one house have had it, some of the inmates have escaped though in daily contact. It spreads from village to village in two ways: (*a*) by the infection being carried either in the person or clothes of convalescents and others, and (*b*) by means of the atmosphere, travelling in the direction of wind currents. A mild temperature, with a rather quiet atmosphere, appears to have favoured its development, but a strong north-easterly wind has been more or less destructive to the epidemic.

The disease affects persons of every age and class. There is a period of incubation of about two days, often reduced to a few hours, during which there is a feeling of *malaise* and irritability, or depression. Then during a period of chilliness with occasional rigors, the temperature rapidly rises to 102° F. or 104° F., attended by severe throbbing headache, pain at the back of the eyes, muscular pains, and great nervous depression and lowness of spirits. Running from the eyes and nose has only been observed in a small percentage of cases. The prostration in most cases is complete; nevertheless many people have had it so mildly that they have been able to attend to their business.

During the course of the complaint the usual signs of fever have occurred. As a rule the duration of the fever has been from forty-eight to seventy-two hours, when the temperature has rapidly subsided during a critical profuse perspiration to normal; convalescence has usually occupied six or eight days more. The average duration of uncomplicated cases has been eight days. A relapse, however, has been observed on the sixth or eighth day in such a large percentage of cases as to be almost the rule; the period of the relapse has usually been the time for the onset of complications. The disease is evidently mild if the patient goes to bed as soon as shivering and lumbar pains come on, but it is dangerous if he is exposed to the weather, or otherwise improperly treated. Exposure to cold during the height of the fever or convalescence may entirely change the character of the complaint, bringing about a speedy relapse with some severe complications.

I have observed a rash in a few cases, not always however of the same kind; thus: 1. Several cases had a papular eruption on the head, face, neck, back, chest, and arms, the itching of which was excessive, the eruption lasted about three or four days, and terminated by desquamation around the papules. In two instances the desquamation was rather more general, extending to the hands and feet. 2. A rose coloured rash or spots have been observed. 3. Herpetic eruptions about the face have been common.

Hæmorrhages have not been infrequent; and generally I have observed that the discharge of blood has been the forerunner of a severe attack, usually accompanied by some complication. Among my uncommon cases, four set in with hæmoptysis, one with epistaxis, two with hæmaturia, and several with bloody stools. In cases with hæmoptysis and epistaxis premonitory symptoms preceded the illness by a few hours; but in the cases of hæmaturia the patients observed that, after a rigor, the next urine passed was bloody. In one instance a clot of blood was formed round the utensil of the thickness of a shilling. Bloody stools, along with diarrhœa, have not been uncommon.

Among other complications, I think pneumonia has been the most frequent; but chest symptoms of a catarrhal or bronchitic kind have been common; meningitis, severe neuralgias, otalgia, etc., have been noticed.

There does not appear to have been any definite interval between the attack of different members of the same household. Such intervals have varied from a few hours to a week or two, but in most cases they have followed in rapid succession. Although many in one house have had it, some of the inmates have escaped, though living in daily contact. I have observed that a few persons who have escaped have either been rheumatic or had a tendency to it.

Dr. Jackson, of Somerby, informs me that he has observed that horses in his neighbourhood have been affected with a cough, with profuse discharge from the nostrils, swollen submaxillary glands, and inability to work, lasting about ten days. The same thing has been observed in other parts of the district. Bronchial attacks in horses have also been common.

The deaths from influenza in my sanitary district have been few in number.

Conclusions.

1. That it is a disease *per se*.
2. That it is of miasmatic origin, the specific germ being an unknown bacillus.
3. That it is severely infectious, and but mildly contagious.
4. That it spreads by atmospheric influence, and by development in external media.
5. That its development outside the body is the cause of its being so rapidly and widely epidemic.
6. That one attack is not protective against future attacks; though it has not been under observation long enough to decide this, we may judge from analogy with other diseases of this class that such is the case.
7. The cause of the origin of this world-wide epidemic is unknown, and that, in a given district, the epidemic probably fails from want of numbers, or some change in the atmospheric conditions.

ON THE QUESTION OF ANÆSTHETICS IN OPERATIONS FOR ADENOID GROWTHS OF THE NASO-PHARYNX.

By HENRY DAVIS, M.R.C.S., L.S.A.,
Teacher and Administrator of Anæsthetics to St. Mary's and the National Dental Hospitals.

Since Wilhelm Meyer, of Copenhagen, described adenoid vegetations[1] in the naso-pharynx, and also showed that their removal offered an almost certain relief in many cases of intractable deafness in young children, the attention of aurists and laryngologists has been directed to this matter, and with admirable results. Meyer advised that in removing these vegetations, an assistant should hold the head, which is to be slightly bent forward, and the patient is to be requested to breathe deeply and regularly through the mouth during the operation. The surgeon, standing in front of the patient, introduces the left index finger into the naso-pharyngeal cavity, and with a steel instrument passed through the nostril, the vegetations were to be detached. Such a procedure is naturally followed by free bleeding, and although the operation is not in itself a very painful one, the difficulty in carrying it out on a child aged 7 may be easily imagined.

During the last few years, the operation has been considerably modified and simplified. It is also made more comfortable for the patient, in that most operators now avail themselves of an anæsthetic. Some surgeons employ nitrous oxide, whilst others use ether or chloroform; and as I have had a considerable experience in the administration of anæsthetics in this particular class of case, I should like to offer a few suggestions on this subject. It is, of course, needless for me to urge the advantage of operating under an anæsthetic. Patients of fifteen years and upwards may be found sufficiently resolute to control themselves in such a way as not to embarrass the operator; on the other hand, the manipulations of the surgeon's finger in the naso-pharynx of a child of 10 are not calculated to keep it in good humour, and the sight of a pair of forceps completes the picture, and produces a profound feeling of dismay and often panic.

The advantages of the unconscious condition are so obvious that one need not point them out, but proceed at once to discuss the anæsthetic and method of administration best suited to this particular operation.

Some anæsthetists employ nitrous oxide, but its effects are so transient, and even during the anæsthetic period it is so difficult to keep the patient tranquil, that the operator is rarely able to accomplish his aims to his complete satisfaction.

The method which commends itself most to my mind is as follows: The patient is anæsthetised either with ether (using gas as

[1] *Med.-Chir. Trans.*, 1869.

a preliminary), or, in the case of young children, chloroform alone, or mixed with a small proportion of absolute alcohol. The degree of narcosis depends upon the method the surgeon intends to employ. If the finger is used only, the narcosis need not be so deep as if the forceps is employed. The patient, lying on his back, should have the head drawn over the table as in the method now so frequently employed for staphyloraphy. The advantages of this position are the following: The blood cannot trickle downwards into the larynx, but collects into the roof of the pharynx, which in this position forms, as it were, a cup to receive it, and from which the blood and fragments of adenoid tissue can be easily removed by sponging.

A very important fact for consideration is that in this position we are sure, thanks to the admirable investigations of Dr. Howard, that the air passages are free, and that the epiglottis is raised from the larynx.

The importance of giving the patient every facility for respiring freely cannot be too strongly insisted upon, for the whole of the naso-pharynx is not infrequently plugged with the overgrown pharyngeal tonsil; respiration through the nostril being obstructed, every care is required while he is under the effects of the chloroform.

I would urge the administration of an anæsthetic in these cases on the following grounds: The surgeon can perform the operation more deliberately and with greater thoroughness; the patient is spared much pain and discomfiture, and, if unconsciousness is produced by one who is accustomed to this particular class of case, it is as devoid of danger as in any other operation in surgery. I think it necessary to insist on this point, because I feel sure that many laryngologists are more willing to let the patient endure a certain amount of pain than incur undue risk on the score of the imaginary additional dangers which are supposed to complicate anæsthesia in such patients. I can speak with great confidence on this matter, for I have administered chloroform now in a very large number of these cases, and have never had the slightest untoward symptom; and this success I would attribute mainly to the position of the patient during the performance of the operation. Lastly, I cannot avoid the conclusion that in removing adenoid vegetations from the naso-pharynx of a child, it is incumbent on the operator, in the majority of cases, to give the patient the advantage of an anæsthetic.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CHOLE-PULMONARY FISTULA.

MRS. C., aged 70, had always been healthy, except as follows: In 1882 an attack of jaundice, evidently obstructive, lasted six weeks, was accompanied by hepatic pain, and ended in complete recovery. In 1887 she had a similar illness, but said to be without jaundice; recovery. In January, 1889, all the symptoms of obstructive jaundice developed and remained more or less persistent; pain never great; occasional sickness.

Suddenly, on July 13th, rigor and severe persistent pain in the hepatic region set in and continued next day, preventing sleep and quite upsetting the patient. The pain suddenly ceased on the morning of July 15th, with sudden onset of cough and profuse expectoration. It was on this day I first saw the patient. She was much exhausted, thin, and had the typical symptoms of obstructive jaundice. She was sitting upright, and refused to lie down, because the moment she did so she had distressing intermittent cough and expectoration, which troubled her less when she was upright. The physical signs were those of acute bronchitis of the right lung, much less marked in the left, and at first I took the expectoration to be bronchitic mucus deeply bile-stained, but more careful examination showed it to be bile; it was thickish green-and-yellow fluid, with very slight admixture of air. Temperature normal. Little could be made out by abdominal palpation, as whenever the patient tried to lie down the cough and expectoration increased. There was no marked tenderness in the hepatic region. During the next four days the urine and the conjunctivæ became lighter in colour, the stools continued to be quite clayey; hepatic pain had quite gone. Patient continued to expectorate the same fluid till the evening of July 18th. By the morning of the 19th this had stopped, and the right lung had become solid. Temperature remained normal. She now gradually became weaker, more distressed, more deeply jaundiced, and there gradually developed in the region of the gall-bladder a swelling, which by the 26th could be palpated as a cyst containing fluid, and which was very tender. The patient gradually sank, and died on July 30th.

A necropsy was not granted, but the history and the symptoms point to chronic inflammation of the gall-bladder, and occlusion of the hepatic and cystic ducts or of the common ducts, followed by a fistulous opening of the gall-bladder into the right lung. While this opening remained patent the symptoms of retention and absorption of bile diminished, although the fæces remained clayey. These symptoms again increased when the opening closed, from the consolidation of the right lung caused by the passage of the bile through it. The history of jaundice seven years previously, and again of hepatic pain and disturbance two years previously, and the absence of hard abdominal tumours seem to negative the idea of cancer.

JAMES ADAM, M.A., M.B., C.M.

Hamilton, N.B.

SUPERFICIAL KERATITIS INDUCED BY ANILINE VIOLET.[1]

SOME time ago, a healthy boy aged about 7 years was brought to me, and the mother gave the following history: On the preceding afternoon the little fellow had been amusing himself by drawing with an aniline blue pencil, and had got his fingers well stained with the violet dye, and from these had got it into the left eye. When she first noticed the child, "the white of the eye (as she put it) was quite purple." But the child made no complaint. Towards evening the eye got very irritable with photophobia and lachrymation. In the morning the purple colour had faded considerably, but the child had great dread of light and pain. On examining the patient, after instillation of cocaine, I found the conjunctiva extremely congested and of a reddish purple colour. After reducing the superficial hyperæmia by pressure, the colour was of a bluish purple. At the inner side below was an area of deeper circumcorneal injection. The pupil was slightly dilated and active. On examining the cornea by oblique illumination, I found six small vesicles on the inner and lower segment, filled apparently with transparent fluid; one of these had burst and left a small superficial ulcer with clean edges. There seemed to be no infiltration of the corneal tissue around, the media was clear, and the fundus normal. I ordered atropine, cocaine drops every three hours, and boracic acid lotion, the eye to be protected from light. Next day all the vesicles had burst and coalesced to form one superficial ulcer, the floor of which was quite transparent and the margin showing no infiltration. There was much less photophobia, and the violet staining of the conjunctiva was much less marked. The atropine was continued and a light compress applied, and in forty-eight hours the ulcer had completely healed, There was a slight haze over that part of the cornea for a day or two, but eventually it became perfectly transparent and full vision returned. The purple stain had entirely disappeared on the fifth day.

J. TATHAM THOMPSON, M.B.

Cardiff.

ERGOTIN IN ERYSIPELAS.

I HAVE read with interest Dr. Kingsbury's note on the above subject, and though I have never applied ergot externally, I have for some years given it internally in association with perchloride of iron with great success. I was first induced to try it in a case complicated with epistaxis, and the result was so satisfactory, that I have ever since used it. I have employed the liquid extract of the *Pharmacopœia* in combination with tincture of perchloride of iron and glycerine.

A. H. T. CAMERON.

Liverpool.

PRECOCIOUS MENSTRUATION.

THOUGH the early appearance of the menstrual flow is by no means infrequent in the tropics, it is of interest to note its occasional occurrence in the British Isles, where the usual age varies between 13 and 17 years.

E. D., aged 7 years and 3 months, a native of Portsmouth, was brought to me with a muco-serous vaginal discharge and general *malaise*, backache, and loss of appetite, being, as the mother described it, "out of sorts." A week subsequently the true san-

[1] Read in the Section of Ophthalmology at Leeds.

uineous flow came on, continuing for five or six days, and gradually subsiding. Here it is curious to note that the signs of premature puberty were not so marked as is usual in such cases. Krieger gives the extremes for commencement of the catamenial flow as 18 years in Swedish Lapland, and 10 years in Egypt. Parin has recorded a case at $3\frac{1}{2}$ years, and Ploss a series of cases under 8 years, mostly in healthy subjects.

C. E. GREY STALKARTT, M.B., C.M.Edin., M.R.C.S., L.R.C.P.Lond.

Southsea.

INFLUENZA AND CATALEPSY.

I HAD under my treatment some cases in which catalepsy appeared immediately after an attack of influenza had subsided. I shall give a brief description of only one case.

O. B., aged 32, mother of three healthy children, of poor condition, had a severe attack of influenza on January 5th last. I saw the woman on the same day. Her symptoms were shivering, abdominal pains, want of appetite, obstinate constipation, vague pains all over the body, and great restlessness; temperature 103°. After four days' illness she was well enough to get out of bed. She was seized, however, with a sudden loss of consciousness. I was called to see her, and found her lying in bed apparently senseless, with her eyes open. The pulse was 120 and weak; the colour of the face very pale. I raised first one arm and then the other, and they remained in the position in which they were placed. I then attempted to rouse her from the senseless state, and for nearly five minutes she remained sitting on the bed in the same position in which I placed her. I raised her legs from the bed, and they remained so for nearly ten minutes.

There is no doubt the case was an attack of catalepsy following the attack of influenza suffered a few days before, which had weakened the patient and rendered her more nervous. I prescribed an enema with assafœtida and camphor mixture. The fit lasted for nearly two hours, and the disease subsided with the first attack, the woman having been all right ever since.

G. F. INGLOTT, M.D., D.M.O.

Malta.

LARYNGEAL STENOSIS FROM FIXED ADDUCTION OF THE VOCAL CORDS, FOLLOWING CANCER OF THE ŒSOPHAGUS.

THE very able report, by Dr. Percy Kidd, of six cases of glottis-closure from tubercular disease, in the JOURNAL of March 29th, recalls to my mind the following case, which may be of interest as bearing on some of the points he adduces:—M. T., aged 51, labourer, came under my notice in September last, by the courtesy of a colleague who had charge of the case. He stated that he had been ill four months (?) but his appearance betokened much suffering. His breathing was noisy, and during the consultation he had several paroxysms of dyspnœa after coughing. His voice was very rough. Externally, the larynx was observed to make scarcely any respiratory excursion, and appeared enlarged on the left side. A swollen gland was felt near the posterior border of the left sterno-mastoid, and the thyroid was palpably enlarged. No dulness was found on percussing the chest, but on auscultation tubular breathing was slightly marked on the right side. There was much expectoration of frothy mucus, and great pain was experienced, especially in swallowing, which latter act was extremely difficult.

Laryngoscopic examination: Swelling of both ventricular bands, especially the left, which somewhat overlapped the vocal cord of that side. The vocal cords were fixed in the median position and only about an eighth of an inch apart. The mucous membrane over the summits of the arytenoid cartilages was much swollen. The dyspnœa, though marked, was never sufficiently urgent to call for tracheotomy, the patient really dying from exhaustion. The necropsy revealed cancer of the upper portion of the œsophagus involving both recurrent nerves. The crico-arytenoid joints were fixed by the surrounding inflammatory thickening.

I assume that in this case the vocal cords primarily occupied the cadaveric position in consequence of bilateral paralysis of both the adductors and the abductors, but these latter undergoing tonic contraction, of a similar character to that noticed after severe facial palsy, caused the cords to take up the position in which I found them. The contraction, though affecting both sets of muscles, resulted, as in the case of spasm, in the adductors overpowering the abductors, possibly from mechanical advantage. The fixation of the vocal cords in their baneful position is accounted for by the condition of the crico-arytenoid joints found *post mortem*.

J. G. BLACKMAN, M.D., M.R.C.S.

Portsmouth.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GENERAL HOSPITAL, MADRAS.

AORTIC ANEURYSM PRESENTING IN THE DORSAL REGION.

(Under the care of Surgeon-Major BROWNE, M.D.)

CHENGAL ROYAN MOODELLY, aged 30, by occupation a dyer, and formerly a cultivator, Hindu Moodelly by caste, was admitted on



Fig. 1.

April 27th, for a large painful pulsating tumour of the back.

About two years ago he felt a peculiar gnawing pain on the left side of the abdomen, extending from the lower end of the ensiform cartilage backwards along the costal margin to the mid-axillary line. At first the pain was not severe, though enough to disturb his sleep at nights. The pain was relieved by pressure, was paroxysmal in character, coming on for ten days at a time, and with intervals of similar duration. There was no accompanying fever, but his digestive system became disordered, his appetite failed, and there was a tendency to constipation. For this pain counter irritation was used, but ineffectually. The pain gradually grew worse, retaining, however, its paroxysmal character, till the tumour in the back apppeared—that is, two months ago—since which time the pain is constant. After the tumour appeared he sought relief from a native doctor, but obtained none. He then applied some leaves to it and poulticed it, after which a papule formed on it, which burst and then healed up. Simultaneously with the appearance of the tumour there was a change in his

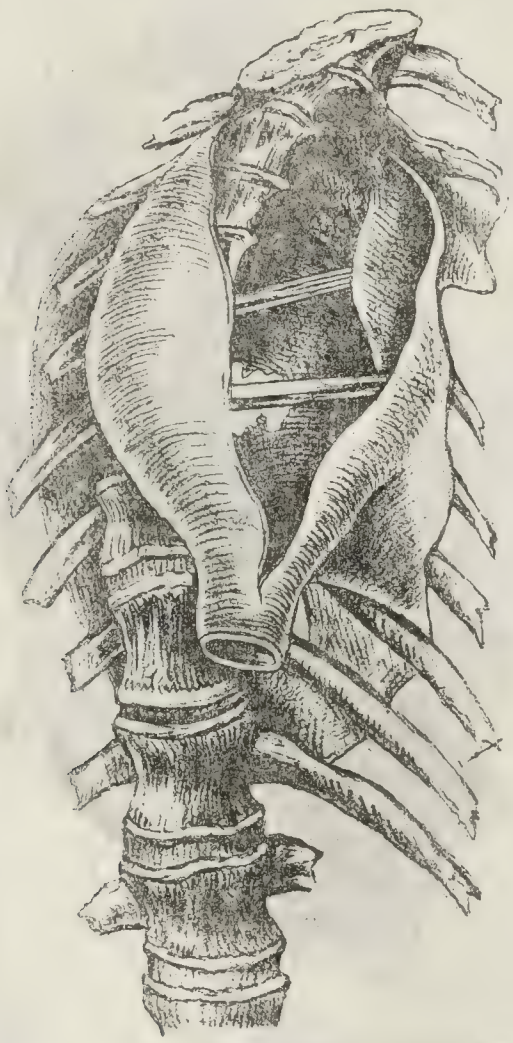


Fig. 2.—Anterior view, showing the primary sac.

voice, which gradually became weaker and higher pitched. He has not suffered from dyspnœa or dysphagia. He had a chancre and bubo about ten years ago, not followed by any secondary symptoms, and about the same time he had also gonorrhœa. He has not met with any injury or accident to the abdomen, and, as regards his habits, for five years before the pain in the abdomen began he was a hard drinker, being often the worse for liquor, and his beverages were arrack and toddy, especially the latter. He gives no family history of malignant disease or of similar tumour formation. He now[1] complains of constant gnawing pain in the abdomen and tumour. It is greatest at night, and he thinks the moon's phases influence it, the pain being greater at new moon than at other times.

On examination, there is a large oval, prominent, pulsating tumour on the back, to the left of the vertebral column, measuring nine inches and a half from above downwards, and six inches and a half transversely in the greatest diameters. Its upper and lower margins are not very well defined, gradually merging into the surrounding tissues, but the lateral borders stand out clearly. It extends along the spinal column from about the fifth dorsal to the first lumbar vertebra, and has caused a marked lateral curvature of the spine, with depression of the left shoulder and with a deep furrow between the spinal column and the right scapula. The surface of the tumour is smooth, even, and glazed, presenting a small scab on its prominent point, corresponding to the poultice-induced papule already noticed. The ribs from the fifth to the twelfth can be traced to its outer border and are then lost. The ninth rib is more prominent than the others. (During the subsequent examination of the patient by the members, it was pointed out that this rib was more mobile than the others, and crepitus could be made out at the outer margin of the tumour, showing that the rib had given way by the outward thrust of the tumour). The tumour is markedly distensile, expansile, and resistant, and imparts to the

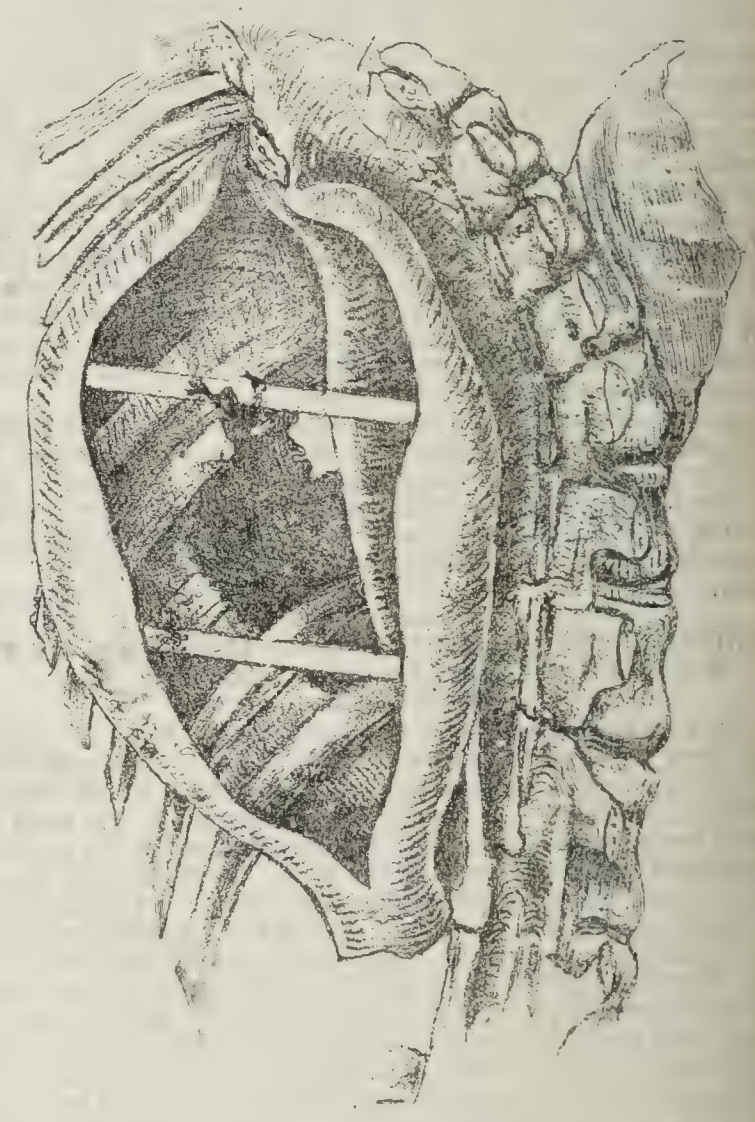


Fig. 3.—Posterior view, showing the large secondary sac.

finger the feeling of a sac filled with fluid. The pulsation in th tumour is synchronous with the ventricular systole. The "throb is heaving and distinctly visible over the whole tumour, but n *bruit* can be detected. There is also diffuse pulsation all over th left side of the chest below the fourth rib, and this side of th chest is fixed and does not expand on deep inspiration; the are of cardiac dulness is normal, and on palpation *frémissemen cataire* is marked over the fourth intercostal space, close to th sternum. On auscultation a systolic *bruit* is audible, traceabl into the axilla. The pulse at the wrist is soft, weak, compres sible, and regular, 130 per minute, and is equal on both side The pulse in the carotid is soft and weak like that in the radial while in the lower extremities the pulse is of improved force an nature.

As regards his general condition, he is a poorly nourished ma with an unhealthy careworn look. He has been gradually losin flesh and strength for the past two years. His appetite is fai the tongue is slightly coated, small, moist, and pale. There is tendency to constipation. No noteworthy symptoms about th respiratory or urinary systems. Owing to the pain, he suffers fro insomnia at night. He always lies on his right side with his le drawn up, so as to relax the abdominal walls. Pressure on th

[1] The patient was exhibited at a meeting of the South Indian Branch, and a brief note was published in the report of that meeting.

.bdomen relieves the pain, while an upright position aggravates t and he is thus unable to stand or walk. The tumour gradually ncreased in size, but in other respects retained its physical characters. The patient suffered a good deal of pain at times, for which hypodermic injections were given, with the desired effects of alleviating the pain and securing sleep. His death was sudden, and occurred during the night of May 23rd, as he was found dead at 4 A.M., having been very quiet all night.

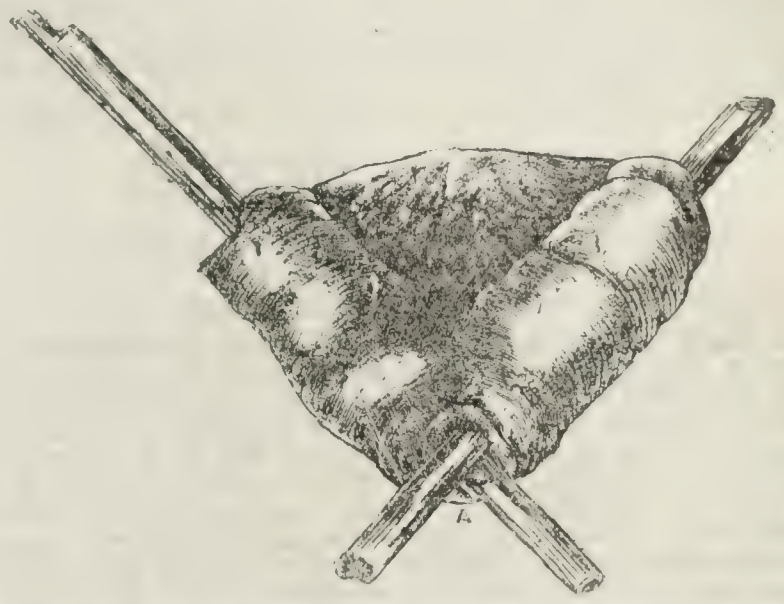
Necropsy.—Dr. Reeves had to make a rather hurried necropsy, as the relatives were anxious to remove the body, but he succeeded n obtaining this very interesting specimen.[2] (Figs. 2 and 3). Death was due to rupture of the aneurysm into the left side of the thorax, which was found full of dark soft clotted blood that had probably escaped from a ragged aperture near the top of the primary sac.

The specimen shows a large aneurysm (Fig. 2) involving the descending thoracic aorta, with much erosion of the bodies of the adjoining vertebræ and destruction of the eighth and ninth ribs near their angles, with an irregular aperture admitting the tips of four fingers leading to the large false sac which had formed under the soft tissues of the back. This secondary sac (Fig. 3) was found full of soft black *post-mortem* clot, with very little laminated fibrin deposited on its walls, while there is a considerable amount of ordinary laminated firm fibrin deposited on the walls of the primary sac. The aorta shows marked atheromatous changes—excessively so for so young a man—the "plates" being very characteristic. Doubtless, the posterior wall of the aorta gradually yielded at the site occupied by a "plate," then eroded the sides of the vertebræ, and, as it enlarged, caused absorption, by pressure of the ribs, and, pressing through towards the back, ruptured to a slight extent—with the result that a false secondary sac gradually formed among the soft tissues of the back, and ultimately became the pulsating tumour that we saw and felt.

STRANGULATED INGUINAL HERNIA: HERNIOTOMY: RUPTURE OF THE BOWEL, ENTERECTOMY AND RADICAL CURE: RECOVERY.

(Under the care of Surgeon-Major W. R. BROWNE, M.D.)[3]

A HINDU bazaarman, by name Govindu Chetty, aged 36, was brought to hospital on the morning of May 11th for a hernia that he stated had come down suddenly five days previously as he was rubbing his head while bathing. He suddenly felt an acute pain in the groin, and something came down into his scrotum. He had some food after his bath, but vomited it, and shortly afterwards he had two motions. The vomiting continued for two days, but he had no more motions. Then his relatives put him in a cart and started him for Madras, and during the two days passed on the road the vomiting persisted. On admission, his expression was not particularly anxious, nor did he give the appearance of much suffering, nor was the abdomen distended. Very soon after admission he was taken into the operating theatre, and there was found a small tense, somewhat tender swelling, occupying the right inguinal canal, and meeting a small tense hydrocele of the right tunica vaginalis, a little below the pubic spine. It was irreducible on gentle manipulation, and there was no impulse communicated on coughing. Under chloroform, as taxis failed, herniotomy was performed. The spermatic cord was found lying in front of the sac and was drawn to one side. On opening the sac, which contained little or no fluid, an irregular mass of what was thought to be probably altered omentum was found occupying the inguinal canal, adhering to the testicle below and above to the apex of a knuckle of congested intestine that was protruding through the internal ring, the edges of the latter grasping moderately tightly the protruding gut. A "nick" directly upwards liberated the gut, and, to free the intestine from the altered omental mass, the incision was continued sufficiently far downwards to allow the testicle to be drawn out of the scrotum. The tunica vaginalis was punctured, and exit given to about an ounce of ordinary hydrocele fluid, and then the testicle was freed by peeling off the adherent sac and contained mass, which was easily done. There then remained apparently nothing to do but to separate the knuckle of gut and return it. It was therefore peeled off very gently from the mass, which seemed only adherent over a circular area on the free margin of the gut of about an inch in diameter. The gut itself was a little thickened, of a light purplish colour, but smooth and shining. When it had been nearly freed and while it was being very slowly separated, the wall of the gut suddenly gave way, and there resulted, on the completion of the separation, an opening into the free margin of the gut, nearly circular in shape and about half an inch in diameter. The edges of this opening were very soft and friable, thickened to about double the ordinary thickness, and of a purplish colour. Looking to the disorganised condition of the margins, it was evidently not feasible to close the opening by sutures, and the choice lay between establishing an artificial anus and resecting the whole of the protruding knuckle. On pulling down either side of the knuckle, perfectly healthy bowel was found just beyond the internal ring, and, as the patient was standing the operation well, I determined on enterectomy. I entrusted either



Knuckle of small intestine resected for rupture; A, marks site of rupture.

side of the bowel to the fingers of Drs. Reeves and Browning, and I then removed the protruded knuckle, together with a wedge-shaped piece of the mesentery. The process of securing the cut edges together was a little complicated by one end having a larger diameter than the other; but with a little puckering, these were brought together by means of many Lembert sutures of fine catgut in a small round sewing needle. The edges of the mesentery were also secured by several closely-placed catgut sutures, and after it had been well closed apparently the gut was gently returned into the abdomen. During the stitching a small amount of fluid yellow fæculent matter twice escaped, but was instantly mopped up with sponges (not subsequently used), and the parts washed with perchloride lotion. The sac was then cleared from its posterfor attachments, cut across near the internal ring, and secured after Barker's method, and the walls of the canal also brought together by the same surgeon's plan. Superficial sutures, iodoform dusting, dry pads of corrosive lint, gauze dressing, and bandage completed the operation, which had lasted nearly two hours. His condition was fair with a rather rapid pulse. Twenty minutes before the operation he had been given an injection of a quarter of a grain of morphine, and at its conclusion a hypodermic injection of a quarter of a grain of morphine, and $\frac{1}{100}$th of a grain of atropine, was given. He was kept fully under the influence of opium for several days, but this did not prevent the bowels acting for the first time on May 13th (nearly forty-eight hours after the operation); the motion being moderately large, yellowish, and semi-fluid; and again on May 14th, and subsequently nearly every day. His diet consisted of an ounce of arrowroot conjee every second hour and an ounce of chicken broth every second hour, alternating with the conjee. He was dissatisfied with his limited dietary from the very first, for he complained of being hungry on the evening after the operation. Small quantities of milk and eggs and an ounce of brandy on May 19th were added, and the first solid food, bread, he had by mistake, on May 21st.

There was retention of urine till May 16th, and the urine had to be drawn off till then. At first the wound seemed to have united by first intention throughout, but it suppurated later on, and an abscess formed in the scrotum, which was opened on May 17th, and exit given to several ounces of extremely offensive pus. The use of a drainage tube and free syringing with iodine lotion (1 in 80) soon checked both the fœtor and the amount of discharge, and the wound healed up nicely subsequently.

[2] Shown at the meeting of the Branch on June 7th.
[3] Reported to the South Indian Branch.

The existence of pain and extreme tenderness all over the abdomen with a rise in temperature pointed to peritonitis as having been established within sixty hours of the operation, and the expression became anxious, and he was a little restless with a rapid pulse on the evening of May 13th. For four or five days his condition caused much anxiety; but the pain and tenderness gradually subsided, and after the tenth day he steadily improved, and the chief trouble consisted in meeting his dissatisfaction at his limited dietary, for he constantly complained of being hungry, and wanting curry and rice.

Temperature.—May 11th, 2 P.M., 98.4° (operation), evening 99.6°; May 12th, morning 99.0°, evening 100.4°, 8.30 P.M. 101.2°; May 13th, morning 99.2°, evening 100.4°, 8 30 P.M. 101.6°; May 14th, morning 101.0°, evening 100°, 9 P.M. 99°; May 15th, morning 98°, evening 100°; May 16th, morning 98°, evening 98.6°; May 17th, morning 98°, evening 98.2°. After this date the temperature was normal.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 8TH, 1890.

TIMOTHY HOLMES, M.A.Cantab., F.R.C.S., President, in the Chair.

A Study of fifty Consecutive Cases of Operation for the Radical Cure of Non-strangulated Herniæ.—Mr. A. E. BARKER, who read this paper, said that this series of cases was studied with the following questions in view:—1, was the procedure called for? 2, was it safe—(*a*) as regards the patient's life, (*b*) as regards the contents of the scrotum? 3, did it secure against a return of the hernia? All the cases in the series were operated on for non-strangulated herniæ which were not amenable to other treatment. The first question was shown to be answered in the affirmative by common experience as far as selected cases went. The safety of the procedure was indicated by the absence of a single death or ill effect to the structures in the scrotum in any case among the fifty. True suppuration of the wound only occurred in two cases; the rest healed well. There were no cases of wound-infection or shock. In two instances the bowels were coughed out during the operation, but no ill effect followed. The stitches in the skin were usually removed on the tenth or twelfth day; those in the ring were left untouched. The ages of the patients varied from three months to seventy years; the numbers for each five years were given, as well as the varieties of ruptures met with. Some of the details of operation were alluded to, and the general subsequent course of the cases during convalescence. The examination of the question of security against recurrence was then undertaken, and the numbers were given of those which returned. Some conclusions which seemed to follow from the study of this series of cases were then given by the author.—Mr. BENNETT said that he thought a tendency existed in very young children for a natural cure to occur, and that in such subjects the operation was rarely necessary. In the case of adults operative procedures were far more frequently indicated. Although he had not met with any fatal cases, he believed that several had taken place. As to the contents of the scrotum, he believed that their safety depended upon the way in which they were treated during the operation. He had seen two cases in which the testicle had sloughed, and in each of these there had been an attempt to dissect the sac away below the point of ligature. He had observed in another case that, although the whole of the cord had been divided, the testicle did not slough. In the vast majority of cases in adults he believed the patient was relieved, but not absolutely cured. In many cases it was still necessary to wear a truss after the operation. Very frequently the truss was worn too soon after the operation, and so possibly prevented the efficient organisation of plastic material which would otherwise have been of benefit. He had observed in one or two instances a tendency to the formation of secondary herniæ after the operation.—Mr. GREIG SMITH deprecated operations for non-strangulated herniæ in children; and he would not operate on irreducible herniæ unless the patients were incapacitated from work or in danger of life. He believed the vitality of the testicle to be jeopardised by the dissection of the sac from it. He would not consider the operation to be curative if a truss had to be worn after it. He thought Dr. Macewen's method of operating to be the best.—Mr. R. W. PARKER said that he had frequently performed the operation on young children, and although a tendency undoubtedly existed in such subjects for the canal to close when the gut was kept in the abdomen cases were met with in which no such tendency could be detected. With regard to the best method of operating, he preferred to bring together the neck of the sac, much as the neck of a bag would be closed up, and then to sew up the pillars of the ring. He had had no deaths from the operation itself.—Mr. PYE, referring to what Mr. Bennett had said with regard to the appearance of other herniæ after operation, said that he could not regard such an occurrence as the result of there being insufficient room for the intestines in the abdominal cavity. He thought spring trusses were not to be depended upon.—Mr. KIALLMARK asked what Mr. Barker's opinions were as to operating in umbilical herniæ. There were only three cases referred to in Mr. Barker's report.—Mr. BOYCE BARROW said that all reducible herniæ could be treated satisfactorily by a well-fitting truss. In nearly all the cases in which he had operated he had entirely removed the sac, and in no case had he observed any damage to the contents of the scrotum to follow.—Mr. HOWSE had operated on twenty-five cases at the Evelina Hospital for Children, the patients all being below the age of 12. He had employed various methods, and in all cases except one a radical cure resulted. He now believed that in very young children with reducible herniæ an operation was usually unnecessary, though where a truss could not be worn he thought it advisable to operate. In some instances he had found the testicle very small, and had then removed it with good results,—The PRESIDENT said that the subject should be considered in two parts. Mr. Barker had ably discussed one of these, and it remained for him or some other Fellow of the Society to bring forward the other, namely, that dealing with the indications for the performance of the operation. He thought that patients should submit to the operation even if they knew they would have to wear a truss afterwards.—In reply, Mr. BARKER said that he agreed with Mr. Bennett as to the tendency in children towards natural cure. He had only operated upon cases in which no other treatment seemed likely to answer. Mr. Greig Smith had referred to Dr. Macewen's method of operating, and had mentioned some of its details, but he (Mr. Barker) thought Mr. Greig Smith was under misapprehension concerning the manner in which the sac was gathered up. With reference to Mr. Kiallmark's question, he would have no hesitation in operating on umbilical herniæ in suitable cases.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MARCH 26TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Specimens.—Dr. EDIS showed a specimen of small Subperitoneal Fibroid, which he had removed on account of the pain to which it gave rise in consequence of its becoming impacted in the uterus. A particular feature in the case was the removal of the stitches on the fifth day on account of the irritation to the skin caused by the pins.—Dr. HEYWOOD SMITH and Dr. BANTOCK questioned the propriety of removing the pins so early, and Dr. EDIS explained that he applied long strips of plaster encircling the pelvis, so there was no risk of the adhesions giving way.—The PRESIDENT and Dr. CARFRAE also took part in the discussion.—Dr. HEYWOOD SMITH showed a Fibroid which he had removed from a lady, aged 58, the mother of fourteen children. It sprang from the fundus, but was adherent right down to the os. He also showed a model of a Pelvis, constructed in plastic material, which allowed the shape of the various pelvic deformities to be impressed upon it for purposes of demonstration.—Mr. BOWREMAN JESSETT related a case in which he had several times scooped away large masses of a growth from the uterus which proved to be fibro-sarcoma, the return thereof necessitating vaginal hysterectomy, which he had performed on the previous Saturday. The patient was doing very well.—Dr. BANTOCK showed several specimens. The first was one of Soft Fibroid removed from a single woman 36 years of age. The specimen included the uterus, and Dr. Bantock explained his method of applying the *serre-nœud* so as to make the pedicle extraperitoneal, and for the purpose of avoiding the trouble and inconvenience resulting from a short pedicle. He reiterated his objections to removing the stitches early, as in Dr. Edis's case, and mentioned several cases in which, although strips of adhesive plaster had been used to afford support, the adhesions had broken down under a strain, and the intestines had escaped. He then showed two specimens of Epithelioma of the Cervix Uteri.

The first was from a lady aged 57, sent to him by Dr. Thompson, of Rome, in which hysterectomy afforded the only means of getting rid of the growth; the second from a widow aged 36, in whom he had considered it sufficient to remove the cervix by means of the galvano-cautery. While on this subject he showed an ingenious arrangement, consisting of a small rubber tube and a metal stem, by means of which the passage of the platinum wire round the mass was facilitated. The next specimen comprised a Fœtus, at about the sixth week of pregnancy, the Right Uterine Appendages, and the Placenta, removed from a woman, aged 35, the mother of five children, the last having been born a year before. The patient was unaware that she was pregnant, but it was elicited that she had missed a period. There were three well-marked attacks of hæmorrhage and collapse, and when opened the abdomen was found to contain an enormous quantity of blood.—Dr. WARDEN, under whose care the case had first been, pointed out that this case did not bear out Mr. Tait's view that ectopic pregnancies only occurred in sterile women in consequence of the loss of the ciliated epithelium of the Fallopian tubes.—Mr. BOWREMAN JESSETT endorsed what Dr. Bantock had said with reference to the early removal of the pins, basing his remarks on his own experience in inguinal colotomy. He pointed out that unless the operator was quite sure that the vaginal walls were not infected, hysterectomy was useless. He questioned the fact of the cases being really epithelioma, a rare condition as affecting the cervix. He asked whether a microscopical examination had been made.—Mr. HEYWOOD SMITH, Dr. EDIS, and others having made some remarks, Dr. BANTOCK, in reply said he attached little importance to microscopical appearances, preferring to rely on clinical observation. As to the cases being epithelioma, he said they belonged to the class that had always been known clinically as epithelioma, with characteristic cauliflower excrescences and a great tendency to bleed on touch. Had the vaginal walls been implicated in the second case he should have performed vaginal hysterectomy.

HUNTERIAN SOCIETY.

WEDNESDAY, MARCH 26TH, 1890.

STEPHEN MACKENZIE, M.D., President, in the Chair.

Puerperal Fever.—Dr. HORROCKS read a paper on this subject. He said several distinct diseases were grouped under that term, and to change the name to puerperal septicæmia did not help to distinguish them. All were agreed that the fever caused by decomposition within the uterus and accompanied with a foul discharge was quite different from the disease in which there was no decomposition and no foul discharge. Where there was decomposition the disease was sometimes called puerperal sapræmia, and the most important of the different affections included under the common term but without a foul discharge was a disease which, from its fatal effects, its frequency, and its importance in relation to other diseases, might be termed true puerperal fever. Puerperal sapræmia was a comparatively mild disease, and when the decomposing mass was cleared away the patient at once improved, so that the prognosis was good. In true puerperal fever there was nothing in the uterus to clear away, and the patient, who as a rule began to be ill on the third day following parturition, died on the ninth day, after one week of fever. *Post-mortem* examination mostly revealed some lacerations in the parturient canal; the uterus was more commonly affected than any other organ, and there was more or less local or general peritonitis. The following cases were cited:—1. Lady, aged 21, married 10 months, primipara, ordinary labour, feverish on the third day, died on the tenth. 2. Lady, aged 23, attended by the partner of the doctor who attended case 1. Feverish on third day, suppression of lochia and milk. Chloroform administered and uterus explored, but nothing found; the walls of the uterus were scraped with a blunt curette and the cavity thoroughly washed out with a solution of perchloride of mercury. The patient had feverish symptoms for a week and then recovered. Curetting the uterus as thus practised might be of advantage in some cases when done early. 3. Primipara, died 26. Rigors and fever soon after labour, died on the tenth day. No foul discharge, but suppression of lochia. This case was attended by a doctor who, in a practice of 20 years, had never before lost a patient from puerperal fever. 4. Primipara, aged 25. Her husband had been married before, and had lost his first wife from puerperal fever in her first confinement in the same house. Fever on the third day, suppression of lochia and milk, tympanites, foul discharge, very ill for a week, then recovered. Some medical men appeared to be particularly unfortunate in having cases of this disease. Whether scarlatina could produce true puerperal fever or not had not yet been satisfactorily settled, many believing that it always bred true and was scarlatina with its usual phenomena, even when affecting a woman in the puerperium. A medical man ought certainly to attend no other midwifery case so long as he was in actual attendance upon a patient suffering from true puerperal fever, whether he made vaginal examinations or not. After he had ceased attendance he could make himself completely aseptic, and therefore fit to resume obstetric practice in forty-eight hours—possibly in less; but that he could do so in forty-eight hours Dr. Horrocks had himself proved by performing Cæsarean section successfully within forty-eight hours of having made a vaginal examination of a woman who died of true puerperal fever on the ninth day of the disease. Every practitioner ought to be very thorough in his application of antiseptic precautions in obstetric practice. It was well to dip the hands in a solution of perchloride of mercury (1 in 2,000), and keep them in it for five or ten minutes before making a vaginal examination. He did not think it either necessary or wise to wash out the uterus and vagina as a routine practice in every case of labour. If an operation had been performed, such as the forceps, version, craniotomy, etc., then the uterus might be syringed out with advantage. He was not prepared to advocate removal of the uterus as a mode of treatment in puerperal fever.—Dr. GERVIS said that thirty years ago nothing was known about puerperal fever. Nothing had added more to the comfort of practitioners than the knowledge of the nature and treatment of these cases. In the great majority of cases septicæmia did not occur without local trouble, and very commonly evidence of this would be found near the outlet if carefully sought for; especially a perineal laceration, which must be treated with antiseptic solutions. Pelvic pain was no safe guide to local mischief; considerable parametric swelling might be found on one side when pain was absent. Pelvic inflammatory mischief was the usual precedent to puerperal septicæmia. Curetting the uterus in these cases would need great caution. He agreed as to not washing out the uterus unless there were distinct reason to believe that septic matter was inside it, but he had long made a practice of sponging out the genitals with an antiseptic solution, and ordering a daily vaginal douche. He thought that by these means puerperal fever might be in time prevented from occurring. Scarlatina might indirectly lead to septicæmia by leaving surfaces on the tonsils and elsewhere, which would give ready entrance to germs.—Dr. P. WARNER found plenty of quinine and opium helpful; he had given 2 grains of the latter every four hours.—Dr. HERMAN said true puerperal fever might be one of various diseases, such as diphtheritic condition of the wounds, septicæmia, or pyæmia. In the General Lying-in Hospital there had been only one fatal case of septicæmia in many years since the sublimate got fairly into use, and only 20 per cent. of all cases had any febrile symptoms. Salufer did not answer the purpose. As to scarlatina, there was evidence that when outbreaks of scarlatina occurred in lying-in hospitals where antiseptics were used no septicæmia was produced. The death-rate from puerperal fever was not increased during epidemics of scarlatina.—Remarks were also made by Messrs. G. J. B. STEVENS, A. H. TUBBY, BORLASE HICKS, and F. QUICK, who adduced instances where otorrhœa and ozæna in the practitioner had conveyed the disease; and Dr. HORROCKS replied.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 7TH, 1890.

THOMAS MOORE, F.R.C.S., President, in the Chair.

Treatment of Fracture of the Patella.—Mr. JOHN POLAND read a paper on this subject. He said a simple immovable apparatus of plaster-of-paris, etc., was all that was requisite in many cases where the fragments could be readily brought into close apposition. Aspiration with careful attention to cleanliness of the instruments was necessary when blood or fluid in the joint prevented this. If this first principle of treatment by immediate apposition were efficiently carried out patients were able to follow even laborious occupations, as Mr. Bryant had shown at the Clinical Society in 1883. Pressure upwards on the lower fragment should be carefully guarded against as tending to its rotation thereby causing its articular surface to look upwards, and preventing close fibrous union impossible. Of the methods of treating articular suture, that brought before the Clinical Society by Mr. Mayo Robson appeared to be at once simple and

in suitable cases. Mr. Poland believed that sufficient stress was not laid upon the causation of transverse fracture of the patella; in his experience as surgical registrar at Guy's Hospital he had ascertained that nearly one-half of the cases of transverse fracture were caused by direct violence combined with muscular action. In a certain proportion of such cases extensive laceration of the capsule, fascia lata, and extensor tendon at the front and sides of the joint was to be found, together with considerable extravasation of blood into and around the joint. If, in these exceptional cases, there was this history of the accident, and when, in consequence, there was strong presumptive evidence of the existence of the above lesions, wiring under strict antiseptic precautions should be performed, otherwise a more or less crippled limb was sure to result. He expressed his belief that a more or less stiff but strong joint was better than a crippled limb and wide separation of the fragments with the probability of fracturing other bones. (Illustrative cases were shown.)—The PRESIDENT showed a case in which he had wired a recent fracture of the patella. The patient had returned to his occupation of a furniture mover, being able to carry heavy weights downstairs.—Dr. ERNEST CLARKE read notes of three cases; he had two treated by Croft's splints, and the third by Steavenson's splint.—Dr. PURVIS, Dr. ERNEST CLARKE, Messrs. JOHN PURVIS, MASQUITA, and the PRESIDENT took part in the discussion on Mr. Poland's paper.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, MARCH 20TH, 1890.

T. F. HOPGOOD, M.R.C.S., L.R.C.P., President, in the Chair.

Case.—Mr. BURNS showed a patient with Dupuytren's Contraction in a Finger of Each Hand, due to rheumatic inflammation of the palmar fascia.

Specimen.—Mr. MORGAN showed a Varix which he had removed.

Papers.—Dr. DRINKWATER read a paper on Adenoid Vegetations of the Naso-pharynx, and showed three children in whom he had destroyed such vegetations with the galvano-cautery. He strongly recommended ablation with the finger nail in young children. This required to be done quickly, because it was very painful, but the cure by this method was the surest and most rapid. He advocated the use of nitrous oxide gas as an anæsthetic.—Dr. COLLIE read notes on a Case of Catheter Retention for Twenty-two Years. —The PRESIDENT read a paper on Hypnotics, dealing chiefly with morphine, opium, chloral hydrate, bromide of potassium, urethane, paraldehyde, and sulphonal.—Dr. DRINKWATER was inclined to think that urethane was absolutely inert. He regarded antipyrin as a useful hypnotic and anodyne.—Drs. BRADY, COLLIE, and Mr. LEGAT also joined in the discussion, and the PRESIDENT replied.

REVIEWS AND NOTICES.

HISTORY AND PATHOLOGY OF VACCINATION. By E. M. CROOKSHANK, M.B., M.R.C.S. London: H. K. Lewis. 1890.

[SECOND NOTICE.]

DR. CROOKSHANK gives a very full, and, we believe, accurate description of cow-pox. Quoting the descriptions given by many observers, he speaks of it as an offensive and loathsome disease, which is often attended with extensive suppuration, an abundant formation of scabs, much surrounding inflammation of an erythematous or erysipelatous character, but, as a rule, with little constitutional disturbance. He admits, however, having regard to the source of the lymph raised by Pearson and Woodville, that the disease in cows may present a mild character.

It is not quite clear what Dr. Crookshank's views are with respect to the origin of the disease or its specific characters, or, indeed, whether he regards it as a specific disease at all in any ordinary sense of the term. He seems to believe that it is a disease special to cows; also that it arises spontaneously in them without any specific cause; that, in what he is pleased to term its "natural" state, it is an untamed disease presenting much local virulence; and that, although by cultivation its virulence may be largely reduced, it has under favouring conditions a natural tendency to revert to its primitive malignancy. But these are views which he adopts from other writers, and for the most part does not justify by facts or by any original observations of his own. If the disease be special to cows, it is curious that its spread among them should be almost exclusively due to the intervention of man, himself being also a sufferer. If cows were endowed with reason and could speak or write, they might with equal show of reason argue that the disease was special to human beings, and that its appearance in cows was due to its accidental transmission from mankind to them. But assuming it to be primarily a disease of cows, it surely can only be spontaneous in the sense that scarlet fever, hydrophobia and syphilis are spontaneous diseases; that is to say, in the sense, not that it springs up spontaneously from time to time without the operation of any specific cause, but that it is a specific disease which, whatever its remote origin may have been, never appears excepting as the result of inoculation with the virus on which it depends. This seems so obvious that it would have been needless to refer to it were it not that Dr. Crookshank and other antivaccinators seem to believe, even if they do not definitely assert it as a fact, that cow-pox may be the result of many different kinds of poisonous inoculation, the local consequences of which may by natural or artificial cultivation ultimately become identical or indistinguishable, a gratuitous and unscientific opinion which is supported neither by experiment nor by our experience of the behaviour of other similar diseases.

Why the virulent local inflammation which no doubt often characterises cow-pox in the cow should be regarded as the natural disease to which the attenuated forms tend to revert is not very obvious to us. The affection of the cow is caused for the most part by the hand of the milker charged with virus from some other cow. The skin of the inoculated cow must, in order that inoculation may take place, be already chapped or abraded; it is exposed to repeated daily friction, not only when the disease is imparted, but while the local inflammation is in progress, which must tend to irritate and inflame; moreover, the hands of the milker are coarse and not overclean, and are apt to inoculate the sores already existing with filth of various kinds and septic organisms. It is hard to conceive of any combination of circumstances more likely than this to render a comparatively trivial inflammation extensive and virulent, and to prolong its duration. The natural disease is rather that which is produced by simple cleanly inoculation, in which the natural progress of events is not interfered with or complicated by accidental conditions liable to aggravate inflammation. The natural disease is surely that which can be observed any day at the Government cow-pox station, where every precaution of cleanliness and of health-maintenance is enforced and a pure cultivation is the result, and not that from which the original descriptions of the disease have been derived. The specific virulence of the original disease, and the tendency of the cultivated disease to revert to original virulence, are, in fact, mere hypotheses based on misinterpreted facts and expressions. No one has any right to deny that cow-pox as met with in dairies and cow-pox as it presents itself nowadays after vaccination are both of them in unequal degrees liable to be associated with erysipelatous, phagedenic, or pyæmic conditions; but all these latter are specific diseases due to specific causes, and when they arise in connection with cow-pox, whether in the cow or in man, are the results, not of the vaccinal virus, but of specific poisons of a different kind which have either been introduced with the vaccine virus or have inoculated the vaccinal sores at a later period.

Dr. Crookshank adopts the view first propounded by Auzias-Turenne, and since advocated by Dr. Creighton, that cow-pox is "analogous" to syphilis. He points out that the earliest opponents to vaccination regarded the disease as lues bovilla, and that it had even been suggested that the cow had derived the complaint from milkers who were affected with syphilis. He rightly discards that unfounded view, but nevertheless he holds to an analogy between them, displayed in the courses which they respectively run. He does not go so far as Creighton, who "has a tendency to regard all cases of so-called vaccinal syphilis as truly vaccinal, being reversions to the original type of the disease in the cow," but the grounds which he puts forward in favour of his own view are, first, that horse-pox is (sometimes) transmitted by coition; secondly, that "many cases which are attributed to syphilis are unquestionably the full effect of the cow-pox virus;" and thirdly, that "if we study the effects of syphilis artificially inoculated on the human subject, the appearances in some cases are strikingly similar to inoculated horse-pox;" and he calls attention to the plates illustrative of Ricord's cases of syphilisation, adding that "so striking, indeed, are the appearances, that it is possible that by judicious selection a strain of syphilitic lymph might be cultivated which would produce in time all the physical characters of the 'vaccine' vesicle." The answer to the above view which suggests itself is as follows: (1) the fact of either disease

being communicable by coition is merely an accident due to the circumstance that the specific lesions are liable to appear on the genitals as well as in other parts, and that when the genitals are affected inoculation of the same part in the opposite sex is likely to take place; (2) it is hardly scientific to say that, because an occasional difficulty arises with respect to the differential diagnosis of certain incidents of different diseases, therefore the diseases are themselves analogous, whatever that may mean; and (3) with respect to the effect of artificial inoculation of syphilis, even if we admit that the pure virus causes papules, which develop into vesicles, and then into pustules, which later scab over, and then leave permanent cicatrices, a condition of things having some resemblance to what occurs in the case of cow-pox, or, we may add, inoculated small-pox, it must not be forgotten that a similar progress of events is not peculiar to any of those diseases, but that it is the normal consequence of the inoculation of many different poisonous substances. No doubt the local consequences of vaccination are generally distinguishable from the consequences of other forms of inoculation which resemble them, by a combination of certain slight distinctive features which the skilful eye can for the most part readily distinguish; but after all, the real distinction between inoculated syphilis and inoculated cow-pox resides in the later phenomena of the two diseases, which, Drs. Crookshank and Creighton notwithstanding, are, as every pathologist and clinical physician knows, absolutely different. The last of the above sentences quoted from Dr. Crookshank implies a view of pathological processes which has never been proved to be correct, which is not admitted by those best qualified to form an opinion, and in support of which he adduces no definite facts.

The account which Dr. Crookshank gives of horse-pox is very full and interesting and deserving of study. He shows from the observations of Jenner, Loy, and Sacco, and more especially from experience derived from outbreaks of the disease at Toulouse, in 1860 and in 1880, that horses are liable to an epizoötic febrile disorder, attended with the development of vesicles in various parts of the body, which, on being inoculated on cows or on human beings, produce a local eruption, apparently identical with that of cow-pox, and which, like ordinary vaccinia, may be perpetuated unchanged; that this disease, which is much more virulent in the horse than cow-pox in the cow, and probably, like small-pox, spreads by aërial infection, affects the hocks as well as other parts, and doubtless forms one of the affections formerly, and probably even now, included under the designation of "grease;" and that in this country early in the century, and in France of late years, it has been largely used as a source of "vaccination." It seems in fact clear from the evidence which Dr. Crookshank places before us that cow-pox in the cow and horse-pox are essentially the same disease; that horse-pox, which is the more virulent form of the complaint, and is characterised, like small-pox, by a generalised eruption, undergoes mitigation when imparted to the cow and becomes identical with cow-pox; that, in fact, horse-pox inoculated in the cow acts exactly as small-pox does under similar conditions. Indeed, Dr. Crookshank's account of horse-pox justifies the view which Jenner was inclined to adopt, but which Dr. Crookshank brings as one of his indictments against his scientific reputation, namely, that cow-pox, horse-pox or grease, and small-pox have a common origin.

We now come to the consideration of Dr. Crookshank's last chapter on the "Progress of Vaccination in England," a chapter in which he brings together what purport to be his reasons for disbelieving in the efficacy of vaccination as a preventive of small-pox, and declares himself a disciple of Birch, Tebb, White and Company, and an uncompromising antivaccinator. It is not easy, however, to follow his lines of thought, for his conclusions seem to have little, if any, relation to the evidence he adduces. The first part of the chapter is devoted to a somewhat puerile and quite unimportant rediscussion of Jenner's opinions with respect to the causal relations of cow-pox, horse-pox, and small-pox. Then follows a longish disquisition on the extremely important subject, "the great question after all," as he justly styles it, "whether this disease" (cow-pox) "did or did not protect from small-pox?" But this disquisition is little more than a series of extracts from Dr. Alexander Monro's observations "On Small-pox after Perfect Vaccination," giving instances of the inefficacy of cow-pox, which were published in the early part of the century, and illustrate only what all vaccinators fully admit—namely, that vaccination is by no means so perfect a protection as Jenner had believed that it would prove to be. In considering this, "the great question after all," will it be believed that Dr. Crookshank makes no reference whatever to the accumulated statistical and other evidence of the last seventy years? In the third place, taking Baron's life of Jenner as his text, he discusses at some length the question whether cow-pox is small-pox inoculated on the cow; and, notwithstanding his admission (already quoted) that Badcock had succeeded in producing in cows by inoculation with small-pox virus, and transmitting to thousands of human beings, a disease absolutely indistinguishable from cow-pox, and which is not communicable by aërial infection, he concludes that cow-pox and small-pox are totally distinct diseases. He bases his views on this subject on the statement that "never in any outbreak of cow-pox or horse-pox has a connection with human small-pox been established," and on a mere enumeration of many outbreaks of cow-pox which have occurred in this and in foreign countries; and then sums up: "To assert, therefore, the theory of cow small-pox on the ground of Ceely and Badcock's experience is to substitute experimental fallacies for correct clinical observation;" and again, in other words, "the practical student of cow-pox is at once convinced, without any further evidence, that the two diseases, small-pox and cow-pox, are specifically distinct." Fourthly, he discusses the nature of cow-pox. He holds that it has no relation or resemblance to small-pox, because the poison is communicated solely by inoculation, begins, therefore, as a local affection, and is followed by constitutional symptoms, while the latter "is an acute disease, characterised by sudden and severe fever, which is followed after forty-eight hours by a generalised eruption." But he omits to note, though he knows it, that inoculated cow-pox and inoculated small-pox are both local affections, and practically indistinguishable until the eighth or ninth day, and that in both about that date febrile disturbance shows itself, which in the one case habitually aborts, so to speak, while in the other, although a similar abortion may occur, the disease generally goes on to the stage of general eruption; and, further, that in small-pox caught by inhalation of the virus, although no localised lesion of inoculation has been detected, the disease is as much local during the week or two of so-called incubation as it is in the early period following inoculation. And he fails also to observe that, for anything that has been shown to the contrary, cow-pox may really be infectious. Cow-pox virus inoculated in the system by the breath would naturally only produce the vague febrile symptoms which attend the maturation of the inoculated pustule, but would, of course, be unattended by the local eruptions by which alone the disease is now distinguished. He then proceeds to show that cow-pox is "strictly analogous to syphilis." We have already referred to this subject, and need only add that if cow-pox is analogous to syphilis, so equally is small-pox. He next goes on to assert that whereas "we have been led to regard vaccination as inoculation of a benign disease of the cow," the viruses actually "in use have been derived from several distinct and severe diseases of different animals;" and that cow-pox inoculation is a purely empirical treatment based upon folk-lore, and involves the principle of the protection from one disease by the artificial introduction of a totally different disease—"a principle which was not, and has not been since, supported by either clinical experience or pathological experiments."

The conclusions at which Dr. Crookshank arrives are that neither cow-pox, horse-pox, sheep-pox, cattle plague, nor any other radically dissimilar disease exercises any specific protective power against human small-pox, and that for the eradication of small-pox we must in future resort to the method of stamping out, or, in other words, to notification and complete isolation. He thinks that before long a system of compulsory notification and isolation will replace vaccination, and ends the chapter with the following words:—"Unfortunately a belief in the efficacy of vaccination has been so enforced in the education of the medical practitioner that it is hardly probable that the futility of the practice will be generally acknowledged in our generation, though nothing would more redound to the credit of the profession and give evidence of the advance made in pathology and science."

Notification and isolation, if they can be thoroughly carried out, are no doubt extremely valuable measures, but it may be pointed out that in the presence of an epidemic such measures in large towns, as in London, would be exceedingly difficult, if not impossible, to carry out efficiently, and that in two or three cases of our later comparatively small epidemics, not only did the segregation of the sick in hospitals fail to check the disease, but the hospitals themselves acted as centres of virulent diffusion of contagion. As regards vaccination, Dr. Crookshank, although he asserts its inefficacy, has really brought forward no evidence of the slightest

value in favour of his view. As he says, the great question of all is whether cow-pox does or does not protect from small-pox. But this question he never really discusses, and such arguments as he uses in reference to it are, as we have shown, derived from writings more than 70 years old.

What Jenner's views of the origin and nature of cow-pox were, and whether cow-pox is analogous to syphilis or not, may be matters of interest to some persons, but have no bearing on the efficacy of vaccination. The question as to the relationship between cow-pox, horse-pox, sheep-pox and small-pox is unquestionably interesting and important; and if it could be shown that these were all specifically distinct diseases, even though by cultivation they could be so attenuated as to produce affections absolutely indistinguishable from one another, it would certainly, *primâ facie*, appear improbable that their attenuations would all possess a protective power against the same disease; yet even then, if their protectiveness were proved by experience and experiment, theoretical objections would have no force. But Dr. Crookshank has not proved that these several forms of disease are specifically distinct. On the contrary, the evidence he adduces points very strongly indeed to their actual causal and potential identity.

The impression left on our mind by the perusal of so much of his work as is original is that Dr. Crookshank has little or no practical acquaintance with vaccination or small-pox; that his conclusions are based not on facts, but on theoretical considerations which are not likely to be generally accepted; and that he expresses his opinions on debateable matters with a singular lack of the scientific caution and modesty which befit the true scientific inquirer.

Micro-organisms, with Special Reference to the Etiology of the Infectious Diseases. By Dr. C. Flügge. Translated by W. Watson Cheyne. The New Sydenham Society. 1890.

This volume forms an important addition to English medical literature, Flügge's book being justly considered one of the best standard textbooks. The general description of bacteria and the fairly complete systematic analysis of the morphological, cultural, and physiological characters of the various species of fungi and bacteria are unquestionably the best that have as yet appeared. The special relations of bacteria to the various fermentative processes and to infectious diseases, the epidemiological and hygienic application of the various discoveries concerning bacteria and disease germs are carefully described and presented in a readable form.

The translation is, with few exceptions,[1] accurate and, on the whole, well done. We only wish we could say the same of the printing of the illustrations; but, like those in too many medical works published in this country, they are either indifferent or decidedly bad. The printing of wood engravings in English works—in medical books, at any rate—leaves much to be desired. One has only to take up most French, German, or American books and to compare their wood engravings with those printed in this country and the great gulf fixed between the two kinds of printing must be apparent. One can quite understand the unwillingness of a medical publisher to spend money beyond what is absolutely necessary, and of course the careful printing of wood engravings means some extra attention and extra labour—that is to say, a few pounds less profit on the edition; but the Sydenham Society should surely be above commercial considerations of this order. In a book like the present the illustrations, forming as they do an important part of the whole, could and should have been brought up to the delicacy and excellence of the original; as it is, most of the drawings are printed in far too coarse and dark a manner.

There are several other points in which the translation stands some distance behind the original. In the German work, there is at the beginning a short and most useful synopsis of the contents and illustrations; it is difficult to understand why this should have been omitted, and it becomes not less so if the index at the end of the German work is compared with that in the translation, where numerous references not connected with or dependent on the differences in the two languages are omitted.

Throughout the original text has been strictly followed, but there would surely have been no harm in the highly competent translator adding a few notes relative to discoveries which have been made since the German work was published. Thus Flügge, in 1885-1886, did not know, though he might and ought to have known, the difference between swine erysipelas and swine fever; in 1890 such a confusion of the two diseases is quite unjustifiable. Or, to take a more important instance: In 1885-1886 Flügge might perhaps have been justified in writing thus concerning the microscopic character of the blood in malarial fever (p. 296): "We can only say that Laveran evidently obtained a number of forms, as the result of errors in preparation, and mistook these forms, as well as the altered blood corpuscles, for stages in the development of a micro-organism." Again (on p. 297): "It is, however, as yet doubtful whether the granules and bodies observed are to be looked upon as parasitic forms, or only as secondary products of the breaking up of blood corpuscles." After the publications of Marchiafava and Celli, Councilman, and particularly the beautiful and exhaustive researches of Golgi on the malarial parasites, the statements we have quoted sound strangely antiquated.

[1] *Stichkultur* is incorrectly translated by "puncture culture;" *Strichkultur* by "stroke culture." The former should be "stab culture;" the latter "streak culture."

Companion to the latest edition of the "British Pharmacopœia." By Peter Squire. Fifteenth Edition. Revised by P. W. Squire, F.L.S., F.C.S., and A. H. Squire. London: J. and A. Churchill. 1890.

The new edition of this well-known work contains seventy pages more than its predecessor. It is stated in the preface that this edition has been in preparation for over twelve months, and that its publication has been delayed longer than was expected, owing to the large amount of matter to be collated, digested, and condensed, also to the experimental work necessarily involved in the elucidation of controversial matters or disputed points. The authors are to be congratulated upon the practical character of the book which they have produced. The value of a work of this kind depends in a great measure upon the verification by actual experiment of the facts stated. This applies especially to the various solubilities given, which therefore carry with them the stamp of reliability. The solubility of caffeine citrate is now stated to be 1 in 32 of water; in the last edition 1 in 10 was given. In a footnote is the following explanation:—"The low figure (1 in 10 of water) given in the *British Pharmacopœia* and in the *Companion*, 1886, probably arose from the readiness with which caffeine citrate forms supersaturated solutions. The salt readily dissolves in 12 parts of water at 95° F., and if the solution be heated to 120° and then set aside, no crystallisation will take place, even when cooled below 60°; but if the liquid be then stirred, it will become solid almost immediately."

The facilities for reference have been greatly increased by alterations which have been made in the type. The medicinal properties, doses, tests, and solubilities of any drug can be readily seen by the large type side headings, also by the printing of certain words in the body of the matter in distinguishing type, under the head of medicinal properties; the various forms in which a remedy can be administered are clearly indicated.

The information as to the chemistry and pharmacy of the materia medica has been brought up to date. Aconitine has received special treatment, and upon this subject the opinion is given that the *Pharmacopœia* should order the pure crystalline product such as can be obtained by the Duquesnel process from a definite species of aconite.

The description of eucalyptus oil given in the *British Pharmacopœia* refers to eucalyptus oils as a class, but as the oils from different sources vary so much, a detailed account is now given of the two principal varieties (the oil from E. globulus, and that from E. amygdalina), and their points of difference indicated. The latest information is also given of the nature of the commercial product passing under the name of eucalyptol.

The list of foreign pharmacopœias to which reference has been made is considerably extended; many of their preparations are given under the heading of "Not Official."

Exalgine, hypnone, chloralamide, urethane, somnal, acetanelide, salol, antipyrin, sulphonal, ichthyol, sozoiodol, and iodol, are some of the new drugs described. The literary references to their medicinal actions are very numerous.

An immense amount of labour appears to have been expended in rendering the work as complete as possible. After a most careful perusal we have only been able to note the omission of any mention of Scheele's prussic acid, and of the incompatibility of chloral hydrate and extractum cinchonæ liquidum with antipyrin.

For many years *Squire's Companion* has been considered, on

account of its reliable information, the standard book of reference. This character the present edition fully maintains.

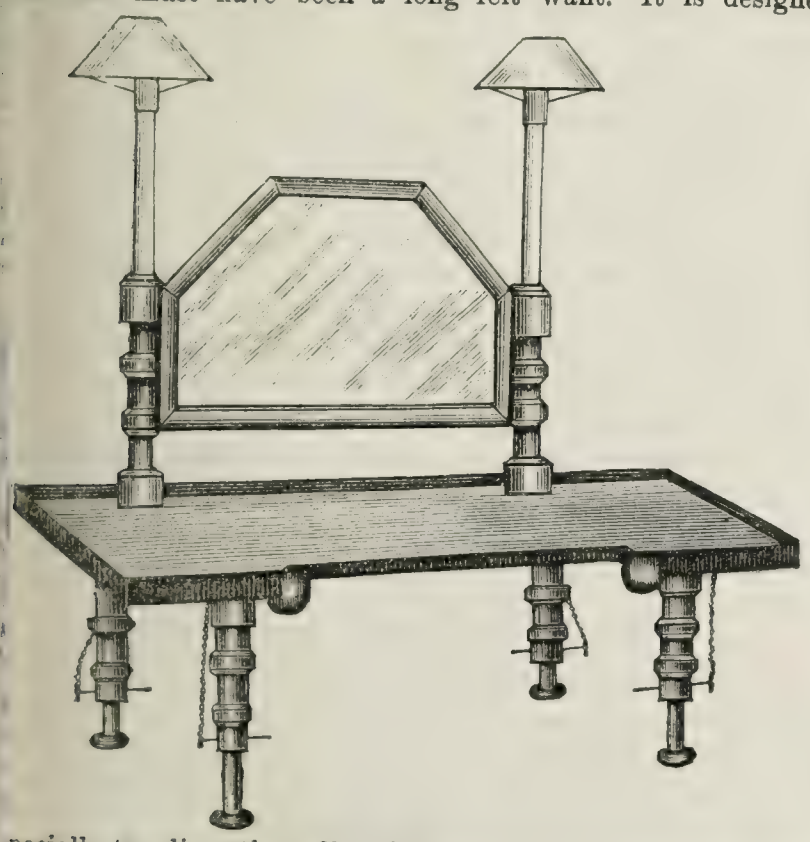
NOTES ON BOOKS.

Original Contributions to Ophthalmic Surgery, by J. R. WOLFE, M.D., F.R.C.S.E., Professor of Ophthalmology in St. Mungo's College. (London; J. and A. Churchill).—This interesting series of papers, contains a report of the Demonstration on Extraction of Cataract, given at the annual meeting of the British Medical Association, in Glasgow, in 1888; an account of Dr. Wolfe's operation for the cure of detachment of the retina, and of the demonstration given at the Paris National Ophthalmic Hospital, a description of a new method of performing plastic operations, including a report from Professor von Esmarch's clinique, 1888; a demonstration of Dr. Wolfe's well-known method of transplantation of conjunctiva from the rabbit to the human subject; a report of a case of total staphyloma cured by a very ingenious method of operation, and a paper on "Tubercle of the Iris and Ciliary Body." Our readers are for the most part well acquainted with the operation devised by Dr. Wolfe for the treatment of detachment of the retina. In this paper he gives 14 cases treated by himself and others with remarkable success in ten. Other surgeons—Dr. McGregor Robertson, M. Warlomont, M. Coppez, and Mr. Simeon Snell—are quoted as having also had successful results. In Dr. Wolfe's method of performing plastic operations he transplants skin flaps from distant parts without pedicle. Mr. Swanzy and Mr. Benson, of Dublin, have applied the author's method with success, and Professor von Esmarch has had equally good results. This little volume is interesting as bringing together the results of the experience of an ophthalmic surgeon whose work shows originality, ingenuity, and practical skill.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW REFLECTING, ADJUSTABLE INVALID BED-TABLE, WITH ARRANGEMENT FOR LIGHTING.

I HAVE designed a bed table which is decidedly unique, and supplies what must have been a long felt want. It is designed



especially to relieve the tedium hitherto felt by children suffering from spinal or hip disease, when it is necessary that they should lie perfectly flat on their backs with the head low. The looking-glass, when set at the required angle, enables the child to see reflected therein everything which is upon the table. He can thus play with his toys, put together puzzles, etc., with perfect ease, and so amuse himself for hours. The image being "inverted" in the glass, it is of course necessary that the object should be placed on the table in an "inverted" position, when it will appear in the glass the "right way up."

The legs of the table are telescopic, thus enabling them to be lengthened or shortened at will. This arrangement is extremely simple, and they are kept in position by a transfixing pin. The table can thus be placed over a child of any age, or over an adult if required. Thus, one of these tables would serve for a whole hospital ward.

The lighting arrangement is placed at the greatest possible distance from the patient, and is "fixed," thus ensuring perfect safety. It consists of two spring candle tubes with reflecting shades, which are sunk for about two inches into the upright supports of the looking glass. The superior angles of the glass are cut off, so as not to intercept the light from the candles. When the lights are not in use, a small vase for flowers can be fitted into the uprights, or an ornamental knob takes their place.

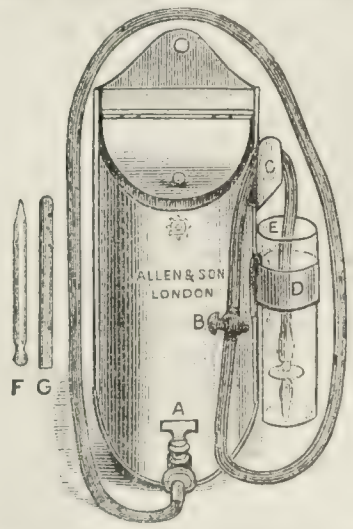
In the cases in which this table has already been used, it has not only been the means of affording many happy hours to the little patients, but it has also materially aided their recovery by keeping them amused and quiet. Ladies requiring to use a bed-table will also find in it the luxury of a toilet table.

The table is manufactured by Mr. Alfred Carter, of 47, Holborn Viaduct, E.C., where it is now on view, and is registered.

R. W. SUTTON BARRACLOUGH, M.D.

ANTISEPTIC DOUCHE APPARATUS.

THIS apparatus, made at the suggestion of Dr. John Shaw, successfully overcomes some of the disadvantages attending the use of the ordinary portable douche. The douche is provided with a small glass secondary reservoir, attached to the side of the main one, to contain an antiseptic solution, in which the vaginal tube, immediately on its withdrawal, may be immersed. The vaginal tube is made of soft rubber, after the fashion of a Jacques's catheter, with lateral openings, so as to avoid injecting the uterus, and, from its perfect elasticity, is not liable to do any damage after the operation of perineorraphy. The reservoir, which can be made to any size required, is of strong metal, japanned, white inside, and bronzed outside. It has a flat back and base, so that it may be either hung against a wall, or stood upon any piece of furniture of sufficient height to give the required fall to the solution used as an injection. A shows the outlet tap, with union, and bent nozzle to prevent injury to the india-rubber tubing when



hanging from the reservoir, and to secure an easy flow of fluid. B is a vulcanite tap, inserted in the tubing within a few inches of the end, for the convenience of the operator. C is a grooved rest on which the tubing is placed, when not in use, to allow the end pieces to hang inside the glass disinfecting chamber E. F is a glass tube to produce a fine jet of fluid, so as to keep the surface of an operation wound not only free from blood, but also antiseptic. G is a soft rubber vaginal tube. A bone end is also provided for enema purposes, as shown at the end of the tube in the glass reservoir. The makers are Messrs. James Allen and Co., 21 and 23, Marylebone Lane.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 12TH, 1890.

THE NEW RULES OF THE COMMISSIONERS IN LUNACY.

WE have obtained, through the courtesy of the Secretary to the Lunacy Commission, an advance copy of the new rules which are about to be issued by the Commissioners in Lunacy, with the approval of the Lord Chancellor, and imposed upon those who are connected with the care and detention of persons of unsound mind in asylums (public or private), or in lunatic hospitals, or as "single patients" under private care. The general effect of these rules is greatly to increase the amount of clerical work, the number of formal reports, the number of forms, registers, and notices to be filled in with particulars in relation to lunatics under care in the institutions above-mentioned, or under "single" care.

In every institution for lunatics there are to be kept a visitor's book (for entries of Visiting Commissioners), a register of patients, a medical journal, a register of mechanical restraint, a medical casebook, a register of removals, discharges, and deaths, a patient's book, and a register of voluntary boarders. Most of these necessitate entries under many heads. Some of them are old friends, with or without modifications, and under a new name or not, and some are entirely new provisions. Forms for most of them are given in the schedule annexed to the rules; nineteen forms in all are included in the schedule.

In the case of private patients, in addition to copies of the documents analogous to those of which copies are now sent with the statutory "notice of admission," there will for the future be also made and sent a copy of the "petition" and "statement of particulars" in the usual case of reception orders upon petition. In the case of every private patient, also, it is a new provision, carrying out the requirements of the Act of 1889, that a report upon the bodily and mental state shall be sent by the medical officer of an institution for lunatics, or in the case of a "single patient" by the medical attendant one month after the patient's admission.

It is a new rule that "every entry" (however trivial or brief, we suppose) made by the medical officer in the "Medical Journal" and in the "casebook" shall be signed by him. And as regards the entries in the latter, namely, in the "Medical casebook" to be kept in institutions for lunatics, minute and detailed instructions are laid down with regard to the requirements of the Commissioners. Some of these requirements are made, possibly, on the principle of requiring the very most in order to secure much; some of them, indeed, could scarcely be accurately and completely fulfilled by any one who is, or ever has been, an asylum medical officer. And we do not think the instructions as to the description to be made of the phenomena of the mental disorder [under Rule 11, Subsection "(c)"] as suitable as they might be, or fully expressive of their object.

The duties of a medical attendant of a "single patient" are the subject of Rules 14 and 15.

Every quarter of a year a copy of every entry in the "Register of Mechanical Restraint" is to be sent to the Commissioners. A list of all the private cases in any licensed house or lunatic hospital for the time being on the books, with the rates paid for the maintenance of each, is always to be kept prepared and accessible to the Commissioners or other Visitors.

Applications for transfer from one asylum to another must for the future be accompanied by the medical officer's report on the mental and physical condition of the patient, and by his "recommendation" if "leave of absence" be sought for a patient.

Notice of removal is for the future to be a different form entirely from the notice of discharge; and new forms are laid down as those in which escapes and recaptures are to be reported. When a non-recovered lunatic is discharged a copy of any certificate of the medical officer of the propriety of that lunatic's discharge to a workhouse shall accompany the notice of discharge. Additions are made to the notices of deaths of lunatics to be made to the coroner; and a larger number of notices of death of a lunatic dying in an institution for lunatics than heretofore are directed to be sent in the future.

Rule 25 compels lists to be made twice yearly of all pauper patients' names, with dates of admission, and other particulars, and to be sent to three authorities at least, in some cases to more; and there is a somewhat similar provision as to private cases. It is not apparent of what benefit all the clerical work required under this rule is to be.

Rules are laid down for the guidance of those who seek renewal of licences to receive lunatics, or who seek a licence for a house not previously licensed; but in view of Subsection 6 of Section 56 of the Act of 1889, this, probably, does not mean what it appears to mean—namely, the establishment of new licensed houses (apart from substitution).

There do not appear to be forms laid down for the periodic reports and certificates of the medical officers of institutions for the insane on all cases not of very recent admission. The and the share of the work under the above new rules falling asylum medical officers will curtail the time they can for t future give to medical duties and to scientific work.

The new rules will come into force on May 1st.

ELECTRIC CURRENTS IN THE SKIN.

THE discovery of animal electricity dates from the observations of Galvani in 1786; the subject at once attracted attention, and Galvani and his fellow-countryman Volta were for many succeeding years engaged in a celebrated controversy on the meaning of the phenomena observed. It was not, however, until Nobili, utilising the discoveries of Oersted a

Ampère on the properties of magnetic needles, had constructed a galvanometer, that physiologists were able to demonstrate that Galvani and Volta were both right and both wrong. Galvani was right in maintaining the existence of inherent animal electricity, and wrong in supposing that the contact of two metals with the tissues gave proof of this. Volta was right in considering that galvanism could be produced independently of animal tissues, but wrong in denying altogether that electrical currents existed in them.

The subject of the electrical properties of muscular fibres has since that time been more fully investigated by du Bois-Reymond and Hermann, and more recently a large number of workers both in this country and on the Continent have demonstrated that change of electrical potential occurs during the functional activity of other tissues and organs, of which the electrical organs of fishes, the secreting glands, the brain, and spinal cord may be more particularly mentioned.

The latest explorer in this most interesting region of scientific discovery is Professor J. Tarchanoff, of St. Petersburg. His communication, published in *Pflüger's Archiv*, vol. xlvi, p. 46, is only of a preliminary nature, and it may be briefly summarised as follows:—Electric currents occur in the skin from mental excitation; non-polarisable clay electrodes, connected with Meissner and Meyerstein's delicate galvanometer, were applied to various parts of the surface of the body- hands, fingers, feet, toes, nose, ear, and back—and after compensation of any currents that occurred during rest, the effects of mental stimulation were noted; light tickling with a brush caused, after a somewhat long latent period lasting a few seconds, a gradually increasing strong deflection of the needle. Other sensory stimuli were found to act in the same way: the stimuli used were heat, cold, a needle prick, sound, light, taste, and smell; merely opening the eyes, after they have been closed some time, caused a considerable deflection when the electrodes were connected to the skin of the hand; mental efforts, like calculation, produced currents which varied in amount; and during tense expectation the needle made irregular oscillations. In all these experiments it appeared that the strength of the skin currents depended on the degree to which the part of the skin bearing the electrodes was furnished with sweat glands, and Professor Tarchanoff considers it possible that the currents are intimately associated with the varying activity of their glandular epithelium.

Such an investigation as this is fraught with many difficulties, and we look forward to the full account of the experiments in order to see whether these have been successfully combated, and whether the indications of the galvanometer can be reduced to any fixed law, or whether they are merely of an irregular, uncertain nature. Hermann demonstrated, many years ago, that the cutaneous glands of the frog showed well-marked electrical changes on activity. These results have in this country been confirmed by Bradford and Bayliss, and the former of these two observers has demonstrated that similar phenomena are observable in the salivary glands. We know also that severe mental acts and emotions are associated not only with increased activity of the sweat glands, but also with vasomotor disturbances; less severe mental activity may, therefore, probably be associated with an increase or diminution of function in the secreting cells of the sweat glands which is hardly perceptible except to the most delicate of galvanometers.

There appear, therefore, *a priori* reasons why Professor Tarchanoff's explanation should be accepted; there are, however, many factors which have to be eliminated or allowed for. In the first place vasomotor actions with associated changes in the rate of blood flow would doubtless produce deflections of the needle independently of any changes in the secretory activity; the same may be said as to the occurrence of slight and almost unnoticeable contractions of the skeletal muscles, which the so-called thought-readers have managed to grapple with. The influence of the heart-beat must be allowed for and the greatest caution would also have to be exercised during an experiment, to prevent the contacts of the electrodes from getting shifted, and also to keep them absolutely at the same temperature.

Until we see how Professor Tarchanoff has overcome these difficulties, as well as others we have not enumerated, our attitude should be one rather of observant expectancy than of conviction; we cannot, however, withhold our praise from an investigator who has ventured to attack this most difficult subject, and it is to be hoped that, even if his experiments cannot be accepted in their entirety, he will at least pave a way for those who follow him.

THE FUTURE OF SOLDIERS' DIETARY.

Mr. Stanhope has, we understand, decided to accept the report of the Committee on Soldiers' Dietary. Luckily none of its recommendations have offended the delicate susceptibilities of his military advisers, and as the increased expenditure involved will be comparatively trifling, we have no doubt that the vote will readily pass when it comes before the House of Commons next week. But pending official sanction of one or two matters which touch the public purse, several improvements have already been carried out with good effect. We all know how absurdly inefficient the old-fashioned system of regimental meat inspection used to be. Neither the subaltern of the day, nor the quartermaster, nor even the medical officer himself had any real knowledge of the work, and in spite of their well-meant efforts and a casual glance thrown on the ration at dinner time, Tommy Atkins was left pretty much at the mercy of the contractor. All this has now been changed. Inspectors have been appointed who drop into the barracks at uncertain times and condemn without mercy all supplies which fall short of the proper standard. Much better meat is now being served out. Several contractors have been struck off the list, and we hope that one result of the new system may be to raise the contract price from the absurdly low point to which it has gradually dropped, and to remove the danger of making the margin of profit depend on the inferior quality of the article supplied.

We extract from a memorandum of the Quartermaster-General the following details of the steps already taken to improve the food supply of the soldier: "A class for the instruction of selected officers in the various qualities of meat has been instituted at the Metropolitan Meat Market under arrangements made with the medical officer of health for the City of London, with a view to the appointment of

these officers as fully-qualified inspectors of rations supplied under contract."

"Classes have been formed at Aldershot for the instruction of regimental officers in the method of judging the quality of supplies; about eighty officers will be instructed annually; and His Royal Highness is of opinion that they will be of great assistance in ensuring a good quality of supplies at out-stations."

"A system of monthly rewards to company cooks for the best-dressed dinners during the month" has been found to work well at Colchester, and will probably be extended generally throughout the service; and individual responsibility will be made much more defined by the appointment of a field officer in each regiment, whose duty it shall be to supervise generally the messing of the corps and the expenditure incurred upon it. These are all steps in the right direction, and we congratulate the military authorities on having taken them. Whether, combined with Mr. Stanhope's concessions, they are sufficient to settle this vexed question, must be left for future consideration.

RESPONSIBILITY AND INHERITANCE.

In the case of the two boys tried at Crewe the other day for parricide, their counsel suggested to the jury that they should not be accounted "guilty," or at least that their blood-guiltiness should be regarded with very considerable leniency, on the ground that they were more or less, if not wholly, irresponsible, because of their souls' inherited furniture of passions and tempers. "What," said the advocate, in effect, "could you expect of the children of such a father?" Now, no doubt, the father's ill-conditionedness was abundantly proved; but the first biological reflection upon such a plea would be that the alleged inheritance from the father was extremely problematical. A very little knowledge of even very popular biology would remind us how heredity often jumps a generation or two, and consequently how little ground there was for the assumption for the defence. As thrown out, it was no more than an unproved and quite *a priori* possibility. We do not propose to discuss the grounds for the recommendation to mercy, or the considerations which have actuated the decision; but perhaps the counsel's plea to which we have referred has more interest in another way, as one small example of the perpetual recrudescence nowadays of the doubts about human responsibility, engendered by the rapidly accumulating facts concerning heredity, when these are ill digested and work upon loose-thinking minds that have never clearly distinguished and put before themselves what responsibility is, and how it is constituted.

What is "responsibility?" Answerableness. To what? To the law—that is, the organised and established system of manners and customs in any given society. This is at least to take "responsibility" in its ordinary sense, though it may be, from a philosophical point of view, a rather low and shallow one. But what constitutes responsibility, which, it must be observed, is a quality of the subject of law? Is it the mere fact that the subject is amenable to the external discipline of the social environment, that society reacts upon the evil-doer? Then water-spouts and mad dogs are responsible; we kill these, we fire cannon to disperse those. But responsibility rests with the knowledge of this amenability and this reactiveness, conjoined with the feeling somehow begotten that these are within their right. The origin and nature of this sense of *oughtness* is a difficult problem, and need not be considered here.

At present it is enough to note that the presence in the subject of the law of this discernment of good and evil, right and wrong, as these are by inveterate custom reckoned in the given society, is what constitutes him responsible. This absent, he is irresponsible; this present in consciousness, no matter what else is present or absent, he is responsible. Evil tendencies, passions, tempers, may abound in the same consciousness with this discernment to a degree that almost overwhelms it, but if it is not quite submerged and sunk below the limit of consciousness, responsibility remains. The existence of an evil nature, then, whether inherited or acquired, whether first nature or second nature, is totally irrelevant to the question of responsibility.

The letter of Richard Davies, written three weeks before his trial, shows that he, at least, was not devoid of responsibility in this lower, ordinary, and juristic sense, if, indeed, it does not evince a still deeper responsibility. "In an evil hour I was tempted and overpowered to do wrong." "May the Lord help it to be proved truly at the trial, and may I meet my punishment bravely." Brave words! Conscientious words! Words evincing moral discernment. With such proofs of responsibility as are involved and implied in these deliberately written words, the medical witness and alienist will do well to furnish himself when he is solemnly called upon in the witness box, and in a matter of life or death, to give an expert and authoritative opinion.

"COLLES'S LAW."

One of the most important of all pathological facts is the transmission of syphilis from father to child without infection of the mother. Many men aware of this fact, and already victims of syphilis, hesitate to marry, almost entirely on account of their future offspring rather than their future wives. The extinction of the syphilitic virus in well-fed patients is one reason why the disease is not often seen in its hereditary form in children among the prosperous classes of society, as Paget has had occasion to observe. The immunity of the mother is a question which deserves the closest investigation. According to a well-known law first laid down by Colles, and afterwards confirmed by Baumès, a mother who suckles her syphilitic child never thereby acquires syphilis. Diday, Jonathan Hutchinson, and others have established this law; and the exceptions are so few as almost to prove the rule, if not themselves "suspect." Dr. L. Merz has published notes of two exceptions in the *Archives de Tocologie* for January. He notes two cases where the law was strikingly confirmed. In one, the child of a syphilitic father was suckled for three months by its mother. As it then was covered with a specific eruption, the mother, believing her milk to be bad, employed a wet nurse. The latter became infected within six weeks, an indurated chancre appearing on one nipple. The mother remained healthy.

The first exception to Colles's law was noted by Tommasi-Crudeli in the *Instituzioni di Anatomia Patologica*, Turin, 1882.

In the second case, under the observation of Dr. L. Merz himself, the father was clearly syphilitic, and the mother free from venereal disease when a child was born. She suckled her infant, which soon showed unmistakable signs of congenital syphilis, mucous patches appearing on the lips. The mother as well as the child was submitted to specific treatment. Nevertheless a chancre formed on a fissure in the left nipple, and it was followed by roseola, mucous patches on the buccal mucous membrane, and alopecia. The supply of milk did not fail, and the mother was able to suckle the child. Both made a good recovery. Dr. Merz attempts to explain Colles's law and its exceptions. The law, he believes, is based on the fact that the mother is generally inoculated by her unborn child. The degree of inoculation may, however, vary. In most cases it is subtle, yet so thorough as to guarantee the mother both against that severe yet chronic train of symptoms which constitute syphilis, and against infection through her child at the breast. In some cases it is sufficiently severe to infect the mother during pregnancy, as has been repeatedly observed. Lastly the infection, instead of being severe or medium, may be insufficient. The mother is not protected against infection during lactation. This would account for such cases as that reported by Dr. Merz. Immunity through soundness of the nipple or healthiness of the infant's mouth could never explain Colles's law; for sore nipple is a very common disorder, the mouth is very often attacked in congenital syphilis, and in cases where the law is proven it is the nipple of the wet nurse that is usually the seat of the chancre.

THE NEW EDUCATIONAL CODE.

THE Educational Code stands to-day practically the same as when it was issued in 1887, notwithstanding the report of the Royal Commission on Education, in which important recommendations were made. A new Code has now been laid upon the tables of the Houses of Parliament, and, if sanctioned, will come into force on September 1st of the present year. The Code now presented appears likely to be more popular with both managers and teachers than that presented last year and withdrawn in July; it does away with much of that which was objected to under the name of "merit grant" and "payment by results," and gives encouragement to all schools which reach the minimum standard of excellence, and lessens the individual examination of children.

Managers and teachers are allowed a greater amount of freedom in settling the educational course of the children, and it is no longer necessary for children to be in the same standard for the three elementary subjects; at the same time the requirements as to the teaching staff are raised very considerably.

Some misunderstanding existed last year as to the provision of ten square feet for each school place; this applies only to new schools; the department are satisfied with eight square feet, and eighty cubic feet of air to each child in the existing schools, previously sanctioned as efficient. Schedule VII gives in detail the various requirements and building rules.

As regards the training of teachers a great change is made in allowing them to attend day classes in training colleges, or in others of university status. A grant of 1s. or 1s. 6d. per pupil for discipline and organisation is given according to the report of Her Majesty's inspector, whose duty it is to report on the neatness and order of the school premises and furniture, and the proper classification of scholars, their habits of punctuality, good manners, and language, etc. The inspector is also to satisfy himself that the teacher has not unduly pressed those who are dull or delicate in preparation for examination at any time of the year. It is also provided that "no child may be refused admission as a scholar on other than reasonable grounds;" but no attempt is made to define the grounds upon which admission may be refused. Managers are warned that they must comply at once with any notice of the sanitary authority of the district in which the school is situated requiring them for a specified time either to close the school or to exclude certain scholars from attendance; after complying with such notice the managers may appeal to the Department if they consider the notice to be unreasonable.

We have often insisted on the great importance of not refusing education to any child because it is feeble, dull, or weak; but to say or imply that admission may be refused on any grounds thought reasonable by managers or teachers, without further safeguarding the interests of the public in training feeble and exceptional children to get a living, shows a total disregard for the recommendation of the Royal Commission that feeble children should be sought out and specially provided for. If former codes have left too little liberty to teachers in classifying their pupils, the present fails to render any assistance in recognising the pupils who need special training and care, and makes no special provision for their teaching. It is surprising that the Education Department should continue to incur responsibility for the training of 6,000,000 children without the advice of a medical officer; what will they do when a Board appeals to them against the requirement of a local sanitary authority to close the school temporarily, or to include certain pupils, how can a lay board judge of such matters without assistance? How can Her Majesty's inspector, trained in arts and scholarship only, know the children who are really mentally dull, ill-developed, and delicate, and tell whether the teachers have or have not neglected them or overpressed them?

HYPNOTISM AS AN ANÆSTHETIC IN SURGERY.

THE influence of the mind on the body is a subject whose study involves so many of the most fundamental and difficult problems in Nature that it would be strange if it were popular among many men whose first aim is to be practical. But every now and then these deeper problems show that they have a practical side. Even conditions which have been regarded with contempt or indifference as imaginary or fictitious may be found useful to the operating surgeon or the practical dentist.

We recorded in our columns last week some interesting experiments carried out at Leeds by Dr. Milne Bramwell and Messrs. Carter and Turner on the use of hypnotism as an

anæsthetic. A considerable gathering of more than sixty medical men and dental surgeons was held, and under their free inspection seven patients (three males and four females, varying in age from eight years old to middle life) were hypnotised by Dr. Bramwell, and some necessary surgical operations, which are usually very painful, were performed on them in this condition without giving them any pain, and entirely without their knowledge, except to a very slight extent in the one case of a boy, aged 8. In one the stumps of sixteen teeth were extracted by Mr. T. Carter; in another the tonsils were excised; in a third a cyst in the nose was removed; and in a fourth the striking effect of post-hypnotic suggestion was shown in a man in whom Dr. Bramwell had re-established temperate habits by this means. The success was so complete as to call for a vote of thanks and the emphatic expression from Mr. Pridgin Teale, that he was sure the time had come "when we shall have to recognise hypnotism as a necessary part of our study."

Such a scene naturally carries back our thoughts nearly half a century, to a time when similar experiences were attracting attention in very various sections of the medical world. Braid, starting from a position of hearty and orthodox scepticism to investigate what was then called mesmerism, had convinced himself by his own researches in 1842 that he must give up his scepticism and admit the reality of an artificial sleep with some accompanying anæsthesia, which he used rather for the relief of pre-existing pain than as a help in surgical operations. His most successful method for producing this hypnotism, as he was the first to call it, was by fixing the eyes and attention of his patients on something close at hand, best placed, as he thought, if it was a strain to look at it. He deduced the theory that fixed attention, especially if it produced fatigue of the ocular muscles, was the agent that brought about the hypnotic condition. Under such a process, which for a time the world termed Braidism, many interesting psychological phenomena were produced, and along with them a state of anæsthesia in which Sir J. Tomes, one of the greatest authorities in dentistry of that time, was much surprised to find that he could, like Mr. T. Carter, extract several teeth without causing the least pain or leaving the slightest memory in his patient of what had happened.

About the same time, under very different conditions, in India in 1845, Esdaile, in a bolder and more adventurous spirit, and in almost complete ignorance of Braid's experiments, without ever having seen a man hypnotised before, performed for himself his first induction of hypnotism on a Hindoo convict on whom he had just been operating, and who was at the time in the very acute pain which was a common consequence of operation before chloroform came into use. He completely stopped the pain and sent the man to sleep for several hours, and after that unexpected success went on to hypnotise his patients before operations. After five years of such practice, he left a record at Calcutta, in 1850, of 261 painless operations, some of them as severe as lithotomy, amputation above the knee, and removal of a tumour 105 lbs. in weight in a case of elephantiasis.

There had been a few similar genuine cases in France before this, such as an operation by Récamier in 1821, an amputation of the breast for cancer by Cloquet in 1829; but the triumph of chloroform and ether as surgical anæsthetics, after their first introduction, has been practically complete. Since then, in some cases of long and painful labour, hypnotism has been found useful for prolonged anæsthesia by Thomas, Pritzl, Auvard, Secheyron, and others, and occasionally the patient's wishes are for hypnotism as an anæsthetic, as in M. Mesnet's case of excision of a cyst in the Hôtel Dieu last July. Its usefulness on such occasions as Dr. Bramwell reports is double; it both protects the patient and affords a test for the genuine influence hypnotism can exert, for the pain that is caused by such operations is not a matter that can be neglected as trivial or hidden by simulation; and if Mr. Pridgin Teale's anticipations prove true it is eminently desirable we should know the power of the agent with which we are dealing.

THE *Medical Record* of New York states that some of the medical women of Chicago propose to hold an "International Congress of Female Physicians" during the World's Fair, which it is hoped may be opened in that city in 1892 or 1893.

THREE cases of dengue are reported from Nice by Dr. Niepce. The main interest of this report consists in the origin of the cases; the malady brought by a merchant from Smyrna is described as having been transmitted by contagion.

THE appetite for the marvellous grows with indulgence. Another "new disease" has been discovered in Northern Italy by the correspondent of a Venetian journal. An investigation by Professor Vigna, however, proves that the cases were examples of ordinary small-pox, with well-marked prodromal rash.

PROFESSOR RUDOLPH VIRCHOW, who is equally distinguished as pathologist, anthropologist, and political leader, will enter on his 70th year on October 13th. The medical men and anthropologists of Berlin, with Professor Waldeyer at their head, are already taking counsel how fitly to celebrate the event. English physicians and men of science will no doubt wish to join in doing honour to one to whom honour is so conspicuously due.

SIR WILLIAM JENNER.

SIR WILLIAM JENNER has given up his house in Brook Street and has left London. He has purchased a place a few miles from Southampton. We are glad to say that he is in good health and is proposing to do some literary work, collect and publish his writings scattered through several journals, transactions etc.

SIR RICHARD OWEN.

WE are happy to learn from a bulletin furnished to us by Sir Richard Owen's medical attendant, Dr. Palmer, that although he had suffered for a few days recently from stiffness and discomfort in the muscles of the neck, he is steadily improving, and is practically, although somewhat shaken and enfeebled by his recent illness, and easily fatigued, in fair health, rising each day and amusing himself with books, papers, and conversation.

MEDICAL EDUCATION IN THE UNITED STATES.

IF America has sometimes seemed to be open to the charge of neglecting the more scientific side of medicine and medical education, that reproach is in a fair way to be removed. Hardly a month passes but we hear of fresh foundations of laboratories and

chairs. At the present time a large new laboratory is in course of erection as an extension of the accommodation already provided in the Harvard Medical School, Boston, U.S.A., and the University of Pennsylvania, having obtained an endowment fund of two hundred thousand dollars for the department of hygiene, is about to erect a hygienic laboratory at a cost of fifty thousand dollars.

OBSTETRICAL SOCIETY OF LONDON.

On April 2nd this Society met for the first time in the meeting room at the Royal Medical and Chirurgical Society's premises, 20, Hanover Square. A large number of specimens were exhibited, and Dr. Cullingworth read an important communication on Vaginal Extirpation of the Cancerous Uterus. An active debate followed, and the discussion was adjourned until the next meeting, on Wednesday, May 7th.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND.

We are requested to state that the reports on the questions issued by the Committee of Collective Investigation of this Society last September are due on or before April 15th. The Committee will be pleased to receive any suggestions as to subjects suitable for the next inquiry. All communications should be addressed to the Secretary, Mr. Arthur Thomson, Anatomical Department, Museum, Oxford.

ANTISEPTIC SOLUTIONS FOR MIDWIVES.

The Académie de Médecine, of Paris, having recommended that midwives should be advised to employ a solution of bichloride of mercury in all obstetric cases, and that to avoid accidents it should be coloured, a committee, including MM. Brouardel and Tarnier, and of which Dr. Baden is the reporter, recommends that the packets of disinfectant should be made up according to the following formula:—"Corrosive sublimate, 25 centigrammes; tartaric acid, 1 gramme; alcoholic solution of dry carmine of indigo (5 per cent.), 1 drop; reduce to an impalpable powder." This quantity suffices for a quart of water.

COUNTY MEDICAL OFFICERS OF HEALTH.

Mr. Edward Sergeant, L.R.C.P.Lond., M.R.C.S.Eng., Medical Officer of Health and Public Analyst for the Borough of Bolton, Ex-President of the North Western Branch of the Society of Medical Officers of Health, has been appointed Medical Officer of Health for the County of Lancashire. The salary is £800 a year. The Sanitary Committee of the Worcestershire County Council have, out of five selected candidates for the post of Medical Officer of Health for the County, recommended the appointment of Mr. Alfred Edwin Harris, L.R.C.P., L.R.C.S.Edin., Medical Officer of Health for the Borough and Port of Sunderland. The Essex County Council have referred the question of the desirability of appointing a Medical Officer for the County to a Committee to report thereon.

THE LEPROSY COMMITTEE.

The Leprosy Committee appointed by the Prince of Wales continues its meetings at Marlborough House from time to time, the Presidents of the Royal Colleges of Physicians and of Surgeons, Sir Joseph Fayrer, Sir James Paget, Dr. Thorne-Thorne and others taking part in the development of a plan for the scientific study of the disease. Of the £12,000 which it is desired to raise about £7,000 has been subscribed. It is proposed to send young physicians trained to scientific investigation to Hawaii, Persia, and other seats of leprosy, in the hope that in this way a large body of evidence may be collected, which should tend to give precision to our knowledge of the cause of the disease and its mode of transmission, and furnish further data for preventing its extension. The question is one which especially affects our colonies and dependencies, and it is to be hoped that from these sources also means will be forthcoming to supplement English subscriptions for the amount required.

ENGLISH MANAGEMENT OF EGYPTIAN ASYLUMS.

The *Egyptian Gazette*, which in 1883 made painful disclosures as to the cruel treatment of the lunatics in the Government asylum at Abbasseeyeh, reports now the thorough reforms which have been carried out since the Khedive placed this asylum under the direction of Dr. Greene Pasha, the Director-General of the Board of Health, and speaks in the highest terms, not only of the general sanitary condition of the asylum, but of the excellent and humane treatment adopted, the liberal dietary, and the deep interest taken in the welfare of the patients by the medical officers and attendants in charge. The reform of the hospitals and asylums in Egypt is not one of the least services which have been rendered to that country by the English during their period of occupation.

DEBATE ON ABDOMINAL SURGERY.

On Monday, April 14th, Mr. Meredith will read a paper on the "Present Position of Abdominal Surgery" at the Medical Society of London. The debate which will follow will be adjourned to April 21st. It is hoped that Sir Spencer Wells and Dr. Keith will speak. Many London physicians and surgeons will unavoidably be prevented from taking part in the debate in consequence of their presence being required as examiners for the final and qualifying examinations of the Conjoint Board of the Royal College of Surgeons of England and the Royal College of Physicians of London on the evenings of April 14th and 21st. Amongst those from a distance who have signified their intention of speaking may be mentioned: Mr. Greig Smith (of Bristol), Mr. Mayo Robson (of Leeds), Dr. Griffiths (of Swansea), Mr. John Taylor (of Birmingham), Mr. Lawson Tait, Dr. Elder (of Nottingham), Dr. Thomson (of Dublin), Dr. Thomas Savage (of Birmingham), Dr. David Newman (of Glasgow), etc. The President (Mr. Knowsley Thornton) is expected to speak on the second night of the debate.

INFLUENZA IN INDIA.

Influenza appears to be extending widely all over the continent of India. Bombay, Poona, Benares, Meerut, and other places are recorded as having been attacked. The disease is now rapidly spreading among the native population. Brigade-Surgeon Hamilton, writing from Lucknow, under date of March 18th, says: "In the bazaars and city of Lucknow it is very prevalent, while at Bombay and Poona thousands are stated to be suffering. In this particular station it has run through the men of the Scottish Rifles, and there are few fresh cases from that corps. The Royal Welsh Fusiliers are still suffering, but the disease is abating. The men of the 17th Lancers are now giving the most of the cases, and it is also spreading to the Royal Artillery. The native troops," he adds, "have also been attacked, and the medical officer of the 5th Bengal Light Infantry tells me he has fifteen and twenty cases daily. In my own compound nearly all my servants have suffered; and officers and their families are *hors de combat* in every direction, and some of the younger children have been in a critical condition. No deaths have been recorded, but there has been great inefficiency, as many as two hundred men a day being off duty in consequence. The after-effects are very severe in some instances, and many of the men are so debilitated as to require admission to hospital. Had the disease broken out during the cold season, when there were some 2,000 men under canvas, there would certainly have been some mortality. All the evidence

points to importation by travellers, and further that the disease has extended from the European to the native community. The most marked symptoms are fever, bronchial catarrh (in some cases coryza), pains in head, eyes, back and limbs, congested throat, much malaise, followed by severe debility.

THE ROYAL COMMISSION ON HOSPITAL ADMINISTRATION.

It will be seen that thus far the Government have not arranged to extend the inquiry of this important Committee beyond the metropolis. It is, however, obviously very desirable that the information which is in the possession of provincial members of the profession, and their views as to the administration of provincial hospitals and the influence of hospital abuses on the welfare of the public and the profession in large provincial cities in Great Britain, should also be within the cognisance of the Commission. There are many important cities, such as Manchester, Liverpool, Birmingham in England, Glasgow in Scotland, and possibly Dublin in Ireland, where not only the same problems exist as in London, but where they have been very thoroughly studied and investigated; from these cities important evidence would be forthcoming. Communications addressed on behalf of the Council of the British Medical Association to Lord Sandhurst have been met in a very courteous and friendly spirit, and there seems good reason to think that if a strong wish in this direction were expressed from the provinces and from some of the great towns it would probably be complied with. We hope, therefore, that practitioners and physicians who are interested in the due investigation of this question and in obtaining a satisfactory solution, not only in London, but throughout the country, will without delay communicate with Lord Sandhurst. His lordship's London residence is 29, St. James's Place, S.W.

EASTER MANŒUVRES.

The medical organisation with the volunteers at Folkestone showed great improvement owing to the increased efficiency of the Medical Staff Corps. On Saturday two field hospitals were erected in the neighbourhood of Lammer House Hill, one for the attacking and the other for the defending force, and were equipped to meet any emergency. On Easter Monday the operations were conducted in the neighbourhood of Cæsar's Camp, and on the plateau to the north of this was pitched Captain Tomkins's field hospital and tortoise tent, which was placed at the disposal of Surgeon-Major Norton, Commandant of the Volunteer Medical Staff Corps. Although the weather was very cold and wet, the hospital was able to provide every comfort for the patients admitted. During the stay of the Volunteer Medical Staff Corps at Folkestone, the Surgeon-Commandant presented the medal for long service and good conduct to Sergeant-Major Allen. The regiments of the South London Brigade were not all provided with stretcher bearers; the 2nd and 4th Middlesex seem to have been the only regiments with stretcher detachments. It is difficult to obtain men who will carry heavy stretchers (weighing 32 lbs.) long distances before the commencement of fighting operations; ambulance waggons should be provided to avoid this unnecessary fatigue, and to carry the injured after they have been removed from the fighting line by the stretcher bearers. It would stimulate the efficiency of regimental ambulance organisation if a small grant were made for those men who had obtained the Army Ambulance certificate, qualifying them for this special work. Several casualties are reported: an officer injured by a fall from his horse, and a fracture of the fibula. At Brighton two men were injured in the neck by the discharge of blank cartridge from the rifles of men in the rear rank. The Volunteer Medical Staff Corps despatched to serve with the Portsmouth column a body of fifty trained men and three officers, under Brigade-Surgeon Watson. This corps also had with it a tortoise ambulance tent, which was erected at a point near Grange Fort; a system of field hospitals and collecting stations in continual touch with the bearers accompanying each battalion of the fighting column was also maintained. Attached also to the collecting stations were signallers, who were able to report to the base the arrival and dispatch forward of each sick man as he was brought in. The Volunteer Medical Staff Corps each day treated from ten to fifteen cases of exhaustion and diarrhœa. Brigade-Surgeon Brunton, of the 1st Volunteer Battalion East Surrey Regiment, was superior over the medical arrangements of the Eastbourne force.

THE HIGHER EDUCATION OF CONVICTS.

The ultimate results of some most interesting experiments which have been in progress for some years in the States of Massachusetts and New York will be watched with much interest by all persons interested in prison discipline. At the Concord Reformatory (Massachusetts) and the Elmira Reformatory (New York) convicts under 40 years of age are received, and are given the advantages of very considerable educational facilities. Regular classes for instruction are held in political economy, music, architectural drawing, mathematics, and other branches. There are periodical examinations, which furnish a basis for the apportionment of good marks, which materially expedite the periods of liberation. In this way the maximum period of detention, which is only five years, may be reduced to eleven months. Recreations of various kinds are provided, debating societies, scientific and literary clubs, printing presses, and weekly newspapers. The physical side is not neglected, for at Concord there is a farm of 160 acres, and at Elmira a very fine gymnasium was recently opened. It is a separate building, 140 feet long and 100 wide, equipped with all the most approved apparatus for physical culture, including, according to the *Boston Medical and Surgical Journal*, Russian and Turkish baths. After this, it is not surprising to learn that these prisons are exceedingly costly.

ELECTRICAL TREATMENT OF UTERINE FIBROIDS.

A series of cases recently reported by MM. Lucas-Championnière and Danion appear to show that the electrical treatment of uterine fibroids still promises a fair measure of success. When the experiment was first introduced too great hopes were founded upon it, with the necessary result that it came in many quarters to be discredited on the grounds of disappointing experience. It can never afford a radical cure; but, since it has been found sometimes useful, it is probable that there are cases to which it is appropriate. No discovery in therapeutics is complete until the means are obtained of discriminating the purposes to which it is applicable. MM. Lucas-Championnière and Danion have given their minds to this subject. They conclude that electrolysis is the procedure, *par excellence*, in cases which may be ranged under the three following categories: (1) those of women approaching the menopause; (2) those in which the other symptoms are somewhat severe, while the tumour increases but little in bulk; (3) cases of soft tumours where operation is inadvisable. In such they have found it of very great benefit. Their method differs somewhat from that of Apostoli. The uterine electrode is olive-shaped, or an index of platinum carried on an insulated handle, and capable of being bent so as to enter the cervix or fundus. The large electrode is made of tin covered with tinder and wash-leather, or else it is a plate of potter's clay. The latter is to be chosen where currents of great strength are used. In the matter of current strength, however, these observers have made an important innovation. They find that it need not be so great as is generally supposed, and in this way they get rid of one class of objections to the treat-

nent. They never employ more than 60 to 65, and usually not more han 45 to 55 milliampères. The application is invariably begun vith the positive pole, and in subsequent sittings the current, usually of diminished strength, is repeatedly reversed. The numer of sittings has varied from fourteen to twenty-six, and an occasional return to treatment is thought necessary. The published esults are most satisfactory. The tumour diminishes rapidly in ulk, with, however, a tendency to grow again when treatment s intermitted. Hæmorrhage and menorrhagia grow less or disappear, pain is entirely subdued, the feeling of weight and abdoninal distension is relieved, and with the amelioration of symtoms the general health is said to improve very quickly. Above ll, the ease with which currents of comparatively low strength re tolerated and the freedom from anything like shock and the ad effects of such subsequent exertion as is unavoidable, give this nodified proceeding a claim to extended trial.

THE MEDICAL REGISTER.

We have received from the Registrar of the General Medical ouncil a copy of the *Medical Register* for 1890. As in previous ears, the *Register* has undergone a thorough revision, and corections have been made from all available data. From the statisical table supplied, it appears that the number of registered edical practitioners is still increasing; in the year 1876, which as the first year in which such tables were compiled, the number f pages in the *Register* was 598, and the number of practitioners 2,200; the number of pages is now 1,220, and the registered ames number 28,348, being also 409 in excess of the number last ear. The average number for the last five years is 27,197. In nother table will also be found a list of the various licensing odies which grant diplomas or certificates in the subject of public ealth; nearly all of these, being issued under regulations in conormity with the latest recommendations of the Medical Council, an now be registered as additional qualifications. The *Dentists' Register*, 1890, has also been issued. From the excellently-arranged series of tables it is seen among other things that the total umber of registered dentists has decreased from 5,291 in 1879, to 810 in 1890, but that the licentiates in dentistry have increased number from 483 in 1879, to 1,079 in 1890. The increase in the ercentage of these licentiates to the whole number of registered ractitioners appears to be constant. In 1879 it was 9.13; in 1884 .12; in 1887, 17.89; in 1889, 20.81; and now, in 1890, it is 22.41 opies of these registers, and of the *Medical Students' Register*, n be obtained from the Council's publishers, Messrs. Spottisoode and Co., of New Street Square, E.C.

ADULTERATED CHEESE.

A Liverpool tradesman named Wood has, we learn from a report the *Liverpool Evening Express*, just been summoned, and fined e absurdly small sum of 20s., under the Sale of Food and Drugs t, for selling adulterated cheese to an inspector. It appears om the report that suspicions were entertained by the local icers as to the genuine character of certain cheeses which had en largely sold in Liverpool, chiefly for the purpose of being ailed in Manchester. The inspector visited Wood's warehouse, d asked whether he could have any "white cheese, from 25s. to ., which would suit Manchester." He was informed that not s than five could be sold. He then intimated who he was, and ormed the vendor of his object, upon which he obtained a single eese. The public analyst certified that the cheese had been made m skimmed milk, and that the place of the cream removed had en partly supplied by added lard, the cheese, however, remain very deficient in fat. The analyst's certificate, it seems, also tained the somewhat singular statement that while the addin of the lard was partly intended to increase the weight and bulk, it was chiefly meant to "fraududently conceal the inferior quality of the cheese by supplying some fat which will grease the iron used in cutting the cheese, so as to conceal the fact that it is skimmed-milk cheese." It is highly probable that a very large quantity of factitious cheese is sold as genuine. The so-called lard cheese is extensively manufactured in America, and a great deal of it no doubt finds its way into this country. It was admitted in the course of the case just related that the cheese in question was part of an American consignment, and that it had been sold in considerable quantities in Manchester, Warrington, Widnes, and the districts surrounding those towns. It is to be regretted that in this case the mistaken idea seems again to have prevailed that the vendor was, in a sense, an innocent party, or he did not actually carry out the adulteration. He was the distributor of the adulterated goods, however, and as such was responsible. It may perhaps be doubted whether the American firm will allow its customer to suffer, even to the extent of twenty shillings.

THE TREATMENT OF LEPROSY.

In the *Monats. f. prakt. Derm.*, 1890, vol. x., No. 5, p. 240, Dr. Pontoppidan, of Copenhagen, gives a summary of Danielssen's triennial report of the Leper Hospital at Bergen, 1886-1888. Systematic attempts to cure leprosy had been continuously made. The salicylate of soda had proved useful, especially in the anæsthetic form; it was also useful in tubercular leprosy, particularly in the stage of acute eruption, in which it diminished fever, cut short the outbreak, and caused the disappearance of the newly-formed nodules. The older of the nodules appear only to be affected by external applications. Ichthyol was tried for a long period without any good results. Unna's treatment of chrysarobin, salicylate of soda, and creasote with ichthyol was also tried in several cases. The nodules seemed to diminish, but the author considered the improvement to be only temporary. Chaulmoogra oil was not found useful, nor was salicylate of mercury. Iodide of potassium was also tried. This drug has a special effect which is constant, namely, that it causes a greater or less degree of eruption. It can therefore be employed when it is supposed a cure has been effected. If no new eruption has been produced by the iodide of potassium the case may be considered definitively cured. The author is sceptical regarding the alleged cases of cure published by Unna and Drachmann, considering that all that had been effected is the diminution in size of the nodules, a result which is not difficult to obtain.

TOTAL EXTIRPATION OF THE UTERUS.

Dr. Münchmeyer described in a recent number of the *Archiv für Gynäkologie* an account of 110 cases of total vaginal extirpation of the uterus in the Dresden Women's Hospital. Eighty were cancerous; the mortality in these malignant cases was 5 per cent.; and 64.5 per cent. of the patients who recovered remained over two years free from recurrence. The appendages were latterly removed entire whenever that step was practicable, as in two cases where they were left behind they became involved in the cicatrix at the top of the vagina and caused so much pain that an operation was needed for their removal. Parametritic induration was frequent, but it gave less trouble than narrowness of the vagina. Dr. Münchmeyer did not particularly dread injury to the bladder, as if immediately sutured a wound in the vesical walls was not serious. Recurrence of cancer did not appear to be more frequent when inflammatory infiltration in the parametrium and uterosacral ligaments existed at the time of operation. Carcinoma of the cervical canal proved the most serious form; cancer of the body was less, and cancer of the vaginal part of the cervix least prone to rapid recurrence. Total extirpation was also performed for small fibroids, which crippled the patients, in 17 cases; the

mortality was given as 11 per cent. Five of these operations were performed, all successfully, for total prolapse of the uterus; 8, also all successful, for disease of the appendages, on the plea that without tubes and ovaries the uterus was useless, and that the operation was less dangerous than an abdominal section. In this country it is doubtful whether many authorities approve of total extirpation of the uterus excepting for malignant disease. The above statistics will be interesting in reference to the recent discussion on Dr. Cullingworth's paper at the Obstetrical Society.

ACTION OF COD-LIVER OIL.

MM. GAUTIER and Mourgnes, in a recent communication to the Academy of Sciences, discuss at some length the reasons why cod-liver oil is superior to other fats as a therapeutical agent, and arrive at the following conclusions:—1. It is more easily assimilated owing to its containing free fatty acids and some biliary matters which render its emulsion specially easy when it comes in contact with the pancreatic juice. 2. It is rich in phosphates, phosphoric acid, lecithin, and phosphorus in organic combination; the phosphorus, especially in the last-mentioned form, is very readily assimilated to form protoplasm, and thus nutrition is greatly stimulated. The small amounts of bromine and iodine being also present as organic compounds exercise a beneficial influence on the general metabolism. 3. The alkaloids present—butylamine, amylamine, morrhuine—and morrhuic acid stimulate the nervous system, increase the amount of sweat and urine, and act as nervine tonics.

TREATMENT OF LUNATICS IN AMERICA.

THE first Annual Report of the State Commission in Lunacy[1], which has been submitted to the Legislature, urges that all power vested in the State Board of Charities, which still retains the power of making visits and requiring reports, should be transferred to the Commission in Lunacy. It has been found that hundreds of insane were in various institutions, either without certificates at all, or under certificates that were defective, and the Commission very properly has ordered all of them to be re-examined with the view of ascertaining their condition. No sane person was found detained. We are glad to hear it is the intention of the Commission to make the medical superintendents really the heads of the asylums so that there shall be no division of authority. The report shows that the county asylums are in most instances in the charge of "keepers," unqualified to undertake the care of the insane; that the attendants are in many instances incompetent and are permitted to use restraint without medical supervision; that the dietary is neglected; and that the sanitary surroundings and hygienic management of the patients are often most incredibly defective. The indictment is a heavy one, for a more serious list of charges it would be difficult to imagine. We cannot but agree with the Commission in stating that if these things be true the county care of the insane has been a lamentable failure, that it ought to be abolished, and the policy of State care for all insane, both chronic and acute, should be re-established at the earliest practicable date.

PROLAPSE OF THE URETHRAL MUCOUS MEMBRANE IN CHILDREN.

THIS affection proved the subject of a discussion at a meeting of the Berlin Obstetrical and Gynæcological Society last January. Dr. Benicke described three cases. The first patient was 11 years old; the prolapse was slight and readily cured by the application of the actual cautery. In the second case, the child was 10 years old and robust; the urethra was greatly dilated and the prolapse very marked; it was reduced and the meatus made narrow by means of one suture. The third patient was also 10 years old; the prolapse was extreme and irreducible. The protruding mucous membrane was cut away and the edges of the wound were successfully united by means of catgut sutures. Frequent severe hæmorrhage was the chief symptom in all these cases; dysuria and allied forms of suffering were absent. The causation of the prolapse could not be traced. Dr. C. Ruge and Professor Martin believed that, as a rule, prolapse of the urethral mucous membrane was caused by the development of a vascular growth under the mucosa, which also underwent partial hypertrophy. Professor Martin did not believe in treatment by caustics and cautery, which only gave occasional good results. Cutting off the prolapsed tissue sometimes caused the formation of a troublesome cicatrix, which contracted to a serious extent. Careful plastic proceedings gave better results. Professor Veit had never observed serious cicatricial contraction. The raw surface in a plastic operation might be cut so as to be circular, and also wedge-shaped at one point; Schröder had practised a method of trimming the prolapsed tissue so as to prolong the meatus, but Professor Martin observed that serious damage to the bladder had followed this practice. Prolapse of the urethral mucous membrane, which is in no way related to caruncle, although it contains angiomatous tissue, is certainly rare before puberty. Several distinguished authorities who joined in the discussion had never seen the disease in children.

DEATH FROM VISCERAL AFFECTIONS AFTER OVARIOTOMY.

DR. COE, of New York, contributed a valuable essay, bearing the above title, to the *Transactions of the American Gynæcological Society* for 1889. The essay is well worth the study of all surgeons who undertake abdominal sections of any kind. Pathological records of the Woman's Hospital, New York, which extend over a period of nearly twenty years, have been prepared by Dr. Coe, and they show serious visceral lesions in 85 cases of death following operations for the removal of ovarian cysts and diseased appendages. The most frequent complication was diffuse nephritis, which was found in 13 cases. In no fewer than 43 cases disease of the kidneys was detected. Mr. Doran demonstrated, as long ago as 1878, in the *St. Bartholomew's Hospital Reports*, that in necropsies after fatal cases of ovariotomy, renal disease of a marked character was suspiciously frequent. Dr. Coe rightly observes that when a case begins to do badly after operation, we must not always assume that something is wrong with the wound, and reproach ourselves with some omission of antiseptic precautions during the operation. Each organ should be interrogated for evidences of some complication, as in a case of typhoid fever or pneumonia. When a patient dies from an unrecognised visceral affection, and no necropsy is made, the obscure symptoms are most probably attributed to "a low form of septicæmia."

SCOTLAND.

THE Edinburgh "portals" have been thronged during the past ten days with anxious groups of candidates. So far as the examinations have proceeded the reports which have reached us have been satisfactory. The summer session of the Medical School will commence on Thursday, May 1st.

GLASGOW UNIVERSITY HONORARY DEGREES.

AMONG those on whom the Senate of the University have resolved to confer the honorary degree of Doctor of Laws are Sir William Arrol, of Forth Bridge fame; Professor J. Kirkpatrick, Dean of the Faculty of Law of Edinburgh University; Professor Palmer,

[1] *Boston Medical and Surgical Journal*, cxxii, No. 6.

rinity College, Dublin; Mr. Henry Sweet, of Balliol College, xford; and Dr. Wm. Macewen, the distinguished Glasgow sur- eon. The graduation ceremony will be held on April 25th.

RECENT SCIENTIFIC APPOINTMENTS AT EDINBURGH.

Y the removal of Dr. Woodhead to London, the posts of Superin- ndent of the Laboratory of the Royal College of Physicians of dinburgh, and of Pathologist to the Royal Hospital for Sick hildren have been rendered vacant. The Council of the Royal ollege have appointed Dr. D. Noel Paton to the former, and the irectors of the hospital have nominated Dr. Alexander Bruce for ie latter.

MEDICAL REFORM AT THE EDINBURGH UNIVERSITY.

T the statutory half-yearly meeting of the University of Edin- urgh, to be held in the University on Tuesday next, various uestions of medical interest will be brought forward. Among iese may be mentioned certain proposals affecting the present ystem of professional examinations, more particularly with a iew to publicity at such examinations, the subject of extramural eaching, the relation of university graduates to hospital appoint- ients, and the revised rules for graduation in the department of ublic health.

THE ROYAL COLLEGES GOLF CLUB.

HE Royal Colleges of Physicians and of Surgeons of Edinburgh ave played their first golf match, and the Surgeons have carried he day by 23. The match was well contested, fourteen playing or each college. As an outcome of the match, it was resolved at meeting, held under the presidency of Mr. John Duncan, Presi- ent of the Royal College of Surgeons, that a golf club be formed mong the Fellows of the sister colleges, to be called "The Royal olleges' Golf Club;" that each Fellow interested in golf be asked o subscribe one guinea towards the purchase of a suitable trophy, he said trophy to be played for annually by teams from each ollege, and to remain in the custody of the winning college for ne year; that two meetings of the club be held annually, one in larch and one in October; and that Dr. Argyll Robertson be aptain of the club, Dr. P. A. Young treasurer, and Drs. Russell, . Wood, and Noel Paton secretaries.

ABERDEEN: COMPULSORY PUBLIC HEALTH EXAMINATION.

ERY considerable dissatisfaction was expressed by the candidates or the M.B. and C.M. degrees of the Aberdeen University, during he recent examination, at the introduction of questions relating o public health. This feeling of displeasure has taken the form f a protest to the University Court, which has been signed by all he graduates, with one exception. The following is the protest vhich has been lodged with the Secretary of the University ourt:—"We, the undersigned graduates in medicine of Aberdeen niversity, hereby protest against public health being made a ompulsory part of the professional examination in medical juris- rudence, seeing that, in violation of the ordinances which specify iedical jurisprudence alone as being the subject for examination, ne-third of the recent written examination was purely on public ealth, and in several instances the oral examination by the xamining professor was confined solely to questions on public ealth; and we hereby appeal to the University Court to enjoin hat in future the examination in medical jurisprudence be con- ucted in accordance with the ordinances." The University Court ieets this week, when the protest will be under consideration.

DEATH OF DR. A. GIBBON.

ENERAL regret is felt in the city of Aberdeen at the death from poplexy of Dr. Alexander Gibbon. Dr. Gibbon belonged to Inverkeithney, Banffshire, and studied medicine at Aberdeen, graduating in 1835. He entered the East India Company's service, in the Presidency of Bengal, as assistant-surgeon in the Benares circle. He served in the Scinde war under Sir Charles Napier, and was the recipient of two medals. First promoted to the rank of surgeon, Dr. Gibbon subsequently received the appointment of superintendent surgeon, and in 1861 he retired from the service with the rank of Deputy Inspector-General of Hospitals. In that year he returned to Aberdeen, and has since uninterruptedly resided in the city. Dr. Gibbon was well-known and highly esteemed for the quiet but worthy part which he played in all philanthropic and religious work. He was an elder in the Free West Church, and was for many years treasurer of the North-East Coast Mission and of the Aberdeen Evangelical Association. Dr. Gibbon, who had reached his 80th year, married, after his return from India, a daughter of the late Professor Pirrie. In 1826 he was elected a junior member of the Aberdeen Medico-Chirurgical Society, and in 1849 he became, and has ever since remained, an ordinary member of the Society.

IRELAND.

THE PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

MR. AUSTIN MELDON, President R.C.S.I., writes: "On Monday, June 4th, 1883, at the annual meeting of the College, after full notice had been sent to every Fellow, it was proposed by Mr. Thomson, and seconded by Mr. Corley, and carried: 'That from and after June, 1887, the President of the Royal College of Surgeons in Ireland should be eligible, and may be invited to hold office for a second year.' In June, 1887, Mr. Corley was elected President, but, for reasons best known to himself, did not seek re-election. In 1888 Mr. FitzGibbon was elected, and, had he desired it, I would most willingly have stood aside and allowed the will of the College to have taken effect. Now, I have been urged by one hundred Fellows to seek re-election in June next, and I will do so if it is the desire of the majority of the Fellows, as I only desire to do what they think is best for the interest of the College. For this reason I have addressed a circular to the large number of the Fellows whose opinions I did not already know, and beg through you to thank the eighty who have replied to me, and to express a hope that the remainder will advise me in this matter, which seems to me to be so important a change that every individual Fellow should be consulted on the subject."

OUTBREAK OF FEVER IN LISMORE UNION.

AT a meeting of the Lismore Guardians last week, Dr. Dennehy, Medical Officer of the Workhouse, reported that there were 19 patients in the hospital suffering from typhoid fever, all from the Ballysaggartmore district, where fever was very prevalent. Dr. Baylor, Medical Officer of Ballyduff, also reported on the prevalence of fever in his district. The Guardians have ordered the houses where the contagion exists to be disinfected and the patients to be removed to the Fever Hospital; they also have telegraphed to Dublin for a trained nurse to take charge of the Fever Hospital during the present outbreak.

THE late Mr. Birchfield, of Upper Holloway, has bequeathed £2,000 to the Royal London Ophthalmic Hospital.

DR. GEORGE W. BALFOUR, Edinburgh, has been elected a member of the Enlarged Court of the University of St. Andrews.

BY a decree of the Republican Government, which came into effect at the end of last year, medical practitioners in Brazil are compelled to notify every case of yellow fever, cholera, plague, diphtheria, small-pox, measles, and scarlet fever which they may be called to attend.

NOTES
ON
SOME GERMAN UNIVERSITIES.

By WALTER K. SIBLEY, M.B., B.C.Camb.,

II.—THE UNIVERSITY OF BERLIN.

(Continued.)

The Physiological Institute.—Professor du Bois Reymond.

The Physiological Institute, a red-brick building situated at the corner of the Neuen Wilhelmstrasse and the Dorotheenstrasse, contains four departments: (1) Microscopic and Biological, under Professor Fritsch; (2) Chemical, under Professor Kossel; (3) Special Physiological, under Professor Gad; (4) Physical and Physiological, under the director, Professor du Bois Reymond. The building contains two lecture theatres, one seating 250 persons which is used by the director, and one with accommodation for 65 students which is used by his assistants. On the ground floor are the director's private workroom and laboratory, and the physical department with a laboratory for six workers and a private workroom; there is a special instrument room for physico-physiological apparatus. On the first floor is the microscopical department with twenty places, a large aquarium for sea animals, a microscopical gallery, and an injection room, together with the zoological and comparative anatomy collections. On this floor there is also a special photographical department under the direction of Professor Fiitsch. On the same floor is the chemical department under Professor Kossel, with a laboratory fitted for thirty workers, which every summer term is used by seventy or eighty students; moreover, a weighing room and a spectroscopic room. The vivisection department, with six places, is on the ground floor, and is provided with a demonstrator's table and a gallery. The animals are kept in the cellars. In the summer the frogs are kept in a large basin in the garden. In the cellars are also two bacteriological chambers, together with heating apparatus. The lectures and courses are very numerous. Professor du Bois Reymond lectures twice a week in summer on the first part of physiology, and in winter on the second part of physiology, with experiments four days a week. Professor Fritsch teaches histology, comparative anatomy and microscopic work, Professor Kossel, medical chemistry with experiments, and Professor Gad gives special courses on respiration, speech, and experimental work. Several special courses are also held by the other assistants.

Professor du Bois Reymond was born in Berlin in 1818, and was a pupil and assistant of Johannes Müller. In 1843 he published his work *On the So-called Frog's Current and the Electrical Fishes*, with a dissertation entitled, "Quæ apud veteres de piscibus electricis extant argumenta?" In 1858 he succeeded Müller in the Chair of Physiology. In 1848 appeared the first volume of his chief work, *Experiments on Animal Electricity*. A number of further essays on electro-physiology followed. As Secretary to the Academy of Science, since 1867, he has had to deliver a number of lectures which have been recently published by Seit and Co., of Leipzig. From 1859 to 1877 he edited the *Archives of Anatomy and Physiology*, in conjunction with Reichart. Since 1877 he has been sole editor of the *Archives of Physiology*. In spite of his age, du Bois Reymond is still a most energetic worker, and in addition to his distinction as a physiologist, he is a leader of philosophical thought in Germany. As a representative of natural science, du Bois Reymond is considered to base his philosophical theories upon definite knowledge; in reality, however, they appear to rest on an absence of definite knowledge, that is on agnosticism. "Ignoramus" is his invariable answer to all fundamental problems, and he often carries this profession of present ignorance still further by adding "Ignorabimus." Since his famous paper at the Naturforscherversammlung of 1872, he has employed himself in marking out the boundaries of our knowledge in various directions, putting up a *Welträthsel* whenever, in his opinion, the limit was reached. From one *Welträthsel* he has advanced within a few years to seven, so that at last, with Haeckel one looks on with concern, wondering where he is going to stop. At the same time it would be interesting to know from what place, within the boundaries, the knowledge comes which has enabled the Professor thus to formulate his "Ignorabimus." A good feature of du Bois Reymond's system is its usefulness to the practical scientific student. Lange says somewhere, in speaking of modified materialism, that it may serve as a *Maxime der wissenschaftlichen Detailforschung*, words which exactly describe the possibility of usefulness of all philosophical agnosticism. As the physicist would never have got on if he had puzzled his head too much about the metaphysical meanings of force, matter, attraction, etc., so all along the line of scientific inquiry there are certain disturbing elements both under the stars and beyond them which must necessarily be excluded when special progress is to be made.

THE PATHOGENIC MICROBE OF DISTEMPER IN DOGS, AND ITS USE FOR PROTECTIVE INOCULATION.

By EVERETT MILLAIS.

[From the Pathological Laboratory of St. Thomas's Hospital.]

Distemper is a disease which attacks the whole dog tribe before maturity, as a rule, and, in my opinion, is due to a bacillus whose identity I believe I have established. Distemper is a specific infecticus disease (one attack confers immunity); and as with other zymotic diseases, so here, some animals appear to be naturally immune against it.

After exposure to infection an incubative period of variable duration follows; the symptoms which then appear are dulness, loss of appetite, and fever; the nose at the same time becomes hot and dry, and a husky cough, constipation, or diarrhœa are commonly present. The eyes and nose now discharge freely, the fluid being at first watery but purulent later on. Finally, the animal emaciates rapidly, while the coat becomes hard and staring. In about three weeks, should no complication ensue, the dog begins to regain condition and recovers. Unfortunately, complications generally do supervene, for few cases occur in which bronchitis is not a symptom. Pneumonia carries off a large number of those attacked, whilst jaundice, fits, and diarrhœa account for the death of many others. As sequelæ we find chorea and paralysis.

The mortality is very high, and 90 per cent. has been given as the loss from this disease. It is nevertheless doubtful whether the mortality is really so high, as it is a notorious fact that mongrels are peculiarly exempt from malignant distemper. In well-bred dogs, however, 90 per cent. fairly represents the average of fatal cases.

To give a slight idea of the fatal effects of the disease on highly bred canine stock, I will give but one or two examples, although these might be increased by hundreds.

Table I.—*Distemper contracted at Shows.*

Show.	Date.	Owner.	No. Shown.	Deaths.	Ultimate Damage at Home.
Crystal Palace	1887	Mr. A.	2	1	23 deaths.
Barn Elm ...	1888	Mr. A.	2	1	15 deaths.
Brighton ...	1889	Mr. B.	1	1	13 deaths.
,,	,,	Mr. C.	2	1	Entire kennels attacked.
,,	,,	Mr. D.	2	2	17 deaths.
Crystal Palace	,,	Mr. E.	3	0	6 deaths.
Total ...	—	—	12	6	74 deaths.

Such a table will give a small notion of the frightful annual loss occasioned by exhibiting puppies for the first time at our principal dog shows.

Experiments Undertaken to Discover the Pathogenic Micro-organism.—In the beginning of June, 1889, I inoculated gelatine tubes with the mucus from the nose of a collie suffering from distemper complicated by pneumonia. Four tubes were inoculated, and in three days a growth of a similar character was apparent in each, the growths liquefying the gelatine. Shortly after this Mr. Sewell procured for me a puppy suffering from pneumonic distemper. From this dog further tubes were inoculated with the discharge from the nose, and in a like period similar growths were to be seen as those grown from the collie. This puppy was then destroyed.

A drop of each growth, stained with fuchsin and examined with a Zeiss D, showed three micro-organisms, namely, two bacilli, which I will distinguish as A and B. In addition, micrococci were present in far larger quantities than either of the bacilli. The

organs of the puppy that came from Mr. Sewell were also examined, after being hardened in alcohol and stained by Gram's method. In addition to the lungs and trachea, the liver, spleen, and kidneys were found to contain similar micro-organisms. From the condition of the organs and the fact that they contained in large quantities the same micro-organisms as had been observed in the gelatine growths, I was led to test these growths by experiment, in order to prove whether one of the micro-organisms might not be perchance the active agent producing the disease. I therefore applied to a gentleman to do the inoculations for me, choosing as subjects two of my own very inbred basset hounds.

Puppy No. 1 was inoculated by syringing the nasal fossæ with the growth contained in a gelatine tube, and puppy No. 2 was immediately after the inoculation placed with No. 1. In eight days both puppies were down with the disease, and afterwards showed signs of pneumonia, No. 2 having undoubtedly taken the disease from sniffing the nose of puppy No. 1.

No 1 was destroyed on the tenth day from the first symptoms, and its organs were found to be filled with all three micro-organisms, just like the puppy first examined. This fact seemed to prove that the growths contained the pathogenic microbe of distemper, and as the disease had been produced with tubes of the eighth generation, I now tried to isolate each organism.

No difficulty was found in separating out and obtaining pure cultures of bacillus A and micrococci by means of ordinary plate cultivation; both liquefy gelatine. The bacillus produces an opaque liquefaction, a yellowish scum forming on the surface of the tube; whereas the micrococci grow with a clear liquefaction, forming a thick deposit of a chalky appearance at the bottom of the tubes.

Two puppies, No. 3 and 4, were each inoculated with one of the growths respectively, No. 3 being inoculated with a tube containing bacillus A, and No. 4 with micrococci without the animals showing any symptoms of disease. The inoculations were now reversed, No. 4 being inoculated with bacillus A, No. 3 with micrococci, again without result. Both puppies were now inoculated with both micro-organisms, and suffered no harm. From such negative results I felt justified in supposing that neither bacillus A nor the micrococci were the cause of the disease. I now isolated bacillus B, photographs of which, taken by Dr. Copeman of St. Thomas's Hospital, are annexed.



Fig. 1.—From a photograph taken by Dr. Copeman, of St. Thomas's Hospital (oil immersion).

The bacillus B, like the other micro-organisms found, also liquefies gelatine, descending as a flakey mass in the almost clear fluid, which is covered by a whitish scum. Finally, when the whole of the gelatine is liquefied, the flakes gather at the base, and, if stirred, appear to be of a ropy consistency.

Puppy No. 5 was now inoculated in the nose, and in a week it began to show unmistakable signs of the disease. Another puppy, No. 6, was inoculated in the nose with the previously described micrococci, and kennelled with puppy No. 5. Three days after No. 6 was placed with No. 5, No. 5 began to show signs of pneumonia, and was destroyed. Again three days after the death of No. 5 No. 6 showed symptoms of distemper, and was then also destroyed.

Microscopic examination was now made of the organs of both dogs, when the organs of No. 5 were found to be filled with the micrococci, those of No. 6 to be full of bacillus B. In other words, No. 5 previously inoculated with bacillus B contracted distemper from the inoculation, and then showed symptoms of pneumonia directly it was brought into contact with No. 6. No. 6 on the other hand, whose organs were found filled with bacillus B, showed no signs of pneumonia, although it had been inoculated with micrococci, but of distemper. Doubtless, had it been allowed to live, pneumonic symptoms would have appeared.

The only legitimate conclusion is that No. 6 contracted distemper from No. 5, and that in all probability bacillus B is the cause of the disease. At the same time, not feeling satisfied, and having obtained a licence to carry out experiments on this disease, I inoculated two puppies, No. 7 and 8, with bacillus B. In five days both puppies showed well-marked distemper, when No. 7 was destroyed, but No. 8 was inoculated with the culture containing the micrococci. No. 8 then showed symptoms of pneumonia and was destroyed. On examination the organs of No. 7 were found to be filled with bacillus B, those of No. 8 containing few bacilli B but numerous micrococci; the disease is, therefore, produced by bacillus B.

TABLE II.—*List of Experiments, with Dates, Inoculations, and Growths used.**

Cases	Growth used and Date of First Inoculation.	Growth used and Date of Second Inoculation.	Date of first symptoms.	Results.
1	D July 10	—	July 18	Mild pneumonic distemper.
2		—	July 18	Mild pneumonic distemper.
3	A August 6	—	—	No results.
3	C August 20	—	—	No results.
3	A & C August 30	—	—	No results.
4	C August 6	—	—	No results.
4	C August 20	—	—	No results.
4	A & C August 30	—	—	No results.
5	B October 20	—	Oct. 28	Mild pneumonic distemper.
6	C October 31	—	Nov. 7	Mild distemper contracted from No. 5.
7	B December 17	—	Dec. 21	Mild distemper.
8	B December 17	C December 25	Dec. 22	Mild distemper, followed by severe pneumonia.

* Growth D equals the 3 micro-organisms; A equals bacillus A; B equals bacillus B; C equals micrococci.

Experiments in Attenuation and Protection.—Now none of the growths with which these experiments were made had been grown at such a high temperature as that of the dog, viz., 101.5° F. In fact they were all cultivated in a cool room at the top of my house, at a temperature varying from 60° F. to 70° F., and I can only come to the conclusion that the successive generations of cultures which have been produced from the originals and grown at a very reduced temperature to that which the pathogenic microbe flourishes in the dog, has resulted in attenuating the virus, as the inoculations with bacillus B were followed by a mild attack of distemper only. Mr. Garnett, of Bromley Cross, having placed two very valuable bloodhound puppies at my disposal I inoculated them both with bacillus B.

TABLE III.

Case.	Growth used and Date.	First Symptoms.	Result.
9	B January 7	January 13	Mild distemper.
10	B January 7	January 13	Mild distemper.

If the fact that the original growths were obtained from dogs suffering from the disease in its most acute form be taken into consideration, and if we also remember that bloodhounds, when attacked, show less resisting power than any other variety of dog, except the basset hound, it is clear that bacillus B had become

attenuated. The temperature of both Mr. Garnett's hounds never exceeded 102.5° F., even at the time they were suffering from the effects of the inoculations.

Protective Treatment.—A growth of bacillus B having been heated to 60° C. for 10 minutes, 5 cubic centimètres of this culture were taken and added to 5 cubic centimètres of previously sterilised water. This quantity was now injected under the skin of two puppies (Nos. 11 and 12) but no ill effects followed. After allowing a week to pass for the virus to take effect, the same two dogs were inoculated in the nose with a pure culture of bacillus B, and to make the experiment more demonstrative, the animals were placed in a kennel which had been inhabited by the dogs previously suffering from distemper. No disease following, I determined to repeat the experiments, a list of which is now given:—

TABLE IV.

Case.	Inoculation subcutaneously with Modified Virus.	Inoculation through the Nose with Non-modified Virus or Exposure to Infection.	Results.
	Date.	Date.	
11	December 26	January 2	No distemper or symptoms.
12	December 26	January 2	No distemper or symptoms.
13	January 13	January 20	No distemper or symptoms.
14	January 13	January 20	No distemper or symptoms.
15	Control experiment.	January 20	Distemper January 28.
16	January 15	Placed with diseased dogs, January 22	Distemper January 30; died.
17	January 15	Sent to Liverpool Show, January 27	Mild distemper; pneumonia.
18	January 15	Ditto	Mild distemper; pneumonia.
19	January 15	Ditto	Mild distemper; pneumonia.
20	January 15	Ditto	Mild distemper; pneumonia.
21	January 15	Ditto	No distemper; pneumonia.
22	January 27	Ditto	Mild distemper; pneumonia.



Fig. 2.—Section of small bronchial tube, showing bacilli. Bronchial drawn from a section; surroundings diagrammatic.

The above table is worthy of attention on various grounds. It will be observed that the dogs in cases 11 to 14 were inoculated hypodermically with modified virus in order to protect them from the disease. Case No. 15, on the other hand, contracted the disease, being the only animal not protected by the injection of modified virus. Case No. 16, the only one in which death resulted, deserves notice. This puppy was only 7 weeks old, and it was thought better not to give it a full dose of the protective material. As a result it was only given a very diluted dose, suitable, as was thought, to its age. But in point of fact it was evidently given too little, especially as it was afterwards exposed to contagion by the most malignant virus. Case No. 15 is somewhat remarkable from the fact that two puppies, not intended to be used for experiments at all, became infected through carelessness, as I neglected to carefully disinfect my hands after handling case No. 15. Cases 17, 18, 19, 20, and 22 exhibited symptoms of the disease seven days after exposure to infection at Liverpool. When I saw them five days after their illness commenced there was no running at the eyes or nose, and no cough except in the case of two. In fact, their owner informed me that they were much better than they had been. They were at that time in a fair way to recover, when the weather became intensely cold, with a keen east wind, and to this cause we must attribute the subsequent pneumonia. In case 21 the veterinary surgeon at Liverpool, Mr. Sumner, states that the animal showed no symptoms of distemper, but suffered from congestion of the lungs and pleurisy. In every case the animals have recovered, or are doing so, and this is all the more remarkable, since a large number of malignant cases of the disease have appeared in non-protected puppies which were at the same show, some of which have died and others likely to succumb.

Finally, we have the statement of a St. Bernard breeder who allowed me to inoculate two puppies out of seventeen. Distemper had broken out in his kennels. Of these seventeen puppies fifteen are dead, the survivors being the two inoculated puppies, who, although kennelled with those which died, have shown no symptoms of the disease.

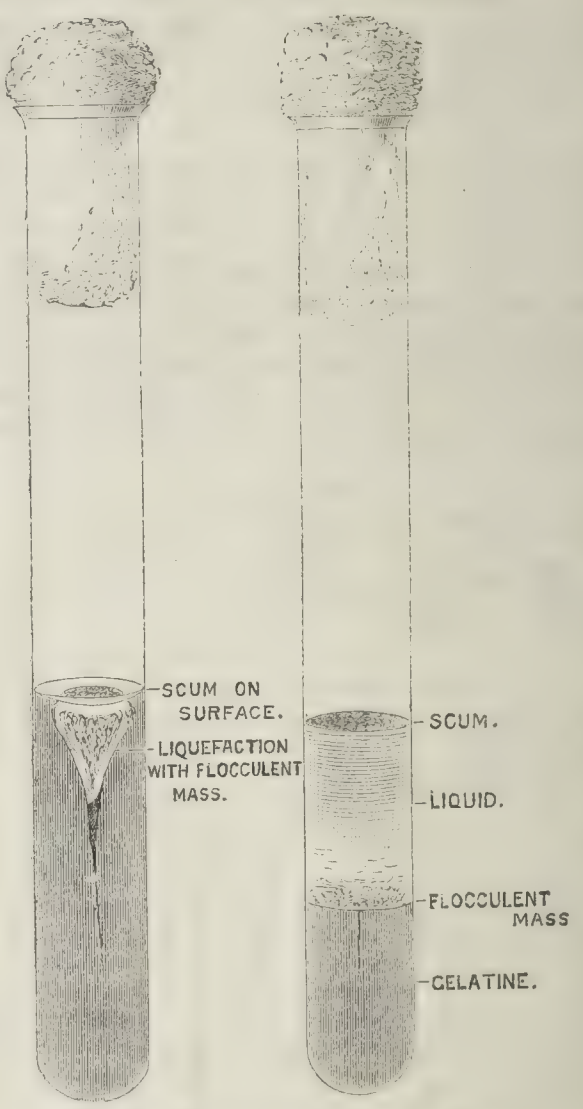


Fig. 3.—Third day after inoculation. | Fig. 3.—Tenth day after inoculation.

Without presuming too much, I think we may assume that whil five cubic centimètres of modified culture, added to five cubi centimètres of sterilised water, is sufficient to protect against mil distemper as produced by the culture of bacillus B, it is not quit strong enough to render animals immune against the extremel virulent bacilli met with at shows.

One thing, however, is clear, namely, that some kind o immunity is produced, and it is possible that dogs inoculated wit ten centimètres of undiluted material will prove to be immun against the stronger virus.

It will have been noticed that death in distemper results from complication, namely, pneumonia. In pure uncomplicated di temper we find a large number of bacilli and few micrococci onl

whilst in pneumonic distemper the latter are present almost to the exclusion of the former. This fact opens up the following important question, namely: Can a micrococcus such as is found in the dog, and which, when injected through the nose, has been proved by experiment to have no evil effect on the dog (see Cases 3 and 4), have a dangerous result or cause complication when associated with the bacillus B as in Case 1, or when succeeding the bacillus as in Case 8. That one of the micro-organisms is often associated with the other appears highly probable. It is a well-known fact that if a puppy contracts simple distemper it will infect others with a similar mild form of the disease. In an exactly similar manner we find that if a puppy suffers from pneumonic distemper, it will affect others with the same variety of the disease. Finally we know that if a dog suffering from uncomplicated distemper, be brought into the presence of one suffering from the pneumonic type of the disease, that animal will very soon develop the malignant type.

In conclusion, the bacillus is the primary cause of disease, namely, distemper; the micrococcus is the cause of the complication, namely, pneumonia; whilst the two when combined produce pneumonic distemper. Judging from facts observed in the course of my investigations I think it highly probable that there are two kinds of micrococci to be met with in the nasal fluid of distempered dogs, and it is perfectly possible that two or more kinds of micro-organisms may cause pneumonia.

For instance, the micrococci that were injected in Case 8, differed in appearance in their mode of growth, and in the severity of the symptoms produced by their inoculation from the micrococci found in the first cultures. May we not assume that the bacillus causes lesions in the lung, and in so doing prepares the ground for the micrococcus?

To three gentlemen I am considerably indebted for their kindness in greatly assisting me in these experiments, namely, Dr. Sherrington, of St. Thomas's Hospital, who has, besides affording me the use of his laboratory, given me his assistance and advice; Dr. Copeman, of the same hospital, who has been at great pains in photographing my cultures and sections, as also my fellow student Mr. A. Dalzell, who has assisted me in mounting the microscopic specimens.

LEPROSY IN CYPRUS.

A VERY interesting report on leprosy in Cyprus by Dr. Heidenstam, C.M.G., Chief Medical Officer, has recently been issued as a parliamentary paper. As to the date at which leprosy was first observed there are no reliable records, but local tradition is to the effect that it was brought into the island about three hundred years ago by pilgrims from Palestine, who established themselves in the neighbourhood of the monastery of Trooditissa. The natives believe that the disease is transmitted by inheritance; but Dr. Heidenstam, after a very careful investigation of the disease as it occurs in the sparse population of the island, an investigation of almost every individual case that has come under his notice, has arrived at the conclusion that the disease is "simply and solely due to the inoculation of the virus of a person affected into another up to that time free." He has met with many cases where, in his opinion, no other explanation can be accepted. Several of the cases quoted are certainly most remarkable. When about 55 years of age D., who lived with his wife in a village where there had been no case of leprosy, and whose family history was entirely free from any suspicion of leprosy, took as his servant M., a man from a village notably infected with leprosy. After a year or two M. began to show signs of leprosy, but remained in D.'s home, and was carefully tended for some years by D.'s wife. First D.'s wife and then D. himself began to show unmistakeable signs of leprosy. No other case occurred in their village, and their children, who had been sent away for education before M.'s arrival, have not suffered. Another man, M. of N., whose father, mother, and relatives were perfectly healthy, with no history of leprosy, left his native village and went to K., "where he contracted the disease." He returned home, but the peasants of the village remonstrated with his father, who housed him in a garden, where he ministered to his son's wants. The son was eventually admitted into the leper asylum, and two years after his father also sought admission, a decided leper. Only those two in the family suffered. It is a curious fact that the Moslems suffer much less than the Christians; in the Leper Asylum, out of sixty-one cases three only are Moslems. "This minority in the Turkish element can," in Dr. Heidenstam's opinion, "only be accounted for by the fact that a Turk avoids a leper as he would a mad dog." As to these three leprous Moslems, the history of one, who was a renegade, could not be traced; another, Y., was the intimate friend of a leper from Paphos; Y. was the only member of his family affected. The history of the third Moslem is most interesting: "His father, mother, grandfather, and grandmother, as well as six brothers, the eldest 30 and the youngest 4, were all perfectly healthy, and there was no other case in the village. He cohabited with a Christian woman, who after some time became a leper, and was ultimately brought to the leper farm, where a few years after he followed." The mode of spread of leprosy through the island teaches, in Dr. Heidenstam's opinion, the same lesson; with a few exceptions in which the villages were affected previous to the present century, and the history is very vague, in every village, "the arrival of the first leper in the village is easily ascertained, and the progress of the affection clearly defined." As an example he mentions Marathovouno, a village now notorious for the number of cases of leprosy. Up to a date about seventy years ago, this village had been quite free from leprosy. At that time a native of the village who had developed leprosy at Paphos returned home; the villagers with one exception shunned him; this exception was an old friend Yacomo. This man died a decided leper; he had no children after the disease declared itself, but the subsequent cases are all traced back to his family or relations. Several other parallel cases are given, and as a contrast the history of the village of Augastina is related. Early in the present century a leper arrived at the village; he was refused admission, but permitted to live in a cave at some distance, where food was sent to him, and where he died at an advanced age. No case had occurred since that time in the village. Towards the end of the last century most of the lepers in the island had spontaneously congregated on a piece of ground conveniently placed for begging, just outside the gate of Famagusta. The Pasha, disliking their presence so near his capital, ordered them all to "be made away with." A wealthy and benevolent dragoman, however, took pity on them, and obtained leave to locate them on a farm near Nicosia, which he offered as a free gift. Upon this farm the majority of the lepers in the island have ever since dwelt. In 1889 there were 63 lepers on the farm, the total number in the island being probably under 100. Since the occupation of the island in 1878 the Government has built stone houses for the lepers on the farm, and have made a small allowance of bread and money. This has had the desired effect of preventing the lepers from leaving the farm and roaming about the island on begging expeditions, and to this wise action may fairly be attributed the considerable diminution in the number of lepers in the island which Dr. Heidenstam shows has taken place.

THE METEOROLOGICAL ASPECT OF THE INFLUENZA EPIDEMIC.

AN important communication on "Influenza and Weather" was made to the Scottish Meteorological Society by Sir Arthur Mitchell, M.D., at its last meeting, held on March 31st, under the presidency of Professor Grainger Stewart. The paper embodied the results obtained by Sir Arthur Mitchell and Dr. Buchan from an exhaustive examination of the deaths registered as due to influenza in London, from the years 1845 to 1890. While certain errors were inevitable in all such inquiries, they believed that the figures disclosed certain phenomena of considerable importance, from which valuable lessons were to be drawn. Thus there could be demonstrated a well marked winter maximum and a well marked summer minimum of mortality, with a small secondary maximum in the second half of March and the first half of April. This was found to correspond with the mean distribution of temperature. When temperature was low, the number of deaths was high, and *vice versâ*. The distribution of deaths from influenza was essentially the same, speaking generally, as that from diseases of the respiratory system. Out of the forty-five years embraced in the period they had selected, there were five manifest periods of epidemic influenza, namely, 1847-48, 1850-51, 1855, 1857-58, and 1889-90. While the total mortality from influenza during the forty-five years was 4,690, the periods from December, 1847, to April, 1848, from March to May, 1851, from January to March, 1855, from November, 1857, to January, 1858, and from January to March, 1890, gave an united mortality, from the same cause, of 2,687, or 57 per cent. (*circa*.) In each of those epidemics it was

also to be noted that the rise to the maximum was exceedingly rapid after the disease had been recognised as epidemic.

From their inquiry they felt themselves justified in concluding that, though epidemics of influenza occurred during the winter, they were not connected with exceptionally cold weather, especially at their commencement, but rather with exceptionally warm weather, which was noted both before and during the epidemic. Having especial regard to the late epidemic, they observed that the total mortality from all causes had been much above the average, and this was not explained by the increased number of deaths registered as due to influenza. Thus, during the first four weeks of the year, when the mortality from influenza was at its maximum, the total number of deaths was 343, while the total mortality from all causes was 10,065, that is, 2,258 over the mean death-rate of the same four weeks for the previous ten years. The diseases which had yielded an exceptionally high general death-rate during the period were those of the respiratory, circulatory, nervous, and locomotory (rheumatism) systems—more particularly the respiratory. This was the more striking when it was remembered that the temperature had been exceptionally high and fogs had been absent. The diseases which had showed a diminished mortality in London during the prevalence of the epidemic were diarrhœa, dysentery, liver disease, measles, scarlet fever, typhoid fever, and erysipelas. As to the weather, the first three weeks of November had a temperature above the mean; the last week of November and the first two weeks of December showed a temperature below the mean; the last two weeks of December had a temperature above the mean; the first week of January had a temperature above the mean; the last three weeks of January and the first week of February, when the epidemic was at its height, had a temperature much above the mean, while, since that time to the middle of March, the temperature was below the mean. As to age, there had been a remarkable rise of the death-rate of all persons above the age of 20 during the four or five weeks immediately preceding the epidemic, so far as this could be fixed by registration statistics.

As to the spread of the epidemic from one locality to another, the mistake had frequently been made of assuming that it was only winds blowing over or near the surface of the earth which were concerned in the distribution of the germs. If the surface winds did not account for the successive distribution of the epidemic it was concluded that the germs had not been transported by the winds. But this was incorrect. It had now been virtually proved that the winds in a cyclone were drawn inwards towards its centre and then ascended in a vast aërial column to the upper regions of the atmosphere, whence again they flowed as an upper current towards any cyclone or cyclones that might surround them. Thereafter they slowly descended down the centre of the anti-cyclone to the earth's surface, over which they were carried in every direction. Owing to the known rapidity of these aërial movements, two or at the least three days were amply sufficient for this distribution. And it was during winter that this rapid and complete distribution of atmospheric impurities from country to country in Europe was effected. In summer time cyclones were rare and the wind system of Europe was more immediately connected with the Atlantic Ocean than during winter.

AUSTRIAN UNIVERSITIES.—During the winter semester 1889-90 the total number of students in the Austrian universities was 13,278. Of these 5,703, or 42.9 per cent. of the whole number, belonged to the medical faculties, Vienna having 2,589, Innsbruck 282, Gratz 575, Prague 1,703 (646 in the German, and 1,057 in the Czech faculty), and Cracow 554. In the winter semester of 1888-89, the total number of medical students in Austria was 5,666. As compared with last year, Vienna and the Czech faculty of Prague show a slight falling off, while the numbers in the other universities have increased.

LITERARY INTELLIGENCE.—A course of lectures on the growth and means of training the mental faculty, delivered by Dr. Francis Warner in the University of Cambridge in 1888-89, will shortly be published. An important work on vaccination in Germany, Holland, Belgium, and Austria (*Der Kuhpockenimpfung in Deutschland*, etc.), from the pen of Dr. M. Hay, has recently appeared at Vienna (Moritz Perles). Dr. A. Baer, the well known Austrian advocate of temperance, has recently published a work (*Die Trunksucht und ihre Abwehr*, Vienna: Urban and Schwarzenberg) dealing with the drink question in the encyclopædic fashion characteristic of German writers.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 16th day of April next, at 2 o'clock in the afternoon.

The following Committees will also meet:—

Tuesday, April 15th, 1890.—Proxy Voting Committee, 3.0 P.M.—Trust Funds Committee, 4.0 P.M. *Wednesday, April 16th, 1890.*—Journal and Finance Committee, 11.30 A.M.

April, 1890. FRANCIS FOWKE, *General Secretary.*

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 16th, July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.—A meeting of this district will be held at the Dispensary, Loughborough, on Wednesday, April 16th, at 3.30 P.M. The following communications have been promised: Mr. C. J. Bond: The Treatment of Enlarged Bursæ and Ganglia by Excision. Dr. H. Handford: Some Forms of Cardiac Dilation. Dr. F. W. Bennett: Recent Experiments on Nasal Respiration. Dr. F. M. Pope: Resorcin in the Treatment of Gastric Ulcer. Dr. J. Headley Neale: A case of Malignant Disease: Enormous and Rapid Enlargement of the Liver. Mr. R. Paul: A case of Compound Comminuted Fracture of the Leg. Dinner at the King's Head Hotel at 6 P.M.; tickets 5s. each, exclusive of wine. All members of the profession resident in the district will be welcomed. Notice of specimens or cases to be exhibited to be sent, before April 12th, to the Honorary Secretary, FRANK M. POPE, M.B., Leicester.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 17th, at 5 P.M. Dinner at 5.30. The subject, as settled by the Council, for discussion after dinner is the Influenza Epidemic. Members having any case or communication to bring before the meeting are requested to send the title thereof as soon as possible to W. M. KELLY, Honorary Secretary, Taunton.

SHROPSHIRE AND MID-WALES BRANCH.—The half-yearly meeting will be held at the Salop Infirmary, on Tuesday, April 15th, at 3 P.M. Papers have been promised by Messrs. Stephen Paget (on Cancer of the Breast), Webb, and Dr. Charnley. Members having any communications to make or papers to read will kindly inform the Honorary Secretary as soon as possible.—J. A. BRATTON, Honorary Secretary, Shrewsbury.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Town Hall, Walthamstow, on Thursday, April 17th, at 8.45 P.M. A paper will be read by Dr. Angel Money on Nocturnal Restlessness in Children. Visitors will be welcomed.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, Dalston, N.E.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this Branch will be held at Croydon on Thursday, May 8th.—P. T. DUNCAN, M.D., Honorary Secretary, Croydon.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, April 25th, at 3.15 P.M., in the Radcliffe Infirmary, Oxford. Gentlemen are requested to send to the Honorary Secretary, W. LEWIS MORGAN, 2, Broad Street, Oxford, notice of any papers to be read, or cases shown, on or before April 14th.

NORTH OF IRELAND BRANCH.—A general meeting of this Branch will be held in the Board Room of the Belfast Royal Hospital on Thursday, April 17th, at 4 P.M. Gentlemen who wish to read papers, show patients, exhibit specimens, etc., will kindly communicate as early as convenient with the Honorary Secretary, JOHN A. BYERS, M.D., Lower Crescent, Belfast.

BORDER COUNTIES BRANCH.—The next meeting of the Branch will be held at Lockerbie on the afternoon of Friday, April 26th. The hour of meeting will be notified on the circulars. There will be a dinner after the meeting. Notice of papers and cases to be read to be sent as soon as possible to the Honorary Secretary, JAMES ALTHAM, M.D., Birkbeck House, Penrith.

NORTH WALES BRANCH.—The intermediate meeting will be held at the Westminster Hotel, Rhyl, on Tuesday, April 15th, at 1 P.M., Evan Williams, Esq., President. After some formal business, the election of five representatives on the Court of Governors of the University College of North Wales will be proceeded with. Messrs. J. Richards and O. T. Williams will open a discussion on Influenza. The following papers will be read: On the Treatment of Puerperal Fever, by F. Imlach, M.D.; On the Surgical Treatment of Infantile Paralysis, by Robert Jones, F.R.C.S.Ed.; and on a surgical subject by Damar Harrisson, F.R.C.S.Ed.—W. JONES MORRIS, Honorary Secretary, Portmadoc.

METROPOLITAN COUNTIES BRANCH: WESTERN DISTRICT.—A meeting of the above District will be held on Friday, April 25th, at the Prince's Hall, Ealing. The chair will be taken by Dr. Ord, President of the Branch, at 8.30 P.M. Dr. Clement Godson will read a paper on Cancer of the Cervix Uteri.—C. A. PATTEN, Honorary Secretary, Marpool House, Ealing, W.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.

A MEETING of this District was held at the Royal Surrey County Hospital, Guildford, on Thursday, March 27th, Mr. T. M. BUTLER in the chair.

Next Meeting.—It was decided to hold the next meeting at Dorking on the last Thursday in October.

Honorary Secretary.—Dr. J. P. A. Gabb, Guildford, was re-elected for the ensuing year.

Papers.—Mr. T. M. BUTLER read a case of Suppression of Urine, owing to blocking of the ureter by a calculus. The other kidney had previously suffered in a similar way. The specimen was shown.—Dr. BOXALL read some unusual Cases of Death in Children, and showed illustrative drawings, etc.—Mr. A. A. NAPPER read a paper on Influenza, the recent Epidemic.

Dinner.—The members and friends afterwards dined at the White Lion Hotel.

SOUTH EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

A CONJOINT meeting of these districts was held at the Grand Hotel, Brighton, on March 26th, Mr. BABER in the chair.

Nurses' Co-operation Association.—A letter from Dr. HOLMAN was read concerning the proposed formation of a Private Nurses Co-operation Association, and a paper was circulated for the signatures of those who approved of this proposal.

Communications.—Dr. HOLLIS showed a patient suffering from Peripheral Neuritis.—Dr. SAMUEL WEST introduced the subject of Influenza, and the CHAIRMAN, Mr. VERRALL, Dr. HAYMAN, Mr. TODD, Dr. HOLLIS, Dr. RICHARDSON, Dr. MENZIES, Mr. ALBAN and Mr. KINNEIR joined in the discussion.

Next Meeting.—The next meeting of the East Sussex District will be held at Tunbridge Wells in May.

MELBOURNE AND VICTORIA BRANCH.

THE annual meeting of this Branch was held on February 12th.

President's Address.—The retiring President, Dr. FISHBOURNE, read an address, in which he dealt first with the amended Lunacy Act for the colony, which had come into force on the first day of last year. The part relating to the administration of the estates of lunatics was in many particulars satisfactory; but the new provisions concerning the management and treatment of the insane were, with few exceptions, "mischievous, unnecessary, or unworkable." Five certificates instead of two were now required before a lunatic could be placed under treatment. The medical man had no protection, as under the Imperial Lunacy Act, but was absolutely at the mercy of any released madman, and equally bad jury, who might think he had not acted in good faith. The results of thus increasing the difficulties of placing lunatics in confinement in the early stages of their complaint were deplorable. Licensed houses for private patients had been abolished, and no accommodation had yet been provided for the well-to-do classes. If it were permitted to found a properly equipped asylum for such patients, a much-felt want would be met. Provision had been made for boarding out suitable cases, and an extension of the system was desirable; but while wages were so high and the labouring classes so prosperous, it was not likely that offers to take charge of patients would be received from suitable persons. A great want in the colony was a separate asylum for criminal lunatics, meaning by that term prisoners who became insane after having become criminal. Provision for the voluntary admission of patients in imitation of the English Act was also badly needed, and there was as yet no adequate provision for dealing with idiots and imbeciles. Dr. McCreery, at Kew, had initiated a system of training idiot children with pleasing results. Dr. Fishbourne hoped the system might be extended, for there were many children in Melbourne who were so feeble-minded as to require instruction for which the State schools made no provision. In Victoria, in 1888, there was one registered insane person for every 300 of the population, while in New South Wales there was only one in 346. No explanation had been offered of this difference; but there was little doubt that, if the Victorian statute were strictly administered, the difference would be greater still. After severely criticising the proposed abolition of the asylums at Kew and Yarra Bend, which together had cost the country nearly half a million, and the placing of the patients in asylums built upon the cottage plan, like the one to be erected at Sunbury at an estimated cost of £180,000, Dr. Fishbourne proceeded to plead for the more thorough instruction of the graduates of Melbourne University in psychological medicine. He mentioned that an asylum for inebriates had been opened at Beaconsfield; but as, under the Inebriates Act, the patient could only be detained for three months, he feared the measure would be of little use. Dr. Fishbourne next criticised recent changes in the election of the new Board of Health, which, instead of being independent of the municipal councils whose proceedings it was its duty to control, practically consisted of these very bodies. The local health officers were not independent of local influence, and their remuneration was a mockery. Under these circumstances, there could be no check on "municipal selfishness," and it might be expected that sanitary abuses would be multiplied instead of being reformed.

Election of Officers.—The following office-bearers were elected for the ensuing year: *President:* The Hon. Dr. Le Fevre, M.L.C. *Vice-President:* Dr. Shields. *Secretary:* Dr. Kenny. *Treasurer:* Dr. Meyer.

Report of Council.—The retiring Secretary, Dr. MAUDSLEY, read the report of the Council, which showed a roll of members of 138, and a balance to the good of £35.

After the meeting, the health of the new President was proposed by Dr. NEILD and cordially responded to, and the health of the retiring President was proposed by Dr. HENRY, who took the opportunity of expressing his gratification at the contributions the different Branches of the Association had made to science during the past year. He thought that political federationists might well take a lesson with advantage from the organisation of the British Medical Association.

BRITISH MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 27, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Senior Professor of Medicine, Queen's College, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women, Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HENRY BROADBENT, M.D., Physician to St. Mary's Hospital, London.

The scientific business of the meeting will be conducted in twelve Sections, as follows, namely:

A.—MEDICINE AND THERAPEUTICS.
President: Sir DYCE DUCKWORTH, M.D.
Vice-Presidents: E. RICKARDS, M.B.; D. DRUMMOND, M.D.
Hon. Secretaries: ISAMBARD OWEN, M.D., 40, Curzon Street, Mayfair, W.; C. W. SUCKLING, M.D., 103, Newhall Street, Birmingham.

B.—SURGERY.
President: T. H. BARTLEET, F.R.C.S.
Vice-Presidents: BENNETT MAY, F.R.C.S.; J. G. SMITH, M.B.
Hon. Secretaries: F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingham; H. G. BARLING, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

C.—OBSTETRIC MEDICINE AND GYNÆCOLOGY.
President: T. SAVAGE, F.R.C.S.
Vice-Presidents: C. J. WRIGHT, M.R.C.S.: J. MURPHY, M.D.
Hon. Secretaries: J. K. KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, M.D., 192, Broad Street, Birmingham.

D.—PUBLIC MEDICINE.
President: A. HILL, M.D.
Vice-Presidents: J. B. WELCH, M.B.; A. S. UNDERHILL, M.D.
Hon. Secretaries: L. C. PARKES, M.D., 61, Cadogan Square, S.W. S. BARWISE, M.B., Clough View, Blackburn.

E.—PSYCHOLOGY.
President: F. NEEDHAM, M.D.
Vice-Presidents: S. H. AGAR, L.K.Q.C.P.; E. B. WHITCOMBE, M.R.C.S.
Hon. Secretaries: J. WIGLESWORTH, M.D., Rainhill, near Prescot; E. LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

F.—ANATOMY AND PHYSIOLOGY.
President: D. J. CUNNINGHAM, M.D.
Vice-Presidents: W. H. GASKELL, M.D., F.R.S.; B. C. A. WINDLE, M.D.
Hon. Secretaries: W. F. J. ALLEN, M.B., Mason College, Birmingham; W. P. HERRINGHAM, M.D., 13, Upper Wimpole Street, W.

G.—PATHOLOGY.
President: D. J. HAMILTON, M.B.
Vice-Presidents: C. A. MCMUNN, M.D.; G. SIMS WOODHEAD, M.D.
Hon. Secretaries: S. DELÉPINE, M.B., 6, Chapel Place, Cavendish Square, W.; G. F. CROOKE, M.D., Edmund Street, Birmingham.

H.—OPHTHALMOLOGY.
President: D. C. LLOYD OWEN, F.R.C.S.
Vice-Presidents: H. EALES, M.R.C.S.; J. B. STORY, M.B.
Hon. Secretaries: H. E. JULER, F.R.C.S., 77, Wimpole Street, W.; E. W. W. WHITE, M.B., 72, Newhall Street, Birmingham.

I.—DISEASES OF CHILDREN.
President: A. H. CARTER, M.D.
Vice-Presidents: W. THOMAS, M.B.; W. PYE, F.R.C.S.
Hon. Secretaries: H. HANDFORD, M.D., 14, Regent Street, Nottingham; A. FOXWELL, M.B., 47, Temple Row, Birmingham.

J.—LARYNGOLOGY AND RHINOLOGY.
President: J. ST. S. WILDERS, M.R.C.S.
Vice-Presidents: C. J. SYMONDS, F.R.C.S.; A. E. GARROD, M.D.
Hon. Secretaries: E. H. JACOB, M.D., 12, Park Street, Leeds; SCANES SPICER, M.D., 28, Welbeck Street, W.

K.—OTOLOGY.
President: C. WARDEN, M.D.
Vice-President: G. W. HILL, M.D.
Hon. Secretary: R. K. JOHNSTON, M.D., 22, Lower Baggot Street, Dublin.

L.—DERMATOLOGY.
President: JONATHAN HUTCHINSON, F.R.S., P.R.C.S.
Vice-Presidents: MALCOLM A. MORRIS, F.R.C.S.; H. RADCLIFFE CROCKER, M.D.
Hon. Secretaries: E. G. SMITH, F.R.C.S., 93, Bristol Road, Birmingham; T. COLCOTT FOX, M.B., 14, Harley Street, Cavendish Square, W.

Honorary Local Secretaries:
R. SAUNDBY, M.D., 83A, Edmund Street, Birmingham.
JORDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham.
A. HARVEY, M.B., 358, Wheeler Street, Lozells, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.
9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council, Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.
9.30 A.M.—Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. WALTER FOSTER, M.D., M.P.
9 P.M.—Reception by the Worshipful the Mayor of Birmingham in the Council House.

THURSDAY, JULY 31ST, 1890.
9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 1ST, 1890.
10.30 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.
9 P.M.—Reception by the President of Mason College and Mrs. Lawson Tait.

SATURDAY, AUGUST 2ND, 1890.
Excursions.

SPECIAL CORRESPONDENCE.

PARIS.

Influenza.—Transplantation of Skin in Burns.—Treatment of Porrigo Decalvans.—Treatment of Chronic Metritis.—Phosphorescence of Crustacea.—Foundlings in Paris.—General News.

AT a recent meeting of the Société Médicale des Hôpitaux M. Féréol stated that he met with one case of ascending myelitis complicating influenza. M. Hayem said that in marked anæmia the blood corpuscles are endowed with very complex movements. The entire corpuscle is contractile; sometimes it has prolongations endowed with movement; sometimes the corpuscle oscillates without changing its place, at others it moves to another spot in the preparation. M. Chantemesse said he had observed bodies exactly like those described by M. Hayem in the blood of patients suffering from influenza. M. Gaucher had found angina pectoris, suppurating otitis, mastoiditis, thyroiditis, and meningitis as complications of the disease.

M. Berger recently showed at the Surgical Society two patients in whom he had cured torticollis following burns by transplantation of skin. He makes a circular incision in the cicatrix as far as the deeper layers of the integument; the edges of the wound are then pulled wide apart, and one or two pieces of skin, measuring from 20 to 25 centimètres, which include the whole thickness of the cellular tissue and a small portion of aponeurosis at the base, are fixed in position by sutures. The skin is taken from over the scapula or from the front wall of the chest.

M. Brocq prescribes the following local treatment for porrigo decalvans. After shaving the head the scalp is washed with hot soap and water. After epilation of the affected regions, they are washed with a $\frac{1}{500}$ or $\frac{1}{250}$ solution of corrosive sublimate. A few hours later the following ointment is rubbed in:—℞ Hog's lard, 30 grammes; oil of sweet almonds, 4 grammes; glycerine, 4 grammes; hydragyrum vitriolatum, 1 gramme. The sublimate lotions and the ointment are applied morning and evening. Epilation is repeated three or four times. M. Brocq sometimes also uses the following lotion:—℞ Water, 400 grammes; glycerine, 1 grammes; corrosive sublimate, 1 gramme. M. Vidal applies lotion of essence of turpentine to the scalp, then tincture of iodine and finally rubs a thick layer of vaseline over the parts, which is then covered with gum plaster or laminated gutta-percha. Lailler, after epilation, applies frictions of the following preparation with a piece of linen:—℞ Water, 950 grammes; glyceri 50 grammes; bichloride of mercury, 1 gramme; hydrochlor of ammonia, 1 gramme. The linen which has been used

he frictions is placed on the head, which is then covered with a ap. The scalp is washed once a week. The treatment lasts rom twelve to fifteen months. M. Besnier, after epilation, washes he head daily with warm water containing $\frac{1}{2000}$ of boric acid and oap. The affected spots are rubbed every evening with vaseline, o which a very small quantity of acetate or sulphate of copper 0.50 to 1 per cent.) is added. If the scalp shows signs of inlammation $\frac{1}{20}$ of boric acid is added to the vaseline instead of he copper.

M. de Sinéty treats chronic parenchymatous metritis as follows: Twice a day for a fortnight wafers containing 20 centigrammes of reshly powdered ergot of rye and 30 centigrammes of powdered cinchona are administered. The treatment is discontinued for ifteen days, and then resumed. Shower baths, lasting from ten to ifteen minutes, and ordinary or medicinal baths are taken every wo or three days. In advanced stages of the affection seaathing is recommended. Thermal baths often prove beneficial. When the uterus is soft, red, and enlarged, bleeding by leeches or scarification is used every four or five days. After scarification, lressings of cotton wool impregnated with glycerine are applied. When the organ is pale, hard, and resisting, the actual cautery s employed. In the interval, suppositories, to which 1 gramme of potassium iodide is added, or cotton wool plugs saturated with 50 grammes of neutral glycerine, 6 grammes of potassium iodide, and 4 grammes of tannin, are applied.

In investigating the cause of phosphorescence in certain crustacea, M. Giard observed a *talitre*, which at 10 o'clock on a moonlight night, and at several yards' distance, appeared to be illuminated throughout by a brilliant green light. He cut off one of the creature's legs and submitted it to microscopical examination; this revealed quantities of bacteria swarming between the muscles, which were deteriorated by the action of the microbes. M. Giard inoculated the blood of this luminous *talitre* into other crustacea, which became phosphorescent after two or three days. Salt water in which fragments of phosphorescent *talitre* were placed became suffused with opal tints in a few hours. Crabs and shrimps placed in this water rapidly acquired a phosphorescence, which could be rubbed away with the finger.

When the City of Paris suppressed the *tours*, or receptacles for foundlings, a *bureau d'abandon* was established as a substitute. The Council of the Assistance Publique now proposes to increase the number of these offices. It is hoped that this measure may make infanticide less frequent. The present *bureau d'abandon* is in a very quiet street near the Observatory; there is always on duty one female official, but only one at a time. These women take an oath never to reveal the secrets which they learn in the course of duty. They are instructed by the City of Paris not to reveal these secrets even to their superiors, or to the representatives of the law. The child is brought to the *bureau d'abandon*, by its mother, a relative, or a friend, sometimes by the midwife; its certificate of birth must be furnished, the names of the parents are asked, but they may be withheld, and generally are so. The person who deposits the child is then told that if left at the office it cannot ever be claimed. If, however, the mother wishes to keep her infant she will receive help every month during the suckling period, and in many cases the mother encouraged by this promise keeps the child. It is proposed to have *bureaux d'abandon* in every hospital for children.

The Assistance Publique obliges students presenting themselves for the examination for the *external* to produce a certificate showing that they have been revaccinated at a proper period. The *Progrès Médical* blames the faculty for not taking similar precautions. Medical students register and pay their fees without any certificate of vaccination being asked for. Many lives are thus lost which might be saved.

M. Lechoppé and Dr. Floquet have recently published a book entitled *Droit Médical; ou Code des Médecins, Docteurs, Officiers de Santé, Sages Femmes, Pharmaciens, Etudiants, etc.* Foreign medical students wishing to study at any of the French faculties will find all information which they require in this work.

A case of fasting is reported from Bourdeilles (Dordogne) in a woman who has passed fifteen days, under strict supervision, without taking food of any kind. She is rather thin, but not at all emaciated.

A midwife has been condemned by the Merville tribunal to six months' imprisonment and a fine of £2 for culpable negligence in the execution of her duties. Between the beginning of January and February 19th seven women attended by her died of puerperal fever.

A circular has been addressed by the Minister of the Interior to the mayors of towns containing over 40,000 inhabitants enjoining them to send a daily bulletin with a list of the deaths occurring every day and those recorded for the corresponding day during the five preceding years.

Dr. Gendrin, physician of the Paris hospitals, has bequeathed 20,000 francs (£800) to the Assistance Publique. Mme. Emilie Chambre has bequeathed part of her fortune to the Pasteur Institute.

VIENNA.

Balsam of Peru in Tuberculosis of the Skin, Bones, and Joints.—Compensatory Hypertrophy of the Sexual Glands.—Trephining for Cerebral Tumour.—Multiple Atheroma of the Skin.

At the first congress of Polish surgeons at Cracow, Dr. Jassinski, of Warsaw, read a paper on the treatment of tuberculosis of the skin, bones, and joints with balsam of Peru. He has employed it most frequently after arthrectomy of the elbow joint. He used the pure balsam, which he obtained directly from the Republic of San Salvador, and on which he could not succeed in cultivating microorganisms. He agreed with Binz in ascribing the effect of the balsam to the cinnamon which it contained. He had employed it in 11 in-patients and 16 out-patients. Tuberculosis of the elbow joint he could cure in from three to four weeks. No other method gave such satisfactory results. No unfavourable after-effects were observed, and a cure was obtained in all the cases. He had used the balsam in tuberculous spondilitis. In these cases he diluted it with alcohol and injected it after three or four days.

Dr. Ribbert has tried to decide whether there is a compensatory hypertrophy of the sexual glands analogous to that of the muscles and the kidneys. In a paper read at the last meeting of the German Physicians and Scientists he said he had used two or three young animals of the same age for each experiment. In one or other of these he removed one of the testicles, one of the ovaries, or several mammæ, and after a long time compared the remaining glands with the corresponding organs of control animals. He found that the testicles and mammæ left behind had invariably grown more considerably than in the normal animals. With regard to the ovaries the conditions were not so clear. Dr. Ribbert, however, came to the conclusion that after the extirpation of one of the ovaries a considerably larger quantity of ova had developed in the other one. As to the experiments of Nothnagel, who denied the existence of a compensatory hypertrophy of the testicle, Dr. Ribbert believed that these experiments actually confirmed his assertion. Nothnagel found that the weights of the organs left behind did not exceed the highest weights of normal testicles. But, though this was correct, the average weights of these testicles exceeded the average weights of normal testicles by one-fifth in full-grown animals, and by one-third in young animals. Observations on man also favoured his view. In two men, aged about 40, with one testicle atrophied, the other gland was abnormally large. Histological examination showed that hyperplastic processes exclusively played a part in the enlargement of the organs. The increased growth of one of the sexual glands after removal of the other could not, of course, be explained in the same way as compensatory hypertrophy of the kidneys. It was probably due to the action of the nervous system, and this perhaps in such a manner that, owing to the want of the impressions which were conveyed from the removed organ to the centre, an effect was produced on the other gland.

A locksmith, aged 30, was recently admitted into Professor von Schrötter's clinic with paralysis of the left upper extremity, severe paresis of the left lower extremity and the facial nerve, and epileptiform attacks, the number of which reached 40 a day. The man had, when 7 years old, fallen on his head from a height, and had sustained an injury to the right parietal bone. Professor von Schrötter diagnosed a tumour of the region of the right central convolutions, and recommended operation. Professor Albert trephined at the spot indicated by Professor von Schrötter, and a tumour was found adherent to the dura mater. The growth was removed, and on the very day of operation the number of epileptic attacks fell to five, and on the second day there were none at all.

At a recent meeting of the Prague Society of German Physicians, Professor Chiari related a case of universal multiple atheroma of the skin in a man, aged 74. The atheromata varied in size from scarcely perceptible nodules up to the size of a nut. They were partly cutaneous and partly subcutaneous. In some places, such as the

dorsal aspect of the forearms, more than 20 were counted over an area of 10 square centimètres. The tumours were not grouped symmetrically. Histological examination showed that they had developed from the sebaceous glands and the hair follicles. The opening of the ducts of the glands was blocked by masses of horn, which caused retention of the secretion, young hairs, and epidermic cells. Professor Chiari maintained, in opposition to Franke and others, that the so-called subcutaneous atheromatous cysts should be looked upon as real products of retention of sebaceous glands, or hair follicles.

SWITZERLAND.

Bromide of Ethyl as an Anæsthetic.—Treatment of Influenza.—Swiss Medical Faculties.

DR. E. HAFFTER, of Frauenfeld, the editor of the *Correspondenz-Blatt für Schweizer Aerzte*, draws attention to bromide of ethyl (æthylum bromatum, $C_2 H_5 Br$.) as an excellent general anæsthetic for minor surgical operations, such as extraction of teeth, evulsion of nails, incision of whitlows, carbuncles, or abscesses, excision of sebaceous cysts, disarticulation of digits, *brisement forcé*, circumcision, tenotomy, etc. The dose required varies according to the patient's age and constitution, from 5 to 20 grammes. The whole amount required should be at once poured into an impermeable mask, which should be applied quite close to the patient's mouth and nose. Analgesia is complete, and the operation may be safely commenced, in from fifteen to twenty seconds. As a rule, there is no preliminary struggling or excitement. The anæsthesia, however, does not last long, sensibility returning to its normal condition in about twenty seconds after the cessation of the inhalations. No disagreeable after-effects are ever observed. When employed in the doses indicated, bromide of ethyl is quite innocuous, and may be safely administered to all sorts and conditions of patients. A certain small proportion of persons, however, especially habitual drinkers, cannot be brought under the influence of bromide of ethyl to the extent that is desirable. These statements refer solely to a pure preparation of the drug, such as Merck's æthylum bromatum purissimum. It may be added that bromide of ethyl has already found ardent advocates in Russia. Thus, in the *Meditzinskoïe Obozrenië*, No. 13, 1889, p. 64, Dr. Lev M. Kheifetz, of Odessa, states that he has tried it in 250 cases of tooth-extraction, and in several of incision of whitlows and perirectal abscess, and has come to the conclusion that it is effective, safe, and exceedingly convenient in practice, as no assistant is required nor any special appliances beyond Esmarch's chloroform mask. The total amount of the bromide required in an individual case is about half an ounce, according to Dr. Kheifetz. Bromide of ethyl, if impure, imparts a disgusting garlic-like odour to the patient's breath, causes nausea, vomiting, and diarrhœa, and, moreover, is comparatively ineffective. Commercial preparations (made after the so-called German method, which consists in treating bromide of phosphorus with alcohol) are usually impure. Dr. Kheifetz uses Kranzfeld's bromide of ethyl prepared after the "French method," by treating bromide of potassium with alcohol and sulphuric acid.

Professor Hermann Eichhorst, of Zurich, says that in the last three cases of influenza seen by him he obtained very striking results from subcutaneous injection of pilocarpine. Neuralgic pains were successfully treated by the internal use of antipyrin or phenacetin, as well as salicylic acid given in one-gramme doses every hour until noises were heard in the ears. As a diaphoretic, he used with good results a hot infusion of elder or linden flowers. He also tried apple-water, so warmly recommended by Professor O. Liebreich, of Berlin, but "did not observe any good results beyond an unpleasant abdominal pain and sometimes diarrhœa." Quinine, eulogised by older writers as almost a specific for influenza, proved in Professor Eichhorst's hands, as a rule, exceedingly unsatisfactory.

The total number of students in the five Swiss medical faculties during the winter session 1889-90 amounted to 934, the highest figure on record. Of that number 127 were studying at Basle, 289 at Berne, 198 at Geneva, 34 at Lausanne, and 289 at Zurich. Among the 934 there were 136 women. Of these, 55 were attending lectures at Berne, 26 at Geneva, 1 at Lausanne, and 54 at Zurich. The Geneva Dental School was attended by 43 students, 5 of whom were ladies.

CORRESPONDENCE.

THE UNIVERSITY OF LONDON AND DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—The letter in the JOURNAL of April 5th from Mr. Macnamara is truly discouraging to the cause of London students desiring university degrees. It becomes more and more evident that opposing interests of the various examining bodies necessarily form insurmountable obstacles in the way of their arriving at any solution of the problem. The London student cannot therefore look forward with any hope of benefit arising out of their conferences and deliberations, and must be content to wait for the time when a sufficiently strongly constituted association of our teaching colleges will be able to carry the much needed comprehensive scheme of a true university in the face of existing institutions. Meanwhile, however, the present University of London, without in any way lowering its standard of examination, might bring its medical degrees within reach of a much greater number of students by simply making some alterations in the regulations, namely:—1. By holding the examinations more frequently; 2, by re-examining unsuccessful candidates in those subjects only in which they have failed after whatever interval the examiners may fix.

To "cram" for the matriculation is now practically a necessity, for it requires, to say the least of it, a most unusual effort to support an intelligent memory of about twelve subjects at one time—an effort which many otherwise clever men are unable to sustain. Holding the examination every three months, and giving candidates credit for the subjects in which they had satisfied the examiners in cases of partial failure, would give students the option of taking up the subjects in two parts, without much delay, with less effort, without "cramming," and with greater interest, and would largely increase the number of matriculators.

With regard to the Preliminary Scientific, the majority of students have already begun their anatomical and physiological studies by that time, and would be far better able to meet the requirements of the University if they were not obliged, as at present, to devote their available time to all four subjects at once.

Again, at the "Intermediate" examination, when the anatomy is well known to be stiff, it would be preferable to take that subject alone, or with physiology, and the chemistry and materia medica six months later.

Those who go up for the Final M.B. are, for the most part, in practice or doing appointments, and would find it much less exhausting and more practicable to divide the subjects.

With all the advantages we possess with regard both to teachers and opportunity for scientific and clinical study, the standard of the London University ought not to present great difficulties to the bulk of London students if the Senate would make the concessions I have indicated.

The great strain of these concentrated ordeals and the ill-health they often produce—the traditional ten hours a day reading of the "London man," the stories which go the rounds of good men ploughed in one subject, the reputation in the outside professional world of "examination men" and "theoretical physicians," etc.—all act upon the young man's mind to deter him from attempting the "higher flights" of medical qualification offered in Burlington Gardens.

I feel assured that the majority of London men—graduates and undergraduates—will agree with me, that if the curriculum were thus made more inviting and less exacting a far greater number of students would be attracted to it, and we should number amongst us a smaller proportion of those who attain distinction more by their mnemonical than by their scientific powers, and who are only too readily regarded by their professional brethren in practice as types of the London University.—I am, etc.,

AN UNDERGRADUATE.

THE SURGICAL TREATMENT OF IMPACTED LABOUR.

SIR,—Dr. Leith Napier's "pernicious absurdity" and "comment is superfluous" constitute no argument. The mortality of complete placenta prævia is terrible. We have no exact knowledge of how great it is, though Spiegelberg regards the maternal mortality as being at least 30 per cent. Depaul gives 25 cases with 14 deaths, Heckar out of 42 cases lost 16, and the fœtal mortality by the same authorities is given as running between 50 and 75. I have known personally of 7 cases and they have all died. Surely these

facts are enough to justify any kind of suggestion for dealing with this terrible catastrophe; and now that I know what I do of amputating the pregnant uterus, I feel sure that it would be a great gain to employ this treatment for placenta prævia. My suggestion, however, is a tentative one, and will be soberly discussed by writers who have a better choice of language than Dr. Leith Napier.

I feared that some one or other would be led into the conclusion that, in speaking of the mortality of forceps work, I alluded to the modern practice of helping the fœtal head over the perineum, and Dr. Leith Napier has made this blunder; but my paper was concerning impacted labour, and my statement that the long forceps operation for pelvic contraction resulted in a maternal mortality of 1 in 7 or 8 is given on the authority of Simpson and Ramsbotham.

In the *American System of Obstetrics*, published only last year, and therefore quite within the period covered by Dr. Napier's challenge, we find that the use of forceps in cases of deformed pelvis is most fatal, the death-rate amongst mothers being as much as 30 or 40 per cent. Hugenberger and Williams give it as 60 and 70 per cent. mortality for the fœtus. Bear in mind these figures are taken from the experience of skilled obstetricians, and they therefore by no means represent the percentage of mortality experienced in disasters in outlying districts at the hands of men who cannot have the skill which Dr Leith Napier pretends to, simply by reason of the rarity of their experience in such cases. The mortality, therefore, of these operations is put in the books at a minimum; and I feel sure the more I know and the more I hear of such cases that if we knew the facts, we should be horrified at the mortality of all these obstetric operations.—I am, etc.,

Birmingham. LAWSON TAIT.

JOHN HUNTER AND WILLIAM CLIFT.

SIR,—With reference to the very interesting communication of Dr. Finlayson respecting the above, I am able positively to identify the well-known handwriting of Mr. Clift, having in my possession a large portion of his diaries, some of which give full particulars of the destruction of the Hunterian manuscripts by Sir Everard Home, Bart., of which I published a short account in the *Times*, when writing a biographical notice of Clift, immediately after his death. I think I am able to answer Dr. Finlayson's question as to "how and where did Dr. McKellar obtain such a volume?" I attended the sale of the effects of Mr. Clift, at his residence, Stanhope Cottage, Hampstead Road, and purchased a large number of his books, engravings, and autographs, and amongst the latter several lots described as "waste paper." These precious lots, tied up in several large parcels, contained his diaries and valuable correspondence with Sir Joseph Banks, Wollaston, Davies-Gilbert, Sir Humphry Davy, Cuvier, Livingstone, etc. Whilst the sale was going on one of the attendants came to me in a great hurry to tell me that some men were opening my lots. Representing this to the auctioneer, he at once stopped the sale until all my lots were carried upstairs into a spare room, the door locked, with directions to give me the key, but when I examined them I found several parcels opened and in great disorder, and scattered about the hall. Is it not possible that this identical volume was one of them, and purchased by or given to Dr. McKellar? With regard to the destruction of the Hunterian manuscripts by Sir Everard Home, I thoroughly agree with Dr. Finlayson that some hitherto obscure points in John Hunter's or Sir Everard Home's affairs might be cleared up by the entries or correspondence. Many years ago a former editor of the JOURNAL, Dr. Peter Hennis Green, gave me a long and very interesting paper, which I lent to Sir James Paget, which he published in one of his valuable catalogues of the Hunterian Museum. Although I had not the slightest doubt of its being the writing of Hunter, to add to its value I submitted it to Mr. Clift, asking him to state in writing what he thought of it. This is his characteristic reply: "Dear Stone,—This manuscript account of the various operations for the relief of hydrocele is undoubtedly in the genuine handwriting of John Hunter; having seen him write hundreds of times and having also transcribed more of his handwriting, during his life and since his death, than perhaps any other individual living or dead.—WM. CLIFT. May 6th, 1841.

"The caligraphy, orthography, and punctuation afford but a lame excuse to Sir Everard Home for destroying all Mr. Hunter's manuscripts, 'because they were unfit to meet the public eye.' The sense is strong enough and clear enough for those who are not wilfully blind. 'There are none so blind as those who won't see:' Old Proverb.—Roy. Coll. of Surgeons, Lincoln's Inn Fields, May 6th, 1841."

Mr. Clift always insisted that the ponderous volumes, *Home's Comparative Anatomy*, were all written by Hunter. At the same sale I also purchased a small parcel of books, in one of which Clift had written: "The child's 3 Letter Book by Sir Everard Home, Bart. His only genuine work."

With regard to the rare engraving by Sharp of Hunter, I purchased at the same sale the identical proof which Hunter gave to Mr. Clift.

If Dr. Finlayson contemplates writing a life of Clift I shall be very happy to assist him. I have often wished that such a man as Sir James Paget, so intimately acquainted with all the work of Hunter, would write his life, as so much has been discovered since the very good life of him by Drury Ottley.—I am, etc.,

THOS. MADDEN STONE.

SHALL WE EAT TUBERCULOUS MEAT?

SIR,—Under the above heading there appears a leading article in the JOURNAL of April 5th, criticising the verbatim report of a trial at Glasgow filling 326 pages, and containing 5,430 questions and answers. Thirty-three witnesses were examined, and lengthy speeches were made by council and the judge. The very title of the article is misleading and calculated to prejudice. The question tried at Glasgow was not "Shall we eat tuberculous meat?" It really was whether certain carcasses should be destroyed; but the great question fought out was, whether meat from animals which during life offered appearances of perfect health, and after slaughter were found to have been suffering from localised tuberculosis, should be permitted to be used for food.

I beg to mention a few facts from my evidence at the trial, which occupies 40 pages, and includes 525 answers, which I think are not altogether unworthy of consideration, but would refer your readers to the volume of evidence as containing many other important facts.

In the first place, a word as to the origin of the agitation on this question. It undoubtedly originated in the year 1888, not with medical men or sanitarians or pathologists, but with veterinary surgeons assembled in congress at Paris. With all respect for veterinary surgeons, and for the president of the congress, a most distinguished experimental physiologist, I submit that a resolution as to the origin and pathology of tuberculosis in man is not best solved by them, and more particularly not by a vote taken at a public meeting. Yet it was in such a meeting that the resolution was carried with acclamation condemning *in toto* as unfit for food meat from animals which, after slaughter, exhibit a trace, however minute, of tubercle. This resolution was mainly relied on by the prosecution at Glasgow, and outweighed the decree of the French Government, which expressly sanctions the use of such meat, a decree passed immediately after.

1. Up to the passing of this resolution the sanitary authority of Glasgow, like every other one in Great Britain, sanctioned the use of such meat.

2. At the present time the vast majority of medical officers and other authorities sanction its use.

3. The resolution was not founded on facts proving that such meat is infectious, but merely on theory.

4. Every-day experience proves that meat apparently healthy from animals which after slaughter showed localised tubercle may be eaten with impunity when cooked. In fact, if official statements are correct, a large proportion of the meat in general use has such origin.

5. There are numerous experiments proving that no one has hitherto succeeded in infecting with tubercle by means of such meat, even when raw, whether inoculated into the tissues, injected into the blood, or ingested into the stomach.

6. There are facts proving that meat actually tubercular has been eaten for years with impunity.

7. There is no existing law in any country which condemns such meat.

8. The use of meat from animals suffering from localised tuberculosis is expressly sanctioned by the laws of almost every European country, including France, Belgium, Holland, Prussia, Bavaria, Saxony, etc. The Governments of some of these countries at least may be assumed to be acting upon the advice of competent persons.

9. No hygienist, and no work on hygiene or pathology of recognised authority, condemns such meat.

10. Several of the greatest living authorities expressly regard it as quite free from danger. The illustrious Koch says there would be no danger from the meat, but only in "eating the tubercular lungs, glands, etc." Baumgarten is equally clear on this point; Cornil, Nocard, Dujardin-Beaumetz, Pettenkofer, and others hold the same view.

11. Those gentlemen in this country who now condemn totally the flesh of slaughtered animals which exhibit localised tuberculosis allowed it to be eaten before the resolution, and have only changed their practice since, and in consequence of the resolution; but not one fact was given to warrant the adoption, nor have those sanitarians in this country who have adopted the resolution, since then brought forward one fact in support of their change of opinion.

12. Localised tuberculosis, it is well known, may never spread; it may be removed by the knife, and the disease be cured. Hence the existence of localised tuberculosis does not imply that parts of the body distant from the infected part are tubercular, or could infect if eaten cooked or raw.

13. Human and bovine mothers, far advanced in tuberculosis, bear children absolutely free from tubercle; therefore, large parts of their bodies must be absolutely free from tubercle, while other parts are seriously infected.

14. Men and women have been proved to have recovered from pulmonary phthisis, and to have children free from tubercle. The disease must have been localised, as no case of recovery from generalised tuberculosis in man or beast is on record.

15. Bovine tuberculosis is alleged by veterinary authorities to be on the increase; so, undoubtedly, is the consumption of meat by our population. Yet tuberculosis in man is diminishing, although the use of meat from animals with localised tuberculosis has been general.

I have trespassed too long on your space, and yet have given only a few, but I hope not entirely valueless, illustrations of what was actually advanced at the trial, and is recorded in the volume treated so scurvily in your article. If you would trouble to look through the book I feel sure you would find much that would be worth laying before your readers, though, in candour, you might well consider that the witnesses were not at their best when under the lash of a hostile advocate, not in the least concerned to ascertain the truth, but to win his case, on the instructions laid before him. Many an able man breaks down under such an ordeal.—I am, etc.,

THOS. WHITESIDE HIME, M.D., B.A.

Horton Road, Bradford.

SPINAL LOCALISATION.

SIR,—Dr. Macewen's case of Localisation of a Limited Lesion of the Spinal Cord, described in the JOURNAL for April 5, 1890, is an excellent illustration of the possibility of accurately localising a lesion of the spinal cord by observing in detail the extent of the resulting paralysis and by appreciating the relations of the affected muscles to the nerve roots and spinal nuclei. From an examination of a large number of similar cases[1] I have been enabled to work out the clinical phenomena of a lesion at any level of the spinal cord, and a reference to the table on p. 4 of my book, or on p. 1,382 of the JOURNAL, 1888, vol. ii., will at once show that the symptoms of Dr. Macewen's case indicate a hæmatomyelia involving that portion of the spinal cord, whence arise the nerve roots from the sixth cervical to the first dorsal, both inclusive. So far, therefore, Dr. Macewen's localisation of the lesion is confirmed, not only, as he says, by physiological data, but also by the whole of the very considerable amount of clinical evidence which I have been able to obtain, evidence to which this case, in common with those of Bruns[2] and others, lends additional support.

Dr. Macewen suggests, however, that as in his case there was, in addition to the paralysis of the enumerated nerves of the brachial plexus, a temporary paralysis of the intercostal muscles but no serious affection of the lower limbs, therefore we may regard the lesion as specially implicating the direct pyramidal fibres, and the latter as being the nerve channels from the brain to the upper limb and intercostal nerves. This suggestion, which furnishes the novel and therefore the most interesting portion of Dr. Macewen's paper, does not, in the light of a large experience of cases of the nature referred to, appear to me to be warranted, unless, as is pointed out in the editorial remarks upon the case, the evidence of a necropsy distinctly showed the direct pyramidal tracts to have been picked out by the lesion.

Professor Horsley[3] has shown that in the case of tumours pressing upon the spinal cord the direction of invasion of paralysis is from the level of the lesion downwards, and on p. 81 of my own work, above referred to, I have pointed out that similarly in cases of hæmatomyelia, the direction of recovery of paralysis is from below upwards. In other words, when we have a pressure lesion of the cord, whether from hæmorrhage or tumour, the muscles supplied from below the lesion are more seriously implicated the nearer their spinal nuclei lie to the seat of the lesion. This is a general law the explanation of which is by no means clear, but which applies to all muscles equally with the intercostals. Hence then the fact that in Dr. Macewen's case the hæmatomyelia in the lower cervical region was accompanied by more marked and more enduring paralysis in the intercostal than in the lower limb muscles is but an example of this general law, a law which from its applicability to the muscles of the lower limbs cannot be dependent merely on the supposed distribution of the direct pyramidal tracts to the brachial plexus and upper intercostals.

In fact Dr. Macewen's case itself illustrates the general application of the above rule, for with the secondary changes which followed the injury we find the paralysis extending downwards to the lower limbs, and, with the subsequent recovery, we again find it clearing up from below upwards. We also find that shortly after the infliction of the injury the plantar reflex was present, whereas all reflexes of higher origin were in abeyance—another indication of the greater perfection of the motor mechanism at a greater distance from the lesion.

On these grounds, therefore, it would appear that the suggestion as to the connection of the direct pyramidal tracts with the brachial plexus and upper intercostals, although possibly correct, cannot be regarded as established by the above case, the results of which must depend on the as yet obscure but more general condition which determines the varying intensity of paralysis below the level of a pressure lesion of the spinal cord.—I am, etc.,

WILLIAM THORBURN, F.R.C.S.,
Assistant Surgeon Manchester Royal Infirmary.

[1] In *Brain*, January, 1887, and October, 1888; JOURNAL, December 22nd, 1888, and more fully in my "Contribution to the Surgery of the Spinal Cord."

[2] *Deutsche med. Wochenschrift*, 1889, No. 48.

[3] *Med.-Chir. Trans.*, lxxi.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PRESCRIBING CHEMISTS.

AN inquest was recently held at Halesowen touching the death of a child aged 12 months. The child, who had been ailing for six months, was taken to a chemist, who, according to the evidence, examined it, and said it was suffering from consumption of the bowels. He prescribed for it and supplied some medicine for the mother to give the child, for which he charged 2s. 6d., and requested the mother to bring deceased again in a week's time. A week afterwards the mother took the child to the chemist's shop and told him how the child slept after taking the medicine. He replied that it was a good sign that deceased was getting better. He then gave her some more medicine and charged the mother 1s. for it, and the latter continued to give it to deceased until the day it died. A neighbour corroborated the evidence of the mother as to the sleeping of the deceased after taking the medicine. Dr. Ord said he examined the deceased after death and found the body in a very emaciated condition, but he was unable to say what the real cause of death was. He had no doubt death resulted from natural causes. The bottle containing the medicine was produced, upon which the coroner remarked that he thought the jury would require some explanation as to the composition of the medicine, as the evidence showed that after taking it the child became very sleepy. He also pointed out that it was unusual and illegal for a chemist to take such a course.

At the request of the jury the chemist was called in and explained the ingredients of the medicine, which Dr. Ord said were not injurious. The coroner said that the chemist should have advised the mother of deceased to take the child to a medical man. The chemist is reported to have said that he had been in practice for thirty-five years, and had on some occasions acted in the absence of medical men. It was the first case of death under his treatment.

The jury returned a verdict of "Death from natural causes," and also expressed the opinion that the chemist had acted improperly and against the law in treating the case of the deceased, and that he should have advised the mother to take the child to a medical man. The coroner advised the chemist to act on the recommendation of the jury in future.

CONVICTION OF A MILK SELLER.

WILLIAM BROWN, of Forester's Road, Mile End, trading as the Farmers' Direct Milk Supply Company, recently appeared at the Thames Police Court to answer four summonses charging him with selling milk deficient in cream. The prosecuting counsel is reported to have stated that the defendant was selling milk as "pure milk" at 2½d. a quart, and a genuine article could not be sold at that price. There had been prosecutions against the defendant by vestries, and last week he was fined as much as £22 at Worship Street. Defendant contracted with a butter factory for their milk, which he mixed

with a little pure milk. This was a great injustice, both to the genuine traders and the public. Three summonses were formally proved, showing, it was stated, that the milk in these cases was deficient in 12, 35, and 30 per cent. of cream respectively. Mr. Lushington said the summonses appeared to be for practically one offence, although he must convict in each case. Defendant would be fined £20 on the first summons, and 1s. each on the others, with £2 10s. costs.

CONVICTION FOR SELLING A DANGEROUS DRUG.

EDWARD DAVIES, who is reported to have sold as a specific for colds what proved to be a strong solution of ammonia, has been charged at the Worcester Quarter Sessions with having by this means caused grievous bodily harm to a carpet weaver named Reece at Kidderminster, who was badly injured by the irritant action of the liquid. Davies, who maintained that he told purchasers to sprinkle the stuff on a handkerchief and merely to inhale it, was sentenced to a month's hard labour.

CONTRACTS NOT TO PRACTISE.

ALIQUIS asks whether an agreement entered into between himself and a friendly society, stating that the former shall not practise for a period of twelve months within the radius after leaving the society, would hold good. It was not stamped.

*** It would seem that it may be assumed as the result of the authorities on the subject that contracts in partial restraint of practising are good and valid provided there is a fair and reasonable ground for the restriction. In the particular case referred to this question would have to be considered. The contract could not be given in evidence unless stamped, and a penalty of £10 in addition to the stamp duty would probably have to be paid.

COMPETITION FOR APPOINTMENT.

J. writes: A. and B. are partners, B. having been so eighteen months. A. holds an appointment to a provident society. A. dies, and B. applies for the post in the usual manner. C. is a practitioner of some years' standing, also having a junior partner. He is asked by one, on behalf of several members of the said society, to apply for the post now vacant by A.'s death, and does so. B. is aggrieved that C. should do so, on the ground—B. and C. being on very friendly terms—that it is a discourteous and unfriendly action. Is C. doing a discourteous or unprofessional action in complying with the request of the members of the said society?

*** The question resolves itself into a sentimental rather than an ethical one, and we know of no medico-ethical rule that would under the specified circumstances debar C. from becoming a candidate for the appointment. How far, however, it may be judicious to endanger the "very friendly terms" existing between C. and B. by assenting to the candidature is a matter for the former's personal consideration. At the same time, his action in "complying with the request of the members of the provident society" would not, in our opinion, be unprofessional; and, moreover, if he abstains from all interference, direct and indirect, in the election, we fail to see that B. would have any just cause for feeling aggrieved.

CLUBS AND PRACTITIONERS.

A MEMBER writes: I was hurriedly called, on the evening of March 3rd, to J. M., the messenger stating that he had had a hand almost smashed off. I attended, and found the case not quite so bad as reported, but still the hand was very seriously injured indeed. After a careful examination, I thought that the entire hand might be saved. I reduced several dislocations, and dressed the hand in such a manner as I thought most likely to secure a favourable result. I was early next morning called by telegram to a family case, but directed my assistant, Dr. ——, to see the patient in the morning, which he did. On returning home, about 9.30 P.M., I found the following letter from the patient's wife on my table:—

"Sir,—I beg to inform you that our own medical attendant, Dr. ——, called this afternoon. At the time, and in fact during the whole night, the pain my husband suffered was so intense that he could hardly endure it, and he pressed Dr. —— to open the hand out, which, after much pressure, he consented to do, and the doing so has given my husband great relief. Dr. —— has consented to take charge of the case. The fact is, Sir, that there is no help for this, because my husband is a Forester, and, as you will be aware, Dr. —— is the Foresters' doctor.—Yours respectfully, M. M."

Seeing that I had been called to the case, a serious one, and had to decide as to whether an attempt should be made to save the hand, and, after serious examination and consideration, had decided that I would try to do so, and no hint being given at the time that the case would not remain under my care, would you kindly say whether it was doing as one would be done by or in accordance with acknowledged medical ethics for Dr. —— to take over the case?

*** The ethics of the above personally annoying case as related by "A Member" depend upon his *de facto* knowledge or otherwise that the patient in question was a Forester, and as such ordinarily attended by the medical officer of the club. In the former event the following rule extracted from the *Code of Medical Ethics*, chapter ii, section 5, rule 7, would especially apply. We may further note that, unless there was necessity, in consequence of the intolerable pain or other cause, Dr. ——, by removing the dressing and "opening out the hand," and so far interfering with the treatment, without previous communication with the attendant practitioner or his assistant, distinctly contravened the rules both of medical and of moral etiquette, in so far as he failed to do unto others as he would doubtless wish to be done by.

"When a practitioner is called to an urgent case, either of sudden or other illness, accident, or injury, in a family usually attended by another, he should (unless his further attendance in consultation be desired), when the emergency is provided for or on the arrival of the attendant in ordinary, resign the case to the latter; but he is entitled to charge the family for his services."

RELIEVING OFFICERS AND PAUPER LUNATICS.

E. B. writes: Some three weeks since I gave notice to the relieving officer that a patient under my care ought to be removed to the county asylum. He was suffering from delusions and hallucinations, with occasional outbreaks of violence; he was a member of a friendly society. Shortly afterwards, at the request of a magistrate, I attended at the police court, some five miles distant, for the purpose of signing the necessary medical certificate for his removal, and I there declared the patient was not under proper control, and was dangerous. The relieving officer, who was also present, said the man was under proper control. The magistrate accepted the relieving officer's statement, and refused to certify.

A fortnight later I was asked by the same magistrate to again attend at the police court for the same purpose. I promptly declined, at the same time pointing out that no change had taken place in the condition of the patient since their refusal to certify, and he continued under the same control. The relieving officer on this occasion declared the patient was not under proper control, and he was forthwith sent to the county asylum. The points I wish elucidated are the following:—

1. Is a relieving officer a higher authority on the question of the proper control of insane patients than a medical man?

2. Whose evidence should have guided the magistrates in their decision in this case?

3. Did I act properly in declining to attend on the second occasion? I thought the magistrate's decision equivalent to saying they considered me either less competent or less trustworthy than the relieving officer, which sentiment I felt it a duty not to endorse by again appearing in the case.

*** 1. No.

2. That of the medical man, but it is also required that the justice "be satisfied upon view, or personal examination of such pauper, or other proof, that such pauper is a lunatic, and a proper person to be taken charge of and detained under care and treatment."

3. Apparently yes.

It is assumed that the alleged lunatic was a pauper.

VISITS OF COURTESY.

TO THINE OWN SELF BE TRUE writes: Will you kindly allow me a short reply to "M.R.C.S." in the JOURNAL of April 5th on "Visits of Courtesy," which may possibly suggest further expression of opinion on the subject. I am sorry I can have no sympathy for "M.R.C.S."—indeed, I should rather incline to say, "Serve you right." "M.R.C.S." only courted the humiliating snubbing he received by not withdrawing when he had pronounced his own opinion—which, moreover, in this case could only have been confirmed by any other practitioner—instead of foolishly waiting until an unfriendly medical neighbour had made an examination of what was strictly the patient of the first man called. Speaking with an experience of twenty years, I regret to observe that the so-called "visits of courtesy"—in general practice, at least—do little if any good in forming subsequently true friendships. They are generally altogether hypocritical, sometimes quite meaningless, and therefore in many localities the good old custom has come to be "more honoured in the breach than in the observance."

IRREGULAR PRACTICE.

G. F.—If the person referred to practises as an apothecary without a certificate, it would be well to refer the matter to the Society of Apothecaries, Blackfriars, London, who institute proceedings for penalties in cases calling for their intervention. It would be difficult to sustain proceedings under the Medical Act of 1858.

DEATH CERTIFICATES FOR INSURANCE COMPANIES.

L.R.C.P.LOND.—One guinea is the customary fee for a certificate of death given to an insurance company for the purposes of a claim under a life policy, but we are not aware that there is any legal decision on the question of the amount. In our experience the fee is generally handed to the medical man in exchange for the certificate.

B. B.—It does not very clearly appear in what respect an opinion on the case submitted is required, unless it be on a question of etiquette, of which, on the facts as stated, a breach has been committed. The person referred to, having become an L.S.A. in June, 1888, is entitled to style himself "Surgeon."

PRESENTATION.—Mr. W. H. Waterhouse Stacey, L.R.C.P.Edin., M.R.C.S.Eng., of Grimston, Norfolk, who has given a course of ambulance lectures in First Aid and Nursing to a ladies' class of about forty members, has been presented by them with a silver sandwich case and an address, in token of their appreciation of his services.

MEDICAL MAGISTRATE.—Dr. Joseph Ewart, F.R.C.P.Lond., of Montpelier Hall, Brighton, representative of the St. Nicholas Ward on the Town Council, and member of the School Board, has been appointed a magistrate for Sussex by Lord Hampden, Lord Lieutenant and Custos Rotulorum of the county. Dr. Ewart is a retired Deputy Surgeon-General of Her Majesty's Indian Army, and was formerly Professor of Physiology and Medicine in the Medical College, Surgeon to the European General Hospital, and a Municipal Commissioner at Calcutta.

NAVAL AND MILITARY MEDICAL SERVICES.

MILITIA SURGEONS.

W. K. C. informs our correspondent "W. L. C." that in former days each militia regiment had two medical officers. He is not likely to get credit for doing militia work, as the spoliation of the militia surgeons was one of the inducements offered to the authorities to grant the Warrant of 1879.

SOUND TEETH IN THE NAVY.

C. G. C. is informed that very considerable stress is laid on sound teeth in the navy. Naval recruits are rejected for unsound teeth in a larger proportion than for the army. As regards probationary candidates for the naval departments, there is probably less strictness in this matter; but the best plan for an intending candidate is to get the opinion of a naval medical officer as to whether he is likely to pass the Medical Board.

PAY IN INDIA.

T. writes: Your correspondent "X." has a grievance "that a surgeon serving under him has charge of a native regiment, for which he draws 100 rupees per month extra pay." But I am serving under a brigade-surgeon who, when a railway appointment of 50 rupees per month fell vacant, represented he was so badly paid that he got it himself instead of its falling as before to the wretchedly underpaid surgeon. Is such grasping consistent with dignity? Who ever heard of a "colonel on the staff" nobbling a paltry appointment like this? Let us have titles and position, but do not let us forget our self respect.

FAREWELL DINNER TO DEPUTY SURGEON-GENERAL F. W. WADE, M.S., P.M.O.

On March 19th, at the Royal Yacht Club, Bermuda, a farewell dinner was given by the officers of the medical staff to Deputy Surgeon-General Wade on his his departure from the island, having been relieved by Brigade-Surgeon J. Ross Murray. The following medical officers were present: Brigade-Surgeon Ross Murray, Surgeon-Major Adye Curran, and Surgeons Mathias, Clarkson, Windle, and Reily. The toast of the evening was proposed by Surgeon-Major Adye Curran, who, in a few well chosen words, bade Mr. Wade farewell, and expressed regret at his leaving, not only on behalf of the medical staff, but also of the general community, with all of whom he was a great favourite. Deputy Surgeon-General Wade replied in suitable terms, and took his leave amidst many "God speeds" and wishes for a safe journey home.

THE NAVY.

Surgeon A. W. May, A. J. J. Johnston, F. A. Trevan, J. O'B. Williams, M.D., and Samuel Keays have been promoted to be Staff-Surgeons from March 30th, having served twelve years as Surgeons. Surgeon May was Surgeon of *Achilles* during Egyptian war of 1882 (medal, and Khedive's bronze star); Surgeon of *Alexandra*, flag; served with the Naval Brigade, landed for service in the Soudan, with the Nile expedition for the relief of General Gordon at Khartoum, 1884-85; present in the s.s. *Sofia* with Lord Charles Beresford at the relief of Sir C. Wilson; mentioned in despatches for his attention to the wounded under fire (clasp). The other gentlemen mentioned have no war record in the *Royal Navy List*.

The following appointments have been made at the Admiralty:—Graham E. Kennedy, Surgeon to Malta Hospital, April 17th; Richard E. Biddulph, Surgeon to the *Benbow*, April 17th; Charles H. Upham, Surgeon to the *Cambridge*, April 5th.

THE MEDICAL STAFF.

Surgeon H. H. Pinching has received permission to accept the order of the 4th class of the Medjidieh, bestowed upon him by the Khedive of Egypt in recognition of his services while employed beyond the British dominions with the Egyptian army. Surgeon Pinching was with the Nile expedition in 1884-85, for which he received the Egyptian war medal with clasp and the Khedive's bronze star; with the Soudan Frontier Field Force in 1885-86, and again in 1889, being present at the action of Toski, for which he was mentioned in despatches, and obtained an additional clasp.

Surgeon Edward Landon has retired from the service with a gratuity. His commission was dated March 6th, 1880.

Surgeon-Major Arthur Sanderson has been placed on retired pay. He entered the service as Assistant-Surgeon, January 12th, 1859; became Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1874. He has no war record in the *Army List*.

INDIAN MEDICAL SERVICE.

Deputy Surgeon-General W. R. Rice, M.D., M.R.C.S., Bengal Establishment, Inspector-General of Civil Hospitals in the North-West Provinces and Oude, is promoted to be Surgeon-General, *vice* Sir Benjamin Simpson, M.D., K.C.I.E., who has retired from the service. Surgeon-General Rice began his army career as an Assistant-Surgeon, November 20th, 1856, and rose to be Deputy Surgeon-General, December 9th, 1887. He is 57 years of age, having been born on January 6th, 1833. He served at Indore during the Indian Mutiny in 1857, and has the medal granted for that campaign.

Sir Benjamin Simpson, M.D., M.R.C.S., K.C.I.E., Bengal Establishment, who now retires, entered as Assistant Surgeon, October 20th, 1853, and was made Surgeon-General, March 29th, 1885. He was born in March, 1831. He was engaged in the Bhrotan campaign in 1864-65, and has the medal with clasp therefor.

Brigade-Surgeon J. G. Pilcher, F.R.C.S., Bengal Establishment, is promoted to be Deputy Surgeon-General, *vice* W. R. Rice. His commission as Assistant Surgeon dates from October 1st, 1860, and that of Brigade-Surgeon, May 14th, 1888. The *Army Lists* do not assign him any war service.

Surgeon-General A. J. Cowie, M.R.C.S., late of the Bengal Establishment, died in London on the 6th instant, at the age of 56.

Deputy Inspector-General Alexander Gibbon, late of the Bengal Establishment, died on April 3rd, at Aberdeen.

THE VOLUNTEERS.

Acting-Surgeon J. Little, M.D., of the 1st Cumberland Artillery, is promoted to be Surgeon.

Surgeon S. Andrews, of the Hampshire Yeomany (Carabineers), has resigned his commission, which dated from October 24th, 1885.

Mr. Joseph Henry Dickson, M.B., is appointed Acting-Surgeon to the 1st Cumberland Artillery.

Surgeon E. O. Thew, M.B., of the 2nd Northumberland (Percy) Artillery (Western Division Royal Artillery), has resigned his commission, which bore date January 29th, 1881.

Surgeon C. G. M. Lewis, 1st Volunteer Battalion East Kent Regiment (formerly the 2nd Kent), is promoted to be Surgeon-Major, ranking as Major.

Mr. William Crump Beatley, M.D., is appointed Acting-Surgeon to the 3rd Volunteer Battalion Northumberland Fusiliers (late the 1st Newcastle-on-Tyne).

Surgeon-Major J. W. Walker, M.B., 1st Volunteer Battalion Lincolnshire Regiment (late the 1st Lincoln), has resigned his commission, with permission to retain his rank and uniform. His commission as Surgeon dates from May 16th, 1863, and that of Surgeon-Major from February 1st, 1889.

Acting-Surgeon W. Nettle, 2nd Volunteer Battalion Duke of Cornwall's Light Infantry (late the 2nd Cornwall), is promoted to be Surgeon.

Acting-Surgeon R. Lunan, 5th (Perthshire Highland) Volunteer Battalion Royal Highlanders (late the 2nd Perthshire), has resigned his appointment, dated March 5th, 1873; he is permitted to retain his rank and uniform.

OBITUARY.

The Rt. Rev. HENRY CALLAWAY, D.D.Oxon., M.D., M.R.C.P.

For the following very full and accurate account of the life and career of Bishop Callaway we are indebted to the kindness of an old pupil of his. The Right Reverend Henry Callaway, first Bishop of St. John's, South Africa, was born on January 17th, 1817. He was educated at the Grammar School at Crediton, of which at that time the late Dr. Lightfoot was the master. There he acquired an excellent training in the Greek and Latin classics. His superior mental endowments began to show themselves, and, being of a deeply religious turn, thoughts were entertained of his devoting himself to the Church. Very early a strong impression rested on his mind that it would be his duty to give himself to the work of a missionary among the heathen. Soon after leaving school, however, he engaged himself as a tutor, and, being brought in contact with some worthy members of the Society of Friends, he began to read their literature, especially the writings of the founders of the Society. Their lofty notions of the spirituality of the Christian religion, and of the constant communion attainable between the believing soul and God, strongly attracted him, and, at a subsequent stage of his career, he became a member of the Society.

His view that he was called to the life of a missionary was never lost, though now its fulfilment seemed less likely than ever, for until quite lately the Society of Friends have scarcely attempted mission work among the heathen. He eventually entered the medical profession, commencing his studies at Bridgwater. He subsequently pursued them with much distinction at St. Bartholomew's Hospital, where life-long friendships were formed with Sir George Burrows, Sir James Paget, Professor Humphry, Dr. Protheroe Smith, and others.

In 1842 he became a Member of the College of Surgeons, and in 1843 a Licentiate of the Apothecaries Company; he shortly afterwards received overtures to become one of the Company's examiners, but this he declined. He practised with great success in London from 1844 to 1852. He was appointed Assistant Teacher of Midwifery at St. Bartholomew's Hospital, Surgeon Accoucheur to the Farringdon Dispensary, and Surgeon to the Hospital for Women, then in Red Lion Square.

Throughout all these years of intense activity his mind was chiefly occupied with religious subjects, and gradually he became convinced that he ought to rejoin the Church of England. With characteristic energy he retraced his steps in this matter, though it cost him a mental effort and a wrench to his feelings, under which his bodily strength, never great, was seriously broken down. He gave up his practice, and spent the winter of 1852-3 in the South of France.

In the following summer, pending some definite opening in the Christian ministry, to which he always believed himself to be called, he took the M.D. degree at King's College, Aberdeen, and

the licence of the Royal College of Physicians of London. The following winter (1853-4) he spent at Bonchurch, in the Isle of Wight.

At this time Bishop Colenso had just been consecrated, and, hearing of his need of missionaries, Dr. Callaway offered himself, and was ordained deacon at Norwich Cathedral on August 13th, 1854. In the same month he sailed for Natal, and after a voyage of nearly fourteen weeks reached Port Durban. In September, 1855, he was ordained priest, and appointed to St. Andrew's, Pietermaritzburg, the first church completed in Natal. Having never lost sight of his view of work among the heathen, he threw himself with great energy and success into the study of the Kaffir language, and early in 1858 he obtained a grant of 3,000 acres of land at a very carefully selected site in the wilderness, about a day's journey beyond Richmond, and here he founded a station, naming it Spring Vale. Under his wise, energetic, and self-sacrificing guidance, this station prospered wonderfully, and became a centre whence Christian and civilising influence emanated far and wide. Here Dr. Callaway carefully and minutely studied the Kaffir language and the beliefs and traditions of the people, as well as their laws and customs. He took an active part in reducing the language to a written form, and made translations of nearly the whole of the Bible and of the Prayer Book, and composed a work in Kaffir, entirely derived from natives, with a literal translation and copious notes, which he called *Zulu Nursery Tales; The Religious System of the Zulus*, together with other works of great value to philologists and students of folklore.

In the year 1873 the authorities of the Scotch Episcopal Church, at the instigation of the late Bishop Cotterill, decided to take up as a mission field the region lying between Natal and Cape Colony then known as Independent Kaffraria, and they offered the bishopric of this large district to Dr. Callaway. With considerable hesitation and much regret at the prospect of severing his connection with Spring Vale, he accepted the invitation, and was consecrated at Edinburgh on All Saints' Day 1874. He speedily returned to Africa, and travelled in his waggon, or sometimes in his "spider," throughout the widespread diocese, and at length falling in with the urgent desire of the Government, he established himself at Umtata, there being at the time only one or two traders settled in the neighbourhood. Marvellously rapid development took place, a small town quickly gathered around the station, and there were established a procathedral, a theological training college for natives, various schools for boys and girls, native and European, a small hospital and various other institutions.

Bishop Callaway continued indefatigable in his visits to distant parts of the diocese, and in discharge of the various and often difficult duties devolving upon him. At length his incessant labour began to tell, and he had an attack of a paralytic character. From this he seemed to recover, and again visited England under medical advice, but on his return to Africa slight attacks recurred from time to time, and he felt it necessary to appoint a coadjutor. Bishop Key was consecrated to this office in 1883, and in 1886 Bishop Callaway formally resigned and returned to England to end his days.

On quitting Spring Vale, with characteristic liberality he dedicated all his property there to church and mission purposes, and subsequently he transferred to the Episcopal Church of Scotland, subject to a life interest to himself and Mrs Callaway, £2,000 for the permanent augmentation of the stipend of the Bishop of St. John's.

Bishop Callaway published a small volume of sermons; the volume on Kaffir folk-lore, in Zulu and English, already alluded to, of which he has left materials for a more complete edition, occasional sermons; and various pamphlets and papers chiefly in reference to native matters. He also wrote numerous poems and hymns, but these have not hitherto been published. In 1864 he was appointed local secretary for Natal of the Anthropological Society, and, in 1870, corresponding member of the American Philological Society.

Bishop Callaway died at Ottery St. Mary on March 26th, after repeated attacks of a paralytic character.

Mr. JONATHAN HUTCHINSON, F.R.S., sends us the following reminiscences of Bishop Callaway in early life:

"The late Bishop Callaway was some years my senior, and I never knew him as a student. In somewhat later life I often met him. After obtaining his diploma he became assistant to the late Mr. May, of Tottenham, who was a member of the Society of Friends, and a man of earnest character and persuasive address. In Mr. May's family Henry Callaway (previously a Churchman) became a convert to Quakerism, and was in due course admitted a member of the Society. He was, however, by no means of the quiet temperament best suited for that persuasion, and although he had married a Friend and had for a few years occupied a position of much esteem amongst them, he eventually relapsed. During this period he had taken a house in Finsbury Circus, and had engaged with much success in family practice. He was beloved by all his patients, indeed, by all who knew him, for he had a warm heart, was unselfish, and had winning manners. In person he was a tall, comely man. It was whilst engaged in practice in Finsbury, and doing, I believe, exceedingly well, that Henry Callaway became filled with the desire for a missionary life, and decided to renounce his prospects of worldly success. At this time the Society of Friends offered but small outlet for missionary zeal, and I suspect that in other directions Callaway had found his zeal had not been encouraged to develop itself into the activity which he longed for. Like many converts he went ahead of those whom he had joined. I well remember Mr. May himself, a most scrupulous Friend, remarking plaintively to me, 'Henry Callaway has been reproving me for allowing *Punch* to come into my family; dost thou think there is any harm in it?' Thus it came about that Callaway found that his yearnings for work in the cause of religion would be best realised by returning to the Church which he had left, and he not long afterwards sought ordination, and went out as a medical missionary to South Africa. In making this change he did not forget his old associations, but kept up his friendship with those whom he had known as patients. A Quaker lady, now much advanced in years, on whom he regularly called when he revisited England, still speaks of him affectionately as 'my bishop.' He was just the man for the life which he ultimately lived, and none better fitted for a modern bishop could have well been found. He was well informed, and zealous in the acquisition of knowledge of all kinds; of a loving disposition, and anxious to consecrate all he knew and all he had to the increase of the happiness of others. His advance in life was not hindered by an over-development of the logical faculty, and whilst it could not be said that he was original in his work in any department, his attainments were more than respectable in many. Some of his anthropological researches have supplied materials to Herbert Spencer and other authorities. Whilst, however, his intellectual gifts were above the average, his strength of character lay in his warmth of heart and his conscientious sense of responsibility. I remember an anecdote of his student days at St. Bartholomew's which may serve to illustrate his faithfulness in rebuke, and which will be appreciated by those who knew both or either of the men concerned. He once addressed the late Mr. Wormald somewhat in this fashion: 'I am grateful, Thomas Wormald, for much practical knowledge which thou hast given me, but thou must permit me to say that I have often been pained by the anecdotes thou relates. Excuse me saying it, but thou art too jocose.'"

HOSPITAL AND DISPENSARY MANAGEMENT.

SELECT COMMITTEE ON MEDICAL CHARITY ADMINISTRATION.

SIR,—As the petition presented by the London Charity Organisation Society asked for an inquiry into the metropolitan medical charities only, and as many of us are very anxious that the inquiry be extended so as to include the provincial hospitals as well, may I ask all interested in the success of the latter desire to petition Lord Sandhurst to grant our request.

The following resolution was passed at the Leeds meeting of the British Medical Association, and has, I understand, been forwarded:

"That this general meeting of the British Medical Association views with great pleasure the action of the Charity Organisation Society of London, in presenting a petition to the House of Lords praying for an inquiry into the management of the metropolitan medical charities, and earnestly hopes that the scope of the inquiry will be extended so as to include the provincial hospitals and dispensaries, and thereby obtain as complete information as is possible upon this important subject. That a copy of this resolution be forwarded to the Lord President of the Privy Council; that he be requested to receive a deputation thereon; and that the Council be requested to appoint a special committee to deal with this question, and to request the Charity Organisation

Society of England to form a similar committee to act in conjunction with it."

But with this efforts must be made (*a*) by practitioners sending letters to Lord Sandhurst, (*b*) by asking medical practitioners in Parliament to use their influence, (*c*) by asking other members of Parliament to help us, (*d*) or by forwarding petitions from medical societies or signed by practitioners in different towns to Lord Sandhurst.

If we do not wake up and help ourselves, we shall be left out in the cold, and for this we shall have ourselves to blame. Just now there is a strong desire to tackle this medical charity question; and if we are not, in the provinces, included, it is most likely we shall not have another opportunity for the next fifteen years.—I am, etc.,

Liverpool. ROBERT R. RENTOUL, M.D.

THE DROGHEDA INFIRMARY.—The decision of the Local Government Board, on the evidence given at the recent inquiry into the circumstances attending the death of the man Segrave, is that the doctor, nurses, and master were all to blame. They have been reprimanded.

GLASGOW HOSPITAL FOR SKIN DISEASES.—The annual report of this institution states that a total of 35,258 patients have been treated since its foundation twenty-nine years ago. Last year the number of patients was 1,310, and 77 students attended the *clinique*, to which also practitioners are resorting in annually increasing numbers. The expenditure is under £300 a year, and is more than met by contributions and invested funds.

SAMARITAN FREE HOSPITAL.—A bazaar, under the patronage of the Empress Frederick of Germany, the Princess of Wales, Princess Christian, Princess Louise, Princess Beatrice, and other distinguished ladies, will be held at the Portman Rooms on May 6th, 7th, and 8th, with the object of raising a sum of £1,500 with which to provide additional furniture for the Samaritan Free Hospital for Women and Children. Any surplus obtained over the above sum will be devoted to the reduction of the building debt.

UNIVERSITY INTELLIGENCE.

OXFORD.

EXAMINATIONS IN MEDICINE AND SURGERY.—The Regius Professor of Medicine gives notice that the Final Examination for the degree of Bachelor of Medicine will commence on Monday, June 9th, at 9.30 A.M., in the Examination Schools. The examination for the degree of Master in Surgery will take place on Thursday, June 19th. The First Examination for the degree of Bachelor of Medicine will commence on Monday, June 30th, at 9.30 A.M.

The Secretary of the Boards of Faculties gives notice that he will be in attendance at his office in the Clarendon Building on Monday, May 26th, from 9.30 to 10.30 A.M., and from 2 to 3 P.M., for the purpose of receiving names of candidates for the Second Examination for the degree of M.B.; on Monday, June 2nd, from 2 to 3 P.M., for the purpose of receiving names of candidates for the examination for the degree of M.Ch.; and on Monday, June 16th, from 9.30 to 10.30 A.M., and from 2 to 3 P.M., for the purpose of receiving names of candidates for the First Examination for the degree of M.B. Names, with the statutable certificates and fees, may be sent to him by letter at any time not later than the above-mentioned days.

No name can be entered for any of these examinations unless the statutable certificates are exhibited and the fees paid within the prescribed limit of time, namely, "at least fourteen days before the first day of the week in which the examination is to be held." The statutable certificates and fees are as follow:

I. *For the Second Examination.*—1. For candidates who offer Materia Medica and Pharmacy only. Fee: 15s. 2. For candidates who offer the remaining subjects, whether in conjunction with or without Materia Medica. Fee: If Materia Medica be offered, £2 5s.; if Materia Medica be not offered, £1 10s. Certificates: Certificates of having passed the several subjects of the First Examination, namely, (*a*) Human Anatomy, (*b*) Human Physiology, (*c*) Organic Chemistry. Exemptions: (1) The above-mentioned certificate (*b*) is not required from candidates who have obtained a first or second class in the Honour School of Natural Science in the subject of Animal Physiology; (2) the above-mentioned certificate (*c*) is not required (i) from those who have obtained a first or second class in the Honour School of Natural Science in the subject of Chemistry, (ii) from those who passed the examinations for the degree of B.A. before the end of Trinity Term, 1886, and who were on March 16th, 1886, registered as medical students.

II. *For the First Examination.*—Fee: For Organic Chemistry, whether offered with or without the remaining subjects, 15s.; for the remaining subjects, £1 10s. Certificates: (*a*) A certificate of having passed either the Preliminary Examination in Mechanics and Physics, or the Final Pass School, Group C (4), or the examination in Mechanics and Physics of the medical statute in force up to Michaelmas Term, 1886; (*b*) a certificate of having passed either the Preliminary Examination in Chemistry, or the Final Pass School, Group C (3), or the examination in Chemistry of the medical statute in force up to Michaelmas Term, 1886; (*c*) a certificate of having passed either the Preliminary Examination or the Final Honour Examination in Animal Morphology and in Botany. Exemption: The above-mentioned certificate (*c*) is not required from those who passed the examinations for the degree of B.A. before the end of Trinity Term, 1886, or who obtained a class in the Honour School of Natural Science in or before Trinity Term, 1888, in Animal Morphology or in Animal Physiology or in Botany.

For the Degree of Master of Surgery.—Fee: £5. Certificate: If the candidate be not already a member of the surgical staff of a recognised hospital, he must produce a certificate, countersigned by the Regius Professor of Medicine, of having acted in such a hospital as dresser or house-surgeon for six months.

ABERDEEN.

AT the graduation ceremony on April 3rd, 1890, the following candidates receive Degrees in Medicine and Surgery:

Degree of M.D.—G. L. H. Milne, M.A., M.B., C.M., Forres; R. Shiels, Edinburgh; J. Souter, M.A., M.B., C.M., Burghead.

Degrees of M.B. and C.M.—J. A. Bruce, Glenrinnes; W. Bulloch, Aberdeen; H. F. Cameron, Aberdeen; H. G. Cowie, M.A., Turriff; W. Davidson, Oldmeldrum; H. G. Deans, M.A., Dunecht; R. C. Duthie, M.A., Woodside; P. Fowlie, Stornoway; T. Holt, Burnley, Lancashire; J. M. Key, Montrose; J. B. Lendrum, Huddersfield; A. B. Lyon, Banff; W. Macbain, Aberdeen; W. S. Park, M.A., St. Fergus; J. Rannie, Glenbucket; A. H. Rideal, Preston; J. H. Skeen, Aberdeen; J. Smith, Insch; J. A. Sutherland, Argyllshire; C. W. T. Stephenson, Aberdeen; H. P. Taylor, Alnwick; J. Wilson, M.A., Banchory. J. R Levack, Aberdeen; J. M'Donald, Kildrummy; A. C. Ross, Craigellachie, have passed the examinations for the degrees of M.B. and C.M., but will not graduate until they attain the necessary age.

Graduation Honours:

Highest Academical Honours.—W. Bulloch.

Honourable Distinction.—H. G. Cowie, M.A., W. Davidson, J. R. Levack, J. Rannie.

The diploma in Public Health will be conferred on the following candidates:

W. C. Dale, M.A., M.B., C.M., St. Helens; G. Reid, M.D., Stafford.

The University gold medals for the winter session, 1889-90, have been awarded as follows:

Fife Jamieson Memorial Gold Medal in Anatomy.—H. Fraser, M.A.

Keith Gold Medal for Systematic and Clinical Surgery.—G. W. H. Tawse.

Shepherd Memorial Gold Medal for Systematic and Practical Surgery.—W. Findlay, M.A.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

BLOODLESS MEAT AND FISH.

IN connection with the article on "Shall we Eat Tuberculous Meat?" published in the JOURNAL on April 5th, Mr. J. Lawrence-Hamilton, M.R.C.S., Brighton, has forwarded an extract from his recently published report to the London County Council, in which he discusses the question of our food supply of bloodless fish, flesh, and fowl. He points out that the Mosaic law did not allow of the use of animals from which the blood had not been carefully drained by educated responsible "clerical veterinary practitioners," whose duty it was to reject any animal with any sort of blemish. "These priestly veterinary experts were appointed absolutely to protect and preside over the immediate interests and health of their entire people, and not to make loopholes for the sale and distribution of unsound, unhealthy, diseased, or other improper food. They have always considered every killed animal unhealthy till its technical inspection and dissection after death shall have proved its goodness, as otherwise the carcass is forbidden to orthodox Jews. Blood and other fluids found in cattle putrefying more rapidly than flesh, muscle, or fat convinced Moses of the necessity to remove all blood. Modern science confirms this view by the microscope so frequently revealing putrefactive germs or bacteria or microbes in the blood and internal fluids of fish, flesh, and fowl, whilst their muscles and fat may still be quite healthy. But if the blood has once become contaminated by these putrefactive germs it is likely to at once infect the sound flesh, muscle, and fat."

After discussing the causes of putrefaction in flesh and fish Mr. Lawrence-Hamilton says that the statistics of the Jewish veterinary practitioners, or shechita board, show "that about one-quarter of the animals slaughtered under its conscientious inspection are declared to be unfit for human food according to the strict doctrines of the orthodox Jews. This veterinary-priestly Jewish board affixes a seal on all sound healthy meat killed according to the Jewish ritual, which may be called its ecclesiastical and sanitary duty, whilst its financial part, which is used to support the synagogues, consists in levying a light tax on a bullock of 4s. 3d.; a calf, of 1s. 6d.; a sheep, of 6d.; fowls to the traders

ach, of 1d.; turkeys and geese, each, 2d., their public paying for oultry an additional tax of one half-penny on each animal killed cording to the Jewish ritual."

"Carefully concealing its previous history, the diseased meat ndemned by the Jewish authorities is said to be sold in the etropolitan meat markets, and by Christian retail butchers as ie best prime English meat."

Describing and criticising the Mosaic laws as regards fish, we e told that "it is curious that both Moses and his disciples, the almudists, appear all alike to have overlooked and omitted the rbidding of unbled and ungutted fish, which is much more unealthy, dangerous, and poisonous than unbled meat."

It is interesting to note how thoroughly the Jewish laws tinge ost of the Continental regulations for the inspection of meat. nyone who has gone through the abattoirs in Berlin and other rge towns on the Continent, must have been struck by the fact iat any animal in which the slightest trace of tuberculosis is ound is never stamped as "first class." If it is allowed to pass ito the market at all it is sold under special regulations, in a ecial market, and any customer purchasing it can see at a glance iat it is not first class meat, and that before it is used it must be oroughly cooked. It is, of course, sold at a cheaper rate. milarly, any animal which, during life, has suffered from bruised uscles due to blows or fracture, is condemned to be sold as cond class meat, either altogether or in part.

It is curious to observe in connection with Mr. Lawrence amilton's report on the Jewish code and its relation to ungutted sh, that few precautions are taken against the distribution and nsumption of such food, even in those cities in which the most rfect system, as regards flesh meat, has been adopted, this being n additional argument in favour of the Jewish origin of most of ie Continental regulations.

It remains for our legislators to adopt, directly or in a modified rm, such portions of the Mosaic law as have been proved to be value, and to fill up, with the aid of the knowledge and experiice resulting from modern investigations, those gaps which are ow known to exist, in order that we may have a more complete de of meat inspection and control.

HEALTH OF ENGLISH TOWNS.

URING the week ending Saturday, April 5th, 5,345 births and 3,601 deaths ere registered in twenty-eight of the largest English towns, including London, hich have an estimated population of 9,715,559 persons. The annual rate mortality in these towns, which had declined from 26.6 to 21.4 per 1,000 in e four preceding weeks, further fell to 19.3 during the week under notice. ie rates in the several towns ranged from 10.5 in Huddersfield, 12.9 in Birnhead 14.1 in Nottingham, and 15.5 in Leicester to 25.0 in Wolverhampton, .1 in Plymouth, 27.8 in Newcastle-upon-Tyne, and 28.6 in Manchester. In the enty-seven provincial towns the mean death-rate was 21.5 per 1,000, and ceeded by 4.8 the rate recorded in London, which was only 16.7 per 1,000. ie 3,601 deaths registered during the week under notice in the twenty-eight wns included 351 which were referred to the principal zymotic diseases, ainst 364 and 426 in the two preceding weeks; of these, 145 resulted from hooping-cough, 80 from measles, 37 from diphtheria, 36 from diarrhœa, 34 from arlet fever, 19 from "fever" (principally enteric), and not one from smallox. These 351 deaths were equal to an annual rate of 1.9 per 1,000; in London e zymotic rate was 1.9, and corresponded with the mean rate in the twenty-ven provincial towns, among which the zymotic death-rates ranged from) in Preston and 0.5 in Norwich and in Birkenhead to 2.8 in Salford, 3.6 Liverpool, 4.6 in Portsmouth, and 6.7 in Derby. Measles caused the highest oportional fatality in Liverpool, Plymouth, and Derby; whooping-cough in erby, Liverpool, Newcastle-upon-Tyne, Bristol, and Salford; and "fever" in nderland. Scarlet fever showed no fatal prevalence in any of the twenty-ght towns. Of the 37 deaths from diphtheria recorded during the week der notice in these towns, 20 occurred in London, 5 in Salford, 2 in Manester, and 2 in Sheffield. No fatal case of small-pox was registered during e week under notice, either in London or in any of the large provincial wns; and 4 cases of this disease were under treatment in the Metropolitan ylums Hospitals on Saturday, April 5th. These hospitals contained 1,043 arlet fever patients on the same date, against numbers steadily declin-g from 1,541 to 1,035 at the end of the thirteen preceding weeks; 84 cases re admitted during the week, against 73, 78, and 84 in the three previous eks. The death-rate from diseases of the respiratory organs in London was ual to 3.5 per 1,000, and was considerably below the average.

HEALTH OF SCOTCH TOWNS.

the eight principal Scotch towns 852 births and 624 deaths were registered ring the week ending Saturday, April 5th. The annual rate of mortality these towns, which had declined from 28.7 to 24.2 per 1,000 in the seven preling weeks, further fell to 24.1 during the week under notice, but exceeded 4.8 per 1,000 the mean rate during the same period in the twenty-eight ge English towns. Among these Scotch towns the lowest death-rates re recorded in Greenock and Paisley, and the highest in Aberdeen and asgow. The 624 deaths registered in these towns during the week under tice included 105 which were referred to the principal zymotic diseases, ual to an annual rate of 4.1 per 1,000, which exceeded by 2.2 the mean motic death-rate during the same period in the large English towns. The ghest zymotic death-rates were recorded in Perth, Edinburgh, and Leith. e 275 deaths registered in Glasgow included 22 from measles, 14 from ooping-cough, and 5 from "fever." In Edinburgh, 14 fatal cases of measles, 10 of whooping-cough, and 3 of diphtheria were recorded; and 6 deaths from measles occurred in Dundee. The death-rate from diseases of the respiratory organs in these towns was equal to 5.1 per 1,000, against 3.5 in London.

MEDICAL NEWS.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in Anatomy and Physiology at a meeting of the Examiners on March 31st, namely:

G. W. K. Crosland, E. W. S. Hughes, H. G. Paterson, and E. S. Steward, students of Yorkshire College, Leeds; J. Dulberg, of Wurzburg and Owens College, Manchester; H. G. Dain, A. J. Martin, and E. St. John Whitehouse, of Queen's College, Birmingham; W. H. Ligertwood, C. M. Phillips, J. C. Smyth, and E. White, of Bristol School of Medicine; J. C. Hepton, S. T. Lord, C. C. Preston, and W. M. Steinthal, of Owens College, Manchester; C. M. Corkery, of Bombay and Queen's College, Cork; G. Browning, of Rennes, France; J. K. Troup, of Melbourne and Edinburgh; and A. J. Thomas, of University College, Liverpool.

Passed in Anatomy only.

J. E. Abbott, J. E. H. Mitchell, and J. Nicholson, of Yorkshire College, Leeds; W. W. Darlington and G. A. Wilkes, of Queen's College, Birmingham; T. Aspinall and J. N. Platt, of Owens College, Manchester; and S. Wilkinson, of University College, Liverpool.

Passed in Anatomy and Physiology on April 1st.

A. Ellison and J. M. Nicol, of Yorkshire College, Leeds; R. P. Lawson, A. Hooton; A. H. McDougall, and J. D. Willis, of Owens College, Manchester; C. R. Batchellor, R. B. James, and J. A. H. White, of Queen's College, Birmingham; E. A. Duffield and R. C. Leonard, of Bristol School of Medicine; M. Ashley, of University College; F. J. Carter and J. M. Flavelle, of St. Bartholomew's Hospital; and F. E. Rock, of Middlesex Hospital.

Passed in Anatomy only.

F. G. Doreyi W. Faull, and E. Howgate, of Yorkshire College, Leeds; S. A. Coad, of Leeds and St. Mary's Hospital; P. F. Howden, of Bristol School of Medicine; J. E. Hickman and H. H. Rubra, of Queen's College, Birmingham; H. W. Nott, of University College, Liverpool; H. A. Howes, of Owens College, Manchester: and H. E. Pittway, of Middlesex Hospital.

Passed in Physiology only.

E. G. C. F. Atchley, A. L. Flemming, and W. R. Hadwen, of Bristol Medical School; T. H. Wilkins, of Queen's College, Birmingham; and L. N. Gibbes, of St. George's Hospital.

Passed in Anatomy and Physiology on April 2nd.

H. L. Barnard and J. D. Jenkins, of London Hospital; V. T. Greenyer, H. B. Maingay, and J. S. Sloane, of St. Bartholomew's Hospital; C. Planck, W. Redpath, E. Smith, and K. B. J. Vickers, of St. Thomas's Hospital; H. Davies and F. T. Travers, of University College; B. W. Nankivell, of Middlesex Hospital; A. E. Hine and H. E. Oldfield, of Charing Cross Hospital: R. E. G. Phillips, of Guy's Hospital; D. C. Longden, of Edinburgh University; and T. H. J. C. Goodwin, of St. Mary's Hospital.

Passed in Anatomy only.

A. G. Cooley and E. Morton, of Sheffield Medical School; F. A. Robinson, of Guy's Hospital; C. J. Harrison, of University College; E. C. Frend, of St. Bartholomew's Hospital; G. E. Kinnersly, of St. Thomas's Hospital, and H. W. Hull, of London Hospital.

Passed in Physiology only.

P. S. Ewes, of University College.

Passed in Anatomy and Physiology on April 3rd.

E. D. McDougal and E. K. Perrine, of St. Bartholomew's Hospital; B. H. Kingsford, G. V. Benson, J. C. Durston, and E. P. Wrinch, of St. Thomas's Hospital; J. W. W. Stanton and W. E. Fry, of London Hospital; G. E. Mould and F. J. Poynton, of St. Mary's Hospital; T. H. Symons, of Charing Cross Hospital; W. F. Lucas and H. B. Long, of Middlesex Hospital; A. Gaskell and E. J. Smyth, of University College; A. J. Sharp, C. S. Pantin, J. W. Taylor, and R. C. Kirkby, of Guy's Hospital; W. Mansell-Woodhouse, T. S. Good, and N. Elrington, of St. George's Hospital.

Passed in Anatomy only.

A. E. Weston, of St. George's Hospital; W. W. Hodgins and H. S. Revell, of University College; and A. A. Macfarlane, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology.

Passed in Physiology only.

V. Foote, of Charing Cross Hospital, and R. L. Meade-King, of St. Bartholomew's Hospital.

Passed in Anatomy and Physiology on April 5th.

J. T. Sear, of St. Thomas's Hospital; R. H. Castellote, of University College; H. W. Newton, of Middlesex Hospital; W. J. Johnson, of Guy's Hospital; and E. E. Francis, of St. Bartholomew's Hospital.

Passed in Anatomy only.

E. H. Worth and A. Marshall, of St. Thomas's Hospital; T. Streatfield, of University College; C. M. Greenway and J. J. E. Biggs, of Guy's Hospital; H. L. Powys, of London Hospital and Mr. Cooke's School of Anatomy and Physiology; S. P. Hopewell, of London Hospital; B. A. Lukmani, of Bombay and Mr. Cooke's School of Anatomy and Physiology; F. Wall, of Ceylon and Mr. Cooke's School of Anatomy and Physiology; J. E. Phillips, T. Stevens, and W. A. Powell, of Charing Cross Hospital; and A. C. Durham, of London Hospital and King's College.

Passed in Physiology only.

B. Cooper, of St. George's Hospital; P. Northcote and C. Hodgson, of St. Thomas's Hospital; P. V. Hughes and R. W. Prentice, of King's College; E. H. Smith and R. R. H. Wonnacott, of London Hospital; W. B. Winckworth, of Westminster Hospital; W. W. Lacey, of St. Bartholo-

mew's Hospital and Mr. Cooke's School of Anatomy and Physiology; G. E. Clarkson, of St. Bartholomew's Hospital; E. S. Dukes, of Guy's Hospital; and R. Evans, of University College and Owens College.

Passed in Anatomy and Physiology on April 7th.

A. H. Woodcock and H. G. Toombs, of St. Thomas's Hospital; M. W. W. Curtis and A. M. Mills, of Middlesex Hospital; S. C. Cresswell, F. G. Hopkins, and H. D. Eccles, of Guy's Hospital; S. A. Bull and T. E. Harper, of Westminster Hospital; A. R. Rendle and H. S. Elliott, of St. George's Hospital; F. N. Grinling, D. Keele, I. Costa, and G. Read, of University College; W. Shears, K. Rogers, W. N. Roden, and H. M. Sylvester, of St. Bartholomew's Hospital; D. O. Thomas, of Indiana and St. Bartholomew's Hospital; H. J. Cummings, of Trinity University, Toronto.

Passed in Anatomy only.

G. R. Swinhoe, of St. Thomas's Hospital; A. P. Brice, of Westminster Hospital; and B. W. Swenden, of St. George's Hospital.

Passed in Physiology only.

C. F. P. Baly and C. F. Van Geycel, of University College; H. J. Clark, of St. Thomas's Hospital; F. A. M. Flegg, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology; S. Infield, of Guy's Hospital; and H. E. Dalby, of Charing Cross Hospital.

Passed in Anatomy and Physiology on April 8th.

H. Cogill, H. A. D. Dickson, and W. Stokes, of St. Thomas's Hospital; E. H. Helby and N. I. Smith, of Middlesex Hospital; C. N. C. Walch, R. C. Tweedy, and A. C. Underwood, of St. Bartholomew's Hospital; C. P. T. Edwards, A. D. Heath, S. R. Schofield, and A. Y. Fullerton, of University College; W. S. H. Sequeira, of London Hospital; G. C. Hayes, of Melbourne and King's College; C. F. Warren, of St. Mary's Hospital; and R. N. Moon, of Guy's Hospital.

Passed in Anatomy only.

H. Potts, of University College; J. H. Compton and O. C. Worthington, of Guy's Hospital; and B. Brook, of King's College.

Passed in Physiology only.

A. W. Wilson, of Melbourne and Middlesex Hospital; R. B. Williams, of St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology.

THE new Hospital for Women, Euston Road, will be open on April 24th; the old building in Marylebone Road is now closed.

OF 414 students who matriculated this year at the University of Copenhagen, 11 were women, 3 of whom had passed their "maturity" examination with the highest distinction.

THE Lord Chancellor has placed Mr. John St. J. Wilders, senior surgeon to the Queen's Hospital, upon the commission of the peace for the city of Birmingham.

NORWAY, which has a population of 2 000,000 souls, is divided into 152 medical districts, with 581 doctors and 89 druggists' shops.

THE Empress Frederick of Germany has given 4,000 marks (£200) to the Seaside Sanatorium for Children at Norderney in Schleswig.

IT has been decided at a special general meeting of the Governors of the Royal London Ophthalmic Hospital to petition for a Royal Charter of Incorporation.

THE Duchess of Fife has consented to open a grand fancy bazaar on June 4th in aid of the funds of University College Hospital in the College grounds, Gower Street.

DR. ERNEST WILLIAM SKINNER has been unanimously elected Mayor of Winchelsea, one of the ancient towns of the Cinque Ports.

SIR HENRY LOCH, the Governor of Capetown, laid on April 8th the foundation-stone of the new Leper Hospital on Robben Island.

ACCORDING to official statistics, there were 234 medical practitioners, 13 dentists, 107 midwives, and 141 pharmacists in Lisbon on January 1st, 1890.

AT the thirty-eighth annual commencement of the Women's Medical College of Pennsylvania on March 13th, the degree of Doctor of Medicine was conferred on forty candidates. One of these ladies is an Englishwoman.

BY a recent enactment of the Argentine Republic, ships carrying patients suffering from beri-beri are to be considered suspect, and all passengers must be landed and kept in quarantine for the usual period. The ships must also be thoroughly disinfected.

INSANITARY BOARD SCHOOLS.—The Islington Vestry General Purposes Committee, after considering letters from the Vestries of Kensington and Wandsworth in favour of a searching inquiry into the affairs of the London School Board, so far as relates to the acquisition of sites and the construction of schools, have recommended that a petition be presented to the House of Commons praying for the appointment of the Commission for the purpose.

To mask the taste of antipyrin, M. Batterny (*Lyon Médical*) recommends adding an infusion of coffee with milk to the watery solution of the drug. Soda water also, with currant or raspberry syrup, will both disguise the unpleasant taste of the medicine and lessen its disturbing action on the stomach.

DEATH FROM CHLORODYNE.—A retired baker, named Maysent, living at Tunbridge Wells, is reported to have died from the effects of an overdose of chlorodyne. The jury, in returning a verdict of "death by misadventure," added a rider expressing the opinion that the sale of chlorodyne should be restricted.

SUCCESSFUL INOCULATION OF PSORIASIS.—Destot (*Provence Médicale*, June 8th, 1889; *Annales de Derm. et de Syph.*, February, 1890), succeeded in inoculating himself with psoriasis from a child by the insertion of scales into the skin of the shoulder on May 9th. On May 25th, it is stated, that there were patches of psoriasis on both elbows.

DEVON AND EXETER MEDICO-CHIRURGICAL SOCIETY.—A meeting of this Society was held at the Devon and Exeter Hospital on March 21st; Arthur J. Cumming, F.R.C.S., President, in the chair. Mr. Domville opened a discussion on antiseptics and their value in surgical practice. An interesting discussion followed, in which many members of those present took part. We are informed that the Society already numbers over 50 members, and is well supported by the medical men of Exeter and the neighbourhood.

PHARMACY IN PORTUGAL.—A committee has been appointed to consider the steps to be taken for the reform of pharmaceutical teaching and the better regulation of pharmaceutical practice in Portugal. The committee includes the names of most of the leading teachers of pharmacy in Portugal, Senhor Joao José de Sousa Telles, President of the Lusitanian Pharmaceutical Society, being the President, and Senhor Emilio Fragoso, editor of the *Gazeta de Pharmacia*, the Secretary.

PRESENTATIONS.—Mr. H. Culliford Hopkins, M.R.C.S.Eng., L.R.C.P.Edin., Surgeon to the Bath City Police, has been presented by the Bath City Police force with a handsome silver punch-bowl, in recognition of his undeviating kindness and attention.—Mr. P. M. Scatliff, M.R.C.S.Eng., L.R.C.P.Lond., was presented by the ladies of the Lordship Lane Branch of the St. John Ambulance Association with a very handsome case of silver afternoon teaspoons and tongs, as a mark of their appreciation of his services as honorary lecturer to the class recently concluded.

SMALL-POX AND VACCINATION.—A neat little demonstration of the protective influence of vaccination has recently been given by the "logic of events" in Germany. The town of Gladbach, in the Rhine province of Prussia, was visited by an epidemic of small-pox. Of a population of 47,800, 94 persons were attacked, of whom 48 were vaccinated, 38 revaccinated, and 8 not vaccinated. The number of deaths in these three categories was 9 in the first, 1 in the second, and 4 in the third. These figures show a death-rate of 50 per cent. among unprotected, 18.75 per cent. among partly protected, and 2.63 per cent. among better protected persons.

BEQUESTS.—Mr. Philip Falk bequeaths by his will £200 to the Jews' Hospital, £100 to the Home for the Jewish Deaf and Dumb (Notting Hill), £50 each to the Institution for the Relief of the Indigent Blind of the Jewish Persuasion (Duke Street, Aldgate), the Jews' Convalescent Home (South Norwood), University College Hospital, the London Hospital, St. Mary's Hospital (Paddington), Great Ormond Street Hospital for Sick Children, the Male Lock Hospital (Dean Street), the Female Lock Hospital (Paddington).—Miss Clara Waddington, sister of the late Dean Waddington, of Durham, has bequeathed the sum of £2,000 to the Durham County Hospital free of legacy duty.

NOTIFICATION IN SOUTH AMERICA.—The introduction of the notification of infectious diseases by the municipal authorities of Rosario, a town of the Argentine Republic, has created a state of acute tension between them and the local medical practitioners, who strongly object to having this duty thrust upon them. The municipality no doubt means well, but its zeal for sanitary reform would seem to be not altogether according to knowledge, since venereal diseases are apparently included among those which must be notified. It is not easy to understand what public benefit could follow the notification of such cases, but it is obvious that in a small town it would be pretty sure to give rise to the gravest social and domestic complications.

INTERNATIONAL MEDICAL CONGRESS.—The programme of the ection of Medicine is not yet definitively arranged, but it is proable that the following subjects, among others, will be discussed: he Treatment of Diseases of the Heart and Kidney; of Various 'orms of Anæmia; of Phthisis, particularly in special hospitals; f Diabetes; of Gallstones; of Uræmia; and of Locomotor Ataxy. ir Andrew Clark will deliver an address on the Bearing of the Exclusive Bacillary Theory of Tuberculosis on the Clinical History f Phthisis; and Dr. Ord will introduce a discussion on Myxœdema. among the non-German physicians who have promised communiations are Drs. W. Osler, of Baltimore; Andrew H. Smith, A. S. oomis, and Jacoby, of New York; Lépine, of Lyons; Dujardin-Beaumetz, of Paris; Pavy, of London; and Grainger Stewart, of Edinburgh. Further particulars may be obtained from Mr. G. H. Makin, 2, Queen Street, Mayfair.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—At a recent meeting of the Bradford Medico-Chirurgical Society Dr. Major showed a case of alcoholic paralysis associated with pleurisy, pointing to ncipient phthisis, which is so frequently associated with that lisease. In discussing Dr. G. Carter's paper on Landry's Paraysis, which will be published in the JOURNAL, Dr. Major inclined o attribute the affection to a toxic cause, as indicated by the requent implication of the spleen, while Dr. Rabagliati believed t to be due to changes in the fluid of the central canal of the spinal cord. Drs. Goyder, Bell, and Kerr also joined in the discussion, the latter stating that he had seen a fatal case of poisoning by bromidia presenting exactly similar symptoms. A paper was also read by Dr. Major on the Position and Duties of Private Practitioners under the New Lunacy Act.

INFECTIOUS DISEASES IN ITALY.—The following are the official statistics of cases of infectious disease notified in Italy (the population of which was 30,565,253 on January 31st, 1888) during the month of January in 1890 and 1889 respectively: Small-pox, 2,317 in 1890, as against 52,341 (?) in 1889; measles, 9,946, as against 5,478; scarlet fever, 1,599, as against 3,692; diphtheria, 2,314, as against 3,431; typhoid, 2,615, as against 3,158; typhus, 114, as against 160; puerperal fever, 597, as against 734. There were besides 79 cases of malignant pustule and 6 of rabies in January, 1890, while Italy showed a clean bill of health in respect of both these diseases in the corresponding period of 1889. In January, 1890, 178,679 cases of influenza were reported, but that number does not adequately indicate the prevalence of the epidemic, as influenza not being in the list of notifiable diseases, many communes did not send in any return relative thereto.

HORSE SHOEING.—Periodically the discussion of this interesting subject recurs, sometimes in the daily press, but more frequently in the pages of weekly journals devoted to "sports and pastimes." Recently several meetings have been held to consider this matter at the Animals' Institute, where at the present time there is an exhibition of horseshoes, interesting and complete, perhaps more complete in demonstrating that the number of useless inventions far exceeds those of practical merit in dealing with horses' feet. As a rule more harm than good is caused by an exhibition of this kind to the general public and the "horsey amateur." The latter often proceeds to experiment upon information afforded by exhibits to the disaster of his faithful four-footed servant, and travels over ground long cleared of every blade of grass by the skilled and trained student of farriery and veterinary surgery. It is gratifying to know that in effect the result of the deliberations at the Animals' Institute was to establish that a piece of iron bent to the shape of the foot, pierced with holes, and with its centre of bend thinner than its branches and extremities, was, in the opinion of the meeting, the best and most economical, especially in the face of the formidable array of inventions exhibited. The Institute has arrived at a wise decision; in fact, it is a decision endorsing the opinion of several generations of horseshoers, and there is nothing at all novel in the matter. For a horseshoe a practical test is always at hand: If it cannot be used, of what service are the brilliancy of the idea and depth of thought exhibited in elaboration of detail? The harm done in horseshoeing is not that caused by the principle of the shoe, but by the ignorance, carelessness, or want of ability on the part of the smith in fitting. We do not want new principles so much as a careful, painstaking, thoughtful manipulation of the iron in fitting, to render it suitable to the organ to which it is to be applied.

MEDICAL VACANCIES.

The following Vacancies are announced:

BETHLEM HOSPITAL.—Two Resident Clinical Assistants; doubly qualified. Residence in the hospital for term not exceeding six months, with apartments, rations, and attendance. Applications to John Baggally, Esq., Bridewell Hospital, Blackfriars, by April 12th.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—A vacancy exists in the Honorary Acting Out-patient Staff. Applications to the Honorary Secretary, Mr. Russell Jolly, 43, Waterloo Street, Birmingham, by April 28th.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Double qualification. Salary, £100 per annum, and £30 for cab hire. Applications, with testimonials and certificates of registration, to the Secretary by April 17th.

BOLTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon. Double qualification. Salary £100 per annum (increasing to £150, by £10 annually) with furnished apartments, board, and attendance. Applications to be addressed to Mr. Kevan, Honorary Secretary, 12, Acresfield, Bolton, by April 26th.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road.—Resident Medical Officer, fully qualified. Salary, £80 per annum, with board and residence. Applications by April 16th to the Secretary, A. C. Davis.

CITY OF LIVERPOOL.—Medical Officer to the Main Bridewell. Double qualification. Salary £110 per annum, to include cost of medicines, medical appliances, etc. Applications, endorsed: "Application for appointment of Medical Officer to Main Bridewell," to be addressed to the Chairman of the Watch Committee, under cover to the Town Clerk, Municipal Offices, Dale Street, Liverpool, by April 14th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist; must be registered and not engaged in practice. Salary, 100 guineas per annum. Applications by April 16th to the Secretary, T. Storrar-Smith.

ENNISKILLEN UNION (Ely Dispensary).—Medical Officer. Salary, £115 per annum and fees. Applications to Mr. John Trotter, Honorary Secretary, Mully Kevill, Derrygonnelly. Election on April 14th.

FEMALE LOCK HOSPITAL, Harrow Road, W.—House-Surgeon. Candidates must be Members of the Royal College of Surgeons. Salary, £100 per annum, and board and lodging. Applications by April 14th to the Secretary.

GENERAL INFIRMARY, Leeds.—Resident Officer at the Ida Hospital. Appointment for six months, with honorarium of £25. Board, lodging, and washing in the Infirmary. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

GENERAL INFIRMARY, Leeds.—Two House-Physicians (one for six and one for twelve months). Board, lodging, and washing. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

GENERAL INFIRMARY, Leeds.—Two House-Surgeons. Board, lodging, and washing. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

HENDON RURAL SANITARY AUTHORITY.—Sanitary Medical Officer. Salary, £100 per annum. Applications, endorsed "Application for Sanitary Medical Officer," to be sent to W. A. Tootell, Clerk, Edgware, by April 21st.

HOLBORN UNION.—Assistant Medical Officer at the Infirmary, Archway Road, Upper Holloway, N.—Salary, £100 per annum, with board, lodging, and washing. Applications to James W. Hill, Clerk to the Guardians, Clerk's Offices, Clerkenwell Road, E.C., by April 15th.

LANCASTER COUNTY ASYLUM, Whittingham.—Experienced Pathologist. Salary, £200 per annum, with board, lodging, washing, and attendance. Applications to Dr. Wallis, the Medical Superintendent.

LONDON COUNTY ASYLUM, Colney Hatch.—Medical Superintendent. Salary, £1,000 per annum, with a furnished house, coals, gas, etc. Age not to exceed 50. Double qualification. Must have had similar experience. Applications (on forms furnished) to be sent in by April 23rd to the clerk, R. Partridge, London Asylums Committee Office, 40, Craven Street, Strand.

MACCLESFIELD GENERAL INFIRMARY.—Senior House-Surgeon; must be doubly qualified. Salary, £100 for first year, an increase of £10 the second year, with board and residence. Applications to "Chairman House Committee" by April 12th. Election April 25th.

NORFOLK AND NORWICH HOSPITAL, Norwich.—Assistant to House-Surgeon. Must possess one qualification. Appointment for six months only. No salary, but board, residence and washing. Applications to the House-Surgeon, H. C. Nance, by April 22nd.

OWENS COLLEGE, Manchester.—Demonstrator in Materia Medica and Pharmacy. Salary, £100 per annum. Applications addressed to the Senate under cover to the Registrar, H. W. Holder, by April 15th.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Salary, £150 per annum. Applications by April 28th to the Registrar, Henry Wm. Holder, M.A.

PADDINGTON GREEN CHILDREN'S HOSPITAL, London, W.—House-Surgeon. Salary, £50 per annum, with board and residence. Applications to the Secretary by April 22nd.

QUEEN'S HOSPITAL, Birmingham.—One House-Physician. Salary, £50 per annum, tenable for one year. Double qualification. Applications to the Secretary by April 24th.

QUEEN'S HOSPITAL, Birmingham.—One House-Surgeon. Salary, £50 per annum, tenable for one year. Double qualification. Applications to the Secretary by April 24th.

QUEEN'S HOSPITAL, Birmingham.—One Obstetric and Ophthalmic House-Surgeon. Salary, £10, tenable for six months, with board, lodging and washing. Applications to the Secretary by April 24th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, by June 1st.

STOCKTON-ON-TEES HOSPITAL AND DISPENSARY. — House-Surgeon (non-resident), doubly qualified; to reside near the hospital and give whole time. Salary, £200 per annum. Applications to the Secretary, John Settle, by April 12th.

WALSALL AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Resident Medical Officer. Married. Salary, £200 per annum, with unfurnished residence. Applications to the Secretary, James Kimberley, 61, Williams Street, Walsall, by April 22nd.

YORK COUNTY HOSPITAL.—Senior House-Surgeon, duly qualified. Salary, £100, with board and residence. Candidates to state whether, if elected, they would be willing to take the Assistant's post (he being a candidate for the appointment). Applications to C. E. Pinfold, Secretary, by April 22nd.

MEDICAL APPOINTMENTS.

BARRETT, R. H., L.R.C.P., M.R.C.S., appointed Medical Officer for the 2nd and 3rd B. Districts of the Wisbech Union, *vice* E. Welchmann, L.R.C.P., M.R.C.S., resigned.

BENHAM, H. A., M.D., C.M.Aberd., L.S.A., appointed Medical Superintendent at the Fishponds Lunatic Asylum, *vice* Dr. Thompson.

BLACK, R. S., M.A., M.B., D.P.H.Aberd., appointed Clinical Assistant to the South-Western Fever Hospital (Metropolitan Asylums Board), Stockwell, *vice* A. W. Carter, M.B.Edin.

BRADSHAW, James C., L.R.C.P., L.R.C.S., C.P.H., reappointed Medical Officer of Health to the Brackley Rural Sanitary Authority for two years.

CAMPBELL, H. Gordon, appointed Resident Clinical Assistant to Dundee Royal Asylum.

CHALMERS, Quintin, M.D.Glasg., appointed Medical Officer to the Commercial Travellers' Society of Scotland, *vice* Professor Wm. Leishman, M.D.

CLOTHIER, H., M.D., L.R.C.P.Lond., reappointed Medical Officer of Health to the Hornsey Urban Sanitary Authority.

CREASY, R., L.R.C.P., M.R.C.S., reappointed Medical Officer and Public Vaccinator to the 2nd District of the Winslow Union.

DANIELL, E. P., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to St. Peter's Hospital for Stone, Henrietta Street, Covent Garden, *vice* E. L. Paull, M.R.C.S.

DEVEREUX, W. C., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the General Hospital, Birmingham, *vice* T. G. Crump.

DRAGE, Lovell, M.A., M.B., M.R.C.S., reappointed Medical Officer of Health to the Hatfield Rural Sanitary District.

FISHER, J. A., L.R.C.P.Edin., L.M., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Garston Local Board.

GANGE, F. A., M.D.St.And., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Faversham Rural Sanitary Authority.

GOODE, Charles Fox, M.R.C.S.Eng., L.S.A., appointed Medical Officer to the Northern District and Vaccination Officer of the Eastern District of the Parish of Brighton, *vice* John Hams Ross, M.D.

HARRIS, A. Wellesley, M.R.C.S., L.S.A., D.P.H., appointed Medical Officer of Health to the Borough of Southampton—not, as stated, to the Southampton Infectious Diseases Hospital.

HUTCHINSON, Jonathan, F.R.C.S., appointed Honorary Consulting Surgeon to the Jewish Home for Incurables.

ILLINGWORTH, Charles R., M.D., M.R.C.S., appointed Surgeon to the Altham Collieries, near Accrington, *vice* John William Irvine, L.R.C.S.

JARDINE, Robert, M.D.Edin., C.M., M.R.C.S.Eng., appointed Physician in the Department of Diseases of the Chest, Glasgow Public Dispensary.

JONES, Hugh R., M.A., M.B.Cantab., B.Sc.Lond., appointed Honorary Assistant-Surgeon to the Liverpool Hospital for Cancer and Skin Diseases.

LANGWILL, Hamilton G., M.B., C.M., appointed Resident Physician to the Royal Edinburgh Hospital for Sick Children.

LEON, John T., B.Sc.Lond., F.I.C., F.C.S., appointed to the post of Demonstrator of Chemistry and Assistant Lecturer on Physics.

MCGOWAN, W. S., M.A., M.B., C.M., appointed House-Surgeon to the Alnwick Infirmary, *vice* Dr. J. Duncan.

MACGREGOR, D. A., M.B.Edin. and C.M., reappointed Medical Officer of Health to the High Hoyland Division of the Penistone Union Rural Sanitary Authority.

MCLEAN, Chas. J. Russell, M.D., M.S.Edin., reappointed Medical Officer of Health for the Yeadon Urban Sanitary District.

MORCOM, A., L.R.C.S.Edin., L.M., L.S.A., reappointed Medical Officer of Health to the Luton Rural Sanitary Authority.

MOYNIHAN, B. G., M.B., M.S.Lond., F.R.C.S., appointed Resident Surgical Officer to the General Infirmary, Leeds, *vice* H. Littlewood, F.R.C.S.

MUNN, Dr., appointed a Medical Officer to the Workhouse of the Belfast Union.

OSBALDESTON, L. Fredk., M.R.C.S.Eng., L.S.A., reappointed Medical Officer to the 3rd District of the Hatfield Union.

PARKER, Charles A., M.R.C.S., appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden Square, *vice* H. B. Brackenbury.

PATCHETT, R. A., L.R.C.S.Edin., reappointed Medical Officer to the Chipping District of the Clitheroe Union.

POWELL, William, L.R.C.P., M.R.C.S., appointed Surgical Registrar to Westminster Hospital.

PRESTON, H. T., M.B., C.M., M.R.C.S.Eng., reappointed Medical Officer for the Wolverley District of the Kidderminster Union.

SANDERS, W. G. W., M.B., appointed Resident Physician to the Royal Edinburgh Hospital for Sick Children.

SERGEANT, E., L.R.C.P.Lond., M.R.C.S., L.S.A., Medical Officer of Health for Bolton, appointed Medical Officer of Health for the Lancashire County Council.

SHARMAN, John Schutze, M.R.C.S., appointed Surgeon to the Finsbury Dispensary, Brewer Street, Goswell Road, *vice* John Sharman.

SKINNER, Ernest W., M.B., C.M.Edin., appointed Medical Officer of Health to the Rye Rural Sanitary Authority.

SMITH, Fredk. J., B.A., M.B., M.R.C.P.Lond., appointed Consulting Physician to the Jewish Home for Incurables.

SMITH, K. R., M.D.Lond., B.S., M.R.C.S., appointed Medical Officer for the 7th and 8th Districts of the Totnes Union, *vice* J. A. B. Thompson, M.D.Glasg., resigned.

SWALLOW, F. McDonald, L.R.C.P., L.R.C.S.Edin., L.S.A., reappointed Medical Officer of Health to the Silkstone District of the Penistone Union Rural Sanitary Authority.

VAISEY, T. F., M.R.C.S., L.S.A., reappointed Medical Officer and Public Vaccinator to the 1st District of the Winslow Union.

WATSON, Thomas, M.D.Glasg. and C.M., reappointed Medical Officer of Health to the South Stockton Urban Sanitary District.

WHEATSON, S. W., M.D., M.R.C.P., M.R.C.S., etc., appointed Registrar and Chloroformist to the Royal Hospital for Children and Women, Waterloo Bridge Road, *vice* Dr. Orr.

WILSON, A. C. J., L.R.C.P.Edin., L.M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Penistone Union Rural Sanitary District.

WORBOYS, Thomas Saunders, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Wrexham Infirmary and Dispensary, *vice* Edward A. Clarke, L.S.A.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Meredith: On the Present Position of Abdominal Surgery.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Mr. Henry Sewill: On some points in the Etiology and Pathology of Dental Caries, illustrated by Microphotographs of the Tissues exhibited on the Screen by Mr. Andrew Pringle, and the original slides shown under the microscope. Mr. W. Scott-Thomson: Casual Communications.

TUESDAY.

PATHOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Brigade-Surgeon Myers: Perforating Ulcer of Duodenum. Mr. Hurry Fenwick: Spontaneous Fracture of Urinary Calculus. Mr. Buckston Browne: Spontaneous Fracture and Reunion of Vesical Calculi. Mr. Anthony Bowlby: Melanotic Epithelioma (two specimens). Mr. E. Solly: Melanotic Carcinoma of Labium. Mr. James Berry: Fibrochondroma of Tongue. Mr. D'Arcy Power: Fracture of Patella from Direct Violence. Dr. Montague Murray: Four Sacculated Aneurysms arising from Dilated Aortic Arch. Mr. Jonathan Hutchinson, jun.: Calcareous Nodule of Skin. Card Specimens: Mr. H. D. Rolleston: Separation of Symphysis Pubis. Mr. Shattock: Necrosis Sicca of Digital Phalanx.

WEDNESDAY.

ROYAL MICROSCOPICAL SOCIETY, 20, Hanover Square, 8 P.M.—Mr. W. West: Fresh-water Algæ of North Wales. Mr. M. Hartog: The state in which Water exists in Live Protoplasm.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 7 P.M.—Mr. Charles Harding: On the Cold Period at the beginning of March, 1890. Mr. J. E. Clark: Note on a Whirlwind. Mr. Albert E. Watson: On the possibility of Forecasting the Weather by means of Monthly Averages. Mr. W. B. Tripp: On the Rainfall of the Globe.

THURSDAY.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Mr. J. E. Lane: Urethral Chancres. Dr. Sidney Phillips: On the Symptoms connected with the Circulation in Diphtheria.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTHS.

BARRETT.—On March 4th, at 21, Learmouth Terrace, Edinburgh, the wife of W. H. Barrett, M.B., of a son.

CHEESEWRIGHT.—On Easter Sunday, at Rawmarsh, Rotherham, the wife of John F. Cheesewright, M.R.C.S.Eng., of a son.

DEATH.

POLLARD.—On March 29th, at Southlands, Torquay, William Pollard, F.R.C.S.Eng., in his 71st year. Deeply regretted.

SCALE OF CHARGES FOR ADVERTISEMENTS IN THE "BRITISH MEDICAL JOURNAL."

Seven lines and under	...	...	...	...	£0	3	6
Each additional line	...	...	...	...	0	0	4
A whole column ...	...	...	...	...	1	15	0
A page ...	...	...	...	...	5	0	0

An average line contains seven words.

When a series of insertions of the same advertisement is ordered, a discount is made on the above scale in the following proportions, beyond which no reduction can be allowed.

For 6 insertions, a deduction of	...	...	10 per cent.
,, 12 or 13 ,, ,,	...	...	20 ,,
,, 26 ,, ,,	...	...	25 ,,
,, 52 ,, ,,	...	...	30 ,,

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-Offices letters addressed to initials only.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W, 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F. 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

TREATMENT OF ALOPECIA.

D.S G. asks for advice in the treatment of the following case: A patient, an officer, is steadily losing all the hair out of his eyebrows and moustache. The loss is slow but steady, and the moustache and eyebrows have now a moth-eaten appearance, and cause much annoyance. Sole previous medical history: acute rheumatism in 1885. Both parents gouty. Has tried arsenic, tonics, blistering, but cannot manage chrysarobin as it stains skin and linen.

ANSWERS.

W. M. W.—The office of the Anglo-American Vienna Medical Association is at 12, Landesgerichtsstrasse, Vienna.

A MEMBER.—Turpentine baths for the treatment of rheumatism, etc., may be prepared by shaking up 90 to 120 grains of oil of turpentine with a very strong solution of green soap, and mixing this emulsion thoroughly with warm water when the latter is poured into the bath.

AN ASSOCIATE.—Appointments to the post of surgeon to a passenger ship are made by the owners, to whom application should be made, backed up if possible by a recommendation from some person having influence with the managers of the line selected.

HYDROCOTYLE ASIATICA.

R. T. HUSTON.—Hydrocotyle Asiatica has been recommended by some French physicians in the treatment of eczema, but has found no favour either in England or America, and in the best textbooks it is not considered as deserving even of mention.

LARVÆ PASSED PER ANUM.

E. E. B.—If our correspondent will consult Leuckart's *Die menschlichen Parasiten*, of which the first volume of the second edition has recently been translated by W. E. Hoyle, he will probably be able to identify the larvæ for himself. Any person having a fair knowledge of the subject could identify such larvæ.

DYSMENORRHŒA.

MR. FRANK BOXALL, M.R.C.S. (Rudgwick, Sussex) writes: In answer to "Puzzled," I would suggest the use of antipyrin, in 15-grain doses every four hours till the pain is relieved, as I have found it very useful in similar cases.

DR. STANLEY HAYNES (Malvern) writes: "Puzzled" should order solution of dialysed iron, 10 drops, on sugar or bread, morning, noon, and night, for his patient, beginning as soon as her period is ended until the next, repeating for another month, or two or three if necessary, and warning her she should not miss a dose.

Chloral hydrate, or antipyrin, in doses of 10 grains of either, every hour—to six doses if required—could be hopefully given during the paroxysms of pain, unless specially contra-indicated.

Local examination may be essential in the case described in "Puzzled's" letter.

DEPILATORY.

MR. HEYGATE VERNON, F.R.C.S. (Boscombe, Bournemouth) writes: In reply to Dr. Shelton Daly's question on "Depilatory" in the JOURNAL of April 5th, page 819, the only satisfactory way to treat the hairs is by epilation, and then destroying the hair follicles by means of the electric needle cautery, as used by ophthalmic surgeons for a similar purpose in the eyelids. This is tedious but radical, and not very painful.

NOTES, LETTERS, ETC.

UNINFLAMMABLE FABRICS.

A FRENCH Commission, after a long investigation, recommends (according to *Le Génie Civil*) as a simple and efficacious method of rendering textiles non-inflammable that they be soaked in a 10 per cent. solution of ammonium phosphate.

A DANGEROUS PRACTICE.

DR. CHAS. J. RUSSELL MCLEAN (Yeadon, Leeds) writes: One night a few months ago I was called in haste to Mrs. X., the message being that she "had broken a glass in her inside." Taking a few instruments, I set off, and found the poor woman on her knees afraid to move for fear of pain. She had been using one of those objectionable glass vaginal syringes, and, as often happens when the piston is packed too tightly, it had broken. After very carefully getting two fingers in behind the remains of the syringe in the vagina, I managed to get a Sims's speculum introduced, and then easily picked out four large sharp-edged pieces of glass, and finished off with a gentle syringe from a Higginson's syringe.

The use of such glass syringes as one sees in nearly every druggist's shop cannot be too strongly condemned. In the above case no damage resulted; but one can easily imagine a case where the woman, bashful of being seen using the syringe—and such people are constantly met with—would try to remove the pieces of glass herself, with disastrous results.

ENDOWMENT OF BOTANICAL SCIENCE.

THE *Botanical Gazette*, published at Crawfordsville, Indiana, gives some particulars of one of the most magnificent bequests ever made for scientific purposes: that of the late Mr. H. Shaw for the endowment of the Botanic Garden and School of Botany at St. Louis, Missouri, amounting to no less than between 3,000,000 and 5,000,000 dollars. The trustees have determined

to apply the income to the maintenance and increase in the scientific usefulness of the Botanic Garden; to provide fireproof quarters for the invaluable herbarium of the late Dr. George Engelmann, and to supply means for its enlargement; to secure a botanical museum; and to gradually acquire and utilise facilities for research in vegetable physiology and histology, the diseases and injuries of plants, and other branches of botany and horticulture. To aid in the carrying out of this last purpose travelling botanical scholarships have been established. The present very able director of the Botanic Garden is Dr. William Trelease.

Medical Appeal.

The Rev. Arthur R. Carter (Rector of Wapping) writes: I am requested to send you a list of subscriptions received as a supplement to the vote of £10 granted by the British Medical Benevolent Society for removing a medical practitioner to a warmer climate, as advised by hospital and other medical authorities. The following sums have been forwarded to me, namely:

	£	s.	d.
Sir Andrew Clark, Bart.	2	2	0
Sir James Paget	1	0	0
Dr. Thomas Stevenson	0	10	0

The Fasting Man.

Mr. G. N. Robins, M.R.C.S.Eng., L.R.C.P.Edin. (Westminster) writes: Signor Succi has during the third week of his fast lost 5 lbs. 4 ozs. in weight, and is becoming very emaciated in appearance. During the week there has been a steady though slight reduction in temperature, but in other respects his health does not appear to have suffered from the effects of his continued abstinence.

Daily Record of Succi's Condition during Third Week of his 40 Days' Fast at the Royal Aquarium, Westminster.

Date, 1890.	Day of Fast.	Pulse.	Temperature (axillary).	Respirations.	Weight.	Dynamometer (kilogrammes).	Spirometer (cubic centimètres).	Urine passed (fluid ounces).	Urea = (grains).	Water Consumed (fluid ounces).	Kaiser Brunnen (fluid ounces).	Hunyadi Janos (purgative) (fl. oz.).	Sleep (hours).
					lb. oz.								
April 1st, noon	15	58	97.9°	21	106 9	47	1500	14¾	177.3	12	7	—	6
													2
,, 2nd ,,	16	71	98.2°	19	106 0	51	1550	16½	176.8	16	9	—	5
													4
,, 3rd ,,	17	65	98.2°	21	104 13	48	1500	17	178.5	13	4	—	6
,, 4th ,,	18	62	97.6°	18	104 3	48	1450	13	136 5	13	10	—	7½
,, 5th ,,	19	64	97.8°	19	103 12	47	1500	11½	131.5	13	7	—	5½
					at 3 P.M.								2
													1½
,, 6th ,,	20	56	97.8°	18	103 4	47	1450	13	153.5	15	9	5	4
													3
,, 7th ,,	21	58	97.0°	18	102 9	48	1450	11	132.2	18	4	—	4½

Surgical Instrument Makers as Practitioners.

Spes writes: I shall be extremely glad to know if there is any way of suppressing a traffic which is largely carried on by certain surgical instrument makers after the following manner: I send a patient simply to buy an ordinary truss; but instead of being supplied with one at a moderate cost he is advised by the maker (after a "consultation," for which the fee is half a guinea or a guinea) that a specially constructed one is desirable, and for this he is charged most exorbitantly.

In the first place, I fail to see why these persons are allowed to charge consultation fees, and, in the next, I think it is due to our patients that we should protect them against being thus misled. Within the last few minutes I have had a working man in my surgery, who, after such a "consultation" with such a maker paid £2 18s. 6d. for an unnecessary make of truss, which I happen to know would have been dear at one-third that amount. To my knowledge this kind of thing has occurred repeatedly, and it seems absurd that we should be powerless to put a stop to such dishonourable trading.

I cannot help thinking that we might at least have a method for obtaining information as to who are trustworthy, for it is a serious reflection on a medical man who innocently recommends patients to such makers as I describe.

A local list of "recognised surgical instrument makers," published by each Branch of the British Medical Association, might be a valuable guide.

American Medical Degrees.

A Colonial Member B. M. A. writes: In recent numbers of the Journal you published some correspondence on the value, or rather the want of it, of certain American degrees. Doubtless too many of the American graduates are undereducated; but British graduates are far from being immaculate, as the recital of my experience in a recent consultation with two of them will show.

One of the gentlemen to whom I allude has the M.D. of a well-known British university, and on every possible occasion boasts of his high classical and professional education—and, as the result of all this, affirms that uric acid crystals are not reddish brown but colourless, and that they are never seen except under a high power, while oxalates are like cayenne pepper, and have frequently been seen by him without a microscope.

The same gentleman, together with a new fledged M.R.C.S., diagnosed a case of enormously distended gall bladder—verified by operation—as "gastric catarrh, probably cancer," and they both said the only treatment was to "go in for euthanasia by gradually increasing doses of morphine until she dies!" Surely this displays no less ignorance than the statement of an American graduate that he had treated several cases of prostatitis in the female.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. T. Maccall, Morecombe; Mr. J. Hutchinson, London; Dr. O. Wood, London; Mr. G. N. Robins, London; Surgeon H. W. G. Macleod, Meean Meer; The Dean of St. Mary's Hospital Medical School, London; Mr. T. L. Drewe, London; Mr. W. E. Row, Sydenham; Mr. E. Somers, Pendleton; The Secretary of the University of Oxford; Mr. W. S. Frew, Princetown; Dr. G. Thin, London; Dr. Maxwell, Woolwich; Mr. R. Black, Brighton; Mr. J. E. Blomfield, Sevenoaks; Miss M. Longlands, King's Lynn; Mr. H. Vernon, Boscombe; Surgeon-Major J. MacGregor, London; Dr. W. A. Aikin, London; Mr. H. C. Nance, Norwich; Cuticura; Mr. F. Boxall, Rudgwick; A. B.; Mr. A. de Winter Baker, Dawlish; Dr. A. G. Blomfield, Exeter; Mr. F. Joy, Northwold; Mr. F. M. Puddicombe, Devonport; Mr. J. S. Gelston, Ixworth; Mr. C. E. Pinfold, York; Cockade; Mr. H. Herbert, Oldbury; Dr. R. Stockman, Edinburgh; Mr. G. Fisher, Guildford; Mr. A. Hulme, Birmingham; Dr. G. N. Pitt, London; W. H. Lewis, M.B., London; Dr. W. Sykes, Mexborough; Mr. D'Arcy Power, London; Mr. J. T. Jones, Corris; Dr. Dreschfeld, Manchester; Rev. Dr. Carter, London; Mr. C. R. Niven, Eaglesham; Mr. A. E. Joscelyne, High Wycombe; Mr. A. W. Mayo Robson, Leeds; Mr. J. Binks, Wakefield; Mr. Ballance, London; Mr. J. Clarke, Cambridge; Mr. W. N. Hepburn, Coxhoe; Dr. J. Cagney, London; Mr. V. L. Watts, Clonskea; Dr. C. Norman, Grangegorman; Dr. D. J. Mackenzie, Glossop; Mrs. O'Neill, Wisbech; Mr. H. W. Roberts, London; Mr. Michel de Lapinsky, Kiew, Russia; Dr. E. D. Mapother, London; Mr. Wm. Philipson, Newcastle-on-Tyne; Mr. R. W. Lloyd, London; Mr. G. H. Makin, London; Messrs. Bush and Co., London; Dr. Edwardes, London; Mr. F. Evans, Beeston; Sir J. Paget, London; Mrs. E. G. Fenwick, London; Dr. F. M. Pope, Leicester; Mr. A. Milman, London; Surgeon-General Cornish, London; Dr. Blackman, Portsmouth; Mr. T. Fisher, Garstang; Dr. E. Seaton, London; Dr. T. R. Bailey, Bilston; Mr. G. H. Corbisbley, Macclesfield; Dr. C. J. McLean, Yeadon; Mr. W. H. Copley, Wisbech; Mr. A. Colles, Wellington; Mr. F. C. W. Piggott, Teignmouth; Mr. A. E. Legat, Sunderland; Dr. F. Little, London; Mr. C. E. G. Stalkartt, Southsea; Mr. H. B. Hewetson, Leeds; Mr. T. J. Verrall, Brighton; Dr. Abercrombie, London; Dr. R. Martin, London; Dr. Balding, Royston; Mr. J. Poland, London; Dr. W. E. Steavenson, London; Miss M. Kavanagh, Coventry; Mr. Lawson Tait, Birmingham; Mr. A. Barker, London; Dr. C. C. Cripps, London; A General Practitioner; Mr. S. Craddock, Bath; Dr. F. W. Lewis, Llandovery; Dr. R. Barnes, London; Mr. H. S. Leigh, Cheatham; Dr. L. W. Morgan, Bath; Dr. B. Shillitoe, London; Dr. J. Goodhart, London; Dr. S. M. Copeman, London; Dr. A. Ruffer, London; Dr. T. W. Hime, Bradford; Mr. R. Greene, Berry Wood; Dr. G. T. Galbraith, Stirling; Dr. A. Meldon, Dublin; D. S. G.; Mr. A. Thomson, Oxford; M. W. M. Hanquine, Paris; D. D.; Dr. C. Steele, Clifton; Mr. J. C. Thresh, Chelmsford; Mr. W. W. Wagstaffe, Sevenoaks; Parish Doctor; Mr. E. H. Fowler, Plymouth; One Who Has Seen Much Service; Dr. W. W. Ireland, Prestonpans; J. W. Downie, M.B., Glasgow; Dr. J. D. McCaw, London; Mr. E. Blacker, Midsomer Morton; A Member; Mr. J. St. S. Wilders, Birmingham; Surgeon J. R. Mallins, Rawal Pindi; Sir William Jenner, Bishop's Waltham; Miss M. F. Cusack, Toronto; Brigade-Surgeon J. B. Hamilton, Lucknow; Dr. S. Haynes, Malvern; Mr. P. M. Scatliff, London; W. F.; Dr. H. B. Bailey, Grantham; Brigade-Surgeon; Mr. F. H. Moore, Ely; A Member B.M.A.; Dr. J. Cross, London; Mrs. E. Clark, Datchet; Dr. J. Ewart, Brighton; Dr. W. S. Lang, Edinburgh; Mr. C. Hanbury, Richmond Hill; Confido; Messrs. Blondeau and Co., London; Mr. W. M. Jones, Swinton; Mr. E. C. Masser, Wellington; A Colonial Member B.M.A.; Mr. M. Jennings, Bervie; The Dean of the University of Aberdeen; Dr. Rentoul, Liverpool; Mr. H. M. Madden, Braidwood, N.S.W.; Mr. H. R. Jones, Liverpool; An Associate; Mr. James West, London; Surgeon-Major Adye Curran, Bermuda; Mr. W. Thorburn, Manchester; Mr. J. E. Crisp, Corsham; Mr. J. M. Stone, Wimbledon; Dr. G. S. Woodhead, Edinburgh; Dr. F. W. Mott, Harrow-on-the-Hill; Our Paris Correspondent; Mr. W. J. Miller, London; Dr. Ward Cousins, Southsea; Mr. G. M. Whipple, Richmond; Surgeon-Major J. Macartney, Newbridge, etc.

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REMARKS
ON
FATTY TUMOURS.

By J. BLAND SUTTON, F.R.C.S.,
Assistant-Surgeon Middlesex Hospital.

Any tumour composed of fat is called a fatty tumour, but such tumours are of various kinds, arise in any situation, and receive a variety of names. These tumours are by no means restricted to regions where fat is found normally; they may occur in a muscle, or in the midst of a myoma, in connection with the brain, spinal cord, or even grow from periosteum.

For convenient description, fatty tumours may be considered in the following groups: 1, subcutaneous; 2, subserous; 3, subsynovial; 4, submucous; 5, intermuscular; 6, intramuscular; 7, parosteal.

1. Subcutaneous Lipomata.

Beneath the skin of our bodies exists a layer of fat which varies in thickness in different parts, but is most abundant over the trunk and trunk-end of the limbs. These are the common situations in which to find fatty tumours. They appear under three forms: sessile, pedunculated, or diffuse.

Sessile Lipomata occur as irregular-shaped, often lobulated, indistinctly circumscribed, encapsuled masses of fat more or less adherent to the overlying skin. Unless they have been inflamed, they are movable within their capsules. As a rule, lipomata are single, but ten, twenty, and even a greater number may occur in the same individual. In point of size they vary widely; a fatty tumour, weighing 8 ounces, is usually regarded as a large specimen, but, under exceptional conditions, they have been known to attain a weight of 50, 80, and even 100 lbs. Subcutaneous fatty tumours are for the most part confined to the trunk and trunk-end of the limbs, but they



Fig. 1.—A fatty tumour of the palm of the hand.

may occur in any part of the limbs, even in the palm of the hand. In this situation they are apt to give rise to difficulty in diagnosis, and it may be useful to recapitulate their leading clinical features. They are not limited by age, as fatty tumours from the palm have been removed at the age of 16 years, and as late as 60. The tumour grows slowly, is soft and doughy to the touch, irregular in shape, imparts a sense of fluctuation, and is adherent to the skin. In all cases that I have seen, the tumour was closely associated with the thenar eminence. The general appearance may be inferred from Fig. 1. These tumours closely simulate a compound ganglion of the flexor tendons. The lobes of fat usually burrow beneath the palmar fascia.

Fatty tumours in the sole of the foot are more easy of comprehension than one in the palm of the hand; yet, strange to say, they are more frequent in the hand than the foot; indeed, I only know of one recorded case in this situation.[1]

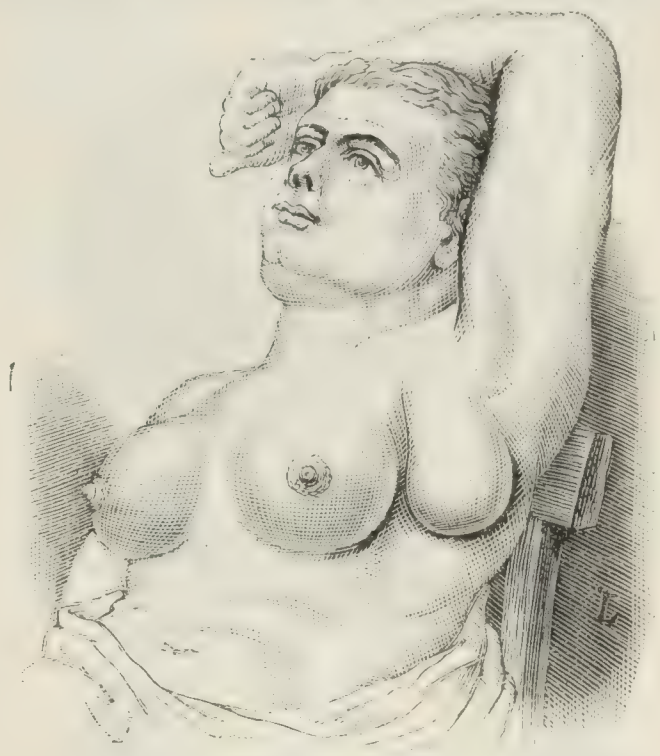


Fig. 2.—A pedunculated lipoma growing from the axilla.

Pedunculated Fatty Tumours are rare in connection with the skin. They occur most frequently on the thigh. The pedicle may be thin and stalk-like, or very thick. An unusual form is sketched

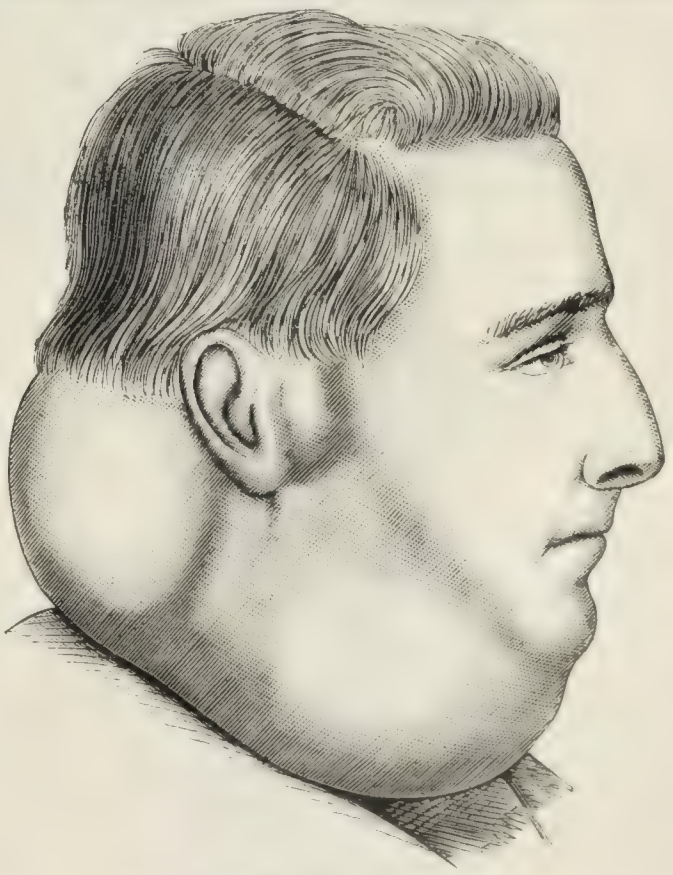


Fig. 3.—Diffuse lipoma.

in Fig. 2, growing from a woman's axilla; the tumours in this case were symmetrical, and resembled supernumerary milk-glands with-

[1] Gay, *Path. Soc. Trans.*, vol. xv, p. 243.

out nipples. On dissection they were found to consist entirely of coarsely granular fat, permeated with many blood vessels.

Diffuse Lipomata differ from the preceding in several important particulars. In typical specimens they appear as symmetrical swellings in the neck and on each side of the ligamentum nuchæ (Figs. 3 and 4). The fat has a coarsely granular appearance in such tumours, due to its being bound up into tiny lobules, which causes it to resemble omental fat. In the neck these collections are situated on the deep, as well as the superficial, aspect of the platysma. Similar unencapsuled masses of fat often occur in the groin, pubic region, and axillæ of those who are unfortunate enough to possess them in the neck.

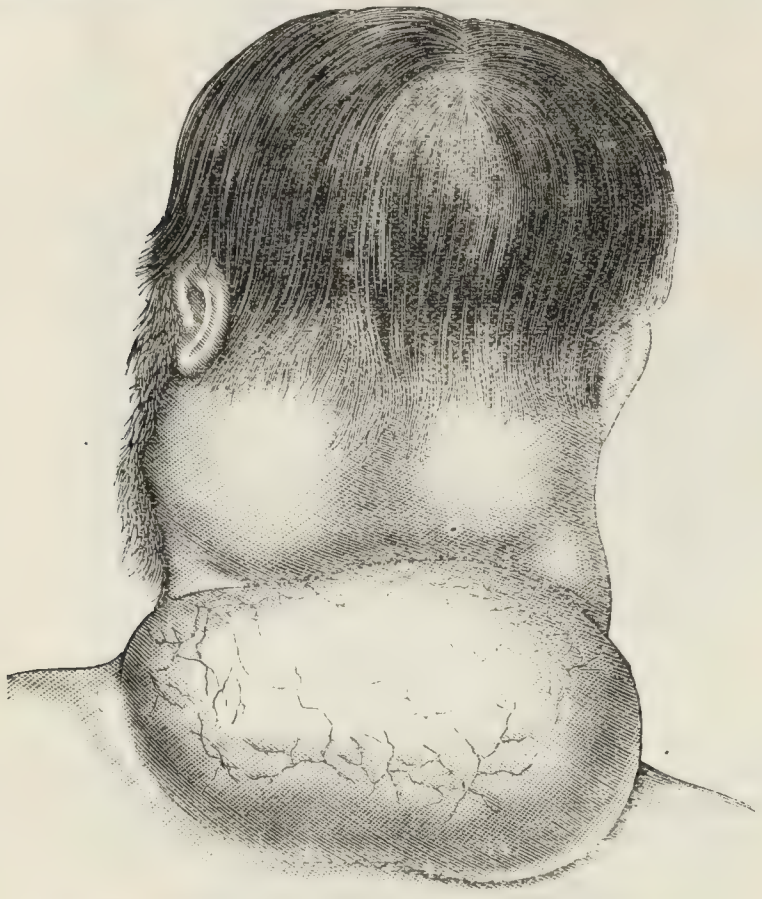


Fig. 4.—Diffuse lipoma (after Morrant Baker and Bowlby).

Subserous Lipomata.

The peritoneum, like the skin, rests upon a bed of fat, the thickness of which varies considerably in different situations and in individuals. As with subcutaneous tumours, we find three clinical varieties of lipomata arising in this subserous bed of fat: sessile, pedunculated, and diffuse. We may commence our study of these by a consideration of inguinal lipomata. Surgeons have long been aware, in operating for inguinal or femoral hernia, that occasionally they come across masses of fat, and find difficulty in determining whether it be omental, or a local increase of the subserous fat surrounding the hernial sac. It is now clear that in the neighbourhood of the femoral and inguinal canals an overgrowth of the subserous fat may occur and be mistaken for a hernia, and individuals have been recommended to wear, and have actually worn, trusses for fatty tumours of this character. It is also clear that as these local overgrowths of fat arise and protrude in the groin, they occasionally draw with them a pouch of peritoneum unassociated with a hernia. These pouches may subsequently lodge a piece of gut, and become true hernial sacs. Thus peritoneal pouches, produced mechanically by subserous lipomata, may subsequently become hernial sacs, and such lipomata may arise in relation with peritoneal pouches which were originally hernial sacs. In some cases a subserous lipoma of this character will invaginate a peritoneal pouch and form a pedunculated lipoma (Fig. 5). This pouch was removed by Mr. A. Pearce Gould; it is preserved in the museum of the Middlesex Hospital. Such lipomata may arise in connection with inguinal and femoral hernial pouches.[2] Fatty tumours may arise in the scrotum or labium, and attain a large size unconnected with hernial pouches.



Fig. 5.—A hernial pouch with a pedunculated subserous lipoma.

These specimens are of very great interest, for they serve to explain the mode in which appendices epiploicæ arise. These are local overgrowths of subserous fat which project into the peritoneal cavity, forming pedunculated lipomata. As long as they retain average dimensions they are regarded as normal, but sometimes they become very large, and then rank as tumours. This variety of fatty tumour is especially seen in cases of old-standing syphilitic stricture of the rectum; the gut, for twenty inches or more, is covered with clusters of pedunculated fatty fringes, to which



Fig. 6.—"Lipoma arborescens" of the colon.

the term lipoma arborescens of the colon is applicable (Fig. 6). Overgrowth of these subserous fatty fingers is not necessarily associated with stricture, syphilitic or otherwise, and the peculiar dentate appearance they present reminds us of the corpus adiposum of the frog and toad.

Subserous lipomata associated with the colon occur in consequence of emaciation. In a well-nourished subject the appendices epiploicæ are directly continuous with the fat in the layers of the mesentery. When wasting occurs the connecting band of fat atrophies, leaving an adipose nodule at the bottom of a peritoneal pouch. The movements of the intestines and the swinging of the pouch lead to the formation of a pedicle; this may become twisted and so narrowed that an unusual movement will bring about their detachment and set them free in the peritoneal cavity. Occasionally they have been found loose in a hernial sac; sometimes they calcify.

Such tumours are common in oxen and horses; in the latter I have met with them weighing 2 lbs. They have been known to lead in horses to invagination of the bowel and to cause death.

[2] For some references and an admirable account of hernial lipomata see J. Hutchinson, jun., *Path. Soc. Trans.*, vol. xxxvii, p. 451; vol. xxxix, p. 451.

Fatty tumours arising in the subperitoneal tissue occasionally make themselves evident at the anterior abdominal wall, especially in the neighbourhood of the umbilicus. They are often referred to as "fatty herniæ in the linea alba," as they are often mistaken for omental hernia; as in the case of inguinal lipomata, they sometimes produce peritoneal pouches. This form of sub-

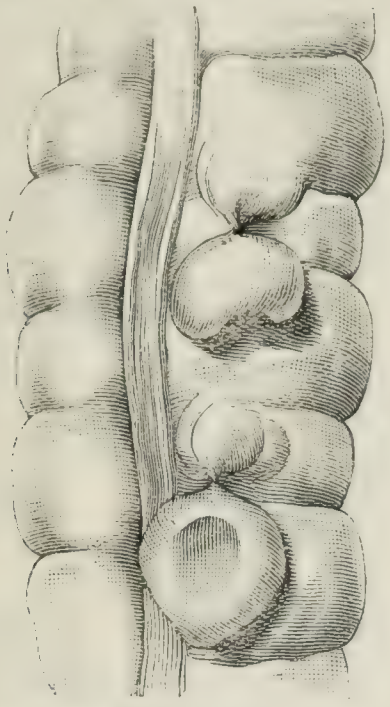


Fig. 7.—Pendulous lipomata of the ascending colon. The pedicles are twisted.

serous lipoma may attain a large size. These tumours further simulate hernia in that the traction they exercise on the peritoneum produces pain. Subserous lipomata occasionally arise on the under aspect of the diaphragm, and pass upwards into the anterior mediastinum through the foramen usually found behind the ensiform cartilage.

Diffuse Subserous Lipomata may attain a great size. In a case reported by Pick,[3] a mass of fat weighing 29¾ lbs., arose in the subserous tissue posterior to the transverse colon, in a man aged 36 years. Mr. Meredith[4] successfully removed by abdominal section, from a woman aged 62 years, an omental lipoma, which weighed 15½ lbs. In 1868 Mr. Cooper Forster[5] reported a similar specimen, found after death, in a woman aged 63 years, which weighed 55 lbs. Mr. Hudson has recently reported a retroperitoneal lipoma from a fox terrier bitch weighing 12½ lbs.

Subsynovial Lipomata.

Beneath the subserous tissue of large joints, such as the knee, there is a layer of fat of varying thickness. This fat may, as in the case of inguinal lipomata, increase in quantity, and projecting into the joint form a fatty tumour. A common situation for this to occur is beside the patella, at the spot normally occupied by the alar ligaments. Many specimens are doubtless due to overgrowth of the fat in the alar fringes, but they may arise in other parts of the joint.

The best known variety of subsynovial fatty tumours is that to which Johannes Müller applied the term "lipoma arborescens." This condition is often, but by no means always, associated with rheumatoid arthritis. A typical specimen from the shoulder-joint is represented in Fig. 8.

Submucous Lipomata.

Besides subcutaneous, subserous, and subsynovial layers of fatty tissue we find, as Virchow has pointed out, the submucous tissue in many situations laden with fat. In the normal state it is true that no continuous layer of fatty tissue exists in submucous tissue, but fat lobules can always be detected in this situation in well nourished individuals. It is thus easy to understand that abnormal collections of fat are possible in connection with mucous membranes. Submucous lipomata have been especially studied by Virchow.[6] He has figured one beneath the mucous membrane of the stomach, near the pylorus, of the size of a nut. Also one from the jejunum, and points out that they may become pedunculated and cause invagination of the bowel.

Mr. Sydney Jones[7] removed a lipoma from the right aryteno-



Fig 8.—Lipoma arborescens of the shoulder. A, Acromion. F, Glenoid fossa. C, Coracoid. (*Trans. Path. Soc.*)

epiglottic fold of a man aged 40 years; it hung down into the pharynx, and the patient could protrude the tumour into the mouth. It was smooth and round, and measured 2 inches in diameter. It was an irregularly lobulated mass of fat; the lobules were held together by connective tissue. It contained a small cyst lined with stratified epithelium.

Laryngeal lipomata are very rare. The most remarkable example on record is one described by Mr. Holt.[8] The patient, a man, died suddenly; hanging from the left aryteno-epiglottic fold, and from the side of the epiglottis, was a pedunculated tumour, which extended into the œsophagus for a distance of 9 inches. It consisted of fat, and was covered with a layer of mucous membrane.

Fatty tumours are sometimes seen in children beneath the conjunctiva, near its reflection from the lower lid to the eyeball. They may also arise in connection with the orbital fat, and project beneath the conjunctiva in the neighbourhood of the lachrymal gland, and near the insertions of the ocular muscles. Lipomata in this situation are extremely rare.

Intramuscular Lipomata.

Many examples of fatty tumours found in the midst of a muscle have now been noted, and are of interest from the difficulty they cause in diagnosis. My attention was first directed to this variety of lipoma, by finding one in the middle of the short head of the biceps humeri of an old woman. It was lobulated, and resembled in its general characters a subcutaneous lipoma. It seems anomalous that fatty tumours growing from periosteum often contain striped muscle tissue, but never when growing in a muscle. Fatty tumours have been found in the following muscles: Deltoid[9] (Mr. Andrew Clark), biceps humeri, and complexus, in the muscle tissue of the heart,[10] in the middle of a myoma of the uterus (Mr. T. Smith).[11] A similar specimen has been recorded by Lebert,[12]

[3] *Path. Soc. Trans.*, vol. xx, p. 337.
[4] *Clin. Soc. Trans.*, vol. xx, p. 206.
[5] *Path. Soc. Trans.*, vol. xix.
[6] *Tumeurs*, tome i, pp. 369 and 378.
[7] *Path. Soc. Trans.*, vol. xxxii, p. 243.
[8] *Path. Soc. Trans.*, vol. v, p. 123.
[9] Museum Middlesex Hospital.
[10] For lipomata in the heart see Handford, *Path. Soc. Trans.*, vol. xxxviii, p. 108.
[11] *Path. Soc. Trans.*, vol. xii, p. 128.
[12] *Trait. de Pathol.*, pl. xvi., fig. 11, tom. i, p. 128.

which occupied the middle of a uterine fibroid the size of a billiard ball.

Intermuscular Lipomata.

Fatty tumours also arise in the connective tissue between muscles, and in such situations may attain a very large size. They have been found between the greater and lesser pectorals; several have been removed from between the muscles of the tongue,[13] and very large ones from the intermuscular stratum between the oblique muscles of the abdomen.[14]

One of the most remarkable belonging to this variety is that known as the sucking-cushion. In dissecting the cheeks we find lodged between the masseter muscle and the buccinator a mass of fat, which comes, anteriorly, in close relation with the ordinary subcutaneous tissue of the cheek. This fat is lobulated, and during dissection may be easily shelled out by means of forceps; it is often termed the *boule graisseuse de Bichat*. Ranke[15] has

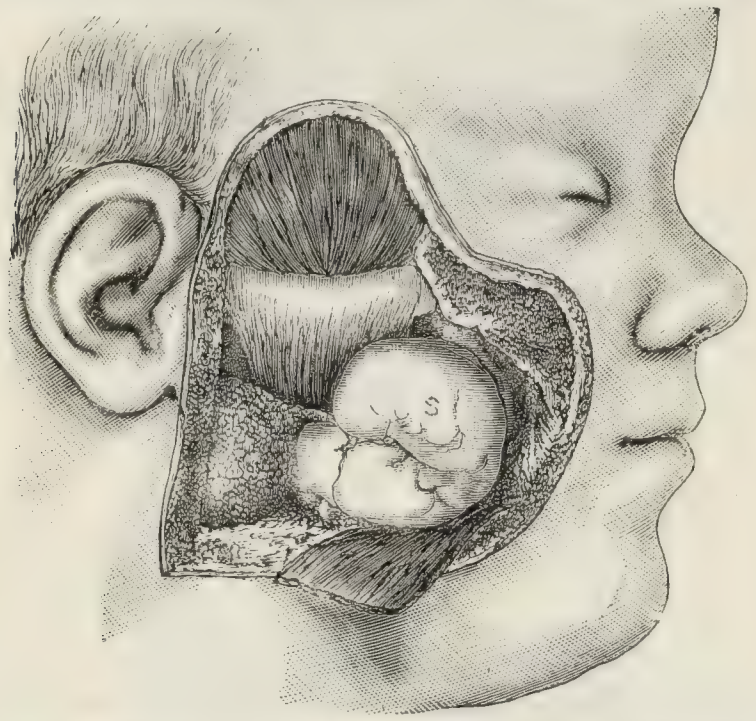


Fig. 9.—Dissection of a child's cheek to shew the sucking-cushion (s).

recently drawn attention to this under the name of "*Saugepolster*" (sucking-cushion). It is believed they exercise an important function in the act of sucking, by distributing atmospheric pressure, and preventing the buccinators from being forced between

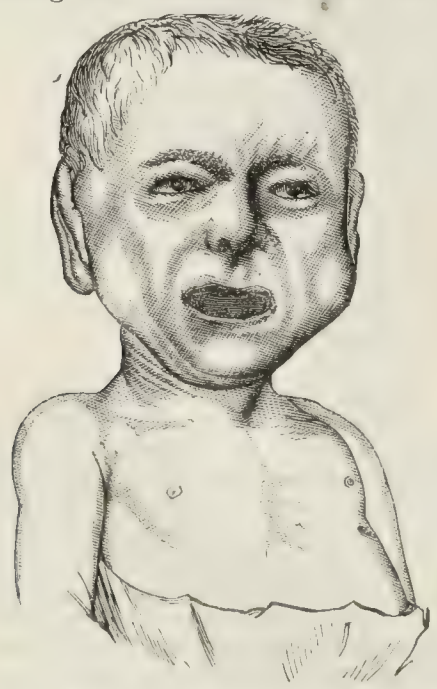


Fig. 10.—An emaciated child crying, showing large sucking-pads.

the alveolar arches when a vacuum is created in the mouth. Whatever their function, it is certain they are relatively larger in infants than in adults. Ranke also points out that in emaciated children they are only slightly diminished in size, even when there is scarcely any subcutaneous fat on the body.

These pads offer a remarkable contrast to the camel's hump, for this is said to get smaller when it performs long and toilsome journeys. The sucking-pads occasionally enlarge in adults, and M. Paul Berger[16] relates a case admitted into La Charité with a large calculus impacted in Steno's duct. The irritation consequent on this accident caused enlargement of the pad.

Parosteal Lipomata.

This term has been applied to fatty tumours arising in connection with periosteum. They constitute an interesting group, as they give rise to great difficulty in diagnosis. Although the published accounts of such tumours are not numerous, yet I believe parosteal lipomata are not rare. Their special features are the following: as a rule they are congenital, and nearly always contain tracts of striped muscle fibre.

A typical specimen is represented in Fig. 11, which grew in



Fig. 11.—A parosteal lipoma attached to the clavicle.[17]

connection with the clavicle near the attachment of the sterno-mastoid muscle muscle of a child. Along the seat of attachment to the periosteum a wide stratum of striped muscle fibre was found. This specimen was presented to the museum of the Middlesex Hospital by Mr. A. Pearce Gould.

Parosteal lipomata have been found attached to the following bones: tibia and fibula, deeply placed between the muscles of the leg—it was noticed when the girl was a year old, and removed when she was 7 by Mr. T. Smith[18]—femur[19] (D'Arcy Power); ischium,[20] neck of radius,[21] and coccyx[22] (Mr. T. Smith); anterior superior spine of the ilium[23] (Mr. Walsham); clavicle[24] (Pearce Gould) (Fig. 11); scapula[24] (Mr. T. W. Nunn); frontal bone[25] (Sydney Jones).

Dr. Fred. Taylor[26] reported a case of fatty tumour growing from the front of the bodies of all the cervical vertebræ; it projected into the pharynx, and bulged on each side of the œsophagus, simulating a postpharyngeal abscess. The patient was a little girl aged 4 years.

In some of these specimens striped muscle tissue was noted, but not in all. In June, 1889, I removed from beneath the occipito-frontalis muscle of a man, aged 30, a lipoma adherent to the pericranium overlying the right frontal eminence. The patient had noticed the tumour as long as he could remember. The centre of this lipoma was occupied by a layer of well-marked, unstriped muscle tissue.

Lipomata in Relation with the Spinal Cord and its Membranes.

Fatty tumours are found in connection with the spinal cord under two forms. The most remarkable are those which grow within the dural sheath, and surround the cord. Some of these

[13] Dr. F. Churchill, *Path. Soc. Trans.*, vol. xxiii, p. 234; M. Cauchois, *Gaz. des. Hôp.*, July 7th, 1883.
[14] Eve, *Path. Soc. Trans.*, vol. xxxix, p. 295.
[15] *Virchow's Arch.*, Bd. xcvii, 527.
[16] *Gaz. des Hôpitaux*, November 15th, 1883.
[17] *Medico-Chir. Trans.*, vol. lxviii. Fatty tumours.
[18] Butlin, *Path. Soc. Trans.*, vol. xxviii, p. 221.
[19] *Loc. cit.*, vol. xxxix, p. 270.
[20] *Loc. cit.*, vol. xvii. p. 286.
[21] *Loc. cit.*, vol. xix, p. 344 (also Holmes Coote, Journal, January 1st, 1870).
[22] *Loc. cit.*, vol. xxi, p. 334.
[23] *Loc. cit.*, vol. xxxi, p. 310.
[24] Catalogue Mus., Middlesex Hospital.
[25] *Path. Soc. Trans.*, vol. xxxii, p. 243.
[26] *Loc. cit.*, vol. xxviii, p. 216.

intradural lipomata are more curious, in that they contain tracts of striped muscle fibre. A specimen of this nature has been placed on record by Gowers.[27]

Recklinghausen described a fatty tumour in a man lodged within the dural sheath. In this case the cord, instead of ending at the level of the second lumbar vertebra, extended to the middle of the sacrum, and was imbedded in fatty tissue containing striated muscle fibre. Recklinghausen remarked that the muscle resembled the short fasciculi of the special muscles of the spine. Each fasciculus was a muscle in miniature, and had terminal tendons. The man was the subject of spina bifida occulta in the lumbo-sacral region.

Obré[28] described a specimen found in the spinal canal at the level of the seventh clavicle and first dorsal nerve.

The occurrence of an intradural lipoma is not surprising, for the loose connective tissue between the cord and the dura mater is in many mammals, especially in young lions, bears, and tigers, occupied by fat often in large quantity.

Many congenital tumours have been described as lipomata which have occurred in connection with the spine, and in a few instances where surgeons have been rash enough to meddle, the tumours have been found to pass deeply, and to be connected with the dura. In the majority of instances these were examples of spina bifida in which the sac had become surrounded by an unusual quantity of fat.

In this account of fatty tumours I have intentionally avoided considering those which arise from fatty changes in nævi.

FOUR YEARS' EXPERIENCE OF CASES OF STRICTURE OF THE URETHRA TREATED BY ELECTROLYSIS, WITH A RECORD OF FIFTY CASES.[1]

By W. BRUCE CLARKE, M.B.Oxon., F.R.C.S.,
Assistant-Surgeon to St. Bartholomew's Hospital.

It is more than four years since Dr. Steavenson and I first published a note in the Journal on the treatment of strictures of the urethra by electrolysis. This was supplemented by our paper before the British Medical Association a year later, and also by a contribution of my own in the *Practitioner* of the same year. The plan of treatment laid down in these papers by Dr. Steavenson and myself has been in the main adhered to, being modified only in a few details.

The cases referred to in the following paper comprise those which were recorded in my paper in the *Practitioner*, as well as others which have since come under my care. I am anxious to take the present opportunity of tendering my best thanks to Dr. Steavenson and his various assistants in the electrical department at St. Bartholomew's for the help I have so often received at their hands.

During the past four years I have had special opportunities of testing this method of treatment, and propose in the ensuing paper to give some accounts of what results may be expected from it, and I am the more induced to do so because I have received a large number of letters from others who are interested in the same subject, and who have requested me to furnish them with some details of the management of these cases.

In addition to this, a large amount of correspondence has taken place in the various medical papers, particularly during the past year, tending to throw a certain amount of discredit upon this method of treatment. I am, however, convinced that anyone who takes up the subject, if he will, before doing so, master the details of the electrical apparatus which he proposes to employ, and if he will carefully attend to his battery and to the other instruments which he employs, will not be disappointed by the result which he obtains; nay, more than that; the success which will attend his efforts will be quite as great as that which will attend treatment of nævi by this method, or in any other of the various conditions for which electricity has been so largely employed in recent years.

In addition to discussing the best method of carrying out electrolysis, I am anxious in this paper to give as far as it lies in my power the subsequent history of fifty cases of stricture of the urethra treated by this method, with the results, temporary and permanent, which this plan has yielded. With regard to the question of permanency, I am quite aware that it may be urged that even four years is not a sufficient length of time to enable one to ascertain with accuracy what the ultimate result may prove to be; but a somewhat extended experience of these cases leads me confidently to assert that, though four years' immunity from urinary trouble may not be an absolute safeguard against relapse in all cases, yet in the great majority of instances such a period of freedom from symptoms may be regarded as practically constituting a cure.

Before passing on to consider more in detail the various modifications of the electrolysis treatment which I have adopted or the various kinds of stricture to which this kind of treatment is applicable, I will give a brief summary of the changes in the urethra which can be produced by this plan of treatment. As I stated in the account which I gave both in the Journal and also in the *Practitioner* between three and four years ago, an employment of a galvanic current to effect changes in the normal and diseased parts of the body is no new idea, nor is its application in some form or other to the treatment of urethral stricture by any means a recent innovation. Mallez and Tripier gave a full account of their attempts in this direction in the *Comptes Rendus*. Apparently, from their description they failed to distinguish between the galvano-caustic and electrolytic action of the current which they were employing. The reintroduction of this plan of treatment is largely owing to Newman in America, though my experience does not by any means dispose me to agree with him in all particulars, yet it is only due to him to state that he was, as far as I can learn, the first distinctly to point out that the change to be effected in the tissues must be one of gradual alteration (electrolytic action), and that the tissues must not be destroyed wholesale by the galvano-cautery.

Caustics had been employed early in this century by Sir Everard Home, and he gives in his writings a most graphic account of his success in at length passing a stricture, after some hundreds of sittings. Sir Henry Thompson has alluded to this subject in his account of stricture, and that plan needs only now to be mentioned to be universally condemned.

The method which is now known by the name of electrolysis is as essentially different in its results from those which are produced by the galvano-cautery as from the treatment point of view to be in no sense comparable with it and when the weaker electrolytic currents are employed, the changes which are effected in the tissues by them are of so slight a nature, and give rise to such an entire absence of anything like destruction, that they cannot in reality be compared to a destructive process. Every one has observed the changes that go on in a recent scar, after it has been skinned over, how the tissue undergoes alteration, and eventually the firm, hard cicatrix, with which we are so well acquainted, is the result. That which is effected by electrolysis is really an action upon the tissues, promoting and softening of this cicatricial tissue, and to be efficient must be very gradually and carefully produced. And this is no mere theory, for we have frequent opportunities of witnessing what takes place in those tissues which are submitted to electrolysis, and which are at the same time under the observation of the naked eye. It seems as if the action of a current through the tissues gave rise to increased activity in them and thus produced, in many instances, a rapidity of tissue change which could not under ordinary circumstances be effected without some considerable lapse of time, and in many instances would not have taken place at all. Thus, for example, I have on more than one occasion witnessed the effect of galvanism on two legs which were the seat of a considerable amount of œdema, the result of plugging of the veins. If the one be galvanised, the positive pole being placed over the region of the sacrum and the negative over the affected part, the leg which is so treated will recover its normal condition some time sooner than the one which is left to Nature; and, to effect this purpose, the same battery, almost the same electrodes, the same galvanometer and almost the same current strength may be employed, as if it were the urethra we were operating on. Use the same battery and the same instruments, replacing electrodes which were used in the previous case by sharp pointed needles, and we can effect such change upon nævoid tissue as will promote a healthy action in the parts, coagulate the blood in the blood vessels, and convert the vascular into fibrous tissue.

[27] *Loc. cit.*, vol. xvii, p. 19.
[28] *Path. Soc. Trans.*, vol. iii, p. 248.
[1] Read before the Medical Society of London.

The only difference between this and the previous instance is to be found in the increase in the strength of the current. It is at the same time perfectly true that if a stronger current still be employed, or the positive pole of the battery in place of the negative be used to destroy the nævus, a much more rapid action will take place, and a considerable sloughing and loss of substance will ensue. In the case of a nævus, we can utilise this process because we can carry it on under our immediate eyes. In the case of a stricture it is totally inadmissible, and, if employed, will lead to the most disastrous results. It is most necessary thus to illustrate the subject, and also to insist on the operator being thoroughly well acquainted with the instruments which he employs, with the method of employing them, and with the exact results which he expects to produce. To attempt to operate without these precautions and without this knowledge is to court disaster, and is about as likely to yield a successful result as if an ordinary surgical operation were performed by someone who was not conversant with the instruments which he proposed to use, or with the result which he was desirous of achieving.

Electrolysis consists in the chemical decomposition of some compound, by which one component is liberated at one pole of the battery and one component at the other. The simplest instance of this process is perhaps furnished by the familiar example of the chemical decomposition of water into its two component gases oxygen and hydrogen. But it must not be imagined that the decomposition which takes place within the human body is of so simple a nature as the above. So long as the exact chemical composition of the tissues of the human body is unknown we must be content to remain in ignorance of the exact chemical change which takes place when they are electrolysed. We may assume, we may imagine, and we may infer, but we cannot know, and we must be content to gauge the efficacy of the process by the results which it yields, and which can only be fully appreciated when patients have been under our observation for some considerable length of time. It is to these results, therefore, that I appeal as a testimony of the value of the procedure.

When a solution of any salt in water is decomposed by electricity, the positive pole (anode) liberates the acid, and the negative (cathode) the alkalies or the bases. It has long been known that this law was equally exemplified in the human body, and advantage has been taken of it in the treatment of various diseased conditions; but as I have already stated, we must be careful to recall the fact that the two poles of the battery differ widely in their action, and therefore produce very different results. When undertaking the treatment of urethral stricture by this means, it is absolutely essential that the negative pole alone should be employed. If the current be reversed during the process even for a few seconds, the acid which is then liberated gives rise to considerable pain, corrodes the electrode which is being employed, and often causes bleeding from the urethra, none of which phenomena are ever observable if care be taken to make use only of the negative pole and to employ weak currents.

A galvanometer should always be employed in order to register the strength of the current. The sensations of the patient, or the number of cells, may form a fair substitute where no better means are at hand, but there is no excuse for employing them when a galvanometer is readily obtainable, which will do away with all possible sources of error. It should be obtained graduated in milliampères, which may, for all practical purposes, be regarded as measures of changes in current strength, just as the degrees on a thermometer denote changes in the temperature.

At the commencement of the sitting a current strength of from three to five milliampères may be employed, which should be gradually increased, if the patient's sensations admit of it, to from seven to ten milliampères, but this latter limit should never be exceeded. In order to carry out these arrangements properly it is most essential that the galvanometer should be employed, for one cannot too often emphasise the fact that a cell which is capable of giving a definite strength of current one day may generate a totally different strength the next, from the fact that it has been weakened by continued use. So too the tissues of the patient may offer a greater or less resistance to the passage of the current on different occasions, owing to conditions of moisture, etc., which we have no means of accurately guaging, but by the deflections of the galvanometer. In fact it is usual for the galvanometer to indicate that the current strength has increased within, say, five minutes after the sitting has begun, which is owing to the skin becoming moister from the wet pad of the electrode, which is in contact with the back, and thus a less number of cells suffice to complete the remainder of the sitting.

The thickness and therefore the conductibility[2] of the skin varies in different individuals and in different parts of the same individual, and without a galvanometer the operator will remain in complete ignorance of these numerous sources of error.

It is hardly necessary to state that the cells of one battery differ in strength and size from those of another, hence a comparison by cells is not only useless but misleading. At the same time of course it goes without saying that if an operator is thoroughly familiar with his own battery, and has tested it under different conditions, and on many occasions with a galvanometer, he can pretty well gauge its strength, and may work it with success in the absence of his galvanometer. It is, however, never desirable to do so, for on more than one occasion it has happened to me, that a patient in the middle of a sitting has slightly shifted his position, and had it not been for the galvanometer, I should perhaps never have detected the fact that he had dislodged his pad, and that the current had ceased to pass through the body.

The exact kind of battery is of no particular moment provided that it is readily under control, and is of so simple a nature that the operator can readily set it right if anything goes wrong during the sitting. It should consist of some twenty-five or thirty cells of average size, certainly of not less than twelve or fourteen, each of which, when freshly charged, is capable of exerting an electromotive force of from one to two volts.

In my hospital practice I have generally employed a Stöhrer's battery, consisting of a series of zinc-carbon elements, but a series of Daniell, Grove, or Bunsen cells would answer equally well. In my own house I employ a battery consisting of thirty-six Leclanché cells (quart size), which though largely in excess of anything that I am likely to require, is at the same time useful as affording a most efficient safeguard against any chance of a breakdown, besides being useful in the electrolysis of nævi, for which a much higher current strength is required. The cells possess the additional merit of being perfectly free from smell, and being readily accessible to inspection in case anything should go wrong in the connections, etc. The only attention or trouble they have demanded during more than three years has been that the cells require to be filled up about every six months with water.

Such a battery is of course not portable, and where portability is an object, either a small Leclanché cell battery or a Stöhrer will be best employed, but at the same time it must be born in mind that these small batteries are much more liable to get out of order. For the purpose of electrolysis, if the battery is to work economically, the cells should be so arranged that each zinc plate is coupled to its corresponding carbon, whilst for the purposes of galvano-cautery where a "quantity current," as it is called, is required, the battery should consist of a few large cells. At the same time the surgeon must bear in mind that a battery arranged for electrolysis is quite capable, if too many cells are employed, of producing a caustic effect.

It may not perhaps be out of place to mention at this point that a battery usually fails to work because its connections (that is, the places where the wires are joined either to the electrodes or to the battery) are either rusty, or dirty, or in some way imperfect. The surgeon who makes use of them should so far master their construction as to enable him to repair any of the simple mishaps he is sure to be constantly meeting with.

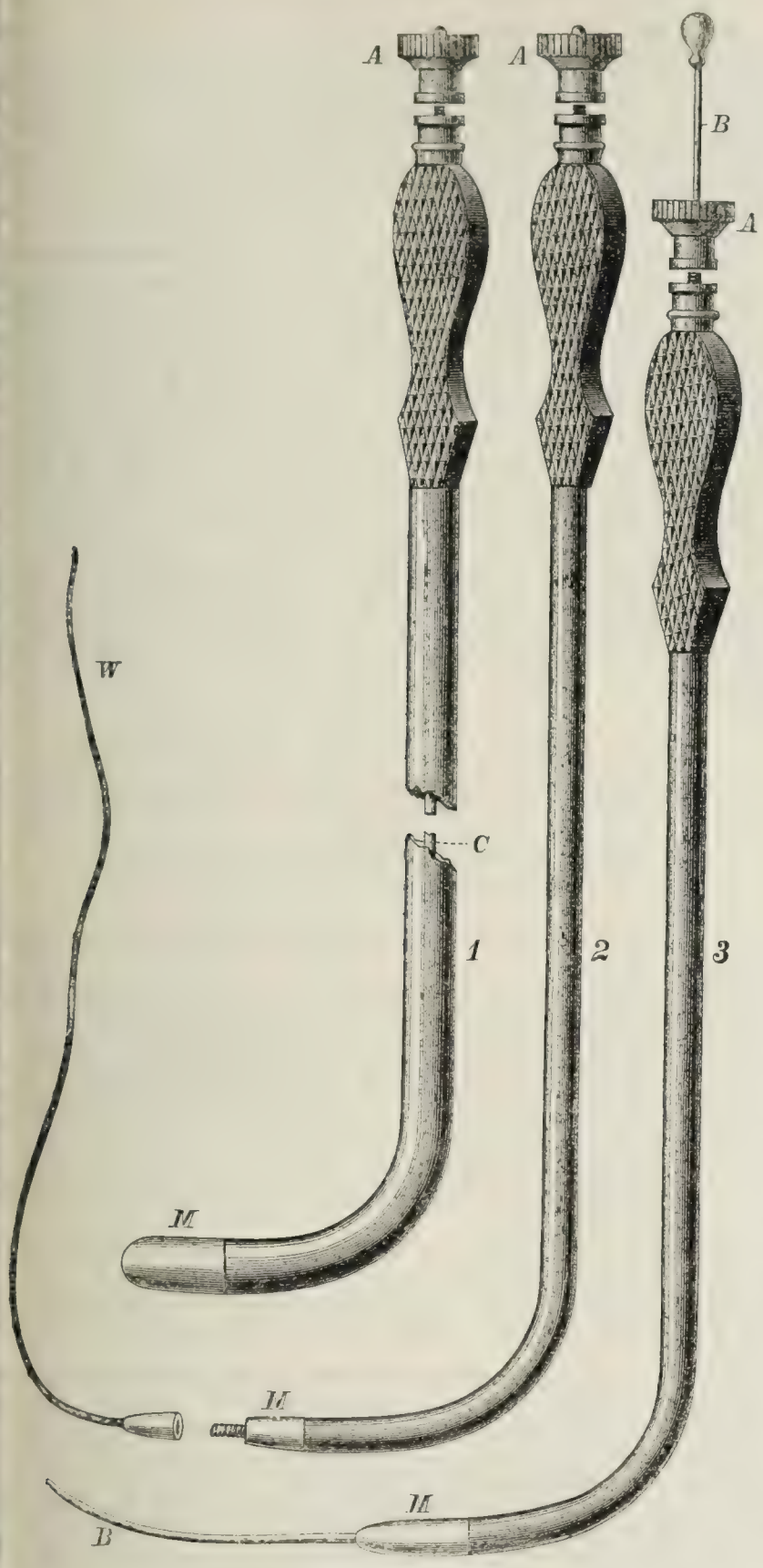
The instruments which I have been in the habit of employing are of three different kinds.

No. 1 is practically a stiff catheter to which a black (Brodie) handle is attached. Its tip, *M*, is made of metal (copper or zinc) which is nickel-plated, and is connected by a copper wire, *C*, passing up the centre of the catheter with a binding screw, *A*, by means of which it is attached to the negative pole of the battery.

No. 2 is similar to No. 1 in construction, except that a small guide bougie, *W*, is screwed on to its point, exactly as it is in a Teevan's urethrotome. The guide bougie in the drawing is rather shorter than it should be.

No. 3 differs from the other two instruments in being tunnelled like a railroad catheter, so that a catgut or small bougie, *B*, may pass through it. The connection between the metal tip, *M*, and the binding screw is in this case effected by a ribbon of copper or tin, which is wound round the inside of the instrument, instead of by means of a copper wire passing up its centre.

[2] These terms are not identical, though they are used so here for practical illustration.



BOUGIE-ELECTRODES.

For most purposes, a series of bougies of No. 1 pattern will be sufficient, and the small sizes are not so essential as the larger, or in some instances I have rapidly dilated the stricture first to No. 5 or 6 English, and then used electrolysis subsequently. The bougies can be made stiff and unyielding or thoroughly flexible so that they can be bent into any shape the operator may prefer. The Number 2 instrument is a most useful form, but it has this disadvantage, that the current acts to a slight extent on the whip bougie (*W*) where it is screwed into the metal, and if it is not carefully examined from time to time, there is no doubt some slight risk of its being left behind in the bladder. At one time I deemed this objection to be a more serious one than it really is. I am, however, confident, from a somewhat extensive use of this form of instrument, that with the most ordinary care this accident is impossible.

(To be continued.)

6

TWO CASES OF ACUTE INTESTINAL OBSTRUCTION, ASSOCIATED WITH ENORMOUS SECRETION OF PERITONEAL FLUID: ABDOMINAL SECTION AND RECOVERY IN EACH.

BY J. GREIG SMITH, M.A., F.R.S.E.,
Surgeon to the Bristol Royal Infirmary; Joint Lecturer on Surgery, Bristol Medical School.

CASE I.—D. D., aged 14, was seen, in consultation with Mr. Firmin Cuthbert and Dr. Edis, at Gloucester on April 18th, 1889, and operated on on that day.

The following notes were kindly supplied by Mr. Firmin Cuthbert: "With the exception of sluggish bowels, the lad had been quite well until April 11th at 10 A.M., when he was seized with pain in the epigastrium, which lasted till 3 P.M., when he was sick and had relief from pain. At 5 P.M. the pain came on again, and lasted till 8 P.M. He went to bed at 8 P.M., and, at 10 the pain returned and lasted all night, increasing in severity. When I saw him for the first time, at 9 A.M. on April 12th, he was in such great pain that I gave him a hypodermic injection of one-sixth of a grain of morphine. This relieved him slightly, but, in about three hours, a similar dose had to be administered. During the previous night he had had a dose of salts and an enema to move his bowels (without effect); I therefore gave him belladonna and opium in pill (quarter grain of each) every two hours.

"On examining the abdomen, I could feel nothing abnormal. The sickness ceased, but the general aspect of the patient and the continued pain indicated acute obstruction from some cause or other. No blood was passed *per anum*. An enema, administered by myself, brought away some fæces, but increased the pain. During the night he had no pain, and slept well. His tongue in the morning was coated, and there had been no action of the bowels. In the afternoon the pain returned; another injection of morphine (one-sixth of a grain) was given, an enema administered, and the abdominal parietes were painted with a mixture of glycerine and belladonna. On the 14th the pain was less; on the 15th it was worse, and his condition was so serious that operation was proposed, but rejected. On the 16th and 17th the boy got steadily worse, the sickness increasing and abdominal distension becoming more marked. On the 18th I telegraphed to Mr. Greig Smith with a view to the performance of abdominal section."

The lad when I saw him had the well-known appearance and symptoms of a patient entering the later stages of acute intestinal obstruction. It was evident enough that, if unrelieved, he could scarcely live over another day. The abdomen was greatly distended, the parietes being tense and brawny. There was dulness in both flanks and in the hypogastrium up to the level of the pubes. Examination of the rectum and abdomen revealed nothing.

It was clear that the patient would not bear a prolonged operation; in fact, the administration of an anæsthetic was not free from risk. An incision large enough to admit two fingers was made at the upper level of the dull area just below the umbilicus, and large quantities of clear serous fluid ran out—perhaps about three or four pints in all. The lower abdomen was almost free of intestine, but high up under the diaphragm the intestines were crowded together in an apparently inextricable mass. A little manipulation with the two fingers released something, and coils of bowel at once fell downwards towards the pelvis. I could now feel an agglomerated lump composed of intestinal coils comparatively empty, which I unravelled, pulled down, and spread out in the lower abdomen. Gas could be felt rushing into the liberated coils; and, being satisfied that the cause of the obstruction was overcome, I did nothing more, but at once inserted a drainage tube and closed the wound. A rounded, hard nodule felt in the mesentery was pulled to the surface and examined; it looked like tubercle, but almost certainly was not.

The after history of the case, as reported by Mr. Firmin Cuthbert, who treated him, is devoid of interest. Pain and sickness passed off; the bowels acted the same night, and with regularity every day following with a few exceptions, on which small enemata were employed. The tube was removed after four days, very little fluid having come away through it—not more than an ounce in all. The temperature was normal throughout the pro-

gress of the case both before and after operation. He is now (March, 1890) in perfect health.

Case II.—Mrs. A. F. H., aged 30, was seen in consultation with Mr. Alford, of Weston-super-Mare, at noon, on December 24th, 1889, and operated on at once.

The history given by Mr. Alford was as follows: On the evening of December 15th the patient had been confined of her first child, after a somewhat tedious labour, by the aid of the long forceps. The after progress was perfectly natural and satisfactory. On the third day the bowels acted well after a dose of castor oil and an enema. There was some little trouble from hæmorrhoids. On the eighth day (December 22nd) the bowels were again thoroughly moved by castor oil and enema. On December 23rd she had a good night as usual, felt very well, and enjoyed a good breakfast. After breakfast she sat up in bed and was selecting Christmas cards, when she suddenly screamed out with acute pain from "cramp in the bowels," as she said. The pain continued all day, and was of a very violent character, in spite of poultices, turpentine fomentations, anodyne applications, and nepenthe by the mouth. Castor oil was given by the mouth, and large injections of oil and water by the rectum. The abdomen rapidly became distended with flatus. There was no special tenderness on pressure over the abdomen. Towards night dulness was made out in both flanks.

On December 24th, at 8.30 A.M., she was decidedly worse. She had not slept all night, and the pains had been very severe. Pulse 140, weak and thready; face drawn and anxious; mouth dry and parched; tongue densely coated with dark fur. No fæces or flatus passed. Abdomen enormously distended, tympanitic in front but dull in the flanks, and for some way upwards in the hypogastrium. Mr. Alford telegraphed to me to come to Weston-super-Mare prepared to operate for intestinal obstruction.

The patient's condition when I saw her was almost hopeless; it appeared as if she had only a few hours to live. The chance of her living through any operative proceeding, even the slightest, seemed to be almost infinitesimal; but, after a rapid consultation with Mr. Alford and the patient's husband, it was decided to give her the benefit of this chance. Dr. Rossiter most cautiously and skilfully administered chloroform, and the abdomen was rapidly opened by a short incision a little below the umbilicus.

Clear, straw-coloured fluid at once spouted through the opening to the height of at least a foot, and poured out more quickly than we could collect it, saturating sponges, cloths, sheets, and carpet, and partly filling several vessels. As the main object was rapidity, the fingers were inserted while the fluid continued to flow and the condition inside the abdomen ascertained. The bowels were crowded up under the diaphragm, and under the liver a knot of entangled bowels was definitely and easily discovered. The coils were unravelled and pulled down to the lower abdomen, when they at once became filled with the gas which distended almost to bursting the contiguous intestines. A large glass drainage tube was passed into Douglas's pouch, no attempt being made either to empty the abdomen of fluid or to irrigate it. The whole proceeding occupied only a few minutes, and the patient bore the operation better than was expected.

She was at once put under the most vigorous stimulating treatment, and slowly rallied. During the night she was very ill, but in the morning she had picked up a little strength, and thenceforward she rapidly got well. Forty-two hours after operation there was a free natural action of the bowels. At the end of a week the tube was removed, very little fluid having come away after the first day, when it consisted of fluid unremoved during operation. The patient continues quite well.

Remarks.—These two cases are recorded together because they seem to have much in common, and because, in respect of some of their features, they are, in my experience, unique. One striking feature was the extraordinary amount of peritoneal effusion, in one case measured by pints, in the other certainly several quarts. Another noteworthy feature was the entanglement of coil upon coil of bowel without any tangible cause such as usually causes obstruction. It seemed in each case as if one half of the intestines were overdistended with gas and free, and the other half twisted and entangled into a confused mass into which gas could not enter. No refined diagnosis was attempted, as it was of great importance in each case to waste no time over any step which was not absolutely essential to the immediate saving of life.

As to the amount of peritoneal secretion present, it could not be accounted for on any other ground than traumatic irritation to a large peritoneal surface such as the unusual amount of bowel involved would provide. Cases of abdominal section for intestinal obstruction frequently reveal the presence of peritoneal secretion in ounces, or even to the extent of a pint; but the amount found in the second case, which was certainly poured out in a period not extending over twenty-six hours seems almost incredible. After evacuation of the fluid the abdomen, which was distended beyond the limits of a full-time pregnancy, appeared relatively flat and hollow.

As to causation, the only possible suggestion of traumatism in the first case is a history of gymnastic exercises on a horizontal bar a day or two before the attack. But the onset was not immediately after the exercise, and the details were only vaguely remembered. The second case was preceded by a somewhat severe confinement a week previously; and it is possible that complete replacement of the intestines had not taken place when the attack came on. Immediately after breakfast, and with an obstetric binder on, she sat up in bed, almost for the first time. This abdominal flexure on intestines engaged in digestion, and perhaps in abnormal positions and under unusual pressure, may have determined the onset of the attack.

In the second case the possibility of puerperal peritonitis naturally was discussed. But nearly all the symptoms were against this diagnosis; indeed, abdominal distension only could be regarded as pointing to it, whereas the presence of a *vera causa* in the intestinal entanglement seemed definitely to negative this diagnosis.

THE RADICAL CURE OF HERNIA,

With a Description of a New Modification of Macewen's Operation.

By E. STANMORE BISHOP, F.R.C.S Eng.,
Honorary Surgeon, Ancoats Hospital, Manchester.

The operations for radical cure of hernia are readily divisible into two classes:—

1. Those which act by the production of an obstruction to return of the prolapsed bowel in the abdominal wall itself.

This category contains the majority of the operative measures at present in vogue, and in its turn is divisible into two:—

a. Those produced by various methods of suture applied to the sac and canal. This includes the methods of Banks, Ball, Wood, Socin, Riesel, and Halstead.

b. Those which aim at producing scar tissue in the walls of the canal and superjacent tissue, including the methods of McBurney, Spanton, and Little.

The method of Heaton by hypofascial injection can scarcely be ranked as an operation, nor have its results been of a sufficiently satisfactory kind to require much notice (see remarks of Dr. Bull at the Medical Society, County of Kings, U.S.A., October, 1889).

2. The second class includes all measures which aim at the formation of an internal pad which shall block the hernial opening from within, thus making the abdominal walls themselves the spring of a natural truss, the pad of which is inside. This category includes the operations of Macewen, Barker, and my own. Macewen's operation is perfectly well known: the ordinary incision being made, and the herniated bowel returned, the sac as a whole is dissected out, and freed from its connections in the scrotum, the inguinal canal, and for half an inch around the abdominal aspect of the internal ring. A thread is fixed to the fundus, and carried through and through the sac from side to side up to the external ring; this thread is then passed on through the canal to the abdominal aspect of the fascia transversalis, and there penetrates the abdominal wall about one inch above the internal ring; by passing the thread through and through the muscle, after pulling upon it so as to invaginate the plug so formed, it is fixed, and the sac then lies inside the abdominal opening between the transversalis fascia and the outer surface of the peritoneum, in the space formed for it by freeing the peritoneum from the internal wall. The ring and canal are then closed by a suture so placed that it draws the conjoined tendon in front of Poupart's ligament, and holds it there until consolidation has been effected.

Consideration and practice of this method reveal certain things. It will be noticed:—

1. That the sac must depend after operation for its vitality upon

ts attachments above and on either side of the internal ring, and t is evident that for the operation to succeed the sac must be effectually nourished. Every additional half-inch of separation above must necessarily diminish the chances of that vitality, and ncrease the risk of a slough being shut up inside the abdominal cavity.

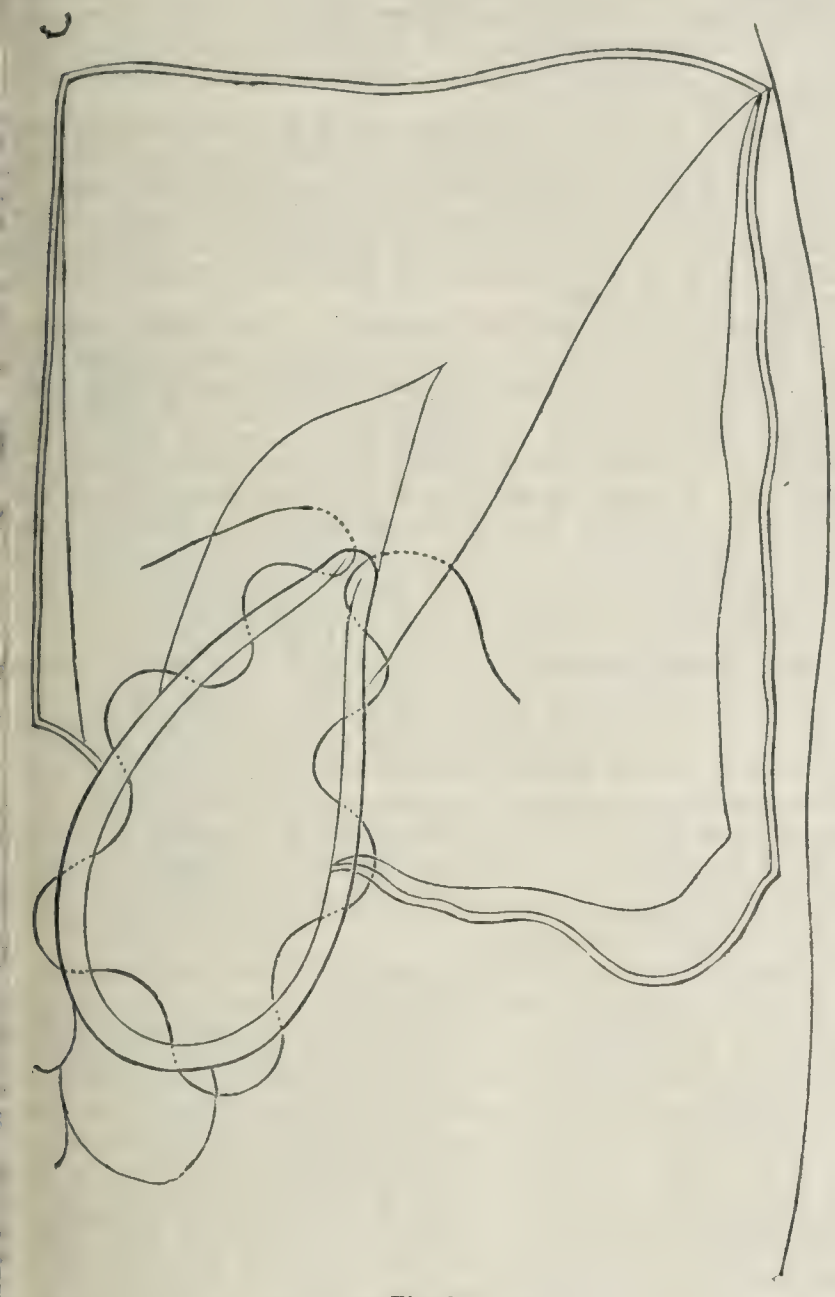


Fig. 1.

2. That by the method described, the environment of the sac after operation will be connective tissue, and that its connective issue surface is opposed to this. Whilst union between connective tissue surfaces is fairly rapid, that rapidity is as nothing o the quickness with which peritoneal surfaces unite when once hey are brought in contact after some slight traumatism, such as s produced by the passage of a suture.

3. That one of the main advantages of this method is the power possessed by the new pad of deflecting from the weakest point of he abdominal wall the impulse of the intestines against it when nfluenced by the concussion of a cough or other sudden contraction of the abdominal cavity; that power is doubtless possessed by the pad Macewen makes, though I doubt whether the profile shown by him accurately represents the outline presented, at east during the first forty-eight hours. Any arrangement which will give that pad a perfectly-rounded outline in every direction rom the first will more perfectly attain this indication.

4. That by the means described of fixing the pad interiorly, it s conceivable that in less practised hands than Macewen's it night not be left perfectly covering and protecting all sides of he opening. It might easily be drawn too high, or tilted slightly o one side, so that the original cause which slowly extruded the primary sac would protrude gradually another at the unguarded point, slowly pushing aside the block which should protect the whole.

The method I have adopted, and, so far, with satisfactory results, is based upon the same principle, and will be easily understood by reference to the accompanying figures.

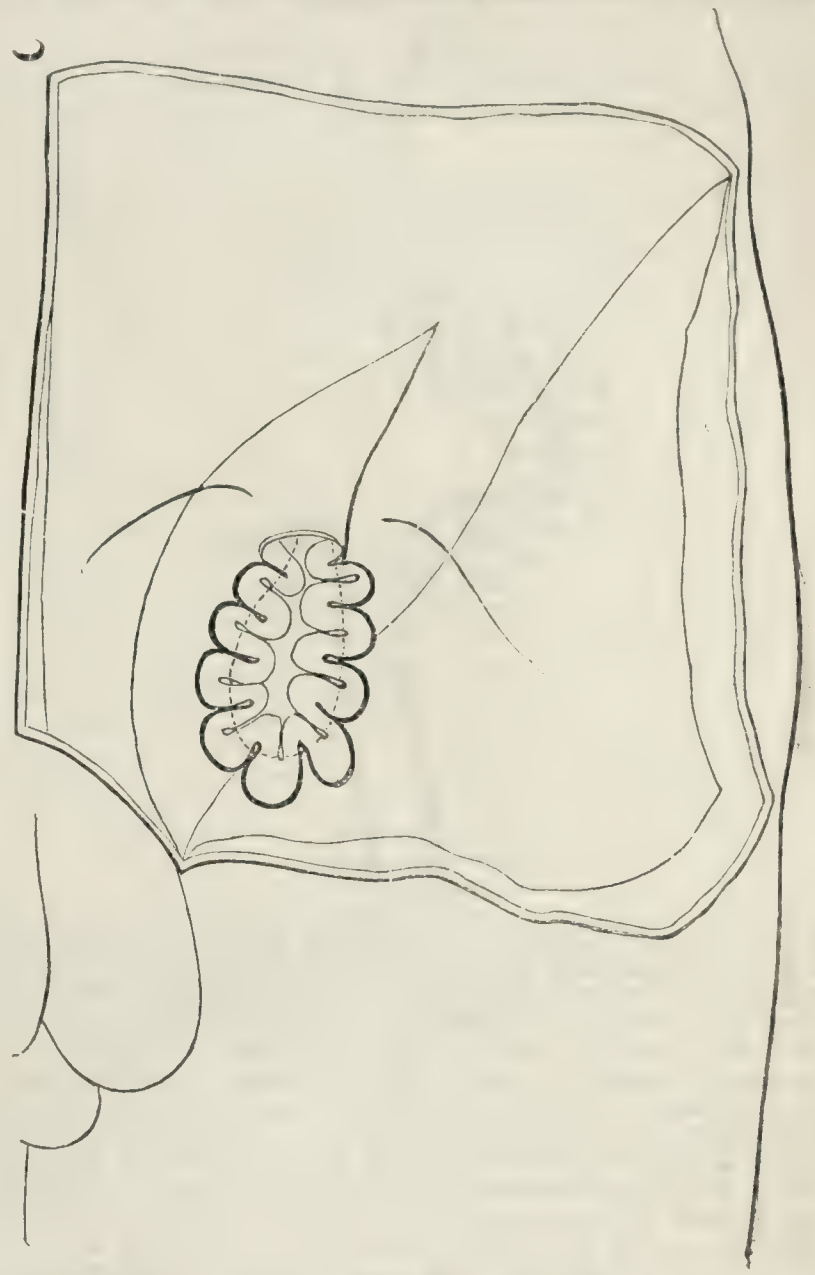


Fig. 2.

The preliminary incision is the usual one, and is so arranged as to lay bare the entire canal, and a short distance below the external ring, sufficiently far that the fundus of the sac may easily be reached from it. The contents of the sac, being reduced, are so kept by the finger of an assistant pressing upon the internal ring. The canal is then divided along the anterior wall; the sac is next freed entirely up to, but not beyond, the internal ring. A long suture, armed at both ends by needles—if the hernia is large two are used—is now passed from below upwards through each wall of the sac, in such a way that when the ends are pulled upon the sac is drawn up, not like a curtain, as in Macewen's operation, but like a purse. The central fold formed is the largest, and each fold progressively diminishes in height on either side as it nears the external ring. The neck of the sac is then invaginated on one side before the finger, and the needle belonging to the end of the thread on that side passed through the internal ring, and made to pierce the abdominal wall from within outwards; the same thing is done on the opposite side. When both threads are presenting through the muscular structures they are pulled up, the sac being, at the same time, invaginated before the finger as the threads are drawn upon. The sac is thus turned inside out in its passage, and becomes fixed as a rounded boss exactly over the internal ring, its peritoneal surface being turned towards the intestine, and its first fold on either side being firmly applied to the peritoneum immediately within the ring. The ends of the thread are then tied firmly, but not tightly, over the ring, which, with the canal, is then further closed by catgut buried sutures, which are so placed as to draw the superior half of the anterior wall of the canal and internal pillar of the external ring well over in front of the in-

ferior half and external pillar. A horsehair drain is left in the canal, which must not be so tightly closed as to prevent free movement of the cord lying in it. The superjacent tissues are then united by horsehair sutures, and the whole dressed aseptically.



Fig. 3.

It will be seen that (1) it is impossible for the pad to lie anywhere but immediately over the internal surface of the internal ring; (2) that the surface presented to the peritoneal investment of the intestines is also peritoneal, that each fold presents a peritoneal, and therefore quickly adhesive, surface to its fellow; (3) that the whole pad forms, as it were, a bridge—a Roman arch—over the weak space in the abdominal wall, of which bridge the fundus forms the key-stone; thus the pad becomes progressively thicker and more resistant as the space covered is weakest. Resting, as it does, like an arch on the tendinous walls of the internal ring, it is, when consolidated, practically incapable of dislodgment, so that the chances of return at this point are absolutely *nil*. The protection against return does not therefore depend upon the sutures which bring the canal and rings into a closed condition after the first forty-eight hours, for which time we may safely trust either gut or silk.

In this way the advantages to be gained by the adoption of Macewen's principle are all obtained without the disadvantages which his method appears in practice to entail.

A SUCCESSFUL CASE OF LAPAROTOMY FOR RELIEF OF INTESTINAL OBSTRUCTION.[1]

By RICHARD LYDDON, M.R.C.S.Eng.

The patient was a healthy lad of 15, and a coachbuilder's apprentice by trade. I first saw him on August 26th. He complained of anorexia, sickness, and pain in the abdomen. The pain was not constant, but of a griping, paroxysmal character, and referred chiefly to the right side. There was little or no tenderness on pressure, no distension of the abdomen, and no tumour to be felt either in the abdomen or over the usual seats of hernia. The temperature and pulse were normal.

I learnt that on the morning of August 23rd he lifted some iron bars on to a truck at the railway station. The bars weighed about a hundredweight; he lifted one end while a porter lifted the other. He thought at the time the weight was rather too much for him, but felt no ill effects, and continued his work during the day. Next morning he complained of pain in the abdomen, but went to work as usual till dinner-time, when he gave up. He was sick during that afternoon, and at night his mother gave him two pills, but thought they were vomited; at any rate, the bowels did not act. I learnt also that the boy had eaten some green apples a day or two previously; and this, together with the fact that he referred his pain chiefly to the right iliac region, and that a slight fulness could be detected there, led me to think his trouble might be due to some undigested food in the neighbourhood of the cæcum. Accordingly I ordered him a dose of castor oil. The oil operated, but not freely.

On August 28th, two days after my first visit, his symptoms remained the same; he complained of stomach-ache, and walked into the room with his hand over the abdomen and body bent. I ordered him to be kept in bed and to have a simple enema. After the enema the bowels acted, but not freely; and, as only a small quantity of water was injected, we probably only succeeded in clearing out the rectum.

From this date the symptoms increased. Pain, which had only been present at intervals, became constant, with paroxysmal exacerbations, as though the intestines were trying by their peristaltic action to overcome some obstacle. The boy had an anxious expression, and cried out or moaned every now and again as the paroxysms returned. He lay chiefly on his side with the knees drawn up. He was ordered a grain of opium every four or six hours, and my efforts were in future directed to obtaining an action of the bowels by injections. This treatment was continued during the next few days. Opium considerably relieved the pain; in fact, the patient was kept comparatively quiet by it; but there was no relief from the bowels in spite of large enemata.

It soon became evident we had to deal with a condition of affairs of a more serious nature than an impaction of fæces or of undigested food. The bowels had not acted for a week. There was anorexia, and sometimes sickness, and colicky pains in the abdomen. There was no previous history of intestinal trouble, either of diarrhœa or constipation; no previous peritonitis. There were no symptoms peculiar to intussusception, no tumour to be felt either in the abdomen or rectum, no tenesmus or passage of bloody mucus. The symptoms were more or less acute, and pointed either to an internal hernia, a volvulus, or a strangulation beneath an adherent diverticulum or band.

On September 6th the vomiting was decidedly fæcal, suspicious both in colour and smell, and evidently consisting of more than the contents of the stomach. I now gave up all hope of relieving the boy by any means other than laparotomy. To this the parents would not at first consent; but eventually, and after considerable delay, they gave their permission, and the patient was removed to the dispensary. On the morning of September 10th the operation was undertaken. My note for that morning states that the boy was getting very thin. His abdomen was distended, and large coils of intestine were visible through the abdominal walls across the epigastric and umbilical regions. There was no great tenderness, but pressure seemed to produce pain of a griping character. He had been in pain all night, and had had fæcal vomiting. The tongue was moist, temperature normal, and pulse 112. His pulse during the last few days had become weaker and quicker. His temperature had not risen more than one or two degrees throughout the illness. The secretion of urine did not appear to be diminished. Very little nourishment had been given by the mouth—a small quantity of milk, and pieces of ice to suck—but nutrient enemata of peptonised milk or beef tea had been administered at regular intervals. He had passed neither fæces nor flatus for fourteen days.

At 10.30 the operation was commenced, Mr. Lovell giving chloroform, and Mr. F. Hulke assisting me. Strict antiseptic precautions were taken. I made an incision in the middle line, about four inches long, between the umbilicus and the pubes, introduced my hand into the abdomen towards the cæcum, and swept it round in the direction of the colon, but could feel nothing abnormal. Our next step was to examine the bowels, and search among them for the obstruction. A distended coil of small intestine presented in the wound. This I drew out inch by inch for some considerable distance, returning it as I proceeded, until I came to a twist situated in the lower part of the right lumbar region. Beyond this the intestine was collapsed and empty. On examining the seat of obstruction with the finger, I found I could follow the distended bowel into what appeared to be a ring formed of twisted intestine and mesentery. I could pass my finger through this ring. It was soft to the touch, and fixed at the mesenteric attachment of the

[1] Read before a meeting of the East Kent District of the South-Eastern Branch of the British Medical Association held at Dover.

intestine, so that I was unable to draw it into the abdominal opening. I examined the condition more carefully by drawing aside the bowels while Mr. Hulke retracted the abdominal wall. I then caught sight of a knuckle of intestine on the opposite side of the ring or twist to that on which the coil I had been following ended. On pulling it, I found this to be continuous with a large distended loop, which passed under a part of the twisted bowel, and it occurred to me that, by drawing it out, I might relieve the twist. I did so, Mr. Hulke pushing the loop through on the one side, while I pulled it on the other. By this means we drew out a distended coil of small intestine, 18 inches or 2 feet in length, claret coloured with congestion, and heavy with its fluid contents; and the bowel at this point now seemed continuous without further kink. The collapsed portion was observed to be filling. I had not an opportunity of again examining the seat of obstruction, as the pulse was failing, and I was warned by the administrator of chloroform to finish the operation as soon as possible.

The distended intestines were returned into the abdomen, the wound closed, and the boy put back to bed. During the operation fæcal vomiting occurred twice, once soon after the commencement, before the peritoneal cavity was opened, and once towards the end. He recovered from the chloroform without further sickness, but in the evening still complained of griping pain. Temperature 100.2°, pulse 112.

On September 11th he still complained of pain in the abdomen. In the morning the temperature was 100.6° and the pulse 128. In the evening the temperature was 99° and the pulse 120.

On September 12th an enema of warm water washed out some fæcal matter. The temperature was 99°, pulse 104.

On September 15th the temperature was subnormal, the pulse 72. The wound was dressed for first time; it had healed by first intention. The superficial stitches were removed. The deep stitches were removed on September 17th.

The boy made a good recovery, and returned to his home a fortnight after the operation.

I am induced to record this case, first, on account of the unusual nature of the obstruction; and, secondly, because successful cases of laparotomy are the exception rather than the rule. Had the operation been unsuccessful I might have given a more decided account of the anatomical condition from *post-mortem* inspection; as it is, I can only describe what was revealed at the time of operation. We could see no band under which a portion of intestine might have slipped, no diverticulum by which it might have been snared. The bowel was engaged in what at first seemed a hopeless tangle, and was eventually relieved by passing one coil of intestine beneath another. I am inclined to think we had to deal with a volvulus of the lower part of the ileum, where one coil had become twisted around another. There may have existed an aperture in the mesentery, through which the loop had passed; if so, we failed to notice it on drawing out the loop, and to my mind this would not explain the peculiar twisted condition present. A further point of interest is the length of time the obstruction had lasted, and the small amount of mischief it had produced in the bowel. The intestine was not strangulated so as to cut off its blood supply; its calibre was totally obstructed, and its blood vessels greatly congested, but there was no gangrene in spite of the length of time the obstruction had existed.

CASE OF STRANGULATED RIGHT OBTURATOR HERNIA.[1]

By CHARLES FIRTH, M.D.Lond., F.R.C.S.Eng.
Surgeon to Gravesend Hospital.

I was called, at 10.30 A.M. on Friday, to see Mrs. H., by Dr. G., who gave the following account of his patient: Mrs. H., a spare and feeble old woman, has had a swelling at upper and inner part of right thigh for several years, which has occasionally given her pain, but generally by pressing on the tumour herself it has gone back with a sudden gurgle, and the pain has been relieved. She has always worn an inguinal truss, though there is now no perceptible hernia there, but only some weakness of the abdominal wall. The bowels had been well open on Tuesday (three days previously) and again on Wednesday morning; then came pain in the groin and tumour extending to thigh, knee, and leg, and urgent vomiting, frequent and feeble pulse, and great *malaise*. On examination no swelling could be found in the usual sites of herniæ, but at the extreme inner side of the thigh and close to the pelvis was a soft doughy swelling, not painful on pressure. Ordered opium every four hours. Next day (Thursday) she was in same state. The sickness, constipation, and pain continued, she kept nothing down, and looked pinched and ill; had a foul tongue. The swelling was now much larger, firmer, and semi-fluctuating, and pressure on it gave much pain.

Next morning (Friday) I first saw her with Dr. G. She was then very ill, with an anxious expression, feeble and rapid pulse, subnormal temperature, and dry and brown tongue. At upper and inner part of thigh, and extending foward towards Scarpa's triangle, was a large tense fluctuating swelling (larger than the fist), painful on deep pressure, but with no impulse on coughing. The femoral vessels could be plainly felt to its outer side, seeming to be pushed aside by the tumour. Poupart's ligament could be clearly made out, and no hernia could be felt in either the femoral or inguinal ring. The sickness had stopped, but the pain and constipation continued.

Having agreed that it was probably an obturator hernia, and as the symptoms of strangulation continued, it was decided to take her into the Gravesend Hospital for operation. This was performed under the "mixture" at 6.30 P.M.

A vertical incision, 4 inches long, was made over the tumour, midway between the line of the femoral artery and the spine of the pubes, and carried through skin, fat and fascia till the adductor longus was reached; the upper edge of this was pulled downwards and inwards, and by using the handle of scalpel the fibres of the pectineus muscle were separated without being cut, when the sac came into view. This was thick and tough, and on opening it a very large quantity (more than a pint) of bloodstained fluid, with a urinous and offensive odour, was let out. Then the bowel could be felt deep down in the upper and outer part of the wound. The thyroid membrane was then nicked in a downward and inward direction, after which, with a little manipulation, the bowel was returned into the abdomen; the sac was then dissected out, ligatured in two pieces and cut off; a counter opening was made towards the inner and back part of the thigh for drainage, and the wound brought together. There was no hæmorrhage. The patient recovered from the anæsthetic, but died rather suddenly in the night, of collapse.

At the *post-mortem* examination there was a little lymph about the coils of intestine that had been strangulated, but they were of a good colour and had not lost their polish. As much as 8 or 10 inches of the gut showed signs of having been strangulated; the part was the lower portion of the ileum next to the ileo-cæcal valve; the large bowel was quite empty and very small. The other organs of the body were fairly healthy. I may mention that (as the specimen on the table shows) the position of the obturator vessels and nerve was to the outer and upper side of the neck of the sac between it and the bone.

Remarks.—In glancing through what records I could obtain of this form of hernia, I find that the majority of the cases were in old people and women; and that in a very large proportion the exact state of things was only discovered after death. And it is this difficulty of diagnosis which is the chief peculiarity, as it forms the chief interest, of the disease; for the only points to guide us are, (1) the presence of more or less fulness at the upper and inner part of the thigh; (2) the characteristic pain in the thigh, knee, leg, and even foot, sometimes accompanied by numbness; and (3) the absence of irreducible swellings in the usual sites of hernia, with the continued symptoms of acute intestinal obstruction. In my case, owing to the size of the tumour, the diagnosis was comparatively easy; and there was a peculiarity not usually observed in these cases — namely, that the tumour was very noticeable when looked at from behind, the patient standing up, as I was informed by her daughter. She was also frequently in the habit of reducing it herself by pressure on the inner part of the thigh.

With regard to the operation itself, there is little to be said. In my case it presented no difficulties, and was accompanied by no hæmorrhage. The variable position of the obturator vessels and nerve renders it impossible to lay down rules for their avoidance in dividing the stricture [for in six recorded cases the vessels were on the inner side, in six on the outer, in three behind the sac]; but we may bear in mind that the upper and outer portions of the ring are bone, so that it is only on the inner and lower sides that we

[1] Read before the West Kent District of the South-Eastern Branch of the British Medical Association.

can cut; and then I think it is better to give two or three small nicks than one larger incision.

As to the cause of death—the patient died of pure shock, being an old and feeble woman, as there was nothing either in the operation itself or in the state of the bowels to have justified such a termination. But the records of these cases show a very great mortality; for out of 25 recorded cases recognised during life, 17 were subjected to operation, 8 were relieved by taxis, but only 5 altogether were saved by the two methods of treatment. Possibly it is to the late recognition of the disease, and therefore the absence of early operations found to be so important in other forms of hernia, that the high mortality is due. It is, therefore, in the direction of improved diagnosis that we may look for progress in the management of this disease; and I may remind you that a rectal or vaginal exploration should not be omitted in doubtful cases, as it is by this means that in more than one case the diagnosis has been established.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

MENIÈRE'S VERTIGO AND THE SEMICIRCULAR CANALS.

IN the article on this subject in the JOURNAL of April 5th, I read: "The influence of labyrinthine impressions on the maintenance of equilibrium of the body is now generally believed to have been demonstrated by the experiments of Flourens on the semicircular canals of pigeons, and to have been confirmed by the pathological researches of Menière. Indeed, all textbooks contain the doctrine that destruction of these canals produces definite and special disturbances of equilibration which render any proper co-ordination of locomotion impossible."

Will you permit me to call your attention to two short quotations. I wrote in 1883, in Holmes's *System of Surgery*; in 1873, in *Lectures on Diseases and Injuries of the Ear*, as follows:

1. "The experiments of Flourens, which at one time were thought to have settled the functions of the semicircular canals in regard to the maintenance of the equilibrium of the body, have since been controverted, so it seems improbable that this portion of the labyrinth is the seat of the lesion. As a matter of experience, when the giddy attacks cease the hearing suffers no further loss. Considering the association of vomiting with the giddiness, also the fact that irritation of the tympanum will often cause the patient to vomit suddenly without feeling any nausea; that irritation of the pneumogastric nerve causes unsteadiness of gait, as well as nausea or vomiting, and that the auditory and pneumogastric nerves are intimately connected at their origin, it seems quite possible that the giddiness and sickness in these cases may be due to reflex action of the pneumogastric, excited by some lesion situate on the course of the auditory nerve, or to some disturbing cause at the point of origin of these nerves."

2. "A circumstance which points very strongly to the fact that injury of the brain substance proper rather than to the semicircular canals is productive of inability to walk or run in a forward direction is one which I have, in common with many others, observed when a rabbit or hare is shot. Sometimes a few pellets only enter the brain, and the animal at once begins to run round and round in a small circle many times, and then tumbles down and stops, then he begins again running round in a circle at a great pace. Excepting by the entrance of the few pellets in the brain he does not appear to be injured. As he is approached he attempts to get away, but these attempts only result in his again running in the same circle. He is then caught and killed. I have noticed this phenomenon times out of number for many years, and have found that the few shots have not damaged the ear at all; what, then, about the semicircular canals?"

My daily experience leads me to believe that, in the minds of some, "Menière's disease" covers a good many conditions. I am content to be without a name for a train of symptoms with which I am very familiar, unless and until I can point to their origin. In some cases I believe that I can, in many I know that I cannot; and I share this inability with others for whose powers of observation I have a great respect. If we are able to exclude the semicircular canals it is something, and if we confess our ignorance it leaves us in a position to learn, whilst to vainly clutch at the semicircular canals and pronounce "Menière's disease" is to court the confidence of ignorance.

W. B. DALBY, M.B.

Savile Row, W.

AN UNDETECTED CASE OF COLOUR BLINDNESS.

A NOTABLE case of colour blindness, occurring in an officer serving in the Mercantile Marine Service, has quite lately come to my notice. My notes are not so full as I could wish, but as the case has an important bearing on the question raised by Mr. Bickerton in his instructive paper on Colour Blindness, as to the Inefficiency of Board of Trade Tests, I shall be glad if you will give it insertion in the JOURNAL.

J., an officer of standing in the British Marine Company, was unconscious of the full extent of his colour sense, until accidentally meeting with a friend. He entered into an animated conversation with him, before the window of a druggist's shop, in which was displayed the commonly known coloured glass globe bottles. The friend remarked upon the dazzling effect of the light, and brilliantly coloured bottles, and I replied, "the light is constantly bright, but the colours you speak of are a confused mass to me, and all pretty much alike." "You must be colour blind," retorted my friend. "I have been told before that I do not see colours as other people see them, but whatever the defect may be, I had no difficulty in passing the colour test examination of the Board of Trade, so it cannot be very great. I never once made a mistake about reds and greens." Upon being further questioned, he said to me "the difference between a red and a green is palpable enough; the red is the fuller, while the green is decidedly the fatter." I can easily see this in the dark, meaning thereby at night, and I do not think I have ever mistaken one for the other when in charge of my ship.

Such is the sum and substance of this gentleman's knowledge of colour. He could give no other apparently, and as he naïvely remarked, "it had pulled him through at the Board of Trade examination." No one can doubt that had he been properly or more carefully tested, had a blue-green coloured glass, one orange, or a violet, or had Holmgren's wools been presented to him, the nature of his colour defect would have been quickly detected. I do not think I ever before met with so perverted a colour sense as in this case, for J.'s only idea of the difference between red and green appeared to be comprised in the vague terms of "fulness" and "fatness."

Bedford Square. JABEZ HOGG.

A DIFFICULT CASE OF TURNING RENDERED EASY BY PLACING PATIENT IN THE GENU-PECTORAL POSITION.

I WAS called some time ago, by an experienced midwife, to see a primipara in labour at term; she saying a hand was presenting. I found not only a hand, but also a foot and the head, the last being impacted in the pelvis, having forced down before it the posterior segment of the partially dilated os and cervix uteri, which it was injuriously compressing between itself and the promontory of the sacrum. The membranes had been ruptured a long while before I saw her, and the uterine contractions were nearly incessant. Patient declined chloroform and, being on her left side, after attaching a tape to the presenting foot, I did what I could with the left hand in the vagina towards pushing the head above projection of sacrum, but without success. It then occurred to me that if I put her in the knee-chest position, so as to allow the womb and its contents by virtue of their weight to fall forward and downward, turning might be made easier. This I did, with the satisfaction of finding that I was enabled to complete the operation with the greatest ease imaginable; very slight pressure of the head with simultaneous traction on the leg being alone required. The child, which was of average size, was as might have been expected, stillborn.

I am not aware if this method has been suggested or practised in similar cases before, and have not found it described in those textbooks which I have at hand.

I report it in the hope that it may serve others as well as it has done myself.

EDWIN T. ENSOR, M.D.

Chesterton Road, W.

INFLUENZA AND RHEUMATIC FEVER.

Two cases of subacute rheumatic fever as a sequela of influenza have fallen under my observation.

The first case was that of a married man of middle age, in whose family history there was no evidence of a rheumatic taint, and who had himself never suffered from that disease. He was taken ill about the end of January of this year with a typical attack of influenza, with great pain in the head and eyes. His daughter was taken ill at the same time in the same way, and it should be mentioned that at the time influenza was very rife in the place where he lived. In two or three days the attack subsided, and he came downstairs feeling better as regards the general *malaise* and headache, but complained of pain down the right arm and leg. The brachial plexus was tender, and there were tender points over the nerves of the arm and over the external popliteal. I regarded this as a neuritis or neuralgia left by the influenza, but on my next visit in two days' time I found the patient laid up in bed with great pain in the right elbow, knees, and right ankle. The joints were swollen, reddish and hot, and the tongue covered with a thin white fur, and there was the usual sour-smelling perspiration; temperature about a degree and a half above normal, and pulse-rate in accordance. To cut a long story short, from that time till the end of March he suffered from subacute rheumatism in most of his joints. There were two relapses, and the joint affection seemed peculiarly obstinate to treatment, though his general condition all along was satisfactory, and he often expressed himself as feeling quite well except for the pain in the joints.

The second case was a married man of middle age, who had had previously an attack of "rheumatism" of short duration. In the first week of February he was attacked with influenza, with catarrh of eyes and nose. He was treated with quinine, and got so far well as in a day or two to go out, but on February 8th I was summoned, and he said he had "caught a fresh cold." He had had some shivering, and there were pains in the joints. At that time there was nothing to be seen or felt in the joints, but, guided by the former case, I put him on salicylate of sodium. On the 10th the pains were worse, and the knees and one ankle swollen, with a good deal of pain in the sole of one foot. The tongue was thickly covered with a white fur, and the temperature about 101° F. The whole attack was sharper than in the previous case, and the debility and anæmia were much more marked, though the patient was quite convalescent by the first week in March.

JAMES E. BLOOMFIELD, B.A.Oxon., M.R.C.S.Eng., etc.
Sevenoaks.

VENESECTION IN PUERPERAL ECLAMPSIA.

I WAS called on the evening of December 14th last to see A. N., who was seven months and a half gone in pregnancy. I found her suffering from constipation, sickness, foul tongue, etc. There were no specially suspicious symptoms, and, thinking that she might be suffering from an ordinary "bilious" attack, I prescribed accordingly. On the following morning at 6.30 I was again called to see her, and was informed that she had had a fit. I saw her again at 11 A.M., and she had a violent epileptic seizure while I was present. I immediately put her upon 20 grains of chloral and 20 grains of pot. bromid. every four hours, and, later on, gave a hypodermic injection of half a grain of morphine. In spite of that, however, the fits increased in violence, and became so frequent that by the morning of the 16th she had had twenty-five seizures. For twenty-four hours she had been gradually lapsing into a comatose condition, and the intervals between the fits were so short that they almost ran one into the other. There was no indication of labour, and the fœtal heart could be heard beating distinctly. Temperature 103°; pulse 120. She had not micturated for twenty-four hours, and, on passing the catheter, only a small quantity of smoky, ammoniacal, and albuminous urine came away. Bearing in mind accounts of similar cases in the JOURNAL, I determined to perform venesection, and accordingly took away 8 to 10 ounces of blood from the median cephalic vein. The fits immediately ceased, but she lay unconscious for three days. During that time the urine was drawn off with the catheter, but the quantity was extremely small, and had the same characteristics as mentioned above. The bowels were confined and extremely tympanitic; both conditions were relieved by turpentine enemata. The temperature oscillated between 97° and 100°; the pulse was bad, scarcely ever being below 130, and occasionally being almost uncountable. The breath smelt horribly of urine. There were no symptoms of paralysis beyond slight ptosis of the left eyelid. On the 20th consciousness began to return, and from that time the symptoms gradually disappeared, and she recovered strength rapidly. The fœtus was still alive. All went well until January 2nd, when I noticed that she had slight twitching of the fingers of the left hand. Fearing that the convulsions might return, I determined to induce premature labour. Having, therefore, dilated the os with laminaria tents and Barnes's bags, I gave her chloroform, turned, and delivered her of a male child, which lived about six hours. She made an excellent recovery, and is now enjoying better health than she has had for years. She had never been known to have fits before, but there was a history of "fainting attacks." My chief object in giving this account is to emphasise the value of venesection. My experience of such cases happily is not large, but in those with which I have been brought in contact the result of "clearing out the uterus" during the acute stage has been so fatal that I was tempted in the present instance to adopt a different course. If labour had set in, or if the fœtus had died, I should, of course, have had no option but to deal with it at once in the ordinary way. It is generally said that the hæmorrhage produced by the induction of labour acts in the same way as that caused by an ordinary venesection, but unfortunately that has not been my experience.

J. ELLIS CRISP, M.R.C.S.Eng., etc.
Corsham, Wilts.

THE SUPPORT OF THE PERINEUM.

IT is not my intention to enter into the argument as to whether the perineum should be supported or not. It is sufficient for me that, as a general rule, an attempt is made to support it, or, as Playfair puts it, to effect relaxation. Direct pressure on the distended perineum has been shown to induce increased uterine action, and favour rather than prevent rupture. To obviate this disastrous result it has been recommended to lay the palm of the hand on the perineum, with the thumb and fore finger one on each side of the vulvar opening, so as by gentle pressure forward to induce relaxation of the perineum. Whether or not it is hoped to support the perineum by making the palm for the time, as it were, a part of it, a certain amount of pressure is necessary in order to produce this adhesion of palm to perineum, that enables the operator to push the perineum forward. This pressure must be more or less directed upwards in the long axis of the patient's body. Without a certain amount of such pressure the hand will slip forward without carrying the perineum with it.

I venture to think that two dangers attend this necessary pressure, even when gentle, to which sufficient attention has not been called. One is, that the thumb and finger be allowed to slip apart on the slopes of the projecting head, and aid in rending asunder the edge of the perineum. Another is that the palm, especially if pressure be applied while the forehead is passing, forces the back part of the perineum upward behind the projecting head, and pulls the anterior part too quickly over the projection.

My excuse for calling attention to these points is that I consider them real dangers, and that we can avoid them best when we recognise them.

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Glossop, near Manchester.

THE SURGICAL ASPECT OF HEPATIC ABSCESS.

IN reply to the question asked by Surgeon Nichols, Medical Staff, in the JOURNAL of February 1st, as to the proper course of procedure in the case of a man spitting up a large hepatic abscess, and doing so effectively, opinions will no doubt differ according to the experience of different observers. That abscesses of the liver opening into the lung do sometimes end favourably is undoubted, but in my experience such a termination is unfortunately very rare. It has happened that during the past two years, while in charge of the station hospital at this station, I have had a somewhat large experience of hepatic abscesses, and among them four cases where the abscess opened into the lung. The first three of these were left to Nature, no interference being deemed advisable; all ended fatally, the patients dying from exhaustion, as usually happens in such cases, after weeks or months of misery. The fourth case, of which I append a few brief notes, speaks for itself.

Private P., Cheshire Regiment, was admitted to the Station Hospital from the Central Gaol, Rangoon, where he was undergoing a term of imprisonment for some military offence on September 23rd, 1888. While in prison no notes of his case were made, but his medical history sheet showed that while on field

service in Upper Burmah shortly before, he suffered from dysentery. He was treated for hepatitis in the gaol infirmary, when during a severe attack of coughing he brought up a quantity of pus, which was at once seen to be from an abscess in the liver opening into the lung. The medical officer of the prison applied for and obtained the man's release, and sent him to the station hospital.

On admission, he was extremely emaciated, and so weak as to be scarcely able to sit up in bed. He was spitting up from 4 to 6 ounces of thick pus of a greenish or slightly chocolate tinge daily, which came up after very severe fits of coughing, which left him quite exhausted. Temperature on the evening of admission 102.6°, normal the following morning, the patient being bathed in perspiration. In the evening it was 104°. On the next evening, the 25th, it was again 104°; profuse sweating during the night. On the evening of the 26th it was 103°. There was in addition to the sweating severe diarrhœa, which could not be checked, both together exhausting the patient so much, that it was impossible he could last very long in the condition he was in.

After a consultation it was determined to open the abscess externally. There was no pointing, and nothing to guide us as to the position of the abscess. On the morning of the 27th the aspirating needle was passed in, and after one or two attempts, passing the needle in different directions, pus was discovered. The needle was withdrawn and a trocar and cannula inserted. Guided by this the opening was enlarged sufficiently to admit a medium-sized drainage tube, through which the pus flowed freely. In all, about 12 ounces came away. The cavity was syringed with an antiseptic through the tube. The patient complained of a good deal of pain, and was very restless after the operation, and vomited several times during the day, probably due to the chloroform which was administered. The temperature, which every evening since admission varied between 102.8° to 104°, remained normal. The following morning it was 99°, very slight sweating, and the same evening 100°. From this time to the end of the case the temperature never went above 101°, and was usually below that, except once, when, as the result of the tube getting blocked, it went to 101.6°.

From the moment the abscess was opened externally no pus was expectorated; the cough gradually ceased; the sweating and diarrhœa, which before was so troublesome, stopped, and the patient gained in flesh and strength.

After October 9th the temperature never rose above normal. The discharge continued to come away through the tube in diminishing quantity, ultimately ceasing altogether, and the opening closed. The man left the hospital quite well, but as it was the invaliding season he was sent to England for change.

After the experience gained from this case, and seeing the condition of the lung on *post-mortem* examination of the fatal cases, I would always, if possible, open the abscess externally in all cases similar to this one, and I consider the earlier this is done the better the chance of the patient's recovery.

Rangoon, Burmah. J. A. GORMLEY, M.D., Surgeon-Major Medical Staff.

ON THE ANTISEPTIC AFTER-TREATMENT OF VACCINATION.

UNDER this heading on page 478 of the JOURNAL. Dr. C. W. S. Barrett records his belief that postvaccinal "bad arms" are due to postvaccinal septic infection. As compared with Dr. Barrett's, my own experience in vaccination is small, and limited to private practice; but as it distinctly supports his conclusions, and is, I fancy, somewhat peculiar, it may be worth relating.

Being of opinion that the "dangers of vaccination" arise from sources other than the lymph introduced, I am in the habit of employing the following precautionary measures:—

1. The lymph (Renner's calf) reaches me on the day I intend to use it.
2. The instruments, the unopened tube, and the patient's arm are washed in a disinfectant.
3. I make in four places small scratches and valvular punctures with a Graefe's cataract knife charged with the lymph.
4. Most important of all, I never lose sight of the arm until the spots are quite dry, then I powder with bismuth and apply dry lint.
5. The nurse is directed to lave the part daily in a stream of tepid water after the second day, and to let no sponge come near it.

It happens, possibly as a result but certainly as a fact, that I can recall only one case of inflamed arm during the past six years, and this was an exception strongly corroborative of Dr. Barrett's contention, for the child, whose arm and shoulder ultimately suppurated, had been exposed bare-armed to a current of sewer gas. I am well aware that the processes I choose to employ in my private practice, involving as they do the expenditure of a large amount of time and attention, are inapplicable to the class of patients who most require them, namely, the poor of our large cities; but, as Dr. Barrett says, the authorities would do well to consider means for the prevention of septic infection of vaccination wounds made at their public stations. I beg to submit the suggestion that a thin coating of collodion, which would fall off about the time the papules begin, might serve this purpose.

It cannot be denied that in hospital and dispensary practice one is called upon to prescribe for a far too large number of children suffering from postvaccinal troubles. The mothers, fortified by their neighbours' unstinted opinions, refer these ailments to the operation itself, though doubtless due to their own mismanagement. The extreme importance of Dr. Barrett's unassuming memorandum on the neglected side of this question deserves appreciation, and my object in writing is rather to elicit than to offer suggestions. ALFRED LEACH, M.B., M.R.C.P.Ed., Assistant Physician Italian Hospital.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUY'S HOSPITAL.

CASE OF STRANGULATION OF THE BOWEL THROUGH A HOLE IN THE MESENTERY.

(Under the care of W. ARBUTHNOT LANE, M.S., F.R.C.S., Assistant-Surgeon Guy's Hospital, and the Hospital for Sick Children, Great Ormond Street.)

C. J., boy, aged 10, was admitted on March 12th, 1890.

About 4 A.M. on March 10th he had been seized suddenly with violent pain in the lower part of the abdomen, immediately above the symphysis and in the middle line. Within a few minutes of the onset of the pain he began to vomit, and continued to do so at intervals till his admission. He was given a dose of castor-oil and poultices were applied. He was then seen by a medical man, who diagnosed "stoppage" and gave a soap enema.

On the morning of March 12th he became very collapsed, and the material vomited was fæcal. Nothing had been passed by the rectum since the onset of the attack. He had five doses of castor-oil and four enemas. There was no history of any injury, or of previous inconvenience or discomfort, and the attack came on while the boy was asleep.

On admission, the child was apparently in a dying condition. The pulse was 140 and hardly perceptible, and the temperature 97°. The abdomen was distended, and there was some definite resistance to be felt beneath the right rectus below the level of the umbilicus. No tumour or induration could be perceived in the right iliac fossa. The abdomen was not very tender to manipulation. The child said that he did not feel any pain, though previous to his admission he had had constant pain, with frequent exacerbations.

Though the boy was in such a collapsed condition, in the face of the short history, the apparent absence of any trouble about the appendix, and the resistance felt beneath the right rectus, I determined to operate without a moment's delay.

The extremities and thorax were carefully sheathed in cotton-wool, and alcohol was injected. Chloroform had almost at once to be replaced by ether, as under its influence no pulse could be felt. When the child became unconscious, a very definite tumour, of considerable size and prominence, occupied the position of the resistance already described. It was resonant on percussion. The abdomen was opened by a suitable T-shaped incision over the tumour, and a considerable quantity of somewhat foul-smelling, bloody fluid escaped from the peritoneal cavity. A mass of intestine, of a dark bluish colour, and covered by flakes of lymph

presented itself. The coils were much distended and were found to consist of three feet of small intestine, which had passed through a hole in the mesentery near its root. This opening was readily made larger by tearing through the mesentery along the length of its vessels, and the bowel was reduced. At this period of the operation the pulse could not be felt, and the respiration was so superficial as to be hardly apparent. Irrigation of the peritoneal cavity with hot boracic lotion revived the child slightly, but, as the edges of the incisions were being brought together, the child died.

At the necropsy, the diameter of the original aperture was found to be seven-eighths of an inch, and would readily admit the index finger. The strangulated bowel measured three feet and a half, its lower end being two feet above the ileo-cæcal valve. There was no general peritonitis. The margin of the original aperture was as rough and shaggy as of that portion formed by tearing, and not rounded and smooth as if of old date. It was in the middle line, two inches above the ileo-cæcal valve and close to the posterior attachment of the mesentery.

Though this case proved fatal, owing to delay before it was brought to the hospital, it is of interest from several points of view:

1. On account of the rarity of the occurrence of strangulation of the gut through a hole in the peritoneum, which hole appeared to be recent in formation. As far as one could judge, there was no pathological reason to suppose that its causation was not mechanical, or, in other words, traumatic. Of course, it is possible that the smooth edge of a small aperture in the mesentery might, as the result of its distension by the bowel, have been replaced by the ragged edge of a larger aperture; but Mr. Parkin, who made the necropsy, was unable to find any remnant of any smooth unlacerated edge.

2. The development of the strangulation during the night after the boy had been asleep for many hours.

3. The rapid progress of the case, the child dying in but little more than forty-eight hours from the onset of the symptoms. I do not think that the operation made any appreciable diminution in the duration of the lad's life. It was done very quickly, and with a minimum of exposure. The chief cause of the rapidly fatal termination was the energetic purgative treatment adopted.

4. The last point to which I would call attention is perhaps the one of most practical interest, and that is the very important aid to diagnosis which is afforded by anæsthesia. In this case, before the administration of the anæsthetic, all that could be felt was an obscure feeling of increased resistance; but, on the muscles being relaxed by the ether, the tumour stood out distinctly and unmistakably. Other similar cases, and particularly doubtful ones of typhlitis, receive the most important assistance in the early verification of their diagnosis from the administration of an anæsthetic, providing due care is exerted in performing the manipulation of the abdomen.

ABERDEEN ROYAL INFIRMARY.

CASE OF INTRACRANIAL SUPPURATION; TREPHINING AND EVACUATION OF PUS: DEATH: NECROPSY.[1]

(Under the care of Professor OGSTON.)

[By W. R. C. MIDDLETON, M.A., M.B., C.M.]

J. W., aged 31, mason, native of Newcastle. Mother said to have died of phthisis. Family history otherwise good. Was a healthy man till four weeks before admission (on November 10th), when he was seized with sudden pain in the left ear. Pain of a severe lancinating nature and constant persisted for a week in the left ear, then shifted to left supraorbital region, and discharge appeared from left auditory meatus. Pain remained in supra orbital region for ten days, and though not so severe as it had been, was bad enough to prevent sleep. It next moved to vertex, and after it had been here for three days, patient, on November 4th, complained of tingling and loss of power in the right hand. This was followed by loss of speech and of consciousness. He remained unconscious and speechless till evening of same day (November 4th) when he regained both speech and consciousness, and also the power of using his right hand. At this stage antiseptic irrigation of the left ear was advised, and patient began to improve. On the two following days he continued to improve, though on the 6th there was noticed watering of the left eye. On the 7th he became worse, and wandered in his mind. Consciousness again returned for a few hours, but was once more lost towards the evening of the 7th. On the 8th patient lost the power of the right arm, and on the 9th became aphasic At the same time the mouth was observed to be drawn to the left side. Consciousness alternated with delirium. Patient tossed about, rubbed forehead, and occasionally his occiput; was sleepless and moaning. Retention of urine began on the 9th, and continued till relieved on admission, when 24 ounces were drawn off. No vomiting or convulsions.

Condition on Admission.—Fairly well nourished; expression restless and occasionally vacant; conscious, but heavy and stupid; loss of sleep; pupils react to light, discs normal; slight convergent strabismus of right eye; smell and sight good; hearing on right side good, on left side impaired; lungs and heart normal; tongue furred; appetite impaired; constipation; retention of urine; paralysis of right side of face and right arm; right leg and left side of body not involved; plantar and patellar reflexes good on both sides—the latter, if anything, slightly exaggerated; pulse 60, regular, full, compressible; respirations 18, and regular; urine normal.

November 11th. Patient's mental condition varied considerably—at one time restless, rolling his eyes and rubbing his forehead; at another heavy and listless, but resenting interference, such as touching eyelids. In afternoon, got out of bed, caught up objects to throw at nurse, and for ten minutes resisted every effort to get him back to bed, while an hour after this he was again quiet and conscious, recognising his wife. Became restless again towards midnight, and took a slight fit, the symptoms of which were confined to face—eyes fixed and staring, jaw and tongue moved to right. No convulsive movements or rigidity of limbs. Fit lasted about two minutes. In a quarter of an hour he had a repetition of above symptoms, but to a less extent, and lasting only one minute. Skin during day was at one time cool, at another hot and pungent, and there were occasional flushings of face. Once he was observed to slightly move the right arm. Respirations suddenly fell from 18 at 1.15 P.M. to 9 at 1 40 P.M., and remained low but regular. Pulse varied from 60 to 72, but was regular, full, and soft. Temperature ranged from 96° F. to 98.6°. Irrigation of ear with corrosive sublimate lotion was done regularly every hour. Catheter was passed every eight hours, about 10 ounces being withdrawn each time. During the night took 16 ounces of beef tea.

November 12th. After fits above mentioned, patient slept for three-quarters of an hour, and then became more restless. The respirations continued as low as 9 per minute, the pulse remaining at 72, and the temperature keeping subnormal (96° to 97° F.). After consultation, it was decided to trephine. The patient was removed to the operating theatre and anæsthetised. After shaving the scalp over the temporo-sphenoidal region of the left side, and disinfection with corrosive sublimate and turpentine (the septic ear being also plugged with a turpentine wad), a horseshoe-shaped incision was made, with the convexity backwards in the region above named. The flap was dissected up, and the hæmorrhage controlled. The periosteum having been detached, the trephine was applied, and an opening made in the skull. The dura mater was incised, and from between it and the arachnoid about $1\frac{1}{2}$ drachm of pus spurted out. The pus was evacuated, and a knife introduced into the cerebral matter, but no cerebral abscess was revealed. Catgut drains were introduced, the wound closed in the usual manner, and iodoform dressings applied. Immediately after the operation, the pulse, which before had been 72, rose to 108, but was regular and fairly strong. Patient was restless, rolling his head, and attempting to remove the dressings. He was also intolerant of the irrigation of the ear. In the afternoon he had a slight tremor of the upper part of the body, and to a less degree of the legs, lasting about ten minutes. The tremor returned about half an hour after, but only lasted about two minutes. The temperature four hours after operation had risen to 101.4° F., but fell gradually to 100° F. in the next twelve hours. The respirations in the same time became more frequent—from 18 to 24—and regular, and the pulse improved from 120 and weak to 90 and strong. The ear was irrigated at first every hour, and then every two. Nourishment: 2 ounces of beef tea with 1 drachm of brandy every two hours.

November 13th. At 1 A.M. the patient was quite conscious, and used the right arm frequently. Afterwards slept for four hours and a half. At 7 A.M. appeared more heavy, drowsy, and stupid. Brandy stopped, and hourly irrigation resumed towards evening. Expression of face much more intelligent, and heaviness notice-

[1] Read before a meeting of the Aberdeen, Banff, and Kincardine Branch.

able in afternoon had passed away. Continued to move right arm, and did not interfere so much with dressings. Up to 11 A.M. was quiet, but at this time lips suddenly began to tremble and the teeth to chatter, continuing so for about five minutes. Eyes fixed and staring for about five minutes. Temperature at this time was 100.8° F.; pulse 66; and respirations 18. After this, once more became heavy and drowsy. During the day temperature varied from 98.6° at 3 A.M. to 101° at 3 P.M.; falling again to 100.8° at 11 P.M. Pulse fell gradually from 84 at 8.30 A.M. to 66 at 8 30 P.M., but remained regular and of fair strength. Respirations about 20. Had beef-tea, ℥ iv every two hours. Amount of urine withdrawn ℥ xxxv.

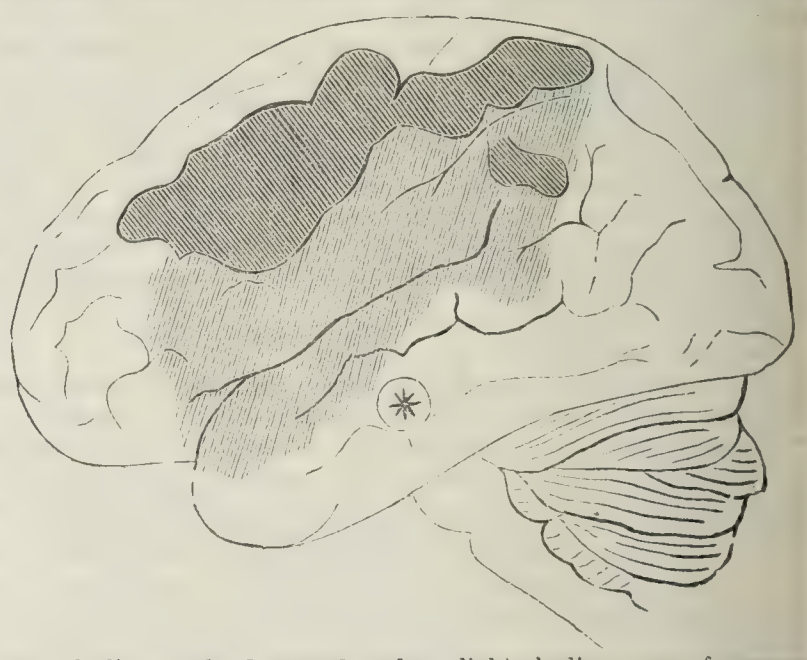
November 14th. Patient more restless during previous night, and made efforts to get out of bed. About 10 30 A.M. had another fit, resembling the one before operation—eyes fixed, twitching of eyelids and lips; pupils semi-dilated; grinding of teeth and escape of saliva. No movements or rigidity of arms; legs drawn up. Pulse 78, somewhat irregular and hard. Respirations 24, and rather shallow. Symptoms lasted about three minutes. Patient troubled with tympanites; relieved by enema of soap and water. Passed urine twice in bed, about ℥ ii each time. Alternately quiet, and taking nourishment readily, though he seemed to have some difficulty in swallowing; and restless, attempting to remove dressings; wound dressed twice. Small amount of discharge, quite "sweet" on the dressings. Pulse rose steadily from 72 at 7·30 A.M. to 96 at 11.30 A.M., and was occasionally somewhat irregular. Respirations fell from 20 at 7.30 A.M. to 14 at 3 P.M., rising again to 25 at 11.30 P.M. Temperature rose from 99.4° at 7.30 A.M to 101.8° at 3 P.M., and 102° at 11.30 P.M. Amount of urine withdrawn ℥ xxxi.

November 15th. Mental condition of patient improved; answers questions rationally and puts out tongue when told. Made several attempts to speak, remarking, "I say," and "Well, well." On being asked if he could write, replied in affirmative, and attempted to do so, but was unable to hold pencil. Seemed to know what he wanted to say, but had a difficulty in finding the necessary words. Expressed by signs his wish to have a screen between himself and window. Towards night became restless, moving his arms and hands; seemed to see objects before him and stretched out his hands towards them. About midnight restlessness increased, began to mutter, picked at nose and bedclothes, and kept moving his fingers. Took nourishment readily. Ear irrigated every hour when awake. Wound dressed twice, discharge small in amount and sweet. Otorrhœa diminishing. Pulse at 7.30 A.M. was 94, and somewhat irregular, but rose to 108, full and regular at 10 A.M., and continued so all day. Respirations varied from 24 to 30 in afternoon, falling again to 24 in the evening. Temperature fell steadily from 102.8° F. at 7 A.M. (the highest point it ever reached) to 101° at 11 P.M. Amount of urine withdrawn, 33 ounces. Nourishment, milk, 19 ounces, beef tea, 26 ounces in twenty-four hours.

November 16th. In early morning and up to 8 o'clock the patient was quiet and conscious; asked for "drink" and "water;" enquired "What time is it?" and on being told, remarked, "Is that all?" Afterwards asked for tea, and drank 4 ounces. Spoke in a slow, deliberate manner, and seemed to have difficulty in remembering words, but none in articulating. About 11 A.M. began to get more restless with twitching of face, muttering to himself and following imaginary objects with his hands. Ear irrigated and wound dressed as before. Pulse rose gradually from 90, full, soft, and regular in the morning, to 132, small and hard in the evening. Respirations varied from 24 at 7.30 A.M, down to 18 at 11 A.M., and up again to 30 in the evening. Temperature, 99° in morning, 100° at night. Urine withdrawn, 24 ounces. Nourishment in twenty-four hours: Milk, 28 ounces; beef-tea, 12 ounces.

November 17th. Slept very little previous night. Restless, muttering to himself, lying with eyes wide open, and catching at imaginary objects. Could be roused to answer questions, which he did correctly, but relapsed into unconsciousness. Put out tongue when told, and said, "That will do," and "Haste you," when catheter was passed at 7.30 A.M. Muttering became more incoherent and restlessness increased as day advanced. Subsultus tendinum came on. About 5 P.M. raising of eyebrows and twitching of eyelids were observed, eyes turned to right, and occasional attacks of nystagmus. About 7 P.M. the above symptoms increased and breathing became very oppressed. Pulse was 144 at 9 P.M., and remained fairly strong up to 10 P.M., after which it became slower and weaker. Patient got rapidly worse and died at 10.30 P.M. Pulse varied considerably in frequency and force from 126 at 7.30 A.M. to 132 at 11 A.M., 144 at 3 P.M., 168, small and feeble, at 5 P.M., falling to 144 at 9 P.M. Respirations varied from 30 in the morning to 40 in the evening, and were shallow but regular. Temperature varied from 100.6° at 2 A.M. to 102° at 3 P.M. at which point it remained at 7 P.M., when last taken. Half an hour after death it was 100.4°.

Extract of Notes of Post-mortem Examination conducted by Professor Hamilton.—Pupils semi-dilated, right more than left. No discharge proceeding from left ear. On left side of head a shaved patch about size of saucer. Above and behind left ear was a semilunar incision, edges of which were healing by first intention, enclosing a flap of skin two inches across between the ends of the incision. Left temporal muscle was infiltrated with blood, and there was slight yellow discoloration of the fascia covering the muscle. Anterior margin of opening in skull corresponded to a point half an inch behind the external auditory meatus, and two inches above it. The point of the brain corresponding to the opening was located in the second temporo-sphenoidal convolution, $2\frac{3}{4}$ inches from the tip of the temporo-sphenoidal lobe. The dura was closely adherent to arachnoid over the greater part of the surface, where recent lymph had been



Deep shading marks depressed surface; light shading, area of suppuration; * position of trephine opening.

effused as undernoted. On removing the dura mater large collections of pus were found in following localities: 1, over the third left frontal and its immediate neighbourhood; 2, over ascending frontal; the abscess collection situated on ascending frontal and posterior part of second frontal was somewhat triangular in shape, the apex pointing forwards, and measured 2 inches from before backwards, and $1\frac{1}{2}$ inch from above downwards, and its upper extremity was located $\frac{3}{4}$ inch from the longitudinal fissure; 3, posterior extremity of second frontal, where it had formed a distinct cuplike depression upon the surface of the organ, but neither in this situation nor the foregoing was there any destruction of the surface of the brain substance. Between the above-mentioned collections of pus there was a quantity of half purulent lymph, to which the dura was pretty firmly adherent. Over the temporo-sphenoidal, in its anterior two-thirds, there was also a considerable effusion of semipurulent lymph, but no depression of brain surface. At the base there was a little purulent effusion over the left side of the pons. The left third nerve appeared to have a considerable quantity of pus lying over it. Between the under surface of the brain and the upper surface of the cerebellum there was a considerable quantity of yellow purulent-looking lymph. The ventricles of the brain were a little dilated and filled with serum. The other parts of the brain were healthy.

Left Ear.—The small bones of the middle ear were all present. The cavity of the tympanum was filled with thick tenacious greyish-yellow pus, and the membrana tympani appeared to be in a state of dissolution. When detached it presented a shreddy appearance, as if from a perforation. The channel of the meatus appeared almost free from any pus. The rest of the body was not examined.

Opinion as to Cause of Death.—Meningitis evidently arising from the condition of left ear.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 15TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

Perforating Ulcer of Duodenum.—Brigade-Surgeon MYERS gave an account of the following case:—Private A., Grenadier Guards, aged 27, of very healthy physique, was admitted into hospital October 17th, 1889, suffering from intense pain in the abdomen. On the 16th he was out of barracks on pass, and remained away until his admission. During this period he had been drinking rather freely and had eaten little. He began to feel pain in the abdomen early in the afternoon of the 17th, and at 5 P.M. came to hospital. He had received no injury but thought he had strained himself. Physical examination revealed nothing abnormal, and the inguinal and femoral rings were found quite free. The next day symptoms of grave intestinal mischief set in, and the question of exploring the abdomen was considered, but had to be abandoned in consequence of the collapse which rapidly developed, and the patient sank at 11.45 P.M. The *post-mortem* examination revealed general peritonitis of recent date, and a considerable amount of yellow fluid of fæcal character occupied the peritoneal cavity. On examination of the intestines a perforating ulcer was found on the anterior surface of the duodenum, immediately below the pylorus, through which the intestinal contents had escaped. This case was reported chiefly to draw attention to the causation of duodenal ulcers. According to many authorities they were usually single, most frequently occurred in the upper part of the duodenum, and were far more prevalent in males than in females (about 10 to 1). One of the chief causes given by Virchow was the arrest of the circulation over a small portion of the intestines and the consequent solvent action of the gastric juices upon it, and only by Gull and one other had Dr. Myers found reference made (with regard to gastric ulcer) to the probability of their being caused by abrasions of mucous membrane. He asked the members of the Society if it did not appear to be a very reasonable proposition to advance that many of those cases of perforating ulcer of the duodenum were due to an accidental abrasion of the mucous membrane by some indigestible substance in its passage through the less movable portion of intestine, and by the consequent deleterious action of the gastric juice on the subjacent structures.—The PRESIDENT asked if the man had been a spirit drinker, and Dr. MYERS said that he had not been.—Dr. MONTAGUE MURRAY mentioned two cases of ulceration of the duodenum which occurred in men of the ages of 38 and 42 years respectively. The men had been previously healthy, and in each case the illness started immediately after a very heavy meal.—Dr. BRODIE asked Dr. Myers what was the position of the ulcer with reference to the opening of the bile duct.—Dr. EWART mentioned the case of a girl of about 20, in which there was a pyriform ulcer just within the pylorus. The shape of the ulcer was exactly like that in Dr. Myers's specimen. He also asked Dr. Myers if he had noticed a second ulceration lower down in the duodenum which had attacked the mucous membrane but not perforated the serous coat. He noticed that this ulcer was between two ridges.—Mr. PEEKE RICHARDS asked if there was any difference between this ulcer and those produced by burns; the latter were reasonably supposed to be due to nervous disturbance, and why should not this one have the same origin?—Mr. JOHNSON said that since Dr. Hunter's paper, which was read before the Society at a previous meeting, he had examined the records of University College Hospital, and found that, out of 93 *post-mortem* examinations after deaths due to burns, in only 2 were there ulcerations in the duodenum. In the first case there was a single ulcer high up in the duodenum. The patient had died several days after the day of the injury, and the appearance of the ulcer was that it was due to a digestion process. In the second case there were two ulcers in the lower part of the duodenum; the death in this case occurred a few hours after the burn. He considered that neither of these cases supported Dr. Hunter's suggestion that the ulcers were produced by some irritant secreted in the bile.—Dr. MYERS replied that there certainly was no second ulcer present at the time of the *post-mortem* examination in his case; and that the ulcer was just beyond the opening of the pylorus. He thought that these single ulcers were probably caused in a different way to those produced by burns.

Spontaneous Fracture of Vesical Calculi.—Mr. HURRY FENWICK read notes of a case of a patient, aged 68, who had been under the care of Dr. Wilberforce Smith for many years. The patient had latterly passed quantities of mustard-seed (uric acid) calculi. After a course of alkaline waters, the calculi increased in size then broke up, and came away in pieces. The apparent value of the treatment was proved, however, to be fallacious. On examination of the fragments, it was found that a phosphatic deposit had been formed upon each original stone, and had subsequently split off from it. Each stone was the size and shape of a pea—each consisted of three layers, a thin external shell of urate, a middle friable phosphatic zone, and a uric acid nucleus. These had evidently been manufactured, retained, and disrupted in a post-prostatic pouch. Three theories had been framed to account for spontaneous fracture of vesical calculi: 1. Rounded stones (pisiform) were split by the swelling of the perinuclear zone, as a shell by a bursting charge (Ord). 2. Irregular stones, in which the cortex was gradually abraded by urine changes and violence. 3. The interpenetration of mycelium (Ord). The case recorded went to substantiate the correctness of the first theory.

Spontaneous Fracture and Reunion of Vesical Calculi.—Mr. BUCKSTON BROWNE read an account of two cases where uric acid calculi had broken up in the bladder, in both of which complete and incomplete calculi and fragments became cemented together, in the one case by uric acid deposit, and in the other by phosphatic matter, resulting in the production of new calculous formations. The first case was seen last June with Dr. Wolfenden Collins, of Sydenham. W. H. M., aged 70, had suffered from great vesica irritation for some time. On sounding, several stones were felt, and, owing to the large amount of prostatic hypertrophy present, it was decided to remove them by suprapubic lithotomy rather than by lithotrity. Mr. Jonathan Hutchinson had observed that at any rate one objection which could be urged against the operation of lithotrity was that it spoiled so many interesting museum specimens, and certainly the unusual formation of the twelve calculi, or rather twelve calculous masses, which were removed, would have been entirely unobserved had lithotrity been resorted to for their removal. They weighed 200 grains, and were composed of uric acid, but their weight did not adequately express their size, because they were full of chambers and irregular spaces. In the middle of the box in which they were exhibited was placed a solid uric acid calculus, which was probably originally the centre of a laminated uric acid stone. The other masses appeared to consist of fragments of laminæ and smaller individual calculi all broken up, and afterwards cemented together. On looking closely at some of the masses it was to be noted that the centres of many of the smaller calculi appeared to have been washed away or dissolved. The probable explanation of the formation of these concretions was that originally the case was one of multiple uric acid calculi, and that from the loose connection between the laminæ and from the movements of the body the calculi broke up, and that afterwards the fragments became cemented together by fresh deposits of uric acid. It was evident that the centre of the largest calculus did not explode, as had been suggested by Dr. Ord, as an occasional cause of spontaneous fracture of calculi; but from the appearance of some of the smaller stones and the very peculiar rings of stone on some of the concretions, it seemed not improbable that this was the cause of the breaking up of some of the calculi. The second case was one of a calculus, the *débris* of which weighed 1,770 grains, removed by lithotrity. It consisted of numbers of uric acid calculi as large as cherry stones, more or less spontaneously fractured and cemented together into a vesical mass by phosphatic deposit. The patient, whose age was 70, passed his first stone in 1865, and off and on for twenty-five years calculi and fragments of calculi came away. In 1880 he was obliged to submit to lithotrity. In 1889 he went to Contrexéville, and while there passed many fragments of uric acid calculi. When seen with Mr. Manley Sims in October, 1889, the urine was excessively alkaline, and the bladder habitually retained 6 ounces of decomposing urine. A calculous mass was found in the bladder, and, although very large, it was soft, and easily broken up by the lithotrite. Upon examination the *débris* was found to consist of numerous uric acid calculi and broken laminæ, and much phosphatic matter. Many of the calculi showed portions of fractured laminæ still adherent to their centres, and the centres were all intact. Dr. Prout taught that the best solvent for, and disintegrator of, urinary calculi was perfectly healthy urine, and in this case the fracture of the calculi was probably not spontaneous, that is, not due to internal causes, but the formation of the calculi and their subsequent disintegration was due to alternating condi-

tions of healthy and unhealthy urine for a period of twenty-five years. Since the operation, that is, for six months, the patient had been carefully dieted, and had not passed a particle of calculous matter. In considering the question of what might be called the non-instrumental fracture of calculi within the body, of which true spontaneous fracture was probably only a variety, Mr. Buckston Browne wished to put the following questions to the Society: 1. Did renal calculi ever break in the kidney? 2. Was there a well-authenticated case of fracture of any calculus other than a uric acid one? 3. Were not the cases in which fracture occurred nearly always those of multiple uric acid calculi? 4. Did the alkali in the water of many watering places really deserve the credit of breaking up and bringing away stones, but rather was not the disintegration of the calculi due to their being bathed by healthy urine, the result of drinking freely of water, and of the fresh air, exercise, and somewhat restricted diet usually imposed upon the frequenters of these health resorts?—Mr. BRUCE CLARKE referred to the occurrence of spontaneous fracture in minerals and specified quartz. A lump of quartz became infiltrated by some metal such as iron, antimony, or arsenic, until there was a certain quantity of the substance in the quartz block, when spontaneous fracture occurred. Spontaneous fracture of vesical calculi occurred in elderly people, and the characters of the urine were always altered. It became alkaline instead of acid, or normal instead of morbid. The nucleus could not generally be found, and this was evidence that the cause of the rupture was the nucleus. It had been asked if renal calculi ever ruptured spontaneously. He had recently seen a small chip of calculus passed which there were reasons for thinking might be a portion of a renal stone.—Mr. SHATTOCK asked if the specific gravity had been taken during the latter course of the case from which Mr. Fenwick's specimen came. Dr. Ord had first suggested the true cause of the rupture of calculi, that the colloidal basis swelled under altered conditions of the urine, and that it was sometimes due to a lowering of the specific gravity, so that it was important to know whether this had altered at the time when the fracture occurred.—Dr. WILBERFORCE SMITH, in answer to Mr. SHATTOCK, said that the specific gravity had been 1010, but that at the time of the fracture it was higher, being associated with an improved condition of the patient.—Mr. FENWICK, in reference to the question asked by Mr. BUCKSTON BROWNE, as to whether spontaneous fracture ever occurred in other than uric acid calculi, mentioned a case recorded by Dr. Symonds, of Oxford, in which an oxalate of lime calculus, with a phosphatic covering, had spontaneously fractured into four or five pieces.

Melanotic Epithelioma.—Mr. ANTHONY BOWLBY showed specimen with sections, and gave the following account of a tumour of this description: S. D., a woman, aged 55, was admitted into President Ward of St. Bartholomew's Hospital under the care of Mr. Willett, on November 28th, 1889. She stated that two years previously she noticed the nail of the great toe growing black, and after a short time the nail itself came off and left an open sore. Since that time the blackness had spread slowly to the pulp of the toe and to the knuckle. The growth had been painless. The personal and family histories were unimportant. An examination showed that the great toe of the right foot was much enlarged. The site of the nail was occupied by an irregular ulcer with a dark red-brown base and raised edges. The neighbouring skin, for a distance of about half an inch, was black, but otherwise natural. The rest of the foot was healthy. There were no glandular enlargements or secondary growths. The toe was amputated and examined microscopically. The section showed that the rete Malpighii of the skin for some distance away from the growth was infiltrated with pigment, that the interpapillary processes dipped in more and more as they neared the seat of ulceration, and that at the latter place there was an infiltration of the subepithelial lesion with columns of large epithelial cells enclosed in an alveolated matrix. The pigment was found in both the cells and the matrix. The case differed from those of melanotic sarcoma in its duration for so long a period as two years, in its early ulceration, in the extensive pigmentations of the neighbouring skin, and in the absence of secondary growth in the glands and in other parts of the body. It differed also microscopically, in that its structure was epithelial.

Melanotic Carcinoma of Labium.—Mr. E. SOLLY showed the specimen with sections, and read a paper on a tumour of this description and on other specimens illustrative of the pathology of melanotic tumours. He said that of those which commenced in the skin many were sarcomata of ordinary character, but that a few were carcinomata, and that some appeared to be intermediate between the two, and possibly consisted of cells which during development had never become differentiated, and could not be said definitely to be either epiblastic or mesoblastic. This view had been advanced by Billroth in regard to melanotic mammary tumours, and agreed with Cohnheim's theory of the origin of new growths, in that the pigmented cutaneous moles in which these tumours so frequently commenced were obviously due to errors in tissue development. In the eye most melanotic growths appeared to be sarcomata springing from the choroid, but one specimen was exhibited which appeared to be epithelial. In the tumours exhibited the pigment was present both in the epidermic cells and in the tissues below, as was the case in pigmented moles. Each specimen had been tested for iron by the ferrocyanide test, but in no case had the "Prussian blue" reaction been obtained. All melanotic tumours, whatever their structure, appeared to infect the lymphatic glands and viscera.—Dr. HALE WHITE referred to a case of primary melanotic carcinoma of the liver which he had published in the Society's *Transactions* some years ago. He had shown sections to Professor Hamilton, who held that all melanotic growths were sarcomatous, and he certainly had considered the specimen to be a sarcoma, but all the other competent authorities to whom Dr. White had shown the section agreed with his opinion that it was carcinomatous.—Mr. KANTHACK gave a history of the literature of these growths from the time when they were first described by Hildanus in the beginning of the century, as cancerous melanotic tumours, to the time when Strohmeyer first used the term melanotic sarcoma, and then Virchow reviewed the whole subject, and came to the conclusion that these growths started as sarcoma, but might become infiltrated with or degenerate into carcinomatous elements.—Mr. SHATTOCK thought that Mr. Solly had done good service by showing that these melanotic tumours started both in the skin and beneath the skin. Skin tumours were alveolar in structure, and most of them were alveolar sarcomata, in consequence of which the cells in the alveoli were in lymphatic spaces, and so approached the carcinomata in character. He had examined a mole which had been removed during life in the course of an operation for something else, and had found epithelial cells dispersed amongst the connective tissue cells; so that in moles epiblastic and mesoblastic elements were intermingled, and it was probable that in tumours starting from moles a mixed series of new elements might arise, which could properly be called sarcoma carcinomatosum.

The Varying Effects of Violence in Producing Fractures.—Mr. D'ARCY POWER showed the knee-joints of a man, aged 23, who had jumped out of a fifth-floor window and fell apparently upon his knees on the pavement. As a result of this fall he sustained amongst other severe injuries fractures of both patellæ. Although the injury, so far as could be ascertained, was of exactly the same character in both legs, the results were strikingly dissimilar, for in the right leg the patella was fractured from within, so that the cartilaginous surface suffered severely, whilst the aponeurotic expansion of the quadriceps had escaped rupture. On the left side, however, the force had been so applied that the patella had been split from without inwards, or in an exactly opposite direction. At first sight this difference appeared difficult to explain, but on closer examination the author said that he had been able to show that the difference was due to the altered direction assumed by the force causing the fracture. In the right knee the fracture was produced by the violent impact of the articular surface of the patella against the unyielding condyle of the femur. On the left side, however, the force had been so applied that the patella acted as a wedge and split the condyle against which it was driven and which had itself received no injury.

Four Sacculated Aneurysms arising from a Dilated Aortic Arch.—Dr. MONTAGUE MURRAY gave the following account: The specimen was taken from the body of a man aged 58, formerly a sailor, who died suddenly from hæmatopericardium. The aortic arch was dilated and the internal surface much puckered. The lowest aneurysm pointed forwards, two (including both the largest and smallest) backwards, and one to the right. All the aneurysms were small; the capacity of each was 2, 6, ¾, and 3 drachms respectively. No laminated clot was found in any of them. The hæmorrhage had occurred through a minute hole in the lowest. Two less defined pouches were found, one on either side of the origin of the great vessels. Only one such case had hitherto been recorded in the Society's *Transactions*, and the writer inquired whether multiple aneurysms of the arch might

therefore be considered rare, for, on *a priori* grounds, the condition should be a common one. He considered syphilis an important factor in the causation of this case, and pointed out that the case illustrated the usual varieties and positions of aortic aneurysm. Hæmatopericardium occurring with aortic aneurysm was not, in his experience, always due to rupture of the aneurysm, but sometimes to that of an atheromatous ulcer considerably below the sac.—Brigade-Surgeon MYERS asked why the aneurysms should be supposed to be of syphilitic origin in this case. If it was so, one would expect to find other traces of syphilis in the body. He was of opinion that aneurysms in soldiers frequently had a different causation.—Dr. MURRAY had considered them due to syphilis from the marked puckering of the aorta which was present, and which was not usually considered to be due to simple atheroma. The only other evidences of syphilis—if they could be considered such—were scars in the capsules of the spleen and of one kidney.

Calcifying Adenoma of the Skin.—Mr. J. HUTCHINSON, jun., showed an example of this rare form of cutaneous tumour. It was obtained from the forearm of an elderly man. The epithelium over the little tumour was raised and somewhat discoloured. On section it was found to be as hard as bone, somewhat oval in shape, measuring two centimètres across by one centimètre in depth. After decalcifying by hydrochloric acid, sections were made perpendicular to the surface, and showed a glandlike structure of compressed and calcified lobules, between which was a good deal of fibrous and areolar tissue, which contained calcareous granules and a few calcareous plates. Here and there the hard part presented a close resemblance to the bone. The lobules referred to could be distinctly seen to be composed of sphenoidal or polygonal cells, like those met with in a sebaceous gland, but smaller. Perhaps owing to shrinking during the process of calcification spaces were formed in the supporting tissue. Here and there large multinucleated cells were seen close to the calcareous lobes, resembling the giant cells of developing bone. These had previously been described by M. Malherbe, who with M. Chenantais published an account of twelve cases in the *Trans. of Internat. Med. Congress* of 1881. M. Malherbe gave the name of calcifying epithelioma to these tumours, and cell nests could be frequently found in the lobules, but the innocent nature of these growths told wholly against their being included in the class of epitheliomata. The structure in the present case was like that found by Mr. Eve in a case reported in the *Path. Trans.*, and was quite different to that met with in ordinary sebaceous cysts which had undergone calcareous degeneration, since there was no cyst wall.

Card Specimens.—Dr. H. D. ROLLESTON: Separation of Symphysis Pubis.—Mr. SHATTOCK: Dry Necrosis of Digital Phalanx.—Dr. HEBB: (1) Four Cases of Congenital Heart-Disease; (2) Rupture of Left Ventricle; (3) Tumour of Breast.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 11TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Living Specimens.—Mr. POLLARD showed a boy, aged 6½ years, on whom he had performed Arthrectomy 2½ years ago for Disease of the Knee-joint, with remarkable success, so far as movement was concerned, this being perfect.—Mr. W. H. BENNETT showed a man, upon whom he had operated several times for Fibrosarcoma of the Nasopharynx. The salient points of the case were: 1, the first symptoms occurring as far back as 1866, in the shape of profuse hæmorrhage; 2, the long intervals before recurrence took place; and 3, the histological changes in the growth during this long period, which, starting as a fibrosarcoma, then became very full of spindle cells, and is now built up of mixed spindle and myeloid cells.—Mr. ARTHUR DAVIES showed two sisters, aged 27 and 30 respectively, suffering from well-marked Goître. The affection began at the ages of 15 and 12, and both patients were natives of Barnstaple. There was a family history of epilepsy.—Mr. C. G. SYMONS sent a case of Impacted Extracapsular Fracture of the Hip in a man, aged 58, in which the power of locomotion was retained.—Mr. COTES showed a case of Pedunculated Sarcoma of the Groin, the size of an orange, in a man, aged 32, the first appearance of which dated from two years since.

Hydatid Cyst of the Liver Causing Serious Displacement of Viscera: Operation: Death.—Mr. LAWFORD KNAGGS (Leeds) contributed the history of the case of a woman, aged 36, who, six years previously, began to develop varicose veins in both legs. Four years later she noticed a lump in the epigastrium, which gradually increased. Since then she had had two attacks of obstructive jaundice, but with that exception her chief discomfort was shortness of breath in going about. The liver and cyst occupied an enormous area. The upper border was on a level with the third rib, and the lower limit corresponded to a line drawn diagonally across the abdomen from the right superior iliac spine to the tenth rib on the left side. The heart was displaced beneath the first and second left intercostal spaces, and its apex was between the fourth and fifth ribs in the axilla. To the left of the umbilicus the rounded under surface of a large cyst could be felt. On April 26th 47½ ounces of clear fluid were slowly drawn off through a fine trocar. There was no alteration in the position of the viscera, but the operation was followed by 18 hours' severe vomiting, œdema of eyelids and nose, scanty and albuminous urine, drowsiness, contracted pupils, and a state of collapse which nearly proved fatal. These symptoms passed away, and on May 1st she was convalescent. On June 9th the cyst had refilled, and harelip pins were passed through the cyst wall and abdominal parietes to secure adhesions, and on June 14th a good sized trocar was passed through the space included by the pins, and 30 ounces of yellowish green fluid were withdrawn. The trocar was plugged, but fluid oozed by its side into antiseptic wood-wool pads during the night. No troublesome symptoms followed till June 16th, when there was vomiting and a rise of temperature. On the 17th, under ether, the opening was enlarged, the cyst thoroughly washed out, and a large drainage tube inserted. In the evening she was pulseless, but with none of the former symptoms of impeded circulation, and she died 18 hours after the operation. At the *post-mortem* examination the liver weighed 7¼ lbs. There was an enormous single hydatid cyst, which had probably commenced in the left lobe. It was firmly adherent to the under surface of the diaphragm on the right of the median line, and it was this adhesion that led to the peculiarities of the case. It had evidently been formed when the cyst was small, and as it grew the liver had been pushed, and rotated downwards, backwards, and to the right. The liver had accommodated itself to its new position, and it had completely lost its natural shape and could not possibly have resumed its natural situation. The cyst wall was a quarter of an inch thick, and the lining membrane lay within loose and detached. No adhesions had been produced by the harelip pins, and there had evidently been an escape of some of the cyst contents into the abdomen, and the coils of intestine lying in the pelvis were inflamed and covered with flakes of lymph. The most important factor in causing death was probably the shock caused by interference with the circulation consequent upon some alteration in position of the heart and great vessels. As the heart was largely supported by the cyst some effect must have been produced when it completely collapsed. The heart was kept in its abnormal position by the abnormal shape and position of the liver and stomach. The latter was adherent to the under surface of the cyst, and much elongated, and lay under the left ribs high up in the thorax. The case was recorded to illustrate the grave conditions to be met in some rare cases of hydatid cyst of the liver. Any energetic plan in this instance could hardly have failed to be followed by rapidly fatal consequences. The intention had been to diminish the size of the cyst by degrees, but the onset of serious symptoms led to the cyst being opened and irrigated.—The PRESIDENT was sorry the plan of treatment had not met with the success that its ingenuity deserved. A rise in temperature after the tapping of a cyst was commonly observed.—Mr. HOWSE said that he had never found it necessary to fix the cyst in the manner described, in order to produce adhesions. Usually the cyst bulged forwards in a pronounced manner. He considered that the needles were apt to produce much needless irritation.—Mr. BARKER also thought that the application of the pins was unnecessary, and was not unattended with danger. The simplest plan was to cut down upon the cyst.—Mr. VOELCKER mentioned six cases, in three of which the operation was followed by urticaria.—Mr. POLLARD said that the only cases in which, after operation, he had observed a rise of temperature were those in which it was probable that some of the fluid had escaped into the peritoneal cavity.—Dr. BRADFORD mentioned a case in which pyrexia and urticaria followed an operation upon a hydatid cyst.—Mr. BATTLE thought it would have been well to watch the effect of the removal of a small quantity of the fluid by simple paracentesis before undertaking the larger operation.—Dr. MONEY remarked that an eruption of the nature of urticaria had followed the injection of fluid from a hydatid cyst into the arm.—Mr.

KNAGGS, in reply, said that the particular line of treatment adopted had been undertaken after careful consideration of all the special circumstances of the case. No rash of any sort had been detected on the skin.

Acute Diffuse Suppurative Peritonitis: Laparotomy: Recovery.—Mr. HAWKINS-AMBLER (Kirkburton) and Mr. LAWFORD KNAGGS (Leeds) contributed notes of this case. A boy, aged 9, had symptoms of intestinal obstruction upon which peritonitis supervened. On the second day after the onset of urgent symptoms laparotomy was performed, and the abdomen explored. The intestines on the surface were glued together with yellow lymph. The obstruction was found to be due to a kink in the small intestine, which was adherent at the bottom of Douglas's pouch. As the adhesions were being separated with the finger, an abscess cavity was opened, and a quantity of very fœtid pus escaped. A glass drainage tube was then passed into the right lumbar hollow, and several ounces of pus (not fœtid) were ejected with such force as to shoot almost clear of the operating table. There was no collection in the left lumbar hollow, but a thin layer of pus was present in the folds of the mesentery. A drainage tube was placed in Douglas's pouch, and the wound closed, the operation being concluded as rapidly as possible. After an anxious twenty-four hours the boy began to rally, the bowels were freely opened, the distension disappeared, and the general progress was all that could be desired; but at the end of a fortnight he grew worse, and a large, flat, doughy tumour developed in the neighbourhood of the umbilicus, with pyrexia, tympanites, scanty urine, and rapidly increasing pulse. These symptoms gradually disappeared simultaneously with the discharge of a considerable quantity of sour-smelling pus from the drainage tube, and from this time progress was uninterrupted. The sinus was quite healed in about five weeks, and the boy was shown at the Leeds and West Riding Medico-Chirurgical Society on March 7th, 1890, ten months after the operation, looking the picture of robust health, and with nothing beyond the scar to show that he had had any abdominal trouble. The bowels were acting regularly and well. Attention was drawn to the fact that the abdomen had not been washed out. The operation was performed under exceptional difficulties in the country, and with only dirty tank rainwater available, and without apparatus that could be adapted for washing out. Though this omission might be criticised as bad surgery, yet the result went to prove that washing out was not so absolutely essential as had been imagined. This was just one of those cases in which careful cleansing of the peritoneum had hitherto been regarded as necessary to ensure success. The authors believed that had thorough irrigation been attempted the boy would have died; the extra manipulation of the intestines, which were so distended as to make the introduction of a finger a matter of difficulty, would have so added to the shock that the scale would have been turned against the patient.—The PRESIDENT remarked on the advance in abdominal surgery that seemed to be here portended. Formerly, the use of an antiseptic irrigation was considered to be indispensable; lately, mere washing out with boiled water had been held to be sufficient, and now, according to the authors, no washing out at all was required. This might mean a further advance in surgery.—Mr. BARKER mentioned the case of a boy whose local condition was probably much the same as in the case just mentioned, but whose general condition was much worse. At the operation, the intestines were found glued down by inflammation surrounding caseating glands. He died of the obstruction and of the operation, which had not relieved the obstruction. In his case there was a fœtid abscess, which discharged a quantity of fœtid pus when the adhesions were separated. He thought that irrigation of the abdomen should be used in a limited way. In some cases it was not desirable to irrigate, in other cases irrigation was of the greatest value. Under irrigation he had not found the power of the patient depressed; on the contrary, irrigation with hot water had improved the pulse. Where there was a limited peritonitis he would only wash out the part in which the inflammatory products lay, and not the rest of the abdomen, otherwise the germs of the local disease might be carried all over the peritoneal cavity.—Mr. PARKER would like to know the class of cases in which irrigation was likely to do good or harm respectively. In a former discussion the general verdict seemed to be that irrigation was of great value. He had generally found that where warm water was used it revived the pulse; and the same result occurred when the chests of sickly children suffering from empyema were flushed with warm water.—Mr. HOWSE said that his experience was entirely in favour of irrigation, and that, although great improvement in a case was likely to follow from the relief of tension and letting out of pus, irrigation also had its share in the success that usually followed the operation. He thought it better to irrigate with a fluid that had been rendered aseptic—water that had been recently boiled, for example. He had in the accident ward at Guy's Hospital a man who had been struck on the left side of the abdomen, and was in a great state of collapse. After forty-eight hours the patient's pulse rose very high, and he seemed likely to die if left alone. The abdomen was opened in the expectation that a rupture of the intestine might be found. There was no rupture, but a collection of clotted blood. Irrigation with water at a temperature of 100° was done, and a large quantity of blood was washed out, and kept running as if a large vein were freely pouring out blood. Eventually the fluid that came away was less coloured. In spite of the hæmorrhage, the pulse improved under the irrigation; the patient's temperature fell, and he was soon well again. The injury in that case was probably a bruising of a large vascular surface.—Mr. BATTLE said there were many cases of peritonitis in which it was impossible to say what was the cause of it. One case at St. Thomas's Hospital especially occurred to him, in which he had operated for peritonitis. Three days afterwards the patient's temperature rose, and vomiting ensued; he then performed laparotomy, and found purulent peritonitis without a discoverable cause. The child died next day, and was found, after death, to have swollen mesenteric glands. The child's mother was at the same time suffering from pyæmia in the same hospital; so that the child's case was possibly one of pyæmic peritonitis. In some cases the depression of the pulse following irrigation was such as to show that a great shock had been produced. He mentioned two cases of ruptured spleen as instances; whilst in a case of extravasation of blood from the pedicle of an ovarian tumour, when the wound was opened, without the use of an anæsthetic, as the blood was washed away, the pulse became quicker and its force diminished.—Mr. HAWKINS-AMBLER, in reply, stated that he did not think it desirable to do away with irrigation altogether, though he considered that there were cases in which it might be inadvisable to employ it. He generally used it, because it rather enabled one to do without a drainage tube, or to keep it in for a short time only.—Mr. KNAGGS, in reply, mentioned a case of peritoneal effusion which he had washed out, and had reported in another paper, in which he had advocated irrigation. Possibly his views with regard to the necessity for irrigation and the use of antiseptics had somewhat changed. He now attributed importance to the character of the effusion, whether it was serous or purulent. It must be remembered that in the effusion there was a tendency to the accumulation of micro-organisms, which would grow there, and become more and more virulent. If one removed this reservoir of fluid, one placed the patient in the best way to regain health, and the body might then fight successfully against the organisms that must be left behind.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 14TH, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

On the Present Position of Abdominal Surgery.—Mr. MEREDITH, as arranged, inaugurated a discussion by an address on "The Present Position of Abdominal Surgery." He observed that one could not do otherwise than ask what had been the causes of the wonderful advances made in abdominal surgery during the last ten years. The present range of abdominal surgery included the treatment of injury or disease of every organ within the abdomen and even the peritoneum itself. So extensive a field for the surgeon contrasted strongly with what obtained ten or twelve years ago, when the knife of the operator was restricted almost exclusively to operations for ovariotomy. It was in 1877 that his own attention had been first directed to abdominal surgery, and at that time operations for ovariotomy were the only ones thought of in this region. It is true that other abdominal and pelvic tumours were sometimes touched, but this was mostly the result of accident, in the sense that it resulted from a mistaken diagnosis. The mortality, even of ovariotomy, was very high. Thus, according to the statistics of Sir Spencer Wells, in 1876-7, of 150 operations there were 29 deaths, equal to 19.3 per cent., and of this number no fewer than 23 were due to septic peritonitis. The mere prevalence of such a mortality was sufficient of itself to check the progress of abdominal surgery, and its causes were themselves worthy of separate consideration. One of the causes

was undoubtedly a defective method of dealing with the pedicle, and an inadequate conception of the absorptive powers of the peritoneum, both for good and evil. The use of the clamp, again, was undoubtedly a direct factor in the production of this large mortality, and in London, at all events, the intraperitoneal treatment of the pedicle by ligature was practically restricted to cases in which the shortness of the pedicle rendered the use of the clamp inadmissible. The danger of the clamp lay in the opportunity it afforded for septic infection, the risk of subsequent hæmorrhage, and the risks incidental to a long and tedious convalescence. These were sufficient reasons for condemning it long before 1878, when the plan was finally abandoned in favour of the intraperitoneal ligature. The next important advance in abdominal surgery was the introduction of Listerian practice into this department, which their President had been largely instrumental in effecting in 1877. He expressed his conviction that the teachings of Lister, by drawing attention to the value of surgical cleanliness, had, directly or indirectly, done more to promote abdominal surgery than any other factor during the last ten years. Drainage and the flushing of the peritoneal cavity had, in fact, revolutionised the practice of abdominal surgery. Drainage was at first attempted by means of glass tubes of unnecessary size and clumsiness, and their use was at first looked upon with little favour. Moreover, the methods adopted to prevent putrefaction of the fluids which oozed away through the tube were most unsatisfactory. The employment of tubes of smaller calibre and duly protected against septic decomposition, had done much to render drainage safe and efficacious. The plan of flushing the peritoneal cavity, associated with subsequent drainage, had proved of immense value in ovariotomy and other abdominal operations, especially when undertaken for injury to or rupture of the hollow viscera. However explained, the success of this combined plan of treatment could not be denied. The addition of antiseptics to the water used was fraught with the risk of poisoning and could do no good, even the precaution of using water previously boiled was not essential to success, provided a fluid was used which was not itself contaminated with septic material. So long as no decomposing material was left in which the micro-organisms could develop, the peritoneum—thanks to its wonderful powers of absorption—was capable of getting rid of the small amount of fluid that remained behind, and any stray organisms were thus deprived of the moisture requisite to their rapid development, and were, moreover, themselves probably absorbed and excreted. These exceptional effects of flushing the peritoneum and drainage illustrated two other points, namely, the inadvisability of administering opium and the advisability of giving saline purgatives in the presence of certain symptoms pointing to incipient peritonitis. With regard to the administration of opium, he said it was a mistake, owing to the restraining influence exerted by it on absorption and excretion. Its use after abdominal operations ought to be strictly limited, and as a rule patients did much better without it. The *rationale* of the administration of saline purgatives in the early stage of peritonitis could only be explained by their promoting absorption and excretion. Of course, if there were an obstruction or an impaction, purgatives could only do harm, and in such cases he preferred belladonna, which usually overcame the difficulty. The gradual improvement in the results after ovariotomy was evidenced by the records at the Samaritan Hospital for three separate periods during the last twelve years. In 1878-79 there were 170 operations, of which 24 proved fatal, equal to 14.1 per cent.; in 1886-87 there were 140, of which 10 died, equal to a mortality of 7.1 per cent.; and in 1888-89, of 130 patients operated upon, only 6 died, equal to a rate of 4.3 per cent. The figures 4.3 compared with 14.1 might be taken as a measure of the improvement effected within the last ten years. With regard to the treatment of uterine tumours, ten years ago the results obtained in this branch of abdominal surgery were highly unsatisfactory. The treatment of the uterine stump, whether by intraperitoneal or extraperitoneal pressure, was invariably followed by terrible mortality, due either to hæmorrhage or to septic poisoning. Of 17 cases operated upon by Sir Spencer Wells prior to 1880, 8 proved fatal, being at the rate of 47 per cent. In consequence, interference with uterine tumours was undertaken only when the growths themselves were thought likely to prove fatal. Then came the introduction of Koeberlé's *serre-nœud*, which was first used by Keith in 1873, but was not appreciated in London until long after. With respect to hysterectomy as performed at five hospitals during the last four years, there had been 82 cases with 15 deaths, equal to a rate of 18.2 per cent. These figures indicated a reduction of 60 per cent. on the former rate. His own results in connection with this operation was 6 deaths out of 30 cases; out of these, 4 occurred in the first 10, and the remaining 2 among the last 20, thus giving a markedly diminished mortality during the last series. Success in this procedure depended largely upon familiarity with the various details, especially with regard to the treatment of the stump. Extraction and removal of tumours involving the upper portion of the uterine body, even if of large size, was now commonly not a matter of any serious difficulty. In a certain proportion of the cases, however, complications arising from the growths being beneath the broad ligament, leading to displacement of the bladder, etc, necessitated extensive enucleation in order to form a pedicle for the application of the *serre-nœud*. In such cases the removal of the uterine appendages could sometimes be performed; but as often as not this alternative was not practicable, and the more serious operation had to be done. The chief danger was hæmorrhage, to be avoided, in the first place, by securing the ovarian vessels on either side of the uterus, by transfixion and ligature of both broad ligaments below the appendages, followed by the use of pressure forceps above that level. The next thing was to free the displaced bladder from its connection with the surface of the tumour. He insisted upon the importance of including in the ligature both ovarian arteries, also of uniting the free borders of the divided capsule. The ultimate success of these operations depended upon the proper adjustment and management of the stump and upon the precautions taken to protect the peritoneum. The tumour having been taken away, the remaining portion of the stump had to be dealt with, and the question of the removal of the uterine appendages had to be considered. The treatment of pedunculated tumours of the uterus was a very successful procedure in properly selected cases, and the removal of the appendages for the arrest of hæmorrhage due to fibroid tumours was an operation the efficacy of which was undoubted. Unfortunately, however, complete removal of the ovaries and tubes was not always possible, hence the occasional necessity for resorting to the more radical measures. The chief point was to avoid puncture of the frequently distended vessels of the pampiniform plexus and the complete removal of all ovarian tissue. It was not sufficient to strip the broad ligament clear of the base of the ovary, for some ovarian substance might remain on the distal side of the ligature and lead to recurrence of the hæmorrhage, and render recourse to hysterectomy advisable. Accepting the theory of the influence of the ovaries on menstruation, he said the continuance of the hæmorrhage must be due to some ovarian tissue having been left behind. He alluded to Mr. Tait's views with respect to the influence of the tubes and also to the possibility of there being a special nerve branch which might be destroyed during the operation. He expressed a hope that further light might be shed on this point in the course of the debate. The mortality of these operations in the hands of skilled operators was very small, only 2 per cent., according to Mr. Tait's recent work on the subject. The removal of the uterine appendages for disease raised questions of very serious importance, particularly because the operation in a large proportion of the cases was directed to the relief of affections not in themselves menacing life. If the operation itself were absolutely devoid of danger, the matter might perhaps be left to the conscience of the operator, but as, even in the most skilled hands, there was a certain percentage of unavoidable mortality, the matter assumed a different aspect. The main question in respect of this subject was the value of the operation, and this had to be considered (1) with reference to the nature of the cases operated upon, and (2) as to the ultimate result of the treatment on the welfare of the patients. An analysis of 147 cases of removal of the appendages published by Mr. Tait showed that there were 45 cases of pyosalpinx, 9 of hydrosalpinx, 43 of chronic ovaritis, 1 of exanthematous ovaritis, and 2 of ovarian abscess. This was 54 per cent. of cases of tubal disease, and 46 of chronic inflammatory conditions of the ovaries. He observed that it was worthy of note that in these cases the suffering was often quite out of proportion to the lesions, but the converse was equally true. He dismissed the difficulties of the differential diagnosis in these cases, and insisted upon the inadvisability of active intrauterine treatment. He admitted that there was great difficulty in defining exactly the cases which called for surgical interference, the propriety of which depended on social and other considerations as well as upon the nature and extent of the disease. He urged that no radical opera-

tion should be advised or undertaken in these cases until a course of palliative treatment had been given a fair trial. He asked for further information on the subject of the ultimate consequences of removal of the appendages, as to which little was at present definitely known. He then passed on to discuss the improvements effected in the diagnosis and treatment of the various forms of ectopic gestation, and the views held by authorities on the pathology of this terrible abnormality. He pointed out, in reference to the substitution of Porro's operation and the modified Cæsarean section for craniotomy in obstructed labour, that the choice of the method would depend upon the predilection of the operator, the results obtained by both in skilled hands being satisfactory when performed at full time. He said the surgical treatment of tubercular peritonitis was now generally recognised, and was of utility in checking the development of what appeared, for a time at any rate, to be a local disease. The results of surgical interference in suppurative peritonitis had, so far, not been satisfactory, probably because the peritoneal mischief was usually secondary to suppurative nephritis, which could not be relieved by mere drainage. The treatment of pelvic abscess by abdominal incision was a vast improvement upon the pelvic operation, especially as it was often possible to get at the sac without opening the peritoneum. In no department of abdominal surgery had greater progress been effected than in dealing with calculous and suppurative diseases of the liver. He passed in review the various operations directed to the relief of these conditions and the conditions which should preside over the selection of particular methods of procedure. He quoted the contributions by Mr. Godlee, on the Surgical Treatment of Hepatic Suppuration,[1] as an excellent summary of what had been done in this branch. The advances effected during the last ten years in renal surgery were not less marked, and had been largely brought about by their President. He insisted upon the necessity for devising means of arriving at an early differential diagnosis between tumour and calculus, and urged the advantages attending early surgical measures, not only in these, but in many other affections of this organ. He alluded to the diagnostic importance of the abdominal incision in these cases in preference to the lumbar incision, in which the surgeon had to be guided by what he could feel, in cases where he had need of the assistance of all the senses. He concluded by a few remarks on the surgery of the spleen and pancreas, the results of which still left much to be desired. As, however, the spleen might be removed without any necessary detrimental effect on the economy at large, he hoped that further progress would shortly be made in the diagnosis and treatment of diseases of this organ. He added, in thanking the Fellows and members for their attention, that he hoped his paper would pave the way to a debate worthy alike of the ancient Society to which they belonged, and of the worldwide reputation of British surgery. — The PRESIDENT suggested that attention should be especially directed to the following points: as to the operative defects of hysterectomy; facts bearing on the recurrence of menstruation after ovariotomy; the ultimate history of cases of oöphorectomy; the early diagnosis of ectopic gestation; the relative merits of Porro's operation, and the new methods of performing Cæsarean section. Then as to the complete closure of the gall bladder and the relative value of cholecystotomy and cholecystectomy, and as to the removal of gall stones from the ducts by incision, etc. As to the removal of the kidney in hydronephrosis; the differential diagnosis of renal calculus and tumours; the exact localisation, as to the side, of renal lesions; as to the ultimate results of mere draining of the kidney in suppurative disease; also as to the ultimate history of cases which had recovered from splenectomy, and lastly, as to the symptoms of early disease of the pancreas. He explained that the subject was so vast that, unless some definite plan were laid down, it would be difficult to deal with it satisfactorily.—Dr. GRIFFITHS (Swansea) said there were ten important points to be borne in mind in abdominal operation—in fact, ten surgical commandments bearing on the treatment of the wound; (1) the arrest of hæmorrhage; (2) the avoidance of mechanical irritation; (3) the guarding against infection or contagion; (4) the proper apposition of the edges of the wound by aseptic sutures; (5) to provide for necessary drainage; (6) to apply gentle pressure to prevent congestion and exudation; (7) to give the most perfect physiological rest; (8) to secure the best possible position of the parts to promote comfort and healing; (9) to provide for hygienic surroundings, and (10) to attend to the patient's general health. If these were attended to and the condition of the patient was up to the average, the operation could not fail to prove satisfactory. He declared his firm belief in the practices inculcated by Lister. His own experience was limited to 56 cases of operation for ovarian tumour, including 3 oöphorectomies for hæmorrhage due to fibroid tumour of the uterus. He was very stringent in the use of antiseptics, but never used a drainage tube in ordinary ovariotomy, considering it worse than useless. He admitted, however, that there were cases in which it was indicated, and he regretted not having used it in one case of his own. There were 6 deaths among the 56 cases, in 3 of which the operation was undertaken for malignant disease; the fourth was an "impossible" case for operation, in the fifth the bladder was ruptured, and in the sixth the patient died from fatty degeneration of the heart. He had not had a single death from septicæmia.—Mr. MAYO ROBSON (Leeds) said he only proposed to speak as to the result of operations and on the subject generally, without going into the question of individual diseases. What they should aim at was to establish general principles for guidance. He expressed his gratitude to the leaders in abdominal surgery, whose teaching and experience had enabled younger men like himself to start from their high platform. At the Leeds meeting of the British Medical Association he had brought forward 200 cases of abdominal operations, and he had since added considerably to the number. Of these, 61 were operations for ovariotomy, and of these 2 died, but these were apparently very unfavourable cases; in one of them intestinal obstruction supervened at the end of a week, and if this occurred now he would reopen the abdomen and endeavour to ascertain the cause. The other death was from exhaustion consequent on removal of a suppurating multilocular cyst, adherent to all the surrounding parts, and the profuse drainage had determined fatal exhaustion. The fact that he saw names of equal weight on both sides in reference to the employment of antiseptics led him to think that there must be some common ground, and that ground he thought was the value of extreme surgical cleanliness. While he might dispense with the spray if operating in the country, in a pure atmosphere, he hesitated to do without it in a general hospital in which the surroundings were not of the purest. He certainly felt safer when he used the spray, not directed straight at the abdomen, but pointed into the air over the region of operation. With reference to the contention that abdominal operations ought not to be performed in a general hospital, he denied that there was any valid reason for the suggestion. He maintained that it was possible to obtain results in a general hospital equal to those at a special hospital, or even in private practice. He did not argue from mere belief, but he had statistics which would compare favourably with those at special hospitals and elsewhere. Of 61 cases of ovariotomy 2 died, and in the condition described by Mr. Meredith as an extremely serious operation, namely, the removal of diseased appendages, he had operated 34 times without a death. He had also 5 cases of abdominal section for tubercular peritonitis in which he had opened and drained without a death, and 10 cases of pelvic abscess treated by abdominal section also without a death. Further, he had 12 cholecystotomies without a death, and 2 cholecystectomies, operated upon under the impression that there were gall stones. One turned out to be malignant disease of the head of the pancreas, and the patient died from hæmorrhage, which set in three days after the operation. Within three weeks he had a similar case, but on that occasion he tied every vessel instead of trusting to pressure forceps, and no such mishap occurred, though the patient ultimately succumbed to malignant disease. He denied that general surgeons were more exposed to have their hands contaminated with septic material than the surgeons at special hospitals. He urged that gynæcologists particularly were very liable to come into contact with infective cases in the course of their examinations; the argument, therefore, would not hold. The real question was as to whether general surgeons could perform these operations successfully. With regard to the removal of the appendages for myoma of the uterus, out of a large number of these cases he had only seen the hæmorrhage persist in one. In this case although after the operation the uterus had diminished in size, and had once more become a pelvic organ; it had since begun to grow again, and now reached above the umbilicus, so that he had advised the patient to undergo hysterectomy. With regard to the ultimate result of removal of the appendages for disease, he said these cases must be divided into two classes: Battey's operation, in which the ovaries were removed to obtain a physiological result; and Tait's operation for the removal of diseased appendages. His results with the

[1] JOURNAL, vol. i, 1890, pp. 61, 120, and 172.

atter operation had been eminently satisfactory, but, as Mr. Tait ad pointed out, they must not look for an immediate result. hey must wait for a year or eighteen months, for the final re- ult would not be noticed until the menopause had been thoroughly stablished. Battey's operation, in his hands, had yielded results minently unsatisfactory in every way. The nervous symptoms ad simply shifted to some other part of the body, and he would ot again be inclined to remove ovaries unless he had distinct evi- ence of their being diseased. With regard to tubercular periton- is, his experience was that if there were fluid when the peri- oneal cavity was opened, then draining it and washing it out did ood. If, on the other hand, the intestines were simply matted ogether by tubercular matter, the procedure hardly afforded any elief. In regard to pelvic abscess, he believed that unless the bscess absolutely pointed in the vagina, opening the abdomen as by far the best course. He had never had reason to regret aving adopted this method in his ten cases.—Mr. JOHN W. TAYLOR, f Birmingham, said he would briefly direct attention to several oints in his own experience in reply to the question of the Presi- ent, bearing on the diagnosis of extrauterine pregnancy in its arly stages; he had succeeded in doing so on two occasions. here was indeed not much difficulty; in both the presence of retrouterine tumour, possessing all the characters of a distended allopian tube, associated with the early signs of pregnancy, ob- iously pointed to the diagnosis. On the broad subject of the vening's debate, he said that many of the dangers associated ith their work as abdominal surgeons, and not a few of the fatal esults sometimes met with, were largely preventable; they ad therefore to consider the means of perfecting their work. e insisted upon the necessity for early surgical intervention hen this was called for, and he said there was room for good deal of improvement in this respect. He mentioned case of papillomatous cyst of the ovary which had been nown to exist for two or three years, but for which nothing ad been done until rupture took place, and it was sent o him as urgent. It would, in such a case, have been much etter for the surgeon and the patient to have operated long efore and without waiting for rupture. They were all agreed as o the importance of cleanliness, but there were several problems o be solved in hospital management before they could hope to ttain the maximum of success. He pointed out that abdominal ases appeared to be peculiarly sensitive to influences which ould not have any import in the ordinary run of surgical cases, nd this was a point which ought to be borne in mind. With eference to the influence of kidney disease as affecting the mor- ality after surgical operations, he said that he had operated when he urine had been markedly albuminous without any bad result, ut he remembered two cases in which kidney disease seemed to ave precipitated the sequel. On carefully reviewing his wn work, all his most anxious cases appeared to be affected n one way or another by the factors which he had men- oned.—Mr. FREDERICK TREVES said he should confine his ttention to two points. The first concerned the technical etails of the operation for hysterectomy. Before mentioning hat appeared to be the better plan of operating, he said he ished to point out that there was really nothing special in bdominal surgery—that is, there was nothing peculiar about . The common principles that influenced general surgery held ood in abdominal surgery, and if at any time a Herbert Spencer surgery came to write the first principles of surgery, it would hen be seen that they were to all intents and purposes identical. he opening of the peritoneum in peritonitis and allowing the uid to escape, washing out the cavity afterwards, seemed, it was ue, to open up a new field for surgical procedure, but it in no ay really differed from the ordinary treatment of abscess else- here. The whole history of ovariotomy was only the history of he treatment of simple tumours. Just as with tumours in years one by, the pedicle had at one time been cauterised and then amped, but the time had come when the thing was done cleanly nd efficiently, and that was where ovariotomy was at present. The esent position of abdominal surgery merely amounted to this, hat a certain remarkable reformation of the methods of treating ounds had rendered it possible to apply the general principles surgery to the abdomen—only this and nothing more than this. e said he mentioned this because it rendered intelligible what e was about to say with reference to hysterectomy. He said it ust be allowed that there were still some cases in which the xtirpation of the uterus with the tubes and ovaries was a justi- iable operation. It was a vexed question, but he thought it might be taken for granted at present. In his practical experience he had endeavoured to treat these cases as he would a large external tumour growing from some part of the uterus. He asked them to imagine such a tumour growing from the back or the buttock. It would be treated on a certain definite plan, and that when applied to the abdomen had given excellent results. The blood vessels going to the great mass were not numerous and were well known, and were, moreover, easy to find and easy to ligature. He took it that the ovarian arteries ought always to be tied, though the ovarian branch of the vaginal artery might be more difficult to find, and only be come across late in the operation. The ovarian arteries having been ligatured, the broad ligament was divided and the neck of the uterus was cut across, hæmorrhage having been provided against by the application of an elastic ligature, and at last there swept from one side of the pelvis to the other a huge gash in the peritoneum, and in that gap certain vessels required to be ligatured. That gash in the peritoneum was closed in such wise that when healed there was a seam running right across the base of the pelvis. He compared his procedure with the use of the *serre-nœud*, which, without exaggeration, was, he said, a barbarous method, and really belonged to the Middle Ages. The method of dealing with any tumour by begging the question of hæmorrhage and ligaturing the whole until it dropped off by gangrene, was unsurgical and absurd. The position of the *serre-nœud* in respect of hysterectomy was that of the clamp in ovariotomy. His own results on the plan laid down had been admirable. It was admitted that there were no class of cases in which complications were more likely to arise than in these cases of tumour of the uterus, but he ventured to say that if there were any kind of tumour inside or outside of the body, around which a *serre-nœud* had been passed, that pedicle could most certainly have been treated by simple surgical measures. Even if fifty ligatures were required, that plan of dealing with the pedicle was better than by means of this uncouth piece of metal, which reminded him of the whip-cord formerly applied to the tongue by torsion. With reference to the treatment of that form of extrauterine fœtation, in which the fœtus had died, one might imagine that the sac had been opened, the fœtus had been removed, and nothing remained but the placenta and sac. He thought that, on common surgical grounds, not only should the placenta be removed, but also every trace of the sac. Some persons would say that this was difficult, if not impossible, but he pointed out that the sac must necessarily be of recent formation, and therefore flimsy, and the adhesions could not be of more than moderate strength. It ought, therefore, to be reasonably easy to carry out this plan of practice. He had had three cases within eighteen months, in all of which he had removed every trace of the placenta and sac, cleaned out the pelvis, and closed up the abdominal wound, without drainage, and the patients had recovered in about the usual time required for convalescence from an ovariotomy. As to the surgery of the pancreas, he believed that no case of tumour of the pancreas had ever been intentionally operated upon this country, for the disease had not been diagnosed. If they had paid a little more attention to the remarkable paper by Senn on the subject there would not be so much difficulty in arriving at a diagnosis. He recalled the case of a man in a certain hospital with an enormous belly, which was said to have reached that size in two months. It was popularly supposed to be a sarcoma. They obtained the man's consent to an exploration, and they found that it was an enormous cyst of the pancreas, which was opened and its contents evacuated, and it healed up without complication or trouble of any kind. He hoped that when Mr. Meredith made a further communication to the Society he would take up the question of the manner in which different cysts in the belly were to be dealt with, seeing that there was an enormous difference in the behaviour of such cysts after evacuation.—Mr. SKENE KEITH said that in the removal of pyosalpinx one expected recovery to follow in a moderately short time. The few cases he had seen had all recovered very rapidly. The other cases of salpingitis, ovaritis, hydrosalpinx with adhesions and varicosity of the veins of the pelvis, which had so much to do with the sensation of dragging the pain and the general discomfort, got better almost invariably, and ultimately the patients became as well again as they had ever been. It was a mistake that was often made not to warn patients and their friends that they would be a very long time getting better. Patients put up with the idea of a little waiting if told beforehand, but otherwise after six months or so they began to get restive. He mentioned the case of a patient upon whom he had operated some months ago and who

was not as well now as she was before the operation, so far as strength was concerned. She however was free from the pain and the vomiting, and in a couple of years that woman would probably be as well as ever she had been in her life. He insisted upon the fact that these women with diseased ovaries belonged to a "fragile" class, and had probably never been able to do as much as other women, and this must be borne in mind in formulating expectations. One reason why they took so long to get better was that they had been a long time ill, and had for years been gradually going down hill. Naturally therefore it took them some time to pick up again. He agreed with the last speaker in what he had said in reference to hysterectomy, but there were cases in which the clamp could not be dispensed with. They could not always spare the time to get the stump thoroughly under the ligature. The method of compression so far as they had got was simple enough by means of a double screw clamp. Another point was as to the ease with which the vessels could be tied. He reminded Mr. Treves that though in some cases it might be possible to pick up and name the vessels, it was not always so, and they often had to deal with a large number of vessels all as large as the radial artery, which they were glad enough to tie without giving them a name. He thought the clamp had been unnecessarily abused. The clamp and antiseptics came in together, and if they made sure that no putrid matter could trickle down to the peritoneum—a contingency which was usually amply provided against—he thought they might get as good results in ovariotomy, or in the removal of the appendages with as without it. At the same time he did not advise it except in certain cases. He wished to draw attention to the good Listerism had done in bringing about habits of surgical cleanliness. He mentioned the story of a gentleman who before assisting at an ovariotomy, was asked to wash his hands. He rather indignantly said it was unnecessary, he had washed them in the morning. When, however, he was told that the water contained 10 or 20 per cent. of this or that antiseptic, he did not hesitate or feel hurt at being asked to perform his ablutions.—The debate was then adjourned until April 21st, when it will be reopened by Mr. Lawson Tait.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 2ND, 1890.

A. L. GALABIN, M.D., President, in the Chair.

Specimens.—The following specimens were exhibited: Dr. GODSON: Living Female Child with Three Lower Limbs.—Dr. SPENCER: Congenital Hernia.—Dr. MACNAUGHTON JONES: Drawing of Central Choroido-retinal Disease.—Dr. CULLINGWORTH: Uterus after Porro's Operation, and a Child from a Case of Extra-Uterine Fœtation.—Drs. GALABIN, LEWERS, HERMAN DAKIN, and CULLINGWORTH: Cancer of the Uterus.

Four Cases of Vaginal Hysterectomy.—Dr. CULLINGWORTH read a paper in which four cases of total extirpation of the uterus *per vaginam* were related, two of columnar-celled carcinoma of the cervix, and two of squamous-celled carcinoma of the portio vaginalis. In three of the cases the patients recovered from the operation; in one recurrence took place in eight months. The disease had extended into the body of the uterus in both the cases of cervical carcinoma, and Dr. Cullingworth expressed a doubt whether the tissues above the internal os were respected as frequently as was alleged. Museum specimens were shown where the corpus uteri had been more or less invaded. In the fatal case the patient had a parovarian cyst situated behind the uterus; this was removed by abdominal section on the same day that the vaginal hysterectomy was performed. Death occurred on the third day, apparently from intestinal paralysis. The paper concluded with some remarks on the diminished mortality of the operation as compared with what it was when Dr. W. Duncan's paper was read in 1885.—Dr. JOHN WILLIAMS said two things must be considered: 1. The direction of growth of cancer when it began in the cervix. 2. The difference in the results obtained after total extirpation of the uterus and supravaginal amputation of the cervix. Regarding the direction of growth of cancer of the cervix, it had been maintained that its tendency was to spread outwards towards the parametric tissue, and that it invaded the body of the uterus only in advanced cases. The specimens shown by Dr. Cullingworth went to show that cancer of the cervix had a tendency to grow outwards, and invaded the body of the uterus in the later stages only. The results obtained after total extirpation supported the same view. After supravaginal amputation recurrence took place, not in the stump of the uterus left, but in the cellular tissue around (the exceptions to this were rare), and after total extirpation it occurred of course in the same place, and if statistics of the same period were taken, far more frequently. This might be due to the fact that total extirpation had been performed for the severer cases. Dr. Williams did not think total extirpation presented any advantages over supravaginal amputation.—Dr. W. DUNCAN agreed with Dr. J. Williams that cancer of the cervix spread laterally, and only invaded the body of the uterus in the later stages. Since 1885 he (the speaker) had carefully examined every case of cancer of the uterus he had met with, and in only three could he satisfy himself that the parametric tissue was unaffected and a radical operation advisable. He recommended careful examination of the uterosacral ligaments *per rectum*. He asked if this had been done in Dr. Cullingworth's cases. He regarded foreign statistics as practically valueless, inasmuch as total extirpation was performed for other conditions than cancer. He maintained that in the few cases where any radical operation was called for, the supravaginal amputation was the one to be preferred.—Dr. SINCLAIR referred to the fact that the minor operation had been almost unanimously abandoned by the German operators, as a point in favour of total extirpation. As the operations were performed almost entirely in the public hospitals, the German reports must be considered fully as reliable as any published. Total extirpation for cancer of the body or for cancer of the portio, gave comparatively good results, owing perhaps to the fact that a clean sweep was made of all the affected tissue at a considerable distance (anatomically if not physiologically) from the disease. Cancer originating in the cervical canal was liable to remain concealed for a longer time than in the body, where it caused pain and discharge, or in the point of the vaginal portion where it produced a typical hæmorrhage. If the cancer was to spread, it must do so in the parametric structures, but the rule was that the spreading occurred comparatively late in the disease and thus the exceptions in which the disease spread up and down to an extent which could only be ascertained after operation were so numerous that the only safe rule was to perform the major operation as early as possible. The operation was called "major," but it was perhaps less dangerous than some of the so called minor operations, in which the circulation, both hæmic and lymphatic, was left comparatively uninterrupted. His own experience amounted to eighteen cases of total extirpation for cancer. Twelve of these had been performed within the last twelve months, and all were alive and well except one patient, who died of acute septic peritonitis. He gave details of cases of extirpation over two years ago, in which no recurrence had taken place and the patients remained in very good health.—The discussion was adjourned on the proposal of Dr. LEWERS, seconded by Dr. GRIFFITH.

HUNTERIAN SOCIETY.

WEDNESDAY, APRIL 9TH, 1890.

STEPHEN MACKENZIE, M.D., President, in the Chair.

Cases.—Mr. BIDWELL exhibited a girl, aged 6 years, with Congenital Dislocation of both Hips, the head of the femur lying upon the dorsum ilii, the trochanter being an inch and a half above Nélaton's line. The child had also lateral curvature of the spine and there were slight signs of rickets. She had never walked, the legs were little wasted; knee-jerks present. She was being treated by extension with 5 lb. weights.—Mr. COTMAN showed an infant, aged about 6 months, with Congenital Nystagmus, the movements being vertical. The infant was plump, the eleventh child of a healthy woman. He was inclined to attribute it to a local chorea. Vision and intelligence appeared unimpaired, but the father was a heavy drinker and had strange delusions. Mr. Cotman also showed a case of numerous Rheumatic Nodules on the hands, elbows, and knees of a boy, aged 16 years, who had had rheumatic fever two years before. Well-marked mitral disease and hypertrophy of the heart were present. Temperature just below 100° F.—The PRESIDENT and Mr. F. R. HUMPHREY alluded to cases where nodules occurred in connection with syphilis or with muscular rheumatism independently of acute rheumatism.—Dr. DUNDAS GRANT showed a case of Papilloma of the Larynx in a girl, aged 8 years, with loss of voice for four months, and attacks of dyspnœa; there was a large papilloma of hourglass shape, partly above and partly below the glottis. After several attempts with the snare, a good part of the growth was removed with Mackenzie's forceps, and the voice returned.

practical cure had thus been effected, although considerable sessile papilloma remained on the left vocal cord. The difficulties in operating on a little child were not small.—Dr. W. FOWLER showed an example of Ectopia Testis Cruralis in a patient aged 17. Over the saphena opening was a superficial fluctuating tumour, about the size of a split tangerine orange, at the lower part of which the testis and cord could be felt. Above the tumour was an ill-defined fulness reaching up to Poupart's ligament. Here alone there was very slight impulse on coughing, but not that characteristic of bowel. When lying down a certain amount of fluid could be displaced from the tumour into the fulness above it, as though the processus vaginalis were not obliterated. The displaced testicle was small, tender, and possessed testicular sensation. The lump had been noticed about ten years, lessening in size on lying down. The only inconvenience had been some aching in the part, especially after exertion. The patient wore a truss for ten years in the belief that it was a hernia. Excision was recommended, on account of the dangers (1) that hernia might follow, (2) that the gland might take on sarcomatous growth.—Mr. RIVINGTON considered the case of great rarity. He would leave it alone unless it became more inconvenient.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF ANATOMY AND PHYSIOLOGY.

FRIDAY, MARCH 14TH, 1890.

J. M. PURSER, M.D., President, in the Chair.

Exhibit.—Professor BIRMINGHAM exhibited a Right Lung, the upper and inner parts of which, including the whole of the apex, were marked off by a deep fissure as a supernumerary lobe.

The Lantern as an Aid to Anatomical Demonstrations.—Professor BIRMINGHAM gave a demonstration of the magic lantern applied to the illustration of anatomical lectures. He pointed out that the lantern might be used in daylight in a theatre with a head light, if the screen were provided with a projecting canopy, so that a penumbra might be produced on its surface.

Collective Investigation Reports.—On the motion of Professor CUNNINGHAM, the interim reports of the collective investigation conducted in the Anatomical Department of Trinity College were read by the gentlemen who had charge of the different investigations.—Dr. W. H. THOMPSON read a report on the formation of the portal vein; Messrs. A. C. O'SULLIVAN and O. L. ROBINSON one on the arrangement of the renal arteries; Mr. J. J. LONG one on the relation of the internal maxillary artery to the external pterygoid muscle; Mr. C. E. STOKES one on the tuberculum laterale of the astragalus.—Professor CUNNINGHAM reminded the Section that this was the second report of the collective investigation read before the Academy. A somewhat similar collective investigation was instituted late last year in connection with the Anatomical Society of Great Britain and Ireland, which it was proposed to extend to all the schools in these countries. This placed the anatomical department with which he was connected in a dilemma. While extremely anxious to take part in the general work, yet they felt that this result ought to belong to the Academy of Medicine in Ireland. After some correspondence on the matter it was arranged that the programme of the Anatomical Society should be adopted, but that the reports from the Irish branches should be read at the Academy of Medicine in Ireland, published in its *Transactions*, and then handed over to the Anatomical Society.—Professor BIRMINGHAM pointed out that Dr. Thompson's report on the termination of the inferior mesenteric vein differed from the results of Treves, who found that the vein terminated in the splenic in only 18 per cent. of his 100 cases. Treves considered this ending a sign of higher development.

The Parieto-Occipital and Calcarine Fissures of the Brain, their Development and Relation to the Calcar Avis.—Professor CUNNINGHAM made a communication, illustrated with diagrams, on the development of the parieto-occipital and calcarine fissures and their relation to the calcar avis.—Professor BIRMINGHAM made remarks, and Professor CUNNINGHAM replied.

CARDIFF MEDICAL SOCIETY.

THURSDAY, APRIL 3RD, 1890.

W. F. EDWARDS, M.D.Lond., F.R.C.S., President, in the Chair.

Borax in Epilepsy.—Dr. STEWART, assistant medical officer at the Glamorgan County Asylum, related cases illustrating the value of borax in epilepsy. 1. A girl admitted, aged 13, had had epileptic seizures dating from birth, occurring in numbers varying from two to twelve per day, and chiefly by night. She had been under treatment repeatedly, but without benefit. Without treatment the fits during the first week were twenty-six in number; under borax they were reduced to twenty-four in the second and eight in the third week. After an interval free from fits of sixteen days, four occurred on two successive nights; then after another interval of nine days a single fit took place, and since that there has been no recurrence of fits, that is, a clear interval of over a month. 2. This patient began to suffer from nocturnal epilepsy at 18, and came under treatment five years afterwards. The case was complicated by serious cardiac disease and stenosis of the mitral orifice. Without treatment the average monthly number of fits were 101, and under borax this was reduced to twenty in the first month, seven in the second, one in the third, five in the fourth, none in the fifth, and one in the sixth. 3. This patient had whooping-cough at 7, followed by left hemiplegia, imbecility, and epilepsy. The average number of fits a week, when no special treatment was employed, was 3.5, and bromide failed to effect any reduction; after two and a half years' treatment the weekly average had risen to sixteen. Under borax the weekly average during the first month was reduced to 15.5, and during the second month to 11.5. The diminution took place chiefly in the nocturnal seizures. In 4, 5 and 7, in which the fits occurred both by day and night, bromide exercised a decided influence upon the diurnal seizures, leaving the nocturnal practically unaltered, and in these benefit was experienced from the combined use of bromide and borax, three doses of the former during the day and one single dose of the latter at bedtime. 6. This patient, epileptic and imbecile from birth, came under treatment at 35. The fits were of the nocturnal type, were uninfluenced by bromide, and were slightly diminished by borax. Dr. Stewart concluded that borax exercised a peculiar influence over nocturnal seizures, and that it was in cases where the fits were entirely of that kind that the greatest good might be expected; that bromide, on the other hand, exerted a more powerful influence over diurnal seizures, and that in cases characterised by both day and night fits a combination of these two remedies would be productive of most benefit.

ABERDEEN, BANFF, AND KINCARDINE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WEDNESDAY, MARCH 19TH, 1890.

JOHN GORDON, M.D., in the Chair.

Communications.—Dr. MACGREGOR read notes of a Case of Rupture of the Kidney, the result of an accident at football. Hæmaturia and extravasation of blood around the kidney followed, with peritonitis, tympanites, sickness, and hiccough. After a week of intense suffering improvement set in and went on to almost complete recovery. The accident happened in January, and, although the patient was now apparently quite well, a few blood corpuscles were still found in the urine.—Dr. BEVERIDGE gave an account of a Case of Lumbar Hernia in an Elderly Woman.—Dr. MCKENZIE DAVIDSON described the Method of Using Stereoscopic Photography in Illustration of Surgical Cases, and showed stereoscopic photographs of a variety of cases. Dr. McKenzie Davidson also showed Lang's Twin Needle, and explained its use in the treatment of anterior synechiæ.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, APRIL 2ND, 1890.

JAMES ROSS, M.D., LL.D., in the Chair.

Lithotrity in Children.—Mr. SOUTHAM made some remarks on the good results of lithotrity in children, and mentioned two cases in which uric acid calculi, weighing 15 and 45 grains, had been crushed and removed at one sitting from boys aged 3½ and 10 years respectively. In each instance the operation was well borne by the patients, who made a rapid recovery, and in the course of a week were convalescent.

Epithelioma of the Tonsil.—Mr. WM. THORBURN described a case (which was shown at a previous clinical meeting) of epithelioma of the right tonsil and fauces which had spread to the soft palate, mucous membrane of both alveoli, and base of the tongue, and was accompanied by an enlarged gland in the neck. The entire growth was removed by pharyngotomy on December 18th, and a small patch of recurrent growth on the soft palate on January 31st. Since then the patient had remained well.

Treatment of Chronic Rheumatic Arthritis.—Dr. F. H. COLLINS read a paper suggesting a new treatment for chronic rheumatic arthritis, and related cases. Chloroform was administered, and the joints moved freely and without fear; at the same time the flexors and extensors of the affected joints were roughly massaged. This treatment was not followed by increased effusion into the joints, and no inflammatory action was set up. In each case the severe aching pain was immediately relieved, and did not recur. In one case chloroform was administered three times, and from being a complete cripple unable to move except when assisted on both sides (almost carried), the patient was able, after the first operation, to move about the room without pain. After the second operation, ten days subsequently, she could go down and upstairs, and the next day walked out in the street. Within one month from the first administration of chloroform she threw aside her crutches and sticks. Dr. Collins thought the active movements of the joints produced absorption of the rheumatic deposit in the fibrous tissues and muscles (1) by increasing the vascular supply, (2) by relieving the pressure upon the nerve trunks which was caused by deposit in their sheaths. The numbness frequently observed in some of these cases was due to rheumatic deposit pressing upon the nerve trunks. He supported this statement by relating how in one case the fingers supplied by the ulnar nerve had become quite numb owing to a perceptible deposit situated about the internal condyle. This numbness disappeared completely after the operation, and the patient, who had formerly been a skilful pianist, was able to resume her musical studies. A large proportion of the pain present in cases of rheumatic arthritis was due to mechanical irritation and pressure on nerves by deposit of rheumatic elements.

Pancreatic Cyst.—Dr. LEECH read a paper on two cases of pancreatic cyst which had been under his care in the Manchester Royal Infirmary. In one case the cyst was in the head of the pancreas, and caused jaundice. In the second there were two cysts connected with the body of the pancreas. One, about the size of an orange, which projected downwards; the other much smaller, seemed to spring from the upper part of the gland. The cystic change was connected with cancer of the organ, and was diagnosed during life.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, APRIL 10TH, 1890.

C. N. GWYNNE, M.D., President, in the Chair.

Specimens.—Dr. KEELING showed a Tumour removed from the left labium of a woman, aged 21. The tumour had commenced four years ago in a warty roughness of the labium, growing to the size of a man's fist, flattened. It appeared to be due to hypertrophy of the natural tissues.—Mr. R. FAVELL showed Twin Ova removed from a woman who had in a previous pregnancy been delivered of twins. One of the ova was larger than the other, being about the size of a pigeon's egg. The embryo was distinctly apparent, curved on itself, and the head and caudal extremity well made out. It was evidently between the third and fourth week of pregnancy. The second ovum was only about half the size of the former, the embryo not being very distinct. The age of this was evidently about twelve or fourteen days.—Mr. E. T. COLLINS showed for Dr. MARTIN a Papillomatous Growth removed from the cervix uteri of a single woman, aged 19, who had menstruated for three years. She first noticed a fleshy protrusion between the labia two years and a half ago. The symptoms were those usual in cases of polypi. The mass, which on removal weighed 13 ounces, filled up the vagina and posterior *cul-de-sac*, and gave the sensation of a saturated sponge. It was removed with a chain *écraseur*, with only a very slight loss of blood. On inspection it appeared to be a papilloma undergoing myxomatous and fatty degeneration.

Cases.—Mr. ATKIN showed a case of Infantile Prurigo, which had resisted all treatment The boy was rachitic and of the sanguineous temperament, yet the pigmentation was very marked, especially over the lumbar region. The head and flexures of the joints were not involved.—Mr. EDWARD BARBER showed two cases: one a child, 18 months old, in whom the left testicle was felt to the inner side of the thigh, the right occupying the normal position in the scrotum. The other case was one of Bifid Uvula.

Peritonitis Treated by Incision.—Dr. PEARSON read the notes of a case of general peritonitis which he had treated successfully by incision and irrigation of the cavity. The patient, a girl, aged 13, was admitted into the Fever Hospital as a probable case of typhus fever. She was then suffering from peritonitis, and had been ill thirteen days. There was fluid in the abdomen, which continued to increase; the temperature ranged from 99.8° to 104°. Pulse 116 to 140. There was much abdominal pain, shortness of breath due to lung disease (catarrhal pneumonia), and there was also parotitis with suppuration. On the tenth day after admission the abdomen was very much distended with fluid, which the introduction of a hypodermic syringe proved to be pus. On the thirteenth day the navel projected two inches beyond the surface of the abdomen, and looked as if it would burst. Mr. Arthur Jackson saw the case with Dr. Pearson, and advised opening the peritoneal cavity. This was done, and several pints of pus escaped. The cavity was afterwards syringed out with a warm solution of boracic acid twice daily, and poultices applied externally. Quinine, brandy, eggs, and cod-liver oil were administered; the patient made a good recovery, and was discharged cured thirteen weeks after admission.—Dr. GWYNNE, Dr. KEELING, and Mr. BANHAM made remarks.

Typhus in Sheffield.—Dr. THEODORE THOMSON read a paper on an outbreak of typhus fever which had occurred in Sheffield during the past winter. The first recognised cases had been sent to the Borough Fever Hospital in January last, as cases of typhoid fever, but it was found on inquiry that three members of the same family had been attacked, the nature of the disease not being recognised. Three remaining members of this same family (of nine in all) were subsequently affected. Simultaneously with this outbreak another household in another part of the borough was attacked by typhus. In spite of the most careful inquiries no connection could be made out between the two outbreaks. Subsequently four other persons, all of whom had been exposed to infection through one or both of these sources, contracted the disease; the total number of cases in the outbreak being fourteen. No source of infection had been discovered, and Dr. Thomson suggested, as a possible explanation of this, that undetected typhus cases might keep up an undercurrent of infection, and that there might be a more or less universal existence of a specific organism, which under ordinary conditions did not develop sufficiently to display its potential infectivity, but which, under special conditions, might so develop. The slowness with which the disease was propagated, as indicated by a period of seven weeks being required before the members of one family were all affected, was pointed out and contrasted with records of the past, as instanced by the Oxford "Black Assize," of 1557, and other examples. Further, the loss of virulence in the type of the disease was commented on, including the fact that in this outbreak no less than three of the fourteen cases were cases of aborted typhus. It was also pointed out that this outbreak coincided with a marked rise in respiratory diseases and especially in pneumonia, and in view of the variety of typhus fever in Sheffield, and of the outbreaks having occurred in two places simultaneously, it was suggested that the special conditions favouring these diseases might also, though to a less extent, favour typhus fever.—Dr. HARGREAVES, Dr. KEELING, Dr. BURGESS, Dr. GWYNNE, and Dr. PORTER took part in the discussion which followed.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, APRIL 3RD, 1890.

E. CRESSWELL BABER, M.B., President, in the Chair.

Epistaxis, etc.—The PRESIDENT read notes of two cases of epistaxis in which the hæmorrhage came from a point on the septum, and was promptly checked by treatment directed to the bleeding spot. Thorough examination of the cavity of the nose in cases of epistaxis was too often neglected, and plugging of the posterior nares consequently resorted to unnecessarily. He also passed round an excellent photograph of a young lady in whom he had successfully removed some scrofulous cervical glands, and asked the experience of members of this operation, and also how far irrigation and drainage tube were desirable.—Remarks were made by Dr. BLACK, Mr. W. FURNER, and Mr. TURTON; and the PRESIDENT replied.

Specimens.—Mr. CALVERT showed a specimen of Malignant Disease of the Pericardium. The patient, a boy, aged 15, was admitted into hospital with cardiac dyspnœa. On *post-mortem* examination the pericardium was found to be nearly an inch thick, and almost uniformly involved in new growth, the left lung having the air squeezed out of it, and being "splenified" by pres-

ure; the anterior mediastinal glands were very numerous, and were all enlarged. The microscope showed the tumour to be ymphomatous, and Mr. Calvert was of opinion that the disease egan in the lymphatic glands of the anterior mediastinum, involving the pericardium secondarily.—Mr. HODGSON showed a pecimen of generally Dilated Heart, with disintegrating clot, which had produced emboli in lungs, liver, and kidneys; there vas no valvular disease. The patient, a woman, aged 43, had suffered from emaciation and weakness and general dropsy; there vas occasional slight fever, pains in the abdomen and hepatic egion, but no chills, rigors, or sweating; apex systolic *bruit*. The scites was relieved by withdrawal of two gallons and a quarter f serum. Mr. Hodgson considered the case to be a somewhat uncommon one.—Dr. SANDERSON briefly referred to a similar case in he Westminster Hospital.

Myeloid Sarcoma of Femur.—Dr. BLACK read notes of a case of ayeloid sarcoma of lower end of femur, and showed the specimen. 'he patient, a woman, aged 26, was admitted into hospital under he care of Mr. Blaker, complaining of disease of the right kneeoint. Five months ago she was stated to have fractured the high bone just above the knee. The joint appeared hot, tender, nd swollen, and started at night, but, with rest in bed and a plint, diminished in size and became less painful at night. The case vas considered one of disease of knee-joint, and a preliminary ncision was made with a view to excision, when a quantity of ark blood poured out, and the cavity was found to be the exanded lower epiphysis of the femur, which had partly given vay, the interior being occupied by a soft, friable, sarcomatous nass. The limb was at once amputated through the upper third f the thigh.

OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY OF GLASGOW.

WEDNESDAY, MARCH 26TH, 1890.

MURDOCH CAMERON, M.D., President, in the Chair.

Vomiting in the Later Months of Pregnancy.—Dr. KIRK (Parick) read a paper on two cases of severe vomiting in the later nonths of pregnancy, associated with hemialbumosuria and iaceturia, in which he stated that these conditions of the urine ad not been previously observed in pregnancy. In the first case he vomiting was associated with marked pigmentation of the kin, and in the second, in which it was of the convulsive form, vith slight jaundice. The propeptone or hemialbumose was deected in the ordinary way, namely, by carefully adding a mineral cid and boiling. This treatment of the urine in both cases gave flocculent precipitate, which disappeared on boiling, but reppeared as the urine cooled. In the second case the urates were lso precipitated by the test, but these were readily distinguished y the low temperature at which they disappeared on heating. 'he urine in this case further gave a deep purple-red colour with erric chloride, indicating the presence of ethyl-diacetic acid; not nly so, but the same reaction was also obtained at first in the istillate after acidulating with hydrochloric acid, this apparently eing the first time this has been observed, a fact which Dr. Kirk vas inclined to attribute to the large quantity of the acid present n this case. Both patients were treated by chloral hydrate, and ubsequently by sodium salicylate (the diaceturia was observed efore the latter or any drug was administered). In both the bnormal state of the urine ceased within eight days, and they vere generally much improved. Dr. Kirk further drew attention o the great viscidity and frothing power developed in the urine y ferric chloride, and to the light which this shed on the styptic ower of this substance. He next referred to cases of jaundice rom obstruction and functional disturbance, in which he had also bserved the occurrence of hemialbumosuria and diaceturia (singly r both together), and said that although these states of the urine ad been often observed in the same class of cases, he was not ware of their coexistence in any single case having been preiously pointed out, an occurrence which nevertheless he believed ust be not uncommon.

THE TELEPHONE AND CONTAGION.—An appliance, consisting of thin gutta-percha cover which is placed over the telephone tube efore it is applied to the ear, has just been patented in Russia by n inventor, who is anxious to prevent the possibility of infecion by the promiscuous use of telephone tubes at public stations. he appliance can be conveniently carried in the pocket, and costs bout one shilling.

REVIEWS AND NOTICES.

THE NATIONAL MEDICAL DICTIONARY. Edited by JOHN S. BILLINGS, A.M., M.D., etc. 2 vols. Edinburgh and London: Young J. Pentland. 1890.

THAT this dictionary is edited by the accomplished medical historian of the American civil war would be a sufficient reason for a respectful examination, even if the inherent excellence of the work did not make any extraneous claim to attention unnecessary. Within the lines laid down for it by its editor, it is a most complete and valuable undertaking. It makes no claim to etymological perfection. The English words treated are the only ones whose derivation is indicated, and this often but slightly. The genders of foreign substantives are not given, nor are even the parts of speech noted to which the various words inserted belong.

It is as a polyglot vocabulary of medical terms, whose meanings are defined with admirable terseness and exactitude, that the book appeals to us. Its title is certainly the worst thing about it; a dictionary dealing with English, French, Italian, German, and Latin words, can scarcely be called in America "a national dictionary," unless, indeed, one looks upon it as representing the languages of the various nationalities which make up the Great Republic. "An International Medical Dictionary" would, in our opinion, have been a far better and more expressive title.

The dictionary proper is preceded by several tables of doses, antidotes, numbers of lenses, expectation of life, thermometry, food, etc., which are of a very useful character, although one is tempted to inquire what relevancy they bear to the purposes of a dictionary, or why, having been inserted, others quite as important have been omitted. In the table of dosage no indication is given as to what pharmacopœia is employed, whether the *U.S.P.* or *B.P.*, or what other. The dose of the tinct. aconite is here given as 1 to 3 minims. In Lauder Brunton's *Pharmacology* it is put at 1 to 15 minims; and a non-officinal tincture of the leaves is stated in the dictionary to be exhibited in 10 to 20 minim doses. While the dose of the *B.P.* tincture of belladonna is given as from 5 to 30 minims, and that of the *U.S.P.* as from 8 to 30 minims, that in the dictionary is stated to be 10 to 20 minims. An International Pharmacopœia is a great desideratum, but an indeterminate system of dosage issued in an American work by English publishers does not seem quite void of danger. The method here used of marking the extreme limits of quantitative safety in prescribing the more lethal drugs by a (!) is an excellent one.

Turning to the dictionary proper, we are struck by the fulness and up-to-date character of the vocabulary; scarcely any medical words, however recently introducted into medicine, are omitted. A very useful system of connecting leading anatomists and physicians, etc., with parts or diseases named after them is here adopted in a few instances. The name, country, dates of birth and death of the person indicated, are given; then, in alphabetical order, the anatomical or pathological entities named after him; for example: "Pott, Percival, English Surgeon [1713-88]." Then with definitions: "'Pott's Aneurysm,' 'Pott's Curvature,' 'Pott's Disease,' 'Pott's Fracture,' and 'Pott's Gangrene.'" So with Smith, Hunter, Dupuytren, and several more. On the other hand, we look in vain for some names which should have been admitted. We find Addison's and Bright's diseases, and Addison's keloid defined, but neither Addison nor Bright; half a dozen discoveries labelled "Bowman," but no Bowman himself. We hope in the second edition of this work the system of biographical indication and identification will be extended, while a bibliographical reference to the work in which discoveries of this class were first named would be very useful and acceptable indeed.

The definitions are, as we have said, terse and adequate for the most part. Take "Croup" as a favourable example: "A disease, generally of infants, characterised by inflammation with fibrinous exudation, of the larynx and trachea." Here the definition is excellent, even if the wording is slightly awkward. Some definitions are, of course, not equally good. Enteric fever is declared to be "an acute infectious disease, characterised by fever and inflammation, usually followed by ulceration of Peyer's patches and the solitary follicles of the intestines." It would have been better to replace "infectious" by "miasmatic contagious" in this definition; while "usually followed" may be compared with

Liebermeister's statements that the changes "in Peyer's patches, etc., are present in all cases without exception," and that the enteric ulcer begins to cicatrise during the fourth week of the disease. We decline to accept the spelling "polyclinic," or the definition: "A large general clinic or hospital not devoted to any special forms of disease" as adequate representation of the German "Poliklinik." "Death-rate" can hardly be rigidly defined as "number of deaths in a year per 1,000 of population," since although this is the usual comparison, some statisticians take a death-rate per cent. or per million, as the case may be. These are, however, only unimportant slips among numbers of excellent definitions which rightly claim our applause; and on every page there is room for interest in the varied information supplied.

The number of diseases named after saints is astonishingly great, and in some instances savours more of familiarity than reverence. St. Vitus's dance and St. Antony's fire are old acquaintances, but not everybody knows that toothache is St. Appolonia's disease (who should certainly be dubbed saint and martyr), that tinea is St. Aignan's disease, or that quinsy is St. Blase's disease. We can understand why St. Hubert gives his name to hydrophobia, and St. Agatha hers to disease of the female breast, but why poor St. Job and St. Sement are relegated to syphilis, St. Fiacre to piles, or St. Lazarus to pig measles our ignorance of the saints' calendar does not enable us to suggest.

We cordially recommend Dr. BILLINGS'S work to our readers.

THE EXTRA PHARMACOPŒIA. By WILLIAM MARTINDALE, F.C.S., and W. WYNN WESTCOTT, M.B.Lond. Sixth Edition. London: H. K. Lewis, 136, Gower Street, W.C.

THE fifth edition of the *Extra Pharmacopœia* was published in July, 1888. The appearance of the sixth edition in 1890, increased by about 50 pages, shows very clearly that there is no cessation in the stream of new remedies. Most of these newly-introduced drugs owe their existence to the advances made by chemical science in producing substitution compounds or obtaining new series of coal tar derivatives. We note the following as the more important of the new chemical compounds:—Monobromacetanilide, a bromine substitution compound of acetanilide (antifebrin), is suggested for facial neuralgia, neuritis, and rheumatism; tetronal allied to sulphonal, contains four ethyl groups in a molecule, two of which replace the two methyl groups in sulphonal, and it is stated that this substitution doubles the hypnotic effect; methacetin, an antiputrescent, corresponds in action to phenacetin; hydracetin, a powerful body, has been used in a diluted form, under the name of pyrodin; methylacetanilide, known by its registered name of exalgin, possesses chiefly analgesic properties; thiol, a mixture of sulphonised hydrocarbons, is similar in composition and properties to ichthyol; aristol (di-thymol-iodide) and sozoiodol (di-iodo-para-phenolsulphonic acid) are odourless substitutes for iodoform; metaldehyde, the solid congener of paraldehyde, is sedative and hypnotic; orexine is a stomachic and appetiser stimulating gastric secretion; diuretin, a sodio-salicylic compound of theobromine, is diuretic without affecting the nervous system. The new drugs belonging to the organic materia medica are comparatively few in number. The latest definite chemical principles from this source are cannabine, the pure alkaloid of Indian hemp; eseridine, an alkaloid obtained from Calabar bean; and sparteine sulphate, the sulphate of the alkaloid of broom. Oil vaseline is described as a vehicle for hypodermic injections, the medicament being either dissolved or suspended in it. Formulæ are given for the preparation of hypodermic injections of insoluble mercurial salts, such as calomel and yellow oxide of mercury, and of solutions of cocaine, iodoform, thymol, phenol, etc.

The secondary list of drugs, which includes all those of which there is little or no experience, has been augmented. The additional unofficial formulæ of the British Pharmaceutical Conference have been inserted, and the therapeutic reference and index have been much extended.

This edition, in order to render it complete and up to date, has had great care bestowed upon it, and there is no doubt that it will meet with the same appreciation as its predecessors.

DR. WILHELM KOCH, sometime *Docent* at Dorpat, has been appointed to the Chair of Surgery in that University, left vacant by the death of Professor E. von Wahl.

A GUIDE TO DISTRICT NURSES. By Mrs. DACRE CRAVEN (*née* FLORENCE S. LEES). London: Macmillan and Co. 1889.

IT is related that some years ago an old woman, in whose district Miss Florence Lees superintended her Central Home for Nursing, remarked, with unusual perception of the advantages of providence, "Them nurses is real blessings; now husbands and fathers did ought to pay a penny a week as 'ud give us a right to call upon they nurses when we wants they." In this work, therefore, by the lady who earned so warm an encomium from a member of a most exacting class, the reader is fully prepared to expect valuable information on the subject of district nursing. It is to be wished, however, that Mrs. DACRE CRAVEN had entered more fully into the work of setting about the establishment of a "home."

The book contains many hints which will prove of great use as to making "shift" with the scant material which is to be found in the dwellings of the poor. Under the heads of the arrangement of the sickroom, and "On Natural Ventilation" and "Cleanliness," we find remarks which cannot be too firmly impressed on nurses undertaking this special kind of nursing. "Ventilation" is of primary importance, for, as Professor Esmarch has well said: "It is better to have air a little too cold than foul air for our surgical cases." The district nurse must, however, be taught to use judgment in dealing with cases where there are complications, such as bronchitis or Bright's disease. Directions are given for preparing hot-air or lamp baths, and as to temperature, etc., of baths. In the section on "Observations on the Sick," the important points are given, on which the nurse would do well to concentrate her attention, such as posture and the management of cough, expectoration, and many other symptoms. The value of the hints given as to the arrangement of the body after death, those who have had to do with deaths in the dwellings of the poor will be able fully to appreciate. The section on "Sick Cookery" will be found useful even in well-to-do families; but perhaps the section on "Precautions against Spread of Infection" will prove the most important to the public at large. Very much to prevent the spread of infectious diseases can be done by the district nurse, who, in Mrs. Dacre Craven's opinion, should be a woman of higher grade and higher education than the ordinary hospital nurse, who, owing to her position in a hospital, as a rule, has much less responsibility.

The book well covers the limited but most important department with which it deals.

NOTES ON BOOKS.

Nerves of the Human Body. With diagrams. By ALFRED W. HUGHES, M.B., M.S.Edin., F.R.C.S.Ed., M.R.C.S.Eng., Lecturer on Anatomy, School of Medicine, Surgeons' Square, Edinburgh. (Edinburgh: E. and S. Livingstone. 1890).—Dr. Hughes's work forms a handy quarto atlas. The author admits that he has received much assistance from the diagrams of Professor Flower. The work is offered, in the preface, to students, with a hope that it will be used as an adjunct only to standard works on practical anatomy. We hold that an atlas of this kind is rather suited to demonstrators and lecturers, whose duties require them to draw diagrams before their classes. It is, however, an excellent work of reference for students, quite in place in a medical school library. The drawings, executed by Mr. J. T. Murray, are large and bold, demonstrating the distributions and connections of the cranial and spinal nerves with clearness and accuracy. The cranial nerves in particular are well represented. The letterpress forms a syllabus of the nerve supply of the body, of a kind well known to the readers of educational medical works. The preparation of *Nerves of the Human Body* must have cost its author much trouble, and Dr. Hughes may be congratulated on the result of his labours.

Leçons de Gynécologie Opératoire. Par VULLIET, Professeur à la Faculté de Médecine de Genève, et LUTAUD, Professeur libre de Gynécologie à l'École pratique. Deuxième Edition, entièrement refondue, avec 200 figures intercalées dans le texte. (Paris: A. Maloine, 1890.) The first edition of these *Leçons* was reviewed in the JOURNAL in February, 1889. The chapter on massage, a subject with which the name of Dr. Vulliet is closely associated, has been enlarged, and Leopold's and Terrier's methods of performing hysterorrhaphy are described, the descriptions being accom-

anied by good diagrammatic woodcuts. Nicoleti's operation for he relief of flexions by amputation of the uterus above the angle f flexion is described, and meets with a qualified approval, although the authors add that the operation, being serviceable when he flexed uterus is mobile and when no other local complications xist, it is rare that, under these very conditions, the sufferings of he patient are sufficiently severe to justify an operation. A full ccount is also given of Mr. Lawson Tait's method of repairing upture of the perineum.

La Femme Pendant la Période Menstruelle; Étude de Psychologie Morbide et de Médecine Légale. Par le Dr. S. ICARD. (Paris, 1890. Pp. 283.)—The object of this book is to demonstrate the ollowing proposition: "The menstrual function may, by sympathy, especially in the predisposed, create a mental state varying rom simple 'psychalgia'—that is to say, simple moral *malaise*, imple mental inquietude—up to madness, to complete loss of eason, modifying the morality of acts from simple extenuation p to absolute irresponsibility." In support of this proposition he author has collected a large number of cases from ancient and nodern sources (from Moses downwards), illustrating the outreak or aggravation of nervous or mental disease at the menstrual eriod. It is well known that in menstruation the changes in the ody which that process implies are not limited to the uterus.)r. Icard's work supplies a large number of instances exemplifyng this proposition. It is rather a jump to spring from this oundation to the conclusion that criminal women should not be eld responsible for what they do while they are menstruating; ut whether we accept Dr. Icard's views or not, his book is interesting, and he deserves much praise for the labour he has given o it, for the extent of his reading, the orderly way in which he as arranged his matter, and the clearness of his expression. The work is certainly worth perusal by medical jurists.

Blackie's Modern Cyclopædia of Universal Information, etc. Edited by CHARLES ANNANDALE, M.A., LL.D. Vols. II to V. London, Glasgow, Edinburgh, and Dublin: Blackie and Son. 1889, 1890.)—We noticed the first volume of this cyclopædia last May; since then four volumes have appeared, the fifth volume containing Ima—Mom. The work improves as it proceeds; it is wonderfully complete and accurate, and is sold at a remarkably reasonable price (6s. a volume). The editor is well fulfilling his promise that the articles shall be concise and tersely written. We have tested certain articles in the later volumes treating of medical subjects, and have, in every instance, found the information to be correct and well and tersely put.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

DIETETIC TEA.

WE have examined a sample of the tea to which the above name has been given. It is a tea which has probably been selected mainly on account of its low degree of astringency. We find that the percentage of tannin is exceptionally low. The amount present is but little above the lowest recorded percentages for genuine teas. The sample, which was sent by Messrs. Lodge and Co., of Birmingham, was of good quality and flavour and free from adulterations and impurities. The sale of specially selected teas of this kind will certainly be useful.

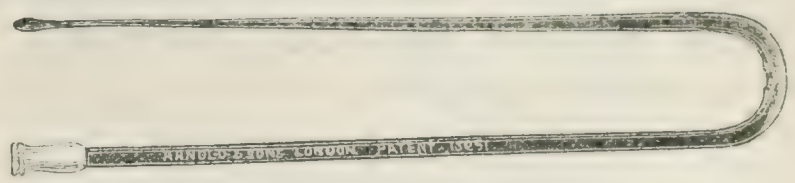
CEREALINE FLAKES.

THIS is a preparation of maize flour in the form of thin laminæ or flakes. It was received from Messrs. Thurbers, Gates, and Co., St. George's House, London. In the process of preparation, which has evidently been carefully carried out, a considerable proportion of the starch granules have been swollen up and broken. It is a light, easily digestible food, and is free from adulteration and impurities.

A NEW CATHETER.

THE instrument represented in the accompanying illustration is intended for the relief of retention of urine from stricture. It is made of very flexible gum elastic, about 24 inches in length, and is really a combination of whip bougie and catheter, with the eye placed about the middle, that is to say, 12 inches from the point.

The first half, or bougie portion, is solid, and very gradually increases in diameter, passing over four sizes, English scale, from its olive point to the eye, thus forming a wedge to open up the stricture for the passage of the second half, or catheter portion, which is uniform in size throughout, and therefore, follows the bougie easily.



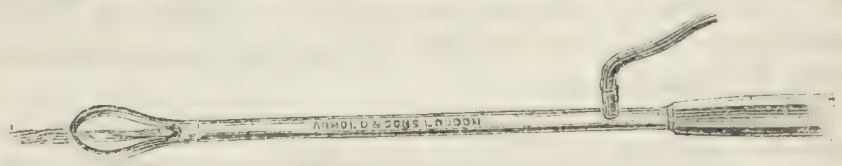
In such an instrument as this the weakest point is at the eye. I have provided against this by making one eye only, which is so woven that it is impossible for it to break, even when the bougie portion has been repeatedly coiled up in the bladder. A wire stilette ensures the cleanliness and strength (if required) of the catheter.

The instrument will be found, in practice, a most valuable arrangement. It has been made for me by Messrs. Arnold and Sons, of West Smithfield, in four sizes, the smallest size having its olive point rather less than No. 1 English.

Liverpool. A. E. DAVIS.

A FLUSHING UTERINE CURETTE.

THE advantages of combining flushing with curetting is obvious to anyone who has performed that operation. For the removal of retained *débris* of an incomplete abortion this combination will, I think, be found a valuable aid. It will also be found a great saver of time when curetting the cervix or corpus uteri; in cases of cancer where the radical operation is objected to, a glass or tin syphon, filled with hot antiseptic solution, is hung up within easy distance of the operator and connected by suitable rubber tubing with a projecting nipple on the curette. When the operation



is commenced the fluid is allowed to circulate through the hollow tube forming handle, the flushing and scraping being thus effected at the same time with more certain and lasting results. The loop of the curette being small there can be no difficulty in introduction, or any necessity for previous dilatation, the cases I speak of generally affording ample room for the admission of the loop, which will be materially assisted by the hot flushing.

The makers are Messrs. Arnold and Sons, who will, I am sure, explain the action practically if required.

ALEX. DUKE, F.K.Q.C.P.I., etc.,
Ex-Assistant Master Rotunda Hospital,
Dublin. Gynæcologist Steevens's Hospital.

IT is expected that the number of medical practitioners taking part in the International Congress at Berlin this autumn will not fall short of 5,000. In view of this large attendance the idea of a general banquet has been abandoned, and each of the eighteen sections will have its own special dinner at ten shillings a head. The recently established Berlin Laryngological Society will also entertain the members of the Section of Laryngology.

MEDICAL AID TO THE POOR IN KAZAN.—The Düma (Town Council) of Kazan has just appointed four doctors to render gratuitous medical assistance to the poor of the East Russian town, which numbers about 150,000 inhabitants. They are to receive a salary of 1,000 roubles (about £100) a year, and are forbidden to engage in private practice. An allowance of 2,580 roubles (£258) yearly will be made by the Düma for drugs and working expenses.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 19TH, 1890.

REFORM IN TEACHING IN THE SCOTTISH UNIVERSITIES.[1]

IN a particularly able communication, constituting a plea for some radical reforms in the present methods of teaching in the universities of Scotland, addressed to the new Commissioners, Dr. Finlayson, of Glasgow, has made out a strong case.

Thirty-two years having elapsed since any important organic changes were instituted in these universities, it may fairly be supposed that the time has now arrived for a reconsideration of many of the methods of academic teaching, which were then believed to be suitable. The Commissioners of 1858 were content to leave matters very much as they were in respect of the duties of professors, and the leading feature of Scottish university training—namely, prelections—was thus continued.

It has always been a fixed belief that the Scottish mind is peculiarly amenable and sensitive to oral discourse, and that the Scottish student has powers of endurance, both mental and bodily, for this form of teaching beyond that of other undergraduates.

The professor in a Scottish university was commonly a powerful entity, around which everything else centred. He was often a giant in intellect, and in many ways a noteworthy personage. There are giants also in these days, but it is but the simple truth to affirm that, from many causes, the professor is no longer the prominent figure he used to be, and in order to meet the requirements of modern ideas, the professorial method is less in vogue than formerly; in short, it has come to this, that a mere attendance on academic lectures no longer suffices to enable students to take their degrees. In the faculty of medicine with which we are most concerned this is especially true, and already a process of devolution has set in whereby a tutorial element is supplied to meet the wants of the day. Dr. Finlayson particularly directs the attention of the new Commissioners to this point, and urges that systematic lectures should henceforth be much curtailed in number, and no longer compulsory, and that the time thus saved from such attendance be allotted to practical work in hospitals and laboratories, and to reading and study at home.

None who know the present Scottish system can doubt that the students are still intolerably burdened and over-lectured, and that a great relief is urgently called for in the direction indicated. Hardly fewer than 500 lectures have to be attended in some of the winter sessions. To the mind imbued with old-time traditions such a proposal as is indicated will appear little short of a heresy, and will doubtless be met by strenuous opposition. There are naturally strong vested interests connected with the chairs in the Scottish universities. The endowments are either *nil* or small, and it is certainly no discredit to the professors that they fill their class-rooms and make a large income out of fees. For all this, the *raison d'être* of a university is not to secure a livelihood for its professors, but to promote learning in a community, and the Commissioners have to consider how this end can best be attained. In respect of medicine in all its branches, it is now certain that the existing curriculum is all too short to enable the student to be as fully equipped for his duties as he needs must be; and the fact that post-graduate courses are being established in various centres simply indicates that the modern graduate is still *doctor indoctus*. This ought not to be, and would not be if the curriculum was really adapted for its purpose.

Dr. Finlayson, as we have remarked, would have systematic lectures cut down, and no longer compulsory. We think, however, that the time has hardly arrived when students of medicine can be left to determine for themselves what lectures they shall attend. They will certainly go where they can learn, and the best students might safely thus be trusted not to go far astray. But for a large number it is equally certain that they are not fit to educate themselves, and that non-compulsion would only tend to fill the unwholesome classes of the professional "grinder," whose *menu* consists solely of the morsels thought appropriate for digestion at the several examination boards.

Such poor nutriment as this must never be allowed to feed students of university rank anywhere, and apparently this fear has not crossed the mind of Dr. Finlayson.

The case would, however, be met, as is proposed, and as is done in the Continental schools, by making attendance on certain practical classes compulsory, these not to consist merely of demonstrations. In this way systematic lectures would become of less importance, and if the courses were curtailed, attendance thereon might be optional. The professor, we think, should be responsible for the practical training of his pupils. Dr. Finlayson is, however, of a different opinion, and would have extra-academical lecturers, to take an equal share in teaching with the professors. This is already allowed to some extent, but knowing the friction that has always existed between these two classes of teachers, we very much doubt whether the university which is to give its stamp of approval should delegate the bulk of the training of its *alumni* to other than academic hands.

If the university staff is not competent or adequate to this end, it should at once be made so. The distinction between a corporation licence and a university degree in Scotland lies in this, that the latter indicates training, for the most part, by the academic staff as against that by other persons, although these are duly recognised as fit teachers of their respective subjects.

The new Commissioners are not likely to curtail the choice of the student in respect of his teachers, but they may fairly see to it that the universities are in all ways fitted to give

[1] *Plea for a Reform of the University Teaching in Scotland.* By James Finlayson, M.D. Glasgow, 1890.

the best training at the hands of the best men. Nothing short of this will satisfy the requirements of those who seek an academic standard as the highest and best attainable.

Dr. Finlayson is clearly in favour of extending the curriculum to five years, and devoting more time to practical studies. If we are not mistaken, the General Medical Council will shortly recommend this course to the licensing bodies.

In respect of examinations for degrees, Dr. Finlayson is at little pains to disguise his contempt for the fact that some professors recommend their textbooks, and expect the candidate to know them. How any harm can accrue from this with independent extern examiners we fail to see. He appears to have little respect for the extern examiners. Here, we believe, he is in error. The extern examiner is commonly, and ought always to be, an independent man from another centre or school, having no interest in, or knowledge of, any single candidate. He must never be the "creature" or dependent of the professor with whom he works. This system we believe to be the best of all examination methods if rightly carried out.

The Commissioners may be trusted to see that extern examiners are properly selected and worthily recommended. Nothing can be worse than an extern examiner who is the rival teacher of the professor outside the university walls. Such an appointment should never be made.

Dr. Finlayson hits several blots in the Scottish university system of teaching. As an extra-academical teacher himself in Glasgow, and one of acknowledged eminence, he knows all the weak points. He is, perhaps, on this account hardly in a sufficiently calm and judicial position to be free from bias; but, taken as a whole, his plea well deserves, and will no doubt receive, careful attention from the important body he addresses, and he will have much sympathy in his present effort.

SEPTIC PERITONITIS.

Many fevers now distinguished from each other were once held to be one and the same disease. The process of pathological specialisation has made such advances, on the strength of sound scientific evidence, that even the term "septic peritonitis" is now held to confound two or more distinct diseases under the same name. Learned papers on the subject are hard for any reader not an expert to follow, and experienced operators are seldom eager to acknowledge pathology and bacteriology as their chief guides. Professor Bumm, of Würzburg, has, however, lately brought out an intelligible communication On the Etiology of Septic Peritonitis. It will be found in the January number of the *Annales de Gynécologie*. Dr. Bumm's valuable researches into the nature of the specific germs of tubercle and other diseases are well known. He distinguished three forms of inflammation of the peritoneum: aseptic, septic, and specific peritonitis. The first form is developed through the agency of mechanical or chemical irritation. It generally ends in fibrinous exudation, and adhesions between different abdominal structures are thus established. The septic form of peritonitis includes two distinct varieties, one due to the streptococcus, the other simply putrid. Streptococcus peritonitis appears to be a very definite malady. It is almost invariably the result of puerperal infection. The germs reach the peritoneum, from their origin in the genital canal, either through the Fallopian tubes, or through the uterine walls and surrounding lymphatics. The fluid in the peritoneum when death occurs very soon after infection is clear and free from odour, but loaded with streptococci and intensely virulent. A minim, or less, injected into the peritoneum of a rabbit, will rapidly set up deadly peritonitis. The physical symptoms are little marked; the intestines are greatly distended, but their serous coat remains white and smooth, and patches of lymph are few, and pale in colour. When death occurs after the disease has lasted for two or three days, the fluid in the peritoneum becomes puriform and far less deadly to other organisms. The familiar morbid appearances are plainly marked.

Streptococci cultivated apart from the fluid developed in peritonitis are also not very deadly. No doubt, men who do not believe in germs will on that account contend that it is something which comes with the germs that causes such disastrous results. The germs do the least harm when introduced without any fluid, or when they have dwelt for some hours or days in peritoneal fluid. According to strict scientific evidence, however, it appears that the greatest harm arises from the combination of streptococci with exudation thrown out in the earliest stage of peritonitis. The streptococcus disease, as we may term it, may attack patients on whom abdominal operations have been performed, through infection which is probably always derived from a puerperal case. As a rule, however, the disease which follows abdominal sections or perforation of the alimentary canal is "putrid peritonitis." In this variety the exuded fluid is from the first fœtid and turbid. It contains, not one specific germ, but a mixture of germs. It does not set up peritonitis if injected into the peritoneal cavity of rabbits in small quantities. In cases of putrid peritonitis the mixed germs lie in a favourable medium and multiply with rapidity. They then are able to set up a widespread decomposition of the fluid in the peritoneum. Hence this disease progresses slowly, going from bad to worse, whilst the streptococcus variety begins with symptoms of extreme virulence.

Of specific forms of peritonitis, the tuberculous is the most distinct. According to Dr. Bumm the existence of a gonorrhœal peritonitis is doubtful. Gonorrhœal pus poured out of a ruptured tube into the peritoneum seems to act as an aseptic fluid provided it be pure, and becomes encysted. When mixed with pyogenic germs the case is different, and septic peritonitis may follow.

THE PRESS AND THE MEDICAL CHARITIES.

The great development of charity in London has given rise to a new form of journalism—the charity press, as it is termed—founded to supply information to the charitable public as to what goes on in the various societies and institutions which administer the vast sums spent annually in the metropolis under the name of "charity," and of which the medical institutions form a very large part. One of these journals, the *Charity Record*, of March 20th, mooted the question of the admission of reporters to the meetings of the governors. We presume that the paper in question is a fair representative of its branch of journalism. It claims to have "the largest circulation of any

charity newspaper;" and as the subject which it has started is certainly an interesting one, and has a direct bearing on the prosperity of our medical charities, we make no apology for bringing it before our readers, though it is not yet ripe for a decided opinion. The following extract will show what the idea of the *Charity Record* is:

Many subscribers are unable to attend the periodical meetings of the charities they support, and as they are entitled to know what goes on we do our best to apprise them thereof. From a long experience of public companies we know it is customary, not only for the press to be freely admitted to their meetings, but also for the directors to send a full report of the proceedings to absent shareholders, so that they may know what has taken place. Here and there some ill-managed, or not over reputable, company excludes reporters, with the natural result of arousing the suspicion that something is wrong. Whilst by our full and special reports we have done much to prevent such an impression about our charities getting abroad, some officials, by their attempts to conceal what occurs, act in the very way to create such suspicion. We have many occasions to, and do sometimes, complain of the discourtesy of secretaries and others, and of their obstruction to our efforts to give to charitable work that publicity which all well-managed institutions should court, and for which, as it has so much increased their funds, we have often been warmly thanked. We are occasionally told that, except to subscribers—and in some cases they even are not excepted, the only persons admitted being governors—the meetings are private. That doctrine we shall not stop to argue, as it will not hold water so far as regards institutions daily asking the public for funds.

The argument of the *Charity Record* is a very simple one. These institutions are daily asking the public for funds; therefore they ought to admit the public to a knowledge of their proceedings. The hospital authorities would no doubt admit their responsibility to the public, but they might demur to the inference that they are therefore necessarily bound to admit every newspaper reporter who chooses to present himself at any one of their meetings. Nor can we think that the cause of charity would be served by the kind of charges and *ex parte* statements to which we have become accustomed in the pages of the "interviewing" newspapers. A reporter is not necessarily any better representative of "the public" than a mob orator is of "the people." We cannot say, therefore, that we see anything censurable in the conduct of the authorities of the Victoria Hospital for Children and the National Orthopædic Hospital, who refused admission to the *Charity Record's* reporters. Nor can we see that the hospitals which are named in this paper—St. George's and the Westminster—as having refused to admit reporters to their meetings, have done anything which they have not a perfect right to do; if the statement be correct—a matter of which we have no knowledge. The *Charity Record* says that the press is admitted to the meetings of public companies—which is true. But reporters are not, as far as we know, admitted to any of the board meetings of directors, and it is to such meetings rather than to the annual meetings of a company that the ordinary meetings of a hospital board are analogous. In our opinion, the presence of reporters at meetings of the latter kind, especially if it is to be followed up by the criticism which is obviously its only motive, would be perfectly intolerable. It would lead to a waste of time that would render the duties of a hospital governor far more laborious than at present, and the criticism would, in all probability, be only calculated to embarrass the board and hinder the efficient transaction of business. In this, as in all other matters, men must really be permitted to manage their own affairs. It will be time to ask for the admission of the all-pervading reporters into the board-rooms of our hospitals when we shall have had some experience of the effect of allowing them to assist at the deliberations of the directors of large steamship companies, banks, and railways.

But if we repudiate, as we do, a proposal which appears absurd, but which is involved in the sentences above quoted from our contemporary, it seems to us a much more arguable proposition that the reporters of reputable journals might, if they chose to apply beforehand, be allowed to attend the meetings of the whole body of the hospital at which the report is discussed and the general methods and results of the hospital management are summarised for the information of the public; and we believe that course is often followed in the hospitals of country towns. The idea is, however, a new one to the London hospitals; and we suspect that the obstacles to it when, if ever, it is fully debated, will come more from the side of the newspapers than of the hospitals. Papers of such weight and ability as to render their co-operation of any value are usually so crowded with matter that they will not feel disposed to give up space to affairs which are after all half private, and in which the general public feels a very languid interest. If it were otherwise, the governors of such institutions as St. George's or Westminster Hospital could have no motive for declining a publicity which could do them nothing but honour. Still we cannot allow that they are bound to admit the press because they appeal for funds to the public. Every member of the public who grants that appeal has, no doubt, a right to see how his money is spent, and that right is fully recognised, and we believe the information is always cheerfully accorded. Non-subscribers have no rights in the matter; though there is a good deal to be said for the policy of giving them also as much information as they can be persuaded to assimilate.

MODERN GYNÆCOLOGY.

It is good now and then to pass in critical review the history of medical specialities. The fault to be guarded against is special onesidedness. This, and the habit of overdressing plain scientific subjects with flowers of rhetoric, is what mars a paper by Professor Goodell.[1] The doctrines and practice of Simpson, and H. Bennet, Kiwisch and Scanzoni, Huguier and Récamier, according to him, are now proved to be heresies. The true pathology of women's diseases is summed in such vague, obscure, and obscuring words, as neurasthenia, neurosis, hysteria, neuralgia, words too often put forward to conceal ignorance and excuse lack of diagnostic skill. Certainly the nervous temperament in many cases plays an important part, but it must not be forgotten that when the nervous system exhibits abnormal working, the rational presumption is that the disturbing cause is at least associated with, if not dependent upon, defective or perverted function of the viscera. In this disordered function primary or secondary, the true physiological pathologist will seek to discover the physical condition of the disturbed organ, not alone in its bearing upon that organ, but in its relations to the general working of the entire organism, including the nervous system. Investigation pursued in this spirit, with the help of the many physical aids to clinical observation we now possess, will frequently give the

[1] *Medical News*, December, 1889.

clue by which to unravel the pathological problem and indicate the treatment.

Dr. Goodell quotes with approval what some one has pithily said, "that woman has some organs outside the pelvis." There is truth in this; but it is to be feared that some who repeat it oracularly are open to the retort that this is no reason for neglecting the organs inside the pelvis. The worst specialist is he who specially neglects any organ. Dr. Goodell's conclusions are not very conclusive. He says, "Uterine symptoms are not always present in cases of uterine disease, nor when present, or even urgent, do they necessarily come from uterine disease, for they may be merely nerve-counterfeits of uterine disease." Again, "In the vast majority of cases in which the woman takes to her bed and stays there indefinitely from some supposed uterine lesions, she is bedridden from her brain and not from her womb. I will go further, and assert that this will be the rule, even when the womb itself is displaced, or it is disordered by a disease or by a lesion that is not in itself exacting or dangerous to life." It is difficult to argue with those who regard displacements of the womb as "nerve-counterfeits." Might it not fairly be said that the "nerve-counterfeit" is a subjective idea of their own? To the sufferers, displacement is real enough. It is singular that an American should forget the name of Hodge. If we might venture upon an aphorism or two in reply to Dr. Goodell's, we should be tempted to say, "No displaced organ can properly perform its functions;" "an organ can hardly be displaced without intruding upon the territory of other organs;" "organs so intruded upon will also be hindered in their functions;" "disturbances thus arising in and from local conditions will be likely to react upon the central and general vascular and nervous systems." *Est modus in rebus.* The true rule is to look upon the body as a whole, all the constituent parts demanding consideration individually and in their solidarity.

THE CONTAGIOUS NATURE OF LEPROSY.

THE interesting account given in another column of the present state of the leper Keanu, and the announcement of the existence of leprosy amongst members of his family nearly related to him, renders it advisable to examine very closely the conditions under which Keanu was inoculated with leprosy. It must be at once admitted that the inoculation of leprosy in such a country as the Sandwich Islands has less value than would be the case if a successful inoculation were to take place in a country free from leprosy. As a matter of fact, it would be impossible to find any person who had been long resident in Honolulu who had not been exposed to contract leprosy from the mere fact of his residence there, and the development of the disease after inoculation would always be open to suspicion, because no one could be certain that the disease was not already germinating in the subject of it before the inoculation took place. The mere fact, then, that Keanu became a leper after he was inoculated by Dr. Arning is not of itself convincing; still less is it so when we learn, as we do now, that his son, his nephew, and his brother-in-law were victims of the disease. It was easily possible for Keanu to have contracted leprosy before he was inoculated by Dr. Arning.

It is only when we examine more intimately the conditions of the inoculation that we find that the experiment is not so much weakened by the existence of leprosy in the family as would appear at first sight to be the case.

On September 30th, 1884, pus from a granulating ulcer was injected into a blister which had been produced on the man's right arm; similar pus laden with leprosy bacilli was also rubbed into a scarified portion of the left ear. On the left forearm an incision was made through the skin down to the deep fascia, and in this was imbedded a freshly-excised portion of a tubercular nodule which was not ulcerated.

Four weeks after this inoculation the patient complained of rheumatic pains in the left shoulder, and afterwards in the other joints of the left arm. Shortly afterwards there was swelling of the left ulnar and median nerves, not painful at first, but afterwards becoming painful. The seat of inoculation healed with the formation of a keloid scar, and five months after the inoculation in this scar there was a waxy yellowish granulation tumour, in the juice of which leprosy bacilli could be detected. Six months after the inoculation the painful symptoms of the left arm disappeared, the patient appeared well, and the granulation tumour seemed to be smaller, although on May 15th, 1885, the keloid appeared larger. A portion removed from the scar on November 5th, 1885, showed the presence of leprosy bacilli in the juice, and sixteen months after the inoculation bacilli could still be found in the juice of the keloid. On June 5th, 1886, the left arm was, however, free from pain, the keloid was unaltered, and leprosy bacilli could not be found.

These statements are extracted from a report made by Dr. Arning to the German Dermatological Society in June, 1889, and contain the results of his observations up to the time of his leaving Honolulu. We know that, not very long afterwards, Keanu showed the full development of tubercular leprosy.

The chief facts in Dr. Arning's report which will merit attention are the development of pains in the left arm after inoculation, the swelling of the nerves, and beyond reasonable doubt development of leprosy bacilli in the seat of inoculation. These facts are of the greatest importance in judging fully of the inoculation, and it is to them that importance should be attached, and not to the mere fact that Keanu became a leper after being inoculated with leprous tissue.

WE are happy to learn that Sir Richard Owen's condition continues to improve, and he now joins the family circle, and is able to spend the greater part of each day in his library.

WE regret to announce the death of Dr. Küchenmeister, the well-known helminthologist, which took place at Dresden on April 13th. He was in his 69th year.

THE meeting of the Senate of the University of London, at which examiners for the ensuing year are to be appointed, will be held on Wednesday next. The reply of the Royal Colleges of Physicians and Surgeons to the Senate's scheme of reform will, we understand, be brought up on the same occasion; but whether opportunity can be found for its discussion appears to be doubtful.

A MEETING of the Royal Commission on Vaccination, under the Presidency of Lord Herschell, was held on Wednesday, April 16th, when Mr. Wheeler, of Darlington, continued his evidence against the Acts.

IT is announced that under the will of the late Sir James Tyler, the Merchant Taylors' Company receive in trust for charitable purposes a most munificent sum. It is probable that the bequest will be devoted to the enlargement of the Company's Convalescent Home.

SIR SPENCER WELLS, Bart., has been appointed Bradshawe Lecturer at the Royal College of Surgeons for the present year. The lecture will be delivered in November or December, and due notice of the date will be given.

AT the last meeting of the Council of the Royal College of Surgeons of England, the offer, made by Miss Lawrence, of a collection of interesting manuscript documents, the property of her father, the late Sir William Lawrence, was accepted.

A DISCUSSION on Influenza, in which medical men not members of the Society are invited to take part, will be held by the Medical Officers of Schools' Association on Tuesday, April 29th, at 3.30 P.M. The subject will be introduced by Dr. Symes Thompson, and the main topics to be discussed are set out in a letter from the honorary secretaries published in another column.

DR. RICHARD SARELL, M.R.C.P., has received from the Queen the Royal licence and authority to accept and wear the Insignia of the Order of the Osmanieh of the Third Class, which the Sultan of Turkey has conferred upon him in recognition of his services as Professor of Clinical Surgery in the Imperial School of Medicine at Constantinople.

THE report presented to the annual meeting of the Home Hospitals Association showed that its position had been well maintained in spite of competition. The Chairman, Mr. H. C. Burdett, claimed for the Association that it had proved it to be possible to establish a hospital, take paying patients in, and make it a financial success, while it had also exercised a most salutary and beneficial influence on the hospital system of the country.

AT the recent meeting of the Metropolitan Asylums Board special reference was made to the ambulance service, and the committee reported that during the year 25 persons certified to be suffering from small-pox were removed from their homes; of these no fewer than 20 were found not to have the disease. During last year 8,908 cases of fever were removed, as against 10,516 the year before; and in nine years the ambulance has conveyed 69,786 fever and small-pox patients between homes and hospitals.

THE proposed memorial of the late Professor Richard von Volkmann, to which we have more than once called attention, will probably take the form of a marble or bronze statue of the departed teacher, which will be placed either in, or in front of, the surgical clinic at Halle, which was the scene of his labours in the cause of humanity and scientific progress. The movement has the support, not only of the foremost members of the medical profession, but of many men of light and leading in literature and other departments of intellectual activity in Germany, for Volkmann was almost as great an artist in poetic expression as he was with the knife. The Committee includes the names of many foreign surgeons; the English members are Sir James Paget, Sir Joseph Lister, Sir Spencer Wells, and Sir William Mac Cormac, to any of whom subscriptions may be sent.

THE JACKSONIAN PRIZE.

THE Jacksonian Prize for the past year was awarded to Mr. W. G. Spencer for his dissertation, bearing the motto "*Luce tenebris*," on the "Pathology, Diagnosis, and Treatment of Intracranial Abscess and Tumour." On the recommendation of the Jacksonian Committee, the following subject of the prize essay for the year 1891 has been adopted: "The Pathology and Treatment of Diseases of the Knee-joint."

THE MEDICAL SOCIETY OF LONDON.

IN the adjourned debate on the Present Position of Abdominal Surgery, at the Medical Society on Monday, April 21st, which will be opened by Mr. Lawson Tait, the following gentlemen from a distance are expected to join: Dr. Elder, Nottingham; Dr. Thomson, Dublin; Dr. David Newman, Glasgow; Mr. Greig Smith, Bristol; Dr. Thomas Savage and Dr. Malins, Birmingham; and Dr. O'Callaghan, Carlow. The debate will be closed by the President, Mr. Knowsley Thornton, and it is hoped that Dr. Keith, if well enough, and Sir Spencer Wells, if in town, will also take part in the discussion.

THE PERIOSTITIS OF MOTHER-OF-PEARL WORKERS.

FOR some reason which remains obscure, notwithstanding the careful investigations of Gussenbauer and Englisch, men and women engaged in working at mother-of-pearl are subject to periostitis, which attacks several bones at once, and is very prone to recur. This malady has been seen both at Vienna and Berlin. Dr. W. Levy has published some fresh observations on the disease in the *Berliner klin. Wochenschrift*. He has noted five cases within four years in Berlin, where about 300 mother-of-pearl workers are employed. These workpeople are nearly all adults. The patients were from 21 to 31 years of age, and all five had worked over five years at the trade in question. In the first patient the inferior maxilla was attacked; in the second the left clavicle, and afterwards the lower jaw; in the third the right metacarpal bones; and in the fourth the lower jaw, and afterwards the lower part of the right humerus. The fourth patient had been fourteen years engaged in mother-of-pearl working. During his first year the right scapula was attacked, and two relapses followed in the course of the two succeeding years. Four years later periostitis occurred in the right superior maxilla and the right clavicle. Afterwards the left side of the lower jaw, the left metacarpals, the right femur, and the left tarsal bones were involved.

NEW DISEASES AND NEW REMEDIES.

Quid novi is as much a question of to-day as it was a thousand years ago. The anxiety for something new has led to the creation for the edification of the public, of no fewer than three new diseases within as many weeks. The first was *La Nona*, with which new title was christened the stupor following upon attacks of typhoid fever and other exhausting diseases. But *La Nona* having once been christened is not allowed easily to die away. The next in order of succession was a new eruptive disease discovered in various out of the way places, so novel in its features that it was not even possible at the moment to christen it. This has been ascertained to be nothing else than the initial eruption of small-pox, occurring in limited outbreaks in small towns on the Continent. The latest new epidemic is reported in the Paris papers as a malady which takes the form of acute inflammation o

he glands around the neck, and which is said particularly to aunt the Champs Elysées, in Paris. There is, however, no reason hy the people of that city should be more exempt from mumps nan those of any other locality, nor, on the other hand, is there any eason why they should be particularly liable to it. The rage or new remedies is not less acute than that for new diseases. t the present moment there are at least 50 new remedies for very new disease. A semi-scientific publication which we have ecently received describes 320 new remedies, with many of which ve must confess we are unacquainted even by name. With respect to most of them the advice holds good that it will be well to se them while they still cure, for their power of cure is apt to die way with the fashion or the commercial enterprise which brought hem into notice.

PROGRESS OF CREMATION.

A CREMATION Society has been established in Sydney. A public meeting was recently held in the Royal Society's rooms, under the presidency of the Hon. Dr. Creed, M.L.C., at which a number of gentlemen were enrolled as members or associates. Dr. Creed, in a brief address, pointed out the sanitary advantages which would flow from replacing burial by cremation. While giving full weight to the sentimental objections which rested upon old-established usage, he mentioned many points in which burial erred against sentiment, especially the want of reverence with which the remains found in old burial grounds, disturbed in the course of modern improvements, were liable to be treated. Even in the colony they had already had evidence of the neglect of due precaution in the sanitary management of the cemeteries near their own city, in the reports of Dr. Ashburton Thompson to the Board of Health on the condition of the Balmaine Cemetery, and of some graves at the Necropolis at Rookwood. The rapid progress made in the adoption of cremation in Paris is very marked. Sir Spencer Wells recently inspected the new crematorium at Père-la-Chaise. The furnace reduces a dead body into ashes in the space of fifty minutes, at a cost of 1½ franc, or 1s. 3d., in coke. Since cremation was begun in Paris, more than 1,200 unclaimed bodies of persons who have died in the hospitals have been cremated. This is regarded as an undoubted advantage for the public health, at the same time that it gets rid of difficulties connected with burial in the common place of interment. The bodies of 300 persons belonging to the upper classes have also been cremated in compliance with their own request, or at the request of their families. Since the beginning of the year there have been thirty-eight cremations of bodies belonging to the well-to-do class. As an adjunct to the crematorium, halls for the temporary deposition of bodies are about to be erected in all the cemeteries, similar to those existing in Germany.

THE SMOKE NUISANCE IN MANUFACTURING DISTRICTS.

THE equanimity with which the smoke nuisance is tolerated in many of our manufacturing towns is truly remarkable. By many of the residents in the perennially murky atmospheres of those districts it seems to be considered that the greater the smoke is the greater is the prosperity; consequently the revolt against the emission of needlessly excessive volumes of black smoke from factories and furnaces is slow in its growth. From the interesting letter, however, which Mr. Alfred E. Fletcher, Her Majesty's Chief Inspector of Alkali, etc., Works, addressed to the *Times* a few days ago, it would seem that some serious attention is being directed to the matter. An influential committee was appointed at a meeting recently held in Manchester, to examine into and report on the whole subject, in order to assist the coal consumers in their efforts to prevent the emission of smoke, and possibly to stimulate the invention of new methods of regulating the combustion of coal. The undertaking is an important one, and the object is one which every sanitary reformer will rejoice to see attained. There are many very efficient methods and arrangements for reducing the emission of smoke, but some of them are regarded by manufacturers as being too expensive for general use. To find an economical, inexpensive, simple appliance for the purpose in view will be the endeavour of the Manchester Committee, and we heartily wish them success. Mr. Fletcher points out that help is needed from all who are directly interested in the question, and refers those who are willing to assist to the Secretary, Mr. F. Scott, 44, John Dalton Street, Manchester.

THE SANITARY CONDITION OF THE DERBYSHIRE INFIRMARY.

DURING the last few weeks an unusual number of febrile attacks has occurred amongst the nurses and servants of the Derbyshire Infirmary, and two of them have been definitely pronounced to be cases of enteric fever by the honorary physicians to the institution. Under these circumstances, the advice of the Medical Department of the Local Government Board was sought, and Dr. Seaton was requested to inquire into the cause of the outbreak and to report thereon. This report, which was read before a special meeting of the Board of Governors of the Infirmary on April 10th, shows that the outbreak has been caused by soakage and emanations from imperfectly jointed drains, in a wing of the infirmary communicating directly with another wing which serves as the "fever house." The local defects immediately accountable for the outbreak are described by the aid of a ground plan. The report then deals with the condition of the central building, or "old house," as it is called. Here evidence was found of serious defects in drainage, the effects of which were made more harmful by the faulty operation of an old-fashioned system of ventilation, by means of which it was intended that warm air should be distributed from a central chamber by shafts to the surgical and medical wards. It was shown that air from the defective drains was drawn into this central warming chamber, and that, consequently, tainted air was conducted to the wards. Moreover, it had been found by the house-surgeon that rats had made their offensive nests in these shafts or passages in the walls. Dr. Seaton had the advantage of a consultation with the honorary physicians and surgeons to the infirmary before making his report to the governing board. He there states that, in his opinion, alterations so extensive and costly will be required to put the "old house" in good sanitary condition that it will eventually be found a better policy to replace the existing building (situate as it is on a spacious site convenient and accessible for both the town and county) by a modern hospital, at once healthy and commodious. We believe that there has already been too much patchwork in connection with the Derbyshire Infirmary, and we hope to hear that the influential supporters of this valuable charity have decided to adopt the policy which the report suggests, and which we are confident will prove to be the most effectual and economical.

THE CONGRESS OF INTERNAL MEDICINE.

THE Congress of Internal Medicine was opened on April 15th at Vienna by Professor Nothnagel, who delivered an inaugural address before the members attending the congress, who numbered about 500. The discussion on Empyema—opened by Dr. Schede, of Hamburg, who advocated resection of ribs, and continued by Dr. Immerman, of Basle, who recommended aspiration—was well sustained, and, at its conclusion, it was resolved to institute a collective investigation of the relative merits of various modes of treatment. On April 16th Professor Fürbringer, of Berlin, read a paper on Bone Disease in Enteric Fever. Two dermatological papers

followed, the first by Dr. Unna, of Hamburg, who advanced evidence to show that the universal application of oily substances to the skin tended to raise the body temperature, while gelatine preparations tended to reduce it. Professor Senator confirmed the correctness of these observations, and stated that gelatine might thus be used as an antipyretic. The second, by Dr. Mosler, of Greifswald, on Pemphigus, led to an interesting discussion, in which Professors Kaposi and Weber took part. The recent epidemic of Influenza was the subject of an address by Professor Bäumler, of Freiburg. Several other papers were read; of these, and of the later proceedings of the Congress, which terminates on Friday, we hope to publish some account shortly.

MEDICAL STUDENTS' REGISTER.

We have received from Mr. Miller, the Registrar of the General Medical Council, the *Medical Students' Register* for the year 1889-90. It contains, among other useful information, a list of the examining bodies whose examinations fulfil the conditions of the General Medical Council as regards preliminary education; a list of the medical schools and other places at which the 2,027 students registered in 1889 respectively commenced their professional studies; and also a statement of the numbers who passed the various preliminary examinations recognised by the Medical Council. A table is also given containing a summary of the numbers of medical students registered each year from 1865 to the present time, and showing how many were thus registered in the three divisions of the United Kingdom. The tables are very ably and carefully compiled, and contain much useful information on these matters. The number of medical students registered in England was in 1865, the date at which the tabulation commences, 313; it steadily rose until the year 1881, in which year as many as 1,064 were registered. In the following three years there was a considerable diminution, the numbers falling to 853 in 1882, 817 in 1883, since which they have again considerably risen, so that in 1889 the number was 1,039. In Scotland the number registered has steadily risen from 321 in 1866 to 720 in 1888, and 702 in 1889. In Ireland there were 208 students registered in 1865; the highest number registered was in 1881, namely, 540. Since then the numbers have pretty steadily decreased. In 1888 there were 264 students registered; in 1889 there were 286.

HYPNOTISM AND SUGGESTION.

Professor Bernheim, of Nancy, gave an interesting demonstration at the Hôtel Dieu, in Paris, a few days ago, of the possibility of suggestion without previous hypnotism. The experiments were performed in the presence of many leading members of the medical and legal professions and several distinguished literary men. Professor Bernheim was able to elicit from patients, to all appearance in the full possession of their senses, confessions of imaginary crimes, which were confirmed by the suggested testimony of other subjects. He is said to have made them weep or laugh as he bade them and to have struck them dumb or motionless at will, playing on their nervous system as on an instrument. It is comforting to be assured by Professor Bernheim that the number of persons whose "stops," as Hamlet says, can thus be governed is exceedingly limited. Possibly when the proceedings are reported in the dry language of science the thaumaturgic element will be less obtrusive than it is in the accounts which have appeared in the lay press.

HYPNOTISM AS AN ANÆSTHETIC.

A case in which a surgical operation was performed painlessly during hypnotic sleep (induced by M. Bernheim, of Nancy) is related in the *Revue Médicale de l'Est*, March 15th. The patient was a girl, aged 21, who was suffering from psoas abscess. On December 20th, 1889, she was taken to the operating theatre, and M. Bernheim said: "She will fall asleep, and will not feel an pain." She went to sleep there and then, and an incision 7 cent mètres in length was made by M. Heydenreich, the patient mean while singing in obedience to an order from M. Bernheim. Th abscess cavity, which was 9 centimètres in depth, was thoroughl scraped out, the whole operation lasting sixteen minutes. I reply to questions the next day, the girl said she remembere nothing of what had taken place, and was surprised to see th wound in her thigh when the dressing was changed. With refer ence to the possibility of hypnotism replacing chloroform or ethe as an anæsthetic, M. Bernheim's remarks are worth quoting. H says: "Hypnotic sleep could hardly replace chloroform anæ thesia for an operation occupying any great length of tim because the surgeon is exposed to the danger of seeing his patien awake by auto-suggestion at the very moment when such a occurrence is least desirable."

THE INFECTIOUS DISEASES PREVENTION BILL.

The dairy trade of the metropolis and the country is protestin against the provisions of the Bill now before Parliament, whic by Clause 5 empowers medical officers of health, by virtue of a order obtained from any justice of the peace, to inspect any dai farm in his district and the animals thereon, and if in his opinio any infectious disease is likely to be caused by consumption o the milk supplied thereon, the local authority may, upon his re port, immediately stop the supply of milk from such farm unt the notice has been withdrawn. The representatives of the tra are fearful that this power, if vested in the medical officer health, will be detrimental to their interests, but inasmuch that official can only act by the authority of a justice of t peace, there seems to us no legitimate ground for opposition o their part. The existing state of sanitary knowledge makes necessary that authorities should be armed with sufficient powe for the prevention of epidemics by infected milk supplies. It well known that some dairy companies exercise great care preventing any possibility of contamination of their milk supplie and with this end in view they incur such expenses as are nece sary in order to make their sanitary arrangements in accordan with modern sanitary requirements. There are, on the oth hand, many farmers and dairymen who are unable or unwilli to understand or accept the teaching of those who have demo strated beyond the possibility of doubt the dangers which m arise from a contaminated source of milk supply. Such perso may, through ignorance or carelessness, endanger the pub health, and for this reason they should be subject to control. W think that the powers which Clause 5 of the Bill proposes to con on medical officers of health are not excessive, and that they a no more likely to be misused by these officials than are those the Public Health Act which relate to unwholesome food.

A STREET AMBULANCE SERVICE FOR LONDON.

Twelve months ago the Hospitals Association undertook t work of organising and maintaining an effective street ambulan for the metropolis. London was mapped out into districts on t basis of the police divisions, and it was decided that there shou be 152 ambulances, including the 58 already at the police statio The Chief Commissioner of the Metropolitan Police, the ch officer of the Metropolitan Fire Brigade, the authorities of t London hospitals, the railway companies, and others, have le their co-operation, and placed suitable stations at the disposal the Hospitals Association free of expense. A trial, conducted the police and hospital authorities, extending over a period three months, resulted in the unanimous selection of an ambula having an iron frame, three bicycle wheels, with india-rub tyres, and all the requisite appliances for rendering first aid to

injured, and this form has accordingly been adopted. There are now 40 Hospitals Association ambulances stationed within the four-mile circle, 20 being at fire brigade stations, 15 at hospitals, 4 at industrial dwellings, and one at Holborn Viaduct. Permission has been obtained from the Chief Commissioner of the Metropolitan Police to station ambulances at various cab ranks; and, as soon as receptacles for these can be constructed, and a few other details are arranged, 18 stations of this class will be opened. Application is being made to the various metropolitan vestries for permission to place on lamp posts in large thoroughfares, near each ambulance station, notice plates stating where the nearest litter may be found. The completion of this service in every detail will shortly be an accomplished fact. The yearly cost, which is estimated at £300, will be defrayed by subscription, and already a sum of £1,500, to cover the initial outlay, has been received. The Right. Hon. the Earl of Meath will take the chair at the last meeting of the seventh session of the Hospitals Association, at which a paper on the New Street Ambulance Service of the Metropolis will be read by Mr. Thomas Ryan, Secretary to St. Mary's Hospital.

IGNORANT CENSURES.

A CORRESPONDENT has drawn our attention to a report in the *Daily Telegraph* of a case in which a mother was charged at Croydon Petty Sessions with starving her child. It appears that the child was illegitimate, and had been out of health for some time past, and that the attention of the medical officer was directed to it about Christmas last; that he then considered the child to be improperly fed, and so advised the mother. This attendance and advice was gratuitous; but, notwithstanding that, the Chairman (Sir T. Edridge) complained of notes not having been taken of the case, and at a subsequent stage of the proceedings found further fault with the doctors as having an extraordinary way of doing their business. Sir T. Edridge showed but little knowledge of the subject on which he thought proper to express a strong opinion from the bench. He can know nothing of the difficulties which so many members of the medical profession constantly meet with when called on to give advice as to the feeding of infants, especially when it happens that they are illegitimate. In this case the comments of the Chairman cannot possibly have any good effect, and may possibly have the very reverse, as they are not likely to induce proper feeding of other children, and certainly tend to make medical men hesitate about giving gratuitous advice in such cases. Beyond all this, the remarks made by Sir T. Edridge were not only quite uncalled for, but were far from generous or dignified; his assertion that it was the doctor's duty to take notes of the case under consideration was a mere *obiter dictum*, and he failed to show the requisite judgment of a chairman when he was led to echo the strong language of the defendant's advocate. We sincerely hope that Sir T. Edridge may be induced to study slightly the subject in question before he again ventures to express publicly any opinion in reference to it.

CIVIC AND MORAL TRAINING IN SCHOOLS.

ALL who are interested in education must be glad to see the energy and good sense displayed in the annual conference of the National Union of Teachers. A particularly interesting subject was brought forward by Dr. Abbott, in a paper on "Civic and Moral Training in Schools," on which he is an authority, after his experience at the City of London School. The writer spoke of the great importance of securing the co-operation of parents and also of the necessity of the teacher gaining a personal knowledge of his pupils, their individual character, and the difficulties and temptations inherent to the individuality of each child; in other words, of the importance of carefully studying the children. This responsibility upon teachers in elementary schools is enhanced by the freedom of classification of children now allowed under the new code, to which we referred last week. It is easy in a school to know the best teachers by the readiness and accuracy with which they can describe the pupils and arrange their classification. Such kind of knowledge needs to be rendered more defined, and is required by teachers and inspectors alike, for it is now a part of a good school report to show "that the school is a place for the formation of right habits as well as a place of instruction." No more important work can be found in the ideal of school training. Dr. Abbott upholds the necessity of corporal punishment, and this, to be wisely administered, must depend not only upon the character of the offence but also upon the condition and character of the child. It was further urged that definite teaching should be given in civic duty and social constitution, showing the dependence of the common wellbeing upon the action of each member of society, that careless throwing of orange-peel may cause accidents, and that the status of any section of the community depends upon the action of each member. It may also be pointed out that a real and reasonable love of the community will lead each member to obey the laws of health; and careful training in habits of cleanliness, neatness, and propriety must always form an important part of moral education. The basis of civic training must be the love of the community and knowledge of its needs. It is then well that the principles of healthy, social life should be impressed upon the young, and Dr. Abbott is right in saying that without formal lectures on this matter numerous opportunities occur in school life which may be wisely used for illustrating and impressing them. In educating pupils to an appreciation of civic duty it would be possible not only to give an account of the acts of successive rulers but also, while tracing the sources of national growth, to refer to the havoc wrought by epidemic diseases in the past and the beneficial effects of wise legislative measures, the efforts of philanthropists and scientific workers, not omitting those of teachers, to improve the condition of the population.

SMALL-POX AT PLYMOUTH.

THE *Western Daily Mercury* contains a further account of the case, to which we have already referred in the JOURNAL of April 5th. There appears to have been some misunderstanding between the Urban and Port sanitary authorities as to which of them was to be considered responsible for the sanitary care of a vagrant case of small-pox. Into this question we do not enter. We are concerned rather to point out the significance of the Plymouth incident to those who are responsible for the prevention of small-pox in this country. What has occurred in the Devon seaport might any day occur at other coast towns. It is possible that at any time a case of small-pox might be smuggled ashore at any of our seaports, and our local sanitary authorities are practically powerless to prevent this being done. Vagrants afflicted with this loathsome and dreaded disease are sometimes passed on from one authority to another, and there is no wish or desire on the part of sanitary authorities to undertake the care of such cases if it is possible to shift the responsibility on to other, sometimes neighbouring, sometimes distant, authorities. If isolation were the chief means of protection against small-pox we would say: Perfect your systems of isolation so that there shall be no possible risk of exposure of infected persons when once the nature of the disease from which they are suffering has been distinguished. But it would be absurd to argue in this sense, seeing that we have in vaccination and re-vaccination means of protection against small-pox far more potent than isolation. An inland town like Leicester may for a time with apparent impunity neglect vaccination, relying on extraordinary methods for isolating small-pox by measures which we do not suppose will ever be tolerated elsewhere. But we have no faith in the permanent success of the so-

called Leicester experiment. Compulsory or systematic vaccination of the best kind is the surest safeguard against small-pox. It cannot be neglected without the risk of terrible disaster, such as that which occurred only four years ago to the city of Montreal.

THE INQUIRY IN REGARD TO METROPOLITAN MEDICAL CHARITIES.

We have received from Mr. C. S. Loch, Secretary of the Charity Organisation Society, a letter with reference to the proposed Select Committee of the House of Lords to make inquiry with regard to all hospitals and dispensaries and charitable institutions within the metropolitan area for the care and treatment of the sick poor which possess real property or invested personal property in the nature of an endowment of a permanent or temporary character, and with regard to the amount of accommodation provided out of the rates, and the management thereof. A large number of the members of the profession signed the petition which has led to this investigation. "I am desired," Mr. Loch writes, "to request you to allow me, through your columns, to ask your readers, especially those who are engaged in general practice, if they would furnish, for submission to the Select Committee, evidence in regard to such defects of our existing charitable medical system as have come to their knowledge, and, more particularly, explicit evidence in regard to cases in which persons have, without justification, claimed, on charitable grounds, the honorary services of the medical or surgical staff at hospitals and dispensaries when they were in a position to pay the ordinary fees. It would be of service also if they could give evidence in regard to cases in which the ailments were of such a trivial character as to make attendance at a hospital or dispensary unnecessary. It may be that the Metropolitan Counties Branch of the British Medical Association would be willing to consider this question and to assist in the collection of evidence. I should add, perhaps, that a circular on this subject is being sent to the members of the profession who signed the petition. Communications in regard to this letter should be sent to me at the Charity Organisation Society's Central Offices, 15, Buckingham-street, Adelphi, London, W.C."

THE CARIOUS PROCESS IN HUMAN TEETH.

An interesting demonstration was given at the meeting of the Odontological Society on Monday last by Mr. Henry Sewill, in the course of which several beautiful photo-micrographs (the work of Mr. Andrew Pringle) of very fine sections of normal and carious teeth (cut and stained by Mr. Pound, of King's College) were exhibited, by means of a lantern, on a white screen. The slides exhibited were some seventeen or eighteen, out of seven or eight dozen that had been prepared, and the magnification varied in different cases from 160 to 650 diameters on the slides, and, consequently, from about 5,000 to 21,000 diameters on the screen. This large size of all the parts exhibited of course rendered them easily visible to the whole audience. Mr. Sewill dwelt upon the fact that caries commences invariably at the exterior of a tooth, and that the process is accompanied by the growth of organisms in the carious cavities and dentinal tubes. It occurs also in re-inserted teeth and in teeth without pulp; and the process in a dead tooth, even when it is artificially produced out of the mouth, is absolutely identical with that in living teeth. The so-called zone around the area of caries, which was once thought to indicate the vital action of dentine in the disease, is now known to be due simply to the softening of the dentine. Altogether the demonstration was very successful, and elicited marked signs of approval from those who witnessed it, and from the various speakers who discussed the specimens.

THE GERMAN SURGICAL CONGRESS.

The nineteenth session of the German Surgical Association was held in Berlin from April 9th to 12th, under the presidency of Professor von Bergmann. A large number of interesting papers was read, among the most remarkable being one by Herr Tilmanns, of Leipsic, on a Case of Tubercular Pleurisy, in which he made a very large resection of the ribs, thoroughly scraped out the cavity, and stuffed it with iodoform gauze. The patient made a good recovery, and was able to return to his work. The left pleural cavity was that affected, and the lung on this side was completely retracted and fixed against the vertebral column. The observation of this patient led Herr Tilmanns to recommend, in similar cases, the complete removal of the retracted and degenerated lung. Papers on the treatment of tuberculous disease of joints were read and discussed by Herren Bruns, Krause, Trendelenburg, Riedel, Angerer, König, Sendler, and others. Professors Israel and Max Wolff related the results of their recent experiments with actinomycosis. They had succeeded in growing the micro-organism on agar-agar and on egg albumen, and in producing the disease in animals by inoculating them with these cultures. Dr. Macewen's method for the radical cure of hernia was strongly recommended by Herr Lauenstein. Numerous other papers of considerable importance were read, and the Congress appears to have been most successful.

SCOTLAND.

EDINBURGH UNIVERSITY COURT.

The Edinburgh University Court, at its meeting on Monday, April 14th, *inter alia*, appointed Dr. J. W. Taylor, Scarborough, examiner in medical jurisprudence and public health for the current year. The Court resolved that the framing of a draft ordinance on graduation in medicine should be delayed till after the meeting of the General Medical Council in May, and that a request should be made to the Scottish Universities Commissioners to extend the time for lodging a draft ordinance on that subject. Authority was also given for the removal of the name of Professor Dittmar from the list of recognised teachers of medicine for the present, as requested by him.

EDINBURGH UNIVERSITY GENERAL COUNCIL AND MEDICAL REFORM.

Several questions of medical interest came before the Edinburgh University General Council at its statutory half-yearly meeting, on Tuesday, April 15th. There was but a scanty attendance of members. The signed and sealed declaration of the Scottish University Commission, fixing the quorum of the General Council at ten for every complete thousand or fraction of a thousand on the register of the members of the General Council, was conveyed to the meeting. The following reply was submitted from the University Court to the representation, which in October last the Council sent up to the effect that "any member of the General Council of the Scottish Universities shall have the right to be present at any of the oral professional examinations in the University of Edinburgh, in the faculties in which they are held. "The University Court approve of a well regulated publicity in the case of the professional oral examinations; and while they cannot accept the proposal of the General Council in its present form, they are prepared to consider any further suggestions that may be put before them by the Council." There were also submitted to the Council copies of a proposed resolution of the University Court, containing revised rules for graduates in science in the Department of Public Health, which it is proposed to pass under Section xii, 2, of the Universities (Scotland) Act, 1858, the modified regulations being arranged to meet certain require

ents of the General Medical Council. It was pointed out by a ıember of Council that the proposed rules seemed to imply too reat a bar on the time and energy, and money of graduates, and ıe suggestion was thrown out that the qualification in Public ıealth might be included in the M.D. degree. The matter was ɜmitted to the Business Committee. The meeting of Council was djourned till May 30th.

ABERDEEN: GRADUATES' COMPLAINT ON PUBLIC HEALTH.

T the last meeting of the Aberdeen University Court, April 8th, ıe protest of the graduates against the introduction of questions ɜlating to public health was under consideration. Professor M. ɜay held that examination in public health was a legitimate part ɜ medical jurisprudence, and that this opinion was shared by ɜher teachers as well as by him. He was glad, however, that the ıestion had been raised, as he had noticed that irritation had ɛisted for some time regarding the point at issue; and asked ıat full inquiry should be made into the method of procedure ɜefore discussing the merits of the question. Dr. Angus Fraser, ɜ a lengthy speech, did not discuss the merits of the points comɜlained of, but submitted the following motion upon the general ɔint of procedure, namely, "That a committee be appointed to ıquire into the manner in which examinations for degrees in ıedicine are conducted; to make suggestions as to what changes, ɜ any, are required to make the examination more satisfactory as ɜ test, and to report. Further, that the said committee have such ɔowers to institute and conduct any such inquiries as are conɜrred on the Court under Section 6, Subsection 6, of the Univerɜties (Scotland) Act, 1889." Mr. Smith, in stating that he would ave no difficulty in supporting Dr. Angus Fraser's motion, lthough he thought that the document might with advantage ɜ sent down to the Senatus for consideration and report, said ıat a grave matter had transpired in the course of the discussion, ɜ so far that they had the authority of the memorialists and of ɜrofessor Hay that there was a difference of view as to the meanɜg of the contract under which the professor taught and exaɜined. There was an irreconcilable difference between the two ɜarties, and it was a perfect scandal that such a difference should ɜ allowed to exist for a single week. After a long discussion, a ıotion was unanimously adopted to the effect that, reserving any ɥestion of competency, the documents be remitted to the Senaɜs to be considered and reported upon to the Court, the clerk ɜing instructed to intimate this to the complainers.

IRELAND.

DEATH OF DR. LIGHTBURNE, OF BESSBROOK.

R. JOSEPH LIGHTBURNE, who has been twenty years medical ficer of Mullaghglass Dispensary, died recently very suddenly. On aturday morning he was awakened at an early hour to attend a ck call, and while sitting in the patient's house was observed to ll, and he expired in a few minutes. The deceased gentleman ad been suffering for several years from heart disease.

POLITICS AND MEDICAL APPOINTMENTS.

HERE is a vacancy for a medical officer in Navan Dispensary, nd the local authorities are much perturbed over the political ɔnvictions of the candidates. The Town Commissioners and ɔor-law Guardians met on Sunday evening last, and came to this ɛcision: "That the elected guardians and members of the Diɜensary Committee be called on to support a Nationalist doctor ɔr the appointment on Wednesday next, and that it be left to ıe members of that Committee to choose one of the two Nationalist doctors—Ryan and Fullam—now before them." The action of these gentlemen is instructive; and probably the hint will be duly taken by other candidates in similar constituencies. The process of political conversion by such means is a very simple one, but it is hard to see the connection between politics and the capacity to recognise and treat disease.

IRISH MEDICAL ASSOCIATION.

DR. A. H. JACOB is dissatisfied with the efficiency of the Irish Medical Association, and he has sent out a circular calling for reconstruction. He proposes that in future the Council shall consist of the president, five heads of colleges as before, thirty-five members representing thirty-five counties, and twelve others elected without regard to locality. The vice-president shall be elected by this council at their first meeting. Ballot papers are to be sent to all members after the the manner of the College of Surgeons' elections. One or more general meetings are to be held annually in Dublin or in the large towns. The executive committee is to consist of the chairman of council, honorary secretaries of the association and of the council, the hon. treasurer, and six other councillors to be elected by the council, and each department of the profession is to be confided to a separate member of this committee in order that he may advise the committee thereon. It will be necessary to submit the scheme to a general meeting of the members, and certain of the articles of association must be altered before it can come into operation. It remains to be seen to what extent Dr. Jacob's discontent is shared by other members. The council in their last quarterly report reply to Dr. Jacob's charges of neglect, and show in how many ways they have endeavoured to advance the interests of the profession, and to assert the influence of the Association.

CHARGE AGAINST A DISPENSARY MEDICAL OFFICER.

AT a special meeting of the Kanturk Dispensary Committee a communication was read from the Local Government Board in reference to the neglect of Dr. Mackay to notice applications for a return of vaccinations to complete the annual statistics. Dr. Mackay made a statement to Dr. Clements (Local Government Board) that the returns concerning vaccination were false, and that the entries of certain successful vaccinations were not correct statements of facts, inasmuch as the children were not vaccinated, but that he intended to vaccinate the children at favourable opportunities. The Board requested the Committee to call upon Dr. Mackay to resign, and if he did not do so they would remove him by sealed order. The Committee unanimously adopted the following resolution: "That having received a communication from the Local Government Board relative to Dr. Mackay as to his admitting having made entries of vaccination in his vaccination books which he had not performed, he, however, stating that he did not charge the board of guardians for those vaccinations, and intending to vaccinate when a favourable opportunity presented itself, we consider it a foolish and gross irregularity, and an act which calls for severe censure. We, however, having received Dr. Mackay's statement, and inasmuch as he admitted the charge, and no fraud being intended, have come to the conclusion that this being the first charge proved against him since his appointment, during which time he has given every satisfaction to the Committee and the public, and as he promises it will never occur again, we respectfully ask the Local Government Board to reconsider their decision, and not ask Dr. Mackay to resign."

THE EASTER MANŒUVRES.—We understand that Brigade-Surgeon Brunton was not present with his brigade, but that Brigade-Surgeon Danford Thomas, who happened to be at Eastbourne at the time, was requested by the Brigadier-General to take duty, and that he did so at a moment's notice, with a result which led to high encomiums on the part of the authorities.

DEATH OF THE "ELEPHANT MAN."

In December, 1886, a series of drawings of this afflicted person appeared in the JOURNAL. Since that date the patient lived at the London Hospital. On Friday, April 11th, he died under circumstances which will presently be stated, having reached the age of 27, according to his relatives. His age must therefore have been overstated four years ago, as then he was believed to be 27.

He derived the name by which he was known from the proboscis-like projection of his nose and lips, together with the peculiar shape of his deformed forehead. His real name was John Merrick. He was victimised by showmen for a time; when shown in the Whitechapel Road, the police stopped the exhibition. He was afterwards exhibited in Belgium. where he was plundered of his savings. On one occasion a steamboat captain refused to take him as a passenger.

The "elephant man" was twice exhibited before the Pathological Society by Mr. Treves.[1] His complaint was not elephantiasis, but a complication of congenital hypertrophy of certain bones, with pachydermatocele and papilloma of the skin. He was born at Leicester, and there was no family history of any similar malformation. He gave an elaborate account of a shock experienced by his mother shortly before his birth, when knocked down by an elephant at a circus. It is almost certain that he was born with enlargement of the bones of the skull, right arm, and feet. When a child his skin was simply thickened, loose, and rough. He suffered in youth from disease of the left hip-joint, which caused permanent lameness. As he grew up, papillary masses developed on his skin, especially over the back, the buttocks, and the occiput. In the right pectoral region, the posterior aspect of the right axilla, and over the buttocks, the affected skin formed heavy, pendulous flaps; a considerable part of the surface of the body, including the left arm, remained free from disease.



The "Elephant Man," from a photograph taken in 1889.

After his exhibition at the Pathological Society, the disease rapidly advanced. The fingers became crippled by hypertrophy of their integument. His general health remained good, and he possessed a fair amount of muscular power.

Such was the condition of the patient when last described in the JOURNAL. He was then in a relatively flourishing condition, still able to go about. It remains for us to say a few words on poor Merrick's last days and death.

The bony masses and pendulous flaps of skin grew steadily. The outgrowth from the upper jaw and its integument—the so-called trunk—increased so as to render his speech more and more difficult to understand. The most serious feature, however, in the patient's illness was the increasing size of the head, which ultimately caused his death. The head grew so heavy that at length he had great difficulty in holding it up. He slept in a sitting or crouching position, with his hands clasped over his legs, and his head on his knees. If he lay down flat the heavy head tended to fall back and produce a sense of suffocation.

Nevertheless, the general health of the "elephant man" was relatively good shortly before his death. Early last week he was in excellent spirits, writing letters. He was out in the garde of the London Hospital on the night of April 10th. At 1.30 P.M on Friday he was in bed (he seldom got up until the afternoon) an appeared to be perfectly well when the wardmaid brought him h dinner. Between 3 and 4 o'clock he was found dead in his bed.



The "Elephant Man," from a photograph taken in 1889.

Mr. Treves, to whom we are indebted for the above details, is opinion that from the position in which the patient lay after deat it would appear that the ponderous skull had fallen backward and dislocated his neck.

An inquest was held by Mr. Wynne Baxter on the body of th "elephant man," on Tuesday last, April 15th, at the Londo Hospital. Mr. Ashe, house-surgeon, said he was called to the d ceased at 3.30 p.m. on Friday, and found him dead. It was e pected that he would die suddenly. There were no marks violence, and the death was quite natural. The man had gre overgrowth of skin and bone, but he did not complain of anythin Witness believed that the exact cause of death was asphyxia, t

[1] *Transactions*, vol. xxxvi, p. 494.

k of his head being greatly deformed, and while the patient taking a natural sleep the weight of the head overcame him, so suffocated him. The Coroner said the man had been sent nd the shows as a curiosity, and when death took place it was ided as a matter of prudence to hold this inquest. Mr. Hodges, ther house-surgeon, stated that on Friday last he went to visit deceased, and found him lying across the bed, dead. He was a ward specially set apart for him. Witness did not touch him. rse Ireland, of the Blizzard Ward, said the deceased was in her rge. She saw him on Friday morning, when he appeared in usual health. His mid-day meal was taken in to him, but he not touch it. The Coroner, in summing up, said there could o doubt that death was quite in accordance with the theory forward by the doctor. The jury accepted this view, and re- ned a verdict to the effect "that death was due to suffocation n the weight of the head pressing on the windpipe."

Ve understand that the Committee of the London Hospital used not only to permit a necropsy on the body of the "ele- ant man," but also declined to allow his body to be preserved. hough the verdict explains the immediate cause of his death, re is reason to believe that he was subject to cardiac disease of uncertain nature; he was certainly troubled with bronchitis.

'he circumstances under which the "elephant man" obtained benefits of residence in the London Hospital were fully ex- ined by Mr. Carr Gomm, chairman to the London Hospital, in a er published in the *Times* on Wednesday. The poor fellow s grateful, intelligent, and interesting. The Princess of Wales l half the celebrities in London visited him. Ever since he en- ed the hospital the Princess forwarded to him yearly a Christ- s card with an autograph message, whilst from time to time Prince sent him game. Lady Dorothy Neville, Mrs. Kendal, s Lankester, and other ladies also showed him great kindness a very practical manner.

'he drawings, kindly supplied to us by Mr. Treves, represent "elephant man" as he appeared in 1889.

HE CONTAGIOUS NATURE OF LEPROSY.

will be remembered that in November, 1885, Dr. Arning in- lated a Hawaiian man, named Keanu, with leprosy, and that disease subsequently developed. Keanu was at the time of inoculation to all appearance in robust health; he was under tence of death, which was commuted on condition that he sub- ted to the experiment. Much interest attached to the case, as eemed to be one in which the appearance of the disease was y to be accounted for on the supposition that it had been com- nicated by the inoculation of leprous matter. It was stated t there was no history of leprosy in his family.

n article contributed by Dr. Sidney Bourne Swift, Resident ysician, Leper Settlement, Molokai, Hawaiian Isles, to the *Occi- tal Medical Times*[1] (April) contains some highly important litional particulars with regard to the personal and family ory of Keanu, which it will be admitted materially diminish value of the evidence afforded by the case as to the inocula- ty of leprosy.

)r. Swift states that Keanu arrived at the Leper Settlement on Island of Molokai on February 9th, 1889. He was at once ed in the hospital at Kalawao, where Dr. Swift saw him imme- tely afterwards. The prisoner was then suffering from bruises the face, head, back, and lower extremities, received by falling vn a metallic winding staircase in the gaol at Honolulu during t. During the first few days in hospital he had two or three icks of vertigo. In about six or eight weeks he had recovered n these injuries, and was able to do some work about the hos- l yard. Dr. Swift found him a good-natured, industrious, est man. He accidentally scalded his hands, and at the time he report had in consequence again been in hospital. His con- on is thus described (see Fig. 1): Age, 70 years; weight, 178 nds; leprous infiltration beneath integument of face and fore- d; tubercular enlargement of lobes of both ears, the right e than the left; ulceration of palate, and extensive ulceration pharynx; tubercular enlargement of uvula; tubercular en- gement of alæ of nose; partial occlusion of nasal fossæ, due eprous infiltration beneath pituitary membrane; chronic con- ctivitis and pterygium-like growth on both eyes; almost deaf; e hoarse and with a nasal inflection. Anæsthesia of hands and feet, although no pronounced enlargement of ulnar or tibial nerves; numerous tubercles distributed over the entire body, but



Fig. 1.—Keanu.

most marked on the upper and lower extremities; three small, but angry-looking ulcers on outer aspect of left leg; softened



Fig. 2.—David, Keanu's nephew.

[1] We are indebted to the Editor of the *Occidental Medical Times* for advance proofs of this article and for the accompanying illustrations.

tubercle on dorsum of right foot. The hands and feet have a "boggy" feel, and pit slightly on pressure. His appetite is good, he feels well, and looks well, and may live long enough to die of old age.

Dr. Swift gives some extremely interesting facts with regard to Keanu's family history. He states that in the same ward and in a bed adjoining Keanu's is a young man named David (see Fig. 2), aged 20, a far advanced tubercular leper, covered with sores, almost blind, nearly deaf, and utterly helpless. This young man is the son of Keanu's only sister Mileka, now deceased. Upon him Keanu bestows the most assiduous care.

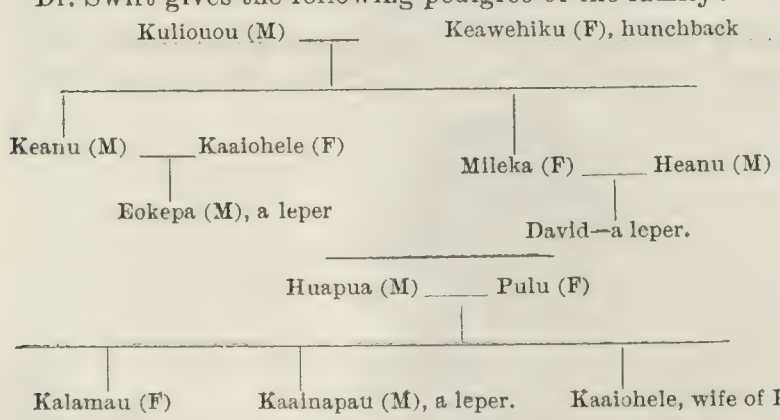
Nor is this Keanu's only relative, his own son Eokepa (see Fig. 3), aged about 23, and his first cousin Maleka, on his mother's



Fig. 3.—Eokepa, Keanu's son.

side, are both lepers, and reside at the Leper Settlement. Eokepa has been a leper since 1873, leaving school in that year on account of the disease. Keanu's brother-in-law, Kaainapau, died a tubercular leper at Kalawao, in 1885, and his (Keanu's) mother, Keawehiku, was a hunchback.

Dr. Swift gives the following pedigree of the family:



It appears, therefore, that Keanu's son, sister's son, and his wife's brother are, or were, lepers. Moreover, in addition to these sources of exposure to leprosy before his incarceration, Dr. Swift points out that during the first three months of Keanu's imprisonment in the gaol at Honolulu, he was in charge of a turnkey named Malaihi, who is now a leper on the island of Molokai, and, according to his own statement, has been a leper for twenty years. Dr. Swift further observes that if the inoculation did produce the disease in Keanu, its ravages in the short space of five years "are such as to make it unparalleled in the history of this settlement, and contrary to what little experience I may have acquired during a continuous residence amongst a thousand lepers for nearly two years."

ADMINISTRATION OF THE ADULTERATION ACTS.

LONDONERS are to be congratulated on the decision at which the metropolitan police magistrates have evidently arrived, to do their best to make the Sale of Food and Drugs Acts a real deterrent from food adulteration. We have frequently called attention to the utter inadequacy of the trifling fines that have usually been imposed on traders convicted of cruel frauds under these Acts, and have pointed out that remunerative adulteration can only b put down by the magistrates clearly showing that by acting di honestly a tradesman incurs the risk of such a heavy fine as wi swallow up all his ill-gotten profits.

Recently, in consequence of a question addressed to him in th House of Commons by Mr. O. V. Morgan, the Home Secretary dre the Metropolitan Chief Magistrate's attention to the matter, and conference of the magistrates was held on the subject. The resu is seen in the imposition recently of some heavy penalties in cas of adulteration. On April 15th, at the Thames Police Court, th manager of the Farmers' Direct Supply Company appeared t answer two summonses at the instance of the Poplar Distric Board of Works, charging him with selling milk deficient in crea to the extent of 50 and 30 per cent. respectively. The publi analyst stated that a large quantity of "separated" milk wa now being thrown on the London market and sold as pure mil Mr. Mead inflicted a fine of £20 in each case, or, in default, tw months' imprisonment.

Last week the same defendant was fined £22 13s. for sellin adulterated milk, and during the previous week £22 at th Worship Street Court for a similar offence. On April 9th, at th Lambeth Police Court, the manager of the Suburban Wine Com pany, Peckham, was fined £20 and costs for selling whisk diluted twenty-six degrees below the legal standard. At th same Court, the manager of the Peckham Co-operative Stores wa fined £20 for selling coffee adulterated with 80 per cent. chicory, and an East Dulwich tradesman was mulcted in a fi of £10, and 12s. 6d. costs, for selling as coffee a mixture contai ing 45 per cent. of chicory. In several similar cases fines varyi from £10 to £20 have been inflicted. With reasonable activity the part of the local authorities, we may now hope for the bett protection of the interests both of the ordinarily helpless co sumer, and the happily not quite extinct honest tradesman.

We would commend this matter to those provincial local a county authorities, and benches of magistrates, who allow t Sale of Food and Drugs Acts to remain practically a dead lett From the last report of the Local Government Board, it appea that in this category must be placed the counties of Oxford, Mor gomery, and Radnor, and the Isle of Ely, and no fewer th seventy-five boroughs, including such important towns as P mouth, Oxford, Dover, Gloucester, Tynemouth, Southpo Grimsby, and Scarborough.

It is not wise to rely implicitly, as is done in some places, up the habitual vigilance of tradespeople, who have to obtain th goods from firms outside their own districts, and may, therefo be the victims—though not always ignorant victims—of impo tion, unless they take the precaution of obtaining a warra from the wholesale dealer, under Section 25 of the Act of 18 As an instance, it may be mentioned that until recently the A were not put into operation in Hereford; but some months a owing to complaints, twelve samples of milk were suddenly sei for analysis. Of these, six were found to have been adulterat In one of these cases the wholesale dealer seemed to be culprit, but the retailer had not protected himself by a w ranty.

Once more, on behalf both of the consumer and of the hon trader, we would ask magistrates to look a little more seriously offences under the Sale of Food and Drugs Acts.

HOSPITAL BEQUESTS.

PUBLIC munificence in the form of charitable bequests will alw be a varying quantity. In an article in the *Standard*, entit "Fifteen Months' Charitable Bequests," attention is called to comparative neglect by charitable testators of the London h pitals during the first half of last year and the first quarter this year, while it will be seen from the following list that provincial hospitals came much better off:

The St. George's Hospital had a legacy of £1,000 from Mr. H. M. Clarke, others of less amount, making up nearly £3,000, and the Charing Cross H pital received £1,000 under the will of Lady Ossington, with other smaller quests, making up something under £2,000; but the legacies to the Lon Hospital appeared to be altogether under £1,000. Provincial general hospi on the other hand, had many bequests of £1,000, £2,000, and £5,000 each. North Cork Infirmary had a legacy of £28,000 from Lady Combermere, and Birmingham General Hospital a conditional legacy of £25,000 from Ryland. Mr. Alexander Webb, of Birmingham, left his residuary estate, a £2,000, to the Nottingham General Hospital. The Leeds General Infirm amongst other bequests, had £2,000 from Mr. Tennant; the St. John's H pital at Twickenham £2,000 from Miss Twining; the Bolton Infirmary £ from Mr. Moscrop, and Huddersfield Infirmary £2,000 from Mr. Beaum The Durham County Hospital has lately had a bequest of £2,000 under the

Miss Waddington, of Marylebone; the Windsor Infirmary had £1,000 from ord Leven and Melville; the Rochester St. Bartholomew's Hospital £1,000 om Mr. Bulmer; and the East Suffolk Hospital £1,000 from Mr. T. W. 'ing. The bequests to the London Hospital noticed last year were £25 from r. Simon and £100 from Sir Benjamin Phillips.

London special hospitals have been more fortunate:

The Great Ormond Street Hospital for Sick Children, in addition to probably early £100,000 eventually to be received from Mr. W. H. Barry's estate, and a versionary legacy of perhaps £2,000 from Mr. Weaklin, had last year, under ord Leven and Melville's will, £3,000; under the will of Mr. G. Robertson, 450, and other legacies. St. Mary's Hospital, Paddington, will receive £2,500 nder the will of Mr. John Barrable, and the Orthopædic Hospital and the rompton Hospital £2,000 each from the estate of the late Mr. Samuel Fielden, Todmorden. The Brompton Hospital has also £1,000 from Lord Leven and elville. Mr. Wing, whose bequest of £70,000 to the Clothworkers' Company, r pensions to the blind, has previously been noticed, left £1,000 to the Victoria ark Hospital. The St. Luke's Hospital for lunatics had a legacy of £500 from r. Barron.

Provincial special hospitals, and especially those in Manchester nd Birmingham, appear to get liberal support without diverting unificence from the general hospitals and dispensaries:

Henshaw's Blind Asylum at Manchester had £2,000 from Mr. Fielden, who so left £3,000 each to the Manchester Infirmary and the Manchester Dispenry. Mr. Richardson, who left £2,000 to the Infirmary, left also £1,000 each to e Hospital for Skin Diseases, and Henshaw's Blind Asylum. The Leeds Inrmary will divide £20,000, in reversion under the will of the late Alderman eorge, with the Yorkshire College; Mr. Hedley, of Burnhopeside, left £1,000 the Newcastle General Infirmary, and £1,000 to the Eye Infirmary and Blind sylum; Mr. Hollingworth, of Maidstone, left £1,000 to the West Kent General ospital, and £1,000 to the Kent Ophthalmic Hospital. In many other inances provincial, general, and special hospitals had bequests from the same stator. Special hospitals, however, it may be said, are not in such variety sewhere as in London.

PROGRESS OF COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

N December 14th and January 25th last we published the ames of local sanitary authorities that had adopted the Infecious Disease (Notification) Act of last session. The Act has nce been adopted by the following additional authorities:—

Urban.—Abergele and Pensarn, Ashby Woulds, Aston Manor, Atherton, wre, Bala, Banbury, Barkisland, Bath, Batley, Bowdon, Bridport, Bridgater, Brighouse, Builth, Bury St. Edmunds, Burslem, Calne, Camborne, arlisle, Cheshunt, Chippenham, Christchurch (Hants), Clayton, Cleator loor, Colne and Marsden, Cromer, Croston, Daventry, Dodworth, Downham larket, East Dereham, East Molesey, East Stonehouse, Evesham, Exmouth, areham, Frome, Godalming, Gravesend, Ham Common, Handsworth, Haverrdwest, Heaton Norris, Hendon, Hinderwell, Hucknall-under-Hathwaite, lunsworth, Huntingdon, Hyde, Ipswich, Jarrow, Kendal, Leyton, Littleorough, Llandudno, Lowestoft, Margate, Maryport, Midgley, Monk Bretton, eston, New Romney, Newhaven, Newnham, Newport (Salop), Northowram, akworth, Ovenden, Pemberton, Penarth, Peterborough, Radstock, Richmond Yorks), Rishworth, Ryde, St. Albans, St. Ives (Hunts), Saltash, Sandal Magra, eaton, Sherborne, Shirley and Freemantle, Sidmouth, Southampton, South olton, Southowram, Stockport, Sutton (Surrey), Thurlstone, Towyn, Tunall. Wallsend, Walsall, Walthamstow, Warsop, Westbury-on-Severn, Whitnurch (Salop), Willington Quay, Wilmslow, Ynyscynhaiarn.

Rural.—Abergavenny, St. Asaph, West Ashford, Aylesbury, Battle, Belford, erwick-on-Tweed, Bishop Stortford, Boston, Bridgend, Bridlington, Chorley, hichester, Dorking, Downham, Epping, Fleggs, Hemsworth, Holywell, Horam, Kingsclere, Kingston, Lampeter, Lanchester, Ledbury, Lewes, Llanelly, almesbury, Marlborough, Melksham, Newcastle-under-Lyme, Oundle, 'wilheli, Reeth, Ripon, Royston, Seisdon, Shaftesbury, Sherborne, Shipton, mallburgh, Stockbridge, Stockport, Stoke-on-Trent, Stow-on-the-Wold, Thetord, Weshley, West Bromwich, Westbury, Weymouth, Whitby, Witney, Wolanton, and Burslem.

Ports.—Barnstaple, Bridgwater, Cardiff, Colchester, Cowes, Falmouth, owey, Hartlepool, Hull and Goole, Liverpool, London, Lowestoft, Newhaven, ewport (Mon.), Rochester, Teignmouth, Weymouth.

The subjoined summary shows at a glance the extent to which ompulsory notification of infectious disease is in force throughout ngland and Wales:—

Under the Act of 1889.

	Population (1881).
London	3,816,483
Provinces:—462 urban districts	6,796,340
325 rural „	4,793,452
17 port „	—
Under previous Local Acts.	
56 large towns	3,751,257
Total population under compulsory notification	19,157,532
Total population (1881) of England and Wales (that is, 39 London districts, 990 urban, 574 rural, and 59 port districts)	25,974,439

Thus it is seen that compulsory notification is already in force n more than half of the sanitary districts of the country, and pplies to at least three-fourths of its total population. It has been adopted in all the chief towns except Leeds, in all the more important health resorts, seaside and inland, except Brighton, and in a large number of rural areas.

It is too soon to gauge the influence which this wide adoption of compulsory notification will exercise in the struggle against epidemic disease. Unfortunately the machinery for making the best use of the early information is, in a large number of districts, very imperfect. There is, perhaps, no isolation hospital available, or the sanitary staff is inadequate to secure the removal of defects disclosed by the occurrence of disease. But the voluntary adoption of Mr. Ritchie's Act is at least an indication that the authority recognise the importance of preventing the spread of infection, and may be taken as an earnest that it will take whatever further action may be found necessary.

The medical profession have loyally performed their part in this matter. The smoothness with which the system works in most towns is largely due to the tact and good judgment exercised by the local health officers, and to the fact that in most cases those officers do not needlessly interfere with the private patients of their medical brethren, and consequently foster mutual confidence and respect.

It is to be hoped that the reported cases of sickness, although treated at the time of their occurrence in a confidential manner, will eventually be carefully tabulated. Much useful information respecting the distribution, localisation, virulence, etc., of various diseases may thus be rendered available for the promotion of general sanitary knowledge. This tabulation could best be undertaken by a central authority, either the Registrar-General or the Local Government Board.

CHOLERA.

ACCORDING to the *Vratch*, Nos. 10 and 11, 1890, the Persian and Turkish Governments have recently issued bulletins announcing that not a single case of cholera has occurred in Persia since February 19th. The same is confirmed by the Constantinople *Revue Médico-Pharmaceutique* of February 28th. The Turkish consul at Tiflis (Caucasian Russia) has informed his Government that recent rumours as to the appearance of a case of cholera at Bakü (Russia) are without foundation.

At a recent meeting of the Imperial Royal Society of Physicians of Vienna, Dr. J. E. Pollak read a paper, in which he said the epidemic of cholera was now quite extinct in Persia and Mesopotamia. He, therefore, believed that Europe would be saved from a visitation this summer. Whether it would have the same good fortune in the summer of 1891 would depend mainly upon the measures of precaution taken at Kirmandschah.

At a recent meeting of the Russian Society for the Protection of the National Health, Dr. Sergheï M. Ershoff, of St. Petersburg,[1] described the precautions which had been adopted by the Russian Government.[2] He laid stress on the utter uselessness of quarantine, and warmly advocated the more radical prophylactic measures successfully practised by the British, French, and Italian authorities—namely, the early recognition of the very first cases of the disease, isolation of the first patients, thorough disinfection of their dwellings, furniture, excreta, etc.; strict sanitary supervision of water and food supply; improvement of the dietary of the poor; and rational organisation of special sanitary authorities armed with full powers to carry these measures into effect.

At a meeting of the Caucasian Medical Society, at Tiflis, Dr. Pavel M. Blumberg, of Bakü,[3] read a paper on the means of preventing the introduction of cholera from India by land. Starting from the fact that the Bengal Delta (Sundarbaris) is the only *habitat* of endemic cholera, and that all cholera epidemics are primarily of Indian origin, he suggests to the British Government the following means of eradicating the disease: At some time when the endemic cholera is at a relatively low level the entire population of the Delta should be removed to some healthy place, while the whole cholera region should be encircled by an effective military cordon, with orders to prevent anyone taking up his abode therein until at least ten years have elapsed. As, however, this method would take some time, Dr. Blumberg proposes to the British Government another more practicable though only palliative measure against the spread of the Indian cholera to other countries *viâ* Afghanistan. This consists in establishing a permanent effective quarantine in the Zuelfagar Pass and other smaller passes piercing the Parapamisus range of mountains.

[1] *Vratch*, No. 11, 1890.
[2] See JOURNAL, March 11th, 1890, p. 623.
[3] *Proceedings of the Caucasian Medical Society*, No. 10, 1890, p. 269.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this Branch will be held at Croydon on Thursday, May 8th.—P. T. DUNCAN, M.D., Honorary Secretary, Croydon.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, April 25th, at 3.15 P.M., in the Radcliffe Infirmary, Oxford. Gentlemen are requested to send to the Honorary Secretary, W. LEWIS MORGAN, 42, Broad Street, Oxford, notice of any papers to be read, or cases shown, on or before April 14th.

BORDER COUNTIES BRANCH.—The next meeting of the Branch will be held at Lockerbie on the afternoon of Friday, April 26th. The hour of meeting will be notified on the circulars. There will be a dinner after the meeting. Notice of papers and cases to be read to be sent as soon as possible to the Honorary Secretary, JAMES ALTHAM, M.D., Birkbeck House, Penrith.

METROPOLITAN COUNTIES BRANCH: WESTERN DISTRICT.—A meeting of the above District will be held on Friday, April 25th, at the Prince's Hall, Ealing. The chair will be taken by Dr. Ord, President of the Branch, at 8.30 P.M. Dr. Clement Godson will read a paper on Cancer of the Cervix Uteri.—C. A. PATTEN, Honorary Secretary, Marpool House, Ealing, W.

SOUTH-WESTERN BRANCH.—The annual Meeting of the Branch will be held at the Ilfracombe Hotel, Ilfracombe, on Wednesday, May 21st, 1890, under the presidency of Dr. Edwyn Slade-King, D.P.H. Notices of motions or communications to be intimated to the Honorary Secretary without delay, and it will facilitate arrangements if members will inform the Honorary Secretary as soon as possible if they hope to be present at the meeting, and join the excursion proposed to be made on the following day. The following motion was passed at the Council meeting on May 2nd, 1888: "That inasmuch as the annual meeting assumes more or less the character of a day of recreation, and with a view of encouraging the district meetings, the business of the annual meeting shall be confined to the President's address, the business of the Branch, the exhibition of cases or of specimens with notes, and the annual dinner." Those members who have not yet paid their subscriptions are reminded that they became due in advance on January 1st.—P. MAURY DEAS, Honorary Secretary, Wonford House, Exeter.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—The annual meeting of this District will take place on Thursday, April 24th, at the Pier Hotel, Ryde, at 4 P.M.—ROBERT ROBERTSON, M.D., Secretary.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.—The next ordinary meeting will be held at the Grosvenor Hotel, Queen's Gate, Southsea, on Thursday, April 24th, 1890, at 4.30 P.M. The chair will be occupied by the President (W. F. Brook, Esq.). Members who are desirous of introducing patients, exhibiting specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary, J. WARD COUSINS, M.D., Riversdale, Kent Road, Southsea.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the members of the Essex District will be held (by permission) in the Town Hall, Haverhill, on Friday, May 2nd, 1890, at 2 P.M. Dr. J. Sinclair Holden, President of the East Anglian Branch, will preside. Messrs. Tandy and Hargrave invite the members and their friends to lunch at the Town Hall, at 12.45 P.M. Business of the meeting.—2 P.M., to elect an honorary Secretary for the year 189 To arrange the place and date of the next meeting. Medical Defence Union. Dr. Mead (Newmarket) will give a short report of the work of the Union for th past year. The following papers have been promised:—Dr. J. Sinclair Holde (Sudbury): A few remarks on Exalgine. Professor Latham (Cambridge); O the Treatment of Megrim or Sick Headache. Mr. R. Harrison, F.R.C.S.En (London): On the Selection and Use of Catheters and other Instruments f Enlarged Prostate. Mr. B. L. Tandy (Haverhill): On a Case of Intestin Obstruction, Laparotomy, followed by Abscess, Recovery. H. J. Hargrav M.B. (Haverhill): Notes of a Suppurating Hydatid of Liver. W. J. Burleig Robinson, M.B. (Halstead): On the Induction of Premature Labour by Rapi Dilatation, especially in its relation to Pneumonia.—C. E. ABBOTT, Honorar Secretary, Braintree.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

THE quarterly meeting of this district took place on Januar 30th, 1890; T. A. BUCK, M.B., in the chair.

Abuse of Out-patient Departments.—The resolutions referre from the Council on the subject of the abuse of out-patient depar ments of public charities were discussed. Resolutions 1, 4, and and Resolution 6 as applied to these, were approved; Resolutions and 3 were disapproved of.

Communications.—Dr. BUCK gave an interesting paper on a su cessful case of Ovariotomy.—Dr. GROVES initiated a discussio upon Russian Influenza, in which all present took part.—M COOMBES introduced the subject of the Action of Sulphonal, whic was discussed.

Dinner.—The members dined together afterwards.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of this Branch was held at th Grand Pump Room Hotel, Bath, on Thursday evening, April 10t W. J. FYFFE, M.D., President, in the chair. Thirty-six membe were present.

New Members.—The following gentlemen were elected ne members of the Association and Branch: Dep. Surg.-Gen. Ev M.R.C.S., Clifton; Dep. Surg.-Gen. Herbert, M.D., Clifton.

Card Cases.—A case of Disseminated Uratic Tophi Deposits r sembling Xanthema in some parts of the body. By H. W. FRE MAN, F.R.C.S.I. The case was discussed by Drs. SHINGLET SMITH, MARKHAM SKERRITT, and H. F. H. GOODRIDGE.—A ca of Cervical Caries. By R. J. H. SCOTT, F.R.C.S.Ed.

Papers.—The following papers were read: 1. Painful Mictu tion in Women. By A. E. AUST LAWRENCE, M.D.; which ga rise to a discussion, in which Drs. BRABAZON, MARKH SKERRITT, HANDYMAN, MICHELL CLARKE, WALDO, and Mess WAUGH and PAGAN LOWE took part.—2. Ulcerative Endoca itis. By H. WALDO, M.D. Dr. GOODRIDGE spoke on the subje —3. Remarks on a case of Acute Goître occurring during t Puerperal Period. By McD. ELLIS, M.D. Observations on t subject were made by Dr. AUST LAWRENCE.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

AN ordinary meeting of this Branch was held in 198, Union Stre Aberdeen, on Wednesday, March 19th, 1890, at 8 P.M., Dr. GORD in the chair.

Nomination.—The minutes of last meeting being read and a proved, Dr. Lindley M. Scott, Bury View, Aberdeen, was nor nated for ballot at next meeting of the Branch.

New Member.—Dr. A. Rudolf Galloway, 203, Union Stre Aberdeen, was balloted for, and unanimously admitted a mem of the Branch.

A report of the scientific part of the proceedings will be fou at p. 901.

ABSTRACT OF PROCEEDINGS OF COUNCIL

AT a numerously attended meeting of the Council, held in Council Room at the offices of the Association, 429, Strand, W on Wednesday, April 16th, 1890, Dr. BRIDGWATER, President the Council, in the Chair, it was

Resolved: That the financial statement for the year end December 31st, 1889, as certified by the auditors, be approved published in the JOURNAL, in accordance with By-law 26.

The remainder of the proceedings of the Council will appear next week's JOURNAL.

BRITISH MEDICAL ASSOCIATION.

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31ST, 1889.

BALANCE SHEET.

DR. LIABILITIES.	£	s.	d.	£	s.	d.
Subscriptions paid in advance				667	6	3
Advertisements ditto				359	13	8
Publishing ditto				11	19	7
Library				300	0	0
Contributors				602	14	1
Reporting				30	9	0
Engraving				75	4	5
Printing Journal				250	17	6
Paper for Journal				683	14	8
Miscellaneous Printing				50	14	6
Inebriates Committee				6	16	0
Reference Committee				50	8	0
Therapeutic Committee				200	0	0
Stationery				35	3	11
Coal and Coke				1	4	0
Repairs				12	9	0
Legal Charges and Architect's Fees				64	5	10
Wood Fund				25	0	0
Rates, Taxes, and Insurance				144	13	6
Plant and Type				101	11	11
Sundries				22	16	5
Office Furniture and Fixtures (Electric Lighting)				124	12	0
TOTAL LIABILITIES				3,821	14	3
Depreciation—as at 31st Dec. 1888			1,347 10 11			
Lease, 18 years, one-eighteenth of 4,500 0 0 =			250 0 0			
Lease, 16 years, one sixteenth of 3,200 0 0 =			200 0 0			
Alterations, one-eighteenth of 4,278 17 2 =			237 14 3			
Furniture, 15% on 1,898 15 1 =			284 16 3			
				2,320	1	5
Plant Depreciation and Renewal Fund as at December 31st 1888			193 3 10			
Add for 1889			250 0 0			
				443	3	10
Surplus Account, namely:—						
Balance on January 1st, 1889			35,617 12 11			
Profit for 1889 brought from Revenue Account			3,338 14 8			
BALANCE, being total of excess of assets over liabilities				38,956	7	7
				£45,541	7	1

CR. ASSETS.	£	s.	d.	£	s.	d.
By Subscriptions—Amount due				1,227	12	0
,, Advertisements—Amount due				3,058	8	0
,, Sundry Sales—Amount due				109	4	1
,, Due from Hastings Memorial Fund				8	15	0
,, Lease				4,500	0	0
,, ,, Agar Street Premises				3,200	0	0
,, Alterations of Premises				4,278	17	2
,, Furniture, and Fixtures at cost				1,898	15	1
,, Library and Fixtures				510	4	0
,, Plant and Type at cost				1,898	0	7
,, Interest due on Investments				325	8	0
,, INVESTMENTS				19,569	7	6
,, Cash, namely:—						
London and Westminster Bank on current account	1,914	14	8			
Ditto, on deposit	3,000	0	0			
Ditto, at Office	42	1	0			
				4,956	15	8
				£45,541	7	1

Revenue or Profit and Loss Account for Year ending December 31st, 1889.

	£	s.	d.	£	s.	d.
Editorial Expenses (Salaries, Contributions, Engraving, and Reporting)				4,525	16	6
Expenses of Journal (Printing, Postage, and Paper)				13,758	2	9
Office Expenses (Rent, Taxes, Office Postage, etc.)				2,398	6	7
Office Salaries and Wages				2,167	1	0
Association Expenses (Scientific Grants, Scholarships, Expenses of Committees, etc.)				2,204	2	9
Plant Depreciation Fund				250	0	0
Provision towards redemption of expenditure on Alteration of Premises, Lease of Premises, and Furniture and Fittings				972	10	6
				26,276	0	1
Subscription Losses from death				386	16	0
				26,662	16	1
Profit for Year carried to Balance Sheet				3,338	14	8
				£30,001	10	9

	£	s.	d.
Subscriptions	13,994	7	2
do. former years	81	15	9
Advertisements (less discounts and allowances)	12,910	0	5
Sundry Sales of Journal	1,379	0	1
Collective Investigation Record Sales	4	9	3
Sundries—Reading and Binding Covers	92	15	5
Reprints	95	2	8
Interest on Investments	694	18	2
Scientific Grants unused and returned	199	14	11
Sale of Waste, etc.	13	6	9
Discount on Printing, Paper, etc.	336	0	2
	£30,001	10	9

STEWART FUND.

£579 invested in 4 per cent. Caledonian Railway Debenture Stock, in the name of the British Medical Association.

1889.		£	s.	d.
Jan. 1.	To Balance brought down	93	3	11
Dec. 31.	,, Interest one year on £579	22	11	8
		£115	15	7
1889.		£	s.	d.
Aug. 17.	By Award (Dr. Klein, F.R.S.)	52	10	0
Dec. 31.	By Balance carried down	63	5	7
		£115	15	7

MIDDLEMORE FUND.

£500 invested in 4 per cent. North British Railway Debenture Stock, in the name of the British Medical Association.

1889.		£	s.	d.
Jan. 1.	To Balance brought down	74	1	4
Dec. 31.	,, Interest one year on £500	19	10	0
		£93	11	4
1889.		£	s.	d.
Dec. 31.	By Balance carried down	93	11	4
		£93	11	4

HASTINGS FUND.

£477 invested in 4 per cent. London and North Western Railway Debenture Stock, in the name of the British Medical Association.

1889.		£	s.	d.
Dec. 31.	To interest one year on £477	18	10	6
	,, Balance carried down	2	6	4
		£20	16	10
1889.		£	s.	d.
Jan. 1.	By Balance	20	16	10
		£20	16	10

We have examined the foregoing Accounts with the Books and Vouchers of the Association, and find the same to be correct.

PRICE, WATERHOUSE, & CO.,
44, Gresham Street, E.C.

29th March, 1890.

SPECIAL CORRESPONDENCE.

PARIS.

The Influence of Influenza on Pre-existing Conditions.—The First Case of Intestinal Charbon observed in France.—Autographism.—The Operation for Squint.—Cure of Tetanus.—Koch's Bacillus and Enteritis.

At the Société Médicale des Hôpitaux M. Séglas cited numerous instances he had met with in which pre-existing affections were aggravated by the influence of *grippe*. One of his patients, after an attack of influenza, was again affected with severe facial neuralgia, from which he had suffered previously. A hysterical woman, who had been free from hysteria during two years, was again attacked during two days after *grippe*. In five cases of neurasthenic patients mental disturbance, characterised by depression and loss of will, were observed after influenza of a mild form. M. Ballet met with a case of delirious melancholia in a woman predisposed thereto, who was suffering from *grippe*. At the same Society M. Joffroy recorded a case of violent delirium, which lasted two weeks, during an attack of *grippe*. At the outset it resembled typhoid delirium. On the eighteenth day fever and delirium disappeared, the memory and intelligence were restored, and three weeks afterwards the patient had completely recovered. During the late epidemic M. Joffroy observed the most varied forms of neuralgia. Two patients presented neuritis consecutive to cervico-brachial neuralgia. These facts may be explained by one of two hypotheses, namely, the existence of infectious neuritis such as is met with in different toxic affections, or that of a special form of meningitis producing the intense pain characteristic of influenza by its irritating action on the nerve roots, and finally neuritis by its persistence in certain regions. This second hypothesis occurred to M. Joffroy after he had detected patches of limited cerebral meningitis in patients who succumbed to pneumonia consecutive to *grippe*.

M. Bouisson records the first case of intestinal charbon observed in France. At the necropsy four quarts of murky fluid were found in a pocket of the small intestine, situated behind the umbilicus. The glands were gorged with blood. M. Bouisson made preparations and cultivations with the blood from the spleen and liver. He detected the presence of the bacillus anthracis in the mucous and submucous membrane, the liver, spleen and kidneys. Inoculations were made on guinea-pigs, and the animals died of charbon. The diagnosis of charbon cannot be established in a living patient, though the employment of the latter may suggest it. M. Bouisson's patient was employed in preparing hides. According to MM. Straus and Wurtz, the sporulous cultivations of the bacillus anthracis are destroyed by the gastric juice at 38° C. The virulence of the micro-organism must be explained by its having been concealed in the food, and thus introduced into the intestine without being brought into direct contact with the gastric juice.

At the Académie de Médecine, M. Mesnet made a communication on what he terms "autographism." He recalled a case of this phenomenon observed at the Hôpital St. Antoine some years ago in a hysterical patient. A letter or design traced lightly on the surface of the skin appeared two minutes later in the form of pale lines, which gradually became so prominent that they could be perceived at a distance of twenty yards. There was complete analgesia, and the least contact with the skin produced intense redness. M. Mesnet has observed four similar instances, all in hysterical patients. The phenomenon produced was always the same, whether the skin was anæsthetised or not. Autographism is a reflex effect. It is not transitory, for M. Mesnet has observed it in his patients during 10, 6, 4, and 2 years. It cannot be confounded with *raie méningitique* or *typhoïdique* but it arises from the same causes as urticaria.

In the operation for squint, it sometimes happens that the suture does not hold. In this case the tendon, instead of being brought forward, retire still further within than before, and the strabismus is increased. Dr. Motais has employed, in eighteen cases, a new method by which this operation, if not efficient, is at least rendered harmless, if the suture does not hold. He lays bare the tendinous insertion, raises the tendon with a hook, and passes the thread through the edges of the tendon, the connective tissue, and the capsule. He then divides the tendon, leaving a tiny fragment of 1 to 2 millimètres in the middle. In order to render the edges, which are to be drawn forward, more mobile, he separates them with the scissors, following the median fragment for a distance of 8 or 10 millimètres, and carefully avoids cutting the threads. The operation is terminated in the usual manner.

A case of tetanus, in which a cure was effected, is reported from the St André Hospital, Bordeaux. Chloral was administered for the tetanic contractions. Subcutaneous injections of pilocarpine and constant steam baths were employed to eliminate the toxic ptomaines.

At the Académie des Sciences M. Bouchard presented a note by M. Gamaleïa to the effect that Koch's bacillus produces enteritis through the action of a diastasic product which it secretes. M. Gamaleïa states that he has induced cyanosis, muscular jactitation, diarrhœa, and albuminuria by intravenous injections of the microbe or its secretions. M. Bouchard obtained these results during his experiments in 1884, but only when he employed the urine of choleraic patients. M. Gamaleïa does not associate the vaccinating and toxic actions of the microbe. MM. Arnaud and Charrin's experiments have shown that when cultivations of the pyocyanic bacillus are distilled a fluid is obtained which is but slightly toxic, and which, if injected into rabbits, increases their resistance to the action of the virus. The residue from the evaporation has a morbific and vaccinating action. If all that is precipitated by the action of alcohol on the broth cultivations is collected, and submitted to the action of water, a liquid is obtained which has no reaction on starch, and which, employed in injections, induces very severe toxic phenomena, but scarcely increases the resisting power of the animal. These facts show that there is an absolute connection between the toxic and vaccinating properties.

VIENNA.

Iodoform Emulsion in Cold Abscesses.

A recent number of the *Wiener klinische Wochenschrift* contains a paper by Professor Billroth on the treatment of cold abscesses and tuberculous caries. He says Mosetig v. Moorhof was the first to recommend iodoform as a local antiseptic and an anti-tuberculous remedy. Since 1881 Billroth himself has made an extensive use of the iodoform emulsion. The parenchymatous injections of such solutions, and the injections of them into abscesses, caused such severe and persistent pain that this method was soon abandoned in his clinic. The formula of the iodoform emulsion, as used by v. Moorhof, was first: ℞ Iodoform. pur. 10.0, ol. ricini, ol. amygdalæ āā 15.0. The first formula used by Mikulicz was: ℞ Iodof. pur. 10.0; glycer. 80.0; oil of olives 40.0. Later on Moorhof recommended the following formula: ℞ Iodof. pur. 50.0, tere c. glycer. 40.0; distilled water 10.0; gummi traganth 0.30. The formula used by Mikulicz in Billroth's clinic differed from v. Moorhof's in that the latter contained considerably more iodoform than the former. As the addition of oil seemed to Billroth to be useless, he had only 10 grammes of pulverised iodoform mixed with 100 grammes of glycerine the mixture had to be violently shaken before it was used. This emulsion could not, of course, be employed for parenchymatous injections. In 1881 Mikulicz reported two cases in the *Berliner klin. Wochenschrift*, in which he had injected the emulsion into cold abscesses of the thigh after opening them. There was considerable diminution of the abscess cavity after some weeks. Professor Billroth himself tried this method, and in 1884 the results were published by Fränkel.[1] Of 20 cases, 18 were definitively cured, but in the other 2 the treatment was not successful. Professor Bruns, of Tübingen, also obtained very satisfactory results by this method. The antituberculous influence of iodoform was clearly proved by these experiments, and if the effect of the powder when applied to carious foci was not so satisfactory, that was no doubt due to its not being long enough in contact with all parts of the walls of the abscess cavities and the bones. The emulsion, therefore, was clearly preferable in such cases. The results of this plan have exceeded Professor Billroth's most sanguine expectations, except in some abscesses taking origin from the vertebral column, in which the treatment seemed to be too dangerous to be tried. This method was practised on almost all the bones, joints, and soft parts of the body, and in nearly all these cases results were obtained far surpassing all previous experience. The *technique* of the treatment is as follows: When operating upon the extremities Esmarch's bandage must be applied; when

[1] *Wiener med. Wochenschrift*, No. 26.

he cavity has been emptied it should be taken off. The cavity is hen stuffed with iodoform gauze, and after all bleeding has eased—it may last from half an hour to three-quarters of an our—the emulsion is poured in and the wound stitched up. In his, as in all other operations, Professor Billroth insists on the nost scrupulous antiseptic precautions; the skin must be washed vith alcohol, ether, and sublimate, and the silk sutures must be ompletely sterilised. An incision is made through the skin and he soft parts over the abscess along the long diameter of the welling. Incisions from the tuber ischii to the popliteal space, r from the latter to the heel, are not uncommon in these opera- ions. A large pledget of iodoform gauze is then pushed into the bscess, and its inner surface firmly rubbed. The cavity is then vashed with a 1 in 3,000 solution of sublimate. If there is a avity in the bone this is energetically cleansed. The wound s next stitched up, except a large opening through vhich the emulsion is poured into the cavity of the abscess nd the cavity of the bone respectively. Finally, the rest of the vound is closed with sutures, and the dressing applied. In most ases fever, lasting from three to four days, supervenes, and oc- asionally also there is rather high evening temperatures. The ollowing types of cases are met with:—1. No pain, only some assing twinges following the operation; fever moderate. Under hese conditions the dressing can be allowed to remain from two o three weeks. Recovery takes place by first intention. The utures are then removed, and the dressing allowed to remain for bout two weeks longer. 2. Sharp pain and severe fever. The lressing is taken off; bloody serum mixed with iodoform emul- ion escapes from some parts between the sutures. The serum is ressed out; the sutures are allowed to remain, and slender drain- ge tubes are introduced into the openings. A new dressing is pplied, which is removed after from three to seven days. When he discharge stops, the drainage tubes are removed. Healing y first intention takes place in the deep parts; the granulating vound is dressed with an ointment; the small fistulæ are touched vith nitrate of silver, and thus are soon closed. This is the most ommon course of events. 3. Pain increases on the second and hird days after operation. Pure blood or bloody serum scapes from the wound; drainage and fresh dressing. Recovery vithout suppuration may occur even in these cases. 4. Stitches urst owing to great tension, and decomposition owing to strepto- occus albus around the sutures. Treatment as above. 5. Con- inual fever and pain. Pus escapes from between the sutures. n this case the operation has not been really successful; cocci of uppuration have remained behind. The stitches are removed, rainage tubes inserted, and pure glycerine or iodoform emulsion oured in every second day. This, in most cases, causes pain and ever. Recovery takes place in from five to six weeks. 6. If fter this time no sure signs of definitive recovery are present, the peration must be repeated. The worst cases of very large bscesses and numerous fistulæ gave in Billroth's hands the best esults, not merely proportionately but absolutely.

CORRESPONDENCE.

HUMAN VACCINE A PROPHYLACTIC IN CANINE DISTEMPER.

SIR,—In the JOURNAL of April 12th, 1890, is a suggestive paper n "The Pathogenic Microbe of Distemper," and some interesting marks upon its use for protective inoculation against the isease, by Mr. Everett Millais. As I find, however, no allusion ade to the success that has attended the mere vaccination of the nimals by calf and human vaccine lymph, I begin to fear that ne advantages of the practice are either less known or less ap- reciated than I imagined they were.

When what I have to say further on the action of vaccine mph is carefully considered, it may present to the mind of some my readers the additional question as to whether or no dog stemper is in reality a mere form of variola; modified and ob- ured not only by the cutaneous appendages of the two animals ing different, but from the *cutis vera* of the dog possessing either sweat glands nor sweat ducts.

In many respects the distemper of the dog, if not the same sease, presents us at least with many features closely resem- ing those of small-pox in man. *a.* It requires an incubation riod for its development of about from ten to sixteen days. *b.* is markedly a pyrexial disease. *c.* It runs a well marked course, and if it does not kill the individual affected with it, wears itself out, usually within three weeks' time. *d.* An attack is almost always a certain preventitive to a subsequent infection. *e.* There is in general not only great disturbance of the respiratory passages—amounting to purulent discharges—but in many instances both diseases are associated with pneumonia, or pleurisy; and occasionally even accompanied by both. *f.* The mere absence of a cutaneous eruption in dogs' distemper cannot be regarded as an overwhelming reason for denying the identity, far less the similarity, existing between the two affections. Seeing that the skin of the two species of individuals are not alone constituted differently, but that even in the human being we are cognisant of a form of small-pox without any pustules being present, and which has been named *variolæ sine variolis vel eruptione*. Just as there may be scarlet fever without any scarlet rash in one case, while in the next bed to it the sufferer may have a well-marked rash over his body, yet little or no sore throat. So that it is not the absence, or the presence, of any single sign or symptom which sways the diagnosis of the philosophic minded physician in any obscure case.

In addition to the points of semblance already cited, I bring forward demonstrable evidence showing that not only calf but human vaccine lymph possesses the power of rendering dogs that have been vaccinated with it insusceptible to the infection of distemper.

Who invented the procedure, or how widely it is at present practised, I know nothing. All I can say is that I learned it from the late Deputy Surgeon-General Wm. Aitken, when I was quite a small boy, some fifty years ago. Dr. Aitken, when on a visit to us, while admiring a litter of cocker pups, of which I was very proud, said, "You ought to vaccinate them, and they won't take the distemper." "Will you do it for me," I asked. "Yes," was the answer, "if you get me some lymph from your doctor." That was soon done, and on the following day he vaccinated the whole litter (then about six weeks old) on the inside of the non-hairy part of the ears. I not only noted how the operation was performed, but in due time had unmistakable evidence of its efficacy, for none of the litter ever showed a single sign or symptom of distemper. What has been the result? From that day till this I have vaccinated with ordinary human vaccine lymph not only every litter of pups (when six weeks old) my dogs have had, but every young dog I have either purchased or had given to me, and also friends' dogs as well, so that not only has the number but the variety of kinds been great, including high bred pugs, setters, collies, both short and long haired, bull terriers, and skyes, and never has a single one of them, as far as I know, ever shown a sign or symptom of distemper. In fact, I have only had two dogs suffering from the distemper, and both manifested the disease before they were vaccinated, and within a few days after they came into my possession. The one, a rough English terrier, of no great value, I destroyed, as I was leaving London on my holiday. The other, an excessively fine, twelve months old, black and tan, short-haired Lowland Scotch collie, which I vaccinated the very first day I noticed his eyes bleared and a tiny drop of pus within the nostril, with the result that he rapidly got well, and had so slight an attack of the disease as to render it unnecessary for me to put him out into the stable.

These are, I think, most suggestive facts, which will prove interesting to all who, like myself, are convinced that every iota of fresh comparative pathological knowledge we can lay hold of will, sooner or later, bear important practical fruit, both in the comprehension of the etiology and treatment of human diseases.—

I am, etc.,
GEORGE HARLEY, M.D., F.R.S.
Harley Street.

THE UNIVERSITY OF LONDON AND DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—As an undergraduate of some years' standing, may I be permitted to offer a few words of criticism upon the letter of another undergraduate which appeared in the JOURNAL of April 12th? I should have fancied that the training necessary to pass the London University examinations would have instilled some idea of accuracy. Surely the effort required "to support an intelligent memory" of the number of subjects in an examination which he has himself necessarily passed cannot be such a great one, but nevertheless he states that the number of subjects required for the Matriculation is twelve, instead of six, as is the case. Again, as regards the Preliminary Scientific, the "majority of students" never touch anatomy or physiology until they have

passed the examination unless they desire the certainty of being "ploughed." As for the "traditional ten hours a day reading of the London man," that is, of course, a matter of taste; but, as a rule, the legend may fairly be classed among other *Kindergeschichten.*

As regards myself, I have gone too far to retreat, but I sincerely wish I had gone to Cambridge instead of going in for a degree which promises soon to rank among the poorest which can be obtained, and one which I must eke out with the B.Sc. and Fellowship.—I am, etc., J. L. B.

"SUGGESTION" IN HYPNOTISM.

SIR,—Hypnotism seems at present to be advancing into the position of a sound and scientific therapeutic agent, in the treatment of certain diseases, both medical and surgical. This is most admirably exemplified by the description of the exhibition given at Messrs. Carter Brothers and Turner's, Leeds, by Dr. Bramwell, of Goole. But I would like to draw attention to a very erroneous statement which occurs in the current *Medical Annual.* In the article "Hypnotism" it is said that Liébeault "soon hit upon the point which Braid had missed, namely, the value of suggestion in the hypnotic state."

I am glad to be in a position to affirm that this is erroneous, as my father, who was a personal friend of Braid, frequently witnessed his hypnotic inductions in the treatment of certain cases. Whatever is actually stated, or not stated, in his writings, suggestion was certainly the point by which his great success in practice was achieved. When Braid wished to produce a particular effect, as calling an organ or function into action which, in the ordinary state, was inactive, he either touched the region or verbally called attention to the desirability of such function or action being performed. Thus, by placing a woman in the position of prayer, touching the brow and suggesting devotion, prayer was immediately commenced, and continued until she was raised off her knees and dehypnotised. This patient, who was under treatment for constipation, had her bowels moved by his placing his hand on the abdomen when hypnotised, and suggesting the necessity for such function to be performed. After she was dehypnotised she immediately retired and acted on the suggestion.

There are many other instances of suggestion being the point in Braid's treatment, and however much credit is due to Liébeault for having discovered that suggestion was necessary, still more is due to Braid, who practised it ten years before the former.—I am, etc., J. CHRISTIAN SIMPSON, M.B.

Stoke Newington.

THE SURGICAL TREATMENT OF IMPACTED LABOUR.

SIR,—The advice given by Mr. Lawson Tait is shortly this: when the country practitioner (for this gentleman is especially singled out) has failed to deliver with forceps or by turning, he is at once to perform Cæsarean section and amputate the uterus. It is also suggested he should adopt the same course in cases of placenta prævia, and this in spite of the diminishing mortality attending this condition. Has Mr. Tait pictured the scene to himself—the small room, the low and insecure bedstead, the trivial light of one or two inferior candles, etc.? Consent having been obtained (about which there would certainly be trouble), the operator must either entrust the anæsthetic to some old woman or wait, most likely hours, for skilled help. In reality, I suspect the operator would be most unwise to begin until two qualified assistants had arrived as well as the anæsthetist, in spite of Dr. Beaumont's statement that the "operation appeared to be one which could be performed with an ease which was delightful," and in spite of Mr. Tait's saying "it was simpler in its performance than the application of the long forceps." The country practitioner would indeed be a fortunate man who could obtain such help as I have indicated. He is often a much worried man, and I take it is as little likely to add to his troubles by adopting Mr. Tait's advice as he is to knowingly buy a bad horse. I should like to ask Mr. Tait whether he recommended this operation to the practitioner who had perforated seven times in six years, and whether he thinks the seven mothers would now be living if that practitioner had done seven Cæsarean sections.

Mr. Tait's figures are always interesting, and sometimes appear to throw quite a new light on the matter to which they relate; for instance, it must be new to many that "the simple application of the long forceps has a mortality of 15 per cent." True, Mr. Tait quotes Ramsbotham, but he would not support any argument with such figures unless he believed in them. But is he not misleading us utterly? One naturally asks, Why go back to Ramsbotham, to the days before antiseptic midwifery, to get statistics to guide us now? I have been in busy private practice ten years doing midwifery amongst all classes, and have used my forceps whenever necessary (somewhere between 60 and 100 times), and I have not had a death, nor had I whilst resident accoucheur to the London Hospital. I believe this to be a common experience, and I could hardly believe my eyes when I read that I ought to have had a mortality of 15 per cent.

This communication is already too long, otherwise I should like to express my doubts about the accuracy of some of Mr. Tait's figures, as, for instance, in forceps cases, "the mortality of the fœtus being well known to be 1 in 7 or 8," but I must forbear for the present, and simply express my belief that any sound deduction is impossible from the figures quoted.—I am, etc.,

Dorchester. FRED. B. FISHER.

SIR,—Mr. Lawson Tait quite misses my points of criticism. So far I agree with him: I admit that in certain cases of pelvic deformity Cæsarean section may be preferable to craniotomy—even when craniotomy is quite possible, and fairly easy. What I disputed was: (1) That Porro's operation was permissible or necessary for the treatment of placenta prævia. Lomer, of Hamburg, has treated 28 cases with but 1 maternal death = 3.5 per cent. Of 190 cases treated in Germany by Braxton Hicks's method, but 9 died, 4.7 per cent. The modern use of antiseptics has revolutionised operative obstetrics since Depane, Simpson, or Ramsbotham practised midwifery. Spiegelberg estimates the mortality of Porro's operation at 54.4 per cent. Does Mr. Lawson Tait accept this also? (2) The alleged mortality of "high" forceps operations. Huguenberger and Williams's figures are of older date than last year, and are given by Davis, in the *American System of Obstetrics*, to illustrate "the indiscriminate use of forceps" in contracted pelves. Winter reports 93 cases of forceps deliveries in 632 cases of contracted pelvis, with a maternal mortality of *nil.* With antiseptic craniotomy, the average maternal mortality is 6.6 per cent. The greater the pelvic deformity, the better the statistics. Wyder has shown that, with a conjugate of three inches and a half, there was a higher death-rate than with two inches and three-quarters to three inches and a half—15 per cent., compared with 10 per cent. With diameters of two inches and one-eighth to two inches and three-quarters, the maternal mortality was *nil.* But these figures imply the use of antiseptics and some little obstetric skill, neither of which Mr. Lawson Tait cares to permit the general practitioner to have or use.—I am, etc.,

Grosvenor Street, W. A. D. LEITH NAPIER.

MISTAKES CONCERNING ECTOPIC GESTATION.

SIR,—My little book on *Ectopic Gestation* has had a most unhappy fate in having been the subject of criticisms by a large number of people who either have not read it or have read it very carelessly. An example occurred in the discussion at the British Gynæcological Society on March 26th, where Dr. Warden is reported to have said that "this case did not bear out Mr. Tait's view that ectopic pregnancy only occurred in sterile women in consequence of the loss of the ciliated epithelium of the Fallopian tubes." I have never said anything of the kind. What I have said is that it is a leading feature in the majority of cases suffering from ectopic gestation that they have been sterile altogether or have been so for some considerable time before the accident. This has been confirmed by all other writers upon the subject; but it does not follow that there are not cases in which ectopic pregnancy will follow closely upon normal pregnancies; in fact, if Dr. Warden had read my book, he would have seen that I there record the case of a woman who had one ectopic pregnancy, successfully operated upon, then a normal pregnancy, then another ectopic pregnancy, which was fatal, all in the course of a few months.—I am, etc., LAWSON TAIT.

Birmingham.

MEDICAL OFFICERS OF SCHOOLS' ASSOCIATION AND INFLUENZA.

SIR,—The annual general meeting of the Medical Officers of Schools' Association will be held on Tuesday, April 29th, at the rooms of the Medical Society, 11, Chandos Street, at 3.30 P.M. when a discussion on Influenza will be opened by the Gresham Professor of Medicine, Dr. E. Symes Thompson.

The following are the chief points which will be submitted for consideration: Is "influenza" merely catarrh in an epidemic form? Does occupation or exposure modify the access or course of the disease? How does the disease affect communities, especially schools? Is it contagious? What is the incubation period? Is segregation desirable or possible? Does one attack secure immunity? Relapses and repeated attacks; association of the disease with measles, etc.; classification; treatment.

Believing that the subject is one worthy of attention, and that it would be useful to collate the large amount of evidence which must now be in the possession of many observers, with respect specially to the points already noted, the Council of the Association desires to extend a cordial invitation to all medical men who are interested in the matter, and who may be willing to attend and to take part in the discussion.—We are, etc.,

ALDER SMITH, } Honorary
CHAS. EDWD. SHELLY, } Secretaries.

THE CASE OF TOOGOOD *v.* WILKES.

SIR,—Will you kindly allow me the permission through your columns to say how grateful I feel for the sympathy shown me by the profession in the action in which I was the defendant (Toogood *v.* Wilkes), and still more for the generous feeling which influenced so many friends and subscribers to defray the legal expenses I had incurred.

A cheque for the amount, £81 10s. 5d., has been sent me by Mr. H. J. Manning, Laverstock House, Salisbury, who has been treasurer to the fund, and whose kindness and able assistance throughout I shall never forget.

Let me hope that Section 12 of the new Lunacy Amendment Act may still be of service to any of us who may yet require to avail themselves of it. I find how growing the feeling is that, whilst we are giving a certificate "in good faith and with reasonable care" (which we have to prove and not defend, as laid down by Mr. Justice Field, and when proved we may not even get our costs), we should act wisely, until our opinions are treated as scientific and privileged, in declining to incur all the risks involved in an honest discharge of professional duty.

Let me thank you for the interest you have taken in the matter.—I am, etc.,

W. D. WILKES.

Salisbury.

COLLECTIVE INVESTIGATION ON CANCER.

SIR,—In response to the request contained in my letter published in the issue of your JOURNAL for February 15th—that those members of our profession, who are able to do so, should forward me, before April 30th next, accounts of unpublished cases of cancer in which, after a lapse of at least five years from the destruction or extirpation of the growths, there has been no return of the disease—I beg to acknowledge the receipt of notes from Mr. Roper, of Exeter, and from Mr. Wagstaffe, of Sevenoaks. The latter gentleman, recognising the importance of this inquiry, suggests that another reminder should be given as to the date mentioned for the limit, which is drawing near, and I therefore trust you will kindly insert this letter in your next issue.—I am, etc.,

CHARLES E. JENNINGS, F.R.C.S.

Upper Brook Street.

MEDICO-LEGAL AND MEDICO-ETHICAL.

VISITS OF COURTESY.

Mr. CHARLES T. QUILLER (Clapham) writes: In the JOURNAL of April 5th, the case recorded by "M.R.C.S." is said to afford a "practical illustration of the irritating annoyance not unlikely to arise from the omission to pay, with as little delay as may be, the customary visit of courtesy to the legitimate neighbouring practitioners," and you advise him to fulfil the "recognised intra-professional obligation which devolves upon members (young and old alike) of the faculty on commencing or changing the locality of practice." My object in writing is to hint that occasionally the older, well-established practitioners may, and do, forget their part of the "intra-professional obligation," and by so doing may in some cases give occasion to the newcomer to feel aggrieved, and perhaps to attempt unworthy reprisals. Starting in this neighbourhood (in which I had been a resident for some years) about eighteen months ago, I at once called on some of my professional neighbours, and selected six, who from their standing might well be regarded as representative; of this number only two thought it necessary to acknowledge my call; one of the others, I may add, was at the time attending an aged relative in my house, and visited her many times after my call, but without any attempt at leaving a card or making inquiry. My experience, therefore, leads me to think that a large proportion of already established practitioners either wilfully ignore, or are ignorant of, those laws of medical etiquette, not to say common courtesy, which we, the younger practitioners, suppose are so generally understood. I know that my experience is not singular, and I also know of no *a priori* reason why my calls should not have been returned except that I started on my own account, and did not succeed to a practice by death, purchase, or partnership.

*** Regretfully as we are constrained, in view of many like plaints, to admit the justice of our correspondent's allegation that the elder practitioners too often omit "to fulfil the recognised intra-professional obligation" to return the newcomer's visit of courtesy, and with promptitude, we are, nevertheless, unable to advance any legitimate excuse for such omissions other than that they must be ignorant of the rules of medical if not of social etiquette. Be that as it may, we hold such disregard of the amenities of life to be especially inexcusable from a professional point of view, inasmuch as, while tending more or less to compromise the intelligence of the defaulting senior, it can scarcely fail to engender an aggrieved and correspondingly indifferent feeling in the young practitioner.

NO CURE, NO PAY.

DR. W. SYKES (Mexborough) writes: Either the degree of M.D. is in very unworthy hands, or the Medical Defence Association ought to intervene. I append a correct copy [names omitted] of a document shown me by a working man to get my advice thereon. On the other side was an unstamped receipt for £2. "——, Sheffield. Received of Mr. G. B—— the sum of 10s. for medicine, lotion, ointment, etc. for abscess appliance for his infant F. B——, to be applied at once. The absolute cure to be performed for the sum of £3; the present 10s. to be on account. If the cure is not perfected to satisfaction, the whole of the money to be returned.

March 19, 1890. F. G. G——, M.D., etc., etc."

*** We cannot find F. G. G.'s name in the *Medical Register* for 1890.

FEES TO SUBSTITUTES.

SUBSCRIBER asks how he should act under the following circumstances: I am requested to call and see the patient of another practitioner, who is a stranger to me, the former having suddenly, in the course of an illness, developed alarming symptoms, and the latter living too far away to be fetched at a moment's notice. Should I attend in the absence of the practitioner in charge of the case, and if so should I, if offered, accept remuneration for my services, or in the absence of any acknowledgment claim a fee for the same? Supposing the case to have been one of accident requiring immediate treatment and involving the use of dressings or splints, should I act and also claim remuneration?

*** Subject to any mutual arrangement that may be entered into between the respective practitioners and the family in question, our correspondent's course of action in the above case should be governed by the following rules: "When a practitioner is called to an urgent case, either of sudden or other illness, accident, or injury, in a family usually attended by another, he should (unless his further attendance in consultation be desired), when the emergency is provided for, or on the arrival of the attendant in ordinary, resign the case to the latter; but he is entitled to charge the family for his services."

"Whenever a patient, whose usual medical adviser resides at a distance, sends for a practitioner residing near, the latter should adhere to the preceding rule, as far as circumstances admit."

A SUPPLANTER.

DR. A. has under his care Mr. X. on several occasions in 1886 for head symptoms. In May, 1886, he advises wet cupping, and takes with him Mr. B., a surgical colleague, to perform the operation, the choice of surgeon being Dr. A.'s. Mr. B. knows Mr. X. socially, but has never attended him or any member of his family professionally before. Mr. X. is again under Dr. A.'s care in 1888. On April 10th, 1890, Dr. A. accidentally hears that Mr. X., who has been ill some weeks with hemiplegia, is under the care of Mr. B., who, he finds, also attended him some eighteen months ago. Dr. A. writes to Mr. B. complaining that he should take as his own patient one who had been introduced to him professionally by Dr. A. (the introduction and the selection as a surgeon being entirely the act of Dr. A.) without in any way communicating with Dr. A. Mr. B. replies, admitting the facts as stated above, but denying that he is guilty of having acted unprofessionally towards Dr. A.

Was Mr. B.'s action in taking charge of the patient without any communication with Dr. A. strictly correct?

*** Although, on referring to the *Ethical Code*, we fail to find any rule which has an absolute and direct bearing on the specific point submitted by our correspondent, there are unquestionably several which have an implied relation thereto, and should have constituted the principle of action in the case in question. But even were it otherwise, there cannot, we think, be any reasonable doubt that Mr. B., in accepting attendance on Mr. X., under the above-specified and special circumstances, morally failed to do unto Dr. A. as he himself would have wished and expected to be done by.

ACCIDENTAL REFRACTURE OF FEMUR DURING MANIPULATION.

MEMBER.—The question is, was the method of treatment adopted for the fracture in question the usual and proper treatment for a fracture of the kind? If so, and if proper precautions were taken when working the limb, and a

want of skill cannot be proved, we do not think the patient has any right of action for negligence. The charges for attendance consequent on the second fracture should be sent in, to prevent any admission of negligence being presumed by the patient.

In reply to the second question, assuming that the patient was living with his father, the latter (in the absence of special circumstances) is liable.

PARTNERSHIP ACCOUNTS.

F. H. M.—A firm of which one partner is registered as an apothecary and surgeon, and the other as a surgeon only, may recover upon a joint claim for attendances and medicines supplied in both capacities. *Primâ facie*, there is nothing on the account enclosed calling for remark.

THE APOTHECARIES' SOCIETY AND IRREGULAR PRACTICE.

A.C.—The Society of Apothecaries does undertake the prosecution of unqualified practitioners at its own expense, and the name of the informant need not necessarily appear, provided that evidence of the alleged illegal practice is forthcoming from other sources. Application should in the first instance be made to J. R. Upton, Esq., Clerk to the Society of Apothecaries, Blackfriars, London.

F. W. (Yorks).—The name of the person referred to as advertising a quack remedy does not appear in the *Medical Register*; if, however, it can be ascertained that he is qualified, it might be well to bring the matter before the General Medical Council. If he is unqualified and it can be shown that he practises as an apothecary, reference should be made to the Society of Apothecaries, Blackfriars, London.

NAVAL AND MILITARY MEDICAL SERVICES.

CHANGES OF STATION, ETC.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

		From		To
Brigade-Surgeon	R. P. Ferguson	Shorncliffe	...	Bombay.
,,	W. W. Tomlinson	Malta	...	Shorncliffe.
Surgeon-Major	G. Hare	Bengal	...	Enniskillen.
,,	A. H. Anthonisz, M.B.	—	...	Aldershot.
,,	W. P. Bridges	Bombay	...	Portsmouth.
,,	E. A. Mapleton, M.D.	Bengal	...	Hounslow.
,,	J. Tidbury, M.D.	Devonport	...	Malta.
Surgeon	W. J. Macnamara, M.D.	Woolwich	...	Sierra Leone.
,,	J. Harran	,,	...	Bengal.
,,	R. W. E. H. Nicholson	Bombay	...	Cork.
,,	L. H. Truefitt, M.B.	Aldershot	...	Shoeburyness.
,,	C. R. Bartlett	Netley	...	Bombay.
,,	D. Semple, M.D.	Bengal	...	Edinburgh.
,,	G. Nelis	,,	...	,,
,,	W. H. Lendrum, M.D.	,,	..	Woolwich.
,,	C. S. Robinson	Shorncliffe	...	Bengal.
,,	R. H. Clement	Shoeburyness	...	,,
,,	A. Stables, M.B.	Clonmel	...	Ennis.
,,	A. De C. Scanlan	Dover	...	Shorncliffe.
,,	C. W. Reilly	Salford	...	Macclesfield.
,,	R. Crofts	—	...	Sierra Leone.

Surgeons M. L. HUGHES, W. T. MOULD, C. A. STONE, M.D., H. J. WALLER, M.B., H. E. WINTER, S. G. MOORES, and L. MAY, appointed February 1st, 1890, are posted to Aldershot. Surgeon A. W. BEWLEY, appointed at the same time, has been sent to Belfast.

THE NAVY.

THE following appointments have been made at the Admiralty:—WILLIAM G. C. SMITH, M.B., Surgeon to the *Orlando*, April 10th; JOHN HUNTER, M.B., Surgeon to the *Asia*, April 10th; TIMOTHY J. CROWLEY, M.D., Surgeon to the *Banterer*, April 10th; LAWRENCE BIDWELL, Surgeon to the *Boscawen*, April 10th; ALFRED H. L. COX, Surgeon to Chatham Hospital, temporarily, April 10th; EDGAR R. DIMSEY, Surgeon to Plymouth Hospital, April 10th; JOSEPH R. M'DONNELL, M.D., Surgeon to the *Impregnable*, April 10th.

THE MEDICAL STAFF.

BRIGADE-SURGEON ROBERT WATERS, M.D., has been placed on retired pay. His commissions are thus dated: Assistant Surgeon, January 19th, 1860; Surgeon, November 24th, 1869; Surgeon-Major, March 1st, 1873; and Brigade-Surgeon, June 15th, 1885. Brigade-Surgeon Waters, says Hart's *Army List*, served in the Gambia during the outbreak of cholera in 1869; was mentioned in despatches by the governor, and for his services during the epidemic received the thanks of the Colonial Government and of the Secretary of State for the Colonies, and was promoted Staff-Surgeon (Surgeon-Major) "in consideration of his highly meritorious service." Served in the Ashanti war of 1873-4 as personal Assistant to the Principal Medical Officer, and was present at the battle of Amoaful, capture and destruction of Becquah, battle of Ordahsu and capture of Coomassie (mentioned in despatches, medal with clasp). Served with the Nile Expedition in 1884-85 as Sanitary Officer, and was for some time in charge of field hospitals at Korti and Abu Fatmeh, and was also for some time officiating Principal Medical Officer on the Lines of Communication (mentioned in despatches, promoted Brigade-Surgeon, medal with clasp, and Khedive's star).

Surgeon G. H. K. M. O'CALLAGHAN, who entered the service March 6th, 1880, has now retired on a gratuity. He was in the Zulu war of 1879, first with General Newdigate's division, and afterwards with the field hospital of Brigadier-General Wood's force (medal with clasp). He also served in the Burmese campaign in 1885-86 (medal with clasp).

Brigade-Surgeon C. S. CLOSE has vacated the post of Senior Medical Officer at Chester.

Surgeon-Major R. H. QUILL, M.B., is brought on the strength of the British forces in the Bombay command from March 10th, the date of his arrival at Bombay.

Surgeon J. C. CULLING, serving in the Bombay command, is transferred from general duty in the Mhow district to the medical charge of the station hospital at Indore, *vice* Surgeon-Major W. M. James, whose tour of service has expired.

The following officers arrived at Portsmouth on April 14th from India in the *Malabar*: Brigade-Surgeon A. ALLAN, M.D.; Surgeon-Major D. C. G. BOURNS, M.B.; Majors G. D. M. LEAKE, W. E. SAUNDERS; Surgeons J. RIORDAN, M.B., H. J. FLETCHER, M.B., and G. CREE.

INDIAN MEDICAL SERVICE.

THE services of Surgeon R. R. WEIR, M.B., Bengal Establishment, are replaced at the disposal of the Home Department from the date on which he relinquishes charge of his duties as Civil Surgeon of Sibi.

Surgeon-Major M. H. SMITH, Madras Establishment, Medical Officer 3rd Light Infantry, has obtained leave of absence from January 25th.

Surgeon C. T. HUDSON, Bombay Establishment, is directed to officiate in medical charge of the 4th Cavalry (Poona Horse), *vice* Surgeon-Major A. K. Stewart, M.D., proceeding on leave.

Surgeon C. M. MOORE, Bombay Establishment, is ordered to officiate in medical charge of the 23rd Regiment (2nd Battalion Rifle Regiment) Native Infantry, *vice* Surgeon B. C. Maitland, proceeding on leave.

Deputy Surgeon-General J. RICHARDSON, Bengal Establishment, is appointed Inspector-General of Civil Hospitals in the North-West Provinces and Oudh, *vice* W. R. Rice, appointed Surgeon-General with the Government of India.

Brigade-Surgeon C. F. OLDHAM, Bengal Establishment, has retired from the service, which he entered as Assistant-Surgeon July 22nd, 1859, attaining the rank of Brigade-Surgeon October 24th, 1887. He served with the 1st Goorkha in the operations in the Malay Peninsula in 1875-76 (medal with clasp), and with the same regiment in the Afghan War in 1878-79 (medal).

Surgeon-Major J. FFRENCH-MULLEN, M.D., Bengal Establishment, first Resident Surgeon, Presidency General Hospital, is appointed to be Civil Surgeon of Nuddea, and to act as Civil Surgeon of Rajshahye during the absence on furlough of Surgeon-Major L. Cameron, M.D.

Surgeon J. CLARKE, M.D., Bengal Establishment, second Resident Surgeon, Presidency General Hospital, is appointed to be first Resident Surgeon of that institution, *vice* Surgeon-Major J. Ffrench-Mullen.

Surgeon J. H. T. WALSH, Bengal Establishment, officiating Civil Surgeon of Pooree, is appointed to be second Resident Surgeon, Presidency General Hospital, *vice* Surgeon J. Clarke.

Surgeon-Major R. D. MURRAY, M.B., Bengal Establishment, officiating Civil Surgeon of Gya, is confirmed in that appointment.

Surgeon G. JAMESON, Bengal Establishment, Resident Surgeon, Medical College Hospital, is appointed to be Civil Surgeon, Tipperah, and to act as Civil Surgeon of Pooree, during the absence on furlough of Surgeon-Major B. Gupta.

Surgeon J. R. ADIE, Bengal Establishment, Resident Surgeon, Eden Hospital, Calcutta, is appointed to be Resident Surgeon, Medical College Hospital, *vice* Surgeon G. Jameson.

THE VOLUNTEERS.

MR. AUGUSTUS FREDERIC CLAY is appointed Acting Surgeon to the 1st Worcestershire Artillery.

Acting Surgeon STEPHEN SKINNER, M.B., 1st Gloucestershire Artillery, has resigned his appointment, which was dated October 8th, 1887.

Acting Surgeon HUGH WEBB, of the 13th Middlesex (Queen's Westminsters), has also resigned his appointment, which dated from January 30th, 1886.

Surgeon THOMAS WILLIAM RICHARDSON, from the 1st Volunteer Battalion Norfolk Regiment (late the 1st Norfolk), is appointed Surgeon to the Norwich Division Volunteer Medical Staff. Mr. WALTER SCOTT WARLTERS is appointed Acting Surgeon, and Mr. FREDERICK MILLS Quartermaster, to the same Division.

THE REFUSAL.

No. 29 says: Mr. Stanhope's refusal to entertain the recommendations of the Committee, while probably meant as a blow, is really the best thing which could have happened. We now have official recognition of our grievances as just ones, and an absolute refusal to in any way meet them. We must make a new start by demanding as one man plain combatant titles, which, with the help of our civil *confrères*, we must obtain.

Organisation of the schools is the key of the position. Some years ago I remember a paper posted on the notice board of my school: "Seventeen Reasons why I Shouldn't Join the Indian Medical Service." Let us post up more, "Why we should not Join the Medical Staff." I would also propose that a retired medical officer should visit the schools and lecture on the subject. Money will be wanted, and I hope you will put me down for £1.

"MILITARY INSTINCTS."

ONE WHO HAS SEEN MUCH SERVICE writes: I have read with pleasure the excerpts from the evidence taken by Lord Camperdown's Committee, published in the JOURNAL of April 5th. There the Duke of Cambridge has been fairly run to earth. He can adduce no reason for refusing military rank and title to the medical officers of the army. All he can say is that his "military instincts [? prejudices] cannot carry it." The Horse Guards clique, including Generals Wolseley, Buller, and Harman, of course follow lead; whilst General Sir Donald Stewart, late Commander-in-Chief of the Army of India, would give a military rank and title to the medical officers, pure and simple, just like the Royal Engineers, and also "a place in the *Army List*, which would be extremely popular with them, and do no harm to anyone else."

I have always thought the position advocated by Sir Donald Stewart the proper one, and that which the medical officers, backed up by the civil profession, should have all along demanded, and not one which by any possibility could be interpreted as in any respect inferior to that of any other body of military officers, such as that indicated by the compound title would, I fear, be too likely to convey.

If it is to be a question of pampering Horse Guards prejudices and administrative imbecility at the further expense of medical and military efficien-

and national disaster, then, I think, the sooner it is settled once and for ever against that effete institution the better.

It is not the so-called "military instincts," or rather, the unreasoning and stupid prejudices of one official, however highly placed or connected, or of any other subordinate and inspired functionaries, that ought to be regarded, but hard facts, reason, common sense, past experience and knowledge, not only of what our own army needs to render it as efficient as possible, but what other armies—for example, those of France, Italy, Switzerland, and the United States—have found it necessary to do towards this end; and all these have found it necessary to accord to their medical officers military rank, title, and command.

Hitherto the attitude, so to speak, of my dear old comrades the medical officers of the army, has, I regret to think, been an absurdly humble one. Had they as a body, and the civil profession with them, asserted themselves much more than they have done, I cannot but think that their position to-day would have been greatly superior to what it is. In future I do hope that there will be less of "bated breath and whispering humbleness" in their struggle for a more tolerable existence and a higher usefulness.

No profession has a better right to hold up its head manfully and self-respectingly, or to speak right out and demand a position second to no other class of officers in the army.

THE COCKADE.

COCKADE.—We cannot say whether it is customary or correct for retired volunteer officers to continue to use the cockade; but we know of nothing to the contrary. These things are mainly matters of taste; the majority of volunteer officers retiring as captains or surgeons would probably drop both the cockade and the military title.

BARRACK IMPROVEMENT.

OBSERVER remarks: Concerning the expenditure of four millions on barrack accommodation we have heard nothing as to whether the improvement of hospitals is included. If many of our barracks are bad, the hospitals at the same stations are usually worse. It is a matter to be kept in mind.

*** As effete barracks and hospitals are, in most instances, in close juxtaposition, it stands to reason that the rebuilding of the one involves that of the other.

INDIA PAY.

A CORRESPONDENT suggests that the candidates who lately came forward for the Medical Staff, in the belief that Mr. Stanhope could hardly set aside the recommendations of his own Commission, should petition for due recognition of pay for rank in India. If refused, it would open the eyes of the schools. If candidates really understood the small amount of pay they receive in India few of them would go there.

LEWIS MEMORIAL FUND.

WE are requested by Sir Thomas Crawford to invite the attention of the subscribers to the Lewis Memorial Fund to the statement of accounts, which will be found in our advertising columns.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF GLASGOW.—The following gentlemen have passed the first professional examination for the degrees of M.B. and C.M.:—

W. T. Ainsworth, T. Armstrong, E. Bidie, J. E. Bow, F. Brown, W. Campbell, R. J. Carroll, T. Colvin, W. Copland, W. J. Couper, A. Crawford, J. S. Davies, M.A.; P. F. Dewar, W. W. Don, J. Donald, G. A. Eadie, J. D. Finlay, H. N. Gardiner, T. Hamilton, J. B. Hartley, J. Harvie, J. Hunter, M.A., B.Sc.; H. E. Jones, J. Lang, J. B. Littlejohn, H. C. Marr, P. Marshall, J. B. Millar, J. R. M'C. Miller, M.A.; J. Milroy, E. J. Morris, J. Morrison, J. H. MacArthur, W. M'Call, G. M'Feat, J. M. M'Lauchlan, D. M'K. MacRae, J. A. Naismith, J. Pearson, A. Ramsey, A. Robertson, M.A.; H. M. Robertson, H. Robertson, J. A. Robertson, G. G. Russell, M. W. Symington, R. Tennent, J. Thomson, J. P. Thomson, P. Thomson, A. Webster, T. Wright.

The following have passed the second professional examination:—

J. Aitken, J. A. Aitken, P. Aitken, E. Beck, D. F. Brown, W. L. Brown, G. B. Buchanan, J. W. M. Buick, J. D. Davies, D. S. Dewar, R. S. Dickson, J. Don, M.A.; W. Duncan, D. W. Girvan, A. Graham, P. N. Grant, J. A. Harrison, W. B. Hastings, Æ. Henderson, N. S. Jeffrey, O. G. Jones, N. Keith, H. Lawrie, J. Marr, R. J. Marshall, J. K. Muir, W. C. Murray, A. C. M'Arthur, D. D. Macdonald, D. N. Macfarlane, J. A. Macintosh, A. J. M'Kechnie, W. J. M'Kendrick, G. M'Lauchlan, P. G. M'Reddie, H. J. Rankin, J. Robertson, R. C. Robertson, M.A.; W. D. Rose, A. T. Scott, M.A.; W. N. Sime, A. R. Smith, P. M. Smyth, D. R. T. Strong, G. N. Turner, C. F. Wylie.

The following have passed the third professional examination, including, in the cases marked with asterisks, the subject of Pathology:—

C. A. Alexander, J. G. Bain*, J. F. Barr, B.Sc.; T. Berry, D. Brown, D. Christie, A. Cluckie*, C. E. Cochrane, W. Colvin, D. Coutts*, E. Davies, R. G. Dick, H. C. Donald, J. G. Duncanson, W. B. O. Ferguson, R. Hamilton, D. Harries, W. S. Harrison, J. J. Hood, F. W. E. Hutchinson, J. Johnson, J. M. M. Kerr, R. R. Kilpatrick*, G. Lamb*, C. Lavery, A. H. Lucas, C. B. Lucas, R. Moir, S. Macbirnie, R. J. Mackay, P. M'Ritchie*, J. H. Naismith, W. A. Neish*, R. J. Nevin*, C. O'Neill, W. Park (Rutherglen), J. G. Ronald, R. H. Rothery*, A. G. Sanders, R. Sharp*, J. Stirling, M.A.*; C. Symington, G. M. E. Thorp*, D. Watson, R. Wilson*.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in Anatomy and Physiology at a meeting of the Examiners on April 9th, namely:

E. Miskin, E. M. Hainworth, C. L. B. Stares, A. R. O. Milton, and W. G. Sutcliffe, of St. Thomas's Hospital; R. C. Bennett, J. Jones, F. Deas, F. W. Wesley, and R. J. Wait, of University College; K. Lawson, W. A. Dixon-Whiteman, W. H. Johnson, and A. E. Bodington, of Middlesex Hospital; J. A. Morgan, N. R. J. Rainier, and J. W. Willson, of Charing Cross Hospital; J. H. Collyns and J. J. Grace, of St. Bartholomew's Hospital; F. Hazell, of Guy's Hospital; W. Turner, of King's College; E. L. Payne, of St. Mary's Hospital; and A. J. Temperley, of London Hospital.

Passed in Anatomy only.

A. A. Rostant and R. F. Symons, of St. Thomas's Hospital; M. C. O'Brien, of St. Mary's Hospital; W. E. Collier and S. E. Gill, of St. Bartholomew's Hospital; W. C. C. Park, of Guy's Hospital; and C. H. Panting, of London Hospital.

Passed in Physiology only.

E. W. Cross, of St. Bartholomew's Hospital.

Passed in Anatomy and Physiology on April 10th.

M. Randell, M. J. Williams, and H. S. Beadles, of University College; C. W. Curtis and H. C. Thomson, of Middlesex Hospital; J. L. Morton, C. M. Rhodes, and A. J. Ortlepp, of St. Mary's Hospital; H. C. French and A. R. MacGregor, of King's College; S. F. St. D. Green, F. E. Greenwood, and P. A. Bradshaw-Isherwood, of St. Bartholomew's Hospital; J. L. Prain, G. J. Arnold, and J. W. Hewett, of St. Thomas's Hospital; S. L. J. Steggal, of Charing Cross Hospital; H. G. Felkin and A. H. Conder, of London Hospital; and C. G. Godfrey, of Melbourne University.

Passed in Anatomy only.

J. C. S. Matthews and R. K. Bayley, of St. Mary's Hospital; H. C. Roberts, J. G. Schewrer, and R. M. Russell, of London Hospital; E. S. Humphry and E. Kennington, of St. Bartholomew's Hospital.

Passed in Physiology only.

A. E. Ridsdale, of St. Thomas's Hospital; E. Clowes, of Charing Cross Hospital; and F. A. Stevens, of King's College.

Passed in Anatomy and Physiology on April 11th.

R. H. Ritchie, of Guy's Hospital; C. G. Spencer and A. W. Kirkpatrick-Picard, of University College; E. S. Cardell, L. W. Rolleston, and A. H. Buck, of St. Bartholomew's Hospital; J. S. Collier, of St. Mary's Hospital; W. A. Pinninger and A. Strange, of London Hospital; H. H. Woods, of Charing Cross Hospital.

Passed in Anatomy only.

H. M. Moore, of St. Thomas's Hospital; O. C. Maurice and H. B. Ellerton, of St. Mary's Hospital; E. A. Rogers, of King's College; and F. W. Rock, of St. Bartholomew's Hospital.

Passed in Physiology only.

E. B. Barber and C. S. Simpson, of London Hospital; W. R. Barrett, of Charing Cross Hospital; P. McK. C. Wilmot, of Guy's Hospital; and B. A. Castellote, of Middlesex Hospital.

ROYAL COLLEGE OF SURGEONS.—At the last meeting of the Council of the Royal College of Surgeons, Messrs. W. M. Crowfoot and F. W. Jowers were elected by ballot to the Fellowship of the College under Section 5 of the Charter of the 15th Victoria, applicable to Members of the College of twenty years' standing. Mr. Willett moved, by permission of the Council: "That the whole question of the instruction of students in ophthalmic surgery, and of the manner in which the subject should be tested, certified, or otherwise approved, be referred to the Court of Examiners to consider and report thereon to the Council."

ROYAL COLLEGE OF SURGEONS IN IRELAND: BARKER ANATOMICAL PRIZE.—The President and Council of the College give notice that two prizes for the years 1889 and 1890, each of the value of twenty guineas, will be competed for on Tuesday, July 1st. These prizes are open to all medical students, and will be awarded for the best dissections, superficial and deep, of (1) the dorsum of the foot, and (2) the popliteal space, subject to conditions which may be obtained on application to the Curator.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, April 14th.

Vaccination Returns.—Mr. MATTHEWS, in reply to Mr. BRADLAUGH, said the return of persons imprisoned for non-compliance with the Vaccination Acts was by inadvertence incomplete; the return would be supplemented with the missing particulars at the earliest possible date.

English Practitioners in Switzerland.—The House went into Committee of Supply on the Civil Service Estimates. On the vote to complete the sum of £407,909 for Diplomatic and Consular Services, Dr. FARQUHARSON asked the Under-Secretary whether there was any likelihood of a relaxation of the extremely inconvenient regulations restraining British medical men from practising in Switzerland.—Sir J. FERGUSSON said it was no doubt a hardship on our fellow-countrymen in Switzerland that they could not always avail themselves of the services of British medical men, but the medical profession was a close one in all European countries. In Switzerland Her Majesty's Government had

been unable to come to satisfactory terms with the Swiss authorities, mainly owing to there being no equivalent to be given to the Swiss in return for the relaxation of the objectionable regulations. An arrangement had, however, been come to in favour of British medical men regularly living in Switzerland.—Mr. DIXON-HARTLAND said that last year an English medical man was fined £5 for practising in the Engadine.—Sir J. FERGUSSON said this gentleman was not one of those in whose favour the relaxation had been made.—Mr. LABOUCHERE thought the Swiss authorities were quite right. How were the Swiss to know whether an alleged British medical man was really qualified or not? Why should not an English doctor who went abroad be required to show to some authority there that he knew something of his profession?

Tuesday, April 15th.

Vivisection.—Sir W. PLOWDEN asked the Home Secretary whether his attention had been called to a letter in the *Scottish Leader* for January 27th, 1890, containing allegations of cruelty against Professor Rutherford in experimenting upon a living dog at the Edinburgh Medical Schools, which would involve infringement of the Act of Parliament, 39 and 40 Vict., cap. 77; whether Professor Rutherford had reported these experiments to the inspector, or inquiry had been made by the inspector respecting them.—Mr. MATTHEWS said his attention had been called to the letter in question. The only allegation in that letter which called for inquiry on his part was that the dog was not killed after the lecture, but kept for other purposes. The inspector inquired into this, and reported to him that that no dogs or other animals used by Professor Rutherford under Certificate C in illustration of his lectures had been allowed to recover from the full effect of the anæsthetic before being killed. An operator under Certificate C was not required to furnish reports of his experiments. He was not, therefore, able to lay particulars upon the table of the House. The experiments were under Certificate C, which was signed by the President of the Royal College of Physicians, Edinburgh, and it did not release the holder from the provisions of the Act referred to. Such certificate ran with the licence, and continued valid as long as the licence was renewed. The certificate in question was granted in the year 1882.

OBITUARY.

EDWIN HUMBY, M.D.St.And., L.R.C.P.Lond.

DR. EDWIN HUMBY, who died on March 27th, at 83, Hamilton Terrace, was a very well known and most respected medical practitioner. His death will be lamented not only by the members of his own family, but also by a very wide circle of medical and other friends.

His life was a prosperous and uneventful one, and one therefore affording but little material for the biographer. He was the third and youngest son of the late Dr. William Humby, of 69, Upper Norton Street, Marylebone, and was born at that address on May 9th, 1820. He was educated first at a private school at Hammersmith, and subsequently at King's College. In due course he became a student at St. George's Hospital, where he was a contemporary and friend of Dr. Robert Barnes, and of Mr. Mould, of Onslow Crescent. He completed his medical training in Paris, and as house-surgeon to the General Dispensary, Marylebone Road. He commenced practice in 1844, in Warwick Road, Maida Hill, but very shortly afterwards, being taken into partnership by the late Dr. York, he removed to Windsor Terrace, where he lived down to 1860, when he migrated to Hamilton Terrace. He became a Licentiate of the Society of Apothecaries in 1841, a Member of the Royal College of Surgeons of England in 1822, and M.D. of the University of St. Andrew's in 1851, and a Licentiate of the Royal College of Physicians of London in 1868. He was also a Fellow of the Royal Medical and Chirurgical Society, and a member of the Pathological Society.

Dr. Humby was a handsome man of medium stature and of courteous and engaging manner. He was a well informed practitioner, who thoroughly understood his duty and did it. He had artistic tastes and wide sympathies, made many friends, and secured the respect andconfidence of all (and they were many) who placed themselves under his medical care. Among his many friends, who were also his patients, may be mentioned the late Sir Edwin Landseer, from whom he received many proofs of well known engravings of his work, which it is needless to say were greatly prized.

Dr. Humby enjoyed excellent health down to a year or two ago, when he began to suffer from general muscular weakness, which slowly increased upon him, until, within the last few months, he found himself compelled to retire from practice, in the full hope of being able to enjoy for some few yeras to come the rest he had so fully earned. Unfortunately, however, he contracted influenza, which became complicated with bronchitis—a condition of things with which his already enfeebled form was unable to cope. His illness was unattended with pain, and his end was peaceful.

The burial service was performed in St. Martin's Church, Hamilton Terrace, and he was interred at Paddington Cemetery, Willesden, on March 31st. He was twice married, and leaves a widow and a daughter to mourn his loss.

CHARLES EDMOND LISTER, B.A.Camp., L.K.Q.C.P., L.R.C.S.I.

MR. CHARLES EDMOND LISTER was the younger son of the lat John Lister, M.P., J.P., of Shibden Hall, Halifax. He entere Caius College, Cambridge; took the degree of B.A. in 1870 (Natura Science Tripos); and afterwards, with a view of following hi father's profession, he became a student at St. George's Hospital and subsequently at the Liverpool Royal Infirmary, of which insti tution he was appointed house-surgeon. He also attended lecture at St. Bartholomew's Hospital, and qualified as L.K.Q.C.P.I., L.M L.R.C.S.I., and M.R.C.S.Eng.

In the pursuit of his favourite studies—ornithology and ento mology, to which he had been devoted from boyhood—Mr. Liste visited the West Indies, and made three voyages to the Uppe Amazon, bringing home with him on each occasion numerou valuable specimens of the fauna of those countries. He presente the University Museum of Cambridge with a unique collection o West Indian birds, and spent considerable time and pains in clas sifying and rearranging the ornithological section of the loca museum at Halifax.

Mr. Lister left England last April with the intention of visitin Bolivia, but in the malarious district above the falls of the Madeir River he was attacked by fever, which unfortunately terminate fatally on November 6th, two hours before he should have reache his journey's goal. Mr. Lister was also a great lover of manl sports, and his upright and sterling character had endeared him t a wide circle of friends.

W. H. WALKER, M.R.C.S., L.S.A.

WITH the death of Mr. W. H. Walker has passed away one of th old school of country practitioners. He received his medical edu cation at the London Hospital, and settled in the country villag of Bugbrooke, Northamptonshire, nearly half a century ago. Fo forty-five years he held the appointment of medical officer to th guardians in his district, and only retired two years ago whe advancing years made the duties too arduous for him. He was a indefatigable member of the British Medical Association, and wa seldom absent from the annual meetings of the South Midlan Branch, to which he belonged. He had been in failing health o account of his advanced age for some years, and died at the ag of 76 years.

WILLIAM POLLARD, F.R.C.S.Eng., L.S.A.

ON March 29th, at his residence, Southlands, Torquay, ther passed away, in his 71st year, William Pollard, F.R.C.S., a forme president of the Western Branch of the British Medical Associa tion, deeply regretted alike by his medical brethren and hi patients.

Born in the year 1819, of an old Devonshire family, a descend ant of Sir Hugh Pollard, one of the purchasers of the well know Torre Abbey at the dissolution of the monasteries, he was nephew of the late Mr. M. W. Pollard, a former medical practi tioner at Torquay, with whom he was a pupil. His uncle bein also a master of foxhounds, William Pollard, in his younger days was very well known in the hunting field.

After receiving a liberal education, and serving his apprentice ship to his uncle, he proceeded, in October, 1841, to St. Bartholo mew's Hospital, and soon became well known and respected b both staff and students, for his honourable character and assidu ous work, obtaining one of the anatomical prizes at the end of hi first session. Passing the Membership examination of the Colleg of Surgeons in April, 1843, he in the following October commence a six months' clinical clerkship under the late Sir George Burrows Bart., who ever after held him in great esteem. His fellow clerk were the late lamented William Kirkes, M.D., subsequentl Physician to St. Bartholomew's; the equally lamented Charle Manners Smith, Surgeon-General on the Bengal Establishment and the writer, who, as the sole survivor, can testify to the warn mutual regard that existed for so many years between all thos thus closely associated.

Leaving St. Bartholomew's in 1844, Pollard went to Paris, an after studying there, settled in Torquay, where he practised fo nearly fifty years, respected and beloved both socially and pro fessionally. Honourable and upright, for it was impossible to hi nature to be otherwise, the friend alike of rich and poor, he live a life of great usefulness and unselfish work, and his memory wil be long held dear by those who knew him best.

He was for many years Honorary Surgeon to the Torbay Infirm ary, to the Western Hospital for Consumption, and the Erit

Home for Ladies. He was also at one time Officer of Health for Tormoham, where he did good service during an epidemic of cholera. To the poor or his professional brethren and their families he was ever ready to afford his skilful help in time of need, and not seldom were his services sought by his brethren, who best knew their value.

The correspondent to whom we are indebted for the above facts, whose knowledge of the deceased extended over half a century, bears testimony to his conscientious work as a student, his great skill and tenderness as a practitioner, and his sterling worth as a man, but above all to his true and unswerving friendship.

OTTO EUGEN KELLER, M.D.Berne, L.R.C.P.Lond., M.R.C.S.Eng.

We regret to announce the death of this young and promising physician, which took place unexpectedly on April 9th. The deceased was 30 years of age, and a native of St. Gall, Switzerland. Having come to London in the pursuance of his studies about five years ago he was induced to stay, and obtained the appointment of Resident Medical Officer at the German Hospital. There he was much esteemed for the great interest he took in his work, his skill, and great amiability of manner. After having resigned the office in the autumn of 1888, he settled in Finsbury Square. He quickly became a great favourite among his countrymen and the German community, and a successful career seemed to be almost certain to him. But though fortune smiled on him in this way, his nearest friends knew for some time that a great despondency of mind was weighing upon the young practitioner, against which he fought by all possible means without being able to overcome it. It ended in his taking a fatal dose of morphine. Several letters addressed to friends, and found on his desk after the event, left no doubt about the disarranged state of the poor sufferer's mind. It will be recollected that Dr. Keller brought some interesting cases of actinomycosis before the last meeting of the British Medical Association, and that his paper on the subject was recently published in these columns.

HOSPITAL AND DISPENSARY MANAGEMENT.

SELECT COMMITTEE ON MEDICAL CHARITY ADMINISTRATION.

Sir,—In reference to the paragraph in the Journal of April 12th, headed "The Royal Commission on Hospital Administration," and the suggestion contained in it, allow me to say that if there could be drawn up one common form of petition to Lord Sandhurst to include provincial hospitals within the scope of the inquiry, I should be happy to obtain signatures to it here; but I think it undesirable that a number of differently worded petitions should go up separately on the subject.—I am, etc.,

Bath. Henry F. A. Goodridge.

City of Dublin Hospital.—Sir John Banks, K.C.B., presided at the annual meeting of the friends of the City of Dublin Hospital. There was a large attendance. The report showed an income of £3,686, and a deficiency of £1,088. Patients to the number of 1,035 were treated in the wards during the year. The various speakers testified to the useful work done by this hospital, and to the excellence of the provision made for the accommodation of the patients.

Cork District Lunatic Asylum.—Last week there were 1,035 patients in this asylum, a number which makes it dangerously overcrowded. Dr. Woods has recommended that the governors should permit him to select some chronic, harmless, and weak-minded patients that might easily be cared for at the workhouses, and the House Committee have the matter under consideration.

One result of Prince Bismarck's retirement will, perhaps, be a notable improvement in the eyesight of his countymen. German oculists almost unanimously attribute the extraordinary prevalence of presbyopia and other defects of vision in the Fatherland to the use of the national blackletter type in school books. Prince Bismarck has always resolutely stood upon the ancient ways in this matter, and has opposed the substitution of the Roman for the Gothic character in German books. The party of typographical reform is now hopeful of succeeding in its object.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE SALE OF MILK FROM TUBERCULOUS COWS.

Dr. Sergeant, the newly-elected Medical Officer of Health for the county of Lancashire, at a meeting on April 11th of the North-Western Association of Medical Officers of Health, called attention to the state of the law with regard to tuberculosis in cows. He pointed out that while they had full power to deal with the carcasses of animals which had suffered from tuberculosis they had absolutely no power to prevent the sale of milk obtained from cows which were undoubtedly suffering from that disease. The sale of the meat from the carcasses of animals suffering from tuberculosis was, he said, comparatively a small matter, as the whole of it was cooked before it was consumed. In the case of milk, however, the greater portion of it was drunk without being cooked in any way. It had been proposed that they should have power to slaughter animals suffering from tuberculosis and compensate the owners, but he hoped that individuals who had probably in the past made great fortunes out of the diseased animals would not be able to come forward and get compensation when their animals were destroyed. Dr. Vacher said that at present a medical officer had power to seize the carcass of a tuberculous animal and apply for an order to have it destroyed. He might, however, find an animal suffering from tuberculosis of old standing and yet being milked and the milk sold to the public, but he could do nothing at all. Dr. Sergeant had induced his authority to petition the Board of Agriculture to try and get this state of things changed, and to allow of tuberculous animals being seized, and to get tuberculosis scheduled, just as other animal diseases which rendered meat injurious were now scheduled, and the Birkenhead Town Council had done the same. Dr. Kenyon observed that though the disease might exist in the lungs without affecting the udder, yet it seemed a horrible thing that cows suffering from tuberculosis should be milked in that state.

THE PUBLIC HEALTH MEDICAL SOCIETY.

A meeting of the Council of this Society was lately held at the offices, 101, Great Russell Street, Bedford Square, W.C.; Dr. Newsholme, of Brighton, in the chair. The new regulations for qualifications in sanitary science, framed by the licensing bodies to meet the requirements of the General Medical Council, together with certain communications which have passed between the latter body and the Society, were under discussion, The following gentlemen were appointed local secretaries: Dr. Caldwell Smith, for Glasgow; Dr. Maxwell Ross, for Edinburgh. Seven medical men, holding qualifications in Public Health, were elected members of the Society.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 5,550 births and 3,834 deaths were registered during the week ending Saturday, April 12th. The annual rate of mortality in these towns, which had declined from 26.6 to 19.3 per 1,000 in the five preceding weeks, rose again to 20.6 during the week under notice. The rates in the several towns ranged from 10.9 in Birkenhead, 15.3 in Portsmouth, 15.6 in Cardiff, and 15.9 in Leicester to 28.3 in Blackburn, 28.8 in Bolton, 30.5 in Halifax, and 31.5 in Manchester. In the twenty-seven provincial towns the mean death-rate was 21.8 per 1,000, and exceeded by 2.7 the rate recorded in London, which was 19.1 per 1,000. The 3,834 deaths registered during the week under notice in the twenty-eight towns included 368 which were referred to the principal zymotic diseases, against 426 and 351 in the two preceding weeks; of these, 155 resulted from whooping-cough, 87 from measles, 40 from scarlet fever, 35 from diphtheria, 29 from diarrhœa, 22 from "fever" (principally enteric), and not one from small-pox. These 368 deaths were equal to an annual rate of 2.0 per 1,000; in London the zymotic rate was 2.1, and slightly exceeded the mean rate in the twenty-seven provincial towns, among which the zymotic death-rates ranged from 0.0 in Portsmouth, 0.4 in Cardiff, and 0.5 in Birkenhead to 3.6 in Derby, 3.7 in Salford, 3.8 in Wolverhampton, and 4.1 in Bolton. Measles caused the highest proportional fatality in Derby; whooping-cough in Norwich, Bristol, Salford, Brighton, Wolverhampton, and Bolton; and "fever" in Preston. Scarlet fever showed no fatal prevalence in any of the twenty-eight towns. Of the 35 deaths from diphtheria recorded during the week under notice in these towns, 21 occurred in London, 4 in Manchester, 2 in Birmingham, and 2 in Sheffield. No fatal case of small-pox was registered during the week under notice, either in London or in any of the large provincial towns; and 5 cases of this disease were under treatment in the Metropolitan Asylums Hospitals on Saturday, April 12th. These hospitals contained 1,041 scarlet fever patients on the same date, against 1,035 and 1,043 at the end of the two preceding weeks; 79 cases were admitted during the week, against 84 in each of the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 4.5 per 1,000, and was below the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, April 12th, 839 births and 591 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had declined from 28.7 to 24.1 per 1,000 in the eight preceding weeks, further fell to 22.8 during the week under notice, but exceeded by 2.2 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Leith and Greenock, and the highest in Edinburgh and Glasgow. The 591 deaths registered in these towns during the week under notice included 96 which were referred to the principal zymotic diseases, equal to an annual rate of 3.7 per 1,000, which exceeded by 1.7 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Greenock, Edinburgh, and Glasgow. The 287 deaths registered in Glasgow included 24 from measles, 20 from whooping-cough, and 3 from diphtheria. In Edinburgh, 7 fatal cases of measles, 3 of whooping-cough, and 2 of scarlet fever were recorded. Six deaths resulted from measles in Dundee. The death-rate from diseases of the respiratory organs in these towns was equal to 4.9 per 1,000, against 4.5 in London.

HEALTH OF IRISH TOWNS.

During the week ending Saturday, April 5th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 25.3 per 1,000. The lowest rates were recorded in Dundalk and Sligo, and the highest in Belfast and Waterford. The death-rate from the principal zymotic diseases averaged 3.0 per 1,000. The 180 deaths in Dublin during the week under notice were equal to an annual death-rate of 26.6 per 1,000 (against 30.9 and 25.9 in the two preceding weeks), the rate for the same period being 16.7 in London and 23.4 in Edinburgh. These 180 deaths included 17 which resulted from the principal zymotic diseases (equal to an annual rate of 2.5 per 1,000), of which 6 were referred to measles, 5 to different forms of "fever," and 5 to whooping-cough.

DUTIES OF POOR-LAW DISTRICT MEDICAL OFFICERS.

Parish Doctor of a District asks whether it is his duty to attend a number of paupers who have lately come to reside in his district, but who belong to, and receive relief from, other parishes.

*** We should think it is, as he has probably undertaken to attend all paupers resident in his district when called on to do so by order of relieving officer or overseers.

POOR-LAW MEDICAL OFFICERS AND SUPERANNUATION ALLOWANCE.

M.D. asks whether in the case of a union medical officer applying for a pension if it is necessary to resign the appointment before doing so? also whether the votes of the guardians must be unanimous; or if the question can be decided by the majority?

*** The medical officer must resign before the question of superannuation can be properly discussed by the guardians. The majority present at the meeting, after formal notice has been given, can decide. The decision of the guardians is subject to the confirmation of the Local Government Board.

MEDICAL NEWS.

Professor Ollier, of Lyons, was elected an honorary member of the German Surgical Society at its meeting on April 10th.

The second meeting of the French Congress for the Study of Tuberculosis will be held at Paris in July, 1891.

A German contemporary speaks of Succi, the fasting man, as a "hunger virtuoso."

A return just issued shows that the number of children vaccinated during the past quarter in Leicester was only 23 out of about 1,200 born.

The New Hospital for Women will open to out-patients only after the bazaar, which begins April 29th, not 24th, as announced. The wards will be open for in-patients in June.

The grand fancy bazaar in aid of the funds of University College Hospital, to be held in the grounds of University College, will be opened by the Duchess of Fife on Thursday, June 5th, instead of June 4th, as previously announced.

On April 20th, the German Society of Psychiatry and Diseases of the Nerves will hold a ceremonial meeting in the hall of the University of Berlin, in memory of its former President, the late Professor Westphal.

At the Surgical Congress recently held at Berlin, it was annouced that the German Emperor had contributed 100,000 marks (£5,000) towards the new Langenbeck Institution, which is to be the general home of the medical societies of the Prussian capital.

Fines amounting to upwards of £21 were on Wednesday last imposed by the magistrate at the Southwark Police Court on the owner of a house near Blackfriars Road for failing to comply with the order of the sanitary authority to put the premises in proper sanitary condition.

"It's an ill wind that blows nobody good." The proverb is somewhat musty, but it has recently received a striking illustration, if it be true, as stated in a foreign medical journal, that Dr. Knorr, the discoverer and patentee of antipyrin, cleared more than £200,000 (?) during the late epidemic of influenza.

Medical charities have, by the death of Mr. Junius S. Morgan, lost a liberal contributor. Quite recently he gave the munificent donation of £10,000 to augment the failing resources of Guy's Hospital, in addition to the two sums of £5,000 contributed to the National Pension Fund for Nurses; and many other institutions shared Mr. Morgan's liberality.

We are informed that the management of the Sanatorium for Consumptives, at Görbersdorf, in Silesia, founded and conducted by the late Dr. Brehmer, has been undertaken by Dr. Felix Wolff, who was chief assistant to Professor Curschmann during his tenure of the office of director of the Hamburg General Hospital.

Literary Intelligence.—It is announced that a new medical journal, entitled *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, will shortly be published by Leopold Voss, of Hamburg. The editors, Professors H. Ebbinghaus and A. König, will have the assistance of Professors von Helmholtz, Hering, Preyer, Exner, von Kries, and other distinguished specialists.

Professor Carl Jacob Loewig, the oldest teacher of chemistry in Germany, died at Breslau on March 27th, at the age of 87. He was originally a druggist, but qualified as *Docent* in Chemistry at Heidelberg in 1830, and was called to Zürich as Professor in 1833. From Zürich he was summoned, some twenty years later, to Breslau, to take the place of Bunsen.

Presentation.—Mr. James Gibson, M.B.Glas., of West Vale, near Halifax, has been presented by the lady members of his ambulance class with a very handsome marble timepiece, and by the male members with a silver-mounted walking stick, a cigar case, and a silver match box, in recognition of his valued services.

Honours to Medical Men in Italy.—Professor Paolo Mantegazza, Senator of the Kingdom of Italy, and Professor Alfonso Corradi, of Pavia, have been named Grand Officers of the Order of the Crown of Italy; and Dr. Francesco Morano, Professor of Ophthalmology in the Royal University of Naples, has been created a Knight of the same Order.

The Portuguese Government has ordered by a decree, dated March 13th, that saccharin, whether alone or mixed with any other product, shall be sold by chemists only on the prescription of a legally qualified medical man. Every contravention of this enactment, as well as the employment of saccharin in the manufacture of sweetmeats and drinks, is made punishable by definite penalties.

Professor Kocher, the well-known surgeon of Berne, has been elected an honorary member of the Medical Society of London, not, as stated in a paragraph which has gone the round of the German medical press, of the British Medical Association. Professor Kocher is said to be the first Swiss practitioner since the encyclopædic eighteenth century luminary, A. von Haller, on whom the honorary membership of the Medical Society has been conferred.

Grateful Passengers.—In gratitude for their deliverance from the perils of the voyage in the Inman liner *City of Paris*, the passengers, before landing, subscribed £600 as a thank offering and appointed a committee to decide upon its application. It is understood that the committee have decided to hand over £400 to the Seamen's Hospital, Liverpool, for its general purposes, and to endow with the balance a bed in the same institution for sick American sailors.

Medico-Psychological Association.—A bronze medal and ten guineas will be awarded in July, on conditions to be obtained from the Honorary Secretary, to any assistant medical officer of any lunatic asylum (public or private), or of any lunatic hospital in the United Kingdom, for the best dissertation on any clinical or pathological subject relating to insanity. Particulars can be obtained of the Honorary General Secretary, Dr. Fletcher Beach, Darenth Asylum, Dartford.

On Saturday, April 12th, Dr. Harvey received a most gratifying testimonial from the English colony in Boulogne-sur-Mer, which town he is about to leave in order to practise in London. At a meeting of a very representative character, presided over by the

British Consul (Mr. Bonham), he was presented with some very valuable plate and a purse containing one hundred and forty guineas, as a substantial recognition from his friends of the value of services rendered during his twenty years of professional life in Boulogne.

News has reached this country of the death of Surgeon A. C. Thompson, of the 10th Bombay Light Infantry, who was killed by a tiger while shooting in the Bhosawal Forest, in the neighbourhood of Poona. The deceased was born in 1856, studied medicine at the Ledwich School and the Meath Hospital, Dublin, and became L.R.C.S.I. in 1877, and L.K.Q.C.P. and L.M. in 1879. In the latter year he entered the Indian Medical Service.

Registered Plumbers for Devon and Cornwall.—A meeting was last week convened by the Mayor of Plymouth for the purpose of promoting a branch for Devon and Cornwall of the Plumbers' Guild, by which examinations may be held and certificates granted. The Master and Secretary of the Worshipful Company of Plumbers were present, the former (Mr. Bishop) gave an address, and a resolution, moved by the Earl of Morley, affirming the desirability of establishing a western branch of the Plumbers' Guild, was adopted. Subsequently resolutions were passed appointing a council representing the operative plumbers, the master plumbers, and the general public in about equal proportions.

Society of Medical Officers of Health.—At a quarterly meeting of the members of the Yorkshire Branch of this society, held on April 9th, Dr. Thomson, Sheffield, read a paper entitled "A Recent Outbreak of Typhus Fever in Sheffield." He pointed out as a curious fact that the cases occurred when there was a large amount of influenza and pneumonia in the town, and he suggested that there might be a predisposing cause to the three classes of malady, probably meteorological. The president, Dr. Cameron, of Leeds, said the ground upon which Dr. Thomson based this supposition was exceedingly small. The influenza had spread all over the country, but he had only heard of typhus occurring at Sheffield at the same time. Dr. McLintock said there had been certain meteorological conditions during the past few months which had very greatly affected the public health, and which he was quite convinced were not yet understood.

Bradford Medico-Chirurgical Society.—At the February meeting of the Bradford Medico-Chirurgical Society, Dr. A. Bronner showed a patient on whom he had operated for abscess of the mastoid antrum. After remarks from Drs. Major, Walker, and Horrocks, Dr. Goyder referred to a case in which fatal meningitis was induced by an abscess which had caused no previous symptoms beyond a chronic discharge from the ear. Dr. Rabagliati related a fatal case of intestinal obstruction caused by a band extending from the vermiform appendix to the ileum. Surgical interference had been deemed inadvisable because the patient was pregnant and there were no urgent symptoms, flatus being passed *per anum* up to the last. The indications for operation in such cases were discussed. Dr. H. Bronner alluded to the beneficial effect which washing out the stomach with the siphon, as recommended by Kussmaul, sometimes had in ileus. Drs. W. G. Burnie, Walker, and Farrow also took part in the discussion. Dr. McIntock, medical officer of health for Bradford, read a paper on the recent outbreak of typhoid in the borough, which was discussed by Drs. Rabagliati, Goyder, Howe, and Burnie.

The case of Martin *v.* Stubbs was heard in the Queen's Bench Division, before Mr. Justice Day and a special jury, on April 15th. Both parties were medical men practising in Hammersmith. According to the opening statement of plaintiff's counsel, the action was to recover damages for alleged libel contained in a death-certificate given by the defendant, which attributed the death of a man named Coleman to an overdose of turpentine administered by the plaintiff. The plaintiff stated in evidence that he found the deceased, Coleman, suffering from flatulent colic, and administered to him a grain of opium, and subsequently two tablespoonfuls of turpentine in hot water. The dose mentioned in the *Pharmacopœia* was ℥ iv. The defendant stated in evidence that he saw the deceased on the following day; he found him suffering from abdominal pain and distension, and he was passing only a very small quantity of urine; blood was subsequently detected by the microscope in the urine passed. The patient sank and died, and the defendant communicated with the coroner, who refused to hold an inquest. The defendant then gave the certificate. Evidence as to the probable effect of a dose of two teaspoonfuls of turpentine was given by Drs. D. W. Finlay, Cecil Y. Biss, and Thomas Stevenson, called by the plaintiff, and by Drs. Lauder Brunton and Collins, called by the defendant. The judge, in summing up, dealt with the facts of the case, and said that there was no doubt that the certificate was given on a privileged occasion, because it was the defendant's duty to give a certificate, and unless the jury found that he was actuated by malice and a desire to injure the plaintiff, they must find a verdict in defendant's favour. In considering whether the defendant acted maliciously or not they must look at all the facts of the case. The jury, after consultation, found a verdict for the plaintiff, and assessed the damages at £200.

MEDICAL VACANCIES.

The following Vacancies are announced:

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—A vacancy exists in the Honorary Acting Out-patient Staff. Applications to the Honorary Secretary, Mr. Russell Jolly, 43, Waterloo Street, Birmingham, by April 28th.

BOLTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon. Double qualification. Salary £100 per annum (increasing to £150. by £10 annually) with furnished apartments, board, and attendance. Applications to be addressed to Mr. Kevan, Honorary Secretary, 12, Acresfield, Bolton, by April 26th.

BROMPTON AND KNIGHTSBRIDGE PROVIDENT DISPENSARY, 12, Hans Road, S.W.—Two Medical Officers, with medical and surgical qualification, and resident in the district. Applications to the Honorary Secretary by April 19th.

CHORLTON-UPON-MEDLOCK DISPENSARY, Manchester.—Resident House-Surgeon. Double qualification; unmarried. Salary, £100 per annum, with furnished rooms and attendance. Applications to the Secretary before April 21st.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Physiciancy. Board and lodging; no salary. Applications to Ashton Warner, Secretary, by May 1st.

EDINBURGH CITY POORHOUSE.—Medical Officer (Resident). Salary, £80 per annum. Applications to G. Greig, Inspector, 2, Forrest Road, Edinburgh, by May 1st.

GENERAL INFIRMARY, Leeds.—Two House-Physicians (one for six and one for twelve months). Board, lodging, and washing. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

GENERAL INFIRMARY, Leeds.—Two House-Surgeons. Board, lodging, and washing. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

GENERAL INFIRMARY, Leeds.—Resident Officer at the Ida Hospital. Appointment for six months, with honorarium of £25. Board, lodging, and washing in the Infirmary. Applications to the Secretary to the Faculty, 19, Queen Street, Leeds, by April 19th.

HENDON RURAL SANITARY AUTHORITY.—Sanitary Medical Officer. Salary, £100 per annum. Applications, endorsed "Application for Sanitary Medical Officer," to be sent to W. A. Tootell, Clerk, Edgware, by April 21st.

LANCASTER COUNTY ASYLUM, Whittingham.—Experienced Pathologist. Salary, £200 per annum, with board, lodging, washing, and attendance. Applications to Dr. Wallis, the Medical Superintendent.

LONDON COUNTY ASYLUM, Colney Hatch.—Medical Superintendent. Salary, £1,000 per annum, with a furnished house, coals, gas, etc. Age not to exceed 50. Double qualification. Must have had similar experience. Applications (on forms furnished) to be sent in by April 23rd to the clerk, R. Partridge, London Asylums Committee Office, 40, Craven Street, Strand.

METROPOLITAN HOSPITAL, Kingsland Road, E.—Assistant Physician; Fellow or Member of the Royal College of Physicians, London. Applications to C. H. Byers, Secretary, by April 28th.

METROPOLITAN HOSPITAL, Kingsland Road, E.—Physician; Fellow or Member of the Royal College of Physicians, London. Applications to C. H. Byers, Secretary, by April 28th.

NORFOLK AND NORWICH HOSPITAL, Norwich.—Assistant to House-Surgeon. Must possess one qualification. Appointment for six months only. No salary, but board, residence and washing. Applications to the House-Surgeon, H. C. Nance, by April 22nd.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Medical Officer. Salary, £50 per annum, with board, residence, and washing. Appointment for six months. Application to the Secretary by April 25th.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Assistant Medical Officer. No salary, board, residence, and washing. Appointment for six months. Applications to the Secretary, by April 25th.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Salary £150 per annum. Applications by April 28th to the Registrar, Henry Wm Holder, M.A.

PADDINGTON GREEN CHILDREN'S HOSPITAL, London, W.—House-Surgeon. Salary, £50 per annum, with board and residence. Applications to the Secretary by April 22nd.

PAROCHIAL BOARD OF KIRKPATRICK, Durham.—Resident Medical Officer. Salary £20 per annum, exclusive of the cost of medicine. Applications to the Inspector of Poor, Parochial Board Office, Kirkpatrick, Durham Dalbeattie, by April 30th.

QUEEN'S HOSPITAL, Birmingham.—One House-Physician. Salary, £50 per annum, tenable for one year. Double qualification. Applications to the Secretary by April 24th.

QUEEN'S HOSPITAL, Birmingham.—One House-Surgeon. Salary, £50 per annum, tenable for one year. Double qualification. Applications to the Secretary by April 24th.

QUEEN'S HOSPITAL, Birmingham.—One Obstetric and Ophthalmic House-Surgeon. Salary, £10, tenable for six months, with board, lodging and washing. Applications to the Secretary by April 24th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, Rangoon Municipality, by June 1st.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square.—Honorary Physician. Applications to Frank Stokes, Secretary, by April 21st.

ST. MUNGO'S COLLEGE, Glasgow.—Applications are invited for two Lectureships in the College on Public Health. Applications to Henry Lamond, Secretary, by April 23rd.

ST. SAVIOUR'S UNION, Surrey.—Second Assistant Medical Officer to the Union Infirmary, East Dulwich Grove, Champion Hill, S.E. Salary, £100 per annum, with furnished apartments, board, and washing. Age not to exceed 26. Applications to Howard C. Jones, Clerk's offices, John Street West, Blackfriars Road, S.E., by April 24th.

VESTRY OF CLERKENWELL.—Analyst under the Sale of Food and Drugs Acts. Salary, £100 per annum. Applications to Robert Paget, Vestry Clerk, Vestry Hall, Clerkenwell, by April 24th.

WALSALL AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Resident Medical Officer. Married. Salary, £200 per annum, with unfurnished residence. Applications to the Secretary, James Kimberley, 61, Williams Street, Walsall, by April 22nd.

WESTERN GENERAL DISPENSARY, Marylebone Road, N.W.—Junior House-Surgeon; fully qualified. Salary, £50 per annum, with board and residence, Applications to the Honorary Secretary at the Institution by April 28th.

WEST LONDON HOSPTAL, Hammersmith Road, W.—House-Physician. Appointment tenable May 12th to September 30th. Eligible for election to the office of House-Surgeon for six months from October. Board and lodging. Applications by May 8th to R. J. Gilbert, Secretary Superintendent.

WESTERN MEDICAL SCHOOL, Glasgow.—Lecturer on Surgery. A fellowship qualification in surgery necessary. Applications to J. N. Morton, Secretary, 62, Vincent Street, Glasgow.

YORK COUNTY HOSPITAL.—Senior House-Surgeon, duly qualified. Salary, £100, with board and residence. Candidates to state whether, if elected, they would be willing to take the Assistant's post (he being a candidate for the appointment). Applications to C. E. Pinfold, Secretary, by April 22nd.

MEDICAL APPOINTMENTS.

BANNATYNE, G. A., M.B., C.M.Glasg., appointed Assistant Medical Officer to the Greenwich Parochial Asylum and Poorhouse, Smithston, *vice* H. J. Younger, M.B., resigned.

BINGHAM, John J., M.D.St.And., L.R.C.P.Edin., L.M., M.R.C.S.Eng., appointed Medical Officer to the Alfreton District of the Belper Union, *vice* Dr. T. L. Roberts, deceased.

BRYANT, E. M. R., L.S.A., appointed Assistant House-Surgeon to the Metropolitan Hospital, Kingsland Road.

DEVEREAU, W. C., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the Birmingham General Hospital, *vice* J. G. Crump.

DODD, H. Work, F.R.C.S., appointed Assistant-Surgeon to the Royal Westminster Ophthalmic Hospital.

DRYLAND, John Winter, M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Kettering Local Board.

DUDLEY, J. Gardner, M.D.Cantab., M.R.C.P.Eng., appointed Consulting Physician to the Metropolitan Hospital, Kingsland Road, on his resignation of the post of Physician, after twenty-three years' service.

EATON, James Wm., L.R.C.P., M.R.C.S., reappointed Medical Officer of Health to the Bingham Rural Sanitary Authority.

FROST, W. Adams, F.R.C.S., appointed Surgeon to the Royal Westminster Ophthalmic Hospital, *vice* Mr. James Rouse, retired.

GOW, William J., M.D.Lond., M.R.C.S.Eng., M.R.C.P.Lond., appointed Obstetric Physician to the Metropolitan Hospital, Kingsland Road, *vice* Albert J. Venn, M.D.Aberd., M.R.C.P.Lond., resigned.

GREENWOOD, Major, jun., M.D.Brux., L.R.C.P., D.P.H., appointed Medical Officer for the Haggerston West District, St. Leonard, Shoreditch.

HANDS, Arthur, L.R.C.P., M.R.C.S., appointed Vaccination Officer for the Wednesfield District of the Wolverhampton Union.

HOOD, George, M.D.Edin., reappointed Medical Officer for the Tow Law Union District.

JOHNSTONE, Geo. Warrack, L.R.C.P.Edin., L.M., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Orrell Urban Sanitary District for one year.

JONES, Hugh R., M.A., B.Sc.Cantab., appointed Honorary Assistant-Surgeon to the Liverpool Hospital for Cancer and Skin Diseases. *vice* Dr. George Westby.

JOY, Fredk., Wm, L.R.C.P.Edin., L.M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Thetford Rural Sanitary District.

KEYT, Frederick, M.B., C.M.Aberd., appointed Third Assistant Medical Officer to the Kent County Asylum, Barming Heath, Maidstone, *vice* W. E. St. L. Finny, M.B., resigned.

KING, Preston, B.A., M.B., B.C.Cantab., M.R.C.S.Eng., L.S.A., appointed Resident Medical Officer to the Bath General or Royal Mineral Water Hospital, *vice* Charles T. Griffiths, L.R.C.P.Lond., M.R.C S.Eng.

LEON, John T., B.Sc.Lond., F.I.C., F.C.S., appointed to the post of Demonstrator of Chemistry and Assistant Lecturer on Physics to St. Mary's Hospital Medical School.

LIMERICK, Wm. S., L.R.C.P. L.R C.S.Edin., reappointed Medical Officer of Great Crosby Urban Sanitary Districts.

LONG, Richard W., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Shap District and the Workhouse of the West Ward Union, *vice* W. Stephen, A.M., M.D.

MCCOLL, John Henry, L.D.S., appointed Honorary Surgeon-Dentist to the Leicester Infirmary, *vice* Mr. William Tibbits, resigned.

MARTIN, A. W., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Gorton Urban Sanitary District.

MASON, William, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the St. Austell Urban Sanitary District.

NEWMAN, Henry, M.R.C.S., L.S.A., appointed Medical Officer of Health to the Hadley Urban Sanitary District, Cosford Union, *vice* A. T. B. Atkins, M.R.C.S.Eng., deceased.

PARKER, G. D., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Metropolitan Hospital, Kingsland Road.

RAYMENT, Edward Wm., M.B.Edin., C.M., appointed Medical Officer for the 2nd District of the Pewsey Union, *vice* T. Clarke, resigned.

SELBY, Dr. P., appointed Medical Officer and Public Vaccinator to the 4th District of the Faversham Union and Medical Officer for the Infectious Hospital.

SEMPLE, Dr., Queensferry, appointed Medical Officer to the Parish by the Dalmeny Parochial Board.

SHADWELL, St. Clair B., L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Walthamstow Urban Sanitary Authority.

STANLEY, Hubert, M.B., B.S.Camb., appointed House-Physician to the Metropolitan Hospital, Kingsland Road.

TAYLOR, John William, M.D., D.Sc., Scarborough, appointed an additional Examiner in Medical Jurisprudence and Public Health (2nd B.Sc. in Public Health), University of Edinburgh, *vice* Dr. David Page, deceased.

WARTERS, W. A., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Riddings and Ironville District of the Belper Union.

WEBSTER, W. H., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., appointed House-Surgeon to the Morpeth Dispensary, *vice* G. Geo. Gidley, L.R.C.P., M.R.C.S., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—The adjourned discussion on Mr. Meredith's paper on The Present Position of Abdominal Surgery will be opened by Mr. Lawson Tait.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 20, Hanover Square, 8.30 P.M.—Dr. Alexander Haig: Salicin compared with Salicylate of Soda as to Effect on the Excretion of Uric Acid and Value in Acute Rheumatism, with some deductions as to the causation of the disease.

WEDNESDAY.

HUNTERIAN SOCIETY, 8 P.M.—Dr. Herman: On Cases of Amenorrhœa from Mental Shock and with Mental Depression. Mr. Bidwell: On the Treatment of Erysipelas by Hypodermic Injection.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 11, Chandos Street, W., 8 P.M.—Dr. Jacques Bertillon (Chief of the Municipal Statistical Department of Paris): On Epidemic Influenza in France. Dr. George Rice: Notes on an Outbreak of Influenza in a Poor-law School.

FRIDAY.

CLINICAL SOCIETY, 8 P.M.—Mr. W. H. Battle: A Case of Tubercular Ulceration of the Bladder; Suprapubic Cystotomy; Recovery. Dr. Finlay: A Case of Rheumatic Pericarditis with Delirium. Mr. E. A. Barton: A Case of Gastric Ulcer; Symptoms of Perforation; Peritonitis; Abscess bursting into Bowel; Recovery. Dr. W. S. Colman and Dr. James Taylor: A Case of Raynaud's Disease, not associated with Hæmoglobinuria, in which there were Local Changes in the Blood.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

SYMONDS.—April 11th, at 26, Weymouth Street, Portland Place, W., the wife of Charters Symonds, M.S., F.R.C.S., of a son.

MARRIAGES.

TERRY—TERRY.—On April 8th, at St. Edmund's, Northampton, by the Rev. H. B. Hull, B.D., assisted by the Revs. Canon Hughes and W. E. Terry, Florence L., eldest daughter of W. Terry, Esq., of Northampton, to Henry George Terry, M.R.C.S., L.S.A., of 16, Green Park, Bath.

TOMKINS—SHETTON.—At the Parish Church, Kidderminster, on April 10, Henry Tomkins, M.D., B.Sc., Medical Officer of Health, Leicester, to Jane, daughter of the late W. W. Shetton, J.P., Dane's Hill, Leicester.

DEATHS.

FORBES.—At his residence, 8, Johnstone Street, Bath, on March 17th, in his 94th year, Surgeon-General John Forbes, F.R.C.P.Lond., Inspector-General of Hospitals, Madras Presidency.

PEEL-YATES.—On April 8th, at Sunnyside, Grouville, Jersey, Walter Peel-Yates, Esq., M.R.C.S.Eng. (of Egyptian Lodge, St. Helier's), in his 44th year.

IN MEMORIAM.

VARDON.—In loving memory of Evelyn Vardon, Esq., M.D., who died at Rome, April 17th, 1889. R. I. P.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9.; Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 1.30; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., W. F., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1 30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

M. B. M. ASSOCIATION asks for precise directions for filling capillary tubes with vaccine lymph from the infant's arm.

M.D. would feel greatly obliged if a brother practitioner would recommend a recent manual or medium-sized book on the horse, and its management in health and disease.

B. C. writes: Can any of your readers kindly give treatments of case of choreic movements, left arm, with some loss of sensation? The cause (worms) has been removed, but the case has not improved under treatment. Age, 15.

M. O. H. asks for information or references to any literature respecting the influence of fish in keeping in check the growth of weeds in fresh water reservoirs for town supply.

MR. J. H. G. GREENHALGH (London) writes: Will you recommend me two or three works which treat clearly and concisely of medico-legal questions and matters of frequent occurrence of which it is desirable that the profession should have legal knowledge? A friend of mine is appointed surgeon to the police, and wants some legal work to which immediate reference may be made in an emergency and at other times. Works on medical jurisprudence are too technical, and often not to the point.

*** We cannot quite make out what is wanted. Works on legal matters written by lawyers are not generally so written as to be "understanded" of the people, and certainly are not likely to be less technical than the medico-legal effusions of medical men, some of which, at any rate, are not very technical. We have submitted this letter to a professor of medical jurisprudence and to a lawyer, but neither is able to suggest any work that would be likely to be of service.

PEDICULI CAPITIS.

T. M. W. asks: What is the best solvent for the cement with which the nits of pediculus capitis are glued to the hairs?

ANSWERS.

THE information furnished does not appear to supply sufficient material for a differential diagnosis.

A. N.—Inquiries with regard to the conditions of the prize essay of the Paris Academy of Medicine on infant feeding should be addressed to M. le Secrétaire de l'Académie de Médecine, Rue des Saints Pères, Paris.

DR. ST. CLAIR THOMSON: Such a handle as that required is pictured and described in Dr. W. E. Steavenson's *Electrolysis in Surgery*, and can be obtained of Messrs. J. Coxeter and Son, 4 and 6, Grafton Street, Gower Street, London, W.C.

M.B.'S AND THE TITLE OF DR.

LINUS.—Our correspondent will find the point he raises dealt with in an answer published in the JOURNAL on October 26th, 1889, p. 962. It would appear that though, by the courtesy of the profession and the public, it is usual to address an M.B. of Oxford or Cambridge (except within the University precincts) as Doctor, it is considered in better taste that the holder of the degree should not describe himself as "Dr." on his visiting card or doorplate.

F.R.C.S.ENG. EXAMINATION.

SURGEON, BENGAL MEDICAL SERVICE, asks for advice as to the most suitable books to read up for the F.R.C.S. (of England) in the following subjects: (1) physiology; (2) comparative anatomy and physiology; (3) surgical anatomy and pathology.

*** 1. Kirkes's *Handbook*, or Dr. Gerald Yeo's or Mr. Power's *Manual* will be sufficient for the examination. 2. Professor H. J. Bell's *Manual* is excellent. 3. Sufficient details on surgical anatomy will be found in Gray's *Anatomy* and in the surgical textbooks of Erichsen, Bryant, Holmes, Walsham, Druitt, etc. Billroth's *Lectures on Surgical Pathology*, or Bowlby's *Manual* of subject, should be read.

Broken Thermometers.

G. J. L. writes: Should the principal supply his qualified assistant who works a branch practice with thermometers in lieu of those broken in use, when the breakage is not excessive—one lasting twelve months? Principal says he supplied me with one instead of that in my possession when I came to him, and now that it has been broken I am to supply myself with instruments to do his work, and though they be broken by patients, I shall at my own expense replace them. Is that correct?

*** A reasonable allowance ought to be made for fair wear and tear.

Dysmenorrhœa.

E. S. writes: Under the above head a gentleman who styles himself "Puzzled" describes a case of a not infrequent type, and one very trying to the patience of both doctor and patient. As stated, there is usually a neurotic tendency; but this is, perhaps, more the result than the cause of the affection, and the severe pain and other subjective symptoms are no doubt due to active congestion of the uterine vascular system, relief being always given by the setting in of the menstrual flow. Such cases are often connected with a narrowed and perhaps slightly flexed condition of the cervical canal, and frequently occur in females suffering from lateral curvature of the spine.

"Puzzled" adds a formidable list of remedies tried without success; but I think he will find that the insertion of a small galvanic stem pessary (made of zinc and copper), allowed to remain *in situ* for twelve or twenty-four hours, will afford his patient much relief.

Preliminary Instruction in Chemistry.

Member of British Medical Association for Twenty Years.—The student concerning whom our correspondent writes should apply for advice at the medical school which he has entered or proposes to enter. If he has really mastered the works of Barff and Roscoe, he is certainly fit to present himself as a candidate; but only a teacher of chemistry could form and give a trustworthy opinion on the student's proficiency.

Grates.

Medicus is desirous of knowing the sort of grates that have been proved to be most healthy and economical; the best consumers of smoke and of elegant appearance; and what was the general result of the examination of the various grates and stoves exhibited at the Smoke Abatement Exhibition. He has examined several sorts, but none satisfy him on all points. He has found some good points in each of the following: (1) Heim's; (2) Brown and Green's; (3) The Scandinavian Stove Company; (4) Pridgin Teale's Front Hob Fireplace; (5) The Parson's Grate; (6) The Wharncliffe; (7) The Constantine Range.

*** In addition to the stoves mentioned by "Medicus," the "Nautilus" and several other grates exhibited at the South Kensington Smoke Abatement Exhibition would seem to be worthy of his attention. Our space will not admit of our giving details of the comparative merits of the several grates referred to, but a critical review of the reports of the tests of the grates was published in the *Sanitary Record* of February, 1883.

Urgency Orders under the New Lunacy Act.

Davies writes: Under the new Lunacy Act, as I understand it, a person may be consigned to a lunatic asylum upon an urgency order made by a friend of the alleged lunatic, accompanied by a single medical certificate. The urgency order only remains in force for one week, and the person making it must present a petition to a magistrate. The point upon which I desire advice is as to what proof the asylum authority or medical superintendent will have that such a petition has been made. The petition is not to be presented in a court of record, and will not be filed, and the medical superintendent can have nothing but the bare word of the person consigning the alleged lunatic to his care that any such petition has been presented. If the petition is granted, the medical superintendent receives the magistrate's order, but if it is refused, he receives no official notification of the fact. The difficulty would have been avoided if the magistrate had been required to issue a certificate that a petition had been presented. As it is, it seems very possible that not a few alleged lunatics will in future cease to be legally committed after the expiration of the seven days; however this may be, the construction of this part of the Act leaves a loophole for vexatious litigation.

*** The "urgency order" holds good as long as a "petition" is pending; if no petition is pending before the end of seven days, the urgency order runs out at the end of seven days, and the alleged lunatic must be discharged. It will be for the petitioner to satisfy the medical officer that a petition is pending. An urgency order, if made before a petition is presented, must be referred to in the petition; if made afterwards, a copy of it must forthwith be sent to the judge, magistrate, or justice petitioned, who, if the petition is dismissed, must send notice that it has been dismissed to the person in whose charge the alleged lunatic is detained under an "urgency order" (in the case supposed). Therefore the latter does "receive official notification of the fact" of the petition being refused or dismissed.

NOTES, LETTERS, ETC.

Treatment of Chilblains and Chapped Hands.

Professor Baelz writes from Japan to the *Monats. f. prakt. Derm.*, vol. x, No. 6, p. 288, recommending the following treatment for chilblains and chapped hands: R Caustic potash, ½ per cent; glycerine and alcohol, of each 20 per cent.; water, 60 per cent. The hands are bathed in warm water, and this mixture is then rubbed into the skin. This is done once daily, and in two or three days a cure is said to be the result.

The Hong Kong Medical Society's Transactions.

Dr. J. Bell (Honorary Secretary Hong Kong Medical Society) writes: In the Journal of February 1st, I see an inquiry as to the *Transactions of the Hong Kong Medical Society*, vol. i. I may mention that Messrs. Kelly and Walsh, of Hong Kong, are the printers and publishers, and the price is two dollars.

Appointments to County Councils and Qualifications in Public Health.

D. P. H. Camb. writes: The recent decision of the Sanitary Committee of the Worcestershire County Council calls, I think, for some comment. The Committee, after mature deliberation extending over a period of some months, selected five candidates, four of whom possessed a qualification in public health. Finally, the Committee decided to recommend to the Council the election of a gentleman who, although doubtless a most excellent medical officer of health, was the only selected candidate not possessing such qualification.

Sudden Change in the Colour of the Hair.

In a paper read before the American Medical Association in June, 1889, Dr. D. W. Prentiss makes a careful study of the evidence going to prove that the hair of man and the lower animals and the plumage of birds can undergo a change of colour within a short space of time. To a case which he had previously reported in which the use of pilocarpine had rendered the hair black, he adds another very similar instance. The woman, 72 years of age, was given the fluid extract of jaborandi for the relief of a dry, harsh skin, resulting from contracted kidney. Twenty to thirty drops several times daily were taken during a period of sixteen months. The patient's hair and eyebrows had been white for twenty years, but about a year after the pilocarpine treatment had been begun it was noticed by the nurse that the eyebrows were growing darker and that the hair of the head was darker in patches. At the time of death these patches were quite black.

Cold in the Head.

Dr. Rabow declares that a snuff made of two parts of menthol, fifty parts finely-ground roasted coffee, and fifty parts powdered sugar is a sovereign remedy against fresh "colds in the head." The powder should be snuffed into the nostrils strongly and frequently.

Medical Appeal.

The Rev. Arthur R. Carter D.D. (The Rectory, Wapping, E.) writes: May I request the favour of your adding the following subscriptions to your former list of sums received on behalf of the medical practitioner whose health has suffered so severely from our English winter, that he is advised by hospital and other medical authorities that a warmer climate is absolutely necessary for his restoration?

	£	s.	d.
Dr. Pye Smith	2	2	0
Edwin Tindall, Esq.	2	2	0
Dr. W. B. Halliburton	0	10	6
M.R.C.S.	0	10	0
Dr. R. T. Lyons	0	5	0

If a further sum of £10 in addition to the grant accorded by the British Medical Benevolent Society were forthcoming by the end of this week, this gentleman could arrange to sail on April 25th.

Toogood *v.* Wilkes.
Wilkes Indemnity Fund.

	£	s.	d.
Amount published	57	4	1
Dr. Samuel Wilks	1	1	0
Anonymous...	23	5	4
	81	10	5

This covers the whole of Mr. Wilkes's costs, and closes the list.

H. J. Manning, Treasurer.

Advertising through Hospitals.

A General Practitioner writes: The practice of medical advertising is condemned in your columns when practised by the needy general practitioner; should it not also be as generally condemned among the men who pose among us in London as consultants, and by their connection with the large hospitals use the charitable aid of out-patient departments as advertising media for their private addresses, and an indirect advertisement for themselves?

I have just had a card from the Hospital for Consumption and Diseases of the Chest, Brompton, shown me, on which was put a name and address which I enclose, not for publication.

A Hint for Tea Drinkers.

Mr. T. Christy, F.L.S., writes: When in a tea warehouse one day trying to get some tea with a fine flavour for my own drinking, a friend said, "Why don't you try a chest of broken leaf Pekoe?" I saw at once the reason. Owing to the rough handling, the small undeveloped leaf or point gets broken, so it was really the best tea I could have. I next found it was so small it went through the spout of the teapot, but as I had my chest of tea it must be used. It occurred to a friend who had some to get a cambric bag made with a string; into this the tea was put, and it proved a success. Although this bag was washed every day, still it got darker and darker from the tannin. This led to an experiment, the result of which was that in people who suffered from indigestion after drinking tea, if the leaf was put in a bag it produced no ill effects, and this plan is now being tried pretty extensively of making the bag take up the tannin. A bag will last for two months, but no doubt much remains to be traced out in this direction.

The Medical Profession and the House of Lords.

Observer writes: Mr. Gladstone's speech about the medical profession at the opening of Guy's College was very interesting and instructive, but it is a pity that eminent statesman did not give some explanation about their persistent exclusion from the House of Lords, where their acquirements and influence as sanitarians and as men of the world would be of much advantage to the nation. The apathy of the profession regarding their exclusion is the most extraordinary part of the case, for I believe it is a fact that in an Association of 15,000 members not a complaint is heard at our annual meetings, at the different treatment in that respect undergone by medical men, when compared with the members of the other liberal professions. No motion is ever brought forward to place the question within the sphere of action of the

Parliamentary Bills Committee; yet in a country governed as ours is, whatever our private views may be, there is no doubt about the loss of professional and social influence and status by the marked exclusion of medical men from the Upper Chamber of the Legislature. It is well known that the Sovereign has nothing to do with the selection of individuals for the peerage. She is a passive agent in the hands of her responsible Ministers; and if the initiative depends on Her Majesty, it is probable, from what is known of her high opinion of medical services, that the elevation to the peerage of one or more doctors would long since have taken place; but what can we expect when the leaders of the profession consider a baronetcy or a knighthood the summit of their ambition? By all means let them accept those distinctions, but only after the principle is recognised and acted on that medical men can sit in the House of Lords.

If we do not respect ourselves, how can we expect the country to respect us? Surely some of our number are as well qualified to sit in the Upper Chamber as the individuals of all classes of the population, who now find or have found their way there. The late Sir William Gull, or a dozen others that could be mentioned, would have been ornaments to the House, and of much service in the government of their country.

Extraordinary Income Tax Overcharge.

The Income Tax Repayment Agency (25, Colville Terrace, Powis Square, W.) write: We would ask permission to call the attention of all members of the medical profession, particularly those residing in the neighbourhood of Cavendish Square, Harley Street, and Wimpole Street, to a very flagrant overcharge we accidentally discovered. One of our clients gave us all his receipts for taxes and rates, and to our astonishment we found that the collector's receipt for income tax on the house was for £130 more than the gross valuation. There is no mistake about this being a fact, for we wrote to the Inland Revenue, and after some correspondence and difficulty we have received on behalf of our client a refund of the overcharged tax. A most suspicious circumstance is that the Inland Revenue, who are not prone to refund, did so in this case sooner than give any explanation. This we have asked for, as we were anxious to know whether the delinquent was the assessor or the surveyor of taxes. This, we fear, we shall never know, but as we think this cannot be a solitary instance, we advise dwellers in that neighbourhood, or indeed all London, to look at their collectors' receipts. We shall be glad to do so without charge for any of your readers enclosing the receipts to us with a stamped addressed envelope for the return of them.

The Fasting Man.

R. G. N. Robins, M.R.C.S.Eng., L.R.C.P.Edin. (Westminster) writes: At the end of the fourth week Signor Succi begins to show signs of weakness, but is still in a remarkably good condition considering the length of time he has fasted; he does not complain of any discomfort, and will not admit any feeling of weakness, but he certainly is much more easily tired than he was last week. His loss of flesh is now little over half a pound a day, so that his original estimate of 32 to 34 lbs. for the forty days will not greatly be exceeded if the present rate of wasting continues.

Daily Record of Succi's Condition during Fourth Week of his 40 Days' Fast at the Royal Aquarium, Westminster.

Date, 1890.	Day of Fast.	Pulse.	Temperature (axillary).	Respirations.	Weight.	Dynamometer (kilogrammes).	Spirometer (cubic centimètres).	Urine passed (fluid ounces).	Urea = (grains).	Water Consumed (fluid ounces).	Kaiser Brunnen (fluid ounces).	Hunyadi Janos (purgative) (fl. oz.).	Sleep (hours).
					lb. oz.								
April 9th, noon	22	58	97.0°	20	102 3	48	1450	16¼	170.625	13	13	—	4 3
,, 9th ,,	23	60	97.4°	18	101 3	47	1400	14⅜	154.1	10	11	—	5½ 4
,, 10th ,,	24	62	97.0°	19	100 10	47	1400	14½	155.44	14	12	—	3 4 2
,, 11th ,,	25	66	97.0°	21	100 1	47	1500	15½	142.77	11½	15	—	5¼ 4½
,, 12th ,,	26	64	97.8°	18	99 9	46	1400	13¼	136.21	14	8	—	3½ 4
,, 13th ,,	27	62	97.3°	20	99 0	45	1450	12	126.0	11½	9	5	7 1½
,, 14th ,,	28	58	97.0°	18	98 5	46	1450	10½	112.56	12	13	—	5½ 1½

The Welsh Fasting Girl.

We are indebted to Dr. John Davies, of Maesteg, for a report on the so-called Welsh fasting girl, whose phenomenal exploits in abstinence from food have been recently the subject of much marvellous representation; but on investigation this case, like most others resolved itself into one of the well-known type of hysteria major or hystero-epilepsy, so well described by Dr. Charcot, in which alternating fits of hystero-epilepsy occur with periods of trance, and the amount of nourishment taken is small and fitful, although by no means so phenomenally small as common report states.

To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the Journal brevity of style and conciseness of statement greatly facilitate early insertion We are compelled to return or hold over a great number of communications, chiefly by reason of their unnecessary length.

A Cruel School Law.

Dr. David Booth, of Sparta, Illinois, has contributed to the *Journal of the American Medical Association*, March 1st, a startling revelation respecting American "common schools." A rule exists there that all children going out in school hours are kept in during one-third of the corresponding play hours. The reason of the regulation is evident. Children are very apt to make the necessities of Nature an excuse for getting a few minutes' holiday during work time, but the hard and fast rule above noted is cruel in principle, and works very badly. Children dislike being kept from play, so that in the schools where the rule prevails they overcome, as much as possible, the temporary desire to relieve the bladder or bowels. In many cases, especially amongst older children, this may be beneficial; they train their natures to regular relief at stated hours. On the other hand, the rule certainly involves the torture of hosts of obedient children, and the more they obey the rule, whether from love of obedience or from pure objection to curtailment of play hours, the more they must damage their digestive and urinary organs. Two cases of severe irritation of the bladder are described by Dr. Booth, and a still worse sample of the ill-effects of the law in question is quoted from a St. Louis paper, a boy of 6 succumbing to brain mischief brought on, it is alleged, by intense irritation of the pelvic organs. The teacher's repeated refusals to let the child leave the room during school hours preyed upon its mind so that the poor little sufferer made appeals to be allowed to "go out" during an access of delirium. The rule also entails another insupportable evil, for many children, it is found, either cannot or will not retain urine or even fæces during school hours, hence the teachers become responsible for the cultivation of dirty habits.

"Specifics" for Diphtheria.

By a curious coincidence the two following letters from persons possessing alleged specifics for diphtheria came under our notice on the same day. The first is a literal translation of a letter addressed to Mr. Lennox Browne, and by him forwarded for publication:

"Schemnitz, Hungary, April 4th, 1890.

"Honoured Sir,—I take the liberty of troubling you with this letter, for I have succeeded, by the help of God, to discover a universal remedy for diphtheria and all other affections of the throat. I have the fullest confidence in this remedy, which has never as yet failed to cure any of these diseases. I will therefore first send doses to doctors and professors, so that they may convince themselves of the efficacy of the remedy, after which they can give me their opinion. Kindly speak to the professors, and ask them whether they desire that I shall send it to them. With the highest esteem I sign myself, yours, "A. v. Filkory, Dentist.

"Please reply in German."

The second letter was addressed to Dr. F. W. Elsner, of Richmond (Melbourne) Victoria, and published in the *Australasian Medical Gazette*, February, 1890, with some apposite editorial comments:

"Church Street, Bega, New South Wales, January 13th, 1890. Bega House, Henry O. T. Cowdroy, General Merchant. Wholesale Department, Centennial Buildings. Millinery, Dressmaking, Drapery, Boots and Shoes. Fancy Goods, Reliable Groceries. Vans deliver daily.

"Doctor Elsner. Sir,—I notice your letter to the *A. M. Gazette*, in which you condemn steam as a remedy for diphtheria. I therefore write you to say you can add something to the steam, which, in conjunction with a powder that I know of is an *effectual cure*.

"I may state that my cure is within the reach of everybody, and I am prepared to come to terms with any medical man for its use. I don't want any pay until it is tried, when on proving its success I want £500. If you think it worth while you can write me. The above address will find yours faithfully, "H. O. T. Cowdroy."

The Australian "general merchant," it will be noticed, is the more frankly business-like, since he is prepared to sell the right to use his specific for a stated sum. On the other hand, the German dentist is the more sanguine, for he asserts that his remedy will cure not only diphtheria, but "all other affections of the throat;" it would appear to be not equally efficacious in the associated buccal cavity, for no mention is made of its power over toothache.

Imperforate Hymen: Retained Menses: A Bibliographical Note.

Dr. William Sykes, F.S.A. (Mexborough, Rotherham) writes: As an addition to the bibliography of this condition, I beg to refer to another case, published in 1798 in Duncan's *Annals of Medicine* for 1797, vol. ii, p. 331, by Mr. John Lucie Smith, surgeon, Bridge Town, Barbadoes. His patient, a negress slave, in December, 1794, when 17 years old, had symptoms of menstruation without discharge, which recurred in a month, and were repeated with increasing severity for four or five monthly periods, when a suprapubic tumour appeared. Various remedies were administered, of which the only useful ones in relieving pain, etc., were emetics.

In January, 1797, after more than two years of increasing suffering, she was brought to Mr. Smith, who diagnosed mechanical obstruction to the menstrual flow. An impervious membrane was discovered drawn tensely across the vagina, about half an inch from the external orifice; this Mr. Smith punctured with a large flat trocar, when there ran out about three pints of a fluid, void of smell, of the colour and consistence of molasses. The trocar puncture in the hymen closed in a few hours after it was made, and in six days the uterine tumour and colicky pains began to reappear. Mr. Smith then, with a sharp-pointed scalpel, incised the membrane in the direction from front to back; at this operation a further pint of the same fluid was removed. The incision was kept open by a tent of lint soaked in oil, retained for several days. A perfect cure was the result. The writer notes the rarity of the condition.

Convalescent Homes.

Dr. Arthur E. T. Longhurst (Grosvenor Place, S.W.) writes: Early in February a patient of mine, convalescent from double pleuro-pneumonia, was sent to the convalescent home at Eastbourne, and I saw her yesterday on her return, much improved in health; but there are a few circumstances connected with her stay in that institution which I think are well worthy your attention as bearing upon the treatment of the patients and the general management of such convalescent homes.

1. I was surprised to find that, neither on her arrival, during her stay, or on her leaving, was any physical examination made as to her condition.

2. Nor was her weight taken.

3. No cod-liver oil, Parrish's food, hypophosphites, or other medicinal restorative was given.

4. The diet was said to be poor; meat very tough; butter so bad that it spoiled the bread, and my patient scraped it off, preferring to eat the bread dry; the breakfast being only bread and butter, with tea or coffee; the dinner, tough meat with potatoes, and other vegetables occasionally, but these latter were omitted during Lent; pudding or soup occasionally, and a pint of malt liquor. Tea: bread and butter and tea or a cup of milk. Supper varied; sometimes cold meat, soup, or pudding and beer; but, as my patient said, beer and pudding did not agree, so either one or other must be left; and cold meat and beer does not, in my opinion, seem a suitable meal at night for a convalescent from severe and acute pleuro-pneumonia.

That no physical examination of my patient was ever made is to me surprising; and the weight taken on the arrival and departure of each patient, with temperature record and other observations on the general health, would surely be of interest, and result in some useful statistics as to the effect of a stay at the institution on different classes of disease as compared with similar institutions at other seaside homes.

Fortunately my patient was able and permitted to buy milk, eggs, and other articles of food, without which, and limited to the ordinary diet of the home, she says she is quite sure that she would not be so well as she is. Of course the diet scale may be modified for special cases, and I hope it is; but nevertheless it appears to be defective, especially on the following points:—

1. As to quantity of food provided.

2. As to quality.

3. As to that provided at the several meals, especially the breakfast and supper; for the former, an egg, a little porridge, a pint of milk, and sometimes bacon in addition to the bread and butter, should be given.

4. A similar meal at supper instead of meat and beer.

Judicious changes of the kind mentioned would, I think, add little, if at all, to the cost, and, if they did slightly increase the cost per head, and at the same time, with suitable medical restoratives, hasten the convalescence and thus allow an earlier return to work and a greater number of patients to pass through the institution during the year, surely the expense would be justifiable.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. W. Scott Lang, Edinburgh; Mr. R. Babet, Middlesbrough-on-Tees; The Council of the Royal Medical Benevolent College, Epsom; Mr. J. Poland, London; Mr. J. Lawrence-Hamilton, Brighton; Mr. C. S. Thomson, Loughborough; Dr. B. Hall, Liverpool; Mr. F. H. Moore, Liverpool; Mr. H. G. Terry, N. Malvern; Dr. W. Habgood, Banstead; Mr. C. Grant, Clonlara; Mr. J. B. Ward, Oxford; Mr. G. Lunan, London; Mr. J. B. Sincock, Bridgwater; Mr. C. A. Patten, Ealing; Dr. F. S. Palmer, East Sheen; A. M.; Dr. Gabb, Guildford; Dr. Mickle, London; Mr. W. J. Miller, London; Messrs. Burroughs, Wellcome and Co., London; Dr. J. M. Bramwell, Goole; Dr. W. Pearce, London; M. B. M. Association; Mr. A. H. Benson, Dublin; Mr. W. F. Haslam, Birmingham; Mr. W. H. Platt, London; Mr. C. T. Quiller, London; Mr. F. B. Fisher, Dorchester; Messrs. Ridges and Sons, Wolverhampton; Mr. J. T. Smith, London; Mr. J. Browne, Aldershot; Sinus; The Secretary of the Gresham College, London; Dr. H. Woods, London; Dr. E. Seaton, London; Dr. Hale White, London; Dr. C. B. Taylor, Nottingham; The Secretary of the Sheffield Medico-Chirurgical Society, Sheffield; Dr. Halliburton, London; Mr. E. H. Fenwick, London; Mr. C. E. Jennings, London; E. H. Frere, M.B., Wickham Market; Dr. A. D. Leith Napier, London; Mr. B. F. C. Costelloe, London; Mr. E. C. Green, Derby; Dr. W. D. Wilkes, Salisbury; Mr. F. Jallan, London; Professor J. Attfield, London; D.P.H. Cambridge; Mr. W. R. H. Stewart, London; Dr. H. C. Pope, London; E. S.; Rev. A. R. Carter, Wapping; Mr. E. H. C. Sullivan, London; Mr. J. T. Finlay, Bacup; Dr. C. H. L. Oliphant, Glasgow; Mr. R. T. Bryden, Shipley; Dr. T. S. Bulmer, Sidcup; No. 29; Messrs. Lynch and Co., London; Brigade-Surgeon A. Clarke, Yorkstown; Dr. Myers, London; Miss M. Forrest, London; Dr. A. Deletrez, Brussels; Dr. W. Sykes, Mexborough; Dr. G. E. Herman, London; Mr. J. B. Sutton, London; Messrs. R. L. and J. L. Lodge, Birmingham; M.D.; Mr. P. Cormack, Urlingford; Observer; Mr. C. Symonds, London; J. L. B.; Mr. F. H. Madden, London; Dr. Rentoul, Liverpool; Mr. J. B. Bailey, London; Mr. C. W. Hogarth, London; Mr. G. H. Percival, Northampton; Professor Charteris, Glasgow; Dr. Illingworth, Accrington; Mr. Ledlie, Belfast; Dr. W. T. Gardner, London; A. Carr, M.B., Boulogne-sur-Mer; Mr. J. F. Nicholson, Hull; Mr. G. H. Spencer, Farnworth; Sir W. B. Dalby, London; Mr. H. Taylor, Guildford; Mr. H. Rainsford, London; Mr. A. Thomson, Oxford; Miss Kerswill, St. Germans; Dr. H. F. A. Goodridge, Bath; Mr. J. Bell, Hong Kong; Professor Charcot, Paris; Mr. W. J. T. Barker, Honiton; Surgeon J. M. Martin, H.M.S. *Himalaya*, Suez; J. C. Simpson, M.B., Stoke Newington; M.B.; Mr. J. R. Sinnatt, St. Helier's, Jersey; Mr. H. A. Dowell, London; Mrs. E. G. Anderson, London; Mr. T. M. Watt, Hovingham; Mr. J. V. Salvage, Trincomalee, Ceylon; Mr. Lawson Tait, Birmingham; Mr. D. Maguire, Belmullet; Mr. S. Cooke, Manchester; I.M.S.; Dr. P. M. Deas, Exeter; Dr. C. Beale, London; Our Swiss Correspondent; Dr. A. Smith, London; Dr. George Harley, London; Dr. Welch, Handsworth; Sir William Mac Cormac, London; Dr. E. Berdoe, London; Mr. L. M. Griffiths, Clifton; Sir Dyce Duckworth, London; Dr. Fletcher Beach, Dartford; Dr. H. Fox, London; Dr. Carruthers, Runcorn; Mr. E. A. R. Ball, London; Mr. G. A. Johnston, Penistone; Mr. J. Pirie, Byfield; The Secretary of the Sanitary Institute, London; Dr. J. Braithwaite, Leeds; Mr. T. Holmes, London; Dr. E. Klein, London; Dr. Balding, Royston; Ignotus; The Income Tax Repayment Agency, London; Mr. Lennox Browne, London; Mr. C. A. Byers, London; Dr. Manning, Salisbury; Dr. G. Steell, Manchester; Dr. E. Jepson, Durham; Our Paris Correspondent; Professor G. Fleming, London; Mr. H. G. Armstrong, Crowthorne; Mr. A. G. Bateman, London; Mr. D. R. Paterson, Cardiff; Dr. J. Mackenzie Booth, Aberdeen; Old Subscriber; Mr. C. E. Abbott, Braintree; Dr. Fenton, London; M.D.; Mr. R. J. Bush, London; Dr. P. Frankland, Dundee; The Secretary of the British Nurses' Association, London; Mr. A. Eccles, Plymouth; Dr. H. Port, London; Mr. G. N. Robins, London; Dr. Churton, Leeds; Mr. A. W. Loveridge, Newport; Mr. P. Fyfe, Glasgow; Mr. J. B. Lamb, London; Mr. P. Jones, Llangollen; Mr. W. Johnson Smith, London; Mr. A. W. Mayo Robson, London; Mr. A. E. Gammidge, Leicester; Dr. R. S. Hubbersty, Frome; Fleet-Surgeon A. W. Coppinger, Haslar; Mr. C. A. Ballance, London; Mr. H. B. Hewetson, Leeds; Mr. J. W. Taylor, Birmingham; Mr. A. Maude, Westerham; Mr. E. Diver, Kenley; M.D., etc., Edin.; Mr. E. A. Onyon, Eye; Mr. F. Yate, Godalming; J. Gibson, M.B., Halifax; Dr. J. Davies, Maesteg; Dr. J. Finlayson, Glasgow; G. A. Bannatyne, M.B., Greenock; Mr. R. J. H. Scott, Bath; etc.

BOOKS, ETC., RECEIVED.

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AN ADDRESS
ON
DISEASE OF THE HEART IN CHILDREN.

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After briefly expressing his thanks to the Society for having honoured him with the invitation to address them, Dr. Bruce proceeded:

Mr. President and Gentlemen,—Disease of the heart as it occurs in the child possesses so many features of special interest that we feel justified in discussing it apart from—indeed as distinguished from—disease of the heart in the adult. The very anatomy and physiology of the circulation are peculiar in young subjects. The causes of disease incident on the puerile heart are also in many important respects different from those which lead to cardiac lesions in persons who have reached the middle and later periods of life, when we have to reckon with physical and mental strain, the various cardiac poisons—alcohol, tobacco, tea, lead, and uric acid especially, with Bright's disease, syphilis, and the several degenerations. The symptoms and physical signs of heart disease are equally modified in many important particulars by the patient's age. Lastly, it is only by a thorough knowledge of these many peculiarities of the circulation and its diseases in juveniles and adolescents, that we can accomplish a diagnosis with accuracy, or offer a prognosis or plan treatment with hope of success.

Now if I were preparing a systematic treatise on disease of the heart in children it would be proper for me to begin with an examination of these differences and peculiarities; but for my present purpose I have felt that it will be more profitable if the brief and necessarily imperfect sketch I offer you is drafted on what I may call natural lines. I propose to take up the history of a child with acquired disease of the heart from the moment when the endocardium and pericardium are first threatened with inflammation, and trace it onwards to that advanced stage when the child is in grave peril from cardiac dropsy.

The various periods of this eventful history which can be profitably recognised and discussed are as follows:

I. *Acute Inflammation of the Heart*, endo-, peri-, and myocarditis, when the disease arises, threatens life directly and through its complications, demands intelligent treatment, and progresses, we will suppose, to an immediately favourable termination, but leaves behind some chronic lesion.

II. *The Establishment and Maintenance of Compensation*, the period during which the child becomes and remains practically free from symptoms of organic disease.

III. *The Rupture of Compensation and Failure of the Heart*, when the patient suffers from cardiac symptoms, and is in a condition of distress or actual danger.

You will observe that this programme does not include either congenital malformation of the heart, ulcerative endocarditis, or functional disturbances of the circulation. Each of these subjects would of itself be sufficient to occupy the whole of the time at my disposal, and I am compelled to devote my remarks entirely to acquired disease of the heart which passes into a chronic form.

I. Acute Inflammation of the Heart.

Let me begin, then, with acute inflammation of the heart in the child, and discuss with some appearance of systematic arrangement the etiology, symptoms, signs, progress, prognosis, and treatment of endo-, peri-, and myocarditis as far as they are peculiar to infancy and childhood.

First, as to the *causation* of these diseases. What are the diseases with which they are etiologically associated in the child? Or, conversely (which is far more important), What are the diseases in which acute cardiac inflammation is so much to be feared in the child that when we meet with these our attention must be specially directed to the heart?

Of these, acute rheumatism is, of course, by far the most common; but it by no means always makes its appearance in a well-declared form. This is the first point on which I desire to dwell to-day. There can be little doubt that the higher relative involvement of the heart in young subjects is due in some measure to the fact that rheumatism is frequently "latent" in the child, and that consequently the most important of all measures for the protection of the endocardium—namely, early treatment—is not always carried out. I would insist on the extreme importance of keeping our minds alive to the possible existence of acute inflammation of the heart not only in cases of well-developed articular rheumatism, but in every instance of pyrexia in young subjects with obscure pains in the limbs—"growing pains," as they are often called; of making careful search for tenderness in the joints—swelling and redness being often impossible to discover in the limbs of a chubby child; and of using the stethoscope repeatedly. And, further, I would insist on the necessity of never failing to think of rheumatism in certain pyrexial diseases in children when arthralgia is entirely absent, such as sore throat, pleurisy, pneumonia, and erythema. We have all seen instances of this kind, where we have discovered, perhaps when it was already too late to prevent endocarditis, that we had missed for days, or even weeks, the true nature of the complaint. In other instances pericarditis is the first event of all. Under these circumstances, we may have regarded the inflammation of the pericardium as "idiopathic" or due to "chill," or as a local extension of the pleurisy with which it is very likely associated; but in many of these instances of so-called simple or primary pericarditis the process is really rheumatic, and the sooner we discover this fact the better for all concerned. Four tests may be employed under these difficult circumstances to determine whether pericarditis be rheumatic or not. These are, first, the association with it of an endocardial murmur; secondly, the effect of anti-rheumatic treatment, especially of salicylates; thirdly, the discovery, after minute examination, of tenderness in the joints; and, fourthly, the family history.

Far behind rheumatism as causes of cardiac inflammation in children come chorea, scarlet fever, diphtheria, septicæmia, measles, tonsillitis, and peliosis rheumatica. The association of chorea with rheumatism and heart disease has recently been worked out both in England and America, and for our present purpose we may venture to conclude that acute inflammation of the heart arises in some cases of chorea where rheumatism cannot be traced.[1]

With respect to acute pericarditis in children, its occasional connection with scarlet fever and with phthisis must not be forgotten. In children, also, I have been impressed by the insidious appearance of pericarditis after slight injuries to the periosteum. I have known acute suppurative pericarditis and pyæmic abscess of the heart follow a kick on the shin in an apparently healthy little girl of 6 years. I have also known fatal pericarditis associated with pleuro-pneumonia occur in a boy of 6, who had drunk a small quantity of water in which cut flowers had been standing for a day or two; the process appearing to be one of infection of quite a specific nature.

The practical lesson to be drawn from these observations is obvious. In rheumatism, however slight, in all acute illnesses in a child which may possibly be of rheumatic origin, even although unattended with pains in the limbs, such as pleurisy, pneumonia, and tonsillitis, and in every case of pain in the limbs of children, especially the children of rheumatic families, the suspicion of cardiac involvement should be entertained, and a careful examination repeatedly made of the chest, front and back. And the same rule applies to all cases of trifling-looking injuries of bones, chorea, and the acute specific diseases.

I now come to inquire whether there are any peculiarities in the *symptoms* of acute disease of the heart in children, which may readily escape, deceive, or mislead us if we are not prepared for them. The first striking clinical feature of acute cardiac disease in the child is the relative latency or mildness of the symptoms as compared with those in the adult, and the relative distinctness of the physical signs. There is nothing remarkable in these characters as far as regards endocarditis, which is seldom attended by proper symptoms in the adult. But even in the pericarditis of young subjects the symptoms may be absent which

[1] The present Address was delivered shortly before the publication of Dr. Cheadle's Harveian Lectures on the Various Manifestations of the Rheumatic State as Exemplified in Childhood and Early Life. In these invaluable lectures the reader will find a complete and remarkably lucid treatment of the mutual relations of the acute arthritis, chorea, cardiac disease, and other "phases" of rheumatism as they occur in the child.

usually direct our attention to the heart. Præcordial distress, pain, palpitation, and the characteristic cubitus may not be present at first, or they may not be so prominent as they usually are in the adult. We must never wait for complaints on the part of the patient, but watch attentively and examine for the development of characteristic signs. The expression of the face, the posture in bed, an increase of dyspnœa, and working of the alæ nasi are important indications of cardiac involvement, whilst physical examination of the præcordia will reveal the alteration in the impulse, the increase of vertical dulness, the friction or the muffled sounds—all with comparative facility in the child.

In the case of acute myocarditis, also, the symptoms are very obscure, being mainly lost in those of the associated inflammation of the endo- and pericardium. Even when they are well marked they may not belong specially to either a cardiac or a respiratory type, but assume a character strongly suggestive of cerebral disease. In addition to anxiety, pallor, or lividity of the face, failure or absence of the pulse, and urgent dyspnœa with clammy sweats, the most prominent feature of the case may be a dull, sleepy state, preceded by headache, convulsions, and delirium, and progressing towards complete coma. It can be readily understood how difficult under these circumstances would be a diagnosis of acute inflammation of the heart, as distinct from some involvement of the brain or its membranes; and, indeed, as a matter of fact, this type of myocarditis has very seldom been successfully diagnosed during life.

The second clinical feature connected with acute heart disease in children is the great susceptibility of young subjects to impressions. Children are very readily excited and upset, under these circumstances, by extraordinary events, whether of a pleasant or of an unpleasant kind. The visit of a friend, a change of nurse, the slightest alteration in diet, neglect of the bowels, or carelessness with respect to the warming of the room on a cold night, may raise the temperature of children with endo- and pericarditis when they are progressing favourably, aggravate the palpitation, or cause a relapse of the acute cardiac disease, the pleuritic effusion, or the rheumatism on which these depend.

This remarkable susceptibility of children to impressions, and, as I believe, the obstinacy of the rheumatic process in childhood, account for the peculiar course and duration of acute heart disease in young subjects. One of the most striking, and perhaps the most important, feature of infantile and puerile endo- and pericarditis is their tendency to repeatedly relapse, and thus run a protracted and indefinite course. In adults the rheumatic process, once controlled by correct treatment, can be subdued with proper care, and does not return if ordinary precautions be taken with respect to rest and food. In children, on the contrary, we have no confidence that when the temperature falls under ordinary treatment, it will not rise again the moment our measures are in the least relaxed. It does not require a change of medicinal treatment or a solid meal to bring back aches in the joints, to induce fresh præcordial pain and distress, and to set up a return of effusion in the pleura. The first attempt to leave bed for an hour, or even to sit up in bed, the anticipation of some promised pleasure in connection with convalescence, the simplest indulgence of the palate (and these children are so urgent in their cravings), the fatigue consequent on listening too long to an interesting story, the leave-taking of their nurse at what appears to be the successful end of the case—these or other exciting circumstances may readily be the cause of a serious relapse. And what most of all tries the patience of the medical attendant, and shakes the hopes of the parents and their confidence in his skill and treatment, is the persistent return of such relapses one after another. As I have just said, the natural irritability of children, their sensitiveness to impressions, is not entirely accountable for this peculiar course of the disease. The rheumatic element must also be reckoned with. As long as the rheumatic process lasts in the child, however slight, even to latency, its manifestations in the joints, the heart and pleura will continue to be worried by it and to suffer, not only in the way of subjective distress and attacks of palpitation, but of repeated pathological change. This is but another statement of the fact on which I have just insisted, that rheumatism is at once latent and dangerous in the child. The course which a case of rheumatic heart disease may thus run in a young subject is measured not by days, nor perhaps by weeks, but by months. It is a comfort to know that even in these cases perseverance is rewarded. The most scrupulous care on the part of the doctor, nurse, and relatives will finally wear out the rheumatic process, which, under half-hearted management, might persist for an indefinite time and lead to disastrous results.

With regard to special *complications*, my experience is that pulmonary disease is more common in children than in adults under treatment for rheumatic endocarditis. A very interesting series of cases illustrative of this connection was recently recorded by Dr. Cheadle,[2] three out of six patients being children. Dr. Cheadle dwelt on several peculiar features of these cases of "rheumatic pneumonia," including the remarkable partiality of the disease for the left lung and comparative immunity of the right lung, the association with pericarditis and with well-marked endocarditis or chronic valvular disease, and the absence of such symptoms as cough and expectoration. This is again but another way of stating the facts to which I have been drawing your attention to-day—the severity, the tendency to complications, the indefiniteness of course, and withal the latency of acute rheumatic disease of the heart in young subjects. It is also highly important for us to remember that, under these circumstances, tonsillitis, pleurisy, or pleuro-pneumonia may possibly be the first symptom of all, then inflammation of the heart, and that rheumatism may not make its appearance in the joints until after weeks of illness. I would add that, in my experience, these complications not only are obscure and serious, but shift and change very remarkably, effusion coming and going in the pleura within twenty-four hours, and that such changes may be exceedingly rapid, the child sometimes dying of increase of fluid in the chest before relief can be afforded.

Several important differences in the *physical signs* connected with the heart have to be borne in mind when we approach the examination of these cases in children. I will not detain you with a description of the special methods which have to be followed in the examination of infantile and puerile patients. All of us who have had much experience of the treatment of young subjects understand the great value of careful inspection, especially in infants: of a keen eye for the general appearance, expression, and complexion, the condition of the hands, the lips, and the neck, the attitude, the behaviour, and the symptoms or phenomena that occur during examination, especially the whole aspect of the patient before the circulation has been disturbed by fear and crying. But I may remind you of a few physiological differences in connection with the heart of the child, which must never be forgotten when we are anxiously examining it day by day for the earliest appearance of endocarditis or pericarditis.

The heart lies higher in the thorax of the child; the situation of the apex beat is usually in the fourth space, and more to the left than in the adult. The impulse, as a whole, is often widely visible and palpable. The sounds, too, are normally somewhat peculiar. They have a puerile character, just as the respiratory sounds have, being especially "divided" (both periods of silence marked), frequently "deliberate" or slow in their development, and more often definitely reduplicated than in the adult. When the heart is diseased in young subjects, the prominence of the præcordia is especially striking—for instance, in acute pericarditis. Palpable signs, such as friction fremitus, are peculiarly well marked in children, and audible friction is relatively loud and easily determined, except that it occasionally simulates somewhat closely the blowing murmurs of endocardial origin. I have also been struck by the extensive area in the back over which systolic murmurs are frequently conducted in children.

I now come to the all-important inquiries: What are the terminations and the immediate and remote prognosis of acute cardiac disease in children? Is death more likely or less likely than in the adult? Is there greater or less relative liability to permanent valvular disease and adherent pericardium?

Let us begin with the first question, that of the *immediate prognosis*. Some authorities would offer a favourable prognosis in acute heart disease as it occurs in children. For myself, I confess I regard it as unwise to forecast so favourably. It is no doubt true that acute rheumatic and choreic inflammation of the heart seldom proves directly fatal in young subjects, but it is equally true that its complications are frequently the cause of death, particularly pneumonia and pleurisy. I have come to look upon rheumatic pleuro-pneumonia in the child and adolescent, in association with endocarditis and pericarditis, as a condition full of peril to life. If other physicians have had better results, I can only repeat that, unhappily, this is not my experience.

The question of the *ultimate prognosis* of acute heart disease in

[2] *Lancet*, 1888, ii, p. 861.

children is rather a peculiar one. The comparative frequency of chronic valvular disease as a consequence of acute rheumatism in the earlier years of life probably depends to a considerable extent upon the social condition of the patient, being greater amongst the poor, who do not always enjoy the advantages of early, close, and continuous treatment. We may anticipate with confidence that the better knowledge of this subject which now prevails, and the improved results of the salicylate treatment of rheumatism, will considerably reduce the proportion of cases of endocarditis and of permanent damage to the heart. But quite irrespective of this consideration, experience justifies us in stating that the remote prognosis of endocarditis is actually better in the child than it is in the adult: that the probability of the development of permanent valvular disease from endocarditis is less, for we know that if proper care be taken, the evidence of valvular lesion, in the form of a murmur, sometimes completely disappears in young subjects—it may be weeks, months or even years afterwards. The proper rule then for us to follow, when we are asked for an opinion with respect to the future condition of the child's heart—as to whether it will be left organically damaged or not, is to be cautious in expressing an unfavourable prognosis, and to give the parents the assurance—to which they are entitled in their great anxiety—that in a certain number of cases the signs of valvular disease ultimately disappear.[3]

I come, lastly, in this connection to some general considerations with respect to the *treatment* of a case of acute cardiac disease in the child as distinguished from a similar case in the adult. I shall not be expected, in discussing this subject, to enter into the details of medicinal treatment.

You will have already gathered from what I have said under the heads of Etiology, Symptoms and Prognosis, the points which, in my opinion, the practitioner has to bear particularly in mind. It is our first duty to reduce the comparatively great liability of acute rheumatism or other primary disease to end in cardiac inflammation, that is, to *prevent* endocarditis and pericarditis. In the great majority of cases this is to be done by immediately and vigorously combating the rheumatic process with salicylates, insuring proper nursing, attending to the diet, the bowels, and the liver, and quieting the circulation and the nervous system. Excitement of every kind, even those very insignificant looking circumstances which I have already mentioned, must be rigidly countermanded. Unhappily we have less control over the other causes of acute cardiac inflammation, such as pyæmia, scarlet fever, and diphtheria; but even in these diseases the process and its local manifestations can sometimes be subdued. In the case of threatened carditis and pericarditis, consequent on acute osteomyelitis from injury, proper local surgical treatment will surely be of some avail. At least if we can do no good, let us carefully avoid doing harm. In diphtheria, where myocarditis may supervene, let us keep off depressing emetics and expectorants such as apomorphine and ipecacuanha, and every kind of meddlesome treatment. One of the most unfortunate circumstances connected with the treatment of diphtheria is the excitement with which the child often meets our attempts to apply local remedies. Nothing of its kind is more distressing to the practitioner than the use of the douche for the nose, or of the brush for the throat of a diphtheritic child whose pulse and general appearance indicate threatening cardiac failure.[4] In scarlet fever the chief indication for preventive treatment as regards the heart is to control the blood-pressure and anticipate acute cardiac dilatation by means of diet, hydragogues, and nitrites. Pilocarpine must be used with great caution.

If endocarditis or pericarditis have made their appearance when the case comes under our care, the same strict measures must be carried out. Our endeavour will be to cut short the rheumatic attack, believing, as we do, that the continuance and, to some extent, the severity of the cardiac inflammation depend on the activity of the original process. Salicin and quinine sometimes succeed when the salicylates fail.[5] As the symptoms are subdued, the very greatest caution must be exercised in relaxing the antirheumatic system of treatment. Relapses must be intelligently anticipated. The practitioner ought from the first to let the parents understand that the case is quite likely to run an irregular indefinite course, and that he is prepared to manage it on intelligent and consistent principles, whatever may be the extent and complexity of its duration. Absolute rest in bed, entire freedom from excitement, and proper nursing must be continued week after week. The diet must be rigidly fluid, and given in small quantities at short intervals. It is not enough that delicacies of a suspicious kind should be withheld; even the cravings and repeated request of the child for simple biscuit, or bread, or other plain solids must be denied, however trying for the mother, nurse, and doctor, as well as for the patient, this may be. Stimulants may have to be given, and that freely. The bowels must be evacuated daily; if not naturally, then by the exhibition of aloes in the evening or a mild saline in the morning, or by enema. The temperature of the room must be most carefully regulated. The patient is not to be permitted to use his hands excepting for the simplest requirements, especially in pericarditis; he must not hold a book nor be allowed to read. As I have already said, the greatest judgment is necessary on the part of the parents and nurse with respect to the mental occupation of the patient as the more urgent symptoms pass off.

I can understand that much of this counsel may seem unnecessary to some of my audience, whilst others may regard the system of treatment as excessively strict from first to last. But those of you who have had experience of such cases as I have just sketched, dragging on from week to month, will not quarrel with my advice, knowing as you do that even if carefully followed for the first week or two, the plan of rigid treatment is apt to be allowed to degenerate when weeks have grown into months, and still the rheumatic pains and the palpitation and the dyspnœa persist or continue to return.

Cases of this kind have to be managed rather than "treated." You will occasionally find it necessary, as one of the wisest of my professional friends has remarked to me, to direct your attention more to the parents than to the patient, and to order blue pill and bromide for the mother, not for the child. I am confident that it is the want of firmness, patience, and consistency in the management of the original endocarditis that has to account for the severity—possibly indeed for the very existence—of some cases of chronic valvular disease of the heart. This brings me to say that there is of course another reason for insisting on continued and prolonged care in the treatment of acute inflammation of the heart. Even when the morbid process has actually come to an end, the diseased valves demand the most careful treatment. The mitral, and perhaps the aortic, cusps are left in a state of diminished resistance, hyperæmia, and vegetative growth. The danger is great that these conditions will pass into a chronic lesion with obstruction or incompetence of the valves. The urgent and obvious indication is for cardiac rest, such as can be secured only by diminished force and frequency of the heart's movements. This circumstance clearly demands a lengthened period of convalescence and a most gradual and cautious return to ordinary occupation.

I must not forget to add that in some instances paracentesis of the chest is necessary when the effusion rises high, or when it is double, or the opposite lung becomes congested. In a few instances, as I have already said in passing, the operation may be suddenly and urgently called for.

II. The Establishment and Maintenance of Compensation.

Let us now suppose that the child has been safely conducted through the perils of acute endo- and pericarditis, has convalesced completely, and has been left with chronic valvular disease—say mitral regurgitation, or with adherent pericardium, or with both. If compensation can now be established, we know by experience that the child will not only live, but may grow, develop, and enter on a happy, active, useful, and possibly long life. The management of a child in whom physiological compensation is being established calls for the exercise of great judgment. The decisions that have to be arrived at, and the success of the plans that have to be carried out, depend on an intimate knowledge, not merely of the condition of the child's heart and other organs, but of the constitution and mental disposition of himself and of his parents—precisely the kind of knowledge that the family practitioner possesses more fully than the consultant.

There can be no doubt that compensation occurs with exceptional completeness and rapidity in the child. In patients coming before us with chronic valvular disease traceable to endocarditis in infancy or childhood, whether their present complaints are of the heart, or whether (as is so often the case) of some other disease or disorder entirely unconnected with it, we are constantly finding evidence of recovery—good cardiac action, the signs of hyper-

[3] *Cf.* Dr. M. A. Boyd, of Dublin, On the Disappearance of Cardiac Murmurs, *Medical Press and Circular*, March 13th, 1889.
[4] Compare Jacobi, *Archives of Pediatrics*, March, 1889.
[5] Dr. Cheatle, *loc. cit.*

trophy, and ability of the circulatory apparatus to discharge their functions within reasonable limits. *A priori* this is only what we should expect—that compensation would be easily and successfully effected in the child, in whom increase in vigour and growth in size are comparatively active natural processes, and vascular and cardiac elasticity still unimpaired. Let us review the circumstances that determine and favour compensation, so that we may understand this matter a little more fully.

The first circumstance that determines compensation is moderately increased pressure within some part or area of the circulatory system, leading to a demand for increased activity and accommodation on the part of the heart and blood vessels. For instance, in mitral disease there is increased pressure between the mitral opening and the pulmonary valves, calling for increased activity of the right ventricle, and demanding room for an increased volume of blood within the lesser circulation. The second circumstance is a sufficient reserve of force in the cardiac muscle and of elasticity in the cardiac and vascular walls to respond to and satisfy these demands. In mitral disease this is provided for abundantly in the right ventricle, and in the walls of the left auricle and the pulmonary veins, capillaries, and arteries. The third condition of compensation is the property or power of hypertrophy or growth of muscular tissue in connection with a continuation of increased activity. And the fourth and last condition is sufficient nutrition—a proper supply of blood through the coronary arteries, and a healthy state of the nervous influences that reach it. If these considerations appear somewhat too theoretical for daily application, let us discuss the subject from the other point of view—as it is presented to us in practice. Our experience is that compensation has to be established in spite of certain circumstances which militate against it, and which we have to remove when they seriously stand in the way. A large and perhaps the most important part of our duty as family advisers in cases of chronic disease of the heart in children is the timely anticipation and prevention of evil.

The first cause of interference with compensation is impoverished blood supply, consequent on general nutritive failure—anæmia, starvation, dyspepsia, and disturbed action of the liver. This cause is evident enough in the children of the poor, but it is often overlooked in the badly managed, pampered, overfed, and coddled children of the well-to-do. Although, on the whole, this source of imperfect compensation is less common in children than in adults, it must never be overlooked. The child's diet must receive our most careful attention. A frequent appeal to the bowels and liver by means of aperient powders is equally necessary. At this period, too, hæmatinics carefully used ought to prove invaluable—iron in one or other of its many forms, and arsenic.

The second set of causes of interference with compensation arise in connection with muscular exertion. An excessive demand for cardiac activity, which is one of the common causes of broken compensation in the adult subject of heart disease, at any rate amongst the poor, is, or ought to be, comparatively rare in the child. Boys will occasionally strain a weakened valve or a hypertrophied heart in play, but this is an uncommon event compared with the occurrence of damage to the heart of the hard-working man, who will not be restrained from resuming work after acute rheumatism—it may be weeks before he is in a fit condition to do so.

Much the same remark applies to nervous causes. We have seen the effect of nervous disturbances in determining relapses during the acute stage of these cardiac diseases in the child. In the same way excitement may disturb the nutrition of the compensating heart, for example, the premature or otherwise indiscreet return of the child to his lessons. But, on the whole, nervous influences are by no means so fruitful of evil in the child as the many that encompass the adult man and woman. Children can be spared many nervous shocks which adults must suffer. This brings us naturally to consider that most important part of the management of the child with heart disease which we are expected to settle, namely, his education. It often taxes our judgment severely to give sound advice on this subject. With the girl of the better classes there is indeed but little difficulty on this score: she remains at home, of course. But with the boy comes the critical question—Is he to be sent to school? How different the significance of this inquiry with each individual lad! Let us recall for a moment what "going to school" meant to each of us and our schoolfellows, according to our several dispositions and abilities. No doubt it is wise to let a boy have lessons at home for a time; then to extend the range of his mental and bodily exercise by sending him to a school in the neighbourhood for a few hours a day; and finally, if all goes well, to put him to a boarding school specially selected for the healthiness of its situation and the amount of individual attention that can be bestowed upon its pupils. Whether there or at home, the youthful subject of heart disease is to be faithfully watched. On the one hand we must be on the outlook for symptoms of mental strain—headaches, night-talking, or sleep-walking, irritability of temper, and the occurrence of choreic twitchings. On the other hand we have to see that muscular exercise is neither abused nor neglected. We are always expected to speak definitely as to games. My own plan is to allow simple quiet cricket to any lad with heart disease who is otherwise able to be at school with his fellows, but to forbid matches of every kind and set games at tennis, where his courage might not allow him to give in until too late. Football and paper-chases are to be unhesitatingly forbidden. Tricycling ought to do no harm if reasonably enjoyed; but, as a matter of fact, it is dangerous, for I have recently had to treat at least four cases of strain of the healthy heart from over-riding tricycles or bicycles.

Having settled this point definitely as to the manner in which the "cardiac" child is to be reared and educated, our duty is not completed until we have given the parents another caution—with respect to the incidence of acute disease. The subject of chronic valvular disease of the heart must be specially protected from rheumatism. His parents and teachers must never be allowed to forget that this is the greatest of all dangers, lest the boy get a return of rheumatism and an increase of his cardiac lesion. They must be cautioned not to disregard the most insignificant looking symptoms that may suggest rheumatism, such as sore throat, a stiff neck, or a trifling ache in the legs. Just as it is difficult to throw off the original rheumatism in the young subject, so we find it is difficult to prevent its return; and we must always be prepared for it. From 10 or 12 till puberty is probably the most unfavourable age in this respect. Some children are rheumatic throughout all these years, continuously or discontinuously. And whilst they are rheumatic, however slight may be the joint symptoms, even to the degree of latency, the heart is never free from a kind of worrying influence of the primary disease and the danger of further organic involvement in the form of pericarditis, extension of the endocardial lesion, and acute pulmonary complications. If the hygienic measures which I have already suggested have been faithfully attended to, including a proper use of baths and clothing and the regulation of the digestion and bowels, rheumatism will be, as a rule, successfully averted. If it do make its appearance, active measures must be immediately instituted.

During the most trying seasons of the year, the liability to acute pulmonary disease must also be kept before the mind, and, if bronchitis or congestion of the lungs arise, the condition of the child's heart will call for careful consideration.

In connection with the subject of the management of compensation in the child, let me refer to the advisability of examining the heart periodically, however free from symptoms it may be. We ought to be intimately acquainted with the size of the heart and the state of the valves and pericardium in anticipation of illness, and, indeed, in order to offer sound advice whilst the child is well.

Lastly, a remark which I have just made with regard to the management of these children in the better classes of society brings me to mention the effects of incorrect treatment of every kind. I do not refer simply to unsuccessful treatment, but to the mistaken application or abuse of good remedies. Not only may there be a abuse of rest and feeding, but we may be guilty of a routine employment of such drugs as digitalis and its allies when they are more than unnecessary—positively harmful. If we clearly understand the significance of compensation, we cannot fail to comprehend the weakness, the uselessness, the worse than uselessness, of these or any other methods of routine treatment.

III. Rupture of Compensation and Failure of the Heart.

Whilst compensation is maintained, we have seen that a child with heart disease is practically free from symptoms. It is, I confess, incorrect to say that the child is free from a degree of anæmia, dyspnœa, and occasional distress when his heart is taxed by exertion or excitement, and it is also true that he is peculiarly thin. Still, he is often so well that no one suspects the cardiac lesion. Unhappily this favourable condition does not last indefinitely. Sooner or later in most cases there occur symptoms indicative of

cardiac inadequacy—temporary, it is true, if care be taken, but very apt to return. In these illnesses, which are characterised by palpitation, dyspnœa, præcordial distress, disorder of digestion and liver, and nocturnal suffering, it is said that the child has "heart disease;" indeed, it may be that the heart disease is now discovered only for the first time. We know that it would be more correct to say that the child is suffering from failure of compensation, or failure of the heart in compensation: that the symptoms are not strictly those of valvular disease of the heart, but of failure of the hypertrophied walls.

The severity of the symptoms of failure varies greatly in different instances, from passing shortness of breath or an attack of nocturnal palpitation after a careless supper to a pronounced condition of dilatation of the heart, with engorged lungs and liver, urgent dyspnœa, cough and hæmoptysis, ascites, albuminuria, and it may be dropsy, of which the patient ultimately perishes. In several important respects the phenomena of broken compensation are peculiar in the child. In the first place, cardiac dropsy and albuminuria are comparatively infrequent. Pain and other subjective symptoms are also less prominent, or at any rate are less complained of than in the adult. On the contrary, dyspnœa is a complaint most commonly mentioned by the mother, and continues to be a striking feature. Epistaxis (with premature menstruation in girls) may attract our attention for the first time to the state of the child's heart. When the condition of the patient is urgent, we find with comparative frequency that some acute pericardial, pulmonary, or pleuritic complication is also present.

All these symptoms are familiar to you, and I need not dwell upon them now. Indeed, so familiar are they, that when we meet with them we are very apt to accept them as a matter of course for symptoms of "disease of the heart," and to make no further inquiry into their origin. A little consideration ought to teach us that we are wrong here. They are never a matter of course. Failure of compensation never arises without a cause. These symptoms would not be present unless something had occurred to undo compensation. As we sit by the bedside of our patient suffering from dyspnœa and palpitation, it is our duty to ask ourselves, "What has happened that this child, who has been comparatively well ever since his attack of rheumatism with endocarditis a year ago, and of whom I have been so careful in the interval with respect to his entire management, should now be suffering from urgent cardiac failure?" On our proper estimate of the importance of asking ourselves this question, and on the correctness of the answer that we give to it, will depend in a great measure the success of our prognosis and of our treatment.

As regards prognosis, the immediate prospect mainly depends upon the circumstance whether, on the one hand, muscular exertion, nervous strain, impoverishment of the blood, or injudicious treatment have been the cause of the undoing of the natural cure, or whether, on the other hand, rheumatism or other intercurrent disease or a fresh lesion is at work. If one or other of the first set of causes be present, a short period of rest in bed and general correct treatment will soon restore the heart; but if an intercurrent disease be at the bottom of cardiac failure, the danger is great both directly and indirectly.

On the whole, the prognosis of cardiac failure in the child is better than in the adult. As compensation tends to be established and to be maintained with comparative readiness in the young, so it is as a rule more easily restored. But here we must be cautious. I have said that such marked symptoms as cardiac dropsy are rare in the child, and the proper complement of this statement is that when these marked symptoms do occur they are of more serious import.

When we proceed to apply treatment in the case of a child suffering from urgent cardiac failure, if we will but be guided by the considerations which I have just reviewed, with respect to the cause which is at work, including the conditions in which the child is living, we shall never allow ourselves to be guilty of routine practice, especially in the direction of the administration of drugs. If we find the cause to have been nothing more than some indiscretion in the way of feeding, medicinal treatment, or general management, we may, in a large proportion of cases, especially amongst the poor, bring the case to a successful issue by contenting ourselves with the employment of proper rest, food, nursing, and the simplest remedies, followed by the administration of tonics and hæmatinics. Confinement to bed for a few days, and abstinence for a longer period from exercise, will in the same way relieve those cases which can be traced to moderate over-exertion. When rheumatism is discovered to be present, the measures which are familiar to you must be immediately instituted, in order to combat the morbid process and sustain the heart. In the case of other intercurrent diseases of an acute kind, such as the specific fevers and pulmonary congestion, the precautions which I mentioned at an earlier part of the lecture must never be neglected; I mean with respect to the avoidance of debilitating remedies, including the abuse of antimony, ipecacuanha, and emetics. In a word, routine must be avoided: each case must be treated on its own merits according to the cause that is at work.

But whilst this is a rational and successful method of treatment in a large number of instances, we must never forget that at times the cause of the cardiac failure may not be discoverable, and that at other times the condition of the child is far too urgent to justify us in dealing simply with the cause. Urgent dyspnœa, palpitation, and failure of the pulse will demand instant attention; and it is our duty under these circumstances to procure if possible immediate relief and to avert urgent danger. Time does not permit me to dwell on the details of the management of these cardiac symptoms to-day, and I can only refer to the general principles which, in my opinion, ought to guide us in our attempt to avert death and to restore compensation.

The first indication in this class of cases is to increase the cardiac force, so that the circulation may be restored and maintained. If the condition of the patient is not exceedingly urgent, this indication can be successfully fulfilled by the employment of digitalis, strophanthus, caffeine, senega, squill, and their allies. Sometimes one and sometimes another of these remedies answers best; but, on the whole, there can be no question that digitalis, if rationally employed, is still the most valuable. Combinations of these drugs with each other, and with other remedies, such as the nitrites, strychnine, and—after a time—iron, are often peculiarly valuable.

When matters are more pressing we have happily a series of cardiac stimulants which act with promptness and success in the child. Ether, ammonia, and alcohol are familiar to us all; but perhaps some of you may not be so well acquainted with the subcutaneous use of strychnine in the form of the 1 per cent. pharmacopœial solution of the hydrochlorate, which in some instances has an effect little short of marvellous in restoring the action of the ventricles. If the urgency be connected mainly with engorgement of the lungs and failure of the right side of the heart, the greatest possible benefit may be derived from venesection, cupping, and leeching; and, under certain circumstances, the judicious use of hydragogue purgatives, mercurial cholagogues, and stimulant expectorants will be attended with the very best results.

Lastly, it is unnecessary for me to insist upon the essential importance in these patients of attention to the diet, which must be highly nutritious, perfectly digestible, and given at short intervals; and under this head I of course include the administration of stimulants in proper form and in proper amount. Occasionally it is necessary in the child to perform paracentesis, and my experience is that this, if carefully practised, may in some cases give not only immediate but permanent relief.

INSANITY IN ITALY.—Insanity appears to be on the increase in Italy as in some other countries. In a publication embodying the results of the last (fifth) census of lunatics in Italy, Professor Verga says that whereas in 1883 there was 1 lunatic in every 1,476 of the population, the proportion now is nearly 1 in 1,000. The ratio varies largely in different provinces. Thus in Sardinia it is 1 in 5,062 inhabitants; in the Neapolitan province 1 in 3,257; in Sicily in in 3,167; in Piedmont 1 in 1,366; in Umbria 1 in 1278; in Venetia 1 in 1,025; in Lombardy 1 in 983; in Tuscany 1 in 913; in the Marche 1 in 893; in Emilia 1 in 760; and in Liguria 1 in 758. These figures, however, as pointed out by Dr. Verga, are misleading, the difference in the number depending much more on local variations in the mode of certifying, admitting, and discharging lunatics than on any special tendency to the development of insanity in particular regions. One very remarkable fact brought out by Dr. Verga's statistics is the relatively enormous proportion of lunatics among criminals. Thus while taking the general population, among 1,000 persons above 15 years of age, the average number of lunatics is 1.24, among convicts the proportion is 12.25 per 1,000. In the female sex the corresponding numbers are 1.09 and 3.08 per 1,000.

FOUR YEARS' EXPERIENCE OF CASES OF STRICTURE OF THE URETHRA TREATED BY ELECTROLYSIS, WITH A RECORD OF FIFTY CASES.

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[*Concluded from page 883.*]

The method which I now usually employ in carrying out this treatment is the following: the patient can either be treated in bed, or in slighter cases he may follow his employment, but it is always advisable, immediately after the first sitting, that he should go quietly home and go to bed. A neglect of this precaution may entail pain, possibly accompanied by considerable difficulty in passing water during the first twenty-four hours, especially if the stricture be a tight one. No anæsthetic is required; indeed, it is usually contraindicated, as the patient's sensations often afford an excellent indication of the effect of the current on his tissues, though as a rule the process is practically painless.

The most convenient plan is to place the patient on his back, letting him lie on a well-wetted pad about the size of the palm of one's hand or larger, which pad is connected with the positive pole of the battery. It is essential that the current from the positive pole should be distributed over a large surface and thus subdivided, so as to avoid its destructive action on the skin. Occasionally it is necessary during the course of the operation to change the place of this pad on account of the burning sensation of which the patient complains.

If the stricture has not been already carefully measured, by means of bougies *à boule*, or by any other method the surgeon prefers, this must be done before the exact line of treatment can be decided on. Where one stricture only exists, that alone will require treatment, and the case is simple: but where more than one is present the most anterior should be treated first, and on a subsequent occasion the deeper strictures should be again carefully measured, as they may have in the meantime become somewhat enlarged in calibre. A bougie-electrode is selected which is about two sizes larger than the largest instrument which the stricture will admit; it is oiled and passed down, and allowed to rest by its own weight against the stricture. By means of the binding screw at the top it is connected with the negative pole of the battery. The galvanometer is introduced somewhere into the circuit, that is, either between the bougie-electrode and the battery, or between the pad and the battery. It is preferable to place it in the latter situation, as it is less likely to be disturbed. One of its binding screws, therefore, must be connected by a short length of wire to the positive pole of the battery, and the other by a similar piece of wire to the back pad. When all these details are completed, the battery is brought into action by lowering the zincs and carbons into the acid.

For the first few seconds it is very likely that the patient will scarcely feel the pricking which is manifest later on, as the resistance offered by the skin before it becomes thoroughly soaked is very considerable. Soon, however, the needle of the galvanometer and the patient's sensations clearly point out that the current is passing. If the current strength is more than from 7 to 10 milliampères, or the patient complain of anything approaching to pain, a less number of cells should be at once resorted to. If the stricture that is being attacked is situated anywhere in the penile portion of the urethra, the surgeon will have no difficulty in determining whether the instrument is passing in the right direction; but if the stricture is situated more deeply, one finger in the rectum will readily indicate what is going on, should any difficulty be experienced. During the course of the sitting bubbles of gas can be seen and felt to pass up the urethra, and if the operation be performed in a bath the bubbling up of the gas forms a striking feature. There is no need to change the strength of the current unless the galvanometer or the patient's sensations demand it. After a period varying from a few minutes to half an an hour, the bougie usually traverses the stricture. As soon as this takes place the current should be arrested and the bougie gently removed, no further operation being attempted for at least a week. It is better to wait a fortnight, or even three weeks.

Occasionally no passage is effected. Should this be the case after the sitting has exceeded half an hour, it is usually better to withdraw the instrument, and wait till the usual period has elapsed before making another attempt. These apparently abortive sittings are really not lost time, and it is curious to note how the patient often states that his stream improves, and that the ease with which he makes water is increased though no instrument has been used. With strictures through which no instrument can be passed, I have had as many as five unsuccessful sittings, but patience has at last been crowned with success, and the increase in calibre speedily becomes augmented.

If the urethra proves to be irritable, the sittings must be shortened, and in many instances the progress of the case will be much quickened if a small stricture is dilated say to No. 4 or No. 5 English, and the remainder only of the dilatation effected by electrolysis.

For a day or so after the passage of the bougie-electrode the patient usually complains of a slight soreness in the urethra, as if he had an attack of gonorrhœa, but this rarely lasts for more than forty-eight hours. After the lapse of ten days or a fortnight the urethra should again be carefully examined, when it will usually be found to admit an instrument one or two sizes larger than the bougie-electrode which was employed on the previous occasion. Thus if the stricture admits No. 4 before treatment, No. 6 bougie-electrode will probably be able to be passed, and a fortnight later No. 8 or 9 will pass without difficulty. If this be so No. 10 bougie-electrode should be employed in the manner that has already been described, and its passage on this occasion will probably be only a matter of a few minutes. A further interval of ten days' rest will most likely enable No. 12 to pass.

The object of this plan of treatment is the absorption or softening of the cicatrix which has given rise to the stricture, and it is well to bear in mind what it is that really does take place, for the process can readily be witnessed when a stricture at or within half an inch of the urethral orifice is submitted to treatment. In these cases the surface of the epithelium is seen to be gradually converted into a glutinous saponaceous-looking material, which bubbles up around the tip and sides of the electrode. If this material is wiped carefully away the surface is seen to be red and somewhat congested in appearance, but it is perfectly evident that the epithelium is not entirely removed with such currents as I am in the habit of employing. It is, moreover, evident that a narrow orifice, which is treated by allowing No. 4 bougie-electrode to pass through it, will three weeks later admit a No. 6 with ease, though no instrument has been passed in the meantime, presumably owing to a continuance of the process of absorption after the bougie-electrode is removed.

Such was the description which I gave of the process when I first published an account of the method, and so far as it goes it is undoubtedly perfectly correct. Mere absorption will not, however, explain all the phenomena which may be occasionally witnessed after an electrical sitting.

The following instances will elucidate my meaning more fully; in one of them a tight stricture, which was extremely painful to the passage of bougies, was completely cured by a single electrical sitting (No. 29), whilst another, though readily yielding to the bougie-electrode at the time, always recurred afterwards, and each time when I saw him (from a fortnight to a month elapsed between each visit) his stricture admitted No. 4 English, but as soon as No. 5 had been held against the stricture for about a quarter of an hour it passed, and then Nos. 8, 9, 10, 11, and 12 all passed in rapid succession. Nine times in succession did I dilate the stricture, and nine times did he return at intervals of from fourteen to twenty-eight days with his stricture in the same condition (No. 27).

It was clear that one had to deal with a *bonâ fide* case of spasmodic stricture. I examined the man's urethra with the urethroscope, and detected on the left side of the canal a small red patch, which, as far as I could judge, was situated as nearly as possible in the locality of the stricture. This at once recalled to me the views on the pathology of rectal stricture, which have been so carefully worked out by my friend and colleague, Mr. Cripps, in his well-known book on *Diseases of the Rectum and Anus*, and the case which he records of a spasmodic rectal stricture which completely disappeared under an anæsthetic, but which, two years later, when he examined the rectum, had been converted into a mass of unyielding cicatricial tissue.

I soon came to the conclusion that I really had to deal with a spasmodic stricture set up by a small ulcer in the mucous membrane, and that this muscular spasm was gradually being worried into a permanent cicatricial contraction of the canal. This being the case, I at once changed my method of treatment, and advised

an internal urethrotomy. The patient consented, and after the operation was completed a No. 16 English was tied in for twenty-four hours, and the urethra kept well dilated by the passage of instruments at frequent intervals for a month. His stricture vanished, and nine months later, for the first time since the operation, I passed an instrument for him, and found no trace whatever of his previous trouble. I cannot, of course, say that he will have no return, but I feel fairly confident that his ease is to be regarded as a true cure, the result of an application of that same surgical principle which Brodie so successfully employed in dealing with ulcer or fissure of the rectum.

At first sight there does not seem to be much analogy between the two cases of urethral stricture to which I have just referred, for in one electrolysis proved absolutely useless, and in the other was attended with brilliant success. The first case was under my care some two years ago, and though seen six months later has since gone to that great unknown land to which so many of our hospital cases, particularly in London, vanish.

Upon reflection on this case, I cannot doubt, and there will, I think, be little doubt in the minds of my hearers that a stricture which only admitted a No. 4 English to start with, and was cured by one electrical sitting, must at least have been partially, probably wholly, due to muscular spasm. If this was the case, it is exceedingly probable, I think, that a small ulcer of the mucous membrane was the cause of it; and just as the cauterisation of a small rectal ulcer will, in some instances, be sufficient to cause its disappearance, whilst in others it demands a surgical operation, surely it is at least equally likely that a similar procedure in the urethra may produce a similar result, and this particular case affords strong probability of the truth of my suggestion.

It is of course no new suggestion of mine that spasm forms a considerable element in many urethral strictures, but its importance has, I think, been underestimated. It is, however, referred to in the following terms in Erichsen's *Surgery*, though it has never received the recognition which it deserves.

"The influence of anæsthetics in facilitating the passage of instruments through apparently impermeable strictures is very marked. Shortly after the introduction of ether as an anæsthetic agent Liston was going to cut through a stricture that had resisted all attempts made by his most dexterous hand at introducing an instrument into the bladder, but no sooner was the patient put on the table and rendered insensible, than the No. 8 silver catheter, which had been passed down as far as the stricture, and the point of which was to serve as a guide to the knife, slipped into the bladder, and thus rendered a dangerous operation unnecessary."

Since my attention has been so forcibly directed to this question of spasm in the production of stricture, I have employed anæsthetics almost as a routine practice before attempting to treat a stricture, and I have been struck with the large number of cases in which the stricture is considerably increased in calibre under the influence of an anæsthetic. But there is a further, and to my mind a more cogent, reason in favour of the view that spasm is the first step in the production of stricture in a large number of cases. Attention has often been drawn to the enormous preponderance of strictures in the membranous portion of the urethra, but no adequate reply has been given to the oft-repeated query of why this should be the case.

The presence of the compressor urethræ muscle offers, I believe, the only adequate explanation, whilst this suggestion is further borne out by the views which were first promulgated by Otis, in which he pointed out that the deeper strictures often yielded readily to dilatation, and in some cases entirely disappeared when the anterior strictures were divided, a result which, from my own experience, I can in many instances fully confirm.

If, however, we can accept the view that spasm of the compressor urethræ is the first stage in stricture, we can, I think, readily explain much that has before been obscure in urethral pathology and treatment. The yielding of some strictures, the unyielding character of others, and the apparently reflex phenomena which surround another class can be explained on this theory, and I believe on this alone. How far this theory is competent to explain these strictures which are situated in other parts of the urethral tract I am at present unable to state; but from what I have seen of them I think there is considerable probability that the large majority of strictures do begin in this manner.

The beneficial effect, then, of electrolysis must be ascribed partly to its absorptive action and partly to the cauterising action of the caustic alkali which is liberated in the urethra, and which, by acting on the mucous membrane at the seat of the stricture, renders the subjacent muscular fibre less irritable. Probably the presence of mucous abrasion is far more common than it is generally admitted to be, for it must be borne in mind, even if we ignore the tendency to bleed which is shown by strictures, that by the aid of the urethroscope it can be seen that after simple dilatation of a stricture the mucous urethra lining is oftentimes slightly split. This is a point to which attention has been drawn by Mr. Berkeley Hill, and which I have myself had the opportunity of witnessing on several occasions.

If we turn our attention for a few minutes to the cases recorded in the table, we shall see that seven of them are known to have recurred, and in three instances the recurrence was so frequent and so rapid that I am inclined to regard it as being aggravated by the passage of the bougie-electrodes. Of twelve I can give no subsequent history at all; five were unable to give the amount of time requisite for electrolysis, and were treated by urethrotomy. This leaves twenty-three cases, twenty-one of whom are known to have been free from symptoms of stricture from a year and a half to three years after treatment, and two of whom are certainly free after four years.

I will allude somewhat further to these two cases. One of them was mentioned in my previous account in the following terms:—

Case III.—J. M., aged 37, was admitted in St. Bartholomew's Hospital in August, 1885, with the following history. About nine months previously he noticed he was passing his water *per anum* as well as *per urethram;* he applied for relief at a hospital, where he was taken in and found to be suffering from extravasation of urine, and his perineum and scrotum were incised. At first no catheter could be passed, but later on one was passed, his stricture was dilated, and he was discharged relieved. Since that time his stream has decreased in size, and only a small catgut will pass into the bladder at present. There is a good deal of thickening round the urethra, extending from about two inches in front of the bulb backwards to the bulb itself, or further.

A bougie-electrode was passed down to that portion of the urethra where the thickening commenced, and held there for more than half an hour. Four days later the patient drew my attention to the fact that all the thickening had disappeared. Treatment similar to that which has been previously described was continued for about six weeks, and he was discharged able to pass a No. 12. The bougie-electrode was passed three times in all.

At the present time (that is, August, 1886) his urethra admits a No. 11 easily, and, with the exception of the two occasions on which I have examined his urethra, he has had no instrument passed since he left the hospital just a year ago. Thus it is clear that electrolysis has effected more for him than incision, and there is at least a fair expectation that, if no contraction has taken place so far, it may never supervene at all.

No. 11 was passed for him in June, 1889, and he has never had a single instrument passed, he tells me, except when I have passed them for diagnosis purposes.

Case xxxviii.—This case was by accident omitted in the previous papers. So far as his stricture goes, he is well, though I have on three occasions extracted stones from his bladder by the suprapubic operation. At the same time it must be borne in mind that catheters have frequently been passed on him for the purpose of washing out his bladder.

More than one case in which urethrotomy has previously been performed has spoken to me with favour of the greater success of electrolysis, and particularly is this the case with three of my private patients (39, 44, 47), whose opinions as to their own sensations must be regarded as of some value, and they speak of themselves as well sixteen months, eighteen months, and two years after treatment.

Further details will be found in the accompanying table.

Of the future of electrolysis in urethral stricture, even after an experience of four years, it is difficult to prophesy. I never expected, as some American writers seem to have done, to find in it one panacea, and I am not disappointed. Every case of stricture must be separately and carefully considered before resorting to treatment, but I am sure I may appeal with confidence to the results which are recorded in my table, results which, considering the nature and character of the strictures operated on, could not have been obtained by any other method; and certainly in those cases in which there is a tendency to rapid recontraction, or where

no dilatation ensues under an anæsthetic, the benefit of electrolysis is most marked.

Results of Fifty Cases of Urethral Stricture treated by Electrolysis.

No.	Name.	Age.	Date of Treatment.	Result.
1	D. C.	52	1886	Letter eight months after to say he is well.
2	T. W.	53	1885	Recurred a year later; electrolysis again; urethrotomy.
3	J. M.	37	1885	Extravasation in 1884. No. 11 passed June, 1889.
4	J. L.	31	1886	Relieved for a time; recurrence. Lost sight of.
5	B. B.	62	,,	No. 12 passed eighteen months later.
6	C. D.	29	1885	Lost sight of.
7	G. S.	27	,,	Only came once.
8	W. D.	39	1886	Not seen after treatment.
9	J. F.	46	,,	Up to 9 English; bronchitis. In hospital, 1889, with partial recurrence.
10	W. B.	37	,, (orifice)	Well two years after.
11	T. T.	24	1886	Only came once.
12	A. L.	29	,,	Returned in 1889 for dilatation.
13	T. P.	27	,,	No. 12 English passed eighteen months later.
14	W. T.	36	,,	No. 10 English passed twelve months later.
15	H. S.	34	,,	Not seen after treatment.
16	S. L.	41	,,	Letter two years after saying he was well.
17	W. N.	29	,,	Lost sight of.
18	F. A.	30	,,	,, ,,
19	J. B.	22	,,	Seen in 1888. Admitted No. 10 English.
20	J. H.	38	,,	Sent patient to me from America, 1888, who said he was well.
21	O. L.	36	,,	Seen in 1887. No. 10 passed.
22	A. E.	35	,,	Not seen after treatment.
23	E. J.	49	,,	Constant recurrence; thirteen times dilated.
24	T. Mc.	52	1887	Went away in middle of treatment; extravasation two months later.
25	J. P.	38	1886	Seen well in 1888.
26	J. D.	49	1888	One sitting; in a hurry; urethrotomy.
27	W. P.	24	1887	Constant recurrence; cured by urethrotomy.
28	F. A.	30	1886	No progress; not seen since.
29	A. E. E.	25	1887	Seen well in 1889; since lost sight of.
30	W. B.	37	,,	Well in 1889; says he has passed catheter once or twice.
31	W. G.	32	,,	One sitting; not seen since.
32	S. M.	35	1886	One stricture gone; other admits No. 9 English, 1888.
33	F. H.	36	1887	Admits No. 10, 1888.
34	G. E. P.	39	,,	In a hurry; divided later.
35	H. T. N.	23	,,	No. 11 passed in 1888.
36	J. McC.	44	,,	Constant recurrences.
37	W. G. S.	40	1889 April	November 2nd, passed No. 12.
38	H. H.	53	1885	No. 12 passes easily; suprapubic lithotomy.
39	K. R. W.	39	1887	Letter to say he has had no trouble since.
40	E. H.	44	,,	Not seen since.
41	O. N.	56	1888	Recurrence.
42	E. P. S.	54	1887	Hurry; urethrotomy.
43	J. F. W.	32	1888	,, ,,
44	J. P. L.	36	,,	Letter, 1889, says he is well.
45	E. W.	39	1887	Recurrence, 1888.
46	M. O.	43	,,	No. 10 English passed in 1889.
47	H. R.	51	,,	A previous unsuccessful urethrotomy; letter, well, 1888.
48	B. S.	29	1888	Not seen since.
49	W. E.	34	1887	No. 12 passed in 1889.
50	H. A.	59	1888	Hurry; urethrotomy.

CASES OF PELVIC ABSCESS TREATED BY ABDOMINAL SECTION.

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Abscesses situated in the pelvis frequently offer very unfavourable conditions for rational treatment, since the abscess cavity either cannot be safely reached, or, if reached, is with difficulty cleared out and drained. These considerations have so influenced gynæcologists that the great majority of them in such cases are content with expectant treatment, although the feasibility and safety of opening the abdomen, searching for, employing, and draining such cases, has been proved by Mr. Lawson Tait and others.

The pelvic abscesses referred to below have nothing to do with lumbar, psoas, and other collections of pus, which have distinct origins outside the pelvis, but are to be considered as mere sequels to certain diseases, such as pelvic cellulitis, pelvic peritonitis, and hæmatocele, or to ovaritis, salpingitis, or breaking down of tubercle, the one thing common to them all being the presence of pus in the pelvis.

Every surgeon knows the course pursued by such collections: their tendency towards continuous or intermittent evacuation into hollow viscera, either vagina, rectum, or bladder; or by long circuitous fistulæ on to the surface; the violence of the inflammatory storms which occur at irregular intervals after a delusive period of quietude; the condition of impotency or infirmity in which they leave women, even after a spontaneous cure, which always demands a very long time; and their frequently fatal termination either by the pus bursting into the peritoneum and setting up acute peritonitis, or by the constant discharge bringing on hectic fever; or, more indirectly, by the supervention of tuberculosis or amyloid degeneration. There are some fortunate cases where the abscess projecting into the vagina allows an opening to be made and drainage to be effected, but these are exceptional; in the greater number it is impossible to discover by the touch a fluctuating point in the hard plastic mass which fixes the uterus. Even if the abscess can be opened by the vagina or rectum, it is a most difficult matter to keep the cavity aseptic and to secure efficient drainage.

If, then, expectant treatment is so unsatisfactory, what other means have we at our disposal? First, aspiration, which, according to Mundè, is a successful mode of procedure. In several cases where there have been small and localised abscesses, I have found this simple method efficient, but it is uncertain in large, and useless in multiple, abscesses, and its indiscriminate use is not unattended by danger, for it must be borne in mind that important structures often overlie the tumour, and have to be pierced before it can be reached. Secondly, subperitoneal laparotomy, as performed and advocated by Dr. Pozzi, of Paris, of which Case III is an instance. It would seem to me, however, that this method can only have a very limited application, and can only be safely adopted where there are signs of the abscess approaching the side of the pelvis, as in the example I have mentioned. And, lastly, abdominal section, of which the other cases form good examples.

Case I.—*Pelvic Abscess Discharging into Rectum for Six Years: Opened and Drained Anteriorly through the Peritoneum: Cure.*—Mrs. A., aged 29, consulted me in July, 1886, saying that she had been married five years, but that she had had no children. About three months after her marriage, during a menstrual period she caught a chill when at a picnic, and was seized with a severe pain on the left side of her abdomen; this was followed by a serious illness, which kept her in bed for three months, at the end of which time the abscess burst into the rectum, giving immediate relief to her urgent symptoms but leaving a persistent discharge of pus, which during the whole period of four years before she saw me had never been less than from 1 to 2 ounces a day. She had had feverish attacks from time to time, accompanied by severe pain in the lower part of the abdomen, especially on the left side. From having been a stout, good-looking, rosy-cheeked woman she had become thin, pale, and cachectic. Night sweats and a short cough made her friends fear that phthisis was developing, and she spent the winter of 1886 at Bournemouth, without receiving any material benefit, as the discharge from the rectum was as free as before. Her menstrual periods, normal and painful before her inflammatory attack, had since been preceded for several days and accompanied by pain on the left side, often of an agonising character. During 1886 difficulty in defæcation came on, so that aperients were regularly required, the motions being flattened and not larger than the little finger. On vaginal examination a tumour could be felt on the left of the uterus, the size of a large orange, which was firmly fixed to the uterus and to the contiguous parts. Bimanually it could be felt above the pubes, but did not form a tumour evident to the eye. The right appendages felt perfectly normal. The uterine sound passed the normal distance.

On examination by the rectum, within reach of the tip of the index finger a stricture could be felt, which would only admit a small rectal ball the size of a large pea; above this stricture the abscess cavity evidently opened, but the opening could not be felt by the finger. As all forms of medical treatment had been fully tried before the patient consulted me, and as there seemed to be no chance of approaching the abscess from below, I advised that the abdomen should be opened and the abscess evacuated in that direction, as the opening into the rectum was situated in such a position that the sac of the abscess could never empty itself; and moreover, the constant irritation threatened soon to produce

complete obstruction of the bowel by the contraction of the stricture.

The patient and her friends took a long time to consider before they would entertain the idea of operation; and it was only when they saw that matters were going from bad to worse that they consented. Mr. Pridgin Teale saw the patient with me in December, 1887, and agreed with the opinion I had given.

In January, 1888, the patient being under the influence of ether, an incision of three inches was made in the left linea semilunaris, across the course of the left deep epigastric artery, which was exposed, doubly ligatured, and divided. On opening the peritoneum, the small intestines were pushed upwards, exposing a hard mass intervening between the uterus and the left side of the pelvis, the tumour appearing to be continuous with both. Sponges were packed around so as to avoid soiling the peritoneum, and an aspirator needle was pushed into the centre of the swelling; when at the depth of an inch and a half it reached the cavity, from which was abstracted several ounces of extremely offensive pus. The parietal peritoneum was pressed down and sutured with catgut to the peritoneum around the opening in the tumour, the incision through the parts above and below the opening being closed by silk sutures. A large aspirator needle was left in the abscess to act as a drainage tube, salufer lotion (20 grains to the pint) being used to thoroughly cleanse the cavity. Sal alembroth gauze was packed round the opening, and over this was applied a dressing of salufer wool. The temperature never rose above normal, and after the first dressing no odour was observed from the abscess cavity, which was syringed out daily with the antiseptic lotion. The stitches were removed on the eighth day. On the seventh day a larger drainage tube was inserted into the abscess cavity, the capacity of which had contracted from 4 ounces to 1 ounce in the seven days.



FIG. 1.—Abscess discharging into rectum and producing a stricture of the bowel. The long arrow shows the site of the opening for drainage.

Although on syringing the fluid returned clear, a cellular drainage tube the size of a No. 12 catheter was retained until the fourth week, when the cavity would not hold more than 2 drachms of fluid, which returned as clear as it went in. The tube was then left out, and the wound healed forthwith. No fæces ever came through the drainage opening, and after the first dressing no flatus passed through it. The patient was up on the fourteenth day, and during her stay in bed had gained flesh and colour. Menstruation occurred normally on the nineteenth day, and absolutely without pain. From the time of operation no pus was ever seen on a motion.

In June, 1888, Mrs. A. reported herself as being in absolutely perfect health. Menstruation was normal and painless, her bowels were opened regularly and without the aid of aperients, the motions being of full size and free from pus or blood. On examination a full sized rectal bougie passed without hindrance, and no remnant of the tumour could be felt on the left of the uterus, which seemed to be normal in size, position, and mobility. The patient had gained two stone in weight, and looked the picture of health.

CASE II.—*Pelvic Abscess Discharging into Ureter: Catheterisation of Ureter: Exploratory Nephrectomy: Subsequent Laparotomy and Evacuation of Abscess: Recovery.*—Mrs. T., aged 34, was admitted to the Leeds General Infirmary on June 18th, 1886, with the history of having, during the previous nine months, suffered from the passage of a large quantity of pus with the urine, with severe pain on the right side of the lower part of the abdomen, extending along the course of the right genito-crural nerve. She had been ill for some time previously, and had suffered from a severe leucorrhœal discharge. Although her menstrual periods had been quite regular as regards time, they had been excessive, and had been preceded by pain for several days. Micturition had not been frequent, but had been somewhat painful during the act.

On admission, the urine which was passed with pain about six times during the twenty-four hours had a specific gravity of 1024, was alkaline, very offensive, and contained about a fourth part of greenish pus, with a few granular casts. There was slight tenderness in the right loin, and on vaginal examination a tumour the size of a large orange was felt on the right of the uterus. On sounding the bladder nothing abnormal could be discovered.

On June 24th the urethra was dilated and the ureters catheterised, when clear urine was drawn from the left, and purulent, offensive urine from the right. It was therefore thought that the pus was proceeding from the pelvis of the right kidney, and after washing out the bladder with a 1 in 10,000 perchloride of mercury solution, nephrotomy was performed; but the exploration showed the kidney to be healthy. The wound was therefore closed, and union occurred by first intention.

As the source of the pus was manifestly not from the kidney, it became evident that the tumour felt on the right side of the uterus was a pelvic abscess discharging into, or by the side of, the right ureter. This was fully explained to the patient, who, after an interval of six weeks, during which time the pus rather increased than diminished in quantity, consented to a further operation, and the abdomen was opened in the linea alba, for the purpose of either removing the disease or draining the abscess. It was found, however, impracticable either to bring the wall of the abscess forward, or to safely incise it, for the intestines were firmly matted over the whole roof of the pelvis. Aspiration was, therefore, performed, the abscess sac washed out with boracic lotion, and the abdomen closed. The patient made a steady recovery, and from that time forward began to pass less and less pus with the urine. She returned to her home in America, and six months afterwards wrote to say that she was strong and well, and was doing her household work.

CASE III. *Pelvic Abscess discharging per Rectum for Six Years: Pulmonary and Abdominal Phthisis: Subperitoneal Laparotomy and Evacuation of Pus and Caseous Material: Relief.*—Several years ago I was asked to see Miss A., aged 21, on account of pelvic trouble, and was told that she had been more or less an invalid since the age of 15, when she began to menstruate. On the second occurrence of menstruation, she caught a chill after a warm bath, which caused suppression of the menses, this being followed by some so-called inflammation of the bowels.

An abscess formed and burst into the rectum in about three weeks. She very tardily regained her strength, and three months after the first attack she had another return of the inflammation, followed by the bursting of a second abscess. Menstruation did not recur for six months. The inflammatory attack was repeated at the end of a year, and between that time and my seeing her she had had no other attacks.

When I saw her she was very much attenuated, and had a hectic flush on her cheeks. There was a slight cough, and some question of commencing tuberculosis in the right lung Her chief complaint, however, was in the pelvis, and on examination *per vaginam* the uterus was found to be firmly and immovably fixed in the centre of a hard mass, which reached about two inches above the pubes; there was great tenderness on the left side, but no fluctuation could be felt through the roof of the vagina. *Per rectum*, the induration was found to extend quite round the bowel, so that, two inches from the anus, the finger passed through an indurated stricture. There was considerable difficulty in defæca-

tion, and the motions were at times coated with thick offensive pus. Pain and frequency of micturition were complained of.

As there seemed to be some doughiness deeply above the left Poupart's ligament, I decided to try to find and evacuate the abscess in that direction; and, having made an incision as if for ligature of the external iliac, I raised the peritoneum without opening it, and passed my finger down the inner side of the pelvis, soon reaching an extensive collection of caseous material with a little pus. This I carefully scooped away with a Volkmann's spoon, then thoroughly irrigated the cavity with a mild antiseptic lotion, and inserted a large drainage tube. Decided relief to the symptoms was given; the pain was lessened, and the hectic diminished; but although the local symptoms were so much benefited the chest did not improve, and the patient in three months died of phthisis. Had this radical treatment been followed out before the advent of tuberculosis, I have no doubt that cure instead of relief would have ensued.

CASE IV.—*Pelvic Abscess: Tubercular Peritonitis: Laparotomy: Evacuation and Drainage of Abscess: Relief.*—J. G., aged 24, was admitted to the infirmary on February 1st, 1888, on account of a pelvic and abdominal tumour, accompanied by peritonitis. The family history was good, and there had been no previous illness. Menstruation commenced when the patient was 16 years old, and had always been regular. She had been married twelve months but had not been pregnant. Six months prior to her admission she was seized with a sudden and violent pain in the lower part of her body, but she did not faint. From that time onwards the pain had continued, being worse at her periods. There had been great frequency of micturition, with considerable pain, although the urine on admission was found to be healthy. There had been pain on defæcation, with straining, but neither pus nor blood had been noticed on the motions. During the whole of the time the patient had been getting much weaker and thinner, and for some weeks she had been completely bedridden.

Examination *per vaginam* revealed great induration at the roof and fixation of the uterus in an apparently solid mass, which extended above the brim of the pelvis. No fluctuation could be perceived at any point. The urethra and base of the bladder seemed to be completely fixed in the mass, as did also the rectum. As the patient was manifestly running down, abdominal section was performed on February 4th by an incision of two inches between the umbilicus and pubes, when the omentum was found completely adherent to the abdominal wall and to the roof of the pelvis. On breaking down the adhesions of the omentum to the pubes, a large quantity of fœtid pus escaped. Sponges were packed into the upper part of the incision to prevent the general peritoneal cavity being soiled. The abscess cavity extended deeply behind the uterus, between it and the rectum, the walls being formed by the small intestine above and the large intestine below. A Keith's drainage tube was introduced to the bottom of the cavity, which was well irrigated with a hot solution of salufer (10 grains to the pint), ten or twelve pints being used, the irrigation being continued until the fluid returned clear; the upper part of the wound was closed, leaving the drainage at the lower end. Although the temperature had been high (between 100° and 103°) for a fortnight, it became quite normal the same evening and remained so for a week, after which it was a little irregular, the irregularity apparently depending on the freedom or otherwise of the drainage. The wound was dressed every day at first, and then less frequently, as the amount of pus at each dressing became less. At the time of operation there were some nodules on the peritoneum suspicious of tubercle. The patient was up at the month's end, and returned to her home at her own request on March 31st, there being still a rubber drainage tube in the wound.

I have reason to think that, although relieved of her pelvic trouble, she never fully regained her strength, and ultimately died of phthisis.

CASE V.—*Pelvic Abscess: Tubercular Peritonitis: Exploratory Laparotomy: Extensive Adhesions over Abscess Sac: Subsequent Aspiration per Vaginam: Relief.*—A. S., aged 31, married, was admitted into the Infirmary in April, 1884, suffering from pelvic pain and frequency of micturition. She had been a bedridden invalid for some months, during which time she had lost weight very considerably, and had suffered from night sweats and evening pyrexia. Abdominal examination revealed fixation of the uterus, with an indurated swelling to the left, apparently adherent to all the parts in its neighbourhood.

On May 21st the abdomen was opened by an incision in the linea alba, below the umbilicus, when the peritoneum was found to be studded with miliary tubercle; and the intestines, also tuberculous, were firmly fixed over the roof of the pelvis; hence the abdomen was closed. Union occurred by first intention, and twelve days afterwards, aspiration of the abscess was performed through the roof of the vagina. Although no fluctuation could be felt, three ounces of fœtid pus were withdrawn, and a short time afterwards the patient returned home much improved in health, and after a few weeks was able to resume her household duties.

CASE VI.—*Pelvic Abscess: Laparotomy, Evacuation and Drainage: Cure.*—Mrs. M., aged 30, called to see me on March 9th, 1889, on account of pelvic distress, debility, and loss of flesh and strength. She said that she had had three children, the last fifteen months ago, since which time she had never been very strong, but this she attributed to suckling.

Menstruation commenced three months after her last confinement, and she had been quite regular up to twelve weeks before seeing me, when she caught cold during a "period," and had what her doctor called inflammation of the bladder, which made her feverish and seriously ill for five weeks; the "period" did not cease abruptly, but was followed by a shreddy, sanguineous, and then by a leucorrhœal discharge.

During the twelve weeks before seeing me she had had severe pain in the left ovarian region, pain down the left thigh, frequent and painful micturition, evening chills and fever, tendency to diarrhœa after food, great debility, and marked loss of flesh.

On examination I found the os uteri fissured on the left, the cervix brawny and hard, the uterus firmly fixed to a hard mass which extended to the left side of the pelvis, and to 1½ inch above the brim; the latter extension could only be felt bimanually, and could not be seen by inspecting the abdomen. No fluctuation could be felt. The bladder and rectum seemed both involved in the mass. I advised her to go into the infirmary for operation.

On admission a week after a doubtful sense of fluctuation could be felt deeply in the left ovarian region. Her general condition

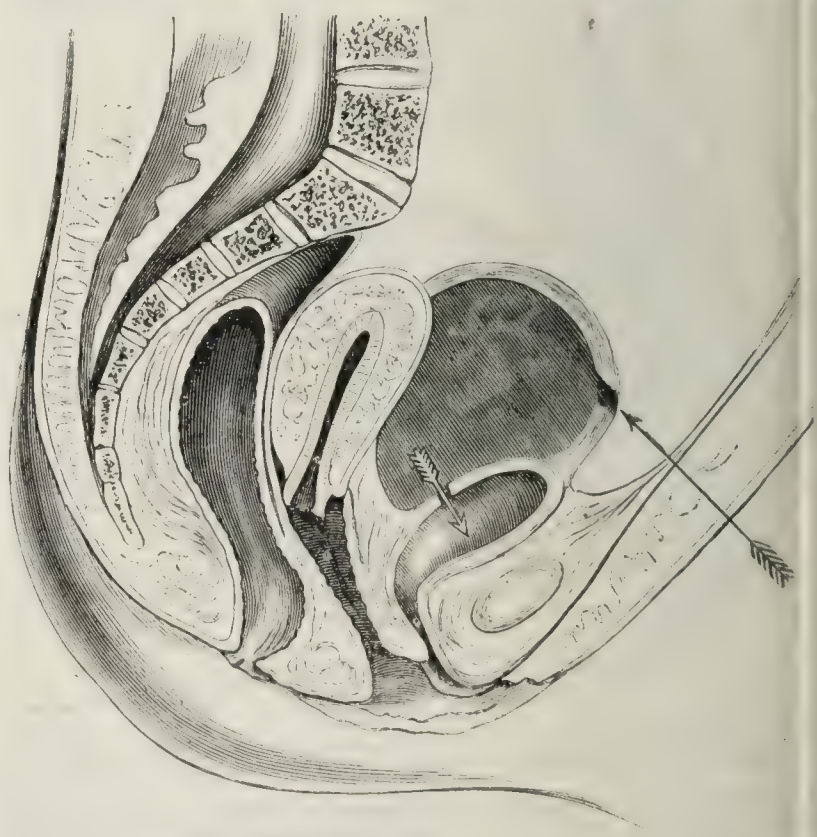


FIG. 2.—Abscess discharging into bladder at site of "short arrow." Long arrow shows the site of the opening made for drainage.

was much worse, and her temperature fluctuated between 10 and 102°.

March 20th. Laparotomy was performed by an incision of inch and a half in the median line below the umbilicus. T tumour could be felt on the left of the uterus, the omentum firm adherent over it. Sponges were packed around the opening, a on exploring with an aspirator needle six ounces of offensive p were withdrawn. In order to get at the tumour a hole was ma through the adherent omentum; the parietal peritoneum w then tucked down and sutured with chromicised catgut to t

risceral peritoneum covering the tumour, which was then opened and drained by a glass tube. Three deep silk sutures closed the remainder of the incision.

From the time of operation the temperature became and remained normal, the pain ceased, the appetite returned, and with it the cachexia disappeared and flesh was gained. The stitches were removed on the seventh day, and the tube on the ninth. From the time of operation to the healing of the wound not a drop of pus was seen. On examination *per vaginam* at the end of a fortnight the uterus was much less fixed, and the œdema of the cervix had disappeared.

She was allowed to get up at the end of three weeks, and was discharged cured within a month of the operation.

REMARKS.—The cases I have related were all serious, as these cases usually are, and without active treatment I believe they would all have died, either immediately or remotely, as the result of the pelvic disease; whereas, under the operative treatment here recommended, relief was given in all, and complete and lasting cure was effected for several of the patients. The first, second, and sixth cases are the most remarkable as they are the most satisfactory, in that there was an absence of tubercle or other diathetic condition which could retard convalescence. They show also that, although the abscess be never so foul, and though it have been in communication with the bowel or bladder for long periods, it is, with due precautions, quite safe to evacuate it through the peritoneum.

The circumstance that particularly astonished me in Cases I and VI was that, after the evacuation of such foul abscesses and the cleansing of the cavity by syringing with an antiseptic, there should never be even a suspicion of odour or of pus in the subsequent dressings. Case I also shows that there need be little fear of a fæcal fistula in opening such an abscess, for the opening into the bowel is probably usually a small sinuous track, otherwise the cavity would be likely to contract and become cured spontaneously and not to persist for years. The complete disappearance of the stricture of the rectum in Case I is worthy of comment, for although I expected some amelioration, its complete cure certainly exceeded my expectations.

It is a difficult matter to lay down any general rules for the treatment of these cases, as each one must be treated on its merits, that is, according to its cause, its site, and its condition. The natural progress of a pelvic abscess is to find an outlet for the discharge of its contents, but as to the course it will select, our anatomical knowledge will seldom enable us to predict it with certainty until the process is well nigh complete. Hence, when we have once made the diagnosis of pus within the pelvis, our course should be, not to wait for Nature's uncertain method, but to evacuate it, and, unless fluctuation can be felt *per vaginam* when the abscess may perhaps be attacked in that direction, the plan of opening the abdomen, searching for, evacuating, and draining the cavity, will, if done *secundum artem*, probably be found to yield the best results.

Since writing the above paper I have successfully operated on four other cases. In one case the abscess was situated in the ovary, and intervened between a small fibroid of the uterus and the rectum; in another the origin of the pus could not be made out, but about 15 ounces were evacuated; in a third the pelvic abscess was lined by intestines, and the pus probably started from a perforated vermiform appendix; and in a fourth a suppurating dermoid cyst had burst into the bladder, through which it was discharging (Fig. 2), the patient at the time being almost at death's door from septic absorption. In the last case the opening into the bladder closed within the week, at the end of which time the temperature had become normal. In all these cases the abdomen was opened and the abscess drained above the pubes, with complete success.

THE well known journal of nervous diseases, the *Centralblatt für Nervenheilkunde und Psychiatrie*, founded and successfully conducted for many years by Dr. Albrecht Erlenmeyer, has now been enlarged in size and widened in scope. It is henceforth to have an "international" character, and Dr. Erlenmeyer will have the assistance of Professor Charcot, of Paris; Dr. van Deventer, of Amsterdam; Dr. W. W. Ireland, of Prestonpans; Professor Kowalewsky, of Charkow; Professor Lange, of Copenhagen; Professor Lombroso, of Turin; Professor Obersteiner, of Vienna; and Professor Seguin, of New York. The actual work of editing will be in the hands of Dr. Hans Kurella, of Allenberg. The publisher is W. Groos, of Coblentz and Leipzig.

UNIQUE CASE OF EXTRAUTERINE PREGNANCY.

BY C. M. MACQUIBBAN, M.D.,
Aberdeen.

ON September 5th, 1888, I was called to attend Mrs. E. S., aged 43.

I found her in bed suffering, pain coming in paroxysms, countenance pale and anxious, pulse 96, temperature 100°, bowels constipated; difficulty of voiding urine; abdomen swollen, and more so on the right side; altered last in May; mother of twelve children; had two miscarriages previous to the birth of her last, aged 4 years; labours were natural. I found a swelling on the upper and back part of the vagina, below the os, soft and yielding to pressure. Os was far up; no dilatation nor discharge; no fœtal sound; had vomiting, and attributed illness to a bilious attack; breasts natural. Ordered hot fomentations over abdomen, 20 drops of laudanum every four hours, also a dose of castor oil, and, if not better, to send for me. Being relieved she did not send until the 10th. She being in pain I ordered her laudanum as before.

September 13th. Free from pain.

September 17th. Suffering extreme pain of a tearing nature. Ordered 2 grains of opium every six hours.

September 19th. Still pained; has retention of urine; had to use catheter; found the swelling in the same place; bowels constipated. Ordered extra strong seidlitz powder, which operated freely.

September 20th. Swelling still the same; suffering excruciating pain; vomiting; pulse, 100; temperature 101°. Had the following: Tincture of hyoscyamus, ½ ounce; spt. of chloroform, 2 drachms; mucilage, 4 ounces; water to 6 ounces. Sig. A tablespoonful every six hours.

September 21st. Easier, but as I was at a loss to know exactly her case asked her to go to hospital. She demurred. I then proposed consultation with Professor Ogston.

September 22nd. After consultation she was admitted into hospital same night, and operated upon the following day at noon by Dr. Ogston. I saw Mrs. S. the other day, well, doing her household work. The following are the notes by Dr. Riddell, then house-surgeon, Aberdeen Royal Infirmary:

On Saturday, September 22nd, Dr. Ogston was called by Dr. MacQuibban to see Mrs. S., who was supposed to be about four months pregnant, and who had for about three weeks been suffering great pain, with other symptoms, pointing to some uterine complication. Patient had previously been thirteen times pregnant, two of these pregnancies resulting in miscarriages.

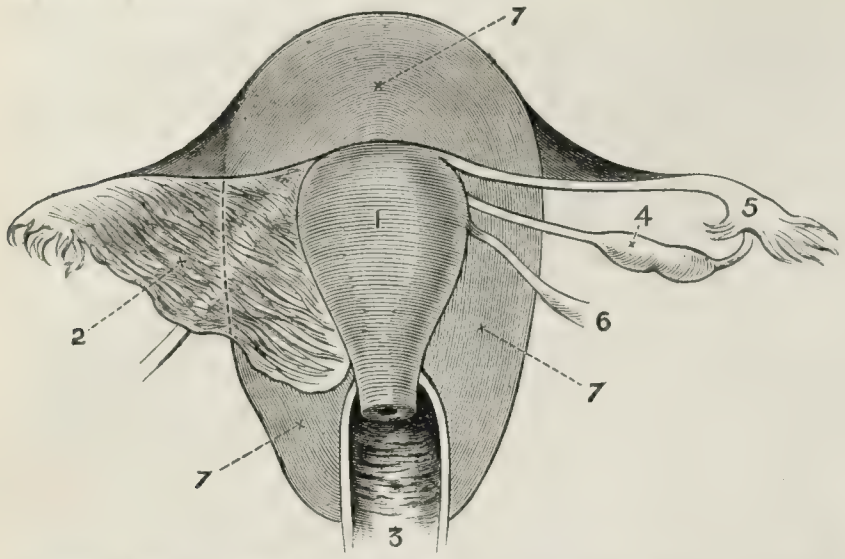
On examination, a soft tumour was distinctly made out in Douglas's pouch, and from its character, along with the attendant symptoms, the case was diagnosed as one either of retrouterine hæmatocele, or extrauterine pregnancy. Accordingly, patient was brought to hospital that evening. Hot fomentations were applied to relieve the pain, and patient was ordered to be prepared for operation the following morning, unless the temperature reached 101° in the morning, it being determined to do a laparotomy to determine the exact condition.

23rd. Bowels opened by warm water and soap enema at 7 A.M.

Professor Ogston performed the operation on the morning after admission.

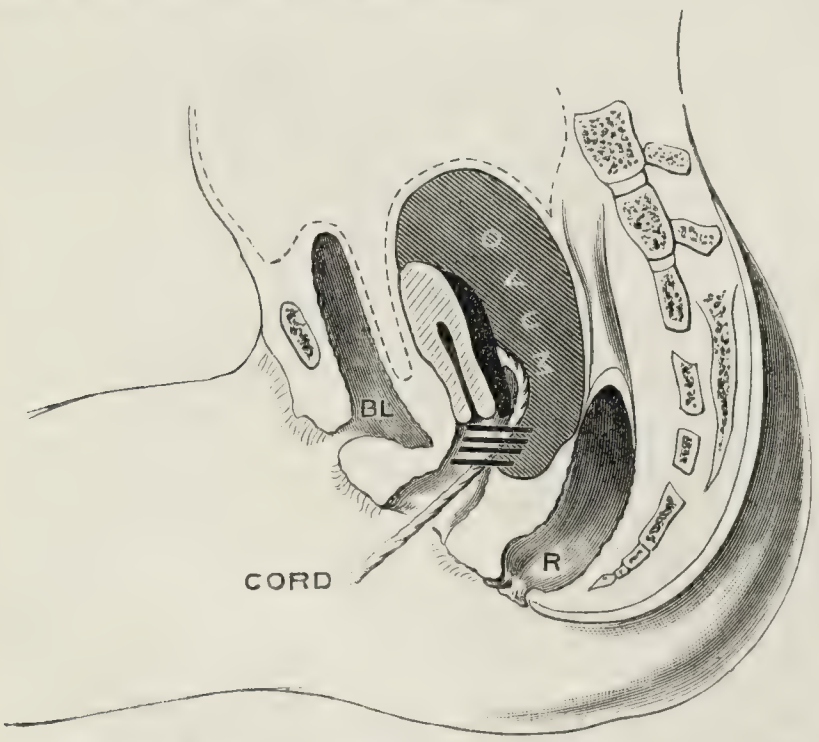
The abdomen having been opened with the usual strict antiseptic precautions, a thin-walled cyst presented itself well up to the umbilicus. This was aspirated with a Potain's aspirator, and, the fluid that came off being of urinous appearance, Dr. Ogston enlarged the puncture opening by a scalpel, and found that the apparent cyst was really an over-distended bladder. This was all the more remarkable, as urine had been drawn off during the night, and the catheter had been used by the ward sister immediately before the patient was placed on the operating table, two-and-a-half pints being then drawn off. The bladder wound was then stitched up with No. 3 catgut, and a soft catheter (No. 20 French) was, after the completion of the operation, tied into the bladder. This catheter was connected with a tube, which could be clamped when necessary by a Pean's forceps, and which led into a tall bottle containing carbolic oil, a continual stream of urine being thus drained off below an antiseptic layer of fluid, which thus always intervened between it and the air. The bladder wound having been sutured, Dr. Ogston next investigated the condition of the tumour,

which had been felt *per vaginam*, and found that there was in Douglas's pouch a cyst independent of the Fallopian tubes and uterus (that is, neither of these were enlarged), and closely adherent to the posterior wall of the uterus. The position of the cyst might be presented as under:



Probable state of parts: Anterior view. Before operation. 1. Uterus. 2. Peritoneum (broad ligament). 3. Vagina. 4. Left ovary. 5. Left Fallopian tube. 6. Round ligament. 7. Cyst.

This cyst was then punctured *per vaginam*, and from it was delivered, by a pile forceps, a well-formed fœtus of about four months. The placenta and cord were left in the "false uterus," which was well washed out with salicylic lotion, and a large drainage tube inserted. Large wood-wool pads were placed over the perineum, and the abdominal wound was then stitched up and dressed with the ordinary Lister's dressing.



Probable state of parts: Lateral view. After operation. The marks ≡ show the vaginal operation.

Subsequent Treatment.—September 23rd.—Dressed every four hours. Irrigated out vagina and washed out tube with salicylic lotion. Labia, etc., rubbed well with iodoform ointment. Patient had a little milk and beef tea and a little weak tea. Ice in small quantities for thirst. Sleeping draught. Nepenthe ♏x in aq. cinnamomi every four hours. Temperature 100.6°.

September 24th.—Temperature 102.2°. Abdominal wound dressed. Lister dressing left off and fresh drainage tube inserted. Dressed with gauze and salicylic wool. Abdominal wound to be dressed now every four hours. Temperature at night 98.2°. Catheter changed. Vagina irrigated every four hours.

September 25th.—Temperature 99.6°. Dressed as before. Vagina and tube irrigated with salicylic lotion. Abdominal wound irrigated with carbolic lotion. Patient has had milk and water, tea, and beef tea. Catheter changed at night.

September 26th.—Complains of slight laryngitis. Dry poultice on throat, and ordered pil. ipecac. c. scill. p. r. n. Temperature 100°. Catheter changed at night. Cord and placenta (small) came away while Sister Dorcas was dressing the case.



Fœtus removed per vaginam. (From a photograph).

September 27th.—As discharge from abdominal wound is a litt fœtid the wound is now dressed every two hours. Vagina an tube douched as before with salicylic lotion. Temperature still little high. Catheter changed at night.

September 30th.—Case handed over to Dr. W. R. C. Middleto house surgeon, Royal Infirmary, who has completed the notes below:

October 2nd.—Patient rather troubled with cough and ticklir in throat. Steam inhalations ordered, which relieved the irrit tion. Wound dressed five times in the 24 hours and cathet changed twice a day. Bowels were kept quiet for a fortnig when a warm water and soap enema was given, which acted sati factorily. After this the bowels were kept open at intervals eith by enema or a slight aperient till they acted naturally.

October 4th.—Patient in same condition, but as the dressing a irrigation of the wound at night disturbed her considerably th was discontinued.

October 5th.—Owing to escape of considerable amount of uri from abdominal wound and soaking of the dressings, the wou was dressed once during the night. Wound in Douglas's pou healed.

October 6th, 7th, and 8th.—Continued to improve. No chan in the treatment.

October 9th.—Catheter was removed and left out for two da but as the escape of urine from abdominal wound increased t catheter was reintroduced. From this time the urine ceased escape through the abdominal wound. Wound was dressed twi during the day and not at all during the night. Patient's con tion continued to improve and on and after October 21st the wou was dressed only once a day.

November 2nd.—The catheter was finally removed and there w no escape of urine in consequence from the abdominal wound.

November 6th.—Patient was allowed to get up for first tin On November 10th she was dismissed, the wound having almo entirely healed up, and the patient being otherwise well.

A LADY obtained the degree of Doctor of Medicine *cum laude* Amsterdam recently. This is said to be the first time a wom has been admitted to a medical degree in Holland.

A TELEGRAM from St. Petersburg, of the date of April 18 states that the Russian Legation at Teheran announces the cess tion of cholera in Persia.

N THE PARALLELISM BETWEEN THE THREE THERMIC MECHANISMS AND DR. HUGHLINGS JACKSON'S THREE LEVELS.

By W. HALE WHITE, M.D., F.R.C.P.,
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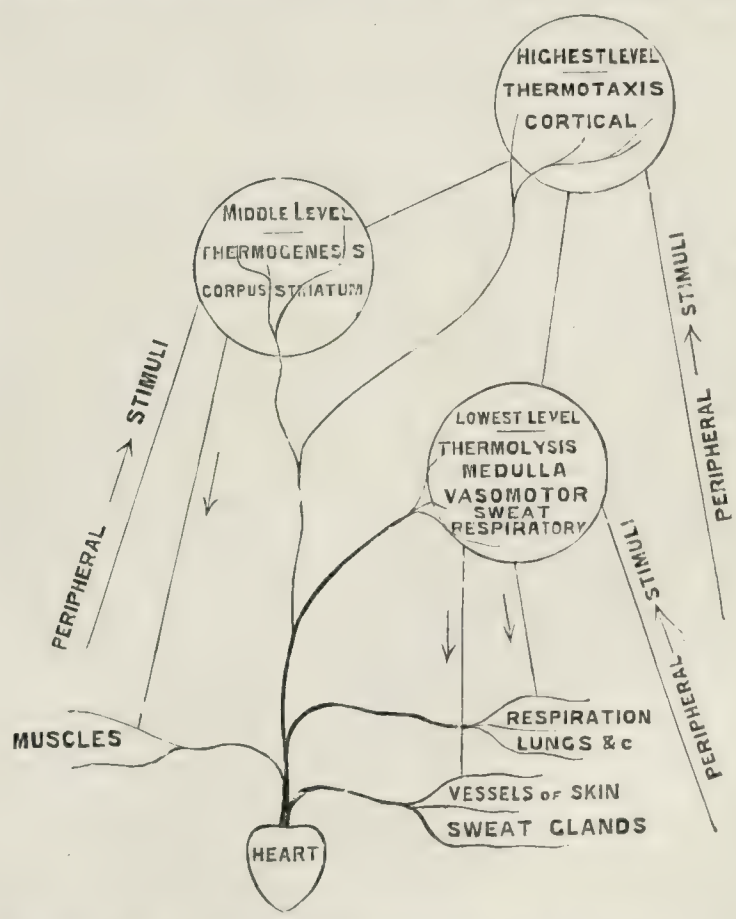
y his Lumleian Lectures, which have recently appeared in the OURNAL, Dr. Hughlings Jackson refers to his oft suggested ypothesis that there are three levels of the central nervous sys-m. The lowest, or first level, consists of the cord, medulla, and ons; it is the first evolved, and represents the simplest move-ents of all parts of the body. The middle, or second level, is mposed of the Rolandic motor area and the corpus striatum; it the next evolved, and represents complex movements. The ghest, or third level, is made up of the centres of the prefrontal bes; it is the last evolved, and represents the most complex ovements. There are three classes of fits corresponding to dis-arging lesions of each of these levels. Each of these levels is nsory as well as motor, hence they are called sensori-motor vels. I have been accustomed to point out that there are also ree thermic levels of the cerebral nervous system.

I need not now refer to the reasons for and against this view they are summarised in an article on the "Theory of Pyrexia" the current number of the *International Journal of Medical iences*, but my object here is to show that the hypothesis of ree evolutionary sensori-motor levels and the modern theory of e temperature-regulating mechanism mutually support one nother, for in each the number of levels is the same, their ana-mical position is the same, they vary equally in complexity, d their order of evolution is similar.

The heat mechanism consists of three parts. First, a heat loss thermolytic mechanism, consisting of the cutaneous vessels esided over by the vasomotor nerves, the sweat glands, presided er by the sudoriparous nerves, and the respiratory movements, ntrolled by various nerves. It is well known that the vaso-otor, sudorific, and respiratory centres are in the medulla and rd. The thermolytic mechanism is the earliest developed, for ost animals lower in the scale than birds have no other heat echanism; they are cold blooded, their temperature for the most rt rising and falling with that of the external medium; the ly means they have of regulating their temperature is the very mple one of modifying the rate of loss. The early development this mechanism is also seen in the fact that, during all but the test months of pregnancy, the human child is practically cold looded, for prematurely born infants can only be kept at a atural temperature by external artificial warmth. Lastly, that e thermolytic mechanism is the most fixed, and therefore the rliest developed, is also shown by the fact that it is difficult to fluence it, as we see in the circumstance that the fall of tem-erature produced by sudorifics is slight and uncertain. The cen-al thermolytic mechanism, therefore, corresponds to Hughlings ackson's first level.

The second part of the heat mechanism is the thermogenetic or eat producing. Most of the heat formed within the body is deve-ped by chemical changes going on in the muscles apart altogether om their motor properties, and this thermogenetic function is esided over by the corpus striatum, for irritation of that body, ther by artificial experiment or disease, results in such a con-derable rise of temperature that it must be due to an increased oduction of heat, which increase is actually proved by calori-etrical measurements. The corpus striatum is part of Dr. ughlings Jackson's second level, and it ought really to be looked pon as a portion of the cortex, for not only is it continuous with e cortex at the base of the brain, but it is developmentally part it. A heat-producing mechanism is clearly more complex than simple thermolytic mechanism. Evolutionarily the thermo-enetic mechanism is evolved next to the thermolytic, for it must pear before the thermotaxic, which adjusts the balance be-veen the other two. This order of evolution is confirmed by the ct that fish and amphibians have small corpora striata; in rep-les, some of which, as the python, are warm blooded, these dies are larger; whilst in birds, which produce much heat, they e very large. The thermogenetic function not having been fixed long as the thermolytic is more easily influenced by drugs, as we e in action of antipyrin and antifebrin, which it has been shown ill not act if the corpora striata are destroyed. It is interesting to notice that in tetanus and hydrophobia, in both of which there is a considerable rise of temperature, there is also a long continuance of motor fits, due in part probably to disturbance of the lowest level, judging not only from the character of the convulsions, but also from the fact that in hydrophobia inflammatory changes occur in the medulla, and in part to a disturbance of the second level. May not this indicate that so much of the second level is poisoned that we get both a rise of temperature and motor fits as a result of its irritation? The *post-mortem* rise of temperature in these two diseases is probably due to the continuance of the action of the poison on the thermogenetic part of the second level after the death of its motor part.

The third part of the heat mechanism is the thermotaxic, whose function is to adjust the balance between the other two. Just as the exact anatomical position of Dr. Hughlings Jackson's third level is speculative, so is the exact position of the thermotaxic centre. The rise of temperature which some observers have produced when experimenting upon the cortex near the fissure of Rolando may be due to damage of the thermotaxic centre. Ott is decidedly of opinion that it is cortical. I have recorded a case of considerable pyrexia after a cortical injury,[1] and those cases of meningitis, accompanied by hyperpyrexia, may be instances of damage to the third level of the heat mechanism. It is true that what slight evidence of locality there is rather places it over the motor area which is part of Dr. Hughlings Jackson's second level, but it must be remembered that our evidence of locality is very scanty, that the levels may overlap, and that some layers of cells in this region may belong to the second level, and others to the third. That the thermotaxic mechanism must be more complex and evolved later than the other two is self-evident. In the human adult it is fairly competent and active, as is proved by our pretty constant temperature. In the lower animals and in children it is probably not so completely evolved, for I have found that the normal temperature of rabbits varies several degrees, and rapid fluctuations of temperature are common in children, even when only slightly ill.



Being the last of the three mechanisms to be developed we should expect it to be easily put out of gear, and the great rise of temperature, so often seen towards the fatal termination of a fever, may be due to exhaustion of this mechanism, and hysterical pyrexia is probably an example of disorder of it.

We thus see that the parallelism between the three thermic levels and the three sensori-motor levels is, in their anatomy, their complexity, and their order of evolution, very close.

The accompanying diagram is to illustrate the relative positions

[1] *Guy's Hospital Reports*, 1884.

of the various parts of the thermic mechanism. Lesions may affect any part directly, for example, we know that hæmorrhage into the corpus striatum will cause a rise of temperature: or poisons in the blood may affect any part, most specific fevers are probably an instance of this, and we have a rise of temperature in belladonna and in fish poisoning: or lastly, it is possible that severe peripheral stimuli may influence the thermic central nervous system. Possibly instances of this last method are the rises of temperature sometimes seen in simple fractures, or in severe biliary colic, and probably the very high temperature often met with in very tense, painful abscesses, and which falls when the abscess *is* opened, is produced by this means.

ON OUABAÏN IN WHOOPING-COUGH.

By WILLIAM GEMMELL, M.B.,
Assistant-Physician, City of Glasgow Fever Hospital, Belvidere, Glasgow.

OUABAÏN is an alkaloid with the formula $C_{30}H_{46}O_{12}$, and is obtained by crystallisation from a watery extract of the roots of the ouabaïo, a plant nearly related to the *Carissa schimperi*. The juice of the ouabaïo plant is used as an arrow poison by the Somalis in East Africa.

Ouabaïn, its active principle, occurs in the form of rectangular crystals, which are white, transparent, colourless, and to a very slight degree bitter to the taste. It dissolves with difficulty in cold water, but much more readily in hot; it is altogether insoluble in chloroform, or ether, and but to a slight extent in absolute alcohol. Its best solvent appears to be partly concentrated alcohol, and this solubility is increased by heat.

Professor Gley and M. Arnaud, both of Paris, first studied the physiological effects of ouabaïn in frogs, rabbits, and dogs, and they found that in a frog $\frac{1}{2000}$ grain caused death by arresting the heart's action. In a dog, $\frac{1}{15}$ grain produced marked slowing of the respirations, without much cardiac disturbance; $\frac{1}{60}$ grain first stimulated, and then slowed respiration, until it ceased completely. Subcutaneously the drug was found to act much more powerfully than when given by the stomach; and $\frac{1}{15}$ grain, introduced into the blood through a scratch or otherwise, is said to be fatal to man.

Dr. Percy Wilde was the first to suggest the use of ouabaïo in asthma and whooping-cough, but I am not aware whether he has actually employed it in these diseases. So far as I know, the following observations are the first on record of the use of ouabaïn in practical therapeutics. In this instance its use has been limited to cases of whooping-cough.

Treatment was begun in the first case on October 31st, 1889, and very small doses were employed at the outset; $\frac{1}{2000}$ grain (or half the lethal dose for a frog) was considered sufficient to start with, but this was quickly found to have little or no effect in controlling the disease. Accordingly the strength of the dose was increased from time to time, until it was found that the standard dose for, say a child aged 5 years, was $\frac{1}{1000}$ grain in solution every three hours. Under this dose, if the case was one of moderate severity, the number of coughs and whoops usually rapidly diminished, but in two cases where the children were much prostrated by the violence and frequency of the cough, even this dose was found to be too small, and to them first $\frac{1}{500}$ grain, and latterly $\frac{1}{250}$ grain was given every three hours. This is equal to about $\frac{1}{32}$ grain daily, and is nearly double the strength of the dose advocated by Professor Gley, who, in a recent communication, estimates the maximum daily dose for an adult as 1 milligramme ($\frac{1}{65}$ grain).

Forty-nine cases of whooping-cough have been treated with ouabaïn. Of these, 25 have been dismissed well, 4 died, and the remainder are still under observation. Of the 4 fatal cases, 1 died from diphtheria, 1 from tubercular meningitis, 1 from acute capillary bronchitis, and the fourth from gradual and progressive emaciation. None of the fatal cases were under treatment with ouabaïn for a longer period than 10 days—one of them only for 4—and in all of them ouabaïn had been stopped at least a week before death took place. In none of the fatal cases were there any symptoms which might have been interpreted as indicative of ouabaïn poisoning.

Throughout the treatment of these 49 cases, careful record has been kept of the temperature, pulse, respiration, urine, skin, etc., and the effect of the drug on the number and character of the coughs and whoops of each patient in each 24 hours has been closely watched. Except in one case (a remarkably severe one) treatment was not begun until the patient had been eight days in hospital; this was to enable comparison to be made of the periods before, during, and after treatment. No patient was dismissed until at least a fortnight after the last cough had been heard. It is on the observations mentioned that the following general conclusions are based.

1. Ouabaïn is of marked benefit during all stages of whooping cough, and, if carefully used, produces gratifying results. In the first stage, it cuts short the attack; in the second, it reduces the violence and frequency of the cough, and diminishes the number of whoops; and in the third, it hastens convalescence in a remarkable manner. The following cases emphasise this.

CASE I.—C. M., aged 7 years, fifteenth day of illness. On admission (December 2nd) he had 16 coughs with 20 whoops in the first 24 hours. From December 2nd till 9th average daily coughs 14, whoops 11; $\frac{1}{1000}$ grain ouabaïn was given every 4 hours, beginning on December 9th. The whoops ceased on December 15th and the coughs on the 23rd. The ouabaïn was kept up, however, till January 5th; total amount given $\frac{1}{4}$ grain. Patient was dismissed well on January 8th.

CASE II.—M. A. E., aged 7 years, fifty-eighth day of illness. On admission (December 16th) she had 17 coughs with 122 whoops in the first 24 hours; there was also profuse vomiting and bleeding. From December 16th till 25th average daily coughs 16, whoops 74; $\frac{1}{1000}$ grain ouabaïn was given every four hours, beginning on December 25th. On the 28th it is noted that "the duration of each cough is less, and the violence of each paroxysm undoubtedly diminished." On December 31st there were 8 coughs with 17 whoops, and the bleeding had ceased. On January 5th there were 2 coughs with 4 whoops, and the patient no longer vomited. On January 10th the last whoop was heard, but an occasional cough remained till January 20th, when it also ceased. The ouabaïn was continued till January 31st, and the patient was dismissed well on February 14th. The total amount of ouabaïn given was $\frac{3}{10}$ grain nearly.

CASE III.—W. I., aged 7 years, forty-third day of illness. On admission (October 22nd) he had 15 coughs with 34 whoops in the first 24 hours. From October 22nd till 31st average daily coughs 14, whoops 37; $\frac{1}{1000}$ grain ouabaïn was given every 4 hours, beginning on October 31st. There was a total cessation of whoops on November 6th, and of coughs on November 13th. The ouabaïn was stopped on November 16th; total amount given, $\frac{1}{1}$ grain nearly. Patient was dismissed well on November 30th.

2. Ouabaïn is a drug which does not appear to be cumulative; its administration can be stopped suddenly without any ill effect beyond an exacerbation of the whooping-cough; it can be as suddenly resumed.

Date.	Ouabaïn.	Fits of Coughing.	Whoops.	Day of Illness.
October 16th ...	—	29	38	24th
,, 20th ...	—	20	48	28th
,, 25th ...	—	23	42	33rd
,, 29th ...	—	20	44	37th
,, 30th ...	$\frac{1}{1000}$ grain every 4 hours	—	—	38th
November 3rd	—	18	40	42nd
,, 4th	Stopped	—	—	43rd
,, 10th	—	25	158	49th
,, 11th	—	29	144	50th
,, 12th	$\frac{1}{2000}$ grain every 4 hours	27	88	51st
,, 16th	$\frac{1}{1000}$ grain every 4 hours	19	38	55th
,, 24th	—	15	28	63rd
December 7th	—	3	2	76th

The foregoing table shows the action of the drug in the case of a child 1 year old. Similar results have been observed in similar circumstances in other three cases.

3. Ouabaïn should be given, at first at any rate, in doses not larger than $\frac{1}{1000}$ grain every three hours ($\frac{1}{125}$ grain daily).

4. For children under 1 year of age the dose should not exceed $\frac{1}{2000}$ grain every three hours.

5. In children of from 6 to 12 years of age, if the cough be very violent, and the whoops are numerous, $\frac{1}{500}$ grain may be given in each dose, but the action of the drug must be carefully watched.

6. Ouabaïn may be given alone, dissolved in water, or in combination with potas. bromid., or chloral hydrate. The simplest way is to dissolve one grain of ouabaïn in distilled water, so that each

inim of the solution shall be equal to $\frac{1}{1000}$ grain ouabaïn, as: :. Sol. ouabaïn, ♏ 48; syr. aurantii, ℥iv; aq. ad ℥vi. M. Sig. teaspoonful every three hours.

All the cases under review were treated in the above way.

7. Under the administration of ouabaïn it is found that the temerature, pulse, and respiration are, in uncomplicated cases, ightly below normal. When the drug is pushed the respiration, s might be expected, becomes very slow indeed; in one patient, ged 4, it was often as low as 16 per minute. It is from this side iat danger is to be expected.

An occasional irregularity of the pulse has been noted, and this lways occurred in the evening:

	Morning.	Evening.
Average temperature	98.4°	97.8°
,, pulse	102	96
,, respiration	26½	27½

8. Ouabaïn seems to promote the action of the skin. Within a w days—always less than seven, and usually three—of beginning treatment patients are noticed to be perspiring freely, and nis is observed to continue so long as the drug is being given. he patient ceases to perspire so freely shortly after the drug is opped.

9. The movement of the bowels is regular; the average number f motions daily is 1¼. In no single instance was there any of that iarrhœa which is usually so troublesome a feature in whooping-ough.

10. The total amount of urine passed is slightly increased. The mount in each case of course varies with the age of the patient. he average daily amount over the whole 49 cases was 14½ ounces. he average age of each patient was 4 years 5 months.

It may be noted that in two of the cases under treatment sugar vas undoubtedly present in the urine on admission. This began o diminish in quantity, in one instance within three, and in the he other within five days, after treatment was commenced; and n the first case on the eighteenth, and in the second on the nineeenth, day of treatment the urine was noted as being free from he slightest trace of sugar. It remained so during the remainder f residence in hospital.

It would be interesting to know whether the same result folowed the administration of ouabaïn in diabetes mellitus.

11. Professor Gley points out that four drops of a solution of 1 n 1,000 produce in a rabbit marked anæsthesia of the cornea, vhich anæsthesia lasts for about two hours. I have failed to nd this anæsthetic effect produced in any of my patients, lthough repeated experiments with a solution of the same trength have been made in nearly every case.

12. The appetite improves. This effect is striking, and has been oted in all the patients without exception.

13. The general physical condition improves considerably. This ffect also is undoubted, although it is to be regretted that accuate data as to the weight of each patient before and after treatnent are wanting.

14. The sleep is sound.

I have no doubt that part, at least, of the effects noted in 12, 3, and 14 is due to the diminished frequency and severity of he cough rather than to any direct action of the ouabaïn.

I have to say, in conclusion, that the statements regarding the hysiological action of the drug are based on a paper, "Sur la oxicité comparée de l'Ouabaïne et de la Strophantine,"[1] by M. E. ley, and on a paper, "Sur l'Action Physiologique de l'Ouabaïne,"[2] y MM. E. Gley and P. Rondeau.

[1] *Comptes Rendus Hebdomadaires des Séances de l'Academie des Sciences*, Séance du 30 juillet, 1888, p. 348.

[2] *Comptes Rendus de la Société de Biologie*, Séance du 5 mai, 1888, p. 421.

THE INTERNATIONAL MEDICAL CONGRESS, 1890.—The principal ubjects to be discussed in the Section of Military Hygiene at he forthcoming Congress at Berlin are: Antiseptics on the battleeld (to be introduced by Professor von Bergmann and a medical fficer of the British Army); movable hospitals in peace and war; ospital ships in naval war; the prophylaxis of epidemics in rmies on active service and at home; uniformity in medical eports of the different armies (to be introduced by Dr. J. S. Billings, f the United States Army); and trephining after wounds received n battle (to be introduced by Professor Bardeleben and a medical fficer of the Italian Army). Papers will also be read by Professor ormani, of Pavia; Dr. Daubler, formerly of the Dutch East ndian Army; and others. Full particulars may be obtained from r. Kröcker, 65, Potsdamerstrasse, Berlin, N.W.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

SUGGESTIVE THERAPY IN INSANITY.

UNUSUAL difficulty attends the practice of hypnotism among the insane, and the fact accounts for its neglect in asylums, where suggestive therapy, so far from having a place in the code of treatment adopted (which could not yet, indeed, be reasonably expected) is not even given a trial. It may, therefore, be worth while to refer to a case in which the method was tried, for one is led to think, from the consideration of this case, that a similar method applied in circumstances more suitable would achieve a more definite result. The patient, male, aged 32, became an inmate of the asylum in September last. He had committed a theft some years before, and had been imprisoned, thereafter became melancholic and suicidal.

On admission, he had ideas of unworthiness, had lost self-confidence, and was depressed. Was put to work out of doors, and his condition improved after the lapse of a month; but depression, though less intense, remained, together with loss of confidence and dislike for occupation. He feared that God was offended with him. Whilst in this state he was hypnotised, the hypnosis being induced in ten minutes by means of a bright object in the usual way. He was now amenable to suggestion. Thus, there was complete inability to raise the eyelids when loss of power so to do was suggested; suggestion of palsy of limbs also obtained. His arms could be made insensitive or hypersensitive; in the former condition pins thrust deeply in elicited no response. The lids were closed; the globes converged upwards and inwards; rate of breathing at outset accelerated markedly. On subsequent occasions the ticking of a watch produced hypnosis in a few minutes. Amenability to suggestion was always evident. Thus, in following one he would take a huge step over a suggested obstacle. He nursed a pillow, drank a mixture of soap, salt, and water called sherry; ate a raw potato, a suggested apple; turned with a wry face from eau de Cologne, being told, with suggestive sounds, that the odour was a foul one. He gave his name, slowly and in altered voice, at order; told he had forgotten it, he showed distress, "groped" for it, failed, and sank back sighing. Charcot's stages could not be obtained. The reflexes were always normal. Further experiments were avoided, as it was merely sought to establish the genuineness of the state induced. Seeing that suggestions were duly carried out in hypnosis, a similar result in the post-hypnotic state was hoped for; they were, therefore, repeatedly made with a view to mental improvement. He was told that all depression would leave him, that he would regain self-confidence and desire for work; that his fears would disappear, etc.

The patient recovered, but there was no clear evidence that new and powerful influences directly brought about recovery; no rapid decrease of depression or increase of self-confidence; nothing which indubitably showed that suggestion worked the cure. It should, however, be added that he spontaneously told the attendant in charge that he felt "different now" (that is, after hypnosis had been several times induced), in what way he could not explained, but he believed that God was on his side. Doubtless, had there been some distinct delusion to remove the force of suggestion might have been concentrated, but the nature of the case permitted only suggestion of a general kind, with diffused, and therefore weakened, force.

In all, patient was six times hypnotised, not oftener, because he got into an undesirable condition of subjection—felt impelled to go to the room in which the state was induced, even on one occasion starting to leave his work at some distance. He kept his eyes fixed on me each time I visited the ward, and told the attendants he felt constrained to follow. The suggestion during hypnosis that he would regard me merely as a subordinate instrument in his cure did not avail to remove this unwholesome state.

EDWIN GOODALL, M.D.Lond., M.R.C.P.
West Riding Asylum, Sheffield.

DORSAL DISLOCATION OF METACARPAL BONES.

T. S. was admitted to the Warrington Infirmary on March 28th suffering from an injury to the hand, caused by a fall down some steps, at the bottom of which was a wall. Against this wall the

palmar aspect of the fingers of the right hand came with great violence.

On examination a swelling on the dorsal aspect of the hand was found. This swelling was sharply defined above and slightly concave, the concavity being turned towards the wrist. A prominence caused by the styloid process of the third metacarpal bone could be seen, and the articular surfaces of the bases of all the metacarpal bones could be easily felt through the skin on the back of the hand. The extensor tendons of the fingers could be felt, and became tense when reduction was attempted. The movements of the wrist were not interfered with. The metacarpal bone of the thumb was not displaced, nor were any of the bones fractured. Reduction was effected (under chloroform) by strong traction and flexion of the hand round the knee.

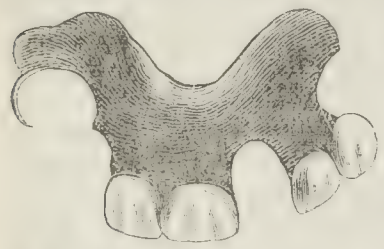
The injury was, in fact, thoroughly well defined, and could accurately be described as a dislocation of the second, third, fourth, and fifth metacarpal bones backwards on to the dorsal surface of the carpus. Dorsal and palmar splints, and appropriate pads secured the position after reduction.

This is, as far as I am aware, an absolutely unique injury, no dorsal dislocation of the metacarpus having ever previously been recorded. Possibly the patient's occupation—namely, that of a shorthand writer—may have had something to do with the peculiar nature of his injury by causing an unusual amount of laxity in the carpo-metacarpal joint.

J. Turville Smith, M.R.C.S., L.R.C.P.Lond.,
Senior House Surgeon, Warrington Infirmary.

TOOTH-PLATE PASSED *PER ANUM*.

On Thursday night, February 20th, 1890, about 10.30, shortly after falling asleep, Mrs. F. was awakened by a sense of choking, and found she had swallowed a tooth-plate with four artificial teeth. I saw her half an hour later. The plate was lodged in the œsophagus, and was causing much discomfort. I introduced a probang, which dislodged the plate. It passed on into the stomach and she experienced immediate relief. I learned that from one end of the plate projected a sharp gold hook (see block), by which the plate had been connected with the nearest natural tooth backwards. I advised that her food should be potatoes, rice, and eggs; that liquids should, as far as possible, be avoided, and that no purgatives should be taken. This course was strictly followed. Next day she complained of some discomfort in the epigastrium, but this soon passed away. The bowels were moved on the Saturday and again on the Sunday. On Monday morning, about 11 o'clock, they were again moved. The motion was firm, and, on its being broken, the plate, teeth, and hook were found entire, and completely concealed inside the fæcal mass. No ill consequence has followed, and no trouble arose during the passage except the epigastric discomfort on the second day and the thirst caused by abstinence from liquids.



A. Ledlie.

Belfast.

PHLEBITIS FOLLOWING INFLUENZA.

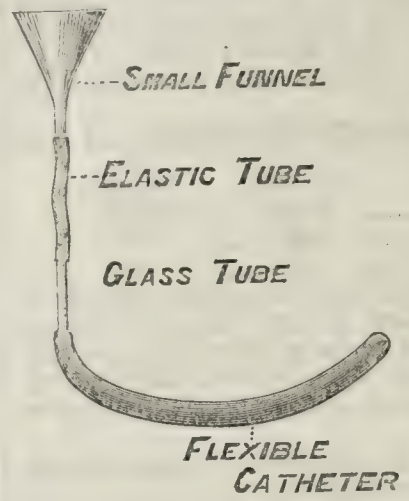
Mrs. G., aged 49 (catamenia regular up to two months ago), had an attack of influenza about a week before consulting me, accompanied by shooting pains in both arms, which had gradually became so severe as effectually to prevent sleep. When seen, both arms, but especially the left, were hard, swollen, and tender, and painful and stiff on the slightest movement; on the left side the swelling extended as high as the sterno-mastoid, impeding the movements of the head. The skin was white, and the appearance altogether analogous to that of the lower limb in *post-partum* phlegmasia. There was no pyrexia, the appetite was good and the digestive organs normal; yet the weakness was extreme, the pulse being especially small and soft, and it was fully a month before the arms returned to their original condition. About three weeks after the arms began to swell, there was some swelling and tenderness of the left calf, but this soon subsided.

The patient had never suffered from gout or articular rheumatism. It is interesting to note that the menopause had commenced —a time of life when vascular disturbances are common.

Regent's Park. J. Cross, M.D.Camb.

AN EASY METHOD OF FEEDING *PER RECTUM*.

Some months ago, having to treat a case of gastric ulcer by rectal feeding, etc., I devised the apparatus represented in the accompanying diagram, consisting of a small funnel, a piece of elastic tubing one-eighth of an inch in diameter, a glass tube four inches long (by which we can watch the fluid descending), and joined on to this an ordinary flexible catheter. The atmospheric pressure is sufficient to force any fluid slowly into the rectum, and I have never noticed any return; absorption being slow, but efficient. Thus it is an amendment on the old enemas in use.



The claims for this method are:

First. It is extremely simple, the patient being able to pass the catheter into the bowel without experiencing any pain or unpleasantness.

Secondly. It is cheap, clean, and easily made.

Thirdly. After once being shown, the most inexperienced person can use it, and thus we can be sure that our patient will have small quantities of nourishment at frequent intervals.

Fourthly. The fluid is slow in its passage, and thus nearly the whole quantity becomes slowly absorbed.

In any case requiring rectal feeding, I venture to hope that my professional brethren will find this simple method of use to them, and a source of comfort to their patients.

Y. M. Jones-Humphreys.

Cemmaes, Montgomeryshire.

THE SALTS OF HYPIODOUS ACID.

Knowing, as we do, that iodine is able to displace chlorine from chlorates, forming the more stable iodates, we should naturally expect that the iodine compounds containing a relatively smaller proportion of oxygen, would still, to some extent at least, exhibit a greater stability than the corresponding chlorine compounds.

The hypochlorites are very unstable, but are still capable of practical use, and therefore we might very reasonably expect that the hypiodites would be sufficiently stable for preservation and use. Experience shows this to be the case. The hypiodites which I have prepared and examined as being useful in medicine are those of calcium, potassium, and sodium.

The solution of calcium hypiodite, which is analogous to a solution of the chlorine compound commonly known as bleaching lime, has been in use for some little time now, under the name of "liquor calcis iodinatæ." It is an excellent and almost tasteless preparation for internal administration. It is much superior to the tincture of iodine, when it is desired to administer free iodine because the iodine is not set free until it reaches the acid stomach and thus the action of iodine on the mouth and throat is avoided. Wishing to obtain a stronger solution for antiseptic purposes, I have recently been examining the hypiodites of potassium and sodium. These, like the analogous hypochlorites, are obtained only in conjunction with the iodides in equal molecules (KI+KOI), etc.

The potassium hypiodite (liquor potassæ iodinatæ) affords a most useful antiseptic and parasiticide solution. Each ounce of this solution contains about 28 grains of iodine, in the form of hypiodite of potassium, which is at once decomposed, yielding free iodine, by any dilute acid. This liquid, containing so large a proportion of iodine in so loosely-combined a form, is obviously a most powerful antiseptic. The ease with which it gives up its iodine is shown by the fact that the acidity of paper or calico is often enough to set free iodine, which colours the starch present. Acidity of the skin in some cases has a similar effect.

Liquor potassæ iodinatæ can be applied undiluted to the unbroken skin, but causes smarting, unless diluted, when applied to a raw surface. Liq. potassæ iodinatæ can also be given internally in small doses (5 or 10 minims) diluted.

The hypiodites, when shaken up with olive oil, form soaps, propenyl hypiodite [$C_3 H_5 (OI)_3$], being probably formed instead of propenyl alcohol or glycerine, [$C_3 H_5 (OH)_3$], as happens when fats are saponified by the caustic alkalies.

The soapy liniment, formed by shaking together equal parts of quor potassæ iodinatæ and olive oil, is a much better preparation than the "linimentum potassii iodidi cum sapone," *B.P.*, nce it contains iodine in a much more active form. A dilute id added to this liniment sets free the iodine.

Messrs. Willows, Francis, and Butler, of 101, High Holborn, ondon, are the manufacturers of these preparations.

Highgate. HUGH WOODS, M.D.

NÆVUS AND MATERNAL IMPRESSION.

HAVE been always sceptical as to "maternal impressions," but his instance has shaken my scepticism:—

Mrs. ——, pregnant with her second child, went, in June, 1889, see a man with senile gangrene, who insisted on showing her vo patches of dry gangrene on his ankle and lower leg. She as very much disgusted and upset, and preserved the idea that ıe child would be marked.

A healthy child was born on February 23rd, 1890. On the left ıigh, just above the knee, was a very black, rough, slightly ised nævus, about three inches long by one broad, of irregular ıape, resembling to a marked degree one of the patches of gan-ene the mother had seen. There are no other nævi on the child.

Westerham. ARTHUR MAUDE, M.R.C.S., L.R.C.P.

FRACTURE OF A RIB FROM COUGHING, IN A PATIENT WITH CHRONIC BRIGHT'S DISEASE.

s the following case is somewhat rare it seems to me worth cording:—

F. S., aged 54, engine driver, a somewhat feeble-looking man, as under my care in June, 1889, suffering from chronic bronch-is and albuminuria. He had been attending at the surgery about vice weekly, and complaining of bronchitic symptoms with dys-epsia. Urine of low specific gravity, with persistent haze of bumen, containing granular and hyaline casts.

On the evening of June 25th he sent for me to see him at his ouse, the messenger stating that he had been suddenly taken with vere pain in his side.

On attending, the following history was obtained from the atient: That he had been seized with a severe paroxysm of oughing, and that during a violent cough he had felt a distinct snap" at the place where he now complained of the pain, and iat since he had had severe pain of a cutting character, aggra-ated by breathing or coughing, the pain being localised to a point ist behind the centre of the eighth rib on the left side.

The temperature was normal, and on auscultating the chest no hysical signs were present beyond pre-existing signs of bronch-is. On manual examination crepitus was present, together with ll the other signs of fracture of the eighth rib on left side, the acture being situated a little behind its centre. The fracture vas treated in an ordinary way by strapping, and united without ny more trouble than one would expect from a similar case com-licated with bronchitis.

I may add, there were no signs of disease of the rib to account or it, nor had the patient received any injury. The urine at the resent time contains a haze of albumen; it is still of low specific ravity, has some hyaline and granular casts and a few blood cor-uscles—probably due to granular kidney.

EDWARD C. MASSER, M.R.C.S., L.S.A.Lond

St. George's, Wellington, Salop.

THE TREATMENT OF INFLUENZA.

ERMIT me to concur in the opinion recently stated in your olumns by Mr. Hanbury Frere, that the administration of fibrin-estroying agents, such as the compounds of ammonia and the ntipyrin group in bronchial influenza, precipitates bronchorrhœa nd other pulmonary complications. In all bronchial cases I give itrous ether and iron, and the result of such treatment, as already ecorded by me, was a cure in twenty-four hours in the majority f cases, and in none the development of the troublesome sequelæ eferred to.

As for antipyrin and its congeners, most of the deaths in the te epidemic are, I think, to be attributed to their use; and I ould as soon think of "trying" full doses of opium in bronchitis, ecause the production of excessive secretion is just as dangerous s the retention of it.

There are cases in which the symptoms are, in the main, peripheral, with only the slightest trace of bronchitis and nasal catarrh. These I have found rapidly curable with nitrate of potash, opium, and ipecacuanha. But in both bronchial and peripheral forms of the disease I have frequently noticed the subsequent development of pain in various parts of the body, more especially in the head and chest, with great debility and feeble, slow pulse. Attributing this to peripheral venous stasis, I have always and successfully combated it with carbonate of ammonia, antifebrin, sodium salicylate, sodium iodide, and belladonna. Some reports in the journals stated the development of purpura as a sequela. Here, again, I think the antipyrin group were more to blame than the disease.

At the meeting of the Royal Academy of Medicine in Ireland on February 28th, Mr. Croly stated that he started, kept up, and finished off with stimulants. Now in cases with a full, bounding pulse of 130 or 140, and acute inflammation of the respiratory tract, I affirm that such treatment is distinctly unreasonable.

Accrington. C. R. ILLINGWORTH, M.D.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GREAT NORTHERN CENTRAL HOSPITAL.

A CASE OF ACUTE OBSTRUCTION OF THE LARYNX AFTER CONVALESCENCE FROM BRONCHOPNEUMONIA.

(Under the care of Dr. CLIFFORD BEALE.)

T. H., aged 13 months, was sent into the hospital on February 18th, 1890, from the out-patient department, suffering from cough and fever. The mother stated that the child, which was the youngest of six, had been troubled with cough and wheezing from its birth, and she could not tell exactly when the present illness began, but she was sure that the baby had got rapidly worse within the last few days. On examination, the child was found to be fairly well nourished, the skin moist, respiration 20 to 24 at first, pulse fairly strong but slightly intermittent. It had been weaned and took milk freely, and did not seem very ill for the first twenty-four hours, being only troubled with a short jerky cough and gradually increasing dyspnœa. On the second day the signs of bronchopneumonia of the left lung began to be manifest in scattered patches, and the disease ran the usual course, clearing up at one spot and appearing at another, until March 5th (fourteen days), but did not attack the right lung. There was nothing remarkable about the clinical symptoms except the temperature, which ran an unusually irregular course during the twenty-four hours, sometimes falling below normal in the early morning and forenoon. After March 5th the child seemed to be rapidly getting well, the signs and symptoms of disease quickly subsiding. On the morning of March 18th, when about to be discharged as convalescent, he was noticed to have a slight cough of a croupy kind, but without any other evidence of fresh mischief, he began to suffer from dyspnœa, and this increased very rapidly, all the symptoms pointing to the larynx as the seat of obstruction. The usual remedies for the relief of "croup" were administered, but without effect. The laryngeal obstruction was obviously increasing, but there was no cough or sputum. Digital examination indicated a good deal of swelling about the arytenoid cartilages, but nothing very positive could be made out, nor was laryngoscopic examination possible. There was no evidence of membrane or of any morbid exudation whatever.

Tracheotomy was performed as soon as it was manifest that palliative measures were inefficient, and the child experienced immediate relief and slept quietly for a long time afterwards. On the second day after the operation it became evident that the bronchopneumonia had begun again, and this time was affecting both lungs. Dyspnœa gradually increased, the temperature again rose, and, although the strength of the pulse and the power of taking milk were well maintained, the child sank exhausted on the following day.

The *post-mortem* examination (by Dr. Galloway) showed very little to explain the marked laryngeal obstruction. The mucous membrane exhibited no definite traces of past or present œdema,

except in the ary-epiglottic folds, nor was the larynx itself markedly congested; the trachea, however, was very deeply congested, and full of sticky mucus proceeding from the bronchi below. There was nothing in the pharynx to note, nor was there the slightest trace of membrane in any of the upper air passages. Both lungs were studded throughout with small patches of bronchopneumonia, more numerous towards the base than at the apex of each lung. These patches were in all stages, but some were obviously quite recent. Other organs were healthy.

The obstruction in this somewhat unusual case must be attributed to acute inflammation of the larynx, either producing œdema, which must have subsided after the performance of tracheotomy, or else spasm of the glottis. The former cause is the most probable, as the obstruction slowly increased in spite of remedies which generally reduce spasm; while the flabby, puckered condition of the ary-epiglottic folds would be quite consistent with the view that they must have formed the seat of the obstruction. The occurrence of such sudden laryngeal stenosis from this cause, following convalescence from bronchopneumonia, does not appear to have been often noted, and hence the publication of the present case.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 22ND, 1890.

TIMOTHY HOLMES, M.A.Cantab., F.R.C.S., President, in the Chair.

Salicin compared with Salicylate of Soda as to Effect on the Excretion of Uric Acid, and Value in Acute Rheumatism, with Some Deductions as to the Causation of the Disease.—Dr. A. HAIG read a paper on this subject, in which, after alluding to the fact that salicin was generally considered to be of less value than a salicylate in acute rheumatism, he said his experiments as to the relative power of these drugs in producing a plus excretion of uric acid showed that, dose for dose, salicylate of soda had about thirteen times the excretive power of salicin, while salol was weaker than a salicylate but more powerful than salicin. Their action in disease appeared to correspond roughly with their action on uric acid excretion. Salicin gave a much less marked reaction with perchloride of iron in the urine than an equal dose of a salicylate. Cases were brought forward showing the inferiority of the former in the treatment of acute rheumatism. Reference was made by Dr. Haig to his previous paper on salicylates in the *Transactions* of the Society, and the deductions then made as to the causation of acute rheumatism; further evidence was now brought forward. He also alluded to the action of drugs and diet in acute rheumatism, to Dr. Hilton Fagge's comparative tables, and to the effects of meat, exercise, cold, and damp. Speaking of the treatment by alkalies, Dr. Haig said their action as regards uric acid was similar to but less powerful than that of salicylates; the effects in disease corresponded with this. Acids and substances which raised the acidity, such as ammonia, caused retention of uric acid and did harm. The action of ammonia as an acid explained its value in the uric acid headache (migraine). Reference was made to the natural cure of rheumatic fever and to the way in which rest and milk diet affected the excretions. With regard to the excretion of acid from the skin, it was pointed out that suppressed perspiration was immediately followed by an increase of urinary acidity (Sir A. Garrod), while increased perspiration was also immediately followed by a decrease of urinary acidity. The reaction of perspiration under various conditions was described, and quotations from authorities given. Dr. Haig went on to say that the influence of increased skin activity in lowering the acidity of the urine could be easily demonstrated. All methods of treatment that were of any value in acute rheumatism caused a plus excretion of uric acid; and salicin and the salicylates were useful in this disease in exact proportion to their power of producing elimination of this substance. The question was asked, Is acute rheumatism due to uric acid? and reasons were given for thinking that the joint symptoms were due to it. Objections were considered, and remarks were made on the difference between gout and rheumatism. It was said to be partly due to difference in the metabolic processes of young and old. It had been shown by Sir A. Garrod that uric acid was absent from the blood in acute rheumatism. The same author had suggested that inflammation destroyed uric acid. Dr. Haig believed that the uric acid was all driven out of the bloo by high acidity and precipitated in the joints, and that such precipitation and not destruction of uric acid explained Sir A Garrod's observation with regard to the effect of inflammatio and the fever of rheumatism. The effect of fever and inflamma tion on the reaction of the blood and tissue fluids and the urin was described. The temperature was higher, and therefore th rise of acidity greater, and the precipitation of uric acid in th joints more complete in rheumatism than in gout. There wer other causes that raised the acidity, as chill and suppresse perspiration; ingestion of acids and acid-forming foods; forma tion of acids in dyspepsia, etc. The effects of tonsillitis or loca inflammation and of bacteria or drainage emanations in producin fever and raising acidity were pointed out. The excretion of uri acid in acute rheumatism was referred to, high arterial tensio at the end of an attack pointing to excess of uric acid in th blood; anything that raised the acidity at this time would caus a relapse. Conclusions were drawn as to the causation of th joint symptoms of acute rheumatism by uric acid.—Dr. NORMA MOORE considered that if rheumatic fever and gout were looke at from the point of view of anatomy they were two distinct dis eases. In gout morbid joint changes were invariably found, whil there were none in rheumatic fever. It was curious that if th knee-joints of patients who had died of mitral regurgitation wer examined nothing abnormal was, as a rule, seen, although th cardiac condition was dependent on some previous attack of acut rheumatism. In the bodies of patients who had died from rheu matic fever there was often evidence of endocarditis; in som cases of gout also there were changes in the endocardium, but h believed that in 75 per cent. of cases of gout the endocardium wa free from disease. In gout then one perceived permanent injury t joints from changes in the cartilages, but in acute rheumatis transient injury to the joints and permanent mischief in the en docardium. Clinically, at first the anatomical view was confirme and the two affections seemed distinct, but from time to tim cases were met with which commenced as rheumatic fever an then passed on into gout. He contended that rheumatic fev was a term which covered several distinct pathological condition Two were distinct: (1) A variety of gout; (2) a condition closel allied to a true septic disease, going on to its most severe cond tion in ulcerative endocarditis. This might be due to micr organisms, which might generate the endocarditis.—Dr. GARRO protested against the manner in which Dr. Haig was building u theory after theory on very fragile facts. He could not agr with the close relationship between gout and rheumatis for which Dr. Haig contended; it must be remembere that though the children of gouty parents might ha rheumatic fever, yet very young children might have tr gout, which was not in the least like rheumatic fever. A theory of rheumatism must explain all the symptoms, a he insisted that rheumatic fever was a systemic diseas of which the joint affection was only one manifestation. Sir WILLIAM ROBERTS stated that Dr. Haig seemed to regard ur acid as an essentially poisonous substance. It must be remem bered that animals could eat uric acid, and have it injected in their blood without suffering any inconvenience. Ebstein assert that if a solution of uric acid in phosphate of soda was inject into the cornea, necrotic changes took place, but that if only solution of phosphate of soda was injected, there were no necro changes. This was supposed to show the deleterious action uric acid. He did not think any confidence could be given to the experiments. Uric acid was harmless until it was precipitat from the blood as biurate of sodium. This was a very insoluble s in the blood; in fact, as insoluble as uric acid was in water. uric acid was precipitated in the joints in rheumatic fever, would be found there, as it was very insoluble. As a matt of fact, it never was found there.—Dr. LAUDER BRUNTON su gested that the reason why uric acid was not found in t joints was possibly because some allied substance was form which was afterwards excreted as uric acid.—Dr. HAIG, in rep said he believed that the reason no uric acid was found in t joints was because rheumatic fever was an acute disease, where gout was a chronic one. He was certain that urates could be g rid of in long illnesses, so that nothing was found in the join excepting erosions of cartilages. If this occurred in gout, w should it not occur in rheumatic fever? He thought uric a might be in the joints in solution. Micro-organisms might ra the acidity of the blood, and so determine an attack of rh matism. Any drug, such as benzoate of sodium, which depres

e acidity of the blood, might be of value in the treatment of eumatism, whereas benzoate of ammonium, which raised it, ould do harm.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 21ST, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

ADJOURNED DEBATE ON THE PRESENT POSITION OF ABDOMINAL SURGERY.

R. LAWSON TAIT said: I have first of all to thank the ıthorities of the Society for their kindness in permitting e to take part by invitation in a discussion so full of terest. I have to congratulate the President on his disguished position at the head of so ancient and so honourle a Society and I have to state my opinion that the Society ıs done well in the selection of Mr. Meredith for the initiaon and guidance of the debate for that he has done in a anner at once judicious and judicial, and so completely as to ave little to be said. Indeed, I find it hard to manufacture contious matter out of Mr. Meredith's paper, and no words of mine n adequately acknowledge the constant and kindly references has made to my own work. All this sounds as if the charges freely laid at the doors of abdominal surgeons that they are ınecessarily combative can no longer be sustained. It looks as the tomahawks which gleamed so brightly and were used so eely some ten years ago were rusty and blunt, and might be ıried. I hope and believe it may be so. The great subject of ntention used to be the so-called antiseptic system, and Mr. eredith's opening sentences so completely accepted my own sition on that matter that I have really little more to say. He, owever, expressed an opinion that it is to Listerism that we owe ır modern system of excessive cleanliness, and I trust he will rgive me when I point out that the exact opposite is the fact. was the opponents of Listerism who showed that it was cleanıess that was wanted and not germicides, that it was the soil ıat we had to fear, and not the seed. The weeds won't grow hen the garden is kept in order, and it is to the preaching of mpson and his school, and not to that of Lister, that our adıces in this respect are due. These views led me into the plan flushing the abdomen, and I cared not how many little beasts ere were in the water so long as I got the dirt out. The logical nclusion of Listerism indeed was, and is, that dirt cannot atter. This was enunciated clearly by Lister's followers, who clared in debate that they went to the operating room from the ssecting room and *post-mortem* table with light hearts, but we ıd that they went back to the same tables with the same ıtients—dead. Now that the system is no longer used as a ver for an ignominious retreat I watch its varying and disapearing phases with amused curiosity, but no longer with interest. ne other criticism have I to offer upon Mr. Meredith's paper, and ıat is a further protest against the American barbarism of the word laparotomy." I need not tell a room full of classical scholars that laparotomy" can only mean a lumbar incision and nothing else. cannot possibly be applied as we apply the phrase "abdominal ction." Concerning the removal of the appendages for myoma, ım glad to find that Mr. Meredith pronounces it to be a difficult eration, one which, indeed, often cannot be completed. In a ok recently published by Dr. Thomas Keith and his son, Mr. Skene ith, entitled *Treatment of Uterine Tumours by Electricity*, it is said at this is an operation requiring no surgical skill. Mr. Meredith ems to cling to the ovular theory of menstruation, and to attrite the failure in cases of removal of the appendages in accomishing the objects desired to incomplete removal of the ovaries. the second volume of the book, the first volume of which has en so freely used with gracious acknowledgment by Mr. Mereth in the construction of his paper, I shall adduce evidence hich will for ever settle this question; but I wish to ask him w to consider what he wants us to believe. It is to the effect at a minute percentage, perhaps not in bulk one per cent. of an gan not removed, but still probably destroyed by strangulation, n be sufficient to carry on the most conspicuous function of at organ. Besides, the observations of Bland Sutton and thur Johnstone must not be brushed aside in this way. ıose who still maintain the ovular theory of menstruation ust read those papers and they must answer them. I ı delighted to find that Mr. Mayo Robson and Mr. Meredith tirely confirm my views concerning removal of the uterine pendages—views which I have been proclaiming for fifteen years, and which have been listened to without misrepresentation only within the last five years. The nearer we approach to Battey's principle in operating upon any case the more unsatisfactory will be the result. The nearer we approach to my principle in operating for gross and palpable disease the more our patients will be benefited. Concerning the ultimate results of these cases I have published a large amount of evidence, and am prepared with much more; but the difficulties are great: difficulties which do not exist in any other department of our art. It is an easy matter to show a bad knee-joint before a medical society previous to an operation for excision, and in a few months the patient can again be exhibited to show the results. But with pelvic suffering in women no such exhibitions can be made, and the patients often absolutely prohibit all publication of their cases. One of my patients, the narration of whose case would convince any who remain sceptical, briefly answered my appeal to her for permission to publish as following: "Dear Mr. Lawson Tait,—It is not, as you know, that I have no story to tell, like the tinker, but simply that it must not be made in any way public.—With the utmost gratitude, yours, ——." Mr. Meredith made a slight allusion to the fact that cases of intraperitoneal hæmorrhage, published as originating from ruptured Fallopian tubes the seat of pregnancies, wanted confirmation. This is a curious fallacy, which is being handed round from critic to critic just as the statements of textbooks are handed down from one to another without examination—as, for instance, concerning the ovular theory of menstruation. Speaking for myself as the publisher of the largest number of such cases, I have to say that in every case the proof was and is complete. First of all, the tying of the broad ligaments stopped the hæmorrhage in every case, and there is no other known cause of rupture of the Fallopian tube leading to severe or fatal hæmorrhage, excepting its rupture by an ectopic pregnancy; finally, the productions of pregnancy, that is to say, placental villi, in the meshes of the muscular structures of the walls of the tube can always be, and in my cases have always been, found. Whether the fœtus is found or not is not a matter of the slighest consequence. This is about the twentieth time that I have had to publish this answer, and I have no hope that it will be the last. Out of Mr. Mayo Robson's speech comes a point hardly pertinent to Mr. Meredith's paper, but of such interest that I cannot pass it over. It is the vexed question as to whether abdominal surgery should be done by general surgeons or not in general or in special hospitals. Some years ago my friend, Mr. W. Thomson, of Dublin, did three consecutive ovariotomies successfully, and he made that fact the text upon which to preach me a lesson for saying—which I never did say—that general surgeons should not do abdominal operations, and I cannot help thinking that Mr. Mayo Robson had me also in his argumentative eye; but why should not my critics take the trouble to read what I say? What I do say is, that abdominal operations will be more successfully done by men who devote themselves entirely to them than by men who take them up casually. Mr. Robson presents a splendid list of cases, rivalling those of any living surgeon and outstripping many; but that proves nothing to the point. It proves conclusively that Mr. Mayo Robson is a most successful surgeon, and it is certainly suggestive that he would make a most successful specialist; but it does not prove that any general surgeon is warranted in operating in the abdomen if there is a chance that his patient can be put in the hands of a specialist. Mr. Syme laid it down as the first maxim in the practice of surgery that all interests must be subservient to the advance of our art. Could Mr. Meredith's paper on "The Present Position of Abdominal Surgery" ever have been written and illustrated by the names he has quoted if men had not given themselves exclusively up to the work of abdominal surgery? As long as ovariotomy received brief and generally condemnatory remarks in the textbooks of surgery the bar of all progress was effectual. When it became the work of special men and the subject of special works the progress was vast and rapid. Neither dentistry nor ophthalmic surgery, nor laryngology, nor obstetrics could ever have attained their present high state of development but for the devotion and success of special men. The first step in the development of specialism was the creation of the College of Physicians, the next the charter of the Barber Surgeons, and the third the creation of the Apothecaries' Company. Finally, the creation of special societies—in every instance at first opposed and then fully commended—has shown how

advance has been and can be made, and to argue against specialism is to argue against the wind; and, finally, who has heard of an experienced physician or surgeon or general practitioner having a wife or a sister or a mother with an ovarian tumour who took her to a general surgeon, however eminent, in preference to Spencer Wells, and I find the same selective practice holds good in this the next generation. Mr. Treves took a similar view to that of Mr. Mayo Robson, though from another standpoint. To him a peritonitis is but as an abscess in the buttock or in the back, and a hysterectomy but as a circular amputation of the thigh. It is charming to think of, and I wish it were true, but there is no truth in it save concerning the two abscesses, that a cavity contains pus and there is pus in a cavity. It is long since I dissected the abdomen, and I may have forgotten all about its anatomy, but when I open that cavity in peritonitis I find that inexplicable nuisance the omentum still there, hampering every movement, and I find adherent intestines softened and apt to tear, so that when my patient dies and there is a *post-mortem* examination I find that there are numerous loculi of pus that neither sponges nor washing could remove. I know of no abscess in the buttock or in the back that presents any such or similar complications. As a matter of fact, in whatever the pathological principles involved in general surgery, and the surgery of the abdomen may be identical, in all the essential details of operations for treatment of the abdomen a singularly specialised field is laid before us. In his lectures on anatomy Mr. Treves may with safety lay down anatomical guides for tying a main artery or cutting for stone, and these rules will not be deviated from in any material detail once perhaps in a hundred times. But, when I proceed to cut out large tumours, especially solid ones, from the abdomen, in a very impressive percentage of my cases I find no landmarks from beginning to end. Sometimes when I have finished an operation I do not know what I have done, and it may be only microscopic investigation of a cyst wall that reveals the fact that I have removed a distended kidney when I thought I was working at an embedded cyst of the broad ligament. Over and over again I have told the stories of huge tumours removed successfully, the origin and nature of which are still unknown; and of cases unsuccessful where careful *post-mortem* examination has left the whole matter still in doubt. I know of no such surgical experience outside the abdomen. In all other regions the surgeon begins his work with a relatively very small chance against him of important error in diagnosis, but in the abdomen we have against us a chance of at least 20 per cent. of total mistake, and such an absence of want of accurate knowledge of detailed relations as amounts almost to complete ignorance, so that anatomical guides are absolutely useless save concerning the most elementary details. When Mr. Treves amputates the thigh I have no doubt he finds the relation of parts practically identical in all his cases. He can choose and determine the length and character of his flaps and he knows exactly what vessels will bleed and where they will be found. He says his experience has been identical with amputation of the uterus for myoma, that he has made flaps, tied vessels, fastened the flaps together, and dropped the stump back in the abdomen with good results. This only means that his experience has been small and his fate exceptionally happy. It is the "stage" method of Schroeder, and even in his hands had a mortality of 30 per cent.; and all of us have tried it with most disastrous results. A uterine stump from which a myoma has been removed is unlike anything else in the human body known to me. It is as hard as cartilage, and as brittle as cheese, so that a ligature will cut through it, or it is so completely infiltrated with serum that a tightened ligature will be quite loose in a few hours, and the vessel will bleed even at the end of forty-eight hours. After I had screwed up a Koeberlé's clamp as tight as I could screw it, I have seen bleeding recur from the stump forty-eight hours later. In some of the cases with specially œdematous pedicles the compression of the stump has been followed by renewed tightening hour after hour, for two or three days after the operation. In such stumps large vessels shrink back in the tissue, and do not bleed at the time of the operation; others which do bleed at first, and were secured, will become loose; and others will play pranks of such fashion as are quite unknown in the general run of surgery, incomprehensible and most vexatious. We all know perfectly well that if we could secure the vessels in our stumps effectually, and then drop the stumps back in the abdomen, we should have at once, in all probability, a 5 or 6 per cent. mortality for these dreadful operations. The only alternative that we have is the extraperitoneal treatment of the pedicle, and it cannot be without the best of all reasons, that the men who have th largest experience in this operation have universally, withou so far as I know, a single exception, arrived at the conclusion th this is the safest and best method. The best implement by f for carrying it out is Koeberlé's *serre-nœud*, and it is ridiculous call the extraperitoneal method of treating the uterine pedic with this instrument barbarous. A few words about the trea ment of ectopic pregnancy, and then I have done. I have nev seen any subject brought under professional discussion into whi so much unnecessary confusion has been brought as in this ca and the confusion is largely due to the want of care which ma of those who take part in the discussion exercise in reading wh has been said on the subject. To those who are familiar with i literature it must be perfectly clear that the suggestion made our President that we should furnish data for forming an ear diagnosis of ectopic gestation referred to the period previous rupture; diagnosis after that is easy enough in the great majori of cases. Concerning my own utterances upon the subject, I ha been misrepresented over and over again. I have not said that is impossible to diagnose it; but what I have said is that t patients do not come to us for diagnosis owing to the absence symptoms till the rupture takes place. In his remarks, Mr. J. Taylor stated that he had two cases in which he had been able make the diagnosis previous to operation, but that was aft rupture. If he has experienced two cases in which a diagno was made before the period of rupture, it will be an advantage he will place the facts with sufficient authentification upon reco Mr. Treves has fallen into error in talking of the removal of t placenta and the sac in cases which have gone on developing af the period of rupture up to the death of the fœtus, which mig be at any time before the ninth month. If the fœtus had be dead for some time, as it generally is in such cases before t operation is done, from a year to eighteen months up to an definite period, there can be little difficulty or trouble in removi the placenta, and I should say very little risk; but what we wa to settle is not that, it is—What is to be done with the placen in the case of a living child? At the fourth month I removed t placenta and arrested the hæmorrhage by perchloride of iron, I I had such an experience of the operation that I should hesit to attack the placenta of a living child very much older than th Mr. Treves recommends the removal of the sac in such cases, a says he has himself accomplished it. What Mr. Treves has do however, is to remove the fœtal membranes; the sac is the br ligament which Mr. Treves would never think of removing, an venture to say he could not remove it if he did think of doing If Mr. Treves differs from me in the belief that the sac is the br ligament, then I ask him to produce any *post-mortem* specim from any museum in this country in which the sac will not found to be constituted of the remains of the distended Fallop tube and the broad ligament; in fact, any specimen in whic will not be proved that the subperitoneal development of ectopic gestation, from the period of primary rupture up to death or removal of the fœtus, did not take place between folds and below the folds of the broad ligament. I have exami all the cases that have been available during the last twelve ye and I have failed to find any case which does not come within category. The supposed exceptions have proved to be corn pregnancies, which are not ectopic.

Mr. GREIG SMITH (Bristol) observed that one point had str his attention particularly in the course of the debate, and t was the apparent desire of the speakers to bring about a t formity of practice; in fact, to formulate a rule of thumb. Spe ing as a general surgeon to a general hospital, he venture differ from Mr. Tait in regard to the uselessness of the spray. spray might, if properly used, do something towards keep microbes away. He urged that in an atmosphere such as t of the Bristol Royal Infirmary, in an operating theatre to wh everyone had access, even fresh from the dissecting room or wards, their results only showed a mortality equal to 5 per c Another example of this "extremism" was to be found in rules that several speakers had attempted to formulate v respect to the treatment of the stump in hysterectomy. T was no doubt that the intraperitoneal treatment was the op tion of election, but there were undoubtedly cases, often the w ones, and those most justifying removal, in which this plan c not be carried out by any means that could be called good. they could get the cervix completely free of muscular tissue well free of the ureters and bladder, and if the severed ute canal could be covered with peritoneum, then the case might

reated on the intraperitoneal plan. If, however, this could not be done then the case would be best dealt with extraperitoneally. Until some means could be discovered of ridding completely the stump of uterine fibre they would do well to hold the extraperitoneal method of dealing with the pedicle in reserve. He said that Mr. Treves's remark as to the wire clamp being a relic of the Middle Ages, by which he supposed he meant the sixteenth century, was no argument against its use, and he took it to be even the opposite, for abdominal surgery was more perfect three hundred years ago than it was within the memory of surgeons now living. Passing on to consider drainage, sponging, and peritoneal irrigation, he expressed the opinion that peritoneal cleansing was often carried to extremes. He suggested that the abdomen rarely required to be sponged out, and a dry sponge or two placed anywhere in the abdomen, and especially in the pelvis, and over the kidneys, at the early part of the operation, would effectually dry the abdomen. Flushing, too, was rarely necessary, and was only rendered indispensable by bad management, whereby blood or pus was allowed to escape among the bowels. Moreover, after irrigation it was unnecessary to remove all the fluid as some speakers appeared to think, for this would come away of itself through the drainage tube, which was very properly used after irrigation. Capillary action was of much help, and a few strands of gauze left in the tube would maintain a constant stream, even of pure blood. There were men who affected to consider drainage pernicious and irrigation unnecessary, but extended experience would teach such men their error. Then, again, with respect to the use of purgatives, one man always used them and another man never, and there must be a mean between the two where the best advantage of the patient came in. There must be cases in which purgatives were necessary, especially in those cases of so-called incipient peritonitis, which he was inclined to look upon as merely due to temporary obstruction, due to overdistension of the intestines by flatus. A purgative relieved the obstruction, and the symptoms disappeared. These were all examples of extremes. He then discussed the treatment of impacted labour. He asked why they should be called upon to adopt one method to the exclusion of the others. He maintained that the operation of election ought to be Cæsarean section, and not Porro's operation. He regarded the latter as a brutal sort of surgery, only justifiable on the ground of saving life. It was as if they said, We cannot manage this organ, therefore away with it. This was but too often the case in surgery elsewhere than in the abdomen. He admitted that Porro's operation was easier to perform than Cæsarean section, but he urged that the surgeon ought to raise himself to a level with the requirements of the operation, and not pull down the operation to his own level. He declined to admit that the argument as to the difficulty in procuring skilled assistance had any weight. He urged that to sweep away the reproductive organs in this way was retrograde surgery, unless it was necessary to save life. He also failed to see that the fact that Porro's operation placed the women in the impossibility of ever again becoming pregnant was an argument in its favour, the more so seeing that, if desired, the same result might be attained in Cæsarean section by snipping a piece out of the tubes. He claimed that the immediate mortality of the new Cæsarean operation was less than that of Porro's operation; but were it even greater he would not hesitate as to the choice of procedure. He thought they ought to begin and to finish with Cæsarean section, and if after all they found that the hæmorrhage could not be controlled, then Porro's operation might be performed as a last resource. There were, moreover, other methods available, and he would be loth to forget elytrotomy. His experience of oöphorectomy, on the whole, was unfavourable. He urged the necessity of greater thoroughness, exhaustiveness, and precision in reporting results. He insisted upon the impetus given to general surgery by abdominal surgeons, and upon the importance of attention to the after-treatment.

Dr. ELDER (Nottingham) discussed the methods by which abdominal surgery had arrived at its present pitch of perfection. In spite of what Mr. Tait had said, he thought that a large share of the credit was due to Lister. Whatever opinions surgeons might hold as to the details of his system, they were now all agreed as to the value of surgical cleanliness. A factor which had largely contributed to the brilliant results obtained was the personal element. It appeared to him that the work of specialists and special hospitals must of necessity be attended by a greater measure of success than that of general surgeons, whose experience was limited. He himself never used antiseptics at the time of operation either for instruments, sponges, or hands, nor even for irrigation purposes, but every care was taken to ensure perfect cleanliness, with the result that at his hospital, out of the last forty ovariotomies, there had been two deaths. Were it not for feeding the patients *per rectum* with peptonised food their attitude might indeed be described as one of masterly inactivity. He asserted that the use of the clamp was barbarous, tedious in its effects, and always fraught with danger, and he thought the day was not far distant when it would be relegated to the limbo of discarded appliances, and that an intraperitoneal method, more in accordance with the advanced position of surgical science, would take its place. With regard to operations on the appendages, he said they were all agreed as to the propriety of extirpating manifest tumours, whatever their contents, which imperilled the life of their possessors. There was, however, reasonable ground for difference of opinion when the subjective symptoms were out of proportion to the objective signs. While he granted that in this class of cases there were many in which other than operative treatment might relieve, yet there were also others in which nothing short of an operation would suffice. He mentioned the case of a very stout woman in whom, by reason of adhesions lifting the appendages out of the pelvis, the existence of an ovarian tumour was not discoverable by bimanual palpation. In this case, as in every other in which the question of operation came up, the history went far to determine the propriety or otherwise of operation. Where the illness dated from labour or miscarriage or venereal infection, with recurrent attacks of inflammatory trouble, then the only treatment was ablation of the diseased appendages. When the real nature of these troubles and their far-reaching effects were better appreciated by the profession, then earlier operations would bring about a lesser mortality to the great advantage of the patient.

Dr. MALINS (Birmingham) said he would confine his attention to the removal of the ovaries and tubes for chronic inflammatory conditions, and also those which Dr. Elder had alluded to, in which the subjective symptoms were more prominent than the objective signs. In the whole domain of abdominal surgery no operation was more unsatisfactory than the removal of ovaries and tubes for chronic inflammatory conditions. On this point he joined issued with Dr. Elder, and he was enabled to do this with more assurance on the strength of a patient who had been under Dr. Elder's care for a long time without any benefit. He agreed with the President as to the necessity for further details as to the subsequent history of these cases. He said that such a want was to be regretted. He said that his own experience and that of others had shown him that many cases in which removal had been advised, got well without it, and his own experience of the results of the operation were very unfavourable. The reasons for this were not far to seek. First, the difficulty of physical diagnosis and the lack of any necessary relationship between the subjective symptoms and the amount of disease. This, he observed, ought not to be. Then, too, the length of time which many of these cases took to improve led to the effects being attributed to the mere lapse of time, and not to the operation. He urged that the mortality of the operation, let them place it as low as they pleased, was still an element which merited consideration. Another circumstance that ought to be borne in mind was the domestic infelicity which often followed these mutilating operations. The sexual troubles that might be said to exist prior to the operation were often intensified afterwards, and the last state of the patient was worse than the first. The patient was but too apt to labour under a sense of sexual deprivation and social disability. With reference to the treatment of suppurative conditions of the pelvis, he admitted that when pus was present it ought at all hazards to be evacuated. He was, however, not prepared to say that blood came in the same category, nor was he disposed to think that all cases of hæmatocele called for abdominal section. The majority of these cases got well by themselves if left alone. He then passed on to consider the suggestion to open the abdomen in cases of puerperal peritonitis or septicæmia. These were cases which taxed their resources to the utmost, and many of them held out not the slightest hope of success by operative interference. He remembered five cases in which the abdomen had been opened for one or other of these conditions, and all had proved unsuccessful. He admitted, though, that there were cases in which prompt intervention might give the patient a chance. While he joined in the chorus of admiration at the progress that had been effected in this branch of surgery, he feared lest the pendulum should swing too far in the opposite direction, and that

operations might be undertaken which, without being altogether uncalled for, might still be unnecessary.

Mr. REEVES observed that, indirectly, no doubt much of the progress was due to Sir Joseph Lister's teaching, but certainly not directly. Personally he never used any antiseptics, though he did not object to the nurse putting some into the dressings, etc. He confessed to a lingering fondness for the use of opium, at any rate during the night following the operation. In respect to the treatment of the "false" peritonitis, he urged that the use of a long tube introduced into the rectum by the surgeon himself, would empty the bowels of superfluous flatus, and so relieve the symptoms. He expressed surprise that this procedure had not been mentioned by Mr. Meredith. The same remarks applied to the use of the old fashioned turpentine stupes. His experience of uterine tumours was not very large, but small as it was, it was not favourable to the use of the clamp. At the same time Mr. Treves had made a mistake in arguing from a couple of successful cases in which the cervix, which formed the pedicle, was most favourable for the operation, that all cases would prove equally simple. He would find that difficulties occurred, and that he would sooner or later have to apply the *écraseur* or leave a large wound. In most of the cases he had seen, the cervix would have made an excellent intraperitoneal stump. He pointed out that Schroeder's procedure consisted in transfixing the cervix, and gave a high mortality. He would not attempt to enucleate a large tumour, and he would prefer to do an intraperitoneal operation if suitable, and if not, then an extraperitoneal. Years ago he had urged that when possible the application of the clamp to both sides of the uterus would render the pedicle unnecessary. He mentioned some cases of cancerous peritonitis with effusion, in which opening the abdomen with irrigation had afforded considerable relief.

Dr. O'CALLAGHAN (Carlow) urged that the after-treatment of cases of abdominal surgery was at least as important as the operation itself. He thought it ought to be decided that the administration of opium in these cases was under no circumstances admissible. With regard to Mr. Treves's remarks on hysterectomy, he said that, according to his own experience, it was utterly impossible to treat hysterectomies in the way advocated by Mr. Treves. With reference to Mr. Greig Smith's observations bearing on the preference to be given to Cæsarean section over Porro's operation, he said that the object of performing the operation in cases of contracted pelvis was to prevent the possibility of the recurrence of the condition for which they operated. Why, therefore, should they not do a simple operation like that of Porro's instead of leaving the uterus to suppurate and inflame? It had been said that no operation could give good results in the dry tubercular peritonitis, but he had had many such cases. He mentioned one in which the adhesions were very extensive, and the glands were so much enlarged as to be felt on external palpation, and it took him five minutes to get into the abdomen. In doing so, in consequence of the adhesions, he cut into the bladder. He enucleated the caseous masses, stitched up the bladder, and the patient not only got well, but had remained quite well ever since.

Mr. BARKER said that Mr. Meredith had drawn attention to a very important point as to the difference between the dry and the moist varieties of tubercular peritonitis. In spite of what had fallen from the last speaker, he ventured to assert that Mr. Meredith had put the matter in its proper light. These two classes of cases were quite distinct, therapeutically and mechanically. He pointed out that in the moist variety they had to do with a more acute process. They were, therefore, less liable to the formation of adhesions, and, being more acute, the cases came under observation earlier in their history, when there was a better chance of intervening successfully. Moreover, the acute process was more localised. In the other variety the number and the strength of the adhesions were so many dangers. He had been struck by the difficulty of dealing with the dry variety with benefit to the patient. He made these remarks in order to emphasise what Mr. Meredith had said, and to urge the necessity for making a distinction between these two varieties. Possibly when they knew more pathologically about the conditions that presided over the dry variety they might be enabled to find a way of dealing with it satisfactorily; but in the meantime they would do well to hold their hands in the matter of operating.

Mr. ALBAN DORAN said that Mr. Meredith's valuable summary had materially strengthened his own conviction that abdominal surgery must always remain more or less distinct from the surgery of other parts of the body. He urged that it was through specialists that ovariotomy, oöphorectomy, hysterectomy, and operations in cases of ectopic gestation had been established n legitimate procedures. He asserted that the special position o abdominal surgery depended upon anatomical conditions whic unlike surgery, never changed. A great serous membrane o quite exceptional relations was opened, handled, and subjected t numerous harmful influences after operation. Even when th peritoneum was not opened, as in lumbar nephrectomy, it migh none the less be exposed to injury and damaged during delicat manipulations in the dark. He admitted that so far as the homo logy of the structures was concerned abdominal surgery did no differ from surgery elsewhere, but he insisted that scientific homo logies were useless to the operator, especially in a branch of sur gery where attention to details was of the utmost importanc The synovial membrane of the knee-joint and the peritoneum wer doubtless histologically homologous, but the different anatomica relations of the two and the functions of adjacent parts had to b taken into account. A spoiled strumous knee-joint might be re moved after an unsuccessful conservative operation, but thi would not apply to the removal of parts implicated in tubercula peritonitis. On the other hand, drainage of the peritoneum inter fered with no function of adjacent organs. It might become channel for the entrance of septic material, or it might fail t effect its object in facilitating the escape of fluids, but it could no cause ankylosis of a joint, nor could it destroy the functions o the pelvic viscera. In short, drainage of the peritoneum, even o the most frivolous pretext, could do little or no harm provided i were properly carried out. The drainage of a large synovia membrane of a joint was quite a different matter, danger to th essential functions of the joint never being entirely absen Again, the peritoneum could be laid open for free inspection c many important organs, the relations of which were often variable whereas the relations of a large synovial membrane were fairl constant. He urged that cutting into a great serous cavit could never be the same thing as cutting into a joint, just as cut ting into the knee could never be the same thing as cutting int the anterior chamber of the eye. Anatomical, physiological, an pathological conditions differed widely in the three cases, an experience had proved that there was more than one form c manipulative dexterity, so that the same surgeon was not neces sarily as skilful in abdominal surgery as in general surgery. Th peritoneum would bear a great deal of handling on condition tha it was by skilled hands, and on condition that the after-treatmer was equally skilled. Tearing down adhesions, performed with im punity by experts, was often followed by bad results when unde taken by novices, who also found that flushing the peritoneu was by no means always as satisfactory as when undertaken b more experienced operators. The same might be said of ligature Moreover, in general surgery, the parts operated upon could nearl always be kept in sight, but this was not the case in removal c the appendages, the very recognition of which, when diseased, w often a matter of difficulty. After the completion of an abdomin operation there remained an integumental wound, far away b hind which, in a great cavity, was another wounded structur ligatured or sewn up—a condition which did not exist after th amputation of a leg or the ligature of an artery. The successes c certain general surgeons proved rather that they possessed th qualities necessary to make good specialists, and they were, i fact, the exceptions that proved the rule. He pointed out that i certain hospitals the obstetric physicians had obtained leave t perform abdominal operations, on the ground that they were mo familiar than the general surgeons with the parts concerned. H urged that this concession was a recognition on the part of th medical schools that abdominal surgery was a speciality.

The PRESIDENT directed attention to the general subject of ab dominal surgery, its history during the past, its present positio and the bearing that its past and its present had upon, and we having upon, the wider field of general surgery, of which it w only a more carefully cultivated acre. Mr. Treves seemed to imp that abdominal surgery had only advanced with the rest, but he (M Thornton) refused to allow such an assertion to pass unchallenge He maintained that surgery and suffering humanity owed muc to the pioneers of abdominal surgery, inasmuch as they had s an example and shown what could be accomplished by careful a tention to detail. In that way they had raised to a first pla operations which were formerly looked upon as unjustifiable, an had conquered prejudice by an honest and thorough publication results. He recalled the risks run by these pioneers, the oppos tion they encountered, the risks they ran, not only to their pr fessional prospects, but even of having the very laws of the

ountry turned against them. He claimed that they deserved and ould have special recognition in the future history of surgery. e suggested that if the general surgeons had imitated them in rnishing more accurate and candid accounts of their work, the lvance in surgery would have come long before. He claimed at the earlier abdominal surgeons had prepared the ground for e principles of his friend and master, Sir Joseph Lister. Had e principle of surgical cleanliness been grasped earlier, the re-lts of ovariotomy would have been incomparably more brilliant, et it was that operation that had paved the way to subsequent ogress. He claimed that Keith, Wells, and others had shown rgeons what could be done even with the imperfect knowledge their disposal, and Lister had shown them how Nature was a illing handmaid to the surgeon if only protected against the tiating influences which hemmed her in at every step. He fully mpathised with Mr. Treves in his diatribe against the extra-eritoneal treatment of the pedicle in hysterectomy by the wire *rre-nœud*, which was only a trifle less unscientific than the old variotomy clamp. Speaking as a practical surgeon, however, e was obliged to admit that it gave better results than ny intraperitoneal method he had met with. Its use in ysterectomy could not, however, be compared with its use ovariotomy, in which there was a pedicle which could be opped into the abdomen without fear. If any method could be scovered by which the mucous membrane of the uterus, cervix, nd vagina could be rendered and maintained aseptic, then the ief difficulty in the intraperitoneal treatment of the stump would ave been overcome. The method of ligaturing the stump de-ribed by Mr. Treves was not perfect as against hæmorrhage, and he ommended the matter of the more perfect method of asepticising nd securing the stump in hysterectomy to the younger workers this department. He pointed out that the plan of crushing the ump was open to the objection that it caused the death of the ssues, and was thus in itself a source of danger. He agreed as to e necessity of ligaturing the named vessels, but he urged that even normally small vessel, when supplying a large tumour, became rge itself, and required to be ligatured like the named vessels. e agreed that success in this department was largely a matter of ractice, and depended upon their being able to recognise when to nucleate large tumours and when to go cautiously to work. The dvantage of the *serre-nœud* was that it tided the patient over the rst few days, by which time the adhesions which would have formed revented the entrance of septic matter, though this was an argu-ent in favour of gentle handling of the wound at this critical me. He dissented from the view that it was well to bring the eritoneum over the stump, preferring to leave the latter open, eeping its surface dry. He urged that, in proceeding to the re-oval of all very large tumours, the bladder should be defined and eeled back from the tumour at once before tying the broad liga-ents, special care being shown in preventing the ureters getting nto the grasp of the *serre-nœud*. He considered the operation for e removal of the appendages in cases of uterine myoma to be a aluable one, and in his own hands the mortality had been under per cent. So far as he had been enabled to follow up his cases, ere had been only one failure, and that, he thought, was simply want of patience on the part of the patient. At the same time, ere was the great difficulty in advising these operations that the sult was uncertain in different people. He insisted upon the cessity of more light being thrown upon the exact relation of e ovaries to the new growth. With respect to the administra-on of opium, he had not yet made up his mind, for the good re-lts which had followed its routine use in his hands indisposed m to believe the evil that had been said of the practice. Ne-rectomies did better without opium, but in other operations he lt sure that it added greatly to the comfort of the patient. In gard to drainage, he said he liked it better than was at one me the case, and he was convinced that it rendered recovery noother. It ought not, however, to be used heedlessly or reck-ssly, and he thought that it promoted the secretion of serum, nd was possibly responsible for the causation of remote intes-nal obstruction. He said he was not yet a convert to the prac-ce of flushing except in particular cases, and he thought it not frequently did harm by carrying mischief up into parts of the eritoneal cavity remote from the seat of operation. The use of ntiseptics, if not essential to success, was at any rate to be rongly recommended, and he asked how one could be sure that e water used for flushing the peritoneum was free from septic ganisms unless it had been boiled. He called attention to the istence of diseased conditions of the ovaries, which was not ap-preciable to touch or sight. He mentioned that he had twice recently removed impacted gall stones from the common bile ducts by incision and suture with success. In conclusion, he congratulated the Society and the profession on the fact that the present position of abdominal surgery was such that there were few burning points to discuss, the fierce controversies of the past having settled down into a general agreement as to the chief lines on which all good work must proceed, all future fighting being on points of detail. While congratulating them on this, and on the absence from the debate of strong personal feeling, he trusted that they would not go to the other extreme, and lose that healthy spirit of emulation without which the vitality of their work might suffer. They would, at all events, continue to be rivals in the matter of obtaining the best results.

Mr. MEREDITH, having thanked the Fellows for the kindly manner in which they had dealt with his summary, and for the valuable information which it had elicited, the Society adjourned.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 17TH, 1890.

STEPHEN MACKENZIE, M.D., F.R.C.P., Vice-President, in the Chair.

Urethral Chancres.—Mr. J. ERNEST LANE read a paper in which he endeavoured to define the exact locality in the urethra where the syphilitic chancre might be met with, to draw attention to certain peculiarities in the progress of such sores, and to note the points by which they might be distinguished from affections resembling them. In 373 cases where the position of the lesion had been accurately determined, he had met with eight sores confined to the urethra, and ten involving the meatus and the commencement of the urethral channel. All the sores situated behind the meatus were in the fossa navicularis, and it was contended that sores were never met with beyond the anterior part of the urethra. The diagnosis of these cases was often a matter of considerable difficulty, the diseases with which they might be confounded being chancroids and gonorrhœa. Chancroids, however, were seldom if ever confined to the urethra, and the diagnosis might be arrived at by inoculations conducted upon the patient, and by the fact that whilst the chancroid was essentially a destructive process, the chancre was a small-celled infiltration which in this situation was seldom attended with any loss of tissue. From gonorrhœa a urethral chancre might be distinguished by the induration of the inguinal glands and the dorsal lymphatic of the penis, by the nature of the urethral discharge, and by the acute and localised pain during micturition. A complication occasionally met with was retention of urine caused by acute congestion of the urethra and predisposed to by narrowness of the meatus, while at a later date a stricture might result from contraction of the cicatrix. Mr. Lane exhibited a patient with a urethral chancre, who had a mucous patch on the right tonsil.—The PRESIDENT alluded to the difficulty frequently experienced in getting a history of primary syphilis in cases where the subsequent symptoms of a disease pointed to a syphilitic origin, and he thought that in a few of these cases a urethral chancre might explain the apparent absence of any initial lesion. It was possible, as Mr. Lane had shown, sometimes to mistake the roseolous eruption of syphilis for a copaiba rash, and in such cases the diagnosis might be assisted by examining the urethra. Finally, he asked Mr. Lane whether he had ever met with a urethral chancre in the female.—Mr. D'ARCY POWER asked what form of mercury Mr. Lane was in the habit of prescribing for patients suffering from primary syphilis, as there appeared to be a fashion in the particular salt of mercury employed in such cases, the fashion frequently changing.—Mr. ROGER WILLIAMS asked whether local treatment in gonorrhœa was not of greater service than the administration of copaiba and cubebs.—Mr. LANE, in reply, stated that he had never met with a case of chancre in the female urethra, nor did he know of any recorded instance. He believed that gonorrhœa and syphilis frequently coexisted, though the thick discharge of gonorrhœa was sometimes mistaken for the thinner discharge which accompanied a urethral chancre. He thought urethral chancres were more common in persons who had a narrow meatus. He considered that tannate of mercury in doses of one or two grains with a little opium gave the best results in the treatment of primary syphilis, as the patient was thereby rapidly brought under the influence of the drug, whilst his digestive system was not upset.

On the Symptoms Connected with the Circulation in Diphtheria.—Dr. SIDNEY PHILLIPS read a paper on some dangers connected with the circulatory organs in diphtheria. Many of these conditions were as serious and as frequent causes of death as the affections of the respiratory apparatus, though their symptoms were often less obtrusive. The paper was based on 100 cases of diphtheria which had come under his observation. Intracardiac thrombosis was an occasional cause of death in diphtheria, especially when it occurred on the right side of the heart. Cases were read showing how suddenly death might result from a clot forming within the right ventricle. Although the clot-formation took a certain time, yet no objective symptoms of its presence need of necessity occur, since the left ventricle was capable of driving the blood through the systemic and pulmonary vessels without assistance from the right side of the heart. In such cases the circulation was kept up until the clot was of size sufficient to prevent any blood flowing through the right ventricle, when death suddenly occurred. In 3 per cent. of the cases of diphtheria it was noticed that there was extreme slowness of the pulse; all these cases were accompanied by vomiting and ended fatally. No treatment was of any avail, except possibly strychnine, and the prognosis of such cases was therefore very serious. The same conclusion was arrived at in regard to another class of cases, in which the pulse was for some days extremely rapid. The latter class of cases was much more frequently met with, but where the number of pulse beats exceeded 200 a minute for two or more days death invariably occurred, and was in nearly all cases due to syncope. The extreme rapidity of the pulse was most frequently found to be present during the first week of the disease, and at a later period even when the other signs were favourable. In many cases, too, it was associated with repeated vomiting, and in others with extreme drowsiness, but in some cases there were no accompanying symptoms. Irregularity of the pulse was not uncommon, but it was not of unfavourable prognosis. Syncope occurred in 26 out of the 100 cases of diphtheria, but these were mostly in severe cases, as the slight ones were not admitted to hospital. In many cases the syncope was preceded by extreme rapidity or slowing of the pulse, or by the approximation of the first and second sounds of the heart, whilst in other cases it happened without any warning of this nature. It usually occurred very early in the disease, and at any later period it was frequent after the thirtieth day, and when the patient appeared to be progressing favourably, or had been discharged from the hospital as cured. Notes of cases illustrating this were read. Dr. Phillips believed that syncope attended either by rapid or slow cardiac action could only be attributed in the majority of cases to disturbed innervation with or without other paralyses. The treatment of these cases by cardiac tonics was of little avail, but stimulants and feeding, administered if necessary through a tube, were insisted upon. Dilatation of both sides of the heart was common in diphtheria, being produced by softening of the muscular fibre of the organ. On the right side collapse or congestion of the lung was especially prone to produce this condition, and if the heart had become dilated before tracheotomy was performed, it often failed to regain its power after the operation. Early tracheotomy was therefore desirable when collapse of the lung appeared to be imminent. On the left side of the heart the softened muscle fibre tended to yield, and this tendency was probably assisted by the increased tension associated with albuminuria, or defective renal elimination without albuminuria. Hæmorrhages from the mucous surfaces were not uncommon in diphtheria. In three cases out of the hundred observed by Dr. Phillips fatal epistaxis occurred; in four there was bleeding from the thyroid body after tracheotomy, whilst in one case hæmoptysis was associated with purpura. Endocarditis in all probability was never a result of diphtheria, though murmurs might be produced by dilatation or anæmia.—Dr. MACKENZIE considered the slow pulse of diphtheria to be due to irritation of the vagus leading to an increase in its inhibitory power over the heart, whilst conversely the accelerated pulse was due to paralysis of this nerve. In confirmation of this view he instanced two cases which he had recently seen, in which cancerous stricture of the œsophagus had caused the pulse to fall below thirty a minute. Fatal syncope, especially when it occurred after a slight attack of diphtheria, as was often the case, was a most distressing termination. He considered that the dilatation of the ventricles could hardly be due to an increase in the arterial tenion, as this was necessarily transient, but he thought that it was more likely to be caused by some toxic agent acting directly upon the arteries and the heart muscle. He asked Dr. Phillips whether the paralyt symptoms, as they only occurred in the later stages of the di ease, might not be due to ptomaines, possibly resulting from disintegration of the mucous membrane. The diminution in t urea excreted in cases of diphtheria and scarlet fever might pe haps be explained by taking into account the diminished quanti of food taken by the patient.—Mr. ROGER WILLIAMS asked wh surgical treatment had been adopted in those cases of diphther which had died of epistaxis; what hæmostatics had been admini tered, and whether at the necropsies the exact seat of the hæmorrha had been discovered?—Dr. HILL asked if the heart muscle in a of the fatal cases of diphtheria had been examined for micr organisms, as they might produce an increase in the rate of t heart beat. He had recently met with a case of Cheyne-Stok respiration in a child, in which relief of the symptoms was obtain by thoroughly clearing out the nasal passages with a solution menthol.—Dr. DREW thought that fatal cases of syncope usuall occurred after a mild attack of diphtheria, and were possibly d to the fact that less care was taken of the patient, and that t dieting and the administration of iron were not persevered to the same extent as with more serious cases.—Dr. SIDNE PHILLIPS briefly replied.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 9TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Myxomatous Tumour removed from the Pelvis.—Dr. FENTO read the notes of the removal of a myxomatous tumour from t pelvis of a woman, aged 44. A lump had appeared in the rig iliac fossa four years previously. The general health had r mained good, and there had been neither pain nor hæmorrhag The tumour sprang from the pelvis below and disappeared und the diaphragm above. Details of the operation were given. Aft the mass was got away, it was found that the entire uterus, wit some two inches and a half of the vagina, had been removed, t tumour itself forming the pedicle, which appeared to be growin from the posterior vaginal wall. The operation was completed in an ordinary hysterectomy. There was no evidence of shoc and the patient seemed to do remarkably well, except that, i spite of most careful catheterisation of the bladder, only 9 drachn of urine were obtained during the first five days. No swellin could be detected in the abdomen or either loin indicating t collection of a quantity of urine. Five days from operation t necrosed stump was cut away, and the living portion allowed t drop back. Within six hours of so doing 109 ounces of urin were collected as having passed through the bladder, and severe pints escaped from the wound and ran into the bed. The patie lived twenty days longer, the first portion of which equal qua tities of urine were passed by the wound and by the bladde Specimens examined from each source were found healthy. The gradually that passed by the bladder became more and more pur lent and fœtid, at the same time getting very scanty, till at t time of her death on the twenty-fifth day from operation th kidney connected with the bladder ceased to secrete, whereas th connected with the wound acted well and produced healthy urin Mr. Bland Sutton had examined the tumour, and pronounced it t be a good example of a myxoma. The *post-mortem* examinatio showed the left kidney to be healthy and its pelvis and urete undilated, but the latter opened into the wound. The right kidne contained phosphatic deposit and fœtid pus in its pelvis, whic was dilated to the capacity of about two drachms. The uret was dilated to double its ordinary calibre, it contained pus, an came to an abrupt termination in the wound.—Remarks wer made by Dr. FANCOURT BARNES, Mr. PURCELL, Dr. BANTOCK, M BOWREMAN JESSETT, Dr. BEDFORD FENWICK, Dr. CAMPBEL POPE, and Dr. O'CALLAGHAN; and Dr. FENTON replied.

Specimens.—Dr. O'CALLAGHAN showed several large Fibroi Tumours he had removed successfully from various patients. Dr BANTOCK and HEYWOOD SMITH discussed the cases.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 11TH, 1890.

H. CAMPBELL POPE, M.D., President, in the Chair.

Cancer of the Breast Treated by Electricity.—Dr. INGLIS PA SONS read notes on this subject.—Remarks were made by M STEPHEN PAGET, Dr. TRAVERS, Mr. JESSETT, Mr. KEETLEY, th

ESIDENT, and Dr. ECCLES.—Dr. PARSONS, in reply, said he had ver spoken of a cure, but professed to have obtained the arrest the growth. He did not use the term electrolysis, because the ount of electricity brought into play was much too great for t method. He used a very strong current, flashing it backrds and forwards, so as to produce a mechanical injury.

Unconscious Automatic Actions occurring at the Close of Epitic Fits.—Dr. COLMAN read a paper on this subject in which he ated a number of cases illustrating the different kinds of ions performed by such patients, and urged the necessity of ring this occurrence in mind when occasion arose to give evice as to the responsibility of a person for peculiar acts which he ght have committed.—The paper was discussed by the PRESINT, Mr. LLOYD, Dr. DREWITT, and Dr. ECCLES, and Dr. COLMAN lied.

Specimen.—Dr. CLIPPINGDALE showed a specimen of Aneurysm the Left Ventricle of the Heart.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

FRIDAY, MARCH 21ST, 1890.

E. BENNETT, M.D., President, in the Chair.

Cases.—Sir WILLIAM STOKES submitted a case of Acute Traumatic lignancy.—Dr. J. K. BARTON presented a case of Lympho-Sarna of the Neck. A tumour, occupying the whole of the right e of the neck, had been growing for four years. Fluctuation cited in one part. Edges undefined. Diagnosed a lymphocoma, which had burst through the capsule, and had become fused through all the structures of the neck. The patient, a ong, robust countryman, became subject to fits. He sudaly became pale, fell over if sitting up, his pulse disappeared, d he lost consciousness for about one minute, after which he covered. An operation was performed to see how far the growth uld be removed, in the course of which the right common rotid, lying behind the tumour and compressed by it, was found be completely occluded. At its bifurcation a rent was torn in but no blood escaped; it was firmly occluded lower down. . Barton thought the fits might have been produced by the comession of the pneumogastric nerve by the tumour.

Specimens.—Dr. JOSEPH REDMOND showed the Brain and Kidney moved from the body of a patient, aged 29, who died on April th, 1889. He had received a blow over the right ear in December, 88, which stunned him somewhat. From that time he comained of severe pain in the right side of his head, and suffered om fits at intervals of about one week. The necropsy showed slight depression at the posterior portion of the right parietal ne, to which the dura mater adhered. On examining the brain tumour, somewhat larger than a pigeon's egg, was found in the gion of the angular and supramarginal gyri, which exnded into the substance of the hemisphere. The right kidney as found to be atrophied, and the left hypertrophied.—. M'WEENEY said the peripheral portion of the tumour conted of small-celled structure, but its internal portion was structreless. It was surrounded by thick connective tissue, in which uld be seen numerous small thickened blood vessels. The specien under the microscope showed the disappearance of the nerveres from the cortex of the brain in the immediate neighbourod of the tumour. The latter was of syphilitic character.—Dr. ALTER SMITH exhibited the Larynx of a man who had died of eumothorax consequent upon extensive tubercular disease of e lungs. There was also amyloid degeneration of liver, spleen, dneys, and intestines. Fourteen years previously Dr. Bennett d successfully performed the Indian operation for an artificial se, owing to the destruction effected by old standing lupus of ce. At the *post-mortem* examination both lungs were found ldled with vomicæ. Tubercle bacilli were found in their conts. The larynx was involved to a considerable extent. The free ge of the epiglottis had nearly disappeared; what remained was ickened and irregular. Between the arytenoids were several ramidal outgrowths, projecting above and below the rima ottidis.—The PRESIDENT exhibited a specimen of Rupture of the eart. The man had been found dead on the railway. There was external sign of injury to the thorax in front. A large portion the sternum was detached from the rest of the skeleton and rust down on the underlying viscera, all the costal cartilages ing broken as well from the second to the eighth. The perirdium and the pleura were full of blood. At the apex of the ght ventricle there was a large rupture; there was another great rent into the right auricle. In the auricular appendix and the musculi pectinati there were a couple of small ruptures. In the back of the heart, at the left auricle, in the interval between the entrance of the pulmonary veins, there were two or three large lacerations. The left auricular appendix was ruptured. Clearly what happened was that, the heart being full of blood, pressure of the detached bone burst the whole of the three chambers.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 26TH, 1890.

LAWSON TAIT, F.R.C.S., President, in the Chair.

Specimens.—Dr. PURSLOW showed a specimen of Aborted Twins with single chorionic, double amniotic sac, from a pregnancy at about the fourth month. Dr. Purslow also showed Hypertrophied Nymphæ removed from a single woman, aged 23. They had been noticed for two years, and had caused much discomfort from dribbling of urine after micturition, and swelling at each menstrual period. Removal had been followed by complete relief.—Dr. MAHOOD showed sections of a spindle-celled sarcoma found in the brain of a subject in the dissecting room. There were no other growths.

Papers.—Mr. CAMERON KIDD read notes of a case of Strangulated Hernia soon after delivery, successfully treated by operation.—Mr. J. W. TAYLOR read a paper on Some Cases of Gynæcological Disease treated by Electricity.

Cases.—Dr. SUCKLING showed a boy, aged 14, who suffered from periodical attacks of insanity. About two years ago he was struck on the nose, and a few weeks later he began to have attacks of great irritability, and was sent to an asylum, where he remained twelve months. Before he came under Dr. Suckling's notice he used to have an attack regularly every month. Each attack was made up of eight or nine separate attacks, the boy being quite well in the interval, and the whole attack would last two or three days, the attacks being grouped like those of ordinary epilepsy. At first he lost consciousness in the attacks, but he did not do so now; there had never been any convulsion or involuntary micturition, and he had never bitten his tongue. He could tell when the attacks were coming on by a feeling of numbness and giddiness, drowsiness and numbness, with dreams, preceding the attacks. During the attacks he was stupid and very irritable. He cried out and complained of heaviness over his forehead. Dr. Suckling considered the case analogous to motor and sensory Jacksonian epilepsy, probably depending on injury to the frontal lobes. Smell and taste were unaffected, and there was no optic neuritis. Dr. Suckling also showed a man suffering from blindness, due to double optic atrophy. He had suffered from syphilis twenty-five years previously. There was a history of alcoholism and some excess in tobacco smoking.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 11TH, 1890.

T. CHURTON, M.D., Vice-President, in the Chair.

Influenza.—Mr. W. H. BROWN opened a discussion on the recent epidemic. He said in his experience recovery was most prolonged in the cases where there was no catarrh, and in the debility of convalescence arsenic had produced the best results.—Mr. SCATTERGOOD had traced direct infection in only one case. During convalescence old troubles were revived; for example, a crural phlebitis in a patient who had been free for six years; another patient who had had a severe scald eighteen years before on the ankle, suffered prolonged pain in the old scar. In another case there was a return of severe neuralgia.—Dr. HOLLINS had traced a large number of cases in the Calverley district to one room in a Bradford mill.—Mr. WRIGHT asked if anyone had observed any effect on puerperal women from the contiguity of influenza. In one case where there was influenza in the house he had carefully isolated the woman with good result.—Dr. EDDISON thought many mild cases were overlooked, the pneumonia which supervened being considered the beginning of the disease. He asked if there had been noticed any regularity in the relapses, as in the case of relapsing fever.—Dr. CHURTON had seen the following among the more noteworthy results in patients who were said to have had influenza: Cerebral meningitis, headache, intolerance of light and sounds, delirium succeeded by semi-coma in a woman aged 40, with recovery. Generalised spinal paralysis, including paralysis of sphincters and anæsthesia, with suppurative pharyngitis,

causing a large quantity of purulent discharge, in a man aged 22, with recovery. Paresis of bladder in two cases. Cystitis occurred in a woman, aged 36. Suppurative pharyngitis, with great debility, but no actual paralysis, in a child; recovery. Two cases of severe vomiting in gouty men. Also a case of extreme irritability of stomach with intense acetonæmia, both breath and urine being of overpowering odour for several days, in a lady, aged 34, not diabetic; urine contained both acetone and aceto-acetic acid; recovery. Two cases of (?) bronchopneumonia in children. Lastly, two cases of "primary purulent pleurisy,"[1] with death in each case on the fourth day after the initial rigors, there being no pneumonia in either case. Both occurred in the same ward and within a few days, influenza being at the same time prevalent among the nurses and patients.—Dr. BAMPTON divided his cases into four groups, namely, those with catarrhal and non-catarrhal symptoms; those with meningitis and gastro-enteritis. The first generally ran through the house. Among the sequelæ he noticed one case of severe cardiac weakness with persistent intermittence, and one case of albuminuria. The suddenness of the onset was very marked.—Dr. BRONNER said influenza produced a very peculiar set of symptoms when it attacked the middle ear. The pain differed in being very intermittent; the drum was red and swollen, and incision of the drum did not bring the usual relief. Deafness remained after the other symptoms had subsided. He preferred to incise the drum and inject cocaine. He had known two cases of œdema of the larynx. He remarked on the infrequency of mastoid suppuration in England compared to the frequency noticed in France and Germany during the recent epidemic, showing that the disease in England was of less severity than on the Continent.—Dr. MACGREGOR had seen about 100 cases in Huddersfield from early in February to within a fortnight ago. They had been very severe. The whole town seemed to become infected in the course of one week.—Dr. TEMPEST ANDERSON spoke of the rash occasionally seen. In one case it began like a scarlet fever rash, then resembled urticaria, and on the third day there was sloughing of some of the patches.—Dr. JACOB described a case where paralysis of the arms, and in a less degree of the legs, had followed the disease. He said the difficulty of finding the bacillary origin of the disease might be due to the small size or the comparatively small number of germs required to produce the disease, and referred to the great difference in the number of bacilli found in tuberculosis and in typhoid.

Operative Treatment of Dislocations Irreducible by Ordinary Means.—Mr. MAYO ROBSON read a paper on this subject. After describing several cases in which he had operated on old-standing dislocations of the elbow, shoulder, hip, and finger, and comparing the results in these cases with others where operations had been declined, he concluded by saying that he felt justified in advocating operation in all cases of irreducible dislocation, if the general health warranted the belief that it could be borne.

Old Drawings.—Dr. WHITHAM showed some copies of drawings from Ambroise Paré.

Specimens.—Dr. ALLAN: 1, Cancer of Breast, with extensively infiltrated skin, six years' duration; 2, Waxy Liver and Kidney from a case of Lupus; 3, Hydatid Cysts of Liver and Omentum; 4, Gouty Toe-joint and Kidneys; 5, Cancer of Penis; 6, Bony Growths in Dura Mater.—Dr. BRAITHWAITE: 1, Double Ovarian Tumour, one without pedicle; 2, Solid Ovarian Growth.

[1] As described by Professor Kahler, of Vienna, JOURNAL, March 15th, 1890, p. 627.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, APRIL 16TH, 1890.

J. DIXON MANN, M.D., M.R.C.P., President, in the Chair.

The Kidneys in Diphtherial Uræmia.—Drs. ASHBY and HILTON THOMPSON showed sections of kidneys from two cases of suppression of urine and uræmia coming on in the course of diphtheria. Death occurred respectively on the ninth and twelfth days. In both cases the epithelial elements were much swollen and their protoplasm cloudy. The swollen cells appeared almost completely to occlude the lumen of the convoluted tubules, and thus mechanically to obstruct the passage of urine along the tubules. There were a few fibrinous casts present in the convoluted tubes. There were no marked changes in the glomeruli, or other elements of the kidneys.

Osteomyelitis.—Mr. WRIGHT exhibited a specimen of chronic osteomyelitis of the femur consequent upon an old fracture of that bone and causing a second fracture by necrosis and suppuration of the knee-joint.

Adenoma of the Rectum.—Mr. WRIGHT also showed a papillomatous adenoma of the rectum from a woman aged 70. The tumour had caused complete obstruction.

Unusual Form of Aortitis and Thoracic Aneurysm.—Dr. DRESCHFELD showed the naked-eye preparation and microscopic sections of a case of aneurysm of the aorta due to subacute aortitis. The patient, aged 31, a native of Havannah, but who had spent the greater part of his life in Buenos Ayres, had enjoyed good health till three months before death, when he began to suffer from a slight cough. He came to Europe in January, went to Paris, where he suffered from influenza, but was seized one day with great dyspnœa and hoarseness. He was able, however, to transact his business, and came to Manchester in the beginning of February. He again suffered from dyspnœa. The dyspnœa was entirely expiratory, and the physical examination of the chest revealed nothing but a small dull patch on the right side of the sternum, over the second and third intercostal space. No *bruit* could be heard, and the air entered both lungs equally freely. An attempt to make a laryngoscopic examination brought on a violent paroxysm of dyspnœa. The dyspnœa became gradually worse, and the patient died on February 18th. The patient never had syphilis, and was very temperate. The *post-mortem* examination showed an aneurysm of the ascending arch of the aorta pointing to the right, and compressing the lower part of the trachea. The heart and its valves were normal; the thoracic and abdominal aorta showed when cut open masses of soft, red raised patches, not unlike swollen Peyer's patches. On section it was seen that these patches did not extend beyond the intima. Close to the origin of the innominate the aorta showed a longitudinal slit in the intima, and this led to the aneurysm; the walls of the aneurysm consisted, close to the neck, of the media and adventitia of the aorta; the media gradually thinned off, and the aneurysmal wall then consisted simply of areolar tissue. The lower rings of the trachea were eroded, and parts of the wall of the trachea formed the posterior boundary of the aneurysm. The muscles of the right half of the larynx appeared paler and thinner than those on the left. Microscopic examination of the aorta at different levels showed the intima close to the subepithelial layer, infiltrated with leucocytes and proliferation of the spindle and tissue cells normally found in the intima. The deeper layers of the intima, the media especially near and around the blood vessels, and the adventitia showed slight cell infiltration. Nowhere was any change found pointing to atheroma, such as fatty or calcareous or hyaline changes. The naked-eye and microscopic appearances corresponded to those seen in acute aortitis; this led to the formation of a dissecting aneurysm, and this, in its further growth, became diffuse. The purely expiratory dyspnœa was explained by the erosion of the tracheal rings found after death. The trachea ceased to be a rigid tube, and with every expiration the aneurysm which bulged into the trachea, was pressed against the posterior wall of the trachea and partly occluded it. It was difficult to assign a cause for the acute aortitis. The symptoms appeared chiefly after the patient had influenza, but the affection must have been of longer date. A few sections examined for micro-organisms gave negative results.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, MARCH 28TH, 1890.

H. L. BROWNE, F.R.C.S.E., in the Chair.

Transposition of Viscera.—Mr. C. GASKIN read a note on the necropsy of a boy, aged 18, who died of tuberculosis, and in whom the viscera were all transposed. The transposition was complete even to such details as the distribution of the azygos, phrenic, suprarenal, and other small veins. There was, however, one remarkable irregularity; the left recurrent laryngeal nerve, passing down beneath the subclavian artery, turned to the right beneath the aortic arch; passing round that vessel from behind forwards, with the right recurrent laryngeal, it ascended in the neck on the right side.

Tobacco Amblyopia in a Woman.—Mr. PRIESTLEY SMITH described a case of this kind. The patient, a very respectable looking middle-aged woman, had taken to tobacco smoking two years previously, under the advice of a medical man, for the relief

asthma. She liked it and had smoked about four pipes a day ice then. She was a small eater, a poor sleeper, and had had iny domestic troubles. The speaker explained how, in a case of s kind, the diagnosis could be made with considerable certainty fore the question as to tobacco was asked. He referred to the ry frequent history of mental worries and troubles in cases of bacco amblyopia, the depression of the system arising from iich rendered it more liable to poisoning by tobacco. If women nerally were to become habitual smokers, they would be very one, among the lower classes, to tobacco amblyopia; for among e poor the women suffered more than the men from insufficient od, loss of sleep, and domestic troubles.—Mr. EALES had seen me six or eight cases of tobacco amblyopia in women. Personal idiosyncrasy was largely answerable for its occurrence, but he ought increasing years or ill-health were generally important predisposing factors. Some twelve years ago, he found this amblyopia in a woman, aged 38, who smoked and chewed tobacco to excess, besides taking snuff. She was also a heavy drinker. In eight weeks her vision recovered from being $\frac{2}{200}$ = to normal ($\frac{20}{20}$) without any treatment, on merely discontinuing tobacco, though she did not abstain from alcohol. In one case he had seen, the patient admitted having smoked 2 lbs. of Cope's mixture and few cigars in eleven days previous to the failure of vision; on the other hand, he had seen this affection in an old man who only smoked an ounce of tobacco weekly.

Paper.—Professor ALLEN read a note on the action of lithium salts on urate deposits.

Case.—Mr. BARLING showed a living case, a man, aged 39, with transposed Viscera.

Specimens.—Dr. LOWE exhibited a specimen of Simple Villous tumour of the Bladder. The growth, which was the size of a walnut, was removed by the perineal operation from a man, aged 50, who had suffered from hæmaturia for a year. The tumour was found close to the neck of the bladder, and was easily reached and separated by the finger. The hæmorrhage at the time was slight, but it became somewhat profuse later in the day. The patient, however, made a fairly rapid recovery, and, four months after the operation, he was quite well, and able to do his ordinary work.

Herpes Zoster Brachialis.—Dr. THOMSON showed photographs of a case of Herpes Zoster Brachialis. The patient was a girl, aged 17, presenting a characteristic herpetic eruption involving the area of skin supplied by the internal cutaneous nerve of the right brachial plexus; there were also two groups of vesicles in the palm of the hand. The eruption was preceded for a day or two by severe pain in the affected region, and appeared in crops which broke out successively in the upper arm, forearm, and palm. The axilla on the same side contained enlarged and tender glands. Mr. Thomson discussed (1) the rarity of the condition, in respect of the distal distribution of the eruption and the youthfulness of the patient; (2) the involvement of the skin of the palm, usually supplied by the median nerve, in a lesion dependent mainly or entirely on neuritis of the internal cutaneous nerve; and (3) the obscurity of the etiology.

REVIEWS AND NOTICES.

GERMAN-ENGLISH DICTIONARY OF MEDICAL TERMS. By FREDERICK TREVES, F.R.C.S.Eng., Surgeon to the London Hospital, and HUGO LANG, B.A. London: J. and A. Churchill. 1890. Pp. viii, 403.

THIS work supplies a long-felt need, and in a really efficient manner. Armed with this well-printed and well-bound handy volume the English student of German medical literature will find his path made smooth. The book deserves, and will no doubt obtain, a very wide circulation. As Mr. TREVES tells us in his preface (each of the two authors has a preface to himself), "In the special branches of medicine and surgery the advance in word-making has been remarkable. The new science of bacteriology has already its Wörterbuch. With the advance of embryology has sprung up a luxuriant growth of technical terms, and in the *Sachregister* of every *Centralblatt*, *Jahrbuch*, and special treatise will be found a multitude of words which were not in existence or in common use some ten years ago." The authors have evidently bestowed great labour upon this work, with the aim of making it as perfect as possible, and Mr. Treves gratefully credits his German colleague with the greater part of the construction of the book. It is estimated by the authors that about 16,000 words are contained in this book which are not to be found in any existing German-English dictionary of any kind. The greater part of these words must evidently include the numerous compounds which the book contains. On this point Mr. LANG tells us that the authors have not given every compound word which may be met with in German medical works. "For instance, we have not included the word *Darmwandeinklemmung*." Again, as Mr. Treves tells us, "we have not included any terms relating to botany, zoology, physics, pure chemistry, or veterinary medicine." Now, in future editions, it would vastly improve the book to give a few more of the commonly used terms from the sciences which bear on medicine, where they are not evidently Greek or Latin terms, and to dispense with many compounds at present included. The word *Magen* (stomach) is followed by nearly 130 compounds, consisting of *Magen* and some other word; *Knochen* has nearly 180 compounds, but *Augen* bears the palm in this respect, for it is followed by nearly 250 compounds. Many of these are unnecessary. The word *Bandage* is translated "bandage," dressing is perhaps more suitable, but both are meant. *Gärung* is given instead of *Gährung;* the latter is the form commonly used. On page 9, the letters A.I.D. occur, and we are told that they stand for *allgemeiner Inhaltsdruck* (intrauterine pressure). This is surely an excess of thoughtfulness on the part of the authors. It is inconceivable that a German author would use such an abbreviation abruptly. On the same page the extreme minuteness of the work is shown by the insertion of such a word as *Akidopeirastik*, that is, Middeldorpf's method of investigating tumours by means of a needle or harpoon. Practically, the Germans speak simply of harpooning. It is curious that two terms extremely common in modern German medical literature are not included in the book—namely, *Kaninchen*, rabbit, and *Meerschweinchen*, guinea-pig. They are to be found in ordinary dictionaries, it is true, but many other common terms have been given in this dictionary not so important—for example, *Quendel*, wild thyme. Such words as *Medizinglas*, *Menstruation*, *Menstruationsperiode*, and similar terms exactly like the English, are not required. A few words are omitted which deserve a place—for example, *Leberthran*, cod-liver oil; *Schaffenskraft*, formative power, etc. But the more the book is examined the greater is our admiration of the industry of its authors. The very clear type which has been employed is a great advantage; the German terms are given in larger type than the English.

We congratulate everyone concerned in this most useful work.

THE LORD OF HUMANITY, OR THE TESTIMONY OF HUMAN CONSCIOUSNESS. By FRED. J. GANT, F.R.C.S., Senior Surgeon to the Royal Free Hospital. London: Hatchards. 1889. 135 pp.

SPECIFIC UNBELIEF: ENGLAND'S GREATEST SIN. By A. D. LAMB, Barrister-at-Law, etc. London: Nisbet and Co. 1889.

IT may be a commonplace that different kinds or types of mind are induced in course of time by diverse and divergent lines of study and practical life, even where we may assume that the first and native furnishing and conformation of the minds were not very far apart; but sometimes even such a truism is brought home to one with the vividness and freshness of novelty when one has the good luck to have two signally different and even opposite samples of mental product on the same topic and within the same sphere of thought and feeling come to hand together. How discrepant, for instance, appear the lawyer's religion and the surgeon's, when we compare Mr. GANT'S statement of personal religious convictions with that of Mr. LAMB, Scottish advocate, and barrister-at-law of the Inner Temple. The very names of the little books are enough—Lamb's *Specific Unbelief: England's Greatest Sin*, and Gant's *The Lord of Humanity, or the Testimony of Human Consciousness*—rigidity, legality, an air of abstract definition and false finality about the one, while the other leads the reader to expect a more human, concrete, and practical treatment. As a matter of fact, it turns out so. The lawyer is all for dogma, "substitution," "imputation" and the like, while the eminent surgeon exhibits, in his 135 short pages, the fruits of long experience and meditation, which, whatever we may think of his detail, bear the stamp of personality, inwardness, and reality.

They continue that long line of honourable tradition whose record is emblazoned with the names of Sir Thomas Browne, George Wilson, John Brown, and many other worthies, whose

writings have gone to disprove or at least cast doubt upon, the too readily accepted stigma that has stuck to our profession for centuries—"*ubi tres medici, duo athei.*" Of course, if we read "heretics" it might be less untrue, for the medical life of a thoughtful and naturally religious medical man does not tend to pin him blindfold to dogma, but rather leads his natural piety to build for itself a body of such materials as it has first made its own by patient assimilation. Here is the nature of those pages which Mr. Gant has written from a sincere and earnest heart and sent as a message on what he regards as the greatest things in the world.

The book will really be best read, and most sympathetically, as a bit of autobiography or piece of intimate confidential talk. "To discover truth in religion and in theology the course of investigation lies within our own consciousness, including conscience. That is the design of this essay. The highest truth must be felt out as well as followed by reason. I have gathered some special experience of human nature, as to its vast unknown capacities for suffering and for happiness in the same person, and thus I have been led to explore further that greatest of all mysteries to every man—himself."

These sentences give the keynote. For the rest, Mr. Gant is a loving and reverent disciple of Frederick Denison Maurice, and, following the footsteps of his master, maintains that a theology which does not correspond to the deepest thoughts and feelings of human beings cannot be a true theology. As an optimist, the main articles of his creed are "the inherent goodness of humanity," universal brotherhood, the fatherhood of God, the unity of God and man or the humanity of God, once individualised in the Galilean life, always mystically present and indwelling in human consciousness, as the divine man within each man, "the Deliverer." There are some extra beliefs which may be thought to encumber the simplicity of Mr. Gant's faith, but they do not really impair the general effectiveness of its presentment.

THE WORKHOUSE AND ITS MEDICAL OFFICER. By ALFRED SHEEN, M.D., M.R.C.S., D.P.H.Camb., Surgeon to Cardiff Workhouse and Infirmary. Bristol: J. Wright and Co. 1890.

THE author of this very useful little work is one of the few who have given us in print their professional experience of workhouses. It is evident that Dr. SHEEN devotes special attention not only to the care of the sick, but also to the general good management of the Cardiff Workhouse and Infirmary, of which he has for many years had medical charge. The rules he has adopted, which are here given, must be of great assistance to newly appointed workhouse medical officers, many of whom have but little idea of the responsibility they undertake when they first accept office; some of the technical work being, as Dr. Sheen points out, unnecessarily irksome. If, however, this manual is carefully read and its precepts adopted, the medical officer will be singularly unfortunate who becomes worried by a Poor-law inquiry.

Dr. Sheen says he has succeeded in getting a good system of sick-nursing adopted, none of the inmates being now engaged in any of the more responsible duties. The diet appears appropriate for the different classes; perhaps a more general use of fish, which we suppose could be readily obtained, would be an improvement; when properly cooked and carefully served, it is much appreciated.

The report of the lying-in department, where from 900 to 1,000 cases have been attended during the last eighteen years with only 3 deaths, is most satisfactory; such a result could only be attained by skilful professional supervision, together with strict attention to hygienic requirements.

The working of the present Lunacy Acts is discussed, and the alterations which will shortly be effected by the new Act are pointed out. The author questions the necessity for two medical certificates being necessary to enable a harmless lunatic to be detained in the workhouse, when only one certificate, as at present, will be required to transfer a patient to a lunatic asylum.

The book is well printed, and the tables and forms in it can be easily read.

NOTES ON BOOKS.

Cancer and its Complications. By C. E. JENNINGS, M.B., M.S., F.R.C.S. (London: Baillière, Tindall, and Cox. 1889.)—Mr. Jennings is an active supporter of the theory of the local origin of cancer, and this work has been written with a view of support that opinion. But he intimates also that other objects were ent tained—to elucidate certain points, the varieties of cancer as sho by their structure and anatomical site, the occurrence with, following on, other diseases, the curability by removal, and action of specific medicines. These are worthy objects, and author's connection with the Cancer Hospital may be expected open a field hitherto sadly barren. That the work is an hon attempt we are glad to acknowledge, and we hope to see more fr his pen. But the book contains the author's opinions, with any addition to our knowledge of the pathology or causes, or, may say, treatment of the disease. His opinions are expres with characteristic terseness, and this is pleasant, though perh not always convincing. No illustrations are given, and we n any philosophical inquiry into the causes and origin, and possi lines of grappling with the disease. True, the author quotes fu from the discussion on cancer at the Pathological Society in 18 but beyond this the book does not contain anything like an acco of modern views as to the local origin of cancer. There is m more than this wanted in a book on *Cancer and its Complicati* The chapters, too, on cancer of the various organs and pa though acceptable as the author's conclusions, contain littl help an inquirer into the causes, kinds, or even complications treatment of this apparently extending scourge.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIO

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AROMATIC QUININE WATER.

MESSRS. H. and T. KIRBY and Co., 14, Newman Street, W., h sent us samples of aromatic quinine water, manufactured by Britannia Fruit Preserving Company, Tiptree Heath, Kelve Essex. It is stated to be charged with natural carbonic acid supplied by the Volcanic Aëration Company, and to contain grain of quinine in each bottle. The water is highly charged v gas, it has a very agreeable fruity taste, and the bitterness of quinine is entirely covered. Analyses show that this ingred is present as stated. It is undoubtedly a pleasant way of adm stering quinine as a tonic.

VIN MARIANI.

THE value of coca as a nerve stimulant and restorative is established, and a popular mode of administering this drug i combination with wine. The vin Mariani is a solution of active matters of coca leaves in wine. It is prepared b Mariani, and the sample has been sent to us by the agents, Me Wilcox and Co., 239, Oxford Street. The wine is fairly palata

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SOLUBLE SANITAS OIL.

THE Sanitas Company, Three Colt Lane, Bethnal Green, E., h forwarded a specimen of a new preparation of their sanitas It is readily miscible with water in any proportion, formi white emulsion. This special form will be found useful for preparation of watery solutions for which the ordinary sanita is not so well adapted.

A NEW CATHETER.

MESSRS. LYNCH and Co. (Aldersgate Street) write: We fail to see how above description under "New Inventions" in the JOURNAL of April 19th be correct. Kindly allow us to state that the regular French *cathéter à b antécédente* is practically the same thing. Again, Dr. Ward Cousins's c lary catheter is practically the same idea. The illustration is simply Reginald Harrison's whip bougie, with hole 12 inches from the point.

A FLUSHING UTERINE CURETTE.

MESSRS. LYNCH and Co. (Aldersgate Street) write: In the JOURNAL of April a description of the above named instrument appears under the headin "New Inventions;" we would ask you to kindly publish the fact tha have had for a long time in stock this article, and also lately an impr pattern, by which different sizes of the curettes can be fitted into the ing tube. It is not by any means a new instrument.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 26TH, 1890.

"THE POLITICS OF POVERTY."

ONE of the closing chapters of Sir John Simon's recent book on the sanitary state of England bears the title which stands at the head of this article, and the phrase is intended, no doubt, to be what is called "an arrest of thought." Politics are, or ought to be, nothing else than the application of thought and effort to the wellbeing of the community; and nowadays it is apparent to even the most cynical of public men that much thought and effort must be promptly devoted to the problems incidental to poverty, if grave mischiefs are to be avoided.

There are two schools of thought among those who profess to be leaders of opinion in this matter. "The advanced thinkers" of the last generation believed in the doctrine of *laissez-faire*—leave each man free of artificial trammels and legal hindrances, and in the struggle of competing interests the general advantage will be evolved. A new school has lately arisen, to whom this doctrine is flat barbarism. To permit the working out of the general good to the chances of the war of selfishness and the game of grab is to them a carnal heresy. Rather, they say, let the community recognise that it has a corporate duty towards the most unfortunate—towards the crippled combatants who are helpless, more or less, in the struggle with the strong. Let it apply the great power of its corporate wealth and corporate organising power to make life at least tolerably human for those who, if left to their individual energies, would go under altogether, to our harm as well as their own.

Like everyone who takes a wide view of the problem of the public health, Sir John Simon has found it necessary to face these questions; and in the chapter to which we have referred our readers will find a very masterly treatment of the position from a very impartial standpoint. The key of the position is, of course, the "housing of the poor." A little while ago there was no practical check on private greed, even when it took the most extreme form of "house-knacking." The Artisans' Dwellings Acts, the public interest aroused by the many Royal Commissions, the Peabody Trust and all the building companies which have followed, the efforts of Miss Octavia Hill and Miss Cons, and, finally, the new initiative of the County Council and the Guinness Trustees have done much-vaunted good. But we hear on all sides from the most competent observers that we are yet far short even of safety, not to say welfare.

Something must be done, and no doubt something will be done. But it is well worth our while, as members of the profession of health, to give to public and parliamentary opinion all the help we can. When the law or the public authorities have laid down the principle that such and such sanitary conditions are indispensable, they have done very little. The primary necessity is to arouse such civic interest among the electorate at large as will ensure the election of local authorities able and willing to see a good law carried out. But no vigilance can be wholly effectual, as Sir John Simon reminds us, so long as there are masses of people eager to live at cheaper and cheaper rents, however foul the fever traps may be into which they are stowed away. In his words, "over-competition for employment and for house-room" is one of the facts of cardinal importance to the public health. In competing for labour, these crowded swarms of London poor keep wages down. In competing for accommodation, they keep rents up, and it seems to the pessimist as if the double pressure were fated to make the state of the London slums continually worse, whatever laws may be made at St. Stephen's.

Philanthropic effort in the way of providing better houses for low rent is now discussed very anxiously in many quarters. Is it merely eleemosynary? Does it tend to discourage the natural supply of buildings by the normal play of the market? Has it not resulted in housing—decently, no doubt—a better class of people than those whose hovels it threw down, leaving the really wretched to go further off and fare worse? Sir John Simon's answer is that the good which philanthropy has really done has been educational. It has undertaken a kind of pioneering. It has shown what can be done as a matter of 5 per cent., and what ought to be done by every landlord who calls himself either a moral man or a good citizen.

He does not venture to pass judgment on a wider question which is already agitating the County Council. Some of the progressive party are asking whether a municipal lodging board may not be the true solution, and we are called upon to decide whether the community can safely build good dwellings for the poor itself, using to that end its enormous advantage of borrowing at $2\frac{3}{4}$ per cent., and foregoing, if it so pleases, all commercial profit on site and structure? If it is conceded that the great philanthropic companies can build good houses and pay 4 or 5 per cent., after charging very reasonable rents and doing all their reasonable duties as good landlords, it follows that the County Council, if its business were well and honestly done, could go further along the same line. The volume of the work done by the societies is not small, yet it falls singularly short of the need of London. Even at a modest calculation, 400,000 rooms are needed now. All the existing companies have not given us, as yet, much more than 50,000 in the whole. Is the community to fill the gap or no? If it should ever decide to do so, a further question will arise, which it would be well for all social philosophers to consider carefully. A public body could afford—by reason of the difference between $2\frac{3}{4}$ per cent. and 5 per cent.—to charge cheaper rents or to give superior accommodation, which is the same thing. Is it to do so, or ought it to make the same profit which an outside company or an outside builder would make? By adopting the cheapening line it might improve the standard of accommodation and further the educational work already spoken of.

But would there be a risk in that case of its finding the whole of the housing question thrown upon its hands by the discouragement of private enterprise?

Sir John Simon does not fear to adventure even further, and to face the ultimate problem of all: "How can the poor be made less poor?" He does not give up the problem, though he warns all well-meaning enthusiasts that it can be solved only by "obeying Nature," as Bacon said long ago. The thriftless may, in some age to come, be sent to reformatory farms; the drunken may be confined in asylums; and the criminals sent to a reformatory. Whether a modern government could venture on these drastic methods and live is a question which only experience can solve. In the meantime it is not necessary for those who would secure the public health to be provided with an "infallible remedy" for human inequalities. But it is well that they should have regard to the broad conditions of the problems of great cities, and to that end this treatise will do good service. Perhaps it may be found practicable for the British Medical Association, through its Parliamentary Bills Committee, to take up the matter and deal with it from some such point of view as Sir John Simon indicates. There are Bills (more than one) now before Parliament concerning the housing and health of the people, and it may well be doubted if any of them are adequate. The Government proposal to codify the law on these subjects offers a golden opportunity. In this, as in most other things, it may be that the best way to prevent rashness is by a bold and statesmanlike reform.

HORSEFLESH AS HUMAN FOOD.

Mr. Lees Knowles, who succeeded last session in passing through Parliament his Bill to regulate the sale of horseflesh as human food, is the author of an interesting article in the *Nineteenth Century* bearing the short title "Horseflesh." This article does not seek to investigate historically the eating of horseflesh, or to promote it, or to defend the taste, but it furnishes much information as regards the practice in our own own times, which will be new to most English readers.

Before the sale of horseflesh for human food was allowed in France the French Government referred the subject, in 1856, to the Conseil d'Hygiène, and from that body received a report, in which it was stated that flesh coming from healthy horses could, without disadvantage, be handed over for consumption. Ten years afterwards a butcher obtained authority to open a shop in Paris for its sale, and in a few months his example was followed by others. The trade increased rapidly, and was well established before the Franco-German war, as, during the first half of the year 1870, 1,992 horses were slaughtered in Paris for human food. During the terrible winter of 1870-71 as many as 68,000 horses, asses, and mules are said to have been used as food; but the siege food not unnaturally created a temporary dislike to hippophagy. However, during the last fifteen years there has been a steady increase in the consumption of horseflesh, and at the present time it amounts to about 5 per cent. of the meat consumed there by the people. The increase is not confined to Paris.

The amount of flesh obtained from each horse is generally calculated to be 250 kilogrammes (about 550 lbs.); the price is 60 centimes per kilogramme (about $2\frac{3}{4}$d. the lb.). In 1886 the total quantity of horseflesh consumed in Paris wa 4,500,653 kilogrammes (about 88,406 cwt.). Horses intende for food must be slaughtered in specially authorised slaughte houses, in the presence of a veterinary surgeon or inspecto commissioned for the purpose, who must inspect them befor they are slaughtered, and the meat when it is cut up. Th meat must not be removed until it has received the stampe mark of inspection. Horses and meat unfit for food must b sent at once, at the expense of the owner, to an establishmen at Aubervilliers. Horses which have died a natural deat which have been killed in a feverish condition in consequenc of injuries, and horses suffering from disease, purulent wound or abscesses (even in the hoof), or in an extremely worn ou condition, are considered unfit for consumption. The hawkin of horseflesh is forbidden, and so is the sale of it anywher than in specially authorised establishments.

In the German capital the sale of horseflesh for huma food dates back from 1847. By 1860 the enterprise was s successful that 613 horses were slaughtered; and in 1865 th number of horses slaughtered for human food had risen t 2,241. At present over 7,000 horses are thus slaughtere yearly at Berlin. A police official resides on the premises superintendent of the slaughterhouse. A new slaughterhou is soon to be built, and the municipality intend taking ov the business. There are many shops registered for the exch sive sale of horsemeat and sausages, etc., made from it; an the sale of horseflesh otherwise than as horseflesh is visite with severe punishment. The retail establishments de weekly with from three to ten carcasses. The average value a carcass is 35s.

Of the horses entered for examination with a view to beir slaughtered for human food, a little under 3 per cent. are r jected. Each carcass passed is stamped by the medic officer. The retail prices in Berlin of horseflesh for huma food is from 5d. to $3\frac{1}{8}$d. the lb. Horses to be used for foo must be examined both before and after slaughter by th veterinary surgeons of the police, and no animal may be passe unless it is found to be perfectly free from all symptoms of nature likely to render its flesh in the least unfit for huma food. The trade of selling horseflesh and making up victua from it can only be carried on in licensed premises marked wit a clearly legible description denoting their purpose, of whic the letters must measure six inches high. In like manner a carts and vehicles for carrying horseflesh must be marked.

In Italy, the sale of horseflesh is not prohibited. Mila seems to be the only place where horseflesh is consumed to an considerable extent. There are no official returns of th quantity consumed in Italy. The animals must be slaughtere in public slaughterhouses, and the flesh sold in speci butcheries.

In Austria, the slaughter of horses for human food is on permitted by persons entitled to exercise the trade, in plac approved of, and in conformity with special regulations. Outsi each shop or stall must be "sale of horseflesh" in legib words, and no other meat may be sold on such premises. Th horses must be examined before and after slaughter, and a condemned if unsound, very old, or in an emaciated co dition.

In Vienna, the number of horses slaughtered for huma

ood increased from 5,086 in 1883 to 6,271 in 1887. The etail price ranges from 24 to 40 kreuzers a kilogramme from a little over 2½d. to a little over 4¼d. the lb.).

The record of the use of horseflesh for human food at home egins with the *Banquet Hippophagique* given in London in 868. The only dish on that occasion to which it was said xception was taken was the jelly. The three horses killed or the occasion were aged respectively 4, 20, and 22 years, nd the main dish, a fine baron, being carved from the four-ear-old. Sir Henry Thompson, one of the guests, made a tatement shortly afterwards that he had carefully compared iquid extracts, made as tea, from beef and horse respectively, nd he considered the latter equal to the former, both in flavour nd in nutritive quality. There is little doubt that horseflesh as been sold for some time past in England for human food. he evidence that this is so is for the most part indirect, and s the trade up to the time of the passing of Mr. Knowles's Act as almost entirely carried on by stealth, its extent cannot be scertained, and would be difficult to estimate. There was othing illegal in selling horseflesh as human food if it had een sold openly, but then there would have been little demand or it, and the profits would have been small. So steaks and rime pieces of the lean were sold as beef, the horsefat being arefully cut off and beef suet skewered on. The portions of he carcass which could not be thus disposed of in tempting ots may have been dealt with legitimately as cats' meat, etc., ut probably much was disposed of as sausages, or in cooked-eat shops.

It is a significant fact that the owners of the Manchester Zoological Gardens five or six years ago paid from 15s. to 5s. per horse for food for their animals, and now have to pay rom £2 to £3. The rise is, in their opinion, due to the in-rease of horseflesh for human food. Those engaged in the raudulent trade in horseflesh have discovered many ways of voiding detection, a common practice having been to slaughter he horses and cut them up in one town, and send the flesh or consumption to another. In this way it appears horseflesh as been sent from Bradford to Manchester, and from New-astle to London. Quantities of salted horseflesh are also sent o foreign ports presumably for human food. In London, it eems that horseflesh is largely used by low-class sausage nakers under the trade name of "Jack." The flesh is first alted to get rid of the peculiar taste and smell, and when the alt is washed off it is ready for the mincing machine. A arge amount of information from the best sources leads to he conclusion that horseflesh has been prepared for human ood in this country, and dealt in surreptitiously to a con-iderable extent.

The object of the Sale of Horseflesh, etc., Regulations Act, 889, is to prevent horseflesh being passed off on those intend-ng to buy beef or mutton, to recognise the legitimate trade n horseflesh, and to regulate it. At the time of the horse-esh banquet, already referred to, it was estimated that the umber of horses killed yearly, which were free from disease nd available for human food, was 75,000. It is reasonable to onclude that the number is much larger now.

There is a special danger in using as human food horses hich have not been examined by an expert. They may have een physicked to improve their condition and help them to assimilate food, and when this is the case the drug used is not infrequently arsenic. The flesh of a horse thus doctored is said to look well at first and after being cooked, but soon after getting cold it turns blue.

As regards the appearance of horseflesh, it is coarse in grain, resembling bull beef, and darker in colour and more moist than beef. It has a peculiar smell and a peculiar sweet taste. Its flavour is said to be halfway between the flavours of beef and game, or a little like hare. The fat is not generally mixed with the lean, is yellower and more moist than beef fat, and readily melts and becomes rancid. The fact that horseflesh is darker than beef may be due to the former being less thoroughly bled.

Mr. Lees Knowles is not quite satisfied with the Sale of Horseflesh, etc., Regulation Act, 1889. He considers further legislation is still wanted, and with a view to this thinks it desirable to obtain an inquiry. He would prevent any article of food from being passed off as another, amend the law in regard to the sale of meat unfit for human food, and put the law as to hawking upon a better footing.

ABDOMINAL SURGERY.

THE discussion on this subject, which took up two meetings of the Medical Society of London, is an event which the profession may contemplate with satisfaction. The debate was entirely free from the disagreeable features which are too often associated with discussions on ovariotomy and the more modern developments of abdominal surgery. The President, Mr. Knowsley Thornton, rightly congratulated the members present on the courtesy which distinguished the debate from beginning to end. Each speaker attributed his successes to his method, and as a rule laid down the triumphs of his adversaries to their skill, their patients being thereby saved in spite of their system.

The presence of so many distinguished provincial authorities was another gratifying feature. Mr. Lawson Tait, Mr. Mayo Robson, Dr. Taylor, of Birmingham; Mr. Greig Smith; Dr. Elder, of Nottingham; Dr. Malins; Dr. Griffiths, of Swansea, and Dr. O'Callaghan, of Carlow, took part in the discussion. Notwithstanding the wide area opened by the subject, the observations of each speaker were, as a rule, succinct; each confined his remarks to one or two special subjects within the domain of abdominal surgery. Much was said for and against specialism and special hospitals. Mr. Mayo Robson believed that his own successes in a general hospital sufficiently indicated that special hospitals for abdominal surgery, or even special wards in large hospitals, are superfluities. Several specialists, as might be expected, took up the cudgels in favour of exclusive devotion to the practice of abdominal surgery. Mr. Doran maintained that abdominal surgery must always remain to a certain degree distinct, owing to anatomical conditions, which never change. He further advanced the opinion that the success of a limited number of general surgeons at large hospitals depended upon the fact that those surgeons are really specialists practising general surgery—in other words, their successes depended on their special aptitude for a special branch of surgery, and thus they only prove what they wish to disprove, namely, that abdominal surgery is, to a marked degree, special. Other speakers dwelt on that great devotion

to detail and to after-treatment which only the specialist could thoroughly acquire.

The chief surgical subject within the area of debate that excited most interest was removal of the fibroid uterus. The specialists mainly favoured the extraperitoneal treatment of the pedicle, with the use of the *serre-nœud*. The general surgeons mostly tended to advocate intraperitoneal treatment of the uterine stump. Hysterectomy for fibroid disease of the uterus is undoubtedly difficult and dangerous. Even surgeons who have performed many ovariotomies feel safest, perhaps, when they employ the *serre-nœud*, though the opposite method is far nearer to ideal surgery. The great difficulty of securing the main vessels is the chief obstacle to the establishment of the intraperitoneal operation. It is instructive to learn how authorities differ in their experience on the removal of the ovaries and tubes for the cure of bleeding fibroids. Some lay stress on the perfect removal of the tubes, others declare the operation to be useless unless the ovaries be entirely removed. Amongst the most judicious speakers was Mr. Greig Smith, who deprecated extreme and slavish adherence to any special method of treatment. Where the air is pure, no spray, he thought, is needed; where it may be impure, the spray is called for. Purgatives are not needed, as a rule, for many days after ovariotomy, but in certain cases they must be administered. In preparing a history of abdominal surgery, the historian may say *Arma virumque cano*, but in the case of any one successful operator the man is far more important than his arms. The successes of men so different in their methods of practice as many of the speakers amply prove this fact.

Mr. H. EALES, Honorary Surgeon to the Birmingham and Midland Eye Hospital, has been appointed by the committee of selection to deliver the Richard Middlemore post-graduate lectures during the ensuing year.

MR. HASTINGS will shortly move in the House of Commons for a return of all the localities which have adopted the Infectious Disease (Notification) Act. We have already anticipated this information by the lists which we have published.

A COMMITTEE on colour blindness has been appointed by the Royal Society, after consultation with the Government, which includes many well-known scientific experts. It appears to be very well constituted for the useful purpose in view.

THE report and evidence taken by the Departmental Committee appointed to inquire into the pay, status, and conditions of service of medical officers of the army, of which only fifty copies were printed, and of which Mr. Stanhope has consented to allow the republication for members of the service interested in it, has now been republished, and copies are on sale at the office of the BRITISH MEDICAL JOURNAL, 429, Strand.

SALE OF POISONS.

DR. STEVENSON, in his report to the Government on the conduct of the examinations of the Pharmaceutical Society (which, on the whole, is very satisfactory), makes the following useful suggestion: "This being the examination which qualifies persons for the sale of poisons, I have again to express my conviction that an elementary examination in the statutory requirements as to the sale of scheduled poisons by chemists and druggists is needed. It is not unreasonable to expect that those who alone are allowed to sell poisons retail should know what are the scheduled poisons and how the register book of the sale of these is required to be kept."

SURGEON T. H. PARKE.

WE are informed that a dinner is to be given by the officers of the Army Medical Staff to Surgeon T. H. Parke, on his return from the Emin Pacha Relief Expedition, on Monday, May 12th, at 7.30 P.M., in the Whitehall Rooms, Hôtel Métropole, Northumberland Avenue, S.W. The Director-General will take the chair. It is probable that Mr. H. M. Stanley will be present during the evening. Officers wishing to attend should communicate as soon as possible with the Honorary Secretary, Brigade-Surgeon G. C. Gibbon, Junior Army and Navy Club, St. James's Street, S.W.

THE MEDICAL OFFICERS OF THE ARMY.

A MEMORANDUM has been prepared by the Chairman of the Parliamentary Bills Committee of the British Medical Association showing the present state of the case of the Army Medical Staff and arguments in support of the recommendations of the Departmental Committee. The question will be raised in Supply by Dr. Farquharson and other medical members of Parliament, and an endeavour will be made to induce Mr. Stanhope at least to carry out the recommendations of that Committee. Copies of the memorandum are at the service of army medical officers, acting and retired, and it is suggested they might apply for them and send them with private communications to any members of Parliament whom they may be able to influence, in order to induce them to support Dr. Farquharson, Sir Walter Foster, and other members in their efforts on behalf of the Army Medical Department. Application for copies of the memorandum referred to should be made to the Chairman of the Parliamentary Bills Committee at this office.

THE REFORM OF THE LONDON UNIVERSITY.

THE Lord President of the Council has, we understand, addressed a letter to the Senate of the University of London, reminding that body that it was understood that it would be prepared to submit a proposal for a new charter for the University during the present spring. Lord Cranbrook further hints that he expects to receive a communication on the subject shortly. In view of this action of the Lord President, it is greatly to be regretted that the Royal Colleges of Physicians and Surgeons have but recently submitted their reply to the communications addressed to them by the Senate of the University in November last. The Royal Colleges therefore, owing to their tardy action in the matter, have contributed to place the Senate in a rather awkward position, one effect of which may, we fear, be that the remaining steps of the negotiations will be hurried, and that the medical interest involved will be placed at some disadvantage. The Special Committee of the Senate will meet on Monday next, and will, it is expected, have another (the third) interview with representatives of University and King's Colleges.

ALCOHOL AND THE BUDGET.

NOTWITHSTANDING the many congratulations that have been indulged in of recent years on the presumed greater temperance of the people, the current Budget shows that these rejoicings have been somewhat premature. The Chancellor of the Exchequer's announcement that he had received £1,800,000 more for duties and licences on alcoholic beverages has struck many enthusiasts with dismay. The most remarkable increase has been from rum, the reason for which particular increase has been alleged to have been the greater consumption of that spirit as a prophylactic and remedy for the influenza, which some months ago swept in an epidemic over the land. We cannot accept this explanation, a

other spirits were also largely resorted to for these purposes. Fashion is more likely to have determined the matter, this old favourite drink having come again into more general favour prior to the prevalence of the epidemic. We cannot confess to surprise at an all-round increased consumption of intoxicants. Waves of temperance, characterised by sensational and emotional appeals, to which we have recently been treated, have their periods of ebb and flow. We shall not be surprised if this alcoholic indulgence continues to increase for the next few years. The only basis of a permanent temperance reformation lies, not in appeals to the feelings, but in the teaching of the composition, character, and effects of intoxicant beverages on body and on brain. Such knowledge should be widely spread.

POST-GRADUATE INSTRUCTION IN LONDON.

THE second London Post-graduate Course will commence on May 5th; the number of lectures and demonstrations, 88 in all, is somewhat larger than in the last course. Two hospitals also have been added to the list of institutions in which instruction is given, these are—Bethlem Royal Hospital for Lunatics, where a series of clinical lectures will be given by the medical superintendent, Dr. Percy Smith; and the Paddington Infirmary, in which Mr. Jonathan Hutchinson and Dr. Broadbent will give some clinical lectures, and Dr. Savill will hold *post-mortem* examinations. This is, we believe, the first occasion on which a Poor-law infirmary will have been used for the advancement of medical education, and it is much to be hoped that the classes may be so successful as to encourage the authorities to adopt a well-considered scheme for a further extension of the principle of throwing open these infirmaries for the purposes of clinical instruction. The number of entries for the first post-graduate course was 29, the majority being British subjects, the minority Americans.

THE FIRST FEMALE DOCTOR IN AUSTRIA.

THE Emperor of Austria has granted Madame Rosa Kerschbaumer permission to practise medicine in his dominions. This is said to be the first case in which such a licence has been granted in Austria. Madame Kerschbaumer, who is the daughter of the Physician in Ordinary to the late Czar of Russia, studied medicine at Berne, and graduated there some years ago. At Vienna she became the wife of Dr. Kerschbaumer, at that time assistant to Arlt, the famous ophthalmologist. The young couple settled at Salzburg, where they started a private hospital for eye diseases, the lady practising under "cover" of her husband. Some of our Austrian contemporaries show a disposition to criticise the Emperor's exercise of his authority in this case: but there appears to be no question as to the lady's professional skill, and the official permission only gives the Imperial sanction to what she has done, more or less *sub rosâ*, for years. There are said to be two medical women, Madame Tiburtius and Madame Lehmus, practising openly and with the full sanction of the authorities in Berlin.

HYPNOTISM AS AN ENTERTAINMENT.

A PUBLIC *séance* was given by Mr. Kennedy at the Royal Aquarium on Friday, April 18th, to which a large number of medical men and journalists were invited. There was a sensational display of the kind which has been customary by persons calling themselves in succession mesmerists, electro-biologists, and by other thaumaturgic names, but who follow the methods of Braid, Esdaile, and recent French and German operators. The performance was of a sufficiently striking character, although it presented no features of novelty. The seven selected persons had previously been trained to hypnotic performance, but there seems no reason to doubt the reality and genuineness of the phenomena. Teeth were extracted, and various other painful proceedings adopted without their knowledge, and without exciting any indications of the slightest suffering. Nauseous substances such as copaiba, kerosene, and cayenne pepper were accepted as pleasant sweetmeats and agreeable draughts, and the muscular systems of the subjects operated upon completely subjected to the influence of suggestion. All this has been familiar for many years, and it has been made the subject of late years of very complete analytical study, especially on the Continent. Whether it can ever be put to any useful purpose, such as that of surgical anæsthesia, on such a scale as to be practically useful is, of course, open to considerable doubt. The experiments of Braid, Esdaile, Charcot, and Bernheim, have not encouraged the belief that it can, although the recent interesting studies of Dr. Bramwell, of Goole, have served to renew interest in this department of the subject. Meantime we can but express a strong opinion, which is, we believe, very widely shared by all who have given any serious attention to the subject, that the procedure, though happily limited in extent, is one capable of producing very mischievous results in respect of the physical and mental soundness of the individuals, and is undoubtedly liable to serious abuse.

"BLOCKING" BILLS IN PARLIAMENT.

THE rules which enable members in certain circumstances to "block" bills which are before Parliament, and thus prevent their consideration after midnight, were framed for good reasons. But they are sometimes somewhat capriciously put into motion. On the order for the second reading of the Labourers' Cottages Bill being called in the House of Commons on Wednesday morning last, a few minutes after midnight, Dr. Tanner objected. Sir E. Birkbeck appealed to him to permit the Bill to proceed, as it was simply to give rural sanitary authorities powers to see that proper arrangements are made in labourers' cottages as regards drainage and bedroom accommodation, and that there is an adequate garden to each cottage. But the simplicity and reasonableness of this proposal did not overcome Dr. Tanner's objection, and so this useful measure has lost its chance of being discussed this session.

KOLA NUT.

A GOOD deal of exaggeration is observable just now in statements afloat concerning the kola nut, which has recently been attracting a good deal of attention in the public press. Europeans who have lived in Africa agree in ascribing to it wonderful sustaining properties during fatigue and abstinence from food. How far it is capable of rendering real service in this way can be deduced from a consideration of what we already know regarding its chemical composition and the action of its active principles. The so-called nut is in reality the seed of the cola (sterculia) acuminata, a tree over thirty feet high growing in tropical Africa, each fruit of which contains from six to twelve seeds about the size of chestnuts. It has properties similar to coffee and cocoa. The chief active principles are caffeine, of which there is about $2\frac{1}{2}$ per cent., theobromine 0.02 per cent., and tannin $1\frac{1}{2}$ per cent., in addition to starch, cellulose, and the other ordinary constituents of seeds. It forms a large article of inland trade in Central and Northern Africa, the Soudan, Tripoli, Morocco, Senegambia, Gaboon, Angola, the Congo State, etc. Kola is the name given to it in Angola, on the Congo it is known as makasso, and in the Soudan as guru, while foreigners have sometimes designated it Soudan coffee. When fresh the taste is aromatic, but when old and too dry an unpleasant bitterness becomes developed. To keep them in good condition during transport the seeds are packed with moist leaves. It has been known to Europeans for a long time, and was first described at length in the sixteenth century.

The kola nut is used in Africa as an infusion and chewed. The native porters use it constantly and prize it highly; and as they are a class of men who can do very severe work on comparatively little food, their powers of endurance have been attributed by foreigners to the kola nut. Its active principles and its action are, however, as we have said, the same as those of tea or coffee, and we already know to what extent and in what circumstances these are capable of acting as refreshing stimulants after fatigue, or during exertion and abstinence from food. The observations with kola nut made by Surgeon Firth on British soldiers bear out this view.[1] He found that it is in no sense a food, that it does not affect the output of nitrogen from the body, and that, taken continuously during times of exertion or fasting, it possesses some power, but not very marked, of warding off the sense of hunger and fatigue. Its action in migraine and in alcoholic craving depends entirely on the caffeine which it contains, while its good effects in dysentery are no doubt due to the tannin. In Germany coffee is a favourite household remedy in diarrhœa for the same reason. It is also employed as a purifier of water, but so are many other mucilaginous seeds to which it is in no way superior in this respect. In short, the kola nut is simply one of the many sources from which the human race obtains the stimulating and refreshing effects of caffeine, and its introduction offers nothing new either in dietetics or therapeutics.

WEST HAM HOSPITAL.

On the outskirts of the metropolis, but within its radius, are growing up vast populations, each of which needs to supply itself with all the apparatus for relieving the distresses and adding to the recreations of populations which are rapidly becoming dense and overcrowded. West Ham had in 1850 a population of 18,000, it has now grown to 200,000; necessarily, therefore, it has had to provide itself with a hospital, and as it is a working and industrial district, chiefly occupied by persons of very limited income, it has had to summon aid from the richer districts. The Duke of Westminster has been foremost in this good work. On Wednesday he opened a new hospital, which will provide two wards for in-patients; it has cost £7,000, exclusive of furnishing, and will require some £2,000 per annum for its support. Large and liberal donations were announced from the Duke himself, who observed that eventually the hospital would require a medical school, then a school for nurses, and last, but not least, he hoped it would come within the purview of the committee to provide for the district nursing of the sick and poor in their own homes—than which he knew nothing that was more required. The *employés* of the Great Eastern Railway have contributed the sum of £220.

EVENING OUT-PATIENTS.

The annual meeting of the Birmingham Skin and Lock Hospital was held on April 16th. During the past year a good deal of hostile feeling has been created towards the hospital by the opening of the out-patient department in the evenings. Practitioners amongst the poorer classes declare that the hospital is simply a competitor subsidised by subscriptions, and that many of those going there and paying a small registration fee are well able to pay for medical treatment; and they state further that this class is likely to increase with the opportunity provided of evening attendance, by which they do not lose any of their wages. This appears to be borne out by the year's statistics, which show an increase in the number of out-patients of nearly 25 per cent. The Committee, however, have determined to make the evening attendances permanent. Dr. Dale, who presided, made some observations on the present overcrowding of hospital out-patient rooms, and the financial difficulties of hospitals generally. He was inclined to think that, where there was a registration fee connection with a hospital, the tendency to regard it as a publ institution of which every member of the community had a rig to avail himself was likely to be still stronger. He did not agr with those who regarded the present agitation for hospital refor as a mere selfish agitation on the part of the medical professio and he pointed out that it was to the advantage of the who community that medical men should be well remunerated, othe wise the best men would be diverted from medicine to other lin of work.

[1] *Practitioner*, xliii, 1889; Journal, July 27th, 1889.

THE ISOLATION OF DOUBTFUL CASES.

The Municipal Council of Paris has agreed to the formation of *service de douteux* at the Hôpital Trousseau. In future, childre who are brought for treatment suffering from symptoms whic are probably the commencement of one of the acute infectio diseases, without being sufficiently defined to permit a diagnos to be made, will be isolated in small separate wards until th nature of the disease can be certainly recognised. This step h been taken in consequence of the occurrence of somewh numerous instances in which patients have been consigned to ward devoted to an infectious disease from which it has afte wards turned out they were not suffering.

HYPNAL.

In a note upon the incompatibles of antipyrin[1] an account w given of the crystals which are formed when strong solutions chloral hydrate and antipyrin are mixed together. The chemic nature of this chloral-antipyrin combination has been studied Herr Reuter,[2] who has shown its composition to be as describ by the chemical name tri-chloral-dehyde-phenyl-dimethyl-pyrazo The therapeutic properties of the compound have been commun cated to the Société de Thérapeutique, by Dr. Bardet, who h given it the name of hypnal.[3] He states that it is a very acti body, which possesses at the same time the sedative and hypnot properties of its constituents. It acts favourably in doses of o gramme only, and in 22 cases where it was administered sle was obtained with facility. Hypnal is especially useful in i somnia, caused by pain and cough. It has neither the disagre able taste of antipyrin, the causticity of chloral-hydrate, nor t irritating effects upon the stomach of its two constituents. can be easily taken, especially by children, and it presents oth advantages in consequence of the absence of taste. The proce for making hypnal is very simple; it is only necessary to dissol separately in the smallest possible quantity of water equal parts chloral-hydrate and antipyrin, upon mixing the solutions a cry talline precipitate falls, which, after washing, can be immediatel employed.

THE DWELLINGS OF THE POOR.

The Vestry of St. Pancras is to be congratulated on havin amongst their number an earnest sanitary reformer in M Lazarus. That gentleman has on several occasions lately show his zeal in endeavouring to abate the insanitary conditions whic prevail among the dwellings of the poor of this parish. At recent meeting of the Vestry Dr. J. F. J. Sykes, the medical offic of health, reported on 11 houses in King's Mews, King Stree Camden Town, as most insanitary. They were dilapidated an structurally bad, the water-closets were under the stairs, and th living rooms were insufficiently ventilated. Mr. Newman, a men ber of the Vestry, pointed out that at the bottom of the mews w the entrance to the Board School, so that children were forced t come in contact with most insanitary conditions. Mr. Lazarus

[1] Journal, November 16th, 1889.
[2] *Pharm. Zeitung*, Nos. 8 and 23, 1890.
[3] *Repertoire de Pharmacie*, April 10th, 1890.

eported to have added that the property belonged to a noble wner, and that this was another instance in which a filthy slum elonging to that owner had been re-leased instead of being pulled own and houses fit for habitation erected in their place. We arnestly hope that the members of the St. Pancras Vestry who ave taken in hand the much-needed improvement of the poorest lass of dwellings in this large and populous part of London will ecure for their energetic medical officer of health the support of is authority in the discharge of his difficult duty, and they will e successful in overcoming such opposition as must, we fear, be xpected from interested, and, unfortunately, influential persons. f they persist in their efforts they will do much to redeem the haracter of St. Pancras among sanitary authorities, and it will no onger be possible to point to it as a conspicuous example of the ailure of the principle of local self-government.

THE CLOSURE OF PUBLIC PLAYGROUNDS.

THE decision of the Metropolitan Public Gardens Association to lose nine of the small gardens and playgrounds laid out under heir care and at their cost, is one much to be regretted in the ublic interest, but as to which they seem to have little alternative. The resources of the Association do not allow it to meet permanently the annual cost of maintenance of the large number of playgrounds which through their instrumentality have been made vailable for the population of London. They have also regarded t as their task to secure the consent of the owners to the dedication to public use of these places, to take the necessary steps, and o procure the funds for laying them out, and to pay the cost of aretakers and general maintenance for a limited number of years. After having thus demonstrated the utility and value of such grounds, they have, as a rule, been successful in inducing the local uthorities to take upon themselves the relatively small annual xpenditure for maintenance of places so eminently useful for the oorer population of the locality. In the nine or ten cases in which his has not been found possible, they appealed to the London County Council to take upon themselves this burden. That course was recommended by the Open Spaces Committee, but the Council, by an evenly divided vote, has deferred, if not rejected, the proposal of its Committee, on the ground apparently that the Council, ike the law, *de minimis non curat*, and probably, also, for the reason hat it is the especial duty and within the means of each locality to do for itself what for the most part the local authorities have been willing to do. The difficult position is apparent, but it may be hoped that a solution will be found either in the indulgence of the Council, or from the munificence of individuals, and that spaces so conducive to the happiness and welfare of the population, who have shown themselves so thoroughly capable of enjoying them and putting them to good uses, will not be permanently closed against them after being dedicated to their use and appropriated for their recreation.

ADVANCED LECTURES ON PATHOLOGY AT CAMBRIDGE.

THESE lectures, which form a new departure at Cambridge, were commenced on April 21st by Mr. E. Hankin, of St. John's College, who began the course on bacteriology, which is to be given by Mr. Adami (Christ's College), and Dr. Hunter (St. John's College) and Mr. Hankin conjointly. Before Mr. Hankin began his lecture, Professor Roy briefly explained the general scope of these advanced courses, and pointed out in what respects they differ from he elementary lectures. The object of these latter should be, n Professor Roy's opinion, to cover the whole ground of pathology as uniformly as possible. In them the lecturer must keep n mind that his hearers desire the kind of instruction which will nable them to pass their examinations as graduates in medicine nd surgery. He should avoid, within certain limits, reference to matters which are not likely to be of direct use to the student. He should not lay special weight on his own researches, or his own particular views regarding the matter on which he is speaking. He should be, in fact, before all things, orthodox. It was better, in some respects, that he should not introduce into his lectures facts or conclusions which are too new to be generally known and accepted by teachers and examiners in pathology. With advanced lectures it was another matter. These should be given only by men who are actively engaged in original research on the subject of their lectures, seeing that otherwise their capabilities for criticising the publications of other workers must be limited. Advanced lectures should, moreover, be fully up to date; and if the lecturer can give information which is still unpublished, so much the better. In an advanced lecture the speaker can state from his special knowledge what is the present position of his subject in the minds of its working pioneers. Such advanced lectures on pathology are of the nature of the post-graduate courses, which have been found so successful in various university towns both at home and abroad. Such courses are especially valuable on a subject like bacteriology, which has made such enormous strides within the last ten or fifteen years, and which has progressed more rapidly than any other medical, or, indeed, than any other biological, subject. Mr. Hankin's lecture, which had, to an admirable degree, all the attributes claimed by Professor Roy for advanced lectures, was delivered to an audience containing a good proportion of graduates. The hour chosen (8.30 P.M.), which is a somewhat unusual one for university lectures, was decided on because no other time during the day was free from the risk of clashing with other medical courses. The lecture was clear and bright, and gave an able account of that part of bacteriology of which it treated.

INFECTIOUS SORE THROAT AND DIPHTHERIA.

A REPORT, which has just been issued, by Dr. F. H. Blaxall, one of the medical inspectors of the Local Government Board, on an outbreak of diphtheria at Berkhamsted town, is specially interesting as illustrating the insidious manner in which diphtherial affections of the throat are liable to spread in schools, and the importance of particular attention being paid to all cases of throat illness amongst scholars. King Edward's Grammar School, at Berkhamsted, contains about 190 boys, of whom 98 are boarders and 92 day scholars. Dr. Blaxall, in the course of his minute and painstaking investigation, did not hear of the presence of any throat illness in the town prior to September 18th, 1889, when the Grammar School reassembled. But a boarder came under medical treatment for a sore throat during the last week of September, and a day scholar stayed at home on September 24th on account of sore throat. During the next few days the mother and several other members of this last boy's family developed diphtheria. It is noted that this boy's mother had suffered from diphtheria some twenty years before, and that all the family were subject to sore throats. Between September 24th and December 2nd, cases of throat illness of an ill-defined character occurred among the scholars, but after the latter date the character of the disease changed, typical diphtheria of a virulent and fatal form manifesting itself in several instances. On December 14th, the school was broken up, two boarders manifesting diphtheria after arrival at their homes, and one case proving fatal. Altogether, inclusive of the recognised diphtheria cases, there was a total of forty cases of throat illness, of which thirty occurred in boarders, four in day scholars, one in an assistant master lodging in the town, and the remaining five in the family of the day scholar above referred to. No case of diphtheria occurred in the town after the school was dispersed. The origin of the outbreak was locally attributed to nuisance caused by the defective sewerage of the town; but if Dr. Blaxall could hear of no cases amongst resi-

dents, who were equally exposed to such nuisance, milk supply and domestic animals, channels by which diphtheria at other places has been found to be spread, could also be dismissed. The water supply, too, was absolved. Dr. Blaxall attaches strong suspicion, however, to the case of the boarder first referred to above as coming under medical treatment for a sore throat during the last week of September. Perhaps even stronger suspicion of introducing the infection may attach to another scholar, who first complained of his throat on September 30th. He was a boy who had been habitually subject to sore throats ever since he had had diphtheria some five years previously, and may have had a bad throat some days before applying for medical treatment. Even if the opinion advanced by some authorities, that diphtheria poison may continue dormant in the system for an indefinite period after the first attack, be discarded, it is possible that in the present case the boy's throat was in an infectious condition at an early phase of his ailment. Dr. Blaxall considers that the infection was probably introduced into the school by some such unrecognised case at the time of reassembling of the school. He also considers that the dissemination was due to infected and healthy boys being brought together in the school.

HOW TYPHUS FEVER ARISES.

THE question whether typhus fever can ever arise *de novo* is one that is specially interesting to medical sanitarians. Four years ago there occurred simultaneously groups of cases in various parts of London, which previously were free from the disease. Their origin was most mysterious. They were not traceable to pre-existing cases, and from the fact that some of them made their appearance in crowded, dirty, and badly ventilated houses, it was argued that their occurrence was a proof of the possible *de novo* origin of the disease under specially insanitary conditions. A group of twenty-one cases which has recently occurred at Paisley shows how difficult it must sometimes be to exclude with certainty the possibility of infection by the ordinary channels, especially where, as in the metropolis, the movements of the vagrant part of the population are never easy to follow. It appears from the statement of Mr. Councillor Wilson, convener of the Health Committee for Paisley, as reported in the *Glasgow Herald*, that in a neighbouring city a child had been struck down with the fever, and that while arrangements were being made for its removal the father, with the rest of the family, consisting of the mother and four children, absconded, leaving no traces as to whither they had gone. It turned out, however, that they had gone to one of the lodging houses in Paisley, and shortly afterwards the local authority had to deal with twenty-one cases that came from two or three lodging houses, and all were traced to the lodging house to which the family referred to had gone to reside. Within the last twelve months cases have been admitted into the South-Eastern Hospital of the Metropolitan Asylums Board, where they have been under the care of Dr. MacCombie. All these cases have come from one locality, called "Sard's Rents," in Horselydown. We believe that the occurrence of these outbreaks has been the subject of inquiry by the Medical Officer of the London County Council. We shall look forward with interest to his report, but in the meanwhile it is important to note that, while typhus seems to have clung to this particular locality, the metropolis generally has been free from the disease.

THE INFECTIOUS DISEASES PREVENTION BILL.

IN the JOURNAL of April 19th we commented on the provisions of Clause 5 of the Bill now before Parliament, which is objected to by those who appear to represent the dairy trade of the metropolis and country, although the grounds of objection had not been stated. It is now stated that the real objection of the trade is to Clause 4 of the Act, and that Clause 5 has, without any stated reason, been included in the objection. We are prepared to maintain that the provisions of Clause 5 are reasonable and necessary for the public health, but we are at the same time ready to admit that Clause 4 in its present form is not sufficiently comprehensive. The clause now referred to empowers the medical officer of health through the local authority of a district to demand from a dairyman or dairy farmer, in the event of his supply of milk being suspected of infection, a complete list of the names and addresses of his customers. The contention is that this clause, while it may seriously, and perhaps needlessly, affect recognised and established retailers, leaves unhampered and untouched the large class of itinerant distributors who, though not having a fixed shop or depôt, daily hawk milk from street to street on the chance of finding a sufficiency of customers. These vendors of milk may become the distributors of infectious diseases, though having neither premises nor books there can be no possibility of ascertaining the sources whence they obtain their supplies, or proving the sales they at any time effect. In some of the Scotch towns, milk is usually sold by itinerant vendors, the arrival of a milk cart in a district being announced by the ringing of a bell. There might be some possibility of tracing the source of the supply in a city as large even as Aberdeen, but certainly not in London. It would be impossible in the metropolis for a householder who draws his supply from a barrow wheeled along the road by an unknown itinerant vendor to ascertain whence the supply was derived, or for the vendor himself to furnish a list of the persons to whom he had supplied milk in his wanderings. We are in agreement, therefore, with the representatives of the trade, whose contention is that Clause 4, in order to be effectual, should be made to apply to all the known means of distribution. We must, however, repeat that the opposition to the provisions of Clause 5, which we noticed in the JOURNAL of April 19th, is, in our opinion, without reasonable foundation.

SCOTLAND.

HONORARY DEGREES.

AT the recent graduation ceremony at Edinburgh University the honorary degree of Doctor of Laws was conferred upon Sir Dyce Duckworth, and a similar degree was conferred upon Sir Joseph Fayrer, K.C.S.I., at the graduation ceremony at St. Andrews.

MEDICAL PRELIMINARY EXAMINATIONS AT ABERDEEN.

THE preliminary examinations were held on April 17th and 18th and to judge from the number of candidates neither the University of Aberdeen nor the profession of medicine is declining in popularity.

BEVERAGES AT ABERDEEN.

IT must be a matter of extreme satisfaction to a great many people in Aberdeen to learn that the whole of the samples of milk and of whisky analysed during the past quarter were "genuine." Curiously enough, however, it was found that one sample of cream of tartar was mixed with 10 per cent. of calcium tartrate, and that the famed oatmeal, on which literature is cultivated, was tempered to the students of these latter days by 1 per cent. of barley. We suppose this barley experiment will not now be continued.

OPENING OF THE SUMMER SESSION AT ABERDEEN.

THE summer session was opened at Marischal College on April 21st, when Professors Reid, Hay, Trail, Nicholson, Carnelley, and Ogston met their respective classes of anatomy, medical jur-

udence and public health, botany, natural history, chemistry, id surgery. The classes of materia medica, pathology, and phy-ology met on April 22nd, under the teaching of Professors Cash, amilton, and MacWilliam respectively. There was a large uster of students at the opening of the various classes. Active rangements are being made for the enrolling of students to the arious extramural classes connected with the University—for ample, skin, ear and throat, eye, and lunacy.

ABERDEEN INFIRMARY.

R. OGILVIE WILL has addressed a letter to the President and irectors of the Aberdeen Royal Infirmary, asking them to accept s resignation as one of the surgeons of the institution. He ates that this step has been taken owing to the extent and portance of his private duties. Dr. O. Will has held the pointment of surgeon for the period of sixteen years. Pro-ssor Alexander Ogston, who has had ample opportunities of timating Dr. Will's abilities, passed a high eulogium on him at e opening of his surgical class, and regretted that the Aberdeen edical School should be the poorer in capacity by his retirement. ie surgeons remaining on the staff after this retirement are rofessor Alexander Ogston, Dr. R. J. Garden, and Dr. J. G. Hall. uite a flutter of excitement exists amongst the younger surgeons the city regarding the vacant appointment, and a keen contest r it is expected to take place.

HE MEDICAL FACULTY OF THE UNIVERSITY OF ABERDEEN.

MEETING of the Committee appointed by the General Council of berdeen University to investigate and report on the changes sirable for increasing the efficiency of the University, in so far the University Commissioners have the power to carry such anges into effect, was held on April 19th in Marischal College; r. Bain convener. After a preliminary statement by Dr. Bain, ie Committee appointed Drs. Beveridge, Mackenzie-Booth, Gar-n, Gordon, Fraser, MacGregor, and Leslie-Mackenzie a sub-mmittee to consider and report on all questions relating to the culty of medicine.

IRELAND.

THE DEFALCATIONS IN DUBLIN HOSPITALS.

E have already referred to the disappearance of the accountant Steevens's and Swift's Hospital for Lunatics. The total sum ficient now appears to be over £6,000, and is about equally vided between the institutions named. The full details will on be made public as the Governors of the hospitals have taken tion against the Bank of Ireland for the recovery of the amount. ie defendants applied on Monday last for particulars of the de-and and discovery of documents, when the Court granted the st part of the motion and refused the second.

OUTBREAK OF FEVER IN LISMORE UNION.

IE outbreak of fever in this union which we recently referred has since shown signs of abating, but the epidemic has been despread and many deaths have resulted. Dr. Dennehy, medical icer of the union, has recommended the guardians to locate the ver hospital at the rear of the workhouse. The hospital at pre-nt is situated about a hundred yards from the town, and only out thirty from the main road leading to the railway station. considers the proximity of the hospital to the public thorough-re and the railway station dangerous.

MEATH HOSPITAL.

AT the annual meeting of the supporters of the Meath Hospital, on Monday, the report showed that the income for the year was £4,535 0s. 6d., and that there was a balance against the institution of £187 4s. 3d. Bequests amounting to £3,000 had been received. The daily average of occupied beds was 95.42, and the cost per bed was £49 7s. 10d., or 2s. 8½d. per diem; 1,381 patients were treated in the hospital, and 15,187 were attended to at the dispensary. Resolutions were passed commending the hospital to the generous support of the public.

ULSTER HOSPITAL, BELFAST.

PROFESSOR SINCLAIR, who has so ably discharged the duties of surgeon to this hospital for the past seven years, has felt himself compelled by the pressure of other duties to resign his position. He has been elected a member of the consulting staff. A similar honour has been conferred upon Dr. T. K. Wheeler, who recently resigned his position on the active staff. Professor Sinclair's place as surgeon will be taken by Dr. McKisack, lately house-surgeon to the Royal Hospital.

DEVELOPMENT OF ROSTREVOR AS A HEALTH RESORT.

A CORRESPONDENCE has been going on in the Belfast papers regarding the development of Rostrevor as a health resort. Rostrevor possesses one of the most beautiful and sheltered sites in Ireland; it is admirably adapted for an invalid resort, and there is excellent hotel accommodation; but, owing to the lack of local enterprise and the very inadequate travelling facilities, it progresses very slowly. Its development would be a real gain to Ulster, and especially to Belfast.

THE ABUSE OF MEDICAL CHARITIES.

THE last meeting of the Ulster Medical Society was mainly devoted to the burning question of the abuse of medical charities. The attendance was very large, and, after a lengthened discussion, in the course of which it became evident that only one opinion existed regarding the abuse of the extern departments of hospitals and the Poor-law dispensaries, and the necessity for reform, two deputations were unanimously appointed to wait respectively upon the governing bodies of the hospitals and the Dispensary Committee, and lay the views of the Society before them. The general feeling of the meeting was strongly in favour of the laying down of a wage limit for the recipients of medical charity, and that the inquiry into incomes should not be left to the medical staff of the various institutions, who naturally object to such duties, but should be entrusted to a special official.

OPENING OF THE UNION INFIRMARY, BELFAST, TO STUDENTS.

AT the last meeting of the Belfast Board of Guardians a deputation of medical students appeared to urge that the wards of the infirmary should be thrown open to clinical instruction. It was pointed out that the infirmary, with its immense number of beds, afforded a fine field for observation which should not remain without being utilised; that similar institutions in Cork and Galway were open to students, and formed the chief clinical resource of their respective medical schools, and that there existed on the part of the Belfast students a general desire to extend their opportunities for clinical training. After hearing the deputation, a resolution was passed giving the required permission, but reserving to the medical officers of the infirmary the right of making whatever rules regarding attendances and fees they should consider necessary.

REPORT

ON

LEAD POISONING FROM DRINKING WATER IN YORKSHIRE.

[By Our Special Commissioner]

Long Prevalence of Lead Poisoning in Sheffield.—Report of the Medico-Chirurgical Society.—A Special Committee.—One Thousand well-marked Cases.—Nearly One-Third of the Population of Sheffield Affected.—The Sources of Water Supply Examined.

In consequence of recent reports of illness, and even of death, resulting from lead poisoning due to drinking water in Yorkshire, we have instituted an inquiry in Sheffield and the surrounding districts, with the object of ascertaining the actual state of the case in that neighbourhood.

Lead poisoning has always been more or less prevalent in Sheffield owing to the trades carried on there, the filecutters being especially liable to suffer from this disease; but of late years there has been a growing feeling among medical men that cases not infrequently presented themselves which could not be accounted for in such a manner.

Early in 1889 Dr. Sinclair White, the Medical Officer of Health at Sheffield, called the attention of the Town Council to the subject, and, in accordance with their directions, he drew up an elaborate report, which seemed conclusively to prove that, after eliminating all cases of lead poisoning from trade, a large number still remained, for which the only cause appeared to be the taking of lead into the system through the medium of the drinking water, this supposition being confirmed by chemical examination of the water, which was found to contain varying, but often large, quantities of lead.

In consequence of this report, and of numerous articles in the local papers, the Town Council in the early part of the present year applied to the Medico-Chirurgical Society for an expression of opinion on the subject, which was given in the following terms:—

1. That there is, and has been for some time past, a very serious amount of lead poisoning in that part of the town supplied with water from the Redmires reservoirs.

2. That a large number of cases cannot be accounted for by exposure to lead in connection with trade, occupation, food, or other sources than the drinking water.

3. That in water drawn from the taps in houses supplied from the Redmires reservoirs, a decidedly poisonous quantity of lead has been again and again detected by competent analysts .....

4. That members of the medical profession in the town have, from time to time, as the result of their professional experience, drawn attention to the prevalence of lead poisoning from water .....

5. That this meeting is of opinion that the Redmires water, as at present distributed through lead pipes, constitutes a serious danger to the health of the community, which calls for an immediate and thorough scientific investigation by competent medical, as well as chemical, experts, with a view to its prevention.

The Corporation acted on the suggestion of the Society by appointing a committee, including Professor Dewar, Dr. Bristowe, and Mr. Hawksley, which met in February of the present year to inquire into the subject, when both the present and the late medical officers of health and a number of the practitioners of the town were examined. At the end of the inquiry the committee published a preliminary report, in which they stated that the Redmires water as supplied to consumers was liable to affect injuriously those who used it for drinking purposes, and offering a suggestion for treatment of the water in the reservoirs with chalk, with the object of preventing such injurious action. They determined, however, to take time before the presentation of a complete report, which has not yet appeared.

Consequently, with the view of ascertaining as accurately as possible the real extent of the mischief, personal application has been made to the medical officers of health and to a number of the medical practitioners in Sheffield, Huddersfield, Leeds, Bradford, and other towns, many of whom have kept accurate records of cases that have come under their care, particularly during the last two or three years, and who afforded every facility in the inquiry, not only by giving access to such records, but by allowing cases under their care to be visited.

In all, more than 1,000 well-marked cases have been collected which had occurred within the time mentioned, more than half of the patients living in Sheffield and places immediately surrounding it, such as Chesterfield, Dronfield, Killamarsh, Eckington and Wadsly. The proportion of females to males is about 4 to 1 which is valuable as affording proof that the lead poisoning is not due to trade, as in such a case the incidence is, as might be expected, more on males than females.

The actual number of deaths has not been large, as, since the disease has been recognised, most of the cases have recovered under treatment; but now and again one is reported, although it appears that deaths are not uncommonly certified as due to the final symptoms rather than to the lead poisoning which has caused them, so that it is difficult to estimate the number that occur.

It appears, however, that the danger to the health of the community is by no means represented by the number of cases which come under treatment for plumbism, as there are innumerable cases of chronic dyspepsia and anæmia combined with a peculiar earthy complexion, which are apparently caused by the ingestion of small quantities of lead in the drinking water, while a blue line on the gums is frequently found in persons who make no complaint of actual ill-health. This fact was forcibly demonstrated by a house-to-house visitation in one of the streets of Sheffield when it was found that every person examined, almost without exception, showed such a blue line, which, on examination with a magnifying glass, was found to be made up of a number of small separate patches, distinct from one another, as described by Hilton Fagge. Many of them had at times suffered in addition from colic and constipation, although for the most part they had not sought medical advice. Dr. White, indeed, gives it as his opinion that a blue line could be found on the gums of nearly one-third of the population of Sheffield.

In the severer cases, in addition to the blue line on the gums and sometimes blue patches on the inside of the lips and cheeks the symptoms most usually found include severe colic and obstinate constipation, dropped wrist, and often more extensive paralysis, epilepsy, rheumatism, gout, and nephritis, with associated albuminuric retinitis. Abortion also is very often brought about by lead poisoning, as was first pointed out by M. Paul, who states that in his investigations on the subject among lead workers he saw in 123 pregnancies, 64 abortions with 4 premature labours and 5 stillbirths. That a similar result is brought about from plumbism due to drinking water is abundantly proved by the following cases, in which any other cause has been excluded as far as possible. A practitioner at Dronfield stated that he had seen more miscarriages than normal labours, one woman attended by him having had five miscarriages in two years. A patient at Sheffield had six miscarriages in succession, after which, having come under treatment for plumbism, and having since used only filtered water, she has had two healthy children. Another case was that of a woman who, after having given birth to a healthy child moved into a new house which had a long service pipe of lead. Shortly after, she became affected by lead poisoning, which was followed by a miscarriage, but on removal to another part of the town she again had another healthy child.

A few selected cases will, perhaps, best show the main characteristics of the disease in its severer forms.

1. M. W., female, aged 29, married, first seen in September, 188. Her illness began two years before, with colic, constipation, and vomiting. Three months before admission to the infirmary she had lost the use of both wrists and of the right ankle (the left being crippled from old disease), while for two months she had been quite helpless and unable to stand. She was admitted for epileptiform convulsions, and there was complete paralysis of both wrists and of the right ankle. She was extremely cachectic and debilitated, and had a marked blue line along the gums. There was no history of ever having used lead in any form, but she had been accustomed to drink unfiltered water from the tap. She left the infirmary to die.

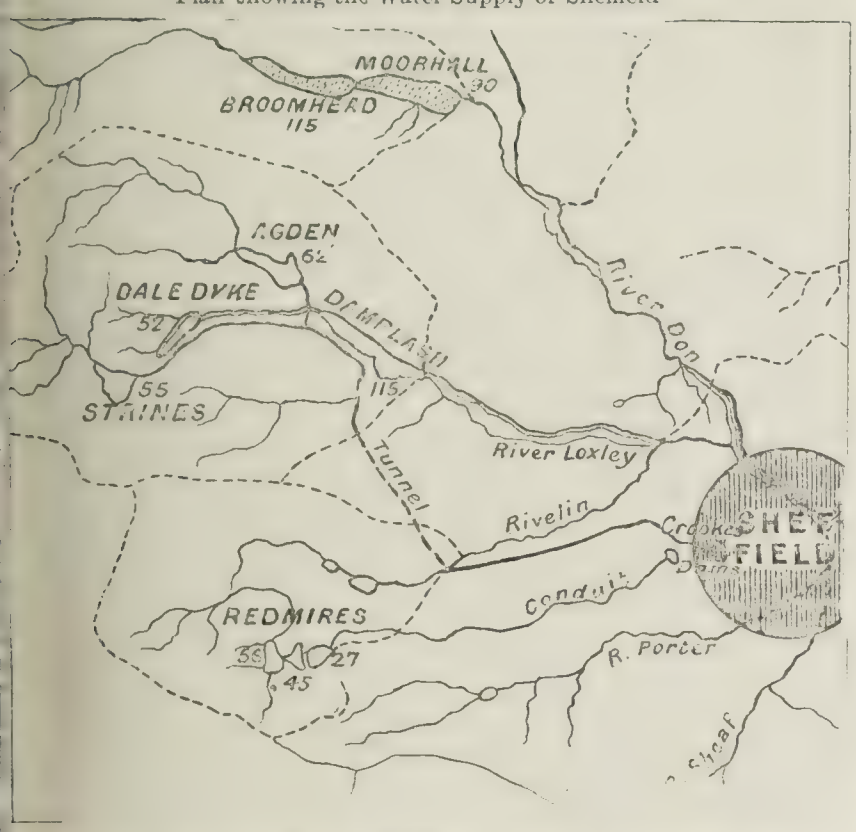
2. H. W., male, aged 34, a platelayer, came under treatment in February, 1888, complaining of an aching pain in the right hypochondrium, which was worse at night, and loss of power in both hands, so that he could not wash or dress himself. The skin and conjunctivæ were of a sallow yellow tint, the tongue large and tremulous, its surface being slimy and glazed. There was a marked lead line on the gums, a peculiar but distinctive odour of the breath, and a metallic taste in the mouth, especially in the morning. He had marked wrist drop on both sides, and wasting

nd loss of power in the small muscles of the hand, being unable o oppose the thumb and little finger of either hand. He could ot extend the fingers by means of the interossei, but could bend he elbow and wrist. The back of the hands was swollen, and here was a trace of albumen in the urine. He got progressively vorse, and died some months afterwards.

3. J. P., male, aged 53, a fork forger. Had never worked in ead, but drank water from a tap at the workshop which was con- ected with a lead cistern, the water from which, when exa- ained, was found to contain 0.56 grain of lead per gallon. There vas a history of persistent illness and increasing feebleness. On dmission into hospital he was suffering from colic, constipation, nd vomiting. He was very cachectic, his lips and tongue were remulous, and there was a well-marked lead line on the gums. His speech was hesitating and jerky, and he had much pain nd thickening in the great toe joints. He improved under treat- nent.

4. A. W., female, aged 23, in service at Dronfield. She drank vater regularly from the tap over the sink and used water from he hot-water tap for filling the kettle for making tea in the norning. She had suffered from vague symptoms for some time. n coming under treatment she complained of colicky pains in the bdomen and obstinate constipation. She was very anæmic, and menstruation was scanty, though regular. Her manner and peech was nervous, and she had a distinct blue line on the gums. 'reatment was adopted with marked benefit.

Plan showing the Water Supply of Sheffield



The numbers refer to acreage of reservoirs. Those at Broomhead, Moorhall and Damplash are not at present in use.

This last case may be taken as a type of many others, as the arge excess of females over males that are affected is in great part made up of domestic servants, who frequently are in the habit of drinking a glass of water the first thing in the morning, thus getting the benefit of what has been stagnant in the lead pipes during the night, and which has been frequently shown by analysis to contain from 0.5 grain to 1 grain, or even more, per gallon. In order to save themselves the trouble of boiling water t is not unusual for them to make use of the hot-water tap, which s supplied as a rule from a leaden cistern, for filling up kettles, the water being subsequently used for making tea and coffee. They also often use unfiltered water for cooking meat, vegetables, etc., so that this also may help to account for the prevalence of ead poisoning.

In connection with those cases of plumbism which have been traced to poisoning from the water supply, it has been known for some time, particularly in Sheffield, that while many persons living in one part of the town are more or less affected, those in other parts remain exempt, this being also notably the case in Bradford, Huddersfield, Dronfield, Mirfield, and Chesterfield. Now, all these places obtain their water supply from more than one source, and, in the case of Sheffield and Bradford more particularly, it has been conclusively proved that it is the "high-level" supply which exerts a marked solvent effect on lead, the "low-level" supply being inert in this respect.

At Sheffield the affected areas include Ranmoor, Broomhill, Broomhall Park, Sharrow, Heeley, and Pitsmoor. On analysing water taken from houses in these districts it is invariably found to contain lead in dangerous quantities, while, on the other hand, specimens obtained from houses in the districts of Penistone Road, Wicker, Attercliffe, and Brightside contain either no lead at all, or an inappreciable quantity only.

On careful inquiry being made into the place of abode of patients which have come under the care of the medical practitioners in the town, in every instance it has been found that they were either living in a part of the town supplied by the high-level water, or that their place of business was so situated. On December 26th of last year the *Sheffield Independent* published a map of the town, showing the parts supplied by the high- and low-level water respectively, which showed this point extremely well, as the cases, marked by stars, were all seen to be confined within the limits of the high-level supply.

(*To be continued.*)

ROYAL MEDICAL BENEVOLENT COLLEGE.

THE twenty-fifth festival dinner of the supporters of the College, which was held at the Hôtel Métropole on April 17th, was a marked success. Sir JAMES PAGET presided, and was supported by Lord Granville, Sir Andrew Clark, the High Sheriff of Surrey, Dr. Quain, Sir Trevor Lawrence, M.P., Dr. Constantine Holman, Mr. Jonathan Hutchinson, Sir Thomas Crawford, Dr. Russell Reynolds, Sir E. Sieveking. Dr. Broadbent, Dr. T. Bridgwater, Dr. W. S. Playfair, Dr. J. W. Ogle, Dr. W. M. Ord, Dr. Hermann Weber, Dr. Bowles, Dr. C. E. FitzGerald, and some 200 other members of the profession. The usual loyal toasts having been duly honoured—

The CHAIRMAN proposed the toast of the "Army, Navy, and Reserve Forces," which was acknowledged by Sir T. CRAWFORD, who expressed regret that the Epsom School was so little known in the medical departments of the public services, amongst whom were many members of the profession that required a school for their children that provided such a liberal, good, and moderately reasonable education as did the Medical Benevolent College.

Mr. HUTCHINSON, in proposing the toast of the Houses of Parliament, observed that the Houses of Parliament might be called upon to investigate the history of the College of Surgeons, and its origin from the barber surgeons, and might further have to exercise another function, that of impeding useless legislation.

Lord GRANVILLE, the President of the Royal Medical Benevolent College, responded for the House of Peers in a humorous speech, and concluded by applauding the desire of the authorities of Epsom College to make it not merely a school for the sons of medical men, but a school, equal in scope and extent, to the other great public schools of England.

Sir TREVOR LAWRENCE, M.P., returned thanks for the House of Commons, and said that no Bill having to do with the medical profession was now before that House. It was an advantage to any profession to be able to legislate for itself. This had not always been the case with the medical profession.

Sir J. PAGET next proposed success to the College. Its objects, he said, were twofold—educational and benevolent—a combination, as it were, of sentiment and reason, of feeling and understanding, or, in the language of physiology, two nerve centres, one inhibitory of the other. Benevolence and education had been at the root of many of the good schools of this country which started with charitable objects, such as Merchant Taylors', St. Paul's, and the Charterhouse Schools, and he thought they would feel safe if with their school they followed such good examples. Beginning as charity, never ceasing to be charity, these schools had come to assist in the higher education of the country. Surely benevolence was never better spent than in the maintenance of fifty decayed members of the medical profession, all of whom probably started with the desire to do well, and yet had fallen in the battle of life. All those present might possibly look back to the time when their success seemed doubtful. In the lives of all of them, if it had not been for chance, or what he would rather term God's mercy, they also would have been left behind in

the race. This should teach them all the necessity of holding themselves together in one bond of absolute brotherhood. As to the educational department of the College, what better thing could one desire for the boys of their school than to give them an education such as the rich might be anxious to procure for their children? The great schools of the country began as schools for the poor, and had given such a good education that the rich were anxious to step in and obtain the education there given. Their fifty foundation scholars at Epsom received a thoroughly good English education, which possibly was about the best education that the world afforded, so that the boys of the rich were now found pressing in, and would be found playing and working with those who were poorer—good for both. The educational work of the College was arranged on the public school system—there were both classical and modern sides—and a class also existed in which boys were prepared for commercial pursuits. But if asked what were the subjects that should be taught in a school, he could not say, nor, after much consideration, could he decide which was the best group of subjects that a boy should be compelled to learn. Each master thought he had the best set of subjects, and each master tried to teach best those that he favoured; but the old things passed away, and newer things came up, and this must go on as long as masters were not agreed amongst themselves which was the best set of subjects. At Epsom School preparatory work of all kinds was as well taught as it could be—for science, commerce, the Civil Service, and for the universities. Lessons in natural history were given, to which the students went far beyond the school bounds. That, he thought, was probably the best education which trained the power of observation. In his early schoolboy life, and in his student life, he had devoted himself to the study of botany, according to the Linnean and natural classification systems. Did he, however, ever learn anything in the systematic study of botany that had since been of use to him in his profession? Absolutely nothing; but from the fact that he was thus taught to observe and put in order his observations, this work had been of the greatest use to him. He eulogised the attention paid to physical training in the school, not only for the benefit carried to the body, but for its moral effect. The education in fair mutual honesty acquired at cricket and football was of the greatest importance to a lad. A student should thereby be trained to hate dishonesty as a thing absolutely contemptible, seeing that in medicine as in other professions, dishonesty would often secure ill-gotten gains. For those intending to enter the profession of medicine no school seemed to him to possess greater advantages than Epsom. But the Council were anxious that it should not be regarded as exclusively intended for the sons of medical men. The Council appealed for funds both to the profession and to the public. It appeared to be inevitable that unless their regular income could be increased some of the good works at present being carried on would have to be abandoned. Speaking of the founder of the school, Mr. Propert, he said that he was exactly one of those who had not merely the wish but the strong resolute will that good should be done, and the will that what he began should be carried through. Of the benefactors to the charity he mentioned several, and said that the only dark spot in the festivity of that night was that Dr. G. Jonson, the benevolent and energetic President of the College Council, had died three days previously. When enfeebled and ill after paralysis he had signed the cheques and had died almost in harness, working for the institution to the very last.

Dr. C. HOLMAN (Treasurer) returned thanks. He eulogised the late Dr. G. Jonson as the most nearly perfect of the chairmen he had ever known. The speaker's one effort since he had been Treasurer had been to make Epsom College more widely known, in which he had been ably seconded by the editors of the medical journals. The authorities of the College tried to find what a boy was fitted for, and if they found him not suited for the learned professions they tried to put him into mercantile life. Recently a boy from the school had gone up for a post at one of the large banks. There were sixty-two candidates, but their boy ran away from the rest, and the manager was so pleased with his attainments that he sent down for another scholar without advertising for candidates for the vacancy. Altogether the school under the present head master was in a most satisfactory state. He thought it was not right to take the recipient people away from their homes as was done now with the pensioners at the College; it would be much better to give them sufficient to pay for their rent and a few other small necessaries of life, and let them spend the remaining years of life amongst their own friends. It was not good for the young scholars at the school that they shoul constantly have the vision of these broken-down members of th profession before them. But to effect this change would requir an expenditure of £40,000 or £50,000, which must be capitalise Towards this consummation the members of the British Medic Association, of which he was also the Treasurer, might help im mensely.

Lord GRANVILLE, in felicitous terms, proposed the health of th Chairman. He said that if asked to give his *beau idéal* of a chair man, he would say that he should be a man eminent in his pr fession, and trusted and beloved both by its members and by th public at large; one, moreover, who could communicate hi thoughts in polished language, and had the power of convincin his audience; such a man was their chairman.

Sir JAMES PAGET briefly responded.

Sir ANDREW CLARK proposed the last toast, that of the honorar local secretaries. No other profession did ungrudgingly and gra tuitously for the public so much as the profession of medicine, an the public ought in return to do more for the Medical Colleg They had 250 local secretaries, who obtained sums varying from £5 to £300 a year each for the College, and the Council deeply thanke them for their valuable services. A better man than the lat chairman, Dr. G. C. Jonson, he had never known, and he (Dr. Jonson had personally collected over £5,000 for the College during hi lifetime. He had seemed to be completely animated by the spiri of self-sacrifice, the great essence of success in all true human lif

Dr. W. C. ARNISON (Newcastle-on-Tyne) returned thanks for th local secretaries, upon whom much of the work of the Colleg depended. He called upon all to increase their efforts.

The ASSISTANT SECRETARY then read the list of subscription which amounted to £2,176.

THE SANITARIUM OF THE EAST.

JAPAN has already earned for itself the title of the "Sanitariu of the East," just as it is fast becoming the Mecca of Europeans i search of the last existing national shrine of the highest and oldes form of the characteristic art and culture of the far East. Ur happily, before many decades have passed, a good deal that most characteristic of the original genius, the exquisite sent ment of beauty, and the feudal habits—art working for art's sake- will have largely disappeared. Western science, commercialism and administrative organisation have been assimilated by th extraordinary and delightful people with surprising and eve alarming rapidity. Their native chemists, electricians, an mechanics are fast rivalling our own in technical training an accomplishment. Their physicians and surgeons, or, at least, tha section of them which has been trained in European science b native or alien teachers, are of very high order of capacity, a their journals show; the last record of ovariotomy, for instanc by two Japanese physicians, shows a series of fifty operations wit only one death—a record not easy to beat under the circumstance and the more surprising when we remember the dense and pe verse ignorance and follies of "the Chinese system" which dom nated all the schools of Japan only a few years since. Th remains of these old barbarisms still survive and flourish largel alongside of the Western schools, but of course they are destine to disappear before very long.

HABITATIONS AND SEWERAGE AND CLIMATE.

The Japanese are very well aware, however, of the weakness their sanitary organisation, especially when old Japanese habit tions and appliances are called upon to fulfil and to amalgama with Western constructions and requirements. The mortality the towns and cities is not high, but the sewerage of the towns primitive—in most towns by open channels or ditches, sometim uncovered, sometimes covered with loose planking. A good de of the sewage is carried off to the fields; what remains, howeve suffices to contaminate the soil and pollute the surface wells an streams which are the sources of drinking water. No wonde therefore, that the last cholera epidemic carried off at least 150,0 persons, and that typhoid is widely spread. Mr. W. K. Burto who, at present, is the able professor of sanitary engineering Tokio, gives an interesting account in the current number of th *Sanitary Record* of the sewage disposal, water supply, dwelling and diet of Japan of to-day. Something was done some yea since to sewer Yokohama and Tokio on the European system, b so bad is the condition of town sewerage and water supply th the ground of surprise is not that there are frequent epidemi

of cholera and that the death-rate from zymotic diseases is rather high, but that the people live at all. The fact is, however, that there are many other highly favourable conditions due to their habitations, diet, and extreme bodily cleanliness, and the excellence of the climate. July and August are very hot months, but they have otherwise a glorified English climate, in many respects, therefore, the best in the world, free from fog, and surprisingly clear in the winter, and abundant in sunshine. The houses are all built above the soil, and raised on platforms, simple, airy, and free from poisoning by ground soil or water. They are kept in a state of absolute cleanliness, matted from end to end, and it is an act of unknown rudeness—except for heedless Europeans—to walk with outdoor shoes across the mats.

Baths and Bathing.

From the very day of his birth every Japanese has a hot bath at least every two or three days, in most cases every day, and in many cases several times a day, usually at a temperature of 110° to 115° F., often as high as 120°, and sometimes 130°. Young girls may be seen stepping and sitting down into a bath that will scald one's fingers, and even babies that are too young to walk are dipped in the same. Europeans used to this dangerous habit have come to alter their opinion; they, too, acquire the habit of enjoying a bath at from 110° to 120° F. The old-fashioned and English notion that it is dangerous to go into a bath at a temperature over blood heat (say 98° F.) is declared, for instance, by Mr. Burton, to be like a good many other old ideas—an entirely mistaken one. He says:

"The ability to go into a bath at a temperature that would at first seem simply sufficient to parboil any human creature is easily acquired. It is only necessary to have a little perseverance, increasing the temperature of the bath by a degree or so a day. I have thus myself acquired the ability to go into a bath at a temperature of 120° F., although I much prefer one ten degrees less hot.

"One who has not tried it can have no idea how refreshing a very hot bath is, and especially in hot weather. One can remain in it for only three or four minutes at the outside; there is none of the enervating effect that there is from the tepid or so-called 'hot' bath of England, but, on the contrary, a feeling of increased vigour.

"A thing I cannot understand is that, whereas in very cold weather the effect of a very hot bath is to so warm the body that one can sit in comfort for some two or three hours after coming from it, even in a Japanese room, without feeling the cold, in summer the effect is (from reaction, I presume) distinctly cooling."

Foreign medical advisers had, in virtue of their superior knowledge, induced the issue of an edict keeping down the temperature of public baths to 100° F., but this proved very distasteful to the natives; and, moreover, the foreign medical advisers have come to see the error of their ways, and now themselves take baths at 100°, and find them agreeable, and, it is said, beneficial. Kusatsu is a famous mineral spring of a temperature of 54° C. (a little under 130° F.); that is, about the limit of enjoyably hot water, even for the inhabitants of the far East. Perhaps there is here a hint for our own physicians, and a subject for investigation.

Diet and Dress.

One reason why the public health is less affected than it might otherwise be by the polluted drinking water is that the habit universally prevails of drinking at all times and very frequently weak hot tea, as the main beverage. It is imbibed very weak and without milk or sugar.—as tea should be by sensible and rational beings. Hot saké, a light wine made from fermenting boiled rice, is the chief national form of alcoholic drink; it contains from 5 to 10 per cent. of alcohol; women never drink it; men only sparingly; drunkenness is exceedingly rare among the unspoiled native population.

Death-Rate and Mortality of Infants.

The death-rate of the population of the whole empire, as gathered from the well edited reports of Mr. N. Seusai, the able chief of the statistical health bureau, is 19.33 per 1,000, due to the low infant mortality. The Japanese have the most tender affection for their children; and all travellers are agreed that next to the beauty of the scenery and the gentle and graceful courtesy of all classes of the population, ranks as among the most pleasurable incidents of sojourn in Japan, the universal love of children and the amiable gaiety with which their pleasures are studied.

According to Mr. Burton, the lowness of the infant mortality is probably due chiefly to the very great attention paid to the children by their mothers, to the fact that no substitute for mother's milk is ever used in bringing them up, and that they are nursed till they are from two to three months old. The habit that Japanese women have of carrying their children in a sort of bag on the back enables them to have the little creatures with them wherever they go, without apparent inconvenience. They appear to be able to go about their regular work, whatever it may be, with a child on their backs, without greater difficulty than if they were unburdened. The child is almost always with its mother, and has a great deal of open air.

The long nursing probably accounts for another fact, once more in exact contraction of popular belief; namely that although the Japanese, especially the women, marry very early; the families are on the average very much smaller than those of Europeans. It is not true, as is sometimes stated, that an artificial check is used to keep down the size of families.

The main diet of the people is rice; flesh meat is scarcely eaten at all, but fish is largely used by this insular race; milk is given like medicine in the hospitals, but is not relished by the population. Cheese is described as putrefied cow juice, and both the flavour and odour of it is intensely disliked. Large kinds of cucumbers, radishes and beans are extensively used. The "jinriksha" man will draw travellers at a pace of from four to eight miles an hour on a rice diet, doing thirty miles a day at a good pace for long successions of time.

Great sanitary improvements are in progress, and more in contemplation. Working under the instructions of the Home Department, Mr. Burton has got out plans for the sewerage of some six or eight great towns, and the importance of improving the water supply is fully recognised, and is being acted on.

NINTH CONGRESS OF INTERNAL MEDICINE AT VIENNA.

The German Congress of Internal Medicine was held this year at Vienna for the first time. The meeting was a great one, and much good work was done. This result was largely due to the personal exertions of Professor Nothnagel, at whose suggestion it was that the Congress changed its place of meeting from Wiesbaden, where it has been held for the last eight years, to Vienna. The number of those who took part in it was about 400. Among the prominent German and Austro-Hungarian physicians present may be mentioned Drs. Leyden, Senator, Ewald (editor of the *Berliner klin. Wochenschrift*), Riess, Fränzel, Fürbringer, Guttmann (editor of the *Deutsche med. Wochenschrift*), and many others.

The Congress was opened on Tuesday, April 15th, by Professor Nothnagel, who delivered an address on the development of medicine in Austria.

The Congress was then formally welcomed by Dr. v. Gautsch, the Austrian Minister of Public Instruction, in the name of the Austrian Government; by the Burgomaster of Vienna, in the name of the city of Vienna; and by Professor Billroth, in the name of the Imperial Royal Society of Physicians.

Treatment of Empyema.

The scientific work of the Congress then began by the reading of communications from Professor Immermann, of Basle, and Dr. Schede, of Hamburg, on the treatment of empyema. These, and the discussion thereon, occupied the whole of the first day. According to Professor Immermann the following were the principal indications: 1. To remove the pus. 2. To prevent its collecting anew. 3. To re-establish as fully as possible the normal conditions of the respiratory apparatus. Out of these indications, the first made surgical interference necessary in most cases. Spontaneous absorption did occur, and was even frequent, in the case of metapneumonic empyema when it only contained pneumococci; when, however, streptococci, staphylococci, and tubercle bacilli were concerned in its production, spontaneous absorption could not be hoped for. The drugs recommended for that purpose were useless. Only in pure pneumococcous empyema was the expectant method advisable; in all other cases the surgeon must be called in. Exploratory puncture should be practised on the largest scale. Thoracocentesis could at present hardly be taken into account as a curative method, as the agents which produced pus could not thus be completely removed from the chest. The success of the procedure was not enhanced by subsequent

washings out with disinfecting solutions. A more rational plan was "*perrigation*" of the pleural cavity by means of two openings made in a diametral direction and the insertion of cannulas, which could be closed, as proposed by Michael. This method permitted daily washing out of the thoracic cavity, and a thorough removal of the newly collected pus. As to radical operation, the prognosis of the simple cases had considerably improved since its introduction; the mortality of these cases was from a quarter to a fifth of that of former times, which amounted to 80 per cent. The method most commonly employed now was that of König. The washings after operation were not only superfluous, but hindered recovery. As to small and encapsulated empyemata, Käster advised filling up the cavity with iodoform gauze, and in large empyemata he recommended double incision at the front and back, close under the diaphragm, with free resection of the ribs at the back, and subsequent drainage of the whole thoracic cavity. The statistics of this procedure showed 76.8 per cent. of recoveries, with only 14.3 per cent. of deaths in uncomplicated cases. The radical operation had, however, certain disadvantages, such as loss of normal mobility of the lungs, owing to obliteration of the pleural cavity, deformities of the chest, deficiency in the bony walls of the chest, etc. The establishment of pneumothorax was also a great disadvantage. This was met by Bülau's method of permanent aspiration-drainage. This method was successfully carried out at Hamburg, Basle, Berlin, and Graz, and its physical principle was that of the aspirator. An elastic drainage tube, with complete exclusion of air, was introduced into the chest by means of a cannula attached to a trocar. The trocar was pushed into the chest; the cannula was then removed, and the drainage tube was allowed to remain, and was attached to a long elastic tube, which emptied itself into a vessel filled with some disinfecting fluid. The masses of pus were thus continually removed from the chest, and the lungs were allowed to expand in a normal manner. Later on the elastic tube was shortened more and more, and gradually removed out of the chest. This method could, of course, only be used when the lungs still retained a certain degree of expansibility. It was chiefly useful in the large recent empyemata without complications and not too thick pus, which were caused by streptococci or staphylococci, and particularly the bilateral empyemata of this kind, in which a double open fistula of the chest could not be established. Metapneumonic empyemata could also be treated in this way, but the thickness of the pus in these cases offered some difficulties. Professor Immermann concluded by giving a statistical synopsis of the results hitherto obtained by aspiration-drainage. The data were obtained from Hamburg, Berlin, Basle, and Graz, and referred to simple or not much complicated recent and old cases of empyema. Of 57 patients of this class, 3 (5 per cent.) died; in 5 (9 per cent.) after-operations—namely, small resections of rib—were required. The other 49 cases (86 per cent.) healed directly. These results were even more favourable than those of radical operation, according to Küster.

Dr. SCHEDE said he considered simple and aspiration puncture only as a preliminary procedure with the view of avoiding a pressing danger. Puncture, with subsequent washing out as recommended by Bälz, had no better effect. Excellent results could be obtained by Bülau's method; in bilateral empyemata it was almost indispensable. It had two great disadvantages, however, namely, that the drainage tube easily became blocked, and that under certain conditions, as in children, the mechanism could only with difficulty be kept in working order. The most reliable method was free incision with simultaneous resection of ribs. For the site of incision he chose the lowest part of the pleura outside the posterior axillary line, so that in certain cases the tenth, ninth, and eighth ribs had to be resected. Dr. Schede denied that the expansion of the lungs was necessarily hindered and deformity of the chest produced by the open incision, and cited cases in proof of his contention. He also argued that amyloid degeneration and tuberculosis did not contraindicate the procedure. He had had a case in which severe amyloid degeneration of the liver with ascites and anasarca completely disappeared after extensive resection of the chest wall; and of four cases of empyema in tuberculous individuals under his care, three had recovered after operation.

In discussing the papers Dr. FRAENTZEL, of Berlin, said that the radical operation was dangerous in weak persons, not owing to the operation itself but to the anæsthesia. In these cases Bülau's method should be used, and this was often quite sufficient; in other cases a radical operation had to be performed after the patient had gained strength. In the vast majority of tuberculous patients only palliative practices could be used.

Dr. CURSCHMANN, of Leipzig, believed that when the presence of empyema was established surgical interference should be had recourse to even in simple cases. He was even opposed to puncture. He did not believe that absorption ever took place, the so-called spontaneous absorption of small empyemata was due to that process being confounded with rupture in the bronchi. Dr. Curschmann recommended the drainage-aspiration; in pulmonary gangrene, abscess of the lung, and tuberculosis, free incision and resection of the ribs were indicated. During the last 10 years he had used aspiration-drainage in 73 simple cases; in 89 per cent. recovery took place, 6 ended fatally, and in 3 a fistula remained behind. Recovery was also obtained by the same method in three cases of pulmonary tuberculosis in the first stage, and two of purulent exudation. He used antiseptic washing only when there was fever.

Dr. HOFMOKL, of Vienna, said with regard to the danger of chloroform he had not observed such danger in the case of children. Bülau's method was useful in simple cases, but incision gave equally good results. In the case of tuberculosis he had seen large abscesses form at the seat of puncture. Washing out was unnecessary.

Professor LEYDEN, of Berlin, advocated Bülau's method. Many patients could not bear a radical operation. The chief danger was in the administration of chloroform when the heart was weak. He always used Bülau's method in his cases, and with very satisfactory results. Incision and resection of ribs were only exceptionally required. Metapneumonic empyemata were the simplest and the tuberculous form the most severe. Empyemata, due to streptococci and staphylococci occupied a position midway between these varieties. Purulent empyemata were not so dangerous as was commonly believed, and could also be successfully healed by Bülau's method. With the view of obtaining trustworthy data as to the value of the several methods of treatment he proposed a collective investigation of the whole subject.

Dr. EWALD, of Berlin, said that every case of empyema, as soon as its existence was proved by punctures, should immediately be sent to the surgeon for operation. In nine cases under his care in which Küster's method of double incision, above and below, was adopted, only one patient died. That was a case of tuberculosis. The rest were cured.

Professor von ZIEMSSEN, of Munich, said he had no experience of Bülau's method, but for ten years he had used incision and resection of ribs with satisfactory results, even in tubercular cases. The radical operation gave the best results, even in the case of children.

Dr. FÜRBRINGER, of Berlin, in discussing the question how long they should wait before operating, said three weeks on the the average was sufficient. If absorption did not take place in that time it was useless to wait longer.

After some remarks from Dr. EISENLOHR, of Hamburg, in favour of Bülau's method, Dr. KORÁNYI, of Buda-Pesth, cited cases showing that tuberculosis did not necessarily contraindicate incision and resection of ribs. In order to avoid the danger of chloroform he had once performed thoracocentesis after previous injection of cocaine. The patient did not feel much pain.

Dr. MAYDL, of Vienna, referring to empyema associated with echinococcus of the pleura, said the results of operation in such cases were very unfavourable. Of 16 cases, only 5 recovered; the rest ended fatally.

Dr. WINTER, of Vienna, said 35 cases of empyema, of which 21 were idiopathic and 14 secondary, were treated in recent years in Professor Billroth's clinic. Excluding tuberculosis and pulmonary gangrene, incision with extensive resection of ribs was employed in 12 cases. Of these, 9 were permanently cured, 1 died some days after the operation, and in 2 fistulæ were left.

Professor BILLROTH said that his experience had reference only to those cases in which the lungs were completely compressed and covered with callosities. Such cases would not occur if operation were performed in time; but even in these exceedingly bad cases a radical operation would give good and permanent results. When the lung was adherent to the chest walls, he thought that healing took place in the way described by Roser. There was no granulation tissue as was observed in other wounds; inflammatory neoplasms developed, which became vascularised and produced extensive adhesions. The deaths following operation did not depend on the operation, but were due to nervous influences.

The discussion was continued by Drs. MOSLER, of Greifswald, YDYGIER, of Cracow, RUNEBERG, of Helsingfors, and WEBER, of falle; and Professor IMMERMANN and Dr. SCHEDE replied.

After the conclusion of the discussions, Professor Leyden's proosal of a collective investigation of the treatment of empyema ras accepted by the Congress. The Committee is to consist of rofessors Nothnagel, Leyden, von Ziemssen, and Curschmann.

SUBSEQUENT PROCEEDINGS.

On the following days several interesting discussions took lace, of which we hope to give some acconnt in a future issue. t is amusing to note that, in response to very generally expressed esire, influenza was *not* discussed; Professor Baümler, however, ras allowed to relate some observations of special interest on the ubject. It was decided that the Congress should meet every econd year at Wiesbaden, and the other years alternately at erlin, Munich, Leipzig, and Vienna.

THE ELECTRIC EPISCOPE.

On the evening of April 17th Professor STRICKER gave demontrations with the electric episcope, invented by Herr Reiner, a ienna medical student. This is an apparatus which makes it ossible, by projecting objects moderately magnified on a gypsum late, to show large objects, as, for instance, anatomical specaens of the cerebrum, etc., as well as experiments on animals caried out on a table quite distinctly, to an audience of 400 persons. rofessor Stricker showed the pulsating heart of a dog and its hanges under the influence of asphyxial blood. He also showed he human brain, and the movements of the intestines of the dog nder irritation of the vagus.

THE ELECTRIC MICROSCOPE.

Professor STRICKER then gave some interesting demonstrations vith his electric microscope. He showed that by recent modifiations of the instrument it was possible, by intense illumination, o attain even a magnifying power of 11,000 linear, and in this vay to show most distinctly even bacteria to a large audience.

We hope shortly to give a full description both of this instrunent and the electric episcope.

NEXT MEETING.

The subjects to be discussed next year are the following: the rophylaxis of Tuberculosis; Perityphlitis and its Surgical Treatnent; Cerebral Pressure and the Treatment of the Cerebral Symptoms due to it; the Diagnosis of Diseases of the Stomach.

CHOLERA.

The *Meditzinskaia Beseda* (No. 5, 1890, p. 157), states that in strakhan, the chief Caspian port, with a population of 80,000, oth the authorities and the community are busily preparing for possible visitation of cholera. A special Sanitary Council *Sanitarnyi Sovet*) has been organised, consisting of all local pracitioners and veterinary surgeons. The Corporation meets every week to discuss the arrangements proposed by the Town Council, nd to elaborate further measures. The proposed organisation of he medico-sanitary service during the epidemic is as follows:— he town is divided into sixteen districts, to each of which there re attached a doctor, a *feldsher* (medical assistant), and two uardians (*popetchitelli*). Each district will have its own "cholera lepartment," where the four officers will be alternately on duty. he central office is constituted by a "chief cholera bureau," regulating the whole special service of the town.

The *Vratch* (No. 13, 1890, p. 315) publishes two official telerams received by the Turkish Chief Sanitary Board, one from agdad, dated March 16th, the other from Mossul, dated arch 18th. The former announces that on March 10th cholera ppeared at Zako. Dr. Portef-Effendi was at once sent there, and he town was encircled by a cordon. On March 10th and 11th 5 ersons fell ill, of whom 3 died; on the 12th, 6 fell ill and 4 died; n the 13th, 5 cases occurred with 4 deaths. The other telegram tates that Dr. Portef-Effendi has come to the conclusion that the isease is no cholera at all, but a *pustule maligne contagieuse.*

ACCORDING to the census of 1881, there were 131,618 lepers in ll India. It is estimated that there must now be over 200,000 epers in our dependency, most of whom roam about shunned by verybody.

THREE ladies from Australia have recently entered as students t the Calcutta Medical College.

ROYAL COLLEGE OF PHYSICIANS.

AN ordinary comitia of the College was held on Thursday, April 24th, 1890, Sir ANDREW CLARK, Bart., F.R.S., President, in the chair.

The minutes of the last meeting and of the meetings of the Censors' Board having been read and approved,

Dr. BRISTOWE (the Senior Censor) proposed a vote of thanks to the President for his present to the College of a set of standard works on medicine for the use of the Examiners in a handsome carved oak bookcase. This was agreed to by acclamation, and the vote was briefly acknowledged by the PRESIDENT.

A letter from Dr. R. Batho, of Jersey, was received, requesting permission to resign his diploma of Member. It was decided unanimously to accept his resignation, and it was further resolved that he should be granted the Licence of the College. The resignation of his Licence by Mr. J. D. Llewellyn was accepted.

The PRESIDENT nominated Dr. Thorne as Milroy Lecturer.

The following gentlemen, having passed the required examination, were admitted as Members of the College: Thomas Robert Bradshaw, M.D.Dub.; Charles William Chapman, L.R.C.P.; James Crawford, M.D.Durh.; Archibald Donald, M.D.Edin.; Vaughan Berkeley Harley, M.B.Edin.; Leonard Remfry, M.B.Camb.; John Sinclair, L.R.C.P.; George Alexander Sutherland, M.B.Edin.; George Owen White-Cooper, M.B.Camb.; Richard Thomas Williamson, M.D.Lond.

The licence of the College was granted to 112 gentlemen, 88 of whom presented themselves under the regulations of the Conjoint Board.

The Murchison Scholarship was awarded to Mr. Bedford Pierce, who attended and received the medal from the President.

A communication was received (1) from the Foreign Office enclosing a pamphlet issued by the Belgian Government relating to the treatment of epileptics in that country, (2) from the Secretary of the Royal College of Surgeons respecting the appointment of delegates to the University of London in respect of the new scheme.

The ballot was then taken for the Fellowship, when the following Members were elected: John Tatham, M.D.St. And., London; Fletcher Beach, M.B.Lond., Dartford; John Dixon Mann, M.D St. And., Manchester; Edwin Clifford Beale, M.B.Camb., London; Thomas William Thursfield, M.D.Aberd., Leamington; Thomas Oliver, M.D.Glasg., Newcastle-on-Tyne; Henry Ashby, M.D.Lond., Manchester; Alexander Haig, M.D.Oxon., London; Robert Percy Smith, M.D.Lond., London.

The quarterly report of the Finance Committee was received and adopted.

A report from the Pharmacopœia Committee was received, and referred back to the Committee for further consideration.

A report from the Committee on the Extension of the Examination Hall Buildings was received and adopted.

The thanks of the College were awarded to the donors of books during the preceding quarter.

ITALIAN SURGICAL CONGRESS.

THE Italian Society of Surgery held its seventh meeting at Florence, from March 30th to April 2nd. Many of the leading surgeons of Italy took part in the proceedings; among them may be mentioned Professors Durante, Ruggi, Ceccherelli, Postempski, Trombetta, Lampiasi, and Corradi. After a short speech from Professor Durante, President of the Directing Committee, Professor Corradi, President of the Congress, took the chair and delivered an introductory address. Among the principal subjects discussed were: The Latest Modifications in the Treatment of Wounds, with special reference to drainage and to the material used for ligatures; the Arrest of Hæmorrhage in Resection of the Liver and the Danger of Bile in the Peritoneal Cavity; Hypogastric Cystotomy; the Treatment of Abdominal Tumours; Resection of the Intestine; the Surgical Treatment of Tuberculosis, and Various Modes of Treating Spontaneous Aneurysm of the Internal Carotid. Professor Ruggi gave an account of the laparotomies performed by him since the last meeting—that is, in ten months. They amounted to 65, bringing up his total to 223. The cases included 5 of oöphorectomy with salpingectomy, all cured; 10 ovariotomies, all cured; 17 "castrations" for various reasons, with 16 cures and 1 death; 2 laparotomies for uterine fibromyoma and sarcoma, with 1 cure and 1 death; 9 supravaginal amputations of the uterus, with 7 cures and 2 deaths; 3 hysterectomies by Ruggi's own method, all cured; 2 for parametric cysts, both cured; 4 intra-abdominal replacement of the uterus, all cured;

3 for retroperitoneal and hepatic hydatid cysts, all cured; 3 exploratory operations, in all of which the patients recovered; and a few cases of a miscellaneous description (foreign bodies, tumour of pancreas, nephrectomy, etc.). Among the 65 cases there were only 5 deaths. Dr. Ferrari described a procedure for the radical cure of hernia, which he described as an improvement on Czerny's method; and Professor Postempski gave particulars of 41 cases in which he had operated by his own method, with 3 deaths. Dr. Postempski also related certain experiments on the cortico-motor centres of the human brain which he had performed in some cases of head injury.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—The annual Meeting of the Branch will be held at the Ilfracombe Hotel, Ilfracombe, on Wednesday, May 21st, 1890, under the presidency of Dr. Edwyn Slade-King, D.P.H. Notices of motions or communications to be intimated to the Honorary Secretary without delay, and it will facilitate arrangements if members will inform the Honorary Secretary as soon as possible if they hope to be present at the meeting, and join the excursion proposed to be made on the following day. The following motion was passed at the Council meeting on May 2nd, 1888: "That inasmuch as the annual meeting assumes more or less the character of a day of recreation, and with a view of encouraging the district meetings, the business of the annual meeting shall be confined to the President's address, the business of the Branch, the exhibition of cases or of specimens with notes, and the annual dinner." Those members who have not yet paid their subscriptions are reminded that they became due in advance on January 1st.—P. MAURY DEAS, Honorary Secretary, Wonford House, Exeter.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the members of the Essex District will be held (by permission) in the Town Hall, Haverhill, on Friday, May 2nd, 1890, at 2 P.M. Dr. J. Sinclair Holden, President of the East Anglian Branch, will preside. Messrs. Tandy and Hargrave invite the members and their friends to lunch at the Town Hall, at 12.45 P.M. Business of the meeting.—2 P.M., to elect an honorary Secretary for the year 1890. To arrange the place and date of the next meeting. Medical Defence Union.—Dr. Mead (Newmarket) will give a short report of the work of the Union for the past year. The following papers have been promised:—Dr. J. Sinclair Holden (Sudbury): A few remarks on Exalgine. Professor Latham (Cambridge); On the Treatment of Megrim or Sick Headache. Mr. R. Harrison, F.R.C.S.Eng. (London): On the Selection and Use of Catheters and other Instruments for Enlarged Prostate. Dr. J. C. Tresh, M.O.H. (Chelmsford): Notes on the Influenza Epidemic in Mid-Essex. Mr. B. L. Tandy (Haverhill): On a Case of Intestinal Obstruction, Laparotomy, followed by Abscess, Recovery. H. J. Hargrave, M.B. (Haverhill): Notes of a Suppurating Hydatid of Liver. W. J. Burleigh-Robinson, M.B. (Halstead): On the Induction of Premature Labour by Rapid Dilatation, especially in its relation to Pneumonia.—C. E. ABBOTT, Honorary Secretary, Braintree.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at St. Bartholomew's Hospital, Chatham on Thursday, May 29th; Mr. J. H. Jeffcoat in the chair. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than May 10th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary of the District.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of this District will be held at Tunbridge Wells on Thursday, May 22nd. Cleland Lammiman, Esq., will preside. Notice of communications should be sent to the Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighton.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this District will be held at the Greyhound Hotel, Croydon, on Thursday, May 8th, at 4 P.M.; Dr. Parsons Smith, of Addiscombe, in the chair. Dinner at 6 P.M.; charge, 7s., exclusive of wine. The following papers, etc., have been promised:—Dr. Mitchell Bruce: On some Forms of Heart Disease, with specimens. Dr. H. Montagu Murray will show Two Cases of Myxœdema. Dr. J. Fletcher Little: On the Treatment of Muscular Atrophy. Mr. Morgan Hughes: A few notes on Nitrous Oxide Gas and its Administration. Members desirous of exhibiting or reading notes of cases are invited to communicate with the Honorary Secretary, P. T. DUNCAN, M.D., Croydon.

SOUTHERN BRANCH: SOUTHAMPTON DISTRICT.—The next meeting of this District will be held on Tuesday, May 6th, at 8 P.M., at 1, Grosvenor Square, Southampton. Election of officers; auditing of accounts. A paper will be read by Professor Notter, M.D., on Disinfecting and Disinfectants. Subscriptions to the Association and Branch, £1 3s. 6d., may be paid to the Honorary Secretary.—THEOPH. W. TREND, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The next meeting of this District will be held at the Great Northern Central Hospital, Holloway Road, N., on Thursday, May 8th, at 8 P.M.; Dr. Bridgwater, J.P., Vice-President of the District, in the chair. W. R. H. Stewart, F.R.C.S., will read a paper on Postnasal Growth. Dr. Beevor will exhibit a case of Locomotor Ataxia, without Ataxia. The new hospital being constructed with every modern appliance will be open to all the members and duly registered medical practitioners.—GEORGE HENTY, M.D., Honorary Secretary, 302, Camden Road, N.

METROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner will take place at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Queen Anne Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., Honorary Secretaries.

WEST SOMERSET BRANCH.

THE spring meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, April 17th, Mr. W. A. HUNT, President, in the chair. Twelve members were present.

Representative of Branch on Council of Association.—Dr. W. M. Kelly was re-elected for the ensuing year.

New Member.—Mr. Cæsar F. Hawkins, of North Petherton, already a member of the Association, was elected a member of the Branch.

The Influenza Epidemic.—This was the subject selected for discussion after dinner.—Mr. WINTERBOTHAM (Bridgwater), who introduced the subject, was followed by Dr. MEREDITH (Wellington). Other members from different parts of the district gave their several experiences, and a very interesting discussion was maintained.

GLOUCESTERSHIRE BRANCH.

AN ordinary meeting of the Branch was held at the General Infirmary, Gloucester, on Tuesday, March 18th, 1890, under the presidency of Mr. H. E. WADDY.

Abuse of Out-patient Department.—Proposed by Dr. SOUTAR, and seconded by Dr. BATTEN, "That the Out-patient Inquiry Committee be empowered to add to their number." Carried.

Diet in Acute Disease.—Dr. WATTERS (Stonehouse) opened a discussion on diet in acute disease, with a full and instructive paper on the subject.—A discussion followed, in which Drs. S. W. SMITH, BATTEN, WILSON, BOND, CLARKE, SOUTAR, Messrs. ELLIS, WADDY, and other members took part.

An ordinary meeting of the same Branch was held at the General Hospital, Cheltenham, on Tuesday, April 15th, 1890, under the presidency of Mr. H. E. WADDY, when Mr. ELLIS (Gloucester) gave an address on the Surgical Physiology of the Abdomen and Pelvis, with particular reference to the treatment of Hernia, Prolapse of Uterus and Rectum, Hæmorrhoids, and Intestinal Obstruction. The thanks of the meeting were returned to Mr. Ellis for his address, and a discussion followed, in which Messrs. BUCKELL CARDEW, WADDY, Drs. BATTEN, SOUTAR, CLARKE, and others took part.

Annual Meeting and Dinner.—The SECRETARY notified to the meeting that the annual meeting and dinner would take place at Gloucester on the third Tuesday in May.

MIDLAND BRANCH: LEICESTERSHIRE DISTRICT.

A MEETING of this Branch was held at Loughborough on April 16th; Mr. B. J. EDDOWES, M.R.C.S., in the chair. Seventeen members were present.

Papers.—Mr. BOND read a paper on the treatment of Enlarged Bursæ and Ganglia by Excision, in which he advocated this treatment in preference to any other. The paper was illustrated by specimens and photographs.—Dr. POPE read a paper on the treatment of Gastric Ulcer by Resorcin, and, after a brief review of the literature of the subject and the chemistry of the drug, briefly related nine cases treated with it. Seven were quickly cured; of the other two, one was a case of nervous vomiting. He expressed the opinion that the use of resorcin would become more general after trial.—Dr. HANDFORD gave an address on some forms of

rdiac Dilatation. He gave as causes of dilatation, besides valar disease, kidney disease, alcohol, rheumatism, fever, overain, and underfeeding, but especially laid stress on pregnancy d anæmia. In relation to the former of these he instanced two es occurring in his practice. He also showed two specimens of arts associated with very small aortæ, and numerous diagrams, hygmographic tracings, and drawings.—Dr. NEALE read notes a case of Liver Disease, where, due to spindle-celled sarcoma, organ weighed over 12 lbs. He also read a paper entitled low Little there is New under the Sun," suggested by the rusal of an ancient medical work, which was shown.—Mr. CANT owed a patient on whom he had performed a Double Lens Exction without Iridectomy. Mr. HODGES criticised the operan, and Mr. Cant defended it.—Mr. LYSTER and the CHAIRMAN owed Urinary Calculi; and Mr. GREEN showed (for Mr. PAUL) a se in the ward of the Dispensary of bad Compound Comminuted acture of the Leg, where the limb had been preserved.

Dinner.—Eleven members afterwards dined together at the ng's Head.

SPECIAL CORRESPONDENCE.

PARIS.

e Municipal Council and Hypnotism.—Cholera on board the 'Fulford."—Sanitation of Restaurant Kitchens.—Asylum for Incurable Vagrants.—French Medical Association.

a recent meeting of the Conseil Municipal, Dr. Després asked at measures the Council intended to adopt in order to prevent e daily papers from publishing hypnotic experiments made on spital patients. Dr. Després commented severely on the practice making such experiments. M. Cochen supported Dr. Després, d objected to the *séances* given at La Salpêtrière. Dr. Paul ousse maintained that hypnotic experiments ought to be as neral as possible. M. Alphonse brought the discussion to a close pointing out that doctors did not agree on this subject, and e Municipal Council could not act as umpire.

A representative of the *Temps* has interviewed Dr. Proust, neral Inspector of the Sanitary Service, with the view of learng the truth concerning the English vessel *Fulford*, now unering quarantine at Pauillac. It appears that on February 8th ere were three cases of cholera on board. This was before the ip left Chittagong. Sanitary measures were immediately taken, d the ship was carefully disinfected. During the voyage the nitary condition of the passengers was satisfactory and there as no recurrence of cholera. The vessel had received orders to to Falmouth; these were changed, and Bordeaux was indicated. the arrival of the vessel at this port, rumours of cholera being board were spread, and the Sanitary Council of Bordeaux sent e vessel into quarantine at Pauillac. The sanitary condition reains good, and before this is published the vessel will have a an bill of health and the passengers will be allowed to land.

The Municipal Council is making inquiries concerning the nitation of kitchens in cafés and restaurants. The facts colted up to the present time show that in these kitchens there is nerally neither air nor light, and the sanitary conditions are as l as they can be.

The General Council of the Seine has voted 518,000 francs 20,720) for the establishment of a section in the Nanterre ylum where vagrants suffering from chronic incurable affecns can be received and looked after. The Council stipulates at the different communes are to pay part of the expenses urred for the reception of their poor.

At the annual meeting of the Association Générale des Médecins France, Dr. Brun stated in his report that the principal ounted to 2,500,000 francs (£100,000), without reckoning the rly grants to widows and orphans of medical men formerly mbers of the Association. Eighty pensions of £24 a year have year been granted to medical men disabled by age or rmity.

SWITZERLAND.

fessor Revilliod on Nervous Symptoms and Complications of Influenza.—Ether or Chloroform?—La Nona.

a recent meeting of the Société Médicale de Genève, Professor L. Revilliod read a paper on the epidemic of *grippe* at Geneva, in which he drew attention to the disease having been largely of nervous type. Even in non-neurotic persons the most prominent symptoms were of nervous origin, sometimes almost completely disguising all other manifestations, and making the diagnosis extremely difficult. The following cerebro-spinal symptoms were observed: vertigo, amounting to syncope; fainting, lethargy, stupor, hysteroid phenomena (including catalepsy and grave convulsive seizures), insomnia in some, somnolence in others, nightmare, hallucinations, giving rise sometimes to ideas of persecution, sometimes to maniacal excitement; delirium of all kinds and degrees, headache, neuralgic pains about the thoracic and abdominal viscera (simulating pleurisy, pericarditis, intestinal, hepatic and renal colic), as well as about the face and limbs; quasi-rheumatic pains about bones and joints; severe cutaneous hyperæsthesia; disturbances of locomotion, amounting in some cases to paraplegia or simulating spasmodic tabes, tetany of the upper limbs (three cases); bulbar symptoms with spasm of the diaphragm or glottis (one case ending rapidly in death, in spite of tracheotomy).

In the *Revue Médicale de la Suisse Romande*, No. 2, 1890,, pp. 73-98, Dr. T. R. Comte discusses the question of "Ether *v.* Chloroform," deciding strongly in favour of the former. He lays down the following propositions: 1. Anæsthesia may be obtained from ether just as well as from chloroform, without any necessity for using excessive doses, or preventing the access of the air into the respiratory tracts. 2. The so-called "intense method," which consists in inducing anæsthesia in two minutes by pouring 50 cubic centimètres of ether into the mask, is an inconvenient, if not also a dangerous, procedure. 3. The drawbacks of ether, such as its unpleasant odour, the vomiting which it causes, etc., are also present in other anæsthetic agents. 4. The period of excitement preceding ether anæsthesia is neither longer nor more intense than in the case of chloroform. Great excitement is only seen in habitual drinkers. 5. The contraindications of ether are limited to inflammatory affections of the respiratory organs, and to those accompanying stenosis of the larynx or trachea. It is also contraindicated in all cases requiring the use of thermocautery or light about the head or its vicinity. 6. Except in the cases just mentioned, ether decidedly is preferable to chloroform in all operations, more particularly in dental surgery, in the reduction of dislocations, and in all long operations. 7. Professor Th. Kocher's method, which consists in inducing anæsthesia by means of chloroform inhalation and keeping it up by means of ether is objectionable, because about 50 per cent. of deaths caused by chloroform occur at the beginning of the administration, before anæsthesia is complete. 8. Ether should always be given by a trained administrator, who should carefully watch the patient's respiration all through the procedure. The danger of ether consists precisely in feeling too sure of its freedom from danger.

So many sensational reports about "*La Nona*" have appeared in the press that the Austrian Ambassador has asked the *Bundesrath* for information on the subject. The answer given was that there was no such disease in Switzerland, all the supposed cases being simply instances of meningitis and other more or less familiar affections. "The *Nona* is nothing else than an invention of the daily press," remarks Dr. E. Haffter, in the *Correspondenz-Blatt für Schweizer Aerzte* (April 15th, 1890, p. 264), "and medical men should do their best so enlighten the frightened public concerning the non-existence of the spectre."

SHEFFIELD.

The Yorkshire Branch of the Society of Medical Officers of Health.—Prevention of Cruelty to Children.—Ambulance Corps at a Military Tournament.

THE Yorkshire Branch of the Society of the Medical Officers of Health held a quarterly meeting in Sheffield on April 9th. The President (Dr. Cameron, of Leeds) delivered an able address, in which he urged the advisability of health officers not separating themselves too much from the general work of the profession. Specialists, he presumed, they would become more and more; but he would have them not to forget that they were at the same time medical men, and that it was important that they should possess such an amount of critical knowledge as would enable them to follow the methods of their brethren and to understand their result. It was advisable for them to attend meetings of medical societies when subjects of general medicine were discussed. Dr.

Thomson, the medical officer of health for the borough, read a paper on an Outbreak of Typhus Fever in Sheffield. Fourteen persons had been attacked; four had died, one a medical man and another a ward maid at the fever hospital.

The Act for Prevention of Cruelty to Children has been enforced in several cases recently and exemplary sentences inflicted. Three such cases were brought a few days since before the magistrates at Rotherham. In one the medical practitioner had grave doubts as to giving a certificate, when the first child died from exposure and neglect whilst suffering from scarlet fever. When a second was brought to his surgery in a practically dying state, he declined to certify, and an order for burial was given by the coroner. The father was committed to prison for two months, and the charge against the brother, who was too ill to appear, was adjourned. Though this was a case of scarlet fever, at the time of the death of the children the room was occupied by a crowd of women, who appeared altogether regardless of the danger of infection. In this and the other cases good wages were earned by the men. It was proved that at least £3 per week was earned in a household where the family slept together on the bare stones covered with rags, with the merest apology for furniture in a four-roomed house. The wife was committed for three months; the husband was stated to be ill, and the consideration of the charge against him was deferred.

A novel feature in a military tournament recently held, and one in which the audience assembled showed a lively interest, was a contest between two teams from two of the large works of the town. The teams entered the ring to treat supposed cases of scalp wounds, fractures, etc. "First aid" was, it is said, expeditiously rendered. A medical man acted as judge.

CORRESPONDENCE.

SICKNESS AND MORTALITY OF THE POLICE FORCE.

SIR,—Many of your readers have no doubt read a letter from Sir E. Chadwick, under the above heading, which appeared in the *Times* a short time ago. My attention was not called to it till very recently, when I wrote to the *Times* to call Sir E. Chadwick's attention to what I cannot but think is an error, when he states that "formerly, when the death-rates have been examined they were found to be 12, 11, and 10 per 1,000." I have published the statistics of sickness in the Metropolitan Police for 18 consecutive years (1867-1884 inclusive) and in these years there is no such death-rate quoted as Sir E. Chadwick states. In the two earliest years the rate was 7.9 and 7.5, after which it fell to about 5 in the 1,000, and has continued at about this rate ever since, the fall being due, as I believe, not to any alteration in the sanitary state of the men but to a change in the system of granting sick leave. It had been the custom to keep many men who were in a condition of chronic sickness for long periods of time on "detached" leave; and of these a large proportion ultimately died. At the time I speak of it was seen to be best, both for the service and for the men concerned, that they should be discharged, with pension or gratuity, as soon as their unfitness was certainly ascertained. The congratulations, therefore, which Sir E. Chadwick gives the public on the supposed fall of the death-rate, as evidence of an improvement in the health of the men, are unwarranted.

And this leads me to say a few words on his general method of looking at the facts connected with the health of the police. I should have thought that the error of assuming relative death-rates as a test of the sanitary state of different institutions or of classes of men under different conditions. was universally admitted. Yet so great an authority as Sir E. Chadwick uses the death-rate of the Metropolitan Police and the Prussian army as a standard of their comparative sanitary condition. The former is a force composed of men of all ages, from 18 to 60, of all periods of service up to and even sometimes beyond 30 years, enjoying and freely using the liberty of resigning at any time, and differing in all these and many other particulars from the soldiers, who are recruited at the same early age and all compelled to serve their three years and no more. If the comparison were made by death-rates it ought only to include those of the police under three years' service. But even then it would be very misleading, since a young policeman who feels ill or finds the work too much for his strength can and does resign, or is discharged as inefficient, while the soldier is bound by the terms of his service, unless the medical officers find him physically unfit.

Nor do Sir E. Chadwick's reflections on the cause of the large daily deduction from the strength of the police from sickness agree with the conclusions which more intimate knowledge of the matter would, I think, lead a medical man to form. He looks to "sanitary improvements in the men's dwellings, with new and cheaper means of washing and ventilation, to effectually reduce this excessive sickness." And, of course, better lodging and more cleanliness might to some extent reduce the sickness, but such means could not do so "effectually," for the main causes of the high sick rate are the exhausting nature of the duty, the long hours, and the exposure to the weather. Most of the police walk nearly twenty miles a day, at a very slow pace, in every kind of weather and in a uniform; and, accordingly, the vast majority of their ailments are very transient, and are the common results of fatigue and exposure.

A comparison of the sickness in the Metropolitan with that of the City Police, where every man who declares on the sick list has to go into the police hospital, has led me to suspect that if a similar system could be introduced in the former force, it would diminish the rate of these short sicknesses; but the extent of the metropolitan area would render any such system intolerably costly; nor do I believe that the metropolitan ratepayers and the taxpayers would tolerate the expense of building great edifices for the families of 8,000 policemen, as Sir E. Chadwick suggests, though undoubtedly it would be a boon to these women and children. Its effect on the general health of the men would, I am convinced, be trifling.—I am, etc.,

T. HOLMES.

Great Cumberland Place, W.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

SIR,—I have the pleasure to send you a list of the contributions collected at the festival on April 17th in aid of the fund for the Pensioners and Foundation Scholars of Epsom College. The Council are most grateful for the liberal response made to the eloquent appeal of Sir James Paget; but, in consequence of the representations of some warm friends of the institution, it has been determined to keep the list open until the annual general meeting of the governors on May 22nd. Any contributions may be sent to the office, 37, Soho Square, W.—I am, etc.,

C. HOLMAN,
Treasurer of Epsom College.

Reigate.

THE FLAVOURING AGENTS OF THE *PHARMACOPŒIA*

SIR,—As the question of the publication of another addendum to the *British Pharmacopœia* is occupying the attention of the Pharmaceutical Committee of the Medical Council, it may not be out of place to call attention to the paucity of flavouring agents in our official compilation. It may be that, thanks to the introduction of special preparations of various drugs, the old-fashioned mixtures are less commonly presented than formerly, but there seems to be no valid reason why we should not have at our disposal means for making them at all events decently palatable. Patients have learnt by experience that medicines need not of necessity be nasty, and expect to have them prescribed in a form in which they can be taken without exciting loathing and disgust. If we look over the official list of flavouring agents we find that our choice is extremely limited. There are a few syrups, such as the syrup of orange peel, the syrup of orange flower, the syrup of lemons, and the syrup of tolu; there are one or two infusions, such as the infusion and the compound infusion of orange peel, and that is about all. Spirits of chloroform, it is true, is a useful adjunct to many mixtures, but patients are frightened when they see the word "chloroform" in a prescription, and raise all kinds of absurd objections, necessitating explanations which they neither understand nor appreciate, whilst the synonym "chloric ether" is equally liable to arouse their susceptibilities. The liquid extract of liquorice is useful in covering the salt and pungent taste of chloride of ammonium, but can hardly be said to be a palatable preparation.

If we glance at the foreign *Pharmacopœias* we find that they are much better off in this particular than we are. The French *Codex*, for example, simply teems with flavouring agents. Looking down the list, it is seen that there are considerably over 100 syrups alone; many of these, it is true, are complex—the *sirop d'armoise composé* boasts of no fewer than eighteen constituents—and others contain active ingredients, but the great majority are

mple palatable preparations, useful as vehicles for the administration of other drugs. Why should not our pharmacists give us omething on the lines of the *sirop de violettes*, the *sirop des ansées sauvages*, the *sirop des fleurs de pêcher*, or even the *sirop e guimauve*?

In the United States elixirs of all kinds are largely prescribed, although as yet only one, the elixir aurantii, has been made fficial in the *United States Pharmacopœia*. They are described s aromatic, sweetened, spirituous preparations, containing only nall quantities of medicinal substances. In the United States ispensatory directions are given for the preparation of twenty-ve simple or compound elixirs, all of which are said to be in onstant demand. In Kilner's *Compendium of Modern Pharmacy* ne list is much more extensive, no fewer than 302 formulæ being iven. It appears that what is known as "simple elixir" may be repared according to eight different formulæ, so that the choice ample. The chief ingredients are fresh orange peel, alcohol, yrup, and water, but oil of cinnamon, coriander seed, star anise, utmeg, caraway, cassia, cannella, and a number of other more or ss aromatic bodies, are occasionally employed. The simple ixir is colourless, but to produce various tints small quantities f cochineal, cudbear, or carmine may be added. The elixirs of ost drugs are prepared by a very simple process; for example, ne elixir of bromide of potassium is made by dissolving the salt the simple elixir, so that each drachm contains ten grains. irections are given for making an elixir of arsenic and quinine, n elixir of pepsine, bismuth, and strychnine, and various others. n addition to the elixirs, Kilner gives directions for making three flavourings," all of which are useful in disguising the taste of auseous medicines.

The subject appears to have occupied the attention of the "Unfficial Formulary Committee," appointed by the British Pharmaeutical Conference, formulæ being given for the preparation of ve elixirs—a simple elixir, an elixir of saccharin, an elixir of ascara sagrada, an elixir of guarana, and an elixir of phosphorus. ood working formulæ are also given for the syrup of Virinian prune, one of the best of the flavouring agents, and for yrup of tar. It is to be hoped that some of these preparations—any of which have undergone a long period of probation—will nd a place in the *British Pharmacopœia*.—I am, etc.,

Weymouth Street, W. WILLIAM MURRELL, M.D.

"SUGGESTION" IN HYPNOTISM.

SIR,—Your correspondent Dr. Thompson, referring to the article n hypnotism in this year's *Medical Annual*, states that Braid ttached great importance to the use of suggestion, and employed constantly in his practice. I have no doubt this statement is orrect, but in his writings—by which the ordinary student must idge of his system—suggestion is rarely mentioned, and occupies nly a very subordinate place.

Dr. Liébeault is the most unassuming and retiring of men, and e gratefully acknowledges his indebtedness to Braid, but I think hat any one who compares the writings of the Nancy School ith those of Braid will see that to Liébeault belongs the credit promulgating the theory, which is now generally accepted as ue, that verbal suggestion is the chief factor in the treatment, nd that hypnotism is merely the psychical preparation for rendering it effectual. The article referred to only professes to give brief summary of the present position of the subject.—I am, etc.,

THE WRITER OF THE ARTICLE.

THE SURGICAL TREATMENT OF IMPACTED LABOUR.

SIR,—Agreeing, as I do, with a great part of Mr. Fisher's letter the JOURNAL of April 19th, on "the surgical treatment of impacted labour," yet I must beg to differ from him when he mpugns the accuracy of Mr. Lawson Tait's statistics of the infant ortality of the forceps delivery. Mr. Tait speaks of "the morlity of the fœtus being well known to be 1 in 7 or 8" in these ses. Now this estimate agrees very closely with that which is sed upon my own experience. When the British Medical Assoation met in Bath in 1878, I read a paper on "The Effects of rceps Delivery on the Infant."[1] In this I stated that, since mmencing practice, I had used the forceps in 153 cases of difficult and protracted labour simply, without reckoning complicaons such as hæmorrhage, convulsions, prolapse of cord, etc. ere were 23 stillborn children, or rather less than 1 in 7 cases (Mr. Tait's estimate). This estimate, however, is considerably less than the mortality given by Dr. Churchill, in 1855, as the average mortality of British and foreign forceps cases—namely, 1 in 4½ children. I then entered into details respecting the cause of the child's death in all my cases. I found that in 17 out of the 23 death appeared to have been caused by pressure on the head, produced either by the natural efforts or by the forceps, or probably in most cases by both combined. In 4 cases the death of the child appeared to have been due to a cause not generally recognised by obstetric authors. "In one of these I observed that, when the child was born, the end of one blade of the forceps was compressing the cord (which happened to be round the child's neck) against the angle of the jaw." The other 3 cases were similar to this one. Here, then, we have a source of danger to the child, arising simply from the use of the forceps, and which cannot be guarded against by any amount of skill. Nothing is more common than coiling of the cord round the child's neck, and it is a condition which cannot be recognised by ordinary vaginal examination before applying the forceps. If, therefore, one blade of the forceps should pass just an inch too far beyond the ear, it would be very likely to cause such an accident, especially if the head be so tight that the ear cannot be felt; or present unfavourably, for instance, with the forehead in the anterior semicircle of the pelvis; or if the head be much altered in shape and elongated by protracted labour." I then remarked: "My own experience, therefore, leads me to coincide with the conclusions of Dr. Galabin, that it has not been shown that the majority or any considerable proportion of the stillbirths which now occur in Britain would be preventable by a more timely use of the forceps." In the discussion which followed my paper, the President (the late Dr. McClintock), however, "considered that more children had been saved by the early use of the forceps than destroyed," but he did not adduce any statistics to support his opinion. Since 1878, I have used the forceps in 58 cases. In these there were 8 stillborn children—death being due to pressure on the head in 4, to malformation in 1, to hydramnios in 1, in 1 to pressure on the cord by the forceps, as mentioned above, and 1 child was born putrid. So that, in these 58 additional cases, there were 8 infantile deaths, or rather less than 1 in 7, as before, which is a striking corroboration of Mr. Lawson Tait's statistics.—I am, etc.,

Clifton. J. G. SWAYNE.

[1] See JOURNAL, September 28th, 1878.

THE UNIVERSITY OF LONDON AND DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—I should like to endorse the remarks of "An Undergraduate" of April 12th with regard to the Final M.B. I did my Inter. M.B. five years ago, and, a hospital appointment presenting itself, I was advised to accept it rather than proceed at once to the Final M.B.; and for the next three years I did hospital work, when a death vacancy occurred in a firm and I was advised to secure the opening, and, after being at work over two years, am sure that this was the best plan. Now I am waiting to see what will ultimately be done with regard to the M.B.

"J. L. B." thinks it to be "a matter of taste" as regards the "ten hours-a-day reading man." I can think of many, and good men, too, who read that number, and, some time before the examination, exceeded it.

In my own case, a fairly typical one, in the midst of the work of a growing practice, reading all the subjects at once means a great deal more than ten working hours; and "J. L. B." and those holding his views would, under such circumstances, rapidly see the necessity for candidates being given credit for the subjects they passed in. "J. L. B." wishes he had gone to Cambridge. Surely he cannot know that all the subjects need not be taken up at once there.—I am, etc., INTERMED. M.B.

THE PROPHYLAXIS OF CANINE DISTEMPER.

SIR,—It will be matter for surprise to many breeders of dogs to find cow-pox recommended as a preventive of canine distemper, either as an unfailing remedy or a novelty; and considerable astonishment will be felt by medical men at the account of the curing of a collie dog by vaccination, although distemper had actually commenced. What would be thought of a man who vaccinated after small-pox had set in, and who reported that the "result" was that the case "rapidly got well?"

Vaccination against distemper was instituted by Dr. Jenner, who published the first reliable English description of the disease in the *Medico-Chirurgical Transactions*, March 21st, 1809.

When Delabere Blaine wrote his work (the first in any language) on the dog, in 1824, the practice was already disfavoured, and, though for a time it was fondly fostered by a few, it died.

Pages of learned argument have been penned with the view of likening distemper to diphtheria, typhus, and enteric fevers, the comparisons uniformly approaching paralogism rather than parallelism. Dr. Harley compares distemper with small-pox. Suffice it to say that small-pox occurs in the dog, and is accompanied by the usual papular, vesicular, and pustular eruption. It has been well described by Fleming,[1] Barrier, Moore,[2] Leblane and Youatt.[3]

Professor Woodruffe Hill, F.R.C.V.S.,[4] states that "between distemper and small-pox there is not the slightest analogy," and I wish to point out further that, while small-pox leaves no sequelæ, distemper, far from "wearing itself out within three weeks' time," is the chief obstacle to the successful rearing of high-bred puppies, on account of the extreme debility which bad attacks leave behind, not to mention the too frequent occurrence of nervous complications, such as paralysis, chorea, and epilepsy.

The fallacious experience often acquired by the owner of a number of dogs is facilitated by the fact that distemper is notoriously irregular in its visitations, frequently absenting itself from a particular kennel for many years; and, finally, judging from the analogous cases of hydrophobia, glanders, tuberculosis, scarlet and enteric fevers, if distemper corresponded to any human malady, canine keepership would be attended by new embarrassment.—I am, etc.,

HENRY N. OGLESBY.

York.

NAVAL AND MILITARY MEDICAL SERVICES.

GRIEVANCES OF THE ARMY MEDICAL DEPARTMENT.

THE following circular has been forwarded to us by the Registrar of the Royal College of Surgeons of Ireland:—

"ROYAL COLLEGE OF SURGEONS IN IRELAND.

"*Grievances of the Army Medical Department.*

"The President, Vice-President, and Council of the Royal College of Surgeons having carefully investigated the grievances of the army medical officers, beg to submit the following statements, and trust that you will assist them in having their recommendations carried out:

"As the College was chartered for the purpose of providing a sufficient number of properly educated surgeons for the army and navy, and has so furnished the largest number of medical officers to the army, the President and Council beg to submit the following statements for the consideration of Her Majesty's Government, Members of Parliament, other medical licensing bodies, and all who take an interest in the well-being of the medical profession and of the army.

"1st—That only a high state of efficiency in the Army Medical Staff can bring within reach of the soldier the benefits of the great advances recently made in surgery and medicine.

"2nd—That a qualification to practise surgery and medicine can now be obtained only by the expenditure of an amount of money, time, and labour, greatly in excess of what was required when the warrants that define the position of army medical officers were issued.

"3rd—That it is within our knowledge that wide, and, we believe, well founded, dissatisfaction exists amongst the officers of the Army Medical Staff as to some of the conditions of that service, and that consequently its efficiency from a professional point of view is likely to be impaired.

"4th—That having inquired most fully into the matter we have come to the conclusion that the causes of discontent can be best remedied, and the efficiency of the service best secured, by making the Medical Staff into a corps such as the Royal Engineers, and by giving the officers substantive rank, their command of course being limited to members of their own corps, patients in hospital, and officers and men attached for duty.

"If this recommendation were carried out we believe that the prolonged discontent of the Army Medical Staff would at once come to an end, for we have traced it clearly to the fact that the officers do not consider themselves as placed on terms of equality with those of other branches of the service.

The President and Council of the College submit the following subjects, which might advantageously be made the occasion of questions addressed to the Secretary for War, and they solicit co-operation in bringing these subjects under the notice of Parliament:

1. What are the duties of medical officers with bearer companies in the field; and are they exposed to the same dangers as other officers of the corps they accompany?
2. Are members of the Medical Staff exposed in the field to greater dangers than are the members of the Army Service Corps, who enjoy substantive rank in the army?
3. To move for a return showing the percentage of mortality from wounds and sickness among officers of the Army Medical Staff, and the same for officers of other branches of the service during the late Afghan, South African, and Egyptian wars.
4. Was the Victoria Cross conferred on any medical officers of the army during recent campaigns, and if so, under what circumstances?
5. To move for a return showing the number of medical officers and of combatant officers of each rank engaged in Afghanistan, South Africa, and Egypt, and the honours conferred respectively on the one and the other.
6. Why, in the matter of sick leave, are medical officers treated differently from other officers?
7. Why, if it has been considered expedient to confer substantive rank on the officers of the Commissariat and Transport Corps, it is considered inexpedient to do the same for the officers of the Medical Staff?

IN the *Dublin Evening Mail* of April 10th is a letter signed "F.R.C.S. on the Army Medical Service," in which its grievances, following on the abolition of relative rank, are very well set forth. The writer says:—

"The action of Mr. Stanhope has placed the Medical Service in a difficult position. It must either tamely submit to the grievances from which it is acknowledged to suffer, and which Mr. Stanhope's Special Commission upon the evidence of such experienced officers as General Sir Donald Stewart and others recommended to be redressed, or it must seek redress by aid of more pungent methods than old-fashioned memorials and deputations. It has determined to adopt the latter course, and now appeals for aid to the colleges of the kingdom. The Royal College of Surgeons, Dublin, has already responded, and has appointed a committee to consider the questions at issue. Its example will doubtless be followed by all the colleges of the kingdom, and by the British Medical Association and its branches, and then, with aid which cannot be trifled with, the service may hope for such Parliamentary action as will obtain for it the concessions it asks for..... In order to facilitate the combined action which may now be looked for on the part of the colleges, the service is recommended to formulate its demands in clear and definite terms and not to encumber them with points of detail or of minor importance which can be laid hold of and used to mask the more vital questions that exist.....Let it adopt generally the suggestions made by "Cantab," in the JOURNAL of April 5th, and ask first for rank, secondly for the formation of the service into a Royal corps on the model of the Royal Engineers, and thirdly for the same treatment as combatant officers receive in matters of sick leave, foreign service, etc."

The above quotations are so well abreast of the point which the controversy has now reached that we commend them to the serious consideration of all interested in its final issue.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION. — The Medical Officers Proficiency Class will, we are asked to state, commence on Monday, May 12th, at 4 30 P.M. Applications to join the same should be made to R. A. Sleaman, Hon. Sec. V.A.S.I., 7, St. Benet's Place, E C.

MILITARY OPINION OF MEDICAL OFFICERS.

M.D. writes: The Military Secretary, Sir G. Harman, states (Q. 249, Report), as his "experience of medical officers, or many of them, their great aim is to appear what they are not, affecting to be combatant officers instead of being proud of the profession to which they belong." But, supposing so, is this entirely the fault of medical officers? Are they not constantly spoken to and reminded of their inferiority as being only "doctors," no matter what their relative military rank? They are treated as nondescript amid their military surroundings. How can a man be proud of a humiliated professional position? Let "my military advisers" mend their ways and treat medical officers as equals, and the complaint of their affecting to be what they are not will disappear.

*** Medicine must ever rank in the eyes of humanity as more noble than mere soldiering; but that is not the point. When it is inseparably bound up with soldiering, in a body like the army, where only military rank and title

[1] *Veterinary Sanit. Sci.*, vol ii.
[2] *Dis. of Dogs.*
[3] *On the Dog.*
[4] *On the Dog*, 3rd edition, 1888.

give honour and precedence, then medical officers have a right to demand due military recognition of themselves as men. They do not want to be mistaken for what they are not, but sharing as they do in the dangers of the battlefield they claim to be military as well as medical, and demand due recognition of the fact. Since the abolition of purchase soldiering has become, as it ought to be, more a career and a profession; but the leaders of our army have, unfortunately, also tried to make it a mere "fighting caste," to the exclusion of the departments without which it could not fight at all. This must be resisted in our voluntary army, which is nothing if it is not constitutional. The time has gone by for caste in every form in this free country, and cannot be tolerated in the army any more than in other departments of the State. It is the pure caste-spirit which prompts such answers as our correspondent quotes from the report.

INDIAN TOURS.

NOTUS writes: No economy whatever will be effected by exacting the one year more in India. The relief of medical officers costs very little; the Indian troopships must run, and it will be no economy to run them with empty berths, or fill the same with mere "indulgent" passages. Let this be brought forward in Parliament.

INCREASE OF FOREIGN SERVICE.

.S. writes: Never was greater injustice inflicted than this; medical officers already spend three-fourths of their service abroad. The order extending foreign service was tardily applied to the other departments, and already the Army Service Corps have dropped out of it. Officers of the Ordnance, Pay, and Royal Engineers have six or seven years at home, while medical officers have about two, so that there is no parallel between them. The Secretary of State for War stated that the "medical officers' tours of foreign service were extended in order to prolong their home service;" but this is a mere blind in order to carry out some small and temporary economy, as no one can show how it can so act. Let the tours of foreign service be extended if they can be equalised with home service, but not otherwise. Our mortality and breakdowns are already sad enough, and we trust to your powerful influence to mitigate our lot.

*** By no possibility can tours of home and foreign service be equalised unless establishments at home and abroad are equalised, and a sufficient reserve be maintained at home, in addition, to meet the inevitable foreign casualties.

MILITARY RECOGNITION.

ESPAIR writes: I have hoped against hope that Mr. Stanhope would not stultify himself by rejecting the Report. Now he has done so, and refuses to redress the grievances which the Commission recognised. I would suggest a petition to the following effect:—

From all ranks of the department praying Her Most Gracious Majesty that her loyal and dutiful Medical Staff might receive that consideration and justice which has been denied in the rejection of the Report.

THE RANK QUESTION.

M. S., writing from India before Mr. Stanhope's decision on the Report of the Commission was made known, says: The delay and inaction seem to indicate he means to do nothing. The Indian Medical Service is at one with the Medical Staff in their uphill fight. Personally, the titles question is not vital to him, but he feels positively angry at the illiberal and unwise treatment of medical officers in the matter of definite rank and titles. It is most unfortunate that the Secretary of State for War has hitherto treated their reasonable demands in the way he has done. Medical officers are like men fighting with their backs to a wall, and overpowering forces in front of them, but will succumb first rather than accept humiliating and unworthy terms. No Minister or other person has a right to place a body of loyal and honourable officers in their position. The action of superiors is of course largely reflected among subordinates, and the consequence is much friction between medical and combatant officers; the former, indeed, are only non-combatant in being unqualified to conduct military operations, not in the sense that they fully share in the danger of the battlefield, as witness the recent bestowal of the Victoria Cross on medical officers for service in the field. The invidious treatment of medical officers in the matter of rank and titles compared with paymasters and commissariat officers is simply disgraceful. I voted for a compound title, but now will not be satisfied with anything under substantive rank. We can have no compromise when even modest demands are treated with contempt.

THE INDIAN MEDICAL SERVICE AND THE NETLEY SCHOOLS.

HE fate of Netley, as far as concerns the Indian Medical Service, or, more accurately, the fate of the Indian Medical Service as far as concerns Netley, is, says the *Indian Medical Gazette*, still trembling in the balance. Our contemporary expresses a strong opinion, founded on personal experience and profound conviction, that the education and training obtainable at Netley are of the greatest use to medical officers serving in India, and of corresponding value to the Government which employs them, and to the communities placed under their professional care. We have not, it adds, during the progress of the discussion affecting this matter, encountered any fact or reason which would induce us to modify or alter our opinion as to the utility and value of the Netley course, nor persuade us to believe that any substitute or imitation can be organised in India without a very large outlay of money and the sacrifice of many features which can be best or only preserved in a school open to the whole of the military medical services of the empire. The teaching imparted at Netley, which may be briefly described as the adaptation of medical and sanitary science to the requirements of soldiers in peace and war, cannot be obtained elsewhere, and the initiation into the peculiarities of military life and practice, which is here systematically and quietly acquired, fits men to assume their proper position and duties without blundering or friction. The *Indian Medical Gazette* concludes by saying that while free to admit that the Netley course may be capable of being in many respects mended, it would be a misfortune to the Indian Medical Service if it were nded.

THE NAVY.

FLEET-SURGEON JAMES DUNLOP, M.D., has been placed on the retired list. His commissions bear date: Surgeon, November 9th, 1868; Staff-Surgeon, August 13th, 1880; and Fleet-Surgeon, March 11th, 1890.

Staff-Surgeon BERNARD RENSHAW has been promoted to be Fleet-Surgeon from April 9th. His Surgeon's commission bears date August 17th, 1869, and that of Staff-Surgeon, March 23rd, 1880.

The following appointment has been made at the Admiralty: JOHN J. H. LEALY, to be Surgeon and Agent at Courtmacherry.

The following deaths have been reported to the Admiralty since December 20th, 1889: Deputy Inspectors-General CHARLES K. NUTT, WILLIAM W. BAYNES, and ARCHIBALD G. COLQUHOUN; Fleet-Surgeons JOHN MOODY and ANDREW GRAHAM, M.D.; Staff-Surgeons THOMAS LOANE, M.D.; Surgeon HENRY J. GORDON.

Staff-Surgeon J. A. ROBERTSON, M.B., is promoted to be Fleet-Surgeon from March 30th. His commission as Surgeon dates from February 16th, 1870, and that of Staff-Surgeon from March 23rd, 1880.

MEDICAL STAFF.

SURGEON-MAJOR W. H. CLIMO, M.D., ranking as Lieutenant-Colonel, is promoted to be Brigade-Surgeon, *vice* J. Fleming, M.D., F.R.C.S.Edin., retired. Dated March 19th, 1890. Dr. Climo's previous commissions are dated: Assistant-Surgeon, April 1st, 1861; Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1876. He is at present serving in the Bengal Establishment in medical charge of the station hospital at Sealkote, but has no war record.

Surgeon-Major W. F. SAMUELS has accepted retired pay. He entered the service as Assistant-Surgeon, March 31st, 1868; became Surgeon, March 1st, 1873; and Surgeon-Major, March 31st, 1880. He served in the Ashanti war in 1873-74, and has the medal granted for that campaign.

Surgeon V. E. TRAVERS-SMITH, M.D., has resigned his commission, which was dated July 28th, 1886.

The Christian names of Surgeon FRANKLING are DENHAM FRANCIS, and not as stated in the *Gazette* of September 3rd, 1880.

Brigade-Surgeon I. M'D. O'FARRELL, serving in the Bombay command, in medical charge of the station hospital at Nusseerabad, is appointed to the medical charge of the station hospital at Kurrachee.

Surgeon-Major R. H. QUILL, M.B., serving in the Bombay command, is appointed to the medical charge of the station hospital at Deolali.

Surgeon J. W. H. FLANAGAN, serving in the Bombay command, is transferred from general duty, Mhow, to the medical charge of the station hospital at Nusseerabad.

Surgeon J. B. W. BUCHANAN, M.B., serving in the Bombay command, is transferred from general duty at Poona to general duty at Mhow.

Surgeon E. WIGHT, who is serving in the Madras Establishment, has been awarded by the Royal Humane Society a testimonial on vellum for saving a private soldier from drowning at Bangalore on March 5th. With others the man was swimming his horse, which became restive and threw him into the water. Surgeon Wight plunged in with all his clothes on, swam to him, and succeeded in bringing him to the bank.

Surgeons-Major H. G. GARDNER, M.B., and C. F. POLLOCK, M.B., who are serving in the Bengal command, have leave of absence, the former for six months on private affairs, the latter to England for a period not stated on medical certificate.

INDIAN MEDICAL SERVICE.

SURGEON-GENERAL GEORGE BIDIE, M.B., C.I.E., Madras Establishment, Surgeon-General with the Government of Madras, is permitted to retire from the service from April 11th on a pension of £700 a year, *plus* the additional pension of £250 a year. Beginning his career as Assistant-Surgeon, February 20th, 1856, he rose to be Surgeon-General, October 9th, 1886. He was engaged with the troops against the rebels during the Indian Mutiny in 1857-58, and has the medal granted for that campaign. He was nominated a Companion of the Order of the Indian Empire, January 1st, 1883.

Deputy Surgeon-General J. M. DONNELLY, M.D., C.B., Madras Establishment, is promoted to be Surgeon-General with the Government of Madras, *vice* Surgeon-General Bidie. His first commission, as Assistant-Surgeon, dates from July 3rd, 1856; that of Deputy Surgeon-General from April 5th, 1885. He was in charge of the Medical Department during the campaign in Burmah in 1885-86, was mentioned in despatches for his services, received the thanks of the Government of India, nominated Companion of the Bath, and received the medal with clasp. He is now in his 60th year, having been born November 30th, 1830.

Brigade-Surgeon D. J. MCCARTHY, M.D., Madras Establishment, who entered the service as Assistant-Surgeon, March 31st, 1865, and became Brigade-Surgeon, August 1st, 1887, has been transferred to the half-pay list from April 5th.

Surgeon-Major C. J. W. MEADOWS, Bengal Establishment, Civil Surgeon of Backergunge, is appointed to act as Civil Surgeon of Moorshedabad, during the absence on leave of Surgeon-Major E. Sanders.

Brigade-Surgeon H. B. PURVES, Bengal Establishment, Civil Surgeon of Patna, is appointed Civil Surgeon of Howrah.

Surgeon-Major E. G. RUSSELL, M.D., Bengal Establishment, officiating Civil Surgeon of Rajshahye, is appointed Civil Surgeon of Patna, *vice* Brigade-Surgeon Purves.

Surgeon W. R. EDWARDS, Bengal Establishment, officiating Civil Surgeon of Nuddea, is appointed Resident Surgeon at Eden Hospital, Calcutta, *vice* Surgeon J. R. Adie

Surgeon D. G. CRAWFORD, M.B., Bengal Establishment, Civil Surgeon of Jessore, is directed to act as Civil Surgeon of Purneah, during the absence on deputation of Surgeon-Major R. L. Dutt, M.D.

Surgeon-Major J. O'BRIEN, M.D., Bengal Establishment, officiating Civil Surgeon of Darjeeling, is confirmed in that appointment.

Surgeon-Major G. PRICE, M.D., Bengal Establishment, officiating Civil Surgeon of Burdwan, is confirmed in that appointment.

Brigade-Surgeon G. D. RIDDELL, Madras Establishment, has retired from the service on the ordinary pension of £700 a year, *plus* the extra pension of £100 a year. He entered the service as an Assistant-Surgeon, February 10th, 1859, and rose to be Brigade-Surgeon, October 20th, 1885. He has no war record.

The *Gazette of India* of March 29th announces that Surgeon-Major G. P. MACKENZIE, M.B., of the Bengal Establishment, Senior Medical Officer at Port Blair, has been granted one year's furlough, on medical certificate, from Febru-

ary 20th; that officer, however, died on March 2nd on board the steamer *Peshawur* on the homeward voyage.

Surgeon-Major W. DUNCAN, M.B., Bengal Establishment, Medical Officer 10th Native Infantry, has leave of absence for one year, on medical certificate, and Surgeon J. K. CLOSE, M.D., Bengal Establishment, has leave to proceed out of India, on medical certificate, for 182 days.

It is announced that an examination will be held in London in August, 1890, for twelve appointments as Surgeon in the Indian Medical Service. Applications should be made to the Military Secretary at the India Office, who will hereafter publish the exact date of the examinations.

THE VOLUNTEERS.

SURGEON-MAJOR R. GOODING is transferred as Surgeon-Major from the 1st Kent Artillery (Eastern Division, Royal Artillery) to the 2nd Kent Artillery.

Acting-Surgeon W. L. CHUBB is transferred as Acting-Surgeon from the 1st Kent Artillery (Eastern Division, Royal Artillery) to the 1st Cinque Ports Artillery.

Surgeons-Major R. C. M. DAVIES and A. R. TICEHURST are transferred as Surgeons-Major, and Acting-Surgeons C. ASHENDEN, F. M. WALLIS, and F. H. SHAW as Acting-Surgeons, from the 1st Cinque Ports Artillery (Eastern Division, Royal Artillery) to the 2nd Cinque Ports Artillery.

Surgeon-Major A. M. SANDERSON, 1st Midlothian Artillery, has resigned his commission, with permission to retain his rank and uniform. His Surgeon's commission is dated April 26th, 1865; that of Surgeon-Major February 1st, 1889.

Acting-Surgeon W. A. CASKIE, M.B., 1st Ayr and Galloway Artillery, has resigned his appointment, which was dated June 28th, 1882.

Surgeon J. W. ANDERSON, M.D., and J. WHITSON, M.D., 1st Lanarkshire Artillery, are promoted to be Surgeons-Major, ranking as Majors; and Acting-Surgeon J. A. ADAMS, M.D., of the same corps, is promoted to be Surgeon.

Acting-Surgeon J. MACKAY, 6th Volunteer Battalion Royal Highlanders (late the 1st Fifeshire), is promoted to be Surgeon.

Acting-Surgeon R. POLLOCK, M.B., 3rd Volunteer Battalion Highland Light Infantry (late the 8th Lanarkshire), is also promoted to be Surgeon.

Mr. JAMES BUNTON BARR, M.B., is appointed Acting-Surgeon to the 1st Volunteer Battalion Argyll and Sutherland Highlanders (late the 1st Renfrewshire).

Surgeon and Surgeon-Major JOHN ARMSTRONG, 5th Volunteer Battalion Manchester Regiment (late the 20th Lancashire), is appointed Brigade-Surgeon (ranking as Lieutenant-Colonel) to the Manchester Brigade Infantry Volunteers, dated April 23rd.

ARMY MEDICAL RESERVE.

SURGEONS GEORGE HASTINGS and WILLIAM TICKLE WHITMORE, F.R.C.S.Edin., of the 3rd London Rifle Volunteers, are appointed Surgeons-Major (ranking as Majors), from April 23rd.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SUPERSESSION.

M.R.C.S. writes: A. and B. are two doctors practising in the same town. A., owing to illness consequent upon an accident, is obliged to go away from home, and leaves his practice in charge of his qualified assistant C. C. is called in by one of A.'s patients to attend his child, who has met with an accident. The child's father, not being satisfied with the progress made, after a few days requests C. to meet B. in consultation. C. does so, although the relations between A. and B. are strained. After remaining with the father and B. for a reasonable time, as the latter makes no move, C. takes his departure, B. remaining behind. The next morning C., in paying his visit, is told by the father that his services will no longer be required, as he wishes B. to take entire charge of the case. This B. does without holding any further communication with C.

*** With reference to the above irritating case of supersession, we may note that, although the right of a patient to change or to discard his medical adviser is indisputable, it is, like other rights, restricted by the legitimate claims of others. A practitioner is justly entitled to expect that he shall not without reasonable and courteous explanation be superseded by another, and especially by one called in consultation, the duty of which latter in the case in question would, as we view it, have been wisely fulfilled by declining further attendance except in consultation, unless the father of the patient insisted on dispensing with C.'s services, under which circumstances the superseding practitioner B. should, ere taking charge of the case, have satisfied himself that an intimation to that effect had been duly conveyed to C. We may further note that, in view of the strained relations existing between A. and B., it was impolitic on the part of C. to withdraw prior to the retirement of B., and contrary, moreover, to the usual rule and etiquette.

MEDICAL WITNESSES AT INQUESTS.

IN the JOURNAL for March 8th an account was given of an inquest held by Mr. F. S. Butcher, the district coroner for Bury, at which Mr. Horrocks, the medical attendant of the deceased, had been requested by him (the coroner) to attend. Mr. Horrocks, it appears, had, before the inquest was ordered, given a certificate that the deceased died from natural causes, namely, pneumonia, and though this was found to be correct by the *post-mortem* examination subsequently made on the coroner's order by himself and Mr. Mellor, and a verdict in accordance returned, yet the coroner, at the conclusion of the inquest, thought proper to say that the certificate of death had been very improperly given, and that he felt bound to mark his sense of the mistake by disallowing Mr. Horrocks's fees.

Mr. Horrocks acted upon advice given, to write to the coroner and request payment of the fees, and then if not paid to take action for their recovery in the county court. The coroner, when written to, offered to bring the case before the Finance Committee of the County Council for them to deal with. Mr. Horrocks replied that such a course was unnecessary, and that legal action would be commenced if the fees were not paid. The case was entered for trial in the Bury County Court, soon after which half the amount claimed, namely, one guinea, was paid into court by the coroner. This did not satisfy Mr. Horrocks, who informed the coroner that the case would go for trial if the whole claim was not paid. We are glad to hear that the remaining guinea has now been paid into court. The coroner appears to have laboured under some mistake, which we understand has now been sufficiently acknowledged.

ADULTERATED CHEESE.

MR. PETER FYFE, Sanitary Inspector (Glasgow) writes: I have just seen the leader on adulterated cheese in the JOURNAL of April 12th. The case you bring under observation is very interesting and important. It is quite certain that enormous quantities of these so-called "margarine" cheeses come into our market from America, and are palmed off on the public as other than skimmed milk cheese. The case you cite presents in its legal aspect a strong antithesis to two cases which lately came before the Sheriff Court here and which, on account of the sheriff's decision being adverse to the prosecution, caused some critical comment in the local newspapers. In order to exhibit the strange vagaries of the law, and show your readers, and particularly our lawgivers, that such adulterations may, notwithstanding the present law go on in various parts of the country, I give you the notes of these cases.

The article was sold on September, 1888, simply as "cheese," the price being 4d. per lb. It was found to contain 14 per cent. of fat which was not butter fat, 12½ per cent. of butter fat, 47½ per cent. of caseine, the rest being mineral matter and water. The case was tried before Sheriff Guthrie in December, and, after considerable evidence had been had, the Sheriff gave the following note upon dismissing the cases:

"He was satisfied," he said, "that the cases fell under the proviso in the 6th Section of the Food and Drugs Act, 'where any matter or ingredient not injurious to health has been added to a food or drug, because the same is required for the production or preparation thereof, as an article of commerce in a state fit for carriage or consumption.' That must be read as meaning that it was intended to prepare the article for consumption with reference to the price that was to be paid for it and the purpose for which it was intended. It was quite clear that there was not in this case anything done fraudulently to increase the bulk, weight, and measure of the food or drug or conceal the inferior quality thereof. What the result of another prosecution for a similar case might be it would be wrong for him to prognosticate; but from the evidence it was clear that this case did not fall within the section."

Here it will be seen the decision is based upon the assumption that, so long as an article is sold at a cheap price, and is not injured in its quality, any ingredient foreign to it *per se* may be introduced either by the manufacturer or by the vendor. This appears to me to be so foreign to the spirit of the Sale of Food and Drugs Act that I make no apology for asking you to give the matter publicity. In our view, an article or substance is either adulterated or not adulterated, price having nothing whatever to do with the question provided it can be established that the said article or substance is a natural product.

*** We think that our correspondent's views as to adulteration are correct. The attitude of the Sheriff is certainly remarkable, but not more so than that of many magistrates who are called upon to give decisions in cases taken under the Sale of Food and Drugs Act. It is greatly to be regretted, of course, that these gentlemen do not clearly understand the meaning of adulteration.

OBITUARY.

PROFESSOR MARINO TURCHI, NAPLES.

PROFESSOR MARINO TURCHI, Dean of the University of Naples, who died on March 3rd, was a notable figure in Italian medicine for more than half a century. He was born in the Abruzzi in 1808, and went to Naples in 1829 to complete his studies. He was chosen by his master, Luigi Sementini, to assist him, and threw himself into the work of teaching with characteristic energy. He seems also to have found time for politics, for in 1848 he was elected a member of the Neapolitan parliament. The turn of the political tide, however, soon threw him back into professional work. His especial merit is that he was the first to insist on the supreme importance of hygiene, and attention to sanitary details was the main feature of his medical practice. In 1861 he presented to the Municipal Council of Naples a report on the hygiene of that city, which is one of the early landmarks of the career of sanitary reform in which Italy is now at last entering in earnest.

In 1863, Turchi followed up that report with another on the water supply and sewerage of Naples, in which he sketched out a scheme of improvement which has since been to a large extent carried into execution.

Turchi was a practical philanthropist as well as a sanitary reformer, and to his initiative was due the foundation in Naples of an association which has solved the problem of the housing of the working classes in a satisfactory manner. The late King Victor Emanuel thought very highly of him, and often asked his advice as to projects for the improvement of Naples and the benefit of the poorer classes in that city. He was a member of numerous scientific societies, both Italian and foreign, and had many honorary distinctions conferred on him without seeking for them.

GEORGE TATHAM, M.R.C.S.Eng., L.S.A., J.P.

. TATHAM, whose death we regret to announce, was a widely pected inhabitant of Brighton, who occupied for some years a t on the magisterial bench. He had been in failing health for ne months, but, nevertheless, the news of his decease came as a inful surprise to the large circle of friends he had gathered und him during his long and successful career as a medical prac- ioner in Brighton. Mr. Tatham was in his 82nd year. He studied Guy's Hospital, and became in 1831 a licentiate of the Society of othecaries, and in 1832 a Member of the Royal College of Sur- ons. He was at one time surgeon to the North Devon Hospital, d subsequently practised in Wandsworth in partnership with Mr. Howell. From Wandsworth he passed, somewhere about the ar 1842, to Brighton, where he carried on an active practice for irty years at 44, Old Steine, and filled at one time the honour- le position of President of the Brighton and Sussex Medico- irurgical Society. In 1874 Mr. Tatham took Mr. Giffard into rtnership, and in the following year retired finally from prac- e, and for a while left Brighton and resided at Cuckfield, where remained for about ten years, afterwards returning to Brighton, d taking up his residence at 7, Marlborough Place, where on ril 7th he died. As a magistrate for Brighton he was very siduous in the discharge of his duties, being, while his health rmitted him, among the most frequent attendants at the Bench. e was a member of the Masonic body, and his kindly dis- sition won him many friends, by whom his loss will be deeply gretted.

INDIA AND THE COLONIES.

VICTORIA.

IE SANITARY CONDITION OF MELBOURNE.—Melbourne has cently been the scene of one of those stormy conflicts which em inseparable from inquiries into the public health question of towns, large and small. It is impossible to read the Aus- alian papers without being forcibly struck by the remarkable milarity between the manner in which sanitary matters are dis- ssed at home and in the Antipodes. In both hemispheres the ews expressed by either party in such debates are so dogmatic d absolute, and so entirely irreconcilable with each other, that is difficult for any but those who have had personal experience such struggles to discern on which side the balance of truth d justice is to be found. That the sanitary condition of Mel- urne has for a long time past been in a most unsatisfactory con- tion is clearly shown by what may be regarded as the most fallible indicator of faulty sanitation—the undue prevalence of phoid fever. A special commission has recently been investigat- g the whole matter, and from this report it appears that in any cardinal points the existing provisions for maintaining the ublic health of the city are of a most imperfect character, and ry inferior to those of Adelaide and Sydney. Thus we learn at the slaughterhouses are ill-appointed, and conducted upon ncleanly principles; that the method of sewage disposal is of the ost objectionable kind; and that the water supply is unfiltered, ghly impregnated with organic matter, and liable to dangerous ntamination. As regards the matter of sewage disposal, reforms e already in progress, and the services of Mr. James Mansergh, E., have been called in. Public interest has, however, been iefly excited in connection with the question of the water pply, which has given rise to a most lively discussion in the lumns of the Melbourne papers. This discussion originated in e highly sensational discovery by Mons. A. de Bavay, of the ctoria Brewery, of a microbe which he believed to be the phoid bacillus in the town water supply. M. de Bavay's investi- tions being of a wholly unofficial character were not treated th such confidence and respect by the Commission as their thor thought they deserved; in point of fact, the services of other bacteriologist, Dr. Oscar Katz, of Sydney, were secured the Commissioners to investigate the matter independently, th the result that this experimenter failed to find the typhoid cilli in any of the numerous samples which he submitted to ltivation; he also, we learn, arrived at the conclusion that the crobe isolated by M. de Bavay, though morphologically closely sembling the typhoid bacillus, yet presented certain differences its mode of growth, and was not identical with it. What- er may be the real truth as to the presence or absence of typhoid bacilli in the Melbourne water—and this it is impossible for us to determine—it is particularly gratifying to learn that the colony possesses such skilful bacteriologists as M. de Bavay and Dr. Katz, whose investigations appears to have been conducted on the most modern lines, and with a full knowledge of the most recent work on the typhoid bacillus. Indeed, had the same question arisen in any capital of Europe, the investigation could not have been carried out on more approved principles. We cannot, however, accept the doctrine that a water supply is to stand or fall according as the typhoid bacillus is undiscoverable or not in its mains and service pipes; the really important point to ascertain is whether the supply is exposed to sewage contamination or not, and, in the event of its being so exposed, then, however often the typhoid bacillus may have been sought for in vain, such negative evidence is quite unavailing to establish the safety of the supply until the possibility of sewage contamination has been removed. This the Commissioners seem to recognise, although the opinion which they pass upon the present water supply appears to be wanting in clearness. There are obviously two cardinal questions which must be answered respecting a water supply; first, Is the source an unimpeachable one? and, secondly, Does the water undergo contamination in passing through the reticulation of mains and service pipes? Now these questions are not clearly answered by the Commission. If there is contamination in the reticulation, the present water supply becomes utterly unsafe, whilst any central measures, such as filtration or precipitation, intended to improve the general quality of the water, become altogether unavailing as long as there is contamination during distribution. But the Commissioners, on the one hand, recommend that "filtration works on a large scale would thus greatly purify the water, and would probably cause any typhoid germs which gained access to it to perish very rapidly," whilst, on the other hand, they deprecate M. de Bavay's suggestion of adding lime to the reservoir, saying that "the contamination, whatever it is, occurs in the reticulation." It is to be hoped that the citizens of Melbourne will demand that these vital questions concerning their water supply shall receive more logical treatment than they appear to have hitherto obtained.

INDIA.

DR. CARTER, late principal of the Grant Medical College, having offered Rs.10,000 for the foundation of a lectureship in Physiology, Pathology, and Therapeutics, to be called the "Lord Reay Lectureship," the amount has been accepted.

MEDICAL AID FOR INDIAN WOMEN.—The *Indian Spectator* points out that the origin of the National Association for Providing Medical Aid for the Women of India was a touching message from the Maharani of Punnah to the Queen, who, says the journal referred to, was so affected by the appeal for lady doctors from England that Her Majesty made a personal request to the Countess of Dufferin to inaugurate such a movement in India, and to do all that one in her position could to relieve the sufferings of Indian women. The appeal of the Maharani of Punnah, and, more so, the motherly response made to it by the Queen-Empress, are worthy of the lasting gratitude of our people.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, April 17th.

Brompton Cemetery.—Mr. JACKSON, in reply to a question from Dr. FARQUHARSON, said the Treasury was advised that it was not necessary on sanitary grounds to close Brompton Cemetery, and as there was a present income of £6,000 per annum derived from the cemetery, he was not prepared to advise that it should be closed on other grounds.

Monday, April 21st.

Deaths from Electric Currents.—Sir M. HICKS-BEACH, in reply to Mr. JAMES, said the Board of Trade had received no official information as to the number of deaths from electric currents in the United States. He was, however, endeavouring to obtain the information, and should be happy to lay upon the table of the House any that he received.

Tuberculous Meat.—Mr. LEES KNOWLES presented a petition from the master butchers of Lancashire, Yorkshire, and Durham urging that until inquiry had been made into the question whether tuberculosis in cattle rendered meat unfit for human food, no trader should be prosecuted for having on his premises a beast suffering from the disease, and that where confiscation was ordered in such cases compensation should be allowed.

PROFESSOR GEORGE LEWIN, of Berlin, one of the pioneers of laryngology, but in late years, perhaps, better known as one of the foremost authorities on syphilis in Germany, celebrated his 70th birthday on April 19th.

PUBLIC HEALTH

AND

POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN THE FIRST QUARTER OF 1890.

THE vital and mortal statistics of the twenty-eight great English towns dealt with by the Registrar-General in his weekly returns are summarised in the accompanying table. During the three months ending March last, 77,745 births were registered in these twenty-eight large towns, equal to an annual rate of 32.1 per 1,000 of their aggregate population, estimated at nearly nine and three quarter millions of persons. In the corresponding periods of the three preceding years the birth-rate in these towns was 32.9, 32.5, and 32.4 respectively. In London the birth-rate last quarter was equal to 31.6 per 1,000, while it averaged 32.5 in the twenty-seven provincial towns, and ranged from 24.2 in Huddersfield, 26.0 in Brighton, and 26.6 in Nottingham to 37.5 in Manchester, 39.5 in Preston, 40.5 in Cardiff, and 41.2 in Newcastle-upon-Tyne.

The 59,791 deaths registered in the twenty-eight towns during the first quarter of this year were equal to an annual rate of 24.7 per 1,000, against an average rate of 22.7 in the corresponding periods of the eight preceding years, 1882-89. The death-rate in these large towns, owing principally to the prevalence of influenza, was last quarter higher than in the first three months of any year since 1882. In London the rate of mortality was 23.6 per 1,000, while it averaged 25.6 in the twenty-seven provincial towns. The rates in these provincial towns ranged from 19.1 in Birkenhead, 19.4 in Nottingham, 19.7 in Leicester, and 20.2 in Brighton to 28.5 in Blackburn, 28.8 in Bolton, 29.6 in Preston, and 33.9 in Manchester.

During the quarter under notice, 4,930 deaths were referred to the principal zymotic diseases in the twenty-eight towns, equal to an annual rate of 2.0 per 1,000. In the first quarter of the eight preceding years, 1882-89, the zymotic death-rate in these towns averaged 2.6 per 1,000. The lowest zymotic death-rates in the twenty-eight towns last quarter were 0.4 in Leicester, 0.7 in Birkenhead, and 0.8 in Huddersfield and in Halifax; while they ranged upwards in the other towns to 3.0 in Liverpool, 3.3 in Bristol, 3.4 in Salford, and 3.6 in Bolton. The 4,930 deaths referred to the principal zymotic diseases included 2,092 which resulted from whooping-cough, 779 from measles, 683 from scarlet fever, 585 from diphtheria, 419 from diarrhœa, 371 from "fever" (principally enteric), and 1 from small-pox. The 2,092 fatal cases of whooping-cough recorded in the twenty-eight towns during the first quarter of this year were equal to an annual rate of 0.8 per 1,000, which very slightly exceeded the mean rate in the corresponding periods of the eight preceding years, 1882-89. In London the whooping-cough death-rate last quarter was as high as 1.11 per 1,000, while it averaged 0.66 in the twenty-seven provincial towns, and was highest in Liverpool, Salford, Brighton, Bolton, and Bristol. The 683 deaths from scarlet fever were equal to an annual rate of 0.28 per 1,000, which showed a marked decline from the rate recorded in the preceding quarter, and was 0.09 below the mean rate in the corresponding periods of the eight previous years; the rate of mortality from this disease in London did not exceed 0.17 per 1,000, while it averaged 0.38 in the twenty-seven provincial towns, among which this disease showed the highest proportional fatality in Leeds, Bolton, Manchester, Plymouth, and Sheffield. The number of scarlet fever patients in the Metropolitan Asylum Hospitals, which had steadily increased from 541 to 1,541 at the end of the four quarters of last year, declined to 1,034 during the three months ending March last; the admissions, which had been 614, 625, 1,449, and 1,886 in the four quarters of 1889, declined to 1,001 during the first three months of the current year. The 779 fatal cases of measles were equal to an annual rate of 0.32 per 1,000, which showed a further slight decline from the rates in recent quarters, and, with one exception, was lower than in the corresponding period of any of the eight preceding years. In London the measles death-rate was 0 31 per 1,000, while it averaged 0.33 in the twenty-seven provincial towns, and was highest in Derby, Bradford, Norwich, Birmingham, and Liverpool. The 585 deaths referred to diphtheria were equal to an annual rate of 0.24 per 1,000, which showed a decline from the exceptionally high rate in the preceding quarter, but considerably exceeded the average rate in the corresponding periods of the eight previous years, 1882-89. The diphtheria death-rate in London last quarter was as high as 0.31 per 1,000, while it averaged 0.19 in the twenty-seven provincial towns, among which this disease showed the highest proportional fatality

Public Health Statistics relating to Twenty-eight Large English Towns, for the First Quarter of 1890.

Towns.	Estimated Population middle of 1890.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
				Births.	Deaths.	Principal Zymotic Diseases.										
28 Towns	9,715,559	77,745	59,791	32.1	24.7	2.0	4,930	1	779	683	585	2,092	371	419	2.1	149
27 Provincial Towns	5,293,898	42,950	33,802	32.5	25.6	2.0	2,583	—	441	498	248	865	256	275	2.9	154
London	4,421,661	34,795	25,989	31.6	23.6	2.1	2,347	1	338	185	337	1,227	115	144	0.9	144
Brighton	123,659	802	623	26.0	20.2	1.8	55	—	1	3	3	42	2	4	2.7	141
Portsmouth	142,952	1,316	841	36.9	23.6	1.1	40	—	1	2	8	21	7	1	0.6	116
Norwich	95,352	894	548	37.6	23.1	1.6	39	—	16	2	8	2	7	4	0.4	149
Plymouth	78,780	674	508	34.3	25.9	2.2	44	—	4	15	7	16	1	1	0.4	134
Bristol	232,248	1,709	1,562	29.5	27.0	3.3	191	—	9	12	5	148	9	8	2.3	176
Wolverhampton	83,406	688	569	33.1	27.4	1.8	37	—	3	4	4	17	2	7	1.4	169
Birmingham	461,865	3,712	2,893	32.2	25.1	2.0	228	—	87	57	12	37	14	21	3.0	137
Leicester	154,344	1,245	757	32.4	19.7	0.4	17	—	—	6	2	—	6	3	2.4	149
Nottingham	244,909	1,627	1,183	26.6	19.4	1.1	68	—	8	12	7	13	14	14	1.4	143
Derby	100,871	716	520	28.5	20.7	1.3	33	—	12	1	3	10	4	3	0.6	131
Birkenhead	105,049	848	500	32.4	19.1	0.7	18	—	1	2	1	9	1	4	1.0	127
Liverpool	613,463	4,696	4,031	30.7	26.4	3.0	461	—	179	65	26	143	25	23	6.2	175
Bolton	115,846	994	831	34.4	28.8	3.6	105	—	2	15	11	61	7	9	1.9	180
Manchester	379,437	3,545	3,204	37.5	33.9	2.7	256	—	35	56	41	55	31	38	2.6	157
Salford	242,509	1,846	1,461	30.5	24.2	3.4	207	—	9	30	44	70	20	34	3.4	173
Oldham	146,716	1,026	898	28.0	24.5	1.0	37	—	—	10	—	21	1	5	2.0	171
Blackburn	123,553	1,093	879	35.5	28.5	2.0	61	—	7	15	3	10	8	18	2.8	171
Preston	105,163	1,036	776	39.5	29.6	1.3	33	—	1	10	7	1	3	11	2.3	179
Huddersfield	94,253	568	527	24.2	22.4	0.8	18	—	—	1	2	5	9	1	3.8	174
Halifax	82,034	628	517	30.7	25.3	0.8	17	—	1	2	6	3	3	2	6.0	174
Bradford	240,515	1,633	1,516	27.2	25.3	1.0	62	—	29	7	1	9	5	11	2.4	148
Leeds	363,799	3,072	2,520	33.9	27.8	1.9	171	—	5	46	6	71	23	20	1.0	152
Sheffield	332,837	2,755	2,353	33.2	28.4	2.1	172	—	17	82	20	22	19	12	5.7	166
Hull	213,833	1,702	1,255	31.9	23.5	1.6	85	—	3	12	7	48	8	7	3.0	150
Sunderland	136,506	1,268	816	37.3	24.0	1.6	53	—	9	16	2	6	15	5	1.8	136
Newcastle-on-Tyne	162,987	1,676	1,101	41.2	27.1	1.2	50	—	2	8	11	15	11	3	1.9	11
Cardiff	117,012	1,181	613	40.5	21.0	0.9	25	—	—	7	1	10	1	6	2.3	13

n Norwich, Plymouth, Bolton, Manchester, and Salford. The 419 atal cases of diarrhœa were equal to an annual rate of 0.19 per ,000, which was slightly below the average rate in the first uarter of the eight preceding years. In London the rate of nortality from this disease did not exceed 0.13 per 1,000, while it veraged 0.21 in the provincial towns, and was highest in Preston, alford, and Blackburn. The 371 deaths referred to different orms of "fever" (including typhus, enteric, and simple and ill-lefined forms of continued fever) were equal to an annual rate of .15 per 1,000, which was below that in the corresponding quarter f any year on record, and 0.09 below the average rate in the first uarter of the eight years, 1882-89. The rate of mortality from fever" in London during the quarter under notice did not exceed .10 per 1,000, while in the twenty-seven provincial towns it veraged 0.19, and was highest in Manchester, Salford, Hudders-eld, and Sunderland. Only 1 death from small-pox was registered n London during the three months ending March last, and not ne in any of the twenty-seven large provincial towns. Fourteen mall-pox patients were admitted to the Metropolitan Asylum lospitals during the quarter, and 7 patients remained under reatment at the end of March.

The rate of infant mortality in the twenty-eight towns, mea-ured by the proportion of deaths of children under one year of ge to registered births, was equal to 149 during last quarter, vhich slightly exceeded the average rate in the first quarters of he eight preceding years, 1882-89. In London the rate of infant nortality was 144 per 1,000, while it averaged 154 in the twenty-even provincial towns, among which it ranged from 116 in Ports-nouth, 117 in Newcastle-upon-Tyne, and 127 in Birkenhead to 75 in Liverpool and in Salford, 176 in Bristol, 179 in Preston, and 80 in Bolton.

The causes of 1,236, or 2.1 per cent., of the deaths registered in he twenty-eight towns during the first quarter of this year were ot certified, either by registered medical practitioners or by coro-ers. The proportion of uncertified deaths in London did not ex-eed 0.9 per cent., while it averaged 2 9 in the twenty-seven pro-incial towns, among which it ranged from 0.4 in Norwich and in lymouth, and 0.6 in Portsmouth and in Derby to 3.8 in Hudders-eld, 5.7 in Sheffield, 6.0 in Halifax, and 6.2 in Liverpool.

SEWER VENTILATION.

Messrs. Ford and Wright have patented a somewhat novel nethod of sewer ventilation, which is being tried experimentally n a section of main sewer at Portsmouth. Air is introduced into he sewer through the street surface ventilators by means of a water jet. This air is conducted by a pipe, in a direction opposite o the flow of sewage, along the crown of the sewer. This pipe is isjointed at regular intervals, so that air can either pass into the ipe or escape from it, according to circumstances; and at a dis-ance of about 100 yards or less from the point of intake the pipe s taken out of the sewer and carried up as an exit shaft above the oof of the neighbouring houses. It is stated that the fresh air scapes into the sewer from the open joints near the intake, thus iluting the sewer air; whilst near the upcast shaft air from the ewer is carried into the pipe, and so escapes above the houses at oints where it cannot be productive of nuisance. The surface entilators, being utilised as intakes by means of the water jets, annot become nuisances by the escape of sewage effluvia through hem, as in sewers ventilated on ordinary principles. The waste ater from the water jets passes into an automatic siphon tank elow, which discharges automatically into the sewer at regular ntervals, and secures efficient flushing.

This system aims at securing what is generally acknowledged o be the great desideratum in sewer ventilation—namely, that ur face ventilators should always be inlets for fresh air, whilst oul air escapes by special exit shafts high above houses, windows, nd chimneys. Unless some motive power is employed to force r in through the street surface ventilators, these will at times ermit sewer air to escape, and hence are liable to be nuisances of reater or less degree according to the condition of the sewer neath. The mere provision of lofty upcast shafts at certain o nts does not provide a sufficient remedy, for there is not always n upward current in such shafts, and, when the air is stagnant n them, the surface ventilators are very generally acting as exit hafts.

Although Messrs. Ford and Wright's system is right in principle, e foresee a great difficulty to its practical working, from the fact at the friction in the long lengths of tubes of small diameter for the passage of the air current would be so great as to completely stop the passage of air within but a few feet of the intake. In addition, the system would at times be working against natural forces in the sewer itself, and, even if its action was not then reversed, it might very easily be brought to a complete standstill. Under such circumstances, sewer gases might accumulate in the sewer to a very considerable extent, and find their way back into house drains and the interior of houses. We should say that the current induced by the water jet would not be nearly strong enough to counteract the frictional and other forces opposed to it. Rotatory fans, worked by gas engines, water power, or electricity, would have to be substituted for the water jets, in order to produce good results; but the expenses of such methods would, of course, be prohibitory.

To obtain perfect sewer ventilation, the sewers must be divided into sections by means of valves, the ventilation of each section being independent of its neighbours. With such closed-in sections, the air pipes of Ford's and Wright's systems are unnecessary, and air need only be propelled into the sewer at one point, and it must escape from the outlet or outlets provided. There can be no doubt that the cheapest propelling force is the wind, as utilised by cowl arrangements in Harrington's system, but this, of course, fails in calm and still weather; and it is exceedingly doubtful if any system can really succeed at all times and in all weathers unless a powerful motor such as steam, gas, water, or electricity is used to drive fans of great propulsive power. As we have already said, the initial cost and the expenses of maintenance of any such elaborate systems appear to be prohibitory. After all, it is a very doubtful point whether our present systems of sewer ventilation by means of street surface ventilators in wide and airy roadways, combined wherever possible with lofty upcast shafts, is not sufficient to ventilate the sewers, at the same time being unproductive of any real injury to health, if the sewers are of modern construction, with good gradients, self-cleansing, and well and regularly flushed. If the sewers are old and defective, and therefore productive of nuisance, it is certainly wiser to lay money out in reconstruction on modern principles than to inaugurate an elaborate and costly system of sewer ventilation which conceals the effects without attacking the cause of the nuisance.

INFECTIOUS DISEASE IN BOARD SCHOOLS.

At the ordinary fortnightly meeting of the managers of the Metropolitan Asylums Board held on April 19th, a letter was received from the London School Board asking the managers to notify them of all cases of infectious disease for the information of the district visitors, the object in view being to keep the schools free from infection. The Chairman said the managers would have to give the letter their serious consideration before granting the request. The Chairman of the School Board first of all applied to the local authorities to supply the information, and it seemed that some were willing to do so, but others had declined. It was questionable whether the managers had power under the Act to supply the information. They were bound to send the returns to the London County Council, but there was no mention of the School Board in the Act. He suggested that the Local Government Board be written to asking their views in the matter. A resolution embodying the chairman's suggestion was then agreed to.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, April 19th, 6,174 births and 3,892 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 19.3 and 20.6 per 1,000 in the two preceding weeks, further rose to 20.9 during the week under notice. The rates in the several towns ranged from 10.8 in Leicester, 14.7 in Nottingham, 16.0 in Blackburn, and 16.3 in Wolverhampton to 28.8 in Newcastle-on-Tyne, 30.0 in Manchester, 31.6 in Sheffield, and 34.7 in Bolton. In the twenty-seven provincial towns the mean death-rate was 22.5 per 1,000, and exceeded by 3.5 the rate recorded in London, which was only 19.0 per 1,000. The 3,892 deaths registered during the week under notice in the twenty-eight towns included 420 which were referred to the principal zymotic diseases, against 351 and 368 in the two preceding weeks; of these, 176 resulted from whooping-cough, 116 from measles, 43 from scarlet fever, 36 from diphtheria, 27 from diarrhœa, 22 from "fever" (principally enteric), and not one from small-pox. These 420 deaths were equal to an annual rate of 2.3 per 1,000; in London the zymotic rate was 2.6, while in the twenty-seven provincial towns it averaged 2.0 per 1,000, and ranged from 0.0 in Huddersfield, 0.2 in Hull, and 0.4 in Nottingham to 3.2 in Bolton and in Salford, 4.6 in Brighton, and 9.3 in Derby. Measles caused the highest proportional fatality in Birmingham, Wolverhampton, Liverpool, and Derby; scarlet fever in Manchester; whooping-cough in Leeds, London, Bolton, Salford, Derby, Oldham, and Brighton; and "fever" in Norwich. Of the 36 deaths from diphtheria recorded during the week under notice in these towns, 17 occurred in London, 4 in Liverpool, 4 in Salford, and 2 in Manchester. No fatal case of small-pox was registered during the week under notice, either in London or in any of the large provincial towns; and 6 cases of this disease were under treatment in the Metropolitan Asylums Hospitals on Saturday, April 19th. These hospitals contained 1,049 scarlet fever patients on the same date, against 1,043 and 1,041 at the end of the two preceding weeks; 70 cases were admitted during the week, against 84 and

79 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 4.5 per 1,000, and almost corresponded with the average.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, 924 births and 674 deaths were registered during the week ending Saturday, April 19th. The annual rate of mortality in these towns, which had declined from 28.7 to 22.8 per 1,000 in the nine preceding weeks, rose again to 26.0 during the week under notice, and exceeded by 5.1 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Greenock and Paisley, and the highest in Perth and Glasgow. The 674 deaths registered in these towns during the week under notice included 101 which were referred to the principal zymotic diseases, equal to an annual rate of 3.9 per 1,000, which exceeded by 1.6 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Glasgow, Aberdeen, and Leith. The 304 deaths registered in Glasgow included 21 from measles, 13 from whooping-cough, and 3 from scarlet fever. In Edinburgh, 8 fatal cases of measles and 6 of whooping-cough were recorded. Seven deaths from whooping-cough occurred in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 6.0 per 1,000, against 4.5 in London.

HEALTH OF IRISH TOWNS.

In the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, April 12th, were equal to an annual rate of 26.8 per 1,000. The lowest rates were recorded in Lisburn and Armagh, and the highest in Belfast and Galway. The death-rate from the principal zymotic diseases averaged 2.2 per 1,000. The 166 deaths registered in Dublin during the week under notice were equal to an annual rate of 24.5 per 1,000 (against 25.9 and 26.6 in the two preceding weeks), the rate for the same period being 19.1 in London and 22.5 in Edinburgh. The 166 deaths in Dublin included 7 which resulted from the principal zymotic diseases (equal to an annual rate of 1.0 per 1,000), of which 3 were referred to whooping-cough and 2 to measles.

NOTIFICATION OF DISEASES (INFECTIOUS) ACT.

Dr. E. J. asks: When any disease under the Act is notified to the medical officer of health, is the medical officer empowered to enter the sick room, and make any examination of the patient?

*** This question has been put to us very frequently of late. Our answer is that the medical officer of health, in his official capacity, has no right to medically examine a sick person without his consent, or that of his medical adviser.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE DIVISION OF LABOUR IN NURSING.

Mr. Warrington Haward, F.R.C.S., read an interesting paper on this subject at the monthly meeting of the British Nurses' Association, held last week; Mr. Andrew Clark in the chair. Mr. Haward said he thought they were agreed that the training of all nurses should up to a certain point be alike; but obstetric and some other nursing required special training. He did not consider it desirable to make a distinction between medical and surgical nurses. A nurse solely medical or solely surgical in her training would not be well equipped for either class of cases. As regarded the question whether there should be separate nurses for adults and children, he admitted that it required the addition of special mental qualities to the usual experience to make a good children's nurse, but did not consider it desirable to make a distinction of classes. Although all nurses who could manage adults were not suitable for children, yet all good children's nurses were equally good for adults. He thought that nurses employed in hospitals should not be available for private patients, the arduous work of hospitals being best endured when it was regularly and habitually carried on, with proper rest and recreation. As to night duty, theoretically it might seem best to have a separate set of nurses, but practically it would be impossible to obtain a satisfactory staff of night nurses, the interest of the work being so much less in the night than day. In the discussion which ensued, in which ladies who never had been nurses took a leading part, after the Chairman had expressed his entire concurrence in the opinions of Mr. Haward, Miss C. Wood (honorary secretary) said there was a great and growing danger, against which she protested, of hospital nursing work being sacrificed to the nursing of outside patients, and that the Association had firmly laid down the rule that no nurse should be sent out for private practice before she had had a thoroughly good all-round training. Mrs. Bedford Fenwick joined in the above protest, and also condemned the practice of hospitals and other charitable institutions making large profits out of the services of nurses, who ought, she contended, to receive better remuneration. Among the speakers were Miss Foggo-Thomson, Dr. Bedford Fenwick, Miss Knight, and Dr. Heywood Smith, who said he thought occasional private nursing would help to complete the education of hospital nurses.

An anonymous donor, whose attention was attracted to some sick children suffering from chronic diseases (as spinal cases, hip and knee-joint diseases), who had been sent home from one of the Birmingham hospitals to make room for more urgent cases, has given a sum of £1,000 to the Birmingham Children's Hospital, to be expended in maintaining a special cot, where such a case may be treated till completely cured.

Queen's Hospital, Birmingham.—The report presented at the recent annual meeting of this charity stated that the past year had been marked by exceptional financial prosperity, the income, after paying expenses, sufficing to clear off a long-standing deficit of £850. The number of beds was said to be wholly disproportionate to the number of persons applying for treatment; the number of out-patients exceeded those of the previous year by 4,637. Reference was made to the improved nursing accommodation which had been effected, the extension of the pathological department, and to the retirement of Sir James Sawyer from the post of senior physician after twenty-two years of valuable service. Mr. H. Davis, in comparing the Saturday and Sunday collections, pointed out that while the former had increased 275 per cent., the latter, representing the contributions of the upper and middle classes, had decreased 15 per cent.

Cost of the New Birmingham Workhouse Infirmary.—At the meeting of the Birmingham Board of Guardians on April 16th, a report was presented embodying the cost of building and furnishing the new infirmary, the whole expenditure amounting to £103.720. The original tender accepted for the building was for £59,850, but numerous changes and improvements were made during the course of erection, which brought up the cost of the building, on the loan account, to £73,548, accommodation being thus provided for 1,665 beds. The cost of maintenance per week for each patient amounts to 11s. 1d.

UNIVERSITIES AND COLLEGES.

University of Cambridge.—The Council of the Senate have published a report, in which they withdraw their proposal of eighteen months ago for suspending during ten years the statutable augmentation of the College contribution to the University. They now recommend that relief should be extended only to those colleges which the Financial Board shall declare to be financially depressed, and that these may be allowed to supplement their university contribution by devoting one or more fellowships to university purposes. Thus a reader, lecturer, or other university officer may be elected to a fellowship, and his dividend may be reckoned as part of his university stipend. The compromise appears equitable, and is likely to meet with general approval.

Mr. J. P. d'Albuquerque, B.A., Scholar in Natural Science of St. John's College, has been appointed Government Professor of Chemistry and Analyst at Barbadoes.

The Boards for Physics and Chemistry and for Biology and Geology propose that, from and after 1892, candidates in Chemistry for the Natural Sciences Tripos, Part II, may present to the examiners notes of independent work carried out by them in the university or one of the college laboratories during one term before the examination, the genuineness of the record being duly attested. This is a new principle in tripos examinations, and will probably be much discussed.

University of Durham.—Faculty of Medicine. First Examination for the Degree of Bachelor in Medicine. The following have satisfied the Examiners:—

In Elementary Anatomy and Physiology, Chemistry with Chemical Physics, and Botany with Medical Botany.—J. Braithwaite, College of Medicine, Newcastle-upon-Tyne; F. H. Browne, College of Medicine, Newcastle-upon-Tyne; C. H. Bryant, College of Medicine, Newcastle-upon-Tyne; H. E. Gamlen, College of Medicine, Newcastle-upon-Tyne; W. E. Harker, College of Medicine, Newcastle-upon-Tyne; S. McCoul, College of Medicine, Newcastle-upon-Tyne; H. B. Morison, College of Medicine, Newcastle-upon-Tyne; A. Y. Richardson, College of Medicine, Newcastle-upon-Tyne; H. Smurthwaite, College of Medicine, Newcastle-upon-Tyne; A. E. Thompson, College of Medicine, Newcastle-upon-Tyne; O. Watson, College of Medicine, Newcastle-upon-Tyne.

Elementary Anatomy and Physiology.—H. Crichton, College of Medicine, Newcastle-upon-Tyne; D. N. Jackson, College of Medicine, Newcastle-upon-Tyne; T. F. Keenan, College of Medicine, Newcastle-upon-Tyne; R. V. Lloyd-Williams, College of Medicine, Newcastle-upon-Tyne; R. F. J. Norman, College of Medicine, Newcastle-upon-Tyne; T. C. Visser, College of Medicine, Newcastle-upon-Tyne.

Chemistry with Chemical Physics, and Botany with Medical Botany.—H. G. Best, Middlesex Hospital; A. G. R. Cameron, St. Mary's Hospital; J. Challice, London Hospital; W. A. Dow, St. Bartholomew's Hospital; F. W. Fullerton, St. Thomas's Hospital; C. Hanks, College of Medicine, Newcastle-upon-Tyne; F. S. Jones, London Hospital; B. H. Morris, College of Medicine, Newcastle-upon-Tyne; W. J. D. Preston, College of Medicine, Newcastle-upon-Tyne.

Chemistry with Chemical Physics.—J. A. Hutton, M.R.C.S., L.R.C.P., Middlesex Hospital.

UNIVERSITY OF ST. ANDREWS.—The following gentlemen having passed the required Examinations, had the Degree of Doctor of Medicine conferred upon them on April 17th:—

D. Fennell, L.R.C.S.I., L.K.Q.C.P.I., F.R.C.S.Ed., London; J. Hall, L.R.C.P.Ed., L.R.C.S.Ed., Peel; W. A. Hepburn, L.S.A.Lond., F.F.P.S. Glasg., Coxhoe; R. A. D. Lithgow, L.S.A.Lond., M.R.C.P.Ed., L.R.C.S. Ed., London; J. Martin, L.F.P.S.Glasg., L.S.A.Lond., L.R.C.P.Ed., F.R.C.S.Ed., Huddersfield; J. Simpson, L.R.C.P.Ed., F.R.C.S.Ed., Leith; C. J. Sutherland, L.R.C.P.Ed., L.F.P.S.Glasg., South Shields; J. B. Unwin, L.R.C.P.Ed., L.R.C.S.Ed., Rugby; C. Westbrook, L.S.A. Lond., L.K.Q.C.P.I., Retford; H. Wilson, M.R.C.S.Eng., L.S.A.Lond., Wavertree, Liverpool.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The quarterly Examinations for the Triple Qualification in Edinburgh took place in April, with the following results:—

First Examination.—Of forty-six candidates, the following thirty-three passed: H. Ashton, Oldham; R. Morris, County Cork; H. H. Isherwood, Preston; J. F. C. Hossack, London; R. H. F. Bostock, Leicestershire, A. Phillips, Coventry; C. A. Smith, Leeds; G. H. Johnston, Belper; A. A. Jeremiah, Penang; J. Sheppard, Fairview, Clontarf; H. Campbell, Newtowncrommelin; T. Dawson, Midlothian; J. M. Rendall, Torquay; A. Peebles, Falkirk; Susan Campbell, Greenock; H. A. Jones, County Cork; W. W. Hoare, County Cork; J. J. Gray, Dublin; J. Larwill, Sussex; J. G. R. Duggan, Edinburgh; R. L. Bolton, Leith; P. Terry, Cork; E. J. W. Waters, New Zealand; J. P. Conway, Cork; T. H. Lawrie, Edinburgh; G. E. Macleod, India; P. G. J. Kennedy, Ireland; F. J. Turnbull, Edinburgh; J. A. Meeke, County Armagh; W. Somerville, Cumberland; L. Roberts, London; A. J. A. Peters, Arbroath; and S. E. Rossiter, Cheltenham.

Second Examination.—Of forty-two candidates, the following thirty-one passed: C. A. Brough, Dorsetshire; S. W. Thompstone, Manchester; A. S. Duke, Dublin; G. H. S. Hillyar, Plympton, Devon; F. F. Thorne, Kent; S. Wood, Rochdale; G. H. Peake, Madagascar; E. Hughes, Wales; A. C. F. Smith, Donegal; A. W. Robertson, Edinburgh; G. Foggin, Newcastle-on-Tyne; F. W. Mason, Leicester; A. J. Millar, Newmains; E. W. F. Kirkman, Dublin; J. Fox, Tyrone; R. McCoull, Ovington-on-Tyne; C. R. Webster, York; S. E. Rossiter, Cheltenham; T. White, County Antrim; R. J. Bodkin, County Galway; Jane Marsh, Dorsetshire; Mary Helen Cumming, Wigtownshire; Margaret Kate Barclay, London; Mary Frances Sinclair, Perthshire; J. A. MacDonald, County Cork; T. L. Davies, Carmarthenshire; D. Ross, Lochinver; J. Goode, County Cork; L. C. Nash, Cork; Elizabeth Adelaide Baker, South Africa; and W. I. T. Baker, South Africa.

Final Examination.—Of sixty-eight candidates, the following thirty-two passed, and were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P.&S.G.: A. H. Atkin, Birmingham; J. G. McCandlish, Leeds; J. Dale, Dumfries; T. Finney, Buxton; W. Pirie, Arbroath; Sr. J. T. Foott, Cork; F. H. Amner, Kew, London; H. G. Magrath, Cork; P. Johnson, London; Annie Wardlaw Jagannadham, South India; J. H. Hodson, Egoria, Russia; J. McC. Morrison, St. Andrews; T. S. MacMahon, Longford; D. J. Murphy, Cork; Louis Marie Antoine Enguerrand de La Roche Souvestre, Mauritius; J. Nesbitt, Ireland; R. FitzGerald, County Cork; G. F. Richards, County Durham; J. A. Phillips, County Dublin; M. A. Wilson, Bradford; G. Ansaldi, San Remo; G. G. Sinclair, Hamilton; R. M. Connolly, Templemore, County Tipperary; D. Mark, Belfast; J. Dunne, Killinardrish, County Cork; S. B. Carlisle, County Down; R. A. Hollingsworth, Madras; J. F. Campbell, Ontario, Canada; G. F. Read, Tasmania; P. E. McElligott, Kerry; J. P. Walsh, Cork; and T. Callaghan, Cork.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—Fellowship Examination. The following gentlemen having passed the necessary examination, have been admitted by the President (Dr. Meldon) Fellows of the College:—

Mr. R. G. Patteson and Mr. W. C. T. Poole, Surgeons, Medical Staff.

MEDICAL NEWS.

PROFESSOR THIERSCH, of Leipzig, has been chosen President of the next Congress of German Surgeons.

THE German Emperor has given 20,000 marks towards the erection of a new German hospital at Zanzibar.

INFLUENZA is said to have been prevalent in Tientsin for some time past, and half of the native population is reported to be suffering from the epidemic.

A NEW association for the promotion of medical science has, on the initiative of Dr. N. Russkich, been founded at Ekaterinburg, in Asiatic Russia, under the title of "The Ural Medical Society."

THE anniversary festival of the Metropolitan Hospital will be held at the Hôtel Métropole, Northumberland Avenue, on Tuesday, May 6th; the Right Hon. the Earl of Derby, K.G., in the chair.

AT an examination held by the Sanitary Institute on April 17th and 18th, 120 candidates presented themselves for the certificate of competency as Inspectors of Nuisances, of whom 50 passed.

THE Duchess of Westminster will distribute the prizes won by candidates who have passed the examination in Hygiene, First Aid, and Home Nursing, on May 12th, at Grosvenor House.

WE are requested to state that Trinity University, Toronto, does not hold examinations in medicine in this country. For courses of study, regulations, etc., application should be made to the Registrar, Trinity University, Toronto.

THE Emperor of Russia has presented a gold snuffbox, ornamented with diamonds, and bearing the Imperial monogram, to Dr. Hermann, member of the Medical Council of St. Petersburg, and Chief Physician to the Obuchow Hospital.

A DENTAL Outpatients' Department in connection with the University of Vienna was opened on April 21st. It is hoped that the new institution, which is under the direction of Dr. Julius Scheff, is the first step towards the establishment of a fully-equipped school of dentistry in the Austrian capital.

A COMMITTEE, consisting of Professors Moleschott, Corradi, Cocconi, Guareschi, and Vitali, and Signori De Cesaris and Tacconis, Doctors of Pharmacy, which was charged some time ago with the revision of the Italian *Pharmacopœia*, has almost completed its task. The revision has occupied twelve years.

THE Belgian Government has issued a circular setting forth the dangers to the public health caused by burying dead bodies in coffins made of metal or hard wood. It recommends that only material which allows decomposition to take place as rapidly as possible should be used.

AT the ordinary meeting of the Council of the County Borough of Brighton on April 17th, Dr. Joseph Ewart, J.P., was elected an Alderman of the Borough. Dr. Ewart is Chairman of the Lighting Committee now engaged in introducing the electric light into Brighton under the orders and authority of the Corporation.

AT a recent meeting of the Liverpool Medical Institution the following resolution was adopted: "That in the opinion of this meeting it is desirable that the physicians, surgeons, and medical officers of all non-medical charitable institutions should receive some pecuniary recognition of their services."

SCHOOL BOARD SCHOOLS.—In the House of Commons on Monday, Mr. T. H. Bolton presented a petition from the Vestry of St. Pancras in favour of the appointment of a Royal Commission to inquire into the alleged irregularities as to the construction of buildings and the acquisition of sites by the London School Board.

DR. ANTONIO PARCHINI-BONFANTI, Director of the Rossi Casa di Salute at Milan, and one of the leading alienists in Italy, died recently. He gave much attention to hypnotism at a time when such studies were held in great contempt, and published an interesting work on the subject. He was offered the Chair of Forensic Medicine in the University of Pavia, but declined the honour.

THE *Wojenno Ssanitarnoje Djelo*, the only periodical devoted to military hygiene in Russia, has ceased to appear in consequence, as the editor, with the frankness of despair, informs all whom it may concern, of "the complete impossibility of continuing any longer to exist." It is hinted, however, that the defunct journal will shortly rise, like the phœnix from its ashes, in the form of a publication of similar character, but wider in scope, bearing the title of *Zeitschrift für allgemeine Hygiene.*

THE Supreme Sanitary Council of Vienna has recently published a report on saccharin, in which it is affirmed that no ill effect is produced on the human organism by that substance, and that it can be used as freely as ordinary groceries. The report states

that no single instance has been adduced in which saccharin could be proved to have done harm to any healthy person, and that even in the sick its use does not appear to be attended with any injurious consequences.

HONOURS TO MEDICAL MEN IN RUSSIA.—The Emperor of Russia has recently conferred the order of the White Eagle on Dr. E. Ettlinger, Physician Accoucheur in Ordinary to the Imperial family; the Wladimir Order (Second Class) on Dr. Meinhardt, Physician to the Minister of the Interior; the Order of St. Stanislaus (First Class) on Dr. Paschutin, President of the Medical Council; Dr. Reyher, Surgeon to the Empress Marie Hospital; and Dr. Hohlbeck, Chief Physician to the Marine Hospital at Cronstadt; and the Wladimir Order (Third Class) on Dr. Kwizinski, Chief Physician to the Marine Hospital, St. Petersburg.

RUSSIAN LADY-DOCTORS IN ASIA.—According to the *Vratch* (No. 12, 1890, p. 293), Mlle. Garïnovskaia, who had established a dispensary for women and children at Samarkand in 1886, is practising very successfully amongst the native female population (Bokhara Jewesses, Lart, Kirgit, Persian, Arabian, and Afghan women). The institution was visited by 7,921 patients in 1886, while in 1889 the number rose to 8,505. A similar dispensary is conducted at Tashvent by Mlles. Poslavskaia, Mandelstaini, and Varshawzkaia; at Khodjent, by Mlle. Favitzkaia; at Kokand, by Mlle. Shishova; at Andidjan, by Mlle. Solnyshkïna; and at Bokhara by Mlle. Breitmann.

FALLS MEMORIAL FUND.—Some friends of the late Dr. William Stewart Falls, of Bournemonth, are endeavouring to raise a memorial which shall take the form of the establishment of a free bed at the National Sanatorium at Bournemouth, with which institution Dr. Falls was connected as physician for over thirty years. About £530 has been already subscribed, but it is desirable to increase that amount, and there are doubtless many of Dr. Falls's friends who would be willing to subscribe when their attention is called to the subject. Donations may be sent to Mr. William Allis Smith, M.R.C.S., L.S.A., Ensbury House, Kinson, near Wimborne; to the Treasurers, Mr. C. J. Nixon, Addiscombe, Bournemouth, or to the Bankers, the Wilts and Dorset Bank, Bournemouth.

THE MECHANICAL TREATMENT OF ERYSIPELAS.—Wölfler has published eighteen additional cases of erysipelas treated by pressure of strongly adhesive plasters. After the plaster is applied the disease extends into the compressed parts of the skin, which swell considerably and remain swollen for several days, and then both the swelling and the fever diminish. He recommends that by way of precaution a second line should be compressed several centimètres distant from the first. The part must be carefully inspected once or twice daily in order to detect any loosening of the plaster. Occasionally the erysipelatous inflammation extends in diminished intensity for a short distance beyond the first line of plaster, but this does not last long.

DEVON AND EXETER MEDICO-CHIRURGICAL SOCIETY. — A meeting of this Society was held at the Devon and Exeter Hospital, on April 18th, Mr. James Somer, M.R.C.S., occupying the chair. Dr. Scanlan read a paper on Natal as a Health Resort. Mr. J. D. Harris described a case of Labio-glosso-Pharyngeal Paralysis in an old man; the symptoms were marked, but the patient ultimately recovered. Mr. John Mortimer presented a communication on an Anomalous Skin Affection. Dr. Arthur G. Blomfield, the honorary secretary, related an interesting case of Gastric Ulcer, which ruptured into the left pleura; the case, however, ended in recovery. The meeting was highly successful, all the papers being of exceptional interest, and the discussions to which they gave rise being well sustained.

PRESENTATIONS.—Dr. J. W. B. Pogson, Resident Medical Officer of the County Hospital, Durham, has been presented with a handsome silver-mounted stick by the members of the Durham Branch of the St. John Ambulance Association.—A handsome timepiece, bearing a suitable inscription, has been presented to Mr. Edward Skinner on his retiring from the post of Surgeon to the Order of Druids, Sheffield.—Dr. Ben Hall, who is resigning his post of superintendent of the Brook Asylum, Liverpool, was recently presented, by Dr. Pitts, on behalf of a few friends, with a large case of surgical instruments. A handsome and massive spirit stand and silver cake basket were presented to him by members of the staff, past and present.—Mr. Arthur Wellesley Harris, the newly-appointed medical officer of health to the Southampton Corporation, was presented last week by the staff of the Highgate Infirmary (Holborn Union) with a scalloped-shell electro-silver basket case, mounted in a gilt frame, and a Tantalus liqueur electro-plated stand, as a souvenir of the affection and esteem in which he is held by those whom he was associated. Dr. Harris held the position of assistant medical officer to the Highgate Infirmary for the last three years. Dr. McLaren, resident medical superintendent, made the presentation, which was feelingly acknowledged by Dr. Harris.

PRIZE ESSAYS.—The French Anti-Tobacco Society offers prizes for the best essays on the following subjects: 1. The influence of tobacco and nicotine on the digestion. The prize will consist of a medal with books to the value of £8. 2. A prize of £16 is offered by M. Decroix for the largest record of cases in which affections have been cured by giving up tobacco in obedience to hypnotic suggestion. The patient's age, the length of time he had used tobacco, and the quantity consumed daily, together with the symptoms presented, and the total number of "suggestions" required to effect a cure, must in all cases be stated. The essays may be written in French, German, Italian, or Spanish. Further particulars may be obtained on application to the Secretary of the Society, 38, Rue Jacob, Paris.

FOREIGN STUDENTS IN GERMAN UNIVERSITIES.—The total number of students matriculated in the German universities during the past winter session was 29,007, of whom 1,930, or 6.6 per cent., were foreigners; of these 1,384 were Europeans, while 436 came from America, 90 from Asia (mostly Japanese), 11 from Africa, and 9 from Australia. Of the Europeans 331 came from Russia, 293 from Austria Hungary, 255 from Switzerland, 177 from Great Britain, 49 from Greece, 44 from Turkey, 42 from the Netherlands, 37 from France, 34 from Luxembourg, 33 from Roumania, 31 from Bulgaria, 29 from Sweden and Norway, 27 from Italy, 27 from Servia, 26 from Belgium, 5 from Denmark, 2 from Spain, 1 from Portugal, and 1 from the Principality of Lichtenstein.

FILTRATION OF WATER.—The good people of Lyons were till lately happy in the belief that their water supply was of exceptional purity. They have been rudely awakened from this dream of bliss by a report which has just been presented to the Académie des Sciences, by MM. Lortet and Despeignes. A bacteriological examination published in 1886 showed that while the water in the river itself contained 51,100, that in the filtering bed contained only 7,000 germs per litre. It has recently been found, however, that there is a deposit in the Chamberland filter fixed in the main, which "swarms with bacteria of different kinds." Culture and inoculations in guinea pigs have shown that this deposit is highly infective, most of the animals which formed the subjects of experiment having died with lesions of various kinds.

PROPHYLAXIS OF PHTHISIS ON FRENCH RAILWAYS.—In view of the large number of phthisical patients using the *wagon-lits* on the French railways on their way to the South, it is proposed to adopt measures for the thorough disinfection of the bedclothes, etc. The velvet cushions and silk hangings are to be done away with, and the seats are to be covered with smooth leather, so that they can easily be washed. Carpets are to be replaced by rugs, which can be shaken in the open air after each journey. The bedclothes are to be subjected to the action of heat in vapour stoves, and the mattresses are to be covered with impermeable silk or gutta percha tissue, so that they can be readily cleaned. The invalid will travel in separate compartments, and each of them will be provided with a spittoon, which can be emptied outside the carriage.

THE "LADY DOCTOR" QUESTION IN GERMANY.—A petition was lately presented to the Medical Assembly of the Grand Duchy of Baden by the German Women's Association of Leipzig praying that women might be admitted to study medicine. The Assembly passed a resolution declining to take any step in the matter, on the ground that women are unfit for the learned professions, and especially for that of medicine, and, moreover, that the latter is already overcrowded. Herr Arnsberger, the Ministerial Councillor representing the Government, said the question was not yet ripe for solution. He also pointed out that the matter was one for the decision of the Imperial authorities, not for those of the individual States. A similar petition has recently been presented by the same Association to the Weimar Landtag, in which the ladies ask to be admitted to the University of Jena not only to study medicine, but with the view of qualifying for appointments as scientific teachers.

A CENTENARIAN INVETERATE SMOKER.—Mr. Hay, who died in Boston recently at the age of 100 years and 2 months, is said by the *Boston Medical Journal* to have been "an inveterate smoker." If he was a smoker at all he was evidently an inveterate one, but he really appears to have smoked much as well as long.

CYST OF THE TRANSVERSE MESO-COLON.—Dr. Czempin exhibited, at a meeting of the Berlin Obstetrical and Gynæcological Society in February, a large cyst of the mesentery. The patient, a woman, aged 41, suffered from a complication of maladies. She came under treatment for bleeding fibroid. On examination, four tumours could be felt, one evidently a myoma, two clearly springing from the appendages, and the fourth, which lay above the uterine tumour, was not connected with the others, nor with the internal genitals, as far as could be made out. The fourth tumour appeared to have grown very rapidly, and, as it increased when under observation, an operation was performed sooner than originally intended. A cyst was found between the layers of the transverse meso-colon, whence it was enucleated. The capsule was cut away close up to the colon, and the aperture closed by a purse-string suture. Both ovaries were removed; one formed a small dermoid tumour. The patient made an uninterrupted recovery, the temperature, according to the report, remaining normal throughout. The opening of the bowels was unattended with any trouble.

HEREDITARY INFANTILE SPASTIC PARAPLEGIA.—In two former volumes of the *St. Bartholomew's Hospital Reports* Mr. Gee has recorded cases of spastic paraplegia apparently of congenital origin. In the volume recently issued he has published an instance where the disease seemed to be inherited. A brother and sister, aged 11 and 12 respectively, were evidently the subjects of the disease. There was the usual history of their never having been able to walk properly, and in the case of the girl before she began to walk the legs were crossed; in both the legs were slightly bent at the knees, and the thighs were adducted; the knee-jerks were active, but there was no ankle-clonus. In both there was some tendency for the hands to be affected, as shown by a cramped position of the hand and adduction of the thumbs, more marked in the boy than the girl; the muscles acted well to faradism. Their father, aged 37, had never been able to walk properly; he was unable to walk without crutches, and his legs were crossed in walking; his thighs were adducted, and the thigh muscles well developed; the knee-jerks were very active. The muscles of his arms were well developed, the deltoids especially so, but there was marked wasting of the muscles of the thenar and hypothenar eminences and of the interossei in both hands. All the muscles acted well to faradism, but the wasted muscles would not respond to the strongest galvanic current. There was no history of syphilis. As a further evidence of inherited nervous taint it may be mentioned that a sister of his mother was said to have been completely paralysed during her whole life, and that two of his cousins on his mother's side were deaf-mutes, and one was born without any fingers.

SOCIETY OF APOTHECARIES OF LONDON.—April, 1890. Pass-list. The following passed the First Examination in Chemistry, Materia Medica, Botany, and Pharmacy:

Bowler, W., Durham University
Woodhouse, J. T., Liverpool

The following passed the Second Examination in Anatomy and Physiology:

Aristie, F., St. Thomas's Hospital
Eayes, C. L., Sheffield
Fickin, P., New Zealand and Glasgow Universities
Hossman, F. V. H., Galway, Sheffield, and Manchester
Hatt, W. W., Charing Cross Hospital
Hider, F. K., Leeds, Yorkshire College
Roberts, R. E., Liverpool, University College
Schilling, G., St. Thomas's Hospital
Taylor, H. N. A., Cambridge University
Williams, R. B., St. Thomas's Hospital
Williams, S. B., St. Mary's Hospital
Winslow, P. Forbes, Charing Cross Hospital

Physiology only:

Bowler, W., Durham University
Hargraves, F. G., London Hospital
Lewis, F. B., London Hospital
Millard, J. E. L., Belfast and Charing Cross Hospital
Power, P., Cork and Royal College of Surgeons, Edinburgh

The following passed the Examination in Surgery:

Chen, J., Charing Cross Hospital
De Groot, S. H. R. Van R., King's College Hospital
Horton, A., Glasgow University
Page, E. E., Queen's College, Birmingham
Pennell, T. L., University College
Sanders, H., Charing Cross Hospital
Spurr, J., St. Mary's Hospital
Symes, W. L., St. Mary's Hospital
Trenow, N. A. A., St. George's Hospital
Wilson, J. G., London Hospital

The following passed the Examination in Medicine, Forensic Medicine, and Midwifery:

Atkins, S. E., St. Bartholomew's Hospital
Colmer, P. A., London Hospital
Colton, F. S., University College Hospital
Hawley, A., Queen's College, Birmingham
Hook, W., Westminster Hospital
Morton, A., Glasgow University
Page, E. F., Queen's College, Birmingham
Pennell, T. L., University College

Forensic Medicine:

Fairfax, H., Charing Cross Hospital

Midwifery:

Coopland, H. C., St. Bartholomew's Hospital
Cresswell, A. H., London Hospital
Fuller, J. R., St. Mary's Hospital

The following received the Diploma of the Society, qualifying for registration:

Messrs. Colmer, Hawley, Morton, Page, Pennell, and Symes.

MEDICAL VACANCIES.

The following Vacancies are announced:

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.—A vacancy exists in the Honorary Acting Out-patient Staff. Applications to the Honorary Secretary, Mr. Russell Jolly, 43, Waterloo Street, Birmingham, by April 28th.

BOLTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon. Double qualification. Salary £100 per annum (increasing to £150, by £10 annually) with furnished apartments, board, and attendance. Applications to be addressed to Mr. Kevan, Honorary Secretary, 12, Acresfield, Bolton, by April 26th.

CARRICKMACROSS UNION.—Medical Officer for the Workhouse, at a salary of £40 per annum. Applications to Mr. Bernard McCaul, Clerk of Union. Election on April 29th.

COUNTY MAYO INFIRMARY.—Resident Apothecary. Salary, £50 per annum, with apartments and rations. Applications to Surgeon Knott, Infirmary House, Castlebar. Election on May 3rd.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Physiciancy. Board and lodging; no salary. Applications to Ashton Warner, Secretary, by May 1st.

EDINBURGH CITY POORHOUSE.—Medical Officer (Resident). Salary, £80 per annum. Applications to G. Greig, Inspector, 2, Forrest Road, Edinburgh, by May 1st.

HARROW LOCAL BOARD.—Medical Officer of Health. Salary, £50 per annum. Applications, marked "Medical Officer," to be sent to the Clerk, R. E. H. Fisher, by May 13th.

LANCASTER COUNTY ASYLUM, Whittingham.—Experienced Pathologist. Salary, £200 per annum, with board, lodging, washing, and attendance. Applications to Dr. Wallis, the Medical Superintendent.

METROPOLITAN HOSPITAL, Kingsland Road, E.—Assistant Physician; Fellow or Member of the Royal College of Physicians, London. Applications to C. H. Byers, Secretary, by April 28th.

METROPOLITAN HOSPITAL, Kingsland Road, E.—Physician; Fellow or Member of the Royal College of Physicians, London. Applications to C. H. Byers, Secretary, by April 28th.

OSWALDTWISTLE URBAN SANITARY AUTHORITY.—Medical Officer of Health for the District of Oswaldtwistle. Salary, £60 per annum. Appointment for three years. Applications to Wm. Sandeman, Clerk, by May 1st.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Salary, £150 per annum. Applications by April 28th to the Registrar, Henry Wm. Holder, M.A.

PAROCHIAL BOARD OF KIRKPATRICK, Durham.—Resident Medical Officer. Salary £20 per annum, exclusive of the cost of medicine. Applications to the Inspector of Poor, Parochial Board Office, Kirkpatrick, Durham, Dalbeattie, by April 30th.

PAROCHIAL BOARDS OF STRATHDON AND GLENBUCKET, Aberdeenshire.—Medical Officer. Salary, £65 per annum. Applications to be made to the Chairman of the Boards.

PONTEFRACT GENERAL DISPENSARY.—Resident Medical Officer. Double qualification. Salary, £130 per annum, with furnished rooms, fire, lights, and attendance. Applications to T. W. Tew, Honorary Secretary, by April 30th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, Rangoon Municipality, by June 1st.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Three Honorary Assistant Surgeons. Double qualifications. Applications to the Honorary Secretary by May 12th.

SWANSEA HOSPITAL.—Resident Medical Officer. Salary, £100 per annum, with board, furnished apartments, coals, gas, attendance, etc. Applications to the Secretary, Jno. W. Morris, by May 15th.

WANDSWORTH AND CLAPHAM UNION INFIRMARY, New Wandsworth.—Junior Assistant Medical Officer. Appointment for six months. Board, lodging, and washing, and honorarium of £10. Applications to the Medical Superintendent.

WESTERN GENERAL DISPENSARY, Marylebone Road, N.W.—Junior House-Surgeon; fully qualified. Salary, £50 per annum, with board and residence. Applications to the Honorary Secretary at the Institution by April 28th.

WESTERN MEDICAL SCHOOL, Glasgow.—Lecturer on Surgery. A fellowship qualification in surgery necessary. Applications to J. N. Morton, Secretary, 62, Vincent Street, Glasgow.

WEST LONDON HOSPTAL, Hammersmith Road, W.—House-Physician. Appointment tenable May 12th to September 30th. Eligible for election to the office of House-Surgeon for six months from October. Board and lodging. Applications by May 8th to R. J. Gilbert, Secretary Superintendent.

YORK DISPENSARY.—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coals, and gas. Unmarried. Applications to S. W. North, Esq., 84, Micklegate, York, by May 6th.

MEDICAL APPOINTMENTS.

ANDERSON, A. R., F.R.C.S.Eng., L.S.A., Nottingham, appointed Certifying Factory Surgeon, *vice* Mr. Massey, resigned.

BARR, C., appointed Medical Officer and Vaccination Officer for the Wentworth District of the Rotherham Union, *vice* W. Clarke, M.D.

BERRY, E., L.K.Q C.P.I., L.M., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Leyland Urban Sanitary Authority.

BROOKS, Chas., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant House-Surgeon to the South Devon and Cornwall Hospital, Plymouth.

BULLOCK, Roger, M.R.C.S., L.S.A., appointed Medical Officer to the Warwick Union Workhouse, *vice* J. S. Baly, M.R.C.S., L.S.A., deceased.

BULMAN, Frank, B.A., M.B., B.S.Durh., appointed House-Surgeon and Secretary to the King's Lynn Hospital, *vice* B. G. Sumpter, M.B., M.R.C.S.

CAMPBELL, Dr., reappointed Medical Officer of Health for the Port of Gloucester.

CARMICHAEL, D., M.B., appointed Medical Officer to Durness, Sutherlandshire, *vice* Dr. A. F. McKenzie.

CARPENTER, E. G., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the East Suffolk and Ipswich Hospital, *vice* A. E. Hewer, B.A., M.B., M.R.C.S., L.R.C.P., appointed Senior.

CHAMBERS, A. B., M.D. Roy. Univ. Irel., M.Ch., L.M., reappointed Medical Officer of Health to the Long Eaton Urban Sanitary District.

DAVIES, D. S., M.B.Lond., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Bristol Port Sanitary Authority.

DELAHUNT, William P., L.K.Q.C.P., L.R.C.S.I., appointed Medical Officer to the Hampstead Provident Dispensary, *vice* William Brattery, L.R.C.P. Lond.

EVANS, W. H., L.R.C.P., L.M.Edin., M.R.C.S.Eng., appointed Medical Officer for Colyton and Shute, Axminster Union, *vice* Dr. Frank Pearse, resigned.

GALLOWAY, W., L.R.C.P.Edin., L.M., L.R.C S.Edin., reappointed Medical Officer for the Birtley District of the Chester-le-Street Union.

GORDON, J., M.A., M.B., B.Ch.Oxon., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the Oxford Eye Hospital, *vice* A. E. Joscelyne.

GRIFFITHS, Alfred, M.B., C.M.Edin., appointed Second Assistant Medical Officer to the Kent County Asylum, Barming Heath, Maidstone, *vice* David Welsh, M.D.Edin.

HARRIS, H. E., L.D.R.C.S., appointed Dental Surgeon to the West End Hospital for Diseases of the Nervous System.

HAYWARD, T. E., M.B.Lond., F.R.C.S Eng., L.S.A., reappointed Medical Officer of Health to the Haydock Urban Sanitary District.

HEAVEN, J. C., L.R.C.P.Lond., M.R.C.S.Eng., reappointed Assistant Medical Officer of Health to the Bristol Port Sanitary Authority.

HIGGINS, Wm., B.A.Oxon., M.R C.S., L.R.C.P.Lond., appointed Assistant House-Surgeon to the Glamorgan and Monmouthshire Infirmary, Cardiff.

HODGKINSON, Alex., M.B., C.M., appointed Lecturer on Diseases of the Larynx to Owens College, Manchester (new appointment).

HYATT, J. T., L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Shepton Mallet Rural Sanitary Authority.

JOHNSTON, Alex., M.B.Glasg. and C.M., appointed Parochial Medical Officer and Vaccinator for the parish of Methven, *vice* Dr. Valentine, resigned.

MCARDLE, Francis James, L.K.Q.C.P.I., appointed Midical Officer to the St. Nicholas District of the Durham Union, *vice* William Boyd, M.R.C.S., L.S.A., retired.

MCPHERSON, A., M.D.Aberd., C.M., reappointed Medical Officer of Health to the Haslingden Urban Sanitary Authority.

MACPHERSON, J. W. Campbell, appointed Fourth Assistant Medical Officer and Pathologist at Wadsley Asylum.

MORGAN, M. J., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., appointed House-Surgeon and Secretary to the Aberystwith Infirmary, *vice* J. J. Rowland, L.R.C.P.Lond., M.R.C.S., L.S.A.

NORMAN, Dr., appointed Medical Officer for the Wendron District of the Helston Union, *vice* Mr. Robinson.

OGLE, John Gilbert, M.A., L.R.C.P.Lond., B.M., M.R.C.S.Eng., B.S.Oxon., appointed House-Physician to the Radcliffe Infirmary, Oxford, *vice* Dr. Rice.

ROWLEY, C. O., M.R.C.S., L.S.A., reappointed Medical Officer for the No. 2 District of the Barnsley Union.

SELBY, Prideaux, L.R.C.P., M.R.C.S., appointed Medical Officer and Public Vaccinator for the 4th District of the Faversham Union, *vice* Dr. Phelps, resigned.

SIBLEY, Walter K., M.B., B.C., B.A.Cantab., appointed Physician to the St. George's and St. James's Dispensary, *vice* Dr. J. E. Squire, resigned.

SMYTH, Wm. Johnson, M.B., C.M.Edin., appointed Senior Assistant Medical Officer to the Kent County Asylum, Barming Heath, Maidstone, *vice* D. J. Jones, M.D.Edin.

SMYTH, W., M B., C.M.Edin., elected House-Surgeon to the Infirmary, Alnwick, *vice* Dr. Duncan, resigned.

SPEECHLY, H. M., M.R.C.S., L.R.C.P., appointed Receiving Room Officer at the London Hospital.

TANNER, C. E., M.D., F.R.C.S.Eng., appointed Medical Officer to the Workhouse and North and Seale Districts of the Farnham Union.

TAYLOR, John W., F.R.C.S.Eng., appointed Honorary Consulting Gynæcological Surgeon to the Birmingham and Midland Skin and Lock Hospital.

THOMAS, J. W., reappointed Public Analyst to the Borough of Cardiff.

TODD, Frederick, M.R.C.S., L.D.S.Eng., appointed Dental Surgeon to King Edward's School, St. George's Road, Lambeth, S.E.

VINCENT, H. B., M.R.C S.Eng., L.S.A., reappointed Medical Officer of Health to the East Dereham Urban Sanitary Authority.

WHITE, Ernest William, M.B.Lond., M.R.C.P.Lond., Resident Physician and Superintendent City of London Lunatic Asylum, appointed Professor of Psychological Medicine at King's College, London.

WHITE, Walter, L.R.C.P., L.M., L.R.C.S.Edin., reappointed Medical Officer to the Darton District of the Barnsley Union.

WILLIAMS, H. Lloyd, M.R.C.S., L.D.S., appointed Dental Surgeon to the West London Hospital.

WILLS, Charles, M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Mansfield Urban Sanitary Authority, in conjunction with the Worksop and Southwell Rural Districts, for one year.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Sir William Stokes on Pylorectomy, illustrated with diagrams.

TUESDAY.

MEDICAL OFFICERS OF SCHOOLS ASSOCIATION, 11, Chandos Street, 3.30 P.M.—Discussion on Influenza opened by Dr. E. Symes Thompson.

WEDNESDAY.

HOSPITALS ASSOCIATION, St. Thomas's Hospital, 8 P.M.—Mr. Thomas Ryan: On London's New Street Ambulance Service.

THURSDAY.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Dr. Alderson: A Case of Placenta Prævia, with remarks. Dr. Montague Handfield-Jones: Uterine Hæmorrhage after the Menopause not dependent upon Malignant Growths.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Patients and card specimens at 8 P.M. Mr. Stanford Morton: Superficial Keratitis. Mr. Tatham Thompson: 1. Cystic Detachment of Retina. 2. Rupture of Choroid. 3. Depressed Fracture of Orbital Roof. Mr. Lawford: Optic Nerve Atrophy in Smokers. Mr. Benson (Dublin): Fibroma of Cornea. Mr. McHardy: On the Artificial Maturation of Immature Senile Cataract by Trituration. Mr. Simeon Snell: On Artificial Ripening of Immature Cataract. Mr. Brailey: 1. Gouty Cyclitis; 2. Microphthalmos with Glaucoma.

FRIDAY.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, Board Room, West London Hospital, 8 P.M.—Mr. H. P. Dunn: Pathological Specimens. Mr. R. W. Lloyd: An entire Membranous Cast from a Uterus. Papers, 8 30.—Dr. Colcott Fox: The Urticaria of Infancy and Childhood. Some illustrative cases will be shown. Dr. Scanes Spicer: What can be expected from Local Treatment in Hay Fever and Paroxysmal Sneezing. Dr. Eccles: Paroxysmal Hurry of the Heart associated with Floating Kidney.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which sum should be forwarded in Post Office Order or stamps with the notice no later than Wednesday morning, in order to ensure insertion in current issue.

MARRIAGES.

BAILY—JOHNSTONE.—On the 15th inst., at St. Andrew's Episcopal Church, Callander, by the Rev. T. W. Hunter, M.A., Incumbent, Edwin Baily, M.B. Oban, to Annie Eleanor, only daughter of the late Robert Gordon Hope Johnstone.

BURKE—TROUTON.—April 17th, at the Church of St. Mary the Virgin, Little Birch, Herefordshire, by the Rev. T. J. Burke, Rector of Babcary, Somerset, father of the bridegroom, assisted by the Rev. H. Marriott-Dodington, B.A. Vicar of Little Birch. William H. Burke, B.A., M.B., Surgeon H.M. Indian Medical Service, to Edith Louisa, youngest daughter of the late Thomas Trouton, Esq., of Clouskeagh, co. Dublin.

GRAHAM—BALFOUR.—At Leven Bank, Leven, Fife, on the 24th instant, by the Rev. Manners Hamilton Nisbet Graham, minister of Maxton, Roxburghshire (father of the bridegroom), assisted by the Rev. Charles Durward, B.D., minister of Scoonie, Robert Balfour Graham, F.R.C.S., L.R.C.P., etc. Edin., Seaview House, Leven, grandson of the late Rev. Robt. Balfour Graham, D.D., minister of North Berwick, to Ella, daughter of Henry T. Balfour, late of East Barnet, Herts.

RICE—BECKTON.—On the 15th inst., at the Parish Church, West Coker, by the Rev. A. C. Beckton, M.A., brother of the bride, assisted by the Rector, the Rev. W. L. Cotter, M.A., stepfather of the bride, Edward Rice, M.D.(Lond.), 36, Banbury Road, Oxford, eldest son of the late Bernard Rice, M.B.(Lond.), of Stratford on-Avon, to Amelia Curtis, eldest daughter of the late Joseph Beckton, of Didsbury, Manchester.

RICHARDS—CLARKE.—On April 16th, at the Parish Church, Richmond, Surrey, by the Rev. F. W. Clarke, M.A. (brother of the bride), assisted by the Rev. Canon Procter, M.A., Vicar, George Oliver Richards, M.R.C.S., L.D.S.Eng., elder son of the late John Richards, of Exeter, to Ada Catherine, fourth daughter of Thomas Meadows Clarke, of Onslow House, The Green, Richmond, Surrey.

DEATH.

FAWCETT.—On April 22nd, at 3, Scroope Terrace, Cambridge, Rowland Morris Fawcett, M.D.(Edin.), J.P., D.L., in his 87th year.

OURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

NCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

NTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

ARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

ELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

ST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

EAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

SPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

G'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

DON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

ROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

DLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

IONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

TH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

AL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

AL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

AL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

AL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

LARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

LARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

HOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4. F., 2.

RITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

AT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

ERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10. F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

MINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C, London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

BAHAMA will be glad to know where he can best procure a good second-hand surgical dressing case to send out to a missionary clergyman in the Bahamas.

PROVINCIAL asks for the formula for artificial Kissingen salt.

ANSWERS.

SURGEON-MAJOR W. FINLAY, M.S., writes: I should be much obliged for any information regarding the examination for the diploma for midwives of the Obstetrical Society of London.

*** Apply by letter to the Librarian, Obstetrical Society of London, 20, Hanover Square, London, W.

W. W. F. asks if there is an asylum anywhere in England where a female, aged 20 years, the daughter of a tradesman, suffering from chronic epilepsy with delusions, would be received at a charge of about £25 per annum.

*** Our correspondent might apply to the Medical Superintendent, St. Andrew's Hospital, Northampton.

DR. HENRY B. BAILEY (Grantham) asks: How far from a thoroughfare or private dwelling can the sanitary authorities be compelled to erect a hospital for infectious cases?

*** This question cannot be definitely answered unless it is stated whether the hospital is intended for small-pox. Scarlet fever or enteric fever hospitals are required to be at a distance of 40 yards from dwellings, but in the case of hospitals intended for the reception of small-pox a much greater distance is required.

M.D.—We are not inclined to believe that any "eminent physician" could have stated that a middle-aged woman addicted to alcoholic excess for twenty years was absolutely incurable, unless she should happen to take a "religious craze." Such cases have been cured with and without the operation of such influences.

OLD SUBSCRIBER.—For the class of cases in question Carlsbad is considered to be the best organised and most effective. The course of cure is usually about three weeks. Neither Carlsbad nor Vichy is very expensive. About ten shillings a day will cover the cost of moderate living. Carlsbad is more agreeable as well as the more effective.

MANAGEMENT OF HORSES.

DR. A. T. BRAND (Driffield) writes: In reply to "M.D.'s" query about a manual on the horse in health and disease, he cannot do better than purchase Lieut.-General Sir F. FitzWygram's book *Horses and Stables*, which is a most admirable work. It is published by Longman, and is phenomenally cheap.

MR. GEO. WILLETT (Keynsham) writes: "M.D." would find *The Simple Ailments of Horses, their Nature and Treatment*, by W. F., published by Cassell and Co., a very handy manual.

F.R.C.S.ENG. EXAMINATION.

WE are requested to point out that Mr. F. J. Gant's *Science and Practice of Surgery* contains special chapters on surgical anatomy.

FILLING CAPILLARY TUBES WITH VACCINE LYMPH.

DR. WALTER LATTEY (Southam) writes in reply to "M. B. M. Association:" For opening the vesicles I find it convenient to use the instrument with which I vaccinate, made from an ordinary cedar penholder, into each end of which a cut is made with a fine fretwork saw. Three common sewing needles are placed in one end, and an ivory vaccine point in the other, and both are secured by binding with silver suture wire. Holding the instrument nearly

parallel with the surface of the arm, one of the needles is carefully inserted into the vesicle and pushed along its whole length, keeping the point well up under the upper surface; after repeating this several times, the end of a capillary tube is placed in the little drops of lymph which have exuded, the fluid flowing into the tube of its own accord by capillary attraction. When the flow is insufficient, it may be advisable to drop a little pure water on to the vesicles, which can be done from a tube of large calibre. There is much difference in the size of the tubes; some are very fine indeed, and it is very difficult to get the lymph out of them again. Some of the larger ones may be conveniently used when it is not required to store for more than a day or two, and I sometimes take up a little pure water in them before applying to the vesicles; and on account of their size they need not be filled for more than an inch or so.

When I take lymph to store for some months, I select medium-sized tubes, and fill them about one-half with undiluted lymph. Having filled a tube to the required extent, it is to be shaken until the lymph becomes centrally placed; the ends are then placed in the outside of a flame until the glass melts sufficiently to seal the tube completely. It has been recommended to draw the tube along the flame, with the idea of getting rid of the air, but I have found this destroy the vitality of the lymph, either by overheating or by causing some of the products of combustion to enter.

NOTES, LETTERS, ETC.

The Fasting Man.

Mr. G. N. Robins, M.R.C.S.Eng., L.R.C.P.Edin. (Westminster) writes: At the commencement of the fifth week of his task, Signor Succi showed some signs of weakness, being very easily exhausted, rather irritable, sleeping badly, and having a lower temperature than hitherto; but as this condition has passed off, and he is now, though weak, not exhibiting any symptoms of actual exhaustion, I think it may have been due to anxiety consequent upon passing the limit of his previous fasts, none of which have exceeded thirty days. At the time of writing, he is in better spirits than he has been at any time during the past three weeks.

Daily Record of Succi's Condition during Fifth Week of his 40 Days' Fast at the Royal Aquarium, Westminster.

Date, 1890.	Day of Fast.	Pulse.	Temperature (axillary).	Respirations.	Weight.	Dynamometer (kilogrammes).	Spirometer (cubic centimètres).	Urine passed (fluid ounces).	Urea = (grains).	Water Consumed (fluid ounces).	Kaiser Brunnen (fluid ounces).	Hunyadi Janos (purgative) (fl. oz.).	Sleep (hours).
					lb. oz.								
Aprl.15th,noon	29	64	97.4°	18	97 12	46	1450	13	136.5	17	6	—	*
,, 16th ,,	30	58	96.8°	20	97 6	46	1450	13½	150.8	12	12	—	3½ 1½ 1½
,, 17th ,,	31	60	97.0°	16	97 2	46	1460	11	144.1	16	6	—	5½ 2 1
,, 18th ,,	32	62	97.0°	19	96 9	46	1450	11	158.5	10½	11	—	5½ 2½ 2
,, 19th ,,	33	64	97.3°	20	96 6	45	1450	12	157.2	15	11	—	4 2
,, 20th ,,	34	62	97.8°	21	95 15	48	1500	14½	158.8	15	3	5	5½
,, 21st ,,	35	52	97.4°	19	95 5	47	1500	10⅛	130.6	15½	10	—	7½

* Restless.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

A Textbook of Obstetrics. By Dr. F. Winckel; translated from the Ger... under the supervision of J. Clifton Edgar, A.M., M.D. Edinburgh: London: Young J. Pentland. 1890.

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REMARKS
ON
PYLORECTOMY.

Delivered before the Medical Society of London.

By Sir WILLIAM STOKES, M.D., F.R.C.S.I.,
Professor of Surgery, Royal College of Surgeons in Ireland.

Comparatively recently, I had occasion to remove the pylorus, since which the operation has largely occupied my thoughts. It is one which, from some cause or causes as yet not satisfactorily explained, has, with one exception, hitherto successfully baffled the best directed efforts of surgeons in these islands, and as we learn from Dr. Winslow, in many other countries, notably France, the United States of America, Brazil, and Norway, the experience of surgeons is equally discouraging. In Austria and Germany, on the other hand, the results are distinctly better, although the mortality is still alarmingly high.

In dealing with this subject, it is not my good fortune to be able to give a record of a successful surgical achievement in that direction, and what I have to say, therefore, will doubtless lack the interest and encouraging stimulus to renewed effort that my remarks might have were I in a position to recount a conspicuous success in connection with an operation, the mortality in which has up to this been so great and so disheartening. However, it must be remembered that on the path of surgical progress are always found difficulties and obstacles which must be recognised, and if possible removed, before any distinct and signal advance can be made.

It is as a rule of equal, perhaps even of greater, importance to consider and analyse the probable causes of our surgical defeats than to dwell, as we would naturally desire to do, on our surgical triumphs. Had the truth of this not been acknowledged in modern times, many of those brilliant operative achievements which must ever signalise the era in which we live and work would never have been brought to a successful issue, and be now regarded as legitimate exercises of our art. In illustration of this, I might indicate several operations now well recognised and frequently performed, among which ovariotomy naturally occupies the foremost place, an operation the mortality in which, during its infancy, was almost uniform. Professor Buchanan, of Glasgow, has stated that he remembers the time when one of the most accomplished surgeons of his day publicly asserted that if a surgeon performed ovariotomy, and it was followed by a fatal result, he might with justice be tried as a criminal charged with culpable homicide,[1] and I can recall the fact of another eminent surgeon, and one of my most respected teachers, who, on the completion of one of my ovariotomies, which he witnessed, and the result of which was successful, thanked his God that he had never been called on to perform this operation.

By those who have commenced the study and practice of surgery within the past fifteen or twenty years such statements will in truth probably be heard with amazement if not incredulity.

Having regard to the fact that pylorectomy must still be considered in its infancy—eleven years only having elapsed since the initial operation was undertaken in Paris by M. Péan—and also to the occasional successes which have been obtained by our Continental brethren, notably Billroth, Wölfler, Czerny, and others, we should not, as some are inclined to do, regard the fortress as impregnable, but rather consider what are the probable causes that have militated so strongly against our getting successful results.

The importance of dealing with this subject appears all the greater, in face of the acknowledged and undoubted steady increase of late years in the number of cases of cancer among the community at large, a circumstance strongly emphasised by Sir Spencer Wells in his Morton Lecture (1888), and also the fact that the pylorus is so favourite a *habitat*—to borrow a botanical term—for abdominal cancer. In proof of this, I would refer to the well-known researches of Gussenbauer and Von Winiwarter,[2] which show that 60 per cent. of the cases of cancer of the stomach are situated at its pyloric end. Another important point, and one alluded to by Mr. Butlin in his work on the *Operative Surgery of Malignant Disease* (p. 212), is that cancer in so many instances remains even to the end limited to the pylorus, and without either any glandular participation or contraction of adhesions to any of the neighbouring organs.

With these few preliminary remarks I may now very briefly detail the main facts connected with the case to which I have already alluded, and which were kindly furnished to me by Dr. Lennon, assistant-physician to the Meath Hospital:—

A. O., aged 34, presented herself at the extern department of the Meath Hospital on June 4th, 1889. She complained of persistent vomiting of sour water and "slime," accompanied by a gnawing pain in the belly, the vomiting occurring chiefly after food, but at times a large quantity came up amounting to several pints, which she could not account for. The sour water was occasionally brown and frothy, but usually clear. Some mornings when lying in bed, or when walking in the streets, her mouth would fill with water without any taste. Her appetite had failed of late: her bowels were confined, and never could be moved without aperient medicine. The urine was of a high colour and very scanty. She had suffered from a "windy" and sour stomach for the past three years, but was never prevented by her illness from going about and discharging her usual duties.

On March 3rd she became much worse, the vomiting being constant and pain at times severe. She had to lie in bed nearly all day owing to weakness and giddiness, and she noticed, as she expressed it, the flesh beginning to "melt off her bones." She was at times greatly troubled with hiccough. At no time had she ever vomited any blood. She could not account for her present illness in any way; she was always of temperate habits; there was no unfavourable family history; had always been comfortable at home, and free from all domestic or other anxieties. Formerly she had been somewhat addicted to drinking strong tea, but of late had quite abandoned the habit. The patient was greatly emaciated, of dark complexion, transverse wrinkles on the forehead very well marked, tongue abnormally clean, papillæ prominent and red, and glands in the neighbourhood of groins, axillæ, and clavicles apparently not enlarged.

On examination of the abdomen the anterior wall was thin and retracted, and a little to the left of the epigastric region there was an extensive, well-marked, looped, fusiform bulging, which extended downwards into the left lumbar region across the lower part of the umbilical and then into the right lumbar region, the concavity of the protrusion being upwards and to the right side. The bulging diminished in size when flatus was got rid of, or when local relaxation took place. On tilting this enlargement, which was clearly due to gastric dilatation, splashing could be distinctly felt and heard. On the right side another smaller and somewhat elongated tumour was discovered, which was firm, lobulated, slightly movable, and distinctly tender, about $2\frac{1}{2}$ inches in length and $\frac{3}{4}$ inch in width, extending obliquely from a point commencing two inches vertically downwards from the ninth rib at its juncture with its cartilage to the lower and right part of the umbilical region. There was dulness on grave percussion over the smaller tumour, while over the larger a variable note was heard according to the position of the patient, dulness being most marked below the umbilicus when in the supine position. Heart sounds were normal, very clear in character.

The diagnosis made was a dilated stomach resulting from probably a cancerous pyloric obstruction. In this view Sir G. Porter, Dr. Arthur W. Foot, and my other colleagues who saw the case concurred.

Having explained fully to the patient my views as to the serious nature of her case, and also the gravity of the operation, which I believed gave her a prospect, though a slender one, of relief, and possibly of recovery, she at once not only consented to have the operation performed, but urged on me to undertake it as speedily as possible.

On the day previous to the operation (June 25th) I washed out the stomach thoroughly with a 5 per cent. solution of boracic acid, which procedure was carried out without difficulty or unpleasantness to the patient. She had a good night subsequently. Next morning, at 9.30 A.M., I again washed out the stomach, and continued injecting the boric solution until the fluid returned was almost transparent. This washing of the stomach did not appear at all to exhaust the patient. Shortly after she was anæsthetised with chloroform, which was skilfully administered by the resident

[1531]

[1] Journal, March, 1888.
[2] *Langenbeck's Archiv*, xiv, 372, 1876.

surgeon, Dr. Newell. No sickness or other untoward accident attended the administration of the anæsthetic, the employment of which had to be kept up for the very protracted period necessary for the operation, in which I was ably assisted by my colleagues, Sir George Porter, Bart., Mr. P. C. Smyly, and Mr. Hepburn. I commenced by making a curved oblique incision, about 4 inches in length, on the right side, a little above the level of a horizontal line drawn across the abdomen, corresponding to the umbilicus. On reaching the peritoneum, I divided it with a blunt-pointed scissors to the same extent as the external wound, the edges of which were drawn asunder with retractors, and a good view was now obtained of the stomach, omentum, pylorus, and duodenum. The disease was found to be confined to the pylorus, which was much enlarged, hard but smooth, and devoid of ulceration. The omenta were apparently free from disease. The next step of the operation consisted in the separation of the omenta from the pylorus and pyloric end of the stomach. This was done by taking up one small portion of the structure after another with a blunt aneurysm needle, armed with a double carbolised silk suture; these were then fastened, and the tissue divided between them. This procedure, which was of necessity a very protracted one, was applied first to the great, and subsequently to the lesser, omentum, and a considerable time elapsed before the pylorus and adjacent portion of the stomach were detached from these structures. The pylorus could then be easily lifted out of the abdominal cavity, and an accurate estimate made of the extent of the disease. The next step consisted in reducing the pyloric end of the stomach, to enable me to subsequently attach it to the duodenum. This I did by applying to the stomach an enterotome (Dupuytren's) from the upper or lesser curvature obliquely downwards and forwards, each end of the enterotome being guarded by soft rubber tubing, which had previously been carefully aseptic ised.

I then made an oblique section of the stomach to the outer side of the enterotome, and then carefully applied along the course of the incision a series of ten Czerny-Lembert sutures, the material employed being very fine twisted carbolised silk, and the needles used small, round, and straight. The enterotome, which was kindly lent to me by Dr. Thornley Stoker, was then removed, and temporarily applied to the lower portion of the stomach, on the cardiac side of that portion of it which was eventually to be attached to the duodenum. To this an enterotome was then applied, the entire lumen of the duodenum being closed by the instrument. This portion of the intestine was then divided on the distal side of the instrument. The most difficult and tedious part of the operation now commenced, which consisted in attaching the divided duodenum to the open portion of the stomach, now temporarily closed by the enterotome. I first applied to the posterior walls of the duodenum and stomach a Lembert suture, which involved primarily the muscular and serous coats of the stomach and duodenum, that is, I passed small, round, straight needles, armed with fine twisted carbolised silk through the muscular and serous coats, first inserting fifteen of them at this stage, and over them I then applied a second series of sutures, involving the mucous lining only. In this way the serous was applied to the serous, and the mucous to the mucous coat. Having done this carefully, I then removed the enterotomes, and proceeded to attach the anterior portion of the walls. To do this I had to reverse the order which I had adopted in the first instance, suturing now the mucous lining first, and subsequently the muscular and serous. This was, as in the first stage of the suturing, necessarily a very protracted part of the operation. Having firmly secured the sutures before closing the wound, I carried out the toilet of the peritoneum with much care, and took every precaution that the parts involved should be left as dry and free from clots as possible. The edges of the wound in the abdominal wall were then brought together in the usual manner, and fixed by strong carbolised silk sutures and dressings of sal alembroth and iodoform wool applied, all being kept in place by a fine and broad flannel roller.

During the operation the patient on three occasions became so weak as to give rise to very serious apprehension on my part. From these semi-syncopal attacks, however, she rallied on small quantities of brandy being given by the rectum, and hypodermic injections of ether administered. On being placed in a previously well warmed bed, the patient's condition in a short time improved in a marked degree.

I saw her at frequent intervals during the afternoon, and each time improvement was noted. The patient complained of no pain, nor was there any gastric irritability. At 10 30 P.M., however, there was a sudden failure in the heart's action. The pulse became very rapid (140), weak, and compressible, and all our efforts to improve it by diffusible stimulants given hypodermically as well as by the rectum proved unavailing. The patient continued to get weaker, and finally succumbed eleven and a half hours after the operation.

This makes, as far as I have been able to ascertain, the fifth pylorectomy performed in these countries. I have been informed by Dr. Bristowe that there was another in St. Thomas's Hospital, but I have not learned any details connected with it, but the result was, I believe, as unsatisfactory as those which preceded it. However, it is satisfactory to know that a break in the cloud has at last come in the brilliant result obtained comparatively recently by Mr. Rawdon.

It may possibly help us to determine the causes of our high mortality in this operation if we take a rapid survey of some of the principal features of these cases. Mr. Southam first performed the operation in England in April, 1882. His patient was a male, aged 43, and was greatly emaciated at the time of the operation, unable to take any solid food, and suffered from constant sickness after taking nourishment of any kind. This condition of things had gone on for four months previously. In this case the patient survived the operation fourteen hours.

The second case was Mr. Meyland's, and was operated on in March, 1886. The patient was a male, aged 46, and at the time of the operation was apparently even in a more debilitated condition than the former case. There was great weakness, emaciation, pain, and frequent vomiting, and he was rapidly losing weight. In this case, too, there was much glandular contamination, chiefly in the gastro-hepatic omentum. The patient had been suffering from symptoms referable to the stomach and pylorus for two years. The operation lasted in this case three and a half hours. The patient survived four days.

The third case was Mr. McArdle's, operated on in May, 1886. I have not ascertained the length of time the patient was suffering previously to the operation, but she was in a condition of great prostration and emaciation when it was performed. The operation lasted three hours. This patient survived four hours.

The fourth case was Professor Buchanan's, operated on in 1888. His patient was a female, aged 48, pallid, weak, and much emaciated. There was great distension of the stomach, and a nodulated, freely movable pyloric tumour about the size of a hen's egg. In this case seventeen hours was the time the patient survived after the operation, which lasted two hours and a half.

The fifth case was the one under my care, the principal details of which I have already given, and the symptoms in which, like the preceding ones, were complained of long previous to the operation. In my case the operation lasted two hours and three quarters.

The last case (Mr. Rawdon's)—"the break in the cloud," as I have termed it—has quite recently been published; but in connection with it the following circumstances are important to bear in mind: First, that the pyloric portion of the tumour was small in size; that there were no adhesions; that there was no extreme emaciation; that the serious symptoms were only "of some weeks' duration;" and that the operation, mainly owing to the sutures that were employed, was not by any means as protracted as any of the preceding ones.

The outcome of this brief survey is important, for we observe in five of the six cases that—

1. The symptoms of pyloric stenosis had existed for a lengthened period previously to the operation.
2. That great weakness and emaciation existed at the time of the operation.
3. That there was constant vomiting.
4. That the operation was much protracted in consequence of a difficult and complicated system of sutures having been employed, and which rendered also an unduly prolonged narcosis necessary.
5. That in the sixth case these unfavourable conditions were for the most part absent.

As regards the causes that have brought about such a high mortality, we may, I think, accept those given by Winslow, namely, shock, collapse, inanition, peritonitis, and gangrene of colon. The most generally accepted view, and one probably containing many elements of probability in it, is that the shock is due to the great length of time the operation necessitates. But the collapse cannot altogether be due to this, for, as Mr. Butlin has pointed out, many successful cases of ovariotomy—and, I may add, hysterectomy—as

well as other operations, have taken as long, but rather, as he says, to the emaciation and debilitated condition of the patient at the time of the operation.

Mr. Southam has propounded a theory as to the cause of the collapse, which, however, I cannot but regard as untenable. He suggests that it may be due to septic intoxication from the ferments in the alimentary canal getting into the peritoneal cavity by the law of osmosis, and setting up an acute and rapidly progressive peritonitis, sufficient to destroy life in the course of a few hours; and he also thinks that the division of the stomach and intestines renders it impossible to keep the parts perfectly aseptic. In this view I cannot coincide either. If any of the methods of suture, such as that of Czerny-Lembert or any of the others here illustrated, are carefully carried out, and during the section of the stomach, previously asepticised by diligent irrigation, the contents are prevented from getting access to the cavity of the peritoneum by the devices of either Rydygier, Gussenbauer, Schede, Billroth, Treves, and others, one need not be very apprehensive as to sepsis supervening from that cause.

It seems to me that, from the hitherto published records of pyloric resection, two main causes have militated against success: one is the late period in the development of the disease in which the operation has been, as a rule, undertaken, and the other is one connected altogether with the *technique* of the operation, namely, the introduction of so many and such complicated sutures, which necessarily protract the performance of the operation, and in this way, from the long exposure of the parts involved, induces—especially in weak, debilitated individuals—shock and collapse. As regards the first of these causes, it seems to me that, having regard to the comparatively little risk that, with due antiseptic precautions, attends exploratory abdominal operations, especially in females, we should, in cases where we reasonably suspect the existence of any organic pyloric disease, expose the part, with the twofold object of determining the existence or not of any adhesions, the size and exact situation of the growth, and also if infiltration to any extent of the adjacent tissues exists. When accurate information on these points is obtained, we could, strengthened by the knowledge thus obtained, either decline any further operative interference or proceed to perform the operation with a confidence we could not otherwise hope to have in the performance of what Professor Buchanan has rightly stated is "truly a formidable operation."

The other point is the question of sutures. That a thoroughly accurate and firm fixation by sutures of the edges of the duodenum and pyloric end of the stomach is essential to success goes without saying. But it is a question whether a simpler and speedier method than those—and many of which are illustrated here, and which are extremely complicated—may not satisfactorily fulfil the required conditions. The suturing of the mucosa, for example, is one of the steps of the procedure, as in the Czerny-Lembert method, which undoubtedly greatly protracts the operation. In my case thirty-one were inserted, and after making many experiments on the cadaver I feel confident that an efficient closure can be made by confining ourselves to the serous and muscular structures, and letting the mucosa take care of itself. I cannot but think, too, that the use of the continuous suture, involving only the serous and muscular coats of the stomach, should be employed at all events in the curtailment of the pyloric end of the stomach. Time would certainly be saved by the adoption of this method of suture. Another plan, undoubtedly affording facilities for expediting the operation, would be the use of Senn's decalcified bone plates, employed with such success by Mr. Rawdon, and also by Mr. Clark in his recently published interesting case of gastro-enterostomy.[3] For the benefit of those not quite familiar with the application of Senn's plates, I am able through the kindness of Mr. Rawdon to exhibit this simple but ingeniously devised model, which clearly explains their mode of application.

The question has been boldly raised as to whether, having regard to the unfavourable statistics of the operation and the frequency of, and in some instances very speedy, recurrence of the disease, pylorectomy can ever be regarded as a legitimate procedure. But it should be remembered that in some of the cases, a year, fifteen months, and in one instance four years, elapsed before the patient succumbed. To base a proposition on the ground of frequency of recurrence seems to me to be unphilosophical, for the logical outcome of the adoption of such a principle would be the practical abandonment of operations for cancer on other organs frequently affected—notably the tongue and breast—and I cannot but think that increasing surgical experience tends rather to strengthen than to paralyse the efforts of surgeons in the operative treatment of cancerous maladies of these organs. Certainly my own clinical experience, extending now over a large number of years, during which I have operated on all recognised forms of cancer in every accessible situation, tends in that direction, and not only emphasises the desirability of early recognition and early removal if a cure or a tardy reappearance of the disease is to be reasonably anticipated, but also compels the adoption of views in favour of the primarily local origin of the disease, views which, as time has progressed and experience widened, have deepened and crystallised into firm belief.

Nor should we abandon as hopeless the possibility of a discovery being made in the future of a constitutional therapeusis which may exercise a modifying and possibly destructive influence on the growth and extension of cancer. Many claims have been made to such an alleged discovery, but although nothing yet has been found to bear the crucial test of scientific investigation or experience, we should not—as so many have done, and still do—scornfully reject all suggestions made in that direction, even though they may not come to us strengthened by scientific credentials. It seems to me that in our existing scepticism we should exercise caution, and especially if, as seems not improbable, the parasitic origin of cancer may yet be established, rather look forward hopefully to the long-wished-for discovery emerging from the hazy mists of mere probability into the clear and bracing atmosphere of scientific truth, a recognised and established fact; but until that day arrives we must be content to render as perfect as possible a local therapeusis, and in doing so we can derive no small encouragement from what has been said by the greatest living pathologist, Virchow, who, speaking more from a purely pathological than a clinical standpoint, admits the possibility not only of cancer being a local affection at its beginning, but often very long afterwards, when "it must," he says, "be possible during this period locally to cure it."

From the preceding observations the following propositions may, I think, be stated:

1. That the recognition of the disease should, if possible, be made before any marked emaciation and weakness supervene.
2. That in all doubtful cases exploratory measures should be adopted with the view of (*a*) forming a just estimate of the nature of the disease, (*b*) the existence or non-existence of adhesions, (*c*) the presence or absence of much glandular infiltration.
3. That washing-out or irrigation of the stomach is a desirable antiseptic precaution, and can be easily carried out without exhausting the patient.
4. That the protracted nature of the operation, as usually performed, unquestionably tends to promote shock and ultimate collapse.
5. That with the view of shortening the operation it is desirable to determine what is an effectual and, at the same time, speedy method of inserting sutures.

I cannot conclude these remarks without observing what a peculiar source of pleasure it is to me that on this occasion the meeting is presided over by one who has played so distinguished and conspicuous a *rôle* in the wide field of abdominal surgery, and acquired for himself thereby so deserved, extended, and lasting a fame.

For the following note on the pathology of the pyloric tumour in the case I have detailed above, I am indebted to Dr. McKee, Curator of the Museum of the Royal College of Surgeons of Ireland:

"The portion excised measures $2\frac{1}{4}$ inches along the lesser curvature, and $3\frac{1}{2}$ inches along the greater. The tumour is annular in form, the ring being wider at the stomach end, where it admits the little finger, and narrowing to about three-eighths of an inch towards the duodenum. At this end the growth terminates abruptly, and is cleared for one-eighth of an inch by the incision. At the other end, a large fringe of apparently healthy mucous membrane has been removed, but here the tumour passes more gradually into the tissues of the part. Externally the tumour shimmers through the serous coat, in which near the great curvature are a few small transparent nodules about the size of a pin's head. On making an incision along the smaller curvature, the tumour was found to be extremely ulcerated, and to have invaded the muscular coats of the pylorus, which were greatly hypertrophied.

"The stomach, removed *post mortem*, measured from the sutures to the cardiac end $9\frac{1}{2}$ inches, and transversely 5 inches. The serous coat is reddened in the neighbourhood of the sutures, and covered

[3] JOURNAL, February 8th, 1890.

with a few flakes of fibrin. There is a similar reddening and swelling of the mucous membrane fading away towards the stomach. No trace of tumour near the line of incision, or in any other part of the stomach."

"*Microscopic Examination.*—The growth is a carcinoma, which appears to have originated in the alveoli of the pyloric glands. The transition from the normal to the abnormal epithelium is sudden, the cells being at once reduced to half their size. While their granular protoplasm is retained, the nuclei are spherical and centrally placed. Still, in all parts of the tumour isolated cells are observable, with flattened peripherally situated nuclei and clear contents. The tumour penetrates the muscularis mucosæ, and extends horizontally beneath it, so as to undermine the healthy mucosa; it insinuates itself between the bundles of the muscular coat, and even penetrates them. The alveolar structure is most marked in the upper portion of the growth, the cells being here contained in long narrow spaces, some of which are provided with a lumen. In the submucosa and muscularis the alveoli are much smaller, irregular in shape, and with very little interstitial substance. The ulceration is extensive, and in places extends as far as the muscularis mucosæ."

REMARKS
ON
BILIARY OR "HYPERTROPHIC" CIRRHOSIS,
WITH A CASE IN WHICH THERE WAS ATROPHY OF LIVER.

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The following is an account of the case:—M. C., aged 37, married. Family history good. She has had eight children, of whom five are alive and well and three died of measles. She has had no bad illness and has always been healthy though delicate. She has always been strictly temperate, and there is no history of syphilis. She has had a great deal of trouble and lately has suffered from nervous depression. Her last confinement occurred two years previously. She gave no history of illness following any of her confinements. The present illness began 15 months ago with jaundice, which has been worse at intervals and has never entirely disappeared. On her admission it was said to be more marked than ever before. She complained often of pain in the right side, suffered from violent attacks of vomiting at times, but never brought up any blood nor passed any in the stools. About once in every two months she noticed that she passed a small quantity of water for some days, and this would be followed by a copious flow. She had always suffered from constipation, and since the appearance of the jaundice from dyspepsia. She had never had fits nor convulsions of any kind. Lately her manner has been strange, and she did not always seem conscious of her surroundings, for instance, whilst carrying food to her mouth she would let it drop without appearing to notice that she had done so. On August 29th, 1889, she was lightheaded, and her friends brought her to the hospital. This was all the history that could be obtained from her friends; the patient herself was incapable of giving us much information. She was admitted on August 30th; her manner was dull and heavy, she allowed her friends to answer all questions addressed to herself, and gave the porter a lozenge under the impression that it was a sixpence. She sat up in bed and talked all the night, and from time to time had violent fits of yawning. She refused her medicine, but took milk and beef tea.

When I saw her on August 31st the patient was sitting up in bed and talking to herself; she did not answer questions unless spoken to loudly, and it was found on subsequent inquiry of her friends that the answers she did make were not altogether correct. She was very weak, rather emaciated, and deeply jaundiced. On examination a soft systolic murmur was audible over the præcordial area, the lungs were healthy, the liver dulness extended in the nipple line from the sixth rib above to a point about half an inch above the lower border of the ribs. The edge of the liver could not be felt, there was no tenderness over it. The urine contained much bile-pigment, a trace of albumen, and some crystals, which looked like leucin plates, but I was not absolutely sure that they were leucin. Specific gravity, 1020. There were also renal epithelial cells and some epithelial and hyaline casts.

On September 2nd the patient was partly comatose, the motions were passed into the bed: they were green in colour and mixed with about 10 ounces of dark blood. The urine was retained, and 12 ounces were drawn off by catheter: it had the character above mentioned and contained 0.6 to 0.7 per cent. of urea, estimated by Russell and West's process. She answered sensibly when spoken to, and said that she was in no pain. A few small petechial spots on the chest; respiration regular, deep, and sighing; tongue covered with thick yellow fur, sordes on teeth and lips, and odour of breath very offensive. No liver dulness detected, apparently from distension of intestines.

On September 3rd her general condition was much the same; the liver dulness was now distinctly made out to be two inches in the nipple line. Examination of the urine showed well-marked crystals of leucin and tyrosin, the leucin plates being the more numerous; there was, as before, much bile-pigment and a trace of albumen; there were renal cells and epithelial casts. On examining a specimen of the blood a few crystals of hæmoglobin were seen lying in the plasma, the red corpuscles did not form rouleaux readily, the red and white discs were in the normal proportion. A small motion containing a little blood was passed in the evening. No vomiting, but violent fits of yawning from time to time.

September 4th. Jaundice more intense; patient much emaciated and in a comatose state, from which she could not be roused. A small motion, not green in colour and not containing blood, was passed. The fits of yawning had ceased; head and face covered with cold sweat. Respiration sighing, 24 to minute; pulse 140, very small and weak; liver dulness two inches in nipple line; tongue dry and foul, and teeth covered with sordes. Throughout the patient had no convulsions and no vomiting. The temperature was normal to the last day of life, when it rose to 100° in the evening, and remained at this level till death. Urine: Specific gravity 1030, no sugar, acid, large trace of albumen, much bile pigment, large crystals of oxalates, bundles of tyrosin crystals, and greasy-looking plates of leucin were all seen in great abundance. The amount of urea estimated by Russell and West's method was only 0.3 per cent.; the quantity passed in the twenty-four hours cannot be exactly stated, as the whole of the urine passed could not be obtained. Death occurred in coma on September 5th.

Necropsy Twenty-six Hours after Death.—Body emaciated; rigor mortis present in legs; a few small, scattered, petechial spots on legs and upper part of chest. The skin and the organs generally, with the exception of the brain, were bile-stained. There were recent adhesions over the greater part of the lung; both lungs were somewhat emphysematous, and a large hæmorrhage had taken place into the lower lobe of the right lung; right lung, 19 ounces; left, 10½ ounces. Heart normal; its muscle was not fatty. The blood was everywhere perfectly fluid, and almost black in colour. No crystals were seen in the portal blood. On opening the abdomen, the peritoneum was normal; no ascites; duodenum distended with gas, and contained, together with partially digested food, some large drops of oil. The opening of the bile duct was patent, and a few drops of very dark bile escaped on pressing the gall bladder. The liver weighed 21½ oz.; it was very small and somewhat flabby to the touch. The capsule was not particularly wrinkled; the surface was smooth, and the shape of the organ normal. On section, the left lobe was in colour a bright canary, firm in consistence, the surface finely granular, the lobules being raised above the level of the section, their outlines rounded, perhaps fused into groups, stained deep yellow, and plainly demarcated from each other by a paler tissue that lay between them. In the right lobe the appearances were much the same, with the exception that there was a large area of dark red material occupying the mesial portion, and similar smaller areas in other parts of it; in these dilated vessels were observed. These changes extended throughout the liver, but were less noticeable in a zone, which was, however, yellowish in colour, about a quarter of an inch in depth, along the posterior border. The spleen weighed 3½ oz., dark and soft. Kidneys: capsules stripped easily, leaving a smooth surface; parenchyma of cortex soft and pale. The pyramids showed deep purple congestion, the venæ rectæ prominent and full of dark blood; ratio of cortex to pyramids normal. Intestines normal; contained some

ard scybala, mostly yellowish in colour, and apparently composed argely of fatty matter. Brain small; weighed 36⅓ oz., otherwise vith the membranes it was normal. Pancreas and suprarenals ormal. Uterus contained one small intramural fibroid.

The following is an account of the histological changes in the ver. There is new formation of fibrous connective tissue, rather oose in texture, for the most part richly nucleated and abundantly supplied with vessels, forming interlobular tracts, separating the individual lobules from each other by narrower or roader bands of connective tissue. Within the lobules between he columns of liver cells and also between the individual cells is more delicate tissue, hyaline in appearance. This is most abundant and more fibrous at the periphery of the lobules. The lobules n the early stages retain the general arrangement of their cells, ut in more advanced parts the cells are irregularly arranged, and ften widely separated from each other by the intervening new row. In other parts there is a very abundant infiltration of ound cells between and around the liver cells, accompanying a milar round-celled infiltration in the interlobular tissue. The mount of this connective tissue varies much in different fields. n some the whole field is occupied by fibrous tissue with a few cattered remnants of liver cells, or total disappearance of these, nd there is every degree of variation from this extreme to fields n which the lobules are well marked and preserve their normal rrangement, but are separated from each other by abnormally wide epta of connective tissue with finer intralobular hyaline growth. he degree of atrophy of the liver cells themselves showed corresponding variation; in the less advanced parts they looked airly healthy. Where round-celled infiltration was marked the uclei of the liver cells were proliferating; in other parts the cells ere atrophied or in process of disappearing, containing pigment nd other granules in the protoplasm, and very rarely fat droplets. atty degeneration may be said, however, to be entirely absent roughout the liver. In the interlobular connective tissue generally, and especially in those spots in which the nuclear growth is ch, there are seen in abundance the double rows of nuclei usually aken to represent small biliary ducts. They appear to branch nd form networks, and in most places their epithelium is undergoing desquamation, the lumen of the tubes in cross section being hoked with products of cell proliferation. I could nowhere dect transformation of liver cells into connective tissue. The ranches of the portal vein showed some dilatation and thickening of their walls.



Hypertrophic cirrhosis: showing interlobular connective tissue in early stage; it is invading chiefly the periphery of the lobules, and the hepatic cells are becoming atrophied in places; the intercellular new growth is well marked, as are the biliary ducts in the interlobular tissue (*aa*).

In sections taken through the red areas the changes differ somewhat from the foregoing. They consist of large areas composed almost entirely of round cells, amongst which no liver cells can be distinguished, accompanied by extensive hæmorrhages. In many of these areas the small biliary channels above mentioned are especially thick set and conspicuous, and the cubical cells lining them in active proliferation; in some places they run parallel to one another, suggesting that they represent the remnants of atrophied lobules. Generally speaking the destruction of the hepatic cells is complete in these areas, but in parts they can be distinguished, and present somewhat different changes to those found in the other parts of the liver; their protoplasm is swollen, clouded, and finely granular, so that their outlines are obscured, and their nuclei invisible.

In the kidneys the epithelial cells of the convoluted tubes had lost their contour, were swollen, with granular protoplasm entirely obscuring the nuclei, which were indistinguishable; no lumen could be detected in the tubes which were filled by the swollen epithelium. In some of the loops of Henle there are similar changes in the epithelium, but this is not universal as in the convoluted tubes. Some of the loops showed earlier changes, consisting of proliferation of nuclei and a granular appearance of the protoplasm. In some of the glomeruli the nuclei were, perhaps, abnormally abundant, otherwise the glomeruli were healthy. In all other respects kidneys quite normal, as were also the heart, spleen, and suprarenals.

From the symptoms observed during the short time that the patient was under my care, the diagnosis made was acute yellow atrophy of liver, supervening on jaundice of some duration. The diminished size of the liver, jaundice, deepening coma, hæmorrhages, presence of leucin and tyrosin in the urine, with failing excretion of urea, pointed to this. At the necropsy the naked-eye appearances in the liver did not correspond with the changes found in acute yellow atrophy; the smooth unwrinkled capsule, the granular section, bright yellow colour and firm consistence, are the chief points of difference. Microscopic examination cleared up the diagnosis by showing that the morbid change in the liver consisted in a new formation of connective tissue around the lobules (monolobular), with round-celled infiltration in parts of it, and of the same growth within the lobules between the liver cells (intracellular); in addition the little channels lined with cubical epithelium which lie in the interlobular tissue, and are generally held to be biliary ducts, were exceedingly numerous, and their epithelium appeared to be proliferating. As to the origin of these little ducts in such cases, there is considerable difference of opinion amongst authors. It is considered by some that they form the essential element in the morbid anatomy of hypertrophic cirrhosis, but it has been shown that they are also present (though not so numerous) in the ordinary forms of cirrhosis, and cannot, therefore, be held to be a distinguishing characteristic of any one variety. Certainly they are more abundant and conspicuous in this case than in sections of ordinary alcoholic cirrhosis. Goodhart is of opinion that there is no new formation of ducts, and quotes Cornil and Ranvier to the same effect, namely, that the increase of biliary ducts is due, not only to the abnormal prominence of those already in existence, but to the conversion of the bile-capillaries into ducts by the extension onwards of the duct epithelium.[1] In this case they are most prominent in situations where the hepatic cells are most extensively destroyed; I could not distinctly make out ducts in process of formation. A more characteristic feature than the presence of these ducts in the interlobular tissue—numerous though they are—and one which gives the sections a quite different appearance to those of the ordinary form of cirrhosis, is the intralobular formation of connective tissue separating the cells from each other. As to the mode of origin of the newly formed tissue, whether within the lobules or growing into them from without, the more advanced change in the periphery of the lobule is in favour of the latter view being the correct one. I think that the "red patches" must have occurred quite late in the disease, towards the end of the illness, when the morbid process was intensified, giving rise to hæmorrhages and rapid round-celled infiltration.

The minute changes in the liver mark the case as one of intracellular or biliary (hypertrophic) cirrhosis, according to the ordinary classification, or adopting Mr. Munro Smith's[2] division of cases of cirrhosis into two groups, obstructive and irritative, it falls under his first subdivision of obstructive cirrhosis. It is sufficient to state that the entire absence of any evidence or his-

[1] *Atlas of Pathology*, New. Syd. Soc., fascic. iv, p. 35.
[2] JOURNAL, 1888, vol. i, p. 1381.

tory of syphilis excludes this as a cause of the condition; and the changes present do not resemble those found in the red atrophy of liver of British authors. In classifying the case, however, one must take into consideration the clinical symptoms as well as the anatomical changes. These symptoms afford a marked contrast to those of hobnailed cirrhosis; there was no alcoholic taint, no ascites, no enlargement of spleen, nor dilatation of abdominal veins. On the other hand, jaundice was present to a degree most unusual in ordinary cirrhosis, and death took place with symptoms of malignant jaundice. The hæmorrhages which occurred late in the case may reasonably be attributed to the profound blood changes then present, and not as in hobnailed cirrhosis, to obstruction to the blood flow through the portal system. Both on clinical and anatomical grounds, then, the case corresponds to hypertrophic or biliary cirrhosis, "*cirrhose hypertrophique avec ictère*" of the French, except that there was no hypertrophy, but instead atrophy of liver. Whether there had been hypertrophy at some time in the period of fifteen months during which jaundice and other symptoms were present, it is impossible to say; the patient frequently complained in the earlier stages of pains in the hepatic region; pain is more commonly present in enlargement than in contraction of the liver, and so far as this symptom goes it is in favour of an antecedent hypertrophy. With regard to this point, I may here quote a case of Murchison's[3] which strongly resembles my patient's. The patient was a girl, aged 12. At the age of 6, she contracted a severe chill from sea bathing; her illness began four years later with jaundice; the liver at that time "reached down almost to the pubes;" later on it was not enlarged. There was at this time slight jaundice and enlargement of the spleen, but no ascites. She died after two years' illness, with symptoms of acute yellow atrophy. At the necropsy, the liver was small and rounded, puckered and irregular on the surface, and weighed only 16 ounces. Comparing this case with that of my patient, there is close correspondence as regards long duration of symptoms, termination by icterus gravis, and *post-mortem* changes. In the former there was great enlargement of the liver at one stage of the illness, and this affords some ground for supposing that enlargement of the liver was the cause of the pain from which M. C. suffered.

The question here arises as to whether "hypertrophic" as a distinguishing term for this form of cirrhosis is not a misnomer, as hypertrophy is not a constant feature of the disease. The size of the liver varies much in individual instances of all kinds of cirrhosis, and it is doubtful whether it is desirable to make hypertrophy an essential characteristic of one variety. On referring to the literature of hypertrophic cirrhosis, I find that nearly all the textbooks describe it as being attended with great increase in the size of the liver, but that they are silent as to subsequent changes in the direction of atrophy that may ensue in cases where life is prolonged beyond the usual period in this disease. Strümpell, however, states "that too much stress has been laid upon this point. If in many cases of hypertrophic cirrhosis the liver has remained large to the end, this is probably in part due to an early death, before there was opportunity for much shrinkage. Cases that lasted longer have presented a contracted liver."[4] He does not, however, give any references to such cases, and after careful search I can only find accounts of two cases that correspond to the one above reported. One is given by Dr. West;[5] the patient was a boy, aged 2; the final illness lasted nearly four weeks; the diagnosis during life was acute yellow atrophy; he had had a severe scald of the abdomen four months previously, from which the illness may have dated. The liver was thought to be enlarged a few days before death, but at the necropsy it is stated to be small in size; the weight is not given. Both naked-eye and microscopical appearances exactly tally with those found in my patient; there was here also cloudy swelling of the renal cortex; it would be interesting to know if this is a constant change in such cases. The other case is the one of Murchison's already referred to, and which Dr. West also cites.

These instances, I think, show that if the term "hypertrophic" is applied to this form of cirrhosis, it is well to bear in mind that hypertrophy is not necessarily present in all stages of the disease, and possibly may not occur at all in some cases, at any rate to a degree capable of clinical recognition. This point is not without its practical bearing, for if in a case of atrophy of liver with jaundice the diagnosis was satisfactorily made of intracellular (hypertrophic) cirrhosis, the prognosis with regard to immediate danger to life would be more grave than if the alternative lesion, hobnailed cirrhosis with jaundice, were present, for if in the former case atrophy of the liver has occurred to a sufficient extent to be recognised clinically, the symptoms of icterus gravis may at any time supervene, and speedily prove fatal.

The termination by icterus gravis seems to be characteristic of the course of the disease; the distinction from acute yellow atrophy and phosphorus poisoning, in which the same symptoms are present, lies in the fact that in those maladies these symptoms come on in persons in whom there is no evidence of previous liver disease, while in hypertrophic cirrhosis there is a history of jaundice for some time before their onset. The symptoms of jaundice, etc., in the early stages are probably caused by reabsorption of bile from obstruction to its flow, owing to the changes in the minute biliary passages. As the disease progresses, partly from irritation by the retained bile, partly from the increasing atrophy of the hepatic cells, both the final stages of the manufacture of bile by the liver are imperfectly performed, and also the nitrogenous tissue waste fails to be completely converted by it into a form fit for elimination by the kidneys. So long as the kidneys act well grave symptoms may not arise, but after a time the continued passage through the renal circulation of abnormal (toxic) material irritates the renal epithelium, and elimination by these organs becomes more and more faulty.

In this way the cloudy swelling of the epithelium of the convoluted tubes may be supposed to be originated. Finally, renal excretion is reduced to a minimum, the toxic products arising from reabsorption of bile, from mal-dissimilation of nitrogenous tissue waste by the liver, and non-elimination of it by the kidney, accumulates in the blood, and death takes place from the poisonous action of these upon the central nervous system.

[3] *Diseases of Liver*, Case CLXXIX.
[4] *Textbook of Medicine*, p. 454.
[5] *St. Bartholomew's Hospital Reports*, vol. xiii, p. 224.

THE RELATIONS OF SUBDIAPHRAGMATIC ABSCESS TO THE THORACIC VISCERA; WITH THREE ILLUSTRATIVE CASES.

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THE separation of the thoracic from the abdominal viscera by means of the diaphragm is incomplete or imperfect at two points. Anteriorly, between the margins of the muscular fibres arising from the ensiform cartilage and the adjoining costal cartilages the fibres of the diaphragm are scanty or altogether wanting, and the space is filled with connective tissue having in relation with its superior or thoracic aspect the pleura, and with its inferior or abdominal surface the peritoneum. It is at this point, therefore, that we meet with phrenic or diaphragmatic hernia, and it is by this channel that occasionally pus will find its way from the mediastinum to the abdomen or the reverse direction. In 11 cases of suppurative mediastinal disease collected by Hare, three were of this character; in one the pus made its way upward from the abdomen, in two it burrowed downward into an adherent liver.

Posteriorly, the arch of the internal ligament affording passage for the great psoas muscle affords another channel for the passage of fluids upwards or downwards. On its upper surface the diaphragm is in contact with three serous membranes, the base of the pleura on either side and in the middle, covering the tendinous centre, the pericardium. On its lower surface is found a portion of the general parietal peritoneum.

The viscera in relation with it are the bases of the two lungs and the heart above; the liver, spleen, and both kidneys (particularly the left) beneath; the large end of the stomach is also in contact with it. As a result of these relations it is by no means uncommon to find suppurative disease traversing these boundaries either by means of the weak points already described or by setting up adhesive inflammation followed by perforation. Circumscribed peritoneal abscesses frequently occupy the right and left hypochondria, and Dr. Fagge has described[1] sixteen cases of this sort. In one of them the abscess was on the convex surface of the left lobe of the liver, and there was a perforation through the diaphragm leading into the left pleural cavity. In a ver

[1] *Guy's Hospital Reports*, vol. 19, p. 213.

rge proportion of hypochondrial abscesses, according to Morris,[2] ıe corresponding side of the thorax becomes affected; pleurisy, ıeumonia, pleuritic effusion or empyema result, and the case is ery likely to be mistaken for one of chronic pulmonary disease, hilst the abdominal abscess is overlooked. Pericarditis may be ıused in the same way, though this is much rarer, and for the ovious reason that the opportunity for the spread of inflamma- on to this membrane by contiguity is less in direct proportion to ıe extent of surface involved as compared with the pleuræ.

I have recently seen in London a fellow countryman, now nder the care of Mr. E. W. Roughton, on account of a condition hich is unquestionably the result of the extension of suppura- ve hepatic disease, through or behind the diaphragm. The llowing brief sketch of the clinical history of the case will I ink make this manifest.

On January 12, the patient, a robust young man who was tra- elling in the East, was taken ill; at first with vague symptoms cold and fever, but afterward with unmistakeable signs of epatic abscess, which on February 1st was opened anteriorly by ıcision just below the costal margin, discharging eleven ounces f pus.

Three weeks later the temperature suddenly rose, and there ere evidences of effusion at the base of the right chest.

On March 2nd the aspirating needle was used and nothing ound, and the same result followed several other attempts, but ı March 16th a pint and a half of serum was withdrawn by spiration, and on March 25th a similar quantity.

On April 13th he reached England. After two days' tappings of ıe chest, pus was found in the mid-axillary line on the level of ıe fifth and sixth rib. About an inch of the rib was then re- ıoved, and the wound thus made has since been kept open.

About May 18th, there were symptoms of the development of a ulmonary abscess, rise of temperature, unpleasant taste in the ıouth, decomposition and fœtor of the discharge, foul breath, tc.

On June 12th, he having been seen by Mr. Godlee, the original ound was enlarged and a portion of the rib next below was re- ıoved. A sinus was found running in the direction of the nipple, nd thought to lead into the lung. The channel of communica- on, if there be one, as seems probable, between the pleural and epatic (or subdiaphragmatic) abscess cavities was not discovered, or was it quite certain in the minds of the operators whether in ıeir digital exploration they were above or below the diaphragm -an uncertainty easily understood by anyone who has operated ı similar cases.

The patient has since been receiving tonic and supporting treat- ıent, and is having antiseptic irrigation of the cavity. His eneral condition is good, but there is a tendency to hectic, and vidence of imperfect drainage.

The case, in my opinion, undoubtedly belongs among those hich I am describing.

Perinephritic abscesses are even more likely than these asso- ated with the liver or spleen to be followed by thoracic sym- toms, as has been recognised since Bowditch, in 1870, called ttention to the importance of early operation in such conditions.

The following case is of interest in this connection, though no irect patulous communication between the large lumbar collec- on and the fatal pericardial disease was demonstrated:—

A man, 39 years of age, was admitted to the medical wards of ıe Philadelphia Hospital in December, 1888, complaining of loss f appetite, flesh, and strength, pain in the epigastrium, vomiting fter meals, etc. His urine was found to contain a large amount pus and albumen.

January 19th. He complained of severe pain in the right side, ıd a slight swelling with induration was noticed just below the st rib posteriorly. This rapidly enlarged, and on the 26th he as transferred to the surgical ward. He was at once etherised ıd a free incision was made parallel to the last rib and about alf an inch below it, beginning at the outer edge of the erector inæ muscle and extending forward for four inches. The skin, ıe fascia, the anterior fibres of the latissimus dorsi, and the ternal and external oblique muscles being divided, an enormous bscess was reached, which discharged several pints of pus. The erirenal fat had disappeared. The finger inserted into the wound ıuld only reach the lower border of the kidney, which was erywhere surrounded and bound down by fibrous bands so ense that they were almost cartilaginous. They could not be oken up with any force which could be exerted, and the explo- ration was therefore very unsatisfactory. The kidney was displaced upward and forward, tightly bound to the abdominal wall and to the under surface of the liver, and gave the impression of having been much reduced in size.

An exploring needle failed to reveal the presence of stone. A drainage tube having been put in place and surrounded by iodoform gauze, the patient was returned to the ward. The temperature immediately sank to normal, pus partly disappeared from the urine, the appetite increased, and he appeared to be on the road to recovery, when at about the end of the tenth day he suddenly died with symptoms of heart failure. The necropsy showed that the cause of death was an extensive purulent pericarditis. There was some pleuritis on the left side, and both pleuræ and pericardium were tightly adherent to the diaphragm. The left kidney was enlarged and fatty; the right kidney was bound down as above described, and could not by any degree of force be separated from its abnormal attachments. No stone could be felt through the much thickened and indurated capsule until, upon breaking up the adhesions between the kidney and liver, the upper anterior surface was exposed, when a large calculus surrounded by an abscess was found, partially projecting through the capsule and imbedded in the liver tissue itself, which was ulcerated and bathed in pus. Careful and repeated attempts to reach this locality through the wound in the loin, the body being placed in the position for operation, showed that it was even then quite impossible to do so. The stone and the abscess about it could not have been approached except by an extensive laparotomy performed through the abdominal wall anteriorly.

As I have said, the chance of the transfer of suppurative action from below to above the diaphragm is probably greater in perirenal inflammation than in any other. The superior portion of the kidney lies upon the diaphragm, the lower margin of which crosses the back of the kidney in a direction obliquely downwards and outwards. This relation of the diaphragm is also shown by the depression of the kidney which occurs on deep inspiration. Holden says it descends nearly half an inch. The pleura on the upper surface of the diaphragm is therefore in proximity to the upper posterior perinephric region, and readily becomes, from contiguity of structure, involved in the inflammation.[3] The following case, illustrative of these facts, seems to me worthy of being placed on record:—

Mrs. B., the wife of a physician, was born in Maine, in 1854, her family history being noted for longevity and good health. Her father died of pneumonia at an advanced age, and her mother of the same disease at the age of 80. Three brothers died or were killed in the Union army during the war. The remainder of eleven children are now living and well. Mrs. B. resided nearly all her life in Minnesota, and in 1872 removed to Walla Walla, Washington Territory. Until two years ago she also enjoyed excellent health, with the exception of about two months during the winter of 1881. At that time she was troubled with a pelvic hæmatocele brought on by exposure during her menstrual period. From this she entirely recovered, and was well until October, 1886. In that month she passed a small vesical calculus of oxalate of lime, which had caused considerable vesical irritability, but no other serious inconvenience. A few weeks later two more calculi were expelled, and were found to be of the same character. At about this time her urine became purulent, and a sample was sent to Dr. Heitzman, of New York, who pronounced her case one of nephropyelitis. During the first part of 1887 she was confined to her bed most of the time. Any muscular exertion or sudden jar, such as might be produced by riding or driving, would bring on a severe chill, followed by hæmaturia and high fever continuing for from ten to fourteen days, during which time her temperature would range from 100° to 103° or 104°. On one occasion it rose to 106°. In May, 1887, after consultation with Dr. D. Hayes Agnew, her husband took her to the sea coast, and she was put upon a course of mineral acids, tonics, the free use of Poland water, etc. Under this her general health improved considerably, but at no time was her urine entirely free from pus, and at intervals it contained blood. In the latter part of 1887, and the early part of 1888, she had symptoms of an acute nephritis or nephropyelitis of the left kidney, with evidence of perinephritic trouble, great tenderness on pressure, some swelling, chills, temperature of 103° in the evening, etc. During this attack the urine for the first time became decidedly ammoniacal. The acute symptoms lasted for several days, and gradually subsided, the tenderness disappeared, and the temperature fell to normal; at

[2] *International Encyclopædia of Surgery*, vol. 5, p. 997.

[3] Roberts, *Am. Jour. of the Med. Sci.*, vol. lxxxv, 1883.

about the same time a slight cough developed, accompanied occasionally by a pleuritic stitch referred to the region of the lower ribs on the left side. A diaphragmatic pleurisy was at this time suspected. During August and September she had profuse sweating, chiefly at night, her temperature varied from 100° to 102°, her pulse and respiration were abnormally frequent, her complexion pallid, and she lost during this time about 25 lbs. in weight. On October 11th she started east with her husband for the purpose of seeking further professional assistance. During the journey she developed a distressing cough, with severe bronchial and laryngeal catarrh, hurried respiration, and considerable pleuritic pain. She reached Philadelphia on October 19th, and was seen by Dr. William Pepper and Dr. D. Hayes Agnew. Various methods of treatment were tried to control the cough and fever, to promote the absorption of the fluid, and to sustain the general health, but the steadily increasing effusion into the left chest continued until, on November 11th, it was thought proper to perform paracentesis thoracis. About 20 ounces of creamy laudable pus were withdrawn, and temporary relief occurred, but the chest rapidly refilled, and on November 26th it was decided to open and permanently drain the pleural cavity. A portion of the sixth rib on the left side was resected in the axillary line by Dr. Agnew, a pint of fluid was evacuated, and a drainage tube inserted. There was again a temporary improvement, which seemed to be favoured by washing of the pleural cavity, boracic acid, listerine, and weak solutions of corrosive sublimate being tried at different times. For some weeks she seemed to lose no ground, but then began to fail noticeably, and was sent to Atlantic City, where her nurse and her husband accompanied her.

In spite of a slight improvement produced by the change of scene and air, it became before long evident that a competent cause for the production of a dangerous hectic condition still existed. Although she ate better, and there was some improvement in her muscular strength, the night sweats and high temperature still continued, and on Sunday, February 10th, I was asked by Dr. Agnew and Dr. Pepper to visit her at Atlantic City. I found her in the condition above described.

On looking over her temperature chart from January 1st, I found that the evening temperature ranged from 102° to 104.5° almost without exception. Her respiration varied from 20 to 30, her pulse from 90 to 120. She was losing weight and becoming dispirited. The urine contained a variable quantity of pus, was acid in reaction, had a specific gravity of from 1020 to 1026, contained a considerable amount of albumen and a few epithelial cells from the convoluted tubules, but no casts were discoverable. On carefully reviewing the history of the case, it seemed to me apparent that, beginning with the pyelonephritis at the end of 1886, there had been a continuous suppurative process going on in the left kidney which had resulted in either a renal or a perirenal abscess, first encysted, later finding its way through or behind the diaphragm and opening into the left pleural cavity, the date of the opening being probably about the time of her journey eastward in October, 1888. If this opinion were correct, it was evident that any operation on the chest walls with the object of producing obliteration of the pleural cavity (Estlander's operation had been discussed) would be useless, as would also any attempt to procure effective drainage by an opening situated above the diaphragm.

I stated the case plainly to her husband and to Dr. Thomas Reed, who was in attendance at Atlantic City, and proposed immediate incision through the loin so as to open up and explore the region of the left kidney. The patient thought that she would prefer, if this was necessary, to have it done in Philadelphia, and accordingly returned with me on the same evening. Two days later, February 12th, my opinion having been concurred in by Drs. Pepper and Agnew, I proceeded to operate with the kind assistance of the latter gentleman.

An incision was made just below and parallel with the last rib, as in the operation for nephrolithotomy. The skin, fascia, some fibres of the latissimus dorsi, and the external and internal oblique muscles having been divided, the perirenal space was opened up, the fat which normally occupies that region having disappeared. Exploration with the finger revealed an irregular, nodulated and apparently contracted kidney fastened tightly by lymph bands to all the contiguous structures, particularly at its upper extremity.

At this point, a few adhesions having been broken up with the finger, an outflow of pus followed, and an opening through the diaphragm, or at its posterior margin, was easily recognised, admitting the point of the finger. No stone could be discovered by either the touch or the exploring needle. Fluid injected through the opening in the chest wall immediately appeared at the wound in the loin, showing a free and uninterrupted communication.

In view of the weakness of the patient, the uncertainty as to the condition of the opposite kidney, and the satisfactory result of the operation, it was deemed best to make no further exploration. Two large-sized drainage tubes were placed in the wound, which was then packed with iodoform gauze, and covered with a large antiseptic dressing. The patient reacted well, and for some time the case appeared very promising. The average temperature was much less, on several evenings not going above 99°.

Her appetite and general strength improved, and I felt hopeful as to her ultimate recovery. The suppurating cavities were washed out twice daily with various antiseptic solutions, hydronaphthol being the one which we came finally to prefer. In about two weeks there was a sudden failure in general strength, a recurrence of chills and night sweats; delirium, at first nocturnal, and then constant, of a low typhoid type; refusal to take food, a rapid running pulse—in fact, every symptom of impending dissolution.

I suspect now that these symptoms coincided with the formation of other abscesses in both kidneys, but at the time they appeared to be septic in character. Greatly to my surprise, the patient, after reaching the brink of dissolution, reacted, gradually regained strength and intelligence, recovered to a certain extent her appetite, and on March 13th, considerably improved in general health, and with a much diminished discharge, left Philadelphia for her home in Washington Territory. The subsequent course of her case may be briefly compiled from letters written me by her husband.

During the trip across the continent her temperature, which at the time of her leaving had for two weeks ranged from normal in the morning to 101° in the evening, rose steadily, until at last in the evening she reached home it touched 104°. After rest this subsided, and subsequently there was no marked exacerbation of fever, but a gradual failure in strength, increasing anorexia, irritable stomach, etc. The condition of the suppurating cavities remained unaltered, and drainage was good.

Antiseptic washing was carefully used, and every possible means that could be thought of for sustaining her strength and prolonging her life were employed by her husband and his medical friends in a most careful and intelligent manner. In spite of this she sank steadily, and died on May 9th.

I cannot complete my report of this case without bearing witness to the great courage and patient endurance of the patient herself. They were factors of so much importance that I am sure they prolonged her life for many weeks. The final cause of death was undoubtedly exhaustion from the septic condition originating in the kidneys themselves.

The report of the necropsy is as follows: "On the night of May 9th, 1889, we made a *post-mortem* examination of the body of Mrs. J. E. B. about four hours after death. On opening the left chest the pleura was found firmly adherent all the way around to the chest wall, and the left lung was completely collapsed, except the portion behind and above the left clavicle. The lining membrane of the cavity was covered by a thick, tenacious pus, and the cavity would probably contain a quart and a half of fluid. At the time of examination it was empty, and was well drained. The heart and pericardium were not examined. The liver was adherent to the abdominal walls and diaphragm, otherwise it was apparently healthy. The intestines were matted together, and gave evidence of chronic peritonitis. The left kidney was completely disorganised and firmly bound to the contiguous tissues and organs. Capsule adherent. Pelvis was filled with pus, and no evidence of calculus. In the kidney there was an abscess containing four or five ounces of pus, which was of green, mucous colour, very thick and slightly offensive; only a slight amount of kidney tissue remained, and this was on one side of the unopened abscess. The tract from the perinephritic abscess—the one opened by the surgeons—was behind the diaphragm to the pleural cavity. The right kidney was very much enlarged. The capsule was adherent; the pelvis contained pus. A secondary abscess, the size of an English walnut, was found. It contained pus of the same character as that in the left kidney. No other organs were examined."

The clinical history of this case is one of exceptional clearness and distinctness. The development of the perinephric irrita-

as a sequel to the nephropyelitis and the subsequent formation of a subdiaphragmatic abscess are stages in the progress of the case which are easily recognised, as is also the localised pleuritis of the inferior portion of the pleural sac, a condition so common in all cases of abscess in contact with the concavity of the arch of the diaphragm, whether splenic, hepatic, or renal.

In Bowditch's series of ten cases of abscess of the perirenal region there were unequivocal ausculatory indications of pleuritic or pulmonary complications in seven, although in four of them the rational signs were extremely slight.

The fact that the perinephric abscess originated in this case in unmistakeable suppurative disease of the pelvis of the kidney greatly facilitated the interpretation of the clinical history. In several recorded instances the pulmonary involvement has occurred so early, or the previous symptoms have either been so vague and insidious, or so inaccurately observed, that the empyema has been supposed to be the primary disease.

In obscure cases it will often be found that a history of flexion of the thigh upon the pelvis, of pain in the loin, or at least of distinct lameness about the hip, will indicate the cause of the thoracic disease. Niemeyer has dwelt upon the value of the position of the thigh as evidence of perforation of the pelvis of the kidney into the connective tissue.

In one of Dr. Bowditch's cases we may find an excellent example of the importance of these symptoms in cases in which the patient comes under observation only in the later stages. He was called to see a young man who was supposed to be dying of phthisis, and who was expectorating large quantities of pus. There was complete dulness over the lower lobe of the right lung, with bronchial breathing and coarse *râles*. Dr. Bowditch was at once struck by a peculiarity of the man's attitude. He seemed sitting as on one gluteus, in order apparently to relieve the other side. A history of lameness, together with pain in the right loin of three months' duration, was elicited. The lumbar fold of that side was found obliterated. On this evidence an incision was practised in the loin, pus was reached, and the case made a good recovery.

Dr. Duffin calls attention[4] to a case quoted by Dr. Dickinson in which an abscess opening into the groin was traced, on *post-mortem* examination, along the track of the psoas to the kidney, and adds that the great diagnostic importance of the symptoms of flexion thus produced will appear, if read in connection with another peculiarity of these abscesses, namely, their tendency to implicate either the pleura or lung, and by partially emptying themselves upward, to cause empyema and pulmonary complications. The symptom of flexion was absent in this case, but the other symptoms, the tenderness, the localised pleurisy, followed by empyema, were quite in accord with the history of a large proportion, or even of a majority, of cases of perinephric abscess in which for any cause operation through the loin is delayed. It should never be forgotten, in such cases, that the thoracic complications are not only the most frequent but also the most important, coming on in an insidious and latent manner; they should always be sought for, even when the symptoms point exclusively to the abdomen, because the fact of the existence of abnormal thoracic signs has an important bearing on the treatment and prognosis of every case of perinephric abscess. On the other hand, the thoracic symptoms may completely mask the renal. Dr. Bowditch, in his report upon the ten cases already alluded to,[5] records the following additional cases: A boy of weak constitution and of a consumptive family was seized with severe pain in the right side of the abdomen, and at the same time a distinct prominence below the liver became manifest. Soon after the pain lessened a cough began. A month later there was a dulness below the middle of the right lung; three weeks afterwards a pint of pus was discharged by coughing, followed by a lessening of the tumour under the ribs. The empyema was tapped a little later and a small quantity of pus obtained. The patient died, and at the necropsy a cavity was found in the lower lobe of the lung, which communicated by an opening through the diaphragm with an abscess above and back of the kidney, and surrounding the upper half of this organ.

A man, aged 50, who had been suddenly seized with pain in the right hypochondrium, followed in two and a half months by cough and the expectoration of fœtid pus, was found to have a perirenal abscess.

In another case of the same character pain in the right renal region was followed by lameness of the right hip with flexion of the thigh, and three months later by cough and purulent expectoration. Opening the perinephritic abscess was followed by immediate and permanent relief.

Dr. Bowditch makes the following remark in reference to these cases: The chief complications in connection with, and in consequence of, an abscess below the diaphragm are often very latent in their progress and really at its beginning the more important features of the case. They may be the cause of death, and they are certainly liable to produce long-continued wasting disease.

A few further examples of cases of this kind may serve to illustrate the interesting and important points involved. Trousseau long ago[6] emphasised the importance of early operation. He said that though sometimes the result of perinephric inflammation is a partially encysted abscess—the abscess remaining limited to the perinephric layer of fat and showing no disposition to extension beyond the lumbar region—yet at other times the inflammation gains the cellular tissue, occasionally even passing that barrier and reaching the pleura or lung, ending there in pleurisy or pneumonia, the pus sometimes penetrating even into the bronchial tubes. These, he added, are the terminations and complications which result from too long delaying surgical intervention. This has been observed by MM. Demarquay, Cusco, Cazalis, and Bernutz, and a case is reported by Dr. Rayer, in which there was a vomica in the lung attributable to no other cause than a perinephric abscess.

M. De Beauvais has reported[7] a case of empyema in a tuberculous patient which was caused by the rupture into the right pleural cavity of a hydatid cyst situated between the liver and the diaphragm.

Martini[8] records a case of chronic pyelonephritis of the right kidney, followed by perinephritis and escape of the pus into the right pleural cavity through a perforation through the diaphragm. In a short analysis of twelve cases of perinephric abscess contained in Schmidt's *Jahrbücher* (1865), it is stated that five perforated the pleura.

Gull reported[9] the case of a man aged 36 who died of pleuropneumonia, and in whom there was found at the necropsy an abscess within the capsule of the kidney, which organ was adherent to the diaphragm, the latter being much softened at one spot, though not perforated. Just above the softened spot the left lung was adherent, and was in a state of gangrenous pneumonia. Dr. Owen Rees reports[10] the case of a patient aged 17, in whom a large abscess of the kidney had passed upward behind the diaphragm, and caused pneumonia of the base of the left lung.

Dr. Barkely reports[11] the case of a patient aged 22, in whom there was an abscess of the right kidney with firm adhesions between the liver and the diaphragm, empyema and abscess of the same side.

There are on record several interesting examples of perforation of the diaphragm in the reverse direction, that is, of empyemata becoming subdiaphragmatic or lumbar abscesses.

Dr. A. W. Foot has reported[12] a case of empyema of the left side following an acute pleurisy, in which the pus was discharged two inches below the twelfth rib close to the left side of the spine, and another in which an empyema of the left side passed downwards behind the left internal arched ligament into the left psoas muscle and emptied into the vertebral canal. Dr. Foot remarks that the passage of an empyema through the diaphragm is its rarest mode of exit through the chest, and adds that when the pus does take this direction, the psoas muscles are, from their anatomical conditions, frequently invaded.

Dr. Hayden has recorded[13] a case of "limited" empyema on the right side which passed through the diaphragm, opened through the right hypochondrium, and discharged three quarts of pus. It took its origin in pleurisy three months previous. When the patient came under observation, he had a fluctuating tumour in the right hypochondrium. The liver was displaced downwards and the heart upwards. Dr. Hayden thought that a differential diagnosis lay between, first, hepatic abscess with vertical enlargement of the liver; second, hydatids of the liver; third, peri-

[4] *Medical Times and Gazette*, September 24th, 1870.
[5] *Medical and Surgical Report of the Boston City Hospital*, 1870.
[6] *Clinical Medicine*, vol. 3.
[7] *Bulletin de la Société Anatomique de Paris*, 1844, vol. xix, p. 147.
[8] Schmidt's *Jahrbücher*, 1864, vol. cxxiv, p. 93.
[9] *Lancet*, July 4th, 1863.
[10] *Ibid.*
[11] *Ibid.*
[12] *Dublin Journal of Medical Sciences*, vol. lv, 1873, p. 40.
[13] *Ibid.*, vol. xlvii, 1869, p. 225.

hepatitis with displacement upwards of the diaphragm; and fourth, circumscribed empyema with perforation of the diaphragm and displacement of the heart and liver. The diagnosis which was finally made of empyema entering the abdomen and penetrating the diaphragm was rather presumptive than positive, and rested largely upon the history of the previous pleuritis.

Dr. Williams mentions a case in which an empyema pointed in the right hypochondrium, and was mistaken for abscess of the liver.

Dr. Townshend describes a case of abscess of the liver pouring its contents into the areolar tissue of the right side, in front of the ribs, by penetrating the diaphragm, yielding fluctuation, and quotes a similar case from Morand. Andral, in his *Clinique Médicale*, Observation 20, gives the following case: A phthisical man, about three weeks after admittance into the hospital, was attacked during an evening exacerbation of hectic with acute pain in the line of the left costal cartilages, accompanied with quick and shallow respiration, which was entirely costal; and pain next extended into the hypochondrium and groin. He sank rapidly, and died about a month from the date of admittance.

Large tubercular cavities were found in both lungs; the base of the left lung adhered to the diaphragm, and surrounded and strictly limited by this adhesion was a vast collection of pus, which passed through an opening in the diaphragm, of an inch and a half in diameter, with blunt and smooth edges, into the abdomen; it seemed to have pushed the peritoneum before it, and lodged between the spleen and the walls of the abdomen, where it was surrounded by adhesions, and contained in a large cavity with villous walls.

In this case, which has been so often quoted by writers on empyema, there was evidence during life of a purulent collection in the abdomen, and no diagnosis made of penetration of the diaphragm.

There is, moreover, no statement as to the evidence afforded by auscultation of the left side, which probably would have been of no special value, owing to the existence in the corresponding lung of extensive tubercular excavation.

Krause gives two cases of perforation of the diaphragm by empyemata; in one the matter pointed at Poupart's ligament, and was opened as a psoas abscess; in the other, the matter burst into the transverse colon by two apertures, through which fæces passed upwards into the right pleural cavity, which had been the seat of the disease. In a case reported by Mohr, there was perforation of the diaphragm near the vertebral column, and the pus descended behind the peritoneum along the psoas muscle, with abscesses and fistulous channels in the thigh, extending down to the knee.

Dr. J. Guiot reports[14] a case of a woman in whom, at about the time of the disappearance of an empyema after operation, there appeared a large purulent collection opening at the umbilicus. There does not seem to have seen very distinct evidence of direct communication between the two, nor does it seem to have been carefully sought for. The patient recovered.

M. Velpeau reported[15] a case of empyema which emptied itself in the lumbar region. A later exploration of the purulent cavity in the loin revealed its communication with a denuded and necrosed rib, the result of the extension of the inflammation of the costal pleura.

TWENTY-SEVEN CASES OF DEFORMITIES OF THE EXTREMITIES TREATED BY MEANS OF THE SCREW CLAMP.[1]

By NICHOLAS GRATTAN, F.R.C.S.Ed.,
Senior Surgeon County and City of Cork Hospital for Women and Children.

I HAVE the honour to exhibit to you to-night a girl, M. S., now aged 13, whose femurs I fractured in July and September, 1888, by means of a special screw clamp. Before the operation she was so badly knock-kneed that she could with difficulty walk 200 yards; now she can walk eight miles at a stretch. I am also able to show you the girl, C. S., operated on a year ago, and the boy, H. W., on whom I operated about ten months ago. You will see that these children are perfectly cured of their deformities. These cases are typical ones, and a like result has followed in all my cases which have been treated by means of this clamp. I have already exhibited this instrument to you, and described the details of the operation which have been published in the JOURNAL, February 9th, 1889.

Since then I have operated on eight bow legs, one case of angular deformity of the radius and ulna, and ten of knock-knee. These, added to one case of knock-knee operated on by Dr. Ashley Cummins, and my seven published cases, make a total of twenty-seven. All these have been cured almost without pain, and absolutely without any constitutional disturbance whatever. The greater number of these cases are in this city, and can be seen at any time.

An extended use of the instrument has been followed by more experience. At first I found it extremely difficult to cut across the bones of very young children, owing to their bending. This difficulty has been overcome by approximating the arms of the clamp. You will see that the clamp has proved successful with a girl, aged 14 years and 11 months, and I doubt if even this is the extreme limit of age at which it may be used. In the first instance I failed with the little girl, N. M., because the clamp cracked at the hinge. I immediately had a stronger clamp made, and, instead of having the arms rubber-covered, had the steel highly polished. I have had also a small racket screwed on the under surface of the clamp, each notch of which corresponds to opening the arms half an inch. By this means I have done away with the necessity of screwing together the arms, and have expedited the operation. I see no difference between the effects of the rubber-covered arms and the polished steel. I have had no skin wound since I have used this latter; and from my experience of the polished wedge, where the pressure is double that of the arms, there is no necessity for any padding whatever.

I now complete all my knock-knee operations by means of the clamp alone, do not jerk the leg inwards, thus preventing any chance of injury to the external lateral ligament of the knee, but after the limb has been broken I take it in my hands, and feel that all the fibres of the bone have been torn across, and set the ends together in their new position. In my last set of cases I used a curved long splint; a Liston splint is fitted to the limb, and is cut across where I expect to fracture the femur. The cut ends are joined by means of a curved piece of flat iron; the splint then somewhat resemble the curved stave of a barrel, and my knock-knee cases are cured with a slight out-bow corresponding to this curve. The bow-legs have also been broken across by means of this steel wedge. No padding whatever has been used, and no skin injury has resulted.

I now give the details of the cases.

C. S., aged 12½ years, admitted into the Children's Hospital March 22nd, 1889. Knock-knee right extremity. March 23rd, 1889. Fractured her right femur with the screw clamp, 2 inches above the knee-joint. Used steel wedge. Arms of the clamp opened 4½ inches. March 24th. Temperature normal, free from pain. April 3rd. Applied a plaster-of-paris splint, giving the limb a slight out-curve. This was removed on May 30th. On June 20th she was walking about the ward without assistance. Result of operation: deformity is entirely cured. I examined her limb on December 31st, 1889. She has completely recovered, and no difference can be detected between her two extremities.

H. W., aged 3½ years; double knock-knee. May 22nd, 1889. Made three attempts to fracture his right femur, but failed owing to the elasticity of the bone; the arms of the clamp were separated from 3½ to 4 inches. May 25th. Fractured his left femur in the first attempt: arms of the clamp separated 3½ inches; applied a curved long splint. June 22nd. Bone united. June 30th. Fractured his right femur 2 inches above the joint in the second attempt; arms of clamp separated 3½ inches. July 4th. Bruises have quite disappeared. August 1st. Bones firmly united, and on August 30th the little fellow was walking about; he has been cured with a slight out-bow; result is extremely satisfactory.

J. C., aged 13 years 14 days; knock-knee, right extremity. June 18th, 1889. Succeeded in fracturing her right femur on the fifth attempt; arms of clamp open to 4½ inches; there was but one very slight abrasion; applied a curved long splint. June 19th. No pain or uneasiness. June 27th. Opened the bandages; skin abrasion is quite healed; limb is in good position. August 1st. Bone firmly united; deformity completely cured.

J. C., aged 1 year 8 months; double bow-legs. July 19th. Under chloroform fractured his left tibia and fibula, straightened the limb; used the steel wedge, the arms of the

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[14] *L'Union Médicale*, vol. xxii, p. 546, 876.
[15] *Journal de Médecine et de Chirurgie*, vol. vii, p. 407, 1840.
[1] Read before the Cork Medical and Surgical Society.

lamp open to 2 inches; put up the broken limb as usual. July 9th. Firm union in the bones; limb perfectly straight. August th. Fractured and straightened his right leg in the lower third n the same manner as the left. October 8th. Discharged; deformity quite cured.

B. N. (a patient of Dr. Ashley Cummins), aged 2 years; ight knock-knee. August 21st. Under chloroform Dr. Cummins fractured her right femur 2 inches above the knee-oint; the arms of the clamp were open to 3 inches; put up the imb in the usual manner in a curved long splint. October 1st.)ischarged; deformity cured.

E. B., aged 1½ year; angular deformity of left radius nd ulna, of which no satisfactory history could be given. eptember 9th, 1889. Fractured radius and ulna quite close to the vrist-joint, using the steel wedge; arms of clamp open to 2 inches; traightened the limb and put it up in side splints. October 10th. Jones united; limb quite straight; discharged cured.

C. B., aged 1½ year; double bow-legs. November 21st, 889. Fractured his right leg in the middle third; having traightened the limb, put it up in side splints. November 24th.)n opening the splints, could find no mark whatever of the pressure; there has been no pain. December 8th. Right leg quite rm; assisted by Surgeon-Major Walker, fractured his left leg in he middle third to-day. December 31st. No pain; doing well. anuary 7th, 1890. Left leg quite firm; his limbs are quite traight.

N. M., aged 9 years; double knock-knee. November 29th, 889. Made six attempts to fracture her left femur, but ailed; owing to a flaw in the hinge of the clamp it sprang and pened; there was one slight skin wound one-eighth of an inch n diameter, and very considerable bruising of the muscles; during he day there was some serous oozing from the wound; the limb vas enveloped in cotton-wool and a splint applied. November 0th. Passed a good night, no pain or fever, very little oozing from he wound; the limb is but slightly swollen. December 1st. No lischarge, wound quite closed, no pain or swelling, and no injury o the knee-joint. December 8th. Put her under ether, and with new and stronger clamp, the arms of polished steel being separated 4½ inches, made one attempt to fracture her right femur nd failed; the second attempt, with the arms opened to 5 inches, ucceeded, and the bone broke with a loud snap; no skin wound, nd but little bruising; enveloped the limb in Gamgee tissue and pplied a curved long splint. December 13th. There has been no onstitutional disturbance and no pain; on opening the bandage, he fracture is doing well. January 25th, 1890. Femur has united n good position. January 28th. Having administered an anæsthetic, the clamp, with the arms opened to 5 inches, was applied o her left femur; the bone fractured with a loud report 3 inches bove the knee-joint; there is no skin wound; time of pressure 5 to 30 seconds. March 7th. Left femur united, with a slight ut-curve; she has had little pain and no constitutional disurbance; the result of the two operations has proved very atisfactory.

K. A., aged 14 years and 9 months; double knock-knee; leformity very great. December 28th, 1889. Under ether pplied the clamp to her left femur, the wedge 3½ inches above the nee-joint, the arms of the clamp opened to 6 inches, In 30 econds the bone slowly yielded, breaking with a loud snap. Put p the limb as usual in a curved long splint. December 29th. emperature normal; free from pain. February 5th, 1890. Bone as united without any trouble. February 22nd. Under ether toay applied the clamp to her right femur. In the first attempt, vith the arms of the clamp opened 6 inches, the bone only slightly ielded. The clamp, with the arms opened to 7 inches, was again pplied. There was very considerable resistance, but the bone lowly separated. There is no skin wound. Applied a curved ong splint to the limb. February 28th. There is but one bruise, he size of a shilling; girl doing well.

E. J., aged 6 years; double knock-knee and anterior curvaure of both legs. January 16th, 1890. Under chloroform, ractured her left femur in first attempt, arms of the clamp open o 4½ inches. Put her thigh up in a curved long splint in the usual anner. The clamp, with arms open to 4 inches, was applied to er right leg, the bones were broken in the lower third, he limb straightened and an iron back splint applied. January 6th, 10.30 P.M. On account of pain opened and examined her eg; at the points of pressure, where the clamp was applied, here is nothing to be seen but a slight redness. Reapplied the plint. February 21st. The broken limbs have united without trouble. February 22nd. Under ether treated the right femur in the same manner as the left; also rectified the deformity of her left leg. February 28th. Child doing well; no pain since operation.

J. R., aged 2½ years; both legs badly curved in the middle third. March 9th, 1890. Under chloroform, the arms of the clamp being open 2½ inches, fractured his left tibia and fibula. Having straightened the limb, applied side splints as usual. The clamp was then applied to his right leg, and it was treated in the same manner as the left. March 12th. Doing well.

I have to acknowledge the cordial co-operation and assistance I have received from my friend and colleague, Dr. Ashley Cummins, in treating the greater number of these patients.

RHEUMATIC NEURITIS AND NEURO-RETINITIS.

By N. C. MACNAMARA, F.R.C.S.,
Surgeon to the Royal Westminster Ophthalmic Hospital.

In a paper published in the JOURNAL of March 8th I referred to the connection which appears to exist between optic neuritis and malaria, my idea being that whatever the nature of the cause which produces malarial fever, it is capable of fixing itself on the tissues constituting the distribution of the second nerve, and unless effective measures are taken to counteract its poisonous influence it may lead to the destruction of the optic papillæ. I gave the outline of four cases in which both optic papillæ were simultaneously affected, but double optic neuritis is by no means the rule in instances of this description, for I have seen papillitis in several such cases confined to one eye. The course of these cases of malarial monocular neuritis bear a close resemblance to those of rheumatic papillitis; in the one set of patients the inflammation of the peripheral distribution of the nerve commencing in a person who for the time is under the influence of the paludal poison, while in the other he is under the influence of something which causes rheumatism. It is almost unnecessary to observe that optic neuritis, the result of intercranial disease, as a rule appears nearly simultaneously in both eyes. It by no means, however, follows that double optic neuritis is never met with unless in cerebral affections; in fact, as I mentioned in my former paper, in cases of malaria, in neuritis connected with uterine affections, and in syphilitic papillitis, as well as in Bright's disease, both discs are commonly affected. It has been suggested that the effusion and subsequent papillitis of malaria might depend on intercranial effusion, or perhaps from heightened arterial tension, consequent on the ague fit; but, in two out of the four cases referred to, the papillitis did not appear during or immediately after the ague; there were no symptoms of effusion on the brain. Moreover, if the neuritis had depended on temporary alteration in arterial tension, it would probably have cleared up with the removal of the cause which had produced it, in place of remaining for weeks after the ague had disappeared.

The following is a well-marked case of rheumatic papillitis, brought under treatment at an early stage of the disease: J. B., aged 16, the son of a rheumatic mother, the lad having himself suffered from acute rheumatism when he was 9 years old; the attack, however, passed off without leaving any evidence of cardiac disease, and, although subject to muscular rheumatism, the lad had been sent to school, and appears to have enjoyed good health. On March 20th, 1889, he was seized with violent pain in his right eye, and, on the following day, his medical atttendant, finding he was blind with this eye, ordered him to be sent home at once. I was called to see the patient on the afternoon of the 21st; there was then only perception of light in the right eye, which was extremely painful. The pain was increased on pressure, or by movement of the globe. There was deep sclerotic infection and great photophobia, but no increased tension. Atropine had been applied, and the pupil was dilated; the optic disc was completely obscured by dense effusion, which had extended into the vitreous and the retina. The veins were much congested. I ordered half an ounce of salicin to be divided into twelve doses, one to be taken every three hours; four grains of hydr. c. cretâ and five of rhubarb, to be administered at bedtime, and a saline purgative in the morning; low diet, and rest in bed. In twenty-four hours the pain in the eye was much relieved, and still more so on the following day, when the dose of salicin was diminished by one half. On March 29th the congestion of the eye had almost

disappeared, and the boy could count fingers with right eye. J. B. continued steadily to improve, iodid. of potassium having been substituted for the salicin, the optic disc cleared although it remained white. When I last saw the patient, on May 4th, he could read 0. 6 of Snellen with the right eye; he was then returning to school.

The following case seems to demonstrate the importance of prompt treatment in instances of rheumatic papillitis. Miss ——, a robust young woman, who had enjoyed excellent health; she belonged to a rheumatic family; her father, in particular, had suffered much from rheumatism. The patient was seized with persistent pain in the muscles of her neck and left arm, which lasted for some three weeks, and was stated to be of a rheumatic character by her medical attendant. Miss —— had hardly recovered from this attack when, about the middle of December, she experienced great pain in her right eye; there was much photophobia, and the pain was increased by pressure on, or any movement of, the globe of the eye. Notwithstanding these symptoms and great impairment of vision, the patient for ten or twelve days remained under the treatment of a chemist, who prescribed a lotion. No improvement having taken place, Miss —— then consulted her medical attendant (on January 1st), and he at once pronounced the disease from which she was suffering to be neuroretinitis; he sent the patient on to me. On January 3rd I found that Miss —— could hardly distinguish light from darkness with the right eye; the optic papilla was much swollen (about 3 D), and its outlines were completely obscured; the retinal veins were much engorged. There was no albumen in the urine, no trace of hereditary disease beyond the rheumatism. The patient was ordered salicylate of soda and iodide of potash, with careful diet and saline purgatives. The pain in the eye and photophobia diminished rapidly under this treatment, but the vision cleared very slowly, and at the end of two months the patient could only just make out the letters of Snellen 5 with the right eye; the optic disc was of a dead white colour. Although the sight in this case will improve, nevertheless the fact of acute neuritis having existed for twelve days and upwards before she came under treatment makes the prognosis serious, because, during that time irreparable damage was probably effected in the delicate structures concerned.

It would be easy to multiply cases of this description from my own notes and from those of other surgeons, and it is remarkable they should have been almost overlooked until M. Parinand drew attention to them in his article published in the Report of the French Ophthalmological Society for January, 1884. In the majority of such cases the patient's history points to inherited rheumatism, and he has himself suffered from this disease; exposure to damp and cold is generally described as the direct cause of the attack of pain in the eye and the loss of sight. The pain in these cases is stated by the patient to be deep seated in the orbit, and to extend from thence over the forehead and side of the head; it is worse at night, and is increased on pressure applied over the globe of the eye; dimness of vision and frequently total loss of sight is present, together with conjunctivitis and sclerotic congestion. The appearance of the inflamed papilla differs in no respect from that produced by malaria or other causes, and although we seldom meet with double rheumatic papillitis, it is not uncommon to find first one disc and then the other involved in the disease. After the inflammation has passed away, although the patient's sight may be restored, the optic disc assumes a whiter appearance than that of a healthy eye.

When discussing the subject of malarial neuritis, I referred to a form of ulceration of the cornea described by Dr. Kipp, Dr. von Millinger, and other authorities; and we meet with affections of the cornea which likewise appear to be connected with rheumatism, the ulceration, like that of malaria, being produced by a fault in the functions of the nerves supplying the cornea. This kind of corneal ulcer is described by W. Mackenzie, in his admirable treatise on *Diseases of the Eye*. He states that among rheumatic patients, especially those advanced in years, after exposure to cold it is not uncommon to find one of the patient's eyes affected with "a peculiar kind of ulcer—which is apt to spread over the surface of the cornea—at first it looks as if a portion of the surface of the cornea was loose and raised up, apparently through the intervention of fluid: the ulcer often cicatrises without leaving any opacity, the cornea remaining merely irregular, as if part of it had been hacked off with a lancet; vision is disturbed by altered refraction." In these rheumatic affections of the cornea, as in the case of neuritis, we have a history of rheumatism and of deep-seated pain, usually worse at night, and increased by pressure or by movement of the globe; the epithelial layers of the cornea become detached by the effusion of fluid beneath, which, as in herpes, is the result of faulty nerve action; the ulcer extends slowly, and if allowed to run its course may last for weeks; but if treated by salicine, and subsequently with iodide of potassium, the pain and other symptoms speedily subside. The local application of a solution of eserine to the eye is often of service in cases of this kind. The patient's bowels must be kept freely open and his diet carefully attended to. And so in instances of rheumatic optic neuritis, if treated by the means above referred to the papillitis disappears, and the patient in all probability will recover his sight; on the other hand, if neglected, or if the disease in spite of treatment continues, atrophy of the optic papilla and permanent loss of sight too often result. In such a case the other eye will probably, sooner or later, be affected with papillitis of a similar character.

EPITHELIOMA PRIMARILY AFFECTING THE TONSIL.

By J. WALKER DOWNIE, M.B., F.F.P.&S.G.,

Surgeon, Throat Department, Western Infirmary; Lecturer on Diseases of the Ear, Throat and Nose, Western Medical School, Glasgow.

Epithelioma primarily affecting the tonsil is comparatively rare, as may be inferred from the fact that many of our textbooks on general surgery either wholly omit mention of such a condition, or it is but vaguely, and in a few words, referred to as a possibility.

Of the references to this disease by specialists the following may be quoted: Dr. Prosser James, in his work on *Sore Throat*, p. 242, says that "cancer very rarely begins in the tonsils, though it spreads to them from neighbouring parts. Dr. Gibb, in his manual of *Diseases of the Throat and Windpipe*, published 1864, at p. 351, says, "If cancer affects the tonsil, it is usually by extension from some other part of the throat; but I had the opportunity of examining a case of idiopathic cancer of the left tonsil in a man, aged 49 years, in October, 1859, under Dr. Marsden's care at the Cancer Hospital. It was eaten away by the disease, forming a large excavation in front of the left pillar of the fauces. The disease was hereditary in him. Cancer commencing in the tonsil primarily, is a very rare affection." Sir Morell Mackenzie, in his work on *Diseases of the Throat*, vol. 1, p. 83, remarks that "cancer of the tonsil is a rare disease," and that "most of the reported instances belonged to the encephaloid variety." Mr. Lennox Browne, in his *Diseases of the Throat and Nose*, p. 245, says that the "primary epithelioma of the tonsil is, although rare, not unknown, and three cases have occurred in my own practice during the past twenty years," being, according to his calculation, about 1 in every 20,000 cases of throat disease.

The patient who forms the subject of this communication is a clerk, and 45 years of age. Eight months ago, that is, in August last, he had an itching pain in his left ear, which at the end of a month was accompanied by pain in the region of the left fauces. The pain in the throat increased gradually in severity, and was aggravated by swallowing—the pain shooting sharply up towards the left ear during the act of deglutition.

When I first saw him early in February, the glands beneath the angle of the jaw on the left side were enlarged and slightly painful to touch. The surface of the left tonsil was ulcerated, and the edge, of the ulcer had just begun to include the edge of the anterior pillar. The advancing surface of the ulcer was elevated, hard and indurated to the touch, and slight manipulation of the part caused bleeding. Since that date it has rapidly advanced, the whole of the anterior pillar is now involved, so that we have the outer edge of the ulcer extending from the junction of the anterior pillar with the tongue, on to the tip of the uvula. Of the nature of the ulcer I think there can be little doubt, and none whatever regarding the impossibility of surgical interference.

Whether it is that cases of malignant diseases are becoming more numerous or not, I know not, but during the past three years I have had other two cases of primary epithelioma of the tonsil, both affecting the right tonsil, and both occurring in men. One was a patient at the throat department of Anderson's College Dispensary, and he died under the care of the physician in charge of the outdoor visiting department. The other was a gentleman 58 years of age, and under the care of Dr. Watt, of Ayr. In this

se the epithelioma began in the tonsil, and at an early stage involved the anterior pillar close to its junction with the side of the ngue. The ulcer with its hardened elevated edge, tended, when t I saw him, to spread towards and involve the base of the ngue.

Sarcoma of the tonsil as a primary affection is said to be of ore frequent occurrence than epithelioma. Of this condition I cently had a well marked case at the throat department of the estern Infirmary. The sarcoma was of the right tonsil, and in a an of about 45 years of age. I refe red him to the wards, and r a few days he was under the care of Dr. Hector Cameron, but e tumour grew with such rapidity that interference was conlered unjustifiable, and he was dismissed, and died within a ry short time thereafter.

Mr. Erichsen, in his *Science and Art of Surgery*, says that nalignant disease of the tonsil is not of common occurrence. I ve, however, seen instances both of scirrhus and of epithelioma this organ as a primary affection. In those cases the disease eedily extends to the pillars of the fauces, the pharynx, and onrds to the floor of the mouth, the glands under the angle beme implicated, extensive infiltration of a brawny character kes place in and around them, the swallowing becomes exemely painful and difficult, respiration is impeded, the arynx and palate become congested and loaded with viscid ucous, and the patient eventually dies in a distressing manner, rtly from starvation, partly from constitutional contaminaon." Another cause of death should I think be added, namely, at from hæmorrhage. This was the immediate cause of death the second case I mentioned, and it has already threatened in e one first related.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

DILATATION INSTEAD OF THE SUPPORT OF THE PERINEUM.

HE dread of the perineum becoming ruptured during the passage the child's head led to the practice of supporting it, and this s been more or less done from time immemorial to the present y. A large midwifery experience convinced me many years ago the fallacy and danger of this practice; and in a paper read fore the Obstetrical Society of London, and published in their *ransactions* of 1875, I recommended a diametrically opposite ne of treatment, which is certainly followed by far better sults.

Let us consider for a moment the object we have in view—mely: We want the soft parts of the outlet of the pelvis to dilate, as to allow of the passage of the child's head without its eakest part rupturing. What does support do? It presses the rineum between the hand on one side and the child's head on e other, so that the more support we give the more squeezed, inned out, and lengthened the perineum becomes. No wonder, en, that it frequently gives way. One can hardly imagine anying so likely to favour a rupture as this pressure on both sides. ue, the support may delay the advance of the head, but this essure against the perineum rouses the uterus and makes the ins more violent, so that, if delay is the object sought, direct essure upon the child's head is infinitely preferable, and safer in ery way.

In cases of ruptured perineum what has occurred? Either the tlet was abnormally unyielding, or there was not time for it to pand, so that the weakest part gave way. The obvious way of eventing this unfortunate result is to dilate the perineum before e child's head reaches it, and practically this is easily effected. ne can readily form an opinion as to the necessity for this proeding by ascertaining the dilatability of the parts, the size of the tlet, the length of the perineum, and the character of the pains. If there is reason to believe that the parts will not readily yield the advancing head, they may be gradually dilated by drawing ck and expanding the perineum during each pain, first with two d then with three fingers, and keeping up as firm extension as n be borne short of pain, and continued from time to time until e required amount of dilatation has been obtained.

By this simple proceeding (1) the pains are strengthened; (2) the latter part of labour is materially shortened, and is far less painful; (3) the perineum is preserved intact.

Fifteen years ago I confidently recommended the dilatation of the perineum as the best means of avoiding the danger of its rupture and of facilitating the latter stages of labour; and further experience fully confirms the favourable opinion I had then formed of its usefulness, and which led me to bring before the profession a mode of treatment which, so far as I know, had not up to that time been recommended.

H. ERNEST TRESTRAIL, M.R.C.P., F.R.C.S.,
Physician to the Glasgow Hospital for Diseases of Women.

THE VALUE OF THE JURY MAST.

I CONSIDER that we are deeply indebted to Professor Sayre for introducing this valuable appliance to our notice, and that many sad deformities and several lives are saved by its use. In support of this view, I wish to publish brief facts regarding two cases which were under my care last year.

The first, a girl, aged 3, was brought to me, very emaciated, with her neck sunk in and curved forwards, her head leaning on her parent's shoulder, in continual pain, restless, feverish, and sick. She had worn a plaster-of-paris jacket, but without any benefit. I found her cervical vertebræ extremely tender to the touch, that any pressure of the head downwards gave increase of pain, but that slight drawing upwards, with one hand under the chin and the other under the occiput, gave instant relief, showing that the bodies of the cervical vertebræ were inflamed. When her head was removed from the reclining position, she instinctively put one hand to each side of it and held it up. I took careful measurements and a tracing of the lead pipe moulding, and sent them to Mr. Cocking, of Plymouth, who supplied me with a felt corset, jury mast, and head straps. These I applied, and relief was promptly afforded. The child's condition improved from the first; she gained appetite and flesh, and some months afterwards was bright, cheerful, and well conditioned, but did not like to have the jury mast removed for my inspection for any length of time.

The second case was that of a young man, aged 24, with a fine broad-chested figure, whose head was sunk, neck apparently much shortened, breathing rapid and distressed. He complained of much pain and weakness, and had been compelled to give up an excellent situation and was rapidly getting worse. I measured as before, ordered corset and felt jacket, and applied them. His relief was immediate and great as regarded every symptom. After watching him for a short time, I sent him for suitable change of air. In three months he was able to resume his occupation, having gained an appointment in a distant city. Two months afterwards he came to see me, and asked to be allowed to wear the corset only while at his employment and the jury mast when at home. To this I agreed, as his condition and restored power in his neck warranted his doing so. Of course, local and constitutional treatment was carried out in each case.

Clifton. CHARLES STEELE, M.D., F.R.C.S.

TEMPORARY STAMMERING COMING ON WITH TONSILLITIS.

M. O., a domestic servant, consulted me on March 28th. At that time she was suffering from subacute tonsillitis with slight febrile symptoms; she could not then speak a word without stuttering badly. I treated her throat with perchloric acid; and, when she was convalescent, she asked me if I thought the stammering would cease when her throat was well. I was surprised at this, as I had thought her defect was of old standing. However, she said that she could speak as well as anyone before the quinsy came on. I gave a favourable prognosis, and after a week on bromide she could speak almost as well as ever. It seems to me that this is rather an unusual case. Was the stammering due to loss of power of co-ordination of laryngeal muscles, due to reflex causes? There was no alteration in the sound of the voice, indicating that the larynx was free from inflammation.

Kilburn Lane. H. RAINSFORD.

POISONOUS EFFECTS OF EXALGINE.

THE following case of idiosyncrasy to exalgine may serve a useful purpose to some:

On April 5th, a medical man (aged between 40 and 50), experiencing severe pain in the lumbar and ilio-sacral regions, from which he has been suffering occasionally for some years, quite

unrelieved by the ordinary medicines, took by my advice one grain of exalgine at 9.30 P.M., and, not feeling relief therefrom, at 10.15 he took two grains more in a little whisky. Shortly afterwards he complained of a feeling of giddiness, and several times said that his head felt so large that it seemed to occupy the whole room. He continued, however, playing cards till 11 P.M., when, without further warning, he collapsed in his arm-chair, prostrate, quite unable to speak or to move, but gasping for breath. He continued in that state for over half an hour, when he got slightly better, and said a few words between the gasps; he said he was not strong enough to move, and he felt that he must go on breathing, though each breath was a fearful effort. In that state he was carried up to his bedroom and placed at the foot of the bed; he said that he was unable to breathe lying down, and was then placed in an armchair well covered up before the fire. Here he again got much worse; his efforts at respiration became painful to witness; he seized and clenched the hands of those around him, and was in many respects just like a man suffering from a bad attack of asthma. His respirations were 38 to the minute, gasping and shallow; pulse quiet and rather weak; surface very cold and face pale, though not cyanosed. He continued in this distressing state till 1 A.M., when he vomited a little whisky (containing some exalgine?) and was almost immediately relieved, though it left him rather sick, and very giddy and weak, and he suffered for about an hour from constant dysuria (both frequent and painful). After that he got to bed and to sleep shortly after 2 A.M., had a good night's sleep, and was able next morning to set off for Scarborough, where he had previously intended going.

He tells me that next morning he was slightly jaundiced, and that during the respiratory paroxysm he felt no pain (in the back or elsewhere), but a feeling of numbness all over, and felt as if his diaphragm had stopped working, and he must go on breathing at any cost. I may mention that he is not at all subject to asthma, but has a weak and very sensitive stomach.

The case appears to me interesting from the severe effects caused by a not very large dose (three grains), some of which was probably vomited unabsorbed; also from there being two paroxysmal attacks, separated by an interval nearly corresponding to the interval between the doses, the second attack being longer and more severe from the two-grain dose, which was probably absorbed quicker from being dissolved in whisky. As there was no evidence of cyanosis, I adopted an expectant treatment.

Penistone. G. AINSLIE JOHNSTON.

MENIÈRE'S VERTIGO AND THE SEMICIRCULAR CANALS.

SIR WM. DALBY, in his remarks under the above heading in the JOURNAL of April 19th, whilst fully recognising stimuli from the middle ear, and pathological and traumatic processes in the brain, as causes of Menière's vertigo, seems to doubt that a like train of symptoms may be caused by labyrinthine impressions.

Now in Menière's case examined *post mortem*, and quoted by Hartmann in his well-known work on *Diseases of the Ear*, hæmorrhagic effusion into the semicircular canals was found; and it was the experiments of Flourens on the semicircular canals of pigeons producing the same symptoms observed by Menière in his case above alluded to, which induced the latter "to assign to these structures his complex of symptoms" (Hartmann).

If Menière was right in attributing the causation of the symptoms to the hæmorrhagic effusion into the semicircular canals, we cannot exclude the semicircular canals, as suggested by Sir Wm. Dalby, although with him we may recognise Menière's vertigo "to cover a good many conditions."

George Street, Hanover Square. F. G. HARVEY.

PHLEBITIS AFTER INFLUENZA.

FOUR cases of this somewhat uncommon sequela of the recent epidemic have been under my care during the past three months, and, as they have several features in common, they may perhaps be worth recording here. I will first briefly reproduce the notes of the cases.

CASE I.—S. G., aged 37, bricklayer, applied early in January amongst my out-patients at King's College Hospital on account of a tender swelling in the left groin. He had had a severe attack of influenza a fortnight previously. The pains and the fever subsided in five days, leaving him so "pulled down," as he expressed it, that he was obliged to keep to his bed. Four days later he noticed pain, especially bad on coughing or straining, in the left groin, and in twenty-four hours his leg had become greatly swollen, and the tender swelling, for which he sought advice, appeared in his groin. Examination showed a phlebitis and thrombosis of the upper inch or so of the left femoral vein, with great enlargement of the lymphatic glands and œdema of the whole limb.

CASES II and III are so similar that they may be described together. The patients were labourers, aged respectively 32 and 34 years, who applied at the hospital at the end of April. The complaint was a solid enlargement of the left lower limb following influenza. The history was that there had been a severe attack of influenza three months before. Symptoms of obstruction of the left femoral vein had come on, in the one case four days and in the other five after the pains had ceased. Then, after having had treatment for a week or two, the patients insisted on returning to work, with the result that the limb became swollen, stiff, and clumsy. Examination showed in each case an enlargement of the left lower limb of more than inch in circumference both round calf and thigh. At the same time, there was no pitting on pressure. The state of the limbs closely resembled that described by Sir James Paget in his Clinical Lectures as occurring after typhoid fever.

CASE IV.—The Rev. T. C., aged about 55, consulted me in April for œdema of the left leg, which was due to an attack of phlebitis following influenza in January last. The phlebitis had occurred five days after the pains and temperature had subsided. He had been under medical treatment ever since, and his sphere of action had been a good deal limited. Consequently, there was only slight œdema of the ankle and foot, with much enlargement of the lymphatic glands in the groin.

It will thus be seen that all the patients mentioned above had the left femoral vein affected. In each case the primary influenza attack had been very severe, and the ensuing prostration very great. The symptoms of the inflammation in the vein came on within a week of the subsidence of the acute symptoms. It will be noticed, too, that the patients were all over 30. In no case could any history of gout, rheumatism, or a previous attack of phlebitis be obtained.

I have lately heard of another case in an elderly gentleman which was in all other respects similar to those narrated above with the exception that it was fatal from pulmonary embolism.

F. F. BURGHARD, M.S.(Lond.), F.R.C.S.,
Assistant-Surgeon to King's College Hospital.

Weymouth Street, W.

ELECTRICITY IN INFLUENZA.

As relapses and fresh cases of influenza are certainly arising, I wish to place on record the very marked benefit derived by many patients by the use of electricity in the neuralgic and rheumatic forms of the affection. In some cases the relief has been immediate and permanent; the pains in the back, groin, and sternum, which people have complained of so much, and which have become more or less chronic and defied treatment, have yielded at once to thirty or forty cells of Leclanché's battery.

Sidcup. G. WORTHINGTON, M.K.Q.C.P.I.

ANTISEPTIC AFTER-TREATMENT OF VACCINATION.

As a public vaccinator of ten years' standing, allow me to state that I do not agree with Drs. Barrett and Leach.

I find that one of the chief causes of danger in vaccination is the destruction of the epidermis by cross cutting. No more than two small lines should be made, and the best instrument is one made by passing two ordinary needles through a vial cork, one-sixteenth of an inch apart. Of course, if the operator be a public vaccinator he will put four such marks on the child's arm.

This done the most ordinary care only is needed until the eighth day, when an antiseptic ointment should be applied.

As regards the precautionary measures named and numbered:

1. This, though expedient, is not, in my opinion, necessary to complete success.
2. The patient need not be washed in disinfectant.
3. Valvular punctures are unnecessary and severe.
4. Totally unnecessary care.
5. Also totally unnecessary.

Accrington. C. R. ILLINGWORTH, M.D.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GLASGOW WESTERN INFIRMARY.

DIABETES MELLITUS: CONVULSIONS FOR SEVENTEEN HOURS: DEATH.

(Under the care of Dr. FINLAYSON.)

[Reported by Dr. JOHN LOVE.]

. McL., aged 43, gardener, was admitted on January 15th, 1889, ıffering from diabetes mellitus. There was great thirst, with ıcessive appetite, voiding of large quantities of urine, loss of ɛsh, and general weakness. The illness seemed to date back ɔout nine months, and during that time he had lost flesh very ınsiderably. He was a man of 6 feet in height, and in June eighed 220 lbs. On January 10th, a few days before admission, .s weight was 175 lbs.

He had formerly been given to the free use of alcohol but denied ıy excesses, and there was no history of injury other than a ight fall eight years before, neither was there any history of abetes, nor of any nervous disorder, nor of any phthisical ten- ɛncy to be ascertained in his parents or in any other members or anches of the family. He himself seemed to have been a power- l, well-built man, and he had enjoyed exceptionally good health ll the present illness began, and he presented no evidence of ıthisical disease.

For the week following admission he was kept on ordinary et so that an estimate of the gravity of his illness might be rmed, and during that time the average daily quantity of urine ıssed was 338 fluid ounces, and the specific gravity averaged)34, while the sugar (estimated by Fehling's method) might be ut roundly as 29 grains per fluid ounce.

A few days after admission his appetite began to fall off a ttle, and he was now found to weigh 168 lbs.

On January 23rd partial diabetic diet was begun, sugar, pota- ɔes, and all starchy foods (with the exception of two slices of ɔast thrice daily) being stopped. This had the result of slightly minishing his thirst, and the urine during the next few days as rather less in quantity, averaging about 225 fluid ounces in ıe twenty-four hours, but the specific gravity was still high,)35, and two observations as to the quantity of sugar gave an verage of 31.7 grains per fluid ounce.

Constipation, which had been a marked feature during his sidence in hospital, and for a few weeks before, now became ery troublesome, and large doses of purgatives were needed to rocure an evacuation.

On the morning of January 29th it was reported that the patient ad complained the previous day of pain in the abdomen, which ad been taken to be due to the constipation and Gregory's pow- er and laudanum were given. This procured a motion with relief) the pain. This morning he was noticed to be in a curious, con- ısed, and mixed condition mentally, and he said he felt "stupid" ıd could not think, while in answering questions the same confu- on was noticed, and at times his answers had little reference to ıe matter in hand, although he could read correctly from a book. e made no complaint of giddiness and only of slight headache. here had been a little vomiting the previous night. The urine as quite free from albumen and the temperature was now, and ıd all along been, normal. He was ordered a large dose of Epsom lts, which acted in the course of the day, and it was directed ıat, on account of the nervous symptoms which had declared emselves, no further restriction in his diet be meantime made.

He was up and going about the wards as usual during the day, ıd although carefully watched, on account of his dubious con- tion, nothing unusual was noticed. He went to bed about 8.45 M.; at 10 P.M. attention was drawn to him by his making a ɛculiar groaning noise, and, on the nurse going to him, he was und to be in a fit, which lasted two and half minutes, and was ɔileptic in character. Dr. Adams, resident assistant-physician, as called, and on his arrival found the patient asleep and breath- g noisily. He could be roused, and he then spoke quite ration- ly, but at once went off to sleep again. Fifteen minutes after had another fit, similar in character to the first. The whole ɔdy was convulsed and he was deeply unconscious, and the breathing stertorous, and he again fell asleep, but only for a few minutes, and then followed a brief period of furious mania, in which he attempted to get out of bed and bit and struck at those about him. This maniacal condition had lasted about five minutes when it was interrupted by the supervention of another convulsion similar to the previous two.

The fits recurred at intervals of rather less than a quarter of an hour during the night, and between 10.15 P.M. of January 29th and 10.45 next morning he had in all forty-six of them, and he was several times wildly maniacal for brief periods between the fits. He gradually got weaker, became very stupid, passed urine and fæces under him, and died at 3.30 P.M. on January 30th. The temperature, which had been normal up to the time of the onset of the convulsions, was on January 30th as follows: 6 A.M., 103°; 11.50 A.M., 102.8°; 1.30 P.M., 102.8°; 2.30 P.M., 102.2°; 3.30 P.M., 101.8°. The urine all along had been quite free from albumen; that passed just before death gave a dubious acetone reaction (so-called) with perchloride of iron.

At the *post-mortem* examination no gross lesion was found anywhere likely to be in any way associated with the diabetes or the convulsions; the lungs contained a few small cretaceous masses at the apices, but otherwise were very healthy.

REMARKS.—Death from coma is a well-known mode of termination in diabetes, but convulsions are, on the contrary, very rare. Doubtless in most of the textbooks it is stated that convulsions may occur; but the statements are of the most general character, and, indeed, it was difficult to find any reference to such cases. Dr. Dreschfeld, in his Bradshawe Lectures on "Diabetic Coma,"[1] says "convulsions are rarely noticed;" and the rarity may be judged from the fact that, in sixteen cases of diabetes ending in coma observed by him, convulsions only occurred once; and in eighty cases which he had been able to trace, convulsions are only noted in six. The resemblance of diabetic to uræmic coma cannot escape remark; but it has always been admitted as peculiar that, while uræmic poisoning very often manifests itself by convulsions as well as by coma, in diabetic subjects coma is relatively common and convulsions very rare. In this case the occurrence of convulsions seemed to render it worthy of record.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 25TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Tubercular Ulceration of the Bladder in which Recovery followed Scraping of the Disease through a Suprapubic Incision after Failure of Other Methods of Treatment.—Mr. W. H. BATTLE read notes of this case. The patient was a girl, aged 20, single. Her father was subject to winter cough; her mother had died of phthisis; other members of the family were healthy. Ten months before admission she had noticed that she had to pass urine more frequently than usual, about every four instead of every eight or ten hours, and had some pain before micturition, but not during the act nor afterwards. The urine had been thick since the beginning of the illness, and contained blood at times. The symptoms had gradually increased in severity. On admission she was obliged to pass urine every hour and a half or two hours, and had a feeling of fulness, an aching pain, and an inability to retain urine, the pain being relieved by the emptying of the bladder. The urine was slightly alkaline, of specific gravity 1015, and contained many pus and some epithelial cells. Occasionally a trace of blood was found in the urine. Being examined under an anæsthetic, and the urethra dilated, an ulcerated surface was felt at the base posteriorly, which measured 2 inches in width by $1\frac{1}{2}$ inch from above downwards. This was rubbed with small sponges on forceps. Next day there was no pain. Cod-liver oil was ordered, and the bladder washed out twice a day with boracic solution, which was changed to quinine and acid injection thirty days later, when there was very little improvement in the bladder symptoms, although there was less pus in the urine. She was stronger and increasing in weight. A week later she was again examined under ether, and the cystoscope was employed. The ulceration was almost as extensive as on the former examination. The finger nail and Volkmann's spoon were used lightly to scrape

[1] JOURNAL, vol. ii, 1886, p. 360.

the surface, and sponges employed as before. She left the hospital fifteen days afterwards, weighing 14½ lbs. more than on admission, and was readmitted two months later not improved. Injections of iodoform and, subsequently, of balsam of Peru were used without apparent improvement. One month afterwards suprapubic cystotomy was performed, the rectal bag being employed, and bladder injected with five ounces of warm boracic solution. The ulcerated surface in the bladder was well exposed and scraped with a sharp spoon. The mucous membrane was puckered towards this surface, evidently from cicatricial contraction after partial healing. The disease was apparently localised to the large surface scraped. There was also a pouch, about the size of a walnut, and covered with healthy mucous membrane. After scraping it was dabbed over with a solution of chloride of zinc (30 grains to the ounce). A self-retaining catheter was passed into the bladder through the urethra, a drainage tube through the lower part of the wound, the upper part of which was closed with a silk suture, and iodoform and sal alembroth dressings were applied. On the fifth day afterwards, when the drainage tube was removed, the urine was clearer. Six weeks later the urine was retained from periods varying from 1½ to 2½ hours; she had no pain on micturition and no discomfort; and she left the hospital on the fifty-third day after the operation. She presented herself in April, 1890, and was then in good health. She was able to retain urine for three hours at a time without pain or discomfort. Examination of the granulation tissue removed at the operation showed caseous degeneration of tubercular deposit; but no bacilli were found, nor could any be discovered in the urine, though this was examined on more than one occasion. The urine, which was slightly alkaline at first, soon became and continued acid in reaction. It was possible that the lesion was a primary one not secondary to kidney disease; this view was rendered more probable by the continuing improvement. Primary tubercular deposit in the bladder was very rare; without exploration it was impossible to say what the symptoms indicated, there being no symptom of any prominence, and no history as to causation. The symptoms resembled those met with in some early forms of renal tuberculosis. Guyon and Reverdin operated for tubercular disease of the bladder. On cases of the disease recurring in males, the distress caused by the cystitis was very great; in all, tubercle bacilli were found in the urine, and in more than one there was evidence of tubercular deposit in other parts. Guyon and Reverdin scraped the disease, and touched the base with the thermo-cautery. Chloride of zinc was preferred here, as it was thought that its effect would be less likely to cause sloughing, and more likely to reach the whole surface.—The PRESIDENT had treated many cases of ulceration of the bladder in females by dilating the urethra, and applying nitrate of silver to the ulcers themselves. It was true that that was before the days of suprapubic cystotomy; but he would ask Mr. Battle whether by the operation he had performed he had been able to do more than could be accomplished through the dilated urethra.—Dr. R. JOHNSON referred to a phthisical patient recently in University College Hospital, under the care of Mr. Berkeley Hill. The urine in that case contained pus which was due to an ulcer at the base of the bladder behind the prostate. The use of iodoform emulsions benefited him, so that he soon left the hospital with those symptoms almost entirely relieved, although the symptoms of phthisis in the lung were advancing. The signs of ulceration as seen by the cystoscope were much less marked than those described by Mr. Battle in his case.—Mr. HURRY FENWICK thought Mr. Battle's case open to three objections, which referred respectively to the diagnosis, the prognosis, and the treatment. As to the diagnosis, two strong links were wanting; one was the absence, or not demonstrated presence, of the bacillus tuberculosis, which was so often found in the discharge from these ulcers, that no stone should be left unturned in its discovery. Then, as to the cystoscope, he did not think it possible to diagnose by that instrument alone tuberculous from scrofulous ulcers. He referred to a case of ulceration of the bladder which he had treated by draining that viscus, with the result that the patient improved greatly, although he had subsequently retrograded. Nor must all ulcerations be diagnosed as tubercular because they did not heal at once. Then as to prognosis, he thought that given by Mr. Battle was somewhat sanguine, seeing that these cases had a fallacious periodicity of active and arrested evolution; and whilst most cases of tubercular ulceration died in three years, those of scrofulous disease went on for ten, fifteen, or even twenty years before ending. Finally, as to treatment: he thought that, with a female patient, a surgeon could, by dilating the urethra, treat the ulceration with applications of all kinds, as a dentist treated a carious cavity in a tooth. He was accustomed to use lactic acid for such a purpose, and found the ulcers heal in the course of a few months. He mopped a 5 per cent. solution on to the ulcer, or injected one of 1 per cent. into the bladder. He brought forward a table of fifty cases of tuberculous ulceration of the bladder.—Mr. BATTLE, in reply, regretted that particulars of these cases had not been published, so that the less severe treatment advocated by Mr. Fenwick might have been tried. He had only resorted to cystotomy after other milder methods of treatment had failed to secure the healing of the ulcer.

Rheumatic Pericarditis, with Delirium.—Dr. FINLAY gave details of this case. The patient, a female cook, aged 49, was admitted under his care into the Middlesex Hospital on December 14th, 1887, with a history of acute rheumatism, which had lasted for about ten days before admission. On admission there was no joint affection, but coarse to and fro friction was heard all over the præcordia, and she complained of some pain, with shortness of breath. Her temperature was 99.8°; pulse 90, compressible; respirations 40; a very faint trace of albumen was present in the urine. She was ordered 15 grains of sodium salicylate every four hours, the frequency of the dose being reduced the following day to every six hours. During the next night she became delirious, with dry tongue and lips, and hoarse, whispering voice, and the medicine was omitted. Delirium continued more or less for twelve days, and was not most marked when the temperature was highest. This once for a few hours touched 103·6°, but during the progress of the case it was generally under 101°; the average pulse rate was under 100. The friction sound lasted for a fortnight, and gradually disappeared. The patient made a good recovery, and was discharged on January 30th, 1888. There was a faint systolic apex murmur present for some time, but this also disappeared, leaving the first sound merely somewhat roughened. The occurrence of delirium suggested the approach of hyperpyrexia, and the temperature was accordingly taken about every two hours for several days, but no hyperpyrexia ensued. Before the introduction of the clinical thermometer into medical use, delirium in cases of rheumatism complicated with pericarditis was attributed to the influence of this complication, but the tendency since had rather been to regard it as due to the raised temperature. The truth probably was that it might be due to various causes. The author regarded it as due in the present case to the pericarditis, and thought that the following conclusions might be fairly deduced from a consideration of the whole question. First, that in the majority of cases of rheumatism in which pericarditis and delirium coexisted the temperature was hyperpyrexial, and the delirium might be attributed to the hyperpyrexia, inasmuch as delirium was equally found in hyperpyrexial cases in which there was no pericarditis. Secondly, that in cases of rheumatic pericarditis, unaccompanied by hyperpyrexia, delirium was rare. Thirdly, that nevertheless it occurred in cases which were free from hyperpyrexia and other causal complications, and might in such be reasonably looked upon as determined by the pericarditis. The mode in which pericarditis produced delirium was probably the same as that by which the same phenomenon might be brought about after an injury or an attack of erysipelas in a drunkard, namely, shock upsetting the cerebral equilibrium. The personal element also could not be left out of the account. So-called nervous people might develop delirium under circumstances which would produce no such effect in those of a less excitable temperament.—Dr. S. COUPLAND thought that Dr. Finlay's paper had quite exhausted the subject. He thought the delirium of rheumatism had not so much to do with pericarditis as with hyperpyrexia. He favoured the use of the term devised by Trousseau of "cerebral rheumatism," which appeared exactly to fit the exigencies of the case. He believed that in a percentage of such cases the rheumatic poison attacked the nerve centres, though there might, of course, be pericarditis as well in many instances, both sets of symptoms (the cerebral and pericardial) being due to the same cause. Lastly, cases of pericarditis without brain symptoms were met with.—Dr. GLOVER inquired what were the symptoms before drugs were administered? Were the cerebral symptoms and the low temperature of medicinal origin or not?—Dr. MACFARLANE believed that the condition of the nervous system before the onset of the delirium had much to do with its appearance. One explanation was that in addition to a sensitive nervous system there was in the blood an excess of acid. The products of cerebral waste were always acid, and with a blood

badly adapted to the depuration of waste nervous products, the cells of the brain would become ill-nourished, and transmit wrong nervous impressions. Thus there might be delirium without either pericarditis or hyperpyrexia.—Dr. FINLAY, in reply, said that he had reason to believe that the temperature of the patient had never been over 102° F. before she came to the hospital, and after her entrance therein it was much below that point; but he did not attribute this to the drug treatment, which was not pushed.

Gastric Ulcer: Symptoms of Perforation: Peritonitis: Abscess bursting into Bowel.—Mr. BARTON described this case. Miss E., aged 37, a chronic invalid from rheumatism, had suffered from symptoms of gastric ulcer for four years. There had been vomiting of blood, sickness, and pain in the belly at varying intervals, but these ceased under treatment. On January 16th she vomited some dark matter which had not been kept for inspection. She had great pain in the epigastrium. Bismuth and opium and cold spoon diet were ordered. 23rd. But little improvement was apparent, and as she vomited everything, rectal feeding was resorted to, and opium in pills given by the mouth. 24th. Symptoms of acute peritonitis set in, with intense pain, vomiting, and retching with hiccough. Tr. opii, ♏xx, every four hours, were ordered to be used with each injection. She seemed relieved somewhat; but on the 27th she had a rigor, two hours after which the temperature was 99°. 28th. She was cold and collapsed, face pinched, pulse very feeble and intermittent, and the temperature 95° in the mouth. She suffered intensely from thirst, and a small quantity of ice was allowed by the mouth. The opium was kept to ♏xx every four hours, and stimulants were freely given, though nothing but a very small quantity of ice was allowed by the mouth. 29th. She seemed slightly better, and had only vomited once in the night, though the pain in the belly was increased. Tr. opii ♏xxv, every four hours, was given. 30th. Pulse 104, and much better in quality, the temperature varied from 95° to 98°, and the opium was further pushed to ♏xx every three hours. In the evening the pain was very severe, and the opium put to ♏xxv, every three hours, and ℥vj of brandy. 31st. There was great improvement; she lay on her side, with pain controlled, temperature 98°, pulse 96, and of fairly good quality. February 1st. She had slept fairly, but a most offensive discharge from the anus was noticed; the discharge was thin, very small in quantity. The bowel and vagina were examined without result. The opium was reduced. Some blood was passed the following day, and two days afterwards ℥ij of fœtid pus were passed. She seemed better but for delirium which now set in and was of a wandering description. She was easily roused, but very stupid and dreamy. 4th. She had some difficulty in retaining enemata, which were mixed with pus. Next day opium was pushed to ℥ss every three hours. She passed nearly every day about ℥vj of pus by the bowel; but as the passage of pus was usually once a day, but little interference with rectal feeding occurred. She improved quickly, the delirium passing off after a week and the pain becoming less, but she had a relapse on the 18th; the opium, which up to now had been reduced to ♏v every three hours, was now put up to ♏xx every three hours, and she quickly rallied in about three days. The pus gradually grew less and disappeared by the 20th, from which time she steadily mended. March 3rd. The bowels were moved copiously and naturally the first time for six weeks. Rectal feeding was decreased as the stomach retained food, and on the 9th no further nutrient enemata were administered. She had been fed almost solely by the rectum for six weeks, in spite of the purulent evacuations. On one occasion she brought up a large quantity of gas by the mouth of a most horribly fœtid kind, and it was suggested that it might have come from the interior of an abscess cavity. It was supposed that the abscess communicated with the colon. The fact that feeding by the rectum was commenced twenty-four hours before symptoms of peritonitis set in, and the stomach was empty, tended to show that but little matter could have been extravasated, and to this fortunate circumstance it was thought probable that the localisation of the peritonitis was due. The temperature was never seen over 99° and was often as low as 95°.—Dr. SIDNEY COUPLAND inquired what were the signs of the abdominal abscess. At the *post-mortem* examination of a somewhat similar case, in which an abscess formed between the colon and the stomach, near the greater curvature, gas accumulated in the cavity, pushing up the diaphragm, and giving rise to symptoms somewhat similar to those of pneumothorax.—Mr. BARTON, in reply, said there were no signs of an abscess externally. He had avoided manipulation as much as possible, in order not to increase the peritonitis. The only sign of an abscess was a little fulness over the stomach.

Raynaud's Disease in a Girl 10 Years of Age.—Dr. COLMAN related for himself and Dr. JAMES TAYLOR the particulars of this case. The disease affected usually the two distal segments of fingers of the right hand, in which the ischæmic stage only was reached. There was a history of a similar condition having affected her maternal grandfather, and a great-uncle. The condition had existed for fourteen months. The attacks were not preceded by any premonitory symptom; the middle finger suddenly became blanched, and the affection then spread more or less rapidly to the other fingers. The thumb was rarely affected. The left hand usually escaped. When it was affected, the spasm in both hands was symmetrical. During three of these attacks, changes in the blood in the affected fingers were observed, namely, crenation and breaking down of blood corpuscles and coloration of the liquor sanguinis. There was never any pain as the attacks passed off. They were worse in cold weather, but placing the hand in hot water would provoke an attack quite as readily as the application of ice-cold water. No hæmoglobin was ever detected in the urine, and it was considered probable that the small amount liberated was excreted by the liver. A younger brother of this patient was also shown, who had noticed during the last few months that his nails cracked and were altered in shape. The change began six months ago in the right thumb, and almost immediately afterwards in the left thumb. The index and middle fingers were affected to a less degree. The change consisted of loss of the convexity of the nails, thinning of their structures generally, longitudinal cracking, and great brittleness of the free edge, and in the case of the thumbs of well-marked transverse ridging, which became more marked at the distal end. There was no special tenderness, and there had been no arterial spasm.—Mr. BARTON said that the authors had stated there was in their patient an increase of the tendency to form rouleaux of blood corpuscles; this was contrary to the usual tendency, which was generally in these cases lessened.—Dr. HALE WHITE mentioned a case of the kind now in Guy's Hospital, in which the corpuscles were irregular in shape, crenated, and did not tend to form rouleaux. In two other patients who had slighter symptoms the corpuscles did not run together, but had not lost their natural shape. In these cases when the fingers and toes were not affected the patients had flushings of other parts, showing that the disease was widespread and not local. Those two minor cases he regarded as connecting links between Raynaud's disease and the local coldness and chills in cool weather to which many people were liable, without considering themselves to be sensibly ill.—Dr. COLMAN, in reply, stated that he also considered there was no hard-and-fast line separating people whose fingers and toes "went dead" from those suffering definitely from Raynaud's disease.—Dr. J. TAYLOR, in reply, said that he thought epileptics showed a special tendency to Raynaud's disease, and agreed that there was no hard-and-fast line separating confirmed cases of the disease from others who had only local coldness and chills. Cases of every degree of severity were found.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 28TH, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

Pylorectomy.—Sir WILLIAM STOKES read a paper on Pylorectomy, which is published at page 997.

The PRESIDENT said that though he had had no experience of the operation under discussion there were several points to which the reading of the paper had called his attention. He could not agree with the author that one could ever rely upon obtaining perfect asepsis in these operations. Then, too, he joined issue with him as to the supposed greater ability of women to support abdominal operations as compared with men, and he said that although this was a generally received idea, his own experience led him to the conclusion that men did as well as women after these operations, if not better. He doubted, moreover, whether the mere duration of the operation was to be credited with any great effect in determining the mortality which had so far followed these operations, and personally he was disposed to attribute much of their ill-success to the fact of the operation being undertaken for malignant disease. Such patients often went wrong in quite an unexpected manner. He denied that pylorectomy for cancer could be placed on the same footing as cancer of the breast, seeing that the latter,

when properly performed, was often followed by years of immunity. He pointed out that malignant disease within the peritoneal cavity was characterised by a disposition to early diffusion, and this fact must necessarily militate against the ultimate success of the operation.

Sir WILLIAM MAC CORMAC said he was unable to take as enthusiastic a view as to the future of the operation as did the author of the paper. At the same time he urged that in the cases hitherto recorded the operation had been undertaken at a stage of the disease when the chances of successful intervention were reduced to a minimum. He could not conceive of the operation, which, however performed, was one of great magnitude, ever proving a success, unless it were carried out at a time when the patient was far too well to induce him to submit to it. The early dissemination of malignant disease in the abdomen, the tendency to the involvement of neighbouring structures with the formation of adhesions, rendered success almost impossible later on. This, indeed, was only to be hoped for on condition that the growth was limited to the pylorus and was perfectly movable, and was removed before the patient's strength was too much reduced. He agreed with the author as to the value of an exploratory incision in order to arrive at an early diagnosis; and he thought if any progress were to be hoped for it would certainly be in that direction. He was inclined to think that the author was right in attributing a share of the mortality to the mere duration of the operation.

Mr. BRYANT agreed with the author that the question resolved itself into three, namely, of diagnosis; as to the period of the operation; and, lastly, as to the operation itself. He pointed out in reference to the exploration that though practically unattended with risk in patients suffering from other than malignant disease, it was very different when this was the case, the effect of the operation then being to aggravate the disease. Apart from that fact, the wisdom of making such an exploratory operation at an early period could not be questioned. He was disposed to regard pylorectomy as a perfectly legitimate operation under certain circumstances. He had himself performed the operation eight or ten times on the dead body, and he had come to the conclusion that the right way was by means of Senn's plates, with which a minimum number of sutures was necessary.

Mr. BOWREMAN JESSETT said he was the first surgeon in this country who had put Senn's proposals to the test, and the results of his experiments and observations had been to convince him of the correctness of the views put forward by Senn. He concurred in what had been said as to the conditions indispensable to success, and as to the propriety of an exploratory incision. He had operated upon four cases of cancer of the pylorus, but none of them were suitable for this operation. In two of them he had performed gastro-enterostomy, a specimen from one of which he showed. The patient in that case was a man who died six days after the operation from exhaustion, but the parts themselves were in a most satisfactory condition. He preferred to use chromicised catgut instead of silk for the ligatures.

Mr. A. PEARCE GOULD said he had assisted at the performance of this operation by one of his colleagues at the Middlesex Hospital, and that case would have to be added to the five fatal cases already on record. He thought that in any case this operation could find but a small place in surgery. He pointed out that, as a matter of fact, there were no symptoms in the early stage of malignant disease of the pylorus, and it was only when it had advanced so far as to give rise to obstruction that suspicion would be aroused, so that even the exploratory operation would not be of much use. Moreover, cancer of the pylorus was not usually fatal *quâ* cancer but *quâ* obstruction, therefore, what they had to do was to consider the question of how best to relieve the obstruction; and, under these circumstances, he thought that gastro-enterostomy would probably be found to be the easier and safer operation.

Dr. GILBART SMITH mentioned a case in which rapid pyloric obstruction having been diagnosed to be due to malignant disease no operation was undertaken, and death ensued, but *post mortem* it proved to have been due to ulceration on the duodenal side of the pylorus, which an operation would in all probability have sufficed to relieve. Since that case he had seen several others of sudden pyloric obstruction, in all probability not of a cancerous nature. Curiously enough, the brother of the first patient had applied to him seven months ago with some abdominal disease, which was diagnosed to be cancerous, and his suggestion to explore was overruled. Subsequent events, however, led to an operation being performed, and the patient recovered.

Mr. BARKER said he had been asked on various occasions to perform operations of this kind, but he had come to much the same conclusion as Mr. Gould, although he would not go so far as that speaker had done in consigning pylorectomy to the limbo of discarded operations. He observed that there must be something very wrong either in the diagnosis or treatment of these cases to have entailed such unfavourable results, seeing that in the hands of a single German surgeon nine operations for gastrostomy out of eleven had proved successful.

Sir WILLIAM STOKES, in reply, said he was prepared to accept the President's statement with respect to the ability of men to support abdominal operations as well as women, in spite of the fact that the contrary opinion was that generally received. When he compared removal of the breast for cancer to pylorectomy, it was only to show how illogical it would be to refuse to resort to the latter operation simply because of the possibility of recurrence. He did not agree with Mr. Gould that there were no symptoms in the early stages of pyloric disease, for the existence of stenosis rendered the diagnosis possible. He thought that when the disease was too extensive to admit of the affected parts being removed *in toto*, then gastro-enterostomy might have for effect to prolong the patient's life for a short time. The fact that they left the diseased tissues behind after an operation of such magnitude, however, would have to be borne in mind.

HUNTERIAN SOCIETY.

WEDNESDAY, APRIL 23RD, 1890.

STEPHEN MACKENZIE, M.D., F.R.C.P., President, in the Chair.

Bronchocele.—Dr. ARTHUR DAVIES showed three cases of bronchocele; two sisters and a niece, all born at one village in Devonshire. Also a fourth case, unrelated, but who lived in the same village and, for three months, in the same house. The tumour in the first case contained some fibrous growth, the others seemed purely glandular.—Mr. HOVELL said that the internal administration of iodine, beginning with 5 minims of tincture, with hydrochloric acid and glycerine, thrice daily, answered well in simple glandular cases. When the gland was fibrous, injection of tincture of iodine was the best treatment, and in a large experience he had met with no serious results, excluding, of course, cases of cystic goître.—Dr. HINGSTON FOX remarked on the connection between disorders of the thyroid gland and menstruation, referring to a case of inflammatory enlargement shown before this Society, and to cases of women whose thyroids enlarge at the catamenial epochs.

Amenorrhœa from Shock.—Dr. HERMAN read a paper on amenorrhœa from mental shock and with mental depression. He narrated several cases in which shock was supposed to have caused cessation, but in which he believed the real condition was one of mental depression, akin to melancholia, and of defective nutrition, the amenorrhœa being beneficial rather than otherwise. The uterus showed either some atrophy or no change. In these cases the Weir-Mitchell treatment, massage, and galvanism generally resulted in re-establishment of the function. Those who could obtain change of air, with exercise, food, and tonics, attained a like result. He saw no advantage in local treatment, and he would ask, finally, whether there were any cases due strictly to mental shock, unaccompanied by melancholic symptoms? Amenorrhœa was the rule in melancholia, and the cases he had described occupied, as it were, a halfway house to this disease.

Stricture of Œsophagus.—Mr. RIVINGTON showed a case of stricture of the œsophagus. A labourer, aged 61, had symptoms of stricture without apparent cause; a bougie passed 14 inches. It was diagnosed as malignant. Bougies were persevered with, and on the twelfth day he passed the smallest tube, increasing until in two weeks more he passed No. 12 bougie with a bulbous end; he could now swallow bread and butter. He was doing his work and gaining weight; no signs of syphilis.—The PRESIDENT thought it was malignant despite the temporary improvement. In cases of tight stricture one could nearly always after death pass the finger through it, when spasm and congestion, the two active elements, were absent.—Mr. RIVINGTON'S second case was of an emaciated woman, aged 55. During a month bougies were tried, once only passed into the stomach. She could hardly swallow anything; was constantly vomiting. On March 1st he performed gastrostomy, finding the stomach much contracted, like small intestine, and having a mass of cancer at the cardiac orifice. The stomach was opened two days after, and a small glass tube left in

through which peptonised fluids were injected. A stone had been lost in weight during three weeks before the operation, 5½lbs. only in the seven weeks since.—The PRESIDENT suggested washing out the œsophagus with some antiseptic fluid to obviate ulceration.—Mr. POLAND advocated feeding through a fine tubular needle introduced immediately into the stomach as soon as exposed.

Treatment of Erysipelas.—Mr. BIDWELL read a paper on the treatment of erysipelas by hypodermic injection—a method introduced by Hüter ten years ago, but never employed in this country. Carbolic acid solution, 5 per cent., was injected in multiple punctures, half an inch away from the spreading margin, in four severe cases in children. All improved under this treatment, and he claimed that whilst the natural tendency of the disease was towards cure the hypodermic treatment shortened the duration and thus lessened the danger of infection.—The PRESIDENT asked whether an adult would submit to the treatment. He would like to see it tried in erysipelas ambulans, a severe spreading form, which lasted a long time and for which he had found no treatment of use.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 23RD, 1890.

SIR T. CRAWFORD, K.C.B., M.D., President, in the Chair.

Influenza in France.—Dr. JACQUES BERTILLON, chief of the Municipal Statistical Department of Paris, introduced by Dr. Mouat, gave an address on the recent epidemic of influenza in France. He began by stating that any estimate of the mortality caused by the epidemic based on the number of deaths certified by the medical attendants and registered as due to influenza would be utterly incorrect and misleading, for while these figures would represent only the small number of instances in which the disease proved fatal, either from asthenia in uncomplicated cases, or from complications or sequelæ supervening in the course of the disease itself, they would exclude the vastly greater number in which these secondary lesions followed at a later period, medical advice not having been sought in the primary attack, as well as the even larger number in which influenza was the means of causing or of accelerating a fatal termination of other and most diverse diseases. While the deaths in Paris certified as due to influenza were but 213 in all, the general mortality of the city during the months of December and January exceeded the average by 5,500, an excess which could not be accounted for by anything except the direct or indirect influence of this disease. The total mortality from all causes during the period in question was just double the average of previous years. There was no greater prevalence of infectious diseases, as small-pox, enteric fever, scarlatina, diphtheria, measles, and whooping cough, but a larger proportion than usual of those persons suffering from these diseases succumbed to pulmonary complications. The enormous increase in the mortality from bronchitis, pneumonia, and pleurisy was clearly owing to the frequent occurrence of these conditions as sequelæ of previous attacks of influenza, but still more remarkable was the increased mortality from chronic diseases as phthisis, organic lesions of the heart, diabetes, alcoholism, chronic diseases of the brain, kidneys, etc., in which the supervention of influenza, even of a mild type, caused or hastened a fatal termination. It was not dangerous to children unless already suffering from lung diseases, or those, as measles and whooping-cough, prone to pulmonary complications. With these exceptions it was rarely fatal to persons under 20, but for every period beyond that the general mortality was doubled. It was only half as fatal to women as to men, probably from their being less exposed to cold and wet during and after an attack. The excessive mortality was equally marked in the wealthier and the poorer quarters of the city; but the most surprising fact, which Dr. Bertillon did not attempt to explain, was that the number of suicides was increased by about 40 per cent. Dr. Bertillon exhibited charts of several countries of Europe, showing by means of lines and circles the populations of the principal towns, the total mortality, its excess in each during the months of December and January, and the weeks in which the deaths were less or more than 50 or 100 per cent. above the average.

Influenza in Banstead Downs Schools.—Dr. GEORGE RICE read a report of an outbreak of influenza in the union schools at Banstead Downs, in which from 30 to 50 per cent. of the children in the several blocks or departments were attacked, as well as from one to three-fourths of the adults, the latter, with the exception of the initial and imported case, subsequently to the larger proportion of the children. The history of the outbreak and its progress through the establishment proved conclusively its contagious nature.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 11TH, 1890.

HENRY E. ARMSTRONG, M.R.C.S., President, in the Chair.

Infectious Hospitals and the Question of Payment.—The evening was, by previous arrangement, set apart for the consideration of the question: Should any charge whatever be made for admission to, and maintenance in, hospitals for infectious diseases, and, if so, on what terms?—The discussion was opened by the PRESIDENT, who said that he assumed that all were agreed as to the necessity for absolute freedom of admission to these hospitals for all persons, without distinction, who could not be effectively isolated at their own homes, so that the sole question before the Society was the expediency of charging for their maintenance those who were in a position to pay. Many sanitary authorities were, he believed, waiting for guidance in this matter, though the general tendency seemed to be towards more or less gratuitous maintenance. The infectious hospital at Newcastle, for example, the oldest in the provinces, was formerly in the hands of subscribers, and required the payment of 3s. per day; but, since 1873, when it was taken over by the Corporation, it had become practically free. The question had a metropolitan and an extra-metropolitan side, though, as regarded London, it was out of the control of the sanitary authorities. From a sanitary point of view nothing could be of greater importance than that the utmost facilities should be given for isolation of infectious patients, and consequently the removal of every impediment in the way of their treatment in special hospitals. Once he thought private patients should be required to pay, but his opinion now was that no attempt should be made to render these hospitals in any way self supporting. Section 132 of the Public Health Act enabled the sanitary authority to recover payment from all patients not being paupers, but was defective in not providing for the case of children, who would always constitute a large proportion of the patients. If it were thought that some classes of patients should be made to pay, the difficulty of deciding which should be was by no means easy. Patients might be divided into the following classes: (1) paupers; (2) poor persons, not paupers, unable to pay, admitted voluntarily or on the order of a magistrate; (3) domestic servants; (4) poor persons ill able to pay; (5) those well able to do so; (6) residents in hotels, schools, and public institutions; (7) police, workmen in firms providing medical attendance, etc. He had sent a circular to a large number of sanitary authorities with a view to obtain information as to the actual practice in each place, and had received replies from thirty-two towns, which showed the greatest diversity in details, though the general tendency seemed to be towards remission of payment. In some, payment was exacted of the well-to-do; in others, accepted as a free gift on their part. In some, paupers only were paid for by the guardians. Some charged nominally for all, but gave discretionary powers to the medical officer or the managers to remit the payment. In many, patients admitted from other districts only were charged, either personally or on their local authorities. In a few, a charge was made for private wards or extra accommodation. At his own town, a fixed subsidy was received from the guardians for paupers irrespective of numbers, and a charge was made for private wards, but all others were treated gratuitously. The opinions of the medical officers of health were in favour of entire freedom. At Salford, the abolition of payment had filled the hospital, previously often empty, and the general feeling was against inquisition into the circumstances of individuals, and the allowance of special privileges to paying patients, which provoked discontent in those who paid, and jealousy in those who did not. The President urged as an argument in favour of perfect freedom that the expense of maintenance was but an insignificant fraction of the total cost, including erection and administration, already borne by the authorities, and that the admission of such patients was not for their individual benefit but for the protection of the general public, on whom, therefore, the burden should fall.—The statements of the President were supplemented by several provincial members present.—Mr. HOLLINGSHEAD stated that as the result of gratuitous admission 68 of the 76 cases of scarlatina notified to him under the Act last year were admitted to the hospital and the average deaths per annum had,

since the operation of this rule, fallen from 10 or 12 to about 1 or 2.—Dr. BOSTOCK HILL, of Birmingham, said that he received 75 per cent. of all fever cases in the borough within a day or two of the notification of their occurrence. Of the adjacent districts, which, having no hospitals of their own, availed themselves of that at Birmingham, Sutton Coldfield, with a population of only 10,000, which made no charge, sent actually more patients than Aston Manor, with 70,000 inhabitants, but a graduated system of payment.—Dr. WOODFORDE and Mr. THRESH gave an account of the means taken in their rural districts in the absence of hospitals for the isolation of cases at their own cottage homes.—Dr. NEWSHOLME (Brighton) strongly condemned the practice of charging employers for their servants for whom they were not legally liable; and Dr. WILLOUGHBY urged that it could not but lead to their being sent to their homes, where they would be a danger to others. Dr. Willoughby did not think that the practice of charging adjoining districts for individual patients or contracting with them in any way was satisfactory or equitable. It would be far better that with a view to gratuitous admission they should combine to defray the entire cost of the establishment in proportion to their respective populations or resources.—Dr. DUDFIELD then traced the history of the provision for the hospital accommodation of infectious cases in London, from the formation of the Metropolitan Asylums Board in 1867 and the negotiations in which he had taken a prominent part, that had at length, after an agitation of 14 years' duration, ended in the admission of non-paupers, on the certificate of any medical practitioner, without forfeiture of civil and political rights. He concluded by moving a resolution, which was carried unanimously, that as a corollary to the notification of infectious diseases, "Every sanitary authority should, either alone or in combination with others, provide a hospital for the gratuitous reception of any persons without distinction suffering from infectious diseases within the meaning of the Act."

SHROPSHIRE AND MID-WALES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

TUESDAY, APRIL 15TH, 1890.

J. H. ROPER, F.R.C.S., President, in the Chair.

Cancer of Breast.—Mr. STEPHEN PAGET read a paper on some points in the early diagnosis and treatment of cancer of the breast. He said that the statistics as to heredity varied so much that they were useless from a diagnostic point of view. The same might be said as to pain; hardness and toughness of the tumour were likewise apt to be misleading. If adhesion of the skin and retraction of the nipple were both present, the case was more than suspicious. Still, these symptoms sometimes occurred together over a chronic abscess or an innocent growth. If the cancer occurred at the margin of the breast retraction of the nipple was absent; oblique retraction, however, was very suspicious. Still, certain diagnosis was practically impossible. The proper course to take in any such tumour was to operate at once, and always to first cut straight into the tumour. Mr. Paget then discussed the question of clearing out the axilla in every case. He then read some notes on Paget's disease of the nipple, and showed sections with the parasite.—In the discussion which followed Messrs. WEBB, BROOKS, and others took part.

Bacillus of Tubercle in Sputum.—Mr. WEBB, in a paper on the value with regard to diagnosis and prognosis of the presence of bacillus tuberculosis in sputum, read notes of thirteen cases in which he had found the bacillus, eleven of which were already dead and the other two in the later stages of phthisis. He read the notes of four other cases which had been sent to him as phthisical, but in which he had been unable to discover any bacilli. One of these had turned out to be syphilis, one lupus (of larynx), and the other two had got quite well. He attached the greatest value to the discovery of the bacillus.

Keratitis after Influenza.—Dr. CHARNLEY read notes of four cases of keratitis following influenza (showing one case). The most noticeable feature in them all was the obstinate pain, which resisted every remedy except salicylate of soda. All had made good recoveries.

Safety Pin in Urethra, etc.—Mr. EDDOWES read notes of a case of a safety pin impacted and broken off in the urethra of a lad, and described the operation by which he removed it. He also showed a case of fracture of the right clavicle between the middle and inner third, and of the left clavicle between the middle and outer third in the same patient, caused by kicks from a horse. He also notes of a case of strangulated hernia.

Double Vagina.—Mr. E. E. KING read notes of a case of double vagina. The patient was a primipara, who aborted at six months. There was some septic (?) trouble after the abortion, and it was while syringing for this complication that the deformity was discovered. The right vagina led to the cervix in the usual way; the left was a *cul-de-sac*, divided from the right the whole way up by a fleshy partition. The uterus was normal.

Specimens.—Dr. SANKEY showed the Brain and Cast of Brain of a Microcephalic Idiot.

Cases.—A few cases for diagnosis were shown by Mr. HOPE, and the meeting then adjourned.

ABERDEEN, BANFF, AND KINCARDINE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WEDNESDAY, APRIL 16TH, 1890.

JOHN URQUHART, M.D., in the Chair.

Micro-corneæ.—Dr. MCKENZIE DAVIDSON showed a man, aged 34 years, the subject of this condition. Both corneæ were very small, 6 millimètres in diameter. There was a coloboma of iris and choroid in both eyes downwards and inwards. The eyeballs, as a whole, were small, the left the smaller, with vision restricted to hand movements. Details of the fundus could not be made out. On the right vision was sufficient to enable the patient to walk without difficulty. The lens, apparently of full size and quite transparent, was dislocated downwards and inwards, and lay over the coloboma of the choroid, probably the result of a blow on the right eye in September last. The movements of the eyeballs were also imperfect, both being in a state of habitual convergence. There was also very rapid lateral nystagmus. No family history to account for the man's defective sight could be elicited.

Bacilli of Grouse Disease.—Professor OGSTON exhibited several microscopic preparations of the bacilli of grouse disease, which had been made under the supervision of Dr. Klein.

Cases.—Dr. MACKENZIE BOOTH showed a girl, aged 3 years, who had been suffering from Necrosis of the Lower Jaw for several months. There had been great swelling of the left side of the face, until a large piece, $1\frac{1}{4}$ inch, of the lower jaw, with the canine and posterior teeth, was removed. Dr. Mackenzie Booth also showed a young man suffering from an Obscure Thoracic Affection of the right side, in which the chief symptoms were severe pain in the side, followed by great dyspnœa. The physical signs were increased size of the right side on measurement, subtympanitic note over the side on percussion, weak amphoric or absent voice and breath sounds over the right side. There was no indication of air anywhere in the subcutaneous connective tissue. No history bearing on the causation of the affection could be elicited. Anodynes and rest in bed had been the only treatment employed, and the lad was gradually regaining his wonted health.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, APRIL 9TH, 1890.

J. HARMAR, M.R.C.S., in the Chair.

Specimens.—Mr. HASLAM showed a Sequestrum two inches in length, and involving almost the entire circumference of the clavicle, removed from a girl, aged 13.—Dr. FOXWELL showed a Left Lung, the upper lobe of which had undergone a uniform fibrosis. At the apex were several irregular, pus-containing cavities of quite recent formation. The pleura was much affected, perhaps primarily so, in places being a third of an inch thick, and almost cartilaginous in texture. Its two layers were adherent except where separated by pus. The lower lobe was collapsed but otherwise normal. The patient was admitted to the Queen's Hospital under the care of Mr. Marsh and Dr. Foxwell with a tumour the size of a large orange centreing over the second left space. This was incised, and the apex of the lung drained through it; but fresh openings arose lower down, with much erosion of the corresponding ribs; the right chest was unaffected. The patient died of exhaustion. The man only gave a nine months' history of cough and expectoration, but had been getting weak for six months prior to this. No bacilli were found, but only one examination was made. Dr. Foxwell believed syphilis was most probably the cause of the condition.

Paper.—Mr. C. MARTIN read a paper on Cholecystotomy, and showed specimens of gallstones that had been removed by Mr. Lawson Tait.

Hemiplegia with Optic Neuritis.—Dr. SUCKLING showed a boy, aged 6, suffering from amnesia and right hemiplegia, who also suffered from well-marked optic neuritis. On February 10th last he had a fall. From February 13th to the 19th he had four convulsions. He was admitted into the infirmary on the 19th in a semi-conscious state with retraction of the head. He appeared to have pain in the back of the head, as he occasionally put his hand up to it. There was paresis of the right arm and right side of the face. He became conscious in a day or two, when he was found to be aphasic, answering "Yes" to all questions. There was still some tendency to retraction of the head. There was no vomiting and no headache, but well-marked optic neuritis, more intense on the left side. Since his admission he had been taught several words. He seemed to understand everything said to him. Dr. Suckling had seen many cases of hemiplegia in children in whom there was also optic neuritis. In two cases the diagnosis of tumour was certain, and yet the hemiplegia came on suddenly. Optic neuritis was rare, in his opinion, in cerebral embolism, thrombosis, and hæmorrhage, but did occur in meningeal hæmorrhage, and the diagnosis rested between this and latent cerebral tumour. The epileptiform attacks and the occurrence of the symptoms after a fall, the boy having previously been quite well, pointed in this case to meningeal hæmorrhage.

REVIEWS AND NOTICES.

MANUAL FOR ARMY MEDICAL SERVICES. By W. E. RIORDAN, Surgeon-Major Medical Staff. London: Eyre and Spottiswoode. 1890.

IN his preface the author states that the title of the work to a considerable extent explains its contents. But we must qualify the statement somewhat, because we think it scarcely does the work or himself justice; for, although it is primarily no doubt intended for medical officers, yet it embraces such a range of important information as must render it of use to every branch of the service, and even to civilians who want a book of the kind for handy reference. While he takes the official War Office regulations and manuals to build upon, and freely lays under tribute the regulations of every branch of the service, yet the result is no mere dry compilation of Army Acts and Orders, but a book full of original and collected matter of a most useful and interesting character.

Such is the compass of this painstaking work, that the medical or other officer who masters its contents will, with the exception say of drill, tactics, strategy, and fortifications, become a veritable authority on army organisation and procedure. The volume forcibly demonstrates the great range and scope of the duties and responsibilities required of the modern army medical officer, and inferentially, *per contra*, exposes the injustice of the "fighting caste," who endeavour to minimise the importance of his functions, and so contrive to withhold from him due military status. If he be only a civilian attached, but not organically belonging to, the army, let them explain, if they can, the *rationale* of such a work as this.

We are aware there have always been a limited few in the Army Medical Department itself who take unkindly to strictly military work under the plea that they only can be "good doctors." We fear such gentlemen (originally, no doubt, devoid of military tastes) have placed themselves in a false position in entering the army, and had better have remained civil practitioners, and we pity them in having, against the grain, to master such a volume as this. Again, it has been argued, theoretically, that the acquisition by the medical officer of such knowledge as herein contained must distract his mind from strictly professional work; but the answer is that this has really never been found to be the case in practice; rather the reverse—the best medical officer in hospital always being also the smartest in a military sense in barracks.

The ideal and model medical officer is an all round, many-sided man, whose knowledge and accomplishments will carry him successfully through the varied positions in which he must inevitably find himself; a man who, keeping abreast of his strictly professional work, acquires a mastery of such subjects as this volume deals with, and thereby becomes on a footing of equality with his combatant brethren, and able to perform the military part of his duties with independence and success.

Assuredly, if he is to take and hold any proper position at all in such a body as the army, it will not be by assuming an air of ignorant indifference and meek civilianism towards his military surroundings, but by fully identifying himself with them. The spirit of military emulation should animate him, as all officers, and is by no means incompatible with his professional position; all the greatest army surgeons have invariably been every inch soldiers.

But our army medical officers have been much repressed; reform and progress in their department have long been thwarted and delayed by the old traditions and prejudices of the combatant branch, who have always viewed the army at large as a sort of feudal preserve of their own, and the medical as an inferior order. It has apparently not yet been fully brought home to such men that the modern military machine is wholly incomplete, and cannot work without well-organised departments. Now it is not difficult, as it ought not to be necessary, to show that the medical department is a very essential and integral part of the machine, without which it neither could nor would be permitted to act. We are aware there are even distinguished and responsible military men who affect to ignore this statement; they affect to be all-sufficient in themselves, yet it is a very apparent affectation, because it is manifest none know better than they that no army in these days could hold together at all without a well-organised medical service; and even if it could for a time, it would soon be regarded, if without the humanities which medical and surgical science bring to it, as a detestable horde of mere man-slayers. An army without the humanities cannot now exist, and we affirm that the hitherto obdurate military caste will soon have no alternative but to accept medicine on a footing of complete equality, or face the charge of seeking to throw the modern soldier back into the cruelties and savageries of the Middle Ages.

But in spite of military opposition, and the opportunism and indifference of successive War Ministries, the Medical Department, as this manual shows, has during the past twenty years made great strides in military organisation, of a very needful kind. The unification system, by which medical officers acquired command of the hospital *personnel*, has undoubtedly brought this about. In the old regimental days medical officers, by some process of reasoning, were held to be absolutely incapable of exercising military command; but when station hospitals were introduced it was soon seen that there could be no semblance or pretence of efficiency, unless the medical officers in charge were given full military control of their immediate subordinates. Such command was conceded grudgingly and tentatively; but it presently appeared the contemned medical officer was just as capable of exercising it as any other human being who had it thrust upon him by means of a military gazette. But to exercise military command efficiently, a knowledge of military law, and the regulations which govern pay, clothing, and equipment is essential; hence the reason for much that is to be found in this manual for the medical services is easily comprehended. It extends to about 450 pages, uniform with the War Office manuals, and is divided into fourteen chapters, embracing all matters relating to the military duties of army medical officers.

The first three chapters, comprising Military Law, Rules of Evidence, and Medico-Legal Evidence, may fitly be considered together. In the two first it is shown that military law is embodied in the Army, Reserve Forces, Militia, and certain minor Acts; and the essence of these is given in an admirable analysis and summary, in clear distinct paragraphs. The author elucidates the various enactments by comments and quotations from the decisions of the Judge Advocate-General and other authorities, and so, gives not merely the dry bones, but the very ethics of the statutes. The third chapter, with some special matter, contains much that belongs generally to medical jurisprudence as taught in the schools. Chapter 4, on the Authority and Jurisdiction of Commanding Officers, will be of much interest to medical officers in command of detachments of the Medical Staff Corps; it shows their special relation to the principal medical officer and the general officer of the district with much perspicuity. Chapter 5, on Army Organisation and Administration, gives a succinct account, which will be to many a real revelation, of the inner working of the War Office and its various departments. From this chapter (page 133) we will quote the following, as bearing on our opening remarks in this review:

"The duties of the Medical Staff extend far beyond what might at first sight appear to be strictly professional; especially so from a civilian point of view. As an instance, take our army hospitals, where we now practise our profession under a liberal measure of self-government. Not infrequently the medical officer visiting his patients in a civil hospital has nothing to do with the directorate of the establishment. This renders his duties comparatively light, and he is relieved of many anxieties which press heavily on the army doctor. In the army, as well as being responsible for matters relating to his patients in every particular, the medical officer is responsible for the whole hospital itself; its equipment, organisation, and every occurrence in connection with such services. Moreover, he is held financially responsible for all public property belonging to the hospital, no matter whether it happens to be in a building within barracks, or the equipment of a movable hospital when campaigning."

It may be asked, Why saddle the medical officer with such responsibilities? Simply because the conditions of military command and discipline are such that any divided authority in an army hospital is absolutely fatal to efficiency; such division has been tried, and resulted in confusion. The placing of financial responsibility for stores and equipment is, indeed, an economical arrangement for the State, as it does away with the necessity of a separate and expensive establishment for that special duty. Although there is not much analogy between a civil and a military hospital, we cannot help thinking it would be well did the medical officers of the former have more voice in the management and government thereof.

Chapter 6 relates to Pay, Clothing, and Service Records. Chapters 7 and 8 on Air, Water, Ventilation, and Construction of Barracks, and on Food belong to the Hygiene of Troops, and are very carefully written and compiled from the best authorities. Chapter 9—Medical Officers doing Duty with Troops in Barracks—will be of special interest to all young officers, and is very clearly and fully written. The title of Chapter 10—Hospitals; their Construction, Organisation, and Administration—speaks for itself. Chapter 11—Movement of Troops by Sea, and Marine Transport—embraces much that is not to be found in the ordinary regulations on that subject. Chapter 12—Field Service, Marches, Encampments, Bivouacs, etc.—is full of interest. In view of a quite recent army corps regulation, which, instead of keeping the Principal Medical Officer with the General Officer Commanding in front, relegates him back to the line of communications—an arrangement considered most ill-advised and dangerous by competent authorities—we quote the following:

"Referring to the necessity of communication between military and medical officers, Inspector-General A. Gordon, M.D., remarks: 'It would be well were the military and medical authorities of forces employed in expeditions aware of the great benefits that arise from free communications between them, and the great evils—even extending to the serious embarrassment of the operations—that follow a contrary course.'"

In support of the benefits arising from such a common sense course, the author cites the intimate relations that existed between Lord Wellington and Sir James McGrigor, and Napoleon and Baron Larrey. Our strategists of to-day, however, do not follow the example of these great captains, but apparently prefer the risk of keeping their principal medical advisers in darkness and at a distance. Let them beware of the consequences.

What strikes us most on a general survey of this book are the immense strides made in army organisation, tables, and regulations during the past twenty years. An enormous amount of labour and talent has been brought to bear by War Office officials on these matters, and the result is very gratifying. Especially are we pleased to think no department of the army possesses clearer or fuller regulations than the medical; this is largely due to the ability displayed in the compilation of the medical regulations of 1878, and of 1885 especially; we fear the officers who worked out the complicated details of these books got very scant recognition of their all-important labours. We know that smart civilian writers sometimes affect to set cheap store on all regulations, which they wrongly identify or confound with red tape. But they speak without knowledge; no complex organisation like the army could possibly be worked without clear and specific rules in detail; such rules, of course, may be wise or unwise, but in the main they are the outcome of perhaps painful experiences; regulations, indeed, being like proverbs—the wisdom of many condensed by the wit of a few. The modern army medical officer has no longer, like his predecessors, to grope about for want of definite instructions; with his new medical regulations in one pocket, and this volume in the other, he can safely take up any duty.

We heartily congratulate Surgeon-Major RIORDAN on his really admirable book; and as his best reward may he find it, where it deserves to be, in the hands of every medical officer, whether of the regular or the auxiliary forces.

MANUAL OF GYNÆCOLOGY. By D. BERRY HART, M.D., F.R.C.P.E., F.R.S.E., President of the Edinburgh Obstetrical Society; Lecturer on Midwifery and Diseases of Women, Surgeons' Hall, Edinburgh; Physician to the Royal Maternity Hospital, Edinburgh, etc.; and H. FREELAND BARBOUR, M.A., B.Sc., M.D., F.R.C.P.E., F.R.S.E., Lecturer on Midwifery and Diseases of Women, School of Medicine, Edinburgh; Assistant-Physician to the Royal Maternity Hospital, Edinburgh, etc. With 14 lithographs and 400 woodcuts. Fourth Edition. Edinburgh and London: W. and A. K. Johnston. 1890.

THE reputation of this standard work is fully maintained in the new edition. The student of gynæcology will be thankful to the authors for the copious "Index of Gynæcological Literature," which is placed at the end of the book so as not to deface and confuse the text. This index contains practically everything worth quoting which has appeared in the JOURNAL and in our native and foreign contemporaries since January, 1886. There is also an "Index of Authors" as well as an "Index of Subjects." All these invaluable appendices are, however, developments from former editions. In the present issue many important novelties in pathology and treatment will be found embodied in the text. Perhaps the most valuable section of the *Manual* is included in those chapters which treat of uterine tumours.

The paragraphs on the surgical treatment of fibroid tumour have been most carefully prepared. Among those sections of this work which are entirely new we must notice the authors' observations on massage and electricity. To the former scant praise is awarded. The authors believe that there are great difficulties in the way of a general acceptance of massage. It involves undue manipulation of the genital organs, a most serious objection, "which will, in all probability, be fatal to the method." Manipulation is dangerous in cases where diagnosis is faulty, especially when pyosalpinx exists unsuspected. There is every prospect, in the opinion of Drs. HART and BARBOUR, that massage will be supplanted, in the few cases supposed to require it, by abdominal section.

The authors, again, are by no means strong advocates of the electrical treatment of uterine fibroids. The supporters of the method may urge that the objections are not the result of direct experience, but the authors quote both parties freely and impartially. They hold that electricity in the treatment of fibroids is still on its trial. It is only two or three years old, and as yet we have no data for coming to any definite conclusion as to its value. Great respect is justly shown to the high authority of Dr. Keith. The words of Dr. Steavenson, of St. Bartholomew's, one of the leading experts in the method, are, on the other hand, quoted in full, and those words inform us that all the palliative modes of treatment of uterine fibroids are eminently unsatisfactory, and the profession would have hailed with delight any mode of treatment that would promise a cure. "This certainly electricity does not accomplish, at any rate, with tumours of any size; but there is no doubt that in the majority of cases the symptoms are relieved, and one of the most troublesome that yields to electrical treatment is that of hæmorrhage."

Drs. Hart and Barbour, comparing Dr. Steavenson's opinions with Dr. Keith's important assertion that "Apostoli's treatment puts a woman with a fibrous tumour who suffers much into the position of a woman with a fibroid who does not suffer, or may be even unaware of its presence," infer that "the application of electricity to fibroids is in great measure a *treatment of symptoms*" (the italics are in the original). "It finds its place alongside of ergotin, being perhaps more certain, but, on the other hand, exacting more time and trouble in its use." There is an excellent appendix on Electricity in Gynæcology in general.

Drs. Hart and Barbour have well maintained the principle enunciated in the preface to the first edition of the *Manual*, that the anatomy, physiology, and pathology of the pelvic organs form the foundation of good clinical work. The *Manual* will be of great value to advanced students and practitioners, and of yet

gher utility to experts in gynæcology who desire to learn, with-
it needless loss of time, the opinions of others who practise the
me speciality.

NOTES ON BOOKS.

A Practical Textbook of the Diseases of Women. By ARTHUR . N. LEWERS, M.D.Lond., Assistant Obstetric Physician to the ondon Hospital, etc. Second Edition, with 146 illustrations. ondon: H. K. Lewis. 1890.)—The popularity of this work is dicated by the appearance of a second edition within two years the first. The author, in the meanwhile, has not changed his ews on the advantages of supravaginal amputation of the cervix r malignant disease. He has little belief in Apostoli's treat-ent, which, in his opinion, has failed to accomplish a great deal at was originally claimed for it. Indeed, chiefly on the ground at the treatment is attended with considerable danger, he be-eves that it is very doubtful whether it will ultimately find any ace in legitimate practice. He advocates removal of the append-ges in cases of uterine fibroid whenever practicable, and, as in e former edition, he insists that it is quite the exception to meet ith cases where hysterectomy is justifiable. As in our notice of e first edition, we may note that, in a textbook for students, one the first questions that the compiler must take into considera-on is whether severe operations should be taught at all. In the ove observation on hysterectomy, however, the author's teach-g, as teaching pure and simple, is perfectly sound. In the case removal of the appendages for tubal disease, an operation, at e best, much harder to perform than a mere inexperienced ectator might believe, Dr. Lewers rightly advises the reader to ave the organs alone should their condition render removal azardous. The chapters on diseases of women, the subject of the ok rather than capital operations, are excellent as before, or, deed, rather improved by judicious revision.

The Diseases and Disorders of the Ov. By GEORGE GRESS-ELL; with additions by Dr. ALBERT GRESSWELL. (London: W. . Allen and Co., 13, Waterloo Place, S.W. 1889.)—This work aves no definite impression on the mind; it presents itself, as r as arrangement of subjects is concerned, as an effort in the right rection, but on careful reading, the large amount of material, ten illogically introduced, so completely extraneous to the ints under consideration, exhausts the reader's patience. The gressions are numerous and extreme in the chapters where gic and concentration of thought are the very life essences of a roper consideration of the subject. Chapter V perhaps exhibits is failing in the highest degree. The statement that "man is ghthanded, as indeed also are quadrupeds, though to a less tent," forms a text whereon a homily is built embodying full natomical reasons why this should be: and this too in a chapter "Origin of Disease and the Germ Theory." A reader may, how-ver, glean a good deal of useful information from this book hich will save him the trouble of consulting a number of works which it originally appeared.

Intercolonial Medical Congress of Australasia. Transactions of econd Session held in Melbourne, Victoria, January, 1889. Pub-shed under the direction of the Literary Committee. (Mel-ourne: Stillwell and Co. 1889.)—The delay in the publication of is volume appears to have been unavoidable. The success of the ongress entailed difficulties owing to the number of papers sub-itted, and the consequent necessity for further financial arrange-ents. The pecuniary difficulty was met by the Government of ictoria, which, with praiseworthy liberality, increased the sum hich it had agreed to grant towards defraying the cost of publi-ation. The magnificent distances of Australasia gave rise to other ifficulties in preparing the matter for the press. The final result, owever, has been the production of a portly volume of over one housand pages, which gives every evidence of having been care-lly edited. Several of the papers are illustrated by photo-raphs, which add very much to their interest. Thus there are me striking photographs of patients before and after the per-rmance of Mr. Fitzgerald's new operation for talipes, and Dr. tirling gives a photograph of each one of the six cases recorded his important paper on sporadic cretinism. Altogether an ex-mination of the volume gives the reader a remarkably favourable opinion of the amount and character of the clinical and scientific work now being done in Australasia.

Inflammation of the Vermiform Appendix: its Results, Diagnosis, and Treatment. By T. G. MORTON, M.D., Surgeon to the Pennsylvania Hospital. (Philadelphia: J. B. Lippincott Company. 1890.)—This pamphlet consists of a paper read before the College of Physicians of Philadelphia in January. It includes reports of seven cases of excision of the appendix for perforative inflammation; five of the cases were exhibited. Dr. Morton holds the more modern view as to treatment, being greatly in favour of operation. He advocates the lateral, not median, incision, and recommends the application of sutures to the wound at first, so as to secure an anchorage of the cæcum in the bottom of the wound by lymph, which prevents prolapse or hernia subsequent to cutting the sutures or after cicatrisation. One or two sutures generally requires removal at the end of twenty hours, others subsequently as tension may demand. Dr. Morton favours operation for chronic disease of the appendix, preceded by careful preparation of the patient by rest in bed, an appropriate diet and management of the bowels, and thorough general and local disinfection.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SOL. IODI.

THIS is a solution of iodine which, when rubbed upon the skin, scarcely colours it, and is apparently quickly absorbed. Several tests appear to show that the desired effect of the iodine was produced. The sample has been sent by Messrs. Brooks and Co, 136, Lower Baggot Street, Dublin.

LISTERINE.

WE have received from Messrs. S. Maw, Son, and Thompson, 12, Aldergate Street, E.C., a specimen of a preparation manufactured by the Lambart Pharmacal Company, St. Louis, U.S.A. According to the formula given it contains the following antiseptics: thyme, eucalyptus, baptisia, gaultheria, mentha arvensis, and benzo-boracic acid. It is a clear liquid, with an aromatic odour, pungent taste, and miscible in all proportions with water. We have experimentally proved that it is a powerful antiseptic, preventing the development of bacteria and decomposition of vegetable infusions. Listerine is certainly a very elegant preparation, and will be found an agreeable antiseptic either for internal or external use.

A NEW CATHETER.

MR. A. E. DAVIS (Liverpool) writes: Messrs. Lynch and Co., in their criticism of my catheter, have evidently overlooked or ignored several points connected with it, and which were very plainly stated in my description in the JOURNAL of April 19th. They state that the *cathéter à bougie antécédente* and Dr. Ward Cousins's and Mr. Harrison's catheters are practically the same as mine.

The *catheter à bougie antécédente* has a conducting bougie portion, nine inches long, which is of the same thickness throughout, then within the next half inch it jumps three sizes (English scale), and afterwards remains of this diameter. It is apparent, therefore, that it possesses no advantage over the old fashioned railway catheter, whilst the fact of its possessing a breakable eye, coupled with a decided inclination of the two halves of the instrument to part company at the point of sudden increase, makes it an imperfect instrument.

Dr. Ward Cousins's capillary catheter also increases in diameter suddenly. Mr. Harrison's catheter is hollow throughout, increases in diameter from the point to the extreme end, and possesses a breakable eye. In mine the bougie portion is solid, and the increase in diameter is almost imperceptible so as to overcome that spasmodic inflammatory narrowing of the stricture which is the determining cause of the retention of urine; furthermore, the increase ceases when its object is attained, namely at the eye. As I stated in my description, the instrument is specially woven so that no part may be broken off and left in the bladder. I may say that I had not seen any one of these instruments before I completed mine.

Messrs. Arnold and Sons, the makers, corroborate me in the following terms: "We are confident that there is no other catheter made possessing such a solid tapering bougie portion from the vesical end to the catheter opening, and our business capacity is sufficient to guarantee this. In confirmation of this we have made many tapering catheters before, but in the whole course of our experience we have never had to make special mandrels as we have done with your instrument, as it necessitated it on account of the bougie portion covering so many sizes before reaching the catheter opening."

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 3RD, 1890.

THE NEW MEDICAL REGULATIONS OF THE ARMY, 1890.

ON April 27th, 1889, in an article headed "The Medical Profession in the Army and Lord Wolseley's *Soldier's Pocket Book*," we reviewed so much of that book as dealt with the position and duties of army medical officers in the field, more particularly as regards the small value which the author attaches to army medical officers and their sanitary functions. We showed that if the noble and gallant officer had his way he would revert to the condition of things that prevailed in the expedition against China in 1840, and in the Crimean war, with the disastrous results that so deeply roused the indignation of the British public.

The *Soldier's Pocket Book* is not an official publication, and its contents are not matters of regulation in the service. As all the world knows, Lord Wolseley is Adjutant-General of the Army, and in this capacity can at his pleasure, with, of course, the sanction of the Secretary for War and the Commander-in-Chief, convert what in the *Pocket Book* was a mere expression of opinion into a regulation, binding on all whom it concerns. This is exactly what has been done. The terrible results—the necessary and unavoidable results—that followed, as by a law, the working of the old system in the first war in Burmah, under Sir Archibald Campbell, and, as we have said, in China and in the Crimea, are, under the new medical regulations, entirely ignored. In the new regulations the final *coup de grâce* is given to the recommendations of the Royal Commission that inquired into the calamities that attended the Crimean war. That famous "inquiry" — the most complete and searching ever made by a Royal Commission—into, among other matters, the status, functions, and responsibilities of the medical service of the army, resulted in the introduction of important changes in the medical department, embodied in the Medical Regulations of 1858. From the date of their appearance the new regulations of the above date were most distasteful to the military authorities, on account of the improved position they gave to the officers of the department and the freedom of action and initiation they conferred on them. A great amount of ingenuity was at once called into action to explain away the new regulations and, where possible, to read them in a non-natural sense. Even when thus shorn of some of their most important provisions, their operation as regards the health of the army at home and abroad was so great as to excite the surprise and admiration of all who were competent to form an opinion on the subject. Nor was this all. The medical and surgical results of the many wars in which this country has since engaged are the most splendid ever achieved in the annals of war. Fortunately this is not a matter of opinion merely; the statistical records remain for all time, and read in unmistakable terms their own impressive lesson.

It is now our painful duty to proclaim to the profession, and through its members to the public throughout the kingdom, that the military authorities, in the face of all that history tells us of an evil past, have determined to restore all that was faulty in military medical organisation. Other great military States have taken to heart the lesson our military men in power have resolved to forget, and, while they are freeing the hands and raising the status of their medical services, our Horse Guards authorities are once more doing what in them lies to lower the status of the service on which the health of the army mainly depends, to discourage the most competent men in our schools and universities from entering it, and, above all—whether consciously or unconsciously, we cannot say—preparing the way for disasters as bad in kind and degree as those which, in times past, have called forth public indignation and raised the blush of shame on every face. If no other purpose is served by the protest which we now make on the part of the British Medical Association, this much at least will be achieved thereby, that when the unavoidable outcome of this retrograde policy stand revealed, it will be impossible for its authors either to say they were not warned, or, as has been the invariable practice of their predecessors, when the storm arises, to stand aside, and with cynical disingenuousness call loudly for a committee to report on the incompetence of the "doctors."

In war no point in medical organisation is more important than the position of the Chief of the Medical Department in the Field. In the Regulations of 1878, Section 6, par. 312, it is written "On the staff of a General officer commanding an army there will be one Surgeon-General-in-Chief, whose duties will be on the staff of the General commanding the army, who will have the supreme control under that officer of all medical arrangements connected with the force." In the Regulations of 1885, the above is a little altered in expression, and stands thus, Section 9, par. 647: "The Surgeon-General will be on the staff of the Army Corps, and will, under the General officer commanding, have supreme control over all medical arrangements and establishments connected with the force. 648. He will remain with the headquarters of the Army Corps, advise the General officer commanding on all matters connected with the medical arrangements of the army, and transmit to principal medical officers and others such orders as he may receive from him, or from the chief of the staff, or that he himself may issue. 649. He will be in communication with the heads of departments in the field, and intimate to them the transport, equipment, stores, and supplies that may probably be required in connection with medical organisation."

Under the Regulations of 1890, important changes are introduced. The Surgeon-General-in-Chief is no longer on the staff of the General commanding in chief; he can no longer offer advice to the General commanding in chief, except "when required," and is to carry out his

ties as medical officer in chief no longer at the headquarters the army, but under the orders of an officer whose headarters is at the base. Thus, supposing this order to have en in force in Abyssinia, the principal medical officer of the ce, when Lord Napier of Magdala was at his objective point, uld have been 400 miles from the commander in chief; and under Lord Wolseley's scheme (*vide Soldier's Pocket Book*) base is also the proper place for the sanitary officer of the ce, it would be hard to find a better example of the *reductio absurdum*. To what good purpose can a surgeon-general vise on the health of an army operating in the field, when under these unwise Regulations, may be hundreds of miles ay from the scene of war, and in utter ignorance of the circmstances on which his advice is required? In short, here are once more exactly where we were in the first war in rmah, when Sir Archibald Campbell told his medical adviser hat medical advice is a good thing when it is asked ;" or at Chusan, when the wise General in command ulted his medical officer because he told him that if he nt on feeding the men of the 26th Regiment on half trid meat "cured" in Calcutta in the dog days, they would of putrid dysentery, which they did. But enough, and re than enough.

PERSONAL IDENTIFICATION.

ERY now and then notorious cases occur in which much ubt exists as to the identification of individuals. An example this occurs to most of our minds in the Tichborne case, there are many others occurring not infrequently in ice courts over the country, where malefactors escape idencation, and where innocent persons are mistaken for minals, and, in some instances, have been even punished. e means usually relied upon for personal identification have, recent years, been photographs and personal recognition. eat changes may be caused in the body by age, climate, and cumstances of life; the appearance may also be altered very siderably by dyeing the hair, shaving, and in a variety of ys too numerous to mention, so that recognition may be rened difficult and very uncertain by these means. What is red is something more than a mere photograph, something ch is inherent in the individual, which does not change l cannot be altered. In police departments photographs n become so numerous as to be practically useless in a very years, it being impossible to search through these photophs whenever an arrest is made. To M. Alphonse Bern belongs the credit of having introduced into France, ut ten years ago, an anthropometrical system of identifica, based upon anatomical characters, which has superseded vague and unsatisfactory descriptions such as "round chin," val face," "large head," still clung to so tenaciously by own officials, and which enables the photographs to be ised for what they are worth. An exposition of the sys was given last week before the Anthropological Institute of at Britain and Ireland by M. Jacques Bertillon, chief of the tistical Bureau of the Municipality of Paris, of the hod now practised in France of identifying criminals by paring their measurements with those of convicted persons he prison registers. The mode of procedure is to measure record in a regular order the lengths of various bony parts of the body which are not liable to alter much; these are specially the height, the length and breadth of the head, the length of the foot and of the middle finger. The observations are afterwards classified in a systematic manner, so that individual measurements may be easily and rapidly referred to at any time. At headquarters, such as Paris, where thousands of photographs are systematically taken and preserved, these are dealt with in the following manner. Supposing there are 100,000 photographs of criminals, these are first divided into males and females. Each of these groups is subdivided, according to the stature of the individuals composing them, into short, medium, and tall persons, definite limits being fixed for the middle group, the other photographs are arranged according as the stature is above 1 m. 67 or below 1 m. 62., the limits of the middle group. Each of these primary divisions is again divided on the same principle, without taking any further notice of the stature, according to the length of the head of its component individuals; each of these new subdivisions (amounting to nine) is further classified into short, medium, or long heads. These classes are again subdivided, according to the breadth of the head, into narrow, medium, and broad heads. Instead of having to deal with groups containing several thousands of photographs, each group will now be reduced to a few hundred photographs. By subdividing each of them, according to the length of the middle finger, into short, medium, and long-fingered, and in turn dividing each of these into other three groups as the foot is short, medium, and long, and subdividing them still further, if necessary, by the colour of the eyes or length of the arm, the limits of a single group are brought down to under a dozen photographs in each of the ultimate groups. Supposing a man is arrested and declines to give his name, his height is first accurately measured; this at once indicates in which series of drawers his photograph is to be looked for; next the length of the head is ascertained, which gives a still further indication as to the drawer of the series: then the breadth of the head, the length of the middle finger, the length of the foot, the length of his arms, and the colour of his eyes will bring us to the exact spot where his photograph should be. The time required in making the various measurements necessary for identification occupies only a few minutes.

The instruments necessary for these observations are compasses or a craniometer, for the length and breadth of the head, and two sliding measures for the other measurements. The height is taken with the person barefooted and his back placed against a wall. The length of the head is taken by placing one limb of the compass in the hollow above the bridge of the nose while with the other point the maximum length of the head is determined. By means of a screw the arms of the compass are fixed at the maximum length, and as a check the operation of measuring is again performed to ensure accuracy. The range of variation in the length of the head is found to be rather over 30 millimètres in different persons. This measurement is so much more reliable than that of stature that in some of the French towns it is adopted instead of the latter as the first measure for the primary division of groups. This will probably become the case universally, since it is much more simple to measure and the subject is not able to influence it in any

way as he can his stature by not standing erect or by tilting the body slightly when unobserved. Equally satisfactory are the breadth of the head and the length of the middle finger of the left hand, provided care is taken when measuring the latter that the finger is bent at right angles to the back of the hand. The maximum length of the left foot is taken barefooted, and in order to avoid the possibility of cheating the subject should stand on the left foot only with the knee bent so that the whole weight of the body is upon the foot. The maximum length of the arms extended is measured by placing the person against a wall with the arms stretched out at right angles to the body. Sometimes it is less and sometimes greater than the stature, and is of use in classi ying after the height. A special table has been framed for the colour of the eyes, which is divided into seven groups, but requires a little practice to use. There are fortunately quite enough means of reducing the numbers of each group to workable limits from measurements of the body without requiring these groups of eye colours, except as secondary or confirmatory evidence.

In order to enable photographs to be dispensed with altogether, certain details have recently been introduced into the system; other parts of the body are measured, such as the forearm, the length and width of the ear, and the height of the bust or sitting height, and length of little finger of the left hand, making in all twelve measurements, instead of seven originally used. This suffices to break up a very large number of persons into small groups, and gives sufficient variety of corroborative measurements to render identity certain. Then, as a last check, records of particular marks and signs are made with great accuracy. Every person has some particular marks, such as moles or scars from cuts or boils on his body, a few of which are enough to identify him out of a large number of persons, provided the nature and position of the marks are accurately recorded, as to length, breadth, direction and distance from two well-defined parts of the body near to the scar or mark.

This system of verifying the physical personality and indisputably identifying persons of adult age is applicable to a very much more extended field than the identification of criminals, and might with advantage be used by persons travelling for the purposes of establishing their identity. In completing documents or records when it is of importance to prevent substitution or for enabling recognition in the event of death, a record such as that practised in France would be of great benefit. The most important steps taken to place such a record of identity within reach of the British public has been the establishment at South Kensington Museum of an Anthropometric Laboratory by Mr. Francis Galton.

THE COMMITTEE OF INQUIRY INTO THE METROPOLITAN MEDICAL CHARITIES.

The House of Lords' Committee of Inquiry into the Medical Charities of the Metropolis has now been nominated, with a wide reference, enabling the Committee to extend the inquiry not only over all the hospitals, dispensaries, and "other institutions for the care and treatment of the sick poor" which possess any realised property, but also over "any other voluntary institutions for like purposes" which may tender evidence, as well as over all the rate-supported medical ch ties. No one, therefore, can take exception to the scope the reference as being too limited, nor do we think that serious fault will be found with the composition of the C mittee. Some of its members, no doubt, as the Archbis of Canterbury, are too busy to render efficient service; we regret the absence of any other clerical member from list. We should have thought that among the junior bish in the House some could have been found with a more p tical knowledge of charitable matters than can fall to the of great lords or active politicians. But if the tribunal to be confined to the House of Lords, the Committee i strong one, and in Lord Sandhurst will have a young energetic chairman, who is already personally interested active in the organisation of charity.

Many will be disposed to regret that the alternative Royal Commission was not adopted, on which the med profession might have been adequately represented. But the whole there is great cause for thankfulness that the m object of recent efforts, namely, a public and thorough inv gation, seems certain to be secured. It now rests with those interested in the inquiry to see that it is success We are glad to announce that our Association—which always through its organ, this Journal, advocated such inquiry—is now pressing for its being made complete by tending it so as to include the provincial hospitals and pensaries. Whether we shall be successful or not for moment in persuading the Lords' Committee to undertak great an addition to labours already formidable, there can no doubt whatever that the one inquiry would be quite inc plete without the other, or, rather, that they are both bran of the same subject, which cannot be adequately studie satisfactorilys ettled if either is left out.

We assume, therefore, that the metropolitan branch of inquiry will begin at once, and that it will be followed at long interval by a similar inquiry into the medical charitie the kingdom generally. This will, we are persuaded, source of renewed strength and usefulness to all deserving stitutions embraced within its scope. Proud as we are— justly proud—of the great things achieved by our hosp system; of the vast sums raised for it from the volun charity of the richer classes; of the daily increasing co-op tion of the poor; of the personal labour undertaken in cause by many of the most distinguished citizens; of the mense and self-denying work of the medical staffs; of the calculable benefit secured for the patients, and of the more widely reaching benefits to the whole human from the ever extending advance of medical scien and claiming therefore as we do a foremost place our hospitals amongst the agencies of civilisation in the pre day, it is impossible for us to shut our eyes to defects in system, and defects which, far from tending to disappear, s on the contrary, to be daily growing. Foremost among t we should be disposed to rank the method of the admis and treatment of out-patients, which growing up at a when the hospitals were doing, however unsystematically imperfectly, the neglected duty of the Poor Law, has now in a great measure superseded (and ought to be still more by the reform and better administration of that law. Ins

having been in fact in any way ameliorated, a reckless and asteful extension has continued, until now the question further complicated by the introduction into some great stitutions of a system of small fees, visibly threatening the ry existence of the general practitioners in poorer neighbourods. Loudly as this crying evil calls for abatement, the andal of private institutions is an evil hardly less ave. Nor is the pecuniary question a light one. Under the esent system the voluntary hospitals have to compete for e means of livelihood, while they overlap each other in many rections; and in many cases it would seem that the public d the profession might be better served if they and the hools attached to them were consolidated, or, failing this, e were removed from a neighbourhood overstocked with spitals to one of the many localities entirely destitute of em.

Again, there is the important and difficult question how far e pay element can be blended with the voluntary system. e steps which have been taken to this end in our public spitals hitherto, as at Guy's and St. Thomas's, seem to us, confess, to be absolutely retrograde; but they are said to only tentative and temporary, and are usually justified only the plea of poverty. Still, however unfortunate we may ld these proceedings to be, they ought not to prejudice the ry important question whether some unobjectionable system uld not be devised, under strong and adequate checks, and er consultation with the local practitioners.

Another topic which must occupy the attention of the Comttee is that of the government of our hospitals. All kinds systems prevail—an open and public board, a committee of nagement, or a nearly autocratic treasurer. And correspondto this is the difference in the status of the medical cers, who are in some hospitals the equals of all their fellowvernors, in others the salaried servants of the institution, and ble to instant dismissal if they venture (as in the case of y's Hospital a few years since) to meddle or to resist the asure of their lay masters.

These are but samples (though they are all that our limited ce allows) of the difficult questions which will come before Committee; and it is of the most vital moment to the blic and to the medical profession how they will investigate m, and how far satisfactory the reforms will be which they y suggest. We do not anticipate, nor is it desirable, that y should introduce any uniform practice. Institutions are individuals, and diversity of character is the condition invention and progress. But we do hope, and confidently ect, that the light in which great abuses, like those we have fly alluded to, will be set will compel the public to remove m; that common action will be, we hesitate to say forced, impressed, upon institutions which are working for a com end; that our hospitals will cease to threaten the ggling practitioner with starvation, and to tempt the ggling poor man into pauperism; that the public will enabled to discern between fraudulent and honest, between ess and necessary, institutions; and that eventually, if e more complete organisation appears necessary, a central y may be formed out of the hospitals themselves, which exercise a general supervision, and harmonise the action he whole. Should this be the result of the movement, its originators will have earned the gratitude of the whole country.

THE SALE AND DISPENSING OF POISONS.

A JUDGMENT was delivered in the Queen's Bench Division on Tuesday last by Mr. Justice Hawkins, on behalf of Baron Pollock and himself, which will probably have an important influence upon the manner of distribution of poisons in this country in the future. The judgment was in respect of an appeal in the case of the Pharmaceutical Society *v.* Wheeldon against a decision of the Wandsworth County Court Judge, the circumstance being briefly as follows: An unqualified servant of a registered chemist and druggist, during the absence of his master and of the qualified assistant in special charge of the business, sold a packet of Battle's vermin killer, containing strychnine, to a girl, who used it to commit suicide. After the inquest the coroner, Mr. Braxton Hicks, brought the evidence that had been laid before him under the notice of the Council of the Pharmaceutical Society, with the result that proceedings were instituted in the Wandsworth County Court to recover from the unqualified servant a penalty of £5, on account of a breach of the Pharmacy Act, 1868, which regulates the sale and dispensing of poisons. The precise offence charged was that a sale of a scheduled poison had been made by an unqualified person in contravention of the fifteenth section of the Act, in which it is enacted that "any person who shall sell, or keep an open shop for the retailing, dispensing, or compounding poisons," not being a registered pharmaceutical chemist or chemist and druggist, shall be liable to penalty. For the defence it was urged that the word "sell" in the section in question applies to the owner of the goods sold, and not necessarily to the person by whose hands the sale is effected; in fact, that the qualification of the employer, even in his absence, covered the act of the unqualified servant. The county court judge, however, held that the words quoted were "wide enough to embrace this case," and that the defendant was liable to the penalty, but he granted leave to appeal. The appeal was ably argued on February 4th and 5th last, when their lordships deferred judgment, but rather, it was stated, because of the importance of the interests affected than through any doubt as to what their decision should be.

The judgment delivered on Tuesday last sustains the decision of the county court judge in most emphatic terms and the appeal has been dismissed with costs. In reply to the argument that hardship would be caused in some cases by requiring that all sales of poisons should be conducted by qualified persons, their lordships said that, to their understanding, nothing could be clearer than that the object of the Act was, beyond all other considerations, to provide for the safety of the public, and to guard as far as possible the members of the community from disastrous consequences arising from the sale of poisons by persons inadequately acquainted with their baleful properties. In their opinion, the whole object of the Act would be frittered away, and the Act itself would become a dead letter, if by their judgment they were to declare that any unqualified assistant can with impunity sell any poison to which the Act applies, unless upon the occasion of the sale he acts under the personal superintendence of a qualified employer

or a qualified assistant to such employer. Further, it was stated that by "personal superintendence" was meant not mere presence in the shop or room where the sale takes place, but actual personal supervision, so that every individual sale shall be so guarded round by precautions prescribed in the Act that the safety of the public may be provided for as far as the law can accomplish that object.

As regarded the appeal made on behalf of qualified persons who cannot afford to keep qualified assistants, their lordships were of opinion that if such persons desired to absent themselves from their shops for greater or less periods of time, they must take such precautions as are within their power, either by locking up the poisons or by other means, to prevent any sale of them during their absence.

Several other arguments urged on behalf of the appellants were referred to in detail by their lordships; but enough has been quoted to show that, in the light of this judgment, the provisions of the Pharmacy Act, 1868, relating to the sale and dispensing of scheduled poisons, have a force and stringency not hitherto generally recognised.

In conclusion, it may be well to consider how this decision affects the medical practitioner who may keep what is known as an "open shop" for the supply of drugs and chemicals. Of course it does not apply to medicines that may contain scheduled poisons when supplied by a legally-qualified apothecary to his patients, for these are specially exempted from the operation of the Act. But the measure of the exemption of the qualified medical practitioner from the legislation that would otherwise limit the right of supplying scheduled poisons to persons registered under the Pharmacy Act, 1868, is distinctly defined in the amending Act of the following year (32 and 33 Vict., cap. 117). It is there enacted that nothing contained in the sections relating to the limitation "shall affect any person who has been registered as a legally-qualified medical practitioner before the passing of this Act," or to "any person who may hereafter be registered as a legally-qualified practitioner, and who, in order to obtain his diploma for such registration, shall have passed an examination in pharmacy."

In regard, therefore, to the sale of scheduled poisons and medicines containing them to others than their patients, such persons enjoy the same rights as qualified chemists and druggists, neither less nor more. It seems necessarily to follow that they will have to exercise the same vigilance in ensuring that sales of poisonous substances shall not be made in their establishments except by qualified hands, or at least under the "immediate superintendence" of a qualified person.

At a recent meeting of the Paris Municipal Council, 49 out of 61 votes were cast for the reinstatement of the sisters of charity in the wards of the Paris hospitals.

Influenza in a mild form has been very prevalent in Dunedin, and is reported to be increasing in severity. The malady is alleged to be identical with the European influenza. Several cases had occurred at Wellington, where horses are said to be also affected.

Mrs. Rogers has presented to the British Medical Associa a portrait in oils of the late Dr. Joseph Rogers. The gift been formally accepted by the Council.

Sir Andrew Clark, President of the Royal College of P sicians, and Dr. Hermann Weber, of London, were elected Co sponding Members of the Berlin Verein für innere Medizin general meeting of that body on April 21st.

SURGEON PARKE.

It will be seen that the Council of the British Medical Asso tion have resolved to give the Gold Medal of the Associa for distinguished merit to Surgeon Parke, who has been inv to attend the annual meeting of the Association in July n at Birmingham, when the medal will be presented.

THE CLIMATE OF CORNWALL.

We are requested to call the attention of members of the med profession in Cornwall to a circular recently issued by the R Medical and Chirurgical Society of London, asking for informa with regard to the climate of this county, and its effects u health. Information on this head should be sent to Dr. Dickin 9, Chesterfield Street, Mayfair, W.

THE ROYAL SOCIETY.

The usual number of fifteen candidates has been selected by Council of the Royal Society to be recommended for election the Society on June 5th. The only person in the list who o this selection to eminent services to medicine is Dr. R. Th Thorne, Assistant Medical Officer to the Local Government Bo Mr. David Sharp, M.B., C.M. (Edin.), is chosen on account of eminence as an entomologist. Three lecturers on biological ject s at Cambridge have been selected, namely: Dr. A. Sheri Lea, University Lecturer on Physiology; Mr. Walter Gardi University Lecturer on Botany; and Mr. W. R. Weldon, Univer Lecturer on the Advanced Morphology of Invertebrates.

MEDICAL PORTRAITS.

Mr. T. M. Stone, the well-known Registrar, who so long faithfully served the Royal College of Surgeons, has forwar to Mr. Ernest Hart, the Honorary Librarian of the Library the Association, for the portfolio of the Library, a series of li graphic portraits, including those of Dr. R. B. Todd, Mr. Benja Travers, Mr. T. C. Skey, Dr. Edward Smith, Mr. James L Mr. John Gay, Mr. Luther Holden, Sir William Fergusson, fessor Edward Forbes, Sir William Charles Ellis, Sir J Forbes, Mr. William Sands Cox, Mr. William Coulson, Mr. Ge Bush, and Mr. John Avery. Should a demand exist among friends and pupils of these gentlemen for further copies of portraits, Mr. Stone has kindly offered to hand over the stone the Association, for the issue of such further copies, the proc to be available for the purchase of books, etc., for the Library.

METROPOLITAN OPEN SPACES. HOW NOT TO DO IT.

A communication which we have received from Mr. Herbert I Toynbee Hall, points out that Spitalfields Churchyard is one the largest in London, for it measures nearly an acre in extent is planted with fine trees, and contains very few monume none, indeed, that it would be necessary to move in order to it out as a garden. Besides this, it is in the centre of a v thickly-populated district, and at a considerable distance f any public recreation ground or park, and yet the parishio and the public are shut out from one year's end to anot There has lately been on foot a movement for opening it;

rector in whose hands the freehold is is not unfavourable; the gentlemen who own the living—Messrs. Truman, Hanbury, and Buxton—offer £25 for five years towards the expense of keeping it up, after the Metropolitan Gardens Association have laid it out, and kept it open for one full year on trial, which they are willing to do entirely at their own expense, and provide caretakers; and Mr. Ernest Hart, Vice-Chairman of the Association, has offered another £25 for five years, making £250, besides the whole of the first year's expenses, contributed by the outside public; and yet the vestry strenuously advise the rector not to open it. They, non-resident for the most part, are afraid of being contaminated and annoyed by the presence in this garden of their fellow parishioners who are resident. They say, in effect, that these men and women live in common lodging houses, or such-like dens, and must be kept there; no gardens are for them; the street, the court, and the alley are the only resting places they are to know before the grave. Mr. Barham alone among the vestrymen has dared to speak up for the poor; he has made inquiries of the clergymen of St. George's-in-the East and St. Mary's, Whitechapel, if the nuisance his fellow vestrymen dread has occurred, and he has found that none has been heard of.

PATHOLOGICAL SOCIETY OF LONDON.

A SPECIAL general meeting of the Pathological Society of London is to be held on May 6th, to consider two alterations in the by-laws. It has long seemed to a good many members that the Society had outgrown some of the regulations made when it was first founded: the field of pathology has been much extended, and new methods of study have acquired importance; the only method of study originally recognised by the Society was the exhibition and description of morbid specimens. Practically the rule in recent years has not always been adhered to, and in other instances the "morbid part" exhibited has only been a peg upon which to hang a paper. The Council now propose to extend the field of the Society's activity by including "the communication of chemical, experimental, or other researches or observations relating to the nature and results of disease." The other alteration is one which might perhaps be followed with advantage by other societies. The medical year—in London at least—begins in October, but it has been the custom to elect new officers of societies at the beginning of the calendar year. The Council of the Pathological Society proposes that in future the annual meeting for the election of President, officers, and Council shall be held in May, and that the newly-elected body shall take office at the first meeting in October.

THE SANITARY CONDITION OF WINDSOR.

FOR several years past public attention has from time to time been directed to the unsatisfactory condition of the Royal Borough of New Windsor. The need for comprehensive action on the part of the local sanitary authority to remedy the various deficiencies of the district has repeatedly been pointed out. In the autumn of 1886, in response to an appeal of the Town Council, the Local Government Board directed Dr. Hubert Airy and Mr. Arnold Taylor to make an inquiry. Their report, which was summarised in the JOURNAL of March 5th, 1887, p. 520, showed that a vast amount of sanitary work was needed before the town would be in proper condition. After allowing an interval of three years, the borough was again visited recently by Dr. Airy and Mr. Taylor, and their second report has just been issued. It shows that some progress has been made. The sanitary authority have adopted a better code of by-laws. They have appointed an energetic inspector of nuisances, who has made a detailed inspection of every dwelling-house in the borough, and secured the removal of many unwholesome conditions; but many defects still remain unremedied. The unwholesome crowding of dwellings on insufficient area is still the main difficulty in the way of improvement of the old house property in Windsor, and the authority do not seem to have applied the remedy, which, as the inspectors point out, exists under the Act (Torrens's Act), which enables an urban sanitary authority to deal with an obstructive building, that is a building which, although not in itself unfit for human habitation, is so situated that by reason of its proximity to other buildings, it stops ventilation or otherwise makes or conduces to make such other buildings to be in a condition unfit for human habitation, or prevents proper measures from being carried into effect for remedying the evils complained of in respect of such other buildings. Certain Crown property in St. Alban's Street, mentioned in the inspector's former report as being in a "neglected and dangerous state," remains still in the same condition. The sanitary authority have not yet made provision for the isolation of infectious disease or for the disinfection of infected articles, nor have they provided a furnace for the destruction of house refuse. It is earnestly to be wished in the best interests of Windsor that the Town Council would proceed a little faster and a little more decisively in improving the insanitary quarters of the borough.

ANATOMICAL NOMENCLATURE.

THE following is the preliminary report of the Committee on Anatomical Nomenclature of the Association of American Anatomists:—The Committee recommend: (1) That the adjectives "dorsal" and "ventral" be employed in place of "posterior" and "anterior" as commonly used in human anatomy, and in place of "upper" and "lower" as sometimes used in comparative anatomy. (2) That the cornua of the spinal cord and the spinal nerve roots be designated as "dorsal" and "ventral" rather than as "posterior" and "anterior." (3) That the costiferous vertebræ be called "thoracic" rather than "dorsal." (4) That the hippocampus minor be called "calcar;" the hippocampus major, "hippocampus;" the pons Varolii, "pons;" the insula Reilii, "insula;" pia mater and dura mater, respectively "pia" and "dura." The Committee desire frank and full expressions of opinion from scientific and medical journals, from individuals who receive copies, and from any others who are interested in the subject. Professor Burt G. Wilder, Cornell University, Ithaca, is the Secretary.

HONOUR TO WHOM HONOUR IS DUE.

THE "fountain of honour" in Italy seems to water the somewhat dusty ways of medical practice more freely than in our colder climate. In addition to the honours to medical men which were chronicled last week, the following further distinctions are now announced: Professors G. Baccelli, S. Cannizzaro, and J. Moleschott have been named Grand Officers; Dr. C. Verde, Inspector of the Marine Sanitary Service, and "Maggior Generale Medico" Dr. F. Baroffio, Commanders; Professors G. Bizzozero, A. Cantani, E Marchiafava, and M. Pantaleo, Officers; and Professors C. Golgi, P. A. Sacchardi, L. Fasce, G. Bellucci, and A. Fabbrini, and Drs. F. Verardini, G. Canettoli, and L. Cua, Knights, of the Order of SS. Maurice and Lazarus. The list is a fairly representative one, including as it does not only many of the most distinguished teachers and investigators of the Italy of to-day, but members of the public services and, *mirabile dictu*, three general practitioners. Seven medical men have also been named Officers, and twenty Knights, of the Order of the Crown of Italy. When we compare these lists with the two or three paltry fragments that remain from the feast of "birthday honours" here, and are passed on to the medical profession, it must be allowed that this country might with advantage learn from Italy how to show a reasonable appreciation of the services of men who watch over the general health, and thereby in the highest degree promote the national welfare.

REFORM OF THE UNIVERSITY OF LONDON.

A CONFERENCE will take place next Wednesday between the Committee of the Senate of the University of London and the delegates of the Royal Colleges of Physicians and Surgeons. Last Monday the same Committee met representatives of University and King's Colleges, and a statement prepared by the two Colleges was considered paragraph by paragraph. Considerable difference of opinion was, we understand, discovered as to the admissibility of the claim of these two Colleges each to nominate three members of the Senate to represent their Councils independently of the members to be chosen by the faculties. The Committee of the Senate were, we understand, indisposed to recommend so large a representation, which would doubtless be objected to by the medical schools and other affiliated institutions. The question whether the examinations for the higher degrees and for honours should be conducted by the Colleges or by the University alone, also led to much discussion. We believe, however, that with these exceptions there was a general agreement as to the alterations to be made in the new charter, and it is thought that the differences mentioned will not be found to be insurmountable.

MEDICAL PORTRAITS AT THE ROYAL ACADEMY.

IN this year's Academy there is little of interest to the medical profession. Mr. Frederick Goodall, R.A., exhibits an admirable portrait of Sir Oscar Clayton. The veteran practitioner is represented leaning his clasped hands on a walking stick, meditating perhaps on a medical problem. The other most notable exhibit, from the medical point of view, is the bust in marble of Sir William Savory by H. Richard Pinker. The face, stern, clean shaven and clear cut, is one which lends itself to portraiture by the sculptor's art, and Mr. Pinker has succeeded, not only in giving a head of reposeful dignity, but life and character to the face. A portrait of William Travers, M.D., by W. R. Symonds, represents the typical professional man—grey, cool, and deliberate. It is well painted. A little portrait of Charles Bell Keetley, F.R.C.S., by Seymour Lucas, A.R.A., must not be passed over. The flesh tints are excellent, and, though very small, the drawing and painting of the head are vigorous. It is a relief to see a smal portrait strongly painted in contrast to the large numbers of huge canvases weakly drawn. In still more striking contrast to these are the collections of miniatures. It is pleasant to see an old and charming art revived, and certainly a beautiful woman never looks so beautiful as in a miniature. Men are not so successfully represented, except perhaps to the person for whom the miniature is intended. Among the collection we noticed a portrait of G. Douglas Pidcock, M.A., M.D., by Evelyn Rogers, delicately painted, and about the size of a shilling. In the black and white room will be found a chalk head of Dr. Lauder Brunton, by Lowes Dickinson.

ALLEGED PREVALENCE OF CONSUMPTION AT SAN REMO.

DR. A. J. FREEMAN writes to us from San Remo: "A paragraph purporting to quote from a German weekly paper which has published some statistics showing an alarming prevalence of consumption amongst the native population of this place and Mentone, having appeared in one or two organs of the general press, it may be as well for the profession to know the exact facts of the case, and to be told how the subject has been brought under notice. In the JOURNAL of January 4th I communicated to you the information that meetings had been held by the profession here with the object of enforcing certain rules and regulations with the hotel keepers and householders to guard against the possibility of infection from tuberculous patients, a danger to be recognised in any community where a certain proportion of phthisical patients are associated with other invalids, but a danger minimised on this coast by th climatic conditions and the mode of life. The regulations, whic were cheerfully acceded to, consisted in the disinfection of room etc., occupied by tuberculous patients, and the general use spittoons. At these meetings it transpired that the tuberculo death-rate of the native population had risen, within a period ten years, from 9 to 12 per cent. To those who have resided ar length of time in this country, this increase of registered disease easily accounted for. Fifteen or twenty years ago, when I b lieve consumption was as prevalent (or at any rate nearly s amongst the natives as it is now, there was a great prejudi against its recognition and acknowledgment. It was looked up then in Italy as a highly contagious disease, and patients we more or less shunned by their fellows. There is no doubt that that time many cases of death from phthisis were returned und other diseases. Of recent years, however, the Italian mind havi become familiarised with the annual mortality of phthisi strangers, and having by force of example, rightly or wrong come to regard the disease as at any rate less contagious, it h become, so to speak, the popular malady, and there is lit doubt that many cases are now returned as tubercular when th are no such thing. In my opinion, the above is sufficient planation of the alleged increase, but no doubt the march of ci isation in the way of less primitive habits, change of food, wo etc., would be possible factors in such an increase. It is far-fetc to imagine that the native population of San Remo and Ment who inhabit the "Old Town" in these places, well removed fr the hotels and villas occupied by the visitors, and who are rar brought in contact with the latter, should be singled out, w the domestics in such hotels and villas enjoy the same immun from phthisis as that said to be experienced by the nursing s at the Brompton Hospital for Consumption."

THE SPREAD OF INFLUENZA.

A DISCUSSION on influenza was initiated at the spring meetin the Medical Officers of Schools Association on April 29th, 1890 Dr. E. Symes Thompson, who reviewed the history of the epidemic, and of those which had preceded it, dwelling more ticularly on its method of dissemination in respect to the pre tions, if any, which were desirable in the case of schools and s lar aggregations of young people. He thought that the evid afforded by the epidemic of 1889-90 supported the view that disease could be disseminated by personal intercourse, but this was not the only means. Definite information was ne as to its nature, origin, course, distribution, its immunities, lapses, and as to the period of incubation. Dr. Adams Clarke that at the school which he attended, with 600 children t were 157 cases of influenza, the first case occurring at the en December. It first appeared among the boys and then among infants. He had observed that one attack certainly did not co an immunity. Mr. H. W. Statham, of the Foundling Hosp said the epidemic commenced on January 2nd among the b and it was some time before it spread to the girls' side. Ou 317 inmates, 95 were attacked, this number being pretty equ divided between the sexes. The children usually recovere three days. The influenza was followed by an outbreak of mea 107 in all contracting the disease. Dr. Armstrong said tha Easter of last year he had to do with a well-marked local break of influenza, 17 boys out of 42 being attacked, of wh had pneumonia. He was strongly of opinion that the disease contagious, if, indeed, this was not the only method of trans sion. He had been enabled to trace this very clearly during last epidemic, after the return of a person from London, w the epidemic was then raging. An interval of three or four usually intervened between exposure to infection and the ons the symptoms. Dr. Richards, of the Hanwell Asylum, said t

were 1,894 inmates in the female department under his control. The staff numbered 104, of which number 63 contracted the disease. On the male side, out of 70 attendants, only 30 were attacked. Among the inmates, of 1,141, 178 suffered, equal to 16 per cent. The epidemic attacked the staff before the patients, and there was a distinct interval of time before it spread to the latter. Many of the sufferers developed a rash indistinguishable from that of scarlet fever. None of the children suffered. Dr. Brett said that of the 500 children in the the London Orphan Asylum 100 did not go home for the holidays. None of them developed the disease, but it broke out the day after the others returned, 115 in all being affected. After a careful inquiry, in which he was aided by Dr. Parsons, of the Local Government Board, they came to the conclusion that there was distinct evidence of contagion. Dr. Shelly said that at Haileybury, with which he was connected, 60 per cent. of the boys were down with influenza. Dr. MacAlister had told him that there were about 70 cases at St John's College at Cambridge, the only death being that of a student who was suffering from Addison's disease. He remarked on the occasional occurrence of epistaxis during convalescence. He observed that there had been more rheumatism in his neighbourhood than he had known for years; also an unusual number of cases of jaundice, and he had heard of several schools having to be closed on account of the prevalence of the jaundice. The same remark applied to alopecia areata, of which a large increase had been noted. He said the contagiousness of the disease had been strikingly shown in the course of the epidemic. He thought that it was especially the severe cases that served to spread the disease.

A CASE OF SUBCORTICAL ALEXIA.

THIS is one of those rare cases standing midway between mental blindness and aphasia; it is reported by Dr. A. Adler, of Breslau (Professor Biermer's clinic), in the *Berliner klinische Wochenschrift*, April 21st, 1890. The patient, a man, aged 52, attended the hospital at first for dyspnœa and pains in the cardiac region. No cerebral symptom was present, but in a few days he had a sudden attack, which showed itself by involuntary movements of the head and left arm. Next day his vision was deranged, and examination showed complete right hemianopsia, the other senses being intact. The mental functions were peculiarly affected, that is, as concerned with the sense of sight. The patient failed to recognise most of the printed letters, and thus could not read books at all; written characters he identified to some extent by copying them, but this artifice helped him less with print. Meanwhile, he could write from dictation and spontaneously, easily and correctly. Amnesial colour blindness was also present; for while he recognised common objects at once, he could with difficulty name them. But they were often named at once, if other senses were brought to bear upon them (smell, touch, taste, etc.). This mental complex has been called by Wernicke "subcortical alexia," and by Freund a variety of "optical aphasia." The patient was presbyopic, but the visual acuteness, on examination, was at least two-thirds the normal. Burchardt's international visual tests were employed, owing to his difficulty with letters. Dr. Adler assumes in this case, besides the lesion of the subcortical optic fibres of the left cerebellar lobe, which caused the hemianopsia, an interruption of the path from the right (cortical) optic field to the left field of speech, where that path courses in the left hemisphere near the commissural fibres connecting the two occipital lobes. This commissure was also interrupted.[1] In the few cases of hemianopsia with alexia examined *post mortem*, lesions were present in the left occipital lobe and the gyrus angularis, facts which are not against the above supposition. Curious deductions may be drawn. The left visual sphere is immediately connected with the region of speech, but not immediately with the outer world; the right optical region, on the other hand, is only connected with the region of speech by a roundabout way through the (cortical) regions of the other senses. Objects then will still be recognised immediately by the right hemisphere; but since the path between the right-sided region of speech and that of vision is cut off, if a transition to the left occipital lobe is prevented, owing to right hemianopsia and interruption of the commissural fibres, then optic perception no longer at once induces speech, or the faculty of speech, but only mediately through the other senses. If the other senses give any essential characters of the object, naming it becomes at once easy. Thus the patient could name letters after copying them, especially if they were written characters that he was accustomed to trace; other senses were brought to bear on common objects. He had shown Wilbrand's "amnesial colour blindness" at first, but by practice he learnt his colours again in a few weeks.

[1] But see Bruns and Stoelting, "A case of Alexia," *Neurol. Centralb.*, 1888 p. 517.

SCOTLAND.

THE summer session of the Edinburgh Medical School commenced on Thursday, May 1st. Both in the University and extra-academical classes the attendance promises to be large. The final examinations for graduation in the University commences in a few days.

THE colleagues of Dr. Macewen in the Glasgow Royal Infirmary, to mark their appreciation of the honour bestowed on him by the University in conferring on him the degree of LL.D., presented him with the graduation robes and hood proper to the degree.

PUERPERAL FEVER AND ERYSIPELAS.

DR. HAY again draws attention to the exceptional prevalence of puerperal fever at Aberdeen, six deaths having taken place from it during the month; this number was greatly in excess of the average. He also points out that erysipelas was exceptionally prevalent, and, as a causal relationship exists between it and puerperal fever, it is equally necessary that medical men and others in attendance on cases of erysipelas should see that they do not convey the infection to lying-in women.

GLASGOW UNIVERSITY GENERAL COUNCIL.

THE first ordinary meeting of the Glasgow University General Council, under the new conditions, was held on April 23rd, and the Council made haste to exercise its recently acquired privileges by adjourning for a week after spending several hours to little purpose. After a prolonged debate it was agreed to appoint the Business Committee, under the same conditions as heretofore, for the general purpose of preparing the business for the meetings of the Council, and the Business Committee was accordingly reappointed for six months. It was agreed that in future all meetings should begin at 2 P.M. instead of 11 A.M., that a representation should be made to the Court to allow a sum for Council expenses. In regard to the Committee on the proposed Chair of Pathology, it was proposed by Professor Gairdner that all the facts and documents at the disposal of the Committee in connection with the subject be placed in the hands of the Court for the use of the Commission, and that the Committee be thereupon discharged; which motion was adopted. After discussing a report by a committee, appointed at last meeting of Council, in regard to graduation in law, the Council adjourned.

ST. MUNGO'S COLLEGE, GLASGOW.

THE first annual general meeting of the governors of St. Mungo's College was held on the 24th ultimo under the presidency of Principal Blackie. The Secretary reported that the first session of the Medical Faculty, opened on October 23rd, 1889, had been carried to a successful close on March 28th last; and the Principal, in moving the adoption of the report, stated that ninety-six individuals had enrolled themselves, and "most of them attended two or more classes." Of course, a considerable number of students have always attended the Royal Infirmary, because of the valuable clinical instruction its wards are fitted to supply, and a considerable number are attracted by one at least of the infirmary surgeons, and these students would be found there even though St. Mungo's College were still in the womb of the future. What it would have been of interest to know is how many additional students, how many over the average that has for a considerable number of years attended the Royal Infirmary Medical School, have been attracted by the transformation of the Medical School into St. Mungo's College. This information might have been deduced from the numbers beginning their course at St. Mungo's College, and would have been an indication of the extent of the demand, which it is stated exists, for an East-end college. But it is just this kind of information that is not supplied, either in the Secretary's report or in answer to private inquiry. The Secretary's report also states that the Medical Faculty have recommended the governors to sanction the teaching of women in the several classes; a step now rendered needless by the decision of the Council of Queen Margaret College to provide there a complete medical training for women. The governors have determined to give the teaching of hygiene an important place in their curriculum, and are inviting applications for two lectureships on this subject. This is a step which cannot be too highly commended; and one may hope that the University authorities will accept on this subject, as they have not been slow to do on others, the lead of St. Mungo's College, and give attention to a department of study that is at present practically neglected at Gilmore Hill. The Secretary's report further noted the opening of a complete faculty of law, which had been welcomed with satisfaction by law reformers in Scotland. It also stated that Mr. Edward E. Prince, B.A.(Cantab.), of Leeds, formerly assistant in the Natural History Department of Edinburgh University, had offered his services for the chair of zoology; that the Royal Infirmary had made over to the College the buildings of the Medical School, with their furniture and equipment, the value of which would not be less than £10,000; and that Dr. Donald Mackintosh, of London, had handed over £1,000 to endow a lectureship in psychological medicine, in memory of his brother, Dr. Alexander Mackintosh, late of Gartnavel Asylum. Principal Blackie, in moving the adoption of the report, urged the necessity of establishing a commercial faculty in the College, for providing courses of instruction suitable for the educational training of young men who propose to follow a mercantile career.

IRELAND.

THE managers of the Mater Misericordiæ Hospital have determined to erect a new wing to the institution for the accommodation of fever patients, and a bazaar has been projected for aiding this object.

DR. JAMES MARTIN, PORTLAW.

THE announcement of the death of Dr. James Martin, of Portlaw, co. Waterford, will be heard with regret by very many. He died on Monday, April 28th, at the advanced age of 77. Dr. Martin became a Licentiate of the College of Surgeons in Ireland fifty-seven years ago, a Fellow in 1844, and a Licentiate of the King [and Queen's College of Physicians in 1858. He was medical officer of th Portlaw Dispensary district and the Fever Hospital, and of th Mayfield Factory Dispensary. He was also an ex-President o the Irish Medical Association. For a great number of years h enjoyed a most extensive practice, and his services were muc sought after in the South of Ireland. He was an excellent prac titioner and an industrious worker to the last. There was no mor upright member of the profession, the dignity of which he uphel with unfailing firmness.

COUNTY GALWAY INFIRMARY.

THE case of O'Hara *v.* the Governors of Galway Infirmary cam before the Court of Queen's Bench this week on a demurrer t the return of the governors to the writ of *mandamus* issued by th Queen's Bench requiring them to insert the advertisements pre scribed by the Act of Parliament, and hold an election for surgeo to the institution. The vacancy had occurred in November, 188 on the death of Dr. Brown, and since then various legal proceed ings had been taken with reference to the appointment of a suc cessor. The return was demurred to on the ground that it showe no legal excuse for not complying with the requirements of th writ, and that it relied on questions of law which had bee already determined in favour of the plaintiff. The argument having been concluded, the Court reserved judgment.

WORKHOUSE DOCTORS.

SOME weeks ago the guardians of the North Dublin Union in creased the salary of Dr. Robert Kenny, one of the medical office by £50 a year, on the ground that his work had increased. Th matter having come before the Local Government Board, th guardians have been informed that Dr. Kenny's salary is as hig as that of any visiting medical officer of the workhouses Dublin, Belfast, or Cork, and, in reference to the increase whic has taken place in the number of persons in his charge, th board do not see why he might not be relieved to a certain exten by a rearrangement of the duties of the medical officers if th guardians are of opinion that his proportion of the work excessive. The board find that the salaries of the medical sta of the North Dublin Union Workhouse already amount to £723 year, and, having compared this cost and the number of inmat with the like cost and number of inmates in other large unions Ireland, they find that the expense per head in the North Dubl Union is very high, and it exceeds that of the South Dublin Uni and Cork Union. Having regard to all these circumstances, th board do not at present see sufficient reason to add to the taxati of the ratepayers of the North Dublin Union by raising the sala of Dr. Robert Kenny as proposed by the guardians.

IRISH AND SCOTCH QUALIFICATIONS IN ENGLISH HOSPITALS.

A CORRESPONDENT writes from Dublin: The action of the ma agers of the Bristol and some other hospitals in England refusing to recognise the qualifications granted by Irish a Scotch Colleges, has naturally given rise to a great deal bitter feeling. The Council of the College of Surgeons h appointed a committee to report upon the subject. T perfectly gratuitous insult implied in the action of the boards ferred to is in these days discreditable to any body of intellige men. The College of Surgeons' and College of Physicians' diplom are of a very high quality, and the visitors to the examinatio have uniformly reported most favourably regarding them. In c tain respects the tests have been copied elsewhere, and some the institutions which enjoy the approval of hospital managers England might adopt Irish methods with great advantage.

REPORT
ON
LEAD POISONING FROM DRINKING WATER IN YORKSHIRE.

[By Our Special Commissioner.]

II.

The Sources of the High-level and Low-level Supplies Compared.—The Lead Poisoning Traced to the High-level Supply.—Report of Messrs. Crookes, Odling, and Tidy.—History of the Lead Question at Sheffield.—The Disease Overlooked in Former Years, or Attributed to a Wrong Source.—Changes in quality of Lead used for Service Pipes.—Composition of the Water practically Unchanged.—Analyses of High-level and Low-level Water.—Character of Water at Chesterfield, Huddersfield, and Bradford.

The high-level supply is derived from the moors in the neighbourhood of Redmires, which, after passing through an open conduit five miles and a half long, is distributed by means of the Hatfield reservoir to the upper portions of the town. The other main source is from the moors in the neighbourhood of Bradfield, this water passing through a tunnel two miles in length, and being distributed to the lower parts of the town through the Godfrey reservoir.

At the committee of inquiry which was recently held at Sheffield, it was admitted on all hands that the solvent action on lead was entirely confined to the high-level supply, while the low-level water was practically free from that tendency, although at certain times it had developed it to a limited extent. But Mr. Allen, the borough analyst, found that on one of these occasions the activity was contemporaneous with the admixture with it of a certain amount of the Redmires water.

Dr. White states, in a report to the Health Committee, that in seeking to discover the reason for the differing action of the high-level and the low-level waters respectively, he found that although the gathering grounds for the two supplies are very similar in character, there are some slight differences. Both are mainly moorland, a great surface of varying depth being underlaid by beds of shale and millstone grit, while in each case there are indications, in ochrey springs which redden the stones over which they flow, of the presence of iron pyrites. This is the case to the greatest extent in the Redmires watershed, where also the peat is more abundant than at Strines and Agden, from which places the low-level water is obtained, while also, owing to differences in the configuration of the hills, there is more tendency for the water to stagnate, and so the peat is more saturated with moisture.

Water taken from the Hatfield reservoir, from the collecting reservoirs at Redmires, from the numerous tributaries of these latter, and from the surface of the collecting grounds, nearly always has an acid reaction, particularly if tested with delicate reagents such as phenolphthallin, although the degree of acidity varies considerably at different times, and it is an interesting fact that the acidity is most marked in specimens of water taken from the higher parts of the collecting grounds, where the water lies stagnant in depressions of the surface of the peat, becoming less in the water of the Redmires reservoir, and less still in the distributing mains.

At Strines the peat is less abundant, and fine sand frequently comes to the surface, and at the same time there is less tendency for the water to stagnate, so that the peat is drier than at Redmires. The water here also has an acid reaction, but not nearly so marked as at Redmires. The Agden water, which unites with that from Strines, is neutral, and, after flowing for two miles through a tunnel of brick, the mixed supply shows no acid reaction. The exact amount of acidity of the high-level water is more easily determined if the water be previously concentrated to one-tenth of its bulk, as the acid is non-volatile, while the low-level supply is not appreciably acid even when concentrated to a similar extent.

The water from both sources is very soft, the high-level supply having an average hardness of 3°, that of the low-level water being usually about 1° higher.

It is of excellent quality, containing only about 6 grains per gallon of solids, and giving no evidence of the presence of nitrates or nitrites. The albuminoid ammonia is somewhat high, but in the absence of chlorides and nitrates this must obviously be of vegetable origin, the peat which is so plentiful at the gathering grounds occasionally also giving the water a somewhat brownish tint.

At first sight it might be thought that the cause of the water taking up lead as it does was to be found in its excessive softness, since distilled water is known to have a marked solvent action on lead; but this is negatived by the fact that the low-level water, which is equally soft, appears to have no such action whatever.

It appears, then, that the main difference between the high-level and low-level waters consists of the presence of an acid in the former which is absent in the latter, and the natural inference is that the solvent action of the Redmires water is due to its acidity; especially as it is found experimentally that if this water, when acting most strongly on lead, be neutralised, its solvent action disappears.

Messrs. Crookes, Odling, and Tidy, however, in their report to the Huddersfield Corporation, published in 1886, state their belief that the action of moorland waters on lead is due, not to the amount of acidity—since they found some specimens active in this respect which were neutral in reaction—but to a deficiency in the amount of silica contained in the water; the amount necessary, in their opinion, to prevent such action being 0.5 grain per gallon, which, by uniting with the lead, formed a lining in the pipes of insoluble silicate of lead. Doubtless the presence of silica has some restraining influence on the solution of lead by water, due, perhaps, to the formation of the insoluble silicate of lead, which becomes deposited on the pipes, thus preventing further action; but still Dr. Tidy is himself a witness against the entire truth of his theory, since in his evidence before a Committee of the House of Lords (Sheffield Water Bill, 1887) he states that the amount of silica per gallon found in various samples of the Sheffield water averaged 0.32 grain in the high-level system, which has alone been proved to act on lead, and 0.236 in the low-level system, which has rarely or never had such action. Moreover, at times, when the high-level water has shown the most powerful action on lead, it has been found to contain more than 0.6 grain per gallon of silica, while a still more convincing piece of evidence against the truth of this theory is afforded by either neutralising the actively solvent water, or filtering it through an ordinary charcoal filter, after which treatment it is found to be practically inert to lead.

Before discussing the nature of the acid to which the solvent action of the water appears to be due, it is worth considering how it is that only of recent years this action has engaged attention, since the water is derived, in the case of the Sheffield supply, from the original gathering grounds obtained by the late water company under their early Acts of Parliament, and the water, the reservoirs, the watercourses, and the methods of distribution are still, as far as is known, precisely in the same general condition as they have been for the last fifty or sixty years.

The reason may be either:

1. That cases may have occurred before, but their true nature has been overlooked.
2. That a change may have taken place in the manufacture of lead piping.
3. That the water may have changed in character.

At first sight it seems strange that in a town like Shefield, where cases of lead poisoning from trade processes are fairly numerous, and where, therefore, the medical practitioners may be expected to be familiar with the symptoms presented by this disease, that if cases had occurred in former times from the effects of water drinking they should have been overlooked; but it is very probable that if they did occur they were, at any rate for the most part, duly diagnosed as cases of plumbism, but of which the cause, in the absence of evidence of exposure to the poison from trade, was not obvious. The knowledge of the action of Sheffield water on lead is not, however, altogether new, as attention was called to it about forty years ago, and a correspondent relates in one of the Sheffield daily papers that when he came to reside in the West End of the town thirty-eight years ago one of the first things he did was to carefully examine the water for lead. He found that a considerable quantity was present in that which had been kept in a cistern, and immediately made arrangements to get the drinking water directly from the mains. He then found that after standing in the pipes for some hours lead was present, but that if such water was run off, and none used but such as had quickly run through the pipes, lead was practically absen

Several years later, when fresh soil was exposed by some new works, the water supply became somewhat harder, and lead was at the same time found to be present in less quantity than before; and he draws the inference that the subsequent increase in this respect, recently observed, may be due to this soil having been exhausted of its soluble salts.

It is quite possible that the solvent action on lead may have become considerably reduced for a time, so that public interest in the matter gradually died out, to be again revived when within the last few years it became impossible to shut one's eyes to the fact that the danger had once more made its appearance, although even at the present time there are to be found one or two of the medical practitioners in the town who, if they are unable in the face of the evidence which has recently accumulated to altogether deny the presence of lead poisoning due to the water supply, still assert that the danger has been much exaggerated. One of these gentlemen, however, on being questioned, modified his former statements somewhat by saying that his practice lay mainly among the upper classes, who possibly do not drink much water, and that this might be the reason for so few cases having come under his own personal observation. In the light of what has been previously stated, it is hardly necessary to say that the chief weight of evidence as to the extent of the mischief is entirely in an opposite direction.

It is, of course, impossible to form any estimate of the amount of illness which has been caused by the contamination of the drinking water during, say, the twenty years preceding the date of Dr. White's report to the Health Committee, but it seems likely that although the danger may not have been present in so marked a degree as during the last few years, still it has been present to a certain extent. One of the physicians to the infirmary states that a number of cases have come under his observation in that institution with symptoms apparently resembling those due to plumbism, but in which he was unable to obtain any history of exposure to lead from trade or occupation, and he remembers having on several occasions said of such cases to the students attending the practice of the infirmary that he should have no doubt as to what they were suffering from if only they had been file-cutters.

Another medical man stated that before lead poisoning from drinking water had been fully recognised, his cook became affected with wrist-drop, the reason for which was not apparent. She was sent into the infirmary for treatment, a day or two after which the lead cistern in his house suddenly burst, and on examination it was found that the lead had been extensively eaten away in several places. Filtered water was always used for drinking purposes in the house, but on inquiry it transpired that the woman herself always drank water straight from the tap, as she preferred it to what had been filtered. No other member of the household showed any symptoms of poisoning.

It appears, then, highly probable that cases in which the true cause of the disease has not been recognised may have occurred to a greater or less extent during the whole time that the town has been supplied in the present manner, while now and again certain circumstances concerning which very little is known may have kindled the smouldering flame into increased activity.

Another factor which requires consideration is the change which has taken place of late in the quality of the lead which has been used for the manufacture of service pipes. Formerly the metal was obtained in great part from Derbyshire, and this, in common with the ores that are usually worked in other parts of England and Wales, always contains a varying but small percentage of silver, which, however, is not enough in amount to make it commercially profitable to extract it. Spanish lead, on the other hand, contains a very notable amount of silver, so much so, in fact, that the lead is worked for the sake of the silver alone, while the pure lead which results from the process, and which is practically a waste product, is shipped as ballast, and consequently can be sold in England for about £4 per ton less than the cost of production of British lead. This lead, from the very fact of its purity, has nothing like the tenacity or the resistance to the solvent action of water which characterises the lead produced in this country.

The engineer to the waterworks who kindly supplied the foregoing information is strongly of opinion that the use of foreign lead has some connection with the recent outbreak, while such opinion receives corroboration from the fact that a considerable number of cases which have been seen during the last few years have occurred in new houses, or in houses which have been newly fitted with service pipes. One would, of course, naturally expect that new pipes, from whatever kind of lead they were manufactured, would be more acted on than old ones—at any rate, until a protective coating of some kind had had time to form in their interior; but still such an explanation does not appear to be altogether adequate. Not only is very pure lead acted on more strongly at first than that which is to some extent alloyed with other metals, but from the fact of its lessened tenacity the pipes stretch very considerably when exposed to a high-water pressure for some length of time. In the water company's offices may be seen specimens of lead-piping, some of which have become expanded to about twice their original diameter, their walls having been uniformly thinned out, while others having given way at one point specially, present the appearance of large aneurysms with, in some instances, a wide rent at the thinnest part of the sac. It is obvious that this stretching of the diameter of the pipe would not only tend to detach any coating which might form in the interior almost as rapidly as it was deposited, but would also be continually exposing fresh surfaces of the metal to the action of the water.

We now come to the question as to whether the character of the water has changed materially during the last few years. To this it is very difficult to give a decided answer in the absence of sufficiently numerous analyses. The composition, of course, varies somewhat at different times of the year, and corresponding variations in the reaction and also in the solvent action on lead are also known to occur. At the same time, it must be remembered that, as stated above, the action of the water on lead excited attention as long as forty years ago, and we have reason to believe that cases of lead poisoning from this cause have occurred at intervals from that time to the present, although the number has apparently undergone a considerable increase of late. Owing probably, to the deficiency of lime salts, cases of rickets are a constant occurrence, and by consulting hospital records, it is found that cases were as numerous years ago as at the present time. Another point which seems to have some bearing on this question is the fact that the inhabitants of Sheffield and the neighbourhood notoriously suffer from bad teeth, as is evidenced by the large number of dentists practising in the town. This seems to be due either to the acidity of the water or to its softness, or possibly to both these factors combined, and the mischief appears to have been as rampant years ago as at the present day, since Charles Reade, in one of his novels, refers to the fact that it is unusual to find in Sheffield any woman over 30 the possessor of a good set of teeth. Naturally this point is most noticeable among the lower classes, who do not take much trouble in cleaning the teeth; and it cannot be doubted the frightful state of the mouth seen in many of the patients that have recently come under observation must of itself tend to the deterioration of health.

As far as can be judged, then, the water supply, although undergoing slight periodical variations in composition, has not changed to any appreciable degree in its main characteristics since the time when it was first distributed to the town, so that we are obliged to fall back on the assumption that, although the difference in the kind of lead piping employed may have something to do with the apparent increase in the number of cases of poisoning which have cropped up of late, the main reason is to be found in the fact that cases which have occurred have not been relegated to their rightful category. Even making allowance for such a possibility, however, it seems probable that during the last year or two there has been an actual increase in the number of cases of lead poisoning from water, a possible reason for which will be suggested further on.

What has been said with respect to the Sheffield water supply is, for the most part, applicable to the other towns and districts in which lead poisoning from this cause has put in an appearance.

At Chesterfield, for instance, the town is supplied by water obtained from Linacre, which is very good, being quite clear, bright, and tasteless. Frequent analyses of it, as obtained from the house taps, have been made, but no lead has ever been detected. The rural sanitary district, however, is supplied by water from two sources: 1. The southern, which is obtained mainly from springs, and which contains no peat. 2. The northern, which is all moorland surface water. This latter is obtained at Holmsfield and Leashfield, from an area which is very similar to that which supplies the Redmires water to Sheffield. This water, on being analysed after passing through the service pipes, invariably contains lead, although apparently some improvement has been recently brought about by treatment of the water in the reservoirs with limestone, while

southern supply exerts no such solvent action. The northern supply is also carried to Dronfield, Eccleshall, Killamarsh, and Eckington, at all of which places there has been a considerable amount of lead poisoning, a death having occurred at Eckington from this cause within the last few weeks. At the inquest it was shown that the water supplied to the house where the death took place passed through a lead pipe 150 yards in length, and it was stated that all the household had been more or less affected.

For purposes of comparison, what may be considered as typical analyses of the high-level (Redmires) and of the low-level (Strines) water, made by Mr. A. H. Allen, the borough analyst, are given below:—

—	High Level.	Low Level.
Appearance in a column two feet in length	Yellowish and slightly cloudy	Brown and slightly cloudy
Taste and smell	Normal	Normal
Total solids in grains per gallon...	5.53	5.84
Loss on ignition ,, ,, ...	1.61	1.57
Chlorine	0.90	0.90
Chlorine estimated as chloride of sodium	1.48	1.48
On distillation the sample yielded free ammonia per 1,000,000 parts	0.07	0.04
On distillation the sample yielded albuminoid ,, ,,	0.16	0.14
Hardness (each degree represents a soap-destroying power equivalent to that produced by 1 grain of chalk per gallon)	2.7°	2.5°
The inorganic matter contained		
Silica in grains per gallon ...	0.47	0.65
Alumina and oxide of iron ,, ,, ...	0.40	0.58
Magnesia ,, ,, ...	0.33	0.34
Lime ,, ,, ...	0.58	0.58
Reaction of water concentrated to $\frac{1}{10}$ of its volume by evaporation	Acid	Neutral

The greater amount of organic matter in the high level water is accounted for by the more abundant development of peat at Redmires; and the acidity to the lesser amount of alumina, and to the presence of (probably) one or more organic acids.

Huddersfield is supplied from the Deerhill, Blackmoorfoot, Wessenden, and Longwood reservoirs, of which the first two are fed by surface water from the moorlands. The geological formation is the millstone grit, but in many places the conduits are cut through beds of shale, which contain iron pyrites, giving rise to ochrey water, and a considerable amount of peat also passes into the reservoirs. The Wessenden and Longwood water, on the other hand, is obtained directly from springs. Analyses of Deerhill and Longwood waters, made by Mr. Jarmain, show a great resemblance to those of the Sheffield supply from Redmires and Strines respectively.

—	Deerhill.	Longwood.
Appearance in a column two feet in length	Slightly turbid and of a greenish colour.	Slightly turbid
Total solids in grains per gallon...	5.6	8.4
Loss on ignition	1.1	2.1
Chlorine, estimated as chloride of sodium, in grains per gallon	1.23	1.48
On distillation the sample yielded free ammonia per 1,000,000 parts	0.26	0.10
On distillation the sample yielded albuminoid ,, ,,	0.10	0.08
Hardness by Clarke's test...	0.5°	3.2°
The inorganic matter contained compounds of lime and magnesia, in grains per gallon	3.27	4.82
Reaction of water concentrated to $\frac{1}{10}$ of its volume by evaporation	Acid	Slightly alkaline

At the time that these analyses were made (1882) the Deerhill water accounted for nearly all the poisoning that had occurred, while the Blackmoorfoot water only acted very slightly on lead; but since that time it seems gradually to have developed a greater solvent action. The Deerhill water is now used entirely for compensation. The Wessenden and Longwood water is very pure, and does not act at all on lead.

Similarly at Bradford the high-level supply has the property of acting strongly on lead, while the low-level water has no such action.

(To be continued.)

CHOLERA IN TURKISH ARABIA.

THE official memorandum of Brigade-Surgeon R. Bowman, M.D., Residency Surgeon, Bagdad, on Cholera in Turkish Arabia during 1889, contains much interesting information. The memorandum was forwarded by the Political Resident to the Secretary to the Government of India on January 20th, and has only just reached this country.

Sanitary Defects.—Dr. Bowman states that very serious sanitary defects exist in the towns which were attacked. "At Bagdad and most of the towns in the two provinces there are no conservancy systems; in certain classes great overcrowding, with bad ventilation, no surface drainages, foul tanks in the courtyard of each house, used as receptacles of every kind of filth; bad water, because among the lower orders it is used unfiltered; intramural burials, and many other causes, make this city a most flourishing hotbed for any epidemic that may visit it." When the outbreak commenced in Bagdad there was an almost universal desire to leave the city, and Dr. Bowman believes that this exodus resulted in much benefit to families who went even a short distance; in some cases, in camps numbering 200 persons, after 1 case the disease disappeared.

Previous Epidemics.—There was a very severe outbreak of cholera in 1846; it reached Bagdad on or about September 18th, and within the space of six weeks had, according to Sir Henry Rawlinson's estimate, carried off over 6,000 persons, while the number of deaths in the rest of the Pashalik raised the total to 30,000. The disease reappeared on September 10th, 1847, in a milder form, the number of deaths in this epidemic being estimated at 150. Cholera is not known to have again occurred until December 9th, 1860, between which date and January 2nd, 1861, when the epidemic ceased, 64 deaths occurred. A more severe visitation commenced on September 28th, 1861; it ceased on November 6th, after having caused 302 deaths. No further outbreak is on record until 1889.

Epidemic of 1889: in Towns and Villages.—The first deaths in the present epidemic, so far as can be ascertained, were those returned by the Ottoman Sanitary Department on July 25th. The epidemic appeared at Naseriyeh, a town of 3,000 inhabitants, on the left bank of the Euphrates, on August 2nd, and up to August 26th 470 deaths were returned. On August 3rd the epidemic was reported from Shatra, a low-lying district subject to inundations and traversed by a canal, the Shattu 'l Hai, which connects the rivers Euphrates and Tigris; here 347 deaths were returned by the sanitary department as due to cholera between July 25th and August 16th. Soon after the outbreak at Naseriyeh, the epidemic appeared first a Sûku 'sh-Shuyûkh and then at Hamar, villages on the banks of the Euphrates. It was first reported from Bussorah, which has a population of 12,000, on August 6th. The epidemic is said to have been very severe in this town; the returns show 465 deaths to have occurred. The first case heard of in Bagdad occurred on August 12th, the patient being a Christian servant of a Bussorah resident who had been staying at Bagdad for almost two months. The sanitary department did not report any deaths until August 16th, when 4 deaths from cholera were returned. The mortality rapidly rose until August 25th, when 93 deaths were recorded. From that date until September 30th, when the disease as an epidemic terminated, the mortality slowly declined. The total number of deaths up to October 31st was 927; a few cases were reported from time to time until November 28th, when the official returns were discontinued, the total mortality, according to the quarantine bulletins, being 934; but in reality, probably 1,600 deaths occurred. The population of the city is at least 100,000. To this ought to be added the deaths at Imam Azam or Moadhim, a suburb of Bagdad, to the north, but where the disease only existed for a short time, namely, from August 29th to September 12th; the number of deaths returned was 26. The escort of the British Residency escaped entirely, and only three cases, all belonging to the same family, occurred among the persons residing in the Residency. One case occurred on board the Indian Government steamer *Comet*.

The Epidemic at the Shiah Shrines.—These shrines are four in number, Karbala, one of the most sacred, is a place of pilgrimage for large numbers of Indian, Persian, and other Shiahs, thousands of bodies from every country where the Shiah faith exists are taken to Karbala for interment, so that the place is one vast burial ground. The first case of cholera occurred here on August 31st, and before the outbreak terminated 424 had been officially re-

corded, but the actual number of deaths was probably not under 650. The epidemic had, however, previously appeared at another shrine (Kadhimain), three miles from Bagdad and 50 miles from Karbala; the first case reported in Kadhimain was on August 23rd, the last on October 21st, the total being 294. Najaf, another very sacred shrine and favourite burial place, suffered much less severely, only 85 cases being known; the first occurred on September 7th, the last on September 18th. At the fourth shrine (Samarah) no cases occurred, though several of the chief Shiah families of Bagdad went to live there during the epidemic.

Further Progress of the Epidemic.—The disease travelled slowly to the west, east, and north. The furthest point reached on the Euphrates was Hit, a small walled town on the right bank (lat. 30° 48′, and long. 40° 27′). Only one case occurred here (on October 28th), but at the neighbouring village of Rubiza 41 deaths were returned between October 28th and November 9th. The Rev. Dr. Peters, an American traveller, when passing through Dehr, in December, was informed by the local authorities that there had not been a single case in that district. Moving towards the Persian frontier cholera appeared at Bakuba on August 26th. After September 6th no further deaths were returned. On September 2nd two deaths occurred at Khanakin (lat. 34° 20′, long. 45° 30′), the nearest Turkish town on the frontier and about 8 miles from Sabyi, the Persian frontier station, distant about 95 miles from Bagdad, through which many hundreds of Shiah pilgrims pass annually *en route* to and from Karbala and Najaf. The disease ceased about October 1st. On September 8th five deaths were reported at Sheraban, a village between Khanakin and Bakuba; the disease was in all probability among people returning from Khanakin. At Kirmanshah (Persia), (lat. 34° 19′, long. 47° 13′), about 220 miles from Bagdad, cholera probably appeared about September 25th. In the northern districts cholera was first reported from Kerkuk, whence 10 deaths were reported on September 9th, and Mosal, whence 3 deaths were returned on September 15th. The last death in this district occurred on October 19th. Deaths occurred at Altin Keupri on October 2nd, and at Kpoi Sandjak on October 6th. At Sulimania (lat. 35° 33′, long. 45° 36′), a town containing about 15,000 inhabitants, cholera broke out on September 23rd. The last death was returned on November 25th. The total mortality was 219. Erbil (lat. 36° 11′, long. 44° 2′), population about 10,000, cholera first appeared here on October 14th, and continued to November 2nd. At Ravendonz (lat. 36° 37′, long. 44° 29′), the first death occurred on October 26th, and the last on November 20th. The total mortality from cholera in all districts was, according to the official returns, 7,327.

Arab Tribes.—Dr. Bowman found it impossible to give even an approximate estimate as to the extent to which cholera prevailed among the Arab tribes, who have no fixed place of residence. They undoubtedly suffered severely at the end of August and beginning of September. The total mortality, according to official returns, was 902, but Dr. Bowman thinks that to be anything like accurate the number ought to be doubled.

Inaccuracies of Official Returns.—Dr. Bowman considers the official returns of death to be incomplete owing to the following reasons which the people had for evading the sanitary regulations:—1, their objection to being put under surveillance; 2, to being put into quarantine; 3, the high burial fees; 4, the fear of many of the poorer classes of having their clothing and bedding burnt, should the doctor in attendance, in accordance with instructions issued by the municipal authorities, inform them of the presence of cholera; in some such cases he knew of persons dying from the disease without applying for medical aid.

Quarantine.—Quarantine regulations were imposed from an early stage of the epidemic, measures of this nature being taken as early as August 5th. All such regulations proved unavailing. The disease moved slowly along every caravan route in the country, and the imposition of quarantine seems to have had no effect in impeding the progress or in diminishing the force of the disease. In order to mitigate the hardships and delays of quarantine, it would be highly desirable, Dr. Bowman adds, that the Turkish Government (as regards cholera) should act upon the first recommendation of the Technical Committee of the International Sanitary Conference assembled at Rome, May, 1885, namely: "All land quarantine and sanitary cordons are useless."

Probable Local Origin of the Disease.—Dr. Bowman points out that the character of the district—Shatra—was very favourable to the origin of the disease *de novo;* the same conditions exist there as in the Gangetic delta, with the one exception that the population is sparser. There is no evidence of the existence of cholera within many hundred miles of Shatra district at the time of its first appearance there. He advances the following reasons for believing that the disease was not introduced from India, "the distance by sea from Karachi, the nearest Indian port, on an average at least twelve days' voyage by the ordinary steamers; then twenty-four hours under observation at the quarantine station below Bussorah; the distance from Bussorah by river to Shatra; the non-appearance of cholera at the port or town of Bussorah until August 6th, thirteen days from the time it was first notified as at Shatra; and the absence of cholera in any other part of the province at the time."

In transmitting the memorandum, the Political Resident pays a high tribute to Dr. Bowman: "I trust I may be permitted," the Resident writes, "to record how indefatigably and successfully he devoted himself during all the time of the prevalence of the epidemic to cope with it, both by his personal exertions and by acting in concert with the officials of the Ottoman Government more immediately responsible. Not a few, who would otherwise have died, owed the preservation of their lives to the medical care and treatment bestowed upon them by Dr. Bowman."

NINTH CONGRESS OF INTERNAL MEDICINE AT VIENNA.

(Continued.)

Physiology of the Skin.

Dr. Unna, of Hamburg, read a paper on the insensible perspiration of the skin. He said physiologists were not yet agreed as to the results of varnishing the body. As a number of impenetrable coverings for the skin had recently been introduced into dermatotherapeutics, Dr. Unna, in conjunction with Dr. Mielck, carried out a number of experiments to discover the effect of this mode of treatment. The experiments proved that fats invariably diminished the evaporation of water from the skin, and lanolin did so to a higher degree than the fats of glycerine, though lanolin could be freely mixed with water. The same was true of glycerine, which, though it could be mixed with water in any proportion, nevertheless formed a great obstacle to water vapour. The evaporation density of vaseline was of a similar intensity to that of lanolin. Gelatine, however, was the real contrast to the fats; a thin layer of gelatine augmented the water evaporation of the skin. This fact furnished the explanation of a clinical observation long known—namely, that a person covered with gelatine over all his body constantly felt more or less cold. A similar contrast to that between fat and gelatine was also observed between caoutchouc and gutta-percha on the one hand, and collodion on the other; whereas the two former diminished evaporation (caoutchouc did so much more than gutta-percha), thin layers of collodion increased it. Gelatine and collodion, which increased evaporation, had also another common character, namely, that they spontaneously contracted when drying up. As they were, however, prevented from contracting when drying up over the skin, their normal structure had to be changed; they thus became porous bodies. Dr. Unna believed that the positive increase of perspiration, owing to covering the skin with gelatine and collodion respectively, was due to the change of the natural evaporating layers of the skin by the application of porous substances. The strong check which the water-evaporation of the skin sustained by the application of fats also partly explained the enormous oscillations of the numbers which were found in the determination of the natural water evaporation of the living skin by physiologists. The fact that the horny layer of the skin was covered with layers of fat of varying size had not been taken into account in these cases, as was also proved by the researches of Erismann. In conclusion, Dr. Unna directed attention to the practical bearings of these physiological experiments on medicine. The application of fat to the body preserved warmth, and drove great quantities of water towards the kidneys. On the contrary, the artificial unfatting of the skin took away part of the warmth, owing to increased evaporation, and the kidneys were thus freed of part of the water. He recommended the "unfatting" of the skin, with subsequent application of gelatine to the body to diminish fever, and at the same time relieve the kidney of part of its water in inflammations of that organ.

Professor Senator said he had long been in the habit of applying gelatine to the body. In patients suffering from

ever, he had covered the body with gelatine to diminish the emperature. The temperature fell considerably, but the experinents were not continued owing to the want of appropriate reparations.

Bone Inflammations of Typhoid Origin.

Professor Fürbringer, of Berlin, said that, in 1885, Freund had ublished five cases of bone inflammation of a typhoid origin, oberved by himself, and that seventeen cases were published last ear, out of which eight were communicated by Obermaier, who as the first to show that the affection was due to the bacilli of yphoid fever. Slight and severe forms of periostitis and osteoiyelitis, of a purulent and non-purulent character, occurred uring a longer or shorter space of time. They affected the arious parts of the skeleton, principally the shafts of the long ones. All the recorded cases were by no means due to typhoid ever. In other cases, the long period of time (amounting somemes to a year) which elapsed between the primary disease and ie inflammation of the bones, gave no evidence of a causal conection between the diseases. Among 1,600 cases of typhoid ever under his own observation, Professor Fürbringer had met ie complication only five times. The most remarkable of these as the case of his own son, aged 7½ years; in the course of four onths, seven attacks involved ten parts of the skeleton, and at ie same time a peculiar hectic fever developed. The fever could e exactly controlled, and its curves were demonstrated to the idience. In spite of severe cachexia, due to the severe lancinng pains which were particularly bad at night, and fever, the y completely recovered; this happy event dated from the very ay on which an intercurrent attack of influenza ended critically, e only good result of the "miserable *grippe*." No traces of periteal swelling or osteomyelitic foci remained behind. The other ur cases were observed in the Friedrichshain Hospital; the tients were two children, aged 12 years, a man, aged 21, and a oman, aged 25. The latter had pyæmic fever and rigors, though suppuration was observed anywhere. The affection of the s made him suspect an abscess of the liver. Recovery took ace in some months. In the third case, the trochanter d the iliac bone were particularly affected, so that coxitis had en diagnosed outside the hospital. In one case the skull was eatly affected. In another case, after the osteomyelitis had dergone complete regressive metamorphosis, the patient died hæmato-pyopneumothorax owing to perforation of a necrotic lmonary focus. Professor Fürbringer preferred the term "osteoriostitis," as a distinction between periostitis and osteomyelitis uld not be strictly made in such cases. His cases were also in vour of the assertion of Obermaïer that the typhoid bacilli migrated from the marrow of the bones into the periosteum. e terms "periostitis posttyphosa" and "bone inflammation in valescence" were inconvenient, as the affection occurred as quently during the course of typhoid fever, and might even be initial symptom. With regard to treatment, Professor Fürnger recommended expectancy, but if there was suppuration surgeon should be called in. Iodine, mercury, quinine, salic acid, and antipyrin were of no use, and only destroyed the petite. For severe pain and sleeplessness morphine was the t remedy. The diseased organs should be supported by exten, cushions, etc., and hygienic treatment was of the greatest portance. Diet and careful tepid baths were also of great vice.

Gastric Digestion in Diabetes Mellitus.

r. Gans, of Carlsbad, said that last winter he carried out a ber of experiments in the laboratory of Boas on the gastric ctions in diabetes mellitus. The cases were ten in number. contents of the stomach were withdrawn with a suction pipe r Ewald's *Probe-frühstück* had been taken, and were submitted examination for total acidity, hydrochloric acid, lactic acid, et-acetic acid, pepsin, ferments, etc. The acidity of the urine also tested. The results were as follows: 1. The gastric etion in diabetic patients varies greatly; normal conditions, ersecretion, and total absence of hydrochloric acid were met in different patients, and even in the same patient great difnces in the secretion of H Cl. were met with. 2. The motor tion of the stomach was quite normal in all the cases exned. 3. No relation was found between the function of the nach and the percentage of sugar in the urine or the severity duration of the disease. The fact already known empirically, ely, that in respect of diet each case of diabetes must be treated by itself, was thus for the first time proved experimentally to be correct.

The Influence of Alkalies on Assimilation.

Dr. E. Stadelmann, of Dorpat, related experiments made to determine whether large doses of alkalies had a bad effect on assimilation. The alkalies were administered (1) in very large doses, and (2) for long periods. The experiments were conducted on the experimenters themselves, as conclusions drawn from experiments on animals on animals were sometimes misleading. The carbonate, bicarbonate, and citrate of sodium were used. Almost all the normal constituents of the urine, and the nitrogen of the fæces were taken into account. The quantities of uric acid and ammonia in the urine were diminished after the administration of the alkalies; the secretion of ammonia could not, however, be altogether suppressed. The urea presented the most interesting anomalies. In one of the experimenters the secretion of urea first became diminished, nitrogen was formed, but later on the conditions changed, and the amount of the daily secretion of urea varied greatly, on one occasion being subnormal and on another supernormal. The average quantity, however, did not deviate from the average normal standard. The nitrogen in the fæces increased, and was occasionally double the normal amount. No diuretic effect was noted. Increased oxidation of fat and augmented consumption of the fat of the body after the use of alkalies were very probable. Lime and magnesia were not changed by alkalies with reference to their secretion through the urine, and the same was true of phosphoric and sulphuric acids, which became rather diminished in quantity after the use of alkalies, this being a point worth particular attention. The experimenters thus succeeded in depriving the body of a part of its alkalies by the introduction of acids, but they did not succeed in withdrawing inorganic acids from the body by the introduction of alkalies. The carbonate of sodium was less well absorbed than the citrate. The difference in the absorption of these two compounds also proved that the citrate of sodium was not transformed into the carbonate of sodium until it reached the blood, and not in the intestines, as stated by Buchheim. It was most improbable that the citrate of sodium itself was excreted. No digestive disturbances whatever, nor any injurious effect on the general condition could be observed, even after doses of 430 grammes of the citrate of sodium, or a total amount of 600 grammes during the whole period of experimentation. The use of organic salts thus appeared to be much more convenient than the carbonates, when it is desired, so to say, to alkalinise the body. They found that a considerable portion of the citrate of sodium must have been eliminated in the urine in the form of the carbonate of sodium. Further experiments were made by Drs. Nissen and Mandelstamm, as to the influence of alkalies on the secretion of bile. The experiments certainly proved that neither water, cold or warm, in large or in small quantities, nor the alkalies increased the bilious secretion. Small doses of alkalies (Carlsbad salt), bicarbonate of sodium, sulphate of sodium, phosphate of sodium, acetate of potassium, tartrate of potassium, citrate of potassium, carbonate of potassium, etc., did not influence the quantity and composition of bile at all, whereas large doses of the same diminished the secretion of bile. The secretion of the colouring matter of the bile, the bilious acids and fats remained unchanged. The idea of using alkalies as cholagogues was therefore erroneous. The value of the alkalies consisted in the fact that they had a favourable influence on the catarrhal conditions of the intestines, the bile ducts, and the gall bladder, and that they diminished bilious secretion. As the alkalies undoubtedly increased the alkalinity of the blood the bile secreted under their influence also had a stronger alkaline character, which was able to dissolve biliary concretions and to diminish biliary calculi, so that these could pass through the bile duct.

THE CHOLERA.

According to the *Vratch*, April 17th, 1890, p. 335, an official telegram from Teheran, dated March 21st, states that cholera has altogether disappeared from Persia. This statement is confirmed by Dr. Constantinides' telegram from Kerinanshakh, dated March 28th, while Dr. Cozzonis, the Turkish chief medical inspector, says in his telegram of April 2nd that the Turkish Government has removed all quarantines stationed along the Turkish-Persian frontier. On the other hand, telegrams from other tourists, dated March 20th, state that cholera has broken out in Khorasan, Eska-

bad, and Meshkhed—that is, in Eastern Persian districts bordering upon the Russian Transcaspian region.

In his memorandum on the last cholera epidemic in Mesopotamia and Persia,[1] Dr. N. Daniloff, physician to the Russian mission at Teheran, says that the Persian capital will suffer greatly from cholera in case of the disease breaking out in its population. which numbers about 100,000. The centre of the town is occupied by a bazaar with a number of eating houses and coffee shops. Every species of offal, excrement, etc., is deposited there. Carcasses of horses, dogs, and other animals, are simply thrown out on the streets. The chief danger, however, lies in the water supply. The town receives its water from hills situated a few miles away. "The place abounds," Dr. Daniloff says, "in reservoirs and wells which are nothing but holes leading straight down into the aqueducts, and lying on a level with the ground, without being protected by any fences or frameworks. Here the inhabitants perform their ritual ablutions, wash their linen, and use the same water for drinking purposes."

About the end of 1889, when the epidemic was raging in Persia, the Emin-Sultan, "the first personage after His Majesty the Shah in the country, invited local European doctors to advise what could be done to protect the capital from the epidemic. They unanimously declared that, before everything, the sanitary condition of the town, and especially the water supply, should be radically improved, and they indicated how this might be done. But as the reforms suggested would have involved considerable expense, the Persian Government preferred to leave things as they were. It is only fair to add that it is not the natives alone in Persia who are to blame. Dr. Daniloff complains that, "having their commercial interests in view, British merchants who went on transporting their wares *viâ* choleraic localities, carefully concealed all facts as to the spread of the disease," and thus interfered with any exact investigations bearing on the point. Dr. Daniloff's statement is based on the reports of local Russian consuls.

INEBRIATES LEGISLATION COMMITTEE.

A meeting of the Inebriates Legislation Committee was held at the offices of the Association, 429, Strand, on Tuesday, March 18th, 1890. Present: Dr. Norman Kerr, Dr. Bridgwater, President of Council, Mr. D. S. Balding, Surgeon-Major Poole, Surgeon-Major Pringle, Mr. Wynn Westcott.

The minutes of the last meeting were read and found correct.

Read letters of apology for non-attendance from the President-elect, Dr. Gairdner, Dr. Alexander Grant, Dr. Bruce Goff, Dr. Hart Vinen, and Dr. Williams.

Read views of Dr. Gairdner on the report on Pauper Inebriates.

Moved by Mr. Wynn Westcott, seconded by Surgeon-Major Pringle, and

Resolved: That the report be received and adopted and entered upon the minutes, with an expression of the gratification of the Committee in the large increase in replies of guardians.

Report on Pauper Inebriates.

The Chairman, Dr. Norman Kerr, in presenting an analysis of replies to a circular letter to boards of guardians, stated that at the annual meeting of the Association, held at Cambridge in 1880, a resolution was passed approving of the detention, for curative purposes, of inebriates who are frequently entering and leaving the workhouse, the guardians having no power to detain them—a practice involving great loss to the ratepayers, while actually enabling the paupers themselves to renew and continue their alcoholic indulgence. With a view to influence Parliament to enact the necessary legislation, a circular was issued to boards of guardians in 1881, asking their opinion on such a proposal, which was followed by a second circular in 1882. Last year a third circular was sent out by the Committee, with the authorisation of the Council. In this last circular attention was called to the difficulty often experienced in dealing with habitual or periodical drunken inmates, many of whom, well called "ins and outs," entered to enable them to recover from the effects of an inebriate outbreak, and claimed their discharge as soon as they felt strong enough to recommence their excesses. It was pointed out that a considerable proportion of these "repeaters" are the victims of a diseased condition which has set up an overmastering impulse or crave for intoxication which they are powerless to resist, and that the only prospect of curing this disease is by seclusion from intoxicating drinks under proper medical treatment, so that there may be freedom from temptation, with the adoption of every means helpful in the restoration of the weakened will power. The Committee also expressed their belief (a belief shared with the Council of the Society for the Study of Inebriety) that it would be true economy to deal with such paupers under the provisions of the Inebriates Acts, which Acts they hoped would be increased in efficiency by legislation for the compulsory reception, in properly conducted homes, of inebriates too broken down in will power to apply voluntarily for admission and detention. The Committee asked the opinion of boards of guardians as to whether such boards should be invested with the power (if they should decide to exercise it) of paying for the detention and treatment of pauper inebriates, on like conditions to those now operative with regard to lunatics and paupers having special diseases, namely, either by detention in the workhouse or in some special institution for the treatment of inebriety.

To this third circular the Committee were gratified to receive 22[illegible] replies; of these, 14 boards were unfavourable to the proposed measure, 83 expressed no opinion, and 131 were favourable. A large proportion of the neutral and unfavourable replies state that there had been no experience of drunken "ins and outs" in their parishes.

One of the boards replying (Barrow-in-Furness) in the affirmative, thinks that any such relief should be a loan recoverable from paupers' future earnings. Another (Woolwich) is of opinion that all the expenses should be "thrown entirely on the brewers, gin distillers, and others deriving profit from the sale of spirituous liquors." A number of the replies are very decided in their approval of the amendment of the Inebriates Acts so as to provide for the compulsory reception and detention of non-pauper as well as pauper cases when the inebriates are too broken down to apply of their own accord. The Croydon Board hold that such a power would be "an advantage to the person as well as to the ratepayer." Several boards think, with St. Pancras, that the cost should fall on the Common Poor Fund. The City of London Board think that guardians should pay an amount to be fixed by Government, or in pursuance of an order of the Local Government Board.

It is specially noteworthy that the affirmative replies (131) outnumber by 33 the total numbe (98) of the opposed (15) and the neutral (83). The marked advance of the proposed legislation in the estimation of guardians is shown by the large increase in the number of the favourable replies—131 as against 14 in 1881, and 27 in 1882, and by the total number of replies, 229 in 1889 against 36 in 1881, and 49 in 1882. In many cases the decision was arrived at after prolonged and exhaustive discussion of the proposition, the public press giving full reports.

Favourable replies were received from Leeds, London (Paddington, Woolwich, Holborn, Fulham, St. Leonard's [Shoreditch], St. Pancras, Lambeth, Mile End, Chelsea, City of London, Kensington (St. Olave's), Liverpool, Manchester, Halifax, Middlesborough, Salford, Wolverhampton, Coventry, Cardiff, Blackburn, Nottingham, Worcester, Gloucester, Gateshead, Newcastle-upon-Tyne, Ipswich, Eastbourne, Southampton, Hastings, Walsall, Richmond (Surrey), Croydon, Bedford, Brighton, Hereford, Spalding, Stockport, Eastry, Oswestry, Shipley, Drayton, Horsham, Portsea, Faversham, Hambledon, Totnes, Garstang, Kendal, Saffron Walden, Malmesbury, Whitehaven, Chippenham, Lutterworth, Dolgelly, Aberayron, Guiltcrop, Scarborough, Haltwhistle, Newport Pagnell, Droitwich, Barrow-in-Furness, Christchurch (Hants), Runcorn, Kidderminster, Melton Mowbray, Tisbury, Barton-upon-Irwell, Newtown and Llanidloes, Dalmonton, Hoo, Farnham, Mildenhall, Haverfordwest, Barton Regis, Bedwellty, Barnstaple, Llanrwst, King's Lynn, Leek, Great Yarmouth, Prescott, Redruth, Wheatenhurst, Chepstow, Wellington, Shepton Mallet, Narberth, Carmarthen, Bangor and Beaumaris, Ashby-de-la-Zouche, Wirral, Hungerford, Bridgend and Cowbridge, Chorlton (Manchester), Holbeck, Conway, Wellington (Salop), Hartlepool, Newmarket, Kirkby Moorside, Festiniog, Hexham, Pontypridd, Chorley, St. Asaph, Okehampton, Rothbury, Warrington, Romsey, St. Faith's, Bury, East Ashford, Todmorden, Blofield, Keighley, Fylde, Tiverton, Ormskirk, Tynemouth, Brecknock, Hardingstone, Chester (Tarvin Union), Holyhead, Orpington, Lewisham, Stoke-upon-Trent, Congleton, Steyning.

The boards unfavourable are:—Cirencester, Pewsey, Clitheroe, Great Ouseburn, Reigate, Stroud, Teesdale, Lunesdale, Exminster, West Bromwich, Hawarden, Westminster, Easingwold, Auckland, Sunderland.

[1] *Vestnik Obshtchestvennoi Hîghseny, Südebnoi i Praktitcheskoi Meditzïny*, No. III, 1890, p. 23.

The Boards pronouncing no opinion are: Chailey, Whittlesey, Stamford, Northampton, Seisdon, Amesbury, March, Roeth, Church Stretton, Cranbrook, Bridge, St. George's West, Wandsworth and Clapham, West Ham, Isle of Thanet, Strood, Preston, Bristol, Sudbury, Easington, Burnley, East Grinstead, Durham, Merthyr Tydvil, Uckfield, Daventry, Forehoe, Wrexham, Southmolton, Winchcombe, Romney Marsh, Selby, Sedgefield, Lincoln, Petworth, Bramley, Epping, Dewsbury, Penistone, Penrith, Atcham, Chester, Neath, Aylsham, Wakefield, Bradford, Malton, Wern, Bridport, St. Saviour's (Surrey), Mere, Northallerton, Plymouth, Market Harborough, Worksop, King's Lynn, Holywell, Wetherley, Hunslet, Bromyard, Devizes, Pocklington, Stafford, Dover, Epsom, Wycombe, Cheadle, Northleach, Weymouth, Isle of Wight, Braintree, Dulverton, Greenwich, Freebridge, Loughborough, Axminster, Macclesfield, Newport, Farden, Belford, Dudley, West Ashford, Rochdale.

	Favourable.	Unfavourable.	No opinion.		Total.
Replies in 1881...	14	2	20	=	36
„ 1882...	27	8	14	=	49
„ 1889...	131	15	83	=	229

Moved by Dr. BRIDGWATER, seconded by Surgeon-Major POOLE, and

Resolved: That it be recommended that the report of the Committee on Pauper Inebriates be circulated amongst the boards of guardians of the United Kingdom.

THE SELECT COMMITTEE ON HOSPITALS.

THE following motion was made by Lord Sandhurst in the House of Lords on Monday last, and agreed to:

That a Select Committee be appointed to inquire, with regard to all hospitals and provident and other public dispensaries and charitable institutions within the metropolitan area for the care and treatment of the sick poor, which possess real property or invested personal property, in the nature of endowment of a permanent or temporary nature; and to receive, if the Committee thought fit, evidence tendered by the authorities of voluntary institutions for like purposes, or with their consent, in relation to such institutions; and, further, to inquire and report what amount of accommodation for the sick was provided by rate, and as to the management thereof; and that the witnesses before the said Select Committee be examined on oath.

He remarked that this was a formal motion to which the Government had agreed, and the reasons for which he had mentioned last year. There was one point, however, which he should like to mention—namely, that in putting forward this motion he approached the subject in no spirit of opposition to the hospitals. He knew the great straits in which they were placed, and what he wished to do was to lay bare all the facts, to strengthen worthy institutions, and, by taking the best advice, to suggest, if possible, some organisation which, by the co-operation of different institutions, might render the enormous resources of charity and Poor-law more useful than at present. The following peers were named of the Committee on the motion of Lord Sandhurst: The Archbishop of Canterbury, Earl Cadogan, the Earl of Winchilsea and Nottingham, the Earl of Lauderdale, Earl Spencer, Earl Cathcart, the Earl of Kimberley, Lord de la Zouche, Lord Clifford of Chudleigh, Lord Sandhurst, the Earl of Erne, Lord Lamington, the Earl of Arran, Lord Monkswell, and Lord Thring.

Sir Spencer Wells and Mr. Ernest Hart have been in active communication with Lord Sandhurst on the subject of the extension of the inquiry to the provinces, and have put before him the principal reasons for such extension, and pointed out the widespread desire on the part of leading provincial members of the medical profession that the inquiry should be so extended, and the important assistance which would be derived from the information which can thus be obtained.

The following petition, setting forth this prayer in accordance with the wishes expressed at the annual meeting of the Association, has been drawn and signed by Dr. Bridgwater, Chairman of Council, and Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee, on behalf of the Association. Lord Sandhurst presented this petition to the House of Lords on Tuesday afternoon.

To the Right Honourable the Lords Spiritual and Temporal.

YOUR petitioners, members of the British Medical Association and others engaged in medical practice, have read with satisfaction that your Lordships' House is shortly to be moved to appoint a Select Committee to make an inquiry with regard to all hospitals, provident and other public dispensaries and charitable institutions within the metropolitan area, for the care or treatment of the sick poor, which possess real property or invested personal property in the nature of endowment of a permanent or temporary nature, the Committee to receive, if they think fit, evidence tendered by the authorities of voluntary institutions for like purposes, or with their consent, in relation to such institutions; and further, to inquire and report what amount of accommodation for the sick is provided by rate, and the management thereof. Your petitioners would point out that there are about 800 hospitals and medical charities in this country, of which number only about 100 are situated in London, and that at the general meeting of the British Medical Association, held last August, in Leeds, a resolution was adopted expressing gratification at the action of the Charity Organisation Society of London, and the earnest hope that the scope of the inquiry would be extended so as to include the provincial hospitals and dispensaries, and thereby obtain as complete information as is possible upon this important subject.

Therefore your Petitioners pray your Lordships' House to extend the inquiry to include provincial hospitals and dispensaries. And your petitioners will ever pray, etc.

It is understood that Lord Sandhurst is himself entirely in accord with the wishes thus expressed, and will do his best to impress upon his colleagues in the Committee the importance of acceding to it. As he will, no doubt, in accordance with custom, be chosen Chairman of the Committee, and as the request is one so reasonable in itself and so influentially supported, there is every reason to hope that the Committee will agree to carry out the proposed extension. The Committee will probably meet for the first time on Monday next, for the purpose of taking evidence, and will meantime have appointed its chairman. The sittings will be public.

THE CERTIFICATION AND RECEPTION ORDERS OF LUNATICS UNDER THE NEW ACT.

WITH one exception, the Lunacy Acts Amendment Act of 1889 did not come into force until the first day of this month; and the provisions of this Act and the other enactments in force on the subject of lunacy in England and Wales have recently been consolidated into one Act, of which the short title is the "Lunacy Act, 1890."

We must remind those of our readers who are in private practice of a few of the salient provisions of the Act which has just come into force, which it is necessary they should understand in order to enable them to avoid acting or advising illegally in cases of lunacy in which they act, or advise others how to act. The provisions concerning those who receive lunatics under care are too complex and numerous to be taken up here.

For the purposes of the Lunacy Acts, patients insane are divided into "private patients" and "pauper patients," that is to say, when legal measures are taken to place them under care and control.

Leaving out of view cases of transfer of lunatics from one place where they are already under care and control to another where they will be under similar conditions, an insane person cannot be received into an institution for lunatics, whether it be an asylum, hospital, or licensed house, and cannot be received and detained as a single patient, unless under a "reception order" made by the "judicial authority," a general provision to which, however, there are two exceptions, which will be mentioned below. The "reception order" shall be obtained upon private application by petition, with statement of particulars, and accompanied with two medical certificates, which last must be on separate sheets of paper (forms). The petition shall be presented, if possible, by the husband or wife or a relation of the alleged lunatic, and anyone presenting it must be not less than 21 years of age, and must enter into certain undertakings in relation to the alleged lunatic. Forms of the

"petition," "order," "statement," "medical certificate," and other necessary documents hereafter mentioned, are given in the schedule to the Act, and should be accurately followed.

The "judicial authority" is a justice of the peace specially appointed under the Act to exercise the power of making "reception orders" for "private patients," or a county court judge, or stipendiary or metropolitan police magistrate, having respectively jurisdiction in the place where the alleged lunatic is. Of the two exceptions to this general provision, one applies to cases of urgency. Here an "urgency order" may be signed by a relative of the patient in the form provided by the Act; on which order, and one medical certificate from a practitioner who has examined the patient within two clear days, the patient may be received and detained under care and control for not more than seven days from the date of the "urgency order"; or, if a petition for a "reception order" is pending, until the petition is disposed of. The other exception is the case of "a lunatic so found by inquisition," who may be received from order of "the committee of the person" with an office copy of the order appointing such committee; or, if there is no committee, upon the order of a master in lunacy.

The "reception order" for a lunatic, not a pauper and not wandering at large, but who is not under proper care and control, or is cruelly treated or neglected, must now be made by a justice who is a "judicial authority" as above defined.

From the practitioner's point of view with regard to "pauper patients," the changes are not great so far as concerns their reception under care and control. In their cases, the orders ("summary reception orders") can no longer be signed by an officiating clergyman and relieving officer or overseer. The "orders" to be signed by the justices acting are somewhat different from those in present use.

There are provisions with regard to "single patients" in the houses of medical men and of others; and with regard to visitation and reports, by the district medical officers, of pauper lunatics taken charge of by relatives who receive an allowance for so doing from the authority liable for the maintenance of such lunatics. These it will be necessary for the medical men concerned to pay attention to.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—The annual Meeting of the Branch will be held at the Ilfracombe Hotel, Ilfracombe, on Wednesday, May 21st, 1890, under the presidency of Dr. Edwyn Slade-King, D.P.H. Notices of motions or communications to be intimated to the Honorary Secretary without delay, and it will facilitate arrangements if members will inform the Honorary Secretary as soo as possible if they hope to be present at the meeting, and join the excursio proposed to be made on the following day. The following motion was passe at the Council meeting on May 2nd, 1888: "That inasmuch as the annu meeting assumes more or less the character of a day of recreation, and with view of encouraging the district meetings, the business of the annual meetin shall be confined to the President's address, the business of the Branch, the e hibition of cases or of specimens with notes, and the annual dinner." Tho members who have not yet paid their subscriptions are reminded that the became due in advance on January 1st.—P. MAURY DEAS, Honorary Secretar Wonford House, Exeter.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of th District will take place at St. Bartholomew's Hospital, Chatham on Thursda May 29th; Mr. J. H. Jeffcoat in the chair. Gentlemen desirous of readi papers or exhibiting specimens are requested to inform the Honorary Secretar A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not lat than May 10th. Further particulars will be duly announced.—A. W. NANK VELL, Honorary Secretary of the District.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting this District will be held at Tunbridge Wells on Thursday, May 22nd. Clela Lammiman, Esq., will preside. Notice of communications should be sent the Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighto

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting this District will be held at the Greyhound Hotel, Croydon, on Thursday, M 8th, at 4 P.M.; Dr. Parsons Smith, of Addiscombe, in the chair. Dinner 6 P.M.; charge, 7s., exclusive of wine. The following papers, etc., have be promised:—Dr. Mitchell Bruce: On some Forms of Heart Disease, with spe mens. Dr. H. Montagu Murray will show Two Cases of Myxœdema. Dr. Fletcher Little: On the Treatment of Muscular Atrophy. Mr. Morgan Hugh A few notes on Nitrous Oxide Gas and its Administration. Members desi of exhibiting or reading notes of cases are invited to communicate with t Honorary Secretary, P. T. DUNCAN, M.D., Croydon.

SOUTHERN BRANCH: SOUTHAMPTON DISTRICT.—The next meeting of t District will be held on Tuesday, May 6th, at 8 P.M., at 1, Grosvenor Squa Southampton. Election of officers; auditing of accounts. A paper will read by Professor Notter, M.D., on Disinfecting and Disinfectants. Subscr tions to the Association and Branch, £1 3s. 6d., may be paid to the Honor Secretary.—THEOPH. W. TREND, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The n meeting of this District will be held at the Great Northern Central Hospi Holloway Road, N., on Thursday, May 8th, at 8 P.M.; Dr. Bridgwater, J Vice-President of the District, in the chair. W. R. H. Stewart, F.R C will read a paper on Postnasal Growth. Dr. Beevor will exhibit a case of L motor Ataxia without Ataxia. The new hospital being constructed with ev modern appliance will be open to all the members and duly registered med practitioners.—GEORGE HENTY, M.D., Honorary Secretary, 302, Cam Road, N.

METROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner take place at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Q Anne Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., H rary Secretaries.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meetin the above District will take place at Canterbury on Thursday, May 22nd, Preston in the chair. All communications to be sent to the Honorary Secre Further particuiars will be announced.—W. J. TYSON, Honorary Secretar the District, 10, Langhorne Gardens, Folkestone.

NORTH OF ENGLAND BRANCH.—The spring meeting will be held at the S burn Hospital, by the kind invitation of the Master of the Hospital and of Booth, on Thursday, May 8th, at 3.15 P.M. Business: Dr. Limont and Page will exhibit a Dermoid Cyst. Dr. Hume: A Coccygeal Cyst, cau symptoms of Coccygodynia; also a case of Ununited Fracture of the U treated by Grafting with Rabbit Bone. Dr. Drummond: Pathological S mens. Mr. Williamson: Eyeball, from a case in which the optic nerve divided by an accidental puncture. Dr. Coley will read a paper on the D nosis and Treatment of Pleurisy with Effusion in Children. Dr. Drumm On the Prognosis in Croupous Pneumonia. Dr. Murphy: Notes of a cas Nephro-lithotomy.—G. E. WILLIAMSON, F.R.C.S., Honorary Secretary, Eldon Square, Newcastle-on-Tyne.

STAFFORDSHIRE BRANCH.—The third general meeting of the present se will be held at the Bell Medical Library, Cleveland Road, Wolverhampto Thursday, May 29th. Mr. T. Vincent Jackson, the President, will take chair at 3 o'clock.

BORDER COUNTIES BRANCH.

THE spring meeting was held at the King's Arms Hotel, Locke on Friday, April 25th; Dr. THOMSON, of Dumfries, presided.

The late Dr. Anderson, of Selkirk.—Dr. HAMILTON, of Haw referred to the death of Dr. Anderson, of Selkirk, an old and va member of the Branch; and, upon his motion, seconded by BARNES, of Carlisle, the following resolution was adopted, a of which was directed to be sent to the nearest relative: " meeting desires to express its appreciation of the severe loss w the profession in the Border Counties has sustained by the dea Dr. Anderson, of Selkirk—one of the oldest and most resp

actitioners on the Border, and a regular attender at our meetgs."

Communications.—Dr. BARNES (Carlisle) read notes of a case of oreign Body in the Air Passages, and of a case of Hydatids of the ver in a Child, aged 14.—Dr. BELL (Lockerbie) showed a case of imary Amputation of the Upper Arm, the operation having been rformed under adverse circumstances and without skilled assistce. Also a case of Amputation of the Toes.—Dr. HAMILTON read aper upon the Treatment of Diphtheria, which was followed by interesting and well sustained discussion.

Dinner.—The members afterwards dined together in the hotel.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

ordinary meeting of this Branch was held at 198, Union Street, erdeen, on Wednesday, April 16th, at 8 P.M. JOHN URQUHART, D., in the chair.

New Member.—The minutes of last meeting having been read d approved, Dr. Lindley M. Scott, Bay View, Aberdeen, was lotted for, and unanimously elected an ordinary member of the nch.

A report of the scientific part of the proceedings will be found page 1016.

SHROPSHIRE AND MID-WALES BRANCH.

E half-yearly meeting of this Branch was held at the Salop irmary on Tuesday, April 15th, H. J. ROPE, F.R.C.S., President, the chair.

New Members.—The following gentlemen were elected members the Branch: Messrs. W. Williams, M.A., M.B., Shrewsbury; A. Campbell, The Asylum, Bicton; J. Griffiths, Salop Infirmary; T. J. Jones, The Priory, Shrewsbury.

A report of the scientific part of the proceedings will be found page 1016.

After the meeting the members were entertained by the sident.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

E spring meeting of this Branch was held at Neath on April h. Mr. J. G. HALL (Swansea) took the chair, in the unavoide absence of the President, Mr. J. F. Fry, and about twenty- members attended.

New Members.—The following gentlemen were elected members the Association and Branch: Messrs. C. B. Meller, Cowbridge; . Pegge, Briton Ferry; J. S. Rosser, M.B., Newport, Mon.; . Thomas, Pontycymmer, Bridgend; and W. C. B. Treasure, iff.

Papers, etc.—The following papers were read:—Dr. TATHAM MPSON (Cardiff): Heredity of Eye Affections.—Mr. ARNALLT ES (Aberavon): 1. Two Cases of Anencephalous Fœtus. 2. ertrophic Cirrhosis of the Liver in a Child.—Mr. HORDER diff): The Medical Defence Union.

Donation to Epsom College.—It was unanimously resolved that onation of ten guineas be given to the Medical College at om, on condition that the President for the time being repre- the Branch as a life governor.

Dinner.—The members subsequently dined together at the le Hotel.

OXFORD AND DISTRICT BRANCH.

ENERAL meeting of the Branch was held on Friday, April , at the Radcliffe Infirmary. The President, Mr. SLADE ER, of Abingdon, was in the chair, and about twenty-five bers, with two visitors, were present. The minutes of the last ing were read and confirmed.

New Members.—George McNair, L.R.C.P.Lond., M.R.C.S.Eng., ddington, and Arthur Edward Clarke, M.R.C.S., L.K.Q.C.P.I., arringdon, were elected members of the Association and ch.

Communications.—The HONORARY SECRETARY read (for Dr. , of Wantage) notes of a case of Spontaneous Expulsion of ids from the Uterus.—Dr. BROOKS read a paper on the Feedf Infants.—Dr. WARD read a paper on the Forms of Pro- e for Admission of Patients to Asylums which will be red by the Lunacy Acts Amendment Bill.—Mr. CHEATLE ed a specimen of Fusiform Aneurysm of Aorta.—Mr. WINK- read notes of a case of Feigned Disease of Knee.

PROCEEDINGS OF THE COUNCIL.

AT a meeting of the Council, held at the offices of the Association, 429, Strand, W.C., on Wednesday, April 16th, 1890:

Present.

Dr. T. BRIDGWATER, President of the Council, in the chair.
Mr. C. G. WHEELHOUSE, Leeds, President.
Dr. W. F. WADE, Birmingham, President-Elect.
Dr. HOLMAN, Reigate, Treasurer.

Dr. F. BATEMAN, Whitchurch.
Dr. J. S. BRISTOWE, F.R.S., London.
Mr. H. T. BUTLIN, London.
Dr. J. S. CAMERON, Huddersfield.
Dr. J. WARD COUSINS, Portsmouth.
Dr. P. M. DEAS, Exeter.
Dr. J. L. H. DOWN, London.
Dr. D. DRUMMOND, Newcastle-on-Tyne.
Mr. GEORGE EASTES, M.B., London.
Dr. W. A. ELLISTON, Ipswich.
Sir B. W. FOSTER, M.D., M.P., Birmingham.
Mr. R. S. FOWLER, Bath.
Dr. J. H. GALTON, Upper Norwood.
Dr. C. E. GLASCOTT, Manchester.
Dr. BRUCE GOFF, Bothwell.
Dr. O. GRANT, Inverness.
Dr. T. W. GRIMSHAW, Carrickmines.
Mr. J. H. HEMMING, Kimbolton.
Mr. EVAN JONES, Aberdare.
Mr. T. V. JACKSON, Wolverhampton.
Dr. W. M. KELLY, Taunton.
Mr. H. R. KER, Halesowen.
Mr. C. MACNAMARA, London.
Dr. W. W. MOORE, Brighton.
Mr. W. JONES MORRIS, Portmadoc.
Dr. F. NEEDHAM, Gloucester.
Mr. C. H. W. PARKINSON, Wimborne Minster.
Dr. C. PARSONS, Dover.
Mr. W. PEARSE, St. Tudye.
Dr. W. RUSSELL, Edinburgh.
Dr. R. SAUNDBY, Birmingham.
Dr. A. SHEEN, Cardiff.
Mr. S. W. SIBLEY, London.
Dr. E. M. SKERRITT, Bristol.
Mr. NOBLE SMITH, London.
Mr. T. SYMPSON, Lincoln.
Dr. T. W. TREND, Southampton.
Mr. F. WALLACE, Upper Clapton.
Dr. W. WEBB, Wirksworth.
Dr. G. E. WILLIAMSON, Newcastle-on-Tyne.
Mr. A. WINKFIELD, Oxford.

The minutes of the last meeting having been printed and circulated, and no notice of objection having been received, were signed as correct.

Read letters of apology for non-attendance from Dr. Barron, Dr. Henry Barnes, Dr. De Bartolomé, Dr. Mackenzie Booth, Surgeon-General Cornish, and Mr. Jessop.

Read application from the Rev. E. C. Lucy, of Mersham Rectory, Ashford, for a contribution to a memorial in Mersham Church to Dr. Thomas Linacre, founder of the College of Physicians.

Resolved: That the application be laid upon the table.

Resolved: That the resolution proposing to give the Gold Medal for Distinguished Merit to Surgeon Thomas Heazle Parke, passed unanimously at the last meeting, be and it is hereby confirmed, and the President of Council instructed to communicate the same to Surgeon T. H. Parke and to invite his attendance at the annual meeting to be held in July next at Birmingham, when the Medal will be presented.

COPY OF RESOLUTION.

That the Gold Medal of the Association be presented to Surgeon Parke for his highly distinguished services as Surgeon to the Emin Pasha Relief Force, in evidence of the estimation in which such services are held by the members of his own profession.

Resolved: That 172 of the 176 candidates whose names appear on the circular convening the meeting, be and they are hereby elected members of the British Medical Association.

Resolved: That the financial statement for the year ending the December 31st, 1889, as certified by the auditors as correct, be approved and published in the JOURNAL in accordance with By-law 26 (see page 921).

Resolved: That the minutes of the Journal and Finance Committee of to-day's date be approved, and the recommendations contained therein carried into effect.

Resolved: That the minutes of the special meeting of the Journal and Finance Committee of April 2nd be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Journal and Finance Committee of to-day's date and of the special meeting in April contain the accounts for the quarter ending March 31st last amounting to £6,656 18s. 8d., all of which were approved, and the Treasurer empowered to pay those remaining unpaid amounting to £1,940 10s. 5d. A report from the Treasurer of the investment of £4,000 in India 3½ per cent. Stock, and the quarterly report of auditors.

Resolved: That the minutes of the Committee appointed to consider proxy voting be received and approved, and published in the

JOURNAL, and the report of the Committee transmitted to the signatories of the memorial to the Council.

REPORT OF COMMITTEE ON PROXY VOTING.

The matter referred to this Subcommittee seems to resolve itself into three questions:—

1. Is it possible for the Association to establish the system of voting by proxy at its general meetings?

2. Is it desirable to establish it?

3. If it is, what alterations will be necessary in Articles of Association or By-laws?

1. Inasmuch as the system of proxy voting is not distinctly forbidden by the Memorandum of Association, it is quite possible to establish it by an alteration of the Articles of Association in the manner prescribed by the Companies Acts (1862-80).

With the requirements of these Acts the Council is familiar, as such alterations have, on several occasions, been made.

2. This involves several important considerations, and cannot, therefore, be answered so summarily as No. 1.

We venture to affirm that the Council earnestly desires to conduct the affairs of the Association, not only for its benefit, but also in accordance with the views of the unofficial members generally. These views it has two means of ascertaining.

First, the great bulk of the Council consists of members directly elected by masses of members with a tenure of only one year.

It is further within the competence of a Branch to give during that year direct instructions to its representative as to the course he should adopt upon any given question. As a matter of fact, this has been and is done.

It is at the same time, in our opinion, the duty of a representative to lay before the Council the views and arguments of a minority (if any) of his Branch, both for the better information of the Council, and out of justice to the minority, who are his constituents just as much as are the majority.

The second means whereby the Council can inform itself of the mind of the Association are by the speeches and votes at the annual meetings.

It will scarcely be denied that the criticisms on these occasions of the commissions and omissions of the Council are often very free and outspoken, and that resolutions endorsing these criticisms have been carried. Even when such resolutions have been negatived, the arguments in support of them never fail to receive the careful consideration of the Council, and often influence its subsequent conduct. It will scarcely be disputed that such votes have sometimes been carried at meetings when from the lateness of the hour or other causes the attendance has been scanty, and the Council has, therefore, been left in doubt as to how far votes given under such circumstances represented the views of a majority of the members of the Association.

It is conceivable that in some instances had the attendance been larger, the result might have been different. The institution of proxy voting may commend itself to some persons by the possibility that with it such votes might become more frequent.

We think that the result would be exactly the opposite.

There is little or no doubt that a member with the proxies in his pocket of less than 5 per cent. of the members might carry any motion he thought proper to make.

But it is the duty of the Council to ensure the government of the Association by the majority and not by the minority of its members. It would, consequently, be its duty to obtain the proxies of those members who trust it, and to use them so as to prevent any surprise vote in favour of minority views.

Such a surprise vote, although as we believe quite possible under existing arrangements, would, with proxy voting, become absolutely impossible. We should deprecate the Council being compelled to occupy such a position as regards any minority, however small; but in the interests of the majority of the Association, it would be a duty from which it could not shrink.

If, on the other hand, it should be suggested that an annual meeting with proxy voting would more faithfully represent the general opinions of the Association than one without proxy voting, that is a view to which we cannot assent. The grounds for this opinion may be readily inferred from what we have stated in an earlier part of this report. In our opinion, an annual meeting reflects the common sense of the Association in the same way that a jury reflects the common sense of the public.

We would recommend those who are disposed to favour the introduction of voting by proxy to study the reports of the meetings of commercial undertakings, and to see how little power it gives to individual shareholders, and how much it puts into the hands of the directors. Occasionally, no doubt, the conditions are reversed, but long before any parallel case could occur in our bo there is not the least doubt that the Council would have yield to the opposition and carried out its views.

In conclusion, if we thought that the Council desired to st independent criticism, and to preclude the possibility of adve votes, we should advise it to support proxy voting. As we beli the Council desires nothing of the sort, we advise that it sho oppose it.

No. 3. Under these circumstances we do not consider it nec sary to enter into this question.

April 15th, 1890. THOMAS BRIDGWATER, Chairman

Resolved: That the minutes of the Trust Funds Committee April 15th be approved, together with the Supplemental Mid more Deed, and the recommendations contained therein car into effect.

The minutes of the Trust Funds Committee contain the supplemental of the Middlemore Trust which enlarges the choice of subjects for w the prize may be offered, and (subject to the opinion of the solicitor) prize to be awarded at the next annual meeting.

Resolved: That the Common Seal of the Association be attac to the power of attorney for the receipt of dividends on I Stock by the bankers of the Association.

Resolved: That the Common Seal of the Association be attac to the Supplemental Deed of the Middlemore Trust.

The Seal was then attached to the two deeds and relocke the presence of the Council, and the keys returned to the hol namely, the President of the Council, the Treasurer, and General Secretary.

Resolved: That the minutes of the Inebriates Committee page 1034) and Parliamentary Bills Committee be received approved.

Resolved: That the best thanks of this Council be presente Mrs. Rogers for the portrait of the late Dr. Rogers for the Co room.

Resolved: That the President, the President of Council, an Treasurer be appointed a subcommittee to draw up the draft an report.

BRITISH MEDICAL ASSOCIATI

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Ass tion will be held at Birmingham on Tuesday, Wednesday, T day, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting geon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., F.R.C.P., J.P., Senior Physician, Birmingham General Hos 27, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., J J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WA FOSTER, M.D., M.P., Senior Professor of Medicine, Queen's C Birmingham.

An Address in Surgery will be delivered by LAWSON F.R.C.S., Surgeon, Birmingham and Midland Hospital for W Birmingham.

An Address in Therapeutics will be delivered by WILLIAM H BROADBENT, M.D., Physician to St. Mary's Hospital, Londo

The scientific business of the meeting will be conduc twelve Sections, as follows, namely:

A.—MEDICINE AND THERAPEUTICS.

President: Sir DYCE DUCKWORTH, M.D.
Vice-Presidents: E. RICKARDS, M.B.; D. DRUMMOND, M.D.
Hon. Secretaries: ISAMBARD OWEN, M.D., 40, Curzon Street fair, W.; C. W. SUCKLING, M.D., 103, Newhall Street, Bir ham.

B.—SURGERY.

President: T. H. BARTLEET, F.R.C.S.
Vice-Presidents: BENNETT MAY, F.R.C.S.; J. G. SMITH, M.

n. Secretaries: F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingham; H. G. BARLING, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

C.—OBSTETRIC MEDICINE AND GYNÆCOLOGY.

esident: T. SAVAGE, F.R.C.S.
e-Presidents: C. J. WRIGHT, M.R.C.S.: J. MURPHY, M.D.
n. Secretaries: J. K. KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, M.D., 192, Broad Street, Birmingham.

D.—PUBLIC MEDICINE.

esident: A. HILL, M.D.
e-Presidents: J. B. WELCH, M.B.; A. S. UNDERHILL, M.D.
n. Secretaries: L. C. PARKES, M.D., 61, Cadogan Square, S.W. S. BARWISE, M.B., Clough View, Blackburn.

E.—PSYCHOLOGY.

sident: F. NEEDHAM, M.D.
e-Presidents: S. H. AGAR, L.K.Q.C.P.; E. B. WHITCOMBE, M.R.C.S.
n. Secretaries: J. WIGLESWORTH, M.D., Rainhill, near Prescot; E. LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

F.—ANATOMY AND PHYSIOLOGY.

sident: D. J. CUNNINGHAM, M.D.
e-Presidents: W. H. GASKELL, M.D., F.R.S.; B. C. A. WINDLE, M.D.
n. Secretaries: W. F. J. ALLEN, M.B., Mason College, Birmingham; W. P. HERRINGHAM, M.D., 13, Upper Wimpole Street, W.

G.—PATHOLOGY.

sident: D. J. HAMILTON, M.B.
e-Presidents: C. A. MCMUNN, M.D.; G. SIMS WOODHEAD, M.D.
n. Secretaries: S. DELÉPINE, M.B., 6, Chapel Place, Cavendish Square, W.; G. F. CROOKE, M.D., Edmund Street, Birmingham.

H.—OPHTHALMOLOGY.

sident: D. C. LLOYD OWEN, F.R.C.S.
e-Presidents: H. EALES, M.R.C.S.; J. B. STORY, M.B.
n. Secretaries: H. E. JULER, F.R.C.S., 77, Wimpole Street, W.; E. W. W. WHITE, M.B., 72, Newhall Street, Birmingham.

I.—DISEASES OF CHILDREN.

sident: A. H. CARTER, M.D.
e-Presidents: W. THOMAS, M.B.; W. PYE, F.R.C.S.
n. Secretaries: H. HANDFORD, M.D., 14, Regent Street, Nottingham; A. FOXWELL, M.B., 47, Temple Row, Birmingham.

J.—LARYNGOLOGY AND RHINOLOGY.

sident: J. ST. S. WILDERS, M.R.C.S.
e-Presidents: C. J. SYMONDS, F.R.C.S.; A. E. GARROD, M.D.
n. Secretaries: E. H. JACOB, M.D., 12, Park Street, Leeds; SCANES SPICER, M.D., 28, Welbeck Street, W.

K.—OTOLOGY.

sident: C. WARDEN, M.D.
e-President: G. W. HILL, M.D.
n. Secretary: R. K. JOHNSTON, M.D., 22, Lower Baggot Street, Dublin.

L.—DERMATOLOGY.

sident: JONATHAN HUTCHINSON, F.R.S., P.R.C.S.
e-Presidents: MALCOLM A. MORRIS, F.R.C.S.; H. RADCLIFFE CROCKER, M.D.
n. Secretaries: E. G. SMITH, F.R.C.S.Edin., 93, Bristol Road, Birmingham; T. COLCOTT FOX, M.B., 14, Harley Street, Cavendish Square, W.

Honorary Local Secretaries:

SAUNDBY, M.D., 83A, Edmund Street, Birmingham.
RDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham.
HARVEY, M.B., 358, Wheeler Street, Lozells, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.
9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.
9.30 A.M. Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. WALTER FOSTER, M.D., M.P.
9 P.M.—Reception by the Worshipful the Mayor of Birmingham in the Council House.

THURSDAY, JULY 31ST, 1890.
9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 1ST, 1890.
10.30 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.
9 P.M.—Reception by the President of Mason College and Mrs. Lawson Tait.

SATURDAY, AUGUST 2ND, 1890.
Excursions.

THE ANNUAL MUSEUM.

IN connection with the fifty-eighth annual meeting of the British Medical Association, the Museum and Exhibition will be held in the Queen's College, Paradise Street, Birmingham, close to the building in which the sectional meetings will be held. The Museum will be arranged in the following Sections:—

SECTION A.—Food and Drugs, including Antiseptic Dressings and other Chemical and Pharmaceutical Preparations. (Honorary Secretary, Dr. Stacey Wilson, 65, Temple Row, Birmingham.)

SECTION B.—Pathology, comprising Casts, Models, Diagrams, Apparatus, Microscopical and Spirit Preparations, etc. (Honorary Secretary, Dr. G. F. Crooke, 2, Edmund Street, Birmingham.)

SECTION C.—Anatomy and Physiology, comprising Special Dissections, Methods of Preparation, Drawings, Models, and Microscopic Preparations. (Honorary Secretary, Dr. A. E. Mahood, Queen's College, Birmingham.)

SECTION D.—Instruments and Books, including Appliances, Ambulance, Medical, Surgical and Electrical; Microscopes and Microtomes. (Honorary Secretary, Mr. Gilbert Barling, M.B., F.R.C.S., 85, Edmund Street, Birmingham.)

SECTION E.—Sanitary Appliances. (Honorary Secretary, Dr. A. Bostock Hill, 14, Temple Street, Birmingham.)

To Non-Professional Exhibitors.

In consequence of the increasing cost of these exhibitions, charges will be made to exhibitors (other than members of the medical profession), according to the space occupied.

Regulations Regarding Exhibits.

1. Intending exhibitors must communicate with the Secretaries of each Section in which they propose to exhibit, and a brief description of each exhibit for insertion in the Museum Catalogue must be in the hands of the respective Secretaries before June 29th.

2. All exhibits should be addressed to the "Secretary of the Museum, British Medical Association, Queen's College, Birmingham," with the name of the Section for which they are intended. Packages should not be addressed to a firm's representatives at the Museum.

3. Communications on general matters connected with the Museum to be addressed to the Museum Secretary, Mr. Gilbert Barling, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

All communications respecting advertisements in the Museum Catalogue must be made to Mr. Edward B. Lawley, Queen's College, Birmingham.

GILBERT BARLING, M.B., F.R.C.S. Hon. Sec.
BERTRAM C. A. WINDLE, M.A., M.D., Chairman.

SPECIAL CORRESPONDENCE.

PARIS.

Treatment of Throat Affections.—"Pseudo"-typhoid Bacillus.—Poisoning by Uterine Injections of Corrosive Sublimate.—Diphtheria of Birds and Human Diphtheria.—Influenza in Dogs.—Hysteria.—"Dégraissage."—General News.

M. RUAULT has treated several cases of tonsillitis with naphthol; where sloughing seemed inevitable, doses of naphthol changed the aspect of the affected tissues, and suppuration was prevented. M. Gouguenheim, at the recent Congress of Laryngology, mentioned several cases of pharyngitis successfully treated with phenol sali-

cylate. Salol, he says, acts favourably on all forms of sore throat; pain and difficulty of swallowing are quickly relieved; the temperature is lowered, and in most cases the illness is cut short. M. Gouguenheim gives not less than 4 grammes.

M. Cassederat has found in river water what he calls "pseudo"-typhoid bacillus. The organism is apparently always present in river water. Sown on potatoes, the cultivations are the same as those of Eberth's bacillus; cultivated on gelatine, peptonised bouillon, agar-agar, white of egg, or by inoculation, the "pseudo"-bacillus is slightly differentiated from that of Eberth's. M. Chamberland, in the course of his researches on the typhoid bacillus, has observed that the essence of cinnamon kills this organism.

A case of poisoning by uterine injections of a 1 per 2,000 solution of corrosive sublimate practised immediately after parturition has lately been recorded in the *Annales de Gynécologie*. M. Legrand has also met with the following case. Two injections were given at an interval of three hours, and were followed by an injection of borax solution. The following morning symptoms of poisoning showed themselves, and death ensued three days later.

At the Society of Public and Professional Sanitation, M. Jules Ménard mentioned a rumour that children have caught diphtheria at the Jardins d'Acclimatation from birds kept there. The rumour was based on the fact that the child of well-known parents was seized with croup a few days after a visit to the gardens. M. Ménard said that, while it is true that the birds in the gardens sometimes have the diphtheria peculiar to birds, there is no analogy between that form of diphtheria and the disease as it affects human beings. During seventeen years' service at the Jardins d'Acclimatation as *directeur adjoint* he has seen thousands of birds attacked with diphtheria without meeting with one case of transmission to the keepers or their children. Bacteriology also shows that these two forms of diphtheria are distinct. At the central market a number of people are employed to feed pigeons artificially (*gavage*). These birds often have diphtheria, but transmission has never been detected. M. Treille stated that the fowls on board a ship become very thin in the course of a voyage, and are frequently attacked with diphtheria. They are nevertheless cooked and eaten, and diphtheria is unknown in the navy.

MM. Méguin and Veillon have observed in three packs of hounds an epidemic similar to influenza. M. Strauss found different lesions in the dead bodies of these animals; in one there was purulent pleurisy—a rare affection in dogs. A bacteriological examination revealed the presence of very small micrococci, with the characteristics of streptococci found in the purulent pleurisy following influenza in the human subject.

M. Duponchel showed to the Société Médicale des Hôpitaux a soldier suffering from hysterical tremor. This condition dates from the age of 10. He also exhibits zones of anæsthesia. At Dunkirk a girl of 17 was seized with epilepsy, and fell into the canal; when rescued twenty minutes afterwards she presented all the symptoms of catalepsy. Notwithstanding the prolonged immersion she is now well. At the Beaugon Hospital, in the Gubler ward, there is a patient who, after sleeping for six days, woke, and, after some hours, again fell asleep.

A few days ago the *Temps* startled its readers by describing a new surgical operation for thinning persons whose flesh is of the "too too solid" kind. The subject of the operation was a literary man, and it was stated that MM. Demars and Marx removed masses of adipose tissue from his body, and this thinning operation will be repeated in other regions till M. —— has regained the slimness of his youth. Expressed in medical terms, this new marvel of advanced surgery resolves itself into the removal of lipomata from an unusually fat subject.

The Paris Municipal Council has asked the authorities of the Public Assistance to send in plans and estimates for building a hospital for ringworm on the unoccupied ground attached to the St. Louis Hospital. The Municipal Council has also asked that a sum of £100 be given to M. Quinquaud's laboratory, to enable him to carry on his researches on the radical cure of ringworm, and £60 a year to provide proper assistance for him.

A few days ago a cab-driver found on the seat of his cab 40 small parcels, containing white powder. Remembering that he had taken a customer to a chemist's shop, he went there with the parcels. The chemist did not recognise them, but greatly alarmed the cabman by telling him to be careful as the powder might be an explosive substance. He went to the nearest *commissaire de police*, but that functionary refused to receive them because they were not found in his district. When the *commissaire* of the district in which the little packe were found was applied to, he immediately telegraphed to the pr fect of police and the artillery administration to send an ammur tion cart, which duly arrived with a military escort. In the mea time, M. Girard, Directeur of the Municipal Laboratory, had ex mined the white powder contained in the packets, which w corrosive sublimate.

The friends and pupils of the late Professor Damaschino ha opened a subscription for placing his bust at the Medical Facul The different medical associations and syndicates are holding me ings for the purpose of deciding on a scale of fees for medical m called upon to give evidence in law-courts or perform necr sies, etc.

M. Constans, Minister of the Interior, after consulting M. Mon Director of the Public Assistance, has decided the conditions which gratuitous medical aid will be given. The Bill will be l before the Chamber of Deputies as soon as that body meets.

VIENNA.

Pathology and Therapeutics of the "External Atticus" of th Tympanic Cavity.

AT a recent meeting of the Imperial Royal Society of Physici of Vienna, Professor Adam Politzer read a paper on the pathol and therapeutics of the external atticus of the tympanic cavi By that name Professor Politzer designates that part of the ty panic cavity situated between the body of the malleus and incus and the external wall of the cavity, and bounded above the ligamentum mallei superius, and downwards by Shrapn membrane. Morbid changes develop in that space partly as mary affections and partly as the result of diffuse diseases of tympanic cavity. Professor Politzer exhibited a number of sp mens which showed that in newborn children this space is fi up with embryonic connective tissue, which undergoes regres metamorphosis during the first year of life. In the adult, the ternal atticus is separated from the rest of the tympanic cav partly by the ligaments of the body of the malleus and the in partly by folds of mucous membrane; there are, however, op ings by which it communicates with the cavity, and these m be closed by morbid processes.

Professor Politzer then showed a number of transverse sect of the atticus, in which inconstant bridges and folds of mu membrane were seen to be present in the space, and afterw described the pathological changes in it. The following is a s summary of them: 1. Collection of serum and mucous masse the external atticus with or without simultaneous catar changes in the rest of the tympanic cavity. 2. Vegetation connective tissue in the external atticus, with partial or com filling of Prussack's space and the upper part of the externa ticus. 3. Fusion of Shrapnel's membrane with the neck of malleus, so that Prussack's space entirely disappears. The mentioned conditions were combined with more or less pronou disturbances of hearing owing to fixation of the malleus and incus. 4. Purulent thrombi of exudation in the reticulæ o external atticus in Prussack's space in the case of acute proce 5. Vegetations of round cells and free purulent exudation i reticulæ, with partial or complete filling of the atticus by g lation tissue. 6. Perforation of Shrapnel's membrane, partial or complete destruction thereof. 7. Formations of p in the external atticus. Professor Politzer showed a specim which Shrapnel's membrane was perforated, and the root lobulated polypus was seen to extend as far as the neck c malleus. 8. Formations of cholesteatoma in the external at with partial or complete destruction of the body of the m and incus. 9. Carious fusion of the margo tympanicus in l ised suppuration of that portion, without simultaneous ch in the other parts of the tympanic cavity. 10. Formation fistula from the external atticus as far as the upper wall o osseous auditory canal. According to Politzer, this fistula be looked upon as the dilatation of a cleft—not hitherto des —extending from the external atticus to the external m auditorius.

With regard to treatment in simple perforations of Shra membrane, the septic matter in the external atticus must fi removed. Simple irrigations are insufficient, as the fluid not penetrate into the deep parts owing to the narrowness opening. For these irrigations Politzer recommends Hartm cannula, or an instrument devised by himself, which is su with an elastic tube. As to the fluid for irrigation, a 3 per

vatery solution of resorcin, or, when there is a foul-smelling discharge from the ear, a watery (1 in 2,000) solution of sublimate, recommended. After repeated antiseptic lotions, some drops of a saturated alkaline solution of boric acid (1.05 to 20) or the alcoholic solution of iodol, occasionally also a concentrated solution of nitrate of silver (1 to 10), should be injected into the atticus through the perforated Shrapnel's membrane with an elastic tube. In some occasions the introduction of thin iodoform rods into the suppurating cavity proves highly useful. If continued, severe suppuration engenders a suspicion of caries of the ossicles. Politzer advises a careful examination of the atticus with the sound, as caries of the ossicles or the margo tympanicus can only be detected in that way. He demonstrated a manœuvre devised by himself, by which a soft flexible sound can be turned around its longitudinal axis, and the cavity of the atticus thus explored in all directions. As to the extraction of the malleus, which had repeatedly been practised in modern times, Professor Politzer thinks it is indicated only in those cases in which caries of that ossicle can be certainly proved to exist, or when, after extensive inflammation of the membrana tympani, only a useless fragment of the malleus remains behind. With regard to rough parts about the margo tympanicus, Politzer recommends that they should be scraped away with the sharp spoon; suppuration of long standing can thus be cured. Small cholesteatomata can be removed either with the curette or by means of elastic cannulas introduced through Shrapnel's membrane, and a number of troublesome symptoms, such as pain, giddiness, and headache, can thus be at once relieved.

RUSSIA: KIEFF.

[FROM AN OCCASIONAL CORRESPONDENT.]

Faculty of Medicine at Kieff.—Extrauterine Pregnancy

THE Faculty of Medicine at Kieff was founded in 1840, but the University has been in existence since 1835. The total number of students in all the faculties of the University is 2,600, of whom 600 are students of medicine. The period of study extends to ten sessions, comprised in five years. The two first years are devoted to the theoretical and practical study of the natural sciences—anatomy, physiology, chemistry, inorganic, organic, and physiological; physics, zoology, botany, etc.; thirty-three hours a week are thus occupied. At the end of these courses an examination is passed, and the student turns to the study of the strictly medical subjects for three years. Another examination is held during the last half-year, and the successful candidate receives the diploma of "Doctor." In order to obtain the diploma of "Doctor of Medicine" another more difficult examination has to be passed, and a thesis must be submitted and sustained by public argument.

A woman named Eudoxie L., nine months pregnant, recently applied at the gynæcological department, presenting symptoms which led our Professor of Gynæcology, Professor Reïn, to make the diagnosis of *graviditas extrauterina* at the first inspection. More minute examination showed that the child was on the left side of the abdomen between two folds of the broad ligament. The child was living. Having established so much, Professor Reïn determined to perform Cæsarean section. The statistics of Harris and Carpentier contain only thirty such operations, only four mothers and nine children having survived. Statistics, therefore, were not favourable to our case. Nevertheless, Professor Reïn performed the operation on February 7th (O.S.). The child, a boy, and his mother are both in good health at the time of writing (nearly six weeks after the operation). Eudoxie L. is therefore the fifth mother who has survived this operation, and her son, Michel L., the tenth infant. It is a circumstance worthy of remark that the operation was performed aseptically, without such disinfecting fluids as carbolic acid or corrosive sublimate (as in operations performed antiseptically). Sterilised water only was used, that is, water heated several days before to 60° Celsius. In spite of this, despite of the number of people who were present at the operation, the temperature, pulse, and respiration of the patient remained normal during the whole time she was under treatment.

I may add that, during last session—in November, 1889—Professor Reïn performed two laparotomies for extrauterine pregnancy (both children dead), the one at the twentieth, the other at the fifteenth month. The child in both these cases was partly absorbed, and had contracted attachments to some of the abdominal organs. Both of the mothers recovered.

CORRESPONDENCE.

THE THREE THERMAL MECHANISMS AND THE MOTOR LEVELS.

SIR,—May I be allowed to remind your readers that the analogy between the thermal and the motor mechanism, so lucidly set forth by Dr. Hale White in the JOURNAL of April 26th, page 949, was, so far as I know, first propounded in my Gulstonian Lectures for 1887.[1] As you were able to publish these lectures in abstract only, and as the complete text is now out of print, it may be of interest if I give here the following extract, in which my conclusions are resumed. Dr. Hale White's excellent diagram will serve to illustrate the quasi-localisation of the thermal mechanisms referred to:—

"The thermal nervous system has three parts: let us call them briefly the thermotaxic or adjusting, the thermogenic or producing, and the thermolytic or discharging mechanism. Disorder of the first implies irregularity of temperature only; disorder of the first and second implies in general heightened temperature and increased body heat—that is, ordinary fever; disorder of the first, second, and third implies in general hyperpyrexia, dangerous increase of heat, and steadily rising temperature. In the ascending scale of evolution we seem to rise from the thermolytic to the thermogenic and then to the thermotaxic nervous system. Cold-blooded animals possess the mechanism that in mammals becomes thermolytic—a nervous mechanism that controls the vessels and the breathing. The thermogenic system in them is ill-developed, and probably not well differentiated from the system of motor and inhibitory nerves that subserves locomotion. The frog in a normal condition hardly needs to generate heat in his muscles, but when the motor trunks are artificially stimulated heat can be produced in them. But his oxidative thermogenic metabolism is at best feeble, and we cannot easily throw him into an enduring fever. In young mammals the thermogenic system is developed before the thermotaxic. The instability of an infant's temperature is its chief characteristic. A little sends it into a high fever; a little restores it again. As the child grows, the range of its power of regulation increases, its temperature grows stable, and the thermotaxic mechanism is evolved.

"Time fails me to say more as to the successive evolution of the three mechanisms from what we may call the historical point of view. The consideration of their organisation leads us, however, to a like result. In Dr. Hughlings Jackson's words, 'Evolution is a passage from the most to the least organised—that is to say, from the lowest well-organised centres up to the highest least-organised centres; putting this otherwise, the progress is from centres comparatively well-organised at birth up to those, the highest centres, which are continually organising through life.' The order of organisation is, like that of evolution—thermolytic, thermogenic, thermotaxic. The localisation of the thermolytic centres is admitted even by the opponents of localisation; they do not object to speak of the vasomotor, respiratory, and sweat centres; the best-organised and the most automatic centres are the best recognised, and the lowest. The cerebral thermogenic mechanism I have hadly ventured to speak of as consisting of 'centres.' Yet some observers claim to be able to point to the inhibitory centre, and others, as competent, to the excitor centre. I have laid before you specimens of both claims; that they are not universally admitted is to me evidence that the organisation of these thermogenic centres is less complete and therefore less localised; that they are, in a sense, in process of evolution; that they are higher than the thermolytic. As to the thermotaxic mechanism, no one, so far as I am aware, has been able to say it is at this spot or at that. Least organised, least automatic, least and last developed, its localisation is necessarily the most imperfect; but its existence I take to be as necessary as that of the 'highest motor centres,' which control and connect and represent the 'middle motor centres' localised in the cortex. It co-ordinates because it represents the thermogenic and the thermolytic centres.

"You will see from what I have said that, regarding the thermal mechanisms as functional and evolutional hierarchy, I regard fever as 'dissolution,' a progressive negative process, a relaxation of control from above downwards, in the same sense (and with the same reserves) that the term is used by Dr. Hughlings Jackson in his Croonian Lectures of 1884. The ideas set forth in that

[1] *The Nature of Fever*. Macmillan and Co.

most suggestive course with reference to the evolution or dissolution of the motor functions I venture in all deference to apply to the correlative thermogenic function. If I may so express myself, the pains that have been taken to adjust our thermal relations to our environment, the nicety of the balance in widely varying circumstances, the impairment of all the higher functions which ensues when the balance is but a little disturbed in either direction, move me to regard thermogenesis as no mere by-end of our nature, no mere casual but unavoidable concomitant of chemical processes performed for another primary purpose. I would put it in the vital scale a little 'higher' than circulation and respiration, and a little 'lower' than voluntary muscular action. The motor function of the muscles is related to the highest centres; their thermogenic function connect them with the lower or animal centres; and the innumerable quantity of causes which disturb or 'dissolve' the control of numerous mechanism, the readiness of 'fever' to result from numerous influences of so many kinds, is the expression of the fact that the habit of stable temperature is, so to speak, recently acquired. As a last test of the 'dissolution' hypothesis, consider what happens in recovery from a typical febrile attack. First, the thermolytic mechanism is waked to adequacy, there is a critical sweat or a relaxation of the vessels of the skin, and a gush of heat from the surface brings down the temperature with a run. But the thermogenic centres have not yet recovered, and the temperature will swing backwards and forwards for some days, and an epicritical excretion of urea takes place. Thermogenesis becomes less and less excessive, and is vigilantly counterbalanced by thermolysis; but thermotaxis is yet feeble. The patient's temperature is down, but it is still far from stable. As convalescence proceeds the stability increases, and at length thermotaxis, the first to be disturbed and overthrown, is the last to be restored."

—I am, etc.,
DONALD MACALISTER.
Cambridge.

THE DISCUSSION AT THE MEDICAL SOCIETY.

SIR,—In the course of the discussion on Mr. Meredith's paper at the Medical Society, at which I was unable to be present, my friend Mr. Lawson Tait made an allusion to me. Here it is:—

Out of Mr. Mayo Robson's speech comes a point hardly pertinent to Mr. Meredith's paper, but of such interest that I cannot pass it over. It is the vexed question as to whether abdominal surgery should be done by general surgeons or not, in general or in special hospitals. Some years ago my friend, Mr. W. Thomson, of Dublin, did three consecutive ovariotomies successfully, and he made that fact the text upon which to preach me a lesson for saying what I never did say, that general surgeons should never do abdominal operations, and I cannot help thinking that Mr. Robson had me also in his argumentative eye, but why should not my critics take the trouble to read what I say before they attack me? What I do say is that abdominal operations will be more successfully done by men who devote themselves entirely to them than by men who take them up casually. Mr. Robson presents a splendid list of cases, rivalling those of any living surgeon and out-stripping many. But that proves nothing to the point. It proves conclusively that Mr. Mayo Robson is a most successful surgeon, and it is certainly suggestive that he would make a most successful specialist, but it does not prove that any general surgeon is warranted in boggling about in the abdomen if there is a chance that his patient can be put in the hands of a specialist.

As I do not care to lie under the imputation that I attributed to him an opinion which he did not hold, I will ask you to print what he did say:—"I am also strongly of opinion that no surgeon engaged in constant attendance on the promiscuous cases admitted to a general hospital should perform such an operation as ovariotomy."[1] I do not know whether Mr. Tait makes any difference between abdominal surgery and ovariotomy, but in our present stage of knowledge removal of an ovarian tumour involves opening the abdominal cavity. My paper was a protest against the doctrine which he laid down, and now with a larger experience I hold the same view. Mr. Tait's work and teaching no one values more highly than I do, but he is not infallible, and forcible words do not necessarily make a doctrine true. The effect of his warning in this matter has been to make some people believe that the moment they call themselves specialists they acquire a certain mysterious power which none outside the sacred ring can ever possess. I have no doubt they look down upon such men as Greig Smith and Mayo Robson and others as interlopers. If those poor general surgeons had any sense of the proprieties they ought to be very shamefaced. But they are not, and they need not be; yet if Mr. Tait is right they should have been crushed by failure.—I am, etc.,

Dublin. WILLIAM THOMSON, F.R.C.S.

[1] *Diseases of the Ovaries*, p. 256.

THE PROPHYLAXIS OF CANINE DISTEMPER.

SIR,—In the JOURNAL of April 19th Dr. George Harley, F.R.S draws attention to the fact that "human or vaccine variolou lymph" has been used as a preventative against "canine distemper and a *primâ facie* impression of the statement of Dr. Harley's ow experience might favour the view that the process was protectiv In this connection I may be allowed to state that seven years ag in response to pressure of dog-owning friends, I put inoculatio with human and vaccine lymph to the test, and since have ha many opportunities of gathering information on the subject, an am bound to say I find no reason for assuming that this vaccin tion is in the slightest degree protective against canine distempe I regret that I cannot place my hands on the details of this worl In the same communication Dr. Harley, I presume reasoning o the premisses before named, supports a possible analogy betwee this disease and those generally termed "variola;" suggesting, i deed, that distemper is the variola of the dog.

We are, of course, bound to recognise the fact that occasionall but comparatively rarely the most constant lesion in the typic variola may be absent, that is, there may be no characterist skin lesions. In a considerable clinical experience of canine di temper, I have never observed an eruption in any way resemblin that of the variola.

The points of resemblance of the two diseases named by D Harley would apply to other specific diseases affecting other an mals, for example, influenza in horses, to which canine distemp offers much similarity, but it would entail a great exercise imaginative power to convince anyone acquainted with both their identity. I may add, too, a remarkable fact which has bearing on deductions of a negative character, that, though a d owner for a considerable period, I have never had a case of di temper among my own, notwithstanding their not being vac nated, and my constantly associating with dogs suffering fro distemper.

A careful study of the pathology of the distemper, as demo strated by Mr. Everett Millais, will, I think, at once disperse a ideas as to the relation of the two conditions.—I am, etc.,

JOHN PENBERTHY, Professor of Pathology,
Royal Veterinary College, Camden Town, N.W.

SIR,—Allow me to offer a few remarks upon this subject fr my own somewhat large experience as a dog-breeder. Many yea ago, as again now, inoculation with vaccine lymph was regard by some veterinary surgeons and others as a sure prophylac against this disease. I adopted it, and had all the puppies I h bred vaccinated for several years; amongst these were some of t breeds most fatally subject to distemper—namely: bull do clumber spaniels, the most highly bred strain of pointers, a some few bloodhounds; of all the dogs I bred, vaccinated as I ha said during several years, none ever had the distemper at a severely or even distinctly, although I had at different times so obtained from elsewhere, which had the distemper while in r kennels, and one at least, as I remember, died of it; but witho any of the dogs of my own breeding becoming infected. T immunity at the time I attributed to vaccination.

Subsequently I observed that those dogs I had bred, which fr one cause or another had not been vaccinated, were as free fr distemper as the vaccinated; I consequently abandoned t method altogether, and still through several years subsequen the dogs I bred remained free from any serious attacks of the d ease, though on some occasions after the institution of dog-sho some of them were sent to these exhibitions, and on one occasi a clumber spaniel, purchased at one of them, came to me with t distemper and died of it in a few days. I observed, howev latterly that some few of my dogs had the distemper, generally puppies, but in such a very mild form that previously in all p bability it had generally escaped notice or recognition. There at present many whose experience and opinion are entitled to c sideration who believe that vaccination is efficacious as a prop lactic, but it is not my object here to discuss that question.

The deduction I draw from my own experience is, in accorda with the opinion of Mr. Oglesby, in the JOURNAL of April 2 and beyond that, that in this disease it is necessary to be v cautious in attributing the immunity of any animals from it any particular prophylaxis.

With regard to the excellent investigation of Mr. Everett Mill it deserves all commendation; it is work in the right directio that of extending the methods of prophylaxis inaugurated by

Roux and the other collaborateurs of M. Pasteur, to whom solely we are indebted for any practical results from a decade of microbiology; but caution again is necessary in concluding that the microbe isolated and described truly constitutes the contagium of the disease. Passing over the wider and more fundamental question of whether, if a microbe be clearly shown to carry infection, it necessarily of itself constitutes the contagium, the true *materies morbi*, I will here only remark that if it be conclusively shown that the culture fluids of a particular microbe do actually frequently or constantly confer immunity from infection, it does not follow that that microbe constitutes the contagium, or stands in any relation to it. The experiments of M. Pasteur, nine years ago, proved that inoculation with the modified virus of one disease will confer immunity from another; he showed[1] that inoculation with the virus of chicken cholera rendered fowls immune from charbon. This shows that although canine distemper and variola may be, as they probably are, totally distinct diseases, yet that the virus of the one or of some other disease may be a prophylactic against the other.

This result seems to have been altogether overlooked in this country, although it appears to me that it is one of the fundamental points that must be borne in mind if we are ever to extend our knowledge of the relations of micro-organisms and their products to disease. We have unfortunately been occupied with traversing much of M. Pasteur's work rather than in following his methods and endeavouring to extend his results, but the paper referred to by Mr. Millais is an advance in the right direction.—I am, etc.,

G. F. D.

THE EARLY DIAGNOSIS OF EXTRAUTERINE PREGNANCY.

SIR,—In answer to an invitation from the President of the Medical Society of London, at the recent debate on abdominal surgery for remarks on the diagnosis of extrauterine pregnancy in its early stage, I mentioned two cases in which I had successfully diagnosed this condition previous to operation. I find that a subsequent speaker, Mr. Lawson Tait, if correctly reported, took upon himself the responsibility of stating that this diagnosis was made after rupture had occurred. The question of rupture was not raised either by the President or myself, but in one at least of the cases referred to there can be no doubt that the diagnosis was made before any rupture had taken place. I will narrate the facts of this case as shortly as I can.

The patient was a married woman, aged 30, and was seen by me for my colleague, Dr. A. E. Clark, on March 20th, 1885. She then had a history of amenorrhœa of about eight weeks' standing, but had been "losing" slightly for a few days, with some abdominal pain. Otherwise she was in good health, and came to the out-patient room in the usual way without assistance. On examination the following notes of the case were made:

"Distended tube felt behind the uterus. Uterus only slightly, if at all, enlarged. Uterine sound purposely not passed. Besides the distended tube something else (cyst?) can be felt anteriorly and to the left of the uterus. Diagnosis, extrauterine pregnancy."

At this date I cannot remember what subjective symptoms may have confirmed me in my conclusion as to pregnancy, but the history of amenorrhœa followed by irregular loss after seven or eight weeks, together with the presence of a distinct and large tubal tumour, were the main factors in the diagnosis. On April 2nd, after an interval of nearly two weeks, during which the patient attended to her usual duties as a small shopkeeper, the case was operated on by Mr. Tait, and figures as No. 11 on p. 45 of his book on *Ectopic Pregnancy*. I assisted at the operation, and the tube was distinctly seen enlarged and brown in colour, without sign of extratubal hæmorrhage until it was torn in process of removal. A small fragile cyst of the ovary co-existed, which was broken during the operation.

The other case was seen on August 3rd, 1888, and operated on the same day. There had been some hæmorrhage into the broad ligament, but "no free rupture into the peritoneum" had occurred.

I do not think that the conclusion arrived at in either of these cases required special diagnostic skill. While I agree with Mr. Tait that it is rare for the surgeon to meet with cases for diagnosis before rupture occurs, I should not hold that it is specially difficult to diagnose such a case if one meets with it. I can hardly conceive of a tubal pregnancy which could not be felt as a tubal tumour by the fifth or sixth week; and I believe it will be found, as experience increases, that a tubal pregnancy in its early stages is to be diagnosed with less difficulty than at a somewhat later period, when through rupture the tumour has lost its distinctive character.

Of course, mistakes may easily be made. Pregnancy in the fundus of a retroflexed uterus may well be mistaken for a tubal pregnancy, and I have known of such a case in which the abdomen was opened, without, however, any harm resulting to either patient or pregnancy. This mistake may be avoided by very careful bimanual examination, under an anæsthetic if necessary, and by recognition of the fact that some hæmorrhage usually occurs after seven or eight weeks in tubal pregnancy, while the amenorrhœa persists in uterine pregnancy unless abortion is evidently threatening.

The three signs of greatest service in forming a diagnosis at an early period are, I believe, the following: 1. Amenorrhœa, followed after six or seven weeks by irregular hæmorrhage; 2, absence of any uterine enlargement; 3, tubal tumours, usually felt directly behind the uterus.—I am, etc.,

Birmingham. JOHN W. TAYLOR, F.R.C.S.Eng.

[1] *Comptes Rendus, Acad. Sc.*, Paris. August 9th, 1880.

DIAGNOSIS OF PANCREATIC TUMOUR.

SIR,—Among the remarks made by Mr. Treves during the discussion on abdominal section in the Medical Society is one—namely: "That he believed that no case of tumour of the pancreas had ever been intentionally operated on in this country, for the disease had not been diagnosed." If such were the case, it would certainly not be to the credit of British differential diagnosis. Many cases of tumours of the head of the pancreas can be diagnosed, and verified *post mortem*. Unfortunately, they are usually malignant; the comparatively late stage of growth and infiltration possibly precluding operative procedure, which is practically confined to the cystic variety.

For the sake of British surgery in general, and of Edinburgh in particular, I beg to draw attention to my report in the BRITISH MEDICAL JOURNAL (June 8th, 1889), of a pancreatic cyst, which was diagnosed as such in 1885, and subsequently treated by incision and drainage, resulting in cure. This was performed by Professor Annandale in March, 1886, and was published, as Dr. Wölfer, of Graz, claimed in 1888 to be the first to have diagnosed a pancreatic cyst in a female.

Much valuable time is frequently lost before surgical treatment of many obscure abdominal diseases and tumours is undertaken, and this on account of failing to sufficiently recognise exploratory abdominal section as an aid to diagnosis, independently of any immediate or subsequent operation being performed.—I am, etc.,

Stoke Newington. J. CHRISTIAN SIMPSON, M.B.

THE RADICAL CURE OF URETHRAL STRICTURE BY ELECTROLYSIS.

SIR,—Will you allow me to make a few remarks appertaining to the paper of Mr. Bruce Clarke in the JOURNAL of April 26th.

First, in referring to the locality of stricture, he says: "Attention has often been drawn to the enormous preponderance of strictures in the membranous portion." This is surely an error, likely a *lapsus calami* only. Real stricture is, of course, rare in the membranous portion. Probably Mr. Bruce Clarke means apparent, that is, spasmodic, stricture.

Second, it would have assisted our conclusions as to the value of electrolysis if in his interesting table of fifty cases he had mentioned the calibre, duration, and seat of the obstruction in each case, for without these items of information critical deductions are valueless.

Observation and experience have compelled me to adopt a pathological classification of strictures, and I think whoever will narrowly watch the result of different forms of treatment will agree with me that such a classification is necessary. I would suggest that those narrowings of the urethra called "strictures" are either pre-organised, semi-organised, or organised, and that the effects of electrolysis are only marked in the first two varieties, accompanied or not by spasm. The first term may appear meaningless, but it is not really so. Stricture has its stages, often long stages, and the length of time it may have lasted is not at all times a sure indication of its degree of development. Not only may an instrument indicate a morbid coarctation, but we may often feel the deposit, and markedly too, from the outside, and still under the influence of the passage of a bougie, even when

used a few times only, I have seen such thickenings pass away rapidly. Here, therefore, is one instance of inflammatory products constituting the state called stricture, but evidently where the cellular elements have not advanced to or assumed the character of fibrillar connective tissue, or fully-organised stricture.—I am, etc.,

Crouch End, N. JAMES MACMUNN.

ECTOPIC PREGNANCY IN THE BROAD LIGAMENT.

SIR,—As we are rapidly approaching a more complete knowledge of the question of ectopic gestation every case now published requires to be carefully examined as to whether the statements concerning it are to be justified. There is only one statement concerning Dr. MacQuibban's well-reported case of great moment, and that is the one by which he assumes it to be of a unique character. If Dr. MacQuibban will read what I have said about the growth of ectopic pregnancies in the broad ligament, after the period of their rupture from the Fallopian tube, and then read Dr. Berry Hart's description of *post-mortem* examination of the same kind, he will see that his case answers the details given in every particular. The figures that he gives himself show this clearly. It had been a tubal pregnancy of the right side. It had dissected up the peritoneum, as shown in the dotted line of the second figure, as such growth always does. The fœtus had died, and if it had not been operated upon it would probably have suppurated and discharged behind the posterior lip of the cervix, the point of election of such a case. The only peculiarity about Dr. MacQuibban's description is that he has made the ovular cavity of the broad ligament absolutely symmetrically placed. In all probability it was not quite so symmetrical at the time of the operation, but it would have become quite as symmetrical as it progressed.—I am, etc.

Birmingham. LAWSON TAIT.

NAVAL AND MILITARY MEDICAL SERVICES.

COMPOUND TITLES.

MEDICAL STAFF writes: You unfortunately support the double title recommended by the Commission. If the titles Surgeon-General and Surgeon-Major have been found (*vide* evidence) to convey nothing to the military mind, either as to status or position of the holders, how can an extension of such titles benefit us?

*** We have received a temporary check, but with such a distinguished soldier as Sir Donald Stewart on our side, must persevere and contend for purely military rank and titles which he would give us.

SHORT HOME SERVICE.

LEX writes: The reduction in the active list of the Medical Staff renders foreign reliefs increasingly difficult, and in order to give medical officers some small increase of home tours, there are rumours of reduction in the foreign establishments. This would render duty at these stations still more arduous, leave more difficult to obtain, and increase the sickness and death-rate.

TITLES AND RANK.

MEDICAL STAFF proposes four compound titles, as follows:

1. Surgeons-General, ranking with Majors-General.
2. ,, Colonel { 1st 25 with Colonels, next 50 with Lieutenant-Colonels.
3. ,, Major { after 20 years, Lieutenant-Colonels. under 20 years, Majors.
4. ,, Captain, with Captains.

Corps: The Royal Medical Staff.

The above would shorten titles, and do away with the cumbrous Surgeons Lieut.-Colonel, and amalgamate Brigade-Surgeons and Deputy Surgeons-General. Knowing the men, the evidence before the Commission of Generals Harman and Buller is no surprise to me. The Colleges must now in honour take the matter up.

MR. STANHOPE ON RELATIVE RANK.

D. S. S. is informed that between February and July, 1887, Mr. Stanhope, when interrogated in the House, repeatedly asserted that the deprivation of relative rank made no difference to medical officers, on the ground that it never was a rank, and really had no meaning; of course the revival of relative rank, in the terms "ranking with," and "ranking as," must on his own argument be likewise held to confer no rank. We are not aware that he has ever modified his original views on the significance or value of relative rank as a rank.

"MILITARY INSTINCTS."

SIX CAMPAIGNS writes: H.R.H. the Duke of Cambridge stated before the Commission, without reservation or qualification, and apparently as his chief argument, that his "military instincts" could not carry the idea of giving medical officers military titles or rank. Such a puerile or even feminine plea is unworthy of the gallant gentleman. He, indeed, has had no personal experience of the services of medical officers in recent campaigns, but he cannot have forgotten what happened in the Crimea; I can assure him that it is not forgotten by many living men, myself included, who were there. How his own valuable life was saved at a critical moment, through the gallantry of an officer of the very department which his military instincts compels him to abandon and dishonour. How, when the Duke became detached from his men, and surrounded by Russian infantry, Assistant-Surgeon Wilson, perceiving the critical position, rallied a few British soldiers, and at their head forced his way to the Duke and rescued him. To such as this very man he would now instinctively deny military rank and titles, although freely conceding it meanwhile to paymasters and commissariat officers, whose duties never bring them within the zone of fire.

*** Our correspondent ought to be thankful for the Duke's outspoken frankness in narrowing the issues down to such an impalpable point.

VOLUNTEER SURGEONS.

ANTI-JUNKERISM writes: Your correspondent, "Væ Victis," does well to urge all branches of the Auxiliary Medical Services to stand by the Medical Staff in the present crisis. The question is a broad one of professional status and honour affecting all. It is only a little narrow-minded clique of "military advisers" who are withstanding the just claims of medical officers; they will try and divide (and so conquer and keep under their selfish heel) the profession by playing off civil against military.

HOW DISCIPLINE IS AFFECTED.

OBSERVER says: Discipline in the Medical Staff corps and among patients in hospital cannot escape being seriously affected by the position of medical officers as regards intelligible rank. Soldiers read much nowadays and quite grasp the situation. Senior medical officers complain that junior subalterns treat them with increasing contempt. Can the game of the "military advisers" be to bring about such an impass in the discipline of hospitals, that they may again thrust inferior combatant officers into position of command connected with them?

MIDLAND VOLUNTEER MEDICAL OFFICERS' ASSOCIATION.

THE fifth annual meeting of this Association was held on April 26th at Birmingham, Surgeon J. P. Massingham (1st Salop and Staffordshire Artillery Volunteers) in the chair. The report stated that, at the present time, owing to the Association work, there was hardly a regiment or battery without its ambulance corps. The officers elected for the year were Brigade-Surgeon Manby, as President, and Surgeons-Major J. Clarke and D. Gentles as Vice-presidents.

Two matters were deferred for further discussion—the giving of a *conversazione* by the members of the Association to the officers and ladies attending the meeting of the British Medical Association in Birmingham this year, and the question of purchasing and offering a silver challenge shield to ambulance corps for annual competition. The Chairman suggested, without proposing any resolution, that their Association should amalgamate with the Midland Volunteer Officers' Association—a body of later formation than their own—so as to form one of its many sections.

THE NAVY.

THE following appointments have been made at the Admiralty: WILLIAM E. HOME, Surgeon to the *Thrush*, May 6th; DOUGLAS D. C. MENZIES, to be Surgeon and Agent at North Queensferry, April 23rd; CHARLES H. SLAUGHTER, Deputy Inspector-General to Jamaica Hospital, May 1st; JOHN JENKINS, Surgeon to the *Sparrow*, May 13th; JOHN MCELWEE, M.D., Surgeon to the *Widgeon*, May 13th; SAMUEL W. JOHNSON, M.D., Surgeon to the *Mistletoe*, May 13th; EDWARD T. MORLEY, Surgeon to the *Pembroke*, May 13th; ARTHUR S. NANCE, Surgeon to Walmer Depot, Royal Marines, May 12th; CHARLES S. WOODRIGHT, Surgeon to the *Hibernia*, April 24th; WILLIAM BETT, Surgeon to the *Defiance*, May 1st; JOHN D. HUGHES, Surgeon to the *Britannia*, temporarily, May 6th; J. BRADLEY, M.D., Surgeon to the *Magpie*, April 29th; E. C. WARD, M.D., Surgeon to the *Jackal*, April 29th.

MEDICAL STAFF.

SURGEON-MAJOR C. J. L. BUSHE, M.B., has retired from the service with a gratuity. His commissions were dated: Assistant-Surgeon, March 30th, 1872; Surgeon, March 1st, 1873; and Surgeon-Major, March 30th, 1884. He served during the latter part of the Zulu war, in 1879, with Colonel Baker Russell's column, and received the medal with clasp granted for the campaign.

Surgeon-Major C. F. POLLOCK, M.B., serving in the Bengal command, is granted leave to England on medical certificate for a period to be fixed by His Royal Highness the Commander-in-Chief.

The undermentioned officers, serving in Bengal, have leave of absence as specified: Brigade-Surgeon J. B. HAMILTON, M.D., for six months, on urgent private affairs; Surgeon-Major J. E. FANNIN, for eight months, on urgent private affairs; Surgeon-Major H. G. GARDNER, M.B., for six months, on private affairs.

INDIAN MEDICAL SERVICE.

SURGEON E. HUDSON, Bengal Establishment, is appointed to the medical charge of the 15th Native Cavalry, *vice* Surgeon D. F. Barry, transferred permanently to civil employment.

Surgeon F. W. THOMSON, M.B., Bengal Establishment, from the officiating medical charge of the 1st Battalion 1st Goorkha Light Infantry, is appointed to the medical charge of the 22nd Punjab Infantry, *vice* Surgeon-Major L. R. Dawson, deceased.

Surgeon W. H. B. ROBINSON, Bengal Establishment, is appointed to the medical charge of the 34th Pioneers, *vice* Surgeon-Major C. W. S. Deakin, deceased.

Surgeon-Major T. ROBINSON, M.B., Bengal Establishment, from the medical charge of the 4th Punjab Infantry, is appointed to the medical charge of the 1st Battalion 1st Goorkha Light Infantry, *vice* Brigade-Surgeon Oldham retired.

Surgeon G. B. FRENCH, Bengal Establishment, is appointed to the medical charge of the 4th Punjab Infantry, *vice* Surgeon-Major T. Robinson.

Surgeon A. W. D. LEAHY, Bengal Establishment, is appointed Agency-Surgeon at Ulwur from March 3rd, *vice* Surgeon-Major T. F. Mullen, M.D., appointed Medical Officer to the Meywar Bheel Corps.

Surgeon-Major E. G. RUSSELL, M.D., Bengal Establishment, civil surgeon f Patna, is appointed Superintendent of the Temple Medical School at atna.

The services of Brigade-Surgeon R. HARVEY, M.D., Bengal Establishment, rofessor of Midwifery at the Medical College, and Obstetric Physician to the den Hospital, Calcutta, are placed at the disposal of the Government of India the Military Department.

Surgeon-Major T. E. L. BATE, Bengal Establishment, on return from special aty, has resumed charge of the office of Civil Surgeon and Superintendent of ie Lunatic Asylum at Delhi, relieving Surgeon G. F. Nicholson, M.D., trans-rred.

Surgeon G. F. NICHOLSON, M.D., Bengal Establishment, civil surgeon, is ansferred from Delhi to Umballa, where he has assumed charge of the duties, lieving Surgeon J. O'Neill, M.D., transferred.

Surgeon-Major J. O'NEILL, M.D., Bengal Establishment, civil surgeon, is ansferred from Umballa to Ferozepore.

Surgeon-Major P. R. MARTIN, M.D., Madras Establishment, is appointed cond Medical Officer at Cotacamund.

Surgeon J. CRIMMIN, V.C., Bombay Establishment, is directed to act as rofessor of Midwifery at Grant Medical College during the absence of Surgeon J. Baker, M.B., on privilege leave.

The Queen has approved of the admission of the following Surgeons to the dian Medical Service, dated September 30th, 1889:—Bengal: H. B. MEL-LLE, J. C. S. VAUGHAN, A. L. DUKE, J. C. WHITE, H. W. ELPHICK, C. H. DFORD. Madras: C. L. WILLIAMS, W. C. VICKERS. Bombay: J. B. SMITH, F. CLEVELAND, E. L. C. SMITH, T. M. SHAW.

THE VOLUNTEERS.

TING-SURGEON G. F. A. ENGLAND, M.B., of the Hampshire Yeomanry (Cara-iers), is promoted to be Surgeon, from April 26th.

Mr. ROGER BULLOCK is appointed Acting-Surgeon to the Second Volunteer ttalion Worcester Regiment (late the 2nd Warwickshire).

Acting-Surgeon J. HINTON, of the 1st Wiltshire, has resigned his commis-n, dated December 18th, 1878; he is permitted to retain his rank and uni-m.

Mr. H. E. H. MATTHEWS is appointed Acting-Surgeon to the 4th Volunteer ttalion Manchester Regiment (late the 16th Lancashire).

Acting-Surgeon P. PHELPS, 1st Volunteer Battalion East Kent Regiment te the 2nd Kent), has resigned his appointment, which was dated July 31st, 6.

MEDICO-LEGAL AND MEDICO-ETHICAL.

INTRODUCING A NEW PARTNER.

UNTRY MEMBER asks for opinion of the following questions:

1. X. disposes of his practice to Y., by partnership introduction, and in-rms his patients by letter that he has taken Y. into partnership, eulogising ., and enclosing his testimonials; many of "Country Member's" patients presumably by accident) receiving these circulars. Is this in accordance ith medical etiquette or good taste?

2. In the above case would it not be usual for the new practitioner to call pon those already practising in the town?

*** Our correspondent will find an answer to his respective questions in the llowing quoted rules; and if a fuller exposition be desired, we would refer im to the third edition of the *Code of Medical Ethics*, chap. ii, sect. 1, ule 3, and chap. iv.

1. That it is contrary to medical etiquette "to notify the introduction and ldress of a partner, otherwise than *vivâ voce*, or by an autograph or by a *csimile* of a written note; and its circulation should be strictly limited to *nâ fide* patients of the transmitter."

2. That "on commencing or changing the locality of practice, in town or untry, an obligation is entailed on each new comer, young or old, to call, ith as little delay as may be, upon every duly qualified, legitimate practi-oner (who should return the visit with like promptitude) resident within a asonable distance of his own selected place of abode, and courteously an-nunce his intention to practice in the locality."

OWNERSHIP OF THE BODY AFTER DEATH.

.—A man cannot by will, or in any other way, dispose of his dead body. e executors are charged with the duty of providing suitable burial, and no e else can say what is to be done after death.

The only way to carry out the wishes of the patient is to obtain from her a itten or verbal direction (the latter in the presence of two witnesses) that r body is to be examined anatomically. The Act 2 and 3 Wm. IV, c. 75, s. 8, ovides that in such case, "if before burial such direction is made known to e party having lawful possession of the body, that party shall direct such amination to be made, unless the deceased person's surviving husband, or fe, or nearest known relative, shall require the body to be interred without ch examination."

A SUPPLANTER.

A. AND MR. B.—In commenting on Mr. B.'s own "version of the affair," erred to in the JOURNAL of April 19th, under the heading of "A Sup-nter," we deem it right to remark that not only was Dr. A.'s statement of case submitted to him (Mr. B.) prior to its insertion, but in acknowledg-its receipt he thus wrote: "All right about the B. M. J.....Of course he JOURNAL thinks I have erred, I shall abide by their decision." He ertheless now demurs thereto, and we have therefore, in compliance with request, carefully and impartially reviewed the points involved by the light his own detailed statement, which, however, differs but little from that of A., with a like result; for it seems to be clear that on the specified emergency ng provided for, he (Mr. B.) should, even under the circumstances related, e courteously but firmly declined further attendance, except in consultation with the ordinary medical adviser, Dr. A. In closing our comments on the case, we would suggest, for the consideration of Mr. B. (whose name was unknown to us until revealed by himself) the question of probability as to whether Mr. X. would have consulted him if it had not been for the professional introduction afforded by Dr. A.

THE L.K.Q.C.P.I.

A LANCASHIRE PRACTITIONER.—1. A person possessing the qualification of L.K.Q.C.P.Ireland only, cannot now be placed on the *Medical Register*, unless he has passed the qualifying examination required by the Medical Act of 1886.

2. A person registered under the Medical Act, 1858, in respect of a medical qualification only, cannot recover charges in a purely surgical case.

PARTNERSHIP ACCOUNTS.

F. H. M.—There is no legal objection to a L.S.A. calling himself a physician, nor would there be any to a medical man with a double qualification in partnership with a M.R.C.S., styling themselves "Physician and Surgeons," although a person practising by himself alone as a surgeon must not call himself a physician.

OFFICIAL CERTIFICATES.

JUSTICE.—Registered medical practitioners are alone qualified to sign certificates of death and vaccination, and to them only ought the forms of certificates of death be issued by the registrar. If the facts are quite clear that certificates of death and vaccination are signed by a person not on the *Register*, and are accepted, a representation should be made to the registrar and vaccination officer on the subject.

As to a club appointment, registration is not essential provided the holder is duly qualified. A person unregistered, however, although duly qualified, cannot recover his fees, and might run the risk of not being able to enforce payment of his salary as medical officer of a club if payment refused.

UNIVERSITIES AND COLLEGES.

CAMBRIDGE UNIVERSITY.—At the Congregation on Thursday, April 24th, the following medical and surgical degrees were conferred:—

M.D.—E. Lycett Burd, Caius; E. Mansel Sympson, Caius; W. G. Holloway, Sidney; C. E. Shelly, Sidney.

M.B. and B.C.—F. M. Ogilvie, King's; A. C. Rendle, Christ's.

PROFESSOR NEWTON requests that applications for permission to work at the University's tables in the Zoological Station at Naples, or in the Marine Biological Laboratory at Plymouth, may be sent to him (Magdalene College, Cambridge) on or before May 22nd.

GLASGOW UNIVERSITY.—The winter session of Glasgow University was brought to a close on April 25th by the graduation ceremony, at which the degree of D.D. was conferred on seven gentlemen, that of LL.D. on six, among whom Sir William Arrol, the engineer, and Dr. William Macewen, the surgeon, were received with special acclamation by the students. Five graduates in medicine and surgery received the higher distinction of Doctor of Medicine, Dr. John A. Anderson being specially commended for a thesis "On Tetanus; with a Record of Six Cases." For the first time the doctorate of science was conferred, of which degree there were four recipients. There were twelve graduates in divinity, five in law, seventy-eight in arts, and eleven received the degree B.Sc. At the close of this ceremony Principal Caird addressed the graduates. As is his custom, before beginning his address proper, he made public expression of the gratitude of the University to her recent benefactors. The list of benefactions is this year a very brief one. A gift of £1,000 has been made to the Senate by Dr. Donald Mackintosh, London, to found a bursary in connection with the medical faculty, to be called the Mackintosh Mental Science Bursary, in memory of the founder's brother, Dr. Mackintosh, for many years superintendent of Gartnavel Asylum. Mrs. Elizabeth Parlane has bequeathed a sum of £2,400 for bursaries in medicine and divinty. Principal Caird mentioned that during the last twenty-seven years the sum accruing to the University from foundations for special purposes, such as bursaries, scholarships, demonstratorships, and the endorsement of new chairs amounts to no less than £210,000, or at the rate of about £8,000 a year.

UNIVERSITY CLUB, GLASGOW.—The Glasgow University Club have forwarded to the University Commissioners a memorial setting forth their suggestions for reform in the universities. They advocate reorganisation of the teaching staff by the foundation of new professorships, to widen the range of studies, by the appointment of junior professors, holding the same tenure as ordinary

professors and directly represented on the Senate, by the appointment of assistants where necessary, elected by the Court, and paid an adequate salary from university funds, and by the constitution of boards of studies, formed of the professors and junior professors of each faculty, whose business it would be to arrange courses of instruction. They advise the institution of teaching fellowships for providing short courses of lectures on special subjects, and additional lectureships on subjects not included in schemes for graduation. They urge the granting by the Court of recognition of distinguished graduates as qualifying teachers, and they suggest that the Court should look with favour on applications for affiliation by colleges sufficiently endowed and organised. They approve of granting degrees to women, and of the affiliation of colleges for their instruction; and they suggest that all teachers entitled to send up students for examination should be represented on the examining boards. The memorial then goes into a very complete and careful examination of the conditions for graduation in the various faculties, and of the changes that ought to be made to meet modern requirements. The suggestion is made that in medicine the curriculum should extend to five years, and that a course of 100 lectures on pathology should be compulsory, while the student should also be compelled to produce evidence of having dissected the whole body, and of having attended practical courses in physiology, pathology, and pharmacy. The institution of a chair of pathology is urged on the Commissioners, and the foundation of junior professorships in anatomy, physiology, and public health; the need of lectureships on gynæcology, diseases of children, diseases of the ear and throat, and diseases of the skin is urged; and the foundation of scholarships for encouraging original research. It is further suggested that all examinations in medicine should be conducted by a board of three examiners, one the university professor, a second selected by the Court as assessor, and a third representative of extra-mural teachers and professors of affiliated colleges, but also selected by the Court. The memorial concludes with a well-reasoned consideration of the financial changes involved in the reforms advocated. A fee fund for each faculty is urged, the increase of fees from £3 3s. to £4 4s. is suggested, and the fixing of a minimum emolument to each professorship, which might be £800 where the professor does not practise his profession, and £400 where he does practise.

UNIVERSITY OF DURHAM.—Faculty of Medicine. Second Examination for the Degree of Bachelor in Medicine. The following candidates have satisfied the Examiners:—

Honours—First Class.—C. W. Turner, M.R.C.S., Yorkshire College, Leeds.

Honours—Second Class.—J. A. Hutton, M.R.C.S., L.R.C.P., Middlesex Hospital.

Pass-list.—G. H. V. Appleby, College of Medicine, Newcastle-upon-Tyne; A. Badock, London Hospital; W. H. Bishop, College of Medicine, Newcastle-upon-Tyne; F. C. Brodie, M.R.C.S., L.R.C.P., L.S.A., Middlesex Hospital; T. L. Bryan, College of Medicine, Newcastle-upon-Tyne; H. S. Burniston, St. Mary's Hospital; A. G. R. Cameron, St. Mary's Hospital; H. A. Collinson, College of Medicine, Newcastle-upon-Tyne; A. J. Dale, College of Medicine, Newcastle-upon-Tyne; T. Dixon, College of Medicine, Newcastle-upon-Tyne; C. C. Eardley-Wilmot, St. Bartholomew's Hospital; J. W. H. Eyre, Guy's Hospital; A. A. Fennings, St. Mary's Hospital; W. Fowler, College of Medicine, Newcastle-upon-Tyne; J. P. Iredale, College of Medicine, Newcastle-upon Tyne; W. D. Johns, B.A., College of Medicine, Newcastle-upon-Tyne; H. M. Jones, College of Medicine, Newcastle-upon-Tyne; W. Martin, B.A., College of Medicine, Newcastle-upon-Tyne; R. S. McPherson, College of Medicine, Newcastle-upon-Tyne; A. E. Merewether, London Hospital; C. M. O'Brien, Trinity College, Dublin; W. Oliver, College of Medicine, Newcastle-upon-Tyne; J. Peacock, College of Medicine, Newcastle-upon-Tyne; A. W. Port, St. Bartholomew's Hospital; L. L. Preston, M.R.C.S., Middlesex Hospital; E. Race, College of Medicine, Newcastle-upon-Tyne; J. M. Ritchie, Queen's College, Birmingham; F. Robson, College of Medicine, Newcastle-upon-Tyne; L. W. Rolleston, St. Bartholomew's Hospital; N. F. Rowstron, St. Bartholomew's Hospital; H. Shore, Queen's College, Birmingham; C. Stewart, College of Medicine, Newcastle-upon-Tyne; E. F. Syrett, St. Bartholomew's Hospital; L. C. T. Thorne, St. Bartholomew's Hospital; W. J. N. Vincent, London Hospital; J. P. Willis, College of Medicine, Newcastle-upon-Tyne; G. S. Ware, M.R.C.S., L.R.C.P., L.S.A., Middlesex Hospital.

Examination for the Licence in Sanitary Science. The following candidates have satisfied the Examiners:—

J. W. Hembrough, M.D.; J. Hindhaugh, M.B., B.S., Durham; J. A. Jackson, M.B., Glasgow; J. Kelland, M.B., C.M., L.R.C.P., L.R.C.S.Ed.; J. A. Marsden, M.R.C.S.Eng.; N. Raw, M.B., B.S., Durham.

ROYAL UNIVERSITY OF IRELAND.—The *Calendar* for 1890, and a supplementary volume containing the examination papers for 1889, have recently been issued. The former contains particulars of the scholarships for women recently founded by the Drapers' Company and by the Irish Society of London.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having conformed to the by-laws and regulations and passed the required examinations, were, at a meeting of the College on April 24th, admitted Licentiates and received their diplomas:

*Ackland, R., Charing Cross
Adkins, A. J., St. Thomas's
*Allford, H. G. L., King's College
Andrew, F. W., St. Bartholomew's
Baker, H. S., Charing Cross
Beadles, C. F., University College
Bernau, H. F., St. Thomas's
Beville, F. W., St. Thomas's
Boulton, A., Charing Cross
Buckley, C. H., Manchester
*Buncombe, W. D., London
Butler, C., St. Bartholomew's
Cargill, L. V., King's College
Carpenter, W. S., St. Mary's
Carter, W. R., Cambridge and St. Thomas's
*Christal, T. F., Guy's
*Clayton, J. H., Birmingham
*Clowes, J. P., St. Thomas's
Coleman, P., St. Thomas's
Collins, E., St. Bartholomew's
*Cooke, C. M., St. Mary's
Cooper, L., University College
*Cottam, F. H. W., Manchester
Craig, W. W., University College
Dauber, J. H., Middlesex
Dickinson, G. F., Charing Cross
Dudley, G. J., Birmingham
Earle, H. M., Middlesex
Elliman, A. C., Guy's
Farmer, G. W. S., London
Fawcett, J., Guy's
Fincham, W. S., St. Thomas's
Fisher, T. E. H., St. Thomas's
Foster-Foster, F. F., Guy's
Fowler, F., St. Thomas's
*France, E. P., University College
Gann, T. W. F., Middlesex
Gilpin, R. H., Middlesex
Green, J. H., Manchester
Grey, T. C., Bristol
Hall, F. W., Guy's
Handfield-Jones, C. R., St. Mary's
Harris, F. S., London
Harrison, A. W., Westminster
*Hayman, W. S., King's College
Henstock, J. L., St. Bartholomew's
Hodgson, V. J., Guy's
Hopkins, G. H., Liverpool and University College
*Howell, A. H., London
Jaffrey, F., St. George's
James, W. E., University College
Kerr, W. J., Manchester
Kershaw, H. W., St. Mary's
Lancashire, G. H., Manchester
Legg, C., Guy's
Lowsley, L. D., St. Bartholomew's
*McArthur, D. C., University College
Marshall, W. E., University College
Martley, F. C., Cambridge and St. Mary's
Mason, F., Edinburgh and Middlesex
Matthews, S. P., Westminster
Maund, J. H., St. Bartholomew's
Morgan, D. N., London
Morris, H. C. L., St. Mary's
Muir, A., Cambridge and London
Murrell, G. F., St. Bartholomew's
Nix, H. W., St. Thomas's
Odell, R., Liverpool
Openshaw, E. H., Bristol
Pearson, H. B. A., Westminster
Pearson, R. S., Manchester
Powell, H. A., St. Bartholomew's
Pridmore, E. L. N., University College
*Radford, W. J., Charing Cross
*Rennie, G. S., Trinity College, Toronto
Richards, A. F., Cambridge & London
*Roberts, F. H., King's College
Roberts, G. E., University College
Robinson, O. L., Dublin
Robson-Scott, C. G., Edinburgh and Middlesex
Rouse, E. R., St. Bartholomew's
Routh, R. H. F., University College
Rowse, E. L., Charing Cross
*Rugg, W. J., King's College
Sandifer, H. S., King's College
Sarjant, F. P., Guy's
*Shannon, J. W., Liverpool
*Shaw, C. W., St. George's
Smith, A. H., London
Smith, S. B., St. Bartholomew's
Smith, W. S. M., Guy's
Snook, S. P., London
*South, R. E. E., St. Thomas's
*Statter, H. B., Guy's
Stephenson, O. T., Liverpool
*Stevens, H. G. L., Charing Cross
Streeten, E. R., St. George's
Strouts, S. R., London
Sykes, A., Leeds
Templeton, P., Westminster
Thomas, J. L., St. Bartholomew's
Thomason, R. H., King's College
Townsend, A. A. D., Birmingham
*Trenfield, G. H., Bristol
Wake, C. H., University College
Walker, H., Leeds
Waring, H. J., St. Bartholomew's
Weber, F. P., St. Bartholomew's and Cambridge
*Whyte, H. W., Guy's
Williams, R. J., London
Wingate, W. W., Guy's
*Wood, J. A., University College
Yearsley, P. M., Westminster

* Candidates who have not presented themselves under the regulations of Examining Board.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, April 25th.

London Dust.—Mr. C. GRAHAM gave notice that on that day four weeks would move a resolution relating to the clearing away of dust and garbage London vestries, and to the condition of the women employed in the work.

Monday, April 28th.

Sanitary Defects of School Board Buildings.—Dr. FARQUHARSON asked First Lord of the Treasury whether, considering the serious accusations sanitary and other structural defects recently made against buildings erec by the London School Board, the Government would give facilities for the c sideration of the Sanitary Registration of Buildings Bill now before the Ho or would themselves introduce a Bill to prevent the use of schools and ot new public buildings until their fitness for sanitary occupation had been ce fied by some competent authority.—Mr. W. H. SMITH said the Governm could not undertake to give any exceptional facilities for the consideratio the Sanitary Registration of Buildings Bill, nor could they at present give undertaking to introduce a Bill to prevent the use of schools and public bu ings until their sanitary fitness for occupation has been certified. The gr ing of certificates as to the sanitary fitness of premises was not unattended w risk, unless the duty of examination was exercised with great care, and u circumstances which admitted of a proper examination being made. Any tificate as to sanitary condition would be regarded as relieving from respo bility as regards sanitary arrangements those on whom the responsibility sh rest.

Succi's Forty Days' Fast.—Mr. MATTHEWS, in reply to Mr. S. SMITH, sai law gave him no power to interfere with the public performance of adult sons on account of their danger or their folly. If the performance of the ing man was open to objection on grounds other than those of danger,

licensing authorities might possibly take the matter into consideration when the next application was made for a licence.

Sale of Food and Drugs Act.—Mr. O. V. MORGAN asked the Secretary of State for the Home Department whether the metropolitan magistrates had yet conferred together with the object of arriving at some common understanding as to the administration of the Sale of Food and Drugs Act.—Mr. MATTHEWS said the chief magistrate informed him that he had conferred with his brother magistrates on this subject. They were unanimous as to the importance of the facts, and as to the principle which should guide them in fixing the amount of fines; and they attributed the difference in the amount of fines inflicted solely to the variety of the circumstances in each case, the variation ranging from gross fraud to simple accident, and from large to very small adulteration.

Tuesday, April 29th.

Pharmacy Act (Ireland) 1875.—Mr. JOHNSTON obtained leave to bring in a Bill to amend the Pharmacy Act (Ireland) 1875. The Bill was brought up and read a first time.

Tuberculous Meat.—Mr. G. BALFOUR asked the President of the Board of Agriculture whether he proposed to take any action in view of the facts laid before him by a deputation on the 24th instant, relative to the disease of tuberculosis in cattle.—Mr. CHAPLIN said he stated to the deputation that the first thing in his judgment to be done was to obtain an authoritative opinion as to how far and at what stages of the disease meat derived from animals suffering from tuberculosis was unfit for and dangerous as human food, and that he would consult with his right hon. friend and his colleagues, without delay, as to the most satisfactory means of obtaining such an opinion. He had taken an early opportunity of doing so, with this result, that as this was a question primarily affecting the public health, the President of the Local Government Board proposed to institute a scientific inquiry into the question without delay.

INDIA AND THE COLONIES.

INDIA.

ZENANA MISSION.—The annual report of the Zenana Mission testifies to the good work which is being done in India by this comparatively young organisation. It has established hospitals and dispensaries in the great cities of Benares and Lucknow, and is contemplating starting one or two more, for which £3,000 has either been given or promised. At the Benares and Lucknow hospitals there were, it is stated, no fewer than 5,600 patients last year.

NEW SOUTH WALES.

AT the opening of the New South Wales Parliament on April 10th it was stated that the following among other Bills would be submitted:—to improve the water supply in town and country; to provide protection for women and children employed in factories and workshops; and to amend the law relating to public health.

CAPE OF GOOD HOPE.

THE LEPERS OF ROBBEN ISLAND.—On the occasion of the laying of the foundation stone of the new leper hospital on Robben Island, on April 8th, Sir Henry Loch congratulated the Government upon the steps that had been taken to provide accommodation calculated to provide sufficient room for what he believed would be the demands on the part of the patients for the next few years to come. His Excellency then dwelt upon the difficulties which had to be considered and overcome by the Government before they could enforce the Act which provided for compulsory removal of lepers to Robben Island. He went on to say that the manner in which the Government's power was exercised must depend on a variety of circumstances, and the public of England would be making a very great mistake if they supposed, because they heard of isolated cases of leprosy in distant parts of the colony, that the matter was not being carefully dealt with by the Government of the colony. It would be a great pleasure to him to convey to those interested in this question the assurance that there was no part of the world, as far as he was aware, where the Government was taking better, more stringent, or more speedy measures to provide an adequate institution for the care of that unfortunate class of people, and he believed that in a short time a still larger number of lepers would be attended to and taken care of by the Government.

ABERDEEN ROYAL INFIRMARY.—At a meeting of the Infirmary Board of Directors, held on April 23rd, the resignation of Dr. Ogilvie Will was accepted with regret. At the same time, it was agreed to request Dr. Will to continue his connection with the hospital as consulting surgeon. At the same meeting the following resident assistants to the hospital staff were appointed for twelve months: Dr. Alexander Mackay, Dr. William Bulloch, Dr. Francis Kelly, and Dr. Peter Fowlie.

OBITUARY.

GEORGE CORNELIUS JONSON, L.R.C.P.EDIN., L.S.A.

THE death of Mr. George Cornelius Jonson, which occurred on April 14th, three days before the twenty-fifth annual dinner of the Royal Medical Benevolent College at Epsom, of which he was a ruling spirit, has been deeply regretted by a wide circle of admirers. Mr. Jonson was for many years in good general practice in Belgravia, where he gained the confidence and friendship of a large and influential circle of friends and patients, as is shown by the liberal contributions which he collected for the Royal Medical Benevolent College and for the British Medical Benevolent Fund from those outside the profession as well as from his brethren. Mr. Jonson was also for some years one of the visiting apothecaries of St. George's Hospital, and took great interest in the management of the dispensary of that institution. For many years of his later life Mr. Jonson was blind from cataract. He lived to have the cataract removed, and saw perfectly to the end of his life.

Mr. Jonson was twice married, and by his second marriage leaves three sons and a daughter. At the dinner of the Royal Medical Benevolent College, Sir James Paget, at the close of his speech, said, "We may justly mingle one sigh of great regret with the happiness and hopefulness with which we meet to-night, for of all the benevolent, earnest, and hard-working men whom I have known in our profession, none ever surpassed George Jonson."

Mr. J. Lumsden Propert sends us the following on the late Mr. Jonson's work at Epsom College: "He was the last survivor of the band of devoted men who stood by my late father's side on the platform at the Hanover Square Rooms in June, 1851, when the scheme of the College was first launched. He thus worked energetically for the College for close on forty years. He collected between £5,000 and £6,000 for its funds. He was the Chairman of the Council, and with the exception of the time when he was operated upon for cataract, scarcely ever missed a meeting. The operation was completely successful, and he immediately resumed his duties, and carried them on to the end. His retirement from active practice some years since left him leisure to inquire minutely into the cases coming up for election at the College, and he never failed to find out the most deserving cases, affording them the help of the large number of votes which were allotted to him in virtue of the sums of money collected by him for the funds, but also aiding them by valuable advice as to the conduct of the canvassing. He was the last link which connected the past of the College with the present."

Dr. W. H. Broadbent (Treasurer of the British Medical Benevolent Fund) writes to us: "Mr. Jonson was connected with the British Medical Benevolent Fund in the time of Mr. Toynbee, under whose hands it first assumed any importance, and soon after his death was appointed Chairman of the Committee, the appointment being renewed from year to year ever since. During the whole of this time he scarcely ever missed a meeting, excepting after an operation for cataract which he underwent a few years ago, and during an illness in the early part of the past winter. He usually brought with him a contribution from some friend, and he collected a large amount for the charity. But great as were his services in this respect, the benefit he conferred upon the applicants for relief by his kindness and thoughtful care for them individually were still greater. At one time he visited applicants who were within his reach, and made himself acquainted with their special needs, and in this way came to see that the help and comfort afforded by the grants or annuities would be greatly increased if they were paid in instalments, and this he not only saw, but actually undertook to carry out. At the time of his death, he was sending out every month sixty-six such instalments to annuitants and it was a point of honour with him to make sure that every one had his cheque by the first post on the 1st of the month. Wherever he was, he so timed the posting of the letters as to secure this.

"He had naturally become a centre for all charitable work relating to the profession, and this was the main occupation of his life for many years. His memory was extraordinary, and to the last he seemed to remember the particulars of every case which had come under his notice.

"He attended the meeting of the Committee on March 25th, and appeared to be recovering strength. He was in excellent spirits,

and was looking forward to further work on behalf of the Fund. On Good Friday, April 4th, the stroke which proved fatal came on."

ROWLAND MORRIS FAWCETT, M.D., L.R.C.S.Edin., L.S.A.

We have to record the death of Dr. Rowland Morris Fawcett, of Cambridge, who died on April 22nd, at the advanced age of 86. He was the son of the Rev. John Fawcett, Incumbent of St. Cuthbert's, Carlisle, and was born in 1803. He commenced his medical studies in Edinburgh, being articled as pupil to Mr. John Bell, of that city, and he afterwards studied under Professor Simpson, and became L.R.C.S.Edin., in 1824, and proceeded to the degree of M.D.Edin. in 1825. The following year he became L.S.A.Lond., having continued his studies up to that time at St. Bartholomew's Hospital.

How much he saw of the early use of many important drugs may be realised from the fact that in his student days iodine was a mere scientific curiosity, having only recently been discovered by M. Courtois, of Paris, in 1812, and the writer has heard him relate how a friendly wager of a dinner for 12 was laid with his friend Dr. Craig, of Edinburgh, about its future application, the correctness of his opinion being duly attested by the dinner taking place many years after.

He commenced practice in Leeds, and his cousin being Vicar of Leeds and his brother being incumbent of the large district of Woodhouse in that town, seemed to give him the chance of introductions which might lead to practice. After a short time, however, he had the offer of a partnership with Mr. James Farish, of Cambridge (the brother of Professor Farish), whose health was failing on account of advanced age, and he settled in Cambridge in 1828, and soon had one of the largest practices in the town. In 1843 he obtained the assistance of Mr. James Hough, whom he soon after took into partnership, and who remained with him until 1883, when Mr. Fawcett retired from active work.

In the midst of a very large obstetric practice he found time, even during his busiest years, to devote not only to municipal affairs as an alderman, up to the passing of the Reform Bill, but also to politics. He was Mayor in 1843, and was a magistrate for the borough for 50 years, and a deputy-lieutenant for the county about the same period. He was a member of the Improvement Board up to the time of its dissolution, in 1889, and during this period took an active interest in the sanitary condition of the town and contributed largely to the near solution of the much-vexed drainage question.

Amongst the charities with which his name was associated the Eastern Counties Asylum for Idiots claimed for a number of years a large share of his attention. He certainly set himself a very high standard of what life ought to be, and as a leading physician has said of him: "His conduct in matters professional was consistently upright and honourable, as it was in all other matters, so that he was as respected by the profession as he was by all classes of his fellow townsmen."

His erect figure and resolute look as he took his daily walk in Trumpington Street will be missed by many a Cambridge man.

BRIGADE-SURGEON MACDONALD HOUSTON, M.D.Aberd., M.R.C.S.Eng.

Brigade-Surgeon James Macdonald Houston, whose death occurred on April 20th at Edinburgh, was the second son of the late Mr. James Houston, Tullochgriban, Strathspey, and was educated at Elgin, Aberdeen. He was an M.D. of King's College, Aberdeen, and a Member of the Royal College of Surgeons of England. He entered the Indian Medical Service in 1858, where he had a useful and honourable career. He was first posted to the Madras Presidency. After a few years' service in the military department he was appointed to the medical charge of the irrigation works on the Upper Godavery, where his duties were of an arduous nature, and involved much exposure in a highly malarious climate. He never spared himself, with the result that after five or six years his health broke completely down, and he had to return home.

On his return to India he was for some years civil surgeon at Tanjore, which station he left on being selected to hold the important appointment of Durbar physician to His Highness the Maharajah of Travancore. He was not only physician to His Highness, but was also chief of the entire medical department of the State. The hospitals at the capital were directly under his charge, and those in the several districts were administered and inspected by him. His strict impartiality and high character secured for him the respect of his numerous subordinates, wh his ever-ready kindness to them and to the small European cor munity, whose medical attendant he also was, made him great beloved. He retired from the service in 1888, after having he the Travancore appointment for about fifteen years.

His wife, who was a daughter of the late Surgeon-General Ey predeceased him, leaving one son, who is now an officer in t Royal Engineers, and is at present serving on the Afghan fronti

WILLIAM MATTERSON, M.D.St.And, F.R.C.P.Lond., M.R.C.S.E., L.S.A.

Dr. William Matterson, who died at York on April 23 within a month of completing his 75th year, was the son of t late William Matterson, who was for many years a medical pra titioner in that city. Dr. Matterson was born in May, 1815, a became a licentiate of the Society of Apothecaries in 1837, and Member of the Royal College of Surgeons, England. He took h M.D. degree in 1862, and thirteen years later was admitted a F low of the Royal College of Physicians. For some time he w physician at the York County Hospital, and at the time of l decease was a consulting physician in connection with that ins tution, and filled a like office in regard to the York Luna Asylum. He rendered valuable assistance as a lecturer to t School of Medicine which was formerly in existence in the cit He was a justice of the peace for the city, and belonged to t executive committee of the Wilberforce School for the Blin He took an active interest in the operations of various organis tions for the furtherance of church work. To quote the words an appreciative writer in a local paper, Dr. Matterson's dea "brings to a close a career whose influence for good has pe meated the public and private life in which he moved."

P. P. AGIUS, M.D.

By the death of Dr. P. P. Agius, which occurred on April 16th, t medical profession in Malta has been deprived of one of its mo respected members. He held for a long time the post of Distri Medical Officer, and by his courteous manner and skill in his pr fession he soon built up an extensive practice. He held also f many years the important office of Superintendent of the Lunat Asylum, and afterwards that of Chief Sanitary Officer of t island. The difficult and most important duties in connecti with these offices were discharged by him with the utmost pun tuality and impartiality, thus rendering him very valuable to t Government, while his sterling integrity won for him a lar circle of friends amongst his professional brethren and the pub in general.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE INQUIRY IN REGARD TO METROPOLITAN MEDIC CHARITIES.

Dr. John Page Hentsch (Camberwell) writes: It is stated a circular recently addressed to the profession by the Chari Organisation Society, that "the provision of gratuitous medic relief to large numbers of persons, both as in- and out-patien without inquiry or any sufficient regulations, is, as investigati shows, a serious obstacle to the promotion of provident instit tions, at which medical treament can be secured by small perio cal payments," to which I have replied in the following way; a as the subject is of vast interest to the general practitioners, m I ask the favour of your publishing it?

To the Secretary, Charity Organisation Society.

Sir,—With reference to Paragraph 3 of the circular you recently sent to m I beg to say that as a member of the Executive Committee of "the Medi League," I have had a good opportunity of ascertaining the feelings of a lar number of general practitioners upon the subject of the formation of provide dispensaries, and feel certain that they are strongly opposed to any su scheme, and, much as they would like to see the present out-patient relief sy tem greatly checked, they would by far rather it should remain as it is than by such check it would in any way facilitate the establishment of provide dispensaries. I am aware of individual cases which would help to prove t injuries inflicted upon the profession and the poor by the way in which h pital out-patient (so-called) relief is at present administered.—Yours faithful

John P. Hentsch.

Dr. E. O. Wright, of the Medical Staff Corps, was among t recipients of testimonials from the Royal Humane Society f rescuing a trooper of the 21st Hussars whose horse shook him o while at swimming practice in a tank at Bangalore.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ZYMOTIC MORTALITY IN LONDON.

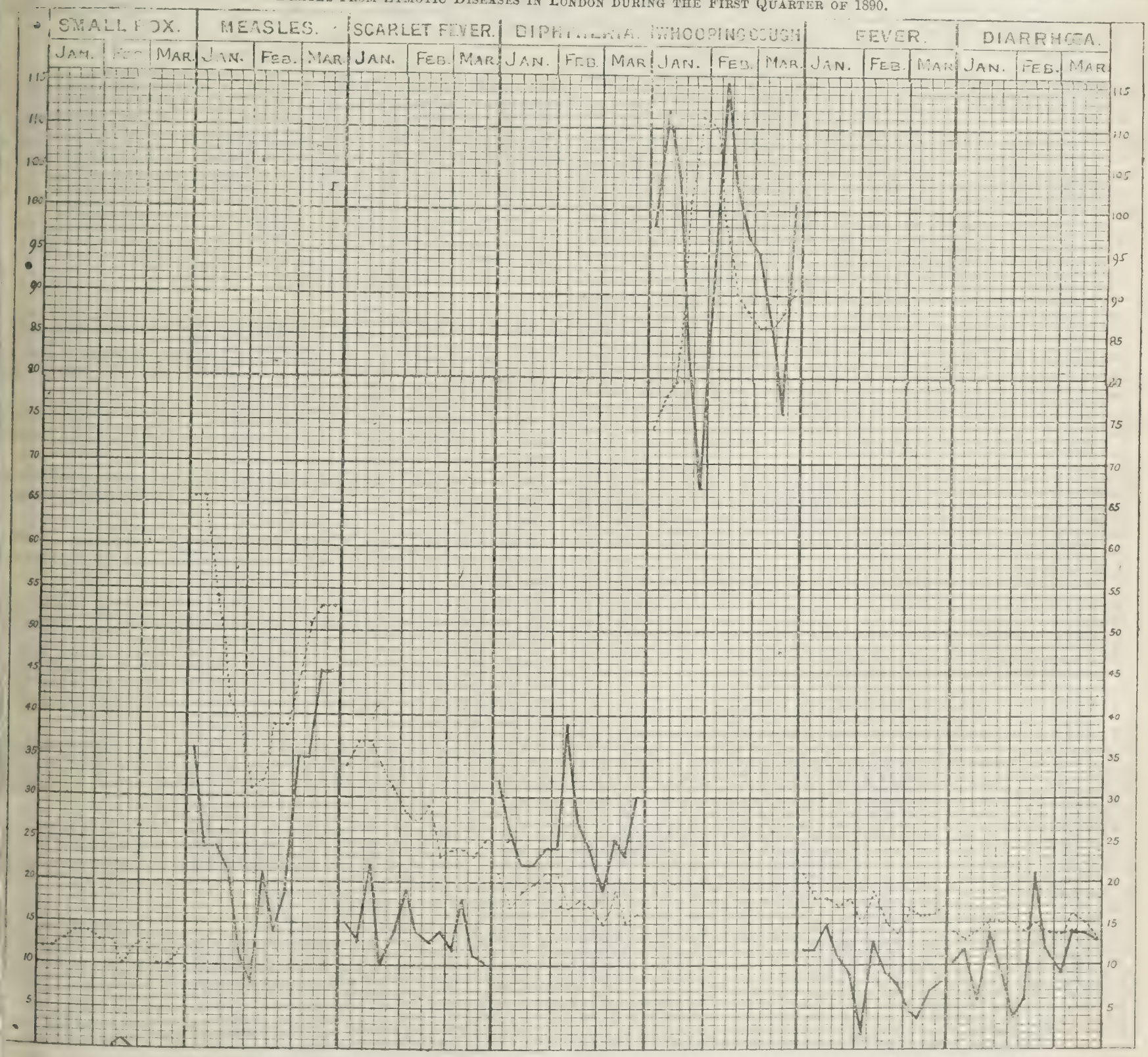
THE accompanying diagram shows the prevalence of the principal zymotic diseases in London during each week of the first quarter of the current year. The fluctuations of each disease during the period under review, and its fatal prevalence as compared with that recorded in the corresponding weeks of recent years, can thus be readily seen.

Small-pox.—Only one death from this disease was registered during the first thirteen weeks of the current year, the average number in the corresponding periods of the ten preceding years, 1880-89, having been 158. This fatal case belonged to Holborn sanitary area; it occurred in February, and was the first death from small-pox recorded in London since November last. The Metropolitan Asylum Hospitals contained 7 small-pox patients at the end of March last, and 14 had been admitted since the beginning of the year.

Measles.—The deaths referred to measles were below the average throughout the quarter; the total fatal cases of this disease did not exceed 338, the average number being 610. Among the various sanitary areas of the metropolis, the highest proportional fatality of measles was recorded in Islington, Bethnal Green, Clerkenwell, Bermondsey, and St. Luke's.

Scarlet Fever.—The very low rate of mortality from scarlet fever in recent quarters was fully maintained during the first three months of this year. The deaths referred to this disease were only 185, whereas they would have reached 376, or more than twice as many, had the average mortality in the corresponding quarters of the preceding ten years been recorded last quarter. The number of scarlet fever patients in the Metropolitan Asylums

DEATHS FROM ZYMOTIC DISEASES IN LONDON DURING THE FIRST QUARTER OF 1890.



Note.—The black lines show the *recorded* numbers of deaths from each disease during each week of the quarter. The dotted lines show the *average* number of deaths in the corresponding week of the preceding ten years, 1880-89, corrected for increase of population.

Hospitals, and in the London Fever Hospital, which had steadily increased during the first six months of 1882 to 1609, had declined to 1,083 at the end of March. The number of cases admitted into these hospitals, which had been 685, 1,523, and 2,010 in the three preceding quarters, declined to 1,082 during the first three months of this year. Among the sanitary districts of London the highest fatality of scarlet fever occurred in Holborn and Fulham.

Diphtheria.—The prevalence of diphtheria presents a marked contrast to that of scarlet fever, for while the latter was below the average throughout the quarter, the former showed an excess during each week. The fatal cases recorded during the three months under notice were 337, against an average of 236. During the quarter, 185 cases of diphtheria were admitted into the Metropolitan Asylums Hospitals, against numbers increasing from 83 to 275 in the four quarters of 1889; 111 patients remained under treatment at the end of the quarter. Among the various sanitary areas diphtheria was proportionally most fatally prevalent in Hammersmith, Poplar, Holborn, and Bethnal Green.

Whooping-cough.—This was by far the most fatal zymotic disease in London last quarter, although the 1,227 deaths referred to it exceeded the average by only 46. Among the various sanitary areas, whooping-cough showed the greatest proportional fatality in Camberwell, Plumstead, Mile End Old Town, Bethnal Green, and St. George-in-the-East.

Fever.—Under this heading are included deaths from typhus, typhoid fever, and simple and ill-defined forms of continued fever. The "fever" mortality during last quarter in London was lower than in the corresponding period of any year on record, and was below the average during each week of the quarter. The total deaths referred to different forms of fever were only 115, against an average number of 221 in the first quarters of the ten preceding years; and in no sanitary area of the metropolis was "fever" fatally prevalent during last quarter.

Diarrhœa.—The deaths from diarrhœa registered during the three months under notice were 144, and were 43 below the corrected average.

In conclusion, it may be stated that during the first quarter of this year the 2,347 deaths referred to these principal zymotic diseases were more than 20 per cent. below the corrected average number in the corresponding periods of the ten preceding years, 1880-89, and that in only two of them, namely, diphtheria and whooping-cough, did the mortality show any excess.

FEES TO MEDICAL OFFICERS OF HEALTH.

M. O. H. writes: I hold the office of medical officer of health to the urban sanitary authority; my salary is paid in part by the Local Government Board. I am in private practice. When called upon to give evidence in court (magistrates) in proof of nuisances injurious to health, am I entitled to a fee, or is the granting of a fee at the option of the magistrates? If fees are not allowed, what is my proper course to pursue?

*** A medical officer of health is entitled to a fee under the circumstances mentioned. Some medical officers of health whose whole time is not engaged by the authorities they serve, are in the habit of charging fees; others, who are engaged on the same terms, are not. Magistrates naturally attach more weight to the evidence of those officers who consider it part of their public duty to appear as witnesses in cases in which their testimony is important, and who do not gain pecuniary advantages by appearing.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons 5,730 births and 3,848 deaths were registered during the week ending Saturday, April 26th. The annual rate of mortality in these towns, which had increased from 19.3 to 20.9 per 1,000 in the three preceding weeks, declined again to 20.7 during the week under notice. The rates in the several towns ranged from 16.0 in Brighton, 16.5 in Birmingham, and 17.1 in Huddersfield to 27.1 in Salford, 29.1 in Sheffield, 30.4 in Manchester, and 30.7 in Newcastle-upon-Tyne In the twenty-seven provincial towns the mean death-rate was 22.5 per 1,000, and exceeded by 4.0 the rate recorded in London, which was only 18.5 per 1,000. The 3,848 deaths registered during the week under notice in the twenty-eight towns included 400 which were referred to the principal zymotic diseases, against numbers increasing from 350 to 420 in the three preceding weeks; of these, 153 resulted from whooping-cough, 101 from measles, 56 from scarlet fever, 35 from diarrhœa, 31 from diphtheria, 24 from "fever" (principally enteric), and not one from small-pox. These 400 deaths were equal to an annual rate of 2.1 per 1,000; in London the zymotic death-rate was 2.4, while in the twenty-seven provincial towns it averaged 1.9 per 1,000, and ranged from 0.0 in Wolverhampton and in Huddersfield, and 0.2 in Hull to 3.3 in Norwich, 3.8 in Brighton, 4.1 in Salford, and 5.7 in Derby. Measles caused the highest proportional fatality in Norwich, Liverpool, Plymouth and Derby; scarlet fever in Birkenhead and Manchester; and whooping-cough in Norwich, Oldham, Plymouth, Bolton, Salford, and Brighton. The mortality from "fever" showed no excess in any of the towns. Of the 31 deaths from diphtheria recorded during the week under notice in these towns, 20 occurred in London, 6 in Salford, 2 in Manchester, and 2 in Birmingham. No fatal case of small-pox was registered during the week under notice, either in London or in any of the large provincial towns; and 3 cases of this disease were under treatment in the Metropolitan Asylums Hospitals on Saturday, April 26th. These hospitals contained 1,052 scarlet fever patients on the same date, against 1,041 and 1,049 at the end of the two preceding weeks; 83 cases were admitted during the week, against 84, 79, and 70 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 4.1 per 1,000, and was slightly below the average.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, April 26th, 865 births and 627 deaths were registered in the eight principal Scotch towns,. The annual rate of mortality in these towns, which had been 22.8 and 26.0 per 1,000 in the two preceding weeks, declined again to 24.2 during the week under notice, but exceeded by 3.5 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Perth and Greenock, and the highest in Aberdeen and Glasgow. The 627 deaths registered in these towns during the week under notice included 86 which were referred to the principal zymotic diseases, equal to an annual rate of 3.3 per 1,000, which exceeded by 1.2 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Aberdeen and Dundee. The 301 deaths registered in Glasgow included 16 from whooping-cough, 14 from measles, and 3 from "fever." In Edinburgh, 6 fatal cases of whooping-cough, 3 of measles, and 3 of "fever" were recorded. Eight deaths were referred to measles in Dundee, and 4 in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 6.0 per 1,000, against 4.1 in London.

HEALTH OF IRISH TOWNS.

During the week ending Saturday, April 19th, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 27.3 per 1,000. The lowest rates were recorded in Lurgan and Dundalk, and the highest in Galway and Drogheda. The death-rate from the principal zymotic diseases averaged 2.0 per 1,000. The 179 deaths in Dublin during the week under notice were equal to an annual death-rate of 26.5 per 1,000 (against 26.6 and 24.5 in the two preceding weeks), the rate for the same period being 19.0 in London and 24.0 in Edinburgh. These 179 deaths included 5 which resulted from the principal zymotic diseases (equal to an annual rate of 0.7 per 1,000), of which 2 were referred to "fever" and 2 to whooping-cough.

MEDICAL NEWS.

The influenza epidemic is reported to have reached Mandalay.

The distribution of prizes of the Faculty of Medicine, University College, London, will take place on Tuesday, May 20th. Dr J. Russell Reynolds, F.R.S., will preside.

The French Minister of Marine has absolutely prohibited the medical officers of the navy from practising hypnotism "under any pretext whatever."

A policlinic, or medical institute, similar to the policlinic at Vienna and Berlin, will be opened at Paris at 28 rue Mazarin in a few days.

The annual dinner of the Pharmaceutical Society of Great Britain will take place at Freemasons' Tavern on Wednesday, May 21st.

The provision of a separate building for infectious cases at the Warwickshire County Lunatic Asylum, which has been sanctioned by the Council, will, it is anticipated, cost £4,600.

The Paris Municipal Council has just voted 270,000 francs (£10,800) for the construction, on ground cut off from the Mont Parnasse Cemetery, of a sleeping refuge for pregnant women in a state of destitution.

An election for a medical officer to Mullaghglass Dispensary will take place this week. Dr. Palmer, J.P., of Crossmaglen, is a candidate, and it is expected that he will succeed the late Dr. Lighburne, whose sudden demise we recently recorded.

The first experiment in the cultivation of opium in Russia has recently been made in the Lipowez district of the Kieff "government." From an analysis made by M. Bogdanow of some opium grown on the estate of Herr Rewa, it appears that it contains 5.1 per cent. of morphine.

The New Hospital for Women.—The Marchioness of Salisbury opened on April 29th a bazaar at the New Hospital for Women, Euston Road, in aid of the ground-rent fund of the institution. The building is expected to be ready for opening for hospital purposes in the course of a few weeks.

Druggists and the Licensing Question.—At the Edinburgh Licensing Court, on Thursday last, applications were presented on behalf of four chemists and druggists for wine licences. The applications were opposed by the Licensed Grocers' Association, and were severally refused by the Court.

THE honorary title of "Professor" has been conferred on Dr. Gottstein, of Breslau, who though he has for many years been recognised as one of the foremost laryngologists in Germany, has hitherto had no higher rank in the teaching hierarchy than *Privatdocent*.

IT has been decided to give four annual money prizes for successful vaccination in the Venetian and Mantuan provinces of Italy. These prizes were recently awarded for the first time, the sums given being respectively about £21, £18, £14, and £10. Ninety-one other practitioners received "honourable mention."

THE Hospitals Association have placed one of their ambulances, with a zinc cover shelter, adjoining the cab rank at St. Clement Danes Church, Strand. Similar ambulances have been placed recently by the Hospitals Association at Charing Cross and at the Marble Arch, Hyde Park.

WE are requested to state that an address on the Scientific Observation of Pupils in Schools will be given by Dr. Francis Warner in the Board Room of the School Board Offices, Victoria Embankment, on Friday, May 2nd, at 6 P.M. The chair will be taken by Mr. W. Rouston Bourke, Chairman of the School Management Committee.

IT is stated that the French Minister of Justice has in view the institution of a Superior Council of Legal Medicine. It will consist of a commission of physicians and magistrates, whose duty it will be to give their opinion on the responsibility of criminals, and on such questions as the influence of suggestion and heredity.

RECENTLY published statistics show that, in 1888, there were 709 chemists' shops in Holland. The *personnel* of these establishments comprised 21 fully qualified pharmacists, 123 assistants under the old regulations, 68 apprentices (including 20 girls), and 70 assistants under the new regulations, of whom 247 were women.

THE French Exhibition at West Brompton will devote the proceedings of one day's special entertainment to the French Hospital in London, which is about to open in its new building. As the Exhibition is very varied and attractive, and likely to be a favourite summer resort for the season, it may be hoped that the funds of the hospital will largely benefit by this generous offer.

NATIONAL HEALTH SOCIETY.—The distribution of medals and certificates to candidates who have successfully passed the examinations of the National Health Society, 44, Berners Street, on domestic and personal hygiene, first aid to the injured, and home nursing will be made on Tuesday, May 6th, at 3.30 P.M., at Grosvenor House, instead of May 12th as previously announced.

DEATH UNDER CHLOROFORM.—A death under chloroform is stated by the *New York Medical Record* to have occurred at Columbus, Ohio, on March 26th. The patient was a man, aged 56, who had sustained a fracture of the femur. Chloroform was administered and the patient succumbed before any attempt at reduction had been made.

ST. MICHAEL'S HOSPITAL, KINGSTOWN.—A ball in aid of the funds of this charity took place last week. On Saturday the amateurs of the Grenadier Guards devoted the proceeds of a morning performance to the same institution. The burlesque of *Miss Maritana*, written by Lieutenant Nugent and Mr. Whitbread, was admirably put upon the stage. Mr. Nugent's acting was perfect. A considerable sum must have been realised.

FISH POISONING.—The *Cape Argus* gives an account of the poisoning of a whole family in Cape Town by the eating of poisonous fish. A widow, her five children, and three boarders, who partook of a fish supper, were seized on the following morning with violent vomiting and purging, and other unmistakeable symptoms of poisoning. Dr. Baird prescribed for the sufferers, but two of the children, aged respectively $2\frac{1}{2}$ years and 8 months, succumbed.

CREMATION.—The sixth meeting of delegates from the various cremation societies will meet at Berlin from August 4th to 6th. The following is the programme as at present arranged: Report on the position of legislation with regard to cremation in different countries; the conditions of transport of dead bodies on railways in Germany and elsewhere; discussion on the best kind of cremation chamber, and the results by experience in different countries.

PRESENTATION.—In connection with the changes which are now taking place in the Grimsby and District Hospital, a presentation was made to the late matron, Miss Mountford, on April 28th, by members of the medical staff and managing committee. The presentation was made by Dr. Moody, as senior surgeon, and consisted of an address and a purse containing a handsome sum of money. The departure of Miss Mountford is regretted by all who have met her in the discharge of her duties at the hospital, as well as by a large circle of private friends.

THE INTERNATIONAL MEDICAL CONGRESS AT BERLIN.—In the Section of Pharmacology, a discussion on Anæsthetics will be opened by Dr. Lauder Brunton, and one on the Pharmacopœia question by Dr. Langgaard. Addresses will also be delivered by Professors Binz, Böhm, Brackett, and Liebreich. A *souvenir* of the meeting will be presented to the members of the section in the form of a "conspectus" of all the German essays on experimental pharmacology which have appeared during the last twenty-five years.

THE RABIES ORDER IN MIDDLESEX.—The report of the Executive Committee of the Middlesex County Council for the quarter ending March 31st last gives some important statistics on the rabies question. During the three months, no fewer than 1,039 stray dogs were seized, of which only 108 were claimed, the remaining 946 being sent to the Dogs' Home or slaughtered. During the six months ending March, 18 dogs were destroyed suffering from rabies, the largest number of which were terriers of various breeds.

GERMAN MEDICAL STUDENTS.—According to official statistics, the following were the numbers of medical students attending the various German universities during the winter session 1889-90: Münich heads the list with 1,422, Berlin comes next with 1,373, then come in order Würzburg with 998, Leipzig with 944, Greifswald with 377, Breslau with 358, Strassburg with 353, Bonn with 343, Erlangen with 340, Freiburg with 327, Halle and Heidelberg each with 284, Königsberg with 258, Kiel with 241, Marburg with 239, Tübingen with 232, Jena with 216, Göttingen with 211, Giessen with 158, and Rostock with 145.

THE BOYS' CAMP.—Last year the London Diocesan Council undertook the work of forming a camp, where a fortnight's fresh air and freedom could be enjoyed by boys whose ages varied from 14 to 17, who were earning wages, but wages not sufficient to permit of their taking a change. The boys themselves contributed the small sum of 2s. 6d. a week. The Council obtained tents and the necessary camp equipment at an outlay of £220, and the railway company has given special cheap fares. It is prepared to repeat the experiment this year, and a camp will shortly be established at Sandhills, near Deal, on the same ground as last year.

PUERPERAL MASTITIS.—Dr. M. Deis has collected a long series of cases of puerperal inflammation of the mammary glandular tissue, and embodied his researches in a thesis published last year at Heidelberg. About 3.6 per cent. of lying-in women are attacked, the majority being primiparæ. In half the cases the inflammation subsides without suppuration. Mastitis begins, as a rule, between the eighth and tenth day, and lasts from three to five days. The outer and externo-inferior lobes of the gland are the most frequently attacked. The temperature ranges from 100° to 104°, the maximum being usually attained on the first day of illness.

PROPOSED STATUE TO CLAUDE BERNARD.—Soon after the death of Claude Bernard, who was born not far from Lyons, the Faculties of Medicine and Science of that city determined to erect a statue to his memory in the Court of Honour. After a considerable sum had been collected and M. Aubert (the artist selected) had executed his model, the project was allowed to lapse so far as that no order was given for the reproduction of the statue. Professor R. Lépine, who has recently joined the committee, now appeals anew for subscriptions, which may be sent to the Secrétariat de la Faculté de Médicine, quai Claude Bernard, Lyons. The Conseil Général of the Rhone has recently voted the sum of 500 francs.

GRANTS FOR SUCCESSFUL VACCINATION.—Mr. Philip E. Hill, public vaccinator, Crickhowell district, Crickhowell Union, has received, for the seventh time in succession, the grant for efficient vaccination.—Mr. Price Jones, public vaccinator, Eastern district, Corwen Union, has received for the first time a grant of £16 19s. for efficient vaccination.—Mr. Felix Jones, M.R.C.S., etc., of Llanfyllin, Montgomeryshire, has received for the third time the

Government grant for successful vaccination.—Mr. J. H. Lloyd M.R.C.S.Eng., etc., public vaccinator for the Collumpton and Kentisbeare districts, has been awarded the Government grant for successful vaccination.

THE foundation stone of the new County Lunatic Asylum, Claybury—which it is stated will cost half a million of money—will be laid by the Chairman of the London County Council, Lord Rosebery.

DISORDER IN A LUNATIC ASYLUM.—It is stated that on Sunday last the inmates of the Dundrum Criminal Lunatic Asylum became very disorderly while at dinner, because of the withdrawal of an allowance of beer. They threw the food about the dining room, and broke some of the dishes. The warders being unable to control the malcontents, the police were called in, and the rioters were promptly placed in their cells.

GUARDIANS OF THE POOR.—Captain Verney, in moving the second reading of the Guardians of the Poor (Election) Bill in the House of Commons on Wednesday, April 30th, called attention to the general feeling which prevails that guardians did not do their duty in respect of sanitary matters, such as water supply, drainage, and insanitary conditions. If the Bill were passed, the voters would only have themselves to blame if the guardians whom they elected did not discharge their duties satisfactorily.

MEDICAL DEFENCE UNION.—At a numerously attended meeting of the South Wales and Monmouthshire District, held at Neath on April 24th, the following officers were elected:—*President:* Dr. W. Taylor (Cardiff). *Vice-Presidents:* Dr. E. Davis (Swansea), Dr. Morgan (Newport), Dr. H. N. Davis (Rhondda Valley). *Council:* Dr. Evan Jones (Aberdare), Dr. Richwood (Rhymney), Dr. Pringle (Bridgend), Dr. Wood (Pontypool), Dr. Thomas (Newport), Dr. Nell (Penarth), Dr. Hardyman (Cardiff), Dr. C. T. Vachell (Cardiff), Dr. Milward (Cardiff), Dr. Neale (Barry), Dr. D. W. Davies (Lantrissant), Dr. W. B. Davies (Llandrindod), Dr. T. D. Griffiths (Swansea). *Hon. Sec.:* T. Garrett Horder (Cardiff).

PRIZES TO MEDICAL STUDENTS.—The Council of the British Medical Temperance Association having offered a first prize of ten and a second prize of five guineas for the best answers by medical students, the adjudicators awarded these to Mr. James McKendrick (Glasgow) and Mr. W. R. Smith (King's College). Two Edinburgh competitors also received honourable mention—Mr. G. R. Leighton and Mr. Wansburgh Jones. There were four questions on the composition and influence of alcohol; and that all the answers, which were written at examinations held simultaneously at London, Edinburgh, Glasgow, and Belfast, were of a high order of excellence.

PHTHISIS AND THE NEEDLE-WORKERS.—Mr. G. H. Fosbroke, medical officer of health for Stratford-on-Avon Combined Sanitary District, in his annual report calls attention to the fact that about 7 per cent. of the deaths registered were due to phthisis. The percentages of deaths from this cause were highest in the Stratford Urban and Alcester Rural District. He thought it would be found that those engaged in the different branches of the needle manufacturing trade were the chief sufferers. He thought that the needle manufacturers in the district had done all they could to render their factories healthy, but so long as the mechanics did not realise the value of efficient ventilation so long he feared phthisis would dwell among them.

MEDICAL VACANCIES.

The following Vacancies are announced:

BRIGHTON, HOVE AND PRESTON PROVIDENT DISPENSARY.—Surgeon to District No. 8. Applications to the Secretary, 117, Queen's Road, Brighton, by May 14th.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon, unmarried and under 30 years of age. Salary, £120 per annum, with furnished apartments, coal, gas and attendance. Applications to Burgess Smith, Secretary, 76, West Street, Brighton, by May 30th. Election June 6th.

CANCER HOSPITAL (FREE), Brompton, S.W.—House-Surgeon. Salary, £60 per annum, with board and residence. Applications to the Secretary by May 3rd.

CANCER HOSPITAL (FREE), Brompton, S.W.—Registrar, qualified under the Medical Registration Act. Salary, £50 per annum, with board, and residence. Applications to the Secretary by May 3rd.

CARRICKMACROSS UNION (Carrickmacross Dispensary).—Medical Officer. Salary, £115 per annum and fees. Applications to Mr. Thomas Phelan, Honorary Secretary. Election on May 7th.

COUNTY MAYO INFIRMARY.—Resident Apothecary. Salary, £50 per annum, with apartments and rations. Applications to Surgeon Knott, Infirmary House, Castlebar. Election on May 3rd.

DOWN DISTRICT LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 per annum, with the usual allowances of apartments, rations, etc. Applications to the Resident Medical Superintendent. Election on May 3rd.

GREAT BERKHAMSTED RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary to be settled by Joint Committee. Application to H. M. Turner, Clerk to Rural Sanitary Authority, Watford.

HARROW LOCAL BOARD.—Medical Officer of Health. Salary, £50 per annum. Applications, marked "Medical Officer," to be sent to the Clerk, R. E. H. Fisher, by May 13th.

HYDROPATHIC ESTABLISHMENT, Limpley Stoke, near Bath.—Resident Medical Officer, age not under 40, no family. Salary £120 per annum (or more according to experience), with board and laundry. Applications to S. H., at the above address.

KENT COUNTY LUNATIC ASYLUM, Chartham, near Canterbury.—Second Assistant Medical Officer; must be registered. Salary, £120 per annum, with furnished apartments, board and attendance. Applications with testimonials by May 19th, to Allen Fielding, solicitor, Canterbury.

LONDON COUNTY ASYLUM, Hanwell.—A Fourth Assistant Medical Officer. Salary, £150 per annum, rising annually to £180, with board, furnished apartments and washing. Single, and not more than 35 years of age. Double qualification. Applications, on forms to be had by applying to R. W. Partridge, London Asylums Office, 40, Craven Street, Strand, by May 8th.

LONDON COUNTY ASYLUM, Hanwell.—A Fifth Assistant Medical Officer. Salary of £120 per annum, rising annually to £180, with board, furnished apartments and washing. Single; not more than 35 years of age. Double qualification. Applications by May 8th, on forms furnished, to be addressed to R. W. Partridge, Clerk to the Asylums Committee, 40, Craven Street, Strand, W.C.

NORTH LONDON CONSUMPTION HOSPITAL, HAMPSTEAD AND LONDON.—Resident Medical Officer, double qualification. Honorarium, £40 per annum, with rooms and board. Applications to Lionel Hill, M.A., Secretary, 216, Tottenham Court Road, London, W., by May 19th.

PAROCHIAL BOARDS OF STRATHDON AND GLENBUCKET, Aberdeenshire.—Medical Officer. Salary, £65 per annum. Applications to be made to the Chairman of the Boards.

PAROCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary, £50 per annum. Applications to Peter M'Donald, Inspector, New Abbey, Dumfries, by May 12th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, Rangoon Municipality, by June 1st.

ROYAL SOUTH HANTS INFIRMARY.—Assistant to House-Surgeon, qualified or 3rd year's student at a recognised medical school. No salary; board and rooms provided. Applications to T. A. Fisher Hall, Secretary, by May 8th.

SALFORD ROYAL HOSPITAL.—Honorary Medical Officer for the Pendleton Branch Dispensary. Double qualification. Applications to Alexander Hay, Secretary, by May 18th.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Three Honorary Assistant Surgeons. Double qualifications. Applications to the Honorary Secretary, Walter Wilson, by May 12th.

STIRLING DISTRICT ASYLUM, Larbert.—Assistant Medical Officer. Salary £100 per annum, with board and residence. Experience in pathological research will be considered a recommendation. Applications to Dr. Macpherson, Medical Superintendent, by May 15th.

SWANSEA HOSPITAL.—Resident Medical Officer. Salary, £100 per annum with board, furnished apartments, coals, gas, attendance, etc. Application to the Secretary, Jno. W. Morris, by May 15th.

WEST HAM HOSPITAL, Stratford, E.—Assistant House-Surgeon. Honorarium, 30 guineas and board and lodging. Applications to the Secretary.

WEST LONDON HOSPTAL, Hammersmith Road, W.—House-Physician. Appointment tenable May 12th to September 30th. Eligible for election to the office of House-Surgeon for six months from October. Board and lodging. Applications by May 8th to R. J. Gilbert, Secretary Superintendent.

WIRRAL CHILDREN'S HOSPITAL, Wood Church Road, Birkenhead.—Resident House-Surgeon (lady or gentleman), fully qualified. Salary, £50 per annum, with board, lodging and washing. Applications to T. F. Square, Honorary Secretary, 25, Lord Street, Liverpool, by May 15th.

WOOLWICH UNION.—Assistant Medical Officer (Resident), at the Infirmary, Plumstead. Salary, £90 per annum, with apartments, rations and washing. Age not above 30, and single. Doubly qualified. Application on the prescribed printed forms, by May 7th to be addressed to the Clerk to the Board.

YORK DISPENSARY.—Resident Medical Officer. Salary, £130 per annum with furnished apartments, coals, and gas. Unmarried. Applications to S. W. North, Esq., 84, Micklegate, York, by May 6th.

MEDICAL APPOINTMENTS.

AMBROSE, Alexander, B.A., LL.B., T.C., M.D.Dub., appointed Medical Officer for the Buckhurst Hill District of the Epping Union.

BABST, C. T., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Willington Quay Local Board.

BERRYMAN, H. A., L.R.C.P., appointed House-Physician to the General Infirmary, Leeds.

BROOKE, W., M.D., reappointed Medical Officer of Health to the Crompton Urban Sanitary Authority.

BROWN, Walter, M.B.Aberd., L.R.C.P.Lond., M.R.C.S.Eng., appointed Assistant Physician to the General Infirmary at Gloucester and the Gloucestershire Eye Institution, *vice* Henry Peacock, M.R.C.S., F.R.C.S., resigned.

BURTON, R. G., M.D., L.R.C.S., reappointed Medical Officer of Health to the Brentford Rural Sanitary Authority.

CRESSWELL, R., M.R.C.S.Eng., Lond., L.S.A., appointed Medical Officer of Health to the Cheltenham Rural Sanitary District, *vice* H. Jess, deceased.

OSSFIELD, H. V., M.B., C.M.Glasg., appointed Resident House-Surgeon to the Chorlton-upon-Medlock Dispensary.

ALTON, Ernest E., L.R.C.P.Lond., appointed Medical Officer to the Western District of the Cerne Union.

NDAS, R. T., L.M., L.R.C.P., F.R.C.S.I., appointed Medical Officer to the Enniskillen Union, Ely Dispensary.

SHER, T., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Garstang Rural Sanitary Authority.

SHER, J. B., M.B.Edin., and C.M., reppointed Medical Officer of Health to the Whitehaven Union Rural Sanitary Authority.

LES, Oswald, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Ruskington Urban Sanitary Authority.

WAN, Bowie Campbell, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., appointed Sanitary Medical Officer to the Hendon Rural Sanitary Authority, *vice* Dr. W. Thompson.

ANGER, Robert Fawcett, L.R.C.P., L.R.C.S. Edin., appointed Medical Officer for the West Whitby District and Workhouse of the Whitby Union, *vice* J. R. Semple, M.B.Glasg.

NSON, Arthur Stephen, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Paddington Green Children's Hospital, *vice* F. W. Tunnicliffe, M.B., M.R.C.S., L.R.C.P.

DSON, —, M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Ida Hospital, General Infirmary, Leeds, *vice* Walter Thompson, resigned.

LBERT, E. B., M.B., appointed House-Physician to the General Infirmary, Leeds.

ES, Parry, M.D., appointed Medical Officer for the No. 5 District of the Mansfield Union.

GSTON, P. J., L.R.C.P., M.R.C.S., appointed House-Surgeon to the Female Lock Hospital, Harrow Road, *vice* H. Carlos Barr, L.R.C.P., M.R.C.S., resigned.

YD, Edward J., M.D., M.S., M.R.C.S., appointed Honorary Surgeon to the Carnarvonshire and Anglesey Infirmary.

AUDLISH, J., L.R.C.P. L.R.C.S.Eng., appointed House-Surgeon to the General Infirmary, Leeds.

DELEY, Edward, M.R.C.S.Eng., L.S.A., appointed Resident Medical Officer to the Walsall Amalgamated Friendly Societies Medical Association, *vice* Dr. Riordan.

NTLOCH, C., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Chelsea Hospital for Women, *vice* F. J. Wadham, M.R.C.S., L.R.C.P.

VBOULD, Dr., appointed Medical Officer for Abbots Bromley District of Uttoxeter Union, *vice* R. Earlam.

TON, Everett E., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant Medical Officer to the Holborn Union Infirmary, Archway Road, *vice* Arthur Wellesley Harris, resigned.

MMOND, —, M.D., appointed Medical Officer and Public Vaccinator for the Bardfield District of the Dunmow Union, *vice* Dr. Basil Ronald.

ERTS, E. C., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health for Southgate.

TH, H. L., M.K.Q.C.P., L.R.C.S.I., appointed Medical Officer to the Eastern District of the Cerne Union.

Y, E., F.R.C.S., appointed Surgeon to the St. Georges and St. James's Dispensary, *vice* W. R. Cheyne, M.R.C.S., resigned.

ERVILLE, John, M.B., C.M., appointed Resident Assistant Medical Officer to the Workhouse, Fir Vale, Pitsmoor, Sheffield Union, *vice* Frank Jeeves.

ENSON, Robert, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health for Rothwell.

WART, Edward, M.D., M.R.C.P., appointed Honorary Physician to the Marylebone General Dispensary, Welbeck Street, *vice* S. H. Habershon, M.A., M.B., M.R.C.P., resigned.

IVAN, F. W., L.R.C.S.I., L. and L.M.K. and Q.C.P.I., appointed Medical Officer and Medical Officer of Health to the Navan Union, *vice* Dr. Nicolls, deceased.

ON, H. G., M.D.St. And., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health for Sittingbourne.

RS, G. Rayleigh, M.A., M.B.St. And., and C.M., appointed Medical Officer for the Ravesby District of Horncastle Union.

TTLE, Glynn, M.D.Cantab., M.R.C.P.Lond., appointed Medical Officer of the New Bridewell, *vice* J. W. Cavanagh, L.R.C.P.Edin. M.R.C.S.Eng., deceased.

INSON, R., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the General Infirmary, Leeds.

DIARY FOR NEXT WEEK.

MONDAY.

CAL SOCIETY OF LONDON, 8.30 P.M.—Annual Oration by Dr. A. E. Sansom on the Rapid Heart—a Clinical Study; and *Conversazione*.

OLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Mr. J. Howard Munnery: On some Points in the Preparation of Microscopical Sections of Teeth, illustrated by the lantern. Mr. Thos. G. Read: On a Method of Crowning, using a model. Mr. Harry Baldwin: On a Case of Hyperostosis of the Upper Jaw.

ON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Examination of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Cheadle: On Tubercular Peritonitis.

TUESDAY.

OLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Mr. Raymond Johnson: Two Specimens of Persistent Lingual Duct. Mr. Alban Doran: Myoma of the Uterus becoming Sarcomatous. Dr. Norman Moore: New Growth in Lung of a Child. Dr. Norman Moore and Dr. Andrews: Ulcerative Endocarditis (1) with Aneurysm, (2) with Amyloid Degeneration. Dr. Hector Mackenzie: Tubercular Disease with Multiple Abscesses of Liver. Mr. H. B. Robinson: Duct Carcinoma of Breast. Mr. Bruce Clarke: Calcifying Sarcoma of Breast. Mr. James Berry: Fibrochondroma of Tongue. Dr. Rolleston: Tubercular Strictures of the Colon. Card Specimens: Dr. Lediard: Coloured Photograph of Epithelioma of the Scalp. Mr. H. B. Robinson: Dermoid Cyst; Sebaceous Tumour of Scalp; Epithelial Tumour of Soft Palate. Mr. Shattock: Cystic Squamous-Celled Carcinoma of Scalp arising in Sebaceous Cyst; Polypi of Lymphatic Tissue from Child's Rectum.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On Melancholia. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Lupus and Scrofula.

WEDNESDAY.

OBSTETRICAL SOCIETY OF LONDON, 20, Hanover Square, W., 8 P.M.—Specimens will be shown by Mr. J. Bland Sutton and others. Adjourned debate on Dr. Cullingworth's paper on Four Cases of Vaginal Hysterectomy. Dr. W. Sinclair Stevenson: Case of Spurious Pregnancy simulating Ectopic Gestation. Dr. Lewers: On Plugging the Uterus in Severe Cases of *Post-Partum* Hæmorrhage. Dr. Hurry: Case of Symmetrical Erysipelas followed by Premature Labour; Eclampsia *Post Partum*.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Mitchell Bruce: On Graves's Disease. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: Ophthalmoscopic Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Beevor: On Tabes. New Infirmary, Paddington, 4 P.M.—Dr. Broadbent: Senile Changes in the Heart and Vessels considered Clinically. 5 P.M.—Dr. Savill: *Post-Mortem* Examinations.

FRIDAY.

CLINICAL SOCIETY, 8 P.M.—Living Specimens. Mr. Charters Symonds: 1. A Case of Locomotor Ataxy with Laryngeal Paralysis; 2. A Case of Pemphigus of the Conjunctiva with Associated Lesions of Tongue and Larynx; 3. A Case of Epithelioma of Tongue and Œsophagus in the same subject. Dr. Percy Kidd: Case of Cured Tubercular Ulceration of Larynx. Dr. Althaus: A Case of Bilateral Paralysis of the Portio Dura. Mr. W. H. Battle: A Case in which both Hip-joints have been Excised. Mr. W. H. Bennett: An Extreme Case of Arthritis Deformans. Mr. John Poland: A Case of Injury to the Cervical Spine, Chronic Meningitis with Paralysis of Hypoglossal Nerves, etc. Papers at 9 P.M.:—Dr. Sainsbury and Mr. W. H. Battle: A Case of Disease of the Middle Ear in which Symptoms suggesting Central Abscess were completely removed by Treatment of the Ear Trouble. Mr. Arbuthnot Lane: A Case of Thrombosis of the Longitudinal Sinus following Fracture of the Vault of the Skull. Mr. A. T. Norton: A Case in which Excision of the Lower End of the Rectum for Epithelioma was followed by Restoration of Function.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Mitchell Bruce: On Graves's Disease (concluded).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

HARDWICK.—On April 23rd, at Prospect House, Newquay, Cornwall, the wife of Arthur Hardwick, M.B., of a son.

MARRIAGES.

EZARD—HODGART.—At Milliken, Renfrewshire, on April 25th, by the Rev. J. Cornwall Brown, Stewarton, brother-in-law of the bride, and the Rev. Dr. Graham, Kilbarchan, Edward H. Ezard, M.B., B.Sc.(Edin.), to Mary Helen, widow of the late John Hodgart, and daughter of John Glegg, Milliken.

IRVING—FARRAR.—At All Saint's Church, Berbice, on April 8th, by the Most Rev. the Lord Bishop of Guiana, Major Henry Court Irving, L.R.C.S. and P.Edin., Colonial Medical Service, son of Surgeon-General J. Irving, M.D., Bengal Army, retired, to Annie, second daughter of the Venerable Thomas Farrar, B.D., Archdeacon of Demerara.

NAISMITH—SANDERS.—At Hillhead Parish Church, Glasgow, on April 29th, by the Very Reverend Principal Caird, D.D., William John Naismith, M.D., L.R.C.S.Ed., Ayr, to Edith Mary, youngest daughter of the late W. R. Sanders, M.D., F.R.C.P.Ed., Professor of Pathology in the University of Edinburgh.

NEWBOULD—READ.—On April 17th, at St. Paul's Church, Honiton, by the Rev. M. F. Sadler, M.A.,, Newton John Newbould, L.R.C.S.E., L.R.C.P.E., L.F.P.S.G., of Abbots Bromley, Rugeley, second son of the late Rev. William Williamson Newbould, M.A., to Bessie, eldest daughter of Charles Read, Esq., of Honiton.

DEATHS.

GOODMAN.—On April 27th, 1890, at Brigg, Lincolnshire, James, the beloved and only child of Godfrey Goodman, L. and L.K. and Q.C.P.I., L.R.C.S.I. and L.M., and grandson of the Rev. Canon Goodman, of Trinity College, Dublin, and vicar of Abbeystrewry, aged nineteen months.

HOUSEMAN.—At Mount Park Estate, Harrow, on April 28th, Mary Emily, the wife of James Gilpin Houseman, M.D., late of Heywood, Lancashire.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4 F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*——Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH T OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS C BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Edi 429, Strand, W.C, London; those concerning business matters, non-deliv of the JOURNAL, etc., should be addressed to the Manager, at the Office, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on editorial business of the JOURNAL be addressed to the Editor at the offic the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDI JOURNAL are requested to communicate beforehand with the Manager, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications sh authenticate them with their names—of course not necessarily for publicat

CORRESPONDENTS not answered are requested to look to the Notices to Co spondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Offi of Health if they will, on forwarding their Annual and other Reports, fa us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which sp departments of the* JOURNAL *are devoted, will be found under their respe headings.*

QUERIES.

A. W. H. asks to be recommended a suitable lozenge, void of sugar, fo persons.

MEDICUS asks to be recommended a home for inebriates in Norway.

COUNTRY DOCTOR would feel much obliged for information as to wher could obtain a cheap glass eye for a mechanic, and its lowest cost.

DR. HOWARD DUMMERE (Brasted, Sevenoaks) asks to be recommended a l for an inebriate woman (hereditary insanity) 10s. to 20s. weekly. Contr stitution preferred.

RAILWAY CONTRACTS.

MR. STONARD EDYE (Monte Video) writes: Will some of my profess brethren, holding railway appointments, kindly answer the follo queries:

1. What proportion of their wages do the members pay to the sick fun
2. What ratio does the sick pay bear to the subscription?
3. Is the sick pay divided into bed, and walking, and if so how are th spectors appointed and paid?
4. What is the average annual percentage of sick?
5. Is the medical officer considered as one of the railway staff, and ent to the same privileges?

DR. H. S. LEIGH asks for information about the Consumption Sanatoriu Echuca, near Melbourne, Australia. Who is at the head of the institu and what have been the results of the treatment there?

ANSWERS.

M.B.LOND. asks for advice as to books to read for the M.D.Lond., in Me and Mental Physiology?

*** For Medicine: Fagge's *Principles and Practice of Medicine*, or S pell's *Textbook of Medicine* (English translation). For Mental Physio Ladd's textbook on the subject is the best, but it is difficult to name a exactly suited to the purpose. Classes to prepare candidates in mental siology are held by Dr. Savage, at Guy's Hospital, for particulars of apply to the Dean, Guy's Hospital, S.E.

DR. HOSEGOOD (Swinton).—The following are among the latest and best on diseases of women, published at a moderate price: Dr. Berry *Manual of Gynæcology* (Johnston), Dr. Lewers's *Diseases of Women* (L Mr. Doran's *Gynæcological Operations* (Churchill).

GRATES.

A. T. W. writes: After six months trial I can strongly recommend the " ringham." Prime cost moderate; good smoke consumer; of very ne pearance, with tile sides; very economical of coal. Preferable to the W cliffe, or Parsons. I see nothing so good in the Report of the Smoke ment Committee.

TRIPLE QUAL.—Most of the books on children's diseases contain chapt references to the disorders of infants. Some of the earlier chapters in Ashby and Wright's recent work would probably meet our correspo requirements.

BURMAH.

IN reply to "Junior Member," the current value of the rupee in Burmah all practical purposes the same as in Madras or Calcutta. The purc power of the rupee in India and Burmah has not greatly deteriorated recent years, but its exchange value is only about 1s. 5d., and has been The climate of Lower Burmah is very moist and relaxing, many of the being built on marshy ground, on piles. Intermittent fever and dys are not uncommon, although not worse than in many parts of India climate is unsuitable for European children.

PEDICULI CAPITIS.

H. E. CAUTY (Liverpool) writes: "T. M. W." inquires in the JOURNAL of April 19th, what is the best solvent for the cement with which the nits of pediculi capitis are glued to the hairs. I have failed to find any solvent, at all events one of the following have given any satisfactory results, though they have been tried successively as well as independently, that is an oleaginous application has been followed by an alkaline or ethereal: Water hot and cold, soap, soda, potash, ammonia, oil, lanoline, lard, ether, chloroform, benzine, benzoline, and alcohol. Of course nothing is admissible that would destroy the hair, nor can any such continuous action of any remedy take place as was finally effectual some years ago in the case of a beautiful collection of minerals. These having been placed in a cabinet made from new cedar wood, became coated with a deposit of clear gum which no solvent removed, but by boiling for hours the continued heat at last dissipated.

NOTES, LETTERS, ETC.

LABOUR RENDERED EASY BY PLACING THE PATIENT IN THE GENU-PECTORAL POSITION.

RICHARD NEALE (South Hampstead) writes: At page 888, Dr. Ensor refers to the above position not having, to his knowledge, been adopted in similar cases. A glance at section 1574: 1 of the *Medical Digest* will show that in 1867 Dr. Bigman advocated a similar plan.

MEDICAL APPEAL.

The REV. ARTHUR R. CARTER D.D. (The Rectory, Wapping, E.) writes: May I ask you kindly to acknowledge the following sums received since I last wrote on behalf of the medical practitioner whose state of health obliges him to seek a warmer climate.

I should also be glad to inform your readers that the total sum received for this gentleman now amounts to £24 10s., and that a further sum of £11 is still required to enable him to carry out the change of residence.

	£	s.	d.
Sir Edwin Saunders	2	2	0
Dr. H. Coupland Taylor (Madeira)	1	0	0
W. J. Stephens, Esq. (Brighton)	0	10	6
Dr. G. H. De'Ath (Buckingham)	0	10	6
C. M. (Woolwich)	0	5	0
Anon (Hoylake)	1	1	0

NONCONFORMIST NURSES.

ROBERT N. INGLE (Cambridge) writes: In view of the religious restrictions which in some institutions have been imposed upon those seeking to be trained or employed as nurses, and the difficulties which in cases accurately known to me have been placed in the way of Nonconformist candidates, may I ask your insertion of the enclosed?

"The Rev. Newman Hall having been invited to dinner at King's College Hospital, inquired if it were true that Nonconformists were excluded from nursing, and received the following satisfactory reply, which we have great pleasure in publishing:

"'King's College Hospital, April 3rd.

"'Dear Sir,—On behalf of Dr. Wace I have the pleasure to acknowledge the receipt of your kind letter of the 2nd inst.

"'I am very glad to be able to write to you, with reference to the latter part of your letter, that you may most fully contradict the impression that no nurses are appointed here excepting those who belong to the Church of England. We have others. We train young women who may belong to the Wesleyan, Baptist, or Congregational churches, and they have full liberty to attend the place of worship to which they belong.

"'Our nursing some years ago was conducted by a sisterhood, and then nurses were expected to belong to the Church of England; but the nursing is now conducted by our own trained nursing staff, and I believe that a thoroughly liberal mind pervades the hospital.—Yours faithfully,

"'N. Bromley (Rev.), Warden.

"'The Rev. Newman Hall.'"

CONVALESCENT HOMES.

W. L. CHUBB (Medical Officer, Convalescent Home, Sandgate, Kent) writes: Dr. A. Longhurst, in his letter to the JOURNAL, April 19th, on the above subject, suggests some improvements in: 1. The treatment of patients. 2. The general management of these institutions.

As regards medical treatment, Dr. Longhurst can hardly have considered the labour which would be entailed on the medical officer in carrying out his suggestions—that a physical examination should be made, and that a temperature chart, and notes of each case should be kept.

Such observations would be very interesting and instructive, but would require more time than most men could give, for in all the convalescent homes with which I am acquainted the medical officer is an honorary physician or surgeon who finds that his ordinary work is considerably added to by such an appointment, even when he attends to the necessary cases only.

The home with which I am acquainted takes in about 1800 cases annually, a considerable number being chest cases from the Brompton Hospital and then the work takes more time than I can well spare.

The patients are supposed to be independent of nursing and medical care when sent down, but unsuitable cases often arrive, and are the source of great trouble and inconvenience. One occasionally gets a treat in the shape of an unhealed stump, or large wound which requires daily dressing.

Patients generally bring their cod-liver oil with them, and are as a rule able and willing to provide any medicine if ordered.

It would be a great help if a few rough notes were sent with any case the nature of which was not obvious, as patients are often unable to give any information as to the nature of their illness.

The diet in the institution referred to by Dr. Longhurst seems to have been very poor and unsuitable, but I think that such a state of things must be exceptional.

The Homes of the London Samaritan Society with which I am acquainted are admirably managed in this as in every other respect. The diet is of the best quality, and unlimited in quantity. Stimulants are given only on medical order, and the diet is modified to suit special cases.

A complaint of any sort in these homes is very rare, and most of the patients, like Dr. Longhurst's, return much improved in health, and with pleasant recollections of their stay at the seaside.

VENESECTION IN INFLAMMATION.

DR. ROCHE (Kingstown) writes: Mr. Ellis Crisp has done good service in publishing in the JOURNAL, of April 19th, the case of puerperal eclampsia, which he successfully treated by venesection. There will be scarcely any medical man who will not agree to the opinion that he had to deal with sudden congestion of the kidneys and suppression of urine, inducing the convulsions by quick accumulation of urea in a nervous state. Almost without an exception there can scarcely be a remedy used in the early stages of inflammation in any organ which can be compared with bleeding; and in bronchopneumonia, emphysematous asthma and complicated pleurisy where cyanosis and danger of hæmoptysis are present, venesection of five to seven ounces acts instantaneously.

A number of years ago, I saw a poor man suffering from emphysematous asthma, and who had some experience of bleeding in previous attacks; though he was nearly speechless he conveyed he would cut his throat unless he was bled, and his wife was obliged to remove sharp weapons from his room. Without having any bandage, but having grasped the arm, I opened the median cephalic, and when five ounces were drawn his breathing, voice, and appearance were immensely improved, though he had been suffering for nigh a week. He slept soundly, and awoke the next morning stating that he was better than he had been for months. I may mention he had been bled previously for similar attacks, with similar results.

Dr. J. Boyd, surgeon, St Michael's Hospital, Kingstown, has informed me that he had an almost identical case. Many medical men have experience of the beneficial effects of opening a vein for acute orchitis. As I have been convinced of the advantages of blood abstraction in moderate quantity in many diseases, particularly in the early stages of acute inflammations of middle aged and robust persons, and have advocated it too, I trust that you will allow an entreaty to have it used more frequently appear in the JOURNAL.

AN EASY METHOD OF FEEDING PER RECTUM.

DR. DUNCAN J. MACKENZIE (Glossop, near Manchester) writes: Permit me to draw Mr. Jones-Humphreys's attention to two methods of rectal feeding by means of a catheter, or piece of catheter, and fine india-rubber tubing described by me, one in the JOURNAL of June 19th, 1886, page 1161, the other in that of July 2nd, 1887, page 25. The funnel is easily obtainable on an emergency, but for a long case I think it inconvenient.

THE METEOROLOGICAL ASPECT OF THE INFLUENZA EPIDEMIC.

MR. W. G. BLACK, F.R.C.S.E., F.R.M.S. (Edinburgh), writes: I lately perused a copy of the JOURNAL giving a fuller notice of Dr. Buchan's communication on influenza and weather to the Scottish Meteorological Society than some other publications. The conception is interesting and deserves investigation, and may get it now that Mr. Aitken has invented instruments for appraising the occurrence of atmospheric dust. But as far as researches have gone as yet into the quality of the air of mountain heights, hill resorts, and balloon observations, they point to a serious objection to Dr. Buchan's idea, in that the air at such heights has been found pure, transparent, and healthy, and not infected by germs or dust. The liability to disease is decreased by altitude, and probably therefore the infectivity of the germs.

PROFESSIONAL CONFIDENCE.

A SINGULAR use of the New York Act prohibiting the betrayal of professional confidence was, says the *Medical Standard*, made in a recent *habeas corpus* case. A patient of an insane hospital sued out a writ of *habeas corpus*. When the hospital physicians attempted to show cause why they retained him, objection was raised on the ground that they were debarred from so doing on the ground that they would betray professional confidence. The Court sustained the objection, and discharged the patient as a sane man. It certainly looks like a legal absurdity to summon a physician to show cause why he did a certain thing, and then refuse to allow him to testify, on the ground that by so doing he betrays professional confidence. The truth is, the lawyer who defended the doctor was ignorant of the fact that the commitment of a patient to an insane hospital pending recovery made the physician an officer of the court, with whose duties the Professional Confidence Act had no concern.

POLLUTED OYSTERS AT NAPLES THE SUPPOSED CAUSE OF TYPHOID.

DR. GODWIN TIMMS writes: I have just received from Dr. F. W. A. de Fabeck, Brigade Surgeon, Bengal (retired), a very lucid account of the death, at Capri, of a very talented young artist, Mr. Frank James, who was on a visit to his mother and sister, who are residents. He arrived in Italy on February 16th, 1890, began to sicken on March 22nd, and died of typhoid fever on April 18th.

Dr. de Fabeck attributes the disease to the eating of polluted oysters, and goes on to say: "I think it right to take the opportunity of begging you to warn all intending visitors to Naples against the eating of oysters." "The locality in which the oysters are kept has always been a very foul one. The oyster beds lie in comparatively stagnant water close to the embouchure of drains opening into the sea: and now that a retaining wall has been built outside the site of these beds, with the view of ultimately reclaiming the land on which they lie, there is no circulation of water whatever.....You will, I trust, in the interest of the travelling public, pardon me for writing to you thus fully."

ERRATA.—Dr. Sidney Phillips writes to point out that the statement attributed to him in the report of the Harveian Society (JOURNAL, April 26th, p. 960) that a pulse of 200 a minute in diphtheria is always fatal, is incorrect. He spoke of such a pulse as a dangerous symptom, but read notes of a case showing that it is not necessarily fatal. We are also requested to state that at the meeting of the West London Medico-Chirurgical Society on April 11th, Dr. Inglis Parsons replied to a question as follows, not as printed in the JOURNAL of April 26th, p. 961. "Dr. Inglis Parsons said that the amount of electricity used was very much less than that used with the constant current for electrolysis. What he relied upon was the injury produced by a momentary flash."

Vinegar in Urticaria.

Mr. J. S. Swain (Canonbury Grove, N.) writes: I had a severe case of urticaria lately. I tried all remedies mentioned in Roberts's *Practice of Medicine*, without relief. I was told to try vinegar, and it gave almost instant relief. Since that I have had two other cases, with relief obtained from vinegar, to which one-third part of water is added; used externally.

The Fasting Man.

Mr. G. N. Robins, M.R.C.S.Eng., L.R.C.P.Edin. (Westminster) writes: The last five days of Signor Succi's fast were not marked by any special phenomena, except the continued loss of weight, averaging rather over half a pound a day, making the total loss during 40 days 34 lbs. 3 ozs.

On completion of his self-imposed task, Sigor Succi was extremely wearied, but by no means exhausted. Nineteen hours after breaking his fast he had regained one pound in weight, and had not suffered any discomfort from resuming food.

Daily Record of Succi's Condition during Last Days of his 40 Days' Fast at the Royal Aquarium, Westminster.

Date, 1890.	Day of Fast.	Pulse.	Temperature (axillary).	Respirations.	Weight.	Dynamometer (kilogrammes).	Spirometer (cubic centimètres).	Urine passed (fluid ounces).	Urea = (grains).	Water Consumed (fluid ounces).	Kaiser Brunnen (fluid ounces).	Hunyadi Janos (purgative) (fl. oz.).	Sleep (hours).
					lb. oz								
Apr. 22nd, noon	36	68	97.4°	18	94 13	46	1450	13½	165.37	16	8	—	*
,, 23rd ,,	37	58	97.4°	18	94 4	47	1450	16	157.6	19	8	3	5
,, 24th ,,	38	56	97.4°	20	93 15	49	1450	13	165.1	14	4	7	6½
,, 25th ,,	39	58	97.4°	18	93 4	51	1450	15	183.75	20	11	—	†
,, 26th ,,	40	58	97.4°	22	92 0	50	1500	22	192.5	16	4	3	†

* Restless. † Short intervals.

COMMUNICATIONS, LETTERS, etc., have been received from:

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A CLINICAL LECTURE
ON
ULCERATION OF THE STOMACH.
WITH
SPECIAL REFERENCE TO THE STATISTICS OF THIRTY-FIVE CONSECUTIVE CASES.

Delivered in the Western Infirmary, Glasgow.

BY McCALL ANDERSON, M.D.,
Professor of Clinical Medicine in the University of Glasgow.

GENTLEMEN,—Having brought under your notice several cases of ulceration of the stomach, I now propose to direct your attention to the results of an analysis of 35 consecutive cases.[1]

The first point to be noted is the frequency of the affection as met with in hospital practice. I find that 2,538 medical cases yielded 35 illustrations of gastric ulcer, or nearly 1 in 73, that is, about 1½ per cent.

The Sex of the Patient.—It is well known that the disease is much more frequent in females than in males, but there is some difference of opinion as to the proportionate excess of female cases. Ziemssen tells us that the journals of the Pathologico-Anatomical Institution in Erlangen show that of 53 cases in which ulcers or cicatrices were discovered on *post-mortem* examination, 35 were in females and 15 in males, while Brinton gives the proportion as 3 to 1. This estimate, however, like Ziemssen's, is based on fatal cases, which may partly account for the widely different result brought out by my statistics. These show that of 35 cases, 32 occurred in females and only 3 in males. And this disproportion is all the more striking when I mention the fact that the former occurred among 927 female medical cases, the latter among 1,611 males, that is to say, that in males gastric ulcer was met with once in 537, and, in females, once in 29 medical cases,

The Age of the Patients.—Let us hear what Brinton says: "The liability of an individual to become the subject of gastric ulcer gradually rises from what is nearly a zero at the age of 10 to a high rate, which it maintains through the period of middle life, at the end of which period it again ascends, to reach its maximum at the extreme age of 90. We may therefore conclude that ulcer of the stomach is especially, though not exclusively, a disease of middle and advancing life."[2] This opinion is not at all in accordance with my own general experience, nor with the present statistics, which, in the main, support the view of Ziemssen, that ulceration of the stomach is specially a disease of adolescence and of middle age. The following table gives the ages of the patients at the date of their admission into hospital:

		Years.			Years.
Males	... ...	1	Females (contd.)	... ...	28
,,	... ...	1	,, ...	... ...	30
,,	... ...	1	,, ...	... ...	31
Females	... ...	1	,, ...	... ...	32
,,	... ...	3	,, ...	... ...	35
,,	... ...	4	,, ...	... ...	36
,,	... ...	1	,, ...	... ...	37
,,	... ...	3	,, ...	... ...	39
,,	... ...	1	,, ...	... ...	45
,,	... ...	1	,, ...	... ...	60
,,	... ...	2			
,,	... ...	1			
,,	... ...	4			
,,	... ...	1			
,,	... ...	1			
,,	... ...	2			
,,	... ...	2			
,,	... ...	3			
		35			

From the above it will be seen that none of the males were above 45, while, of the females, 16, or one-half, were between 15 and 26 years, 15 between 27 and 45, and 1 at 60. These figures confirm the impression which I have long had, that gastric ulcer is, *par excellence*, a disease of adolescence and of middle life, and that the earlier in life the disease appears, the more likely is the patient to be a female.

The duration of the symptoms at the time of admission into hospital is shown in the following table:

Males, 1 case, was of 2½ months' duration
,, 1 ,, ,, 4 ,, ,,
,, 1 ,, ,, 2½ years' ,,

In the females the duration was stated in all but two cases.

In 2	it was of	2	weeks'	duration
,, 1	,,	3	,,	,,
,, 4	,,	1	month's	,,
,, 1	,,	1½	,,	,,
,, 3	,,	2	months'	,,
,, 1	,,	2½	,,	,,
,, 3	,,	3	,,	,,
,, 3	,,	4	,,	,,
,, 4	,,	5	,,	,,
,, 1	,,	7½	,,	,,
,, 1	,,	10	,,	,,
,, 2	,,	1	year's	,,
,, 2	,,	2	years'	,,
,, 2	,,	3	,,	,,
30				

These statistics show that in 22 of the 30 female cases the duration of the disease was not more than five months, and bear out my previous impression that ulceration of the stomach is a more chronic affection in males than in females.

The following table gives the proportion of previous attacks:

Males.—One was attacked for the first time; 1 had 4 previous attacks during 2 years; 1 had repeated attacks during 5 years.

Females.—Of 26 cases in which this point was specially mentioned, 15 were attacked for the first time, and 11 had had previous attacks. Of the latter, 6 had one previous attack, the interval varying from 1 to 9 years; 4 had two previous attacks at intervals of from 5 weeks to two years; while 1 had had hæmatemesis repeatedly during the previous 12 years. So that these statistics bear out the character of this as a relapsing disease.

We now pass on to the statistics bearing upon symptomatology, which we shall consider upon the five following heads: 1. Appetite. 2. Pain. 3. Vomiting. 4. Hæmatemesis. 5. State of bowels.

1. Appetite.—This was specially mentioned in 18 cases; in 8 it was good, in 2 indifferent, and in 8 it was said to be bad; but this last statement must be taken with a reservation, because patients often say that they have no appetite, while they mean that they are afraid to eat on account of the pain which follows the taking of food.

2. Pain.—a. The Character of the Pain. In 21 cases this was specially referred to. In 6 cases it was described as burning, in the same number as gnawing; in 2 each, as shooting, cutting, dragging, and dull; while in 1 it was said to be "sharp." This bears out the general experience that burning or gnawing pain is most characteristic of ulceration. *b. The Time of Onset of the Pain.* This was specially noted in 21 cases. In 10 it came on immediately after food was taken, in 3 soon after food, in 3 within a quarter of an hour, in 3 in half an hour, in 1 in from half an hour to an hour, and in 1 an hour elapsed before its onset, thus bearing out the general experience that pain usually comes on soon after food is taken. The pain usually continued for two or three hours, or until the patient vomited, which he generally did within half an hour of the onset of the pain. *c. Tenderness.* Of 26 cases in which this symptom was alluded to, in 4 it was absent, and in 22 present. In most of these it was localised, and the tender part was indicated by placing the point of the forefinger on the epigastrium, a little below the ensiform cartilage; in 1 case, however, it was widely diffused; in 2 cases only was tenderness discovered over or near the lower dorsal spines (Cruveilhier's symptom).

3. Vomiting.—This feature was specially alluded to in 32 cases; in 2 there was none, in 4 it was occasional, in 4 it always occurred after food, and in 22 it was frequent, so that vomiting is one of the most constant symptoms of ulceration.

4. Hæmatemesis.—This symptom was referred to in 30 cases; in 6 it was absent, in 14 it was scanty ("coffee ground" vomiting), in 4 it was moderate in amount, while in 6 it occurred to the extent of a breakfast cupful to a pint or more. My own general experience led me to anticipate that these statistics would have shown a greater proportion of cases of large hæmorrhages.

5. State of the Bowels.—This was mentioned in 25 cases; in 1 the bowels were regular, in 1 irregular, and in 23 costive.

In 15 cases melæna was noted; in 1 case it occurred only once,

[1] These statistics were kindly collected from the ward journals by my Resident Assistant, Mr. Robert Anderson, M.B., C.M.

[2] *Lectures on the Diseases of the Stomach*, by Wm. Brinton, M.D. London: Churchill and Sons. 1864.

in most cases it was observed repeatedly, and in 1 it was almost continuously present for 3 months; in 14 cases there was hæmatemesis without any mention of melæna, and in 3 melæna was present without hæmatemesis, thus showing the importance of a careful and continuous inspection of the motions in every suspected case of ulceration.

Complications.—In 15 cases the ulceration of the stomach was primary and uncomplicated, while in 20 there were complications. One patient was suffering from abdominal aneurysm; 1 was hemiplegic, 2 had bronchitis, and 1 of these had pleurisy in addition; 2 were scrofulous, 7 were anæmic, and 7 were chlorotic. I believe that several of those described in the reports as anæmic were really chlorotic, but, at any rate, the statistics show that, in women, chlorosis is a very common accompaniment of ulceration. This fact must be carefully kept in view, else the pain of the ulceration may be mistaken for neuralgia of the stomach, which is so frequently met with in chlorosis, all the more as these are the very cases which are most apt to terminate fatally by perforation.

Results.—Of the 35 cases 2 only remained for a week or two in hospital, and 1 insisted on leaving on the twenty-fifth day, being "much improved." One patient was "improved" when dismissed, 7 were "much improved," and 23 were cured. Only 1 patient, a male, died, as the result of hæmorrhage from the stomach and bowels, and on *post-mortem* examination an ulcer was found at the pylorus, which had perforated a large vessel. These results correspond pretty closely with the result of Brinton's observations, which show 1 death in 20 to 30 cases, males succumbing to the disease nearly four times as often as females.

Treatment.—Having recently directed your attention to the treatment of ulceration of the stomach in connection with cases in the wards, it is only necessary now to indicate briefly the lines which were followed in connection with the cases comprised in the foregoing tables. 1. The patients were always strictly confined to bed—a point which, I have reason to believe, is not always insisted upon, as not only does the ulceration heal more readily, but the danger of profuse hæmorrhage and perforation is lessened. 2. The dieting was generally the main point in the treatment. Hard, hot, stimulating, and irritating food was rigidly excluded: soft and fluid food, in small quantities, frequently repeated, being the rule; and, in the majority of cases, unless there was some contraindication, milk, in combination with a little potash or lime water, was prescribed. In some instances peptonised meat preparations were given, especially Carnrick's beef peptonoids, to the extent of a teaspoonful every four hours. The patient was directed to suck the powder, so as to mix it thoroughly with the saliva before swallowing it. In some instances a slight modification of Debove's meals was administered. This consists of 25 grammes of Carnrick's beef peptonoids, 1 gramme of burnt magnesia, 2 of prepared chalk, and 1 of saccharated lime. The gastric juice is thus neutralised, and no peptones are formed in the stomach. It was found, however, that three of these meals per day sometimes produced diarrhœa, so that latterly three half meals were prescribed. As to the quantity of soft or fluid food given at a time, two ounces was the usual allowance at first, but the quantity was diminished if pain or vomiting resulted, and, of course, the less food that was taken the oftener was it repeated. We always adhered strictly to the rule of gradually reducing the quantity administered at one time, until it produced neither pain nor vomiting; and if even a teaspoonful of milk disagreed, all food by the mouth was suspended for a time, and the patient was fed exclusively by the rectum, although he was allowed to suck a small piece of ice occasionally. The rectal feeding usually consisted of the introduction every four hours of a zyminised milk or meat suppository, and on the alternate four hours an enema, consisting of 3 drachms of Carnrick's beef peptonoids mixed with 2 or 3 ounces of warm water, was given.

A cure often resulted from dieting and rest alone, but the bowels were regulated when necessary by enemata, or the injection of a drachm of glycerine into the rectum. In a good many cases Carlsbad salts (the artificial salts by preference when constipation was present), as recommended by Ziemssen, sometimes yielded excellent results. These are given on the principle that the most essential obstacle to the formation of granulations in the floor of the ulcer is the corrosive influence of the gastric juice. The salts neutralise the acids and check fermentation; they likewise discharge the fermenting liquids into the bowel, and act as an aperient. The dose is from 1 to 4 drachms dissolved in a pint of boiling water. This is allowed to cool, and when tepid is slowly drunk to the extent of a quarter of pint every ten minutes until it is all swallowed, and is given in the morning.

During convalescence the diet was very slowly improved, and sometimes small doses of arsenic in the shape of Schieffelin's pills (gr. $\frac{1}{60}$ to gr. $\frac{1}{30}$), thrice daily, seemed to consolidate the cure.

In some cases, when pain was a prominent feature, and especially when it persisted when the stomach was empty, opiates in small doses, or a combination of hydrocyanic acid and bismuth, were administered. When hæmorrhage occurred to any extent rectal feeding was resorted to; although the patient was allowed to suck ice; ice was applied in an ice bag to the epigastrium, and morphine was given by subcutaneous injection, and occasionally ergotine. Finally complications were dealt with on general principles, according to their nature—chlorosis, the most frequent one, being treated with Schieffelin's Blaud's pills.

REMARKS
ON
THE TUBERCULOUS NATURE OF THE SO-CALLED SIMPLE PLEURITIC EFFUSION.[1]

By ALFRED G. BARRS, M.D., M.R.C.P.,
Senior Assistant-Physician to the General Infirmary at Leeds; Lecturer on Materia Medica in the Yorkshire College of the Victoria University.

THE observations I am about to make are the outcome of an inquiry in which I have been engaged from time to time during the last year and a half for the purpose of ascertaining the remoter event in cases of pleuritic effusion.

I have taken from the hospital records, for the years 1880 to 1884 inclusive, the names and addresses of all the cases of simple pleuritic effusion, purulent or non-purulent, and have ascertained by such means as were at my disposal if they were still living, and if so, in what condition, and if they were dead I have, so far as possible, ascertained the cause of death, sometimes from the medical attendant, sometimes by an inspection of the death register of the district in which the patient had lived. No case has been inquired into in which there was any reasonable doubt as to the presence of fluid in the pleural cavity, or in which the effusion could be regarded as in any sense of secondary origin in the ordinary acceptation of the term. So that we have not to consider any case of pleuritic effusion which was secondary to any recognised pulmonary lesion, such as phthisis or acute pneumonia, both of which are, in my experience, extremely rarely complicated by fluid effusions into the pleural cavity, or secondary to cardiac or renal disease. We are, in short, concerned only with those cases which appear to be spontaneous, and which are usually said to arise from exposure to cold. The undertaking has been a somewhat laborious one, and it was originally my intention to have placed the results of it before the Section of Medicine of the British Medical Association at its meeting in Leeds in August last, but my duties in connection with that meeting made it impossible for me to do so.

I may state at once that the point I have had in view throughout has been to ascertain the relation of pleuritic effusion to pulmonary phthisis or other tuberculous manifestation, and so to a tuberculous pleuritis, for I see no reason to doubt that if a pleuritic effusion is followed by phthisis, the effusion itself was in the first instance of a tuberculous origin. I cannot better define my own position than by quoting a few short remarks made in a debate on this subject by Dr. F. C. Shattuck, of the Massachusetts General Hospital, in the early part of 1888: Dr. Shattuck[2] then said that "about three years ago he had written a note to Strümpell's *Textbook of Medicine* to the effect that the experience of physicians in America was not like that of the Germans, who according to Strümpell, found pleurisy due to cold only in very rare instances. He had given as his reason for the statement that in America so many patients with pleurisy entirely recovered. Since then his views had undergone a marked change. Fact

[1] Read before the Leeds and West-Riding Medico-Chirurgical Society.
[2] *New York Medical Journal*, July 14th, 1888, p. 48.

seemed to be pointing to the stand taken by some Continental writers that pleurisy was always due to tuberculosis. We were in the habit of associating in our minds tuberculosis and an unfavourable or fatal prognosis, because formerly only tuberculosis pulmonalis had been recognised, and then only when going on to a fatal issue. But we had learned that local tuberculosis frequently existed, and was recovered from, whether in the pleura or elsewhere. It was true that the tubercle bacillus had not always been found in the pleuritic effusion or on the surfaces of the membranes, but that was only negative evidence, and could not be regarded as of weight when it was remembered that in the most favourable cases for finding the bacilli the search was tedious; nor was our inability to account for the arrival of the germs at the pleural cavity an argument of value against the microbic origin of the disease."

Dr. Shattuck has here defined my own present position in this question with complete precision, and it is from this position that I have set out upon my inquiry. Five years ago I should have said that ordinary simple pleuritic effusion was a distinctly recoverable condition, easily treated, and of little danger to life, immediate or remote; but during the last few years I have seen in the out-patient rooms more than a few cases of phthisis in persons who had previously been in the hospital for pleuritic effusion, and who were described in the hospital returns as "well."

At this point I should like to say, but without any intention of digressing into an abstract discussion, that I never have believed, and do not believe, that "cold" is an efficient cause of inflammation in any organ or structure of the body except such as those to which it can be directly and immediately applied, the skin and parts immediately beneath, and the earliest sections of the respiratory and digestive tracts, for example; and consequently I have never been able, to my own satisfaction, to state the cause of the so-called simple pleuritic effusion. While not going so far as those—Landouzy, for instance—who say that all cases of pleuritis which are not rheumatic, pyæmic, and so on, are of necessity tuberculous in origin, I am strongly inclined to agree with Dr. Shattuck that a very large proportion of the so-called "idiopathic" or "exposure" cases of pleurisy are really of a tuberculous nature.

I have never been quite able to understand why the pleura, in accordance with views very generally held until quite recent times, should be allowed to become inflamed under circumstances which are said to be innocuous to all other serous membranes in the body. No one, I imagine, really believes that exposure to cold is an efficient cause of peritonitis, meningitis, or synovitis. While we all readily recognise a primary tuberculosis of the peritoneum, the meninges and synovial membranes, there has always seemed to be a great reluctance to admit tuberculous pleuritis as a primary cause of pleuritic effusion. Dr. Douglas Powell,[3] in opening the discussion on "Chronic Tuberculous Processes in Serous Membranes," at the meeting of the British Medical Association, 1889, said: "Tubercular disease of serous membranes is so rarely primary." "Tubercular pleurisy was by itself, as shown by *post-mortem* examination, a rare disease. Was it so rarely met with clinically? It was well known that pleurisy commonly preceded phthisis, but were not such cases of pleurisy in the first instance tubercular?"

In regard to the *post-mortem* evidence in favour of a primary tuberculous pleurisy, it is clear that such evidence must of necessity be scanty. The pleura itself is not a vital organ. Pleuritic effusion very rarely nowadays is allowed to be fatal in the only way in which it can be so, by a mechanical interference with the respiratory or cardiac movements; it therefore follows that in hospitals (and it is there where such evidence must be found if it is to be found at all) necropsies upon cases of simple pleuritic effusion are, comparatively speaking, extremely rare. In the Leeds Infirmary, for instance, there was one death in each of the years 1886, 1887, 1888 from pleurisy with effusion, while in these three years no fewer than 87 cases of pleuritic effusion were under treatment. The fact is that pleurisy with or without effusion cannot of itself be fatal under ordinary circumstances. It is only by directly involving some vital organ such as the lung, or by the induction of some general infective condition, that it can prove so.

In August, 1887, there came to the out-patient room a boy, aged 15, in whom the right lung was practically solid, and who a few months later died of phthisis, as I am informed by his medical attendant. The previous history of this case was as follows. In 1884 he was in the infirmary under Dr. Eddison's care from the 10th to the 19th of June. Two months before admission he had had a pain in the right side, said to have been due to his getting wet. He is described in the clinical report as a strong, healthy looking lad, with no apparent symptom of any illness; but his pulse was 132, and he had wasted a little. There were signs of fluid at the right base from a little above the angle of the scapula downwards.

The day after admission 7½ ounces of fluid were drawn from the right chest (there is in this case, as in many others, a striking discrepancy between the physical signs and the quantity of fluid found which is worthy of attention). Seven days later the dulness is described as diminishing, the fremitus as fair, and the cough as practically gone, and on this day he left the hospital "well." This case is a striking example of what I believe occurs in a considerable proportion of cases of pleuritic effusion—a simple pleuritic effusion ending in pulmonary phthisis at the end of three years. An example still more impressive by reason of the necropsy, but belonging to another class of cases, occurred in this hospital in 1881, the chief details of which are as follows:—

A man, aged 43, was admitted under Dr. Clifford Allbutt's care on September 9th, 1881, and died on November 7th of the same year. The record is headed by myself (I was then house-physician): "Pleuritic effusion; repeated tappings; general tuberculosis; death." Five months before admission his illness commenced, not quite suddenly, with an "ordinary cold" and some shortness of breath. Ten weeks before admission he was seen by Dr. Clifford Allbutt, and the left chest was explored, there being signs of fluid, but with a negative result. Six weeks later exploration was again had recourse to with the same result. He wasted much and got steadily worse. On admission he looked very ill and was much wasted; pulse 124, respiration 36. The whole of the left chest was fixed and absolutely soundless, on percussion from apex to base with the other ordinary signs of fluid. The heart was perhaps displaced to the right, for its impulse could not be found in its usual situation. On September 12th the left chest was tapped, and 50 ounces of serum drawn off with immediate relief to the symptoms. On September 17th the chest was again tapped, and 23 ounces of serum drawn off, and again, on September 28th, 20 ounces of fluid were drawn off. Two days later his temperature rose in the morning for the first time, and for the next month he got steadily worse. At this time the left chest was explored, but no fluid found, although the signs were just as marked as on admission. On November 3rd great dyspnœa set in and ended with his death in a few days. At the necropsy the left pleural cavity contained about 40 ounces of serum and some masses of lymph. The surface of the lung, the left side of the pericardium, the left chest wall, and the left half of the diaphragm were covered with thick and fibrous feltings. The condition of the diaphragm was most interesting. The inflammatory material had infiltrated the muscle as a distinct band, and was here and there obviously caseous. The solid parts of the effusion were everywhere of a soft cheesy nature. The left bronchial glands were enlarged and caseous. The left lung, reduced to one-quarter its natural size, was almost airless, œdematous, and spleenised. Its substance was thickly studded with miliary tubercles, but there was not the least trace of an ordinary phthisis lesion. The right lung was also thickly studded with grey tubercles, and its pleura was acutely inflamed in patches. Both kidneys were also studded with grey tubercles. (I said a moment ago that practically pleuritic effusion could only prove fatal by setting up destructed processes in the lung or by a general acute infection. I am inclined to think, in the light of this case and some others which I have seen, that it is possible for there to be such changes in the pleura itself in the way of enormous production of solid effusion and the subsequent softening of that effusion to cause death by an ordinary wasting process such as in true phthisis pulmonalis.)

In commenting upon this case I should like to direct attention to the fact that in the lungs themselves only an acute tuberculosis was found, while the signs of pleuritic effusion had been present for at least six months before death, so that there could be no reasonable doubt as to the order of events, the pleural affection being long antecedent to any lung disease. Whether the caseous enlargement of the bronchial glands upon the same side had any causal relation to the pleuritic effusion is a question which has occurred to me. Was it a secondary or infective caseation, or was it the cause of the pleuritis in the same way that chronic tuberculous peritonitis is said to originate from caseous mesenteric glands? In my *post-mortem* room experience caseous

[3] JOURNAL, December 14th, 1889, p. 1317.

enlargement of the bronchial glands is perhaps the commonest of chronic tuberculous lesions in young subjects. May it not be that in some instances this is the cause of the pleuritic effusions of later life by a simple spreading of a tuberculous inflammation to the pleural surface in the immediate vicinity of the diseased gland? The occurrence of acute pleuritis of the right lung is interesting, as showing, as I think it does, the association of acute inflammatory changes in the pleura with the presence of miliary tubercle in the same way in which it occurs in the meninges.

In October last I made the *post-mortem* examination of a very instructive case which had been under Dr. Churton's care in the hospital. A woman 29 years of age, of alcoholic habit, had been admitted suffering from hepatic cirrhosis, of which she died by means of coma in a few days. She had been in the infirmary from May 21st to July 17th, 1889, suffering from left pleuritic effusion. Six or seven years previous to that date she had had "pleurisy in the left side." The pleuritic effusion in May, 1889, had had a gradual onset, and the temperature curve throughout her stay in hospital had been of a remitting character. The chest was tapped on May 27th, and 43 ounces of fluid drawn off. Signs of fluid continued, but explorations in July failed to confirm them, and she left the hospital with persisting dulness in the chest. At the *post-mortem* examination, the liver weighed 92 ounces, and presented the ordinary appearances of cirrhosis. The left pleural cavity was practically obliterated by old adhesions, but where obliteration had not taken place numerous miliary and submiliary nodules were visible, clearly of a tuberculous nature. There were similar nodules on the right pleura. At the apex of the left lung there was a small recent caseating lesion with a central cavity. In the right lung there were numerous nodules and lumps of consolidation undergoing caseous change. There were also three large patches of tuberculous ulceration in the intestine and miliary lesions in the kidneys.

I have recited these cases in order to indicate the kind of anatomical evidence there is to hand of the close association of pleuritic effusion with tuberculous changes in the body. To establish tuberculous pleuritis as a primary disease, we should, I take it, require evidence of the following nature:—

1. The presence of characteristic organisms in the products of the inflammation or in the organs affected.
2. The demonstration in non-fatal cases of lesions generally recognised as tuberculous.
3. The demonstration after death of lesions of an admittedly tuberculous character.
4. A very frequent, not to say constant, association of the pleuritis with other tuberculous disorders.
5. A certain clinical march of the cases, stamping them as tuberculous.

As to the presence of the tubercle bacillus, there is very little positive evidence forthcoming; all observers are, I believe, agreed that it is exceedingly difficult to demonstrate its presence even in the most likely cases. Its absence in any case, I need scarcely say, could not be accepted as showing the non-tuberculous nature of the disease.[4]

In cases of tuberculous peritonitis, we can, after incision of the abdomen, see the nodular condition of the peritoneum. This kind of evidence is not available in the case of pleuritic effusion under our present methods of treatment. Estlander's operation has not, so far as I know, been at present applied to simple effusions. The evidence by *post-mortem* examination I have already dealt with. The association of pleuritic effusion with phthisis—taking the commonest tubercular lesion we have, or any other tuberculous disease—I will now proceed to deal with, in the light of the cases which have been the subject of inquiry.

There were found in the hospital records for the year 1880-84 inclusive 114 cases of pleuritic effusion conforming with the limitations I have previously laid down, and proper cases for inquiry. Of these, 40 were cases of empyema and 74 were cases of "pleurisy with effusion." To take the pleurisies with effusion first: Of the 74 cases, 32 are dead, 25 are living, and 17 could not be traced—that is, there had been a death-rate in the cases which could be traced of something like 57 per cent. In the 32 fatal cases the average age of the patients was 32.5 years, the maximum being 54 and the minimum 3. As to the duration of life after the onset of the disease, there died in hospital 3, died the day after leaving hospital 1. In the remaining 28 cases the average duration of life was $2\frac{1}{2}$ years, the maximum being 5 years and the minimum 6 months. The causes of death in the 32 cases were as follows:—

Known phthisis	14
Probable phthisis	1
Hip disease	1
Tubercular meningitis	1
Acute tuberculosis	1
"Pleurisy"	3
"Dropsy"	2
"Hydropericardium"	1
Unascertained causes	8
Total	32

So that 21 cases out of 32 died of the disease "pleurisy," or some recognised tuberculous condition, mainly phthisis pulmonalis.

I have not sufficient facts before me to enable me to state with any certainty what the precise position of the destroying lesion has been in regard to the pleuritic effusion. It has not always been in that part of the lung corresponding with the affected pleura. For example, in a case at present under my care, where the onset of the disease was so acute that the case was sent to the Municipal Hospital in July, 1887, as a case of enteric fever, there was pleuritic effusion at the right base, which was tapped. Shortly afterwards he was in the infirmary under Dr. Churton's care, when the right chest still being dull on percussion, an exploratory puncture was made, but no fluid found. After a short interval he came to my out-patients, spitting blood freely and frequently. The right chest was still dull, with signs of consolidation rather than of fluid. After attending for some months he was again admitted, under Dr. Churton's care, for pleuritic effusion on the left side, which was tapped, and the other day he came back to my out-patients with a very phthisical aspect and signs of consolidation at the right apex, and also, but to a less extent, at the right base.

I have made a careful examination of the details of the fatal and non-fatal cases, with a view to ascertaining, if possible, any features which distinguished the one class from the other, but I am in the end unable to say that there is anything in the clinical manifestations which could be relied upon for that purpose. Many of the fatal cases were just as acute in their march, just as readily relieved by tapping, and appeared, on leaving the hospital, to be in quite as promising a condition locally and generally as the cases still living. There was also the same proportion, or thereabouts, of "dry tappings" and "negative explorations" and "expectant treatments" in the one set as in the other, so that I am unable to add anything to the information which is already to hand for the purpose of estimating the duration of life in any given case, beyond the important fact that 57 per cent. of the cases which could be traced are now dead, the duration of life over the series being not greater than two years and a half. If further experience should tend to confirm this, our prognosis in ordinary cases of pleuritic effusion will have to be more guarded, and perhaps our treatment more radical; it may be by free incision and antiseptic irrigation of the cavity, instead of by simple puncture, as at present.

In regard to the non-fatal cases, I will only at this time remark that their tuberculous nature is in no sense disproved to me by their recovery. The recoverability of tuberculous lesions for tunately requires no demonstration. In an important paper deal ing with this subject, Dr. Vincent Bowditch[5] has published the results of an investigation of the after-histories of the cases of pleurisy occurring in his father's practice from 1849 to 1879. He says: "In comparing the percentage mortality from phthisis in the cases from 1870 to 1879 inclusive, with that of the cases of the first decade, 1849 to 1859, we find the percentage 24 in the former as against $43\frac{1}{3}$ per cent. in the latter, and against 47 per cent. in the second decade, from 1860 to 1869 inclusive." As will presently appear from my own figures, it is most important in considering Dr. Bowditch's statistics to bear in mind that "the cases are not classified so that 'dry pleurisies,' pleurisies with serous effusion and empyemas are put all together." My own investigation shows very conclusively that the introduction of the empyæma case will considerably reduce the percentage mortality from phthisis and so it may be that the death-rate from phthisis in Dr. Bowditch's cases is not materially less than in the Leeds cases.

On this occasion there is not much that I need say in regard to the empyema cases. The figures I am about to give go a long w

[4] On the question of micro-organisms in pleuritic effusions, the reader may be referred to an important discussion reported in the *Berliner klin. Wochenschrift*, May 14th, 1888.

[5] *Medical News*, July 20th, 1889, p. 63.

owards confirming me in the view that I have for a long time eld, that empyema and simple pleuritic effusion have very little a common either in their clinical march, their pathology, or their ltimate event.

Of the 40 cases of empyema, 32 cases are well, 6 are dead, and of there is no return. Of the 6 fatal cases, 1 died of chronic Bright's disease (not lardaceous), 1 died of croup when 4 years old, died in hospital of "exhaustion from prolonged discharge," and n 2 cases the cause of death could not be ascertained.

My own conclusions, based upon grounds of which the preeding observations form only a part, are practically those apended by Mayor[6] to an excellent thesis on the after-event in leuritic effusion, namely:

1. "The majority of cases of simple idiopathic pleurisy, or of leurisy from exposure to cold, conceal or reveal a tuberculous rocess."

2. "A careful study of the lung in the neighbourhood of the effuion is more important in regard to the prognosis in any given case han the study of the effusion itself."

3. "The immediate prognosis in cases of pleuritic effusion is, under resent conditions of treatment, almost always favourable; the emoter prognosis, on the contrary, should always be most uarded."

THE TREATMENT OF PLEURISY WITH EFFUSION.[1]

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hysician to the City of London Hospital for Diseases of the Chest, Victoria Park, etc.

HE subject I have chosen as that upon which to offer you ome remarks this afternoon is one about which a very great eal has been and is being said and written. The question of he treatment of pleural effusion has received attention from both hysicians and surgeons, and may be said to be placed upon the ypothetical boundary line which separates the province of medicine from that of surgery. The affection is, indeed, sufficiently ommon and sufficiently serious to make it of importance that very medical man, be he physician or be he surgeon, should have definite idea as to the line of treatment to be adopted under he various circumstances in which pleural effusion occurs.

I do not propose to bring before you any exhaustive treatise pon this subject. This would be, in my opinion, undesirable even possible. I shall rather confine my attention almost exclusively o my own experience, which a connection with a special chest ospital for many years has rendered somewhat extensive. I ust warn you not to expect anything very new upon this, which ay be called a well-worn subject.

Effusions into the pleural cavity, even in large amounts, are not y any means always diagnosed. First, because the physical igns of such effusions do not present themselves in orthodox orm, supposing the chest is examined carefully; secondly, beause it not infrequently happens that patients suffering from leural effusion are so little inconvenienced, that they pursue eir usual avocations, and consult a medical man for symptoms, may be, of dyspepsia, which do not suggest an examination of e chest; and thirdly, because pleural effusion is very often condary to some other affection within the chest, as, for example, tubercle of the lung, cardiac disease, or aneurysm of the aorta, which one's attention is more particularly directed.

Thus it happens that any increase in the dyspnœa, pain, or her symptom which the original affection had produced is often t down to an increase in the affection itself, and not to its real use, namely, an intercurrent pleurisy. There can be no doubt the minds of those accustomed to see many necropsies, that diagnosed, and therefore unrelieved, pleural effusion is answerle for the deaths of many affected with chronic diseases. Such tients would, of course, have died from the primary affection ter a varying time, but unless pleural effusion had happened, t just then. I may illustrate this by a reference to a *post-ortem* register nearest to hand. In a record of about seventy cropsies at the City of London Hospital for Diseases of the est, Victoria Park, I find that in nineteen the pleura was more less affected; in thirteen cases, the fluid in one or both cavities was very excessive; and in four cases, the record says that the pleural cavity was full of fluid. Certainly one would imagine that death might have been caused in four out of seventy cases, at the very least, by the intercurrent pleural affection, and not by the original disease. One other point with regard to the diagnosis of pleural effusion; it is, of course, best in all cases of doubt to insert the needle of a small syringe, and to withdraw a specimen of the fluid, if fluid there be, but sufficient stress has not been laid upon the necessity of employing a sufficiently long needle, nearly twice the length of that supplied with the ordinary morphine syringe, as without it, in cases of very thick-walled sacs, you may fail altogether in your attempt to reach the interior. I have quite lately seen a case in which one or two preliminary trials with an ordinary short needle failed to withdraw pus from a chest until a very long needle, about 5 or 6 inches, having been employed, the pus was reached.

Having arrived at the certain diagnosis of fluid within the pleural cavity, the question naturally arises: What is best to be done under the circumstances of the case? 1. Are we to leave the fluid to be absorbed by Nature's unaided efforts? This used to be the routine practice in a majority of cases.[2] It is certainly a fact that in some cases a pleural effusion disappears in a comparatively short time if left to itself, even if we regard as apocryphal those cases in which it has been stated that the largest effusions have been absorbed in a day or so. We have all, no doubt, watched cases in which absorption is taking place, noting the shrinkage of the area of fluid from day to day. It is by no means easy, it must be confessed, to understand how the fluid is absorbed—whether by the blood vessels or by lymphatics, or by both—more especially when we recollect that the surfaces of the pleura are usually covered by thick layers of fibrin, and that the blood and lymphatic vessels, thickened as they must be by this deposit, are in the condition most unfavourable for such a process. In the cases in which early absorption takes place one is tempted to imagine either that the fibrin has not been deposited upon the pleural surfaces or that the inflammation of the pleura is local and not general. It is believed by some that in many cases at any rate the upper part of the serous membrane is first inflamed; perhaps in some cases, therefore, the inflammation is localised to its primary seat. But, granting that effusions are sometimes absorbed by Nature's efforts alone, are we wait for this absorption, are we to try and help the absorption by drugs or other means, or are we to remove the fluid at once by operation? The practical summary of such questions, then, is, How long shall we leave an effusion in the chest before tapping it?

I think you will agree that it is quite impossible to lay down any arbitrary rule as to how long we are to leave an effusion before tapping it. My own plan of proceeding is as follows: If the preliminary aspiration with the small syringe has demonstrated the presence of pus, I do not delay the operation, if I can possibly help it, a single day; or again, if the physical signs reveal the presence of a large effusion of whatever nature, I recommend immediate operation. I think a patient with one side of his chest full of fluid is in considerable danger of death, and especially of death from syncope. With such a belief it behoves one to be careful not to delay the immediate and certain relief afforded by paracentesis thoracis.

If the fluid be not pus, and be moderate in amount, immediate operation is not necessary, and it is permissible to wait awhile and watch the case; in fact, to adopt the expectant treatment. As regards the use of drugs and other methods supposed to aid the absorption of the fluid, I confess I have but little faith in them. Diuretic, diaphoretic, and purgative drugs, for example, except in so much as they aid in maintaining the bodily functions in health, are, in my opinion, of little use. The exhibition of salts, the restriction of fluids in the diet, the strapping the side with mercury plaisters, and the like, although theoretically correct, have not proved, in my experience, of much practical value. I am inclined, however, to make an exception in favour of blisters and of the preparation of iodine externally, and of iodide of potassium internally. I think—I say I think—that I have seen good come of the use of these remedies in certain cases. But, at any rate, good and even generous diet—wine, cod-liver oil, maltine, preparations of iron—ought in all cases to be given, with the great object in view of improving the general health; with the same object, the patient should be allowed to get up part of the day, and, if the weather be

[6] *De l'Avenir des Pleuritiques.* Thèse par Alois Mayor. Paris: 1887.

[1] Read at a meeting of the West Kent District of the South-Eastern Branch of the British Medical Association.

[2] From the table annexed I find, however, that operation of some kind was done in 24 out of 38 cases.

fine and warm, moderate exercise in the open air should be allowed.

If in the course of a few days or a week there is distinct evidence of diminution of fluid, the case is probably one in which paracentesis is not necessary, and may be left in Nature's hands.

More than a fortnight should not be allowed to elapse before tapping in a case in which the area of dulness, due to fluid, remains stationary; perhaps one should curtail even this period of expectation. If the fluid is manifestly increasing, do not delay to tap. In fact, the days are gone by in which paracentesis thoracis was a method of treatment adopted as a last resource, and we may now lay down a rule that, in cases of doubt, proceed to that method without delay.

In the case of pleurisy with effusion in children, according to my experience, the operation is particularly successful; but it is also true that in such cases there is a strong tendency towards rapid, spontaneous absorption, and of course, in such cases, one ought to give the effusion a chance of being got rid of in such a way. One must not forget, on the other hand, that in children the effusion is very often purulent, and any hectic temperature ought to indicate the operation, especially if preliminary puncture revealed the nature of the fluid.

My rules, as above mentioned, obviate one usually laid down, namely, that operations should be done if the patient show loss of flesh, feeble circulation, great debility, or failing appetite. It is best, I think, never to wait until such a condition arise. In short, my plan may be thus summarised: operate early in rapid effusions, in excessive effusions, if there be dyspnœa or other pressure symptoms, in stationary or increasing effusions, and when the fluid contained in the chest is undoubtedly purulent.

When pleural effusions arise, as in the course of other chest affections—such, for example, as phthisis, heart disease, aneurysm of the aorta, unless its amount be very small, if one wants to delay death, as is indeed our duty, there is no alternative course—paracentesis must be done, and done quickly.

Having decided to empty the chest of its fluid, it becomes necessary to decide further as to what kind of operation is the best. It would ill become me to dogmatise upon this more or less surgical point. I wish, rather, to record my own experience upon the question. Naturally the kind of operation varies with the circumstances of the case.

First of all in cases of non-purulent effusion we have two chief "close" methods of emptying the chest, or, to speak more correctly, of removing some of its contained fluid, namely, by means of an aspirator of some kind or by the syphon method. I must confess my preference for the former, in spite of the considerable prejudice which exists against it in the minds of many. This prejudice finds expression in an excellently practical paper of Dr. W. Henry White, written some years ago, as follows: "The use of the latter (that is, the aspirator) ordinarily in effusion should be disregarded, as it is a dangerous instrument in inexperienced hands, notwithstanding the brilliant results obtained by Bowditch, Dieulafoy, and others. For the instrument can be made to exert so great, so unnecessary, and so injurious a pressure within the chest that more fluid is evacuated than is prudent, and, consequently, its reaccumulation, if not transformation into empyema, is encouraged, whilst cough and other disagreeable and urgent symptoms may be induced. If this instrument should be used it should have a manometer attached, in order to be able to estimate the tension within the chest."

This opinion appears to take a very pessimistic view of the use of the aspirator. I cannot say that it accords with my experience, for, in many of my cases, that instrument has been used quite without accident. It is, moreover, in my opinion, the method freest from the danger of entrance of air. We must of course be careful to use as small a minus pressure as is compatible with success, and one must not entirely empty the chest, and must also see that the apparatus is in perfect working order, I prefer the posterior position for puncture to that more in the axillary line.

The second method, namely, by syphoning off the fluid, is, I am bound to confess, getting more and more popular, and, I think, will after a time displace the aspirator. It consists of attaching to the trocar and cannula used for the puncture an india-rubber tube sufficiently long to reach from the patient's bed to the floor: it is filled with some antiseptic solution, for example, carbolic acid, perchloride of mercury, or boric acid, and the free end of it is nipped by the fingers of an assistant below the level of some more antiseptic fluid in a vessel on the floor or raised well above the patient's bed. When the trocar is withdrawn, in an air-tight collar, the end of the tube in the fluid is unstopped, and if the vessel has been raised it must be lowered and placed on the floor. In this way, as the attached tube is now in free communication with the cannula tube and with the fluid within the chest, a syphon action is set up and the fluid flows quietly and at a moderate rate into the vessel containing the antiseptic. If the cannula becomes stopped, the tube may be flushed out by a return current of fluid set up by raising the vessel in which the antiseptic is well above the patient's bed.

When the effusion is purulent it becomes necessary to remove it more thoroughly, and the way in which this should be done with least danger to the patient becomes a difficult question. Let me briefly recall to your minds the chief methods which have been hitherto employed.

First of all, by free incision, with or without previous tapping of the chest, with a large trocar and cannula. (This method allows free entrance of a certain amount of air into the pleura.) It is the plan usually adopted. If the whole operation is done with strict attention to antiseptic precautions the air which is admitted should be harmless, that is to say, should be free from living micro-organisms. A drainage tube is then inserted, and the side is dressed according to Lister's method. As far as my practice is concerned, after the first dressing I almost invariably combine this method with a thorough irrigation of the suppurating cavity with some disinfectant solution; for example, mercuric chloride 1 to 5 in 1,000, boric acid, or the like; and this washing out of the cavity by means of a reversed syphon action or by means of a perfusion cannula, I direct to be done each time the dressing is removed, that is to say (unless the discharge is very profuse), every two days. In simple incision of the chest there can be no complete emptying, and pus remains in certain amount in the dependent parts of the chest. By the means of the irrigation method, if sufficient time is taken, the pus may be thoroughly washed out, and the fluid which remains is quite aseptic. From a somewhat extended experience of both methods, I have no hesitation in recommending that by incision and irrigation with a large quantity of an antiseptic solution. I cannot myself speak in favour of the so-called "close" method of operating when the fluid is purulent, that is to say, the removal of the fluid by means of a simple trocar and cannula, irrigation with an antiseptic, and complete closure of the wound without entrance of air. It may answer sometimes, but generally after several such operations a free incision has to be made after all, and I really do not see why antiseptic air or gas should be worse to have in the chest than any other antiseptic fluid. Of course, there is no actual reason why the "close" method should not be tried first of all. As a matter of fact, the entrance of air into the chest through the incision is never quite free. As a safe means of irrigation in cases of empyema, and, if thought necessary, in cases of serous pleurisy, there is no better apparatus, as far as I know, than that designed by Dr. Philip Hensley, and described by him in *St. Bartholomew's Hospital Reports*, vol. xvii, p. 79, to which account, as I have no time to describe it, I must refer you.

Of the dangers of paracentesis, a long list of which one finds very properly, tabulated in textbooks, I am inclined to think syncope is the most likely of those which are serious. It is usually due to the too rapid removal of fluid from the chest, which, of course, diminishes the extracardiac pressure. Blood-spitting also sometimes happens from removal of the extrapulmonary pressure. Of the occurrence of other dangers during or after the operation, such as embolism, I have seen no examples.

I must just mention the plan of treating empyemata by making two openings in the chest in intercostal spaces, one below and behind the other, and passing a drainage tube through the two openings. This method was the one almost always adopted when I was house-physician at St. Bartholomew's, and when antiseptic surgery was young. It is a severe operation, especially if it has been long delayed, as is usually the case, since the chest wall has become in most cases very thick. It is an operation not now to be recommended unless absolutely necessary, although, no doubt, strict attention to antiseptic precautions might be expected to make the operation more successful than it used to be.

Let us now turn to the consideration of what happens to the chest contents on removal of fluid from the pleura.

First of all, in the case of the "close" operation. As the pressure of the fluid outside of the lung is removed, and as no air replaces that which is removed, the lung is obliged to follow the movements of the thoracic walls and diaphragm, and expand, drawing in air at each inspiration, to establish an equilibrium

General Table of Pleurisy with Effusion treated in the City of London Hospital for Diseases of the Chest 1887-90.

No.	Age.	Sex.	Side Affected.	Variety of Operation (if any).	Characters of Fluid.	Duration of Stay in Hospital.	Result.
1	47	M.	Right	—	—	6 weeks	Improved.
2	57	M.	,,	—	—	—	—
3	47	M.	,,	Cannula trochar, 8th interspace, middle axillary line, aspirator	4 pints of offensive pus, no blood	4 weeks	Death.
4	34	F.	,,	—	—	7 ,,	—
5	37	M.	Left	—	—	7 ,,	Improved.
6	22	M.	Right	Cannula and trochar	4½ pints of greenish coagulable plasma, specific gravity 1020, neutral, solid, with albumen	5 ,,	Recovery.
7	21	M.	Left	Aspirator, 8th space behind	5 pints serous fluid	10 ,,	,,
8	33	F.	Right	—	—	14 ,,	Improved.
9	46	M.	,,	—	—	—	—
10	31	M.	,,	Incision 7th rib, interspace in line of left of scapula	1 pint of blood-stained bendable pus	—	—
11	16	M.	Left	—	—	—	Improved.
12	15	M.	Right	—	—	—	,,
13	19	M.	Left	—	—	6 weeks	,,
14	14	M.	Right	Tapped twice, 18 pints pus, 15 pints pus (blood-stained)	—	6 ,,	,,
15	18	M.	Left	—	—	9½ ,,	,,
16	24	M.	,,	Aspirator	26 ozs. pus	7 ,,	Greatly improved.
17	8	M.	Right	Aspirator 1½ ins. below left of scapula	8 ozs serum	11 ,,	Recovery.
18	20	M.	Left	Paracentesis, 7th space, resection, discharge varying per diem 1 to 4 ozs.	34 ozs. thick pus	6 months	,,
19	10	M.	,,	—	—	4 weeks	,,
20	46	M.	Right	Paracentesis	21 ozs. dark coloured fluid, specific gravity 1021, highly albuminous	6 ,,	Improved.
21	38	F.	,,	Paracentesis twice	37 ozs., 39 ozs., clear fluid	—	,,
22	24	M.	,,	At Brompton Hospital aspirated 8 times in 4 months Aspirated (S.P. Hospital) middle axillary line	45 ozs., 41 ozs., 27 ozs., 4 ozs., 40 ozs., 60 ozs., 43 ozs., 50 ozs. 19 ozs. chocolate coloured fluid, thick	—	,,
23	41	M.	,,	Aspirated Paracentesis Resection, 7th space, discharge varying from 12 to 3 ozs. per diem	77 ozs. dark serum 28 ozs. chocolate coloured pus 24 ,, ,,	14 weeks	
24	14	F.	Left	—	—	4 months	,,
25	66	F.	Right	Paracentesis	5 ozs. clear serous fluid	8 weeks	,,
26	42	M.	Left	Paracentesis Aspirator	38 ozs. straw coloured fluid	2 ,,	,,
27	23	F.	,,	—	—	3 ,,	,,
28	27	M.	,,	Aspirator ,,	104 ozs. serum 38 ozs. pus (sweet smelling)	13 ,,	Death.
29	15	M.	Right	,,	42 ozs clear serum	7 ,,	Improved.
30	37	M.	Left	Aspirated ,, Aspirated and drained discharge, 1 to 3 ozs. per diem	20 ozs. pus (sweet smelling) 18 ,, ,,	7 months	,,
31	29	M.	Right	—	Muco-pus (coughed up) offensive	11 weeks	,,
32	15	M.	Left	—	—	9 ,,	,,
33	35	M.	,,	Paracentesis Aspiration	20 ozs. turbid serum 11 ozs. purulent pus	11 ,,	,,
34	26	F.	Right	—	—	5 ,,	,,
35	49	M.	Left	Aspirator	72 ozs. serum, specific gravity 1040, large quantity of albumen	6 ,,	,,
36	21	F.	Right	—	—	11 ,,	,,
37	29	F.	Left	Aspiration ,, Resection	4 ozs. pus 10 ozs. pus. 96 ozs. pus (offensive)	9 ,,	Improved, still in hospital.
38	50	F.	Right	Aspirated	24 ozs. clear serum	2 ,,	,,

twеen the intra and extra (minus) pressure. That air commences enter the lung at once when the fluid is being taken away, any ie may convince himself by applying a stethoscope to the chest uring the operation; in a short time coarse vesicular breathing ay be distinctly heard. At the same time the position of the art's apex beat may gradually change, partially, no doubt, from e re-expansion of the hitherto collapsed, or partially collapsed, ng.

If the operation of paracentesis has been long delayed, the pul- onary pleura is oftened covered with so thick and fibrinous a yer of false membrane that early and complete re-expansion of e lung cannot satisfactorily take place, and the result is that a nus pressure is still exerted, and constantly acts upon the con- nts of the chest, interfering with the action of the heart, tend- g to place too great a strain upon the parts of the lung which e the most expanded, from being less bound down, as well as ding to draw inwards the chest wall, upwards the diaphragm d the mediastinum towards the affected side. This untoward sult is certainly a great argument in favour of early operation. m in accord with those who do not look upon the entrance of , if aseptic, in small amount, with any apprehension under such cumstances. Theoretically, indeed, it would seem to be a good ng, as it would diminish the partial vacuum set up by the re- val of fluid,

In cases of free incision into the pleural cavity, when there is a communication more or less free between the chest and the external atmosphere, we have a condition which, speaking from a strictly physical point of view, allows no opportunity for the re-expansion of the lung. We know, however, from clinical experience, that the lung often re-expands, as may be proved from the physical signs, and we know also that not infrequently the lung expands, the discharge from the side ceases, and the patient becomes convalescent, without any marked deformity of the chest. I have several such cases under operation at the present time.

Evidently the same process of repair does not occur in all of these cases, and it must be that the former view, which looked upon every discharging empyema as likely to heal up only as an abscess cavity, by the union of granulating surfaces, is untenable. In a very interesting paper, Dr. Robertson, of the Oldham Infirmary,[3] has brought forward a considerable amount of evidence in favour of what he calls the "valvular theory," to explain the speedy expansion of the lung, even in cases of so-called free incision. He believes that in a certain number of cases the aperture into the chest wall, although patent on expiration, and so adequate as an exit for pus or other fluid or air on violent expiration, is not patent on inspiration. This valvular action at the point of

[3] *Medical Chronicle*, March to July, 1888.

incision our author thinks is due, first of all, to the antiseptic dressing of the wound.

"First, a large tube is inserted, then a piece of protective iodoform collodion is placed over the wound unoccupied by the tube; finally, numerous layers of moistened gauze, and then the mackintosh are applied, the whole being kept in position by a bandage. It is perfectly obvious that the protective, especially when it is coated with pus, must form an excellent valve."

At the same time, the tube is full of pus in all probability. The wound itself, too, soon becomes valvular, the edges become covered with granulations, and are speedily in full contact, and by further growth they bulge outwards, and assume the form of two soft projecting masses. Under these circumstances, air appears neither to enter nor to leave the chest; during forced expiration some air or fluid is expelled, but a violent inspiration has the effect not of opening, but of closing the valves. If Dr. Robertson's views are correct—and they appear to me to be very reasonable—an empyema, treated by incision and drainage according to the antiseptic method, is placed much in the same physical condition as a pleural effusion, simply tapped, with closure of the point of puncture. The air and fluid are gradually pumped out of the pleura, and no air enters the chest to replace them. The lungs, answering to this gradually increasing extra pulmonary or pleural minus pressure, expand gradually, whilst their expansion is accelerated and rendered permanent by the gradual growing together of the pleural surfaces.

It appears, as already stated, a very plausible explanation of certain cases of good results after free incision. I am inclined, however, to believe that it is not the only explanation. For example, it appears very likely that we have to deal very often with loculated empyemata, or with cases in which previous adhesions here and there prevent the complete collapse of the lung, which is usually assumed in operation cases. I cannot, however, devote any more time to this point.

As a result of certain cases of empyema we have great deformity of the chest and spine, and with a persistent opening constantly discharging pus. If regular and prolonged washing out of the cavity, which will not fill up with granulations, does not succeed—there are few such cases I fully believe—and when the health is obviously giving way, suggesting the possibility of amyloid disease, resection of several ribs may be done. The operation is done in the axillary line and one to two inches of the ribs chosen are removed with the bone forceps. The fifth and sixth ribs are the important ones to resect. By means of this operation the ribs can fall in more completely, and the cavity discharging pus in the pleura is put in a condition to become obliterated. I am glad to say that my experience of cases in which this operation has become necessary is small.

Before concluding this very cursory glance at the treatment of pleural effusions, I would desire to emphasise two details in the post-operative treatment:—

1. The first is the necessity of getting the patient out of bed as soon as possible, and, further, of getting him into the open air without delay. By attention to these points one is likely to cut short the long period of convalescence, and, in cases where there s an open wound, to diminish the discharge.

2. The second is this: As soon as ever it is possible, that is to say, early in cases of the "close" operation, and as soon as the discharge is small (say ℥ss per diem), when there has been incision, make the patient expand his chest by regular and frequent but moderate dumbbell exercise or by drilling.

The best results I have obtained have occurred in cases in which I have insisted upon this regular muscular exercise. The extraordinary muscles of inspiration are thus brought into play, the lung expands more completely, and the chest cavity, which always has a tendency to diminish in pleural effusions after operation, has a chance of returning to its normal capacity.

A BEQUEST of £1,003 14s., after the deduction of income tax, which it is thought will be refunded, has been made to the Hospital Sunday Fund by the late Mr. Thomas Crouch, of New Union Street, Cripplegate.

INFLUENZA IN GUATEMALA.—The first case of influenza in the Republic of Guatemala appeared in January among the artillerymen stationed in the city of New Guatemala, which is 300 miles from the nearest seaport on the Pacific. There was no case of the disease in any of the towns between Guatemala and the coast. If the facts are as stated, this would appear to be a *crux* for the contagionists.

CASE OF GASTRO-COLIC FISTULA, WITH REMARKS.

BY HENRY F. A. GOODRIDGE, M.D., F.R.C.P.,
Senior Physician to the Royal United Hospital, Bath.

History.—W. W., aged 46, a commercial traveller, first came under observation six years ago. He was then suffering from acute gastric disturbance, the result of a drinking bout, in which he was wont at that period every now and then to indulge, and which always left him in much the same condition. During the intervals he had tolerably good health. On two different occasions later on, when away on his business engagements, he was attacked with severe illness, marked by acute pain in the abdomen, vomiting, and constipation; and he stated that after both of these attacks he passed blood by stool. For the six months preceding his present illness he said he never enjoyed better health in his life; and four months prior to the same event he married, and had since been living very steadily and as almost a teetotaller. Dr. Douglas Kerr, who had attended him from time to time, and who has kindly furnished me with these particulars, and permitted me to record the case, was summoned to him on November 1st, 1889. The patient stated that he had been taken suddenly ill on a journey, that he had had violent vomiting, the vomited matters being of vile smell and taste, and that nothing had passed from his bowels for four days, not even flatus, but that much of the latter came up by his mouth. He was considerably prostrate; his pulse was very weak; his tongue was foul; he had slight tenderness on pressure in the epigastric region, and there was some feeling of solid resistance there, but otherwise his abdomen presented nothing remarkable. Feeding by mouth was at once discontinued, and rectal feeding substituted, and the next day he was more comfortable and stronger; the same night, however, there was a return of vomiting, and the matters ejected were found to be decidedly fæcal.

On November 5th Dr. Kerr requested me to see the patient in consultation. He was on his back, semi-recumbent, his expression was tranquil, his complexion somewhat pale, and his nutrition good, though it was stated that he had wasted. He had had no severe paroxysms of pain, nor any pain at all except occasionally a little in the left hypochondrium. He was said to go for periods of about twenty-four hours without vomiting, and then to bring up a quantity of most offensive matter. Some that was brought up the previous evening was of unmistakably fæcal odour, but the light was not sufficient to be sure of its colour. His bowels had not been properly relieved for several days. His pulse was 100, small, and weak. His tongue was coated; he had at times a fæcal taste in his mouth, and his breath was observed to have more or less of that odour. He had complete anorexia. There was no distension of his abdomen, the walls of which were quite flaccid; no distinct splashing sound could be produced by succussion; there was some firmness and slight tenderness on pressure in the epigastrium, otherwise he bore free manipulation of his abdomen without inconvenience. It was not known that he had passed undigested food or anything extraordinary from his bowels at any time during his illness; he had not passed much flatus. Feeling satisfied that the patient was not suffering from intestinal obstruction, I expressed the opinion that he had gastro-colic fistula, but could not speak so confidently as to the previous disease.

November 7th. I saw him with Dr. Kerr again. He then had had a vomit of such markedly fæcal character that it might have been said that he had literally vomited fæces. He was now manifestly weaker; his pulse was 120, very small, and feeble. On attempting to examine again his abdomen, although no pain was produced, he said it made him feel sick; the attempt, therefore had to be abandoned. The next day he had a very free and natural action of the bowels, and was reported to be better; but the vomiting soon after returned, the matters continuing to be fæcal, and he gradually got into an exhausted condition, and died on November 13th.

Necropsy Twenty Hours after Death.—On opening the abdomen there were no appearances of recent peritonitis, and there was no considerable distension of the intestines, which were generally of a light slate colour. The great omentum was retracted, and the arch of the colon was high up in the epigastrium and under cover of the false ribs. The stomach was out of sight. On moving aside the small intestines, it was soon manifest that

e colon in its transverse portion was adherent to the stomach. n further inspection it was found that at a spot rather nearer to e splenic than to the hepatic flexure, at the spot, indeed, where is adhesion existed, there was considerable condensation of ssue, so that the two hollow viscera here were quite inseparable om one another. On laying open their cavities respectively, ep ulceration was found to have taken place at the correspond- g spot in the interior of the colon, whereby a somewhat funnel- aped passage had been tunnelled, as it were, through the con- nsed tissue, the apex reaching the interior of the stomach, d appearing distinctly on its mucous surface as a somewhat lvular opening of about the size of a goosequill, and situated tween two and three inches from the pyloric orifice. The latter as rather contracted, admitting only the point of the index ger, and there was some fibroid thickening of the pyloric ring. ere was no ulceration elsewhere in the stomach, but in the pending parts of it intense vascular injection with patches of stre pigmentation. Moreover, there was no ulceration in other rts of the colon, nor any alteration of its lumen or other morbid ange. Liquid fæcal matter, much coloured with bile, was found re and there in the small intestine. There were no enlarged esenteric glands, and no secondary deposits on the surface of e liver; but at this stage the examination of the body had to be ought to a close. Sections of the condensed tissue, micro- opically examined, revealed the presence of a neoplasm, which hibited the histological characters of cylindrical epithelioma.

REMARKS.—The rarity of the lesion present in the foregoing se is amply attested by the scant notice of it to be found in the dinary textbooks of medicine; in some of which, indeed, there no notice of it at all. More than thirty years ago the late Dr. urchison, after ransacking English, American, and Continental edical journals, and all anatomical museums within reach, suc- eded in collecting thirty-three cases of gastro-colic fistula. In arching medical records since, an isolated case is to be met with w and then. Two or three cases may be found in the *Patholo- cal Transactions* (and *only* two or three in the now forty lumes). Albeit, Murchison's Memoir, based upon his collection, d published in the *Edinburgh Medical Journal*, July and gust, 1857, must be recognised as still the best source of infor- ation on the subject.

Finding, then, as we do on reference to the same, that of these irty-three cases, the great majority, namely, twenty-eight, arose m disease commencing in the stomach, and only two from ease commencing in the colon; only one, indeed, from cancer- s disease of the colon; we see that in the case before us we have t merely a rare lesion, but a rare form of that lesion.

The prominent clinical feature of the case was the fæcal vomit- g. The overwhelming frequency with which this symptom is pendent upon intestinal obstruction raises a very strong pre- mption in any given case that this condition is present as the use of it. Once satisfied, however, to the contrary, the diagnosis the main is arrived at. Fistulous communication between the lon and the upper part of the small intestine is so surpassingly re that it can hardly be taken into account; while if diffuse ritonitis ever gives rise to fæcal vomiting, as maintained by me writers, intestinal obstruction, as shown by Mr. Treves, must the proximate cause of it.

But, the existence of gastro-colic fistula assumed, it was not so parent where and what was the disease which had led up to it. e acute gastric disturbances the patient had formerly suffered m, and the firm resisting feeling with some tenderness observed his epigastrium, taken in connection with the relative fre- ency, as shown above, of the gastric origin of the lesion, rather ggested the presence of some latent, and possibly malignant, eration of the stomach; while the two acute abdominal attacks ich he stated he had experienced, followed by hæmorrhage m the bowel, however significant when regarded in the light of *post-mortem* disclosures, seemed of too transient a character, l too remote from the advent of the fistula, to draw attention to colon as the seat of disease. That for six months preceding his al illness, that is to say, up to within three weeks of his death, patient should assert that he never enjoyed better health in life is not a little remarkable.

t is interesting to note that while fæcal vomiting is so charac- istic of gastro-colic fistula, when intestinal obstruction can be luded, this same lesion may exist without it. As Murchison nted out, in cases of gastric cancer, which are just those in ich the lesion is most apt to occur, if the pylorus is much tructed no fæces are formed. The food taken into the stomach passes by the "short cut" into the colon, and is voided *per anum* in a crude and more or less undigested form, giving rise, indeed, to the condition described under the name of "lientery." Normal fæces not being formed, of course there is no fæcal vomiting. In this case, however, not only was the fæcal character of the vomit unmistakable, but the stool when voided was of quite natural appearance, and no crude or undigested matters had at any time been noticed in it. Indeed, the opening from the stomach side, it will have been observed, was somewhat valvular, admitting pretty free passage into the interior of the organ, but not so readily a passage out of it. There was no evidence of any of the matters used for rectal feeding reaching the stomach.

As to treatment, the question of surgical relief was discussed, and Mr. F. K. Green, F.R.C.S., was consulted; but the general condition of the patient was deemed to contraindicate operation. In a somewhat similar case recorded by Mr. Walter Edmunds in the *St. Thomas's Hospital Reports* for 1883, colotomy on the right side was performed with a view to intercept the contents of the colon before they arrived at the fistula, but the operation was attended with no very encouraging result.

HÆMORRHAGES OCCURRING DURING PREGNANCY.[1]

BY A. E. AUST-LAWRENCE, M.D.,
Physician-Accoucheur to the Bristol General Hospital, and Lecturer on Diseases of Women, Bristol Medical School.

THE object of this paper is to put before the profession those cases where a woman is pregnant yet loses blood *per vaginam* either at regular intervals or irregularly. My purpose will be best served by giving cases illustrative of the subject, which will help to elucidate some of the problems placed before us when we are consulted by women who are pregnant and yet are in doubt about it, owing to seeing blood discharges come from the vagina.

To begin with, we will assume that the woman is pregnant, that under perfectly normal conditions she ought not see any discharge of blood from the date of conception to the advent of labour, but we have to look at one form of hæmorrhage, which is, to a certain extent, natural, namely:—

Persistence of Menstruation.—It is not impossible that a woman may be pregnant and yet have a discharge of blood from the uterine cavity before the two deciduæ have come in contact, which will in nowise interfere with the progress of development. Whether this is to be regarded as a menstrual period after conception, and whether an ovum has escaped after the fecundation of a previously escaped one, I shall not enter upon. My subject is essentially a practical one, and I am willing to admit that one real period may take place after conception, but not more than one; the seeming menstrual acts which do take place can be explained by some of the various causes of hæmorrhage which I shall relate further on. I cannot enter upon the question of ovulation, either with or without uterine hæmorrhage. One point there can be no doubt about, and that is, that when once the uterus has acquired the habit of bleeding periodically we see this habit kept up in the various diseased conditions of the uterus long after ovulation must have ceased. We often find that greatly increased hæmorrhages, at certain definite intervals, do occur. Of course it is exceedingly puzzling for a woman who thinks she is pregnant to find that her periods recur, and it often makes her think she is not pregnant, and very often medical men are deceived, because they overlook facts which I shall give in detail in this paper. One can quite understand that, if conception occurs just prior to the advent of a menstrual period, that period will come on, but most likely modified in its duration and amount of discharge lost, and I also admit the possibility of one period subsequent to the impregnation; but, as a rule, these are not the cases that we are consulted about. In these cases the error that happens, as a rule, is only that of miscalculating the date of confinement, the amount of blood lost not being more than an ordinary period, and very often much less. We must dismiss, then, in my opinion, persistence of menstruation as a cause of bleeding in pregnant women, except in very rare cases, such as in double uteri and extrauterine gestations. The probability of one period may be admitted, but other causes, to be mentioned as we go on, will explain the majority of cases, only one must not lose

[1] Read before the Bath and Bristol Branch of the British Medical Association

sight of the fact I have already alluded to, namely, the tendency of all uterine hæmorrhages to be more or less periodic, and given a woman who loses a little blood more or less constantly from the uterus, she will lose a great deal more at what would, under ordinary circumstances, be a menstrual period.

The second cause of bleeding in pregnant women is one I have often noted, namely, from a granular and eroded os and cervix uteri not malignant. Here we have a pregnant woman who loses a little blood at irregular intervals, increased in amount at what would be the periods; or she constantly passes a dirty brown mucus in large or small quantities, varying with the hæmorrhages above mentioned. In these cases all we have to do is to examine the woman and recognise at once the cause. I have seen twelve cases of this form. The application of nitric acid to the granular surface soon cause the parts to assume their natural state. Astringent injections will sometimes cure these cases without any other treatment. In some cases the granular state we see is complicated with a similar condition high up the cervical canal, and possibly extends into the uterus; then nothing is of any good to stop the bleeding, which, if excessive, would soon run the patient down; all we can do in these cases is to induce abortion.

I regard this form of bleeding as being very common, and constantly overlooked because no proper examination is made. If the os and cervix be exposed with a duck-bill speculum, the granular surface is easily seen, with its highly developed papillæ, and if you rub these with a sound they will bleed; but in simple cases, where the disease does not extend up the canal into the uterus, you do not see any blood coming down the canal. The direct application of nitric acid cures these cases like magic; but if you see dark blood coming down the canal, you may rest assured that you have some intrauterine cause of hæmorrhage such as I shall describe further on.

One interesting case I saw lately. The woman was pregnant four months, and yet had repeated hæmorrhages. I found a small polypus growing from just inside the cervical canal. This was removed; the bleeding ceased, and the pregnancy went on its normal course.

The third kind of cases includes those where the bleeding comes from the cervix owing to its being the seat of malignant disease. I have seen several cases with a history like this: No evidence of any disease or anything unusual until pregnancy has taken place, when slight hæmorrhages have occurred at irregular intervals; sometimes, however, there has been profuse bleeding. An examination reveals the nature of the case. Under most circumstances the best treatment is at once to induce abortion. You check the bleeding to a great extent, and you lessen the woman's risk by not letting her go on to full term with an increasing disease of the cervix uteri.

Although I have seen six cases where the disease of the cervix was recognised prior to the delivery at full term—simply because the women came on account of the unnatural discharge of blood—yet I have seen a very much larger number where there has been no doubt but that the disease existed prior to delivery, from the history which I obtained; but the women only came under observation after confinement, most of them being supposed to suffer from some of the many post-puerperal conditions which induce menorrhagia. In all these cases the disease was already far advanced, and in all the fatal termination was most rapid.

It is not always easy to diagnose malignant disease soon after labour, as the following case shows: A woman came into the hospital under my care with pelvic pain and offensive discharge, a very large, hard, ragged cervix, and fixed in the pelvis, but it was not cancer. It was a case of septic cellulitis, fixing the big subinvoluted uterus with its bulky lacerated cervix, the bleeding and offensive discharge being caused by a piece of retained decomposing placenta, itself the origin of all the trouble. The patient made a perfect recovery.

Certain forms of vaginal hæmorrhage must not be overlooked, as the following case shows: A woman was six months pregnant, and began to bleed profusely. The doctor in attendance thought it was a case of placenta prævia, and induced abortion. The bleeding went on; he then washed out the uterus with solution of perchloride of iron. The bleeding stopped for two days, then recurred very badly. I was then asked to see her with her doctor, and immediately on passing my finger into the vagina recognised an ulcerating malignant growth of the anterior vaginal wall, about an inch long and half an inch broad, beginning half an inch posterior to the meatus urinarius. Of course the explanation why the bleeding ceased when the solution of iron was injected was simply this, that as the solution ran down from the uterus it went over the vaginal sore. It was a case of primary vaginal cancer, and proved rapidly fatal.

I have seen very troublesome bleeding in pregnant women from vascular growths at the meatus, also from rupture of some of the vaginal veins, most probably due, I believe, to coitus, although possibly in some cases to straining at stool. Of course, one may see cases where bleeding from the urinary tract may give rise to the idea of its being uterine; but an examination will clear up these cases, as well as those where the bleeding may come from the rectum.

Hæmorrhages from the stomach and lungs, complicating pregnancy, I have nothing to do with in this paper. The question does arise sometimes as to the propriety of inducing labour, in order to lessen vascular tension, and so lessen the bleeding.

We come now to consider the part the placenta may play in these hæmorrhages; and I take, first, those cases where the position of the placenta is normal, but its constitution is wrong. Either there is a deficiency of trabecular structure which does not give proper support to its vessels, or the vessels are weak from fatty degeneration. Whichever of these conditions exists, the result is the same: the placenta is very soft and pulpy, and from very slight cause blood oozes from its vessels, and either escapes into the amniotic cavity or, more frequently, passes down between the membranes and the wall of the uterus, and escapes externally. If in spite of rest and opium, and small doses of ergot, the bleeding persists, then clear out the uterus. I have seen a large number of these cases, and have never regretted acting too soon, but have regretted sometimes not acting soon enough. If the amount of blood which a woman is losing is telling on her health, you must check it, and there is only one way, and that is by clearing out the uterus. In these cases, with a speculum, you can see the blood coming directly from the cervical canal; it is most usually dark, and often the woman has pains like those that occur early in labour.

We now take another class, where the construction and position of the placenta are normal, and yet, from an accident, separation of the placenta has taken place, with the result of one of two things: (*a*) hæmorrhage, external; (*b*) hæmorrhage, internal. If the hæmorrhage is external, of course it is visible, and if there is much loss and you cannot check it, do not try and be too refined in your diagnosis as to whether it is accidental hæmorrhage, placenta prævia, or the form of hæmorrhage I mentioned in the last class. Realise at once the position of the woman, and clear out the uterus; she has no safety as long as the placenta is separated, and bleeding is going on.

Again, take the second variety, where the bleeding is internal: these are the cases to try a medical man. The woman is bleeding into her uterine cavity either between the membranes or wall of the uterus, or into the amniotic cavity itself. There is no external evidence of hæmorrhage, yet every symptom the woman has points to the loss of blood. You exclude loss from every conceivable place—mouth, bladder, bowels, and vagina; you have positive history of sudden pain, and tension in the uterus, faints, etc. Your only chance of saving that woman is in clearing out the uterus; and if you do not see the patient early the probability is that in spite of all she will die. I shall never forget a case I had myself. The lady was a primipara, eight months gone, and was suddenly seized with great pain and faintness. I saw her soon after, and there, protruding from the vagina, was a large bag of the membranes, purple from contained blood. I ruptured the membranes and delivered rapidly, and saved her life, but was blamed for hurrying her labour. I need hardly tell you I did not take the blame quietly. Of course, the public do not understand these things, and we must act as our judgment dictates, although I am aware that sometimes we get less blame if we allow patients to die unaided than if they die in spite of our efforts to save them.

The last class is one best known to most medical men—namely, placenta prævia, and I do not intend to enter upon this subject any further than to use it to illustrate one form of hæmorrhage. My chief object has been to divert attention from this variety of hæmorrhage into other channels, for the usual idea is that if a woman bleeds before she is gone six months, she is going to abort, and if she bleeds after six months, she has placenta prævia.

I trust this short paper of mine will open up other possible sources of hæmorrhage. Exclude all the other varieties I have named, and the presumption is you have a case of placenta prævia to deal with; and there again the golden rule comes in, clear

e uterus; and as in the majority of cases the os uteri is closed, wish to draw your attention very briefly to these sponge tents use, and also to the precautions which I adopt. I have no doubt it that most of you saw them last year, when I read a paper on e "Treatment of Incomplete Abortion." I bring them before u again because I find that tents are being blamed for evils hich arise from their abuse, and from their not being used with oper antiseptic precautions. Of course, when the woman is ar her full time you can often do all the work with the best nt in existence—namely, your index finger properly aided with dilating india-rubber bag.

The precautions I use in clearing out the uterus are as follow:) wash out vagina with carbolic lotion, 1 part in 100, (2) pass to uterus a 20-grain iodoform bougie to keep the contents of erus aseptic, (3) pass into uterus my antiseptic sponge tent, (4) ug vagina with iodoform wool to keep the tent in position; ave the woman alone for twelve or even twenty-four hours, en (1) remove vaginal plug, (2) remove tent, (3) wash out vagina ith carbolic lotion, (4) pass into the uterus one or more fingers d clear out its contents, (5) wash out uterus and leave in it doform pessary of 20 grains.

The tents referred to in this paper were shown at the meeting the Obstetrical Society in London in December, 1889. They e very carefully prepared from sponge which has been soaked me days in 1 in 2,000 of corrosive sublimate, and after they are ade up they are coated with gelatine holding in solution corro- e sublimate 1 part in 1,000. The gelatine coating enables them be passed very easily, as the point of the tent retains its firm- ss for some time. The tents have been made for me by Mr. ixton, chemist, Queen's Road, Clifton.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

A NEW REMEDY FOR SEA-SICKNESS.[1]

HE successful treatment of sea-sickness which surgeons afloat ve so much to do with, and which generally they are unable ectively to alleviate, must prove my excuse for bringing before e profession the curative effect of kola (*Sterculia acuminata*) in is affection. In the few cases which I have lately had to deal th, I have found the internal administration of the seed of the la a most successful remedy. Half to one drachm of the seed ewed slowly was followed, in about forty minutes, by complete ssation of the various symptoms of *mal de mer;* the depression, miting, and giddiness disappeared; the heart's action regulated d strengthened, and a confidence in heavy weather that my ses never before experienced during the many years they have rved in the Royal Navy, and had tried the usual remedies pre- ibed by their advisers. At present, no means of preventing sea- kness in those susceptible of it is known; and I venture to be- ve that in kola, or its alkaloid, we have one, and that a larger al of this drug will tend to support my opinion. From its well- own sustaining and invigorating properties during fatigue, for hich it is daily used by the natives on the West Coast of Africa d the Soudan, its action in sea-sickness seems to be the giving ie to the nervous system, proving a stimulant—acting generally d locally. As a good deal of attention is now directed to this g, it would be advantageous if for future trials pharmaceutical emists would give us a neater, more portable, and efficient paration than the kola seed, which seems reliable only when shly procured.

CHAS. W. HAMILTON, Surg. R.N.

[1] Communicated by the Director-General of the Medical Department of the Navy.

CASE OF IDIOPATHIC INFLAMMATION OF THE TONGUE.

the morning of October 2nd, 1889, I was called to see M. L. e patient was an overgrown strumous-looking girl of 17. On king about 5 o'clock she found her tongue swelled and pro- ding between her teeth. She had a similar attack nine years ore, and had been under treatment then for twenty-seven eks. She sat up in bed unable to speak intelligibly. The elled tongue, forcing apart the dental arches, protruded an inch l a half. Over the swollen organ the saliva kept flowing abundantly. She had little or no pain, and the inconvenience and unsightliness of her affliction gave her much uneasiness. Pulse was good, 92; respirations, nasal, 20 a minute; temperature, 99.8°. She had been as well as usual the night before. Menstruation had begun early (13 years), and was regular, the last period having taken place a week before. She had not used mercury nor other poisonous substance as a medicine or food, so far as she or her relatives knew. Her father was living, aged between 40 and 50; her mother died of consumption; her only brother was 15 years old, and never ailed anything; he, however, looked strumous. She usually had good health, but had occasionally suffered from swelling of the glands.

A smart purge was given, followed by 5-grain doses of potassium iodide three times a day. The mouth was kept clean by syringing, often with solutions of borax and alum sulphate.

At the end of ten days the swelling was not greater, but the teeth of the lower jaw were beginning to ulcerate into the tongue on its inferior surface. The submaxillary and sublingual glands were hard and swollen, and she complained of stiffness all round the neck. There was no rash. Pain and stiffness were relieved by poultices applied over the swollen glands, and linimentum iodi was then painted over them, and iodide of potassium continued internally.

On October 24th there was no reduction in the size of the tongue, and quinsy developed in the right tonsil. Temperature 102.5° F. Potassium iodide was stopped, and poulticing and fomentations soon relieved the tonsillitis.

I proposed to incise the tongue, but the relatives resolutely refused to allow me. I therefore, on October 26th, applied six leeches scattered over the surface of the swollen member, and the bites were encouraged to ooze about four hours. A week after she could withdraw the tongue a little, but it was still impossible to get it inside the teeth.

On November 5th I again applied the half-dozen leeches, which caused oozing for four or five hours after they fell off. Then iodide was resumed internally as before, and on November 27th the tongue was inside the teeth, but it was not until December 21st that she could bring the teeth together.

REMARKS.—The chief peculiarities of this case are, I believe, its rarity, the absence of severe symptoms, and the duration of the disease. From the improvement which followed leeching I should not hesitate to incise the tongue in another such case at the beginning, giving iodide to complete the cure. I much regret that she refused the photographer one negative while the tongue was protruded. A good photograph would have shown the disfigurement better than any amount of letterpress could describe.

Tarporley. ALLEN MCCULLOCH, M.B.

PROLONGED SOMNOLENCE AFTER INFLUENZA.

I HAVE had a case recently which must, I think, be considered an example of the disease *La Nona*, of which such wonderful reports have been given.

The patient, a child aged 1 year (not at the breast), had an unmistakable attack of the epidemic catarrh, with general myalgia well marked. The mother described it as "not being in pain, but uncomfortable all over." The attack was followed by a peculiar somnolence and great prostration, which lasted some ten days, during which the child had to be roused for food, of which it took very little; also it was roused for its bath, which in health it vigorously resisted, but now scarcely noticed.

The convalescence commenced suddenly. The child was put to bed at 6.30 P.M., and, being for some reason forgotten, it slept till 3 P.M. of the following day, when the mother roused it and gave it food. It went to sleep again directly, and slept for about half an hour, when it awoke spontaneously and seemed itself again, taking notice of everything as usual, and from that time made a good recovery.

During the somnolent period I was several times in doubt whether it would recover, the prostration being extreme. The mother had had a typical attack of the epidemic a month previously, but developed no somnolent symptoms.

Holland Park, W. ALFRED E. BARRETT.

DIABETES AFTER INFLUENZA.

I SHOULD like to add to the interesting series of sequelæ to influenza, recorded in the JOURNAL, two cases of diabetes which appear to owe their origin to the morbid conditions brought about by this curious epidemic.

CASE I.—The earlier in point of date was that of a girl named O. B., aged 22, who had never been very strong; last Christmas she had an attack of influenza, and shortly after began to suffer from thirst and frequency of micturition. When seen she was passing about 100 ounces of urine daily, containing about 10 per cent. of sugar. This case is not a severe one, and has improved very much under treatment; the quantity of urine is normal, and there is only a very little sugar still present.

CASE II was a glassblower named C. A., aged 30, who was in bed for a week at the end of January with a severe attack of influenza. Immediately after he began to suffer from thirst and loss of weight. He had been in the habit of weighing himself at intervals, and was sure that up to the attack of influenza he had not lost weight; since then, although a spare man, he has lost 17 pounds. He passes from 200 to 300 ounces of urine daily, containing 7 or 8 per cent. of sugar. This is a severe case, and has not at present been greatly influenced by diet or drugs.

Birmingham. ROBERT SAUNDBY, M.D., F.R.C.P.

SCARLET FEVER AND PUERPERÆ.

RECENTLY I attended two children of a lady who was some months pregnant. She attended to all the nursing herself, and, when one child was convalescent and the other desquamating freely, she aborted at the fifth month. She lay for three days in a room opening off that occupied by her children, and afterwards in another room close by. Her recovery was rapid and uninterrupted. Both children were treated from the first by Jamieson's method, and it is chiefly as an illustration of the value of the treatment that I report the case.

Bagnalstown. J. COOPER STAWELL, M.B.Dub.

ANTISEPTIC AFTER-TREATMENT OF VACCINATION.

WITH regard to Dr. Illingworth's remarks in the JOURNAL of May 3rd upon my memorandum upon the above subject, it is only necessary to state—the form of the instrument is a matter of taste—that inflammation due to the incision should follow the operation upon the first day, and not appear as usually upon the eighth or after. Public vaccinators do not always make four marks, neither do many others prefer to do the operation imperfectly to sending obstinate cases elsewhere. It is a matter of opinion whether the antiseptic is best conveyed in a dry dressing, a lotion, or an ointment.

Hinckley. C. W. SESSIONS BARRETT, M.B.

CELLULITIS OF THE ANTERIOR ABDOMINAL WALL OCCURRING AFTER A PREMATURE BIRTH WITHOUT EVIDENCE OF COEXISTING PELVIC DISTURBANCE.

C. R., aged 45 and married eight years, was sent to me on April 30th, 1890, by Dr. Loftus, of Radipole Road, Munster Park. She complained of a lump in the right lower stomach which she had noticed for fourteen days, and which had gradually increased in size. Seven weeks previously the patient was delivered of a six-months' child, which lived twenty-four hours, and ever since this confinement she has experienced a pricking pain in the region where she now complains of the swelling. There is no vaginal discharge, and there is neither bladder nor rectal trouble.

Physical signs: The abdominal walls are very thin; the lower two inches and a half in the hypogastric and right and left iliac regions are smooth, whilst above this they are markedly corrugated. Occupying the smooth portion of the abdominal wall is a regular cake-like phlegmon, which extends from the superior border of the pubic bone to four inches above this anatomical mark; transversely it measures five inches, three inches and a half to the right and an inch and a half to the left of the umbilical line. The swelling is only tender to the touch towards the pubes. It is perfectly hard, and appears to be solid throughout, except at a little spot about the size of a shilling, slightly to the left of the umbilical line, where it is softening, and where it is showing a disposition to point.

Vaginal examination: The uterus is central, and there is no evidence of inflammatory deposit in the pelvis. The anterior fornix is quite free from involvement, and moving the abdominal tumour conveys no impression to the vaginal finger whilst firmly pressed against any part of the pelvic floor. The temperature taken in the mouth is 99.2°.

Gordon Square, W.C. JAMES OLIVER, M.D., F.R.S.Edin.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

FROME UNION HOSPITAL.

INFREQUENT PULSE WITH EPILEPTIFORM ATTACKS.[1]

(Under the care of E. CORKEY, M.R.C.S., and R. S. HUBBERSTY, M.D.

J. H., aged 60, labourer, admitted on February 1st, 1890. He ha been able to work up to five weeks ago, when he said he had fainting fit. Since that time he had been unable to go to worl having had many such fits, during which he lost consciousnes and was not able to get up for more than a few hours each day.

On admission he did not, to look at, show any evidence of illnes beyond a little pallor and varying rate of breathing, and was well-made, powerful-looking man. His pulse was found to b 14, of moderate strength, and irregular. Atheroma of both radial at the wrist; apex beat not transmitted to the surface; over th heart, best heard at the middle of the sternum, there was a ver distinct long first-sound murmur, and the second sound wa hardly audible.

There was some improvement on March 4th, the pulse increas ing to an average of 60 from March 3rd to 7th inclusive, whi the breathing, which had been rapid, became natural in rate, an on the 6th and 7th he was free from fits and able to sit up.

From March 8th to 20th the pulse became of slower averag and the fits more numerous. On the 21st the pulse was altogeth irregular, the skin generally bloodless, but the nose black and wit slight passive hæmorrhage from its interior. Death occurred o March 23rd after gradual failure and continuation of the slo pulse and the fits. No albuminuria was ever observed.

The pulse was 11 on two occasions, and twice reached 76. Th pulse at the wrist always corresponded numerically with the bea of the heart. The largest intermissions were—on February 11t two minutes, when, during a fit, the patient became engorged an almost black in the face, arms, and chest, with stoppage of breat ing during the second minute, and apparent death during mar seconds, followed by return of the pulse to 76 beats in the fir minute and rapid recovery; and on February 17th, 45 seconds, a during a fit. Intermissions of 7 to 11 seconds were frequent an day. The pulse was under 12 on 2 days, under 15 on 10 day and under 20 on 16 days. The average rate for the first 18 da was 29, during the 14 intermediate days 54, and during the last days only $14\frac{1}{2}$. Increase in speed on sitting up in bed was nev observed except once, when it ran up from 36 to 65, but it so returned to 36, and so remained on sitting up a second time. O March 6th it was not quickened by walking round the ward.

The breathing between February 3rd and 21st averaged $27\frac{1}{2}$ 12 days, and the pulse 33 on the same days. It was seldom un form in rate, and Cheyne-Stokes breathing was well marked o February 3rd and March 21st, but was not present on the last d of life. The deepest respirations always occurred during pul intermission.

The fits were epileptiform, and invariably noted to occur duri the intermissions of the heart's action, and to be apparently d pendent on them. They were always marked by the same mu cular action of the various parts, most noticeable in the fac expression, slight internal squint, and grinding of the teeth. Th varied in number from a quantity in quick succession (every h minute) to one or two in the day.

Treatment.—Milk and beef-tea were given at first, and lat whenever patient had fewer fits, his appetite was good, and preferred full diet. Brandy was found useful during the e haustion following numerous fits. Bromide of potassium in 1 grain doses every four hours was found of service, and was chie given between February 27th and March 13th; after the lat date he derived no benefit from it.

Post-mortem Examination.—Body well nourished and lur healthy. A layer of fat covered both the pericardium and hea the muscular wall of which was healthy; left ventricle firm contracted, and its walls $\frac{5}{8}$ inch thick; the aortic valves rath firm in consistence, and in the half open position in which th were found let water through freely, though on carefully closi

[1] See Broadbent on the Pulse, Cassell and Co.'s *Clinical Manuals*, 18s chapter vi.

m with the finger they were quite competent. There were ny hard and sharp atheromatous patches in their sinuses, and ttered patches in the aorta in its first inch, the valves themves being free of atheroma. The mitral valve very incompet; the more anterior cusp was a mere fringe, nowhere broader n $\frac{3}{16}$ inch; the more posterior segment had one large atherotous nodule. The left auricle much dilated. Right side of the rt and its valves were healthy, and both auricles full of fluid od. Weight of heart 1 lb. Both coronary arteries showed plete rings of atheroma at intervals. The brain, its memnes and vessels, healthy but quite bloodless, while all the other ernal organs were full of blood. The abdominal organs all lthy. Spleen, $3\frac{1}{2}$ ounces; right kidney, $7\frac{1}{2}$ ounces; left, 7 ces.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 6TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

meeting was a special one for the consideration of cer- recommendations of the Council to the effect that: (1) The ual general meeting should be held in May instead of January. r. ALBAN DORAN suggested that the *Transactions* should agree h the calendar, and not with the medical year, and proposed amendment to that effect, which was seconded by Mr. AR WILLETT. The amendment was put and lost, and the inal proposition carried.—Mr. SHATTOCK then proposed that first by-law of the Society should be altered so as to read as ows: "The Pathological Society of London is instituted for cultivation and promotion of pathology, by the exhibition and cription of specimens, drawings, microscopic preparations, s or models of morbid parts, and also by the communication hemical, experimental, or other researches or observations re- d to the nature and results of disease, and by discussions reon."—Mr. ROGER WILLIAMS approved the alterations, and NORMAN MOORE thought that it would be unfortunate if nbers were to read papers without bringing specimens or wing experiments in support of their statements.—The PRESIT did not concur with this view. This proposal was then put he meeting and carried.

necimens of Persistent Thyroid Duct.—Mr. RAYMOND JOHNSON cribed two cases of persistent thyroid duct. The first case was of a girl, aged 15 years, who, at the age of 10, first noticed all swelling in the front of the neck, which was opened and evacuated; it continued to discharge. When admitted under care of Mr. Beck at University College Hospital, a rounded l passed downwards from the hyoid bone to a sinus $1\frac{3}{4}$ inch ve the sternum. The fibrous cord was dissected out; it lay eath the deep fascia between the sterno-hyoid muscles, and at upper end was firmly attached to the deep surface of the id bone. Two months and a half later a small opening con- ed to discharge an occasional drop of mucus, and a fine probe d be passed upwards more than half an inch above the hyoid towards the base of the tongue. The fibrous cord contained ne lumen in its whole length, and was lined with a thick r of stratified epithelium, having a distinct papillary arranget. The second case was that of a female child, aged 6 years, ne middle line of whose neck a small swelling appeared at the of 4 years; it soon burst, and continued to discharge pus. n admitted under Mr. Barker's care a small depressed sinus situated over the thyroid cartilage, and from it a fine rounded passed up to the hyoid bone. The treatment was the same the above case, and the wound healed rapidly. There was a lumen, but no epithelial lining could be demonstrated. In case it was believed that the lower part of the thyro-hyoid had remained unobliterated, and an external opening had ed as the result of suppuration around the lower end of the In the first case the lingual portion of the duct above the l bone had only partially closed. Reference was made to Bland Sutton's classification of these cases, and also to a case ribed by Cusset in a monograph published in 1877 on nchial Fistulæ." In a girl, aged $5\frac{1}{2}$ years, a track, lined with ed epithelium, led from the hyoid bone upwards towards the of the tongue, and opened externally below the hyoid as the t of suppuration.—Mr. BRUCE CLARKE had noticed that suppuration was liable to occur in these cases after injury. In a case that had been under his care no permanent cure had been effected even after free cauterisation. Some of these cases had been described, and particularly in France, as bursæ.—Mr. ROGER WILLIAMS asked Mr. Johnson if these tubes could be considered as obsolete ducts of the thyroid gland.—Mr. JOHNSON was unable to answer the question.

Myoma of the Uterus becoming Sarcomatous.—This tumour, exhibited by Mr. ALBAN DORAN, was removed from a woman, aged 31, by Mr. Thornton. It had been observed for four years, and grew rapidly during the last few months before operation. It sprang from the fundus, the uterine wall forming a complete and extremely vascular capsule. The tumour contained much blood, and was, on section, of a uniform pale yellow colour, free from calcified or softened patches, cysts, effused clot, or sinuses. It was mostly made up of well-formed, plain muscle cells, but also included large collections of relatively short spindle-cells, with broad, oval nuclei. No metastatic deposits had developed, but the case resembled another exhibited by Dr. Finlay before the Society in 1883, which, on clinical evidence alone, was clearly more advanced; widely-spread secondary deposits were discovered. Mr. Doran, therefore, considered that the tumour now exhibited was either a myoma in an active though very early stage of sarcomatous change, or else a "soft fibroid"—a class of tumour which did not usually cease growing after the menopause, and, as Von Winiwarter had already noted, behaved clinically like a sarcoma.—Mr. SHATTOCK suggested that the sarcoma might have started in the connective tissue of the myoma, similarly to the way in which they sometimes commence in ordinary muscles.—Mr. ROGER WILLIAMS thought that specimens of this description did not bear out Cohnheim's hypothesis that neoplasms were mostly derived from embryonic remnants.—In reply, Mr. ALBAN DORAN stated that myomata were much more purely muscular growths than was generally supposed. It was possible that they started from the muscular walls of uterine arterioles. He said that it was as yet uncertain how myomata occasionally became malignant.

Ulcerative Endocarditis, Aneurysm, and Amyloid Degeneration.—Dr. NORMAN MOORE showed a heart, which was taken from the body of a man, aged 37, who when he was first seen complained of severe pain in the right groin, in which a hard swelling was found, which, however, soon subsided. Shortly after, no pulsation could be detected in the left femoral artery, and it was very feeble in the right femoral artery. Three weeks later, no pulse could be felt at the right wrist. The man then complained of considerable tenderness above the umbilicus, beneath which it was thought that an indefinite lump could be felt. There was a loud double murmur to be heard over the base of the heart. The patient had at some previous time had rheumatic fever, and for a long time had suffered from frequent epileptic fits. His illness had been acute for the last nine weeks of life, and during this period he had had no fits. At the *post-mortem* examination, fungating vegetations were found on the aortic valves, and there were clots in the right brachial and in both femoral arteries. In the middle of the abdomen, corresponding to the tender area mentioned above, an aneurysm of the main pancreatic artery was found, which was evidently of recent origin, and contained a clot. He then described the formation of aneurysms in these cases. The second case was that of a boy, aged 14, who had been under Dr. Gee's care in St. Bartholomew's Hospital for five months, which was practically the duration of his illness. He suffered at first from indefinite pains. There was a double murmur to be heard over the base of the heart, and a loud systolic murmur at the apex. A few weeks before death, right hemiplegia set in. At the *post-mortem* examination, vegetations were found on the mitral and aortic valves. There were infarcts in the spleen and kidneys, and the liver, spleen, and kidneys were found to be lardaceous.—Dr. ANDREWS then mentioned the different kinds of micro-organisms that had been found in cases of ulcerative endocarditis. In the cases under discussion, in the first case only streptococci were found in the vegetations and in the clots from the femoral and brachial arteries. No micro-organisms had been found in the kidneys or spleen. In the second case, more than one kind of micro-organism were found in the vegetations on the valves; one kind was very similar to the diplococcus pneumoniæ. It was remarkable that the streptococci from these two cases would only grow on agar-agar at the body heat, and not on gelatine in the cold.—Mr. H. H. TAYLOR described a case in which he had found large masses of micrococci in the vegetations of a case of ulcerative

endocarditis. Similar micro-organisms were present in ordinary cases of endocarditis, but not in such profusion.—The PRESIDENT asked Dr. Moore if any other cause for lardaceous degeneration had been found in the second case.—Dr. NORMAN MOORE replied that no other cause for lardaceous degeneration could be found. There had been no evidence of syphilis, congenital or acquired, and no evidence of any suppuration was present. He ventured to put forward the suggestion that there might be some connection between the presence of micro-organisms and the lardaceous change in the organs.—Dr. ANDREWS mentioned that bacilli could ordinarily be found in the spleens of both men and animals, but how they got there it was impossible to say.

Tubercular Disease with Multiple Abscesses of the Liver.—Dr. HECTOR MACKENZIE showed a specimen of extensive tubercular disease of the liver from a man aged 50, who had died in the Royal Free Hospital last November under the care of Dr. Sainsbury. The man had been ill about fourteen weeks before death, and for nine weeks was confined to bed, suffering from shortness of breath, perspiration, loss of flesh and strength, and pain on the right side of the chest. He was in the hospital four weeks, gradually getting weaker. The pain in the right side continued, and there was tenderness in the region of the liver, which felt slightly enlarged. The physical signs in the lungs pointed to phthisis. The temperature ranged between normal and 100° F. Some days before death signs of pleurisy with effusion developed on the right side. There was a family history of consumption, and the man had been a heavy drinker. At the necropsy there was recent pleurisy with effusion on the right side, collapse of the right lung, and what looked like ordinary tubercular disease in both lungs. The left was chiefly affected, and there was consolidation, caseation, and excavation in the middle part of the upper lobe. With the exception of one small ulcer in the upper part of the ileum no change was found in any other organ except the liver. The liver was drawn over to the right, so that the interlobar notch was situated about the junction of the ninth and tenth costal cartilages, while most of the right lobe was inaccessible from adhesions. Immediately above the right kidney there was a large globular mass, feeling like a cyst, with thick walls. The liver, diaphragm, kidney, suprarenal, and duodenum had to be removed *en masse* before the nature of the case could be determined. When the adherent parts were separated from the liver the right lobe was seen to present a very remarkable appearance. The liver, to the right of a vertical section, through the notch for the gall bladder, was extensively diseased, while the remainder was apparently healthy. The gall bladder, although it had formed adhesions to the liver, was itself unaffected by disease. It contained a few small gall stones, but its mucous membrane and that of its duct were quite healthy. The portal fissure and the vessels entering there were also normal. The diseased portion was shrunken to about two-thirds of its normal size. The capsule was thickened and the edge was rounded off. The globular mass already referred to was situated in the lower part immediately to the right of the gall bladder. It was about the size of a Jaffa orange. The capsule of the liver was quite continuous over it. Most of the surface of the affected part of the liver unoccupied by the tumour was studded with yellow prominences varying in size between a shilling and a threepenny piece. On making sections through the larger and smaller tumours it was found that the former contained in its interior a soft pultaceous mass of a purple colour, consisting of broken-down caseous material, mingled with altered blood. The cavity left after the removal of this matter was one which was separated from the surface in its lower half only by a layer of fibrous tissue which posteriorly was hard from calcareous deposit. The cavity wall in the upper part was ragged aud reticulated, being formed by the liver substance itself. The smaller masses, which were quite as numerous in the interior as on the surface, were found to consist of soft yellow caseous material, surrounded by connective tissue walls. The contents of these masses readily escaped from the cut surface, giving the appearance of cavities. Microscopic examination showed the disease in the liver to be tubercular. Quite typical tubercles with giant cells and surrounding small-celled tissue were abundantly seen in the circumferences of the masses, especially in the smaller ones. In connection with the case of actinomycosis of the liver, reported by Dr. John Harley some few years ago, in which he looked on the essential element in the disease as tubercular, it was thought desirable to make repeated examination for the ray fungus, but no trace of it was found. This form of tubercular disease of the liver was extremely rare. A few cases had been shown at the Society in which masses probably tubercular, had been found which had undergone softening but none in which the disease was so extensive as in this case. By German writers a rare form of tubercular disease of the bile ducts was described, in which the entire organ became honeycombed with innumerable cavities filled with bile-stained softened material. There seemed no evidence that in this particular case the disease had originated or extended by means of the bile ducts.—Dr. THOROWGOOD mentioned a case under his care at the Victoria Park Hospital in which tubercular abscesses were found in the liver.—Dr. VOELCKER had seen two cases in children in which the cysts contained green-stained material. Tubercle in the liver was not uncommon, but cavities were certainly very uncommon.

Duct Carcinoma of Breast.—Mr. H. BETHAM ROBINSON described a tumour of this description which was removed from a married woman, aged 46, in June, 1889. She had had no trouble with the breasts until a little over three years previously, when she noticed a hard lump in the left breast, just above and to the outer side of the nipple. This did not inconvenience her until three months before admission, when it rapidly grew and became painful. There were several nodules of a hard elastic growth, especially in the upper and outer part. The skin was free and not altered; there was no eczema of the nipple or of the areola. The growth was attached to the nipple, but the latter was not retracted. There was no enlargement of the axillary glands. There was a slight discharge from the nipple. The right breast was healthy. On section, the tumour appeared like a cystic thyroid; it was composed of nodules, which seemed gelatinous, supported by a fibrous framework, the former bulging on section. The growth was lobulated and well defined and pigmented from blood staining. There were cysts in it, containing a thick greenish-brown fluid, and in some cases blood-clot. Microscopically, there was seen at the margin of the growth a cystic condition of the breast. The smaller ducts were dilated but the acini did not appear to be much altered. These dilated ducts were lined with a columnar epithelium, the cells of which were proliferating, and in their interior the cells appeared spheroidal, and were undergoing mucoid degeneration. The ducts and acini were surrounded by a dense fibrous tissue. The larger spaces showed large papillary processes covered with several layers of epithelium, passing into the interior and branching in all directions, so the cyst space was almost completely filled up. Besides general dilatation of the blood vessels there was extravasation of blood into the connective tissue and into the cysts. The connective tissue showed no marked round-celled infiltration. From examination of the sections, there was some evidence as to the starting point of the disease, namely, in the cystic condition which arose in connection with involution of the gland. Microscopical appearances did not suggest any marked malignancy, and the history of most of the cases went to prove that such was the case. It was quite the exception to get enlargement of the axillary glands; local recurrence was not rare, but secondary growths appeared to be very rare. It was now one year since the operation, and the patient was quite well and free from any recurrence.—Mr. ROGER WILLIAMS thought that the tumour had originated from the ducts, and asked if it was encapsuled.—Mr. ROBINSON replied.

Card Specimens.—Dr. LEDIARD: Coloured Photograph of Epithelioma of the Scalp.—Mr. H. B. ROBINSON: (1) Dermoid Cyst; (2) Sebaceous Tumour of the Scalp; (3) Epithelial Tumour of the Soft Palate.—Mr. SHATTOCK: (1) Cystic Squamous-celled Carcinoma of Scalp arising in Sebaceous Cyst; (2) Polypi of Lymphatic Tissue from Child's Rectum.—Dr. HEBB: Gangrene of Uterus.—Mr. TARGETT: Congenital Cyst of Testis.

MEDICAL SOCIETY OF LONDON.

MONDAY, MAY 5TH, 1890.

J. KNOWSLEY THORNTON, M.B., President, in the Chair.

THE ANNUAL ORATION.

The Rapid Heart.—The annual oration was delivered by A. E. SANSOM, who took for his subject "The Rapid Heart: a Clinical Study." The orator justified his choice of a subject on the ground that there were very few medical men who were not occasionally perplexed concerning cases involving disturbances of the normal action of the heart in relation to diagnosis, prognosis and treatment. He insisted on the equal undesirability of overr

g as of understating the consequences of such perturbations. is remarks were confined to cases in which the heart's action was orbidly accelerated, leaving on one side those cases in which regularity of action coincided with acceleration. He excluded, so, cases in which valvular or other organic disease of the art was present, and cases in which the rapidity was due to ver or analogous general condition, or to peripheral irritation, or which the acceleration was "paroxysmal." Moreover, cases of lpitation were likewise excluded when existing in a heart which der ordinary circumstances had a normal beat. By "rapid art" he intended to comprise the cases in which the cardiac tion was set, so to speak, for an abnormally rapid rate. The ator then defined the normal beat as one not exceeding 90 per inute in the adult. He pointed out that in infants and young ople not only is the heart rate normally more rapid, but it is so extremely susceptible to accelerating influences which may, der certain circumstances, become more or less persistent. He en gave a list of the affections in which this abnormal rapidity of e heart's action is found: (1) in Graves's disease, in which the chief use of danger is the cardiac involvement; (2) the irritable heart soldiers, noticed and described by Dr. Da Costa, of Philadelphia, e feature of which was that, although the pulse rate is per-tently quickened, the breathing remains normal, or nearly so, ten resulting in cardiac hypertrophy or dilatation—this form of pid heart is peculiarly common in times of great political and cial excitement; (3) the rapid heart of osteoarthritis, specially mmented upon by Dr. Spender, of Bath; (4) the rapid heart ithout notable morbid association, recorded by Bristowe, Broad-nt, and Samuel West. He called attention, in relation to these ses, to the fact that the rapidity often existed for long periods time without palpitation. Moreover, the cases which he had his mind were not "paroxysmal," in the sense that the hurry was rsistent, and the condition was often associated with a curious sence of distress, or even of discomfort, on the part of the tient. In spite of this latter feature, the orator insisted upon e fact that this condition of rapid heart was serious and ngerous. Of seven such cases recorded by Dr. Bristowe, five oved fatal, with symptoms which seemed to show that the fection was in causal relation with the fatal result. In ference to the fact that this condition was found in persons giving other indication of cardiac disease, he asked whether in such ses it was to be regarded as an affection of the myocardium, or some portion or portions of the nervous system. He quoted venty-five cases from his notebooks, in which no evidence was und of organic disease of the heart or of any other structural sease in obvious association therewith. They were, moreover, l cases in which the rapid heart beat had existed for com-ratively long periods of time. He grouped these cases under two ads: First, those in which there was no association whatever ith the recognised cardinal signs of cardio-vasomotor disease, 46 number, comprising 30 females and 16 males; secondly, cases which this association existed, 29 in number, 24 females and 5 ales. He read detailed notes of a case belonging to the first tegory, in a lady, aged 52, with fatal termination, and another a man, aged 61, in whom the condition appeared to date from ysical effort, also ultimately followed by a suddenly fatal termi-tion. He gave a synopsis of the chief points in relation to this oup of cases, the maximum pulse rate being from 110 to 260, d he discussed the circulatory and nervous phenomena associated erewith. In many of the cases the onset was ascribed to ysical or mental overstrain (shock), but in others the onset of e symptoms was gradual, and associated only with vague spepsia. Restlessness and insomnia were common. He then oceeded to discuss the cases coming in the second group, of hich 12 out of 29 were obviously associated with Graves's ease. He narrated two of these cases which served to demon-ate the types. The orator concluded that the conditions in the o sections of cases were closely allied, both being probably condary to nervous implication. He regarded the differences be-een the two sets of cases as of extent rather than of kind. With gard to treatment, he said that while in the less severe cases s had proved of great value, it was practically useless in the y marked cases. He particularly commended the application the continuous current of electricity over the region of the great ve centres.

Reception.—After the oration there was a reception by the ESIDENT, followed by a very interesting demonstration by Mr. CTOR HORSLEY, on Prehistoric Trephining, illustrated by photo-crographic slides projected on to a screen by means of the optical lantern.—Other demonstrations by the aid of the lantern were given by Dr. ARMAND RUFFER, MR. ANDREW PRINGLE, and Mr. BOYCE, the two latter gentlemen also giving several demonstrations on photomicrography.—In the course of the evening, Dr. COPEMAN exhibited a large and beautiful collection of blood crystals, the microscopes used being lent by Mr. Baker, of Holborn.—There was also a choice collection of works of art, natural history curiosities, etc., and a well filled programme of music was executed by the band of the 2nd Life Guards.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 1ST, 1890.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Treatment of Placenta Prævia.—Dr. ALDERSON read a paper on this subject, based on two cases in his practice. Both patients were multiparæ, over 40 years of age, and in both the placenta was more or less centrally attached, whilst both had suffered from several attacks of bleeding. In both the initial symptom was severe and sudden flooding, commencing without warning during sleep, between the sixth and seventh month of pregnancy. The first patient was a delicate woman in her tenth pregnancy; the labour was terminated, after a second attack of flooding, by rupture of the membranes and delivery by the long forceps. There was no bleeding either during or after delivery. Chloroform was administered, but not to complete narcosis, and in both cases so much of the placenta was separated and removed as was within easy reach of the finger. The second case terminated quite naturally upon the fourth day; but in examining the afterbirth, which was much atrophied, thinned, and flattened, it was noticed that a large portion of its uterine surface had been removed, as was mentioned, during the early stage of labour. Dr. Alderson had found both ergot and bromide of potassium of service in arresting or preventing bleeding in cases of *post-partum* hæmorrhage, after the flooding had been stopped by the separation or removal of as much of the placenta as could be reached by digital exploration, in the manner recommended by Dr. Barnes. This practice had invariably stopped the hæmorrhage, time was gained, and either external version or turning could be employed, whilst the partial separation of the placenta did not necessarily cause the death of the child. On one occasion he had removed the entire placenta after an alarming flooding, and then turned, when speedy and excellent recovery followed. In such cases puncture of the membranes was usually recommended as a routine treatment, though the operation might be performed too soon. Plugging the vagina was objectionable owing to the septic complications which might ensue.—Dr. AMAND ROUTH said that perhaps the safest way to treat such cases of placenta prævia was to turn by the bimanual method without rupturing the membranes.—Dr. GRIFFITH said that theoretically the treatment of placenta prævia was easy, but in practice a number of difficulties always arose which could not be foreseen, and which had to be treated as they occurred. He thought the proper treatment in Dr. Alderson's cases would have been to deliver at once. A good rule to adhere to was that when there was hæmorrhage, with a dilated os, delivery should be effected at once. The really difficult cases, however, to treat were those in which the woman was not in absolute labour and was extremely anxious to have a living child. The general principle of treatment resolved itself into turning at once where a woman in the later months of pregnancy was losing much blood.—Dr. ROBERT BOXALL agreed with the previous speakers as to the advisability of not interfering with the fœtal portion of the placenta in such cases as had been described by Dr. Alderson, since this practice endangered both mother and child. If possible he would have turned by the external method and before rupture of the membranes. The placenta was liable to separation irrespective of its position in the uterus, and he believed that in some cases of placenta prævia the unavoidable hæmorrhage began as accidental hæmorrhage.—Dr. EASTES treated cases of placenta prævia by turning as quickly as possible. He preferred to use the A.C.E. mixture rather than chloroform for the production of anæsthesia when a patient was blanched from loss of blood.—Mr. FRANKISH related a case of placenta prævia in which he had successfully employed irrigation with very hot water to arrest a very formidable hæmorrhage. In no case would he remove portions of the placenta.—Dr. ALDERSON, in reply, was very sorry that he had been misunderstood in his advice in certain cases of *post-partum* hæmor-

rhage, to separate such portions of the placenta as were within easy reach of the finger. He recommended this form of treatment because it was successful and could be carried out before the os was dilated and whilst the bleeding was in progress. He thought that it acted partly by the manipulation stimulating the uterus, and partly perhaps by reducing the bulk of the placenta, the uterus was enabled to contract more effectually upon the placental vessels and uterine sinuses. The first bleeding usually occurred at a menstrual period, and at that time the uterus was congested and the placenta received an additional quantity of blood. In the first case he considered that the attachment of the placenta was more central than in the second. One of the children survived its birth for an hour and a half, although it was only at the sixth month, and this he thought demonstrated the utility of waiting if no urgent symptoms were present. As the labour terminated naturally in some cases, he concluded that it must be good practice to temporise. The choice of the anæsthetic he left entirely to the administrator in those cases where he was a skilled person. Turning by the bipolar method before the membranes ruptured, would no doubt be of service, but it was not one which he was in the habit of employing. The treatment of partial separation here adopted had the sanction of Dr. Barnes.

Uterine Hæmorrhage after the Menopause not Depending on Malignant Growths.—Dr. HANDFIELD-JONES related four cases illustrative of hæmorrhage from the vagina in women who had passed the climacteric. The cases were chosen not because they formed any pathological sequence or illustrated any special point in treatment or diagnosis, but rather for the purpose of drawing attention to some of the more rare forms of hæmorrhage from the genital tract in women of advanced life. In one case lupoid disease, attacking the upper portion of the vagina, had been present, but had disappeared after the use of the curette and actual cautery. Attention was directed to the characteristics of the disease, and to the difficulty which was often experienced in making a differential diagnosis between this form of ulceration and that which was due to tertiary syphilis. The causes of the hæmorrhage in the other cases recorded by Dr. Handfield-Jones were "senile endometritis," vaginal ulcerations from pressure of retained pessaries, and pelvic suppuration discharging through the cervical canal. Particular attention was called to the erroneous histories given by the patients, especially regarding the amount of blood lost.—The PRESIDENT had seen two cases of stricture of the vagina due to lupus, each resulting from the extension of the disease from the external organs of generation.—Mr. FRANKISH had recently met with a case of annular stricture of vagina occurring in a woman, aged 60 years, which was undoubtedly of syphilitic origin.—Dr. AMAND ROUTH related a case of adhesive vaginitis similar in its characters to that mentioned by Dr. Handfield-Jones..—Dr. BOXALL related a case in which, after death from a simple hæmorrhage a year after the menopause, in a woman who appeared to be about 50 years of age, a small hæmatosalpinx was found.—Mr. ROGER WILLIAMS and Dr. GRIFFITH also made some observations, and Dr. HANDFIELD-JONES replied.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MAY 1ST, 1890.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Corneal Tumour (Fibroma?) in a Man, aged 72.—Dr. BENSON (Dublin) read notes of this case. The tumour was attached to the upper portion of the left cornea of a blind glaucomatous eye. It measured 5 millimètres in its longest diameter, 2 millimètres in thickness. It was adherent to the surface of the cornea above the centre by 2 or 3 millimètres of its thin edge. The eye was said to have been blind for many years, but a few days before the patient came under observation he had knocked it against something, and since the blow had suffered intense pain. There was no evidence of recent injury to the eye. The growth was dissected off the cornea, and was found to consist of fibrous tissue with blood vessels and cells, the whole being covered with epithelium, except at the margin, where it had been separated from the cornea. It had a dull, lustreless, grey colour, and was lenticular in shape. The writer mentioned the great rarity of corneal tumours of any kind, and expressed his inability to account for the existence of the growth in his case. A model and microscopic sections and photographs were shown.

Optic Nerve Atrophy in Smokers.—Mr. LAWFORD read a paper based upon nine cases of optic nerve atrophy in which the symptoms in the early stage so closely resembled those of toxic amblyopia that the diagnosis made at first was that of tobacco blindness. All the patients were men and smokers, usually consuming a large quantity of tobacco. Treatment by abstinence from tobacco and the administration of nervine tonics led to no improvement; indeed, in most of the cases, sight became progressively worse. The general features presented by these cases were gradual failure of vision, with central negative scotomata for form and colour. The ophthalmoscopic signs were slight pallor of the temporal half of the discs, without visible alteration in the retinal vessels. The chief distinction between these cases and those of ordinary tobacco amblyopia was found in the peripheral limitation of fields of vision, which was almost always discovered if sought for; whereas in tobacco cases the boundaries of the fields were in most, if not in all, instances normal. None of the patients under the writer's observation had symptoms of spinal disease, but one man, aged 51, became insane some months after his sight failed. He was of opinion that tobacco was certainly a factor in the causation of the optic nerve disease.—Mr. ADAMS FROST said he was familiar with cases similar to those just described. He looked upon them as cases of tobacco neuritis in which secondary atrophy supervened. He had long been of opinion that if vision deteriorated beyond a certain point in tobacco amblyopia, recovery did not take place, and in such instances he was accustomed to give an unfavourable prognosis.—Mr. EDGAR BROWNE (Liverpool) thought that the cases cited were undoubtedly instances of tobacco poisoning. They occurred in persons of unstable nervous constitution, not displayed otherwise than in the behaviour of the optic nerves; the instance of three brothers quoted as being affected in a similar way bore out this impression. Many cases showing no contraction of fields recovered; on the other hand, those in which the disease was severe and of long standing, and in which the fields were limited, did not recover. He had recently under his own care two brothers, smokers, who both suffered from amblyopia; in one the disease progressed and the field of vision became contracted; in the other improvement occurred. He was not aware of any instances of similar optic nerve disease in non-smokers.—Dr. HILL GRIFFITH said that he was familiar with cases like those described by Mr Lawford. He did not look upon them as cases of tobacco neuritis, for he held that disease of optic nerves from tobacco was always followed by recovery on discontinuing the drug. He thought some such cases might be explained by the coincidence of progressive atrophy of optic nerves and tobacco amblyopia, as in one case he had in a patient with locomotor ataxy.—Mr. DOYNE (Oxford) said that he had found that cases of tobacco amblyopia which were likely to improve always experienced great temporary improvement in sight from the inhalation of nitrite of amyl. He thought the use of strong tobacco interfered decidedly with nutrition and assimilation of food by its action upon the digestive tract. Many cases of tobacco amblyopia had loss of appetite.—Dr. BRONNER (Bradford) spoke of the similarity in the effect of alcohol and tobacco on the optic nerves, and of the gaps which still existed in our knowledge concerning toxic amblyopia. He was accustomed to stop the use of tobacco in all cases of optic nerve atrophy.—Mr LAWFORD briefly replied.

The Artificial Maturation of Immature Senile Cataract by Trituration.—Mr. M. MCHARDY read this paper, in which he said that full five years' experience with the artificial ripening of immature senile cataracts, practised with increasing frequency and confidence, had convinced him of the truth of the following proposition: Complete ripening of immature senile cataracts may be safely and almost certainly secured in from eight days to eight weeks by preliminary iridectomy, with trituration of the lens through the cornea and pupil, done with judgment, experience and care; the ultimate results (surgical and visual) of extraction operations in such cases are quite equal to the results of similar operations for senile cataracts, which have been allowed to fully mature spontaneously; and, further, the removal of such artificially-matured cataracts is entirely free from those risks, drawbacks, and often impaired ultimate results, which follow from the removal of immature senile cataracts. He thought that a large debt was due to Förster for the initiation of this procedure. By memoranda from his first 25 and last 100 cases the author furnished details regarding his past experience with and preser practice of the procedure, and emphasised thereby how its safety and success grew with the operator's experience.

Card Specimens.—Mr. TATHAM THOMPSON: (1) Cystic Detach

nt of the Retina; (2) Rupture of Choroid; (3) Depressed acture of Orbital Roof.—Mr. BRAILEY: Gouty Cyclitis.—Mr. RTRIDGE: (1) Cyst in Anterior Chamber; (2) Changes in the s in Glaucoma.—Dr. W. J. COLLINS: Monocular Kerato-iritis. Mr. LANG: Pemphigus of the Conjunctiva.—Mr. TREACHER LLINS: Sections of Cornea from a Case of Xerophthalmia.—. HARTLEY: Granuloma of Iris.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 23RD, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Portable Operating Table.—Mr. BOWREMAN JESSETT showed a w portable operating table which he had devised. When folded was enclosed in a canvas bag, the whole measuring three feet one foot nine inches, and only four inches in thickness, weigh- about 30 lbs. When extended it measured five feet nine hes by one foot eight inches in breadth. It comprised various pliances for maintaining the patient in position, and was per- tly rigid, and strong enough to support the weight of three ult men of average size.

Specimens.—Mr. JESSETT showed a specimen comprising a roid of the Uterus, together with the Uterus, which he had re- ved from a patient on the previous day. He said he showed it a striking example of the assistance to be derived in these rations from the procedure advocated by Dr. Bantock, of ap- ing an elastic ligature around the base of the mass outside the sule, then opening the latter and separating it from the tumour it down to the base, where he applied the *serre-nœud*. The e was one of some difficulty, but by this means he had been bled to carry it through easily and successfully. No blood was , and the edges of the capsule were stitched to the parietes.— narks were made by Dr. PURCELL and Dr. BANTOCK.—Dr. BERT showed an apparently Single Placenta which he had re- ved after a twin pregnancy at about the seventh month. He ught that there were probably two placentæ originally, since sacs were distinct. At the same time no line of demarcation visible. The cords were attached to the edges.—Dr. BARNES stioned whether it was in reality a single placenta.

New Electrode.—Dr. HEBERT also showed a new form of elec- le, which he had devised to replace the electrode of potter's r. It was composed of a sort of bag of metallic tissue separated n insulating cushion, the connection with the battery being h the side distant from the body. In this way the current was e equally distributed, and the pain and inconvenience of the sage of a strong current through a limited tract of skin was ided.

Paper.—Dr. LYCETT contributed a paper on the Aims and Pre- t Position of Gynæcology, in which he urged the necessity of ater facilities being afforded to the student of becoming ac- inted with the symptoms and treatment of diseases of women. then discussed the tendencies of modern gynæcology, and the s by which it had arrived at its present position.—The discus- was postponed until the following meeting.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF MEDICINE.

FRIDAY, APRIL 11TH, 1890.

LOMBE ATTHILL, M.D., President, in the Chair.

Massage.—Dr. KENDAL FRANKS read a paper on massage. He ained its physiological *modus operandi*, and showed that the ts it produced could scarcely be brought about by other ns. He quoted cases to show its power in neurasthenia. ther illustration showed how its effects were interfered with nsanitary conditions, but that a good result immediately fol- d a change of lodgings. The use of massage in certain para- affections was dealt with, and the cases in which it was y to succeed were indicated. Dr. Franks advocated a modi- system of massage in cases of gout, by which he had found a fresh attack of the disease was long delayed, and imme- relief was speedily attained. In surgical cases local mas- was frequently useful, and produced astonishing results in t sprains and fractures. In a case of Pott's fracture massage employed eighteen days after the accident, and the patient enabled to walk with ease, with a freely movable and pai- joint, twenty-two days later. A boy, aged 15 (who was bited at the meeting), with a transverse fracture of both bones of the leg, was able to raise the leg from the bed without assistance on the twentieth day, and was able to walk about with a light support on the leg on the twenty-sixth day.—After remarks by Mr. COX and Dr. ORMSBY, Mr. TOBIN mentioned that in the northern parts of India he had seen massage adopted to put horses into marketable condition with the minimum expenditure of material. Balls composed largely of ghee and sugar were shoved into the horse's throat, and some hours afterwards the animals were massaged at the particular parts where development was desired. The masseur, with gloved hands, pounded the flesh at those parts; but the horse was never exercised, and so the required development was brought about in the cheapest way. Although the horses were bought in large numbers for the artillery, he did not consider the animals were in condition to "go," their lungs and heart not being in a corresponding state of development; hence he thought it was advisable to combine exercise with massage.—Cases exemplifying benefit derived from massage were related by Drs. WALLACE BEATTY, M. A. BOYD, ALFRED SMITH, and HEUSTON.—Dr. NINIAN FALKINER suggested its use in amenorrhœa; and Dr. FRANKS replied.

NORTH OF IRELAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, MAY 17TH, 1890.

GEORGE GRAY, M.D., President, in the Chair.

Suprapubic Lithotomy.—Dr. H. O'NEILL showed an engine fitter, aged 45, from whose bladder he had removed two phosphatic calculi by suprapubic lithotomy six months previously. The calculi weighed 100 and 16 grains respectively. The patient had returned to his work.

Peculiar Affection of the Nails.—Dr. CALWELL showed some photographs of the hand of a patient affected with chronic rheumatoid arthritis, who had been under the care of Dr. J. W. Browne and temporarily under his own. There had been enormous hypertrophy of the papillæ of the bed of the nails, producing masses of hard, scaly, mortar-like material, which lifted up the nail, sometimes to a right angle with the axis of the finger, and caused it in many to break off short. It had commenced while the patient was undergoing a "crisis" at a hydropathic establishment. All four extremities were affected, but in all some nails escaped. There was great wasting of some muscles; less of others. Sensation was fair. There was tenderness in the course of some nerves, but no centric lesion was established. The patient had had attacks of eczema and periodical copious deposits of urates.

Optic Neuritis.—Dr. CALWELL read a short paper on the value of optic neuritis as a sign in medical diagnosis. In no disease was it a pathognomonic or localising sign. In some it was ambiguous; in some actually misleading; and its absence was never conclusive. It aided in pointing to real intracranial mischief, and so might be a differentiating sign, and its progress was an index to that of a coarse lesion, such as a tumour. Optic neuritis and the consecutive atrophy were of course of indispensable value in explaining alteration in function of the nerve, and probably threw light on similar variations in that of other nerves under analogous conditions.

Plastic Bronchitis.—Dr. LINDSAY read the notes of a case of plastic bronchitis in a young man, aged 28. An attack of what seemed at first ordinary bronchitis became aggravated by severe asthmatic paroxysms occurring in the morning, and attended by a scanty, viscid, and blood-streaked sputum. The dyspnœa became more and more severe, and recurred with absolute regularity every morning about 2 A.M. Casts of the bronchial tubes from one to two inches in length, about one-eighth inch diameter, and cylindrical in form, were found in the sputum. Each cast consisted of several fasciculi, and some had the dendritic form. Each fasciculus seemed to the naked eye like a minute string of yellowish beads. Under the microscope, the casts presented the appearance of a fibrillar base crowded with leucocytes. The patient's weight fell from 12 stone 6 lbs. to 8 stone 10 lbs. in nine months. Anti-asthmatic remedies were of some value in relieving the dyspnœa, but free emesis, which usually brought away some casts, was most efficacious. General tonics were very useful.

Abdominal Sections.—Dr. BYERS showed specimens removed in two ovariotomies. Microscopic sections of one, prepared by Dr. Burden, indicated that it was a sarcoma. Dr. Byers drew attention to the fact that malignant ovarian tumours were by no means rare; his own operations showed a large percentage of sarcomas

of the ovary; it was, therefore, of very great importance to observe the subsequent history of all those who had undergone ovariotomy. The fact that tumours of the ovary were often malignant, as the experience of Thornton, Leopold, and Schroeder proved, was in itself an additional argument in support of the rule now universally accepted, that an ovarian tumour should be removed as early as possible.

Œdematous Fœtus.—Dr. BYERS gave details of a case in which considerable difficulty had arisen in the delivery of a child, owing to the fact that the tissues were œdematous, and that the abdominal cavity was greatly distended with fluid. The cord was thick, and the placenta, which was about twice the normal size, was infiltrated with serum, and was pale in colour and very friable.

CLINICAL SOCETY OF MANCHESTER.

TUESDAY, APRIL 15TH, 1890.

HENRY SIMPSON, M.D., President, in the Chair.

Abdominal Abscess caused by a Pin.—Dr. SCHOLEFIELD (Blackpool) showed a girl with the following history: In June, 1886, the patient, then aged 10 years, was brought to him complaining of pain to the right side of the umbilical region. She had complained of abdominal pain frequently before, but had been much better for twelve months. Nothing abnormal was felt at that time, but in September of the same year she complained of feeling a lump. On palpation no tumour could be felt, but in November one could easily be felt apparently rising up from the pelvis. This rapidly increased in size until it filled the hypogastric, umbilical, right and left iliac, and the greater part of the right and left lumbar, regions. Dr. Scholefield introduced an exploring needle at the end of December, as he suspected pus, and advised an incision; but this was not permitted. Pus formed and made its way out in several places, by which means the tumour decreased very much in size. This went on until May, 1887, when her mother saw the point of a pin protruding from an opening just below the umbilicus. This she removed, and rapid recovery took place.

Abdominal Section for Hydatid Cyst of the Liver.—Dr. LLOYD ROBERTS showed a girl, aged 9 years, upon whom this operation had been performed. The patient was examined in March, 1889, when a resistant mass was found in the pit of the stomach; it was semi-fluctuant, but not tender. The girth at the umbilicus was 23 inches. On June 11th aspiration was performed, and 13 ounces of clear fluid drawn off, containing hydatid hooklets. The tumour remained unaltered, and in November, 1889, an incision 2 inches in length was made in the middle line, immediately below the ensiform cartilage. This exposed the anterior surface of the liver; a trochar was introduced, and, as only a small quantity of fluid escaped, the puncture was enlarged to an inch, when a large quantity of clear fluid, containing hooklets, escaped. The cyst wall, which was almost a quarter of an inch thick and of cartilaginous hardness, was stitched to the abdominal wound, and a glass drainage tube inserted. The patient made an uninterrupted recovery. On the thirteenth day a large slough of cyst wall was drawn out, about 5 inches long, and by the sixteenth day the quantity of fluid escaping from the wound was only a few drops.

Ovarian Tumour.—Dr. LLOYD ROBERTS showed an ovarian tumour, which he had removed from a girl, aged 21. The abdomen was uniformly distended by a fluctuating tumour, dull on percussion, the greatest girth being 42 inches. For some time before operation the patient suffered from some abdominal pains and vomiting. The temperature occasionally reached 101° or 103° in the evenings. There was no cough, but three distinct crepitations at both apices. On March 28th, 1890, the abdomen was opened. The tumour consisted of one very large cyst, which was adherent to the front of the abdomen, and of several smaller ones; the fluid measured six gallons, and was loaded with cholesterine; there was also some colloid material. The pedicle was transfixed and tied with silk, and a glass drainage tube was inserted. The patient was now convalescent, and no crepitation could be heard at the apices.

Flat Foot.—Mr. HARE made some remarks on flat foot.

COUNTY AND CITY OF CORK MEDICAL AND SURGICAL ASSOCIATION.

WEDNESDAY, MARCH 12TH, 1890.

J. COTTER, M.D., Vice-President, in the Chair.

Epithelioma of Penis.—Dr. COTTER showed a portion of the penis which he had removed for carcinoma of the glans. The patient, aged 43, presented himself a week or so previously with œdematous prepuce, and urine dribbling away; the foreskin was adherent to the glans on the affected side. Two-thirds of the penis was removed, leaving the urethra and corpus spongiosum slightly longer than the corpora cavernosa. Hæmorrhage, which was severe, was kept in check by hot iodine solution; the urethra was stitched to skin on either side. Although the growth had existed for a long time, the glands in the groin were unaffected. Microscopically it presented the characters of lobular epithelioma. He used the catheter whenever the patient desired to pass water, and condemned the practice of tying in the instrument.—Remarks were made by Drs. E. R. TOWNSEND and ASHLEY CUMMINS.

Deformities of the Extremities treated by Osteoclasy.—Dr. GRATTAN read a paper on this subject.[1]

Sporadic Diphtheria following Influenza.—Dr. LEE (Honorary Secretary) read notes of a case. A man, aged 70, suffered from influenza complicated with bronchopneumonia. He had been under treatment for about three weeks, and was much improved. A well-marked diphtheritic exudation suddenly appeared over the uvula and tonsils, subsequently appearing on the soft palate and the back of the pharynx, and extending to the larynx, with fatal result eight days after the first signs of the affection.

REVIEWS AND NOTICES.

A TEXTBOOK OF ANIMAL PHYSIOLOGY. By WESLEY MILLS, M.A., M.D., L.R.C.P., Professor of Physiology in McGill University and the Veterinary College, Montreal. New York and London: D. Appleton and Co. 1889.

THIS book is the first successful attempt that has been made to produce a manual of comparative physiology. Although it deals in very great measure with human physiology, Dr. WESLEY MILLS has taken a much wider view of his subject than many writers, and has included an account of the various physiological processes that occur in the lower animals from the amœba upwards. He is eminently fitted to perform such a task, as he is well known as a able biologist, and his position as a teacher, both at an important medical school as well as at a veterinary college, is such as not only to keep before his mind the needs of the two sets of students with whom he has to deal, but also such as to prevent him from falling into the too narrow view of physiology to which we have alluded.

The scope of the work before us is not only novel, but the arrangement is even more so; and though this is at first somewhat startling, it will be found to have much to recommend it. The early place given to the subject of development is that which will at once strike the reader as a new departure, but the reason of this is at once apparent when we remember that the subject of the book is not human, but animal, physiology.

The subject first treated of is the cell, the living unit; unicellular organisms are next described, and then multicellular organisms, culminating in the mammal. Structure is treated only in outline only; the author never forgets that his subject is function.

The chapters relating to reproduction follow next, and the development of the embryo is described in a clear and interesting manner. These are interspersed with discussions of questions of general biological and philosophical interest; we thus have sections on the law of periodicity or rhythm in Nature, and on organic evolution in which the inquirer will find a lucid summary of the recent theories of Weismann, Romanes, and others which have been proposed as riders to, or modifications of, Darwin's great theory. These various, and to some extent conflicting, theories are not merely set out in order, but they are critically examined, and the author's own opinions on these points is by no means an unimportant contribution to the vigorous discussion now being carried on between the neo-Lamarckians and the followers of Weismann.

The book then treats briefly of the chemical constituents of the body; this brevity is, however, compensated to a certain extent by an appendix similar to that in Dr. Foster's well-known text-book. The subject of physiological chemistry is evidently not a favourite with Dr. Mills; he compares it to the examination

[1] See JOURNAL, May 3rd, p. 1006.

ruins of an elaborate building which has been thoroughly ed to pieces; such an examination can result in only a limited ant of information relative to the original structure. Such a cism might have been applied with equal force to all the er efforts of chemistry; before reconstruction can occur, pull- o pieces or analysis must be a preliminary process.

ext follow descriptions of the various tissues, the blood and irculation, the heart, the applications of the graphic method, ligestion and absorption of food, respiration, excretion, meta- m, animal heat, and the nervous system. The treatment of e subjects is very like that to be found in most physiological books, which, although they are called textbooks of human physi- y, deal largely, if not chiefly, with facts and conclusions ob- ed from observation and experiment on the lower animals. part of Dr. Mills's book differs rather in degree than in kind other manuals, by developing the comparative side of the ect. He is also exceedingly careful not to jump at a conclu- without due evidence—by assuming that because certain facts approximately true for certain groups of animals, they are ssarily true for man also.

ie book is not by any means a complete one; it does not pre- to be. It takes for granted that the student knows his omy, both comparative and human; that he, moreover, vs his physics and chemistry, and is acquainted with the ele- ary principles of physiology, and is familiar with physio- al apparatus. It is a book which presents him with conclu- ; it teems with argument; it summarises his knowledge; it ies him above all to think and compare, showing him the way which general laws may be reached by induction. Its con- t text is the present incomplete condition of the science; how rom absolutely true are even the most generally accepted iological theories; many chapters are homilies on the irre- ble fact that our ignorance is greater than our knowledge; rs point out how incompletely chemical and physical laws ain such phenomena as absorption, secretion, respiration, and rth. There is always the unsolved vital action of the cell in tion. Dr. Mills does not definitely commit himself to ming the existence of any special vital force; he merely nes that chemistry and physics as at present understood do xplain life.

ch a book as this would be an ideal one for an ideal stu- ; that is to say, for a student who was acquainted with phy- chemistry, and comparative anatomy; for a student who ied Nature in order to grasp its laws, and not to accumulate facts; for one who wished to know how to think and reason his knowledge, rather than satisfy an examining board with w crammed facts, the fewer the better. Such students are and far between. Those engaged in the actual teaching of iology are painfully aware of the desire that so largely exists arn not as much, but as little, as possible. Students with even lementary acquaintance with chemistry, physics, or biology o rare that the lecturer on physiology has generally to teach e subjects in addition to his own. We cannot, therefore, say this book is suitable for those whose sole aim is "to pass the ges," and forget all they have learnt as quickly as possible wards; but to those who wish to approach physiology in the scientific attitude, that of reverence and caution, that of lth as opposed to narrowness of view, to these we can most ily and confidently recommend Dr. Mills's most interesting horoughly conscientious work.

only remains to add that the book is got up in excellent , that it is free from palpable mistakes, and that typographical s are almost absent. There are over 500 illustrations, which refully selected, instructive, and remarkably well executed.

Massage et la Mobilisation dans le Traitement des actures. Par le Dr. J. Lucas-Championnière, Chirur- n de l'Hôpital Saint Louis. Paris: A. Coccoz. 1889.

his interesting and suggestive pamphlet, M. Lucas- tpionnière endeavours to cast some discredit on what has rto been regarded as the main and indispensable method of ng fracture, and advocates the practice of massage and ional movement of the injured limb as being preferable to its nuous confinement for a long period in splints or stiffened ges. Certain evils, not hitherto generally recognised by ical surgeons, that are likely to follow the long established od of immobilisation are stated with much force, and the ent results obtained in the course of the last five years from the practice of massage in the treatment of fracture are described in terms of warm commendation.

There can be no doubt that the use of splints in cases of fracture is often attended with unfortunate results, and is sometimes quite unnecessary. Some forms of fracture left to consolidate without any proper surgical treatment, as, for example, in many instances of such injury occurring at sea, do not as a rule result in impaired function of the limb, or of distortion from undue displacement of the fragments, whilst in other instances in which the injury has been treated under more favourable conditions, the most careful immobilisation may fail to prevent overriding of the fragments, and persistent weakness of the extremity. The almost constant occurrence of pain, stiffness, and swelling after the treatment of some fractures, especially those in the vicinity of large joints, is probably due in great measure rather to the prolonged confinement of the injured limb than to the injury itself. The advantages claimed by the author for massage in the treatment of fracture are these—speedy relief of pain, rapid disappearance of the swelling caused by effusion of blood amongst the contused soft parts, and by serous exudation into the sheaths of tendons; decided rapidity in the formation of firm callus, very early restoration of the functions of the muscular and other soft parts of the injured limb, and absence of any atrophy of the limb during and after the period of treatment.

Notwithstanding the many proofs that are given by the author of the very beneficial action of massage in cases of fracture, we doubt whether the plan of treatment so enthusiastically advocated in this book will ever be extensively practised. The proper performance of massage, with a due observance of all its complicated technical details, demands prolonged training and much patience and experience, and for this reason we imagine that surgeons, though ready to follow out with confidence and energy the treatment advocated by M. Lucas-Championnière, will often fail to obtain from it any good results. It is held by this surgeon that rubbing is of almost universal application in the treatment of fracture. In some cases—for instance, fracture of the radius, of the fibula, and even of both bones of the leg without displacement or free mobility of the fragments—he trusts to massage alone. In those cases in which there is free mobility and tendency to displacement a mixed plan of treatment is carried out, which consists in massage of the limb as soon as possible after the injury, and in subsequent confinement of the limb in splints, which are removed every eight or ten days for a repetition of the rubbing. The only fracture in a limb which is not treated by massage is that of the patella, which injury, the author thinks, is best treated by exposure, and apposition by sutures of the fragments of the broken bone.

Influenza. Eine geschichtliche und klinische Studie. Von Dr. A. Ch. Kusnezow, o. ö. Professor der klinischen Medicin und Therapie an der kais. Universität in Charkow, und Dr. F. L. Hermann, Charkow. Nach dem Russischen bearbeitet. Von Dr. Jos. O. Drozda, Docent für innere Medicin an der Wiener k. k. Universität. Wien: Josef Safár. 1890. [Influenza. An historical and clinical study.]

This volume, of about one hundred pages, contain a fairly complete account of the history, etiology and symptoms of influenza. It is founded upon a Russian monograph, by Professor Kusnezow and Dr. Hermann, of Charkow. The first part, which deals with the history of previous epidemics, contains the information on this head usually to be found in works of reference, but some additional particulars of interest are given with regard to recent prevalence of the disease in Russia.

The authors quote from the reports of the Sanitary Department of the Russian Ministry of the Interior the statement that the number of cases of *grippe* registered during 1886 represented a proportion of 4.9 to the 10,000 inhabitants. The actual number of cases of *grippe* in the Russian Empire amounted to 52,570 with 512 deaths. The greatest number of cases were reported from the governments of Livonia (4,628), Cherson (3,551) and Witebsk (3,254), in the west of Russia, and of Irkutsk (3,172) in the the south-east of Russia in Asia. The report for 1887 shows the greatest number of cases in the governments of Witebsk (2,998), Tver (2,833) and Livonia (2,724), all in the west of Russia. The total number of cases in the empire in 1887 was 43,983, with 450 deaths. Further, it is stated on the authority of Wolowski, that 50 per cent. of the cases of infectious disease admitted into the hospitals of the St.

Petersburg and Warsaw Railway during 1885, 1886, 1887, were cases of *grippe*.

It is not easy to estimate the exact value of these statistics, but they would appear to prove that influenza has been present in widely different parts of the Russian Empire, and that its incidence upon the Western provinces was especially severe. In 1889 the first recognised cases of influenza in the Russian Empire appear to have occurred in the second half of May at Bokhara; before the middle of July, half the Europeans dwelling at New Bokhara had been attacked. At the beginning of October influenza appeared in Tomsk, over wide areas in Siberia, and in the province of Ufa in Astrakhan (European Russia). By the end of the month it had made its way to St. Petersburg, and was prevalent in the province of Kostroma in the middle of European Russia. It is not stated whether these dates are old or new style, but, from other sources, we know that they are old style; this ought to have been made clear.

The authors point out that the recent epidemic has fully confirmed Hirsch's view, that a pandemic of influenza does not spread along one line, but in a radiating fashion.

In the clinical section of the volume a summary is given of recent bacteriological investigations, and the question whether influenza is to be classed with the miasmatic or the contagious maladies is discussed. Several instances apparently proving its infectious nature observed during the recent epidemic are given, but their number might easily have been increased. The only instance with which our readers are not already acquainted is one observed by Professor Kusnezow, but the details are not given with any precision. At the beginning of the epidemic a large number of cases occurred among the students of the fifth year at the University of Charkow who had been in intimate relations with a single case. Professor Kusnezow also dwells on the gradual spread of the disease through a family as evidence of its contagious nature—first the father, then the mother, and then the children suffering.

The authors describe the three clinical varieties of influenza usually recognised—the nervous, the catarrhal, and the gastric. A good account of the complications and sequelæ is given; but the effect of the epidemic on the death-rate, though indicated, is not analysed, as it has been, for instance, in the pages of this JOURNAL. The statement that about 650,000 persons were attacked in St. Petersburg is reproduced without criticism—indeed it is supplemented by the further statements that 300,000 suffered in Moscow, 100,000 in Odessa, and that in Charkow hardly a family escaped.

Dr. Drozda appears to be responsible for the list of references appended to the volume; it is woefully incomplete, and shows in particular a want of acquaintance with the best sources of information in English literature.

A PRACTICAL GUIDE TO MEAT INSPECTION. By THOMAS WALLEY, M.R.C.V.S. Edinburgh and London: Young J. Pentland. 1890.

A BOOK on meat inspection by so competent a veterinarian as the Principal of the Edinburgh Royal Veterinary College can hardly fail to be interesting, and to contain many useful suggestions. He has had thirty years' experience in his profession, a long official connection with the Edinburgh abattoirs, and brings to his task a store of information on the subject he deals with. The author writes in a plain, straightforward way, not dogmatically, many of his statements being put forward merely as personal opinions. The chief fault of the little work appears to be its want of orderly, systematic arrangement, but this is of less importance as a good index is provided. Mr. WALLEY points out how much the question as to what flesh is marketable is ruled by fashion; thus the carcass of an ox or sheep unbled no one would purchase, but unbled game is bought at a high price. Nor indeed can a definite answer always be given to the question, What meat is nocuous? Should the owner of a carcass be dishonest, much of the evidence which would enable the inspector to judge rightly is withheld. It is noted that the more certainly it can be shown that any particular disease from which an animal has suffered is capable of being transmitted from animals to man, the less hesitation should there be in condemning its flesh for the purposes of human food. In particular, the author supposes it will be admitted that when an animal has been slaughtered while suffering from any of the following diseases, its flesh is absolutely unfitted for human food; mortification, pyæmia, septicæmia, uræmia, erysipelas, anthrax, variola, trichinosis, glanders or farcy, hydatid disease of th muscles, dropsy, the advanced stages of rabies or swine feve cattle plague, well marked cachectic conditions, whether these b cancerous, tuberculous, or otherwise; and also when putrefactio has set in, and when marked physical changes have taken pla as the result of inflammatory or febrile affections or importa forms of blood deterioration.

The book is handsomely printed and illustrated with beautif chromo-lithographs. What is a matter of some importance, t volume is not too big for the inspector's pocket.

NOTES ON BOOKS.

"*Agenda du Chimiste.*" Par G. SALET, CH. GIRARD, a A. PABST. (Paris: Hachette. 1890.)—This work is a collecti of chemical constants and analytical details. It is divid into three parts. In Part I are tables for conversion of Engli weights and measures into French; tables of coefficients expansion of gases, vapour tensions, and vapour densities. Al tables of specific gravities of solids, liquids, and gases; tabl showing the relationship between the specific gravities a the weights of dissolved solids in various solutions; a the temperatures of combustion, fusion, and ebullition various substances. In Part II the elements are enum rated, with their symbols, equivalent weights, atomic weigh and specific heats; also tables of constants concerning the p perties of many mineral and organic compounds. Part III de with constants bearing upon technical chemistry as applied to t arts and industries. Water analysis, alkalimetry, assaying useful metals, composition of alloys, chemistry of bleaching, milk and urine analyasis are here treated of; also the chemistry glass and wax manufactures, explosives, fats, sugars, wines, pap and colouring matters. As a book of reference, this little volu which is in its fourth edition, cannot fail to be of the great service to all chemists and analysts.

Studies in Evolution and Biology. By ALICE BODINGT (Elliot Stock. Pp. 220.)—This is an interesting and clever written little book; it conveys in a lucid and pleasant styl large amount of easily-assimilable matter, and clearly indica that Mrs. Bodington has a good grasp of the general principles evolution. The book is not a systematic treatise on evolution natural history; it consists of a series of short studies on logical subjects. The first one deals with the pineal eye of lizar and the curious eyes of *Onchidium*, especially in connection w Semper's strained hypothesis as to the relation of the multi eyes of this mollusk, and the fish *Periophthalmus*. The study extinct species and surviving forms of mammals is interesting the speculation it contains relating to the immediate ancestor man, but, it must be added, it leaves the question as obscure ever. The remarks on the flora of the past are a reproof to cautious timidity of botanists, and should serve to stimulate th to construct a genealogy of plants. Micro-organisms as paras receive, as they justly deserve, a fair share of attention, amo warfare being carefully considered, especially in relation to pat genic organisms. A summary of Morris's view, that the bladder of fish is a degenerate lung, is very instructive and s gestive, and the same may be said of the articles on neo-Lamar ism, and the origin of the fittest; this last contains abstracts f the writings of Professor Cope. It would be wrong to criti the views presented in this book, because the authoress pla them before the reader not as her own theories, but as the spe lations of others, and in many cases she has selected them w great care and judgment; several of them have not been previo put before the general reader in a form likely to attract att tion. A little more care should have been exercised in correct the proofs, and if a second edition is called for, the names of mals should be correctly spelt; for instance, on page 166 names of *Lepidosiren*, *Polypterus*, and *Menobranchus* are in rectly spelt. There is also great inaccuracy and inconsistency writing the names of animals; many of them are printed in ita as they should be, but many are not; again, it is wrong to u capital letter for the specific name; thus *Rhinoceros tichorh* is spelt on page 35 as *R. Tichorrinus*, also *Ovibos Mosch* (page 43) *Palæocetus sedgwicki* appears as *Palæocetus Sedgw* (page 50). In several places, "œ" appears for "æ." These seem s

ers, but they mar the pleasure of reading, and with a little are easily avoidable.

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ar Book of the Scientific and Learned Societies of Great in and Ireland. (London: Charles Griffin and Co. 1890.)—seventh annual issue of this useful work of reference has tly been issued. It contains particulars of the objects, officers, ocal habitations of all the principal scientific and learned ties throughout the country. Lists of papers read before societies are given, so that the volume is to some extent a re- of the progress of the year. The information, so far as we been able to test it, appears to be remarkably full and ac- e. It is a little surprising to find the Medical Department of ocal Government Board figuring as a learned society, and it t clear why the St. Thomas's Hospital Medical and Physical ty is given a prominent place while other societies of the class are relegated to the smallest type. These are, how- faults of redundance, and faults of this class are most venial ook of reference.

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inal Concussion Surgically Considered as a Cause of Spinal y, and Neurologically Restricted to a certain Symptom Group, hich is suggested the designation Erichsen's Disease as one Form e Traumatic Neuroses. By S. V. CLEVENGER, M.D., of go. With thirty wood-engravings. (Philadelphia and Lon- F. A. Davis. 1889.)—This inflated and obscure title affords dication of the difficulty that will be experienced in doing ustice to Dr. Clevenger's book, which, though compiled with labour, and presenting to the reader conclusions of origin- and value, seems to have been prepared without any regard idity or grace of diction. The author has certainly devoted time and attention to the study of a very difficult subject, his views on the pathology of so-called spinal concussion much consideration from practical surgeons; on which ds most English readers, we imagine, will regret both the ry defects of his work and the extreme bitterness of its ical sections. The introductory chapters, which deal with iews of recognised authorities on the subject of spinal con- on, especially Erichsen and Oppenheim, are followed by a of illustrative cases treated by Dr. Clevenger and others, by d chapter on the symptoms described by Erichsen as indica- f spinal concussion, and by three chapters on diagnosis, in- ng the use of electricity, which chapters, together with that thology, we are disposed to consider the most instructive por- of this book. The proposal to give the designation of hsen's Disease" to the group of symptoms of spinal irrita- lescribed by that surgeon more than twenty years ago, will, ink, be regarded by most scientific surgeons as an injudicious nd likely to lead to confusion and to increase rather than to nish the difficulties in the course of future investigation. Dr. nger's view concerning the pathology of the complex morbid ition known as spinal concussion is a very ingenious and sug- ve one, and serves to point out a common origin for many toms that have hitherto seemed to be independent and be- the influence of any single bond of association. According to iew, the spinal sympathetic nervous system is the main and al seat of the disease, and the functions of the cord are de- d as a result of secondary vasomotor disturbances.

REPORTS AND ANALYSES

AND

SCRIPTIONS OF NEW INVENTIONS

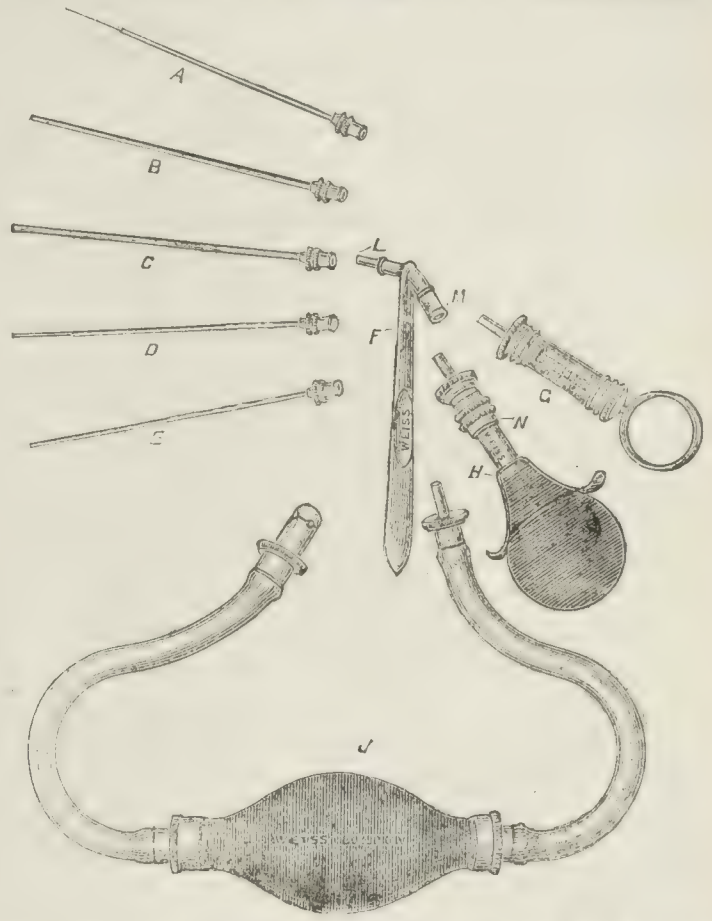
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

DIURETIN.

BROMIN-SODIO-SALICYLATE has lately been introduced as a ic under the name of diuretin. Theobromine, which occurs ao, is chemically allied to caffeine, but according to experi- which have been made by Dr. Gram, and reported in the *peutische Monatschefte*, it possesses the advantage of ab- of any irritating influence on the central nervous system, results in sleeplessness, etc. As theobromine is very in- e in water, Dr. Gram found the most suitable form of ad- ration to be the sodio-salicylate. Diuretin is a white powder; it dissolves when warmed in about half its weight of water, no precipitation occurring upon cooling. The sample which we have examined has been sent by Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, E.C., who are the sole agents for the manufacturers, Knoll and Co., Ludwigshafen.

AN INTRATYMPANIC SYRINGE, DOUCHE, AND ASPIRATOR: A VULCANITE EAR SHOOT.

WANTING a tympanic syringe, and not finding what I sought, I asked Messrs. Weiss to make me one from my own drawings. I have used it now many times, and find it answers my purpose admirably. It consists of five tubes, two of which (A and B) are



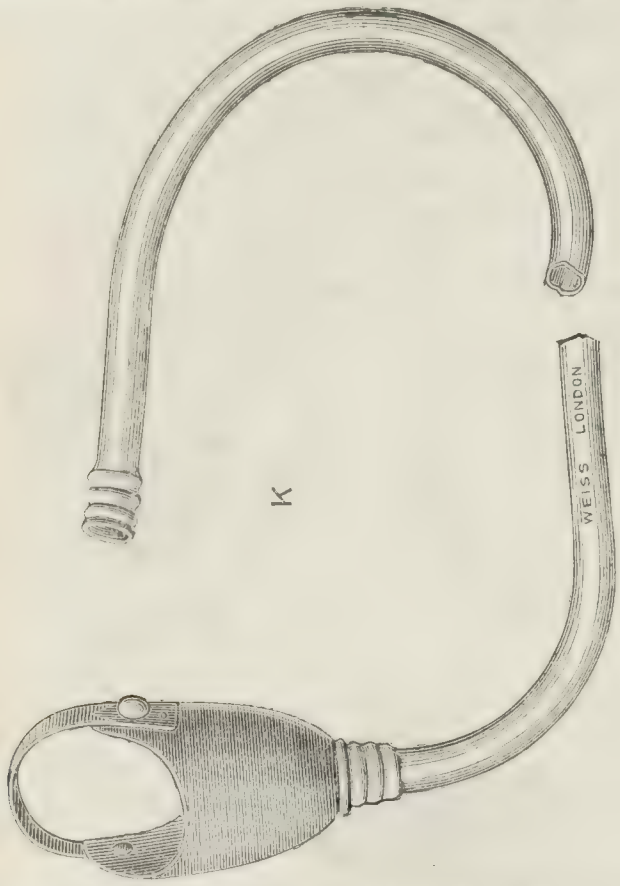
pointed for perforating the drumhead; the other three are blunt, one large (C) and one small (D) for fluids, and one large (E) to be kept exclusively for powders. These tubes each fit on to one end (L) of the handle (F). This handle consists of a tube (L to M) and a haft. The front portion (L) of the tube is at an angle a little greater than a right angle with the haft, the hind portion (M) at about an angle of 45°; this keeps the hand out of the line of sight. The haft of the handle is slightly hollowed on both sides to take the fingers, thus giving more firmness in holding it. The syringe (G), which also, when reversed, acts as an aspirator, the insufflator (H) and the douche (J) all fit into the end (M) of the handle; the insufflator having a small opening at (N) for the powder to be inserted.

In case of suppuration, on the first sign of pent-up matter in the tympanic cavity, I perforate the membrane with tube A or B, as the case may be, always, however, preferring the larger tube; then, using the syringe as an aspirator, draw out as much of the pus as I can from the cavity. The syringe is then detached, emptied, and filled with a warm acid solution of perchloride of mercury, about 1 in 3,000, with 3 grains of tartaric acid to the ounce; a drop or two of this is injected into the tympanum. Great care must be taken when using the sharp point not to injure the tympanic walls and contents, and should the point slip out of the perforation, it is better to use a blunt point instead of re-inserting the sharp one. Again, if the patient is unsteady, and there is not much bulging of the membranes, I prefer to perforate with a Woakes's perforator, and then insert a blunt point. If a perforation has taken place—and it usually has, for it is rare to catch a case of acute suppuration before the burst has occurred—a blunt point, according to the size of the hole, should be used. When a powder is necessary, the tube kept specially for dry treatment must be employed. With the insufflator you are able to place the powder on the exact spot you want, and the ball has

just sufficient force to spread it evenly over the surface without causing it to rebound.

In cases of chronic suppuration with perforation, I have found the douche most useful, as it thoroughly washes away any pus or secretion, inspissated or otherwise, that may have collected in the tympanic cavity. It is simply a small Higginson's syringe, but with it you can so control and modify the pressure of water used that the cavity can be either gently washed out, or sufficient force can be applied to move anything that may be collected there; a large amount of aspiration can also be obtained, if necessary, by placing the reverse end of the douche in the handle.

I now always treat a case of suppuration, that can come to me daily, by thoroughly washing out the tympanic cavity with the acid perchloride solution once a day, drying the meatus, and carefully packing it with antiseptic absorbent wool, and I find the cure is considerably hastened.



But to use the douche requires two hands, so I have had this ear shoot (K) made. It consists of a vulcanite receiver and a long tube. The receiver has an india-rubber pad at the back and sides to ensure a close fit round the auricle, and an india-rubber band to hook over it; this band can be altered in length by the button at the side of the receiver. The tube can be as long as deserved, and is run into a jar to catch the fluid. It is better to pass it under the patient's arm, and this, with a touch of the little finger, keeps it close to the side of the head, and prevents wetting the patient. The self-retaining speculum I use is made up of the blades of a Kramer's speculum cut short and soldered on a spring similar to that of a Thudichum's nasal speculum, with the rack and screw of an ophthalmic one. This answers fairly well, but is still a little top-heavy. The solution I have in a jar on a jointed bracket.

W. R. H. Stewart,
Aural Surgeon to the Great Northern Central Hospital,
Surgeon to the London Throat Hospital.

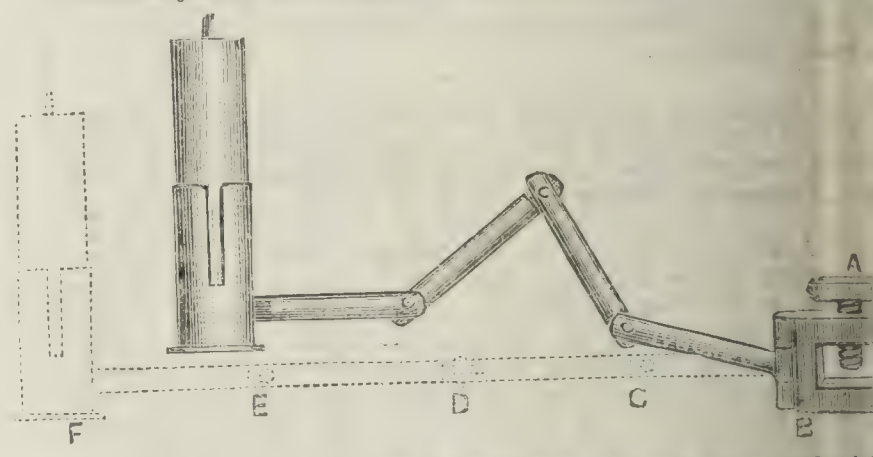
LIQUOR OUABAÏN.

Messrs. T. Christy and Co., 25, Lime Street, London, have introduced a standardised solution of ouabaïn—the alkaloid obtained from the juice of a plant which is used as an arrow poison by the Somalis in East Africa. Ouabaïn is extremely poisonous; it is said that $\frac{1}{65}$ grain of it introduced into the blood through a scratch or otherwise is fatal to man. It exerts a powerful action upon the respiratory centres, and has been suggested as a remedy in asthma and whooping-cough, also as a substitute for digitalis and strophanthus.

The solution contains one-fifth of a milligramme, or 0.003 of a grain, in each fluid drachm. It is coloured a deep rose tint, so as to give it a distinctive character, and thus avoid fatal accidents, which might occur with a colourless fluid. This preparation w be found a convenient one for the administration of this tox principle.

UNIVERSAL SPECULUM LIGHT-HOLDER.

Amongst the every day troubles of gynæcological practice, n the least annoying in its way is the difficulty often experienced making a sufficient visual examination in many instances where t is required. In our too generally sunless climate the trouble referr to frequently presents itself, even in the practitioner's consultin room, where the couch is most advantageously placed; a *a fortiori*, it occurs much more commonly in the patient's cha ber, where the bed is frequently so situated as to exclude a sufficient access of natural light into the speculum. Nor, in t latter case, is that difficulty supplied at least by either of the t electric speculum lights that I have myself employed, as these often fail just at the moment when they are wanted; whilst the m



reliable bit of candle, still recommended by some authorit has the disadvantage of interfering with the use of the hand the surgeon, by whom it must be held. I would therefore vent to suggest to others who have met with this difficulty a trial the little contrivance herein depicted. This has been made me by Messrs. Lynch and Co., Aldersgate Street, who have v carefully and efficiently carried out my suggestion, and have p duced a light-holder that will, I think, be found very handy portable, as well as efficient for its intended purpose. The sev joints are arranged to admit of rotation in every direction that, without being in the surgeons way, this illuminator may readily affixed to any form of speculum, and thus afford suffici light for utero-vaginal examination or operation.

Thos. More Madden, M.D.,
Obstetric Physician Mater Misercordiæ Hospital, Dublin, et

AN IMPROVED SANITARY AND ANTISEPTIC RESPIRATOR.

This convenient and simple little respirator is knitted in p and black wool, and is lined with silk. It is made so tha arches over the mouth and does not lie flat, which is an advant Between the two layers of knitted wool there is an opening means of which a small wire plate with some absorbent ti can be introduced, and this is charged with some vapouris antiseptic. It is claimed for this respirator that it is washabl soap and water, and can therefore be cleansed after it has soiled by use. For persons who have the bad habit of breatl through the mouth, these respirators must be very useful; for those who habitually breathe through the nose, as they ou to do, it would be necessary to make them somewhat large order to cover the nostrils as well as the mouth. It is manu tured and sold by B. Dranfield and Co., Nottingham.

SOLUTION OF SALICYLATE OF QUININE.

We have received from Messrs. Cooper and Co., pharmaceu chemists, 80, Gloucester Road, S.W., a sample of their new paration, liquor quininæ salicylatis. It contains one grain natural salicylate of quinine in each fluid drachm. In app ance, odour, and taste it very much resembles tincture of quin and when mixed with water it is very pleasant to take. T can be no doubt but that quinine salicylate, dissolved as it i this preparation, is more readily absorbed than when adm tered in its usual insoluble form as a pill, powder, or suspe in a mixture.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 10TH, 1890.

THE MEAT TRADE AND TUBERCULOSIS.

A deputation representing the meat trade of the United Kingdom, accompanied by several medical officers of health, members of Parliament, and others, has done much to earn the gratitude of meat producers and meat consumers in bringing their grievances before both the Minister of Agriculture and the President of the Local Government Board. It was pointed out that within the last twelve months medical officers of health and sanitary inspectors had paid special attention to the subject of tuberculosis, and that in consequence butchers had in certain instances sustained considerable loss from having carcasses confiscated which they had purchased as apparently healthy cattle. Mr. Chaplin, in reply to the deputation, started with the proposition that it was necessary to understand the relative positions of the Board of Agriculture and the Local Government Board in discussing the measures to be taken in connection with tuberculous cattle, meat, and milk. In dealing with the real question Mr. Chaplin took up a position similar to that taken by Dr. Hime, in a letter contributed to our columns on April 12th, and we find in consequence that he understands that no adequate proof has as yet been established sufficient to warrant the taking action on the belief that the flesh of animals which have been proved to be suffering from tuberculosis in its earlier stages is necessarily unfit for human food. Even allowing as Mr. Chaplin says, and as Dr. Hime holds, that the danger to human beings through the consumption of the meat of tuberculous animals has been very considerably exaggerated, it must still be admitted that there is considerable evidence, experimental and other, that wherever tubercle bacillus is found in animal tissues or in milk there is danger of its producing tuberculosis (if ingested), perhaps not in healthy individuals, but certainly in those whose tissues are in any way deteriorated by disease or injury. Tuberculosis in some form or other accounts for a very large percentage of the deaths in the country, and when it is stated that there is at the present moment an enormous quantity of meat from tuberculous cattle consumed daily throughout the country without the slightest harm accruing to those who consume it, the reserve with which the statement is made is greatly to be commended, especially when it is also stated that it is only within the last twelve months, or two years at the outside, that attention has been called to the connection between cause and effect—between bovine and human tuberculosis. Because in all these years no connection has been made out between the two diseases, it most certainly does not follow that none has existed. All the evidence gathered in recent years has, indeed, helped to establish a most intimate connection between the two. For how long was it held that the milk from tuberculous cattle had not the slightest effect in producing tuberculosis, experimentally or otherwise, when ingested? Yet now even those who maintain that the meat from a tuberculous animal is not deleterious will most unhesitatingly agree that tuberculous milk is a most potent source of infection, especially for children.

The Local Government Board has at length resolved—very wisely, we believe, as it is a question of public health—to take action in trying to determine through inquiry and experiment certain points connected with the danger of infection from ingested tuberculous meat. In fact, both Mr. Chaplin and Mr. Ritchie are prepared to give what aid they can in helping to determine whether the consumption of the meat of animals in the primary stage of tuberculosis is dangerous or not. This is certainly encouraging; but whilst these experiments are being made and experts are continuing to make up their minds on the subject, some arrangements—temporary arrangements, perhaps—should be come to, first, to prevent the possibility of any spread of the disease by channels that are even supposed to be tainted, and secondly, to make some provision either from the Imperial Exchequer or from the local rates to assist in compensating butchers for losses on tuberculous animals in which during life they were not able to determine the presence of any disease.

Whether the Board of Agriculture or the Local Government Board should deal with the economical aspect of confiscation and compensation is a matter of detail; but if it is granted by the Minister of Agriculture and his advisers that bovine animals, human beings, and fowls are especially liable to tuberculosis, and that the disease is communicable from beast to beast and from man to animals—why, then, not from animals to man?—precautionary measures should be taken at once. If the disease is stamped out or very stringently controlled in animals, there will at least be fewer centres from which the disease can spread to other animals and to the human subject. In any case, every possible though not absolutely proved source of infection should most certainly be carefully controlled.

In classifying diseased carcasses it is a very easy matter to speak of localised tuberculosis; but those who have made a study of the disease know that it is impossible to decide at what period the tuberculous disease becomes general, and that there is undoubtedly a certain proportion of cases in which, although the disease appears to be absolutely localised, the earliest stage of general tuberculosis has set in; no one can say absolutely, however glibly they may speak of "localisation," that the germs of the disease have in any given case not commenced to be circulated in every part of the body.

Those who have watched the onset of an acute miliary tuberculosis in the human subject, following the scraping of a tuberculous gland or the excision of a diseased knee-joint, well know how rapid and complete is the spread of the poison by the blood vascular system: but they also know that it is only in certain cases that such general spread occurs, and that

they cannot say in which cases it will take place. All will agree with Mr. Chaplin that the case of the butchers is a hard one, and that anything that can be done either by the Board of Agriculture or by the Local Government Board to ameliorate the hardships and to compensate the losses of the butchers will be a gain, not only to these latter but to the community at large. As regards the statement that the home producer was greatly injured by the action of inspectors and medical officers in condemning home reared meat, whilst foreign meat was allowed to pass without being subject to similar inspection, this can be perfectly easily adjusted; but it must be by more rigorous inspection of foreign meat and not by any relaxation in the strictness of inspection of home meat. The question of compensation is a difficult one to solve, but, with our present knowledge of the clinical symptoms of tuberculosis in cattle, it is undoubtedly scarcely right that the whole brunt of the loss, where an animal turns out to be tuberculous after it is slaughtered, should fall on the butcher, if reasonable precautions have, in the first instance, been taken to determine that the animal was healthy to outward seeming at the time of sale. A veterinary inspector should be able to determine with tolerable certainty whether an animal is suffering from advanced tuberculosis or not, but it is not always an easy matter to detect the disease in its very earliest stages. On the other hand, although the condemnation of the carcass may be for the public benefit, it seems to be but rational that the butcher should take a certain proportion of risk, as should also the dealer, but the local authorities might in turn be called upon to bear their proportion of the compensation. On the Continent—in Denmark, for example—the butchers have a mutual insurance association, in which every animal has to be insured before it is killed, and from which compensation, partial or total, is paid if the animal, on being killed, is found by the inspector to be diseased. Surely some such arrangement as this might be arrived at in this country. Let a certain sum be set apart, either by the Treasury or the local authorities; to this might be added a small sum per head of cattle sold by each breeder or dealer, and then every butcher should be compelled to pay a small sum per head slaughtered, and from the fund so formed compensation should be paid, not only for tubercle but for such other diseases as may be scheduled.

PATHOGENIC ALBUMOSES.

Although of late much attention has been paid to the ptomaines, the poisonous alkaloidal bodies associated with putrefaction and bacterial disease, it cannot yet be said that a study of their properties has thrown as much light as was at one time expected on questions of symptomatology, nor has it afforded any great insight into the causation of immunity from infective disorders. Yet indications are not wanting that in chemical vaccination lies the future of protective inoculation, and that the same chemical substance may, under some conditions, give rise to the symptoms of disease in their acutest form, and under others produce acquired immunity. To determine the nature and genesis of these protective substances investigators have recently been devoting much thought and labour.

In the Journal for October 12th, 1889, we published a preliminary communication from Mr. E. H. Hankin, of St. John's College, Cambridge, in which he announced his dis covery, in the Hygienic Institute of Berlin, of an albumos isolated from cultures of the anthrax bacillus—that is, of body possessing very definite chemical reactions—which pro duced immunity against the anthrax virus when injected int mice, of all animals the most susceptible to this disease. Im munity so produced had never previously been obtained. Sinc then Mr. Cartwright Wood has, by another method, succeede in protecting by inoculation the same animals. In the *Berline klinische Wochenschrift* of last month Professors Brieger an Fränkel, of the Berlin Hygienic Institute, publish a most im portant article on bacterial poisons. Beginning with a stud of Löffler's bacillus of diphtheria, they show that from culti vations of this microphyte no ptomaines are procurable; th toxic substance is precipitated by alcohol, and therefore can not be of alkaloidal nature. On the other hand, it gave pro teid reactions, and by repeated precipitations in alcohol an solution in water they at length obtained an amorphous snow white powder. This, when injected into rabbits, was followe by all the symptoms of diphtheria save the local diphtheriti membrane. They found, moreover, that small doses of th poison led to gradual emaciation, and in the course of week or months to a typical form of paralysis. Thus far the Berl observers confirmed the results of Roux and Yersin in Franc but whereas the latter hold the poison to be of the nature a ferment, Brieger and Fränkel deny this on the ground tha it may be heated to 50° C. in the presence of hydrochlor acid without losing its characteristic properties. This groun appears insufficient, for it is by no means proved that all fe ments must be destroyed by the treatment they assume to fatal. They obtained similar bodies from cultures of th specific microbes of typhoid, cholera, and tetanus, and of t staphylococcus pyogenes aureus, and in each case the bodi possessed definite pathogenic properties. The details give are not numerous, but it is of interest to note that the prote isolated from cultures of staphylococcus appeared to give ri to the formation of pus, differing from normal pus only being completely devoid of micro-organisms.

The observations made in Berlin are obviously of great i portance, but it may well be questioned whether there is n necessity for regarding these toxic substances as belonging a new class, and giving them (as the authors do) the distincti name of "toxalbumins." The bodies possess all the propert of albumoses; for although one or two of them are soluble water only with difficulty, Kühne's observations on the hete albumoses show that this need not surprise us. Moreover, t methods used by Brieger and Fränkel for their isolation a applicable to albumoses alone among proteid substances. To albumoses are already known to science; the researches Sewall on snake poison, and of Sidney Martin, the Resear Scholar of the British Medical Association, on the poison jequirity (abrus), and the like, have led to their definition as well-marked class. It was, indeed, from consideration of t nature of these albumoses that Mr. Hankin was led to se for them in anthrax cultures. The new and hybrid te "toxalbumin" seems, therefore, altogether uncalled for. may further be remarked that the method of quantitative a lysis, by which Brieger and Fränkel propose to prove the k ship of their poisons to peptones and albumoses rather than

im-albumen, is one which cannot be relied on when applied omplex proteids, however useful it may be in the study of simpler crystalline ptomaines. Raoult's method of obing the freezing point, which they promise to employ in rmining more accurately the structure of the "toxalbus," seems still more inapplicable; it is of use only in the of bodies possessing comparatively simple molecules, and not be applied even to starch.

f a distinctive term is necessary for any other purpose than of associating with the authors' names a class of bodies hich they were not the first investigators, Sidney Martin's "phytalbumoses" appears to meet all requirements. The eria are plants, and it is improbable that all the proteids produce in the matters on which they grow are necessarily c.

DIPHTHERIA IN DOMESTIC ANIMALS.

some years past the suspicion has been growing that cerof the domestic animals are liable to suffer from a disease h is identical with human diphtheria, and so long ago as the Medical Officer to the Local Government Board pred a memorandum for the use of inspectors visiting districts account of diphtheria, directing *inter alia* that inquiries ld be made as to coincident ailments in cows or other esticated animals. That calves, horses, cats, fowls, turkeys, pheasants are liable to a disease bearing the very closest cal resemblance to human diphtheria is universally ad-ed. A certain number of instances have been recorded in h such an epizoötic has preceded, accompanied, or followed an emic of diphtheria. It is true that these instances bear a small proportion to the total number of epidemics of theria which have been carefully investigated, still in some the facts were very significant.

r. George Turner has brought together some instructive nples in a paper published in the Appendix to the Annual ort of the Medical Officer of the Local Government Board 886. In one instance the disease appears to have been con-d from some children to a cat. The children had been cted while attending the village school; they lived in an ted cottage, and during their illness were confined to the r rooms. No food which had been offered to the sick ren was set before the others, the mother habitually gave the cat. This animal subsequently suffered severely, but ually recovered. Dr. A. Jacobi has published another ple; five children were ill with diphtheria in one house; kittens who had been playing with them died from time ime, and *post-mortem* examination showed diphtheritic branes in their throats.

ain, the report made by Dr. Bruce Low in 1888 to the Government Board on an epidemic of diphtheria at Encontains the following significant history:—A little boy fatal attack of diphtheria. On the first day of his illne vomited, and the cat licked the vomit on the floor. In days (and after the death of the boy) the cat was noticed ill, and her sufferings being so severe and similar to of the dead boy, the owner destroyed her. During the part of its illness this cat was let out in the back yard; days later the cat of a neighbour who lived a few doors s noticed to be ill. This cat also had been out in the back yard at night. This second cat recovered, being carefully nursed by four little girls, all of whom developed diphtheria. There was no other known source of infection to which these girls had been exposed but this cat.

Gerhardt has related an occurrence which appears to show that the diphtheria of hens can be communicated to man and the cat. A large number of hens were imported from Verona to a village in Baden; some were suffering from the disease when they arrived, and about half of them died; all the chickens bred in incubators died; four cats kept in the place died of "diphtheria," and four of the six men employed on this poultry farm had diphtheria. No case occurred in the neighbouring village. The more recent researches of Löffler, Pfeiffer, and Klein, however, appear to show that this diphtheria-like disease of fowls is different from human diphtheria.

In 1885 Dr. C. J. Renshaw contributed to this JOURNAL a paper in which he described some cases in which cats, who had swallowed portions of recent diphtheritic membrane from human sufferers, contracted a disease, apparently diphtheria, to which they succumbed in from a week to a fortnight; some mice also contracted the disease in the same way—a rather significant observation; further, in one case the subcutaneous inoculation of diphtherial membrane in a cat was followed by an acute disease characterised by the appearance of false membranes on the fauces.

In the course of an investigation undertaken for the Local Government Board Dr. Klein has ascertained some very interesting facts.[1] He at first obtained only negative results: fowls, pigeons, rabbits, and guinea-pigs inoculated with diphtherial false membrane did not develop diphtheria, though the guinea-pigs died of septicæmia. Cats, however, yielded very striking results; if the anterior epithelium of the cornea in these animals is scraped off it is quickly restored, the process being attended by only a trifling amount of local reaction. If, however, particles of false membrane from a case of human diphtheria were rubbed on the abraded surface the result was very different. After twenty-four hours the conjunctiva was congested, after forty-eight hours the centre of the cornea was opaque, and the conjunctival congestion was greater; these conditions subsequently became aggravated. Inoculation of an abraded surface on the palatine arch was followed by swelling, redness, and the formation of an ulcer covered with a thin yellowish membrane, rather closely adherent. The affection of the palatine arch reached its maximum about the eighth or tenth day, but then rapidly declined, so that at the end of the second week the parts were again in their normal condition; the ocular affection followed a similar course, but recovery took place later. This disease thus produced in cats was found to be communicable from them to other cats. The disease induced in these animals by inoculation with false membrane from human diphtheria bears, as Dr. Klein points out, only a slight resemblance to typical cases of the disease observed in man, since the characteristic thick, firmly-adhering, whitish membranes are not present. It may be added that no mention is made of paralysis as a sequela.

[1] *Eighteenth Annual Report of the Local Government Board, 1889. Supplement containing the Report of the Medical Officer for 1888.* This volume is just issued, and may be obtained from Eyre and Spottiswoode, London; A. and C. Black, Edinburgh; or Hodges, Figgis and Co., Dublin; price 8s. 9d. See also *Cent. f. Bakt. u. Parasit.*, 1890, Nos. 16 and 17.

It has been known since the researches of Klebs and Löffler that a bacillus presenting definite morphological characters is to be found in the superficial layers of the characteristic membrane from cases of diphtheria. This bacillus grew rapidly on solid media at the body temperature; its cultivations inoculated into rabbits produced a form of septicæmic intoxication, and, rubbed into the abraded mucous membrane, caused a sort of pseudo-membranous exudation on the surface, followed commonly by a general systemic infection. In certain of the animals partial paraplegia followed this infection.

MM. Roux and Yersin, working apparently with this same bacillus, arrived at some very remarkable results, which were briefly stated in an editorial article published in the JOURNAL on February 9th, 1889. They confirmed Löffler's statement that the acute malady produced by inoculation of this bacillus was in some cases followed by paralytic symptoms after an interval of about three weeks. They went a step further, however, and showed that the nutrient fluid in which the bacillus had grown possessed pathogenic properties after the microbe had been filtered off; subcutaneous injection of the fluid caused, according to the strength of the dose, either rapid death or a less acute illness, followed by paralysis, from which in some cases the animals recovered.

Dr. Klein states that in every one of twenty-two cases examined he found a bacillus which is probably identical with that described by Klebs and Löffler. The inoculation of guinea-pigs with cultivations of this organism yielded somewhat doubtful results, for in these animals injections in guinea-pigs produced a disease resembling septicæmia, and causing death in about three days; but, again, experiments with cats yielded positive results. Inoculation of the cornea with cultivations of the bacillus was followed in some cases by a process absolutely identical in character and intensity with that produced by inoculation with diphtherial membrane; in other cases the process was slighter and shorter. Two cats inoculated with gelatine cultures started by human diphtherial membrane were kept in the same room as another cat not inoculated, and this third cat developed a similar disease of the cornea. Dr. Klein reports a curious circumstance with regard to this pathogenic bacillus. In examining cover-glass specimens of diphtherial membranes dried and stained in Weigert's gentian violet, Dr. Klein was struck by the presence of a large number of bacilli having a general resemblance to, but smaller than, the Klebs-Löffler bacillus; further, in the cornea of the cases of feline diphtheria he found large numbers of minute thin bacilli. On the surface, where suppuration was in progress, they were mixed with other bacteria, chiefly micrococci, but in the substance of the cornea itself, where, that is, the infective process was spreading, the minute thin bacilli were found in masses unmixed, or almost unmixed, with other bacteria. When cultivated on solid media these minute bacilli grew in a manner almost identical with the Klebs-Löffler bacillus, but presenting certain minute differences. Subcultures of Klein's bacillus of the first and second remove from the original source (cat's cornea) have been found capable of transmitting the malady, but with the later removes positive results have not always been obtained. There is a further circumstance with regard to this bacillus which must be mentioned. The individual organisms are much thicker in the cultivatio than in the cornea. At first it was supposed that the cultiv tions were not pure, but after a large series of cultural expe ments Dr. Klein satisfied himself that this was not so, l that the thin bacilli seen in the cornea and the thicker bac of the cultures made from it belonged to the same speci This fact being accepted the important conclusion must also accepted that by the change thus induced these bacilli ha in a morphological sense, become absolutely identical w those obtained from the false membrane of diphtheria in human subject.

THE REPORT OF THE SELECT COMMITTEE O THE SWEATING SYSTEM.

THE fifth report from the Select Committee of the House Lords on what is known as the Sweating System, is one the most important sanitary reports ever issued. The broad definition of the term "sweating" that has been given is "grinding of the faces of the poor." But without attempt to assign an exact meaning to the term, the Committee st that the evils known by the name of "sweating," are sho to be: 1. A rate of wages inadequate to the necessities the workers, or disproportionate to the work done. 2. cessive hours of labour. 3. The insanitary state of the ho in which the work is carried on. Such evils can hardly exaggerated.

The earnings of the lowest class of workers are barely s cient to sustain life. The hours of labour are such as make the lives of the workers periods of almost ceaseless hard and often unhealthy. The sanitary conditions u which the work is conducted are not only injurious to health of the persons employed, but are dangerous to public in the case of trades concerned in making clothes infectious diseases are spread by the sale of garments mad rooms inhabited by persons suffering from infectious dise We are glad to see that the Committee fully recognise fundamental importance of the sanitary conditions u which the poorest classes live and work.

No one who has studied Sir John Simon's masterly essa "The Politics of Poverty," can fail to see that the "housi the poor," by which term we mean not only the sanitary dition of the dwellings in which the poor sleep and have meals, but also those in which they earn their bread, problem to which every statesman and politician should his best attention. There are in truth no greater "swea or "grinders of the faces of the poor" than corrupt, gent, or slothful sanitary authorities.

"We are of opinion," say the Committee in their re "that all dwellings and workplaces should be required kept in a cleanly state, to be limewashed or washed thr out at stated intervals, to be kept free from noxious eff and not to be overcrowded." This last requisite is the difficult to secure, and at the same time it is the most im ant. Sanitary authorities frequently plead as an excus their inaction in abating the greatest of sanitary evils— crowding—that it is from commiseration for the exigenc the poor. But as Sir John Simon says, in his recently lished book, "When housing infamously unfit is permitt

der itself for hire, and when the laws which have been ected against nuisances, and against the overcrowding of ulation within stated limits of room, or house, or a, are by negligence or corruption left unen- ed, the pretence is commonly to be heard, that the ng has been committed or condoned in compassion for the guous earnings of the poor; but persons conversant with subject will in general be able to discern that the real passion has not been for the earnings of the poor, but for profits of the house jobber or landlord; and that to have mitted the making of profits on such states of dwelling has n as contrary to the true interests and rights of the poor, as contrary to the methods of good government, as would to have permitted, in the provision market, the making of fits on the sale of diseased or rotten meat or fish. In the case, just as in the other, there is wanted for public pro- ion the strict practical enforcement of a limit to the down- d competition in quality."

The Committee on the Sweating System were told that the oduction of subcontractors and middlemen had been the t cause of misery. But in discussing this statement, they that employers are often regardless of the moral obliga- s which attach to capital when they take contracts to sup- articles, and know nothing of the condition of the workers whom such articles are made, leaving to a subcontractor duty of selecting the workers, and giving him by way of pensation a portion of the profit, and that consequently chief blame rests with them. Almost the same language ht be used in discussing the kindred evil to which we have rred, namely, the letting of unhealthy dwellings. Great owners ouse property, some of them hereditary legislators, have in the shown utter callousness in the letting of their property to se jobbers; and they, too, should have come in for their share he blame which the Committee rightly consider to belong to talists. If the middleman is the "consequence, and not cause, of the evil," so, too, the house jobber is the conse- ace, and the superior landlord the cause, of the terrible s which make the houses of the poor unfit as habitations work places.

The recommendations of the Committee are eminently prac- l. One of them refers to the disadvantage arising from fact that different departments of the Government are erned with matters relating to the labour question. The ory inspectors are appointed by and under the control of Home Office. The Board of Trade supplies the public, ugh its Labour Correspondent, with information as to the itions of labour and the state of the industrial classes, requires for that purpose the aid and co-operation of the ory inspectors. The Local Government Board has a cal department, which, for the purpose of promoting ene, ought to be in constant communication with the fac- inspectors. The Committee suggest that it would be ad- le to bring the officers employed in the above-mentioned ions into closer relations with each other. With this estion we cordially agree, and we would further express hope that before long the local governing bodies of the opolis may be brought into closer relation with the Central th Department, whose President in time would come to dowed with the functions of a Minister of Health.

THE SANITARY WORK OF THE LONDON COUNTY COUNCIL.

Lord Rosebery's review of the past work of the London County Council should have the effect of counteracting to a considerable extent the adverse judgment so many people have formed as to the municipal usefulness of this popularly elected body. It must be apparent to every one who has read the Chairman's utterances that, if the County Council has at times debated at length upon political questions somewhat outside its immediate powers and functions, yet it has by means of its committees been able to accomplish a vast amount of useful work, and to arrive at a very complete understanding as to its possibilities of usefulness with its present powers, and, *per contra*, as to the additional powers it requires in order to extend its legitimate sphere of operations.

The Sanitary Committee of the Council, for instance, finds itself charged with a multiplicity of functions, which, from their domestic character, might almost entitle this committee, in the words of the Chairman, to be called "the nurse of London;" yet the Committee finds its powers to be very inadequate. Neglect on the part of the local authorities to administer the Nuisance Removal and Sanitary Acts, the Acts upon which London largely depends for the maintenance of houses in a wholesome condition, is subject to no control by the County Council. The sanitary administration of the metropolis is declared to be in a completely and entirely unsatisfactory state, and the Committee is strongly of opinion that the best remedy for this state of things would be the acquisition by the County Council of the power to frame by-laws for the proper sanitary government of each and every part of London, the new district Councils or the existing local bodies to put them in force, whilst the County Council should be the supervisory body to see that the regulations contained in the by-laws were properly carried out.

In support of this view there is much to be said. Those who have studied the working of Acts of Parliament acknowledge that it is not advisable to introduce into the text of sanitary Acts specific details as to the construction or maintenance of sanitary appliances and fittings, but rather to enunciate generally in the body of the Act the principles on which sanitary work should be carried out, leaving it to the sanitary authorities to determine by means of by-laws, which they should be empowered to frame, how best those principles may practically be enforced. One of the greatest evils of metropolitan sanitary administration at the present time is that there is no uniformity of practice in the different districts. If the County Council were entrusted with those supervisory powers which it desires, this want of uniformity would disappear, with all its evils and glaring anomalies.

The County Council, too, should have larger powers under Torrens's Acts—Acts which have on the whole been entirely disregarded by metropolitan vestries and district boards. Under these Acts the Council can act in substitution of a vestry or district board which has neglected to take any proceedings upon the report of their medical officer of health in respect of dwellings stated by him to be unfit for human habitation: but this power is limited by the circumstance that the Council has no means of knowing what premises have

been reported by the medical officer, except in those districts where the officer has been elected since April 1st of last year—and these form at present the merest fraction of the total number. It is urgently necessary that the County Council should be entrusted with the power of setting Torrens's Act in motion through its own officials. This is a reform which is being strongly urged by the Mansion House Council on the Dwellings of the Poor, as a result of its experience that the demolition of insanitary working-class dwellings cannot be entrusted to boards liable to be swayed by petty local interests.

To pass to another function of the Sanitary Committee, Lord Rosebery lamented that, on the subject of smoke and fogs, the Council had built hopes of devising some remedy, but found themselves unable to make any practical suggestion. The smoke abatement clauses in the Sanitary Acts require that trade furnaces should consume their own smoke, but there is no enactment in regard to the smoke of private houses, and in any case the police, over whom they have no control, are entrusted with the enforcement of the Acts. The County Council is undoubtedly the proper authority to put in operation the existing smoke abatement clauses. The police seem quite unable to deal satisfactorily with this great question, which probably also tends to interfere with the proper performance of their more legitimate duties. It might also be safely left to the County Council to initiate some legislation which would, without pressing unduly on the poorer class of householders, have some effect in reducing the volumes of black smoke that issue daily from the myriad chimneys of private houses in London.

The acquisition by the County Council of the water supply of the metropolis was alluded to by the Chairman as a very urgent matter—not urgent in the immediate interests of the health of the population, but urgent in view of the quinquennial revaluation that takes place next year. A Special Committee of the Council has considered this question, and in its report points out that the annual increase in rateable value of property in London averages about one million and a half at each quinquennial revaluation. Taking the average authorised charge of the several companies for domestic supply to be 5 per cent. on rateable value, the increase of income to the companies at each quinquennial revaluation would amount to £75,000 a year, solely in respect of the increased rateable value of existing property. The consequent increase in value of the water companies' stock would probably exceed two millions, and this sum would probably be the very lowest increase which would be added at each quinquennial revaluation to the value of the water companies. The Committee, therefore, urges that if London ever means to control its own water supply, it should take steps to do so at once, for an enormous additional sum will have to be paid in compensation after each revaluation.

On purely sanitary grounds, perhaps, there is not so very much to be said in favour of a municipal water supply, the restrictions and penalties for supplying impure water as imposed by Government on the existing companies being sufficient to ensure a supply of water good in quality and sufficient in quantity. As regards the question of cost, however, it is evident that it will in the end be far cheaper to face a large initial outlay at the present time than to submit to a periodical ri in ratio for which the consumer gets no sort of return, a which enriches the water companies without their contributi anything to the improvement of their own property.

THE subject of the Croonian Lectures, by Dr. Ferrier, F.R. will be Cerebral Localisation. They will be given on June 3 10th, 17th, 19th, 24th, and 26th.

FOREIGN visitors to the forthcoming Berlin Congress may pleased to hear that a special Committee has been formed whi will supply full information as to lodgings, etc. Inquir should be addressed to the office of the Congress, 19, Karlstras Berlin, N.W., the envelope being marked on the outs "Wohnungsangelegenheit."

MR. DEPUTY BEDFORD intends to bring before the notice of t Common Council at its next meeting the subject of the closing public gardens which have been opened by the Metropoli Public Gardens Association, the London County Council bei unable or unwilling to supply the necessary funds for the p pose of caretakers, etc., needful for their proper superintende He will propose that the matter be referred to the Finance Co mittee to consider and report whether it would not be advisa for the court to contribute £500 in order that these places mi be opened during the ensuing six months.

OBSTETRICAL SOCIETY OF LONDON.

ON Wednesday night the discussion on Dr. Cullingworth's pa on Vaginal Hysterectomy for Cancer of the Cervix was resum Dr. Graily Hewitt, Vice-President, took the chair. Drs. Lew Walter Griffith, Macnaughton-Jones, and Hayes, and Mr. Eger Jennings joined in the discussion. The debate occupied the wh evening, after the exhibition of specimens; and Dr. Cullingwo made some interesting observations in reply.

THE STANLEY EXPEDITION AND THE ROYAL COMMISSION ON VACCINATION.

MR. STANLEY and Surgeon T. H. Parke have been invited by J Herschell to give evidence before the Royal Commission on V cination concerning the impressive facts testifying to the influ of vaccination in the prevention of small-pox and the diminu of its mortality observed during their relief-march across Af Surgeon Parke had vaccinated forty native bearers with party; presently these were sent back with Stanley, and an demic of small-pox broke out, which proved very fatal; thi eight of the forty passed quite unscathed, while the unvaccin natives were dying like sheep around them; the other two, showed imperfect marks, had slight attacks, from which recovered unharmed. It will be interesting to have these f authoritatively on record, although similar evidence on a l scale is forthcoming in overwhelming masses.

MONOMANIA IN STEALING.

A CURIOUS series of facts supplied to Dr. Peddie by the Sheriff Barday, of Perth, exemplifies phases of crime relate habitual drunkenness and to proclivities indicating insan "Between the years 1844 and 1865 one woman was comm to prison 167 times for being drunk, and when drunk her in able practice was to smash windows. Then there was a who, when drunk, stole nothing but Bibles; he was an soldier, wounded in the head; when drunk, the objects of were always Bibles, and he was transported for the seventh of Bible stealing. Then another man stole nothing but spe

nan stole nothing but shoes; another nothing but shawls; here was a curious case (the indictment against whom I of a man, named Grubb, who was transported for the th act of stealing a tub. There was nothing in his line of nd nothing in his prospects, no motive, to make him specially tubs; but so it was, that when he stole it was always, ting on one occasion, a tub."

EMOVAL OF FIBROMA DURING PREGNANCY.

OUTIER successfully performed this serious operation last pregnancy continuing undisturbed. The patient was 37 of age. The tumour appeared to have existed over six years, here was no menorrhagia. The tumour was removed be- the third and fourth months of gestation. It was a large, ous, kidney-shaped, subperitoneal fibroid, over ten inches in gest measurement. The pedicle was as thick as a man's It was transfixed by two pins; the second was passed across st, and great care was taken not to wound the uterus itself; n elastic ligature was passed round the pedicle, and the r was cut away, a portion which was afterwards enucleated ning on the cut surface of the pedicle. The pins were next ed, and the edges of the raw surface sewn together by a con- us suture of stout silk. The uterus was replaced in the en, and the abdominal wound closed. The patient made a recovery. This operation is described in the *Annales de ologie et d'Obstétrique* for March, 1890. Dr. Routier has care- searched medical literature on the subject, and succeeded in ting 15 cases of removal of fibroids during pregnancy, the not being amputated; of these 15, 5 died, 2 succumbing to rrhage after abortion within one week of the operation. In of the 10 recoveries abortion occurred, in the remaining 7 ancy continued till term. The list includes Dr. Routier's sting case.

TIPPLING AT THE CHEMIST'S COUNTER.

demand for medicated wines were confined to those which ntained in the *Pharmacopœia* the retail chemist and drug- ould find but very little difficulty in carrying on his busi- trictly within the limits of pharmacy, and there would be asion for him to become a wine merchant. The use of wine ehicle for the administration of certain drugs has increased reat extent. These so-called medicated wines are advertised y; many of them are by no means unpalatable, so that if there tendency to tipple the chemist's counter affords every facility. wines cannot be sold without a licence, for the Board of In- Revenue has decided that a medicated wine must contain an amount of drug as to render it unpleasant or fit only se as a medicine. There is no doubt that it is the general of the trade, as evidenced by a discussion which took place eeting of the North British Branch of the Pharmaceutical y on April 16th, that the business of a pharmacist should egenerate into that of a publican. It is a matter which in- great difficulty to the chemist, for these wines are pre- l by medical men, and customers will expect to be supplied hem like ordinary medicines.

A NEW REMEDY FOR HAY FEVER.

ARLY as the summer comes round, with its flowers and scented grasses, and the fatal *amari aliquid* which rises hese well-springs of odorous delight to vex the nostrils of tims of hay fever, there is a corresponding efflorescence in dical journals of more or less dainty therapeutical devices the pollen of its sting. Many means of lessening the ab- l irritability of the conjunctiva and respiratory mucous rane have been tried, and for the most part have been found g, and sufferers to whom experience has brought "disillu- sion" are fain to throw physic to the dogs and take refuge on barren mountain tops till autumn brings surcease of sorrow. It is not everyone, however, as the old proverb tells us, that can go to Corinth, and, moreover, those subject to hay fever are as eager as the Athenians of old to hear some new thing that may perchance mitigate, if not cure, their complaint. Some of our readers, therefore, may be glad to have their attention called to a method of treatment which seems to have at least the merit of novelty. Dr. de Lamallerée,[1] who looks upon the disease as a "neurosis of nasal origin," the exciting cause of which is "erection" of the mucous membrane set up by some irritant substance, says he has succeeded in subduing the morbid sensitiveness of the parts by means of douches of carbonic acid gas applied to the interior of the nose, at least three times a day, for a quarter of an hour at a time. In severe cases this local medication is insufficient, and the gas must be given by the rectum, in six-litre doses, morning and evening. Dr. de Lamallerée states that he has "passed into the intestine in less than 10 minutes from 10 to 14 litres of carbonic acid gas without the patient feeling the slightest colic or distension." No other treatment whatever is used. It must be confessed that though Dr. de Lamallerée speaks of this remarkable plan with all the enthusiasm of a discoverer, its results, even on his own showing, do not seem to be particularly brilliant, and it is just possible that many persons might think the remedy worse than the disease.

FEES FOR CERTIFICATES UNDER LUNACY ACT, 1890.

In another column will be found a copy of a resolution passed by the Council of the Poor-law Medical Officers' Association, in reference to a clause in the Lunacy Act of 1890. This clause, which has reference to the retention in workhouses of harmless lunatics and imbeciles, who have hitherto been retained there solely on the certificates of the medical officers of the institutions, renders it now necessary that two further certificates should be obtained to effect the same object. One of these is to be given by a magistrate and the other by a medical practitioner, who is not an officer of the workhouse, and for this last certificate the guardians are to pay such a fee as they may deem fit. It is not unlikely that many boards will endeavour to obtain this certificate for an absurdly low fee, and it is to prevent as far as possible such a custom becoming general that the Council have decided to recommend half-a-guinea as a minimum fee for the duty. Medical practitioners who may be called upon to certify for this class of lunatics will have this resolution to guide them, and it is to be hoped that they will act on the opinion thus publicly expressed and in no case be induced to certify in these cases for a lower fee than that recommended by the Council.

SUICIDE AND THE NEW LUNACY ACT.

From the reports published of the recent suicide of Lieutenant-Colonel Brace it appears that the deceased gentleman had some mental aberration about two years ago, but afterwards became for a time very much better. For a few months before his death he had again become very much changed, had been despondent, had threatened to commit suicide, and had been the subject of depressed delusions, such as that his house was not his, and that he was ruined. About two months before his death he was seen by a medical practitioner, who found him to be very irritable and despondent, and unwilling to attend to his regular pursuits. He also had a great aversion to seeing his friends. It was thought wise to direct that the deceased should be placed under supervision, that two female nurses should attend him, and that firearms should be kept out of his way. Shortly after this he was thought to be better, and about this time he appears to have

[1] *Concours Médical*, May 3rd.

travelled for a short time by himself. Latterly, again, he appears to have been for some time affected (mentally) pretty much as before, and he eventually shot himself early one morning. In a case of this kind it is a pity if the wise precautions and suggestions of the medical adviser are not carried out continuously and closely, or, if that should not be submitted to, it is well that the patient should, supposing him insane, be placed under legal care and control. Such a case is eminently apt to terminate in a suicidal attempt, and it is often in the early morning that such attempt is made; hence the desirability of an attendant in the patient's bedroom at night. The coroner referred to the trouble experienced by the friends in such a case to arrange that someone should constantly look after a person who was not found to be insane, and the difficulty in getting medical men nowadays to sign certificates of insanity. We believe the latter inconvenience will be lessened under the new Lunacy Act now in force.

CHLOROSIS.

MUCH has been written on this interesting subject lately. Sir Andrew Clark has expressed his belief that the anæmia or chlorosis of girls arising in nervous constitutions with imperfectly developed sexual organs is caused, for the most part and in the first instance, by fæcal retention and its consequences, and that ferruginous cathartics and a sound hygiene will effect a cure. Mr. Lawson Tait and Professor W. Stephenson, of Aberdeen, have dwelt on the disputed relation between chlorosis and menstruation. The occurrence of pregnancy in a chlorotic girl is, Mr. Tait observes in his *Diseases of Women*, a not infrequent cause of medical trouble. A practitioner is told that a girl has not menstruated for sixteen months, and therefore he assumes that she cannot be pregnant. The story is true, but she may be pregnant four or five months all the same. Dr. Stephenson has analysed 232 cases of chlorosis to ascertain its relation to the menstrual function. The results were published in the *Transactions of the Obstetrical Society* for 1889. He found, amongst other things, that the tendency of the chlorotic diathesis is to accelerate the age at which menstruation first appears, and that chlorosis by itself is not a cause of retarded appearance of the catamenia. Nevertheless, the show is scanty and the intervals between the periods abnormally long in at least 50 per cent. of the cases. Dyes, of Hanover, and, a few months since, Dr. Wilhelmi, in a work on *Chlorosis and Venesection* published at Güstrow, advocate the occasional abstraction of from 60 to 100 cubic centimètres of blood in bad cases of chlorosis with amenorrhœa. In thirty cases the menstrual irregularities were greatly alleviated. Unlike Dyes, Dr. Wilhelmi purposely avoids any attempt at a scientific explanation of the alleged beneficial results of blood-letting in chlorosis.

THE UNIVERSITY OF LONDON AND THE ROYAL COLLEGES.

A CONFERENCE took place on May 7th between the Special Committee of the Senate of the University of London and the delegates of the Royal Colleges of Physicians and Surgeons. The University was represented by the Vice-Chancellor (Sir James Paget), Lord Justice Fry, Sir John Lubbock, Drs. Quain and Pye-Smith, and Messrs. Fitch, Osler, Anstie, Q.C., and F. J. Wood, Chairman of Convocation. The basis upon which the Royal Colleges stated their willingness to co-operate with the University, it may be remembered, was that the matriculation and preliminary scientific examinations for the Pass M.B. degree should be conducted by the University only, while the examinations in anatomy, physiology, medicine, surgery, and midwifery for the same degree should be under the control of the Conjoint Board of the University and the Royal Colleges. The latter further expressed the opinion that the several schools of medicine ought to be made constituent colleges from the commencement of the reorganisation of the University. These several propositions were discussed with the Special Committee, and the views of the delegates of the Royal Colleges were very fully stated. It was made clear that the Royal Colleges while prepared to co-operate in holding examinations for the M.B. degree would continue to conduct their own examinations for the licences of the existing Conjoint Board, and, of course, for the higher diplomas. There was, we understand, a general feeling that a mutual understanding might be arrived at between the University and the Royal Colleges, although a very large number of details would remain to be considered. The Special Committee will meet again at an early date, and will prepare a report, which will then be considered at a full meeting of the Senate.

CHIMNEY-SWEEP'S CANCER.

FOR many years the student has been informed in textbooks of surgery that this disease is gradually disappearing from England owing to alterations in the method of sweeping chimneys and to the greater precautions which the sweeps take against the formation of the cancer. In 1887, however, Mr. Butlin noted, in his *Operative Surgery of Malignant Disease*, that the authority upon which this statement rests is very doubtful, for the reports of the Registrar-General tell quite a different story. To the twenty-fifth volume of the *St. Bartholomew's Hospital Reports*, recently issued, the same author contributes a short memoir on the same subject. Between 1869 and the end of 1888 thirty-nine patients had been under treatment in the hospital for cancer of the scrotum, the large majority being chimney-sweeps; but Mr. Butlin states that he intends to write at greater length on the subject of employment. As has long been believed, cancer of the scrotum is on the evidence of Mr. Butlin's statistics, a distinctly mild form of malignant disease, amenable to surgical treatment. Owing to the anatomical relations of the part, the skin around the cancer can be freely removed. In one case where the whole scrotum sloughed after operation the patient was alive and well ten years later. Cancerous affection of the glands need not deter the operator from removing the primary disease and the glands with it. Even in advanced cases operations for recurrent disease may, according to Mr. Butlin's researches, be undertaken with a better prospect of success than in the case of recurrence of cancer in other organs.

HYDRASTININ IN UTERINE HÆMORRHAGE.

IN hydrastis canadensis there are two alkaloids: hydrastin and berberin. The former oxydised yields an acid, opianic, and a base called hydrastinin, $C_{11}H_{13}NO_3$, a derivative of isochinolin. Dr. Falk has investigated the properties of this substance physiologically, and, further, he has tried it in medical practice. As to its physiological action, it may be sufficient to record that upon the heart its effect is to cause a prolongation of the systole, and in many cases a return of the systole before the diastole has become complete, but even large doses do not cause complete systolic arrest of the heart. This is upon the frog's heart, but a similar effect obtains in the rabbit; there is slowing and strengthening of the heart beat, and marked rise of blood pressure; this last due to contraction of the arterioles. The slowing of the heart by central stimulation of the vagus. In these cardio-vascular effects the drug is exactly like digitalis. Hydrastinin contrasts with hydrastin in that the latter arrests the heart in diastole, and also that the rise of blood pressure caused by hydrastin is a temporary effect and is followed by vasomotor paralysis. With this physiological record we should expect the drug to be of value in bleedings generally. Dr. Falk has used it in uterine cases, for example, meno- and metrorrhagia without organic disease or in association with such, for instance, with metritis and endometritis, with pyosalpinx, also with the presence of myomata. His re-

very favourable one. Whether hydrastinin causes contraction ıe muscular wall of the uterus Dr. Falk has not established; hinks it probable. Dr. Falk obtained the best results in orrhagia by commencing the treatment six to eight days re the expected flow. He gives during this time a daily hypoıic injection of the hydrochlorate of hydrastinin, 0.75 grain gramme), and when the flow has begun he doubles the dose, rain (0.1 gramme). He has seen no advantage or disadvantage higher dosage (up to 2.3 grains). His solution is a 10 per of the hydrochlorate in distilled water.[1]

CASUALTIES IN SCHOOL CHILDREN.

inquest was held recently on a child attending the Halsall onal School, who died from conditions probably attendant a blow upon the head. According to the report in the *skirk Advertiser*, the girl was 8 years old, and apparently hy. She attended school on a Friday, and appeared well till lay, when she became poorly with headache. She was seen by Ieald, of Ormskirk, on Wednesday, and was then drowsy and ish; and on the following Sunday became comatose and, three s after the last school attendance, died. *Post mortem:* there were arks of external violence; the lungs, heart, and viscera were d perfectly healthy. Under the scalp, over the right frontal , was a clot half an inch in size, surrounded by a number of ler ones. There was acute inflammation of the whole surof the brain; under the left temporal bone was a clot; at the of the brain inflammation was greater on the left side; and vhole substance of the brain was inflamed and pulpy. Dr. d and Dr. Pilkington conducted the examination. The evie as reported would seem to show that this was a case of injury, evidenced by external and internal cranial hæmore, as well as by the encephalitis of local origin. Such a con- is not uncommon two or three weeks after a severe blow or n the head; the evidence was conflicting as to whether the had been boxed on the ear by the teacher, or received a blow ıe head from some boys in the street; the jury were unable y how the injury was inflicted. The case serves to show the ers that may follow in a child from any injury to the head, he folly of any punishment by striking that part; it further rates the delay that may occur between a blow received he onset of brain symptoms following from traumatic inmation.

SLOUGHING OF THE BLADDER.

monographs on this formidable accident have recently been ared by Dr. F. W. N. Haultain. One appeared in the *British ecological Journal*, the other being a very complete scientific t entitled "Necrosis of the Bladder: its Pathology, Ætiology, Course," which was published in the second volume of *ratory Reports*, issued by the Royal College of Physicians, burgh. The protrusion of the whole or part of the mucous brane of the bladder from the urethra is a most alarming tom, and the practitioner will naturally wish to know what ely to result from the exfoliation, and what ought to be done. e we may note Dr. Haultain's observations on "prognosis;" f 53 collected cases of necrosis of the bladder in the female, 5 ended fatally; in 29 exfoliation took place, with only 11 s, an almost incredibly low percentage, especially when it is into consideration that in at least 6 of the recoveries the thickness of the bladder wall was cast off, portions of oneum being found on the external surface of the sac. rognosis as to complete recovery and restoration of the er to its normal functions is less favourable. In the large rity of cases, more or less incontinence of urine was observed. In some cases a certain amount of sphincter action seems to have been left, retention of urine being possible for short periods, even for as long as two hours in a case recorded by Sir Spencer Wells. Turning to treatment, Dr. Haultain advises that when the exfoliating sac protrudes from the urethra a catheter should be passed, so as to empty the bladder slowly, and diagnose the condition from inversion of the bladder. The sac is then removed and the bladder washed out with a strong antiseptic solution, repeated every four hours till the temperature falls below 101°, after which the washing is to be continued at more lengthened intervals till the lotion returns pure. Constant drainage of the bladder is necessary, should there be the slightest tendency to retention of urine.

[1] *Therapeutische Monatshefte*, January, 1890, pp. 19 *et seq.*

MEDICO-PSYCHOLOGICAL EXAMINATION.

We are asked to state that an examination for the certificate in psychological medicine, given by the Medico-Psychological Association, will be held in July. Candidates intending to present themselves for examination should apply for particulars and give 14 days' notice in writing (unless unavoidably prevented) to either the general secretary of the Association, Dr. Fletcher Beach, Darenth Asylum, Dartford; the secretary for Scotland, Dr. Urquhart, Murray's Asylum, Perth; or the Secretary for Ireland, Dr. Conolly Norman, Richmond Asylum, Dublin; according as they desire to be examined in London, Edinburgh, or Dublin. The exact date of the examination and further particulars will be advertised in the JOURNAL. In the month of July an examination for the Gaskell Prize, open to all those who possess the certificate, will be held in London. Particulars can be obtained from the general secretary.

BENZOATE OF MERCURY IN SYPHILIS.

In the *Annales de Thérapeutique Médico-Chirurgicale* for January, 1890, a plea is made for the treatment of syphilis by hypodermic injection of benzoate of mercury. Of this salt it is asserted that the pain following the injection, the needle being thrust deeply into the subcutaneous tissue, is much less than when other soluble salts of mercury—for example, the peptone of mercury—are used; further, that this small amount of pain may be obviated by the use of a cocainised solution; that abscesses may certainly be prevented if the precautions of cleanliness, necessary in hypodermic treatment, are always adopted; that the amount of induration left is in many cases only slight and passing (in some cases it is considerable, and may be sufficient to contraindicate). The formula adopted is that of Dr. Stoukovenkoff, of Kieff. The solution must be recently prepared, as it tends to precipitate mercury. A frequent change of injection needle is necessary, as the mercury corrodes it. Daily single injections were practised by MM. F. Balzer and Thiroloix. The first appearance of stomatitis is the indication for ceasing the treatment; this is the limiting symptom within which the doctor must keep. It is claimed that cases in which intestinal derangements prevent the exhibition of the drug internally, and cases with unhealthy condition of the mouth, which do not tolerate either massive injections or inunctions, may be well treated by these daily minimal injections of benzoate of mercury.

IDIOSYNCRASY IN RELATION TO THE USE OF TANNIN.

A CASE of so unusual a character is reported in the *Deutsche med. Wochenschr.* for January 2nd of this year that it calls for notice. A gentleman aged 29, the subject of a chronic nasopharyngeal catarrh, consulted Dr. Victor Lange, of Copenhagen, for his complaint. A swelling and redness of the parts was discovered, nothing more. A solution of tannin, 1 in 15, was painted over the inflamed surface. Immediately upon this the mucous membrane became greatly swollen; the nose was completely

stopped up, and there was a profuse secretion of watery fluid. On examination, the soft palate and uvula showed marked œdema. Ice pills and cold compresses to the neck were ordered. One hour afterwards the patient returned, complaining of a slight heaviness and of an insupportable itching. There was found a marked general urticaria. The next day this last was gone and the mucous membrane of the throat was but moderately swollen. Astringents are all more or less irritant, and the wonder lies not so much in the severe action upon the throat as in the strange development of the urticaria and the feeling of heaviness. On two previous occasions the patient had suffered similarly from the application of tannin—once when the drug was used in the form of powder, once in solution. The case must be regarded as unique.

THE SELECT COMMITTEE ON HOSPITALS.

In another column will be found a report of the proceedings of the Select Committee on Hospitals, at its first two sittings. The case against the present hospital administration, more especially with regard to the out-patient system, was opened at length at the first day's sitting by Colonel Montefiore, on behalf of the society of which he is a prominent member, namely, the Charity Organisation Society. He submitted a petition and memorandum, with statistics compiled for the Society, and embodying the views of its members and of its local committees as to the abuse of the out-patient departments, the want of combination between hospitals and dispensaries, the diversity in the system of accounts, the lowering of fees of local practitioners owing to the easy and indiscriminate admission of patients to medical charities, and the crowding of hospitals near Charing Cross, taken as a centre. Colonel Montefiore spoke rather in favour than against the internal management of general hospitals, and paid a great compliment to the superiority of the treatment to be obtained at the hospitals. Their great value as medical schools was recognised by the Committee, who will, in all probability, call a number of experts before them for examination. The whole of the sitting on Thursday was taken up by the examination of Dr. Steele, who gave interesting particulars about Guy's Hospital, and Mr. Timothy Holmes, who spoke about St. George's Hospital. Both deprecated the indiscriminate founding of special hospitals, and the latter expressed himself strongly against State control of hospitals.

SODIUM SALT OF CRESOTIC ACID.

In the sodium salt of cresotic acid we have the revival of an antipyretic tried and found wanting soon after 1870. Drunne[1] explains its rejection as the result of the indiscriminate use of the three isomers of cresotic acid, whereas he finds that it is only one of the isomers—namely, the para salt—which is effective. Accordingly, it is the sodium salt of paracresotic acid which is now established in the ranks of antipyretics belonging to the benzene groups. The drug is said to be without evil effect even in the dose of 45 to 60 grains. What its especial claims are we have yet to learn.[2]

SURGEON PARKE.

Surgeon Parke expects to be present at the Birmingham meeting to receive the gold medal for distinguished conduct which has been awarded to him by the Council of the British Medical Association. Meanwhile, loyalty to the engagements which he contracted with his chief will prevent Mr. Parke from publishing any medical or other notes of the expedition for some months to come; otherwise we had endeavoured to arrange that our readers should have profited by these interesting records at an early date Surgeon Parke, who has all the modesty and gentleness of manne which becomes a true professional gentleman, volunteered for th expedition, after a brief interview with Mr. Stanley at Alexandri Upon receiving a telegram from Mr. Stanley shortly afterwards fro Cairo, and having only a very few days' notice, he obtaine leave, without pay, from the department, resigning pay an allowances of £40 a month, and entering, without salary, wit adventurous courage and alacrity upon an arduous expedition, i which he showed the highest qualities of a soldier and a doctor— a formula which expresses much. Since his return, we believe tha the Secretary of War has, in consideration of his gallant and skilfu conduct, and of his great services, decided that the pay relin quished shall be granted to him as well as to Mr. Stairs—a sligh acknowledgment, which is, however, generous as well as just. I is not likely, however, that the recognition of his services will b limited to this. Mr. Parke is an Irishman, and received hi medical education in Dublin. He is a devoted and enthusiasti admirer of his chief, whose character of sincerity, courage, u swerving honour, and wise leadership won upon him from day t day during the expedition, and are now the frequent themes his enthusiastic but well-measured eulogy. The Prince of Wale to whom Mr. Stanley took an early opportunity of presenting Su geon Parke, has treated him with the utmost kindness, both pu licly and on his recent visit with Mr. Stanley to Sandringha In Mr. Stanley's address at St. James's Hall on Friday night, h spoke of Mr. Parke in the following words:

Surgeon T. H. Parke, A.M.D., was the latest of our volunte officers who applied for membership in the expedition. He wro with his own hand the terms of the agreement, the most compr hensive being "loyal and devoted service" gratuitously. For son months he pursues his duties without attracting much notice fro me; he is so quiet and unobtrusive. Finally, the increasing di tresses to which we are subject increases the sick list alarmingl I am obliged to attend personally to the matter, which brings m more into contact with the doctor, and gives me better opportun ties of observing his manner of work. Splinters pierce the fe through and through, ulcers break out like an epidemic, nostalg creates a chronic sinking of the vital powers, hunger weake them, dysentery saps their strength, fevers enfeeble them, a various accidents occur, and each has its victims. Natives wou with arrows, knives, and spears, and before many months I fi that nearly all the men pass under the doctor's hands. His patien vary from 20 to 50 in number daily; for once anæmia has fi hold of the constitutions, and the circumstances which caused t sickness remaining unaltered, except from bad to worse. T doctor's task never lessens. For months he has devoted his sk his time, patiently and uncomplainingly, and always with charming interest in his cases, until I have at last 124, a full o third of the expedition, unfit for further travel. I call the doct and explain to him, and say, "You have done well, I admit; bu wish more yet, if possible. Take these 124, and cure them. H you will do it, I do not know; but come this once. Every hou the day give to them, see that their terrible wounds are dress that they have rations regularly, and that their food is cook etc. Though they were a terrible sight when I left them in charge, in one month over 80 are in prime condition, and fit active service, and a few weeks later there are only five incura sick. To emphasise Dr. Parke's skill as a physician and tenderness a nurse, I must needs produce myself in two instances as a grate witness. From February 18th to March 26th I was in peril of life from a large abscess and an attack of subacute gastritis. could not partake of food, and could not serve myself from we ness. Had I been alone I should surely have died, for the serva could never have treated a sick man to whom food was to be nied. The sickness was repeated ten months later, wherein stomach was so inflamed that life was not possible without str hypodermic injections of morphine. But through both pai seasons Dr. Parke's skill and nursing carried me through trium antly. When the Egyptian refugees from the province joi us, Surgeon Parke's duties increased. Every afternoon called his patients about him, and all forms of hateful dise were treated with a remarkable consideration and sweet patie Every white officer in the expedition, Emin Pacha, Capt

[1] *Pharmac. Ztng.*, 1890.
[2] *Nouveaux Remèdes*, February, 1890.

asati, and the Egyptian officers are indebted to him; and, finally, fter thirty-four months of noble work, he has the sad office of inistering to the necessities of Emin Pasha after his terrible fall t Bagamoyo, and, after twenty days of unremitting attention to im, he is prostrated, and conveyed to the French Hospital at anzibar, where his state becomes so critical that Dr. Charlesworth egs me to hasten to him before it is too late.

urgeon Parke was among the recipients of the gold medal of the oyal Geographical Society at the important meeting held at the lbert Hall on Monday, May 5th. In reply to an invitation from ie President-Elect (Dr. Wade) to attend the annual dinner and ie presentation of the Gold Medal to Surgeon Parke, Mr. H. M. tanley says that he is exceedingly pleased to hear that the ritish Medical Association has awarded its medal to Surgeon arke, and that he will do his best to be present on the occasion.

DEARTH OF DISSECTING MATERIAL IN PARIS.

IE Municipal Council of Paris some time ago passed a resolu- on that the bodies of patients dying in hospitals should be buried atuitously, if claimed by relatives or friends. The result of is measure has been to diminish by one half the number of dies available for dissection. Instead of the former abundance subjects for which Paris was famous, and which attracted mbers of foreign medical men wishing to refresh their anato- ical knowledge, or perfect themselves in operative surgery, ere is now only one body a year for each student whom the gulations oblige to dissect. Professor Brouardel, in a report ich he recently addressed to the Council of the Academy, otests strongly against the municipal enactment, which he calls umanitarian rather than scientific." We should be disposed to m it sentimental rather than humane, for as was pointed out Macaulay during the debate on the Anatomy Act, it is the or, much more than the rich, who suffer from the want of an equate knowledge of anatomy on the part of medical practi- ners. The inscription over the doorway of the dissecting room the old University of Paris: "*Hic locus est ubi mors gaudet currere vitæ*," expresses the true spirit in which the question the provision of material for dissection should be regarded by powers that be. One inevitable outcome of this ill-advised cession to popular prejudice will be that the influx of eigners drawn to Paris by the traditional facilities for practical atomical study offered by that famous school, will be diverted o other channels. Already this year, according to M. Brouardel, authorities have been obliged to turn away 152 foreign doctors o had gone there for that purpose.

HYDROPS TUBÆ PROFLUENS.

e nature of tubo-ovarian cysts is still a subject of dispute. much has been copied from the works of Richard and other y writers, and repeated in standard textbooks. Dr. Walter ffith and Mr. Alban Doran have recently published several munications on specimens of tubo-ovarian cysts, to be found ie *Transactions* of the Obstetrical and Pathological Societies. former writer believes in a congenital form, the latter has vn that simultaneous cystic degeneration of an old inflamed y and its tube sometimes ends in the development of a tubo- ian cyst; indeed, that condition is probably due in the ma- y of cases to chronic inflammation of the appendages. Older ers have spoken of a continuous discharge from the uterus, ecretion proceeding from a tubo-ovarian cyst. This discharge own as "hydrops tubæ profluens." A case of this kind was ribed by Dr. J. Schramm before the Dresden Gynæcological ety in December. The patient was aged 33, and had con- ed gonorrhœa. For a year before operation menstruation, ctly regular, was accompanied by a very copious watery dis- ge, which gave the patient relief from the severe lumbar pains to which she was subject between the periods. The swelling, usually the size of "fist," grew smaller at the end of a period, and on one occasion disappeared altogether for a time. Tubo-ovarian cyst was diagnosed, and discovered at operation. The patient recovered, and her health, previously much impaired by feverish attacks, was at length perfectly restored.

RARE FORM OF IODISM.

AN important contribution to the *Therapeutische Monatsh.*, March, 1890, is made by Dr. A. Groenow, of Breslau on a rare form of iodism with acute œdema of the glottis. In all he refers to nine cases; two are from his own practice, the remainder are reported by Foerster, Fournier, Fenwick, and Malachowski. On reviewing these several cases the author draws the following conclusions: 1. That the œdema, which is sudden in its arising, takes place early in the administration of the drug, generally within twenty-four to forty-eight hours; and that its intensity may be such as to call for tracheotomy. 2. That the quantity requisite to call forth the symptoms varies from the lower limit of 3 grains upwards; in one case, though there were slight throat symptoms earlier, yet it was not till the sixth day, when about 200 grains had been taken in all, that severe dyspnœa set in. 3. That other symptoms of iodism may be quite absent. 4. That the cause of these exceptional effects is not the presence of impurities (iodates), but that the pure drug is alone sufficient. 5. That local laryngeal affections could not be shown to be present and to have predisposed the part to the œdematous outbreak. 6. That the phenomena must be explained by the word idiosyncrasy. 7. That in some cases the idiosyncrasy persists, but that in others it rapidly disappears, the patient becoming tolerant of the drug. The author lays stress on the fact that it is during the early part of an iodide course that this trouble is most likely to arise, and that watchfulness during this stage may avert a dangerous complication.

POISONING BY CHLOROFORM TAKEN BY THE MOUTH.

FATAL cases of poisoning by chloroform taken by the mouth are so rare that toxicologists are still comparatively in the dark as to the symptoms and anatomical changes induced thereby, as was shown in a *cause célèbre* not many years ago. The following report of a case observed by Dr. Brasch[1] may therefore be useful, though unfortunately it is incomplete. A man, aged 53, of robust constitution, but given to drink, swallowed about 70 grammes of chloroform on March 4th, with suicidal intent. Six hours later he was found in an unconscious condition. When seen by Dr. Brasch his face was flushed, the mucous membranes slightly cyanotic, the eyes closed, the breathing quiet, 20 per minute, but occasionally embarrassed, owing to falling back of the tongue. From time to time he vomited and passed fæces involuntarily. The pulse was small, 80 per minute, the cornea insensitive, the pupils not contracted, and not reacting to light or other stimuli. The patient was absolutely insensible, and could not be roused. Five, and a quarter of an hour later two, milligrammes of strychnine were injected subcutaneously. The pulse became stronger, the patient began to move his hands and arms and to open his eyes for a moment or two; he spoke, though unintelligibly, and vomited mucus mixed with food. The vomited matter did not smell of chloroform. Ten hours after swallowing the poison the man recovered consciousness, and complained of thirst, a feeling of internal heat, and nausea. The vomiting continued, and next day there was great pain in the region of the liver, which was enlarged and tender. The skin and conjunctiva were jaundiced, the fæces slightly bloodstained. Towards the end there was great difficulty in passing water, and even with the catheter only a few drops of

[1] *Deutsche med. Zeitung*, April 7th.

turbid yellowish urine could be drawn off. The patient became gradually weaker, and died, sixty-seven hours after swallowing the poison, of paralysis of the heart and pulmonary œdema. The temperature was normal throughout, the intelligence clear to the last. No *post-mortem* examination seems to have been made. Dr. Brasch calls attention to the powerful immediate effect of the strychnine injections, though it was impossible to counteract the rapid decomposition of the blood caused by the chloroform. He thinks it not improbable that, after prolonged inhalation of the anæsthetic, death may occur some days subsequently, owing to a secondary effect of the drug on the blood.

GASTRO-ENTEROSTOMY WITH EXCISION OF A PORTION OF THE STOMACH.

Dr. W. T. Bull, of New York, recently[1] performed a somewhat complicated form of gastro-enterostomy on a woman, aged 29, suffering from carcinoma of the greater curvature and posterior wall of the stomach. The abdomen was opened by a median incision, and the gastro-hepatic and gastro-colic folds, the tumour, together with the pylorus, and about one-quarter or one-third of the pyloric end of the stomach, were then removed. The cut end of the duodenum was sutured, so as to form a blind pouch, the stomach treated in like manner, and an anastomosis made with the jejunum near its commencement by means of Abbé's catgut rings. The operation lasted three hours and a half. There was a serious fear of prostration at the end of the second hour, but at its close the patient rallied. All food by the mouth was withheld till the fourth day. No untoward symptoms were observed; on the seventh day the temperature and pulse were normal, liquid food had been taken freely, and the bowels had acted spontaneously. The patient's subsequent progress was in every way satisfactory, and on the twelfth day—the date of the last report—she was considered to be out of danger. The case is stated to be the third instance in which, after resection of a large part of the stomach, gastro-enterostomy has been performed.

TREATMENT OF RINGWORM BY CHRYSAROBIN.

Dr. Unna has published, in the *Monats. f. prakt. Derm.*, 1889, No. 12, a method of treatment of ringworm by chrysarobin which he believes to have special advantages. A summary of the treatment is given in the *Annales de Dermatologie et de Syphiligraphie*, February, 1890, p. 148, in a paper in which the various methods of treatment of ringworm now in vogue in France and elsewhere are detailed. Dr. Unna's method is as follows: The hair is cut short and a protective zone is formed by applying zinc gelatine to an imaginary ring which extends to the forehead round the temples and nape of the neck. The object of this protective ring is to prevent the extension of the chrysarobin ointment beyond the scalp. The strength used is of 5 to 10 per cent., with or without 2 per cent. salicylic acid, and 5 per cent. ichthyol. The head is then covered with some impermeable tissue such as oiled silk, gutta percha, etc. The borders of this tissue are glued to the skin by gelatine. Over this is fixed a tarlatane bandage, and over the whole is fitted a flannel cap or wax cloth. Once daily the cap is removed, the impermeable covering is raised on one side, the head is wiped and a new application is made, after which the covering is again sealed down. On the fourth day, the chrysarobin is wiped off, and replaced by an ointment of 5 per cent. ichthyol, which is applied once daily for three more days. At the end of the week everything is removed, the zinc gelatine bands as well, and the head is cleaned with oil and soap. A second cycle of treatment is then begun, lasting a week, and so on until a cure is obtained, which Dr. Unna states occurs in a number of cases in four weeks. The details of the method are evidently conceived with a view to prevent the effects of chrysarobin spreading, as it is apt to do. Unfortunately, Dr. Unna does not yet appear to have treated a sufficient number of cases to justify his belief either in the rapidity of a cure, or in the immunity from the disagreeable results which chrysarobin is apt to produce, but doubtless his well-deserved reputation as a therapeutist, and the universal desire to discover some more satisfactory means of curing ringworm than at present exists, will lead to his method being freely tried.

[1] *New York Medical Record.*

NAREGAMIA ALATA.

This new expectorant,[1] which, in the hands of Dr. Stefan Schoengut, has yielded results sufficiently definite to warrant further trial, is used in the form of a tincture, obtained by extracting the outer layer of the skin of the plant with alcohol. The plant is a native of Goa; it is a small shrub, with somewhat pendant branches and triple-pointed leaves; the flowers are white and elongated, and about one inch in length. The active principles are in greatest quantity in the cortex of the branches; this, rubbed up, yields a light brown powder of pungent aromatic odour and nauseous taste. There are present in this powder an alkaloid, oil, sugar, resin, and other bodies. The alkaloid (naregamia, Hooper) is the active principle; it is obtained as an amorphous powder from the ethereal extract of the crude drug, but forms crystalline salts with sulphuric, nitric, and hydrochloric acids. There is no tannic acid in the plant. In India the plant is used as a household remedy in bilious troubles. Dr. Bidie, of Madras, has tried the drug in dysentery and in respiratory affections. It is suggested that naregamia in some respects resembles emetin, and that the freer secretion results from a direct action upon the glands of the bronchial tubes. The alimentary tract is unaffected, though in one case there was some vomiting. The urine is unchanged. The unpleasant odour of the tincture is covered with aqua laurocerasi. The dose was 1 to 3 grains (about 15 to 45 minims) in the day.

SCOTLAND.

EDINBURGH POST-GRADUATE SCHOOL.

Arrangements are in progress for the further development of th post-graduate courses at Edinburgh. As will be remembered, thes have hitherto been held in autumn, from the end of September t the middle of October. It is hoped that a formal programme o the arrangements for this season will be issued in the course of th month. It was found last year that the most appreciated classe were those on special subjects, where attendance was limited i number and a definite fee was charged. The Secretaries—D Claud Muirhead and Professor Chiene, Charlotte Square—will b glad to receive any suggestions for the further elaboration the purpose held in view.

PRESENTATION TO DR. G. SIMS WOODHEAD.

Dr. G. Sims Woodhead was entertained at dinner on Tuesd last by a large number of medical and other friends previous his departure for London. Professor Greenfield occupied t chair, and in proposing the toast of the evening referred to t valuable services Dr. Woodhead had rendered to the Edinbur School, particularly in respect of the development of the Resear Laboratory of the Royal College of Physicians of Edinburgh, a to his width of humanity, which had made itself felt in all u versity movements. In his new field of labour in the south, Woodhead would certainly receive further rewards, and incre his circle of friends. It was with peculiar pleasure that, in

[1] Journal, March 29th, p. 746.

ame of a large number of subscribers, he presented to Dr. and Irs. Woodhead a beautiful collection of plate. Dr. Woodhead re-lied. The "New Research Laboratory in London" was proposed y Dr. Batty Tuke and responded to by Mr. Cathcart; and "Dr. Voodhead's successor," proposed by Dr. Symington was acknow-edged by Dr. Noel Paton.

SCOTTISH ASSOCIATION FOR THE MEDICAL EDUCATION OF WOMEN.

HE Scottish Association for the Medical Education of Women akes rapid progress. The buildings already occupied by the [edical College have been found too small, and the premises have herefore been considerably increased. A number of fresh appli-ations for admission have been made for the summer session. he Court wishes it to be clearly understood that the school is pen to women on exactly the same terms as those on which male udents are received at the Edinburgh School of Medicine. The ssociation has obtained sanction from the Edinburgh City arochial Board for women studying medicine in connection with ie Association to visit the Poor-house Hospital at Craiglockhart, id it is contemplated to appoint lecturers on clinical medicine id clinical surgery, who will co-operate with the medical officer the Board in arranging for the conduct of clinical study, under ie direction of the managers.

PROPOSED MEDICAL EDUCATION FOR WOMEN.

HE Council of Queen Margaret College have had frequently be-re them the question of providing a medical curriculum for omen, and have at length decided that, provided a sufficient uarantee fund can be raised, arrangements will be made to begin regular medical course next October. It is practically certain at the guarantee fund will be provided, and it is expected that finite arrangements will soon be announced. Reference was ade to the subject at the annual meeting of the College on April th, when, on the motion of Professor McKendrick, it was agreed hat the time has now come when medical classes for women ould be instituted in connection with Queen Margaret College." other respects Queen Margaret College is strengthening its sition in Glasgow. An endowment fund of £20,000 is aimed at, d of that sum only some £4,500 remain to be subscribed. Last ar 14 courses of lectures were provided and 5 tutorial classes, r which 203 students were enrolled. For the correspond-ice classes 282 pupils were enrolled. In the past summer two boratories were added to the College buildings, one fully uipped on the most modern scale for chemistry, and one for ysics. The Council is looking forward to securing affiliation th the University in respect of work done in the faculties of s and science and medicine.

ST. MUNGO'S COLLEGE, GLASGOW.

E governors of St. Mungo's College have appointed John aister, M.D., D.P.H.Camb., who is already Professor of Medical risprudence in the College, to the lectureship on hygiene, and n C. McVail, M.B., D.P.H.Camb., to the lectureship on public alth. The governors are also about to fit up a laboratory for rk in the examination of food, water, air, etc., and will equip lso with meteorological and all other necessary apparatus.

THE GLASGOW UNIVERSITY GENERAL COUNCIL.

CORRESPONDENT writes: It is a very remarkable fact that while ry other body connected with the University, official or un-cial, University Court, Senate, Committees of Faculty, Univer-y Club, Assistants' Association, Council Association, and Profes-s and others in their individual capacity, are busy preparing resentations, memorials, schemes, etc., to lay before the Com-sion, the Council, for the extension of whose rights so much fight was made, and the concession of some of which elicited so much gratitude from the reformers, should be the only body which is taking no steps whatever to bring its views before the Commission. This seems to be the fault of the Business Committee, a fault there is still time to rectify. [A report of the last meeting of the Council will be found at page 1109.]

SICK CHILDREN'S HOSPITAL, ABERDEEN.

THE directors have appointed Dr. Rose chloroformist to the hospital, and they have selected Dr. R. G. McKerron as resident medical officer for a period of six months. The directors propose that the resident medical officership be a six months' appointment. Steps are also being taken to appoint an ophthalmic surgeon. The titles of the other members of the staff have been altered to Senior Physician and Surgeon, and Junior Physician and Surgeon.

ABERDEEN MEDICO-CHIRURGICAL SOCIETY.

THE monthly meeting of the Society took place on May 1st. The President, Dr. Smith-Shand, read the history of a case of acute yellow atrophy of liver. The patient, a young married woman, about the age of 24, a multipara, had, while nursing, an attack of jaundice, which lasted about six weeks. Suddenly there developed the symptoms of acute yellow atrophy of liver, and, after an illness of two days, death took place. The *post-mortem* examination, which unfortunately was only allowed to be very partial, showed marked diminution of the liver, with hæmorrhagic markings over its surface, alternating with bile-stained patches. Microscopic examination revealed the liver cells in a state of fatty degeneration. Dr. Gordon exhibited a patient with wrist-drop, caused by the paralysis of the musculo-spinal nerve, as the result of the patient sleeping with the head lying on the forearm, which had rested on a narrow piece of board. Dr. Gordon also exhibited a case of aortic aneurysm, which had been under his observation for seven years, and had lately been developing rapidly.

THE EFFECT OF THE INFLUENZA EPIDEMIC ON THE DEATH-RATE OF ABERDEEN.

DR. MATTHEW HAY, in his report for the month of March, states that the death-rate from all causes during the month was still high, although it showed a decline of 3.13 per 1,000 compared with the death-rate in the previous month. The high death-rate during the month was mainly due to an excess of deaths from miasmatic and nervous diseases. A high mortality from the latter group of diseases was present in the preceding month, and it was then stated that the excessive mortality probably had its origin in the epidemic of influenza. In March influenza only appeared as the cause of eleven deaths. The ages, as in the previous months, with one exception, were those of adults. The duration of the illness, however, was much greater in the majority of the cases than during the previous months, six of them having had a duration of from three to six weeks. It thus appears that the majority of the deaths from influenza in the past month were of persons who had been infected in the previous months, and in whom the secondary and ultimately fatal complications had a protracted course. The epidemic was therefore distinctly on the decline during March, the height of the epidemic having been reached in February.

DENGUE AT CONSTANTINOPLE.—The following figures show the severity of the recent epidemic of dengue at Constantinople:—From March 1st to the end of October, 1889, the average monthly mortality was 841. Then came the outbreak of dengue, which sent the number of deaths up to 1,022 in November, 1,298 in December, and 1,602 in January, 1890. In February the epidemic began to subside, and the deaths registered in that month amounted to 1,110.

IRELAND.

SATURDAY, May 24th, has been fixed for the annual street collection in Belfast on behalf of the Royal Hospital.

DREDGING EXPEDITION.

THE Rev. Mr. Green, Inspector of Irish Fisheries, has proceeded in the Government yacht *Fingall* on a dredging expedition to the west coast of Ireland, and will afterwards submit a detailed report of the various specimens obtained to the Royal Dublin Society.

DR. C. E. LEET.

DR. C. E. LEET, formerly professor of materia medica in the Apothecaries' Hall, Dublin, died last week in that city at an advanced age. He obtained the diploma of the Hall in 1825, and the M.D. of Glasgow in 1834. Dr. Leet was mainly instrumental in obtaining the recognition of the Apothecaries' Hall as a licensing body, and he was the first representative of the Hall sent to the General Medical Council. He had been for some time in failing health. He was highly respected by his professional brethren.

DR. ANDREW YOUNG, OF MONAGHAN.

ANOTHER veteran of the profession in Ireland has just passed away. Andrew Knight Young, Surgeon to the Monaghan County Infirmary, died there last week at the age of 86. He obtained the diploma of the Rotunda Hospital in 1827; the licence of the College of Surgeons in 1829; the Fellowship in 1844; and the M.D. of Edinburgh in 1832. He was a J.P. for the county, consulting surgeon to the Lunatic Asylum, and he held the presidency of the Irish Medical Association last year. Dr. Young was well known throughout the north of Ireland, and enjoyed an extensive practice. He worked up to the close of his honourable and distinguished career, and died amid the regrets of all who knew him.

MEATH HOSPITAL PRIZES.

THE annual distribution of prizes to the successful students took place on Monday, May 5th, when the chair was taken by Sir George Owens, one of the governors. The prizes were awarded as follows:—Senior Medical Prize: Mr. Edward C. Brabazon; Second Medical Prize: Mr. William L. F. Ffrench; Senior Surgical Prize: Mr. Robert Perkins; Second Senior Surgical Prize: Mr. Robert Lane-Joynt; Junior Surgical Prize: Mr. James Chatterton Perry; Second Junior Surgical Prize: Mr. Andrew A. Gibbs. Short speeches were delivered by the Chairman; Sir George H. Porter, Bart.; Sir William Stokes; and Mr. Ormsby.

WORKHOUSE DOCTORS.

THE Board of Guardians of the North Dublin Union have passed a resolution in reference to the refusal of the Local Government Board to sanction an increase in the salary of Dr. Robert Kenny. The Guardians state that the increase was not voted till after the most careful and mature consideration of the case in all its bearings. In the first place the Board found that Dr. R. Kenny's duties had more than doubled since his appointment. This is accounted for by the large increase of pauperism of late years in this union as compared with South Union. The Board also wish to point out that there is a very large saving to the ratepayers by the manner in which Dr. Kenny treats his patients. He is doing work not usually done by the medical officer of workhouse hospitals, such as the treatment of severe acute cases, and particularly operative surgery. If cases of this character were to be sent out for treatment in general hospitals they would cost the union nearly five times as much as when treated in the union, the actual proportion being 14s. per week each, as against 3s. per week in the workhouse.

BELFAST SOCIETY FOR PROVIDING NURSES FOR THE SICK POOR.

THE annual meeting of this Society was held in the Y.M.C.A. Hall, Wellington Place, on April 30th, Mr. Lavens M. Ewart, J.P., presiding. The report showed that during the year 934 cases had been attended. The work of the Society had been exceptionally heavy owing to the large amount of sickness prevalent in Belfast last winter. The financial report showed a balance to the credit of the Society of £557.

THE PRESIDENT OF THE COLLEGE OF SURGEONS.

A DUBLIN morning paper has the following paragraph:—"Rumours are current as to honours to be conferred in Ireland upon the occasion of the Queen's birthday, and amongst these the name is mentioned of the popular President of the College of Surgeons, Dr. Austin Meldon, whose performance of the duties of that high office, to which he was elevated by the suffrages of his profession, has given such conspicuous satisfaction. Dr. Meldon's bountiful hospitality and his zeal for the welfare of all Irish medical men in country and city have marked his presidency with particular emphasis, and any distinction bestowed upon him would be heartily appreciated, not only by them, but by his fellow citizens at large."

THE ABUSE OF MEDICAL CHARITIES IN BELFAST.

THE inquiry into the abuse of medical charities in Belfast, recently set on foot by the Ulster Medical Society, is being vigorously prosecuted. On Saturday, May 3rd, a deputation, consisting of Dr. McConnell (President of the Society), Dr. Kevin, Dr. Bigger, Dr. Osborne, and Dr. Alexander waited upon the Board of Management of the Royal Hospital. The deputation pointed out the enormous increase in the number of out-patients treated in the hospital, which had risen from 9,000 to 26,000 in a few years. They gave instances of persons in good social position who had received relief, and urged the necessity of some reform. The chairman of the board, Mr. W. H. Dixon, J.P., stated that the hospital authorities had long been cognisant of the existence of abuses, but had found great difficulty in devising suitable remedies. He asked the deputation for some suggestions, which were given, and after some discussion the subject was referred to a joint meeting of the staff and House Committee to consider and report upon to the Board of Management. There is no doubt that a genuine effort will be made to devise some remedy for abuses which no one seriously attempts to defend. On May 5th another deputation from the Ulster Medical Society, consisting of Dr. Lewers, Dr. O'Neill, and Dr. Calwell, waited upon the Belfast Dispensary Committee to point out how largely the Poor-law dispensaries were being used by classes quite capable of paying for medical services. Cases were given of families earning £2, £3, and even £5 weekly, who were not ashamed to solicit and who received, gratuitous medical relief. The deputation urged that the issuing of lines requiring the services of the dispensary medical men should be restricted to the relieving officer. It appeared in the course of the subsequent discussion that the power of issuing lines was possessed by eighty-nine members of the Dispensary Committee, and by forty-four "wardens" scattered over the town, and it was admitted that these lines were issued indiscriminately and without due inquiry into the circumstances of those seeking relief. Ultimately the matter was referred to a committee to deal with in conjunction with the board of guardians.

THE ANNUAL REPORT OF THE MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD.[1]

(Supplement to the Board's Eighteenth Annual Report.)

HE Annual Report for 1888-89 of the medical officer of the Local overnment Board has just been issued, and as usual it contains n its 534 pages much varied information, which will be found to e both valuable and interesting to pathologists and students of reventive medicine in all its branches. Sanitary workers would ave been glad to have had this valuable record of official re-earches and experiences in their hands at an earlier period; but s the report is dated "March, 1889," Dr. Buchanan is apparently ot mainly responsible for the delay in its publicatien. Doubt-ss the numerous elaborate plates and drawings with which it is lustrated have required much time and care for their proper roduction. The report is divided, roughly, into two parts, deal-ng respectively with the scientific operations of the department nd with the administrative work.

Cow-Pox and other Eruptive Diseases of the Cow.

Three examples of eruptive diseases affecting the teats of ilch cows were very carefully investigated by Dr. Klein during he year to which the report refers (1888).

Vaccinia.—Mention may first be made of a disease observed mong cows at Alderley in Gloucestershire. It seems to have been retty easily communicated to the milkers, and was easily inocu-ated into calves, producing a vesicular eruption; the material sed for inoculation was either crusts from cow's sores, or lymph aken about the eighth or ninth day from a very well marked um-ilicated vesicle on the back of the thumb of one of the milkers at lderley. The calf, V 1, inoculated directly with this girl's lymph, ad an eruption which appeared to be retarded vaccinia; two alves, V 2, V 3, inoculated from this calf had an eruption which r. Cory declared to be typical vaccinia. This lymph was used or inoculating an infant, A, in five places; only one took, and the esicle was retarded. But the lymph from A was used for inocu-ating another calf, V 4. This animal had typical vaccinia, and wo infants inoculated with lymph from V 4, in five places each ad five typical vaccine vesicles. Moreover, lymph from A was sed for vaccinating another infant, B, in five places, with the esult that B had five typical vaccine vesicles. From B, four other hildren were vaccinated, each in five places, and each child had ve typical vaccine vesicles.

Lymph from milkmaid's vesicle.
|
Calf V 1—retarded vaccinia.
|
Calves V 2, V 3—typical vaccinia.
|
Infant A—retarded vaccinia.
|
Calf V 4—typical vaccinia. | Infant B—typical vaccinia.
Two infants—typical vaccinia. | Four infants—typical vaccinia.

The trial was repeated at a later date with the crust from the ilkmaid's vesicle, with a result almost precisely similar, the only ifference recorded being that the first calves so inoculated had ypical vaccinia. These trials fully satisfied experienced vaccina-ors that the disease which had been found at Alderley was true accinia, but, to clinch the matter, two experiments were made. he subjects of one of these experiments were Drs. Klein and Cory, nd Messrs. Shirley Murphy and G. W. Collins. Each of these entlemen was "revaccinated," each in five insertions, with six-ay lymph from calves, at the National Vaccine Establishment in amb's Conduit Street, in use for the routine vaccination of in-nts there. Dr. Klein alone "took," in one small vesicle with reola (eighth day). After the lapse of several weeks all four ere inoculated, each in five insertions, with eight-day lymph om a calf in which Alderley disease had been induced, but every ne of the twenty insertions failed. At a later date Messrs. Klein, ory, and Collins were once more inoculated with eight-day lymph of another calf of the Alderley series; but again every one of the insertions failed. The subjects of the other experiment were four of the calves which had been successfully inoculated with the Alderley disease. A few weeks after the Alderley eruption had quite died away and healed up, they were vaccinated with lymph from calves in use for routine vaccination at Lamb's Conduit Street. These four calves had at this date fairly good depressed white cicatrices of their Alderley inoculation. The vaccination of these calves with the Lamb's Conduit Street lymph failed completely.

Dermatitis Pustulosa.—Another case investigated occurred at Kingston, in a cow at a dairy farmer's. It had a scabbing eruption on the teats, and the milkman had suffered for three weeks from a febrile disorder associated with pustules and vesicles on the fingers and palms, inflamed arm and swollen axillary glands. This affection was easily communicated to calves by inoculation. The appearances in these calves were uniform, and the animals when reinoculated after complete recovery were insusceptible. The affection from which the animals suffered was, in Dr. Klein's opinion, the same as that described in his reports of the previous year under the provisional name of "the Wiltshire cow disease,"—a dermatitis pustulosa which is not vaccinia.

Bovine Scarlatina.—The third case investigated was observed in a dairy at Camberwell. The milk from this dairy was credited with having distributed scarlatina to a limited section of its customers during May, 1888. On visiting this dairy, Dr. Klein recognised that certain of the cows were suffering from the same disorder as that observed at Hendon and believed to have there produced scarlet fever among the drinkers of the milk from the affected cows. Calves inoculated from a Camberwell cow presented symptoms and appearances agreeing with those observed in calves inoculated with the Hendon disease. The appearances in these calves inoculated from the Camberwell cow differed markedly from those observed in the calves inoculated with the Alderley lymph; but it was felt that the crucial test would be to ascertain whether these calves which had been, by inoculation with it, rendered quite insusceptible to the Camberwell disease, could be inoculated successfully with the Alderley disease (vaccinia). Five such calves were accordingly inoculated with points charged with seventh or eighth day's lymph of calves of the Alderley series. Every one of the inoculations took vigorously. The progress of the eruption, with the subsequent process of healing of the sores and the falling off of the crusts, was in no way different from what had been observed in the calves of the Alderley series. If, then, it be accepted that the experience of this Camberwell outbreak proves that the so-called "Hendon cow-disease"—which, writes Dr. Buchanan, "we now confidently recognise as scarlatina in the cow"—is not vaccinia and has no relations with it, the only question which at present remains is whether the dermatitis pustulosa of Wiltshire and Kingston has any relation to the "scarlatina in the cow." Dr. Klein points out a number of differences, such as the longer adherence of the scabs and the absence of thickening of the floor of the ulcer which distinguish the former from the latter, but the most weighty evidence is from inoculation. He found that the Kingston cow and the calves inoculated from it were in no wise protected from suffering from the disorder which had affected the Camberwell cows (scarlatina). Every one of the insertions took, and the fact, as Dr. Klein claims, goes far to prove that the two maladies are different diseases.

Pleuropneumonic Fever.

Epidemic at Middlesborough.—The main results of Dr. Ballard's inquiry into the nature and incidence of an epidemic pleuro-pneumonia which prevailed during the first three quarters of 1888 in Middlesbrough and adjoining districts were contained in an interim report published last April, and noticed in the Journal at that time (vol. i, 1889, p. 899). The special circumstances which directed attention to the disease were that it was causing week by week from fourfold to sixfold the usual mortality from pneumonia, that it principally attacked persons over 15 years of age, and that it had a strong tendency to occur in groups of cases, with sequence of the attacks among members of the same group, in the manner that is witnessed in diseases recognised as infective.

Symptoms and Morbid Anatomy.—The fatality among persons attacked was very high for all ages above 15; thus it was for ages 15 to 45, 20.9 per cent.; for ages 45 to 65, 37.1 per cent.; and for ages 65 and upwards, 43.3 per cent. The fatality for all ages

[1] Purchasable, either directly or through any bookseller, from Eyre and ottiswoode, East Harding Street, London; or Adam and Charles Black, 6, orth Bridge Edinburgh; or Hodges, Figgis and Co., 104, Grafton Street, ublin. Price 8s. 9d.

was 21.1 per cent., or about double that of ordinary sporadic croupous pneumonia. Clinically, however, the disease closely resembled croupous pneumonia; there was, however, in most cases, at an earlier stage, an unusual amount of prostration, often out of proportion to the physical signs of lung disease; epistaxis, hæmatemesis, and swelling of the joints resembling rheumatism were also observed in a certain proportion of cases. A *post-mortem* examination was only made in twelve cases, and in all but one there were evidences of recent pleurisy.

Mode of Spread.—As to the mode in which the disease spread, Dr. Ballard obtained evidence of most convincing kind that it was communicable from the sick to the healthy directly by close association the one with the other. There was also evidence that the infection remained for considerable periods in a house after the removal of patients suffering from the disease, and also that it might be retained and distributed by sewers, drains, and receptacles of filth.

Bacteriology.—Bacteriological examination yielded results of great importance. The capsule bacillus of Friedländer, and the diplococcus pneumoniæ of Fränkel and Weichselbaum were not to be found, but a short bacillus was present in large numbers in the juice expressed from the inflamed lung in every case which was examined. The microbe is, to a limited extent, polymorphic, and does not form spores. Mice and guinea-pigs inoculated with the lung juice suffered in a certain proportion from an acute disease characterised by pneumonia, and frequently causing death. Mice were more susceptible than guinea-pigs. The bacillus grows well in agar-agar culture media, and mice and guinea-pigs inoculated with these cultivations suffered from the same train of symptoms as those induced by inoculation with lung juice. The cultivation test showed that the bacillus was also present in the blood of mice thus infected. Further, the same pneumonia could be produced, though in a smaller proportion of cases, by feeding mice with artificial cultures of the bacillus. A striking proof of the infectious nature of the disorder was accidentally given. While the above-mentioned experiments were in progress a large number of mice and guinea-pigs, which had been kept in the same room as those inoculated, died with *post-mortem* appearances absolutely identical with those observed in the animals inoculated with the microbe, to which Dr. Klein proposes to apply the name bacillus pneumoniæ. This bacillus was obtained from the blood and lung juice of the animals thus accidentally infected. Three monkeys also contracted the disease in this way, and succumbed.

Contamination of Food.—Dr. Klein found that mice fed with artificial cultures of the bacillus pneumoniæ were liable to contract the disease from the diet, though in a smaller proportion of cases than after inoculation. This observation is of special interest because a consideration of the habits of the class of people in Middlesbrough who were chiefly attacked led Dr. Ballard to form a suspicion that the consumption of imperfectly cooked and cured bacon might have been in some way instrumental in the spread of the disease. Bacon obtained from houses in which pleuropneumonic fever existed was in every instance found to be poisonous to mice and guinea-pigs. In the animals thus killed the lungs were congested, and cultivations made from the organs yielded the bacillus pneumoniæ. How the bacillus found its way into the bacon is not very clear. At first sight it seems most probable that the bacon had become contaminated in the houses of the sick persons, but this opinion is rather shaken by the fact that of samples of bacon obtained from 13 different shops nearly half were poisonous to mice.

Nosology.—Dr. Ballard concludes that this particular form of pneumonia "is distinctly not a local but a general disease, it is a specific fever, marked like other specific fevers by certain definite local characteristics. Like them it would seem to possess the quality of communicability from the sick to the healthy, either immediately through proximity or immediately through food or otherwise. It has seemingly its own specific *contagium vivum*, the bacillus pneumoniæ of Klein, which has been captured, isolated, and duly studied." He therefore desires to apply to it the term pleuropneumonic fever. The fact that pneumonia may occur as an epidemic is of course no new fact, and Drs. Grimshaw and J. W. Moore had described the origin of epidemics of pneumonia, to which they proposed to apply the term pathogenic pneumonia, in association with filthy surroundings. "But," Dr. Ballard truly observes, "it by no means follows that the outbreaks described by others were instances of the same disease I observed at Middlesbrough, or that they were due to identically the same bacillus or *contagium vivum*. There may be many such *contagia viva*, several kinds of micro-organism capable of setting up a specific croupous pneumonia—a true pleuropneumonia fever, which may, indeed, be in some forms contagious, in other forms non-contagious. The subject is matter for future investigation."

Relations of Scrofula, Lupus, and Tuberculosis.

A paper of considerable practical importance is contributed by Dr. Alfred Lingard, who has made a careful investigation of the relation of scrofula and lupus to typical tuberculosis.

Lupus.—Most observers have found that caseating scrofulous material produces generalised tuberculosis in guinea-pigs. Dr. Koch and many other observers have obtained like results with lupus, but Kaposi, Schwimmer, and Leloir have disputed his conclusion. Dr. Lingard's careful experiments entirely confirm the accuracy of Dr. Koch's conclusions. He examined portions of growth from seven cases of lupus, and found the tubercle bacillus constantly present, though in small numbers, contrasting in this respect with tuberculous dermatitis, in which condition the number of bacilli is very large. He inoculated two guinea-pigs with fresh material obtained from scrapings removed from the face of a patient suffering from lupus vulgaris. Both animals died of general tuberculosis, the one after 191 days, the other after 302 days. Again he inoculated two guinea-pigs with scrapings from another case of lupus vulgaris of the face; these animals died after 221 and 257 days respectively, but not of tuberculosis. In a third experiment he inoculated two more guinea-pigs with material from the face of a patient suffering from lupus vulgaris. One died in 361 days with general tuberculosis, the other after 37- days, the only lesion suggestive of tuberculosis found *post mortem* being a caseous gland at the seat of inoculation. Another guinea pig was inoculated with a portion of caseous inguinal gland from the guinea-pig which died after 361 days; this animal died after 21- days of general tuberculosis. In the two animals directly inoculated with lupus which died with pronounced general tuberculosis (in the others the process was more limited), the duration of life after inoculation averaged 331.5 days. Now tuberculosis in guinea-pig induced by inoculation of virulent tubercular matter causes death on an average, in 80 days only; so that with these animals inoculated lupus takes four times as long as inoculated tubercle to produce general tuberculosis.

Scrofula.—All the inoculations with scrofulous material gave positive results. The animals used were guinea-pigs. Three series of experiments were made; in the first the material used for inoculation was caseous gland from the cervical region of the human subject; in the second caseous portions of two glands removed from the neck of a child, aged 11, who appeared to be in good health, and was before the operation supposed to be suffering from Hodgkins' disease; in the third caseous pulpy material from scrofulous abscesses in a boy. A few bacilli were found on microscopical examination in all these cases. The animals (A.) inoculated with the scrofulous material all died of general tuberculosis; guinea-pigs (B.) inoculated from the A. animals died of tuberculosis after a shorter period; other guinea-pigs (C.) inoculated from the B. animals died of tuberculosis after a shorter period than the B.'s; and other guinea-pigs (D.) inoculated from the C.'s died after a still shorter interval. The average periods were as shown in the following table, in which the third column shows the relative duration of the induced malady, the period in the animals inoculated directly with human scrofulous material being taken as 100:

Series.	Number of Days.	Relative Duration of Period.
A.'s	206.3	 100
B.'s	131.0	 63
C.'s	79.5	 38
D.'s	60.1	 29

This result certainly appears to indicate that the tubercle virus is present in an attenuated condition in scrofulous material and that by being transmitted through a series of guinea-pigs is rendered gradually more virulent. At the third or fourth transfer the virus would appear to be at least as virulent as that obtained from cases of miliary tubercle.

The following table, condensed from one given by Dr. Lingard, shows the comparative results of the inoculation of guinea-pig

—	Tubercle.	Scrofula.	Lupus.
ocal glandular enlargement in	6 or 7 days	2 to 3 weeks	4 to 5 weeks
verage duration of life	80 days	206.3 days	331.5 days
ings ... Early	Miliary tubercle. bacilli vary in number, but may be numerous	Miliary tubercle: bacilli few in number	Miliary tubercle: bacilli very few in number.
Later	Caseating nodules	Caseating nodules	Caseating nodules.
Cavities	Do not occur owing to rapidity of process	May be found	Riddling lung.
ver	Hypertrophied: scattered grey nodules increase in size and run together, leaving intermediate tracts in which recent tubercle		Hypertrophy less marked at first: interlobular tubercle and interstitial hepatitis; then caseation and fatty infiltration; finally cirrhosis.
pleen	Hypertrophy: tubercles grow rapidly and become confluent	Hypertrophy often enormous (75 times normal): tubercles grow rapidly and become confluent	Hypertrophy (8 to 10 times normal): tubercles grow less rapidly, and seldom become confluent.
idneys	Miliary tubercle never seen	Miliary tubercle seldom seen	Miliary tubercle seen as a rule.
edulla of femora	Caseating tubercles	Caseating tubercles	Caseating tubercles

The Effect of Heat and of Drying on Spore-bearing and Spore-free Microbes.

It is generally known that spores are better able to resist estructive agencies—such as heat, drying, or disinfectants—than he bacteria of which they are the seed. The number of bacteria ertainly known to form spores is very limited; but there are ertain others as to which it has been alleged by some observers hat they produce spores, while the statement has been contraicted by others. The difference of opinion is due to the appearnce in cultivations of these bacteria of bright granules, which esemble spores in appearance. Dr. Klein has sought to throw ight on this question by observing the behaviour of these rganisms when exposed to heat. As a starting point he tested he bacillus anthracis. Taking a cultivation containing spores of nthrax, he found that exposure for thirty minutes at or below a emperature of 85° C. did not interfere with their power of erminating, which was only destroyed after heating to this emperature for an hour, or to a temperature of 90° C. for fteen minutes. The spores of three different species of potato acillus were even more resistant, retaining their power of erminating after exposure to a temperature of 90° C. for thirty inutes. To ascertain the lowest temperature at which the nthrax bacillus free from spores was killed, advantage was aken of the circumstance that in the blood anthrax does not orm spores; it was found that these spore-free anthrax bacilli ere killed by exposure for five minutes to a temperature of 0° C. These results are in entire accord with those of previous bservers. If it may be assumed that other bacteria would show he same susceptibility and their spores, if any, the same resistnce to heat, then this would afford a criterion for distinguishing pore-bearing from spore-free bacteria. As, however, this assumpon cannot be made with certainty, the results cannot be absoitely conclusive, but they will be of value in reinforcing or ontradicting arguments drawn from other circumstances.

Cultivations of the following bacteria were found to be estroyed when heated for five minutes to a temperature of 0° C.:—

Gaffky's bacillus of typhoid fever.
Koch's comma bacillus of cholera.
Klein's bacillus of pneumonia (Middlesbrough).
Bacillus of swine fever.
Bacillus of swine erysipelas.
Bacillus gallinarum.
Klebs-Löffler bacillus of human diphtheria.
Bacillus of mouse septicæmia.

Streptococcus pyogenes.
Streptococcus of human scarlet fever.
Staphylococcus albus liquescens.
Staphylococcus aureus.

These experiments, therefore, go to prove that none of these bacteria form spores when grown under conditions which lead to copious spore formation by the bacillus anthracis and certain other bacilli. It is known also that spores resist drying, but that many spore-free bacteria are comparatively easily killed by this process. Experiments were made simultaneously with those above detailed by drying. A trace of the culture material was spread on a previously sterilised cover glass, and dried at 36° C. between two watch-glasses for thirty minutes. The cover glasses were then introduced into test tubes containing broth and inoculated at 36°. No growth occurred in any case, thus proving that the bacteria had been killed by the drying. This confirmed in a striking manner the results of the heating experiments.

The Antiseptic Powers of the Gastric Juice.

Since infection of the system occurs, in all probability, through the alimentary canal in certain diseases, notably in typhoid fever and cholera, it becomes a matter of much interest to investigate the action of the gastric juice upon microbes. Dr. V. D. Harris has undertaken such a research, and in his first report indicates the direction in which he proposes to work, and describes two series of experiments which, although they do not contain many novel facts, yet possess value of their own. He administered cultivations of spore-free anthrax and comma bacilli to cats (carnivorous), guinea pigs (vegetable eaters), and mice (mixed feeders). He found that in these three species both the anthrax and the comma bacilli were destroyed before they reached the duodenum. The other series of experiments was directed to ascertain the number and character of the bacteria in the stomach. In the stomach of fasting guinea pigs and cats some bacteria capable of cultivation were found in five out of six cases, but not in very large numbers. From the stomach of a guinea pig in full digestion (carrot) a few colonies, only of the bacillus subtilis probably, were obtained, whereas from the stomach of a cat in full digestion of a mixed meal a very large number of colonies (micrococci and bacilli) were obtained.

Chemistry of Bacteria.

Dr. Macfadyen prefaces his report on the chemical changes produced by bacteria in albumens and peptones by a long and elaborate synopsis of our present knowledge respecting the metabolic products of bacterial life. This compilation, and Dr. Macfadyen's criticisms, are calculated to be of the greatest value to future investigators, who will be the more indebted to the author by reason that he gives references for nearly all his quotations. He treats first of the nutrition, assimilation, and metabolism of bacteria; he then mentions the production of pigment, and next passes on to the discussion of fermentation. Upon this naturally follows a review of our present knowledge of ptomaines. Speaking of these bodies, he says it is a possible hypothesis that ptomaines may be formed indirectly, that is, by the interaction of two or more of the bacterial products. The best media for testing the metabolic activity of pathogenic bacteria would be native albumens, that is, bodies nearest in constitution to the animal organism. Dr. Macfadyen reports a short series of preliminary experiments, undertaken by himself, chiefly as to the nature of putrefaction—an exceedingly complex subject. In one experiment only did he obtain any evidence of the presence of ptomaines.

Lead in Public Water Supplies.

A number of specimens of water from the Sheffield high-level reservoir, its tributaries, and pools on the moor were examined as to the micro-organisms they might contain by Dr. W. R. Smith. Plate cultivations were made to separate the organisms, which were then grown in pure cultivations in alkaline broth. None of the microbes found in the tributaries of the reservoir had the power of rendering the broth in which they grew acid, but a small bacillus found in the water of the reservoir in May did render the broth

slightly acid. Water taken from stagnant pools in the peat in a high part of the gathering ground above the high-level reservoir did not in May contain any organism capable of rendering the broth acid, but a sample taken from one such pool in November contained two torulæ which did possess this power. The research, which has evidently been conducted with great care, is to be continued, but Dr. Buchanan truly observes that laboratory studies cannot profitably supersede investigation of the circumstances of origin of waters of this class. Examination of these moorland waters ought to be simultaneously made at their various gathering grounds. And the object of these combined studies should be to learn the conditions under which these waters acquire their power of dissolving lead; upon which knowledge rests the decision whether or not an elaborate and dubious process has to be applied to a water in order to fit it for domestic use under the customary conditions of a community.

(Dr. Klein's researches on diphtheria are noticed in an article on page 1,081.)

Administrative Relations.

Vaccination.—The supervision of public vaccination appears to have been carefully carried out by the small staff of inspectors, and it was found that the work of the public vaccinators was generally satisfactory. Detailed returns are, as usual, appended to the report. They relate to the 903,846 children whose births were registered during the year 1886, and they show that, of the 748,336 of those children who were surviving at the date of making up the returns, 689,323 (or 92.1 per cent.) are to be ranked in the vaccinated community, whilst 59,013 (or 7.9 per cent.) have gone to swell the unvaccinated portion of the community. These figures are somewhat less satisfactory than those of previous years; but it is at least significant to observe that the bulk of the children whose vaccination has been neglected belong to certain anti-vaccination centres, such as Keighley, Dewsbury, Eastbourne, Banbury, Northampton, Luton, Oldham, Leicester, and the unions surrounding Leicester. A large proportion of the inhabitants of those towns have, unfortunately, had wrong issues placed before them, and have been induced to ignore such remarkable experiences as those of Montreal, Leipsic, Sheffield, and other places. It is to be hoped that they will escape such rude awakenings as the inhabitants of those cities have had within the last few years. Dr. Barry's report on the Sheffield small-pox epidemic of 1887-88 is already a matter of sanitary history, but Dr. Buchanan has done well to reproduce in the present volume his able summary of the facts recorded in that report. It would be well if every intelligent parent in Leicester and such like places, could be brought to study that summary in an unprejudiced manner. He would then realise, amongst other curious facts, that the incidence of the small-pox upon the unvaccinated in Sheffield was much more severe than that upon the vaccinated; that under the general circumstances of the Sheffield epidemic the vaccinated children under 10 years of age had, as compared with the unvaccinated children living in the town, a 20-fold immunity from attack by small-pox, and had a 480-fold security against death by small-pox; that sanitary circumstances did not have any demonstrable influence upon the rate of attack and death; and that although the epidemic was severe it did less mischief than previous epidemics, because comparatively few of the individual members of the community had been left without the protection afforded by vaccination. A report, by the late Dr. D. Page, on an outbreak of small-pox at the St. Joseph's Industrial School, Manchester, shows the facility with which small-pox may spread at an early stage of a patient's case, and from an obscure and trivial as well as from a severe case; and it also shows, as did the Sheffield experiences, how necessary is revaccination at or about 10 years of age.

As regards alleged injury from vaccination, Dr. Buchanan reports that, whilst during the year 1888 some 700,000 vaccinations were performed in England and Wales, only 10 allegations of injury resulting from vaccination were received by the Board. Inquiry by medical inspectors showed that in two of these cases measles and whooping cough were concurrent with the vaccination, in two cases skin eruptioms followed on vaccination, and the remainder were cases of erysipelas or similar disease. The facts respecting all such cases have been laid before the Royal Commission on Vaccination, which is now sitting.

Small-pox Hospitals.—Dr. Buchanan has to record that "no investigation has yet been begun as to the methods by which small-pox hospitals may be so constructed as not to distribute infection from them to their neighbourhoods." Remembering how strongly he has, in previous reports, advocated an investigation of the kind here referred to, and having in mind the good service which his department has rendered already in connection with this subject, we feel sure that no one regrets more than Dr. Buchanan himself the delay which he here simply records. The subject is a national one, and is of practical importance to every sanitary authority and every community throughout the country. A practical systematic investigation, beginning where the Hospitals Commission of 1882 left off, is urgently called for.

Diphtheria.—Half of the local inquiries made by the inspectors of the department related to outbreaks or prevalences of diphtheria, and disclosed the disease prevailing under a variety of conditions. "As usual," remarks Dr. Buchanan, "it has been accompanied, or its outbreak has been preceded, by abundant cases of apparently innocent sore throat, but this has not invariably been the case. As usual, a history of importation of the disease into a district, and of its extension by personal intercourse, was commonly forthcoming, but in some outbreaks any quality of infectiveness was barely discernible. As usual, schools habitually played a considerable part in the distribution, if not in the production, of epidemic diphtheria, but in some instances no such influence of schools was witnessed. As usual, the disease has been found to prevail where water has been polluted, where soil has been undrained, where excremental and other filth have accumulated, but it has also been found where these defects have not been present. As usual, again, one or two outbreaks were to be connected with particular milk services under circumstances that left no doubt about milk having been a factor in the origin and spread of the local epidemic." Once more our ignorance of the proximate cause of the prevalence of diphtheria in England was illustrated. The incidence of diphtheria in this country has usually been rather upon small places than upon large urban districts. But some of the outbreaks of 1888, such as those at Norwich, Enfield, and Walthamstow, seem to strengthen the evidence gathered by Dr. Longstaff, that of late years the larger towns of England appear to be approaching nearer than before to rural districts in their mortality from diphtheria. This is a subject which would amply repay systematic and sustained investigation.

Enteric Fever.—The inquiries which had concern with this disease revealed, without exception, conditions of excrement nuisances or befouled water-supplies associated with the prevalence. The methods by which air and water had become contaminated were not in all cases immediately obvious, but generally were matters of simple neglect or blundering on the part of sanitary authorities or their advisers." In one case the infection was distributed in a milk service.

Scarlatina.—This disease also was the subject of several local inquiries and reports. In one case, that of Lower Brixham, Devonshire, Dr. Blaxall "puts on record the story of a community utterly indifferent about its health or disease, and receiving no adequate guidance from those who had assumed the function of directing its sanitary affairs."

Cerebro-Spinal Meningitis.—A short report by Dr. Thorne Thorne deals with the extent to which epidemic cerebro-spinal meningitis was prevalent in the Mediterranean during 1888. The most serious epidemic occurred in Cyprus, but groups of cases were reported also from Samos, Crete, Greece, Istria, and Sardinia though not all contemporaneously. The reports from Cyprus were to the effect that the disease did not appear to be infectious from person to person. It is more than doubtful whether epidemic cerebro-spinal meningitis has ever been observed in England, but from a dozen to a score of deaths are annually returned as due to cerebro-spinal meningitis; and Dr. Buchanan expresses the opinion that there is, in the fact of the occurrence of any such deaths in England, reason for watchfulness on the part of health authorities and their officers. A disease which kills from one quarter to half those whom it attacks, and leaves a large proportion of the survivors in a state of permanent incapacity, makes a demand to have its every single case identified.

Prize Essay.—The Royal Academy of Medicine of Cadiz offers a prize of 500 pesetas (£20), with the title of Corresponding Member, to the author of the best essay on "Tuberculosis in its Relations to Surgery." The essays, which may be written in Spanish, Latin, or French, must be sent to the Secretary of the Academy, Don Enrique Diaz Rocafull, before December 1st, 1890.

REPORT

ON

EAD POISONING FROM DRINKING WATER IN YORKSHIRE.

[By Our Special Commissioner.]

III.

esence of Free Acid in the Plumbo-solvent Waters.—Sulphuric Acid derived from Iron Pyrites.—Other Acids.—Influence of Micro-organisms.—Immunity of Individuals.—Preventive Measures which can be taken by Householders.—Tea diminishes amount of Lead.—Glass-lined Pipes.—Neutralisation of Water.

E most tangible difference, then, between the waters supplied the various districts included in the present inquiry, which on lead, and those which have no such solvent action, is nd in the fact that the former series contain a sensible quany of free acid, while in the latter no acid is present, at any e in a free state, although it appears that a similar acid exists combination. It is not, of course, asserted that such free acid uld be found in every water which is known to act on lead, but the case of the moorland waters under consideration, this exnation appears to be a sufficient one. It has already been ted that the silica theory of Messrs. Crookes, Odling, and Tidy, any rate as presented by them in their report to the Corporation Huddersfield, cannot be upheld, since when in January, 1888, Sheffield water showed a maximum tendency to the corrosion lead, an amount of silica was found in excess of the half-grain gallon held by them to ensure complete immunity to leaden es. On the other hand, seeing that the amount of silica in the v-level water is usually slightly greater than in the high-level pply, it is of course possible that the differing action of the two ters may be in part explained in this manner.

As to the nature of the acid present, there is considerable divergce of opinion, since its small amount makes an accurate deternation a matter of great difficulty. It appears, moreover, that acid which is found in the water obtained from the service es is not in some cases the same as that to which the reaction the water at the gathering grounds is due, some chemical denposition apparently taking place during its passage through reservoirs and mains. The amount present, therefore, is genely expressed in terms of sulphuric acid; and thus expressed, it found that the Redmires water has occasionally an acidity uivalent to 0.75 grain of sulphuric acid per gallon, while for nths together it has had an acidity equal to 0.5 grain of sulphc acid per gallon.

In the moorland water, supplied by the Rossendale Waterworks mpany to Bacup, the free acid present is believed to be really phuric acid, since when a quantity of the water is evaporated one-tenth of its bulk and tested with barium chloride it is nd to give a white precipitate, insoluble in nitric or hydroric acids, while the concentrated water is also found to char er when heated. The water also contains iron in solution, ich is derived from the iron pyrites in the shale. Now it is ll known that the oxidisation of iron pyrites will produce sulric acid, this reaction being made use of in the preparation of peras, so that we have here a possible origin of the acid. Sulte of lead is often found in the coating deposited on the inior of the service pipes, and as it is usually regarded as an inble salt, it has been thought to exercise a protective influence the pipes. Recently, however, it has been shown to be soluble water to the extent of about 3 grains per gallon, which is equal grains per gallon of metallic lead—an amount which if found e present in drinking water, should be more than sufficient olutely to condemn it for use for such purpose.

In the case of the Redmires water supplied to Sheffield, it also ears that it is sulphuric acid which is formed in the first inice from the oxidation of iron pyrites. In his report, which already been referred to, Dr. White says: "The peat mixed with pyrites being freely exposed to the atmospheric oxygen, and g at one time moist at another time dry, is placed under cirstances favourable to the chemical action suggested; and this tion of the problem would be consistent with the ascertained s that the surface water is most acid, and that the ochrey ngs are not appreciably so, because, in the first instance, the free acid would not have met with bases to neutralise it, and, in the second, the acid in its percolation through the earth would be neutralised, and the resulting salts in the ochrey water, containing, as they do, carbonate of iron, would not render it acid."

The suggestion has also been made that sulphuric acid may be derived from the products of combustion which are poured into the atmosphere with such profusion by many of the towns in the northern part of England, which gain access to the moorland water supplies by being washed by the rain out of the air and off the grass where they have been deposited by the wind; but the evidence in support of this view is of the slightest. It is probable that there is occasionally a slight amount of nitric acid, also, in the water of the reservoirs, which has been supposed to be formed by the action of the sulphuric acid on nitrates, resulting from the breaking down of vegetable organic matter.

Dr. Frankland, Mr. Watson Smith, and Professor Brazier are all strongly of opinion that the formation of free sulphuric acid is brought about by the oxidation of iron pyrites in the soil; but still, although it seems that sulphuric acid is present in the water of the moorlands, it by no means follows that the acid will be the same when the water reaches the lead service pipes, since, meeting with salts it may have decomposed these with the formation of sulphates, other acids being set free. This can be shown by neutralising the water, evaporating to dryness and igniting the residue, when a carbonate is formed, thus proving that the acid now present is of an organic nature. It is also non-volatile, as none appears to be lost in concentration of the water. An obvious source from which such acid might be derived is the peat of the moors, since it has been known for some time that the decomposition of peat and other vegetable substances gives rise to the formation of several bodies which have been described under the names of crenic, apocrenic, ulmic, and humic acids. Unfortunately, however, the literature of the subject is extremely scanty, and there is considerable doubt as to whether any of these acids have ever been prepared in an absolutely pure state. In support of the opinion that it is to the presence of one or more of these bodies that the reaction of the water is due, it may be mentioned that the peat is much more abundant at Redmires than at Strines, and that, as might be expected, therefore, the Redmires water contains a greater amount of organic matter, which is evidently of vegetable origin.

As has been suggested by Mr. Power in his memorandum on Lead Poisoning from certain Public Water Supplies, contained in the Report of the Medical Officer to the Local Government Board for 1887, it is possible that yet another factor has to be considered. He believes that the action of the water on the lead might be due to the growth of micro-organisms in the water, basing this opinion on the fact that the action on lead presents marked seasonal variations, being most intense in the autumn, particularly in September, October, and November. This has been noticed at other places supplied with moorland water besides Sheffield; and in corroboration of the results obtained from analysis of the water at different times of the year it may be mentioned that there appears to be a very general opinion among the medical practitioners of the neighbourhood that acute cases of plumbism from drinking water are also more frequent in the autumn than at other times of the year.

A short paper on this subject recently appeared in the Journal,[1] in which are given some experiments bearing on this point. The author states that under certain conditions of storage a great and rapid multiplication of micro-organisms goes on, as is manifested by the number of colonies found by examination of plate-cultivations. He states, moreover, that the action of such water on lead bore a marked relation to the number of colonies present, but does not think it probable that the micro-organisms directly attacked the lead, the solvent action being most likely due to the chemical products accompanying their multiplication.

The growth of bacteria is naturally favoured by warmth, so that the fermentation process would be most active in the hottest part of the year, when also a somewhat lessened rainfall and greater evaporation would tend to the relative as well as absolute increase in the amount of the products of the life-history of the micro-organisms in the water, and, as has been stated, it is apparently in the few months immediately following the latter part of the summer that the effects of the increased action of the water on lead are most prone to manifest themselves.

If this be so, it does not necessarily disprove the truth of the

[1] Kirker, The Action of Potable Waters on Lead, Journal, January 11th, 1890; see also *Sanitary Record*, 1889.

acid theory, as it is quite possible that the organic substances which yield the acid detected in the water may, at any rate in part, be the result of the presence of bacteria, while some may, on the other hand, be directly derived from the peaty soil. It is hardly necessary to add that the presence of so large an amount of organic matter in the water, as is shown by analysis, would form a most favourable pabulum for the development of micro-organisms, especially when exposed to light and air in the uncovered reservoirs. In this connection it is worthy of note that at all the places visited the sudden increase in the amount of, lead poisoning, which first appeared in 1888, followed the dry year 1887. The late medical officer of health for Huddersfield says: "Even in the latter part of the winter of 1887-88 the water in our reservoirs was still comparatively low, and had the low rainfall of 1887 persisted in 1888 the results might have been very serious. In consequence a considerable amount of storm water, which, had our reservoirs been at their ordinary level, would have been sent down the by-wash, was thankfully received and stored. This circumstance fits in well with the view I have held for several years back, that the action of our moorland water is due quite as much to its mossy as to its mineral constituents. The ampler supplies of rain during the summer and autumn of 1888 rendered this kind of collection unnecessary, and the Blackmoorfoot water now passes, in some cases, through the service pipes with only a trace of lead."

The storm water would be likely to carry into the reservoirs countless numbers of bacteria and their spores, which would usually be more or less perfectly removed by filtration through the soil, and these would rapidly multiply in the comparatively stagnant water of the reservoirs. At the same time the atmospheric conditions were most favourable for their increased growth at the peaty gathering grounds as well.

With regard to Sheffield, the rainfall at Redmires in 1887 only reached 24.7 inches, of which 3.15 inches fell in October of that year, the rainfall for the twelve months being the lowest that had been recorded for the last fifty years, the average for that whole period being 41.29 inches.

In consequence, apparently, of this drought the water appears to have acted much more strongly on the lead service pipes for some considerable time, and, in February, 1888, more than 1 grain per gallon was detected in several analyses of the Redmires water which had been standing in the pipes overnight, and as much as 0.6 grain after the water had been running for some time. In one instance 0.45 grain per gallon was found in a sample which had rapidly run through only 25 feet of lead piping.

These quantities are, of course, extremely high, and there can be no doubt that the danger of drinking water so contaminated is most serious. Fortunately, the action of the water on lead at the present moment seems to be less intense, but still it is capable of causing the solution of quantities much in excess of those which are laid down by most of the writers on the subject as sufficient to condemn a water for drinking purposes. The danger limit is usually placed at 0.1 grain per gallon, but it must be remembered in the first place that lead is a cumulative poison; and, secondly, that personal idiosyncrasy comes into play to a very considerable extent, as was evidenced in the case of the family of Louis Philippe at Claremont. Here the water contained as much as 0.7 grain of lead, but none of the children were affected. On the other hand, as small an amount as $\frac{1}{100}$ of a grain has been stated to have caused poisoning, and one cannot but admit that it may be possible, if only the water be drunk in sufficient quantity and for a sufficient length of time. Taking, however, the higher estimate of $\frac{1}{10}$ of a grain per gallon, it is obvious that the water supplied to many of the inhabitants of Yorkshire and Derbyshire is capable of producing poisonous effects, and must, therefore, be considered dangerous.

It does not, however, by any means follow that even if the water contains more than $\frac{1}{10}$ of a grain per gallon of lead at a given time all the persons drinking it are necessarily affected, or the disease would be far more widespread than it is at present.

As has been said, idiosyncrasy doubtless must be largely concerned, but putting this aside, the actual amount of water drunk by each individual will, of course, be a most important factor, so that in some cases a small percentage of lead would have a more deleterious effect than a far greater amount in others. In the upper classes the amount of water, unfiltered or otherwise, which is habitually drunk is comparatively small, which probably accounts for a certain amount of immunity, but curiously enough the total abstainers, in whom, of all others, one might expect that the most virulent results of water contamination would be seen, do not appear to have been specially affected. Even among such, however, water is drunk perhaps less frequently than any other fluid, tea and coffee supplying a considerable quantity of the water needed by the system; and it is found by experiment that both these beverages cause, at any rate, a considerable part of the lead to be deposited from the water with which they are made. Consequently, it does not by any means follow, when a water is stated to contain a certain amount of lead, that everyone using it for domestic purposes is habitually imbibing that amount of lead; neither, as stated above, does it follow that all those who drink even considerable quantities will necessarily be affected. That comparatively few may suffer is, however, no reason for sparing any attempt at obviating such a source of danger. This naturally leads us to the consideration of the various suggestions that have been proposed from time to time for the prevention or cure of the action of moorland water on lead.

It has been asserted that the poisoning that has occurred in many of the towns obtaining their water from such a source is due to the showers of lead deposited on the moors year after year by sportsmen, and that therefore it is necessary that steps should be taken to prevent contamination by appropriate legislation. It is, however, unfortunate for the supporters of this theory that no lead has ever been detected in the water of the reservoirs, it not being until it has passed through the service pipes that lead is found to be present; and consequently there remains for consideration the various ways in which the water may be treated either before distribution or after delivery to the consumer, so as to secure immunity from plumbism.

The methods applicable in the latter case are: (1) to use as little lead piping as possible; (2) to avoid the use of lead cisterns, slate fixed with cement, or galvanised iron being used if a cistern is absolutely necessary; red lead must be avoided for the joints, and it is advisable that, if the cisterns are of iron, they should receive some protective coating internally; and (3) to run off the water which, as in the case of that first drawn in the morning, has stood in contact with the lead pipes for any length of time. The results of analysis show that this is an efficient way of obviating the evil, except at those times when the solvent action of the water on lead is very intense, as if the water be run off for sufficient time to get rid entirely of that amount which has been stagnant in the pipe, lead is either absent entirely, or only present in extremely minute quantities; (4) filtration through animal charcoal, which entirely removes lead from the water, wood charcoal being, however, practically useless for the purpose, the cause for which appears to be that while phosphates are present in abundance in the former, they are practically absent in the latter. The lead unites with the phosphates, forming an insoluble phosphate of lead, so that other phosphatic material, such as bone ash, answers equally well. Other forms of filter have a very limited action in removing lead from water, such powers as they possess being apparently more of a physical than a chemical character, and comparable to the similar action of filter paper observed by Professor Carleton Williams. If water containing lead in solution be passed through filter paper, a portion of the lead is removed, sometimes as much as 50 per cent., and this fact has been brought forward as a proof that in waters containing lead a portion of it exists in a state of suspension, and that therefore on filtration it is arrested in the fine pores of the filter paper. It is, however, usually the case that the lead which has been taken up from the service pipes exists entirely in solution in the water.

For those who can afford them, filters of animal charcoal are of much value in reducing the danger of lead poisoning to a minimum, but it is necessary to remember that their action only goes on for a certain definite time, after which they require renovation; while, if not attended to sufficiently frequently, they are liable to become an actual source of danger rather than a safeguard.

For poor people, on the other hand, filters are quite useless, even supposing that they could manage to obtain one—which in many cases would be absolutely impossible—it is quite certain that they would never properly attend to its condition so as to keep it in good working order. This being so, the only thing to be done in such cases, in addition to the removal of stagnant water from the pipe, is to advise that the water usually drunk should be taken as much as possible in the form of tea or coffee, when a certain portion of the lead is removed as an insoluble tannate, Professor Horsford having found that water contain

lead lost about $\frac{3}{100}$ of the metal when used for making tea, while coffee removed nearly the same amount.

Everything that has thus far been recommended is, however, only a temporary expedient, which it may be advisable to adopt while the solvent action of the water still remains, but it is obvious that the only scientific manner of dealing with the problem is either to do away with the use of lead pipes altogether or to so treat the water before distribution that its power of taking up lead is entirely removed. In the first case, iron pipes may be substituted for the lead ones, but these are difficult to manipulate, and are liable to be corroded by the water. So to meet these objections tin-lined lead pipes have been manufactured, which are as easily bent and worked as lead piping, except that there appears to be difficulties in the way of soldering, the tin coating being liable to be destroyed in the process. The cost would be about half as much again as that of the ordinary lead pipes. For about the same extra expenditure glass-lined pipes might be laid down. These consist of an inner core of glass surrounded by an iron pipe, the intermediate space being packed with asbestos; they appear to be capable of withstanding a considerable range of temperature, and although it is practically impossible to bend them when fitting them, this difficulty is overcome by the manufacture of junctions of all sizes and shapes, which being fitted to the pipes with thin plates of asbestos ensure accurate apposition.

Pipes of this description would entirely prevent the possibility of the water becoming contaminated with lead; but, though it would be possible to enforce their use in the case of new houses, it would be an exceedingly difficult business to change all the service pipes at present in existence. Still, provided that the corporation would guarantee half the cost and the consumer the other, and, if the old lead pipes were sold, the cost would probably not be very great. An alternative, at any rate in the poorer parts, would be to remove the service pipes from the houses altogether and to erect iron stand-pipes direct from the mains outside the houses. There are, however, obvious objections to such a plan, and it can hardly be doubted that by far the simpler and better plan, and probably also the cheaper in the end, would be to treat the water before distribution so as to do away with its lead-dissolving power.

Seeing that it is to the presence of free acid that this action is due, the logical procedure is obviously to neutralise the acid, either with carbonate of soda, with lime, or with calcium carbonate in the form of chalk or limestone. In the course of experiments bearing on this subject, Dr. Frankland found that the addition of a very small quantity of carbonate of soda to a lead-dissolving water completely stopped its action, the amount necessary in the case of the Redmires water being $3\frac{1}{2}$ grains of common commercial carbonate of soda to each gallon of water. This salt is perfectly harmless, and, as a matter of fact, is present in many town supplies to a greater extent than that which, in the present instance, would suffice for neutralisation. It has been stated as an objection to this method of treatment that there is no tendency to the formation of a protective coating in the pipes, and thus no reserve of security is obtained.

(To be continued.)

EXPERIMENTS ON LIVING ANIMALS.

THE Report of Mr. Erichsen, Inspector of Experiments performed on living animals under licences granted under the Act 39 and 40 Vict., cap. 77, is published this week as a Parliamentary paper. The total number of licences for 1889 was 87. Of these, 68 held their licences in England, and 19 in Scotland. They were, with two exceptions, either graduates of a British university, Fellows or members of one of the Royal Colleges, or registered practitioners in medicine in England and Scotland. A large proportion of the licensees were either professors in a British university or teachers in medical or veterinary schools. Eighteen licensees performed experiments during the past year.

Dr. G. V. Poore was appointed Assistant-Inspector at the commencement of last year, and entered upon his duties at the end of April.

Dr. Poore reports: "I have, as a rule, found that animals kept for experimental purposes are singularly well cared for. This is, in fact, necessary to ensure the success of the experiment. My observation leads me to say that the use of anæsthetics and antiseptics, combined with the necessity of giving close attention to the well-being of the animals, reduces the discomfort to which they are subjected to a minimum. On two occasions I have made suggestions as to the desirability of carrying out structural alterations for the benefit of the animals, and these suggestions were in both instances carried into effect. I have had to make only one report on a case of temporary neglect to comply with the provisions of the Act."

Mr. Erichsen observes: "The Act provides that in the experiments performed under the licence alone the animal must, during the whole of the experiment, be under the influence of some anæsthetic of sufficient power to prevent it feeling pain, and that the animal must, if the pain is likely to continue after the effect of the anæsthetic has ceased, be killed before it recovers from the effect of the anæsthetic that has been administered. The anæsthetic that is commonly used in all experiments on living animals in this country is chloroform, the anæsthetic influence of which is often increased or maintained by the subcutaneous injection of morphine or of cocaine. I have no reason to doubt that anæsthetics are fully administered, so as to render animals experimented upon under the licence unconscious of all suffering. Not only would motives of humanity induce the experimenter to do this, but the exigencies of most severe experiments, such as those performed under the licence alone, require that the animal should be thoroughly anæsthetised during their performance. If anæsthetics are imperfectly or inadequately administered, so as to stop short of producing complete unconsciousness, the animal would become so excited and restless as to render impossible the performance of any experiment requiring careful and delicate manipulation, for which purpose complete anæsthesia is an indispensable requisite. The experiments performed under the licence are always done in the laboratories or lecture theatres of large public institutions, such as universities, colleges, medical and veterinary schools, often in the presence of many persons, and always in places readily accessible to anyone connected with the institution who might wish to satisfy himself as to the completeness of the anæsthesia. We have accordingly the guarantees afforded by motives of humanity, considerations of convenience, and conditions of publicity for the complete anæsthetisation of the animal as required by the Act."

He further points out that: "The main object of the Act 39 and 40 Vict., c. 77, is not the prevention of the performance of experiments for scientific purposes on living animals, but the prohibition of experiments calculated to give pain, except subject to the restrictions imposed by the Act. The attention of those who are responsible for carrying out the provisions of the Act has accordingly been constantly directed to this, its most important requirement. The obligations of the licence which is granted by the Secretary of State are such that no painful experiment can be performed under it without a contravention of the Act. The certificates which exempt either from the obligations of administering an anæsthetic or of putting the animal to death before recovery from its effects, are granted by two scientific authorities, and not by the Secretary of State. Over these certificates he has no control beyond allowing or disallowing them. Before being allowed by the Secretary of State they are always submitted to the closest scrutiny. A description of the nature of the proposed experiments is required, the certificate is restricted as to date of expiry, or number of experiments to be performed, or both, and kinds of animals to be used. If not satisfactory in these respects it is disallowed. In many cases certificates are sent back for amendment in some one or other of these particulars. In all cases they are guarded by certain further restrictions, as for example in certificate A, by the addition of the 'inoculation condition,' rendering it imperative to kill the animal, if severe pain occurs as the result of the disease produced by the inoculation; in certificate B, by the obligation to treat the wound with strict antiseptic precautions, and if these fail then to kill the animal. In addition to this it may be made a condition of the certificate that the holder shall report to the inspector the result of the experiments made under it, after a limited number has been performed. In all cases it is imperative on the licensee to forward to the inspector a return, on prescribed and detailed forms with which he is furnished by the Home Office, of all experiments performed by him during the year. These returns give full particulars as to the date of each experiment, the kind of animal used, whether anæsthetics were employed, description of operation, if any, and if any medicinal, poisonous, infectious, or other agent was used."

LORD DUNRAVEN'S BILL FOR THE REFORM OF THE ROYAL COLLEGE OF SURGEONS.

FORM OF PETITION.

IN accordance with the resolution passed at the recent meeting of the Parliamentary Bills Committee of the British Medical Association, and in due sequence of the resolution passed at the annual meeting of the Association at Leeds, and after examination and revision of the form of Bill which Lord Dunraven will introduce, the following petition has been prepared for the use of the Councils and members of the Branches of the Association, and is submitted for consideration:—

In the House of Lords. Session 1890.

TO THE RIGHT HONOURABLE THE LORDS SPIRITUAL AND TEMPORAL IN PARLIAMENT ASSEMBLED.

THE HUMBLE PETITION of the undersigned MEMBERS of the BRITISH MEDICAL ASSOCIATION

SHEWETH as follows:—

1. YOUR PETITIONERS have learned with great regret that for several years past there has prevailed amongst the great body of the Members of the Royal College of Surgeons of England a grave dissatisfaction with the existing Government of their College.
2. YOUR PETITIONERS, in common with the whole profession, are deeply interested in the good government, harmony, and efficiency of the great Medical Corporations of England, including the said Royal College of Surgeons.
3. YOUR PETITIONERS have long been satisfied that the system of government and the existing management of the said Royal College of Surgeons ought, in the interests not only of the College itself but of the profession at large, to be amended.
4. YOUR PETITIONERS are convinced that the introduction of a broader principle of representation in the government of the said College would enable it to render greater services to the profession and to the public health.
5. YOUR PETITIONERS have welcomed the introduction of the principle of general representation in the recent Medical Act, and they conceive that the results have already proved the wisdom of Parliament in introducing that reform, and have provided a strong reason for applying the principle of general representation to the government of such a body as the Royal College of Surgeons of England.
6. THAT your Petitioners are informed that a Bill has been introduced into your Lordships' House by The Right Honourable the Earl of Dunraven to make certain amendments in the existing system of government of the said Royal College such as may not only improve its present government, but restore to the Members of the College, and enable them to exercise, certain ancient rights and franchises of which your petitioners believe that they are now in practice deprived, and to bring to an end in an equitable manner the present differences which exist within the said College.
7. THAT your Petitioners are encouraged to appeal to your Lordships by the knowledge that on the last occasion on which the constitution of the said Corporation was under the consideration of your Lordships' House, your Lordships gave an emphatic decision in favour of those rights and franchises of the members of the said Corporation which it is the object of the said Bill to protect.
8. THAT the said Bill has been approved in principle by the last Annual Meeting of the British Medical Association, which comprises upwards of 13,000 members of the medical profession practising in all parts of Great Britain and Ireland, and has since been carefully considered and approved by the Parliamentary Bills Committee of the said Association, and has in your Petitioners' belief the support of the vast majority of the medical profession.

YOUR PETITIONERS therefore humbly pray that your Lordships' House would be pleased to pass the said Bill into Law during the present Session of Parliament, with such amendments as to your Lordships' wisdom may seem fit.

AND YOUR PETITIONERS will ever pray.

THE SELECT COMMITTEE ON HOSPITALS.

FIRST AND SECOND MEETINGS.

[SPECIAL REPORT.]

WITH Lord Sandhurst as its chairman, the Select Committee of the House of Lords sat for the first time on Monday last to take evidence, and the whole day was occupied by Colonel Montefiore, of the Charity Organisation Society, in giving statistics, referring principally to the year 1877, of the general and special hospitals. Most of the facts were contained in the draft petition presented to the House of Lords last session and in a memorandum drawn up with special reference to the proposal for this inquiry. The witness gave, from his personal experience and the reports of district committees of the Charity Organisation Society, evidence in support of his contention that there were grave defects in the present administration of medical relief in London. The overcrowding of the out-patient departments by persons, many of whom had but slight ailments, hindered medical instruction and caused much suffering to, and needless waiting of, those who required treatment for severe maladies. Many who could pay for relief became habitual paupers owing to the easy and indiscriminate admission to hospital benefits. The abuse of the out-patient department could never be so bad if the admission were not on governors' letters, but were entirely on the dictum of medical officers. If there were not such enormous crowds there would be more time to devote to the patients, and all the cases could be attended to properly. The petition of his Society was in no way intended to be adverse to those glorious institutions of the country, the hospitals, and what was hoped was that the Committee would be able to see their way to some improvement in their organisation which would make the medical charities even more useful. The gratuitous relief, without proper inquiry or regulation, to such numbers of in- and out-patients of hospitals seriously retarded the promotion of provident medical institutions. The numerous gratuitous and part pay institutions tended to injure the general practitioner by underselling him. The Society's Committees showed that there was a great overlapping of such institutions, and in consequence the medical men who practised among the poor yearly found it more difficult to make a livelihood. In Bethnal Green that result was specially felt. If the hospitals were properly used instead of being abused, the local practitioners' fees would not be driven down as now. For a time he believed the charge at Guy's to every patient had diminished the enormous number of out-patients, but he believed that they were now again increasing. No doubt the charge was made with the view also of increasing the funds, which had fallen off so much in consequence of the depreciation in the value of their landed property. One reason why so many persons went to hospitals for treatment was because of the superior knowledge and skill of the medical staff of the hospitals. Persons with incomes even up to £120 a year could not afford to have expensive operations at their own homes. With reference to the question of the indebtedness of the hospitals, the witness, in reply to Lord Kimberley, said he never knew of a case where the medical staff were contented with existing arrangements.

The ARCHBISHOP OF CANTERBURY: That means progress; and as progress continues, many processes become more economical.

The witness continued that he believed it was the endeavour of all committees to manage their hospitals on the best of plans. Those which obtained grants from the Hospital Sunday Fund he thought desired to see an increase in the number of patients. There was keen and continuous competition among hospitals, which year by year spent much more than their average income justified, and were consequently driven to all sorts of devices to meet their liabilities. Year by year new hospitals were, sometimes under very doubtful auspices, established for the treatment of special diseases, without any consideration to existing similar institutions. Some were started as pure business affairs, and some were started as speculations. The hospitals were crowded together within an area of about two miles from Charing Cross, and the needs of the poor people of the metropolis in the suburbs were almost entirely neglected. For local purposes, too, the hospitals and dispensaries were ill grouped.

Lord KIMBERLEY asked a number of questions with reference to whether there would be any advantage in having medical schools attached to the infirmaries, and Colonel MONTEFIORE said he believed there would be, but the guardians were thought to be very much averse to such schools being established.

On this subject the witness read a report of a special meeting f the Charity Organisation Society in 1887, at which some of the peakers were in favour of using the infirmaries as clinical schools. he medical charities, he urged, should have a status, and their ositions should be assimilated to that of the endowed charities, hich came under the jurisdiction of the Charity Commissioners. . second course would be to register the hospitals under the riendly Societies Act. And a third course was to provide for egistration under a new Act.

Lord THRING remarked that if it was intended to give the hositals a status by registration there was no difficulty about that, or there was in existence complete machinery for doing it. If, owever, compulsory registration were intended, that was a diffeent matter.

The witness then read a long document, containing suggestions f the Society he represented, for the reform of hospitals in regard various matters. It was urged that, to avoid the present diffiulty arising from the diverse method of keeping accounts, there ould be a uniform system; that to increase their responsibility l medical men attached to hospitals should be paid; that the ut-patient cases should be limited in number; that there should e combination between hospitals and dispensaries; and that here should be some central controlling authority over hospitals. or all practical purposes of that inquiry the whole of the London ospitals—except Guy's, St. Thomas's, and St. Bartholomew's—ight be considered as voluntarily supported.

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r the sitting of the Committee on Thursday, evidence was given by r. STEELE, who stated that for thirty-five years he had been edical superintendent of Guy's Hospital. Prior to that he was edical superintendent of Glasgow Royal Infirmary. Having had ie opportunity of watching hospital work for a long time, he ound the present hospital system very much improved within ie last forty years. That improvement was shown in every way -in dieting and nursing especially. The witness explained at ngth the working and administration of Guy's Hospital, and said at no doubt the fact that the institution, in its lying-in departent, dispensed so much charity, must take away from the work many small practitioners in the neighbourhood A medical hool of a hospital must do that to some extent for the instruc-on of the pupils. He considered the advice given at the London eneral hospitals was the very best possible to be obtained. He would ot say that it was better than at some of the best special institutions ch as the Brompton Consumption and the National Hospital in ueen Square. Most of the large general hospitals now had spe-al departments, where patients could be equally well treated as the special hospitals, except perhaps in a few exceptional inances. There was not, he thought, any necessity for the large ajority of the special hospitals. With reference to the position of London hospitals, Dr. Steele said that the South of the metropolis, eckham, Clapham, and other divisions, were without hospi-ls. There were only the two large general institutions—Guy's and . Thomas's—for the people of South London. To Guy's, the case was an urgent one, any person was admitted. He d gone into the question over and over again, and he did not ink the out-patient system at Guy's was abused to any great tent. There were at some hospitals persons who could afford to y a trifle who received assistance. The hospitals were founded tensibly for the benefit of the poor; but he believed the class ich chiefly received the advantages of the treatment at medical arities were the working classes, from the dock labourer to the illed mechanic. The midwifery system at Guy's Hospital he did t think encouraged pauperism. It was got up in the first inance for the benefit of the pupils who attended the hospital—ne 400 or 500 young men learning the profession. In some of cases, no doubt, the head of the family could pay for the treatnt of the patient in lying-in cases. There were a number cases sent to the hospital from the provinces, as the parish auorities thought the patients could get better treatment, and they d 2s. a day. There was no reason why many of the cases should be treated at the local hospitals. The London infirmaries did send such cases to Guy's. He should certainly like to see ie system of licensing or registration before any new hospital s established, and it would be well if there was some central trolling authority over the medical charities. Whilst some of special hospitals were not in good sanitary condition, he could say much for some of the old general hospitals. They were lt when not much was known about sanitary matters; but authorities were doing their best to remedy the existing defects, and to improve the sanitation. After speaking of the system of nursing at Guy's, and of the introduction of the paying system, Dr. Steele said he did not think the general public contributed to the hospitals with the object of improving the medical schools so much as to relieve the distressed and injured. In other countries the hospitals were partly supported by the municipality as well as by voluntary charity. In England it was only the voluntary or the endowed hospitals which were used for the purpose of clinical instruction. At Guy's the whole proceeds of the medical school were put into a common purse, which was divided into shares. The hospital had to pay about £1,500 a year in rates for the support of the sick poor, and that was considered most inequitable, for about one-third of the patients came from the parish in which the hospital was situated, and a great saving to the rates was thus effected. So far as he knew none of the out-patients received outdoor relief. The general feeling of the teaching part of the profession was that the Poor-law infirmaries should be open in certain instances to medical students and also to surgeons and physicians attending the hospitals. But there was a great difficulty thrown in the way of this by the guardians, who were unwilling that any new arrangement should be made. At present there was no authority to control the founding of hospitals, to secure uniformity in accounts, or to ascertain with any degree of accuracy the average cost of the beds, and he thought the Government should appoint some body for that purpose. The Government should have power to prevent the starting of new hospitals by voluntary subscribers and others if thought advisable, although with regard to voluntarily supported institutions, the Government would find some difficulty. A large number of questions were asked by Lord THRING, with the view of ascertaining who was responsible for the management of the various departments of Guy's Hospital, and the witness stated that in general the responsibility rested with himself and the treasurer. In any cases where a serious difficulty arose the matter would be reported to the governors, as was the case some twelve years ago, when there was a question about the nurses. Both his Scotch and English experience confirmed his opinion that the hands of those in authority would be greatly strengthened if there were a weekly board. The witness spoke of the desirability of establishing a convalescent institution attached to Guy's Hospital.

Mr. TIMOTHY HOLMES (consulting surgeon to St. George's Hospital) was also briefly examined, and spoke as to the out-patient system. He said that it would be a hardship to the public if the system were entirely abolished. For medical purposes the department was of great use. He would like to see the out-patient department a consultative department as in France. One half of the special hospitals could be closed, to the great benefit of the public who subscribe to charities. The accommodation in the general hospitals would be sufficient to treat patients suffering from special diseases even if a large number of special hospitals were closed. From his experience, he should be very sorry to see the medical charities placed under State management. Great advantage might be taken of the infirmaries for the purpose of medical education. There were no facilities in London for medical students to study infectious diseases.

The Committee adjourned until Monday.

MEDICAL SELF-HELP.

Increase of Members and Receipts: Payments for Disablement by Influenza: Reserve of £38,000: Further Investments.

THE highly satisfactory quarterly report of the Medical Sickness, Annuity, and Life Assurance Society was presented at the last meeting. Present: Mr. Ernest Hart, in the chair; Mr. W. G. Burnie, Bradford; Dr. F. S. Palmer, East Sheen; Dr. W. J. Stephens, Brighton; Dr. W. Thomas, Birmingham; Dr. B. Lord, Dr. J. B. James, Dr. J. Pickett, Dr. G. E. Hermann, Mr. Swinford Edwards, Dr. M. Greenwood, jun., Dr. F. Wallace, Dr.E. Bartlett, London.

Starting the year with an available membership of 1,016, there have been 39 proposals received during the quarter as compared with 35 the previous quarter and 41 in the corresponding period of last year; 1 of these has been declined, 1 member has died, 1 has withdrawn by letter (without surrender value), and 3 have been excluded by non-payment of contributions. Taking the total of these (6) from the 39 entrants, there is a net increase of 33, and the effective number of members is now 1,049.

The receipts from the various funds amounted to £3,076 18s. 11d., as against £2,610 11s. 8d. in the corresponding quarter of 1889, showing an increase of £1,919. There had been a considerable increase in payments for sickness due to the special health conditions of the quarter. The number of members claiming sick grants for disablement from practice was 132, as against 58 in the preceding quarter, and 45 in the corresponding quarter of last year. Of these 91 were on account of influenza, leaving only 42 from the ordinary ailments. The influenza cases cost £583 12s., the average duration of the claims from influenza being 12¼ days. The absolute excess of sickness due to this exceptional cause was, however, not much over that calculated, and it is noteworthy that in the face of the special circumstances no occasion had arisen to draw on the resources, the current premium income with interest being £335 10s. 8d. in excess of the expenditure in the fund affected—the sickness fund. The position of the funds of the Society at the close of the quarter was most prosperous and satisfactory, showing an invested value of £38,215, as against £30,638 in the corresponding quarter of last year—an increase therefore of nearly £8,000 to the credit of the Society.

The new investments during the quarter had amounted to £4,160, of which £1,758 had been received during the quarter as repayments on the Society's investments. This highly prosperous and satisfactory state of things was the subject of congratulation. Thanks were expressed to the officers of the Society, to the treasurer (Mr. Sibley) and the vice-president (Dr. de Havilland Hall) for their close attention to the affairs of the Society. The chairman was also thanked and congratulations passed on his return to satisfactory health. Further particulars, documents, etc., can be obtained on application to the secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton.

ROYAL COLLEGE OF PHYSICIANS.

An extraordinary Comitia of the College was held on Thursday, May 8th; Sir Andrew Clark, Bart., F.R.S., President, in the chair.

The President announced that, on the previous day, the delegates of the two Royal Colleges had met the Senate of the University of London, and had stated that the results of the conference would be laid before the College at an early date.

The newly-elected Fellows were then admitted.

A letter from the Secretary to the Tenth International Congress was read, inviting representatives of the College to the meeting to be held in Berlin. Dr. Hermann Weber, Dr. Ord, and Dr. Payne were nominated to represent the College.

An amended report was presented by the Pharmacopœia Committee, the adoption of which was proposed by Sir Alfred Garrod, seconded by Dr. Theodore Williams. A discussion followed, in which Dr. Farquharson, Dr. Ord, Dr. Pye-Smith, Dr. Squire, and Dr. Hare took part, and Sir Alfred Garrod replied. This was carried *nem. con.*, and a vote of thanks was passed to the Committee for their services.

A report from the Committee of Management of the two Royal Colleges, recommending a revised synopsis relating to the subjects of the First Examination, was received and adopted.

ROYAL COLLEGE OF SURGEONS.

An ordinary Council was held at the College on Thursday, May 8th, when the minutes of the last quarterly Council were read and confirmed.

Messrs. F. W. Jowers and W. M. Crowfoot were introduced, and formally admitted as Fellows of the College.

Mr. W. G. Spencer was introduced, and presented with the Jacksonian prize for the past year, together with the instrument declaratory of its award.

A report was read from the Court of Examiners in reference to the resolution adopted by the Council on April 10th, that the whole question of the instruction of students in ophthalmic surgery, and of the manner by which their knowledge in this subject should be either tested, certified, or otherwise approved, be referred to the Court of Examiners to consider and report thereon to the Council.

The report is as follows:

The Court of Examiners are unanimously of opinion (1) that the present arrangements for testing the knowledge of candidates in ophthalmic surgery for the diploma of Member of the College are sufficient; (2) that the fact that candidates are liable to be tested in the use of apparatus employed in the various special surgical departments has more effect in leading them to acquire such knowledge than any enforcement of attendance in these special departments.

This report was approved and adopted.

A report was read from the Committee of Management, which had had under consideration proposals made by the Examiners in Chemistry and Chemical Physics for a revision of the synopsis relating to that subject. The object of this revision was (1) the elimination of what they deemed superfluous subjects, so that the synopsis should bear directly on the requirements of the medical curriculum; and (2) the rearrangement of the subject-matter in order to guide the student in a course of systematic reading. The Committee were of opinion that the alterations proposed by the Examiners were desirable, and recommended that the two Colleges should adopt the revised synopsis, and that it should come into operation on and after May 1st, 1891.

The report was approved and adopted.

The President announced that, with the permission of the Council, he proposed to give a *conversazione* at the College during the summer.

The annual meeting of Fellows of the College for the election of members of the Council will be held at the College on Thursday, July 3rd next, at 2 o'clock P.M. precisely.

A letter was read from Mr. R. H. Nicholson in reference to the status of army medical officers. The Council resolved that the President and Vice-Presidents be requested, in concert with Sir W. Mac Cormac and Mr. Macnamara, to investigate the recommendations of Lord Camperdown's Committee on this question, and to report to the next meeting of the Council.

In reply to a request from certain teachers of physiology for permission to attend the Primary Fellowship Examination, the Council resolved that the Chairman of the Board of Examiners in Anatomy and Physiology for the Fellowship be authorised to admit teachers of anatomy and physiology of the several medical schools to the examinations on their personal application to him.

A letter was read from the Secretary of the Berlin Congress inviting representatives from the College. It was resolved that the President, Vice-President, and such other members of the Council as desired to attend should be appointed as the representatives of the College.

On the motion of Mr. Macnamara, seconded by Mr. Marshall it was resolved: That it be referred to the President and Vice Presidents to consider and report to the Council whether any and, if so, what alterations should be made in the payments to professors and lecturers.

Great Northern Central Hospital.—The removal of the Great Northern Hospital to a new site in the Holloway Road a few years ago was not unnaturally followed by an outcry from many gentlemen practising in the neighbourhood, who believed that the establishment of a large out-patient department would materially affect their professional interests. In spite of determined efforts on the part of the lay committee to check abuses the discontent has not altogether died away, but it is satisfactory to learn that amicable negotiations have recently passed between the medical staff of the hospital and a large number of representative practitioners in the district. A well-attended joint meeting was held on May 7th, at the hospital, and some practical suggestions were adopted whereby the abuses still complained of may be minimised, if they find favour in the eyes of the lay authorities.

Small-pox at Milan.—According to the *Gazzetta Medica Lombarda* of April 26th, the small-pox epidemic which has been for some time prevalent at Milan is now practically at an end. During the first three months of the present year only 32 cases were notified; of these, 13 occurred in January, 11 in February and 8 in March. Notwithstanding this abatement, the work of vaccination and revaccination proceeds apace, and the Milanese Animal Vaccination Committee announces that it is in a position to meet all demands by return of post, "whether from the Government, the provinces, the communes, or private individuals." The committee also recalls the fact that its stores of vaccine were replenished no fewer than three times in the course of 1889 with material obtained from outbreaks of cow-pox in calves at Locate Triulzio in the province of Milan, in the public slaughterhouse in the city of Milan, and at Cosio in the district of Valtellina.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

EMBERS are reminded that the Library and Writing ooms of the Association are now fitted up for the accomodation of the Members, in commodious apartments, at the fices of the Association, 429, Strand. The rooms are open om 10 A.M. to 5 P.M. Members can have their letters ldressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

EETINGS of the Council will be held on July 16th, and Octor 15th, 1890. Candidates for election by the Council of the ssociation must send in their forms of application to the neral Secretary not later than twenty-one days before each eeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-w of the Association, who shall be recommended as eligible by y three members, may be elected a member by the Council or by y recognised Branch Council.

Candidates seeking election by a Branch Council should apply the Secretary of the Branch. No member can be elected by a anch Council unless his name has been inserted in the circular mmoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

OUTH-WESTERN BRANCH.—The annual Meeting of the Branch will be held at Ilfracombe Hotel, Ilfracombe, on Wednesday, May 21st, 1890, under the sidency of Dr. Edwyn Slade-King, D.P.H. Notices of motions or communations to be intimated to the Honorary Secretary without delay, and it will ilitate arrangements if members will inform the Honorary Secretary as soon possible if they hope to be present at the meeting, and join the excursion posed to be made on the following day. The following motion was passed the Council meeting on May 2nd, 1888: "That inasmuch as the annual eting assumes more or less the character of a day of recreation, and with a w of encouraging the district meetings, the business of the annual meeting ll be confined to the President's address, the business of the Branch, the exition of cases or of specimens with notes, and the annual dinner." Those mbers who have not yet paid their subscriptions are reminded that they ame due in advance on January 1st.—P. MAURY DEAS, Honorary Secretary, nford House, Exeter.

OUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this trict will take place at St. Bartholomew's Hospital, Chatham, on Thursday, y 29th; Mr. J. H. Jeffcoat in the chair. Gentlemen desirous of reading ers or exhibiting specimens are requested to inform the Honorary Secretary, W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later n May 10th. Further particulars will be duly announced.—A. W. NANKI-L, Honorary Secretary of the District.

OUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of above District will take place at Canterbury on Thursday, May 22nd, Mr. ston in the chair. All communications to be sent to the Honorary Secretary. ther particulars will be announced.—W. J. TYSON, Honorary Secretary of District, 10, Langhorne Gardens, Folkestone.

OUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of District will be held at Tunbridge Wells on Thursday, May 22nd. Cleland miman, Esq., will preside. Notice of communications should be sent to Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighton.

AFFORDSHIRE BRANCH.—The third general meeting of the present session be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on rsday, May 29th. Mr. T. Vincent Jackson, the President, will take the r at 3 o'clock.

TROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner will place at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Queen e Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., Hono- Secretaries.

TROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DIS-T.—The annual meeting for the election of officers will be held at the l Forest Hotel, Chingford, on Thursday, June 5th, at 6 P.M. At 6.15 the bers and their friends will dine together under the presidency of Dr. Ord, dent of the Branch, who will be supported by several past presidents and leaders of the profession. Further particulars will be announced.—J. W. r, Honorary Secretary, 101, Queen's Road, N.E.

MIDLAND BRANCH.—The annual meeting will be held at Lincoln on Thursday, June 12th. Gentlemen desirous of reading papers or exhibiting cases are requested to communicate with me before May 26th.—W. A. CARLINE, M.D., Lincoln, Honorary Secretary.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.

A MEETING of this District was held on May 2nd at the Town Hall, Haverhill, Dr. J. SINCLAIR HOLDEN, President of the Branch, in the chair. Eighteen members and three visitors were present.

Luncheon.—Messrs. Tandy and Hargrave entertained the members at luncheon at the Town Hall previous to the meeting.

Honorary Secretary.—The Honorary Secretary was re-elected.

Next Meeting.—It was proposed and carried unanimously that the next meeting be held at Southend in September, 1890.

Communications.—Dr. J. SINCLAIR HOLDEN (Sudbury): A Few Remarks on Exalgine. Professor LATHAM (Cambridge): On the Treatment of Megrim or Sick Headache. Mr. R. HARRISON, F.R.C.S. Eng. (London): On the Selection and Use of Catheters and Other Instruments for Enlarged Prostate. Dr. J. C. THRESH (Chelmsford): Notes on the Influenza Epidemic in Mid-Essex. Mr. B. L. TANDY (Haverhill): On a Case of Intestinal Obstruction—Laparotomy—followed by Abscess; Recovery. Mr. H. J. HARGRAVE, M.B. (Haverhill); Notes of a Case of Suppurating Hydatid of Liver. Mr. W. J. BURLEIGH-ROBINSON, M.B. (Halstead): On the Induction of Premature Labour by Rapid Dilatation, especially in its Relation to Pneumonia.

Cases.—At the conclusion of the meeting the following cases, etc., were exhibited by Messrs. TANDY, HARGRAVE, and BURLEIGH-ROBINSON: Ovariotomy with Transposition of Viscera; Specimen of Extrauterine Pregnancy; Suppuration of Mastoid Cells Treated by Trephining.

SPECIAL CORRESPONDENCE.

PARIS.

Gastrotomy.—Œsophagotomy.—Laparotomy.—Filaria Sanguinis Hominis.—Retinol in Vaginitis.—Unroasted Coffee in Hepatic Affections and Diabetes.—Boric Acid and Glycerine as an Application in Small-pox.—Aristol in Epithelioma.—New Microbicides.—Statistics of the Pasteur Institute.—General News.

M. PÉRIER has successfully performed gastrotomy on a man aged 36, in order to extract a teaspoon from his stomach. M. Périer made the incision recommended by M. Labbé, parallel to the greater curvature. The operation was done on February 19th and the sutures were removed on the 27th. The patient left the hospital in April, and is now in excellent health.

A child of 10, who swallowed a shirt stud made of bone, has also been successfully operated on by M. Périer. The foreign body became impacted in the upper part of the gullet, and M. Périer performed œsophagotomy and removed the stud. The child made an excellent recovery.

At a recent meeting of the Academy of Medicine, M. Polaillon showed a fœtus of two months and a half removed by laparotomy from a woman aged 26. Pregnancy had taken place in the right Fallopian tube, which ruptured. M. Polaillon extracted the fœtus, carefully removed the placenta and coagula, then removed the right ovary and its tube. The patient made a rapid recovery.

M. Lancereaux read to the Academy a report on communications on filaria sent to that body by Dr. Maurel and Dr. Magalhaes. One of Dr. Maurel's patients, a negro, was treated at the hospital for abscess of the scrotum. Dr. Maurel accidentally discovered filaria in the blood, which shows that this parasite may remain in the human organism some time without its presence being detected. Two years ago M. Lancereaux showed a patient who had been cured of filaria; since that time he had not been troubled with the complaint. Surgical treatment is frequently successful. Dr. Magalhaes, however, states that surgical operations on this class of patients are dangerous. One of his patients, who was operated on for scrotal filariosis and hydrocele, died fifty-eight hours afterwards.

MM. Balzer and Chevalet have treated forty cases of vaginitis with retinol. In some cases this antiseptic, which does not cause either pain or irritation, has succeeded better than any other, especially when there was constantly recurring fungoid growth. Retinol is sometimes called rosinol.

M. Landarrabilco has since 1886 treated liver affections and diabetes successfully with unroasted coffee. In the *Montpellier Médical* he describes the method which he pursues. He uses equal parts of Mocha and Bourbon, with a quantity of Martinique equal to the other two combined. These three kinds are well mixed and divided into packets of 25 grammes, which are placed in a glass of water well covered; ten or twelve hours afterwards it is filtered, and taken before breakfast, cold and unsweetened.

M. Bertrand (of Brest) uses boric acid and glycerine in the proportion of 4 grammes in 50 in small-pox; this is applied to the surface of the pustules, and the marks are rendered very slight, if not prevented.

M. Brocq has treated an epithelioma of the face with a large ulcerated surface with pulverised aristol. Good results followed in five or six days; a tendency to cicatrisation was observed. Twenty days afterwards, cicatrisation was far advanced; in a few more days it was complete. Aristol is preferable to chlorate of potash, inasmuch as it can be applied to a raw surface without causing pain; it is inodorous, and, unlike iodoform, has no poisonous effect. Aristol can be used as a powder or as a pomade, in the proportion of one-tenth mixed with olive oil and lanolin.

MM. Cadiac and A. Meunier have ascertained that the essences of thyme and serpolet kill the microbe of typhoid fever in thirty or thirty-five minutes, and that of glanders in thirty-eight minutes. In five minutes the vitality of the charbon bacillus is greatly modified. Thymol, serpolet, and thyme essences are powerful antiseptic agents, superior to a 5 per cent. solution of carbolic acid.

The Pasteur Institute has now (for the first time since antirabic vaccination has been practised) published complete statistics of the results of the Pasteur treatment for hydrophobia. From January 1st, 1886, to December 31st, 1889, 7,393 persons bitten by mad dogs have been treated; 53 of these have died—a proportion of 0.67 per cent. The proportion of deaths when the treatment is not adopted is 15.90 per cent.; consequently, among the 7,893 patients of the Pasteur Institute, 1,265 would have died had not the Pasteur method of treating hydrophobia been carried out. The statistics published by M. Perdrix show that there are more cases of hydrophobia in the Seine Department than in any other. This is explained by the fact that there are more stray dogs in that department than in any other. The number of cases of hydrophobia depends on the degree of thoroughness with which the police carry out the regulations concerning stray dogs and those that have been bitten. The Pasteur Institute statistics show that there are more cases of hydrophobia between February and May than at any other time of the year.

The French Association for the Advancement of Science has given £40 to the Marine Biological Station attached to the University of Lyons, and £24 to Professor Maget to help him in carrying out his experiments on hæmatology.

Four thousand pounds have recently been bequeathed to the Œuvre de l'Hospitalité de Nuit. This society, which has been in existence ten years, has succoured 570,000 poor people.

MANCHESTER.

Opening of the Medical Session at Owens College.—Post-Graduate Courses at the Royal Infirmary and at Owens College.—Cremation.

THE various classes in connection with the medical department of Owens College were opened on May 1st. The number of entries so far exceeds that in any previous year. There are to be ample facilities for the study of particular departments of medicine and surgery, and the sciences closely related to these, during the present summer session.

At the Manchester Royal Infirmary the physicians and surgeons are giving a post-graduate course, which commenced last week. A very attractive programme of post-graduate classes has been issued by the Owens College Medical School, in which there are blended the practical and scientific. The lectures will begin in June, and from the nature of the subjects and the moderate sum charged for the demonstrations and lectures, they are likely to attract a considerable number of graduates resident in the district.

The subject of cremation seems to be making decided progress in Manchester. At a recent meeting of the Manchester Cremation Society it was resolved that a limited company be formed, one of the objects being the erection of a crematorium. Already over £3,000 has been promised. The society has 230 members, although it was founded so recently as 1888.

SHEFFIELD.

The late Mr. Brooksbank.—Recovery of Value of Condemned Meat.—Lead and the Public Water Supply.—Miscellaneous.

THE General Infirmary has sustained a severe loss in the sudden death on April 21st last of Mr. Brooksbank, the chairman of the Weekly Board. When quite young he became a member of the Board, and occupied a position in it for well on to forty years. For the last sixteen years he was chairman. He was a man of very distinct ability and of a marked individuality. He held opinions strongly, and if at times his ideas ran somewhat counter to those entertained by the staff, no one doubted that he was all through actuated by a strong desire to do the best for the interests of the institution to which, by lengthened services and in many other ways, he had given such proofs of his attachment. To the prosperity of the infirmary he largely contributed. At a special meeting of the Weekly Board and medical staff, held on May 2nd, expression was given in a resolution to the sentiments as before mentioned of the loss sustained by the institution. The medical staff and the Weekly Board cordially united in the election of a new chairman.

The question as to whether or not the butcher can recover from the salesman in a case where the carcass of a beast has been condemned for food has again been raised. A Sheffield butcher claimed recently at Wakefield, before the county court judge and a jury, £15 16s. 2d., the value of a beast purchased, which was unfit for human food. Dr. Thomson, medical officer of health, who had ordered the destruction of the carcass, gave it as his opinion that the disease had existed for many months. The judge held that there was no case to go to the jury. In his opinion there was no warranty implied. Plaintiff was nonsuited, leave being given to appeal.

It is stated that satisfactory results have thus far attended the efforts of the Water Committee to remove the causes of lead poisoning. At the special inquiry, it will be remembered, it was decided to test the effect of chalk in a state of minute subdivision. This has been done, not only at Redmires, but chalk has been added also to the water which has already passed from this place to the dam at Crookes. It was pumped into the water at this latter place, and in a short time the whole of the water became sufficiently impregnated. The water from Redmires to Crookes was treated as it ran along its course. The water became at first coloured, but soon became as clear as when it entered the conduit. It remains to be seen how this plan will act permanently, but for the present Professor Dewar, the chemical expert on the special inquiry, is said to have expressed himself as well satisfied with the results.

The first returns for Hospital Saturday (April 26th) give a gratifying increase over the same returns last year.

Mr. C. Harvey, the chairman of the Barnsley Hospital Committee, has handed over £1,000 worth of 5 per cent. preference shares in Sir J. Brown and Co.'s to trustees, to be applied to the purposes of a convalescent fund.

Chesterfield boasts of a centenarian in Mr. Adam Scott, who celebrates his 100th birthday on May 5th. His father was head gardener to the Duke of York, and afterwards at Chatsworth to the Duke of Devonshire.

CORRESPONDENCE.

THE ALLEGED INCREASE OF CONSUMPTION IN SAN REMO.

SIR,—The JOURNAL of May 3rd contains an annotation on the alleged increase of consumption in San Remo, particularly among the native population. I believe that no reliable or statistic evidence of this increase exists, and if it does so I would challenge its production.

Shortly after settling in San Remo in 1878 I applied to the authorities to allow me to examine the certificates of mortality for the town. These, extending over several years, were very kindly and liberally placed at my disposal, and I drew up from them a number of tables classifying the causes of death, but before I had arrived at the end of my task I came to the conc

n that these statistics were most unreliable, and, as far as the sease phthisis was concerned, valueless. To give but two instances. ound that one gentleman whom I knew well was put down as ving died of consumption, whereas the cause of death really as a general break up from age. A second case was also attrited to consumption, although death was really caused by oplexy, the person in this case being likewise of advanced age. rther, in the register of deaths I found the word "consumption" s written as the cause of death in a considerable number of es following each other consecutively.

From the method of certifying the causes of death in San Remo l some other Italian towns accurate returns are impossible. e deaths are certified by a specially appointed medical man, "medico-necroscopo;" he is supposed to visit every house ere a death takes place, and to inspect the body, but in most es his information is derived from the family or friends, and is obtained as in England from the medical man in attendance, only person who can have any accurate knowledge of the se of death. These particulars and many others relative to death statistics will be found recorded in my work on San no. I had hoped to have derived much valuable information m the examination of the official certificates of death, and was ch disappointed that my labours had been all in vain.

t is quite possible that consumption may be more prevalent n it was formerly amongst the native inhabitants, as occurs in case of other towns where the population is increasing, but belief is that no conclusive or reliable statistical evidence is hcoming to prove the fact.—I am, etc.,

an Remo. ARTHUR HILL HASSALL, M.D.

E LONDON UNIVERSITY AND DEGREES FOR LONDON MEDICAL STUDENTS.

R,—Some weeks ago you kindly inserted a notice that a rotest" against the proposed alterations in the examinations medical degrees of the London University had been drawn up signature. Will you now allow me to make known, through r columns, that this protest, signed by 595 graduates and ergraduates (mostly the latter), has been forwarded to the ate and its receipt acknowledged by the Registrar.—I am, etc.,

. Bartholomew's Hospital. R. C. BAILEY.

IE THREE THERMAL MECHANISMS AND THE MOTOR LEVELS.

R,—I am very glad that Dr. D. MacAlister, in his letter to you ch was published in the JOURNAL of May 3rd, mentioned that was the first, in 1887, to point out that the order of evolution ie three thermic mechanisms is—first, the thermolytic, which ie least complex; secondly, the thermogenetic, which is more plex; thirdly, the thermotaxic, which is the most complex. t of space prevented my quoting his views, which are so ely known and accepted that, in a brief article, it is almost rfluous to quote them, but, in the paper in the *International nal of Medical Sciences*, to which I referred the readers of the RNAL, they will be found fully discussed.

y object was to point out that Dr. Hughlings Jackson's hypos of the three motor levels, and that of the three thermotic mechanisms, mutually support each other, because of the spondence in their anatomical position, in their order of comty, and in their order of evolution; and also again to urge neurotic theory of pyrexia which I put forward in the *Practir* for January, 1886.—I am, etc.,

rley Street, W. W. HALE WHITE.

HE DISCUSSION AT THE MEDICAL SOCIETY ON ABDOMINAL SURGERY.

,—My friend Mr. W. Thomson goes back to a very old quotaand even that he leaves incomplete. As it is, I will take the as he states it.

us take the question of ovariotomy as an index of what abnal surgery may and should be. It is the standard operation, as been admitted on all hands as a fair gauge, and I will fore accept it without going into the wider field of the surof the abdomen. Mr. Thomson's position could only be ed if it were to be found that the results of general surgeons ng in the abdomen were equal to those of the specialists. But ow up to a very recent date the results of all the men in this ry who devote themselves exclusively to the special work, ie results for ovariotomy for all of them are nearer 5 per cent. than 10. On the other hand, we cannot get at the results of general surgeons in abdominal surgery within perhaps a half statement of the full mortality, and yet we know that ovariotomy in the hands of general surgeons has a mortality up to recent date nearer 40 than 30 per cent. It is, therefore, quite unjustifiable of Mr. Thomson to take Mr. Mayo Robson or even his own three cases as anything like an argument against my proposal. It is just as unadvisable for a general surgeon to perform an abdominal operation which it was possible to place in the hands of a specialist, as it would be for him to perform an operation for cataract. The interests of the patients demand that we should place them under the most favourable circumstances possible for what can be done for them; the interests of our profession at large demand the same thing, and it can only be misdirected zeal which results in action inconsistent with these great principles.

In further reply to Mr. John W. Taylor, I have to say that the question of the diagnosis before rupture, and not merely before operation, was raised by the President; and at the second meeting, during my speech, I specially appealed to him as whether it was not so, and he acknowledged that it was. Mr. Taylor's second case is easily dismissed, because he admits there that rupture had taken place with effusion into the broad ligament before diagnosis. As to the case which he now identifies as being one of my own operated upon on April 3rd, 1885, I have to say that there were clear evidences that not only one rupture, but more than one, had occurred, probably several weeks before the operation. The whole tissues of the tube and its neighbourhood were infiltrated with blood, the fœtus was never found, the great part of the placenta had escaped and been absorbed, and, had it not been for the villi in the meshes of the tube, the identification of the real nature of the case would never have been possible. The first rupture must have taken place in this instance long before Mr. Taylor saw her, and his observations entirely confirm what I have said—that whilst it would be easy to diagnose a case of tubal pregnancy if we saw it before rupture, as a matter of fact we do not see them, save very seldom, before it has taken place. As I have already put on record, I have only once met with a case before rupture, and I diagnosed it as a case of tubal distension, for neither objective nor subjective symptoms were such as to suggest pregnancy in any way.—I am, etc.,

Birmingham. LAWSON TAIT.

REMARKS ON PYLORECTOMY.

SIR,—The importance of the paper read before the Medical Society on Monday, April 28th, by Sir Wm. Stokes, cannot be overrated, and must be my excuse for troubling you with the following few remarks.

The chief points in the paper were directed (1) to the safest and most speedy method of performing pylorectomy; and (2) the best mode of treating pyloric carcinoma. It was to these two points that I confined my remarks. As, however, they are not very clearly expressed in the abstract of the proceedings contained in the JOURNAL of May 3rd, I hope you will allow me space to place my views more clearly before your readers.

First, as to the best and most speedy method of performing pylorectomy: When conducting my experiments in intestinal surgery, the idea occurred to me to excise the pylorus and unite the divided ends of the stomach and duodenum by means of the approximation plates in practically the same manner as Dr. Rawdon so successfully did in his case, which he reported recently.

I found, however, the portion of duodenum that was surrounded by peritoneum was so very short that it would have been, I think, impossible to have done the operation successfully. The same difficulty would in most cases apply to the human being, as the first portion of the duodenum is only two inches long, and not more than two-thirds of this is completely surrounded by peritoneum, leaving, after allowing for a small portion which must of necessity be removed with the pylorus, only about an inch to deal with. This would be barely enough to allow of a bone plate being introduced without putting a considerable drag upon the part to be united. When, however, the pylorus becomes obstructed, and the stomach dilated, it seems to have the effect of elongating this first portion of the duodenum. In such a case, the plan put into practice by Dr. Rawdon is undoubtedly, to my mind, the best mode of operating. Should, however, this portion of the duodenum not be elongated, I think then, as I said at the Medical Society, that it would be better, after excising the diseased pylorus, to invaginate the divided end of the duodenum into itself, and secure it by means of a continuous suture passed through the serous and mus-

cular coats, and the divided end of the stomach should be similarly inverted, and fastened by a continuous silk suture in its whole extent. Then a gastro-enterostomy should be performed by drawing out a portion of the jejunum, and fixing it to the anterior portion of the stomach, about an inch from its greater curvature, and fully three inches from the seat of division, by means of approximation plates. This operation could be done well within an hour, and there would be much less risk of leakage than by joining the divided ends of the stomach and duodenum together directly.

As Sir Wm. Stokes so well pointed out, the mortality from pylorectomy is so great by adopting the method at present practised, and this mortality is due in a large majority of cases to shock caused by the prolonged operation upon a patient already much reduced by disease, that I think any suggestion to shorten the operation and to render it less dangerous may be welcome to the profession.

Secondly, as to the best mode of treating pyloric carcinoma in cases unsuitable for pylorectomy: I have not the slightest hesitation in saying that gastro-enterostomy by means of approximation plates should be practised. This operation has been performed in this country, since my experimental researches were published, four times; once by Mr. Clarke, of Huddersfield, once by Mr. Stansfield, and twice by myself; in three of these cases the operation was successful; and in the fourth case, which died six days after the operation, the union of the jejunum with the stomach was everything that could be desired, the man dying purely from exhaustion, pointing to the importance of feeding patients, after the operation, early with peptonised milk, etc.

I hope shortly to bring my cases before the profession with some practical remarks as to the method of operating.—I am, etc.,

Upper Wimpole Street. FRED. B. JESSETT.

NAVAL AND MILITARY MEDICAL SERVICES.

LORD CAMPERDOWN'S COMMITTEE.

SIR,—During the time the Committee appointed to consider the conditions of service of medical officers of the Army was at work I received upwards of 420 letters from officers on the subject. It was impossible for me to reply to these gentlemen while the matter was still under discussion, but I take this opportunity of sincerely thanking them all for the valuable information they so kindly placed at my disposal. Now that the evidence taken by the Committee has been published these officers will, I think, find that nearly all the points which they raised have been brought to the notice and have been considered by the Committee. It has been said because Mr. Stanhope has declined to sanction the important recommendations of the Committee that its work is practically a complete failure. I do not think this is a sound conclusion. It seems to me a point has been gained by the Committee in that they have placed on record the reasons given by our military authorities for refusing medical officers the rank and status of military men. And further, after going carefully into the whole subject and with the evidence of the military authorities before them a Parliamentary Committee has decided in favour of army surgeons being granted clearly defined rank and titles, together with other privileges for which they have long contended. My conviction is that every medical officer interested in this matter should carefully study their position as it is laid down for them in the evidence taken by Lord Camperdown's Committee. In this way they will come to realise the difficulties they have to surmount, and the recognition of these obstacles will be the first step towards overcoming them. Whenever this end is gained and the medical officers of the Army obtain for themselves military rank and status their service will become one of the most efficient, as it is an indispensable, department of the British Army.—I am, etc.,

Grosvenor Place. N. C. MACNAMARA.

A CORRESPONDENT observes: Surely the Commissioners made their report under misapprehension, for they actually propose military titles to men who, according to the highest military officials, are only civilians, on whom military titles would, say they, be "absurd," "supremely ridiculous," "laughable," etc. Lord Wolseley distinctly implies that medical officers are "not soldiers." Sir Ralph Thompson compares them to "outsiders;" the Duke classifies them with the strictly "non-combatant" portion of the army; General Buller accuses them of wishing to adopt "the titles of a profession not their own." Such statements may be an outrage on common sense and the most elementary grounds of fairness, but they are doubtless consonant with sound War Office philosophy.

*** There is much force in our correspondent's sarcastic reflections. What need for the War Minister to appoint a commission to report on the "pay status, and service" of only so-called "officers"? His own officials could hav told him at first hand they were merely civilians.

WHY MEDICAL OFFICERS DESIRE ARMY RANK.

X. writes: Several of the officers who gave evidence before the Camperdow Committee stated that they were unable to understand why medical officer of the army desired a more recognised status or rank than they now po sessed when their legitimate function was only "to heal or to cure." Wit your permission I will try to answer that difficulty.

On page 1 of the *Field Service Manual for the Medical Department of th Indian Army*, an official book published by the Government of India, par graph 5 runs thus:—"The principles of medical organisation on field servic are to provide for the immediate requirements of the fighting ranks in fron and relieve them of all non-effectives; to transfer the sick and wounded i the direction they must eventually go—namely, to the rear—and to apportio establishments and equipment to the hospital requirements and service as whole."

Such duties as are here described fell to the medical department in the la campaign in Egypt. To express these duties in other words, when an offic or soldier nowadays falls out of the fighting line, it is here laid down b authority that the Medical Department is not only to attend to his imm diate wants, but to arrange for his transport, feed him, and convey him fro where he falls out in front to the army's base. These are the reasons why it necessary to invest medical officers with a definite, well-understood rank. afford simply professional aid, it might be argued, needs no military statu but if the sick or wounded officer or soldier is to be conveyed and fed, and the arrangements for these duties are to be made by the medical offic throughout a long line of communications between the extreme front a the base, then it seems obvious that only those holding military rank cou undertake such duties with an army operating in an enemy's country. Me cal officers, in carrying out such responsibilities, are necessarily brought in contact with all ranks and departments of the army under the pressure active service. It is quite certain, therefore, that unless the medical office military rank is recognised, his requisitions and requirements will not me with the attention that such demands coming from officers holding milita rank would. This was proved by experience in Egypt, and is alluded to the answer to Question 542 of the evidence of the Camperdown Committee published in the JOURNAL of April 5th.

It is inconceivable that any body of civilians could carry out the duti mentioned in the commencement of this letter under the circumstances war. If this is conceded, it follows that military officers are necessary f the purpose, and as these duties are now laid upon medical officers, it follo that medical officers must be invested with army rank, however much command might be limited, and it is the recognition of this rank that me cal officers now ask for solely to enable them to carry out efficiently t duties that the modern requirements of war exact from them.

THE DOCTOR'S POSITION.

N. writes: The following conversation was not long ago overheard in a mess Bombay between the two regimental officers:—"Did you see the *Gazette* day? A doctor has got the Distinguished Service Order in Burma "What?" replied the second, "a doctor got the Distinguished Service Ord Then it's not worth having." This shows the contempt in which the te "doctor" is held. Substantive rank is now imperative, and it is necess we should have the power of trying our own men by courts-martial as well being called upon to sit, as we sometimes are, on regimental courts-mart In civil life many people have the idea that the "doctor," as he is dubb never sees a shot fired, and have no notion that we equally share the dang of the battlefield with others.

THE HITCH IN BURMAH.

SERIOUS COMPLAINTS.

THE *Englishman*, in an article complaining of the defective commissariat connection with the Chin-Lushai expedition, says: "The reports wh reach us from the Burmah side are scarcely credible, revealing as they d state of affairs which con be compared to nothing short of the scandals of Crimea. As we know, the supplies of quinine and arsenic gave out—an pardonable occurrence in a fever-haunt like the Chin country—and at same time the tinned provisions are alleged to have been in such a tain condition as to constitute a serious danger to the health of the troops. portion of the tins bore the date 1877, while a still larger quantity are sai have been in store since the time of the Russian scare. Meat, vegetables, even sugar are described as in many cases wholly unfit for human food. I satisfactory, however, to learn that the tea, which was from Assam, wa excellent quality, and was highly appreciated in camp."

*** The above serious complaints are brought by the Calcutta *English* and we trust are exaggerated, but they should be inquired into. In th days, when the military authorities seem bent upon reducing the med department to pre-Crimean impotence, it is necessary to see where every h comes in.

NON-COMBATANTS.

RANK writes: Some important questions in the circular of the Royal Colleg Surgeons in Ireland are, I know, not understood either by the public even members of the House of Commons. In his evidence, His Royal H ness falls back on his "military instincts," from which he fails to underst how a doctor can grasp any point whatever outside of his own profes although he admits the regulations call upon him to exercise military mand, even as a non-combatant. Now, how is this latter term understoo the service? Let me give two instances in illustration from the station w I am now serving.

There are two officers wearing the badges of majors, one in the Army vice Corps and one in the Medical Staff; both have, as it happens, passe the law examinations of the Incorporated Law Society, and been called t

bar of their respective Inns of Court. Till quite recently neither was held to be qualified as a non-combatant to sit as president of a court-martial; but, by a mere mandate, the Army Service Corps officer was lately declared eligible to sit as such by being supposed a combatant. The "military instincts" before quoted still, however, hold the surgeon-major to be ineligible, although actually qualified by his legal position to sit as a judge in the High Court.

The other instance is of a social character. There is a station mess for all corps; the surgeon-major is the second senior in it, but, being a non-combatant, his name figures in the mess books under the last joined boy subaltern. Can it be wondered medical officers refuse to acquiesce in such absurd anomalies?

MEDICAL STAFF DEFENCE.

S. urges the institution of a fund and a committee (say of three) to diffuse far and wide through the medical schools, members of Parliament, and the public at large information how medical officers have been refused that and reason. Probably a day's pay from all ranks would be sufficient, the committee to be auxiliary to the British Medical Association and JOURNAL. Nothing will be done while candidates ignorantly and unwittingly come forward for the service, of the harsh and inequitable conditions of which they know nothing.

MEDICAL OFFICERS AND DRESS.

TO sends us some severe comments "upon the slackness, untidiness, and want of smartness in dress noticeable among a certain proportion of the officers of the Medical Staff." As, himself, one of them, he sees the fact with deep regret; it extends both to uniform and plain clothes. Both seniors and juniors are in that respect equally sinners, and he knows it is a subject of gleeful remark in quarters where it is a prime object to decry the medical officer. He calls for the reproach to be taken away.

*** We would fain hope this matter is not so black as our correspondent paints it; but assuming he has grounds for his strictures, we sincerely think they should be laid to heart. In every profession and walk of life there are sure to be certain ill-dressed and untidy individuals; but in a body like the army, which plumes itself on smart appearances, it is incumbent on all to conform; especially are medical officers in the present crisis of their fortunes called upon to be soldierly.

THE NAVY.

The following appointments have been made at the Admiralty:—GEORGE L. KER, Surgeon to the *Lion*, May 2nd; CYRIL J. MANSFIELD, Surgeon to the *Sage*, May 2nd; JAMES J. WALSH, Surgeon to the *Wildfire*, May 2nd; HERBERT McIVOR, Surgeon to the *Excellent*, May 2nd; CHRISTOPHER PEARSON, Staff-Surgeon to the *Warspite*, for Royal naval sick quarters at Esquimalt, May 3rd; R. MILLER, Surgeon to the *Mosquito*, May 5th.

MEDICAL STAFF.

SURGEON G. K. S. BIGG, F.R.C.S.Edin., has retired from the service, which he entered March 6th, 1880, receiving a gratuity. He served in the Egyptian campaign in 1882, and has the medal with clasp and Khedive's bronze star for that campaign.

The Christian names of Surgeon FAYLE are ROBERT JAMES LEECH, and not as stated in the *Gazette* of March 10th, 1882. (In the *Gazette* referred to he is described as ROBERT JAMES FAYLE.)

Surgeon C. H. MELVILLE, M.B., who is serving in the Bengal command, is appointed to the civil medical charge of Muttra, in addition to his military duties, from March 6th.

Surgeon J. FAYRER, M.D., also serving in Bengal, is appointed to the civil medical duties of Muttra, in addition to his military duties, from March 12th, on Surgeon Melville.

Surgeon G. CREE, serving in the Bengal command, has leave of absence for six months on medical certificate.

Surgeon W. D. A. COWEN, on arrival from England, is directed to do duty in the Madras district.

INDIAN MEDICAL SERVICE.

W. FORSYTH, civil medical officer of Beerbhoom, is appointed to act as medical officer of Gya during the absence on leave of Surgeon-Major R. D. Gray.

Surgeon R. J. MACNAMARA, M.D., Bengal Establishment, officiating civil surgeon, is transferred from Sealkote to Goojerat.

Surgeon H. HENDLEY, Bengal Establishment, officiating civil surgeon, is transferred from Goordaspore to Sealkote, relieving Surgeon R. J. Macnamara.

Surgeon C. MALLINS, M.D., Madras Establishment, medical officer 1st Cavalry Hyderabad Contingent, has leave of absence for one year.

Surgeon W. H. KARNEY, Madras Establishment, doing duty in the Secunderabad district, is ordered to do duty in the Madras district.

Surgeon S. E. PRALL, Bombay Establishment, has leave of absence for four months on medical certificate.

The Government of India have refused to sanction the appointment of Deputy Surgeon-General DONNELLY to the post of Surgeon-General with the Government of Madras, which has just fallen vacant by the retirement of Surgeon-General Bidie, and which was announced in the JOURNAL of April 26th. The appointment assigned has reference to the age limit, Dr. Donnelly being now in his last year.

THE VOLUNTEERS.

ANDREW FREELAND FERGUS has been appointed Surgeon to the Clyde Battalion of the Royal Naval Artillery.

HENRY JOHN MACKAY, M.B., is appointed Acting-Surgeon to the 2nd Volunteer Battalion Wiltshire Regiment (late the 2nd Wiltshire).

Acting-Surgeon T. F. MACDONALD, M.B., of the 1st Dumbartonshire, is promoted to be Surgeon.

WILLIAM JAMES SAVEALL is appointed Quartermaster to the Maidstone Division of the Volunteer Medical Staff.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SUPREME COURT OF JUDICATURE: COURT OF APPEAL.

(*Before the* MASTER OF THE ROLLS, Lord Justice FRY, *and* Lord Justice LOPES).

PARTRIDGE *v.* GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

THIS was an appeal from the judgment of Mr. Baron Huddleston at the trial of the action. The action, it will be remembered, was brought for unlawfully and maliciously removing the plaintiff's name from the *Dentists' Register* kept by the defendants under the Dentists Act, 1878. It appeared that in July, 1885, the College of Surgeons in Ireland withdrew the plaintiff's diploma on the ground that he had advertised in connection with his profession, and notified this fact to the General Council of Medical Education and Registration. This latter body, upon the ground that the plaintiff had lost his qualification, on June 2nd, 1886, ordered his name to be erased from the *Dentists' Register*. A *mandamus* was granted by the court directing the Council to restore the plaintiff's name to the *Register* on the ground that they had not held any inquiry, and had not acted under Sections 13 and 15 of the Dentists Act, 1878. The case is reported in 19 Q.B.D., 467. The plaintiff's name was accordingly restored to the *Register* on September 18th, 1887, and the plaintiff brought this action to recover damages for the wrongful erasure of his name during this period. The General Medical Council subsequently held an inquiry under Section 15 of the Act, and on November 25th, 1887, ordered the plaintiff's name to be removed from the *Register*. The action was tried before Mr. Baron Huddleston without a jury, and he held that the action was not maintainable without evidence of malice, and gave judgment for the defendants. The plaintiff appealed.

Having heard Mr. Waddy, Q.C., and Mr. Lyon for the plaintiff, and Mr. Reid, Q.C., and Mr. Muir Mackenzie for the defendants, the Court dismissed the appeal.

The MASTER OF THE ROLLS said that the case was being tried with a jury, when, for a reason which he could never understand, the case was left to be tried by the judge without the jury. That was equivalent to treating the case as if the jury had never been there, and the question whether or not there was evidence of malice to go to the jury could not arise. The judge must have found, and must be taken to have found, that there was no malice. No one could possibly suggest any malice. There was, therefore, no malice in fact. Then how did the defendants fulfil the duty imposed upon them by the statute? He would undertake to inform them how they ought to act when inquiring whether a name should be erased from the *Register*. They ought to make careful inquiry whether there was any ground for doing so, and they ought to communicate with the person against whom any accusation was made and ask for his explanations. He did not go so far as to say that they ought to hear the witnesses, if there were any, in the presence of the accused, but they ought to communicate the evidence to him and ask for his explanations upon it. They ought to do this before deciding to erase a name. It was quite clear that the defendents had not done in this case what they ought to have done, and the Court had granted a *mandamus* to reinsert the plaintiff's name in the *Register*. But it was quite a different question whether an action would lie against the defendants for having acted wrongly. The duties were imposed upon them by the Dentists Act, 1878, and they were intending to act under the Act. Assuming that they were acting under Section 13, then, in his opinion, they were acting in a judicial capacity. It was said that they intended to act under Section 11, and not under Section 13. In his opinion, if they intended to act under the Act, and erroneously acted under the wrong section, they would not be liable if the act was not merely ministerial. But assuming that they acted under Section 11, was their act a merely ministerial act? He thought clearly not. In his opinion, the giving an order to the registrar under that section was not a merely ministerial act, but depended upon the exercise of their discretion. This proposition seemed to him to be true—that where a public duty was imposed upon persons by statute, and that duty consisted in the exercise of a discretion, the act done in performance of that duty could not be said to be merely ministerial, but must for the purposes of protection be considered as judicial. The protection could only be got rid of by showing that the act was ministerial. The protection, therefore, existed in this case, there being no malice, and the appeal must be dismissed.

LORD JUSTICE FRY agreed that where there was a public duty imposed by statute, and a discretion conferred in the exercise of that duty, the duty was a judicial and not a ministerial duty. The scheme of the Dentists Act was that the registrar should perform the ministerial acts, and the duties of the General Council with respect to the registrar were of a judicial character. The General Council in this case seemed to have considered that the *Register* must automatically follow the qualification, and that they had power to make such corrections by giving an order to the registrar to that effect. They were wrong, but they were exercising a discretion in giving the order to the registrar which the statute conferred upon them. The General Council had no duties in connection with the *Register* which were not discretionary in their nature. In his opinion, for these reasons the General Council were acting in the exercise of a discretion imposed upon them, and were therefore acting judicially. The action, therefore, would not lie without proof of malice.

LORD JUSTICE LOPES concurred.

THE QUESTION OF VESTED INTERESTS IN PATIENTS.

O. H. H. writes: I am in practice a couple of miles from the centre of S———. On March 23rd last a new neighbour called upon me in the surgery for some medicine for himself. He informed me that he was an old patient of Dr. A.'s, but that it was so far for him to go he preferred someone nearer. It was a fresh case of a slight ailment, so I took it. On April 23rd I was called in to see the son, who was suffering from pneumonia. (Nothing was said about Dr. A., nor had his name been mentioned since the first visit of the father to me.) On the fourth day (Saturday) the boy was very bad, and his condition was very grave. The father was naturally anxious, so I proposed a consultation with the old medical man, which was agreed to. I accordingly wrote to Dr. A., giving him some particulars of the case, and asking him to come that night. The messenger returned with the intimation that he was too busy and could not come that night, but would do so the next day. No time was fixed by him, so I waited in for him the next day until 12 o'clock, and as he did not come I was obliged to start off for my other work. Whilst I was out

the enclosed note (No. 1) came from him per messenger, and, as I afterwards learnt, one also for the patient's father. On reading mine, I at once went to the latter and told him I would not meet Dr. A. after the way he had behaved, but offered to throw the case up if they wished, which was at once negatived. On Monday I wrote him letter No. 2, and I was told, on visiting the house, that Dr. A. had sent another message at 5 on the Sunday afternoon, offering to come, but his services were declined. This was unknown to me at the time.

This afternoon I received note No. 3. I should like your opinion as to whether (1) I have been guilty of any discourteous or unprofessional conduct, and (2) have attempted to filch Dr. A.'s patient?

The following are the enclosures referred to:—

No. 1.

"Dear Sir,—The ——— family have been old patients of mine, and I was attending the son, now ill, up to March last. I have written the father to say that, should he wish me to meet you in consultation, I will do so.

"Yours faithfully, ———.

"A. H. H., Esq."

No. 2.

"Dear Sir,—I was not aware, until you told me in your note, that you had been attending the ———'s so recently as March last, or in fact had ever visited them since they came up here. However, that has nothing to do with the present case, as it was and is a decided fresh illness from any there has been before, so there could not possibly have been any prior claim on your part as you seem to insinuate. I was requested to visit and attend, and your name was not mentioned at the time, though I knew you had attended the family previous to their coming up here. I have been referring back, and find my first entry for them is about a month ago.

"After your discourteous behaviour as a medical man and a gentleman, I have declined to meet you, and, as far as I am concerned, your services will not be required.

"Yours truly, ———.

"Dr. A."

No. 3.

"Sir,—In reply to your's of 28th inst. I shall consider the advisability of bringing the matter and your letters before the notice of the profession.

* * * *

"To Mr. H., M.R.C.S.

"I was attending the son up to March 19th, 1890."

*** The above case well illustrates a phase of the indisputable right of a patient to change his medical adviser diverse from that on which we commented in the JOURNAL of April 26th (p. 986), in reference to which we would remark that, under the circumstances related, and especially in view of the specific and legitimate reason assigned by the patient for the desired change of doctor, we are clearly of opinion that Dr. A. had no just cause of complaint against Mr. H. for assuming charge of the patients in question. At the same time, while making every allowance for Dr. A.'s natural feeling of annoyance at being superseded, we cannot but hold him to blame for the undesirable delay that took place in so grave a case from an inadequate sense of his obligation to the patient and his anxious family, irrespective of the lack of courtesy to a brother practitioner in omitting to send a written reply to his explanatory notes or otherwise arranging an early hour for the solicited consultation,

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FAVETE LINGUIS.

J. M. C. AND J. S. W.—Whatever may be the true cause of the regrettable professional misunderstanding that exists between our correspondent and Mr. W., nothing can, in our opinion, justify the cynically discourteous appellation of "snob," as applied by the latter in his note of April 16th to a brother practitioner. Such reprehensible language is, we need scarcely remark, more in accord with that of the illiterate than the cultured classes of society.

In view, moreover, of the much-to-be-regretted personal relations at present existing between the disputants in question, and the determination of the one to decline meeting the other in consultation (a decision that, in the interests of suffering humanity, is always to be more or less deprecated), we fail to see that any practical good can accrue from our further intervention in the matter—at all events, until a more fraternal feeling is evinced, and impels them to consider the general interest of the public and of the profession, rather than their own personal ends.

With reference to the "not for publication" letter, we are equally at a loss with our correspondent to comprehend how it became known to other than himself.

ANTIPUFF.—The paragraph in the *Newbury Weekly News* is no doubt in very bad taste. It was probably the work of an injudicious friend.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, May 2nd.

ON the motion of the EARL OF MEATH, a Bill to provide for the better protection of children was introduced and read a first time.

HOUSE OF COMMONS.—Thursday, May 1st.

Leprosy in Upper Burmah.—Sir J. GORST, in reply to Mr. WEBSTER, said that no information had reached the Secretary of State as to the prevalence of leprosy in Upper Burmah; but efforts were being made to establish, with Government aid, a leper home at Mandalay, and by the Leper Bill it would become possible to segregate lepers in Upper Burmah, and for local bodies to assign funds for the maintenance of leper homes.

Letters from Lunatics.—Mr. W. CORBET asked the Secretary of State for the Home Department whether all persons having charge of single patients alleged to be mentally affected, were bound, by the Act of 1889, to transmit all letters of such patients to the Home Office unopened; and whether it was the custom to reply to or acknowledge the receipt of such letters, and if not, what guarantee had the writers that the requirements of the Act were observed, or how were they to know whether their communications had or had not been forwarded.—Mr. MATTHEWS said the duty of forwarding such letters unopened to a Secretary of State was laid down by section 41 of the Lunacy Act, 1890. It was not the custom for the Secretary of State to reply officially to such letters. When a letter was received from any lunatic which was tolerably coherent it was at once referred to the Commissioners in Lunacy for special inquiry and report, and the action which was taken thereupon by the Commissioners was held to be a sufficient answer to the letter of the patient, and a guarantee that his complaints had been attended to.

Friday, May 2nd.

Drink and Lunacy.—Mr. W. CORBET asked the Secretary of State for the Home Department whether he was aware that the numbers of registered lunatics in Great Britain and Ireland had increased from 55,525 in 1862, to 111,979 in 1889; whether he had observed from the reports of the Lunacy Commissioners that, notwithstanding the great increase of asylum accommodation annually provided for a long series of years, a large amount of additional accommodation was urgently required; had he any evidence to show that drink contributed a large annual percentage to the number of lunatics; and would the Government take into consideration the adoption of some means of dealing with the subject.—Mr. MATTHEWS said he was not in possession of the exact figures for Ireland, but the number of registered lunatics in England and Wales were: January 1st, 1862, 41,129; January 1st, 1889, 84,340. He was informed by the Lunacy Commissioners that extra accommodation was required in some counties, but in many others it was sufficient to supply probable future requirements for some years to come. Table 34 of the 43rd Report of the Lunacy Commissioners showed that in the cases of 18,290 out of 136,478 persons admitted into institutions for the insane, intemperance in drink was stated to have been the cause, or one of the causes, of insanity. The Government would always be ready to consider any suggestions for dealing with this subject.

Monday, May 5th.

Lead Poisoning at Sheffield.—Dr. FARQUHARSON asked the President of the Local Government Board whether the attention of the Board has been directed to the extensive prevalence of lead poisoning in Sheffield and the surrounding districts, due to the drinking water, and affecting about 1,000 persons, as reported in the JOURNAL of April 26th; and whether he proposes to order an inquiry by the Board into the circumstances, and the best means of remedying them.—Mr. RITCHIE said he had received a communication from the Town Clerk of Sheffield, from which it appears that a committee, which included Professor Dewar, Dr. Bristowe, and Mr. Hawksley, was appointed by the Town Council to consider the extensive prevalence of lead poisoning in Sheffield and the surrounding districts due to the drinking water, and that the remedy recommended by that Committee had been adopted by the Town Council. The results as regards the improvement of the water supply were stated to have been decidedly beneficial, and the Town Council hoped that a complete remedy would be provided.

Rabies and the Muzzling Order.—Mr. CHAPLIN, in answer to questions from Mr. LEES, Mr. H. KNATCHBULL-HUGESSEN, and Mr. W. AINSLIE, said the returns of deaths from hydrophobia since the muzzling order came into force were not at present in the hands of the Board of Agriculture. But he was glad to say, with regard to rabies, that in every county which had been placed under the regulations, and in the country as a whole, there had been a marked diminution in the number of outbreaks since the passing of the order. For instance, in 1889, for the last two quarters of that year, there were 133 cases in the third and 81 cases in the fourth quarter reported to the Board. For the first quarter of the present year, they had been reduced to 39, and for the month of April there had only been 7 cases throughout England, as compared with 11 for March, 14 for February, and 14 for January of the present year. In the metropolis and the West Riding, although there had been a large diminution, cases were still of constant occurrence, and there had also been comparatively recent outbreaks in Hampshire and West Sussex, in which latter county a muzzling order had been imposed by the local authority. With regard to Lancashire and the home counties of Essex, Hertfordshire, Surrey, and Kent, so far as these were not included in the metropolitan district, no cases had been reported for a considerable period, and if the reports continued to be as favourable in the case of the home counties as they had been of late, he should hope to be able to modify the order, if it was not suspended, at no distant time. Since the order had been enforced, of the rabid dogs seized in public places nine were properly and securely muzzled, and were thus prevented from doing mischief.

Metropolitan Health Bills.—Mr. W. H. SMITH, in answer to Mr. J. ROWLANDS, said the Government hoped to be able to introduce the Bills dealing with the consolidation and amendment of the laws with respect to public health in the metropolis, and to the dwellings of the working classes, shortly before Whitsuntide.

OBITUARY.

ALFRED LOCHÉE, M.D., F.R.C.P.

WE regret to announce the death of Dr. Lochée, a past President of the British Medical Association, and a much respected member of the profession, whose loss will be much felt in the city of Canterbury, where many years of his active life were spent. The deceased gentleman was born in London on March 8th, 1811, and had therefore completed his seventy-ninth year when he died on May 2nd, 1890. His father, John Lochée, was a barrister, his grandfather, Lewis Lochée, was Master of the Military Academy, Chelsea, and author of works on military mathematics. Dr. Lochée studied medicine in London at the Middlesex Hospital, a pupil of Sir Charles Bell and Sir Thomas Watson, and took the degree of M.D. "insigni cum laude" at Heidelberg in 1835. In 1838 he was admitted Member, and in 1848 elected Fellow, of the Royal College of Physicians. In 1838 he was appointed Physician to the Kent and Canterbury Hospital, and since that date, thou

vice offered the post of Physician to the Middlesex Hospital, had red in Canterbury continuously, where he had taken a strong terest in all that concerned the general welfare of the city and e neighbourhood, and been universally respected and beloved.

Dr. Lochée married in 1846 the eldest daughter of the late Mr. M. Taswell, of St. Martin's Priory, Canterbury, who survives m, and his family consists of four sons and two daughters. His lest son, the Rev. L. T. Lochée, is Rector of Barnes. Dr. Lochée as a strong Conservative in politics, and years ago was local chair- an of the party. He was throughout his life a most devoted d attached Churchman. In the busy days of his life, when he as full of work and his practice was very wide and extensive, it as the rarest thing for him to miss attending church upon a nday. All Church societies found in him an active supporter, d the clergy of Canterbury knew well that they would always ve his help. He rejoiced in the founding of St. Augustine's ssionary College in 1848, and as soon as it was established, inking that some medical knowledge was required in future ssionaries, offered his valuable services, which were thankfully cepted. From 1850 to 1877 he lectured twice a week to the idents of St. Augustine's, simply for the sake of helping on the urch's cause, and neither having nor desiring any remuneration yond the thought that he was devoting his medical skill and owledge to the highest of all ends. The Right Rev. Dr. achan, now Bishop of Rangoon, who obtained the gold medal the University of Edinburgh, began his medical education der Dr. Lochée, and many besides have been the testimonies eived from various parts of the world as to the value of the dical knowledge received from him.

Dr. Lochée filled the distinguished position of President of the itish Medical Association in the year 1861. He resigned the st of Physician to the Kent and Canterbury Hospital in 1884. s eyesight began to fail at the beginning of last year, and for last few months he had been unable to read or write. He had evere attack of influenza at the beginning of April, and though a time he seemed to be gaining strength, a relapse came with er complications, and he passed away early on the morning of y 2nd.

t Canterbury Cathedral on Sunday, May 4th, Canon Holland the morning, and the Dean in the afternoon, spoke of the mple of his life, and of the universal mourning occasioned ough the city by his death. His funeral at St. Martin's on sday, May 6th, was attended by a large gathering of people of classes.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

. C. H. RALFE and Mr. H. W. Page have been appointed addi- al Examiners for the Third M.B. Examination, on account of large number of candidates. Dr. Corfield, Dr. Stevenson, Dr. ham, and Dr. Seaton have been appointed Examiners for the oma in Public Health in the ensuing academical year.

UNIVERSITY OF LONDON.

lection of Examiners.—At the last meeting of the Senate the miners for 1890-91 were elected. The following are the Ex- ners in the subjects for the medical degrees:—Practice of icine: William Cayley, M.D., and Professor F. T. Roberts, ., B.Sc. Surgery: Professor Christopher Heath and H. G. se, M.S., M.B. Anatomy: Professor John Curnow, M.D., and essor Alexander Macalister, M.D., M.A., F.R.S. Pnysiology: . Langley, M.A., F.R.S., and Professor E. A. Schäfer, F.R.S. etric Medicine: C. J. Cullingworth, M.D., and Alfred L. Gala- M.D., M.A. Materia Medica and Pharmaceutical Chemistry: erick Taylor, M.D., and Professor N. I. C. Tirard, M.D. nsic Medicine: Professor G. V. Poore, M.D., B.S., and Thomas enson, M.D.

eeting of Convocation.—The annual meeting of Convocation be held on May 13th, when the annual committee will be ed; Dr. Tirard, Dr. Hale White, and Dr. Woakes are new can- es in the faculty of medicine. The usual report of the al committee will be presented. It deals with various sub- of interest to graduates which have occurred since the last al meeting: the proposed modification in the examination for the degree of Bachelor of Surgery; the desirability of obtaining, in place of the annual Parliamentary grant, a fixed annual grant, which would give the University complete control of its income; and the contemplated extension of the University buildings at a cost of £9,500, are among the topics dealt with. The resignation of three members of the Senate—the Dean of Westminster, Sir William Jenner, and Mr. Thiselton Dyer—has caused three vacancies, of which two have been filled up by the appointment by the Crown of the Rev. H. A. Holden, LL.D., and Sir A. K. Rollit, LL.D., M.P., while one remains to be filled by selection from a list to be nominated by Convocation.

The Proposed Reconstitution of the University.—The Special Committee, appointed as long ago as December, 1885, to confer with the Senate as to proposed alterations in the constitution of the University, will also present a report to this meeting of Convocation. This report reviews the various steps in the long series of negotiations between the Senate, Convocation, the Royal Colleges of Physicians and Surgeons, and University and King's Colleges. Special reference is made to the "suggestions towards a possible scheme of co-operation between University and King's Colleges on the one hand and the University of London on the other" which were made by Professor Carey Foster, and forwarded to members of the Senate and of the Special Committee. These suggestions, it is pointed out, were based upon the scheme provisionally adopted by the Senate in November 1889, but introduced a new feature, which was in substance that in the case of constituent colleges the college courses of instruction, so far as they were to form the basis of University examination, should be in the first instance approved by the Senate; and that, subject to such approval, the examinations (with the exception of the Matriculation Examination) should be conducted by the college professor or teacher in each subject, acting in conjunction with a second Examiner appointed by the Senate. Passing, then, to the amended scheme adopted by the Senate on March 12th, 1890, the Committee of Convocation claims that it is owing to its strong advocacy of the claims of the provincial colleges that these colleges, although not distinctly recognised as "constituent colleges," are placed, in the Senate's most recent schemes, in the same position as such colleges in all matters relating to the special facilities for the examination of their students—a privilege of considerable value. The committee further points out that the proposal of Convocation to the effect that the University, in order to become a teaching university, should take powers to establish professorships or lectureships for the furtherance of regular and liberal education and of original research, has been adopted; and, under this provision, it is expected that the University may be able to take under its direction the work now carried on by the London Society for the Extension of University Teaching. One of the concluding passages of the report is apparently addressed as a warning to some of the more ardent and uncompromising champions of the rights of Convocation, and of the maintenance of the general lines of the present constitution. "It is not of course contended," the report runs, "that any one of the schemes which the Senate or their committee have provisionally adopted is exactly the kind of scheme which Convocation would have recommended. But it must be remembered that the Senate have advisedly attached great weight to the suggestions of the Royal Commissioners, and have been desirous not only of meeting the views of Convocation, but also of arriving at some terms of agreement with the two London colleges."

GLASGOW UNIVERSITY GENERAL COUNCIL.

AT the adjourned meeting of the Glasgow University General Council, held under the presidency of Principal Caird, the following motion was carried after a prolonged discussion;—

That in the opinion of this Council every person seeking admission to the University as a public student in any faculty shall be required to pass an entrance examination in (1) English; (2) Latin; (3) Greek or German or French; and (4) mathematics or chemistry, at a standard not lower than that of the higher grade leaving certificate. That the holder of a leaving certificate of the higher grade, or of the honours grade granted by the Scottish Education Department in respect of any subject included in the examination to be instituted for entrance to the university, shall be exempt from such examination *pro tanto*. That the holder of a senior certificate granted under the scheme of the university local examinations shall be exempt from the proposed entrance examination *pro tanto*. That this be a recommendation to the Scottish University Commission.

An elaborate series of proposals by Mr. W. R. Herkless in reference to the reorganisation of the Arts Faculty was remitted to a Committee to consider and report on. It was agreed, on the

motion of Dr. J. K. Kelly, "That in the constitution of the Examining Board or Boards for degrees, while the examiners may be chosen from the teachers of the University, and from such other persons as the University Court may appoint, in no case ought any teacher to have a preponderating voice in the examination of his own students. That this be a representation to the Scottish Universities Commission."

It was further agreed to appoint a committee to prepare standing orders for the Council.

A motion by Dr. Glaister, condemning as unsatisfactory a recent examination in public health, was ruled out of order, and the meeting was then closed.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examinations, were at an ordinary meeting of the Council on May 8th admitted Members of the College, namely:

Ackland, Robert, L.R.C.P.Lond., 9, Duke Street, St. James's
Adkins, Albert James, L.R.C.P.Lond., Greatworth, Banbury, Oxon
Allford, Hen. Geo. Lynwood, L.R.C.P.Lond., 2, Park Vils., Richmond, Surrey
Andrew, Francis William, L.R.C.P.Lond., Arkleigh House, Hendon, N.W.
Baker, Herbert Stainer, L.R.C.P.Lond., 4, Cazenove Road, Stoke Newington
Beadles, Cecil Fowler, L.R.C.P.Lond., 3, Stanley Villas, North Finchley
Bernau, Henry Ferdinand, L.R.C.P.Lond., 121, Tulse Hill, Surrey
Beville, Frederick Wells, L.R.C.P.Lond., Surrey Villas, Kingston-on-Thames
Boultan, Arthur, L.R.C.P.Lond., The Milstone, Horncastle, Lincolnshire
Bramwell, Herbert, M.B.Edinb., 54, Beverley Terrace, Cullercoats
Brown, Alfred, L.K.Q.C.P.I., 96, Earl's Court Road, W.
Buckley, Charles Herbert, L.R.C.P.Lond., 421, Rochdale Road, Manchester
Buncombe, William Dewey, L.R.C.P.Lond., City of London Infirmary, E.
Butler, Charles, L.R.C.P.Lond., 15, Uxbridge Road, Surbiton
Cargill, Lionel Vernon, L.R C.P.Lond., 7, Gloucester Road, S.W.
Carpenter, William Stanley, L.R.C.P.Lond., 179, Portsdown Rd., Maida Vale
Carter, William Robson, L.R.C.P.Lond., 87, Lambeth Palace Road
Christal, Thomas Foster, L.R.C.P.Lond., 8, Park Hill, Richmond, S.W.
Clayton, John Hazelwood, L.R.C.P.Lond., 39, Calthorpe Road, Birmingham
Clowes, John Palphreyman, L.R.C.P.Lond., Finsbury Barracks, E.C.
Coleman, Percy, L.R.C.P.Lond., Trevena, Daca Road, S.E.
Collins, Ethelbert, L.R.C.P.Lond., Hawthorn Lodge, Yapton, Arundel
Cooke, Charles Michael, L.R.C.P.Lond., 33, Hill's View, Barnstaple
Cooper, Ludford, L.R.C.P.Lond., University College Hospital
Craig, William Wallace, L.R.C.P.Lond., Crescent, Shrewsbury
Dauber, John Henry, L.R.C.P.Lond., Coed Helen, Carnarvon
Dickinson, Geo. Frank, L.R.C.P.Lond., Forleigh, Benhill Wood Rd., Sutton
Dudley, George James, L.R.C.P.Lond., Longmore House, Dudley
Earle, Hubert Malins, L.R.C.P.Lond., Middlesex Hospital College
Elliman, Arthur Charles, L.R.C.P.Lond., 48, High Street, Tring
Farmer, Gabriel William Stahel, L.R.C.P.Lond., 26, New Street, Stepney
Fawcett, John, L.R.C.P.Lond., Fernleigh, Westgate-on-Sea
Fincham, Wm. Sydney, L.R.C.P.Lond., 14, Lena Gardens, Hammersmith, W.
Fisher, Thomas Escolme Hervarre, L.R.C.P.Lond., 18, Almeric Road, S.W.
Foster-Foster, Franz Forester, L.R.C.P.Lond., 12, West Parade, Norwich
Fowler, Frank, L.R.C.P.Lond., 5, Copthall, Twickenham
France, Edmund Percival, L.R.C.P.Lond., Children's Hospital, Hackney Rd.
Gann, Thomas Wm. Francis, L.R.C.P.Lond., Claremont, Hayling, Hants
Gilpin, Robert Harrison, L.R.C.P.Lond., 20, Duke Street, Portland Place
Green, James Howard, L.R.C.P.Lond., 142, Shaw Heath, Stockport
Grey, Thomas Campbell, L.R.C.P.Lond., Abbotsford, Weston-super-Mare
Hall, Frederick William, L.R.C.P.Lond., Cambridge Villa, Lewisham
Handfield-Jones, Chas. Ranald, L.R.C.P.Lond., 24, Montague Sq., Hyde Park
Harrington, Andrew Jerome, M.D.Toronto, 6, Hillmarton Road, Holloway
Harris, Frederick Stuart, L.R.C.P.Lond., Avenue House, Southgate
Harrison, Arthur William, L.R.C.P.Lond., 19, Grange Park, Thornton Heath
Hayman, William Speed, L.R.C.P.Lond., 13, Fitzwilliam Road, Clapham
Henstock, John Lea, L.R.C.P.Lond., 17, Granville Square, W.C.
Hodgson, Victor Jas., L.R.C.P.Lond., Corhampton, Elms Rd., Clapham Com.
Hopkins, George Herbert, L.R.C.P.Lond., 37, Cantlowes Road, N.W.
Howell, Arthur Henry, L.R.C.P.Lond., 105, Hanley Road, Crouch Hill, N.
Jaffrey, Francis, L.R.C.P.Lond., Fern Lea, Queen's Ride, S.W.
James, Walter Evelyn, L.R.C.P.Lond., Abucan House, Abucan, Mon.
Kerr, William James, L.R.C.P.Lond., 165, Drake Street, Rochdale
Kershaw, Herbert Warren, L.R.C.P.Lond., Annaberg, St. Albans
Lancashire, George Herbert, L.R.C.P.Lond., 19, York Place, Manchester
Legg, Cyrus, L.R.C.P.Lond., Eastwell, Elms Road, Clapham Common
Liddle, Percy Herbert, M.B. Melb., 15, Torrington Square
Lowsley, Lionel Dewe, L.R.C.P.Lond., Manor House, Newbury, Berks
McKeown, Patrick Wltr. Hughes, M.D.Toronto, Grand Trunk Rlwy.Toronto
Marshall, William Ernest, L.R.C.P.Lond., 10, Abbey Gardens, N.W.
Martley, Francis Charles, L.R.C.P.Lond., 20, Manor Place, W.
Mason, Frank, L.R.C.P.Lond., Jordan Villa, Barnsley, York
Matthews, Sidney Phillip, L.R.C.P.Lond., 13, Montem Road, Forest Hill
Maund, John Hansby, L.R.C.P.Lond., 150, King Henry's Road, Hampstead
Morgan, David Naunton, L.R.C.P.Lond., Cae Glas, Pontypridd, S. Wales
Morris, Henry Cecil Low, L.R.C.P.Lond., Howden, East Yorkshire
Muir, Arthur, L.R.C.P.Lond., Bute Road, Wallington
Murrell, George Frederick, L.R.C.P.Lond., The Elms, Uxbridge Road
Nix, Herbert William, L.R.C.P.Lond., 11, Cornwall Street, S.W.
Odell, Robert, L.R.C.P.Lond., Prince's Avenue, Liverpool
Openshaw, Edward Hyde, L.R.C.P.Lond., 24, Berkeley Square, Bristol
Peachey, Allan Thomas, L.S.A., 39, Albany Street, N.W.
Pearson, Harry Bearson Allen, L.R.C.P.Lond., 25, Battersea Park Rd., S.W.
Pearson, Reginald Spencer, L.R.C.P.Lond., 19, Heywood St., Cheetham, Man.
Powell, Herbert Andrews, L.R.C.P.Lond., 126, Inverness Terrace, W.
Pridmore, Eric Leonard Norman, L.R.C.P.Lond., Brooklyn, Coventry
Radford, William John, L.R.C.P.Lond., 36, Castle Road, Southsea
Richards, Albert Francis, L.R.C.P.Lond., Castle House, Carmarthen
Roberts, Francis Henry, L.R.C.P.Lond., 7, Hanbury Road, Bargoed, Cardiff
Roberts, George Edwin, L.R.C.P.Lond., 33, Huntley Street, W.C.
Robinson, Oliver Long, L.R.C.P.Lond., 34, Upper Leeson Street, Dublin
Robson-Scott, Chas. Geo., L.R.C.P.Lond., Newton, Jedburgh, Roxburghshire
Rouse, Eusebius Rouse, L.R.C.P.Lond., Woodberry Down, Finsbury Park
Rowse, Edwd. Leopold, L.R.C.P.Lond., 32, Marmora Road, Honor Oak, S.E.
Routh, Randolph Hen. Felix, L.R.C.P.Lond., 52, Montagu Square, W.
Rugg, William John, L.R.C.P.Lond., Stockwell Villa, Clapham Road
Sandifer, Henry Stephen, L.R.C.P.Lond., 25, St. Mary's Road, N.
Sarjant, Frank Percy, L.R.C.P.Lond., 416, New Cross Road, S.E.
Shannon, James Webster, L.R.C.P., 20, Bidston Rd., Oxton, nr. Birkenhead
Shaw, Cyril Walrond, L.R.C.P.Lond., 14, Barnpack Terrace, Teignmouth
Smith, Andrew Hallidie, L.R.C.P.Lond., 36, Gloucester Street, S.W.
Smith, Sidney Browning, L.R.C.P.Lond., 37, Trinity Square, E.C.
Smith, William Stephen Montgomery, L.R.C.P.Lond., 2, New Street, St Thomas's Street, S.E.
Snook, Saml. Penny, L.R.C.P.Lond., Osmonderley, Buxton Rd., Weymouth
South, Richard Edward Ernest, L.R.C.P.Lond., New Romney Rectory, Kent
Statter, Henry Bellamy, L.R.C.P.Lond., Old Hall, Snapethorpe
Stephenson, Owen Taunton, L.R.C.P.Lond., Woolston, Southampton
Streeten, Ernest Rock, L.R.C.P.Lond., Kempsey House, Ealing Green
Strouts, Sidney Robert, L.R.C.P.Lond., 13, Burton Road, Brixton
Sykes, Arthur, L.R.C.P.Lond., 86, Gledholt Bank, Huddersfield
Symes, William Legge, L.S.A., West Allington, Bridport
Templeton, Percy, L.R.C.P.Lond., 3, Devonshire Place, W.
Thomas, John Llewellyn, L.R.C.P.Lond., 7, Shardeloes Road, New Cross
Thomason, Richard Henry, L.R.C.P.Lond. 2, Percy Circus, W.C.
Townsend, Arthur Allen Deykin, L.R.C.P.Lond., Leam Ter., Leamington
Trenfield, George Henry, L.R.C.P.Lond., Chipping Sudbury
Wake, Charles Hereward, L.R.C.P.Lond., Dartmouth Park Hill, N.W.
Wale, Malcolm Edward Henry, L.R.C.P.Edin., 18, Priory Road, Chiswick
Walker, Henry, L R.C.P.Lond., Clifton House, Scarborough
Waring, Holbert Jacob, L.R.C.P., 5, Mecklenburgh Street, W.C.
Weber, Frederic Parkes, L.R.C.P.Lond., 10, Grosvenor Street, W.
Whyte, Herbert William, L.R.C.P.Lond., 3, Harvey Road, Blackheath
Williams, Robert James, L.R.C.P.Lond., 23, Alfred Place, W.C.
Wingate, William Warburton, L.R.C.P.Lond., Guy's Hospital
Wood, John Askey, L.R.C.P.Lond., Elmside, Marlboro' Hill, Harrow
Yearsley, Percival Macleod, L.R.C.P.Lond., 50, York Street, W.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The April Examinations for the Triple Qualification in Glasgow have just been concluded, with the following results:—

First Examination.—Of forty-two candidates entered, the following twenty-five passed: A. W. Hall, Scopwick, Lincoln; W. E. Jones, Liverpool; W. Walker, Aberdeenshire; J. E. Proud, County Durham; A. W. Mason, Glasgow; D. B. Ross, Glasgow; R. T. Jones, Hirwain; W. D. Anderson, London; J. Johnston, Derry; T. W. H. Banfield, County Cork; T. W. Bartlett, Southsea; C. H. Andrews, Cape Town; H. J. Van Brockhuizen, Holland; C. W. Roebuck, Glasgow; J. G. M'Coll, Lanarkshire; H. W. Stewart, Tyrone; W. L. Crewsdon, Edinburgh; J. Towart, Glasgow; Jane Boyes, Hamilton; H. R. Wolfe, Glasgow; R. T. Clark, Harrington; T. D. Waddell, Pitlochry; F. H. Humphreys, London; W. Buck, Boston; and J. L. Jones, Llansantffried, Cardiganshire.

Second Examination.—Of fifty-eight candidates entered, the following twenty-five passed: G. Billing, Manchester; R. Owen, Carnarvonshire; J. O'Shaughnessy, Limerick; H. A. Holmes, Manchester; J. A. Wilkie, Armagh; A. S. Jaques, Yorkshire; W. S. Howard, Chicago; W. Hirst, Leeds; C. C. Salmon, Victoria, Australia; O. J. Caregan, Liverpool; F. Mitchell, Newtownards; W. H. Carlisle, Belfast; J. M'Kee, Greenock; T. P. Shearer, Glasgow; R. T. Davies, Cerrig-y-Druidon; F. P. Basset, Dublin; S. J. Bolton, Kilrea; W. P. Willis, St. Louis; J. W. Mackay, Caithness; J. L. Benson, London; D. E. Richards, Pembrokeshire; S. C. Solomon, Calcutta; C. V. Chisholm, Aberdare; C. T. Bowen, Swansea; and W. Buck, Boston.

Final Examination.—Of forty-three candidates entered, the following seventeen satisfied the examiners, and were admitted L.R.C.P.Edin., L.R.C.S. Edin., and L.F.P. & S.Glasgow: W. B. Brodie, Milngavie; A. O. Hibbert, Hanley; A. H. Pearson, Bessbrook, Newry; G. H. Rowlands, Liverpool; R. D. Thomas, Llanfechell, Anglesea; W. J. Anderson, Toronto; M. Rees, Aberavon, South Wales; C. F. Britto, Goa; H. C. Pauli, Redmire; Bedale, Yorkshire; R. H. Gibbs, Melbourne; J. G. Curdie, Kilmarnock; J. Cantley, Dublin; A. J. Nyulasy, New Zealand; C. Martin, Abyssinia; J. E. Gribble, Ballarat, Victoria; T. H. Hughes, Flint, North Wales; and J. Smith, Hull.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.—The following gentlemen having passed the requisite Examinations, have been admitted Fellows of the College during the last quarter:

H. H. Littlejohn, M.D., 24, Royal Circus, Edinburgh; A. Baird, M.B., Maryhill Barracks, Glasgow; A. C. Roper, M.R.C.S.Eng., 21, East Southernhay, Exeter; D. M. Greig, M.B., 86, Nethergate, Dundee, and R. Horsley, M.B., 46, Heriot Row, Edinburgh.

At the March sittings of the Examiners, the following gentlemen, having passed the necessary Examinations, received the Diploma in Public Health of the College:

J. P. Watt, M.B., C.M., 9, Atholl Place, Edinburgh; A. D. Fraser, M.B., Falkirk; A. M. Adams, F.R.C.S.E., Friarsfield, Lanark; J. H. Hall, M.D., Linden House, Alloa; and J. Stiell, M.D., Lochgelly, Fife.

At the April sittings of the Examiners, the following gentlemen passed the First Professional Dental Examination:

J. C. Holland, Huddersfield; H. A. Matheson, Edinburgh; R. N. Hannah, Edinburgh; M. Thomson, Edinburgh; D. Wilson, Edinburgh; and D. S. Shepherd, Edinburgh.

And the following gentlemen passed the Final Professional Examination, and were admitted Licentiates in Dental Surgery:

J. W. Daniels, Tyldesley, near Manchester; J. W. Lloyd, Liverpool; A. Wilson, Glasgow.

At the May sittings of the Examiners, the following gentlemen, having passed the Final Professional Examination, were admitted Licentiates of the College:

W. H. Lee, Birmingham; A. M. Leith, and W. M. Leslie, Ross-shire.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—The following candidates, being registered medical practitioners of the United Kingdom, have recently been successful at their respective examinations for the diplomas and licences of the College:—

Membership.—H. C. Earl, M.B.Univ.Dub., Lic. Med. 1888; N. McI. Falkiner, M.B.Univ.Dub., Lic. Med. 1889.

Diploma in State Medicine.—M. Cheale, Uckfield, Sussex.

Licence to Practise Medicine.—J. Byrnes, Bouree, co. Limerick; A. V. Shine, Dublin; *J. W. Gallagher, Strabane; *W. P. Lee, Kilfinane, co. Limerick; *W. G. Ternan, Dublin; *G. J. Cressy, Havesden, Wallington, Surrey; W. Scowcroft, Cheadle, Cheshire; W. Loynd, Oswaldtwistle, Lancashire.

Licence to Practise Midwifery.—J. Byrnes, A. V. Shine, *W. G. Ternan, *G. J. Cressy, T. O'Riordan, M.D., South Bank, Yorkshire.

* Conjoint Scheme.

KING AND QUEEN'S COLLEGE OF PHYSICIANS AND ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following is a statement of the results of the Professional Examinations held under the Conjoint Scheme during April, 1890:

Results of Examinations, April, 1890.

Examination.	Number Entered.	Number Absent.	Number Examined.	Passed.		Rejected.	
				Number	Per Cent.	Number.	Per Cent.
Professional	18	1	17	13	76.5	4	23.5
,,	36	2	34	15	44.1	19	55.9
,,	36	3	33	16	48.4	17	51.6
,,	26	2	24	9 *3	50 0	12	50.0
Totals ...	116	8	108	56	51.8	52	48.2

* Came up in part of the Examination only.

The undermentioned candidates, having been successful at the Final Professional Examination under the Conjoint Scheme, have been duly admitted as Licentiates in Medicine and Midwifery of the King and Queen's College of Physicians, and have granted the Triplers Testimonial of the Royal College of Surgeons in Ireland:

J. Callanan, Thurles, co. Tipperary; H. Carr, Rathmines, Dublin; R. H. Dreaper, who passed in October, 1889, but was not then of age, Castlecomer, co. Kilkenny; A. J. Kerin, Kinrara, co. Galway; J. I. Kinsella, Rathmines, Dublin; A. MacM. Murphy, Dublin; Eugene Florence Talbot MacCarthy, London, S.E.; A. F. Penny, Rathgar, Dublin; C. V. Vereker, Dublin; R. S. Wayland, Rathmines, Dublin.

HOSPITAL AND DISPENSARY MANAGEMENT.

A NEW FORM OF MEDICAL CHARITY ABUSE.

SIR,—The Liverpool Dispensaries, a charity which gave treatment to 1,545 persons last year, have issued a printed form, headed "Liverpool School Board," for the medical officers of the dispensaries to sign for those sick children who do not wish to attend school. No fee is charged for this, but medicine is sold at one penny per bottle, this giving an income of over £920 last year. I will not at present say anything regarding the selling of drugs by a charity, or of the demoralising competition springing up between the dispensary and the outside chemists.

I wish to ask if this charity is not exceeding its duty and breaking through its trust deeds by issuing these certificates? It is quite evident that many of the managers of medical charities know little or nothing as to whether a medical practitioner is employed or not. These seem to be actuated by the desire to secure *les employés* medical aid, and at the cheapest possible market price.

I do not say anything of the "professional man" who, at one of these dispensaries, treats a case for the fee of one penny, when he knows very well that such a patient can pay two-and-sixpence.

Our so-called and self-styled "charities" are now "extending their business." Many tout for "pay patients" by offering "pay beds" or "pay wards." Others offer medicine, and just charge a sum "to cover the cost." Another introduces a "provident department," while its neighbour offers to visit patients "at their own houses." Pessaries, syringes, etc., are also supplied "at lower than cost price." The British working-man—who is so much looked after, and who has the happy knack of helping himself—is wheedled into paying "one penny a week" by the promise that he will get so many "tickets of recommendation"—not for himself, of course! The guinea subscriber has a number of "tickets of recommendation" dangled before him. Last and latest, the "charities" are to be opened in the evening, so that people who work and make wages may secure "charitable relief!" Evidently Socialism is not only in the air, but in our charities. Query: If the charity committees are so generous in giving away the skill, time, and capital of the profession, why do they not start other charities, as "the bakers' charity," "the butchers' charity," "the lawyers' charity," "the clergymen's charity," and such like—the word Charity being always in large letters, of course? These say that doctors "make a good thing" out of the charities, and so will not trouble about reform. I do not think that they will, however, object to reform. Many will fail to help because they are engaged on other work, but their "silent vote" will be with all earnest workers.—I am, etc.,

ROBERT R. RENTOUL.

Liverpool.

THE "PROVIDENT PRINCIPLE" AT HOSPITALS.

AT the festival dinner of the Metropolitan Hospital, Shoreditch, celebrated in the Whitehall Rooms of the Hôtel Métropole on Tuesday, May 6th, Lord Derby, who presided, in proposing "Prosperity to the Hospital," said there was one abuse of hospitals which he greatly deprecated—the claiming of the free benefits of a hospital by people who could well afford to pay. The letter system, he thought, did not secure the end desired; for of the poor who were most in need of medical assistance, very few indeed were likely to have friends in a position to secure for them the required aid. He considered it better to stimulate a spirit of forethought and independence by adopting the provident principle. It was yet to be seen whether they would entirely succeed, but so far the results were very encouraging. At the last dinner it was announced that 11,000 persons had come under the new arrangement; this year the number had increased to 16,000. In the near neighbourhood no similar institution existed, and there was within a radius of one mile from the hospital a population of 270,000 of the poorer classes. Their experiment, therefore, would be severely tested. He was glad to see that a Committee of the House of Lords was about to sit on questions relating to hospitals. Lord Sandhurst's experiences on the Sweating Commission should stand him in good stead, and he expected great benefit from the Committee.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—At the recent quarterly court of the directors of this Society—Sir James Paget, Bart., President, in the chair—three new members were elected and the deaths of three were reported. No fresh applications for relief were read. It was resolved that £1,343 be distributed at the next Court to the sixty-one widows, fourteen orphans, and three orphans on the Copeland Fund, on the books at the present time. A legacy of £500, duty free, from the executors of the late Mr. Edward Robson Jones, was announced. The expenses of the quarter were £60 11s. It was recommended that Mr. William Fuller, be elected a vice-president, in the place of Mr. J. Gregory Forbes, deceased; and that Dr. Cribb, Dr. Savory, Dr. Pollock, Dr. Roberts, Mr. Willett, and Mr. A. Pearce Gould be elected directors, at the annual general meeting, in the place of the six senior directors who retire by rotation. The annual general meeting was fixed to be held on Thursday, May 27th, at 5 P.M., at 20, Hanover Square, W.

WESTERN MEDICINE IN CHINA.—In a paper by Dr. E. P. Thwing, of the Canton Hospital, recently read before the Academy of Anthropology of New York, it was stated that the Chinese were at length becoming alive to the benefits of Western medicine. There were at the present time sixty mission hospitals in the country, with eighty physicians in attendance, and an effort was being made to establish an asylum for the insane, something hitherto entirely unknown there. Vaccination had also been recently introduced, and was regarded as a blessing. There was a special field for female physicians in China, as the women would suffer almost anything before they would submit to be treated by a man.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FIRST QUARTER OF 1890.

In the accompanying table will be found summarised the vital and mortal statistics of the forty-one sanitary districts of the metropolis, based upon the Registrar-General's returns for the first or winter quarter of this year. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of deaths occurring in the institutions of London among the various sanitary districts in which the patients had previously resided. By this means alone can trustworthy data be secured upon which to calculate reliable rates of mortality.

The 34,795 births registered in London during the three months ending March last were equal to an annual rate of 31.6 per 1,000 of the population of the metropolis, which was below that recorded in the corresponding periods of recent years. The birth-rates in the various sanitary districts showed the usual wide variations, the sex and age distribution of the population differing greatly. In Strand, St. George Hanover Square, Kensington, St. Martin-in-the-Fields, and London City, the birth-rates were considerably below the average; while in Shoreditch, Bethnal Green, Whitechapel, St. George-in-the-East, and Fulham, where the population contains a large proportion of young married persons, the birth-rate showed a marked excess.

The 25,558 deaths of persons belonging to London registered during the quarter under notice were equal to an annual rate of 23.2 per 1,000, which was 0.6 above the mean rate in the first quarter of the ten preceding years 1880-89, and exceeded that recorded in the corresponding period of any year since 1886. The lowest death-rates during the three months ending March last among the forty-one sanitary districts were 16.2 in Hampstead, 17.7 in Kensington, 17.9 in Hackney, 18.2 in St. George Hanover Square and in Lewisham, and 18.7 in Camberwell; in the other districts the rates ranged upwards to 32.5 in Whitechapel, 33.1 in St. Giles, 34.7 in St. Saviour Southwark, 36.8 in London City and in St. George-in-the-East, and 38.8 in Holborn. During the quarter under notice 2,334 deaths were referred to the principal zymotic diseases in London; of these, 1,224 resulted from whooping-cough, 338 from measles, 334 from diphtheria, 182 from scarlet fever, 143 from diarrhœa, 112 from different forms of "fever" (including 1 from typhus, 103 from enteric or typhoid fever, and 8 from simple and ill-defined forms of fever), and 1 from small-pox. These 2,334 deaths were equal to an annual rate of 2.1 per 1,000, which was 0.8 per 1,000 below the mean rate in the corresponding periods of the ten preceding years, 1880-89. The lowest zymotic death-rates among the various sanitary districts last quarter were 0.9 in Hampstead, 1.0 in St. James Westminster and in St. Giles, 1.1 in St. Martin-in-the-Fields, and 1.3 in Kensington and Strand. The zymotic rates ranged upwards in the other districts to 3.0 in Fulham, 3.2 in St. George-in-the-East, 3.5 in Bethnal Green and in Stepney, 3.6 in Shoreditch, 3.9 in St. Saviour Southwark, 4.1 in

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths occurring in Public Institutions, during the First Quarter of 1890.

Sanitary Areas.	Estimated Population middle of 1890.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age
				Births.	Deaths.	Principal Zymotic Diseases.											
LONDON	4,421,661	34,795	25,558	31.6	23.2	2.1	2,334	1	338	182	334	1,224	1	103	8	143	1
West Districts																	
Paddington	113,245	796	647	28.2	22.9	2.5	70	—	17	2	8	42	—	1	—	—	1
Kensington	198,422	1,023	877	20.7	17.7	1.3	66	—	2	7	15	37	—	2	—	3	1
Hammersmith	103,000	766	506	29.8	19.7	2.3	60	—	—	7	13	30	—	2	—	8	1
Fulham	77,530	818	476	42.3	24.6	3.0	57	—	4	17	7	20	—	1	—	8	1
Chelsea	106,694	724	574	27.2	21.6	2.1	55	—	5	7	10	26	—	1	1	5	1
St. George, Hanover Square	87,862	430	398	19.6	18.2	1.5	32	—	9	—	4	12	—	3	—	4	1
Westminster	54,349	439	435	32.4	32.1	2.5	34	—	—	3	4	23	—	2	—	2	1
St. James, Westminster ...	26,940	164	152	24.4	22.6	1.0	7	—	—	1	1	3	—	2	—	—	1
North Districts																	
Marylebone	149,226	1,199	975	32.2	26.2	1.7	63	—	6	4	5	39	—	2	—	7	1
Hampstead	59,537	384	241	25.9	16.2	0.9	14	—	1	1	3	6	—	1	—	2	1
St. Pancras	245,883	1,848	1,456	30.1	23.8	2.0	125	—	21	2	28	61	—	5	1	7	1
Islington	343,184	2,478	1,789	29.0	20.9	1.7	148	—	48	10	18	54	—	8	2	8	1
Hackney	250,078	1,774	1,117	28.5	17.9	1.4	86	—	11	14	13	39	—	4	—	5	1
Central Districts																	
St. Giles	38,698	235	319	24.4	33.1	1.0	10	—	3	—	4	1	—	1	—	1	1
St. Martin-in-the-Fields ...	14,552	77	97	21.2	26.7	1.1	4	—	2	—	—	1	—	—	—	1	
Strand	28,489	138	225	19 4	31.7	1.3	9	—	5	—	—	3	—	—	—	1	
Holborn	29,395	242	284	33.0	38.8	4.1	30	1	6	8	5	7	—	2	—	1	
Clerkenwell	71,402	627	500	35.2	28.1	1.9	34	—	12	2	8	6	—	1	—	5	
St. Luke's	52,000	498	401	38.4	30.9	4.3	56	—	28	4	4	16	—	2	—	2	
London City	35,636	195	327	21.9	36.8	1.6	14	—	4	—	4	3	—	3	—	—	
East Districts																	
Shoreditch	125,284	1,241	874	39.7	28.0	3.6	112	—	17	9	14	62	—	2	—	8	
Bethnal Green	132,815	1,330	883	40.2	26.7	3.5	116	—	18	6	25	57	—	4	—	6	
Whitechapel	66,446	694	538	41.9	32.5	2.5	42	—	8	3	5	19	—	4	—	3	
St. George-in-the-East ...	46,055	466	423	40.6	36.8	3.2	37	—	2	4	3	23	—	2	—	3	
Stepney	58,975	519	447	35.3	30.4	3.5	51	—	8	2	8	24	—	5	—	4	
Mile End Old Town	117,353	1,056	724	36.1	24.7	2.8	82	—	9	3	10	49	—	5	—	6	
Poplar	193,636	1,551	1,083	32.1	22.4	2.4	115	—	9	5	25	67	—	6	—	3	
South Districts																	
St. Saviour, Southwark ...	26,938	253	233	37.7	34.7	3.9	26	—	10	1	1	11	—	—	—	3	
St. George, Southwark ...	60,404	540	463	35.9	30.7	2.4	36	—	3	4	4	23	—	—	1	1	
Newington	125,456	1,098	789	35.1	25.2	1.9	61	—	2	9	11	35	—	1	—	3	
St. Olave, Southwark	14,500	127	89	35.1	24.6	1.9	7	—	—	2	2	2	—	—	—	1	
Bermondsey	90,817	829	540	36.6	23.8	2.1	48	—	18	4	4	16	1	3	—	2	
Rotherhithe	45,068	406	265	36.1	23.6	2.2	25	—	3	—	3	13	—	3	—	3	
Lambeth	294,261	2,449	1,688	33.4	23.0	1.9	137	—	13	13	12	84	—	6	2	7	
Battersea	174,709	1,346	817	30.9	18.8	2.5	110	—	20	3	8	67	—	8	1	3	
Wandsworth	133,542	1,126	727	33.8	21.8	1.9	62	—	1	4	7	41	—	4	—	5	
Camberwell	276,585	1,907	1,293	27.7	18.7	2.2	149	—	4	14	18	106	—	2	—	5	
Greenwich	162,697	1,415	888	34.9	21.9	1.4	56	—	6	3	7	35	—	2	—	3	
Lewisham (excluding Penge)	69,952	434	317	24.9	18.2	1.4	24	—	1	1	5	13	—	2	—	2	
Woolwich	37,326	303	260	32.6	27.9	1.8	17	—	—	2	1	14	—	—	—	—	
Plumstead	82,750	750	421	36.3	20.4	2.3	47	—	2	1	7	34	—	1	—	2	

olborn, and 4.3 in St. Luke's. In the east districts the zymotic ath-rate last quarter averaged 3.0 per 1,000, while in the rest of ndon it did not exceed 1.9 per 1,000. Compared with the pre- ding quarter the fatality of measles and whooping-cough showed increase, while that of each of the other zymotic diseases owed a decline.

Only one death from small-pox was recorded in London during e first quarter of this year. This fatal case belonged to Holborn nitary area. Fourteen small-pox patients were admitted into e Metropolitan Asylum Hospitals during the first three months this year, and 7 patients remained under treatment at the end March last. Measles showed the highest proportional fatality Islington, Bethnal Green, Clerkenwell, Bermondsey, and St. ke's; scarlet fever in Fulham and Holborn; diphtheria in St. ncras, Hammersmith, Poplar, Holborn, and Bethnal Green; and ooping-cough in Camberwell, Plumstead, Bethnal Green, Mile d Old Town, Shoreditch, and St. George-in-the-East. There s no marked excess of "fever" mortality in any of the sani- y districts.

nfant mortality in London last quarter, measured by the pro- tion of deaths under one year of age to births registered, was ual to 143 per 1,000, against an average rate of 137 in the cor- ponding periods of the five preceding years, 1885-89. Among various sanitary districts the rates of infant mortality were vest in Hackney, St. Giles, Chelsea, St. James Westminster, stminster, and Bermondsey; while they ranged upwards in the er districts to 171 in Lewisham, 175 in Woolwich, 176 in St. orge-in-the East, 185 in St. George Southwark, 207 in Holborn, l 217 in Strand.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

E Registrar-General has just issued his quarterly return relat- to the births and deaths registered in England and Wales ing the first or winter quarter of this year, and to the mar- ges in the three months ending December last. The marriage- e showed an increase upon that recorded in recent correspond- quarters, and was identical with the mean rate in the fourth arters of the ten years 1879-88. The birth-rate was consider- y below the average, while the death-rate showed an excess. e mean temperature of the air at the Royal Observatory, Green- h, was 41.4°, and exceeded by 2.5° the average for the corre- nding quarters of 119 years. The mean temperature showed excess in January and March, but was below the average in ruary. The rainfall amounted to 5.10 inches, and slightly ex- ded the average.

he births registered in England and Wales during the three nths ending March last were 226,327, equal to an annual rate 31.2 per 1,000 of the population, estimated by the Registrar- neral to be nearly twenty-nine and a half millions of persons. s birth-rate showed a slight recovery from the unprecedentedly rate in the first quarter of 1889, but was 2.2 per 1,000 below mean rate in the corresponding quarters of the ten preceding rs, 1880-89. The birth-rate during the quarter under notice in several counties ranged from 24 5 in Rutlandshire, 25.4 in sex, 26.4 in Shropshire, and 26.8 in Surrey to 34.7 in Stafford- e, 35.3 in Northumberland, 37.5 in Essex, and 39.9 in Mon- thshire. In the twenty-eight large English towns for which Registrar-General publishes weekly returns the birth-rate last rter averaged 32.1 per 1,000, and exceeded by 0.9 the general lish rate. In London the birth-rate was 31.6 per 1,000, while he twenty-seven provincial towns it averaged 32 5, and ranged n 24.2 in Huddersfield, 26.0 in Brighton, and 26.6 in Notting- to 39 5 in Preston, 40.5 in Cardiff, and 41.2 in Newcastle-upon- e. The births registered in England and Wales during the ter under notice exceeded the deaths by 60,348; this repre- s the natural increase of the population during that period. n returns issued by the Board of Trade it appears that 47,375 grants (including 14,304 foreigners) sailed from the various s of the United Kingdom at which emigration officers are oned; of these, 24,503 were English, 3,168 Scotch, and 5,400 . The proportion of British emigrants to a million of the re- tive populations of the three divisions of the United Kingdom 833 from England, 769 from Scotland, and 1,149 from Ireland. pared with recent corresponding quarters the proportion of gration last quarter showed a marked decline in each of the ions of the United Kingdom.

ring the first quarter of this year the deaths of 165,979 per- were registered in England and Wales, equal to an annual of 22.9 per 1,000 of the estimated population. This death-rate was 1.6 above the mean rate in the first quarters of the ten years 1880-89, and exceeded the rate in the corresponding quarter of any year since 1882. This marked excess in the death-rate last quarter appears to have been principally due to the fatal effects of the recent epidemic of influenza, which was more or less prevalent throughout the country. The very considerable increase in the rate of mortality is the more remarkable since the meteorological conditions of the quarter were not unfavourable to the public health, the mean temperature being considerably above the average; yet the mortality from diseases of the respiratory organs showed a large excess, and the death-rate among persons aged upwards of 60 years was unusually high. Among the urban population of the country, estimated at more than nineteen millions of persons, the rate of mortality during the quarter under notice was equal to 23.5 per 1,000; in the remaining and chiefly rural population of more than ten and a quarter millions the rate was 21.8 per 1,000. The urban rate was 1.7, and the rural rate 1.8, above the mean rate in the first quarters of the eight preceding years. Among the twenty-eight large English towns the mean death-rate was 24.7 per 1,000; in London the rate was 23.6, while in the twenty-seven provincial towns it averaged 25 6, and ranged from 19.1 in Birkenhead, 19.4 in Nottingham, and 19.7 in Leicester to 28.5 in Blackburn, 28.8 in Bolton, 29.6 in Preston, and 33.9 in Manchester.

The 165,979 deaths registered in England and Wales during the three months ending March last included 4,658 from whooping-cough, 2,010 from measles, 1,533 from scarlet fever, 1396 from diphtheria, 1,252 from diarrhœa, 1,094 from "fever" (including typhus, typhoid, and simple fever), and 4 from small-pox; in all, 11,947 deaths were referred to these principal zymotic diseases, equal to an annual rate of 1.65 per 1,000, a rate 0.41 below the average for the ten preceding corresponding quarters, which was 2.06 per 1,000. The mortality from whooping-cough and from diphtheria showed an excess, while that of each of the other principal zymotic diseases was considerably below the average. The deaths referred to small-pox, which had been but 28 during the whole of the year 1889, were only 4 during the three months ending March last. In the Metropolitan Asylum Hospitals, 14 small-pox patients were under treatment during last quarter.

The rate of infant mortality, or the proportion of deaths under one year of age to registered births, was equal to 148 per 1,000, and slightly exceeded the mean rate in the corresponding periods of the ten preceding years, 1880-89. In London the rate of infant mortality was 144 per 1,000, while it averaged 154 in the twenty-seven provincial towns, and ranged from 116 in Portsmouth, 117 in Newcastle-upon-Tyne, and 127 in Birkenhead to 176 in Bristol, 179 in Preston, and 180 in Bolton.

THE SANITARY CONDITION OF BERKHAMSTED.

We referred lately[1] to the report by Dr. F. H. Blaxall, which was recently issued by the Medical Department of the Local Government Board, on the outbreak of diphtheria which occurred at Berkhamsted a few months ago, and affected especially the scholars in the King Edward's Grammar School. Dr. Blaxall's painstaking investigation led him to the opinion that the disease was introduced by some unrecognised case of infectious throat illness at the time of the reassembling of the school in September last, and that the dissemination was due to infected and healthy boys being brought together in the school, the ill-defined throat illness which prevailed at first ending in the course of some weeks in typical diphtheria. It is satisfactory to find that the continuance of sore throat amongst the scholars could not be ascribed to any fault in the sanitary condition of the school dwellings. The drainage and general sanitary arrangements of the buildings are said to be satisfactory. But the sewerage and drainage of the town is strongly condemned. It is "of a most defective character, involving faults in construction and a method of disposal of sewage fraught with nuisance injurious to health." There were loud complaints of the nuisance caused by the sewer outlets, which is said to be intensified by the admixture of hot brewery refuse No provision is made for the ventilation or flushing of the sewers.

"It will be seen," remarks Dr. Blaxall, "that the Berkhamsted Sanitary Authority have failed to fulfil the requirements of the Public Health Act, 1875, Sections 15 and 19. That the evidence of this report goes to exculpate the sewerage evils existing in this town from direct concern in the causation and spread of throat illness on this occasion does not constitute the smallest justifica-

[1] JOURNAL, April 26th, p. 971.

tion for the present state of the sewerage. Not only is its condition a distinct violation of law and a standing cause of offence and other danger to health, but its condition is such as to ensure the spread of such diseases as cholera and typhoid fever, should they by chance be introduced into the town. Nor is mischief from the present condition of the Berkhamsted sewers limited to the town itself, for the stream enters into the canal at the east end of the town, polluting its waters with foul and dangerous sewage. It therefore behoves the authority to adopt immediate remedial measures by the substitution of efficient sewerage and drainage, and to lose no time in obtaining the advice of a skilled engineer as to the means of gaining this efficiency."

This is sound advice, which it is to be hoped the sanitary authority will follow without further delay. Those immediately interested in the welfare of the place should not forget the compulsory powers embodied in Section 299 of the Public Health Act, 1875, nor the provisions of the Rivers Pollution Prevention Act, 1876. The serious attention of the Hertford County Council might also usefully be directed to the matter.

THE METROPOLITAN ASYLUMS BOARD.

THE Chairman (Sir E. H. Galsworthy) at the last meeting of the Metropolitan Asylums Board, gave a review of the Board's work during the last year. He commenced by referring to the enactment last year of the Notification of Diseases Act and the Poor-law Act; the passing of these should be a subject of much satisfaction to the managers. The Board was now, for the first time since its establishment in 1867, virtually recognised as the metropolitan authority for provision against infectious disease, pauper and non-pauper, and legally empowered to perform duties which the Legislature had imposed upon the district sanitary authorities. The total number of patients received into the managers' hospitals during the year had been greater than during the previous twelve months. The scarlet fever cases in the last year numbered 5,260, and the mortality was 8.8 per cent. There were, in the year under review, 765 cases of diphtheria treated in the hospitals of the Board, the mortality being 40.7 per cent.; 341 enteric cases, with a mortality of 15.2 per cent.; and 32 typhus cases, the mortality being of these 32.10 per cent. Last year there were only 5 cases of small-pox, and this immunity had been obtained for the metropolis by the prompt notification of the cases to medical officers of health. The public could now have the advantages offered by ambulances for the removal of infectious cases to other than the Board's hospitals on a small payment (5s.) in order to prevent the danger arising from the use of public vehicles by infected persons, and the amount of work was shown by the fact that 5,359 separate journeys had been made, during which the ambulances had travelled 45,198 miles. Referring to the necessity for making further provision for lunatics, he observed that it would shortly be necessary to make fresh provisions, as the admissions annually exceeded the discharges and deaths by 312. He thought that all should be under one authority. In conclusion, he bore testimony to the devotion of the committees under Mr. Sedgwick, Mr. Robins, Surgeon-General Bostock, Dr. Felce, and others, and thanked the Board for its consideration to himself during the year.

Mr. Strong added that the London County Council Committee had expressed the same opinion as the Chairman, that patients of the classes referred to in the lunatic and imbecile asylums should be under one authority.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council, held at their rooms, 3, Bolt Court, Fleet Street, on May 1st, 1890, the new Lunacy Act, as applicable to the practice of Poor-law medical officers, was fully discussed. It was unanimously resolved that, in the opinion of the Council, a minimum fee of 10s. 6d. should be paid by the guardians to the medical practitioner who, not being an officer of the workhouse, examines a person for the purpose of a certificate under Section 24, subsection 5, of the Lunacy Act, 1890.

MEDICAL OFFICERS OF HEALTH AND PRIVATE PRACTITIONERS.

M.O.H. writes: I should be glad of your opinion as to the ethics of such a case as the following:—A practitioner notifies to me as medical officer of health a case of diphtheria occurring in a "registered common lodging house." Without seeing the case myself, and to save delay, I sent my inspector to remove the case to the Infectious Diseases Hospital, and to see to the cleansing and disinfecting of the patient's room. I subsequently receive a communication from the medical officer of the fever hospital to say that the case is one of well-marked syphilitic throat occurring in a prostitute, and accompanied by other specific symptoms.

Now, what is my duty in a matter of this kind? On the one hand t sanitary authority have the trouble and expense of a case which ought not be treated in a hospital provided for cases of a different class; and, on other hand, if I object to and report such a case, I shall be held to have tra gressed the bounds of medical etiquette.

My reason for bringing this before your notice is that several corresponde have complained in your columns about the action of medical officers of hea in visiting cases which have been reported to them.

*** Our correspondent does not say whether the practitioner who notif the case as diphtheria gave any indication that, in his opinion, it was de able that the case should be removed to an infectious diseases hospital. the inspector removed the case under the instruction of the medical offi of health without consultation with the medical practitioner, the medi officer of health is not free from responsibility for the "scandal" which case such as that above described may give rise to. It is sometimes better medical officers of health to delay for a few hours the removal of cases wh they think should be removed to infectious hospitals, whilst time is allow for communication with the medical practitioner in attendance. We can further express our opinion on the case submitted, as the facts are not before us.

SEWER VENTILATION.

MR. ARCHIBALD FORD, A.M.Inst.C.E. (Portsmouth) writes: In reference to article in the JOURNAL of April 26th under the heading of "Sewer Ventilati the facts, determined by a series of carefully recorded experiments extend over five months, and some of which have been taken in the presence of engineers of the sanitary authority, conclusively show that there is not slightest difficulty in the practical working of our system.

Dealing in their order with the theoretical points raised, may I be allo to add to the above statement that on no single occasion during our l period of experiments has the passage of the fresh air been stopped by f tion close to the intake; on the contrary, the fresh air has circulated with markable regularity for a considerable distance along the air passage, add greatly to the freshness and purity of the sewer air. That the natural fo in the sewer have never once reversed or impeded the continuous ventila action resulting from our system; on the contrary, our patent is inten to, and does, obviate the retarding action to systematic ventilation, wh such forces generally exert under existing systems. We utilise such for they are available to increase the ventilation.

Our records prove the above facts, and show that the air of the portio the Portsmouth sewer ventilated on our system is, under the least favour atmospheric conditions, changed with approximate regularity about twe four times a day, and when there is a powerful wind more frequently. current of air obtained from the water jet as we apply it in connection v our special air passage has never failed to resist successfully the fo opposed to it, or to prevent the escape of foul air at the surface gratings. records taken during the last few days show that we are introducing and di buting over one hundred thousand cubic feet of fresh atmospheric air into sewer, and removing over one hundred thousand cubic feet of diluted s air out of the uptake shaft during the same time, the cost for water b threepence a day.

These facts prove conclusively that powerful and costly motors and for the ventilation of sewers of even comparatively large size are not requ In face of the "Annual Summary of the Birth and Death Rate" rece issued by the Registrar-General referring to the steadily increasing mort during a period of many years from diphtheria, and which it is officiall marked made, "the most alarming bounds in 1888 and 1889 in the metrop it is difficult to believe that the responsible sanitary authorities of our towns will be willing much longer to tolerate the obviously defective sy which permits undiluted sewer air to escape at the road gratings, unde breathing organ of the populations whose health is entrusted to their ca

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, May 3rd, 5,907 births and 3,831 d were registered in twenty-eight of the largest English towns, including don, which have an estimated population of 9,715,559 persons. The a rate of mortality in these towns, which had been 20.9 and 20.7 per 1,0 the two preceding weeks, further declined to 20.6 during the week u notice. The rates in the several towns ranged from 13.6 in Nottingham in Brighton, 15.7 in Portsmouth, and 15.9 in Halifax to 27.9 in Derby, in Sheffield, 33.1 in Manchester, and 36.0 in Bolton. In the twenty-t provincial towns the mean death-rate was 22.6 per 1,000, and exceeded t the rate recorded in London, which was only 18.1 per 1,000. The 3,831 d registered during the week under notice in the twenty-eight towns inc 418 which were referred to the principal zymotic diseases, against 42 400 in the two preceding weeks; of these, 161 resulted from whooping-c 104 from measles, 49 from scarlet fever, 39 from diarrhœa, 38 from dipht 20 from "fever" (principally enteric), and 2 from small-pox. These 418 d were equal to an annual rate of 2.2 per 1,000; in London the zymotic deat was 2.5, while in the twenty-seven provincial towns it averaged 2.0 per and ranged from 0.0 in Halifax, 0.4 in Cardiff, and 0.6 in Wolverhampt 2.6 in Plymouth and in Manchester, 3.2 in Liverpool, 4.7 in Derby, a in Salford. Measles caused the highest proportional fatality in Birmin Plymouth and Derby; scarlet fever in Plymouth and Sunderland; and w ing-cough in Bristol, Liverpool, Oldham, Salford, and Brighton. The r lity from "fever" showed no marked excess in any of the towns. Of t deaths from diphtheria recorded during the week under notice in these t 18 occurred in London, 10 in Salford, 3 in Manchester, and 3 in Liverpo fatal case of small-pox was registered in London, and one in Hull duri week under notice. Three small-pox patients were under treatment Metropolitan Asylums Hospitals on Saturday, May 3rd. These hospital tained 1,037 scarlet fever patients on the same date, against numbers incr from 1,041 to 1,052 at the end of the three preceding weeks; 84 cases admitted during the week, against 79 and 83 in the two previous weeks death-rate from diseases of the respiratory organs in London was equal per 1,000, and was slightly below the average.

MEDICAL NEWS.

DR. J. JONES, M.B., has been appointed Deputy Coroner for the ithern Division of Breconshire.

THROUGHOUT the whole of England and Wales only four deaths re, during the last quarter, attributed to small-pox.

ON April 20th Professor Liebreich, of Berlin, celebrated the enty-fifth anniversary of his graduation as Doctor of Medicine.

ACCORDING to the *France Médicale*, seventeen medical men od as candidates at the recent municipal elections in Paris. ven were elected.

DR. MAXIMILIAN MICHAUX, for many years Professor of Sur- y in the University of Louvain, and one of the leading geons of Belgium, died recently in London at the age of 83.

N the House of Deputies of the German Empire the medical fession is represented by four members, while the law and the gy have respectively twenty-two and twenty-three repre- tatives.

HE French Minister of Commerce, acting on the advice of the ncil of Hygiene of the Department of the Seine, is about to oduce a Bill prohibiting the use of sewing machines worked pedal by girls of less than 16 years of age.

ROFESSOR LEBER, of Göttingen, has been appointed Ordinary fessor of Ophthalmology and Director of the Clinic of Eye eases in the University of Heidelberg, in place of Professor Becker, whose death was recently announced in these mns.

CCORDING to statistics collected by the Assistance Publique in nce, the death-rate among infants at the breast is 400 per mille uabia, the corresponding ratio in Würtemberg being 329, in aria 317, in Austria 258, in Italy 220, in Prussia 217, in France in England 157, and in Switzerland 154.

HE Educational Committee of the Prussian House of Deputies declared the petition of the German Ladies' Association of zig, asking that the portals of the medical and teaching pro- ions should be thrown open to women, to be unsuitable for ussion by the House.

NEW Pharmacological Institute, in connection with the Uni- ity of Bonn, was formally opened on April 22nd with an ress from Professor Binz. The Professor has had the Order of Red Eagle (Third Class) conferred on him in honour of the sion.

MODEL COMMON LODGING HOUSE.—The London County ncil have decided to proceed at once to the erection of a model mon lodging house, to accommodate from 300 to 350 persons, a site in St. Giles's. This step marks a new departure in icipal policy in the metropolis.

ORTALITY ON RAILWAYS.—The number of killed and injured ailways in the United Kingdom during the year 1889 exceeds of the previous year. There were 1,076 killed, as against 905 88, while the injured were 4,836, against 3,826 in the year e, an increase in the fatal injuries of 171, and the others of .

E Longue Pointe Lunatic Asylum, situated some twelve from Montreal, in which 1,300 inmates were confined, was ly destroyed by fire on May 6th. Several inmates perished e flames, the number of whom has not been definitely ascer- d. Some of the lunatics, it is stated, stubbornly refused to their cells and had to be removed by force. The fire is sup- to have originated by a lunatic setting fire to some paper gs in a cupboard.

OLUBLE COMPRESSED TABLETS.—Dr. Arnold, of Zug (Switzer- calls attention to a serious drawback sometimes attending se of the compressed tablets now so much in fashion. He s two cases—that of a boy, aged 8, to whom half-gramme s of antipyrin were given to reduce the temperature, and f another, aged 10, who took half-gramme tablets of phen- for neuralgia—in which the tablets passed through the length of the intestinal canal without undergoing any e whatever.

AL MILITARY EXHIBITION.—The opening ceremony of the Military Exhibition in the grounds of the Royal Chelsea al was performed by His Royal Highness the Prince of on Wednesday, May 7th. The ambulance section will be a very interesting exhibit, the Army Medical Department showing all the various forms of British ambulance. One special feature will be the tracing of a wounded man from the time he is wounded until he reaches home, each stage being illustrated by the various forms of W. D. equipment and field dressing. The St. John Ambulance Association will maintain a first aid station for the use of the public during the whole period of the Exhibition, and also exhibit carriages, litters, etc., adapted equally for civil or home military purposes; a large detached building, 260 feet long, having been erected specially for this section.

TRANSPORT OF THE SICK IN GERMANY.—The Prussian railway authorities have set apart a few carriages for the conveyance of sick persons; they are fitted up with beds and everything necessary for the purpose. Such carriages are already kept ready for use at Altona, Cologne, Erfurt, Wiesbaden, Hanover, and Berlin (Stettin terminus), and will be supplied to order at any of the other principal stations in Prussia. The charge for the use of an invalid carriage is the price of 12 first class tickets for the required distance.

MEDICAL PROVIDENCE IN FRANCE.—At the thirty-first annual meeting of the General Provident and Mutual Aid Society of French Medical Men, held on April 13th and 14th, the treasurer (M. Brun) stated that the total capital of the Society amounted to 2,492,505 francs (nearly £100,000). Of this sum, 1,343,273 francs (£53,730) formed the capital fund, the interest on which was available for retiring allowances. During the year the Society had paid seventy-four such pensions of 600 francs (£24) and one of £12. The meeting voted that eleven additional pensions of 600 francs should be granted.

INSANITY IN AUSTRIA.—In 1887 there were in Austria 23 public and 5 private lunatic asylums, with a total of 13,441 patients, being 6.2 per cent. more than in the previous year. Of these, 9.3 per cent. were discharged cured and 15.4 uncured, while 11.7 died. The disease was hereditary in 15.7 per cent. of the cases; in 13.1 per cent. it is returned as having been due to drink, and in 6.7 to mental emotion or depressing complaints. In addition to these, there were 20,739 lunatics, giving a proportion, if these alone are taken into account, of 94 in every 100,000 of the general population. Of the latter class of insane persons, only 826, or 8.8 per cent., were in confinement.

MEDICAL CONGRESS AT VALENCIA.—A Medico-Pharmaceutical Congress will be held at Valencia, in Spain, in the latter part of May. It will be divided into four sections, as follows: (1) Medicine; (2) Surgery; (3) Public Medicine and Specialities; (4) Pharmacy and the auxiliary sciences. The widest scope is left to those intending to take part in the Congress as to choice of subject, but in view of the fact that it is desired to give as far as possible a local character to the meeting, the organising Committee will be particularly glad to receive notice of communications on malaria, leprosy, rheumatism, tuberculosis, syphilis, local hydrology, and climatotherapy, medical geography, and natural products of the province of Valencia, etc.

SAMARITAN FREE HOSPITAL.—On Tuesday a bazaar for the purpose of helping to complete the building fund and providing furniture for this hospital was declared open by Her Royal Highness the Princess Beatrice. The fashionable patrons, who came in great numbers to the show, admitted that the display was unusually pretty, even for a West End bazaar. The show continued till Thursday. The new building, which is in the Marylebone Road, near Queen Charlotte's Hospital, is now complete externally; it is a handsome, imposing edifice, and a great improvement to a neighbourhood which has up till now escaped the zeal for architectural beautification so evident in almost every other part of London.

PRESENTATION.—Mr. C. T. Griffiths, upon resigning his appointment as Resident Medical Officer to the Royal Mineral Water Hospital, Bath, was presented with a very handsome carriage clock in morocco case. The base of the clock bears the following inscription: "Presented to Mr. Charles T. Griffiths, L.R.C.P.Lond., M.R.C.S.Eng., by the officers of the Royal Mineral Water Hospital, Bath, as a token of regard on his leaving the institution. April, 1890." He also received a very elegant case of dessert knives and forks, and fish ditto, from the nurses, servants, and patients, accompanied by an address signifying their esteem. A vote of thanks was also passed by the committee to Mr. Griffiths for his services during the last five years.

PRIZE ESSAY.—A prize of 1,500 pesetas (£60) is offered by the Royal Academy of Medicine and Surgery at Barcelona, under the will of the late Dr. Francisco Gari, of Boix, for the best essay on the following subject: "Antipyretic Medication in Acute Febrile Processes: How Far is it Useful and Necessary to Combat Hyperpyrexia, and what are the Best Means of Doing So?" A second prize of 750 pesetas (£30) will be given to the essay which comes next in merit to that to which the first is awarded. The title of Corresponding Member of the Society will be conferred on the winners of both prizes. The essays (which may be written in Spanish, French, or Italian) must be sent in to the secretary of the Academy (Baños Nuevos, núm. 9, Barcelona) before noon of June 30th, 1891.

MEDICAL DEFENCE UNION.—At the instance of the Medical Defence Union, with the sanction willingly afforded by the Master and Wardens of the Society of Apothecaries, proceedings were instituted against a man named Joseph Abbott, of Exeter, for unqualified medical practice. On May 1st, a few days before the case was down for hearing, Abbott paid £60 penalties into court, together with costs amounting to £5 5s. 6d. The Union has also been instrumental in obtaining redress for Dr. W. Y. Martin, of Walkden, who, after the death of a woman whom he had medically attended, was repeatedly threatened with personal violence by the husband, a fishmonger. After the issuing of the summons, the defendant, through his legal adviser, apologised. He was bound over to keep the peace for three months and to pay the costs.

INTERNATIONAL MEDICAL CONGRESS, BERLIN.—An appeal bearing the signatures of all the leading members of the medical profession in Berlin has been issued, in which the hope is expressed that inventors of instruments, etc., throughout the world will join in making the exhibition which it is proposed to hold in connection with the Medical Congress a success. The various sections into which the exhibition will be divided have already been mentioned (see JOURNAL, March 22nd, page 689). The following are the members of the Committee, arranged according to the particular departments which they represent:—Instruments of Precision: Drs. Haensch, Loewenherz, and Zuntz; Microscopic Apparatus: Drs. Benda, Hansemann, and H. Virchow; Bacteriological Apparatus: Drs. Brieger, Pfeiffer, and M. Wolff; Photographic Apparatus: Drs. Fritsch, Günther, and O. Israel; Pharmacological Chemistry: Drs. Darmstaedter, Holtz, and Salkowski; Pharmaceutical Preparations: Drs. Liebreich, Schacht, and Sell; Dietetic Preparations: Drs. Baginsky, Ewald, Kossel, and Munk; Surgical Instruments: Drs. E. Küster, Sonnenburg, and Windler; Medical Instruments: Drs. Ehrlich, Gerhardt, and P. Guttmann; Gynæcological Instruments: Drs. Bröse, Gusserow, and Veit; Ophthalmological Instruments: Drs. Dörffel, Hirschberg, and Horstmann; Otological Instruments: Drs. Hartmann, Jacobson, and Trautmann; Laryngological and Rhinological Instruments: Drs. Fränkel, Heymann, and Schoetz; Dental Instruments: Drs. Busch, Miller, and Sauer; Electro-therapeutical Instruments: Drs. Bernhardt, Eulenburg, and Hirschmann; Orthopædic and Medico-Gymnastic (Massage) Instruments: Drs. Beely, Schütz, and J. Wolff; Urethral, etc., Instruments: Drs. Fürbringer, Nitze, and Posner; Construction of Hospitals, Transport of Sick, etc.: Drs. Herzberg, Merke, Spinola, Körte, Leyden, and Mehlhausen; Military Sanitation: Drs. Rabl-Rückhard, Villaret, and Wenzel; Hygienic Apparatus: Drs. von Esmarch, Petri, and Pistor; Medico-Statistical Maps, etc.: Drs. Guttstadt, Rahts, and Skrzeczka; Models, etc.: Drs. Broesike, Grunmach, and Hertwig; Educational Apparatus, etc.: Drs. Behrend, Güterbock, and Munk; Literary Productions: Drs. S. Guttmann, Villaret, and Würzburg.

MEDICAL VACANCIES.

The following Vacancies are announced:

BIRMINGHAM LYING-IN CHARITY.—Honorary Medical Officer. Applications to Cranmer Gell, Secretary, 71, Newhall Street, by May 19th.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon, unmarried and under 30 years of age. Salary, £120 per annum, with furnished apartments, coal, gas and attendance. Applications to Burgess Smith, Secretary, 76, West Street, Brighton, by May 30th. Election June 6th.

BRIGHTON, HOVE AND PRESTON DISPENSARY, Queen's Road, Brighton.—House-Surgeon. Double qualifications. Salary, £140 per annum, with furnished apartments, coals, gas, and attendance. Applications by May 27th to the Assistant Secretary, J. W. Stride. Appointment on June 3rd.

BRIGHTON, HOVE AND PRESTON PROVIDENT DISPENSARY.—Surgeon to District No. 8. Applications to the Secretary, 117, Queen's Road, Brighton, by May 14th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, V
toria Park, E.—House-Physician. Board and residence and allowance
washing, but no salary. Applications to the Secretary personally o
letter any day.

DUNMOW RURAL SANITARY AUTHORITY.——Medical Officer of Hea
Salary, £50 per annum, including all travelling expenses. Applicati
endorsed "Medical Officer of Health," to F. J. Snell, Clerk, Great D
mow, Essex, by May 12th.

ENNISTYMON UNION.—Ennistymon Dispensary. Medical Officer. Sal
£100 per annum and fees. Applications to Mr. Henry P. Reilly, Hono
Secretary. Election on May 24th.

GREAT BERKHAMSTED RURAL SANITARY AUTHORITY.—Med
Officer of Health. Salary to be settled by Joint Committee. Applica
to H. M. Turner, Clerk to Rural Sanitary Authority, Watford.

HANTS COUNTY ASYLUM.—Third Assistant Medical Officer. Doubly q
fied. Age not to exceed 27; unmarried. Salary, £100 per annum, increa
to £125. Applications to the Committee of Visitors, Knowle, Fareham,
May 21st.

HARROW LOCAL BOARD.—Medical Officer of Health. Salary, £50
annum. Applications, marked "Medical Officer," to be sent to the C
R. E. H. Fisher, by May 13th.

INFIRMARY OF THE CITY OF LONDON UNION, Bow Road.—Assis
Medical Officer and Dispenser. Double qualification. Single, or wido
without children. Not less than 25, not more than 35 years of age. Sal
£100 per annum, with residence at the Infirmary, rations and wash
Applications, in forms to be obtained, by May 13th, to F. W. Crane, C
61, Bartholomew Close.

KENT COUNTY LUNATIC ASYLUM, Chartham, near Canterbury.—Se
Assistant Medical Officer; must be registered. Salary, £120 per an
with furnished apartments, board and attendance. Applications
testimonials by May 19th, to Allen Fielding, solicitor, Canterbury.

LANCASTER INFIRMARY AND DISPENSARY.—House-Surgeon.
married. Doubly qualified. Salary, £80 per annum with residence, b
attendance, and washing. Applications, on forms to be obtained,
reach the Secretary by May 31st.

LONDON COUNTY COUNCIL.—Medical Officer for District D of the
Brigade. Must be a qualified Surgeon. Remuneration at the rate o
per annum for each man in the force (present number 78), to include
of medicine and appliances. Applications to be addressed to the Cle
London County Council, endorsed "Application for post of Medical Offi
by May 22nd.

MACCLESFIELD GENERAL INFIRMARY.—Junior House-Surgeon. D
qualified. Salary, £70 per annum, with board and residence in the in
tion. Applications to Chairman, House Committee, by May 17th. Ele
May 30th.

NORTH LONDON CONSUMPTION HOSPITAL, HAMPSTEAD
LONDON.—Resident Medical Officer, double qualification. Honora
£40 per annum, with rooms and board. Applications to Lionel Hill,
Secretary, 216, Tottenham Court Road, London, W., by May 19th.

NOTTINGHAM UNION.—District Medical Officer. Salary, £100 per a
and fees. Not required to devote whole time to the duties. Applic
to G. Muncaster Howard, Clerk, by May 15th.

NOTTINGHAM UNION.—Public Vaccinator. Fees about £40 per an
Applications to G. Muncaster Howard by May 15th.

PAROCHIAL BOARD OF NEW ABBEY.—Medical Officer. Salary, £
annum. Applications to Peter M'Donald, Inspector, New Abbey, Dum
by May 12th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per me
rising by annual increments of Rs. 50 to Rs. 1,000. Private practi
barred. Applications to J. Short, Secretary, Rangoon Municipalit
June 1st.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke
Brighton.—Acting Physician. Double qualification. Applications
cover to the Chairman of the Medical Committee by May 13th.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke
Brighton.—Assistant Surgeon. Double qualification. Applications
cover to the Chairman of the Medical Committee by May 13th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.
Physician. Salary, £40 per annum, with board and lodging. A
tions to the Secretary by May 10th.

SALFORD ROYAL HOSPITAL.—Honorary Medical Officer for the Per
Branch Dispensary. Double qualification. Applications to Alexand
Secretary, by May 18th.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—
Honorary Assistant Surgeons. Double qualifications. Application
Honorary Secretary, Walter Wilson, by May 12th.

STIRLING DISTRICT ASYLUM, Larbert.—Assistant Medical Officer.
£100 per annum. with board and residence. Experience in path
research will be considered a recommendation. Applications to D
pherson, Medical Superintendent, by May 15th.

SWANSEA HOSPITAL.—Resident Medical Officer. Salary, £100 per
with board, furnished apartments, coals, gas, attendance, etc. Appl
to the Secretary, Jno. W. Morris, by May 15th.

WIRRAL CHILDREN'S HOSPITAL, Wood Church Road, Birkenhead
dent House-Surgeon (lady or gentleman), fully qualified. Salary,
annum, with board, lodging and washing. Applications to T. F. S
Honorary Secretary, 25, Lord Street, Liverpool, by May 15th.

MEDICAL APPOINTMENTS.

BAILEY, Thomas Ridley, M.D.Edin., C.M., reappointed Medical Officer o
to the Bilston Urban Sanitary Authority.

BANNATYNE, Gilbert A., M.B.Glasg., C.M., L.R.C.P., L.R.C.S.Edin., a
by the Greenock Parochial Board Assistant Medical Officer at Smith

Y, H. E. Leigh, M.B.Lond., appointed a Medical Officer to the Brompton d Knightsbridge Provident Dispensary, *vice* Dr. Yarrow Baber.

H, Joseph, M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior House-rgeon to the Bolton Infirmary and Dispensary, *vice* F. R. B. Hinde, R.C.S., etc., resigned.

R, Ludford, M.R.C.S., L.R.C.P., appointed House-Physician to the East ndon Hospital for Children, Shadwell.

R, Arthur Lewis, L.R.C.P.Ed., M.R.C.S.Eng., appointed Medical Officer Health for the Ilfracombe, Morthoe, and West Down District of the Barn-ple Union, *vice* F. Gardner, M.R.C.S., L.S.A., resigned.

N, Daniel Joseph, L.K.Q.C.P.I., L.R.C.S.I., appointed Medical Officer the Workhouse of the Carrickmacross Union, *vice* Dr. William McKenna, ceased.

, H., L.R.C.P., M.R.C.S., appointed Assistant House-Accoucheur, King's llege Hospital, *vice* E. D. Rees, L.R.C.P., L.S.A.

, Arthur, M.B., C.M., appointed Medical Officer and Public Vaccinator the township of Halifax.

H., M.B., B.A., C.M., appointed Assistant Medical Officer to the North-st London Hospital, Kentish Town, *vice* Mr. J. Milsom Rees.

TEN, E. A., M.A., M.B., M.Ch.Oxon., M.R.C.S., L.R.C.P., appointed sistant House-Surgeon to the York County Hospital.

, F. W., M.D.Brux., M.R.C.S.Eng., L.R.C.P.Lond., Resident Surgeon the Birmingham General Dispensary, *vice* J. H. Blakeney, M.R.C.S.Eng., R.C.P.Lond., resigned.

KE, George Haynes, M.R.C.S.Eng., L.S.A.Lond., D.P.H.Camb., ap-inted Medical Officer to the County Council of Worcestershire.

ER, John, M.D., D.P.H.Camb., Professor of Medical Jurisprudence, St. ngo's College, appointed to a Lectureship on Public Health at St ngo's College, Glasgow.

IN, Dr., appointed Medical Officer to the Ilsington District of the wton Union.

T. Campbell, M.R.C.S.Eng., L.R.C.P.Lond., appointed Physician's sistant to Bristol General Hospital, *vice* C. A. Griffiths, resigned.

LY, Richard Henry, M.R.C.S., L.S.A., appointed Medical Officer for the pleben District of the Newton Union.

F. W., M.R.C.S., L.R.C.P., L.S.A., late House-Accoucheur King's Col-e Hospital, appointed Sir J. Lister's House-Surgeon, King's College spital, *vice* A. H. Cheatle, M.R.C.S., L.R.C.P., resigned.

S. S. G. V., M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior Assistant dical Officer to the Wandsworth and Clapham Union Infirmary, New ndsworth.

RN, W. Alexander, F.F.P.S.Glasg., L.S.A., appointed Medical Officer of alth to the Rural Sanitary District of the Durham Union.

TT, R. T., L.R.C.P., M.R.C.S., late Assistant House-Physician, King's llege Hospital, appointed House-Physician, King's College Hospital, *vice* B. Beach, L.R.C.P. M.R.C.S., resigned.

INSON, R. J., M.R.C.S., L.R.C.P., late Assistant House-Surgeon York unty Hospital, appointed Senior House-Surgeon, *vice* Mr. Lionel H. lliams, resigned.

H. L., M.R.C.S., L.R.C.P., appointed Mr. Cheyne's House-Surgeon, ng's College Hospital, *vice* P. T. B. Beale, M.R.C.S., L.R.C.P., L.S.A., igned.

, William, M.R.C.S.Lond., L.K.Q.C.P.I., appointed Medical Officer of alth to the Oswaldtwistle Urban Sanitary Authority, *vice* A. T. wnley.

YAN, Hy. Crawford, L.R.C.P., L.R.C.S.Ed., appointed Resident Medical perintendent to Tuebrook Villa Asylum, *vice* B. Hall, M.D.

DLISH, J. Gordon, L.R.C.P., L.R.C.S.Edin., L.F.P. and S.G., L.M., pointed House-Surgeon to General Infirmary, Leeds.

L, John C., M.D., D.P.H.Cantab., Member of the Institute of Hygiene France, etc., appointed to a Lectureship on Public Health at St. Mungo's llege, Glasgow.

N, Matthew, M.B. and C.M.Glasgow University, appointed Medical icer of the Third or Parkhead Medical District of the Barony Parish, sgow, *vice* Dr. Wm. Young, deceased.

, Andrew, M.B., C.M.Ed., appointed Assistant Physician to the Edin-gh Provident Dispensary, *vice* William Keiller, L.R.C.P. and S.Ed., re-ned.

, Paul F., M.B.Lond., appointed Medical Officer to the Brompton and ightsbridge Provident Dispensary.

ELL, Charles, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer for North District of Great Yarmouth Union.

R, Dr., appointed Medical Officer for the Mullaglass (County Armagh) pensary. *vice* Dr. Joseph Lightbourne, deceased.

Dr., appointed Medical Officer to the Workhouse, Cheltenham ion.

ER, H. S., L.R.C.P., M.R.C.S., appointed Assistant House-Physician, g's College Hospital, *vice* R. T. Hewlett, L.R.C.P., M.R.C.S.

, W. J., M.B., M.R.C.S., L.S.A., appointed Medical Superintendent to London County Asylum, Colney Hatch.

R, M. H., M.A., M.B.Cantab., M.R.C.S., L.R.C.P., appointed House-sician to the Hospital for Consumption and Diseases of the Chest, mpton, *vice* Dr. Keiffenheim.

. D., L.R.C.P., L.S.A., late Assistant House-Accoucheur, King's Col-Hospital, appointed House-Accoucheur, King's College Hospital, *vice* V. Gunn, M.R.C.S., L.R.C.P., resigned.

. Milsom, M.R.C.S., L.R.C.P.Eng., appointed Medical Officer to the th-West London Hospital, Kentish Town, *vice* Mr. J. P. Metcalfe, gned.

, Marc Armand, M.A., M.D.Oxon., etc., appointed Pathologist to the of London Hospital for Diseases of the Chest, *vice* Dr. Wethered, pro-ed to the post of Assistant Physician.

ON, R. H., M.R.C.S., L.R.C.P., L.S.A., appointed Mr. Rose's House-geon, King's College Hospital, *vice* J. Penny, M.R.C.S., L.R.C.P., gned.

WEBER, F. P., M.B., B.C.Cantab., appointed House-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, *vice* Dr. Maclure.

WILSON, J., M.D., appointed Medical Officer for the No. 4 District of the Cheltenham Union.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Cheadle: On Chronic Constipation in Children and its Treatment.

CAMBRIDGE PHILOSOPHICAL SOCIETY, 4.30 P.M.—Mr. J. N. Langley: Effect of Nicotin on the Nervous System of the Fresh Water Crayfish. Mr. A. E. Shipley: On a new species of Phymosoma, with some account of the Geographical Distribution of the Genus. Mr. J. G. Adami: On the Action of the Papillary Muscles of the Heart. Mr. S. F. Harmer: Exhibition of Specimens of a Land-Planarian (*Rhynchodemus terrestris*, O. F. Müller) found in Cambridge.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Mr. Anthony A. Bowlby: On the Condition of the Reflexes in Cases of Injury to the Spinal Cord, with Special Reference to the Indications for Operative Interference.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On Mania. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: Lupus Erythematosus and its Allies.

UNIVERSITY OF LONDON, Meeting of Convocation, 5 P.M.—Report of Annual Committee; of Committee on Reconstitution of University; and other business.

WEDNESDAY.

BRITISH GYNÆCOLOGICAL SOCIETY, 8 P.M.—Council. 8.30 P.M., Ordinary meeting. Specimens.—Dr. A. W. Edis: Diagnosis and Treatment of Obscure Cases of Metrorrhagia.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M. —Dr. J. Mitchell Bruce: On Pseudo-Angina Pectoris. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. Marcus Gunn: Ophthalmoscopic Cases.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M.—Dr. R. Pringle: Enteric Fever in India.

THURSDAY.

HAREVIAN SOCIETY OF LONDON, 8.30 P.M.—Clinical Evening. Cases will be shown by Mr. Carter, Dr. Ewart, Mr. Lockwood, Dr. Stephen Mackenzie, and others.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND, Bethlem Hospital, 4 P.M.—Council meeting at 3 P.M. Dr. C. Theodore Ewart: Cycling for the Insane. Dr. Strahan: The Propagation of Insanity and Allied Neuroses, and will Exhibit a Model of a Bath. Drs. Percy Smith and Hyslop will show and describe Pathological Specimens.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, W.C., 2 P.M.—Dr. Charlton Bastian: On Aphasic and Amnesic Effects of Speech. The New Infirmary, Paddington, 4 P.M.—Mr. Jonathan Hutchinson: Clinical Lecture on Surgical Cases. 5 P.M.—Dr. Savill: *Post-Mortem* Examinations.

FRIDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Mitchell Bruce: On the Gouty Heart.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

ANDERSON.—At Bridgefield, Stonehaven, on April 29th, the wife of J. H. Anderson, M.D., J.P., of a daughter.

MARRIAGES.

LATTER—WALES.—May 6th, at St. Edmund's, Downham Market, Norfolk, by the Rev. Arthur S. Latter, Rector of Outwell, father of the bridegroom, assisted by the Rev. E. D. L. Harvey, Rector of the Parish, Oswald Hawkins Latter, M.A., late Tutor of Keble Cottage, and Assistant Master of Charterhouse, to Ada Elizabeth, third daughter of Thomas Garneys Wales, of Downham Market.

MAKEHAM—PARKINS.—On April 26th (by licence) at St. Margaret's, Lewisham, by the Rev. G. W. Griffith, Henry William Payne Makeham, M.R.C.S., L.R.C.P., L.S.A., M.D., to Frances Emmelline, only surviving daughter of John W. Parkins, Esq., of Ennerdale, Burnt Ash Hill, Kent.

DEATHS.

MARTIN.—On April 28th, at Portlaw, co. Waterford, James Martin, F.R.C.S.I., eldest son of the late William Lill Martin, of Maryborough, Queen's County, in his 77th year.

ROSS.—At Borne, on April 27th, of acute pneumonia, Isabella McDonald, the beloved wife of R. Ross, Medical Officer for Barvas, Stornoway, N.B. Sincerely regretted.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4 F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the E 429, Strand, W.C., London; those concerning business matters, non-del of the JOURNAL, etc., should be addressed to the Manager, at the Office Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters o editorial business of the JOURNAL be addressed to the Editor at the off the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH ME JOURNAL are requested to communicate beforehand with the Manager Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications s authenticate them with their names—of course not necessarily for public

CORRESPONDENTS not answered are requested to look to the Notices to spondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDE CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical O of Health if they will, on forwarding their Annual and other Reports, f us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which s departments of the* JOURNAL *are devoted, will be found under their resp headings.*

QUERIES.

F.R.C.S. asks to be referred to a convalescent home at the seaside surgical cases can be received and treated. Would a paying patient be in?

A. J. H. asks for particulars as to any home for incurables where a man ing from epilepsy can be received by votes or otherwise.

DELTA asks: 1. In Scotland, to whom do you apply to be appointed a d medical officer under the Factories Act?

2. Where can I get a list giving districts or sub-districts with their ar

ANSWERS.

E. H. H.—As a copyright convention exists between this country and Ger it would obviously be illegal, as well as discourteous, to publish a trans from a German work without permission from the author.

BOOKS ON HORSES.

A CORRESPONDENT writes: Among the best books on horses is the *Man Equine Medicine*, by Gresswell, published by Baillière, Tindall, and C which a second edition has just been published. There is also an ex textbook of equine medicine by Professor Robertson issued by the sam lishers. This is the adopted textbook at the Royal Veterinary College.

THE HISTORY OF INFLUENZA.

DR. E. L. LEES.—There is a chronological survey of epidemics of influenz 1173 to 1875 in Professor Hirsch's *Handbook of Geographical and Hi Pathology* (New Sydenham Society's Translation, vol. i, p. 7). The epi in England are included in this list. Probably the best account of su demics is to be found in the *Annals of Influenza* by Dr. Theophilus Tho We understand that a new edition of this work with additions has be pared by Dr. E. Symes Thompson, and is now in the press (publ Percival and Co).

INTERNATIONAL MEDICAL CONGRESS, BERLIN.

NOTTING HILL MEMBER.—The information which our correspondent a has been given more than once in these columns (see particularly Jo March 22nd, p. 689). Full particulars as to programme, etc., may be o from the General Secretary of the Congress, Dr. O. Lassar, 19, Carl Berlin, N.W., or from Mr. G. H. Makins, 2, Queen Street, Mayfair.

NOTES, LETTERS, ETC.

ERRATUM.—In the recent fellowship examination in the Royal College geons in Ireland reported in the JOURNAL of April 26th, Dr. R. G Patteson should not have been described as belonging to the Army M Service.

FISH AND LEPROSY.

DR. J. G. WALLACE-JAMES (Haddington) writes: In looking over a rare book the other day, *Health's Improvement*, 1655, by Muffet, a men our profession, I noticed among a great number of hints as to various of food, the following:—"Hot salmon is counted unwholesome in En and suspected as a leprous meat." This I consider is of great inte present when leprosy is so much to the fore, and when fish is more th pected as the cause of that disease.

F.R.C.S.ENG. EXAMINATION.

"PLUCKED" sends some observations on the choice of textbooks for can implying that the manuals which were recommended in a reply to "S Bengal Medical Service" (JOURNAL, April 19th, page 933) would ha considered sufficient in the opinion of a teacher at a London medical If a candidate, who has been for some time in general or special practi devote two or three hours daily to practical work at a medical scho month or six weeks before examination, he had best brush up the ne

unt of "bookish theorick" from a comparatively elementary manual; y standard treatises will simply confuse him. On the other hand, the study of textbooks alone, elementary or advanced, will never ensure the ing of any candidate; hence every man who has long been away from the ools," and cannot find time to work for a few weeks in a dissecting-room boratory runs a great risk of rejection at the Fellowship examinations.

Dilatation instead of the Support of the Perineum.

Crewdson Benington (Medical Tutor University of Durham College of icine) writes: The dilatation of the perineum during labour is a practice cated by the ancients, and frequently mentioned by writers of all ages— us and Avicenna, "versus os sacrum reprimendo perinæum." Heister (1750) : "It may be proper to lubricate them with butter, oil, or other emol- substance, and then to dilate the parts with the hands and fingers, as we presently declare more at large..... by pressing with one hand upon bdomen of the mother, and by dilating the parts and pressing back the ccyx with the other." Again he says: "Pass the hand, first anointed oil, into the vagina in order gradually to dilate the parts, and press back s coccyx strongly at the instant when the pains and throes of the mother themselves, by which means the delivery very often happily succeeds." is to be observed," he adds in a footnote, "that the labour pains are seldom it when the hand is thus introduced, where its stimulus is usually ient to excite them."

nagine there are few practitioners but have tried by some manœuvres of kind to aid dilatation and facilitate delivery at some time of their career, think the practice is not one which will commend itself after trial. To service, stretching the perineum must be effected before Nature herself ndertaken the process, and it is, therefore, an attempt to forestall Nature. mount of dilatation which can be effected by digital stretching, "short ving pain," I believe to be ineffectual in preventing rupture. That by al manipulation the perineum may be dilated to a certain extent no one gainsay, but rupture occurs when the dilatation has exceeded the bounds rmal dilatability, and that we can by any digital manipulation short of g pain distend the perineum to the extent that the presenting fœtal part to under the influence of uterine contraction, I for one am inclined to . Those cases which appear to have benefited by this treatment are , I believe, which would have done perfectly well if left alone, and, in are successful in spite of the treatment.

thout enumerating the various conditions which may aid the production upture, it may be sufficient to classify them into two, precipitate and re- d labours. A close adherence to dogmatic rules can only lead to dis- . Each case must be treated on its own merits. In precipitate labours, nting bearing down efforts, directing the patient to cry out, the inhala- of chloroform, the administration of chloral, or the pressure of presenting backwards I think are more scientifically indicated, and in prolonged rs, where the pressure of the presenting part is such as to be likely to o destruction of tissue, the timely use of the forceps.

tly, whilst I concur with those who believe that those who neglect the eum will have fewer ruptures than those who support it, I equally depre- manipulative dilatation, which I consider one of the worst forms of ldlesome midwifery," and I wish to call attention to Dr. Berry Hart's ks,[1] in which, speaking of the extension movement, he remarks: "I *in toto* that the chin leaves the sternum, and I hold that this fixation occiput and descent of the sinciput is not the best or normal mechan- The best mechanism to avoid tear is for the occiput to lead, for the to be driven, only a steady movement of translation, any rotation upon arietal axis so taking place as to favour occipital dipping, and never ng of the sinciput." Then follow rules for prevention of rupture based is mechanism, the principle being pressure with the right thumb in of anus in axis of outlet, thus hindering descent of the sinciput, and ring descent of the occiput.

n-Major Edwin Fairland, A.M.S. (Dover) writes: In reference to restrail's note on this subject in the Journal of May 3rd, I, after twenty- ears of practice and much obstetrical experience, say that, in my n, his system is absolutely correct. Invariably I have adopted the ice, using much olive oil in the process, and never have had a rupture. esult may not, of course, be wholly attributable to the system, but I can no hesitation in declaring that in many cases the danger was averted e gradual expansion of the parts before the pressure of the advancing caused the strain to be felt. Meddlesome midwifery is bad, but Nature assistance at times, and at no time more than in a rapid case when the al dilatation of the outlet by the head itself has been imperfectly per- d. In these cases the systematic dilatation advocated, and carried out udgment, is especially valuable.

. L. Swan (Surgeon Gilford Works and Hospital) writes: I can cor- endorse Mr. Trestrail's observations as to the value of dilating instead porting the perineum during labour. In a series of seventy-four con- nts, of which eighteen were primiparæ, I have carried out this method, ve not had one of those bugbears of the obstetrician, a "split peri-

is treatment be commenced during the latter end of the first stage, and out during the second stage of labour, combined with preventing the ion of the head when passing the vulva, laceration is almost im- e. It is not sensible to the patient if practised during a pain, and I ways found it to stimulate the contractions of the uterus.

. Eades (Ipswich) writes: Mr. Trestrail's remark in the Journal of d, p. 1009, on digital dilatation of the perineum, must commend itself e who adopt this method during the passage of the child's head. At ne I rigidly adopted the time-honoured practice of supporting the m; but, in spite of every care and attention, the perineum ruptured, d to be sewn up in one out of every seven cases as occurred to me, in primiparæ, and cases necessitating use of forceps. During the last ars or more I resorted to digital dilatation instead of support of the m, and, from the results obtained, am convinced of its usefulness. Is it ct that a ruptured perineum is often neglected and treated by some were a mere coincidence? Experience will fully confirm that digital on, if more practised, will in a great measure obviate this mischief, ll obstetricians more or less dread.

[1] *Transactions of Edin. Obst. Soc.*, vol. xii, 1887.

Dr. P. Z. Hebert (Berners Street, W.) writes: I have always in my practice adopted the plan of dilating the perineum instead of supporting it, and during about twenty years of private practice I have never had one single case of rupture of the perineum. The method that I have adopted differs somewhat from that suggested by Mr. Trestrail. I do not attempt to dilate during the pain, nor do I commence to dilate so early during the progress of the labour as Mr. Trestrail apparently does; but if I apprehend any danger of rupture, particularly in primiparous cases, I wait until the head of the child nears the perineum, and then, at the expiration of each pain, when the head begins to recede, I press back the perineum with a view to cause the thin edge of the skin forming, or about to be formed, to blend into a thick mass with the tissues of the perineum, and sometimes I hold the perineum in that position for a few minutes, when this does not cause any reaction, to bring on what I may call spurious pains. In this manner a great deal of the dilatation is effected in the length of the labia instead of directly at the point of the raphé of the perineum, but during the pains I allow the head to press on the perineum, which I may press back at the beginning of the pain if the urgency of the case appears to require a more rapid dilatation, yet I never allow the fingers to remain between the head and the perineum when these are brought forcibly in contact by the labour pains. When the tension on the perineum is great I frequently use sweet lard or oil to it, which softens the parts, and, I think, by rendering the skin and tissues more flexible, lessen the danger of rupture.

Dr. Alexander Duke, F.K.Q.C.P.I., etc. (Ex-Assistant Master Rotunda Hospital) writes: Having read Mr. Trestrail's remarks on the above subject, I beg to say that I recommended this proceeding several years ago, and which, I may remark, is not what Mr. Trestrail recommended in a previous paper on the subject. He states in that paper that he used *continuous* extension (the italics are his) but he has *now* adopted *my plan*, which was, and is, intermittent dilatation or extension *during a pain*, and which is alluded to in Parvin's *Obstetrics* as my plan, page 410. The idea struck me while a student acting as assistant to the late Dr. James Isdell, physician accoucheur, Steevens's Hospital, and having made trial of it, and finding it successful in every case, when done in time, I published a short description of my mode of proceeding in the Dublin medical press, as afterwards in the Journal. The following is an extract from my paper:—

"The best preventative treatment of laceration I know of, and of which I see no description in the textbooks on midwifery, is the following. When I find the head fairly engaged in the pelvis, and advancing, however slowly, with each pain, I take my seat by the patient's bedside, and, having first washed my hands, I lubricate my left thumb or the first two fingers of my right hand, and introduce either into the vagina, and, at the onset of a pain, draw back the perineum gently but firmly towards the coccyx, relaxing the tension gradually as the pain lessens till the next ensues, and so on till I can draw back the perineum with very slight effort, I thus tire out the muscular structures, and produce sufficient relaxation for the head to pass. The drawing back of the perineum produces no additional pain as it is done during a uterine contraction," etc.

I have also a copy of my letter written in reply to Mr. Trestrail's former letter on the above subject advocating *continuous extension* in which I state "I only use it *during a pain*," so that I may now claim priority for the idea.

Seaside Convalescent Home.

Mr. R. Crozier (Honorary Secretary of the Cottage Hospital and Convalescent Home at Lytham on the west coast of Lancashire) writes: Founded as this institution was, specially for the inhabitants of Lytham, there is at all times room to spare for patients from a distance. The Cottage Hospital stands in its own grounds in the vicinity of the town with a southern aspect to the sea, and is under the management of a fully trained nurse, with a staff of experienced medical men in attendance, who generously give their time to this benevolent object. The inclusive terms for those from a distance are one guinea per week.

Six Years in Bed: An Appeal.

Will you allow us, through the medium of your columns, to make an appeal on behalf of a distressed medical brother? Dr. C—— has been for twenty years the subject of slowly advancing nervous disease, which has through the whole of that period disabled him. He has been more than six years in bed. He may live ten years yet, and his means are quite exhausted. His friends have privately done what they can for him, but his long illness has exhausted their resources. There is nothing now before him but the workhouse. He has a nurse who is devoted to him, and they live in very economical lodgings. His earnest desire is that his home may not be broken up. Some of us have known Dr. C—— for many years, and can vouch for his respectability in every way, for the accuracy of the above statements, and also for the exemplary patience with which his afflictions have been borne. We shall, any of us, be glad to receive contributions from those who may incline to assist him.

Jonathan Hutchinson,
J. Hughlings Jackson,
Andrew Clark, M.D.,
J. Langdon Down, M.D.

Contributions already promised:

	£	s.	d.		£	s.	d.
Sir Andrew Clark ...	10	10	0	Mr. Wakley	10	10	0
Dr. Down	5	5	0	Mr. Hutchinson ...	10	10	0
Dr. Hughlings Jackson ...	10	10	0				

An Appeal.

Mr. Alfred Woodforde (Plaistow, Essex) writes: Allow me through the medium of our Journal to make an appeal to the members of the medical profession on behalf of Mr. J. W. Danaher, surgeon, Plaistow, Essex, who, I am sorry to say, has been laid aside from the practice of his profession for upwards of a year by disease of the brain and spinal cord, resulting in impairment of mind and complete paraplegia. The object of the present movement is to make some permanent provision for the family, whose circumstances are very straitened. I may mention that there are four children to be maintained, and that Mrs. Danaher has been partially paralysed in the lower limbs ever since the birth of her last child, now a boy ten years of age, whom we are endeavouring to get into the Royal Medical Benevolent College at Epsom. The Committee of the British Medical Benevolent Fund have kindly consented to head the list with a donation of £18, and Mr. Edward East, of 16, Upper Berkeley Street, Portman Square has con-

sented to act as treasurer of the fund. Contributions for the above mentioned objects may be forwarded to the treasurer, or to any of the undermentioned gentlemen, who strongly recommend and support the appeal:—Mr. Jonathan Hutchinson, F.R.S., 15, Cavendish Square, W.; Dr. Stephen Mackenzie, F.R.C.P, 18, Cavendish Square, W.; Mr. F. M. Corner, Manor House, East India Road, Poplar; Major Banes, J.P., M.P., Plaistow, Essex; Rev. R. W. B. Marsh, late vicar of Plaistow.

Large Families.

THE offer of the Canadian Legislature of 100 acres of land to each possessor of eleven or more children is bringing forward a great number of claimants. Among them is a Madame Poirier. This lady has just given birth to her twenty-first child. She is only 39 years old, and married at the age of 15 years. At the age of 17 she was already the mother of three children, having had twins, an event which has happened thrice in that family. Madame Poirier is nevertheless very strong and healthy.

Diamonds and Doctors.

ANY young medical practitioner, says the *Daily News*, who, because the population of the Cape diamond fields is large and believed to be generous, imagines that he might find here a good field for his talents, will do well to listen to Mr. John Drummond, of Styal, Cheshire.

Mr. Drummond, who has lately surveyed Kimberley with a professional eye, tells us that about two-thirds of the population of that district are medically provided for by contract, and a new settler can only hope to pick up his patients from the remaining third, amongst whom he will find Malays, Dutch, Hottentots, Chinese, Indian Coolies, and Kaffirs, who are very much readier to summon a doctor than to pay for his services. The eight thousand or so natives engaged on the diamond fields sign contracts for three months, during which they are, for perfectly intelligible reasons, forbidden to leave the camp. The excuse that they want to see the doctor would be met at once with the information that there is a hospital within the camp, with a medical attendant paid according to the number of Kaffirs under his charge. On the other hand, the white *employes* are associated in benefit societies which provide for the sick.

The Treatment of Influenza.

DR. G. E. J. GREENE (Ferns) writes: From my experience in the therapeutics of influenza gained in the treatment of 204 cases between December 28th and February 28th, I can fully endorse the opinions expressed by Drs. Illingworth and Hanbury Frere as to the danger of using antipyrin and its congeners indiscriminately in influenza (universally acknowledged to be a very depressing affection). I am happy to say I did not lose a single patient from the epidemic or its sequelæ, and I used very little medicine, and that of the simplest description, and only when complications existed; not a grain of antipyrin or of any of its allies was administered by me. I relied principally on strict hygienic and dietetic measures, and I think the results obtained sufficiently justify the course adopted.

Antipyrin does undoubtedly relieve the accompanying headache and neuralgias, but not infrequently it hastens, if it does not actually cause, death; as some cases which have come to my knowledge lead me to believe.

To Correspondents.

OUR correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. J. R. Whitley, London; Dr. E. Seaton, London; Dr. P. Z. Hebert, London; Mr. R. Crozier, Lytham: Mr. W. F. Jones, Anglesey; Mr. H. Smith, Northampton; Mr. D'Arcy Power, London; Dr. Leslie Phillips, Birmingham; W. S. Elliott, M.B., Malahide: Mr. H. T. Wood, London; Dr. Rentoul, Liverpool; The Secretary of the City of London Hospital for Diseases of the Chest, London; Mrs. St. A. Horton, Worthing: Dr. H. F. Parsons, London; Mr. A. Ford, Portsmouth; Surgeon-Major; Mr. O. H. Hudson, Sheffield; Mr. Clark Bell, London; Dr. Ward Cousins, Southsea; Dr. P. M. Braidwood, Shirehampton; Dr. W. B. Geikie, Toronto; Mr. T. C. Grey, Bristol; Dr. W. H. Dickinson, London; The Registrar of the Royal College of Physicians, Edinburgh; Dr. M. Thomas, Glasgow; Dr. McVail, Glasgow; F.R.C.S.; Plucked; Dr. H. Bennett, London; Dr. Danford Thomas, London; Dr. Louis Parkes, London; Messrs. Blondeau and Cie., London; Dr. Freeman, San Remo; Mr. J. W. Watkins, Newton-le-Willows; Dr. A. Edington, Edinburgh; The President of the Royal Society, London; Mr. A. G. Klugh, London; Dr. J. Davies, Maesteg; Dr. R. Urquhart, Edinburgh; Mr. F. Curzon, Leeds; Mr. J. Faulkner, London; Mr. C. H. Lawrence, Marlborough; Mr. H. P. T. Sinclair, Romsey; Mr. H. F. C. Eagle, London; C. M.; Dr. Major Greenwood, London; Messrs. Baillière, Tindall and Cox, London; Dr. Burney Yeo, London; Messrs. Burroughs, Wellcome and Co, London; Dr. Woodhead, Edinburgh; Mr. S. Langton, London; Mr. E. L. Lees, Bristol; Mr. C. H. Knight, New York; Dr. F. Beach, Dartford; Our Swiss Correspondent; Mr. J. G. Adami, Cambridge; L.R.C.P.; Dr. Schofield, London; Dr. Hugh Woods, London; Surgeon-Major F. C. Smith, Tanjore, Madras; Dr. J. Cagney, London; Mr. J. W. Sandy, Peatley; Mr. E. Hurry Fenwick, London; The President of the Pharmaceutical Society, London; Dr. A. Henry, London; Mr. G. C. Stephen, London; Dr. W. A. Carline, Lincoln; Mr. R. T. Hewlett, London; The Director-General of the Naval Medical Department, London; Notting-hill Member; C. W. S. Barrett, M.B., Hinckley; Mr. F. B. Jessett, London; Dr. E. Haughton, Upper Norwood; Disgusted; Dr. G. Balfour, Wimbledon; Mr. R. Harrison, London; Mr. A. E. Barker, London; Professor Tilmanns, Leipzig; M Ludford, London; M. S.; Dr. A. Duke, Dublin; Sir James Murray Son, Dublin; Volunteer Surgeon-Major; Mr. R. Ross, Stornoway; D W. Taylor, Scarborough; Country Member; Dr. R. Saundby, Birming Mr. W. P. Bridges, Winchester; Dr. J. C. Thresh, Chelmsford; Dr. Harthan, Salford; Mr. R. P. Bailey, London; Anti-Puff; Mr. J. G. Wa Jones, Haddington; A Member of the Association; Mr. J. G. McCan Leeds; Mr. E. M. Lewis, London; Professor Wanklyn, New Malden; S. Parsons Smith, Croydon: Messrs. W. J. Bush and Co., London; Mr. Erichsen, London; Dr. W. Walter, Manchester; Dr. Hale White, Lon Dr. J. Byers, Belfast; Dr. Mickle, London; Dr. J. Reid, Canterbury J. Marshall, Plymouth; Mr. E. H. Hare, Crouch End; Questor; Mr. Oliver, Vienna; Dr. William Sykes, Mexborough; Mr. H. H. No Reading; Mr. R. C. Benington. Newcastle-on-Tyne; Mr. E. H. R Tenison, Bexhill-on-Sea; Mr. J. A. Marsden, Standish; Dr. S. A. L. S Gilford; Medicus; Mr. J. Stokes, Sheffield; Surgeon-Major E. Fair Dover; Jeyes' Sanitary Compounds Co., London; Mr. L. W. Keiffen Newcastle-on-Tyne; Mr. C. E. Pinfold, York; Our Paris Correspon Surgeon R. H. Firth, Dover; Mr. S. O. Eades, Ipswich; Dr. J. Oliver, don; T. H. Morris, M.B., Tylorstown; Ralph; Our Manchester Corres ent; Rev. L. Lochée, Canterbury; Poverty; Delta; Mr. A. L. Co Ilfracombe; Dr. A. H. Hassall, San Remo; Mr. Ballance, London D. B. Balding, Royston; Mr. W. Towers Smith, London; Dr E. Abbott, Braintree; M.B.; Dr. G. H. Mackenzie, Edinburgh; M Capes, Kingston-on-Thames; Dr. T. Laffan, Cashel; Mr. J. Altham, rith; Myosin; Miss Williamson, Scarborough; Dr. J. W. Hunt, Lon Messrs. Petty and Co., London; Dr. C. E. Paget, Salford; Dr Cholmeley, London; Mr. Lawson Tait, Birmingham; Mr. J. W. S Brighton; Mr. C. K. Redmond, Gateshead; Mr. H. J. Holt, Bromley R. N. Barber, Hinderwell; Mr. W. Adams, London; The Secretary o Royal Military Exhibition, London; Dr. Burns-Gibson, Willesden, etc.

BOOKS, ETC., RECEIVED.

A Manual of the Theory and Practice of Equine Medicine. By J. B. Gre F.R.C.S., and Albert Gresswell, B.A., M.B. Second edition, revi George Gresswell. London: Baillière, Tindall and Cox. 1890.

On the Reappearance ("Recurrence") of Cancer after Apparent Extir By Herbert Snow, M.D. London: J. and A. Churchill. 1890.

The Palliative Treatment of Incurable Cancer. By Herbert Snow, M.D. don: J. and A. Churchill. 1890.

The Care of the Skin in Health and Disease. By F. Augustus Cox London: Alexander and Shepheard. 1890.

A Course of Lectures on the Growth and Means of Training the Mental delivered in the University of Cambridge. By Francis Warner, M.D. bridge: The University Press. 1890.

De l'Acromégalie; maladie de P. Marie. Par J. D. Souza-Leite. Paris crosnier et Babé. 1890.

Outlines of Practical Histology. By William Stirling, M.D. Sc.D. L Charles Griffin and Co. 1890.

The Anatomy of the Central Nervous Organs in Health and Disease. Heinrich Obersteiner. Translated, with annotations and additi Alex. Hill, M.A., M.D. London: Charles Griffin and Co. 1890.

A Textbook on Diseases of the Eye. By Henry D. Noyes, A.M., M.D York: William Wood and Co. 1890.

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TWO CLINICAL LECTURES ON ALBUMINURIA.

Delivered at Guy's Hospital.

By JAMES F. GOODHART, M.D., F.R.C.P.,
Physician to the Hospital.

Lecture I.—Functional Albuminuria.

HE present lecture is the outcome of an impression that has been owly condensing in me within the last few years, that functional, physiological, or cyclic albuminuria—whether by one of ese or any other name we know the disease—is a condition uch less common than has, I think, come to be accepted. I enture to think that there is a tendency in the profession of edicine—I know not if it be the same, or if, indeed, there be the me liability to it in other walks of life—to unconsciously incorrate the experience of others with our own; and thus some of come to obtain an exaggerated notion of the prevalence of this that disease. I suppose there are few of us who do not remember to have been painfully humbled when, thinking our experience of a particular disease to have been a fairly extensive e, we have appealed to our notebooks to find that it is but a ry small part of what we had supposed it to be.

I think the affection which Dr. Pavy has denominated cyclic uminuria—meaning by this not any case of intermittent albuuria, but those in which there is a definite periodicity and ne degree of regularity—is a good example of this. So far as I ve seen, although cyclic albuminuria is very freely talked about, ere are but few cases recorded since those in Dr. Pavy's original per. I believe we are all trading on Dr. Pavy's cases, confused, may be, with others of intermittent albuminuria, and no doubt th here and there an added case for particular observers. For self I may say that, although I have been on the look out for h cases since Dr. Pavy first described them, I have only seen e case that has shown anything like periodicity. I therefore er that the disease is decidedly rare, and for the present, instead assuming, as I think we do, that the disease is well known, ry such case ought to be recorded. Applying this criticism to self, I thought it would be worth while to analyse my own ervations, conducted now for some years past, on this question functional albuminuria, and having disposed of that matter in s lecture, I propose to devote the next to one or two other points nected with albuminuria. *In limine*, it may be said that for ie years past I have examined for this purpose the urine of h cases as have come to me, in as many individual instances as sible, whether men, women, or children, and in this way I have es of examinations of some 1,500 individuals. Albumen has n noted in the urine of 272 of these, that is, in about 20 per t. of all cases that have been examined. The various cases fall the following groups:

Post-scarlatinal and acute nephritis	17
Chronic parenchymatous nephritis	30
Albuminuria with phthisis	8
The granular kidney	60
Congestive albuminuria	7
Secondary albuminuria—cardiac, etc.	34
From calculus in the kidney	12
Pyelitic albuminuria	7
Pyrexial albuminuria	15
Diphtheritic albuminuria	13
Acute alcoholic albuminuria	5
The albuminuria of anæmia	5
With glycosuria	8
With hæmaturia	7
Albuminuria without obvious disease	39
Undetermined	5
	272

any of these headings may be allowed to explain themselves; rs require a note of explanation. The first of these is the minuria that so frequently goes with phthisis. Many of such ue to lardaceous disease and a consecutive chronic parenchymatous nephritis; others, less frequent, are due to tubercular disease of the kidney, and causes such as this require no comment. But some are thought to be dependent upon some degenerative changes in the epithelial elements of the kidney from disease of and deficient action in the lung; and if this explanation be in any way true, then the change may possess an interest of its own, to which special attention will be directed presently.

As regards what I have called congestive albuminuria, all secondary albuminurias are of course congestive; but by no means uncommon is a group of cases where a bulky man or woman complains of a certain amount of ill health, and it is found that they eat and drink too much, they take no exercise, very possibly have gouty antecedents, they have a congested state of the capillaries of the face, short breath, and are fat and unhealthy looking. The urine of such as these is often of high specific gravity, and contains a little albumen. Give these people periodical purges, diet them, and make them live altogether more according to natural law, and the albumen disappears. It is impossible to call these cases nephritis, and if this were the place I would make them plead for the continued use of the word "congestion," which, although it is no doubt much abused, is not without its legitimate place in the nomenclature of pathological processes. But it is only fair to say in passing that an albuminuria of this kind is perhaps equally able to bear the construction, that it is itself due to, and affords an argument for the existence of a functional albuminuria.

Of pyelitic albuminuria I will only say that one might be surprised to find how much albumen a pyelitis may produce in the urine. The albuminuria of pyrexia and that of diphtheria are well known; the former has a present interest, because it may very possibly be a functional condition. Acute alcoholic albuminuria is another group of the same kind, and of which I have seen several cases. The last that I remember was a man whom I saw with my friend Mr. Wornum. He was in a semicomatose condition from morphine and whisky, and his urine was nearly solid when boiled, from the albumen that it contained. He was vigilantly nursed, and his allowance of alcohol much curtailed, and within a very few days the albumen had all disappeared from the urine. These, too, are cases that lend themselves to either argument; for while they admit of the hypothesis that there is an acute congestion of the kidney, they equally well allow of the view that arrest of the natural metabolic processes has been at work, and that the albumen arises therefrom. The albuminuria of the anæmic in like manner. Many of us must have met with cases of this sort, where the anæmia has preceded the albuminuria, and the visceral conditions in anæmia are such that abnormal transformations of various kinds might readily explain the appearance of albumen in the urine.

Lastly, there are the cases of albuminuria with glycosuria. These have been explained by the injury done to the epithelial coating of the secreting structure by the passage of large quantities of water. This may be the correct interpretation of some cases, but, to my mind, it is too mechanical to account for the frequency with which uric acid, glycosuric, and albumen storms run together or alternate with each other. It seems, therefore, that if the various groups of cases due to acknowledged disease be appealed to, a large body of evidence may be adduced to show the reasonableness of the idea that functional albuminuria is a common occurrence.

But such cases as those just alluded to are not those, so far as I know, that have been appealed to in support of the existence of a functional albuminuria; so we must now turn to those other cases of albuminuria which cannot, in even this restricted sense, be said for certain to be due to disease of the kidney, and from which the main argument is drawn. My cases number in all thirty-nine, twenty-six males and thirteen females, twenty-seven being under 30 and five others under 40. I think there is something in this disproportion between males and females. Excess of mucus in women sometimes gives a little trouble. In many such cases there is a doubt whether there may not be a minute trace of albumen, but no distinct ring or cloud is produced by the tests for serum albumen, and I always pass these by as common occurrences in female urine, and a part of this excess of mucus. The observations that have been made vary considerably for each case. In as many cases as possible when albumen has been present in the urine I have written to the medical man, or occasionally had specimens of the morning urine sent to me for several days running. In nearly all cases—thirty-two out of thirty-nine—it was quite temporary, and in most it had disappeared within

forty-eight hours or sooner. In looking over my cases these points strike me: that two probably find an explanation in an excess of oxalates in the urine; in two others—and I am sure I have seen others of a similar kind—the urine was highly concentrated, but precipitated a quantity of albumen as well as crystals of nitrate of urea. This is an important point in treatment, for many people, and children in particular, do not get nearly enough fluid in the twenty-four hours, and are out of health in consequence. This condition is allied to the temporary albuminuria of gouty people, and also to the congestive group already mentioned. In another case the earlier history was one of hæmoglobinuria, and here, again, I think that the one case may serve to illustrate a group. This young fellow, aged 22, was reported by his medical man to have had an attack of hæmoglobinuria before I saw him, and one of his brothers had had a similar attack. He came under my notice for intermittent albuminuria, and it is not unreasonable to suppose that the latter may have been a modified form of its earlier ailment. Then come the cases in which the urine of women becomes faintly albuminous from leucorrhœal discharges, and of males in like manner from admixture with fluids from the genital passages, either seminal or prostatic. In eight cases this holds good, and I think that Dr. Moxon's observations and inferences in this field are true. Then there is another large group of cases (seventeen in number) associated with a markedly neurotic temperament. This is no explanation; nevertheless I was struck, as I looked over my notes, to see how, with no bias and no idea of definite purpose at the time the notes were made, it is stated that the patient is highly nervous, or has betrayed some pronounced fault of nervous action, and this, I think, most so in those cases which have proved the most typical cases of intermittent albuminuria. For instance, a young married lady, aged 30, whom I saw some six years ago suffered badly from headache, and was a most difficult person to deal with by reason of the nervous excitement that possessed her. All these years she has gone on, at one time passing much albumen, at another, perhaps, only a trace. And this variability has been unaccompanied by any corresponding changes in her general health. The albuminuria seemed so erratic that some urine was at one time drawn off by catheter to prevent the possibility of mistake, and it was full of albumen. I could not but think in the first instance that she had Bright's disease, and I remember well that her husband came and had a long talk on this matter. He quietly intimated that he thought my opinion worth little, for either he or some close relative, I forget now which, had been condemned years ago in like manner by Senator, Owen Rees, and others, and was yet alive. No doubt if he thinks at all on the matter he is now thinking still less of "the doctor," for his prognosis was decidedly superior to mine, his wife being, at any rate, quite recently still alive. Another case is that of a young lady of 14 or 15, who has suffered from convulsive attacks in earlier years, and who without doubt is a most nervous child. For several years she has been subject to attacks of intermittent albuminuria, the albumen being for the most part present at night, and not in the morning. To this case, then, one might apply the term "cyclic," although to do so does not in this case help much, for as much might be said of many a peripatetic albuminuric. Another case was a pale neurotic, who stammered, aged 16; another, a male, aged 25, terribly neurotic, with severe attacks of colic, which, because of albumen in the urine, I at one time thought must be a renal pain, but ultimately felt quite uncertain, the individual neurosis was so pronounced. Another was a female, aged 43, with some symptoms of Graves's disease; another woman suffered from that disease in a pronounced form, and passed at one time much albumen, at another very little, but much or little it all disappeared as she improved in health, as she did very conspicuously. Then there is the case of an exceedingly neurotic girl of 13; a male of 17; a male of 14, with a history of excess of work, worry, and alcohol, and who had had intermittent albuminuria for a year past, sometimes passing little, sometimes much; one was a case of general paralysis.

What the exact meaning of this association of the neurotic temperament with albuminuria may be, and in what way the symptom is produced are questions difficult to answer. Several suggestions might be made. It is possible that some may be oxaluric from a neurasthenic dyspepsia. It is possible that there might occur some visceral flux, comparable to that which takes place and is so well known about the surface of the head and neck and hands of the neurotic woman. I will even go further and say it is probable that surface and deep parts suffer together under such circumstances; and it would seem not unlikely that a condition which subjects the circulation of the skin to alteration so rapid as to determine an instantaneous sweating, as is the case in many of these neurotics, would, if the viscera suffer in an similar fashion, be a cause of some temporary stress to them. An I suppose that it must have been some such temporary flux this, although probably produced by more mechanical means, that led, or leads, to the temporary albuminurias to which attention was first prominently drawn by Dr. George Johnson, where the symptom is produced by sudden and violent exertion and by cold bathing.

But within this group of neurotic albuminurics not only are there oxalurics and such cases as I have just told of, but there are cases where the abnormal constituent is derived from the urinary passages. Some people have described a disease "spermatorhœa." There is no such malady. What has been thus called is a physiological condition in the chaste; in some more, in some less, and more or less, in some measure, depending on the "tone" of the individual, but present more or less in all healthy, continent men; it is only a disease in the mind of the quack; but I have no doubt that candidates who have been working hard for the public examinations—many anxious nervous men—many whose nervous structures are easily excited to discharge themselves—supply in this manner a proportion of these functional albuminurias. And to show that this is no mere visionary idea, I may mention that not very long ago a man was asking my opinion on this very point. He was one of first-rate intellectual power, and engaged in hard intellectual work, and he came because, and told me spontaneously of the fact, that as sure as he devotes himself to an afternoon of an original work, so surely will he have a seminal emission during his night's sleep. He not knowing the physiology of the matter was worried about it, but surely the reading of the fact was this: that when his brain went to work the entire nervous system participated in the excitement, and that when at last the upper centres slept the lower, the subordinate ones, remained active, or may be passed into the state of dreaming. This was not disease; it might have indicated an overwrought or a too easily fatigued nervous system, but nothing more.

But however all this may be, this association of some fault of nervous action—this state of nervous erethism, shall we call it?—with the production of an albuminuria that is not due to nephritis is a feature to my mind of great interest, because it harmonises with the observations made years ago by Dr. Clifford Allbutt, and the truth of which many can supply evidence of in their own experience, that the granular kidney seems sometimes to owe its origin, or date its existence from some period of anxiety or worry. I may also refer to the observations of Dr. Broadbent on similar lines that an increase of tension of the pulse is to be met with in certain states of nervous excitement, in hysteria, and other diseases of the brain and spinal cord. Observations of this kind seem to suggest that the temporary albuminuria of the neurotic may possibly furnish examples of the beginnings of insidious changes in the kidney, which however innocent at their commencement, unchecked, may have a serious, even if remote, ending.

Such, then, have been, in my experience, the main groups of "functional" albuminuria; and I may remark in passing, that Dr. Roberts also has observed that many of these cases are found in nervous subjects. But there are a few exceptional cases—I should say they were quite the exception—where the health is apparently perfect. Such a case I had in Guy's a few years ago. A young man about 21 was sent to me by Mr. Watts Parkinson, of Wimborne, because he had been refused admission to a bank on account of albuminuria. He appeared to be in perfect health, but no doubt the urine contained a small quantity of albumen. I took him into the hospital for further observation, thinking that here there might be a "cyclic" case. He was in the hospital several weeks and his urine throughout contained albumen, but except this single feature there was no other fault to be discovered. I have some urine from this case the other day, and it is still albuminous, and he tells me that two years ago he was examined and it was so then, but that the doctor said the amount was so small that it was hardly appreciable. He was in Guy's Hospital in 1886, and it seems likely that the albuminuria has persisted since that date. He tells me that he is still in the best of health.

I do not pretend to explain such cases; I only say that they are quite uncommon; but I allude to them here because, admitting as I do that they cannot be said to be due to nephritis, they allow me to demonstrate the weakness of the argument in favour of functional albuminuria that is based upon them.

It is urged that these cases go on too long to be due

:uctural change. But, admitting the difficulty, the argument none the less a weak one, as the following case will show: youth aged 16 had had scarlatina at the age of 7. It was a ld attack, and no dropsy followed; but within three to four nths afterwards albumen was found in the urine in some antity, and, with some variations in this latter respect, so it s continued ever since. He was seen in the early stages of the ease by Dr. Heslop, of Birmingham, and under his directions is kept on a milk diet for six months without any appreciable od accruing, and two years later Sir William Gull, who was isulted, was inclined to look unfavourably on the boy's future. had of late been at Charterhouse, and, having had a cold there l lost ten pounds in weight, he was sent to me for an opinion on his prospects and on what was to be done with him. I ind a boy to all outward seeming in perfect health; his heart s quite natural; his pulse not hard; and his urine, although it itained a quantity of albumen, was yet of specific gravity 1022, l I could find no casts.

Now, with the history of scarlatina that existed here and the earance of albumen a short time afterwards, I cannot think t the disease can be anything else than a nephritis, notwithnding that the boy still seemed in perfect health. And, as I r into the mists of my patient's future, I think I see a slowly-eping parenchymatous nephritis nibbling up his margin—bably, as I think, a disease of patches, leaving considerable tions of the organ free and structurally sound. But, by-and-bye, margin consumed, his capital account will be so restricted t his establishment will be reduced; and then the pinch of erty will not only be felt within but become evident to those ind him. Who does not know this? Call it what you like—mpensation" or what not—for brain, heart, lungs, liver, neys, the same rule applies, and most, if not all, of us have a gin, the possession of which adequately explains the absence symptoms in so many cases of so many diseases for long ods.

or would I retire from the position that this boy has a hritis even if the albuminuria should ultimately disappear; why should not the kidney grow out of its even chronic ammations, just as the skin grows out of its scars, but takes nconscionably long time about it? Indeed, I think that this t be so from the long time that albuminuria will persist some-es and then disappear.

nd here I would note two other occasional features of Bright's ase, which may well make us cautious in predicting its nce: First, the change of clinical type that is by no means ommon in children, both in acute and chronic disease. I k that the course or clinical type of the various forms of ritis is perhaps more regular in adults; but in childhood, at rate, it is not so very unusual to find acute nephritis run its se without any dropsy from beginning to end; and perhaps common to find chronic nephritis where no one would have ected renal disease had the urine not been examined. I have two very remarkable cases of this kind, but I shall give n in detail in the next lecture when I come to speak of the ries of renal disease. On the other hand, I have met with cases of chronic parenchymatous nephritis associated with sy in children of 4 or 5 years of age, where the disease, ining stationary for some months, and the child's general ition having even degenerated, and when we had even begun to up hope, a turn occurred, and the symptoms disappeared so lly that I was compelled to ask myself how it was possible ny advanced nephritis to exist such as I had supposed. This ion has, indeed, an interest apart from the one of albumi-, for the matter of treatment is to some degree dependent the doubts to which it gives rise.

t I would not dismiss the subject quite yet, for there are which do admit of the explanation implied in the term ctional" albuminuria, although I am far from thinking they admit of no other. The curious intermission in the t of albumen is one of these. The suddenness with which nen will come and go is such that one may well find a lty in attributing it to local conditions, and least of all to ing inflammatory, for no inflammation *per se* could explain hen I have already alluded to the occasional occurrence of ernation of albumen storms of this kind with uric acid s; and I am not sure that the frequent coexistence of albu-ia and glycosuria does not point in the same direction. cases do rather suggest the sudden unlocking of abnormal olic processes, which to some minds might seem to afford the better interpretation. But, on the other hand, intermission of the output of albumen is a well-known feature in many a pronounced case of nephritis; and, if we consider the matter, intermission is not worth much as an evidence against the existence of nephritis, for most diseases, even those due to structural change, are remittent more or less. There are oscillations in pathological processes and formations, as much as there are in the normal body heat, for example, notwithstanding that our power of gauging them is less or *nil;* as much as there are intermissions of all visceral function. All Nature sleeps or ebbs and flows, and pathology, although abnormal, is yet within the bounds of life. And it is no unphysiological vision this of the diseased kidney with its times of sleep and activity, be they but faradaic current-like, and these oscillations of activity and repose must be determined immediately by the local circulatory condition which in its turn depends upon that of the entire organism.

Such, then, are some of the arguments for and against a physiological albuminuria. To sum up: in the various ways I have mentioned, through congestion of the viscera, over-concentration of the urine, oxaluria, hæmoglobinuria, the admixture of albuminous products in the lower passages, after the urine has passed the secreting structure—and how much albumen may thus be exuded let many a case of pyelitis bear witness—a large proportion of the cases of albuminuria "adolescent," "functional," "physiological," by whatever name we know it—comes about. Some of these, and most of the remainder, are included in another group which I will call the albuminuria of the neurotic, the direct cause of which is open to question, but which, if on the one hand they can be attributed to functional conditions of no great moment to the health of the individual, on the other are equally well explicable by the disturbed conditions of the circulation which have been brought about by nervous influence. And such conditions may be but the first commencement of chronic disease, for cases are not wanting to suggest that this is really the case in some instances.

In my experience the few other cases of intermittent albuminuria that I have seen have been so persistent that there seems to me sufficient ground for their being regarded with grave suspicion as cases of actual nephritis.

My rule of practice, therefore, is this: if a case presents itself for examination, and albumen be found in the urine, it is a case for further investigation. If it be in a young person, and the observation has been made on the early morning urine, the albumen will probably have disappeared at the next examination, or within a very short time, and it is a condition of no importance. If the albuminuria is in any quantity, and its presence persistent or its reappearance frequent, it must be regarded, to use Dr. Gairdner's apt expression, as a danger signal to be watched, and for my own part I believe that some of these cases, at any rate, are due to an irregularly distributed nephritis.

On the whole, I consider that the terms "functional" and "physiological" have little warrant when applied to albuminuria, and ought to be discarded, but that "intermittent" might well be retained; for although intermittency is by no means wholly absent in cases of pronounced nephritis, it may serve to distinguish a group of cases about which it may still be said that some uncertainty exists.

One word about tests. During the last few years I have habitually pitted nitric acid against picric acid, and also against ferrocyanide of potassium and citric acid. Of late I have discarded picric acid because of the frequency with which it causes a difficulty with the administration of quinine; although I think that it is the reagent of the three which makes most show when the albumen is in minute quantities only. Of the other two, notwithstanding that I have steadily investigated this question ever since it was first mooted, I can only find one case in my notebooks in which, albumen being present, I have been able to detect it by the ferrocyanide, and not by cold nitric acid. With this one exception out of hundreds of cases, I have never failed to obtain a distinct reaction with nitric acid when I have got it with the ferrocyanide. And I think that often the film of albumen at the junction of the nitric acid and urine was the more decided of the two. Nothing better than cold nitric acid and heat can be requisite for home purposes, and for travelling I always take Dr. Pavy's pellets of ferrocyanide of potassium and citric acid. They are very delicate, and are free from any noteworthy objection.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The date of the annual dinner of the above society at the Criterion has been postponed to Wednesday, June 11th, at 7 for 7.30 P.M.

REPORTS
TO THE
SCIENTIFIC GRANTS COMMITTEE
OF THE
BRITISH MEDICAL ASSOCIATION.

REPORT ON BILATERALLY ASSOCIATED MOVEMENTS, AND ON THE FUNCTIONAL RELATIONS OF THE CORPUS CALLOSUM TO THE MOTOR CORTEX.

By F. W. MOTT, M.D.
Lecturer on Physiology at Charing Cross Hospital Medical School.

With the assistance of a grant from the Association I have undertaken a research into the cerebral mechanism of associated movements, and am now able to offer to the Scientific Grants Committee a report of a portion of the work upon which I have been engaged for several months. The experiments, which are all upon monkeys, anæsthetised with ether, have been carried out in conjunction with Professor Schäfer in the Physiological Laboratory of University College.

My original idea was to follow up the work of Krause on the laryngeal centres, and to differentiate, if possible, an abductor as well as an adductor centre for the vocal cords. Had this succeeded, I intended to ascertain whether any difference existed in the latent period on stimulation of the abductor and adductor centres respectively, and thus endeavour to explain the fact, amongst others, that a far greater number of expiratory efforts can be made per minute than inspiratory. The results of excitation of the laryngeal cortical centre produced, however, no new fact. One experiment is, however, worthy of record as regards lesions of that centre.

A dog-faced monkey, which was in the habit of barking loudly on all occasions, was selected as a suitable animal for a bilateral extirpation of that portion of the cortex cerebri which Horsley and Semon have shown to be the centre for adduction of the cords in the monkey. A piece of the cortex the size of a threepenny piece was first removed on the left side. Ten days later a similar operation was performed on the right side. In both cases the area removed was larger than the part of the cortex which gave rise to movements of the cords when tested by excitation with a moderate current. After each experiment the animal was able to bark as loudly as before, this result being in general accordance with that obtained by Krause in the dog. He found "that after double extirpation the dogs only lost the psychical representations of the movements of the vocal cords necessary to phonation, and that some of them preserved the rude reflex approximation of the cords as found in the newborn animal, with its squealing whining voice." I am not able to say positively that after the bilateral operation the bark of the animal was merely a simple reflex act, but I never subsequently heard it bark unless it were suddenly frightened, as by the approach of another monkey of which it was in dread. Further details of this experiment will be published as soon as I have made a microscopical examination of the brain and spinal cord.

Finding there was little to be made out in this direction beyond the results already obtained by other observers, we turned our attention to the relation of the corpus callosum to associated movements in general, and those of the eyes and vocal cords in particular. The following is an abstract of the results of our experiments upon this commissure; the details will be published later elsewhere.

I. *Stimulation of Centres connected with associated Movements of the Head and Eyes, and with adduction of the Cords, produces the same effects after as before Section of the Corpus Callosum.*—Unilateral stimulation of these centres invariably gives rise to the same movements after as before section of the corpus callosum. This agrees with a result obtained by Horsley and Semon, which we can also confirm by our observations—that after extirpation of the laryngeal centre on one side, stimulation on the other s causes bilateral movements. The same applies to head and movements.

II. *Stimulation of the Corpus Callosum by weak Induction C rents produces localised Bilateral Movements in all parts of Body, the Muscles which respond to the Stimulus depending u the position of the Electrodes along the Commissure.*—A longitu nal piece of the skull having been removed close to the sagit suture on one side, the dura mater was reflected up to the mid line, thus allowing a pair of fine electrodes to be slipped in betw the hemisphere and the falx cerebri, so that the two points mi rest upon the corpus callosum. The electrodes were specially c structed for this purpose, and very carefully insulated by paraffin, cept at the points of the two wires, which were about 1 millim apart. On stimulation of the corpus callosum in this manner have found that in front of sulcus x, head and eye movements obtained. Upon shifting the electrodes a little farther back, as to be opposite the anterior part of sulcus x, slight flexion the fingers, with well-marked movements of the shoulder musc on both sides, occurs. On again shifting the electrodes a li further back so that they rest upon the corpus callosum op site the middle of sulcus x, we have obtained well-marked bilat movements of the trunk muscles; and still farther back, just hind sulcus x, leg and tail movements are produced. All the mo ments so obtained are bilateral, and fairly equal on both si We have never obtained any face movements, and are unabl explain this. These results cannot be due to the escape of current to the motor region in the longitudinal fissure (margi gyrus), because when the electrodes were withdrawn a few m mètres from the corpus callosum, and, still remaining in the lo tudinal fissure, are thus placed nearer to the marginal convoluti no result is observed.

III. *Stimulation of the Intact Corpus Callosum, after Rem of the Motor Area of One Side, Produces Movements of the responding Muscles on that Side of the Body Only.*—If the arm of the right hemisphere, for example, be removed or destroye cautery, stimulation of the corpus callosum now only gives ris movements of the right arm, instead of both arms. Likewis an incision be made into the cortex, say on the right side, so a cut off the connection of the arm area with the corpus callos without, however, dividing any fibres which might be suppose pass from the commissure into the internal capsule, it is fo that stimulation of the corpus callosum only gives rise to lateral movements of the arm and shoulder of the same sid the body as the injury, namely, the right; although, if the ri arm centre itself was stimulated, movements occurred as usu the opposite shoulder and arm (the left), showing that the fi of the internal capsule were still intact.

IV. *Direct Stimulation of the Fibres of the Corpus Callosu their Transverse Section Produces Localised Movements on Side Opposite to that Hemisphere with which the Stimulated F are still Connected.*—In order to perform this experiment a se operation has to be performed, sometimes attended by much bl ing, but satisfactory results were obtained in a number of cases. hemisphere having been cut away on one side so as to expose cut across the fibres of the corpus callosum as they enter hemisphere, the transverse section of the callosal fibres stimulated, and localised unilateral movements were obta When, for example, the right hemisphere is removed movem on the right side of the body are produced, and this by weakest possible excitation, hardly appreciable on the ton

The portion, excitation of which gives rise to movemen found to be limited to the thin middle part of the corpus c sum. Most anteriorly eye movements are obtained, generall definite and rolling, but sometimes taking the form of pr conjugate deviation (to the right when the *left* hemisphere i intact).

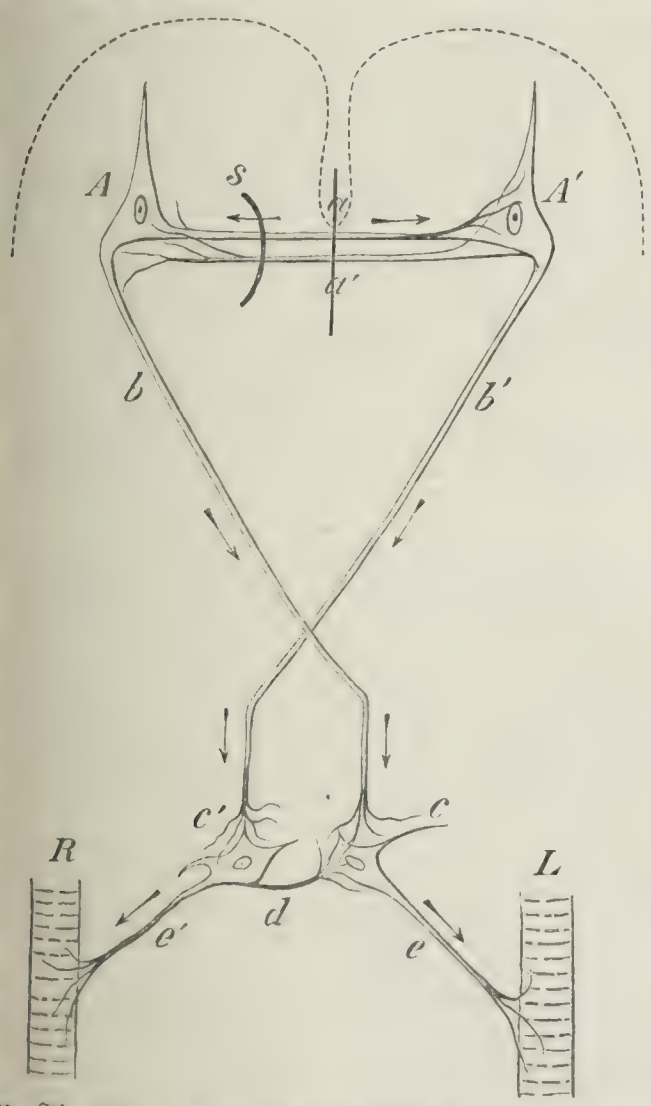
Then come head and shoulder movements, passing into m ments of the arm and wrist. Movements of the fingers may be observed, but cannot be easily differentiated. Then, more teriorly, movements of the trunk and tail, and, lastly, contra of leg muscles. At one point the weakest possible excita always produced opposition of the hallux alone.

The localisation of particular movements to particular poin the excitable part of the commissure is not, however, comp For in some experiments we have obtained the same move by stimulating all points of the excitable part of the commis although at different points it is accompanied by movemen different parts of the body. This will be rendered more clea

instance derived from one experiment (upon a Rhœsus mon-). In this case shoulder movements were obtained, not only stimulation at about the anterior third of the commissure, but in front of this point, where they were accompanied by head eye movements, and behind it, where they were accompanied trunk and, more posteriorly, by leg movements. In other ds, the fibres passing to the cortical area for the shoulder ements, although most massed at a certain point, exhibited a ain degree of scattering along the whole of the middle of the missure. And in another case we obtained a similar result a the eye movements. These facts are in accordance with the eneration results obtained by Sherrington,[1] who has observed r unilateral removal of localised portions of the cortical otor" area, a tendency to scattering of the fibres, which are eable by degeneration from the lesion across the corpus osum.

the grey matter of the cortex cerebri is destroyed by ery or ablation, especial care being taken to preserve any ection there may be between the corpus callosum and internal ule, the movements are no longer obtained, although ulation of the exposed corona radiata, or of the internal cap-, gives rise to movements on the opposite side as usual. This is mentioned as showing that the cessation of effect on de- tion of the cortex was not the result of shock or hæmorrhage luced by such destruction.

Epilepsy is Produced either by Stimulation of the Intact us Callosum, or by Direct Stimulation of the Fibres in Section a Strong Current.—This would indicate that the fibres of the us callosum are direct prolongations of the large cells of the or area, their probable relations to these being represented in accompanying diagram.



RAM.—Stimulation at *a a'* produces movements through the cortical ells A A', the course of the stimulus being represented by the arrows. f the centre A be destroyed, only R will contract when the stimulus applied at *a a'*. After section of the right hemisphere at *s*, made in ich a way as to divide the fibres *a* as they proceed to the corpus callo- um from the motor area A, but not to injure the fibres of the corona adiata, stimulation at *a a'* will excite the fibre *a'* and the cell A', and his will lead to contraction of R, but not L.

[1] *Journal of Physiology*, vol. x, No. 5.

ON LABYRINTHINE DEAFNESS TREATED BY PILOCARPIN.

By GEORGE P. FIELD, M.R.C.S.,
Aural Surgeon to St. Mary's Hospital.

In a previous communication I detailed the results which I had obtained by the injection of pilocarpin subcutaneously in cases of labyrinthine and apparently incurable deafness. I wish now to give an account of my further and more extended experience of this treatment. The cases in which I have found the greatest benefit to accrue are those in which bone conduction had entirely or almost entirely disappeared, where, too, in the majority of instances, the influence of middle ear disease was subordinate to that of the labyrinth. The treatment has, it is true, appeared to be beneficial in some cases of middle ear deafness, but not to by any means the same extent as in disease of the internal ear.

After the favourable results obtained one is forced to inquire how these results can be brought about, and a correct appreciation of its *rationale* would doubtless lead us to an understanding of why it is beneficial in some cases and of little avail in others. It is advisable in the first place to inquire into the pathology of labyrinthine deafness. The absence of bone conduction would point to some condition which prevents the terminal fibres of the auditory nerve from being acted upon by the acoustic vibrations. With very few exceptions, such as, for instance, in some cases of Menière's disease and in locomotor ataxy, this condition is essentially inflammatory in its origin. Primary inflammation of the labyrinth is exceedingly rare, so far as pathological observation has gone. In one case, recorded by Schwartze, suppuration of the labyrinth, independent of any affection of the middle ear, led to suppurative meningitis. Politzer, too, has recorded a case where, the middle ear being normal, inflammation of the labyrinth caused new bone-formation from the periosteum, which completely filled up the cavity. In by far the majority of cases, however, the labyrinthine disease is secondary, and although a few cases have been reported where inflammation has extended from cerebral meningitis along the sheath of the auditory nerve or through the aqueductus cochleæ to the labyrinth, yet usually the primary seat of the inflammation is the middle ear, which is so often affected in the specific fevers.

The early stages of this affection as it attacks the labyrinth are evidenced anatomically by congestion, small cell infiltration and sometimes by suppuration and complete destruction of its membrane. The inflammation may spread along the sheath of the auditory nerve and so reach the cranial cavity, but more commonly and fortunately the inflammatory process is limited to the labyrinth itself. Here at times the inflammatory material undergoes further changes. The cavity of the labyrinth becomes filled with a fatty or cheesy mass, containing granular and sometimes calcareous matter, pigment, and crystals of cholesterine; bands of fibrous tissue may stretch from wall to wall, and the bony walls become thickened as the result of the inflammation of their periosteum. The membrane of the labyrinth may be absolutely destroyed, and with it the nerve endings spread upon it are degenerated and atrophied. More commonly the membrane is thickened by overgrowth of fibrous tissue, and this presses on the nerve endings and paralyses their action. The accumulation of these inflammatory products in so confined a space necessarily causes more or less disappearance of the perilymph and endolymph. The course of the inflammation, it appears then, is that which an inflammation may pursue in other parts, its results being dependent upon its severity and upon the delicacy and complexity of the organ in which it has occurred. Nor would it appear that the cause of the inflammation has much influence upon its pathological results. Syphilitic affections of the labyrinth, in which Politzer first found the pilocarpin treatment of benefit, cause practically the same pathological appearances, although it may be mentioned that Moos and Steinbrügge have described a case in which a true gumma had formed in the periosteum of the labyrinth.

Such, then, is the condition which causes labyrinthine deafness, and it can readily be understood that it is not promising to ordinary methods of treatment. Yet it is in many of just such cases that I have found the subcutaneous injection of pilocarpin to give great relief, and in not a few instances to lead to what is for practical purposes a cure. How this is brought about is for the present at least incapable of proof, but the surmise I would venture to put forward, and it would appear to me to

be at least plausible, is the following. Referring to Dr. Lauder Brunton's *Textbook of Pharmacology*, we find that pilocarpin increases all the secretions of the body, except the bile, and this it does by stimulating the secretory nerve fibres. I notice especially that wax, the secretion of the outer ear, is increased by it, and I may mention in passing that in all these cases of labyrinthine deafness wax is usually absent in the ears. It would appear not improbable, therefore, that the secretion of the inner ear should also be promoted by the injections, seeing that the action of all the mucous membranes of the body is stimulated. The softening of the inflammatory accumulations which would result therefrom would greatly facilitate their removal by the absorbents, and even if it did not cause their absolute disappearance, would so far relieve the pressure upon the auditory nerve endings as to allow of a resumption of their function. If the membrane of the labyrinth had been destroyed entirely no secretion could take place. Again, no improvement could be expected from such treatment if bony hypertrophy had occurred. We know that in peripheral neuritis, as it occurs in other parts of the body, recovery of the function of the nerve may take place even after a considerable lapse of time, and where the auditory nerve endings are functionally hindered by the pressure of surrounding exudation, it may well be that improvement may follow from the removal of the exudation. Where, however, pronounced atrophy of the nerve tissue has established itself—and this has been found in the labyrinthine deafness which is the result of locomotor ataxy, as well as in that of inflammatory origin—no treatment can be of any avail. We have no means at present by which we can judge of the presence of these unfavourable conditions, and I think it probable that to this cause may be attributed some of the abortive results of the pilocarpin injections. In a large number of instances, however, the results obtained have been most gratifying, and I venture, therefore, to record my experience of what I believe to be a valuable method of treatment.

In middle ear disease pathological observations have shown that fibrous adhesions, cicatricial contraction of the mucous membrane, and ankylosis of the ossicles are the most frequent results of inflammation, and these are not so likely to be benefited by the secretory action of the pilocarpin as is the accumulation of inflammatory *débris*, which is oftener the cause of labyrinthine deafness.

The following, taken from a large number of cases lately under my care, are some of the more satisfactory results obtained; but at the same time it is only fair to state, as I have hinted above, that others seemingly similar in every particular have derived little or no benefit. I have thought it better as far as possible to use the patient's own words.

Mrs. G., aged 40, from Leeds, writes: "I was deaf for seventeen years before consulting you, and have not been able to hear without a speaking-trumpet for the past ten years. After undergoing the treatment for about three weeks, there was a slight improvement, which continued to increase, and at the end of eight weeks I could hear better without my trumpet than I ever could with it. It is now six weeks since I completed the treatment, and I am very pleased to say my hearing is as good as when I left off. My family and friends, who had not seen me for three months, found a most wonderful improvement in my hearing." This lady can now hear ordinary conversation very well. She has left off her trumpet entirely, and can hear perfectly well at church or at the theatre.

Mr. S., aged 43, who came to consult me on March 20th last, writes: "The cause of my deafness I believe to have been the noise of locomotive whistling, having travelled a great deal on the engines of express trains in the Argentine Republic, which used their powerful whistles at numerous level crossings. I have also done a good deal of shooting in past years. About ten days after the commencement of your treatment I noticed that the noise in the street appeared much louder; from the twentieth to the thirtieth day nobody noticed that I was deaf, and my wife, who had deplored my increasing deafness, now tells me I appear quite cured."

I received the following letter from a medical gentleman whose wife had undergone this treatment: "Referring to our conversation as to the probable action of pilocarpin in middle and internal ear deafness, some time ago I was talking to a friend of mine who is pathologist at one of the general hospitals in London, and he mentioned that he had been making some investigations on rabbits, in the course of which he found it almost impossible to get rid of the green colouring matter in the cells of the mucous coat of the intestines until he gave them pilocarpin, when t green matter was completely extruded into the cavity of intestine. He also told me that there had been a good deal investigation made as to pilocarpin increasing the secret action of cells, I remarked that this might explain the fav able results that you had obtained in some cases of deaf by increasing the excretory action of the cells, and so remov some coagulable fluid in the submucous tissue which interfe with the movements of the ossicles, and probably also by eq ising the pressure in the cochlea."

Mr. B., aged 37, deaf about twenty years, after eight week the treatment, sends me the following letter: "As you kno am a bank clerk. Mr. H., the manager, came to me on my ret and conversed with me for some time, and then he said, 'W you hear every word I say.' I said 'Yes,' and in the evening brought Mrs. H. round to see me, who said if I could hear Mr I could hear anybody, as he speaks very indistinctly and in a tone. I also called on an old friend, who wished me to tell from him that I was markedly better, and that he was m pleased with the progress I had made."

In contradistinction to this case, Miss W., aged 45, aft month's treatment, did not improve, and suffered from an u carious rash, so that the treatment had to be discontinued. I not at all sure that this was caused by the drug; at any ra have never seen any other instance in which it occurred.

Miss B., aged 31, deaf many years; unable to hear the watc contact in either ear, and unable to follow general conversat but hears one voice when addressed in a loud tone. After weeks' treatment she writes: "I have been to our village ch and heard every word of the service without an effort; I have done this for the last eight years."

Mr. P., aged 41, could hear the watch half an inch off on left side and five inches on the right. After six weeks the improved to five inches and the right to practically normal.

Miss T., aged 28, got deaf about ten years ago immediately an attack of mumps. She was injected with pilocarpin for th days. Her father writes: "There is no doubt at all as to benefit she has derived. Whereas before the treatment no could fail to discover her infirmity, now I think it would be cult for anyone to do so. She hears and follows conversa perfectly, and she enjoys the theatres just as much as her si whose hearing is perfect."

Mr. P., aged 53, deaf for a long time, was unable to hear rem unless addressed to him, and could not follow the servic church. He writes: "In less than three weeks from the mencement of the treatment I could hear my neighbour's clock striking, which I do not remember ever having done be and I am now able to hear the service and sermons in str churches, a thing I have not done for a considerable leng time."

Mr. C., aged 37, writes: "Before consulting you I could hear the tick of a watch at all with the left ear, and only closely pressed with the right. I could not follow what my said when sitting at quite a small dinner table, nor could I my servant enter or leave the room. After about a fortnig the treatment I began to improve, and now, after thirty- days of injections, I can hear a watch tick when held se inches from my right ear and when just clear of my left ea can follow general conversation perfectly well, and all my fr remark how greatly my hearing has improved."

Miss L., aged 33, sent to me by Dr. Leadam; her mother fered from deafness. The patient had had scarlet fever fi years ago, and about five years after that had begun to get From that time to the present she had tried all kinds of treat in vain. She writes: "When I commenced I could scarcely general conversation, and some voices were very indistinct. five weeks of injections I have gained immensely; I can now general conversation well, and the singing I have had in my for many years, though not quite gone, is much relieved."

Miss C., aged 26, three years ago had an abscess in the ear; since that time she had been getting gradually deaf, much worse the last eighteen months; she was unable to conversations quite close to her, and heard nothing in chur at the theatre. She sings a great deal, but lately had been u to hear her accompaniment. She was injected for six weeks began to improve at the end of the first fortnight. At the e the treatment the patient writes that "she is able to hear clocks, and all manner of sounds that she had not hear eighteen months; also that she can hear anyone speaking in

linary voice, and had no difficulty in hearing in church; and t all her friends were delighted with the progress she had de."

Captain A., aged 40, writes: "My deafness came on first when ssing the Rocky Mountains. I had considerable hardships and vations at that time, and previously in the Egyptian campaign. as quite unable to hear general conversation, and could only r if addressed in a loud tone. In the left ear I have been deaf twenty years, and I have the greatest difficulty in locating nd. I have never hitherto derived any benefit from treatment; er five weeks of injections, I could locate sound and hear ieral conversation perfectly."

Mr. V., from India, aged 36, writes: "I was deaf some twenty rs; at first slightly, and then gradually worse, until it was h the greatest difficulty I could hear conversation. I began treatment on November 23rd of last year. For the first fort- ht I did not improve at all; during the third week I was struck h the improvement, and on December 18th, when I had to nd the burial of a friend, I heard almost every word of the vice: whereas a week before I began my treatment, at a similar sadder ceremony, when in the same church and in the same , and with the same clergyman officiating, I could not hear a gle word. I hear many sounds now that I have not heard for rs; my hearing has increased about the same in both ears; t is to say, 'my worst ear is as bad when compared with my d ear;' in other words, my worst ear is nearly now as good as good ear was before I began the treatment."

Miss C., aged 25 years, almost absolutely deaf, everything had e written down for her, writes: "I have been gradually going for the last ten years, and have been subject to great noises he ears. From the first week of the injections I began to hear nds in the house, and was soon able to follow conversation n the aid of a trumpet; at the end of a month I could hear my er's voice at one yard distant, and also had great relief from noises in the head, and could hear a tuning fork at the end of treatment—a thing I could never do before."

Mr. S. C. H., aged 50, sent by Dr. Broadbent. His deafness e on in the spring of 1883, after a cold. Before injections and r ordinary treatment patient found it difficult to follow gene- conversation, and was unable to hear in public places unless he a very good seat. After five weeks of pilocarpin injection he able to hear general conversation, and he writes: "A medi- nan who has known me nearly all my life remarked the other on the improvement in my hearing, saying, that I used to painfully anxious not to miss hearing what he said, whereas I sat at my ease and heard without any apparent effort."

Mrs. A., aged 31, deaf in one ear for 7 years, after an attack of noid fever, other ear good. After five weeks of treatment was to hear a whisper in the affected ear. She had previously n up all hope of recovery.

Mr. S., aged 28, a medical man, after 30 injections was no better. ad lost all sense of hearing in one ear for many years, and d not hear a watch in contact with the other. He writes: "The s wonderfully better, but my experience with it has been ous, as the improvement suddenly began on leaving off the arpin."

Mr. W., aged 63, deaf 20 years, after six weeks of treatment, es: "There can be no doubt that my hearing has been con- ably improved under the pilocarpin treatment. I never ex- d to recover it entirely, but I am very thankful for the good has been done to my enfeebled sense."

Major J., a Royal Engineer, aged 55, writes: "I have been very for many years in my left ear, but only found it out by the st accident, my hearing in my right ear having been so very ct; but about four or five years ago my hearing on the right egan to be affected, and last year it got so bad that I con- d you, by whom I was injected with pilocarpin for 35 con- ive days. I did not derive any benefit till after about a fort- , when my hearing began to improve, and at the end of the e I could even hear on my left side. So great was the total ovement that whereas before treatment I could hardly follow rsation unless the person was close on my right side, after it ld hear all that was said even when the persons speaking at some distance off or on my left side, and I did not dread g to go out to dinner or social parties as before."

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the last meeting of the Faculty, the Texas Medical College rred upon Dr. Thomas More Madden the honorary degree of r of Medicine.

LANDRY'S PARALYSIS.[1]

By GODFREY CARTER, M.R.C.S., L.R.C.P.Ed.,
Ilkley.

Cases of acute ascending paralysis (or, as the disease is more often designated, "Landry's paralysis") are of such comparative rarity outside the wards of our large hospitals that I ventured to think that such a case, occurring recently in my private practice, and in spite of the involvement of the medulla oblongata at a subsequent stage of the disease, yet terminating in complete recovery, might prove of interest.

J. R., aged 25, married, and a stoker in the employment of the Midland Railway Company, plying on an engine running between Bradford and Ilkley, called to see me on July 19th last. He complained of sore throat and a heavy bone-aching cold. He was shivery, all his limbs ached, but no pains in head or back. He said he had not been feeling well for some weeks. There had been an unusually tired feeling for some time past, particularly after his day's work. His nose had bled freely while on his engine, once or twice, and he had been eating poorly. The appearance of the throat indicated simple catarrhal inflammation. There were no "patches" anywhere to be seen, no enlarged glands under the jaw, and the temperature was 99°. I ordered him a gargle of chlorate of potash and boracic acid, and told him he could lie up for a few days if he liked. The throat quickly got well, and he did not leave his duty. I would say at this point that the patient was a healthy-looking young man—had always had good health, in fact. His parents emigrated to America, and died there, his mother in confinement, and his father succumbed after several attacks of ague. He had enteric fever when 10 years old; never had diphtheria. At 19 years of age he went into the engine sheds as cleaner. There he continued for five years, mostly on night work. He has been a very steady man, and never contracted any venereal disease. Two years ago he was promoted to be fireman on a passenger engine, and about the same time he married. I have attended his wife in confinement. The child and mother are now typically healthy; and I must add that the most careful examination of the patient by myself has failed to bring to light the slightest syphilitic evidences.

Now to resume the clinical history of the case. I have said that he got quickly well of the sore throat, but felt tired; three days later he felt increasingly so, even amounting to a sense of weakness, and then experienced for the first time a feeling of "pricking and numbness" in both arms and legs; they felt as if they were asleep. Two or three days later this had increased. He could stoop down with the shovel in his hands, but found he could not lift it up again with coals upon it. The whole arms and the knees felt powerless.

On July 25th (six days after he had first complained of the sore throat) the patient came to see me again. I was struck with his manner when he entered the room. He advanced slowly and putting one foot before the other evidently with difficulty. He looked pale and ill. There was no inco-ordination; the speech was clear. He testified to his weakness and the pricking feel of the hands and feet. I sent him home, and when I visited him on the following day he was worse, the limbs were feebler. The next day was the last on which he was able to walk up and down stairs to and from his bedroom. Two days afterwards my notes say: "He is much worse. I found him sitting on a chair, unable to stand up unassisted. He vomited once or twice into a bucket by his side. He was sweating freely, and the pulse was rapid; temperature normal; no albuminuria; the expression was anxious and pallid. With one person on each side of him he tried to shuffle one leg in front of the other. Sensation was unaffected." He was ordered to his bed, where he remained absolutely for six weeks. He had no nerve pains.

The diagnosis up to this point I felt to be uncertain. The loss of power appeared to be quite equal in both upper and lower extremities. Sensation I have said was unaffected. There was no involvement of either bladder or rectum, and the mind was perfectly clear. I had in my mind spinal meningitis and acute ascending paralysis, but as the case progressed it became evident that the latter condition was the one I had to deal with. I have said that each day the patient grew worse, until on August 2nd

[1] Read at a meeting of the Bradford Medico-Chirurgical Society.

(eight days after coming up to me complaining of numbness, and twelve days after the onset of spinal symptoms) he was at his worst. Cerebral (or rather cerebellar) symptoms had then set in. For a day or two previously he had complained of difficulty in swallowing, but now the dysphagia was complete, and not even fluid would go down; it came back through the nostrils. The dyspnœa was also great. As he subsequently described it, "he had to lift his whole body" each time he wanted to draw a breath. In other words, the diaphragm was becoming paralysed, and the involvement of the muscles of the trunk was shown by the inability to move from side to side, and defæcation was retarded through the weakening of the abdominal muscles. The arms lay powerless by his side, the legs were motionless and flaccid; the pupils were widely dilated, the skin was acting freely, the pulse was extremely rapid and irregular. The paralysed muscles of the neck allowed the head to fall backwards or to one side, according as it chanced to be. The voice came fitfully and in a hoarse whisper. Altogether, the case looked like one about to terminate rapidly in cardiac syncope. There was no retention of urine. He knew when he wished to have the bowels moved, but could not.

The next day he was much as before, perhaps a little easier in the early part of the day, but as night came on the scenes of the night before were repeated. I was sent for twice, and he seemed even more ill. Nutrient enemata were given, but he was fighting for his breath, and the pulse was 130. I gave the gravest possible prognosis to the friends, but added that, while the patient lived, there was always a chance of recovery in this disease. The attack was rapid in its onset, the invasion had risen quickly, and had now reached the brain; but one hoped that it might even recede as quickly. And so it was.

On the following day, August 4th, an improvement in the swallowing and breathing took place. He drank a quart of milk. The pulse and respirations slowed, the voice strengthened, and three or four days afterwards he was able to swallow bread sops.

The cerebral symptoms continued to subside, the pupils contracted, the power of supporting the head was regained. The tide of the disease receded, leaving fresh tracts of nerve tissue free from above downwards. Thus at the end of another week he could move the fingers a little, and gradually the arms, shoulders, and back regained somewhat of their power. The legs were the last to recover. They did so about a fortnight after the arms, thus in the decline placing in the usual clinical sequence the order which had not been so evident in the mode of invasion of the disease.

In six weeks the patient was out of bed, but feeble; two weeks later he could walk across the room with sticks, and so from point to point he gained, until in October I wrote: "He now looks well, but a little thin. The muscles are gradually gaining strength, but feel somewhat flabby. He walks with a firm step, and says he can eat almost anything." Finally, I met him in the street at the end of the old year, He looked as well as ever I had known him. He said he was as strong in muscle as he had ever been, and that he purposed calling to see me in a few days, as he wanted his railway certificates to return to his usual employment.

Now may I say a few words with regard to this singular complaint. I have stated that at the onset I felt that I might be dealing with a case of spinal meningitis. Spinal myelitis I felt was out of the question, because of the absence of implication of the sensory nerves. Myelitis, involving as it does the whole thickness of the spinal cord, would have taken both kind of nerves simultaneously. In meningitis the effused fluid presses first upon the outer layers of the substance of the cord, and these, being white fibre, the power of motion is the first to be lost. But, as the pressure increases, the grey matter is incommoded also, and then hyperæsthesia and anæsthesia quickly follow. Again, there was no actual physical pain suffered from beginning to end of this case, and I have generally noticed that shooting pains down the nerves are an accompaniment of inflammation of the spinal meninges. But while the onset of this case I have narrated was comparatively sudden, yet it was not sudden enough, I think, to warrant the hypothesis of acute adult spinal paralysis. Of course it is patent that any doubt as to correct diagnosis of the case could only exist in the early stages, when both arms and legs simultaneously and progressively lost their power of motion. Whereas the upward course of the symptoms towards the higher centres, coupled with the absence of retention of urine; the preservation of acute power of feeling; the total absence of any tendency towards the formation of bedsores after six weeks of the recumbent position; and, finally (a point upon which I have not yet dwelt), the absence of any marked atrophy of muscles, also of any electrical reactions of degeneration, such as is usual found in acute spinal paralysis, all point unmistakably to an u usual case of Landry's paralysis. I have said unusual; and think the case is unusual in this particular, inasmuch as t patient recovered.

Charlton Bastian, writing of the disease, says: "When the arr have become implicated, or sometimes almost before, the disea becomes arrested in about one-third of the recorded case and, after a brief interval, recovery of power begins manifest itself, usually in the reverse order of its invasio But in the remaining two-thirds of the cases, after the arr have become paralysed, the disease still progresses so as to affe the cervical muscles, the diaphragm, and finally the muscl innervated by the medulla oblongata. Whenever the disease h advanced so far as to involve the medulla, recoveries are co paratively rare."

Of the pathology of this disease we know but little. Bastia definition of it is: "A mysterious affection of the spinal cord, fi definitely described by Landry in 1859, characterised on its clinic side by the existence of a progressive paralysis, advancing rapid from below upwards, and characterised on its anatomical side the most puzzling absence of any appreciable pathological chang On account of the latter peculiarity the disease ought really to described under the class of those dependent upon unknown imperfectly known organic changes. It would appear that have to do with a simple alteration of the molecular condition the spinal motor nerve centres, unaccompanied by any kno inflammation or irregularity of vascular supply."

To these words I have nothing of my own to add, but I know has been more recently suggested by some writers—with wh show of truth and accuracy of observation I will ask you judge and, if you will, comment upon—that Landry's paraly is due to chill, causing an effusion of fluid in the central canal the spinal cord, this fluid rising higher and higher, and exerti most pressure where the column of it is deepest and heavies that is, from below upwards—until finally the ventricle of t medulla is reached, and such symptoms as I have described you are held to supervene.

ON THE SELECTION AND USE OF CATHETE AND OTHER INSTRUMENTS FOR ENLARGED PROSTATE.[1]

By REGINALD HARRISON, F.R.C.S.,
Surgeon to St. Peter's Hospital, London.

I HAVE in this article put together a few notes on this subj and I have selected it because it relates to everyday practice, a to emergencies which we all have to meet. It has been stat on good authority, that within the present century the expectar of life has considerably increased, and though this may be larg due to improved sanitation, advances in treatment can certai claim a share.

In the latter category we must include much that has been cently done for urinary diseases, and more particularly for th requiring mechanical management. The improvements in crushing operation for stone and its extension to all ages of lif an important illustration of my statement, whilst in the mi derangements of the urinary apparatus the better construct of catheters and appliances of this nature has not only added longevity, but greatly contributed to the comfort of those v are dependent upon these aids.

When I first entered the profession the instrument most c monly employed in cases of retention due to a large prostate v the long curved silver catheter. This has now been largely carded, and has given way to less dangerous implements in use of which skill and gentleness take the place of the fo which even the sight of this weapon seems to imply. The d gerous practice of forcing a way *nolens volens* into the bladde now replaced by subtler and surer means of effecting this obje

It is hardly necessary to remark that though a person n possess a large prostate, this by no means implies that he is eit to suffer from it or to require mechanical assistance. Most n over 60 years of age have more or less enlarged prostates, but i

[1] Read before the Essex District of the East Anglian Branch of the Bri Medical Association.

y a small proportion that are incommoded. The liability to ıary obstruction is no doubt there, but by care and the avoid-e, either by design or by good fortune, of some of the accidents iving, a male so circumstanced has a good chance of reaching n an advanced age without recourse to a catheter. I have re-tly seen a gentleman, aged 79, though he has had for some e what can only be described as an enormous prostate, yet urinary functions do not appear to have been thereby dis-ɔed. This point has also been recently well illustrated in Pro-or Humphry's observations on old age.

rostatic catheterism may be referred to under two headings: as being expedient, and (2) as urgently required. By the ıer is meant that a time may come in the life of a person with rge prostate where the use of a catheter becomes necessary as mplement to natural micturition, just as elderly persons may ɜ to supplement vision with glasses. By the latter term, re the catheter is urgently required, I refer to those instances re the enlarged prostate has undergone some more or less len change, which renders natural micturition impossible. It these two conditions I intend confining my remarks now. commonest change coincident with most enlargements of the tate is such as to render the individual incapable of emptying ıladder. In the first instance this is due to the altered rela-ɜ which are brought about between the most dependent por-of the bladder and its outlet. I lay stress upon this point use I do not think in practice we fully realise the difficulties :h such bladders have in becoming completely closed spaces ıe withdrawal of residual urine from them. Assuming that ɔ degree of residual urine is absolutely necessary in most ɔties of enlarged prostate, the question arises, Under what cir-ɜtances is it incumbent on the surgeon in the first instance the patient subsequently to take means for removing that h the bladder cannot expel? The answer to this in a few s will be: When there is evidence either by its quantity or .ty that the urine is doing positive harm to the individual. n this is obvious, then it behoves us very carefully to con-how the patient may best commence what is generally known e catheter life.

me years ago Sir Andrew Clark did good service both to cine and surgery by pointing to certain febrile symptoms, times ending fatally, which not infrequently followed the ıencement of the epoch I am now referring to. In the ·al discussion which followed the publication of these ob-tions, it appeared to me that insufficient prominence was ı to the fact that residual urine is an absolute necessity to bladders, and that if an attempt is made to do without it :hing worse is provided—that is to say, septic urine is sub-ed for aseptic. In a number of observations I made in ɜnce to this point, I found that in certain cases of enlarged ate, where the bladder was not generally atonic, the removal d residual urine was followed by the rapid conversion of quent excretions into a more or less ammoniacal compound d with bacteria. It was under such circumstances that ter fever was seen, and I cannot find any evidence that it ver been met with where the urine was proved to be normal. the course of the inquiries to which I have just referred, I from repeated examinations that it was not difficult to in how urine thus became acutely septic. Where a bladder ɜen accustomed, we will say, to contain three or four ounces ne, the sudden withdrawal of the latter establishes a condi-f flaccidity of the vesical walls which is favourable to the sion of air either by the instrument or the urethra; in the place, there is an excessive exudation of mucus from the ıte and adjacent parts; and, lastly, sanguineous pouring out place from the vesical vessels which are thus suddenly ·ed of their support. In this way material for decomposi-ɜ amply provided. So satisfied am I that the physical con-of the suddenly and completely emptied bladder has every-to do with the setting up of so-called catheter fever—a term must be regarded as merely expressive of what other ɜs and spaces in the body are capable of producing when-heir contents are in any way analogous—that I consider very l precautions should be taken in the first instance, when-esidual urine has to be artificially and systematically re-l, with the view of preventing the aseptic conditions to which ɔ referred being provided. What surgeon does not recog-ıe necessity of doing so where a chest or a psoas abscess has apped with the view of averting what might, with equal be called a trocar fever? Where the urine is acid to com-mence with, it should be removed by instalments; and where alka-line or unhealthy, it should be replaced by some antiseptic fluid, the quantity of which may from time to time be reduced. There is no better antiseptic for the bladder than healthy urine; there is no more dangerous one than when the latter is made to undergo active decomposition.

In failing to recognise a septic cause for the fever which occa-sionally accompanies catheterism, and referring it to some occult morbid condition of the nervous system, I cannot help observing that the same kind of explanation was advanced up to a few years ago as explaining the rigors and fever following the use of instruments for urethral stricture, until I demonstrated by a series of operations[2] that these phenomena were due to the absorption of some products of the urine, probably of the nature of alkaloids. On this being recognised and provided against, as it now is in most operations on the urethra, the occurrence of such complica-tions, often attended with considerable risk, has been largely diminished, if not entirely prevented, in the practice of most sur-geons.

And now a word or two about the selection of instruments. For general purposes, I much prefer the flexible ones; they are readily introduced, and rarely cause hæmorrhage. Those made of silk web have some advantage over the rubber catheter, as they can be used with a little more firmness. It is curious to observe the difference in the curves of the prostatic urethra; hence in one case a *coudé* slips in easiest, in another an olive-pointed instrument, whilst in a third an ordinary round-headed catheter glides in without trouble. It is important that the delivery power of the instru-ment should be relative to the normal size of the urethra, and not greatly in excess. What can be worse for a person who has been accustomed for some years to ooze or dribble his urine, than to have it suddenly drawn off *pleno rivo* in about half the usual time the normal act occupies. I have often found the too rapid emptying of the bladder in the regular employment of catheterism an im-portant factor in producing entire loss of natural expulsive power, and in retarding its return when it has been temporarily sus-pended. Nature will not provide muscle when it is not wanted. Here, then, we have at least two important reasons why the selec-tion of catheters should not be handed over to the instrument maker alone, as a patient may very innocently do himself harm by means of a catheter unsuited to his case.

SUPERNUMERARY TONSILS.

By JAMES DONELAN, M.B., M.Ch.,

In September, 1888, I was consulted by a gentleman, aged 21, who complained that his tonsils were much enlarged, and occasionally very painful. His voice was at times hoarse, especially in cold damp weather, and his respiration at these times was at-tended with some difficulty. He also complained that he had a constant feeling that there was something in his throat which he "could neither swallow nor bring up." On examination I found that his normally placed tonsils were hypertrophied to such an extent as almost to meet in the middle line. Owing to the small space available, an attempt at a laryngoscopic examination was without result. I recommended him to have the tonsils removed and to postpone the further examination of his throat until the wounds had healed. I accordingly excised both his normally placed tonsils with Mackenzie's tonsillotome. The patient came to see me again after ten days. The wounds had healed, but he still complained of the substance that could not be swallowed, and of hoarseness with occasional difficulty of breathing. On examining his throat with the laryngeal mirror I was surprised to see another pair of symmetrically placed tonsils situated low down in the pharynx. Each of these bodies was about the size of a filbert, and their lower extremities overhung and almost en-tirely hid the entrance to the larynx from view. As on account of the position of these tumours it was impossible to remove them by means of the guillotine, I decided to use the galvano-caustic loop. Having applied a twenty per cent. solution of cocaine by means of a spray, I succeeded in passing the loop over the left body and removed it. No hæmorrhage took place, but the use of the hot wire evidently caused very severe pain. The suffering was indeed so great that the patient declined to have the removal

[2] Lettsomian Lectures, 1888.

of the second growth proceeded with on that day, but I saw him again two days later, and on that occasion removed it with the loop. The pain of this operation, in spite of the fact that cocaine had been injected into the mass as well as sprayed on its surface, was very severe. I call particular attention to this as an American writer has recently expressed the opinion that the removal of hypertrophied tonsils with the galvano-caustic loop is a much less painful method than when the tonsillotome is employed. I heard nothing of this patient for over a year, but shortly before last Christmas his father called on me and said that his son had enjoyed excellent health since the operation, and that his voice was quite strong and clear. A microscopic examination of the four bodies removed showed that they all presented the usual characteristics seen in hypertrophied tonsils. I think it will be admitted that the case was a very unusual one in the fact that the supernumerary tonsils were bilateral and symmetrically placed below the normal glands, from which, however, they were separated by the posterior palatine fold, and an interval of half an inch.

I have another case of supernumerary tonsil at present under treatment. The patient is a child of about 10, and has the normal tonsils slightly hypertrophied. In this case the supernumerary tonsil is single, and is situated in the middle line immediately behind the uvula. A rhinoscopic examination showed that it has no connection with Luschka's tonsil, which is quite separate, but is also hypertrophied. In this case the friends of the child object to the growth being removed by the loop at one sitting, I am, therefore, gradually destroying it by repeated cauterisations with the galvano-cautery.

I have made a rather extensive search in the libraries, and have not been able to find more than three similar cases recorded. The most recent instance is a case reported by Dr. Carroll Morgan, at the annual meeting of the American Laryngological Association last year, and in his paper he also refers to the only two other examples I have been able to find, namely, those of Jurasz. None of these cases, however, was bilateral or symmetrical. It would be interesting to inquire how it is that when hypertrophy of the adenoid tissue scattered over the mouth and pharynx takes place, it seems usually to occur in definite situations, and so rarely in other places which one might think were exposed to exactly the same influences.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

TRACHEOTOMY UNDER DIFFICULTIES.

I WAS called on the morning of April 29th to see J. E., a fishmonger, aged about 30 years, who has for years suffered from chronic laryngitis, and found him voiceless and with considerable dyspnœa, an acute condition having evidently supervened upon his ordinary chronic inflammation, attributable, I think, to exposure to the east winds, and undue indulgence in whisky. I ordered sinapisms externally to the throat, a purge, inhalation, and medicine, and calling again in the afternoon, found him much relieved. But on passing the house about 8 P.M., I was called in and told he was dying. I found him unconscious on the bed, lips and extremities blue, pupils dilated, conjunctivæ insensitive, breathing stridulous, ribs drawn in during inspiration, pulse scarcely perceptible, and in fact at the point of death. There was evidently nothing for it but tracheotomy.

I accordingly despatched messengers for a tube, bronchitis kettle, etc., but as the man was every moment becoming worse, I found I could not wait for the arrival of the tube, and was at my wit's end for a substitute, till, having examined all the available pipe stems, and found nothing suitable, I suddenly thought of a quill toothpick. I cut the end off this, and having opened the trachea with my penknife, inserted the quill, and was delighted to find that it answered admirably, the patient being immediately relieved. There was some difficulty in obtaining a large silver tube, and I consequently had to hold the toothpick in position for an hour. On the arrival of the silver tube, with the assistance of my principal, Mr. Lowsley, I enlarged the opening in the trachea, and inserted the tube, and so far the patient is doing well.

The toothpick was an ordinary quill, luckily of largish b and the chief difficulties I experienced in maintaining a suppl air were in avoiding, during his struggles, jamming the against the posterior wall of the trachea on the one hand, pulling it out altogether on the other, but as long as he remai quiet with his neck bent over the side of the bed, and his h low, he obtained an excellent supply of air.

Reading. H. HARVEY NORTON, L.R.C.P., M.R.C.

EPITHELIOMA PRIMARILY AFFECTING THE TONSIL

THE case reported by Dr. Downie in the JOURNAL of May recalls to my mind a similar one occurring in a woman, the case I have seen in my practice.

Mrs. D., aged 42, married, consulted me in October, 1889. S her last confinement the previous month, she had never been The child lived one month, and she had to keep her room for months. She looked ill, with a lemon-yellow complexion, complained of sore throat, with shooting pains radiating from left tonsil, and occasional difficulty in swallowing. The left to was uniformly enlarged, not fixed, granular surface; no other larged glands. Ten weeks previously there was nothing matter with her throat. For years she had been very pale, was better in this respect when I first saw her. Almost ch when she tried to swallow food, which must be liquid. A three weeks' tonic treatment she improved in her general he and the tonsil was decidedly reduced in size, but the pain tinued. In ten days the tonsil had again much increased in and I was doubtful as to its nature; but as she expressed a g wish that something should be done, I excised a portion of it the operation was twice repeated within a period of three w Portions removed were examined microscopically and much thelial tissue found. Subsequently the case progressed ra towards a fatal termination; the tonsil became sloughy, inc ing considerably in size, the pain and difficulty of swallowin creased, and in another six weeks, on January 19th, 1890, she from exhaustion.

Cardiff. ALFRED SHEEN, M

ECTOPIC PREGNANCY IN THE LEFT FALLOPIAN T RUPTURE (?)

ON April 24th I was asked in an off-hand sort of manner to " in" and see Miss X., which I did in a few minutes after the sage, and found the girl (aged 17) in bed. Her mother's acc was that she had been "out of sorts" for two or three days, w she said, was the girl's own blame, as "she had been const eating raw rice and sucking citrate of magnesia." She di seem to think her daughter's illness was anything worse th colic due to these. The previous history was therefore scant I learned that the girl (who worked in a mill) had complain the previous evening of very severe pain in the abdomen, v had come on suddenly and had kept her awake all the night.

On examining her I found the girl in a state of collapse, fluttering, barely perceptible pulse, sighing respiration, pallic and quite the appearance of a person after a severe hæmorr The abdomen was distended, hard, and most prominent on th of the umbilicus. There had been amenorrhœa for eight w and I got out of her with some gentle persuasion that she ha intercourse with a young man about two months before.

On vaginal examination there was great pain when I trie bimanual method. The os uteri was very small. The left f was filled up with a semi-firm substance, and seemed distend round the left side as the pain was so severe. I could not cover anything farther. There was no hæmorrhage fro uterus.

The diagnosis I made was (1) left Fallopian tube pregnan seven or eight weeks; (2) rupture the night before with in hæmorrhage; and (3) when I was called in acute peritoniti perimetritis. This case, if seen before rupture occurred, wou all probability not have been diagnosed as above, owing t girl at first denying any possibility of pregnancy. A *post-m* examination would have cleared up matters very much, but not be obtained. CHAS. J. R. MCLEAN, M.D., M

Yeadon, Leeds.

POISONOUS EFFECTS OF EXALGINE.

THE curious effects observed by Dr. Ainslie Johnston aft exhibition of small doses of exalgine serve to bring into pr ence the intolerance manifested by certain persons for ma

ıese derivatives of the coal tar series, and for which it is always ecessary to be prepared; hence the necessity for always beginıing with small doses, as recommended by Professor Fraser.

I have now used exalgine in quite a number of cases of neuralıa, in doses of from one to three grains; and, while I have had very reason to be satisfied with the relief obtained, I have not so ır been unfortunate enough to have to record the slightest disgreeable, still less alarming, effects as the result of its administration.

ALFRED S. GUBB.

Gower Street, W.C.

REPORTS
ON
EDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

STATION HOSPITAL, HONG KONG.

A CASE OF RUPTURE OF THE DUODENUM.

(By Surgeon M. T. YARR, Medical Staff.)

ıM indebted to the kindness of Deputy Surgeon-General Paterı and Surgeon-Major Barrow for permission to publish this se.

Patient—a boyish-looking soldier of somewhat delicate physique, ed 22 years—while walking from his barrack room in a half-ıeping condition on the morning of August 30th, fell on to a ɔne landing from a height of 7 or 8 feet, and was found groaning ere about five minutes after by some of his comrades, who at ce brought him to hospital. I found him moaning with pain ferred to a point immediately above the pubes, and complaining being unable to micturate, although intensely desiring to do so. ɛamination showed a slight contusion of the abdomen immeıtely above the umbilicus, with great tenderness on pressure in e same situation; contusions—none severe—on left wrist, temple, d left side of face; face flushed; pulse full and bounding; exmities warm; temperature 99°. The suprapubic pain was nost entirely relieved by catheterisation with a No. 10 catheter, ıich passed with ease, and drew off nearly a pint of perfectly rmal urine; large light poultices were applied to the abdomen, ef-tea and milk given in small quantities frequently, and a mixre containing tinct. opii in hourly doses. During the day the ɔrapubic pain and desire to micturate returned at intervals of m two to three hours, and were relieved by catheterisation, all quantities of normal urine being drawn off; intense thirst ın became a prominent symptom, and was relieved to some exıt by powdered ice; these were the most distressing features of case on the first day. Temperature at 7 P.M. 101°, skin warm l moist, face flushed and anxious, pulse full but irregular. An ema of soap and water was given at 9 P.M. without any effect.

ugust 31st. Patient slept in snatches during the night; intense rst continues; urine had to be drawn off at 3 A.M. owing to urrence of suprapubic pain. To-day the chief symptoms are ısea, retching, great thirst, and pain—slight at first but severe ards night—about an inch above and to the right of the umcus. Pulse still full and strong, face flushed but with a drawn ression, skin moist, temperature morning and evening 99.8° 101.2°. Mixture, brandy and powdered ice continued; given morphine hypodermically at 9 P.M. owing to abdominal pain. sed urine twice to-day; suprapubic pain seems to have disıeared.

eptember 1st. Slept well, but wakened at 7 A.M. with a severe ɔr, temperature rising rapidly from 101° at 7 A.M., to 104° at A.M.; great pain and tenderness over entire abdomen (more ked in right and left hypochondriac and epigastric regions); ht distension in the morning, becoming more marked during day; legs drawn up, face flushed and anxious—all the usual ıptoms of peritonitis. Patient was kept under the influence of phine the entire day, receiving $1\frac{1}{2}$ grain hypodermically in the nty-four hours. Small quantities of brandy, milk, and dered ice administered and retained, although there was great sea. Passed urine without any assistance several times in the rse of the day, and at 9 A.M. a small, liquid, brownish-yellow ɔl, without any pain or straining. The clothes were supported the abdomen, to which hot spongiopiline, sprinkled with t. opii., was applied. Temperature at 9 P.M. 105°.

September 2nd. Patient is now vomiting small quantities of almost pure bile at brief intervals; thirst continues intense; distension much increased; pain masked by morphine. I punctured the small intestine about the juncture of the left lumbar and umbilical regions with a hypodermic needle, giving vent to a small quantity of gas, with slight temporary relief. Passed three copious liquid brown stools in the twenty-four hours. Pulse considerably weaker to-day, and extremities cold. Temperature morning and evening 103.8° and 99°. Towards night the amount of bile vomited increased, as much as 8 ounces being vomited at one time. No fæcal smell.

September 3rd. Patient had a restless night, but free from pain; this morning pain has entirely disappeared, but collapse is now marked; temperature 97°, pale drawn face, cold extremities. Small quantities of brandy, essence of beef, and milk given every fifteen minutes. He gradually sank, and died quietly, conscious to the last, at 4 P.M.

NECROPSY PERFORMED FIFTEEN HOURS AFTER DEATH.—*External Appearances:* Body fairly well nourished; rigor mortis present, but not markedly; *post-mortem* staining on loins, buttocks, and shoulders; abdomen distended; contusions on abdomen, left wrist, temple, and left side of face. *Internal Appearances:* (*a*). Abdomen: A large amount of fœtid gas escaped on opening, and nearly two pints of peritoneal fluid, containing numerous flocculi of lymph were removed. The small intestine was enormously distended, the distension beginning about the middle of the ileum, and increasing gradually from below upwards till it stopped abruptly at the duodenum; the peritoneum intensely congested, and the surface of the intestine dotted here and there with flakes of partly adherent lymph. A rupture about the size of a sixpenny piece was found after a careful and difficult search in the anterior surface of the duodenum, immediately below the entrance of the ductus choledochus communis and pancreatic duct; not more than half an ounce or three-quarters of an ounce of fæces had escaped through it, the whole being surrounded, and the intestine at this point tightly constricted, by an organised mass of peritoneal effusion. The stomach, enormously distended, contained 12 ounces of almost pure bile; large intestine normal, small containing nothing but gas. Liver intensely congested and friable, weighing 67 ounces; spleen congested, otherwise normal; kidneys normal; pancreas congested; bladder normal, nearly empty. (*b*). Thorax: Considerable hypostatic congestion of both lungs, which were also compressed by the upward pressure of the abdominal viscera; right side of heart full of dark liquid blood, otherwise normal. (*c*). Cranium: Not opened.

REMARKS.—As will be seen from perusal of the signs and symptoms, the diagnosis was from the first extremely obscure. The most typical symptoms enumerated by Sir W. Mac Cormac in his work on *Abdominal Section*—the prolonged and profound shock, small and quick pulse, hurried respiration, temperature normal or subnormal—were all conspicuous by their absence. We can all be wise after the event; but at the many and anxious consultations held on the first day and afterwards, the question of abdominal section was discussed and not considered justifiable in the presence of the symptoms, which it must be remembered were then the only guides. The history of the accident causing the rupture—a not very serious fall—and the external injuries, which were of a trivial nature, gave us no clue as to the occurrence of so grave a lesion as rupture of the bowel; while the notable absence of collapse until the day of death led us to take a hopeful view of the case. In the three cases quoted by Sir William Mac Cormac in his book, the injuries causing the rupture were of a much graver nature.

The case is a very instructive one, as we learn from it that shock must not be regarded as an invariable concomitant of serious abdominal injury; the rapidity with which the peritoneal effusion became organised is also, I think, remarkable. Rupture of the duodenum without external injury appears to be a rare accident; in the few books of medical reference available here I can only find three recorded cases, though doubtless there are others.

A LARGELY attended "parade" of friendly, benefit, temperance, and trade societies was held on Saturday last in Hyde Park, on behalf of the Morley House Con alescent Home, an institution founded in 1883 in connection with the Hospital Saturday Fund, and which has since been managed by a committee of working men.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 13TH, 1890.

TIMOTHY HOLMES, M.A.Cantab., F.R.C.S., President, in the Chair.

On the Condition of the Reflexes in Cases of Injury to the Spinal Cord, with special reference to the Indications for Operative Interference.—Mr. A. A. BOWLBY, who read this paper, alluded to a recent paper by Dr. Charlton Bastian on "The Symptomatology of Total Transverse Lesions of the Spinal Cord, with special reference to the Condition of the various Reflexes," and to some remarks made by himself in the subsequent discussion. He stated that the conditions of the reflexes in cases of complete crushing of the spinal cord as observed by himself were at variance with the recognised teaching of physiologists, and gave details of eleven such cases of spinal injury in which the conditions of the reflexes were especially noted. In all of these the limbs were quite flaccid, the tendon reflexes were abolished, and ankle clonus and rigidity were absent. In most of the cases the skin reflexes were also lost, but this was not the case in all, and in some patients the skin reflexes returned at a later period. In cases of injury to the spinal cord without complete solution of continuity, on the other hand, the reflexes were found to be increased, and three cases were quoted in proof of this statement. It was further contended that as in all cases of complete crushing of the spinal cord the deep reflexes were lost, and as spinal cords so injured were incapable of repair, operative interference was only likely to be of use when the deep reflexes were not abolished, and when the spinal cord was, therefore, not completely severed. The author then alluded to ten other fatal cases of injury of the spinal cord, and pointed out that in none of the twenty-one cases dealt with was there found, on *post-mortem* examination, any compression by displaced bone, or other condition remediable by surgical interference. The conditions found justified the belief that the cord was crushed by a forward displacement of the upper of the two vertebræ involved in the injury, and that the displaced bone was usually spontaneously restored to its normal position, or else was so far replaced as to prevent any continued direct compression of the spinal cord. The author finally stated that it was not yet certain whether the deep reflexes were ever lost in cases of severe injury of the spinal cord short of complete crushing, and suggested that further evidence was required to make this clear.—Dr. TOOTH showed sections of the spinal cord from some of Mr. Bowlby's cases; in one of these the superficial reflexes had returned, but he had failed to find a single perfect nerve fibre at the seat of the injury; the specimens had, however, only been stained in carmine, and had not been examined by Weigert's method. He cordially agreed that operation could not be of any use in cases of total crushing of the cord. He had examined the literature of the subject, and was convinced that no regeneration of the cord could possibly take place. If the abolition of the deep reflexes was not complete, it was, perhaps, possible that an operation was justifiable.—Dr. BASTIAN referred to the paper which he had recently read before the Society, and contended that the cases reported by Mr. Bowlby materially supported the views he had advanced. Two objections had been raised to his views: (1) that the abolition of the deep reflexes in cases of total transverse lesion of the spinal cord was due to shock; and (2) that the abolition was due to some lesion in the lumbar region of the cord which had been unsuspected. These surgical cases occurring in previously healthy subjects had got rid of the second objection, and, as in several cases the patients had lived for several weeks, the first might also be put on one side. In one case mentioned by Dr. Tooth the reflexes had been restored on one side at least; it was difficult to say that none of the nerve fibres were not uninjured, but at any rate the cord was not diffluent. In a recent case of his own, examination by Weigert's method had shown the presence of some uninjured nerve fibres which were quite capable of transmitting impulses. In endeavouring to ascertain if the lesion was a total transverse one, painful impressions must be abolished as well as tactile sensations, if the surgeon were to conclude the crush was a complete one. In some cases of disease it was found that if painful impressions were not entirely lost, the deep reflexes were not totally abolished.—Mr. WARRINGTON HAWARD thought that the hitherto accepted doctrine in these cases must be given up in favour of the views propounded by Dr. Bastian and Mr. Bowlby. He was ready to admit the hopelessness of operative interference in cases in which the deep reflexes were totally lost, but asked whether an operation was justifiable when the reflexes were present or exaggerated. He drew attention to the rarity of bone being found actually pressing on the cord in cases which were examined on the *post-mortem* table or in museums, and reminded the Society how often the dura mater was uninjured when the cord was irremediably crushed.—Mr. BRUCE CLARKE mentioned a case in which he had been able to relieve paraplegia by manipulation and extension, and contended that this proved that occasionally the cord was pressed upon by bone.—Dr. MONEY asked whether the deep reflexes were completely lost when the cord was quietly and neatly divided above the lumbar enlargement. It was impossible to argue from what occurred in chronic disease or violence. He insisted that when the deep reflexes were lost it might be due to chronic shock; no coarse lesion was necessary; it was sufficient if the cord was simple devitallised.—Dr. CAGNEY asked for a theory to account for the facts narrated by Mr. Bowlby. He was unable to accept Dr. Bastian's view. He did not understand how much Mr. Bowlby relied on the return of the superficial reflexes.—Mr. LANGLEY BROWNE warmly advocated the adoption of extension and the encasement of the spine in plaster-of-paris as a means of treating these cases, and quoted several in which it had been successfully employed.—Dr. ORMEROD drew attention to two points in connection with these cases. First, as to the behaviour of muscles to stimuli other than a blow on the tendon. He found in one of Mr. Bowlby's cases that the quadriceps extensor cruris acted much more readily to a direct blow than in a healthy man. This was similar to what had been observed by Buzzard in cases of tabes. The second point was the reaction of muscles to electricity, for it might be generally asserted that in these cases the faradic contractility of the muscle was diminished.—The PRESIDENT referred to the older doctrine that in lesions of the cord high up the reflex phenomena in the lower limbs were practically unaffected. Bearing on this was the controversy originally introduced by Cline as to the desirability of attempting to replace fragments of bone in cases of fracture-dislocation. In these injuries the displacement of bone was generally in front of the spinal marrow, and no operative interference would be of use. Extension and encasement, so as to render the column immobile, was the proper treatment.—Mr. BOWLBY, in reply, stated that he had purposely avoided theory, and had only related facts. In some of his cases the superficial reflexes never returned at all, and in others they returned in from one day to many months. No stress ought to be laid on the superficial reflexes in either diagnosis or prognosis. He had referred to the question of the surgery of the cases because operation had been done with increasing frequency. He held that if in these cases there was a total loss of the deep reflexes the cord was probably torn right across. He could not, however, insist that the cord was totally crushed. If any deep reflexes were present then the crush was probably not complete. If paraplegia had been caused by the driving in of laminæ then an operation might be of use, but generally the column was bent forward and the cord was crushed against the upper and posterior part of the vertebra below the one which had been displaced forwards, and then the injury was beyond the surgeon's art. Often the displacement was rectified by the elasticity of the ligaments and the action of the muscles, and in these cases, although the dura mater might be found uninjured, nevertheless the cord was hopelessly damaged.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 9TH, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Living Specimens.—Mr. CHARTERS SYMONDS showed a case of Locomotor Ataxy with laryngeal paralysis; also one of Pemphigus of the Conjunctiva, with associated lesions of the tongue and pharynx.—Dr. ALTHAUS exhibited a patient suffering from Bilateral Paralysis of the Portio Dura, or facial diplegia, and drew attention to the stony or statuesque expression of the face which was so very different from that seen in ordinary unilateral facial palsy, in which the face is distorted; indeed, the patient's appearance had changed so much that his friends hardly recognised him. Wrinkles in the forehead had disappeared; there was inability to close the eyes; epiphora, which caused the sight to dim; loss of the power of sniffing, and, consequently, of smelling

oss of taste to such an extent that all food appeared to have lost 'a flavour; difficulty in masticating, so that the patient had been bliged to live upon slops; dryness of the mouth and tongue; rouble in drinking; great alteration of the speech, from inability o articulate properly with the lips; inability to whistle or to spit. Electrical tests showing degeneration of the nerves and muscles; ut no affection of the soft palate, of the auditory, or any other ranial nerves. The case was one of neuritis following an attack f subacute rheumatism. It was not central, because the muscles f the upper portion of the face were affected; it was not seated at he base of the brain or in the nuclei of the nerve in the medulla blongata, because in these latter affections other cranial nerves re implicated, more especially the auditory, pneumogastric, and ypoglossal; nor was it, finally, a lesion of the peripheral branches f the nerve after it has left the skull, because there is no loss of aste in that form of palsy, and because the electrical tests are enerally normal. The lesion must have been situated in the first ortion of the Fallopian canal, where the chorda tympani ranches off from the nerve, because there was, in addition to the aralysis, loss of taste, and dryness of the mouth and tongue; and ecause the electric tests showed degeneration of the nerves and uscles. On the other hand, it could not have been seated higher p in the Fallopian canal, because in that case there would have een hyperacusis and tinnitus, owing to palsy of the stapedian erve, which symptoms were absent. The prognosis was favourble, seeing the great recuperative power of the peripheral nerves fter disease or injury, and the ready way in which they responded treatment. Indeed, the patient had already made good progress owards recovery, and in Dr. Althaus's opinion would be quite ell in another three weeks. The remedies used had been salicylate f soda, quinine, antipyrin, and the constant galvanic current.—Mr. W. H. BATTLE showed a boy, aged 17, in whom both Hip-oints were Excised three years ago for acute disease of two onths' duration. He was admitted to St. Thomas's Hospital n March 24th, 1887, and left on October 2nd, 1888. When dmitted he had displacement of the left hip-joint with a rge abscess, and suppuration in the right hip; numerous deep edsores in various parts of the body; extreme exhaustion and maciation, with a temperature of 104·2°. The neck of the left igh bone was sawn through and removed on May 27th, with reat relief to his sufferings; and on June 7th an incision from the ont was made into the right hip, and the detached upper epi-hysis of the femur removed. Now the boy is in good health, nd can walk quickly and without pain. Both hips are fixed in ne straight position, and in walking use is made of the lumbar ine, ankles, feet, and to a certain extent of the knees. There are any scars remaining in different parts of the body, the result of edsores, but there are now no open sores. The left leg is shorter an the right.—Mr. JOHN POLAND showed a patient who had stained an Injury to the Cervical Spine resulting in chronic eningitis, with paralysis of the hypoglossal nerves, etc.—Dr. ERCY KIDD showed a case of cured Tubercular Ulceration of the arynx.—Dr. HADDEN showed a case of Subcutaneous Nodules in boy without acute rheumatism or chorea.

Cerebral Symptoms accompanying Disease of the Middle Ear: peration on the Ear: Complete Cessation of the Symptoms.—rs. SAINSBURY and BATTLE communicated the report of this se. G. P., aged 30, labourer, formerly in the army, was ad-itted into hospital with headache, vomiting, and drowsiness, mptoms which had supervened on exposure to heat. He had eviously suffered from similar symptoms during the Egyptian mpaign. There was no history of syphilis. On admission, he d severe headache, passing from the occiput over the vertex to e forehead, pain at the back of the eyeballs, giddiness, and eeplessness. From a persistently drowsy state he could be used to answer questions, and was quite clear in his answers, t they came with effort. He complained of pain down the ine to the loins, and of pain on bending the back. On the lips ere some patches of herpes; there was a slight cough, with derate expectoration; slight dulness at the bases of the lungs steriorly, especially on the left side; his temperature was egularly raised; the pulse was full, rather incompressible. The tic discs showed tortuous vessels with blurred margins. There s an intractableness of the symptoms, and no relief to the head m increasing doses of potassium iodide. Both optic discs came intensely inflamed, and there were occasional eye mptoms, namely, unequal pupils once or twice, double vision o once or twice. The temperature curve was pyrexial and y irregular. The cough continued; the expectoration was occasionally blood-stained. Subsequently it was discovered that he had deafness in one ear and disease of the middle ear, namely, a granulation polypus. Mr. Battle removed the diseased bone from the ear, with immediate relief of the symptoms. There was cessation of cough and of sanguineous expectoration. The inflammation of the optic discs very soon began to mend, and all swelling had disappeared when the patient was discharged, seven weeks after the operation.—Mr. ARTHUR BARKER mentioned three cases in which there was well-marked optic neuritis without any other evidence of cerebral implication. The first was that of a girl, aged 14, at University College Hospital, with running from both ears, but more pronounced on one side. She was dull and stupid, and a few days later a commencement of optic neuritis on both sides was noted. He trephined, removed a polypus from the ear, and made the whole of the diseased area clean and sweet, and the patient's general condition improved at once, the neuritis ultimately clearing up. He was under the impression at the time that there was no intracranial disease, either meningitis or abscess, though she probably had trouble about the sulcus lateralis and clotting in the lateral sinus, and the ultimate history of the case bore out this view. The second case was that of a boy, aged 8, who had had a discharge from the ear for some years. In 1886 he caught a chill, and this was followed by severe symptoms referable to the mastoid region, but with very little discharge from the ear. The opening in the tympanum was entirely blocked by the white ceruminous material so frequent in disease of this region. The boy was heavy and listless, and his temperature 105° F. Mr. Barker operated at once, and just beneath the periosteum he found a little pus. On cutting into the mastoid antrum pus escaped under pressure, showing that there was pus near the lateral sinus. The temperature fell at once, and remained practically normal. A few days later the boy was found to have commencing optic neuritis which shortly became exceedingly intense, though in two months it subsided, and finally disappeared; yet there were no other signs pointing to meningitis or cerebral abscess, and he supposed it was a case of suppuration spreading from the mastoid to the parts near the lateral sinus. He also mentioned a third case of a man with well marked double optic neuritis, and with no other symptom except a chronic discharge from the ear. He urged that they ought to be very careful, in view of these and similar observations, in assuming that optic neuritis necessarily indicated actual intracranial mischief. The neuritis was probably due to disease of the bone, and not of the brain itself. He made a practice of examining the eyes in every case of aural disease, and yet in only three cases out of scores had this condition obtained. He thought more of these cases could be met with if methodically looked for, and this was very important from a diagnostic point of view. He would add his cases as an appendix to Dr. Sainsbury's case in the Society's *Transactions*.—Dr. SAINSBURY asked Mr. Barker whether he could give any explanation of the mode in which double optic neuritis was developed, especially in those cases in which the aural disease was on one side only. In one case the optic neuritis was on the right side, while it was the left ear that was diseased.—Mr. BARKER remarked that he had already given his views on this question in lectures delivered last year at the Royal College of Surgeons.

Complete Thrombosis of the Longitudinal Sinus.—Mr. ARBUTHNOT LANE related the history of a case in which thrombosis followed upon a depressed fracture of the vault immediately above the lambdoid suture, in the vicinity of the groove for the sinus. The depressed bone was partly removed and partly elevated, a vein having to be ligatured at its entry into the sinus, which itself sustained no injury. The child was 2 years old, and healthy. The symptoms which appeared on the second day after the operation were convulsive movements, first of one side and then of the other, and later of both sides. These were apparently accompanied by no headache; and although the child was restless, it did not cry out. Following the movements was a condition of apparent paralysis, which was first partial, but soon became general, and was accompanied after a time by drowsiness, which soon developed into coma. The child died on the third day after the injury. There was no optic neuritis. Thrombosis of the longitudinal sinus was diagnosed, and the absence of the neuritis showed that neither lateral sinus was extensively thrombosed. It was supposed that the clotting in the sinus was probably consequent upon the formation of clot about the orifice of the vein ligatured at the time of the operation. The *post-mortem* examination showed that the thrombosis in this sinus was complete, and that it extended back

to the vicinity of the fracture. The oldest portion of the thrombus was considerably in front of the fracture, and there was no evidence that the thrombosis was dependent for its causation upon the fracture. The thrombus was limited to the longitudinal sinus and to some of the superior cerebral veins. There was no meningitis or any inflammation about the portion of brain bruised by the depressed bone. All the organs were healthy. Mr. Lane contrasted this case with the complete absence of cerebral symptoms, other than those of very marked optic neuritis, which were present in a case of complete thrombosis of one lateral sinus, described in the last number of the *Transactions* of the Society, and dependent for its causation upon suppuration extending from the mastoid cells.—The PRESIDENT inquired what was the special symptom during life that enabled Mr. Lane to diagnose thrombosis of the longitudinal sinus during life.—Mr. LANE said he supposed the thrombosis had started from the ligature of the vein entering the sinus, and that, under the circumstances, the symptoms of irritation of the cortex, with subsequent paralysis, justified his diagnosis.—Mr. BARKER asked if Mr. Lane considered that thrombosis of the lateral sinus was necessarily associated with optic neuritis. He had reasons to think that this connection did not always exist. —Mr. BENNETT corroborated Mr. Barker's statement that optic neuritis did not necessarily accompany thrombosis of the lateral sinus. He had recently had two cases of fractured skull, with clotting in the lateral sinuses, in which there was no optic neuritis.—Mr. LANE said that if, in the case of one sinus being blocked by clot, the other lateral sinus was well developed, and the circulation could be thereby well carried on, he did not think there would necessarily be optic neuritis. He did not suppose mere blocking of the lateral sinus, unless it interfered with the circulation of the disc, would give rise to it.

Epithelioma of the Rectum: Excision: Restoration of Function. —Mr. A. T. NORTON described this case. The patient was admitted into hospital suffering from diarrhœa and a rectal growth. On examination an ulcerated epithelioma was found extending upwards as high as the body of the uterus, and pressing forward the vaginal wall so as to appear like a tumour in the vagina, but the tunic of the vagina was not infiltrated. An incision was made in the whole length of the posterior vaginal wall, which was found free from growth, but stretched over it. The recto-vaginal pouch of the peritoneum was sought for, and pushed upwards out of the way; the incision was next carried along the central line of the perineum, diverging on each side of the anus. The rectum was separated by means of the finger and scissors from the levator ani and surrounding tissues to a sufficient height to allow of the end of the gut above the tumour being brought easily down to the skin. The *écraseur* was applied well above the growth, and the healthy gut was fixed to the skin by several sutures. The rest of the chasm was approximated by deep sutures of silkworm gut. The temperature after the operation never rose above normal. Union took place by first intention; only a slight amount of granulation tissue formed at the junction of the skin and bowel, which, when cicatrised, formed an anus about one inch in length. On the tenth day the bowels were opened, and, when the patient was discharged, she had complete power to retain the motions, and without any possibility of further contraction of the new anus. Mr. Norton referred to a case in which a precisely similar operation had been performed on a patient more than a year ago, from whom he had just received a communication to the effect that she was in good health, able to perform her duties, that there was no return of the growth, and that she was not seriously inconvenienced by the altered condition of the parts.—The PRESIDENT said the question of removing the rectum was still unsettled, and those who had done it felt that they had a serious difficulty to face in the contraction of the cicatricial tissue. He had performed the operation several times, but had not been satisfied with the results. If one, however, could draw down the mucous membrane as Mr. Norton had done—and he questioned whether this would be possible in the male, though it had been done in the female—perhaps there might be no subsequent loss of the function of the part. He had known colotomy to be performed eighteen months after a successful operation of this kind on account of the subsequent occlusion of the canal by contraction of the cicatricial tissue. If he himself had cancer of the rectum he would not like to have it removed by this operation. The method suggested by Mr. Norton was similar to that advised in cases of imperforate anus, and when practicable it could not fail to prove a very useful procedure.—Mr. BARKER regarded the procedure as very valuable, and calculated in a limited class of cases to enable them to obtain better results than heretofore. He thought the whole question turned upon whether they could get the wound to close by first intention. In the old operation, as there was much suppuration, union by first intention was not possible, and there was consequently a good deal of cicatricial contraction. He mentioned two cases in which union had been obtained with a minimum of suppuration, and an appreciable amount of contraction had followed. No suppuration meant, of course, that there was no destruction of the light areolar tissue around the bowel. In one of his cases there was an intussusception. He drew down the bowel and unfortunately opened the peritoneal cavity; the patient, however, made a splendid recovery, passed perfectly-formed motions and had since had a family. The facility with which the mucous membrane could be drawn down, as in Mr. Whitehead's operation for piles, showed that Mr. Norton's suggestion was practicable even if the tissue to be removed were cancerous instead of hæmorrhoidal.—The PRESIDENT remarked that cancer of the rectum was rarely limited to the mucous membrane. As regarded Whitehead's operation, he said it was simply the removal of mucous membrane, and, although it gave some excellent results, yet he had heard of cases in which a stricture had followed it.—Mr. NORTON, in reply, said that surgeons must, of course, select their cases, and the more the disease was confined to the mucous membrane the more applicable was this procedure. If the growth had infiltrated the subjacent tissues and invaded the fossa, then the operation was useless. In the male, if the cancerous disease was in front of the rectum and infiltrated the deeper parts, it was almost impossible to free it from the prostate and remove it. It was, of course, indispensable that the growth should be entirely removed. It seemed to him that the wound if made as he had made it, was almost certain to heal by primary adhesion, as it was a clean wound; at any rate, this had been the case with all the patients upon whom he had operated, without even any elevation of temperature.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 7TH, 1890.

GRAILY HEWITT, M.D., Past-President, in the Chair.

Specimens.—The following specimens were exhibited: Mr. BLAND SUTTON: Gangrenous Fibroid.—Dr. AYMARD (Ipswich) (introduced by Dr. Horrocks): Axis Pressure Binder for use during Labour.

Four Cases of Vaginal Hysterectomy.—The adjourned discussion on Dr. Cullingworth's paper was resumed. Dr. LEWERS said that in determining whether vaginal hysterectomy or supravaginal amputation of the cervix was the better operation in cancer of the cervix, two chief factors were to be considered: first, the relative mortality of the two operations; and secondly, the prospect of immunity against recurrence offered by each of them. In total extirpation there was a greater risk of septic infection, owing to the free opening into the peritoneum; a much greater risk of hæmorrhage both during the operation and subsequently, and complications such as adhesions between the uterus and intestine or omentum might be met with. The operation took longer, and so there was more risk from shock. Some German operators reported the mortality of total extirpation for cancer as 5 per cent., but in England it was much nearer 20. So many of the cases operated on in Germany were free from recurrence, that the only possible explanation seemed to be that many of these cases were not really cases of cancer. He quoted cases of his own of supravaginal amputation of the cervix for cancer with no fatal result from the operation, and in which 30 per cent. were free from recurrence two years after operation. He believed that in nine cases out of ten the supravaginal amputation was the right operation in early cases of cancer of the cervix.—Dr. WALTER GRIFFITH stated that the only cases which could be considered really favourable for removal were cases of epithelioma, and that it did not make much difference which operation was adopted as long as the whole disease was freely removed. He had lost one patient from hæmorrhage after the removal of pressure forceps. —Dr. MACNAUGHTON JONES said that hitherto cancer of the uterus had been the opprobrium of gynæcology. His own record, including many thorough high amputations, had been but a melancholy one. He quoted the statistics published by Drs. Mundé and Wells up to 1889, and collected from the results of 183 cases of cancer operated on in Germany, France, America, and England. Of these, there were

eaths after operation, and in only 23 was recurrence noted up to ie time of the publication, and in 13 recovery was said to be per- anent. He alluded to the researches of Abel, which were op- osed to the view that cancer of the cervix did not spread up- ards into the fundus. The microscope was not at times an fallible test. For himself, he felt that in a case in which true ncer of the uterus was once clearly declared in the cervix uteri, d the surrounding tissues were healthy, he should lean to the de of hysterectomy, and not amputation. It gave the woman e best chance both of prolonging and saving life.—Dr. T. C. AYES thought carcinoma of the cervix had a strong tendency invade the body of the uterus. He seldom found that the dis- se was limited to the cervix when patients came under observa- on. If there were assurances of this limitation, vaginal extirpa- on should not be resorted to; it was a much more dangerous eration than amputation, though in the future its dangers would obably be lessened. He urged that patients should in all cases made fully aware of the serious danger.—Mr. JENNINGS con- ided that the curability of cancer by extirpation, when the dis- se had attacked some parts of the body, having been estab- hed, there was no reason why cancer of the uterus should t be successfully dealt with by surgical operation. He main- ned that the entire organ should be first removed in cancer of cervix, and the surgeon's hand subsequently inserted into the vic cavity, by which means diseased portions of the parametria l the ovaries could be drawn downwards and removed.—Dr. LLINGWORTH, in reply, said that the German operators had not xed their cases in drawing up statistics, and that at Dresden the eration of vaginal hysterectomy was slightly less fatal in the es of cancer than when performed for less serious conditions. e argument based upon the contention that the disease did not ead upwards beyond the os internum was not of much value. three out of four of his specimens there was no doubt as to the ition of the os internum, while in the fourth case it had to be ermined by measurement alone; the glands, upon which Dr. liams thought the determination should entirely rest were too involved in the disease to allow of their identification. In re- d to his five museum specimens, in two of them the ltration had extended to within a quarter of an inch the fundus, in one to within one-third of an inch, in another to within an inch, while in the remaining cimens, though it was certain that the upper part he corpus as well as the lower had become invaded, it was nd impossible, owing to the age of the preparation, to define limits by precise measurement; hence the claim that these imens disproved the tendency to spread upwards could not ustained. It was often quite impossible for an operator to be to decide during the course of the operation to what extent parts were affected. That recurrence after amputation did take place in the stump but in the parametric tissues was , though there were exceptions. The phenomenon had its logue in the breast, disease recurring in the skin or glands other surrounding tissue rather than in the stump or moved portion of the breast gland. The knowledge of this deterred few surgeons from removing the entire breast in s of cancer, and those surgeons who, like Dr. Banks, of Liver- , removed it most freely were able to show the largest per- age of cures. No doubt recurrence took place in the majority ases, no matter how the operation was done. Butlin had n that even in so accessible a region as the breast the cures not exceed 10 to 15 per cent. The Dresden statistics com- l favourably with these. For, of the 80 cases of total pation for cancer, no fewer than 27 had lived for two years upwards without any sign of recurrence. He maintained that, apart from saving life, the operation gave the patient ast temporary relief from many of her troubles. Regarding redibility of German statistics, he had selected those of old, Münchmeyer, and Kaltenbach, which all English gynæ- ists could accept. The museum specimens he had exhibited shown to point out that cancer of the cervix of both kinds, owed to run its natural course, ultimately invaded the body e uterus. Mr. Shattock had examined the specimens micro- ally; three were squamous-celled carcinoma, one columnar- l or glandular carcinoma, whilst one was unfit for examina- The utero-sacral ligaments had been examined in the cases ted on, though their condition was not the test as to the iety of operating. By using the clamp instead of the liga- or securing the broad ligaments there were (1) a great saving ne—perhaps twenty minutes—and (2) a larger extent of sloughing in the parametric connective tissue. In supravaginal amputation Douglas's pouch was sometimes opened, and this accident was probably more dangerous than the free opening made in total extirpation, because better drainage was obtained. Dr. Lewers, in comparing the mortality of the two operations, had quoted figures that were altogether incorrect. The mortality from supravaginal amputation was over 7 per cent., while that from total extirpation was but 5 per cent. He (Dr. Cullingworth) thought that English operators ought not to be guided wholly by English statistics, but that they should be ready to profit by the results of others, whatever might be their nationality. He alluded to Cæsarean section and Porro's operation in illustration. He thought that while the partial operation might be sufficient in most cases of squamous-celled carcinoma, total extirpation was the only safe method of dealing with glandular carcinoma of the cervix. A microscopical examination of a portion of the diseased tissue would decide which operation was called for in any given case.

BIRMINGHAM AND MIDLAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, APRIL 25TH, 1890.

H. LANGLEY BROWNE, F.R.C.S.EDIN., in the Chair.

Cerebral Abscess.—The CHAIRMAN showed an abscess in the brain taken from a man aged 38, who had been severely injured on the head four years before. There had always been pain since, especially for four months before. No sickness, no rise of temperature, no external evidence of ear disease. On April 18th, at night, convulsive attacks commenced, having the appearance of middle-level Jacksonian epilepsy. He had 80 attacks in 24 hours, averaging 70 seconds each. He was trephined over the fissure of Rolando, but nothing was seen to denote local irritation. The brain was intensely congested. The man died nine hours after the operation. *Post-mortem* examination showed a large abscess between the dura mater and the temporal bone communicating with the tympanum, which was full of pus, as also were the mastoid cells and antrum. There was a abscess the size of a small nut in the temporo-sphenoidal convolution.—Dr. FOXWELL and Mr. MARSH showed the brain of a man, aged 34, who had suffered from slight left hemiplegia with much headache, loss of memory and, towards the end, violent delirium. There was neither optic neuritis nor pyrexia. Trephining had abated the symptoms for some days, but later septic mischief arose and death speedily followed. Two walnut-sized abscesses, both encapsuled, were found, one on each side of the upper end of the fissure of Rolando. —Mr. MARSH showed a specimen of abscess of the left temporo-sphenoidal lobe of the cerebrum, the result of suppurative otitis media and mastoid abscess. Improvement for a few days took place after the mastoid cells had been freely opened and drained. Symptoms then developed clearly indicating a brain abscess. The patient, a boy aged 13, was trephined; an abscess, containing about three ounces of intensely fœtid pus, was opened and drained. Immediate relief was afforded, but the boy died from meningitis three days and a half subsequent to the operation.—Mr. JORDAN LLOYD read a short notice of case of abscess of the temporo-sphenoidal lobe, which he had successfully operated on in October, 1888, which had been followed by complete recovery. In February last, however, the patient was taken with severe headache, and died at the end of seven days without operation. *Post-mortem* examination showed another abscess—acute in its onset—in the same temporo-sphenoidal region, which had caused death by bursting into the subarachnoid space, and filling the cerebral ventricles with purulent fluid.

Tumour of Brain.—Dr. FOXWELL and Mr. MARSH showed a girl, aged 14, with symptoms pointing to a tumour in the centrum ovale, near the left internal capsule, who, on March 24th, 1890, had been trephined, and the cerebrum explored with a negative result. A quick recovery was made, but no improvement had resulted from the operation.

Hydatid Cyst of Brain.—Dr. RATCLIFFE showed a hydatid cyst of the brain from a patient who was admitted to the General Hospital, August 31st, 1889, after having had three fits. These were preceded by headache and pain in the abdomen; then there was loss of consciousness, which lasted for about five minutes, during which time the legs kept twitching. After the attack he was dazed and the speech slurred. The pupils were widely dilated throughout, and there were severe double optic neuritis

and internal strabismus of the left eye. There was sickness and vomiting from admission till death. He had occasional twitching of the left arm and leg and a peculiar cry. He died on October 26th. On *post-mortem* examination a large single hydatid cyst, the size of an orange, was found occupying the greater part of the right frontal lobe. On the orbital surface of the lobe it had thinned the grey matter, which had given way, showing the cyst. The convolutions over it were much compressed, as was the left frontal lobe. The cyst came away easily, and contained 9 ounces of clear fluid, with large numbers of hydatid scolices. No other cysts were found.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MAY 1ST, 1890.

E. CRESSWELL BABER, M.B., President, in the Chair.

Skin Disease.—Dr. MACKEY exhibited a man, aged 53, with an eruption of three years' duration, but with marked exacerbation every spring; the limbs were especially affected, the eruption closely resembling ringworm. There was, however, no fungus; and neither his wife nor his large family had been attacked. Dr. Mackey inclined to the view that it was a case of lichen circinatus.

Primary Cancer of Omentum.—Mr. TURTON showed a specimen of encephaloid primary cancer of the omentum from a lady, aged 68. He considered the presence of ascites sufficient to require tapping—not a usual symptom of this disease, especially as the growth was not of great size and the portal vein was not pressed upon.

Variations of Bodily Temperature.—Dr. GORDON DILL read a paper on variations in the normal temperature of the body, embodying the results of experiments on his own person, intended to explain the cause of depression following a morning cold bath. He took his temperature in the mouth before rising, and again after shaving, and then after immersion in a hot bath, followed by a cold plunge bath. His morning temperature varied from 96.2° to 97.9°; but after the hot bath (temperature 104° to 106°), the temperature rose very considerably, in one experiment, to 103°, and after the cold bath it remained at 98.6°. When, however, a cold bath was taken without a previous hot bath, the temperature went down to 95.9°, and remained low for some considerable time. Dr. Dill considered the depression felt to be due to this cause, and advised a hot bath before a cold one for persons in whom a cold bath brought no reaction.—The paper was discussed by the PRESIDENT, Dr. UHTHOFF, and Mr. EDWARDS.

New Lunacy Acts.—Dr. GASQUET read a paper upon the New Lunacy Acts as far as they concern ordinary practitioners.—The paper was followed by a short discussion, and Dr. GASQUET replied.

SOUTH-EAST HANTS BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THURSDAY, APRIL 24TH, 1890.

W. F. BROOK, M.R.C.S., President, in the Chair.

Malignant Adenoma of the Cervix Uteri.—Dr. J. G. BLACKMAN submitted microscopic sections and sketches of a tumour of this kind. The case, which occurred in the practice of a colleague, presented clinically all the characters of malignant disease, but microscopically showed depraved adenomatous growth. It illustrated the statement made by Mr. J. Bland Sutton in his third Sir Erasmus Wilson lecture, that "the less perfectly an adenoma mimics a gland, the more likely is it to exhibit malignant properties, and come under the denomination 'cancer.'" Benign adenomata were of common occurrence in the cervix uteri, and were formerly regarded as ulceration, but in these instances the gland formation was more perfect. These considerations raised the question whether all cancers were anatomically instances of depraved gland formation. The practical points were: 1. The innocent adenomata should be treated energetically lest they become malignant; 2, the local character of malignant disease at the outset should render early and wide excision a hopeful procedure.

Cases.—Dr. WARD COUSINS exhibited a case in which the Pinna of the Right Ear consisted of Six Cartilaginous Nodules and a Miniature Lobule. The external meatus was absent. With the finger a depression could be detected at the usual seat of the orifice. The hearing power of the organ was, however, quite sufficient for ordinary conversation, but the watch was heard only on contact. The left ear was normal.—Mr. JAMES GREEN showe a child suffering from Meningocele. The tumour was situated in t median line, just above the occipital protuberance, and was abo the size of an egg.—Dr. WARD COUSINS showed a patient sufferi from a large Cystic Sarcoma of the Mamma. She stated that t tumour had been in existence eighteen years, and that the i crease in size had been very gradual. Five months ago she su tained an injury of the breast during exertion, and this had be followed by very rapid enlargement. Dr. Ward Cousins remark that the specimen illustrated the danger of irritating old tumou Hæmorrhage had occurred into some of the cysts, and this h excited inflammatory and necrotic changes throughout t growth.

Specimens.—Dr. WARD COUSINS showed a Tumour removed fr the Bladder of a woman, aged 43. Hæmorrhage and chron cystitis had existed more or less for three years. During t seven months prior to the operation in November, 1889, t patient had been confined to bed from pain and bladder troub The pedicle of the tumour was broad and hard, a few papilla processes were found connected with it, and it was attached the fundus of the organ. Vomiting and renal hæmorrhage f lowed the operation for two weeks; she then gradually recover and left the hospital well in January.—Dr. F. J. DRIVER exhibit Microscopic Sections of the Growth. He considered that possessed the characters of a fibro-sarcoma.—Dr. WARD COUSI also showed a specimen of Latent Necrosis of the Femur, invo ing the condyles and lower fourth of the shaft of the bone, a consisting of a mere shell of bone which had been filled with dark coloured and inodorous fluid. The patient was a delic woman, aged 29, greatly reduced by suffering and emaciati She had been under treatment for subacute rheumatism of the kn joint in January, 1889, and last June she had an attack of pleuri which was followed by more pain and swelling in the kn When she came under the care of Dr. Ward Cousins the sympto of inflammation of the bone and œdema of the limb were prese but there were no indications of suppuration and very lit elevation of temperature. Dislocation of the joint slowly t place, and the local pain and tenderness were greatly aggravat The femur was fractured during amputation. The joint c tained only a little serum, and the synovial membrane was gen ally injected. The stump healed well. Dr. Ward Cousins said used the term "latent necrosis" with some hesitation. The ease might have been either the result of an osteitis or a necr softening occurring in the progress of an osteo-sarcoma. section of a small fleshy mass attached to one of the bony fr ments certainly presented suspicious microscopic characters.

Right Lumbar Colotomy for Chronic Intestinal Obstructio Dr. WARD COUSINS read notes of this case. The patient, a man, aged 56, had suffered when serving in the East Indies f a prolonged and severe attack of dysentery. For many mon before the "stoppage of the bowels" he had laboured under c stipation, and for twenty days before admission into the R Portsmouth Hospital he had had no action of the bowels. The a men was tense and tympanitic, and there was marked dul above the umbilicus and over the cæcum. He had not vom much for some days, but he had attacks of severe abdominal p and the whole body had a horribly fæcal odour. Right colot was performed, and half a bucketful of fæcal matter evacuate once. The patient was relieved by the operation, but he s from exhaustion in forty-eight hours. The necropsy revealed extensive stricture of the descending colon 8 inches in len The walls of the gut were much thickened, and the mucous m brane of the fistulous contraction was red and granular. cæcum was greatly distended by a hard fæcal concretion, many pinhole perforations had permitted the extravasation of intestinal fluid into the peritoneal cavity. The pelvis conta about a pint of dirty pus. Dr. Ward Cousins remarked that r lumbar colotomy was selected after a careful analysis of the tory and symptoms, and that the case was an illustration of gical assistance too long delayed. The specimen was exhibite

Treatment of Placenta Prævia.—In introducing a discussio this subject, Dr. KEALY remarked that the introduction of method of bimanual version by Braxton Hicks was one of greatest improvements made in operative obstetrics. Tur had assumed an altogether new character since its applica and operations previously considered impossible were now formed with facility. In 178 cases of placenta prævia treate Hoffmeier, Behm, and others by bimanual version, the numb deaths were 8, or 4.5 per cent. mortality. The *modus oper*

id the after-treatment to be adopted were then described in full, d a sketch of the history of the subject was given.—A discussion llowed the paper, in which Dr. LLOYD OWEN, Dr. HACKMAN, . GUILLEMARD, Dr. DRIVER, and Dr. BLACKMAN took part.

New Aural Snare.—Dr. WARD COUSINS exhibited the instrument, and demonstrated its utility in the removal of beads and her foreign bodies from the ear.

Election of President.—Dr. A. GARRINTON was unanimously ected President of the Branch for the ensuing year.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF STATE MEDICINE.

A. W. FOOT, M.D., F.K.Q.C.P., President, in the Chair.

FRIDAY, APRIL 25TH, 1890.

The Infectious Diseases (Notification) Act, 1889.—Dr. COSGRAVE d a paper on the Infectious Diseases (Notification) Act and its ension to Dublin. Having detailed the favourable impression de by a two years' personal experience of the working of compulsory notification in Huddersfield, the author dealt with the ious objections made to compulsory notification. The Act came o force in Dublin on March 1st, but had not yet been acted on. The Act was already in force amongst three-fourths of the ulation of Great Britain, and the medical officers of health had erally reported in its favour.—The PRESIDENT said, in his nion, the workability of compulsory notification would depend the general practitioners. He missed from the Act the salutary vision of insisting on having observation wards for the recepn of cases of doubtful diagnosis, such as were at present ached to some of the general hospitals. It would, he thought, actionable if a person erroneously notified as suffering from ntheria or scarlatina were bundled off to a hospital for infecs diseases, and there got one of those infectious diseases. ther blemish of the Act was that it was not of universal apation.—Dr. WILLIAM MOORE regarded the system as being of rmous advantage. He deprecated the shabby treatment of the fession by the Legislature in awarding the miserable pittances s. 6d. and 1s. as fees.—Dr. GRIMSHAW, Registrar-General, said principal difficulty turned on the question of removal to hos- of the cases notified without risk. He considered it would ittle short of criminal neglect if proper observation wards were provided. In Dublin the Registrar-General's Department sted the Public Health Department of the city most materially furnishing the addresses of persons returned as having died infectious diseases; and the hospitals assisted in like man- Notification had been going on in Dublin in that kind of for the past twenty years. Every medical officer of health m he had spoken to testified to the diminution of disease as esult of notification.—Mr. R. MONTGOMERY and Mr. DOYLE made remarks, and Dr. COSGRAVE replied.

he State Medicine Qualification.—Dr. GRIMSHAW read a paper e State Medicine Qualification. He said that whatever weakParliament might have shown in the enactment of Section 18, as quite clear, by the introduction of the provision regarding a mum population of 50,000, and from the preceding sections of Act, that it was intended that a scientific expert in sanitary ce should be appointed to the important administrative post edical officer of health for a large district, that he should de- his whole time to his duties, and should be well paid for his ces. What had the Medical Council done towards providing a high-class officer? The Council appeared to him to have nceived the extent and nature of the duties required of a al officer of health of a large district devoting his whole time e work. Such an officer was essentially an executive and lting officer, not one for the personal or individual carrying f preventive measures and sanitary improvements. Two ele- s in the special curriculum required by the Medical Council ed to their holding a view contrary to this; they required icates of six months' practical instruction in a laboratory, and onths' outdoor sanitary work. There was not a word about sort of laboratory the study was to be carried out in, further it was to be "approved of by the body granting the qualifica- Was it to be in a chemical, physical, or bacteriological tory, or partly in each? If partly in each, the time for was insignificant. If not in all, the education would be very plete. As to the second requirement—that of a certificate outdoor sanitary work"—he was at a loss to interpret the e, but it must refer to either inspection of nuisances or the study of engineering works. A medical officer of health should know how to inspect nuisances; he should also understand how sanitary engineering works were carried out, but it was not his duty to carry them out, or to inspect nuisances, except in rare cases. The Council did not make any specific demand for instruction in such important subjects as meteorology, engineering, vital statistics, or law and medical jurisprudence. Why were all these left out? Nearly all authorities seemed to agree that there should be two grades of qualifications in State Medicine—one for those district Poor-law medical officers who necessarily must combine many of the duties of health officers with those of attendance on the sick poor; such a qualification should also be required of officers of the Navy and Army, and resident officers of all public institutions, such as lunatic asylums, prisons, hospitals, etc. He believed it would be found absolutely necessary to have two classes of offices and two classes of diplomates to fill them. The Committee of the General Medical Council thought so too in the year 1869, and so did the Council of that day. If the General Medical Council desired to create experts devoting their whole time to the work of medical officers of health over large areas, or to act as district inspectors, their programme was miserably insufficient. If it was for a district officer their standard was too high. Dr. Grimshaw, in conclusion, suggested that for the lower qualification there should not be any curriculum of study required. The candidate for this diploma should be required to answer at a special examination comprising hygiene, chemistry as applied to sanitary questions, elementary sanitary engineering—to be defined by syllabus; to show a slight knowledge of the law as regards nuisances, the spread of infective disease, etc.—all defined by syllabus. This qualification might be termed a certificate in sanitary science, and should be a registrable qualification. For the higher qualification, the candidate should be required to be a registered medical practitioner of two or three years' standing—he preferred three years. He should produce evidence of having studied law, engineering and architecture, vital statistics, geology and meteorology, as applied to State Medicine. The examination should extend over several days, and the classification of subjects of examination adopted by the University of Dublin might be taken as a good one. This qualification might be designated a diploma in State Medicine.—Remarks were made by the PRESIDENT and Dr. WILLIAM MOORE.

The Boarding-out System for the Insane.—Dr. CONOLLY NORMAN read a paper on the boarding-out of pauper lunatics. He briefly considered the working of the Gheel system and the Scotch boarding-out. He very strongly condemned certain features in Gheel—the boarding-out of dirty and semi-dirty patients; the boarding-out of patients in estaminets; the use of restraint; and the too great liberty accorded to some better class patients. The Scotch system afforded a better model. Dr. Norman laid down the conditions necessary to render patients suitable for boarding, and the restrictions and safeguards under which such a system must be worked. He differed from the Scotch authorities in objecting generally to the boarding-out of epileptics. He referred to the special enactments of the Scotch law on this subject, and briefly to Mr. Trevelyan's Irish Bill, which did not become law, one object of which was to found a boarding-out system in Ireland.—Remarks were made by Dr. WILLIAM MOORE, Mr. R. MONTGOMERY, and Mr. DOYLE; and Dr. CONOLLY NORMAN replied.

REVIEWS AND NOTICES.

AXEL KEY'S SCHULHYGIENISCHE UNTERSUCHUNGEN IN DEUTSCHER BEARBEITUNG HERAUSGEGEBEN. Von Dr. LEO BURGERSTEIN, in Wien. (Axel Key's Researches in School Hygiene, condensed and edited in German, by Dr. Leo Burgerstein, of Vienna). Hamburg and Leipzig: Leopold Voss. 1889. 8vo, pp. 346.

DR. BURGERSTEIN, the indefatigable school hygienist and opponent of the modern tendency to cramming and overpressure, has presented in a German, and therefore more generally accessible, form the results of Professor Axel Key's exhaustive and voluminous reports on the hygienic aspects of the school system in Scandinavia, especially in Sweden. He has greatly abridged the original, omitting much that was of local interest only, as well as the copious quotations from foreign authorities and reports already

published, and simplifying the mass of tabular and graphic illustrations. Separate chapters are devoted to the questions of general health, defects of vision, hours of study at school and home, the influence of these on health, the capability of children to fulfil the demands of the courses, hours of sleep and their relation to health, school buildings, conditions and surroundings of home life, bodily development and growth, etc.

Perhaps "education," so-called, is pushed to greater extremes in the three Scandinavian kingdoms than in any other countries, and the disastrous effects on the health and development of the finest and most robust races in Europe have been the subject of complaints from physicians and teachers for a quarter of a century. Royal Commissions have been appointed and reports published, but the outcome of red tape and officialism has too often been "to do something *ut aliquid fecisse videatur*," as, for instance, the reduction of the hours of study by two in the week, including two half-hours previously given to gymnastics.

It would require a small volume to present the most condensed abstract of a work which is itself a digest; but we may remark that one feature of the system it examines, which gives it a special value to those who may wish to refer to the original, is, that the school organisation of Sweden is essentially uniform throughout every class, from the preparatory or infant and elementary, to the middle and high schools, the children of all ranks passing through each in succession, but leaving off at earlier or later stages. The instruction in the "one class" or infant, "two class" or primary, and "three class" or middle class schools, is vernacular and elementary; in the "five class" and "full (or seven) class" schools, the classes above the third are parted into two parallel series of "real" and "Latin," or, as we should say, modern and classical divisions. It may seem incredible, but in these higher courses the mean number of hours of compulsory work in school and at home is not less than ten or eleven daily, the minima being over nine and the maxima ten and a half to over fourteen! This is exclusive of gymnastics, which, under such circumstances, can scarcely be considered as a relief or recreation. This is the case in all such schools, but the number of hours given to sleep, or—what one may well imagine under these conditions is not always the same thing—spent in bed, varies much, the mean being seven or eight hours; but, while the maximum is nine, the minima are five to six, or, in the highest classes of the classical divisions, as low as four! the hour of retiring to rest varies in like manner, being frequently as late as 11, 12, or, in the highest classes of both real and Latin divisions, even 1 A.M. for lads of 16 to 18 years of age, and 11 or 12 o'clock for those of 15 years.

What the consequences of this overwork, excessive study, and limited amount of rest and recreation are can well be conceived without referring to tabular statements of ill-health, short sight, headache, and nervousness or mental inactivity, or to comparative percentages of these conditions in relation to the hours allowed to sleep.

Whatever may be the shortcomings of the education imparted in our middle and upper class schools, the hours are not regulated by an official code; but these exhaustive investigations should serve as a warning to those who would labour to bring the entire educational system of this country under the control of an Education Department. Things are not nearly so bad in Germany; but Dr. Burgerstein, in another work, contrasts the rude health and manly bearing of our "public school" boys with the fagged appearance of those of the same class among his countrymen, and observes that though the English boys would, as a rule, be nowhere in the "Maturitäts Examen" required for admission to a university, they ultimately make as good scholars, men of science, and certainly statesmen and citizens, as those of Germany; any superiority which, in the matter of science, etc., the German students may on the whole achieve being due to the system of instruction at the university, not in the school; while the Scandinavians, if their rulers be not wise in time, will most certainly cease to be able to boast the highest physical development, the greatest longevity, and the lowest death-rate in Europe, as they have in the past.

PAPERS ON SURGERY, PATHOLOGY, AND ALLIED SUBJECTS. By F. LE GROS CLARK, F.R.S. London: Adlard and Son. 1890.

THESE interesting papers are of more than ordinary value, for they are not merely reprints of forgotten and antiquated papers, as often happens to be the case with the collections of favourite productions in the leisure of old age. They may be said to consist (1) of a few older papers which have been specially worth maki known at the present time, as they cast a clearer light on so moot points in anatomy and physiology; (2) of a series of int esting contributions on "Surgical Reminiscences," or more tr surgical opinions after forty or fifty years of active work; (3) dresses dealing with points of importance in the educational moral life of students and similar subjects; and (4) a most int esting contribution on the changes that have taken place in p fessional work since the author's student days. The papers not arranged in any methodical order such as we have outlin but they naturally group themselves thus to anyone who has r them carefully, as we have done; and to read them carefully is enjoy them, and to rise more thoughtful from their perusal.

Among the first group here mentioned, perhaps the most va able is a paper on the Mechanism of Respiration, which has, think, been generally overlooked by writers of physiological te books, but there is much in the paper which repays careful stu The action of the different muscles is clearly given, and functions propounded of the serratus magnus, intercostals diaphragm are more specially worth consideration. Other pap to be noticed are one on the Anatomy and Physiology of Urinary Bladder and the Sphincters of the Rectum, one on Va motor Action and Nervous Exhaustion, the Evolution and Affin of Disease; and an address, delivered more than forty years a on Unity of Type and Simplicity of Structure as associated w Complexity of Function, which, though somewhat different fr modern teaching, shows what thoughtful men of that day co see.

What we have called the second group constitutes the grain experience gathered by a practical mind in his professional wo and may be studied with profit. A hospital surgeon at the cl of his career ought certainly to contribute something which n help the younger race to see what have become the pegs in mental storehouse of their predecessors. Probably the grains wheat worth preserving would, in some instances, be few, bu the aggregate, if all contributed, a valuable record of perso experiences and conclusions would be compiled. It would impossible to give any outline of the results here published, they are taken without any definite order, and occupy nearly pages of pleasant and easy reading, but thanks to a full and cellent index, it is easy to find any subject upon which we may w to see the author's experience and opinion. We think the rema upon all the subjects interesting, and may call special attent to a rare case (p. 142) of perfect recovery after a large bu passed through the chest, wounding lung and internal mamm artery, and producing hæmothorax, which was by no me aseptic. The man is now as active as ever, and shows no sign interference with the functions of the chest. Another interest case (p. 128), not usually followed for so long, is one in wh imperforate anus was operated on in an infant, and the last rec at the age of 37, shows the patient healthy, but obliged to enemata and aperients with regularity, though certainly ungrateful for the early surgical interference. Headaches author speaks of with authority, and many will study caref his conclusions as to treatment for a depressing and comm form of the malady, which is probably lithæmic. We m however, refer the reader to the work itself for the many subj touched upon with a light but masterly hand in these "record surgical experiences."

In the third group of papers are to be found some recent dresses to students at the Physical Society of St. Thomas's H pital on the Cultivation of the Faculty of Observation in Pro sional Work, and on the Faculty of Association; and others the Physical Consequences of Impurity, Recent Advances Natural Science in their Relation to the Christian Faith, s inaugural addresses, and the Hunterian Oration of 1875.

The introduction, which he was urged to write as a fit com ment to these collected papers, is certainly one of the most i resting parts of the work, for it is a survey of the progress in gery and allied subjects during the last sixty years. It is nat to find the author a "laudator temporis acti," and yet we sho do him an injustice if we did not acknowledge that in m things he is in touch with the most recent advances of scie It is good for us to see what a Nestor of the past thinks of ti and men and work which we are apt to overlook or to think e or misleading, or worthless. "But at that time good seed being sown in the form of original observation and valu monographs, which has since borne rich fruit; for many of workers were philosophic thinkers. The present generation

eaping the benefit." We are carried back to the times of old .ondon Bridge, with its rush of water through the narrow arches, ıe oil lamps and watchmen of London, the stage coaches, the :mes before penny post and omnibuses and cabs, and railways nd telegraphs, were thought of. We find the author almost linging to the old abuses of preferment for hospital apprentices lone, for he emphasises the good they did, and Travers, Green, yrrell, Key, Morgan, Bransby Cooper, and Callaway were the rand surgical leaders in the Borough Schools which that system ad produced when the author went there to commence his udies. But he contrasts the teaching, the nursing, the wards of ıen and now, and certainly the present has much to be thankful ır. The advances in surgery, pathology, anatomy, physiology, ıd the allied sciences are dealt with simply but well, and this rms a useful review of an important subject which will interest :ofessional readers.

The work is issued mainly for private circulation among the old iends and pupils of the author, but many others will be glad see that it can be obtained at a nominal price from the printer. is a typically useful memento of a life's work and is a pattern hich others who have finished bearing the burdens and heat of e day may well imitate. The result is a useful record and a easant companion for any spare hours to the practitioner, for the yle is easy and attractive and the reader is made to think for mself, besides taking in the dictum of the author; and this ould be the object of such literature.

IE SCIENCE OF METROLOGY; OR, NATURAL WEIGHTS AND MEASURES: A CHALLENGE TO THE METRIC SYSTEM. By the Hon. E. NOEL, Captain Rifle Brigade. London: E. Stanford, 1889.

"WHO is there among us," asks the author in his preface, "that is t interested in the measures by which we buy our piece of cloth, r pot of beer, our packet of tea?" Our existing systems are in ıny ways deficient and irregular, and their reform is a question at has at times been much discussed. Very little has as yet, wever, been done towards regulating them. There are many rsons, indeed, who strongly advocate that a clean sweep should made of them all, and their places taken by the metric system. ptain NOEL, who is not among the number of these extreme volutionists, offers this little treatise, written in a clear and pular form, for the consideration of the public before any radical erations are legally made. His object is to show that "by very le alteration, by a little amending, the existing English meas- es can be welded into a system scientifically as well as prac- ally superior to the metric, a system which is in many respects ılty." The chief advantages which the metric system possesses dependent on its decimality, and are inherent in any decimal tem as such. This, of course, is owing to the fact that ten is universal basis of notation, and to that fact alone. The num- ten is in itself of no greater value as a base than any other n number, and is decidedly inferior to several others that might e been chosen for that purpose, to the number twelve ecially.

his opens up the very interesting speculation as to whether at ıe future time the great nations of mankind will combine to rthrow the existing decimal notation, and replace it by duo- imals. Be this as it may, the advantages of twelve over ten in division are so great, that Captain Noel does not hesitate to se the subdivisions of his standard measures in the main duo- imal, keeping to decimals for multiplication only. He pro- nds the following as the conditions of a perfect system:—

1. That the standard of linear measure be a round aliquot of some great natural line, as, for instance, the equator or neter of the earth.

2. That the standards of surface, capacity, and weight be all ted to one another, and be directly dependent on the linear ıdard.

3. That all standards be of convenient size, and that there be erent standards for large and small quantities.

4. That the standard of weight be founded on the weight of capacity standard of distilled water under definite atmo- eric conditions.

5. That the multiples of the standards, except in capacity sure, be decimal, and the divisions, except in surface and city, duodecimal, decimal subdivision being kept, if wanted, cientific purposes only.

6. That capacity measures be binary throughout, the principal measures being perfect cubes, and surface measure admit of binary division.

"7. That there be no plurality of measures (as land and sea miles, distinct liquid and dry measure, avoirdupois and apothecary's weights), and that any special standards, as fathoms or chains, be multiples of the basic standard.

"8. That every measure have a distinct name, and that no name be applied to more than one measure."

Captain Noel makes a very heavy indictment against the metric system. He admits that it fulfils conditions two, seven, and eight, but charges it with failure to a greater or less extent in the remaining five. We must refer those interested to the book itself to see how far he substantiates these charges.

It will probably be a matter of surprise to many to find how little alteration most of our English standards require in order to fit them regularly to the natural line chosen by the author as the basis of his system. This line is the polar diameter of the earth. He very rightly objects to all surface earth lines, on the ground that they are curved and self-contained, while the further objection will apply to all except the equator that one could not be chosen which would not impart a local and national character to the system based upon it—a thing to be avoided if universality be aimed at.

By dividing the polar semi-axis by 1,000, a measure of about 3.95 miles is obtained, which it is proposed to term a "league;" the length of the "mile" would have to be slightly shortened to make it the exact fourth of this long-distance measure. The league divided by 10,000 gives an "ell" of 25.0246 present inches, the half of which, or "foot," differs from the present foot by one-twenty-fourth of its own length only; the new "inch" differs from the old to the same extent. It will thus be seen that the old familiar mile, foot, and inch would be retained with very little alteration.

It is also urged that several other advantages would be gained by the use of this new natural linear measure, and these claims are on the whole well sustained. Captain Noel's square measure, however, is his happiest adaptation. By altering the present acre to the very small extent of $\frac{1}{800}$th of its value he is enabled to construct a system, dependent on his new linear measure, beautifully symmetrical and possessing many practical advantages over our present awkward and faulty square measure.

Among the many tables given at the end of the book will be found diagrams drawn to scale of a square league and a square mile, and two each, differently subdivided, of an acre and a perch. If reference be made to these while the chapter on square measure is read a very clear view of the subject will easily be obtained, and it will be seen how greatly superior the author's square measure is to both the metric and the present English systems of surface measurement. It is rather singular that the late ordnance survey of the United Kingdom is based on a scale so constructed that, should this new system ever be adopted in this country, the map will be exactly on the scale of one ell to one mile.

Measures of cubicity are also very well treated. Without any great alteration of the standard measures now used an orderly scheme is proposed to take the place of the present rather chaotic group of tables. The alterations required are affirmed to be no more than a scientific and practical adjustment within historical limits of the national standards, which have been in use for centuries.

In connection with measures of weight, a more important deviation has been made. It is proposed that the ounce should be lowered to two-thirds of its present value. This is, of course, a very considerable difference, and does not seem altogether satisfactory. But it must be remembered that if ever reform in any direction comes at all, there will of necessity have to be at least a few radical alterations, and the proposed change in the ounce, especially when taken in conjunction with the fact that the pound remains very nearly unaltered, is trifling when compared with the proposal to make the gramme the legal standard of weight. The object to be attained by reducing the ounce in value is to make it the weight of a cubic inch of water. The pound would consist of twenty-four ounces, and would be the seventy-second part of the weight of a cubic foot of water.

The horse-power and other compound units, the thermometer, coinage, circular subdivision, and other miscellaneous subjects are shortly discussed.

On the whole, Captain Noel makes out a very good case for his system. He points out that the three greatest empires in the

world—Great Britain with its dependencies, the Russian Empire and the United States of America—have as yet held aloof from enforcing the use of the metric system. He shows that if Russia adopted his system the changes involved would be of much less magnitude than those that would be necessitated by the adoption of the metric values. A few paragraphs to a similar purpose are devoted to the measures of India and the East. There is some loose wording on page 13 in a table of the comparative values of binary and decimal division and multiplication in square and cubic measures. It is therein stated that there is a range of 512 units between $_2\frac{1}{5}\frac{1}{6}$ and 256. This is not correct. It is plain enough what is meant to be conveyed, and the value of the argument is in no way affected by the mistake, but the range in question contains 256, or 256 times 256, units, according as 1 or $_2\frac{1}{5}\frac{1}{6}$ is taken as the unit. There are three other similar misstatements on the same page. With this little exception, the subject is treated in a very clear manner. The book is both concise and interesting, and well deserves the attention of all who wish to know something about metrological reform.

Die Frage des Ueberganges gutariger Kehlkopfgeschwülste in bösartige, speciell nach intralaryngealen Operationen. Redigirt von Dr. Felix Semon. Berlin: August Hirschwald. 1889.

In this volume of 194 closely printed pages, Dr. Felix Semon gives in detail the results of a "collective investigation" set on foot by him with the object of settling once for all the much debated question as to the transformation of benign into malignant growths of the larynx, especially under the influence of what may be called surgical irritation, due to repeated intralaryngeal operations. We need not follow Dr. Semon over the familiar ground of the origin and progress of the controversy on this subject; it need only be said that his history of the matter is marked by scrupulous fairness. With regard to the investigation itself, the plan which he pursued was to send out to all the laryngologists in the world whose names and addresses were known to him a precise statement of the question to be decided, with a request to supply full particulars on the following points: The total number of cases of benign growth of the larynx observed; how many of these were papillomata, specifying whether the nature of the growth was decided microscopically or by its naked eye appearance? Total number of benign growths of the larynx operated on by the intralaryngeal method; total number of papillomata operated on in the same manner; of these papillomata, how many recurred and required further removal? Has spontaneous (that is, without previous intralaryngeal operation) transformation of benign into malignant neoplasms been met with? Has a similar transformation been witnessed after intralaryngeal operation; if so, how often? Total number of primary malignant tumours of the larynx seen? Have cases of malignant laryngeal tumour been met with in which microscopical examination of the fragments removed gave no definite result? The observers were further requested to describe any cases of the transformation in question consecutive to intralaryngeal operations. Under this heading information on the following points was asked for: Age and sex of patient; age when the tumour first appeared; brief description of laryngeal image; was the diagnosis of malignancy founded on simple inspection, or on microscopic examination of the fragments removed? How often were such fragments removed and subjected to microscopic examination? By whom was the latter made? What was the method of operation (knife, snare, forceps, galvanocautery, etc.)? Did apparently benign recurrences first take place? How many such were there? How long after the operation? Were they at the site of the original neoplasm or elsewhere? What interval of time was there between the last intralaryngeal operation or the last benign recurrence and the appearance of the malignant neoplasm? Was the diagnosis of malignancy based on simple inspection and other *clinical* symptoms, or on microscopic examination? Who finally made the microscopical diagnosis? Was the malignant neoplasm at the site of the original benign one, or elsewhere? Course of the case; result of the necropsy (if possible with the result of the microscopic examination of the neoplams *post mortem*). It will be seen from these interrogatories how elaborate and exhaustive the scheme of the inquiry was, and how careful Dr. Semon was to close every loophole against fallacy. Not content even with these precautions, however, and acting on the principle that cases, like opinions, should be weighed rather than counted, he subjected every case presenting any element o doubt to the most searching criticism.

The total number of practitioners who furnished replies wa 107; the period over which the investigation ranged was fron 1862 to 1888, thus coinciding pretty closely with the laryngoscopi era. The total number of benign growths of the larynx observed wa 10,747, of which 4,190 were papillomata. The intralaryngea operations performed in these cases amounted to 8,216, in 3,382 c which the growth was papillomatous. Among the latter case recurrence, rendering further removal necessary, took place in 48 but according to Dr. Semon, recurrence was far more frequen than these figures indicate, many patients under such circun stances seeking other advice, etc. The total number of primar cancerous tumours of the larynx was 1,550. In the 10,747 cases benign neoplasm, transformation into cancer occurred in only 4 in other words once in 238 cases. In only 33 cases did the chang take place after intralaryngeal interference, that is, once in 249 cas operated on. Only 5 of these, however, are allowed by Dr. Semo to be "entirely or almost entirely certain," which would mak the proportion 1 in 1,645, or adding 7 more, which he think "probable," 1 in 685 cases. In 12 cases benign growths w said to have "spontaneously" assumed a malignant characte but most of these also are doubtful. The net result of D Semon's careful analysis of his statistics, therefore, is that th transformation of benign into malignant growths of the laryn which was alleged to be a frequent result of intralaryngeal oper tion, occurs in 1 case of every 685 so treated, and it is possib that fuller information might reduce even this insignificant pr portion to vanishing point.

Dr. Semon goes on to show that it is more than doubtful wheth even in the cases in which the transformation has followed intr laryngeal operation the latter had anything to do with the pr duction of the change. Comparing the 2,531 cases in which operation was performed with the 8,216 treated by the intr laryngeal method, he finds that cancerous degeneration took pla in 12 of the former, and, as already said, in 33 of the latter. Th gives a ratio of malignant change of 1 in 211 of the cases not op ated on as against 1 in 249 in those treated operatively; in oth words, the cancerous transformation actually takes place mo often in the former than in the latter. This is surely a *reductio absurdum* of the contention of those who attributed such dire co sequences to intralaryngeal operations. Dr. Semon is certain entitled to the credit of having definitively settled an importa practical question, and of having fully "justified the ways" intralaryngeal surgery as far as benign growths are concerned.

Independently, however, of its conclusive statistics, the work one of high interest and value from the great amount of informati it contains relative to the diagnosis, pathology, and treatment laryngeal neoplasms. Especially instructive are the three s tions on the laryngoscopic diagnosis of benign from the ea stages of malignant neoplasms, on the diagnostic significance the microscopic examination of fragments removed *per v naturales*, and on other elements in the diagnosis (age, heredi pain, hoarseness, etc.). The book, indeed, gives ample evidence the clinical skill and mature experience, no less than of patient industry, of the author. A word of praise must also given to Dr. Semon for the discretion with which he has avoi stirrring up the *ignes suppositos cineri doloso* that so thickly str the ground he had to traverse. We would venture to sugge however, that the work might be considerably shortened with any loss of interest or cogency. By disencumbering it of merely *ad hominem* argumentation which is already in gr measure obsolete, a residue would be left of permanent value only to laryngology, but to medical science in general.

On Syphilitic Affections of the Nervous System, th Diagnosis and Treatment. By T. M'Call Anderson, M Professor of Clinical Medicine in the University of Glasg Glasgow: James Maclehose and Sons. 1889.

This book consists almost entirely of the clinical account twenty-four cases of syphilitic disease of the central nervous s tem. They are almost all of them excellent examples in po and show clearly the features which should be chiefly relied u in forming a diagnosis, and they also fully illustrate the imp ance of energetic treatment. That to which Professor M'C Anderson most inclines is the internal administration of la doses of iodide of potassium, combined with the inunction of n

rial ointment or the subcutaneous injection of perchloride of ercury.

The account of the cases is followed by an excellent sum- ary of the chief points to which attention should be directed in y case in which it is suspected that there may be syphilitic dis- se of the nervous system.

There is nothing in the book foreign to the ordinary teaching out cerebral syphilis. Professor M'Call Anderson's object in iting it was, to quote his own words, "to help to a more general cognition of the great frequency of syphilitic affections of the rvous system, and of their amenability, in many cases, to early d energetic treatment." There is, we suspect, a good deal of local riation in the readiness with which these facts are accepted. By ne practitioners and at many medical schools there is a dispo- ion to treat patients in whom there is no sufficient reason to spect that syphilis is at the bottom of their trouble with anti- philitic remedies, because it is recognised that with most cases nervous disease our only hope is that they are due to syphilis. ll, as Professor M'Call Anderson has "reason to believe that a ge number of his professional brethren consider that few cases syphilis are followed by affections of the nerve centres," he is ite right to try to bring before them the fact that this is not so, l that many patients may be relieved, or even cured, by a proper atment, but he rightly urges that a complete cure is not by any ans always possible, for often syphilis has irremediably de- oyed parts of the nervous system before the treatment has been gun.

NOTES ON BOOKS.

Elementary Manual of Electricity and Magnetism. Part II. ltaic Electricity. By Professor JAMIESON, M.Inst.C.E. (London: arles Griffin and Co.)—In this little volume the author pro- ds by a natural and happy transition from Magnetism (Part I) a study of the magnetic properties of electric currents, thus lucing the principles of electro-dynamics. After a brief his- ical survey of the discoveries of Galvani and Volta, establishing connection between these and the preceding topics, there ows a scientific development of voltaic electricity. The subject reated throughout in an elementary manner. It is explained every point by simple experiments, which are rendered ier by admirable illustrations. There are in all twelve short tures, each followed by a table of well-selected questions. fessor Jamieson displays the best qualities of a teacher. Dif- lt subjects are made intelligible, and well-worn topics are put a new and attractive form. In view of the growing importance electricity in medicine and of the necessity of thoroughly stering its elementary principles before seeking to apply them, s book may be confidently recommended to the medical der.

The Microtomist's Vade-Mecum: a Handbook of the Methods Microscopic Anatomy. By ARTHUR BOLLES LEE. Second tion. (London: J. and A. Churchill. 1890)—The first edition Mr. Lee's book supplied a distinct want; this second edition ld seem to be almost as much in advance of the former as that superior to any previous attempt in the same direction. fact, this is a new work; and although the chapter upon ro-organisms has disappeared, and the author condemns and ses over the freezing microtome and many of the simple, but essarily simple, methods of the pathologist, so much useful rmation is here given that this *Vade-Mecum* may with- exaggeration be described as an indispensable adjunct to laboratories where normal or morbid tissues are examined roscopically. In a clear and concise form the author describes principles that govern the preparation, staining, and mount- of tissues, and the first part of the work consists in the main practically exhaustive collection of formulæ of methods for ng, hardening, staining, imbedding, and section cutting, and of pes for preservative, injection, and maceration media. The nd part deals with special processes, as, for example, those ciated with embryology and the examination of nuclear sion, nerve endings, the blood, and central nervous system. erences to the original publications are given throughout, the index seems to be full and exact. The only adverse icism that can be brought against the author is, we think, that he is scarcely sufficiently appreciative of the niceties of serial section cutting, or, again, of the position of the morbid anatomist. When tissues have been dead for some hours it is in general useless to study the finest details of structure, and useless consequently to employ elaborate methods of preparation.

Annales de l'Institut Pasteur, January and February, 1890. (Paris: G. Masson. 1890.)—There is much that is of interest in these two numbers of the *Annales*. Of especial importance is a paper by M. Fernbach upon the production of a diastatic ferment by Aspergillus niger, inverting cane-sugar. By a determination of the amount of sugar in a standard solution inverted in a given time, it is shown that when first the fungus is added, the sugar is altered without there being any corresponding amount of the ferment discoverable in the medium of growth. As the sugar becomes used up, the ferment increases rapidly, that is, it increases in the medium when there is little material to transform. M. Fernbach finds that the amount of the ferment within the cells of the aspergillus diminishes correspondingly, being at its greatest when the sugar is being most actively consumed, that therefore the alteration of the sugar is an intracellular process, and the ferment only passes out of the cell practically as a useless excretion. M. Roux describes the production of a modification of the anthrax bacillus; by the action of weak solutions of carbolic acid or of potassium bichromate, he has been able to cause a growth of the bacillus without spores. The bacillus, in fact, loses the power of forming the spores, and apparently in this manner a permanent asporogenous variety is obtained, although, it is interesting to note, the cultures lose nothing of their virulence. M. Metschnikoff continues his series of studies upon immunity, and replies to the attacks of Baumgarten, Czaplewski, Lubarsch, and others upon the phagocyte theory, dwelling especially upon phagocytosis in pigeons inoculated with anthrax. M. Gessard shows that the production of a blue or of a green fluorescent pigment, or of both, in growths of the bacillus of blue pus, depends upon the nature of the nutrient medium, and thus concludes that there are not, as held by Ernst and others, two varieties, α and β, of the bacillus pyocyaneus.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE VACCINATION WALLET.

THIS is a convenient little case, divided so as to allow empty vaccine tubes, and those already charged, to be kept separate. Each division is marked distinctly, and one is set apart for calf lymph, though it does not seem well adapted for the broad points in which this lymph is usually stored. There is a space intended for a lancet. The wallet is manufactured by Messrs. Reynolds and Branson, 13, Briggate, Leeds, price, 1s.

FLUID EXTRACT OF GUARANA.

THIS is a liquid extract which contains in every fluid ounce all the active matters present in one ounce of guarana. With water it forms a transparent mixture which, upon standing, deposits a brown flocculent precipitate. The taste is by no means disagreeable. We are of opinion that it will be found to be a very reliable preparation. The manufacturers are Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, E.C.

KOLA PREPARATIONS.

MESSRS. THOMAS CHRISTY AND CO. (25, Lime Street, London, E.C.) write: We note on page 1067 of the JOURNAL of May 10th a communication upon Kola as a Remedy for Sea-sickness, in which the writer says: "It would be advantageous if for future trials pharmaceutical chemists would give us a neater, more palatable, and efficient preparation than the kola seed." Will you kindly allow us to say that we have for some time made several preparations from the kola, namely, kola chocolate, kolatena, kola lozenges, kola fluid extract, and kola cordial, and we shall be very pleased to supply any medical man who would like to test the remedy in cases of sea-sickness with any of the preparations mentioned.

THE St. Louis *Weekly Medical Review* states that Dr. J. P. Aspy, of Columbus, Ind., recently died of what was considered to be hydrophobia, some time after receiving a bite from a "mad" horse. The animal had previously been bitten by a rabid dog.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 17TH, 1890.

HOSPITAL EXPENDITURE.

THE subject of hospital abuses is at present being brought prominently before the world by Lord Sandhurst's Committee, and the alleged extravagance in collecting funds is, no doubt, one of the charges which will be duly investigated by that body; but, in the meantime, following the example of Charles Lamb, who, whenever a new book came out, read an old one, we have been examining a series of the hospital reports published last year in order to realise what information on this point is already in the possession of the public. The charge is not a new one, nor is it brought with any hesitation. There is a well-known estimate which has placed the total amount of needless expenditure under this item at the good round sum of £100,000, a sum, it is generally added, sufficient to maintain two more large general hospitals. But we may at once say that if an inquirer should expect to find any such startling revelations in the reports of the hospitals, he would very soon discover that he was to be disappointed. There is nothing set forth in those documents with which the public has not been long familiar, and little or nothing in the way of expenditure on collection or advertisement to which grave exception could be taken. The most serious defect in the reports, taken as a whole, is the want of uniformity, which renders any general detailed comparison between the various hospitals almost an impossibility.

Of management expenses the four plain items of printing, postage, stationery, and advertisements do not at first sight seem to offer much opportunity for diversity, but sometimes one pair are grouped together, sometimes another, sometimes an extraneous item is thrown in, upsetting the whole calculation. In some cases the cost of raising special funds is included in the ordinary expenditure, in others the special contributions are acknowledged without any reference to the various expenses which their collection must necessarily have involved. In some instances collectors' poundage forms a heavy item, while in others the subscriptions might collect themselves so far as regards any expenditure shown under this head. These are but a few instances; in a word, an attempted comparison of these accounts is a study in chaos.

There is, however, perhaps no very serious evil actually hidden in this wilderness. So far as can be judged, the expenses of advertising and collecting are in most cases not grievously disproportionate to the very large sums obtained, and begrudging trustworthy collectors is not a desira economy. Moreover, this is one of the abuses most cert to disappear with legislation, and a uniform system will p bably before long be prescribed for the publication of hospi accounts.

Neither is the ordinary expenditure on advertiseme unduly heavy. To be in a position to do good work it of course, necessary to remain constantly in evidence in advertisement sheets. Not only are there annual subsc tions and modest donations to be gathered in, but there the testator to be remembered—to hospitals a very spe form of Providence, in whose way it is desirable to keep.

But it is in the extraordinary expenditure, if anywh that we must seek for profuse outlay. Even the large amou annually given and bequeathed to hospitals are insufficient the work which they are at present attempting to perfo and when the last legacy and last donation have come i considerable sum is still wanting. The public remains only source available, and when the public will no longer g from pure charity, it has to be supplied with fresh indu ments to generosity. It may be cynical, but it is certai true, to say that long after men or even women have cea to contribute to others' welfare they will spend money themselves. So *fêtes* and dinners, balls and banquets organised and enjoyed at a heavy cost, and thus the hosp coffers are enriched with sums which would certainly ne have come to them otherwise during the owner's lifeti Here, if anywhere, is the bulk of the hundred thousand pou to be sought.

But it is exactly at this point that the reports become pressive by their silence. Of these entertainments a separ account is very rarely afforded, and the inquirer has to rem satisfied with a more or less handsome net profit which is tered among the contributions, for of the expenses, which is notorious are sometimes very heavy, there is rarely mention. This is not wholly unsatisfactory so far as it i mark of grace on the part of the hospitals, due to a feel that they are quitting their true sphere in catering for amusement of society, and that they wish to make the le possible reference to it. And so far as it is the fault of public, who will give their money on no other terms, this cuse has some weight.

A still more unanswerable consideration rests on the that it would be extremely easy to evade any prohibit legislation. These performances could most easily be un taken no longer in the name of the hospital, but of th energetic people who already organise them; and though le lation might prevent charitable endowments from formin guarantee fund, it must always remain impossible in a country to prevent a private individual from getting up entertainment and handing over the proceeds to his or favourite charity. The full publication of such acco should, however, be insisted upon, if the name of the inst tion be in any way pledged.

But at present it is hard to see what blame or responsibi can attach to the hospitals who are now compelled to re to such support in their struggle for existence, except in sc as that struggle has been at times less for existence than self-importance.

In regard to the whole question of hospital expenditure it s of course most desirable that not only those who incur sus- icion, but also those who are above it, should publish, on ome uniform system, full statements of the moneys which hey receive from the public, and of the way in which they xpend them. But any real reform in expenditure can only e indirect, and must be based upon other larger and more eneral reforms of the whole hospital system.

DOUBLE PERSONALITY.

r some of the most difficult problems of life that are at ast in part physiological, the rare abnormalities of Nature ve a leading clue to the laboratories of experimental ysiology, which is by no means to be neglected, though it ay be hard enough to explain or thoroughly to follow out. n instance of this occurs in a curious bit of personal history hich came lately under the notice of Dr. Proust, the dis- guished physician and Professor of Hygiene at the Hôtel ieu, in Paris. On this he has read lately a remarkable per to the Academy of Moral and Political Science in Paris. has filtered through several Parisian correspondents into e English press and has excited some comment. It is one those instances of double personality which are so rare to nglish eyes, in which both philosophers and physiologists can rdly fail to be interested, for it offers problems to both hich are not easy to solve, and indeed it would be a feather in e cap of anyone who could provide a complete and satisfactory lution.

The story[1] plainly told is this. Emile X., aged 33, is a rrister in Paris, a well-educated man, successful in his ssical studies as a boy, who spent a short time as medical dent before he turned to law. His father had been an entric man and a heavy drinker, his younger brother was ntally deficient. He was himself always very impression- e, and sometimes a loud and sudden noise was enough to send n into what was considered a hypnotic sleep. Even in the courts on one occasion when conducting a case the judge d his eyes on him and thereupon he stopped speaking and into this abnormal state. His friends, who knew his uliarity, roused him at once and then he went on with his ech. Again when he was at a *café* near the Bank he looked at self in the mirror and fell asleep again. His neighbours e surprised and did not understand it and thereupon took to the Charité, where he was awakened. The strangest thing ut him was his occasional loss of memory for considerable ths of time and his change of personality during these es. He was wide enough awake throughout, but whilst vas in this condition he could remember nothing at all of past life. He was active in every way, walking, riding, elling by train, or making purchases in the shops. And n he passed back from this secondary life to his normal e it was by a process of awakening, and he had no recollec- at all of what he had been doing. He had two memories, oint of fact, which alternated—the first belonging to his nal life, the second to his abnormal. On September 23rd, , he had a quarrel with his stepfather in Paris which re- d him to his second self, and this he did not cast off for e weeks, when he found himself in a village a hundred miles from Paris. He could not tell how he had got there or what he had done; he could find out from questioning his neighbours that he had paid a visit to the priest of the village who had thought his conduct odd, and previously to that he had stayed with an uncle who was a bishop and in whose house he had broken his furniture and torn up his letters, and had even had a sentence passed against him in a police-court for some misdemeanour. During these three weeks he had spent about £20, but where it had gone he did not know at all.

Again on May 11th, 1889, he breakfasted as usual in Paris, and found himself some three days after at Troyes with a similar complete blank in his memory. He noticed that his over- coat was gone and his purse also with £9 in it.

Modern experimental psychology has paid a good deal of attention to a few such cases as this and has been able to advance our knowledge of them considerably and in a useful fashion. Since Azam, of Bordeaux, first published, more than a quarter of a century ago, the outlines of the celebrated case of Félida X., whom he has followed now through thirty-three years of her truly chequered life, we have learnt to appreciate more thoroughly the reality and the meaning of double personality in a few rare cases such as those of Louis V. and Lucile under MM. Bourru and Burot, of Mdlle. R. L. under Dr. Dufay, as well as those under Verriest and Professor Charles Richet. And in these later years the study of memory by Professor Ribot and others has revived the interest in the well-known fact that there may be separate memories conjoined with some separation of character and physical conditions; that most somnambulists, for example, have separate memories in their somnambulic and in their normal states. In an attack of somnambulism an unfinished piece of work is sometimes taken up just where it had been left in previous somnambulism, but had never been known of between whiles. When such natural somnambulists are put into the state of *somnambulisme provoqué* or hypnotism, it is found that as a rule the somnambulic memory is recalled and its ideas and impulses take the place entirely, for the time, of the normal character and normal memory. So too, on a larger scale, after these longer somnambulisms or spells of second person- ality that may last for days or weeks or even years, the memory of them is generally lost after the return to the primary state, but even then it can be revived in hypnotism. In the case which Professor Proust has related, after Emile X. had spent three weeks of travel and visiting in his second personality and awakened with no memory of what had happened, Professor Proust goes on to tell us how he was then hypnotised and could so long as he was hypnotised recollect his wanderings, his conduct in the episcopal palace, his losses of money at the card table, and the misdemeanour for which judgment had been given against him. In the same way, after he had been to Troyes, there was no memory of how or why he had gone till he was hypnotised, and then he could tell the whole tale of his journey. This effect of hypnotism was very lucky for him for it enabled him to describe exactly what he had done with his overcoat and his purse with £9 in it. His friends made a note on this point of what he said in the hypnotic state. After awakening he was surprised to read his own account, but he believed his hypnotic self although his normal memory was just as blank

[1] *Revue de l'Hypnotisme*, Mars, 1890, p. 267.

as before, and wrote to the hotel at Troyes telling them where he had left his coat and purse. He was still more surprised when in a couple of days he received from the hotel keeper the coat found where he had described, and the purse also with the money in it. The law too, in a way that is worth notice, acting perhaps on the important precedent in Dr. Dufay's case, of excusing one personality for the criminal actions of the other, revoked its previous judgment against him for the petty misdemeanour of his second personality.

THE TREATMENT OF PHTHISIS BY CARBONIC ACID.

We noticed recently the proposal of Dr. Hugo Weber to administer CO_2 in cases of phthisis.[1] In reality the treatment is an old one. Its only new feature is the exhibition of the curative agent by way of the stomach. So long ago as 1795, Dr. T. Beddoes, in extension of a letter he had written to Erasmus Darwin, published, in conjunction with James Watt, the engineer, a work[2] recording the trial of various chemical agents, principally gases, for the cure of different diseases, Dr. Beddoes describing the cases and noting the effect of the remedies employed, Mr. Watt giving the method of preparation of the necessary gases, describing the apparatus used, and calling attention to various precautions to be observed both in preparation and use of the curative agents.

In this work Dr. Beddoes stated that in one case "of phthisical cachexy and phthisis" a perfect cure resulted from the inhalation of carbonic acid, and an equally good effect followed the inhalation of hydrogen in another instance. The "hydro-carbonate" (that is, a mixture of H and CO_2), "diluted, cured in two cases; in four cases, where the trial was imperfect, it evidently gave relief, and in one it was inefficacious." Dr. Girtanner, of Göttingen, was induced by Beddoes's work to make similar experiments in cases of phthisis,[3] which he undertook because he was dissatisfied with the Englishman's methods of experiment, inasmuch as the latter had not distinguished between the different kinds of consumption, or mentioned the stages or causes of the diseases, in the cases he recorded, and had indiscriminately recommended carbonic acid, azotic, and hydrogen gases.

Dr. Girtanner decided to experiment with only one kind of gas, and he selected carbonic acid because it is specifically heavier than the atmosphere, and was, therefore, certain to sink to the bottom of the lung (the diffusion of gases being unknown to the experimenter), and so not be immediately expired, and also because it had been shown by the experiments of Ingenhaus and Beddoes to diminish pain and promote the healing of wounds.

The first case in which Dr. Girtanner tried the new remedy (April, 1795) was that of a student, aged 23, who had suffered from phthisis for a year previously. His pulse was 120, skin hot, voice hoarse, cough troublesome and frequent; emaciation and excessive night-sweats, with colliquative diarrhœa were also present. The same evening Dr. Girtanner saw him he made him inhale a mixture of one quart of carbonic acid and two quarts of atmospheric air, with immediate relief of some of t most urgent symptoms. The same treatment with a stri dietetic regimen was continued daily until the beginning May with a marked improvement. The inhalations were d continued on June 6th, when the patient slept well, with night-sweats and no expectoration; pulse 90 (morning) and 1 (evening); fever absent. Having a slight relapse early in Jul he resumed the inhalations on the 8th of that month. By t middle of August his cough had disappeared, both appeti and flesh had returned, and he complained of nothing. left Göttingen on August 27th to walk home, a distance eighty miles, a journey he safely accomplished, and was, the time of writing, perfectly well.

Encouraged by this case, Professor Richter tried the inh lations on a patient in his clinical institution, with passi relief but no permanent benefit. At the necropsy "the lun were found completely suppurated, with many small tubercl full of pus."

Dr. Hempel, of Göttingen, employed the method in advanced case with no success. The botanist Ehrhart, Hanover, used it on himself, under the direction of D Wichmann, with no good result. Dr. Büchner, of Hilbur hausen, was equally unsuccessful in his trial of this meth of cure.

Dr. Girtanner concluded from these cases that in so instances the inhalation of carbonic acid was of the greate use, in others it was ineffective, while in a few it was ev positively injurious.

Mr. James Howieson, a surgeon on the Bengal Establis ment of the H.E.I.C., reports in *Duncan's Annals of Medic* for 1797, vol. ii, p. 324, "A Case of Phthisis Pulmona completely cured from the Patient breathing Mephitic Air In this case, Captain George Roper, of the Bombay Marin "had," says Mr. Howieson, "all the symptoms of a pers in a very advanced stage of pulmonary consumption." T symptoms given, however—"pain in side, with fever, follow after an interval by expectoration of large quantities of p streaked with blood, incessant cough, fœtid breath, and profu perspiration"—point rather to pleurisy, followed by empye and fistulous opening into the bronchi, than to phthisis. Be th as it may, phthisis was the diagnosis arrived at, and the patie was ordered from Prince of Wales's Island, where he then w to Bengal, with not the least expectation or hope of recove He took passage with Mr. Howieson in a merchantman lad with moist sugar. During the twenty-five days of the voya he occupied both by day and night a cabin seven feet squa situated close by a hatchway, whence an intolerable sten caused by a mixture of bilge-water and sugar drainings, p ceeded. So foul was the air in Captain Roper's cabin tha candle would only burn very dimly, and at times went entir out. In spite of these circumstances—or, as Mr. Howies thought, in consequence of them—Captain Roper daily impro during the voyage, and, on the vessel's arrival at its desti tion, was practically well, and continued so when last se fourteen months afterwards. Having read Dr. Beddo observations on the use of CO_2 in phthisis, Mr. Howie drew the inference that Captain Roper's constant residence the "mephitic air" of this cabin was the curative factor the voyage, and, like Dr. Hugo Weber, our author has

[1] Journal, March 8th, 1890, p. 564.

[2] *Considerations on the Medicinal Use and on the Production of Factitious Airs*, by T. Beddoes, M.D., and James Watt, engineer. Three parts. London. 1795.

[3] "Versduche und Beobachtungen über die neue Methode des Hrn. Beddoes, die Lungenschwindsucht zu heilen, etc.," in C. W. Hufeland's *Journal der praktischen Heilkunde*, vol. i, Jena, 1795.

eory of the operation of the remedy. He writes "that the od effects of mephitic airs in the case of phthisis arise lely from their sedative powers in diminishing the action of e heart and arteries, and in consequence lessening that of e lungs, by which the ulcers and wounded blood vessels of e latter are allowed to heal."

Notwithstanding the literature of this subject, ancient and odern, we fear that the carbonic acid treatment of phthisis ll prove as illusory as so many others. That the presence an overplus of CO_2 in respirable air is no preventive to thisis, even if it be allowed that absence of oxygen and esence of other products of respiration are the active factors the preparation of lungs for the disease, is shown by the rible phthisis death-rate of those dwelling in overcrowded d ill-ventilated workrooms and apartments; though here the ne prevention of diffusion of CO_2, which is suggested by Dr. ber as the active factor in the supposed immunity of limeerners from the disease must certainly be present.

At any rate, if this scourge of the world can be either enely cured or even materially mitigated by so simple a remedy an effervescing mixture, we can only congratulate mankind the cheapness, palatableness, and ridiculous simplicity of remedy now recommended to our notice.

IS FAIR HAIR BECOMING EXTINCT?

E primary use of the hair being to form a protective cover- for the head, light coloured hair should be better adapted the inhabitants of cold climates, as we know that light oured substances offer greater resistance to the transmission heat rays than those of darker shades, and thereby main- a more equable temperature. Although it is found that some cases the people of cold climates have light hair, it no means invariably follows that this is so. We certainly et with fairhaired people very frequently in Scandinavia, but the other hand the Eskimos, inhabiting a much colder ntry than the north of Europe, have black hair. Race racter appears to have a very considerable influence in ermining the colour of the hair in different countries, and n in different parts of the same country, and is sufficiently ng to counterbalance the influences of climate and other ditions which would tend to modify it. Fair hair has a long time been regarded to exist chiefly in some of the an groups, but it is also met with among the Asiatic ites, and is very common among the Kabyles. During the nerous immigrations which have taken place in earlier times n other countries into Great Britain, races sometimes with t hair and sometimes with dark hair have been introduced settled down in different parts of the country. So long he various race elements remained separate little change in r physical characters occurred, but on intermarriage with another the characters of their progeny became altered, the British population is now essentially mixed. In some s of the country the intermixture has not been so complete n others, and as a consequence the preponderating influ- of the race characters of the stock from which its inhabi- s were derived may still be traced. The increased facili- for travelling since the introduction of railways is leading much greater and quicker interchange of population ughout the country than has perhaps ever previously occurred, so that the Iberian, Celtic, Roman, Saxon, Norman, Scandinavian, and other race elements, at one time distinct, are becoming much more intimately blended together. The manner in which race characters blend differs considerably. In some cases, as for instance when the one parent is fair and the other dark, the hair of the children may be of an intermediate colour, but often some of the children take after the one parent in the colour of their hair, while others are like the other parent in this respect. Inherited characters are transmitted from further back ancestry than the immediate parents, and an infinite number of blended elements may exist in the same person. As the process of blending of the population goes on it is evident that on theoretical grounds there should be a tendency for the extremes of any pronounced character to become modified, and therefore for the number of persons with very fair hair to become fewer in course of time. This question has received a good deal of attention from Dr. Beddoe, of Clifton, and Mr. Charles Roberts, who have been at considerable pains to investigate the question practically. The number of persons with light hair and light eyes in different parts of the British Isles in relation to the general population of the same places varies very much. As a general rule the east coast of Scotland and the north-east parts of England contains the greatest percentage of fair complexioned persons, but in the neighbourhood of Bristol and Glasgow the actual percentages were found to be highest. In Ireland the highest percentage of fair persons is in the north-west. The results of a large number of observations prove that the prevalence of fair complexion is dependent upon similarity of race origin of the inhabitants.

In forming opinions as to whether fairhaired persons are less numerous in a particular locality now than formerly, the element of age has to be considered. A person who has spent his childhood in a fairhaired district, and visits it again after a lapse of years, may easily imagine that the number of fairhaired persons is fewer than formerly, merely on account of the class of persons from whom he draws the inference being more adult than those of whom he has recollections in former times. Upon the rate at which hair darkens from childhood to adult age we have some valuable observations, which show that the hair of light complexioned male children darkens from 55 per cent. during the first five years of life to 33 per cent. at 45 years, and dark hair with light eyes is found to increase in about the same ratio. Darkening of the female hair and eyes with age takes place to a much less extent than among males. It would appear, therefore, that in estimating the increase or diminution of fairhaired persons in a particular district, observations on females are much more trustworthy than on males, from the fact that they are much less liable to variations; but, on the other hand, it must be remembered that the colour of a woman's hair is more liable to alter according to the tint which is considered the most fashionable at a particular time.

Besides the blending of fairhaired races with the dark stocks, there are other elements which Dr. Beddoe has shown may account for the diminution of fair hair in England, and these should not be overlooked. He considers that the xanthous temperament is less able to withstand the insanitary conditions existing in the crowded populations of our

great cities than the melanotic, and that in this way the law of natural selection operates against its increase. Again, as a large majority of women live and die unmarried and childless, it is probable, in his opinion, that the physical qualities of the race may be, to a small extent, moulded by the action of conjugal as well as natural selection. In support of this he has given statistics showing that of 737 women, only 55.5 per cent. of those with fair hair were married against 79 per cent. with black hair, while 37 per cent. with fair hair were unmarried against 18 per cent. with black. On classifying those with red, fair, and brown hair as "blond," and those with dark brown and black hair as "dark," we have 359 of the former and 361 of the latter. Of the blonds he found 60 per cent. were married to 70.5 of the dark, and 32 per cent. of the former were unmarried to 21.5 of the latter.

If during several generations this preference among the male sex for wives with dark hair should continue, it is reasonable to suppose it would exert an influence decidedly adverse to the increase of fairhaired persons being maintained.

On various grounds, therefore, it would seem as if the fair hair so much beloved by poets and artists is doomed to be encroached upon and even replaced by that of darker hue. The rate at which this is taking place is probably very slow, from the fact that Nature is most conservative in her changes.

CEREBRAL SURGERY.

PROMINENT amongst the names of those who, by careful investigation and bold operative interference, have done so much in recent times to develop cerebral surgery stands that of M. Lucas-Championnière, of Paris. To numerous previous papers advocating an extended practice of trephining in the treatment both of injury and disease of the cranial contents, this surgeon has lately added a summary of a communication made to the Académie de Médecine, giving an instance of removal from the brain during life of an old clot, the result of spontaneous cerebral hæmorrhage. The patient was a man, aged 53, who, after an attack of apoplexy, had remained affected with paresis of the right lower limb, marked contraction of the right hand, and epileptiform attacks, which last, as time went on, increased more and more in frequency and intensity. Study of the symptoms presented in this case having led to the conclusion that they were due to a hæmorrhagic deposit in the ascending frontal convolution, M. Lucas-Championnière decided, as the condition of the patient was in other respects good, on exposure of the supposed clot, with the view of liberating the compressed and irritated cerebral structures. After the skull had been trephined over the middle of the fissure of Rolando, an encysted clot was found embedded in the brain, and, as had been expected, near the middle of the convolution in front of this sulcus. The cyst having been freely opened, the rust-coloured contents were removed, and the cavity washed out with antiseptic fluid.

The results of this operation, it is reported, were very satisfactory. The contraction of the right hand had ceased on the following day, and, when the patient was able to leave his bed, he found that he could walk with more ease. One attack of convulsions occurred about two months after the date of operation, but this was not repeated in the subsequent interval of four months up to the time of the publication of this report. It is difficult at present, M. Lucas-Championnière states, to form any decided conclusions as to the prospects of trephining in cases of non-traumatic cerebral hæmorrhage. Many cases, it is held, occur in which after cerebral hæmorrhage compression and irritation play so direct a part as to lead to the conclusion that operative treatment may be often applied with success. M. Lucas-Championnière can fairly claim the merit of having done much to facilitate and improve the operative methods of cerebral surgery, and to show that trephining by itself is not attended with any great risk, and also that the indications for such procedure now extend over a wide field. In his latest contribution on this subject reference is made to as many as thirty cases of trephining in his own practice, performed with a view to the cure of intracranial affections due to disease and not to injury, in all of which the patients recovered from the effects of the operation without the occurrence of any serious symptoms. Although in most of these cases, particularly in those of idiopathic epilepsy, the ulterior results of the operative treatment do not present instances of complete and brilliant success, they are still encouraging, and certainly justify the attempts that are being made to bring serious and very distressing affections of the brain within the range of surgical treatment.

THE Prince of Wales has intimated his intention of laying the foundation-stone of the new building for the Royal South London Ophthalmic Hospital in July.

WE understand that there is an intention among medical members of the Convocation of the University of London to bring forward Dr. Bristowe as a candidate for the Senate of the University of London. A committee has been formed, of which Dr. W. B. Hadden, 21, Welbeck Street, and Dr. Hale White will act as secretaries.

DR. MORRIS LONGSTRETH, of Philadelphia, who is on a visit to Europe, has been entrusted by the College of Physicians of Philadelphia with the volumes of their *Transactions* required by the Library of the British Medical Association to complete their series—a courtesy for which we desire to make warm acknowledgement.

A MEETING will be held at the Admiralty, by permission of Lord George Hamilton, this day (Saturday), May 17th, at 4 P.M., in aid of a scheme for founding a home of rest for trained nurses. The Princess Christian has consented to preside, and Sir James Paget will speak in favour of the project, which well deserves, and has already received, the support of many influential members of society and eminent medical men. No class of persons stand more in need of such beneficial institution than trained nurses.

THE GENERAL MEDICAL COUNCIL.

THE Executive Committee of the General Medical Council will meet on Monday, May 26th. The business to be brought before it will probably not be of great importance, but the official notification that the Privy Council have applied the second part of the Medical Act, 1886, to the colonies of Victoria and New South Wales will be made. The Council itself meets on Tuesday, May 27th, at 2 P.M., when the President will deliver an address reviewing the work to be undertaken by the Council. The strongly worded resolutions adopted by the Joint Committee of the Royal Colleges of Physi-

ns and Surgeons, in reference to the action of the Council at last session with regard to the conditions on which the lomas in State Medicine are to be granted in order that y may deserve recognition in the *Medical Register*, l doubtless be presented, and may lead to some dis- sion. The correspondence which has taken place with erence to the proposals to issue a free copy of the *Medical gister* to each Registrar of Births and Deaths, and to have the tificates of death numbered, will reopen a discussion to which Treasury appears to be by no means disposed to give a ourable ending. Mr. Rawdon Macnamara, we understand, nds to raise the question of the relative value of the higher gical and medical diplomas granted in England and Ireland pectively. The reports by the Pharmacopœia, the Education, Examination, and the Finance Committees will be presented, in several cases the Council will be asked to exercise or to ew the exercise of its disciplinary powers.

CHEMICAL SALTS DEVELOPED IN LIVING ORGANISMS.

EMOIR by Mr. Robert Irvine and Dr. Sims Woodhead, entitled cretion of Carbonate of Lime by Animals," recently published he *Proceedings of the Royal Society of Edinburgh*, deals with interesting question of the assimilation of food and the lopment of structures partially composed of a definite pro- ion of insoluble chemical salts. Thus, hens supplied with hate of lime, but no other lime salt, produce well-formed egg ls composed of carbonate of lime. The process of shell forma- in the crab appears to differ chemically from egg shell lopment in the hen. Sulphate of lime is not assimilated in same manner, so that crabs which throw off their shells in ficial sea-water in which sulphate of lime as well as chloride odium are present, but from which chloride of calcium is ex- ed, do not form a new exo-skeleton of carbonate of lime. As as chloride of calcium is added, although the sulphate be held, shell formation may go on. The authors of the paper utely describe the share which epithelial and other cells play creting, or causing the deposit of, chemical salts in shells and one. The histological and chemical processes differ consider- in bone, in egg shells, in the shells of crustacea, and in the ntle" of mollusca.

NATIONAL LEPROSY FUND.

ETING of the Executive Committee of this Fund was held May 9th at the town residence of Baron Ferdinand de schild, who took the chair. There were also present Sir s Paget, Sir Algernon Borthwick, Sir Joseph Fayrer, Mr. than Hutchinson, F.R.S., Mr. Edward Clifford, and Sir Somers (Honorary Secretary). The Honorary Secretary presented audited accounts of the dinner which was held in January under the presidency of His Royal Highness the Prince of s, and produced a sum of £3,400. A donation of 50 guineas the Skinners' Company was gratefully acknowledged. The able moneys at the disposal of the Committee were reported about £6,000. After considerable discussion, it was resolved, he motion of Mr. Jonathan Hutchinson, seconded by Sir h Fayrer, that a systematic preliminary investigation by spondence should be immediately undertaken with the t of ascertaining from the medical officers of the leper lishments throughout the world, and from others in posi- enabling them to assist in the inquiry, the actual conditions prosy at the present time. It was further decided that the mation thus obtained should be promptly published as ved in a condensed form in a journal, and Dr. Phineas nam was appointed as Technical Secretary to conduct this special correspondence and to prepare the journal. It was resolved that the memorial to the late Father Damien should take the form of a granite Runic cross, with medallion portrait, to be placed over his grave at Molokai. The Honorary Secretary was instructed to arrange with the Hawaiian Government for the reception and maintenance of the memorial.

THE AMENDMENT OF THE FACTORY ACTS.

IT is understood that the Government Bill for the Amendment of the Factory Acts will embody certain of the recommendations of the Berlin Labour Conference, notably the proposal to extend the limit of age over which children may be employed in factories to twelve years, and the prohibition of the employment of women within a month of childbirth. The Bill will be laid before the House this session, but it is improbable that it will be proceeded with until next year.

THE RELATION OF THE CORTEX TO VISION.

BECHTEREW[1] has reinvestigated the whole subject of the relation of the cerebral cortex to vision, and he finds that the area which is associated with vision is very extensive, occupying the whole of the occipital lobe, both on the outer and inner surfaces, and a considerable part of the parietal. In this area are two centres, which to a considerable extent overlap each other. One occupying the part of the parietal lobe is associated with the corresponding half of both retinæ, and the other, which occupies chiefly the parietal lobe, but also in part the occipital, corresponds in function to the whole of the opposite retina. The fact that these two areas overlap so considerably will probably do much towards harmonising the previous contradictory results at which experimenters have arrived.

DEGREES FOR LONDON MEDICAL STUDENTS.

A MEETING of the Special Committee of the Senate of the University of London was held on Thursday to prepare a report on the conferences held with the Royal Colleges of Physicians and Surgeons, and with University and King's Colleges respectively. Representatives of the other medical schools in London have also been in communication with the Senate, and their views and suggestions will doubtless have due weight with that body. The following resolution, moved by Mr. Macnamara, was carried unanimously at the meeting of the Council of the Metropolitan Counties Branch of the British Medical Association on May 9th: "That a committee of the Council of the Metropolitan Branch of the British Medical Association be appointed (with power to add to their number) to take such measures as may at the present time appear to them to be desirable for the establishment of an efficient university authority in London, through means of which metropolitan students may obtain degrees in medicine upon terms similar to those by which such degrees can be obtained in other parts of the United Kingdom, and which were recommended in a Report by Royal Commissioners dated April 29th, 1889."

PROLAPSE OF THE URETHRAL MUCOUS MEMBRANE IN OLD WOMEN.

A PARAGRAPH on this disease as observed in female children appeared in the JOURNAL of April 12th. Dr. Södermark, of Boras, Sweden, has described two cases of prolapse in old women, in *Hygiea*, vol. li. Three cases of the disorder, one in a child, came under his notice within three years, and he expressed surprise that it is usually described as very rare. He found that the disorder caused great discomfort. In one case, the patient was 58 years old, and was also subject to prolapsus uteri, cystocele, and rectocele. A fleshy mass, the size of a walnut, partly sloughing, occupied the

[1] *Archiv. Psichiatr. Neurolog.*, etc., 1890, No. 1, Russ.

site of the urinary meatus. In the midst of the mass, a depression led into the urethral channel. The entire outgrowth was removed with the galvano-cautery, whilst the vagina was narrowed anteriorly and posteriorly by a plastic operation. The result was satisfactory. The second patient had reached the age of 70. For several years a swelling the size of a plum, consisting of the mucous membrane of the urethra, projected from the meatus. It was successfully removed with the galvano-cautery. The child was 9 years old, younger than any of the cases described by Dr. Benicke in the paragraph above referred to. The prolapse also consisted of the urethral mucosa. It was removed with scissors, and the edges of the raw surface left behind were united by sutures. Thus prolapse of the urethral mucous membrane is not unknown in age and childhood. How frequent it may relatively be in adult life is an interesting theme for experts in gynæcology to determine. As to treatment, opinion is divided, for some have found that the cautery causes more cicatricial contraction than the knife or scissors, whilst some are led by experience to an opposite conclusion.

METROPOLITAN AND NATIONAL NURSING ASSOCIATION.

THE fourteenth annual meeting of this Association was held on May 9th at Grosvenor House, under the presidency of Sir Rutherford Alcock. The objects of the Association are fourfold—to train and provide a body of skilled nurses to nurse the sick poor at their own homes; to establish in the metropolis and to assist in establishing in the country districts organisations for this purpose; to establish a training school for district nurses in connection with one of the London hospitals; and to raise by all means in its power the standard of nursing and the social position of nurses. In their report, the adoption of which was moved by Mr. Rathbone, M.P., and seconded by Mr. Caine, M.P., the Committee were able to show a record of increasing usefulness, of extension, and of an improved financial position. The demand for trained nurses had greatly increased, and it had been necessary to keep the home always full. The number of cases nursed in the past year was 746, and the number of visits paid 19,900. The extension of work to new districts was steadily going on. A donation of £2,000 had been received from Mr. Henry Tate for the special purpose of founding a pension fund for nurses.

THE PLACENTA IN ARRESTED PREGNANCY.

OBSTETRICIANS have long admitted that portions of retained placenta may remain alive and develop into placental polypi. The growth of the placenta in ectopic gestation after the death of the fœtus has been observed by several authorities. Dr. Chaput, of Paris, has reported in the *Bulletins de la Société Anatomique de Paris* two cases where the placenta lived after arrest of normal pregnancy. In the first abortion occurred at the second month, and the placenta was retained for two months. In the second case the fœtus died at the third month, and was retained, with its placenta, for two months longer. The child and its appendages were removed, with fatal results to the mother. Both patients were multiparæ, and over 35 years of age. The tissue of the placentæ was examined under the microscope. In each case it was found that the placenta had neither atrophied nor continued to develop as in normal pregnancy. A singular abnormal development was detected. The villi had decreased greatly in number, and lost their vessels; on the other hand, those which remained were from double to ten times their normal size, and contained numerous cells, some very large, without distinct nuclei. The villi retained an epithelial lining. Dr. Chaput takes care to remind his readers that although science proves that retained placenta does not necessarily die and decompose, the results of retention are not on that account less serious. Both his cases suffered severely, with most of the usual symptoms. His observations, he further insists, do not prove that the placenta can go developing indefinitely; nor can we feel sure that it will perish gradual atrophy rather than by more or less sudden decomposition. In all cases a retained placenta ought to be removed.

DINNER TO SURGEON PARKE.

THIS distinguished gentleman was entertained by his brother officers, past and present, of the Army Medical Staff in the Hôtel Métropole on May 12th. Eighty-three sat down to dinner, including officers of all ranks, active and retired, with Director-General W. A. Mackinnon, C.B., in the chair. With the guest of the evening his companions, Messrs. Nelson, Jephson, and Bonny, were also entertained, but Mr. Stanley and Lieutenant Stairs, R.E., were unavoidably absent through previous engagements. The Director-General, in proposing the health of Surgeon Parke, spoke in highly eulogistic terms of his admirable services with the Emin Relief Expedition; his skill, resource, patience, and undaunted pluck made his brother officers proud of him, and his splendid conduct was a credit, not merely to the Army Medical Staff, but to the profession of medicine at large. He could not but notice that this Parke was a worthy successor of another of the name who was undyingly associated with early African discovery. Surgeon Parke replied in feeling terms to the honour done him, and modestly alluded to his own share in the work of the expedition; he spoke in warm terms of his great chief and other companions, both black and white. Nothing but the mutual support and confidence which the European officers had in each other could have sustained them in their trying and perilous adventures. The health of Surgeon Parke's companions was proposed in eloquent terms by Sir Thomas Crawford, who specially alluded to the fact that Mr. Bonny formerly belonged to the Medical Staff Corps. Professor Flower, in proposing the health of the Chairman, said he had seized with great pleasure the opportunity of meeting with his old brother officers to do honour to Surgeon Parke.

ABDOMINAL SECTION IN JAVA.

TIMES are indeed changed since 1858, when Sir Spencer Wells first set to work with the determination to establish ovariotomy as a recognised operation. Not only are great centres of civilisation famed for the successes of their specialists, Lawson Tait, Keith, Thornton, Bantock, Thomas, Homans, Péan, Martin, Olshausen, and Porro, not to speak of those who have developed the surgery of the kidney, intestines and stomach. Abdominal section is practised not unsuccessfully in remote cottage hospitals and in distant dependencies. Dr. Stratz has distinguished himself by the practice of abdominal surgery, often under difficulties, at and near Batavia, in the Dutch island of Java. He has operated on cases of extrauterine gestation, malignant ovarian tumour, hæmatomes and hæmatosalpinx, pedunculated myoma, general fibroid enlargement of the uterus, pyosalpinx, ovarian cysts, and dilated gall bladder. Of his first ten abdominal sections, two proved fatal; in one of these, a suppurating tube burst during operation. From the account of his cases in the *Geneeskundig Tijdschrift voor Nederlandsch-Indië*, reported in abstract in the *Centralbl. f. Gynäkologie*, No. 16, 1890, it is evident that Dr. Stratz is a bold and able operator. Those who know how annoying it is to find that an instrument or appliance is missing, just before the operation, even when there is an instrument-maker's shop close at hand, can appreciate the difficulties which an operator in a distant colony must encounter. Another sign of the times, manifested by the records of success in half-civilised districts, is the great and successful diffusion of practical education in surgery. So excellent is anatomical and surgical teaching in Europe and America, that dozens of able operators are annually added to the ranks of the profession.

FACILITIES FOR POISONING.

another page a correspondent calls attention to the desirability action being taken to limit the sale of morphine and opium irresponsible persons, and mentions the case of a patient ler his care who has been able to obtain large quantities of both ns of poison. No doubt many of our readers are in a position uote similar cases, and the law in its present form is utterly lequate to deal with this evil. So long, indeed, as certain con- ons are complied with, as to qualification of the seller, entry of , and labelling, it places no limit upon the quantity of any son that may be supplied. It is true that, as a rule, chemists druggists recognise the moral responsibility resting upon them, exercise considerable discretion in the supply of such articles; there are exceptions, and it does not appear that, under the rmacy Act, the Pharmaceutical Society has power to deal n offenders of this kind by erasing their names from the *ister*, though the law might very well be amended in this ction. On the Continent and in the United States actions have successfully maintained against chemists for damages sus- ed through the indiscreet supply of excessive quantities of phine; but, up to the present time, we believe no such action been tried in this country. But even if this form of the culty were successfully dealt with, there would remain the that preparations of opium and morphine can be obtained at st any general shop under cover of the medicine stamp, in quantity, without the slightest restriction. Still, if the sury is in earnest in the statement made recently in its name it does not recognise as coming within the exemption of ent medicines" from the poison regulations any preparation he subject of a patent, there would not be much difficulty in ging home to the minds of makers of preparations containing m or morphine the necessity for using a poison label. A little ious pressure, then, put upon the Council of the Pharma- ical Society might compel it to move in the same direction, exercise its powers to limit the sale of non-patented prepara- containing poisons to the relatively more responsible hands ualified persons.

CCESSFUL NEPHRECTOMY IN A YOUNG CHILD.

ebruary, Professor Dohrn removed from a child aged 3 a large gnant tumour involving the right kidney and suprarenal le. The child was in fair health, but rather pale; there was e of albumen in the urine, but no formed elements could be ted under the microscope. The veins in the parietes over mour were dilated; the inguinal glands were not enlarged. umour was extracted through an eight-centimètre incision, ning at the outer border of the right rectus, and running ely downwards towards the iliac spine. The operation was lt owing to the softness of the tumour. The patient made good recovery. The tumour proved to be a rhabdo-myo- na of the kidney, consisting of round cells and spindle cells, here and there collections of striped muscular fibre. Eberth, heim, Eve, and Dawson Williams[1] have described similar rowths of the kidney, which Cohnheim ascribed to errors in development. Professor Dohrn, in an article in the *Central- für Gynäkologie*, No. xvi, 1890, describing his case, adds that ation of the kidney in children has only been attempted in days. Fischer collected last year 25 cases where that ion had been performed; the mortality was 48 per cent. sor Dohrn has added to the record his own case, and others ed within the last twelve months by Schede, Czerny, and s, making up a total of 29 cases, with an "operation lity" of 44.9 per cent. Professor Dohrn's case was alive ell two months after the operation.

[1] *Trans. Path. Soc.*, vol. xxxiii, pp. 312-317.

DANGERS OF GEYSER BATHS.

Mr. Arthur F. Chapple, in a paper on this subject at a recent meeting of the Balloon Society of Great Britain, cited various fatal cases which pointed to the dangerous character of gas and geyser baths as frequently used, and without due regard to ventilation. He laid special stress on the urgent need for legislation that should compel the makers of these machines to stamp upon the metal work full directions for their use, namely, that the bath must be filled while the room is being ventilated, and the gas and water turned off before entering the bath. This was the great *sine quâ non*. A resolution in accordance with the above recommendation was carried. Geysers or other gas-heating arrangements for bath purposes can only be looked upon as a necessary evil. Wherever practicable, the hot water for bath purposes should be heated through a circulation system from the kitchen or some other suitable fire; but should it be necessary to use a geyser for these purposes, the flue pipe from the geyser should be taken direct into the chimney breast of the fireplace, as high up as possible, if there is one. Should there not be a fireplace, then the adoption of a hopper shape ventilator fixed in the ceiling, say about 9 or 10 inches square or diameter, tapering off, say, to 5 or 6 inches, according to the size of the room is to be recommended; there should then be a pipe of this diameter carried up through the roof, for about 4 feet, remote from any wall, and an extracting cowl fixed thereon. The reason for having this cowl fixed clear of any wall is to prevent any likelihood of a down draught which might otherwise happen, supposing the wind to be in a certain direction, blowing against the wall alluded to. The flue pipe of the geyser should be carried up, and allowed to enter the above-mentioned hopper, leaving a space of 1 inch or 1½ inch all round. The advantages of this are twofold. In the first place, the hopper would ventilate the room; and, secondly, should there be by the greatest chance a down draught from the outside, it would be far more likely to disperse itself into the room than blow down the geyser tube, which would possibly put the gas out. Elbows should not be used if they can be avoided, but easy bends instead, if it is necessary to use either; and another thing which is essentially necessary is that where there is an outlet there should be an inlet for fresh air, in some practical form, of which, as a rule, there are many; "Tobin's," for instance, is a very good system, or some such one.

THE PATHOLOGY OF HEBRA'S PRURIGO.

The pathological anatomy of that extraordinarily distressing affection of the skin known as the prurigo of Hebra is a subject on which there are considerable differences of opinion, and which can as yet be regarded only as obscure. For this reason some importance must be attached to a paper by Dr. Kromayer,[1] in which he gives the results of his microscopical examinations of skin excised from four patients, one of whom was a girl aged 16, another a man aged 57, the third a boy of 13, and the fourth a boy aged 6. All these were typical cases. When sections were examined from hardened tissue the epidermis was found to be thickened, particularly in the horny layer, with formation of small cysts in that layer or under it. Only twice had he found cysts in the rete mucosum. These cysts Dr. Kromayer shows good reason for believing to be due to the results of an exudation. The papules, although some of them were in connection with hair follicles, were not necessarily associated with these structures. The author regards prurigo as having its cause essentially in vasomotor changes in the blood vessels by which the epidermis is nourished, and therefore has some analogy to urticaria. He summarises the results of his work in the following sentences: 1. Hardened pruriginous skin is not suited to elucidate the anatomical changes in

[1] *Archiv f. Derm. u. Syph.* Heft 1, 1890.

the papules. 2. In hardened sections he found thickening of the epidermis, particularly of the horny layer, which in the majority of cases was associated with the formation of small cysts. 3. These changes are referable without doubt to exudation in the cutis. 4. Prurigo consists in a change in the blood vessels in the most superficial layers of the cutis, and in exudation depending on these changes. 5. The conditions under which this exudation is found sometimes in the cutis alone, sometimes in the epidermis alone, or in both together, are yet obscure; and fresh investigations towards elucidating the point require to be made on fresh and not hardened tissue.

THE SANITATION OF HEALTH RESORTS.

At a meeting of ratepayers of the borough of Hastings, held on May 13th, a memorial to the Mayor, aldermen, and burgesses was adopted with reference to the forthcoming election of medical officer of health. The memorial pointed out that it was desirable that such an officer should be in a position to devote his whole time to the duties of this important post, and should be specially qualified, in accordance with the requirements of the Local Government Act of 1888. The memorial has, we understand, already been extensively signed by many influential residents. The importance of having a thoroughly competent and independent medical officer of health in a town such as Hastings, which depends for its prosperity so much upon the influx of visitors in search of health, cannot escape the attention of the Town Council. In appointing such an officer, they will only be fulfilling by anticipation statutory obligations, and will help to confirm the high estimation in which Hastings is held, especially as a winter resort for delicate persons whose homes are in London or northern towns.

CÆSAREAN SECTION IN AUSTRALIA.

Dr. M. U. O'Sullivan, Honorary Physician to the Midwifery Department, Women's Hospital, Melbourne, describes in the *Australian Medical Journal* a case of Cæsarean section with oöphorectomy. Both mother and child were saved. The patient was a dwarf girl, aged 17, only 4 feet 6½ inches in height. There was marked rachitic deformity of the pelvis, the conjugate not measuring more than two inches. She was admitted into hospital when already in labour at term. The operation was performed on Sänger's principles with antiseptic precautions, the abdomen and vagina being thoroughly disinfected with corrosive sublimate solution. The elastic ligature controlled hæmorrhage, but asphyxiated the fœtus, which, however, was quickly resuscitated. For the uterine wound Dr. O'Sullivan used a continuous suture of antiseptic catgut, taking the precaution to fold as much as possible of the peritoneal covering in between the edges. With the object of sterilising the patient, the ovaries and tubes were removed. Dr. O'Sullivan notes that Sänger's Cæsarean section has proved more successful in hospital than in private practice. The cause of failure is due to the defective use of antiseptics in private, and the delay in coming to a decision. Loss of time during labour involves obvious sources of danger.

ATROPHY OF THE UTERUS: SUPERINVOLUTION.

Much was once written about subinvolution after labour, yet there are some authorities who make very light of it in these days. Heitzmann, Kleinwächter, and Thorn have recently investigated an opposite condition—superinvolution, or, as it is sometimes barbarously named, "hyperinvolution." Kleinwächter asserts that atrophy of the uterus is not necessarily associated with amenorrhœa, as the catamenia may recommence or continue when the uterus is in an active state of atrophy; whilst Thorn holds that, as a general rule, the return of menstruation signifies complete recovery of the uterus. The last-named writer publis in the *Zeitschr. für Geburtsh.* a series of aphorisms on the subj of superinvolution after labour, which, he believes, is an alm normal result of lactation, and certainly occurs in otherw healthy women. In normal cases it begins to disappear direct after weaning. Thorn believes that it is a great mistake to ass that the uterus returns to its natural quiescent dimensions l tween four and six weeks after labour. Equally false, accordi to that writer, is the opinion that the uterus can never regain virgin dimensions after natural labour. As for cure of sup involution, Dr. Heitzmann recommends massage and careful amination with a view to detect and move any trace of pel inflammation. All the above-named writers seem to admit t post-puerperal inflammations often play a share in maintaini if not in actually causing, superinvolution. Opinions very simi have been expressed concerning subinvolution, and probably ma authorities will rank both affections as mere secondary results pelvic cellulitis, perimetritis, and endometritis. The practi outcome of the above is that too much care cannot be exercised the local and general treatment of women after labour and duri lactation.

COUNTY MEDICAL OFFICERS OF HEALTH.

A short time since we commented upon the resolution of t Worcestershire County Council to appoint a medical officer health. At the time we thought such an appointment was des able, believing that the Council was about to appoint a medi officer of health who would be able to advise them on the num ous sanitary questions which must come before it, and who mi be regarded as a consultant by many of the existing local medi officers of health. An officer appointed to perform duties of su a character would, we believe, be a very useful addition to sanitary service system, and a sufficient salary should be assig to the officer to mark its importance. In speaking with appro therefore, of the appointment the Worcestershire Council w about to make, in accordance with the provisions of the Lo Government Act, we had in view an office which would be lik to reinforce and strengthen our present system of sanitary gove ment and administration; and we also supposed that this cou authority would see the necessity of assigning to the offic salary commensurate with its importance. We are much appointed, therefore, to find from a report of the proceedings the Council at their recent quarterly meeting that the appoi ment the county authorities have now made is of a differ character from that which we had assumed to be. In the f place, it is not clear from the report of the Sanitary Committ presented by Sir Douglas Galton, its chairman, whether the pointment is that of an adviser and consultant, or that of administrative officer, with responsibilities to existing local tary authorities in the county. In either case the office is v much underpaid, even taking into account the low rate of p ment which generally prevails throughout the sanitary serv If the office is that of an adviser and consultant, then the sal of £600 a year which has been assigned to it is not proportion to its rank. The sum mentioned is little more than the minim which is usually paid for the whole services of those who h less responsible and simpler functions to perform; and it m therefore, be contrary to the public interests that it should fixed so low, just as it would be contrary to the public inter to fix the salaries of the judges of the high courts of law a sum very little, if at all, higher than that which is conside sufficient for those who preside over the courts of p sessions. If, on the other hand, it is intended that the ne created officer shall be endowed with administrative functi and shall in time come to replace the existing small appo ments, then, again, the salary is absurdly insufficient for

e and populous a county as Worcestershire, for it would be tically impossible for one officer efficiently to discharge the es of medical officer for such an area without paid assistants. ie considerations make us hesitate in speaking with approval ie policy of creating this new office, although we are strongly inion that it is most important that every County Council ld provide itself with a good sanitary adviser. If we desired lustrate the necessity for such an appointment, we could not etter than quote from the speech of Sir Douglas Galton in enting his report. He there showed by the figures of the strar-General that the death-rates from typhus, enteric, con-d, and scarlet fever were much higher in Worcestershire might be expected if the sanitary administration throughout ountry had been efficiently maintained. Surely no stronger ment could be advanced for the establishment of an office h under the powers at present existing could not fail in com-it hands to exercise an influence very beneficial to the public h, and to prove advantageous to the ratepayers by saving the ises which preventable diseases always entail.

CHLORALIMIDE.

IOAY has succeeded, in collaboration with M. Béhal,[1] in pre-g a chemical compound which is destined, perhaps, to replace al hydrate. This body is chloralimide, which answers to the ula CCl_3 CH NH. It crystallises in long needles, and is rless, odourless, and tasteless. It is insoluble in water, but le in alcohol, ether, chloroform, and fatty matters. Chloral- must not be confounded with the other new hypnotic alamide, which has improperly received this name, for ically speaking it is "chloral foramide." M. Choay con- that the activity of chloralimide will surpass that of alamide, seeing that for equal weight it gives more chloro- It has no disagreeable taste and is permanent, while alamide is decomposed by a temperature of 60° C. The dose same as chloral hydrate.

PROVINCIAL HOSPITALS FOR INFECTIOUS DISEASES.

a good sign at the present day that the authorities of our provincial towns are beginning to recognise the wisdom of ling hospitals for infectious diseases. When medical officers alth were first appointed under the Public Health Act of municipal corporations were growing content with make-arrangements for dealing with initial cases of epidemic e. The so-called hospitals of fifteen or twenty years ago so unattractive in their appearance, and so uncomfortable cients, that they have been comparatively little used except sons actually destitute or in want of proper lodging accom-ion—persons not so situated generally preferring to remain ie, where isolation was often impracticable, and whence on was likely to spread. By slow degrees, however, the palities have come to perceive that the wisest policy from point of view is to perfect public isolation arrangements, view to preventing outbreaks or epidemics of infectious by the treatment of initial cases. In forming and matur-blic opinion in this direction, medical officers of health have a conspicuous part, and they must be gratified to see that bours are now bearing fruit. Newcastle-on-Tyne deserves n as first among the towns of "the second magnitude" have adopted the enlightened policy of establishing an ous hospital, well placed and admirably equipped. We arn from the *Derbyshire Advertiser* that a similar institu-s been provided for the town of Derby, which is in every ell adapted for the purposes it is intended to serve. The occasion of its opening was made the opportunity for proceedings of a pleasing character. A golden key was presented to the Chairman of the Health Committee, Mr. Harrison. The key was made to open the gate but not to lock it, the signification of that being that the institution would be open for all time to the inhabitants of the borough. In the course of the proceedings a well-deserved tribute of praise was paid to Mr. Iliffe, the medical officer of health for Derby. Mr. Iliffe, by the tact and knowledge he has displayed, has done much to prevent friction and ensure the successful working of the local Act, under which the notification of infectious diseases by medical practitioners has for several years been compulsory in Derby. It is pleasing to record that services of this kind are appreciated by the public; and the fact that the praises of the medical officer of health are echoed by members of the profession with whom he is constantly in official relations is the best possible guarantee that, under his judicious management, the new hospital will become a popular and most useful institution.

[1] *Répertoire de Pharmacie*, 1890, p. 108.

MÜNCHMEYER'S TRANSFUSION APPARATUS.

THE apparatus for this new and simple method of transfusion in cases of hæmorrhage associated with labour or other conditions was exhibited some time ago at a meeting of the Obstetrical Society by Dr. Matthews Duncan. As the President, Dr. Galabin, observed in his address, the interest belongs not merely to the actual instrument, but to the fact that anyone can readily improvise an apparatus for carrying out this method, which has been practised to a considerable extent in Germany and elsewhere. It is said to give results quite as good as those which follow intravenous injection of saline fluid, a far more complicated process. All that is wanted is an aspirator needle sterilised by the flame of a spirit lamp, a piece of elastic tubing, and a large funnel. An antiseptic solution is first passed through the apparatus, and then the saline solution is injected into the cellular tissue by the force of gravity. It is diffused in that tissue, if necessary, by massage, and the flow can be accelerated by running the oiled finger and thumb down the outside of the tube. On the other hand, although good results are claimed, Professor Schäfer's experiments tended to prove that death from hæmorrhage was generally due to lack of sufficient corpuscles to carry on respiration; if so, intravenous transfusion of blood could alone save life in extreme cases.

"THE TRADE IN DEGREES."

WE have received a private communication from a friendly critic in Toronto, who assures us that the statement, referred to in the note published in the JOURNAL of April 5th under the above heading, is entirely without foundation. The statement, which at the time we hardly credited, although it had obtained circulation in two medical journals, and remained uncontradicted by the representatives of Trinity College, Toronto, resident in England, was to the effect that this body had in contemplation the granting of M.D. degrees *in absentiâ* to English practitioners of a certain standing. Evidence was not wanting that the report had been hailed with satisfaction by some persons in England, and we felt bound, in the interest of medical education and of medical self-respect, to protest against the introduction into this country of a system that so easily tends to result in grave abuse. The statement now proves, we are happy to say, to be contrary to the facts, and we at once hasten to withdraw any remarks based on the possibility of its being authentic which might give umbrage to the *alumni* of Trinity College. The action of this University as regards musical degrees has given rise to a warm correspondence in the newspapers, and is understood to be still under the consideration of the Colonial Secretary. The point chiefly disputed is the legal question whether under its charter the University has power

to grant degrees in absence to persons who have passed all their examinations in England, and who have never been in Toronto for matriculation or instruction. That is a question which we may leave to the lawyers. The policy which has caused it to be raised is one which it would appear from our correspondence columns has not met with unanimous approval in Canada itself, and it is, perhaps, not surprising that it has caused some strong feeling at home. Until the dispute is authoritatively settled, we are willing to believe, as we are strongly assured, that the Toronto authorities, even if mistaken as to their rights, have no intention of doing anything which may be described as "selling degrees," or of conducting a "trade" in them. The medical graduates of the University in Canada are numerous and influential, and we feel certain that any course of action on the part of the governing body, however well intentioned, that might have a tendency to diminish the reputation of its degrees will be carefully scanned and guarded against.

THE MIDWIVES REGISTRATION BILL.

THIS Bill, prepared and brought in by Mr. Fell Pease, Sir Frederic FitzWygram, Sir Roper Lethbridge, Sir Walter Foster, Dr. Farquharson, and Mr. Rathbone, comes on for second reading on Wednesday next. It defines a midwife as "a woman of good character and of fair elementary education, who is capable of managing a case of natural labour, and of undertaking the ordinary care of the mother and child after labour, and of recognising any conditions requiring the aid of a medical practitioner." Clause 3 provides that no person shall, after January 1st, 1891, be entitled to take or use the name or title of midwife unless she be registered under this Act. A central board of registration is to be formed for the county of London, consisting of the senior acting obstetric physician of each of the following general hospitals: St. Bartholomew's, Charing Cross, Guy's, King's College, London, Middlesex, St. George's, St. Mary's, St. Thomas's, University College, Westminster; one qualified medical practitioner nominated by each of the following bodies, namely, the Royal College of Physicians of London, the Royal College of Surgeons of England, the University of London, the Society of Apothecaries, the Obstetrical Society of London, and the Midwives' Institute (the lying-in hospitals are excluded). This central board is to regulate the examination of midwives within the county of London, and decide questions referred to it by district boards. The medical officer of health of the county of London is to be general registrar, secretary, and treasurer to the board. District boards are to be formed in Bangor, Birmingham, Brighton, Bristol, Cambridge, Carlisle, Leeds, Liverpool, Manchester, Middlesbrough, Newcastle-on-Tyne, Norwich, Nottingham, Oxford, Plymouth, Swansea, and Winchester. These boards are to consist of not less than three and not more than five members, one of whom is to be medical officer of health for the county, two senior medical officers of the local hospital, and two senior practitioners practising in the town. Provision is made for the local obstetric physician having a seat on the board. The Central Board is to have the power of ordering the formation of these boards. Women applying to be registered must be at least 21 years old and of good character. She must have been a pupil in a lying-in hospital, where instruction is given by the medical officer, for three months, and have attended twenty-five labours, and must pass the required midwifery examinations. Women already in practice as midwives may be placed on the register on producing a certificate of good character and a diploma in midwifery, or certificates of competence from two registered medical practitioners. A registered midwife is to be able to recover fees, and to be eligible for public appointments. The register is to be kept by the district registrar, who is to be the medical officer of health, and he is to send his list of registered midwives to the general registrar, who is to print a complete list every year in January. The examinations of m wives are to be held in each district at least twice every year, nature of the examination being determined by the Central Boa which shall also determine the amount of the examination f It is provided that they shall not exceed two pounds. Such are main provisions of this Bill. It is shorter and much less compl than that drafted by the Parliamentary Bills Committee. makes no provision for the admission to the register of wor holding midwifery diplomas in Scotland and Ireland who n wish to practise in England or Wales. It would be hard u competent women if they had to pass another examination pay fees again before they could practise. Some *ad eundem* p vision is necessary, or the Bill will have great opposition fr Scotch and Irish members. The Bill will need careful revis and as there is no chance of its passing this session, there wil time for more carefully examining its clauses.

SCOTLAND.

MR. THOMAS THORNTON, solicitor, Dundee, and Dr. Sinc Dundee, have been appointed by the Council of University Coll Dundee, to represent them on the University Court.

MEDICAL EDUCATION FOR WOMEN IN GLASGO

THE efforts of the Council of Queen Margaret College, Glasgow institute a full medical curriculum for women, are likely to n with complete success; and it is expected that all the arra ments will be soon made for a beginning being made in Octo The College will seek to attract not only those qualifying Zenana work, or private practice, but also those desirous of f qualifying themselves for nursing or for medical work in con tion with missions. Meanwhile it is announced that Mr Stuart Nairne, F.F.P.S.G., will test the question whether wo themselves are desirous of such education, by giving a serie six lectures on gynæcology in the Western Medical School. lectures it is said are to be treated in a somewhat popular man by avoiding, as far as possible, pure technicalities; and i added that the promoters will be guided in their action as to establishment of permanent classes by the interest taken in present series. It is hard to see how a series of six lectures somewhat popular kind will test the extent of the demand for medical education of women; and it is still harder to perc what profitable result is to be achieved by giving six lectures gynæcology, popular in manner and free of technicalities. seems a somewhat hazardous experiment.

SANITARY OFFICERS AND LOCAL AUTHORITIES

THE Board of Supervision in Scotland have made a very portant statement regarding the relations of local authorities medical officers of health and sanitary inspectors, in view of coming into operation of the county councils. The provisi councils of Stirling, Clackmannan, and Lanarkshire desired from Board permission to remove, before May 15th, all sanitary offi appointed by parochial boards acting as local authorities under Public Health Act. This sanction the Board of Supervision cline to give, and are upheld in the view they take by the opi of the Lord Advocate. The Board state that on the appointed the various officers become the officers of the County Council, continue to hold office by the same tenure and upon the s terms and conditions as if the new Act had not passed, and only be removed with the consent of the body whose conse at present required. The Council may distribute the busine the various officers as they see fit, and may abolish any deemed unnecessary, the officer receiving the usual compensa

y point out that the medical officer is at present appointed ually, and continues to hold office year by year by tacit relo- on. If during the currency of his engagement he is dismissed out sufficient cause, he may proceed against the local ority by action in a court of law for damage. As regards sani- officers, they are appointed by the local authority, but are ovable only by the Board of Supervision, and the Board hold to be equal to an appointment *ad vitam aut culpam*, so that have only exercised their power of dismissal for incom- nce, unfitness, or failure to discharge duty. Sanitary officers me the officers of the district committees, and not of the ity councils, the committees exercising all the powers for- y belonging to the existing local authorities, and this is the change effected by the Act which concerns the sanitary ector. The tenure of office of the medical officers is, how- made more secure, since they cannot be removed by the dis- committees or county councils without the consent of the ral Board; "and it is nowhere provided that the Central d can grant consent for the removal either of the sanitary ector or the medical officer on the ground that the office has me unnecessary. The Board, therefore, are not satisfied that is any provision in the Act which empowers them to remove ing officers, except on the ground that they are unfit or in- petent."

ERRORS IN THE DIAGNOSIS OF INFECTIOUS DISEASE.

s usual report to the Health Committee of the Glasgow Town cil Dr. Russell referred to the harm done by errors in the nosis of fevers. Speaking of the boy ill of typhus removed the city to a lodging house in Paisley, who had been the e of infection of 21 cases, 3 of which died, Dr. Russell men- d that he, along with others of the same family, had been tted to Paisley Infirmary as suffering from enteric fever. He nced another similar case, where enteric fever was mistaken phus. On going over the register of Belvidere Fever Hos- Dr. Russell found that between June 1st, 1889, and Decem- 31st of the same year, 1,499 cases had been sent in as tious, but of these 85 suffered from no infectious disease , while other 29 were not suffering from the infectious se they were supposed to have. In the case of enteric typhus fever, and diphtheria, the errors were excessive. rsons sent in as suffering from enteric fever, 17 per cent. not so suffering, and nearly all of these had no infectious se whatever. Of cases sent in as diphtheria, nearly 24 per had no diphtheria, and nearly half of these had no infectious se whatever. Of cases in which the practitioner ventured gnose typhus, he was wrong in fully 44 per cent., and f of that proportion the case was not one for hospital at all. cases the cautious diagnosis of "fever" was given; out of emerged 23 cases of enteric fever, 9 of typhus, 6 of scarlet 3 of measles; the remaining 14 cases included 9 forms of nary inflammation and 3 cases of non-febrile condition or ent health. It was better, Dr. Russell admitted, that a man l send in a case as "fever" than delay until he could say sort of fever; but it was obvious, where typhus, scarlet and measles were bracketed together as "fever," that the stic skill was not refined, to say the least of it. Typhus was seldom recognised before admission to hospital, and all tle outbreaks now encountered arose around unrecognised Every case found not to have the disease designated in the al order involved, if the disease were another infectious e, (1) the risk of eventual infection in the ward in which tient was first placed, (2) the shifting of the patient to r department, and (3) it might be the subsequent ap- ce there of the disease which the patient was origi- nally supposed to have had brought from the other ward. If the disease were not infectious at all, then (1) the person had been exposed to infection, and (2) if the person were too ill to be returned home, the hospital authorities became responsible for the safe treatment of a non-infectious case in a hospital for infectious diseases, and (3) unnecessary expense had been imposed on the ratepayers. Dr. Russell admitted that it would be easier to diagnose disease in hospital than in the kind of houses from which the majority of patients came, and that he had himself made mistakes in the latter circumstances which he could not have made in the former. Taken as a whole, this report is not flattering to the medical profession of Glasgow, showing as it does that of the whole number of patients sent in to Belvidere, 13.3 per cent. had been sent under essential error. But the report does not seem to consider quite fairly the circumstances under which cases are often sent in. If the report had stated how many of the cases sent in under erroneous designation had been discovered to be wrongly stated immediately on arrival at Belvidere, and in how many cases the error was not discovered till the case had progressed, one would have a means of knowing in how many cases the error was perfectly excusable. For many practitioners will, and we think rightly, risk sending in a case which may turn out to be non-infectious, when circumstances strongly point to its being of an infectious character, rather than incur the responsibility of a wide extension of infection that may take place before certainty is possible. Dr. Russell's report, we think, hardly put this strongly enough, especially considering the unskilled audience to which it was addressed.

IRELAND.

WE understand that Dr. Edward Thompson, Surgeon of the Tyrone County Infirmary, will be again a candidate for a seat on the Council of the Royal College of Surgeons. The Irish county Fellows have, it is stated, at present no representative on the Council, although they number more than half the electors.

ROYAL COLLEGE OF SURGEONS.

AT a special meeting of the Council of the College of Surgeons on Tuesday, May 13th, the following examiners were elected:—Anatomy and Surgery: Sir W. Stokes, William Thornley Stoker, William Stoker, R. L. Swan; Physiology, Histology, and Pathology: J. C. Coppinger, J. A. Scott; Chemistry and Physics: Thos. Donnelly; Midwifery and Gynæcology: Richard D. Purefoy; Ophthalmology: Arthur H. Benson; Dentistry: D. Corbett, G. M. P. Murray, Robert Hazelton, H. Gregg Sherlock, George B. White; Public Health: Thomas Donnelly, D. Edgar Flinn, Edwin Lapper, J. Dallas Pratt; Midwifery Diploma: J. J. Cranny, S. R. Mason, William Roe; Preliminary Arts: M. A. Donnelly, J. Dallas Pratt.

THE IRISH MEDICAL ASSOCIATION.

THE proposed changes in the constitution of the Irish Medical Association came before a special general meeting on Tuesday, May 13th. There was a large attendance of members. Dr. Jacob brought forward his scheme of reconstruction on the lines which have already been indicated in the JOURNAL. A long debate followed, and in the end the proposals brought forward were adopted by a small majority. Thereupon the President (Dr. A. H. Corley), the Honorary Secretary (Dr. Chapman), and the other members of Council resigned. The subject is likely to come up again at the approaching annual meeting, and a warm discussion is anticipated.

DEATH OF DR. W. K. SULLIVAN.

We have to announce the death of Dr. W. K. Sullivan, President of Queen's College, Cork. He had been in bad health for a considerable time, and he died at his residence on Monday last, aged 68 years. His death is a notable loss, not only to the College which he so ably directed, but to science in Ireland, for he was not only himself a distinguished chemist, but he was an enthusiast in the development of all scientific work in the country. Although not a member of the medical profession, he was greatly interested in it, and on the Senate of the Royal University, of which he was a member, there was none more active in the arrangements connected with the Faculty of Medicine. Dr. Sullivan was educated in Germany, and later on he became professor of applied chemistry at the College of Science, Dublin. Subsequently he joined the school of the Catholic University, and, on the resignation of Sir Robert Kane as President of Cork College, he was appointed his successor by the Government. He threw himself into the work of his new position with his accustomed energy. Aided by a local gentleman who was liberal with his purse, Dr. Sullivan made great improvements in the various scientific departments. Besides his contributions to chemical science, Dr. Sullivan translated and edited Ebel's work on *Celtic Philosophy;* and wrote an introduction to O'Curry's *Lectures on the Manuscript Materials of Irish History.* He was a man devoted to the interests of his country, a genial opponent, a highly-cultured scholar, and altogether a remarkable figure in the world of science and literature.

THE ROYAL SOCIETY.

The *conversazione* of the Royal Society, held on Wednesday evening, was very largely attended by eminent men of science, and by many of the leaders of the medical profession, as well as by a distinguished array of guests of social, literary and political distinction. Among the foreign visitors were Dr. Osler, F.R.C.P., of the Johns Hopkins University, and Dr. Morris Longstreth, of Philadelphia. The guests were received by the President, Sir G. G. Stokes.

The exhibits were numerous and exceedingly interesting. Among them were Professor Burdon Sanderson's experiments and Photographs (shown by projection) illustrating the use of the capillary electrometer for investigating rapid changes of potential.

Dr. Waller gave a demonstration of the electrical variations of the heart of man and of the dog, illustrating the very interesting researches made by him, partly in virtue of a grant from the British Medical Association, of which the details have already been presented to our readers, and which have excited much interest abroad as well as at home.

Mr. G. J. Symonds, F.R.S., showed an exceedingly delicate and ingenious instrument described as a brontometer, or thunderstorm measurer, which records the rapid and irregular rise and fall of the barometer during each 60th of a second; the velocity of the wind and variations in the atmospheric pressure, as well as (1) the commencement, variation in intensity, and termination of rain, (2) the instant of each flash of lightning, (3) the commencement and duration of each clap of thunder, (4) the commencement, variation in intensity, and termination of hail. All these phenomena are recorded on one paper, with a single time scale of 0.02 inch per second, so that their precise sequence and correlation are recorded.

Mr. Morris, of Kew, showed a very interesting series of the seed and seedlings of the sugar-cane. There appears to be no authentic record of any really wild station for the sugar cane, and the fruit has not hitherto been figured or described. At Barbados, several times during the last twenty years, and more recently by Professor Harrison and Mr. Bovell, self-sown seedlings of the sugar cane have been observed. The subject was taken up systematically in 1888, and about sixty of the seedlings raised to mature canes. Many of these exhibited well-marked characteristics differing from the varieties growing near them. Careful inquiry has shown that canes known as the "Purple Transparent" and "White Transparent," and possibly also the "Bourbon" cane, produced seeds in very moderate quantities. Spikelets received at Kew have been examined, and the seed found *in situ.* It is anticipated that cross fertilisation and a careful selection of seedlings, it will be possible to raise new and improved varieties of sugar c and renew the constitutional vigour of plants that have bec deteriorated through continuous cultivation by cuttings or s Great importance is attached to the subject in sugar-produ countries, as it opens up an entirely new field of investigatio regard to sugar cane cultivation.

Mr. Edward Bidwell exhibited a collection of photographs, sisting of two views each of 53 of the eggs of the great There are only 67 recorded eggs of this extinct bird, of whic are in Great Britain. Having become very scarce, and b favourite objects of collection, the value of each egg is estim at about £250. Professor Ray Lankester showed a serie sections of the larvæ of Amphioxus, illustrating some new po in development. Mr. William Bonny's selection from the but flies collected during the march of the Stanley expedition thro the great equatorial forest of Africa created much interest little was known of the Lepidoptera of this part of Africa; nin the species collected by Mr. Bonny had been previously reco from that region, and are new to science.

Mr. Newberry showed, by kind permission of Mr. Flin Petrie, manuscripts of special interest in medical literature. T included:

1. Three pages of an ancient Egyptian book on medicine, wri on papyrus, by a scribe named Usertesen Sen, in the twenty-s or twenty-fifth century before Christ. This papyrus, toge with a number of others of the same date, referring to cellaneous subjects (letters, legal documents, accounts, a f mentary treatise on mathematics, etc.), was recently discov by Mr. W. M. Flinders Petrie, during excavations in a ru town of the XII Dynasty, at Kahun, in Central Eg It contains directions for the use of midwives, written black and red ink, in hieratic characters (a cursive or wri form of hieroglyphics). The black ink is used in the body of work for the symptoms, diagnoses, and prescriptions, and the ink is used at the heads of the sections. The following tra tion of the last two and a half lines of the first page will ser show the kind of directions given in this ancient work:—

"*Treatment of a woman** who is pained in her legs and i her limbs, as one who is beaten. *Say with regard to her,** it i growth of the *at* (vulva). *Do thou with regard to her** thus her eat grease until she is cured."

2. Facsimile of an unpublished papyrus preserved in the Br Museum, containing medical prescriptions written in the Egyp hieratic writing of the XIX Dynasty (B.C. 1400-1200).

This papyrus is chiefly interesting from the fact that it con prescriptions copied from an earlier work, now lost, which is (by the ancient copyist) to have dated from the IV Dynasty (B.C. 4000).

Facsimiles of these two papyri, together with translat notes, etc., will shortly be published, under the editorship of F. Ll. Griffith and Mr. Newberry.

There were many objects of scientific interest, and some exc ingly beautiful physical experiments were shown by Prof Silvanus Thompson, Mr. Boyes, and Mr. Bidwell.

Austrian Hospital Statistics.—According to recently-lished official statistics, the number of hospitals in Austria in was 568, showing an increase of 11 as compared with the ceding year. The total number of patients under treatme these institutions was 300,422, being 6,001 in excess of number in 1886. Of these, 67.8 per cent. were cured, 16.1 cent. relieved, and 5.8 per cent. unrelieved, while 10.3 per died. Of particular diseases, syphilis took the lead with 2 cases, tuberculosis coming next with 17,790; one-third of the number of deaths in all the hospitals together is credited to t culosis, while syphilis was accountable for only 0.31 per cent. the 18 lying-in institutions 16,736 mothers and 15,086 in were cared for, the death-rate being 0.93 per cent. among former and 5.21 among the latter. The asylums for the were 10, with a population of 706, of whom 17.2 per cent. born blind; outside these establishments there were 14,798 persons, of whom only 2.2 per cent. were inmates of sp institutions. The total number of cretins was 14,798, mo whom, of course, belonged to the Alpine districts.

* In red ink.

REPORT

ON

:AD POISONING FROM DRINKING WATER IN YORKSHIRE.

(Concluded.)

[By Our Special Commissioner.]

IV.

iestone as a Neutralising Agent.—Purchase of Sheffield Water-orks by the Corporation.—The Effect of Silica.—Successful lpplication of the Limestone Process at Dessau.—Quicklime and laked Lime as Neutralising Agents: Their Dangers.—Chalk s a Neutralising Agent: Its Advantages.—Further Experience equired.—Effect of the Water in Manufacturing Processes efore and after Neutralisation.—Extensive Use of Plumbo-lvent Waters in other Parts of England.—Need for Inquiry y the Local Government Board.

TEAD of carbonate of sodium, limestone may be used for tralising the acid water; but if so, it is evident that it must employed in such a form that the water may be brought in act with it for a definite time, while also a fresh surface t be constantly maintained. If care be not taken to observe precaution, the limestone in a very short time becomes coated a brownish deposit, due apparently to the peaty matter ent in the water, which renders the limestone inactive.

his fact forms a fatal objection to the use of filter beds of such erial unless constant supervision is employed, or to the build-of walls of large blocks of limestone across the reservoirs or luits, an expedient which was attempted at Sheffield for a . Analysis of the water before and after contact with the stone showed that its composition remained unaltered even n perfectly fresh clean limestone had been filled into the ercourse and gauge-basin forty-eight hours before the samples taken. This latter result, however, is not in accordance former experiments, which all go to show that when lime-e of a suitable quality is used and sufficient contact of the er with it is assured for a definite period, any acid reaction which water possessed beforehand will have disappeared, while at same time the solvent action on lead will be practically *nil*, as own in the following table taken from Dr. White's report to Sheffield Corporation:—

h of Time during which the Water s in contact with the Limestone.	Amount of Metallic Lead per Imperial Gallon of the Water.
Untreated Water	0.28 grains.
Half an hour	Slight trace.
2 hours...	Slight trace.
18 hours...	Slight trace.
24 hours...	Slight trace.

e table refers to the action of Redmires water, drawn from ron main, on lead piping, after having stood in contact with yshire limestone, broken into pieces about the size of a hen's nd packed into an earthenware cistern.

e apparent discrepancy between such an experiment as that h is illustrated by the table and those which were carried n a larger scale at the reservoirs is probably to be found in act that in the latter case the engineer purposely selected a Derbyshire limestone from Hopton Wood, because, on com-g the analyses of different kinds of rock found in various s, this was seen to contain the largest proportion of silica, h he believed to be essential to the end in view.

s method of treatment was obviously intended as a modifi-n of the system of water filtration through beds consisting ccessive layers of sand, limestone, and flint, which, under a in the late water company's Bill, they were to be compelled pt, if called upon by the Corporation, for the whole of the —as at the time the Bill came before Parliament no distinc-vas made between the high-level and low-level supplies—at imated cost of £100,000, to be borne by the consumers. This n which the water company asked for increased powers for rpose mentioned, was opposed by the Corporation, who, as sult of their litigation, acquired the waterworks on January 88.

suggested filtration through sand, limestone, and flint was mended by the chemical advisers of the water company, Messrs. Crookes, Odling and Tidy, as the practical outcome of their theory concerning the cause of the action of the water on lead which has already been referred to, the object of using such a combination being to impregnate the water with silica. The same method was advised in their report to the Huddersfield Corporation, but in neither instance have they offered any explanation of their proposal to use limestone in addition to the flint, which, if it be used not as a neutralising agent, but merely on account of the small amount of silica present in it, cannot be expected to be very efficacious since, on an average, it does not contain more than 1 per cent. of silica.

Experiment on a small scale seems to show very clearly that limestone not only has the power of neutralising Redmires water, but that in a continuous trial with a considerable length of lead piping, water which has been treated with limestone only shows after the first two days less corrosive action on the lead than water which has been previously brought in contact with flints as well as limestone.

Flints themselves do not consist of silica alone, containing an appreciable amount of lime in addition, even in the black interior portion, as may be proved by splitting it up and then treating with hydrochloric acid, when a distinct jelly forms on the surface. If this be washed with water, lime will be found to have entered into solution.

Owing probably to this fact, it is found that while natural flints have a sensible action in reducing the activity of the water by neutralising the acid present, flints decalcified by hydrochloric acid are altogether useless. Further experiments in which soluble silica obtained by dialysis was dissolved in the water only confirm this conclusion, as silica added in this manner has apparently no appreciable effect in reducing the action of water upon lead; but it is only right to state that it is difficult in this way to obtain as much as half a grain of silica in solution. An answer to the assertion that silica acts by forming in the lead pipes a coating of insoluble silicate of lead is found in the fact that silica is rarely present in pipe deposits to a greater extent than 3 or 4 per cent.

If contact with flints or a mixture of flint and limestone is not sufficient to raise to any extent the amount of silica in the water, it will be obvious that limestone alone must be practically useless for any such purpose, since if we take the amount of silica present in it as amounting to about 1 per cent., it will be necessary for every gallon of the water to dissolve 10 grains of limestone for each tenth of a grain of silica taken up into solution, this meaning a rise of ten degrees of hardness; or supposing that the water previously contained no silica at all, in order to obtain the suggested protective influence of the half grain per gallon, the hardness of the water would be increased by no less than fifty degrees.

It will thus be seen that the recent experiments with limestone at Sheffield were hardly a fair test of the capabilities of the method, seeing that in the first place, with a faint hope of silicating the water, a very hard stone was employed, which naturally was not easily acted on by the water, and that, secondly, the size of the blocks employed and the method in which they were employed did not ensure a sufficient contact of the water with them.

That limestone when properly applied is an efficient agent in preventing the solvent action of water on lead has been proved in Dessau, which is, like many of the towns and villages in Yorkshire and Derbyshire, supplied with soft water. This water as drawn from the house pipes was found to contain considerable quantities of lead, and had given rise to numerous cases of lead poisoning, although no trace of lead was to be detected in the water of the reservoirs and mains. Like the Redmires water at Sheffield, the water had an acid reaction to which its lead-dissolving power appeared to be due, as this entirely disappeared on neutralisation of the acid, and such neutralisation has been successfully carried out by the employment of an automatic apparatus by means of which the water is mixed with small quantities of powdered limestone as it leaves the reservoirs. As the result of this treatment of the water, lead poisoning has become a thing of the past.

The Water Purification Company offered to lend the Sheffield Corporation a revolving apparatus, devised by them for this purpose, in which the water is brought into intimate contact with the contents of the cylinder, but apparently the offer was not accepted. There is a very obvious advantage in keeping up a continuous motion of the stone and water during the time that they remain

in contact, as in this way the mutual attrition of the separate portions of limestone would prevent the formation on them of any peaty deposit, and always ensure a clean and fresh surface being offered to the water, while at the same time the fine particles rubbed off would assist materially in the neutralisation process. It would probably be advisable to use filter beds of sand in addition, to remove organic matter and particles of limestone, but as they would only be required to act mechanically the filtration might be carried out at a much more rapid rate than is usual. If filtration through limestone be thought advisable, an upper stratum of sand would prevent deposit on the surface of the stone by stopping the passage of peaty material, and consequently the action of the limestone would be enabled to go on practically unimpaired for some time, it only being necessary occasionally to remove the upper surface of the layer of sand.

Lime in the form of quicklime or slaked lime may also be used for the purpose of neutralising the acid reaction of the water. Lumps of quicklime were employed at Keighley for this purpose, together with blocks of limestone, and with fairly satisfactory results, until, the treatment being neglected, cases of lead poisoning again appeared. The lime was placed in the conduit leading from the storage reservoir, and, gradually dissolving, was replaced at regular intervals. This however is at best a haphazard method of treatment, as there is no certainty as to the amount of lime that the water will take up; on the one hand it may be insufficient for the end in view, while on the other it may be more than is absolutely necessary; in which case there is the very grave objection that so far from securing immunity from action upon lead, the power of the water in this direction becomes actually increased. A more rational method consists in first slaking the lime, so as to reduce it to powder, and then gradually adding it to the water by means of an automatic apparatus, or to first make it into milk of lime by mixing it with a moderate amount of water, and then allowing this to flow into the reservoir at a definite rate. The amount usually needed is about a quarter of a grain per gallon, but in any case if the reaction of the water becomes alkaline, it shows that the amount added is in excess of that which is required. The effect of the addition of varying quantities of lime to the Redmires water is well shown in the following table, copied from Dr. White's valuable report:

	Amount of Lead found in Grains per Gallon.
Untreated water	0.28
Water containing $\frac{1}{4}$ of a grain of lime per gallon ...	Slight trace.
,, ,, $\frac{1}{2}$,, ,, ,, ...	Slight trace.
,, ,, 1 grain ,, ,, ...	0.07
,, ,, 2 grains ,, ,, ...	0.14

As the result of an examination of samples of Sheffield water sent to him by the Corporation in 1888, Professor Wanklyn informs us that he has come to the conclusion that the lime treatment is that which should be employed, the necessary amount being 2 grains of lime (CaO) per gallon, which on a large scale corresponds to the addition of 3 cwts. of quicklime to a million gallons of the water. He further states that the plan answers perfectly, the water so treated being without action on lead, but he is silent as to the possible danger of any excess. The results of his analysis of the solids contained in the water are given in the following table, from which it will be seen that carbonates are completely absent:

	Grains per Gallon.
Silica	0.61
Chloride of iron	0.10
Chloride of magnesium	1.04
Sulphate of magnesium	1.20
Sulphate of lime	0.83
Sulphate of sodium	0.35
	4.13
Free carbonic acid	0.44

If lime be used, it would not be a matter of great difficulty to regulate the amount to be added by the results of analyses made at frequent intervals, but efficient supervision would be needed.

An objection to liming the water has been based on the assertion that it caused a precipitation of iron in a reddish flocculent form, and also of a considerable quantity of vegetable organic matter, which discolours the water and tends to block the pipes. It is indubitable that such a precipitate does occur, and also that it remains suspended in the water for some time, but it seems that the occurrence of such precipitation is a cogent reason for the employment of the method rather than its condemnation, especially as it would be entirely removed by filtration through a bed of sand.

Yet another alternative consists in the use of calcium carbonate in the form of chalk, this plan having received the sanction of t late Committee of Inquiry at Sheffield in their preliminary r port, published at the conclusion of the sitting. The advanta of the use of chalk are that it can easily be procured pure and a state of fine subdivision, while, more important still, as co pared with caustic lime, is the fact that any excess in the wa remains inactive. As the amount of carbonic acid in the water very small, there is no solution of the carbonate, irrespective what is required for neutralising the acid, so that the hardness the water is not increased at the most by more than one degree.

Within the last few weeks, the recommendation of the Co mittee has been carried into effect by the addition to the water Redmires of chalk in the form of whiting. Mixed into a sort cream with water, it has been pumped into the reservoirs, wh the water has also been treated in a similar manner in the cou of its passage from Redmires to Crookes. The water beca somewhat coloured at first, but soon became as clear as when entered the conduit. It is, perhaps, too early as yet to draw c clusions from the results that have so far been obtained, but th is reason to believe that the experiment may ultimately pr successful, since we understand that Professor Dewar, the chemi expert at the special inquiry, has expressed himself as satisf with the effect produced on the water up to the present time.

In this connection it may be mentioned that in the House Commons, on May 5th, Dr. Farquharson asked the President the Local Government Board whether the attention of the Bo had been directed to the extensive prevalence of lead poison in Sheffield and the surrounding districts, due to the drink water, and affecting about 1,000 persons, as reported in JOURNAL of April 26th; and whether he proposed to order inquiry by the Board into the circumstances, and the best me of remedying them. Replying to this question, Mr. Ritchie s he had received a communication from the Town Clerk of Sh field, from which it appeared that a committee, which inclu Professor Dewar, Dr. Bristowe, and Mr. Hawksley, was appoin by the Town Council to consider the extensive prevalence of l poisoning in Sheffield and the surrounding districts due to drinking water, and that the remedy recommended by that c mittee had been adopted by the Town Council. The result regards the improvement of the water supply were stated to h been decidedly beneficial, and the Town Council hoped tha complete remedy would be provided.

The Committee referred to in Mr. Ritchie's reply are expe to publish a much fuller report than they were able to do at close of the Sheffield inquiry, when, as before stated, they tented themselves with the finding that the evidence pl before them had established the danger of using Redmires w for drinking purposes, adding to this that by way of prac experiment the water should be treated with chalk in a sta minute subdivision.

The further report of the Committee will be looked for much interest in order to see what has been the outcome of experimental treatment of the water now in progress, as if comparatively simple means are really proved to be of ava will save the Corporation the enormous expense that woul incurred in the laying down and periodical renewal of complic filter beds.

It should be mentioned that at Bradford still simpler m have turned out to be quite adequate, the action of a porti the water supply on lead having been effectually cured by mi the active high-level water, which possesses an acid reaction, the low-level supply, which is alkaline, and thus counteracts solvent power of the acid water—a fact which gives still fu support, if any be needed, to the theory that it is the free ac the water which causes lead corrosion. Unfortunately this si but ingenious expedient cannot be applied in the case of Sheffield water supply, since, though the reaction of the low- water becomes neutral in the course of its passage to the tow is apparently never alkaline. The experiment of mixing waters has been made to a certain extent on several occasion purposes of convenience rather than with any definite id neutralising the action of the Redmires water on lead; but tically no difference in this respect has resulted from such mixture save what might be expected to ensue from the dilution of the peccant acid.

There only remains, then, that one of the various me described above for the treatment of the water should be ad in the way that experience teaches is most efficacious in bri about the desired object; but it should be borne in mind

s is another aspect of the case, which on account of its possible ortance is worthy of investigation.

nsiderable objection has been raised to any chemical manipun of the water on the ground that it might damage it in some or other for manufacturing purposes, such as for tempering l, for dyeing operations, or for use in steam boilers. If, for nce, calcium salts, in the form of chalk or limestone, be used, is been thought that the hardness of the water might be inssed to an injurious degree, but this supposition is founded on ntire misconception of what is proposed in the way of treatt. The amount of lime or chalk necessary for the neutralisaof the acid water is not capable of increasing the hardness ore than one degree at most, which in the case of the Reds water would about render it equal in respect of hardness the low-level supply.

present the high-level water, by reason of its acid reaction, ars to exert considerable corrosive action on the interior of rs, and so far from the slight additional hardness already tioned increasing this action it would tend to remove it altoer, as the result of the concomitant neutralisation of the acid. oint of fact the increase is perfectly insignificant, and would nperceptible to manufacturers, while to suppose, as has been ested, that it could give rise to "stone" or other serious dis r in the human subject is obviously absurd.

a matter of fact, the neutralisation of free acid in water by ought not to cause any increase in the hardness, the free acid f decomposing exactly the same amount of soap as the lime produced by its neutralisation. As pointed out, however, by Allen in a paper read before the Society of Dyers and Colour this theory assumes that the weak acids, probably of organic re, which are present in the water, have the power of decomg a soap with liberation of fatty acids—an assumption which ssibly not based on fact. Even supposing that the hardness e water were to be increased by several degrees it is not by means absolutely certain that the water would be injured for ufacturing purposes, as it is not unlikely that too great stress have been laid on the character of the water employed. In , it is worthy of note that at the present moment many of Sheffield manufactories make use of water obtained from the Don instead of that supplied by the Corporation, for the on that expense is saved thereby.

though Sheffield holds an unenviable notoriety in respect to mount of lead poisoning from drinking water, the evil is one h, as has been shown in the present report, is spread over an edingly wide area. It was stated, indeed, before the House ords Committee on the Sheffield Water Bill that between ,000 and 8,000,000 of the people of England are supplied with r for domestic use which has a tendency to take up lead. It owever, often a matter of great difficulty for local authorities ombat the evil in an effectual manner owing to a want of rate knowledge of the subject in all its bearings, and conently it appears highly desirable that the Local Government d should institute an exhaustive inquiry, embracing all the ted areas, for the purpose of determining, if possible, once for he measures which it is desirable should be adopted in each

effield is certainly to be congratulated on the constitution of Committee of Inquiry appointed by the Corporation, and it ars highly probable that the remedial measures suggested by Committee may be found sufficient, thus justifying Mr. ie's position in the matter in this instance, but it does not w that they will be of universal application, even under apitly identical conditions.

e importance of the subject is evidently appreciated by the ty Council of the West Riding, who, at a comparatively t meeting, adopted the following resolution on the motion of anitary Committee:

hat in view of the great danger to the public health through ontamination of drinking water by lead in many parts of the Riding, and especially in Mirfield, and of the present unnty as to the means of prevention, the Local Government l be urged to direct an immediate and comprehensive in , the results of which would serve for the guidance of local rities, and, if required, as a basis for future legislation."

the last annual meeting of the Yorkshire Branch of the ty of Medical Officers of Health, the chairman said that he ght their Society would be strengthening the hands of the y Council, and also aiding in good work, if they made some mendation on the subject to the Local Government Board. A resolution, setting forth the importance of the subject and urging the institution of an inquiry into the whole subject by the department, was therefore put to the meeting and carried unanimously.

From the evidence that has been brought forward in the course of this report, it will be seen that it is no alarmist cry that has been raised of late in Yorkshire and the surrounding districts, since it is quite certain that an evil here exists which is none the less dangerous because not visible, which, though in many instances it may not kill outright, still tends to lessen the resisting power of the individual to disease in other forms, and which, therefore, it behoves us to combat by all the means at our disposal.

Note.—In the first instalment of this report Dr. White was credited, by an unfortunate mistake, with the belief that a blue line would be found in one-third of the population of Sheffield. The paragraph should have read "in one-third of the population of Sheffield supplied with water from the Redmires reservoirs."

THE NATIONAL HEALTH SOCIETY.

CAREFULLY elaborated schemes of some importance are being worked out by committees of the National Health Society for the systematic teaching of personal and domestic hygiene. The outlines of two systems on which it is proposed to work were ably explained by Dr. Schofield and Mr. Treves at the annual meeting of the Society held at Grosvenor House last week. The Duke of WESTMINSTER occupied the chair. Among those who supported him were: Mr. Ernest Hart (Chairman of the Society), Sir T. Spencer Wells, Sir Joseph Fayrer, the Rev. H. R. Haweis, Dr. Schofield, Mr. Frederick Treves, Mr. Ray Lankester, Mr. Owen Lankester, Mrs. Priestley, and a number of ladies. The Duchess of Westminster distributed about one hundred certificates and eight medals to ladies who, having attended some of the numerous classes on personal and domestic hygiene, ambulance work and nursing, had won distinction.

SCHEME FOR THE EXTENSION AND SYSTEMATIC TEACHING OF PERSONAL AND DOMESTIC HYGIENE.

Dr. SCHOFIELD said no doubt the ambulance and nursing lectures which had been given had led to a desire on the part of ladies for a still more thorough knowledge of personal and domestic hygiene than was possible in the short lectures which were given in those courses. Lord Derby had said "sanitary instruction is of the two even more essential than sanitary legislation." Nothing could supersede the value of personal and private care. Out of 500,000 women who died in this country every year only 50,000, or one-tenth, attained the full age of 75 years. Out of the 450,000 who fell short they were led to believe that about 250,000 (or a quarter of a million) deaths might be classed as due to preventable causes—deaths from carelessness or ignorance. He had been told that the average value of each life was £158 6s. 0d. On that basis they had a loss to the country of something like 20 millions sterling by preventable deaths. He had not alluded to the large amount of preventable sickness. He maintained they had here a noble sphere, not only in healing the wounded, but in attempting to prevent this tremendous waste of life. He believed that it was still true that about four out of every five infants who died did so from improper feeding. A practical knowledge of the laws of personal and domestic hygiene should, he contended, form part of every woman's education. Courses were arranged and would be commenced next October at local centres all over London, giving a thorough groundwork in all the principles and work of sanitation. It should be understood that there was to be no trenching upon the province of the doctor. He was perfectly certain that the work of every medical man would be rendered easier and more valuable if in the house in which he went there was found an intelligent appreciation of his orders and an understanding to some extent of the reasons for which they were given. Ladies ought to understand what it was safe to do and what it was not safe to do until the doctor arrived, and they ought also to be able accurately to carry out his orders and, still better, to prevent the visit of the doctor at all by taking heed to those simple laws of health and sanitation which did so much to avert disease and premature death. A knowledge of these laws would be of especial use to the clergy. He concluded by expressing the hope that the day was not far distant when personal and domestic hygiene would form an important and integral part of the education of every woman.

The Hygienic Training of Women.

Mr. Frederick Treves called attention to a perfectly new branch of the work undertaken by the Society with reference to physical education. Within the last few years an immense deal of attention had been directed to the matter of physical education. It had been pointed out that the education of the mind was well looked after while the education of the body was practically allowed to look after itself. Parents did not realise that proper physical education must be conducted on as precise and as careful scientific lines as the ordinary education of the mind. Parents were quite content to send their children to gymnasiums, and when they had done this, felt that their physical education was complete. They were unaware that there was no proper control over the teachers of gymnastics and callisthenics, a large number of whom were people totally unfit for their work. The particular object of the Society had, perhaps, rather more reference to children and to women than to men and boys. As a matter of fact, the latter class was admirably looked after. No one could find much to criticise in the athletic pursuits of our public schools. When they came to the London shopboy, they found his condition had been materially changed; he had taken to bicycling and other pursuits. When they came to schools, and especially to girls' schools, it must be confessed that the conditions were about as bad as they very well could be. They heard a good deal of the enormous advances of civilisation during the last fifty or hundred years, and their marvellous improvement on the unfortunate savage, who had straight limbs, graceful carriage, and an absence of the ordinary aches and pains, and he was not disposed to be always taking tea or to be living in an atmosphere of tonics. People did not seem to be aware that by a judiciously supervised system of physical education, exercises and due attention to the development of the body it was possible to alter its proportions, to reduce redundances, and to develop deficient and feeble muscles. Motives of vanity and regard for the future physical development of their girls might so influence mothers, who were indifferent to higher considerations, to see that the physical education of girls was carried out, whether in families or in schools, under persons trained, skilled, and having the requisite knowledge to make such physical training in all respects useful and in no case injurious. Neither could be said of the very limited amount of physical training now given to girls. It was pointed out that the National Health Society's diplomas would be granted to such teachers of gymnastics, callisthenics, and physical exercises as had fulfilled the necessary curriculum and passed the required examinations. The Society hoped by the institution of this diploma to encourage the development of physical education in this country; to render such training precise, effectual, and scientific; to protect the public, on the one hand, from incompetent teachers, and, on the other, to establish the position of such instructors as were fully qualified. It was intended, moreover, that the work of such teachers should be devoted and restricted to the one legitimate object set forth in the diploma, namely, physical training, and that they should not undertake the treatment of deformity or disease by "movement cures," "remedial exercises," massage, and the like. The diploma would certify that the candidate had passed an examination in the art and science of physical education, had fulfilled the curriculum required by the Society, and was fully qualified to act as an instructor of gymnastics, callisthenics, and physical exercises generally.

DR. EMIN PASHA.

Emin Pasha is a man of interest to the medical profession. Belonging to that profession by education, and a keen observer and lover of science, his experiences in Central Africa, and his character, are matters claiming our attention, especially at the present moment.

A collection of his journals and letters up to the time he was shut up in the Soudan were made and published in Germany in 1888 by his friends Professor Schweinfurth, Professor Ratzel, Dr. Felkin, and Dr. Hartlaub. The book was translated by Mrs. Felkin, and published in London two years ago.[1] Emin Pasha was then counted almost among the dead, and his work and motives were no longer subjects of inquiry and discussion. The book excited no interest, and was quickly forgotten. Emin Pasha has since been found and relieved, and all Europe rings most justly with the renown of his dauntless rescuer, Stanley. Emin, aft showing some hesitation, has resolved to return to the country fr which he had been just rescued by such superhuman effor What manner of man is this? The book before us tells us son thing.

Emin Pasha was born at Oppelln, in the Prussian province Silesia, in 1840. His real name is Eduard Schnitzer. He began study medicine in 1858 at the Breslau University, and complet his medical education in Berlin, where he graduated in 18 Being animated by a strong desire to travel, he left Berlin imm diately after graduating, and went to Turkey, and joined the st of Hakki Pasha, whom he accompanied on his official journ through Armenia, Spain, and Arabia. He adopted the name Emin, which means "the faithful one," so that his Frankish na should not interfere with his identification with the interests the people he wished to serve.

In 1875 he returned home to visit his family, but suddenly t desire to travel seized him again, and, taking the nearest route Egypt, he entered the Egyptian service as Dr. Emin Effendi. was ordered to join the Governor-General of the Soudan Khartoum, and from there he was sent to act as chief medi officer in the Equatorial Province, of which Gordon Pasha was th Governor. In 1878, after Gordon had been made Governor-Gene of the whole Soudan, he appointed Emin, of whom he had a ve high opinion, to his own former post as governor of the Equator Province.

Between Gordon's term of government and Emin's appointm there had been a lapse of time, during which disorder had gro apace. Emin's task was full of difficulty, but, with surprisi patience and determination, he became master of the situati though always alone, unsupported by any other European. restored order, banished the slave dealers from the province, released the slaves, and managed the resources of the country well that he turned a deficit of £32,000 a year into a revenue £12,000 for the Egyptian Government. His journals are full accounts of long weary journeys through dismal swamps, in t rents of rain, and in the burning sun to distant stations on offi duties.

Medical work was, however, not forgotten, and at Lado, wh was the chief hospital of the province, he might be seen ea every morning going round its wards, and prescribing for patients.

Scientific researches into the botany, zoology, and ornitholog the province were prosecuted unceasingly, and collections m though he never allowed his pleasure in scientific observatio draw him away from his official duties. He held in high esti tion the mission of a doctor. "A sick man," he writes, "is no s ject, but a feeling and suffering being, whose sensibility is gre heightened. Be to your patient in the first place friend, t doctor. Our mission is a high and holy one, and the murmu thanks of a poor man are of far higher value than a few guin and the knowledge that one has saved a sick child for its mot is a far more beautiful reward than can ever follow a brilliant risky operation."

The Mahdi insurrection and the subsequent evacuation of Soudan threw the Equatorial Province into a state of disrupt One by one Emin had to abandon his more northerly stations, in the last letter in the book, dated April, 1887, he describes h he and his Soudanese troops were holding on at Wadelai looking for the arrival of the relief expedition promised f England, but even if relieved Emin declares in emphatic w his deliberate intention not to leave his people and the w begun, to which so many years of his life had been devoted.

"If the people of Great Britain think," he says, "that as s as Stanley or Thomson comes I shall return with them, t greatly err. I have passed twelve years of my life here, would it be right of me to desert my post as soon as the op tunity for escape presented itself? I shall remain with people until I see perfectly clearly that both their future and future of our country is safe. The work Gordon paid for w his blood I will strive to carry on, if not with his energy genius, still according to his intentions and in his spirit." he repeats: "I should like here again to mention that if a re expedition comes to us I will on no account leave my people. have passed through troublesome times together, and I cons it would be a shameful act on my part were I to desert them.

These words do much to explain Emin Pasha's recent actio returning after his rescue, which has been so much discus They are typical of the character of the man. Quietly determine

[1] *Emin Pasha in Central Africa.* A Collection of his Letters and Journals. London: Philip and Son. 1888.

ry on his work, he will be faithful unto death to the mission has undertaken. He believes in the Soudanese and in ir possible development, and he is anxious to deliver them ke from the slave trader, the Egyptian Government, and com-rcial explorers. He has offered his services now to the German vernment, and it will be interesting to watch his future career d to see what he accomplishes.

His friends speak of Emin with reverential affection as a man surprising devotion and unselfishness, and, though of encyclo-dic knowledge in zoology, botany, and languages, of extreme desty and diffidence.

He won the confidence of natives chiefly by patience and jus-e, and by his complete knowledge of, and sympathy with, their des of thought, customs, and prejudices. Despising nobody, st of all the naked negro, and hating none but the ruthless ve trader, Emin Pasha is eminently fitted for the work to ich he is devoted, and is, as shown by his letters and journals blished by his friend, Dr. Felkin, a man of whom the medical fession may well be proud.

NTH CONGRESS OF INTERNAL MEDICINE AT VIENNA.

(Continued.)

Chronic Bright's Disease.

ofessor Senator, of Berlin, read a paper on this subject. ong the causes of the disease, there was, first, acute nephritis, ich became transformed into chronic nephritis more frequently n was generally believed. Other causes were chill, syphilis, aria, abuse of alcohol or tobacco, lead and other forms of metallic soning, chronic pyelitis, and particularly lithiasis. Among the r causes were diabetes, pregnancy, heredity, climate, etc. As syphilis, Professor Senator deprecated thoroughgoing mercurial tment. Local bleeding had no particular effect even in acute hritis, as the kidneys, owing to their position, were not very ssible to direct influences, and the reflex effects were too le to be useful. As regards medicines, stimulants were to avoided, and astringents, which theoretically should dimi-albuminuria, had not the desired effect. Experiments with zoic acid, arsenic, ichthyol, and other remedies had also failed; same might be said of iron preparations, which had been n for the anæmia. Parenchymatous nephritis might come to andstill at any stage, and disappear, leaving more or less organic age. Professor Senator had seen recovery take place even after disease had lasted two years, and Johnson even after three s. As regards diet, albuminoid substances should be ded, and food ought to consist of fat and carbon hydrates. should be continued for several weeks, or even months; the ent should be well nourished, but the food should be such that kidneys were freed of albumen as much as possible. Accord-to Voigt, 80 grammes of albumen, 30 grammes of fat, and grammes of carbon hydrates had to be conveyed to the or-sm to keep up the equilibrium; the proportion of the minoids to that of the carbo-hydrates ought to be 1 to 4. But than a half of the mentioned quantity of albumen would ce: 50 grammes of albumen—equivalent to about 2 litres of 's milk, or to from 8 to 10 eggs, or to 250 grammes of meat—the lowest quantity required by the organism; this need not xceeded if food free from nitrogen was taken in sufficient ntity. Many who were against the limitation of albuminoid emphasised the necessity of giving strong food, which should iorate the condition of the blood. This gain of strength, ever, said Professor Senator, could be obtained in another , for instance, by the introduction of fat. The diet should be by which the general condition of the patient was improved, the affected kidneys were freed as much as possible, and this a diet which contained little albumen, very much fat and carbo-ates. The majority of practitioners were in favour of milk diet, n most cases about 2 litres of milk were given daily. Pro-r Senator was no partisan of the milk cure, but he never ely abandoned the use of milk, as it contained no irritating sub-ces, and it had also a diuretic effect owing to the water it con-d. Disturbances of digestion seldom formed a contra-indication; e contrary, they were frequently improved by the treatment. any cases butter-milk, and also koumiss or kefi, could be d. The drink was also of great importance, as it not only fied thirst, but also had a diuretic effect. Brandy, strong s, and beer were very injurious. The wine of fruits was recommended, as it increased diuresis owing to the organic acids it contained. Besides food the activity of the muscles played a great part, as albuminuria was augmented by violent exertion. Moderate motion was therefore recommended. Fresh air was very useful, and the patients did well even to lie in the open air. Baths and *frottement* were of some utility, as there was some relation between the skin and the kidneys. Alkaline muriatic waters, the various teas, the acetate and tartrate of potassium, etc., had a diuretic effect, and this was also true of digitalis, squills, and strophanthus, by augmenting the activity of the heart. Caffein was contra-indicated, as it also affected the nervous system. Acid diuretics were, of course, contra-indicated. A similar treatment was also indicated in the case of atrophic kidney, in which iodide of potassium was useful, as it partly diminished the arterio-sclerosis which was almost invariably present. Strong cigars should not be smoked. Change of climate was useful, and patients ought to go to Egypt, Lapland, India, etc.

Professor von Ziemssen said that in parenchymatous nephritis, in the treatment of albuminuria, pharmaceutical preparations should be used only with precaution, otherwise the digestion might be much disturbed. Astringents were useless; iodide of potassium was of some use, and in some cases ergot was successful. During exacerbations of albuminuria, and particularly if there was hæmaturia, the patients should be kept in bed. Bartels affirmed that after several years' confinement to bed, combined with the use of diaphoretics, he had seen well-developed albuminuria perfectly cured. Of diaphoretics, hot air and steam baths were chiefly indicated, especially the former. Pilocarpin was beneficial, particularly in dropsy of long standing. Digitalis, squills, acetate of potassium, and the preparations of antimony were also useful. Caffein and theobromin were useful diuretics, and did not increase blood pressure. Calomel had no effect at all in renal dropsy. With regard to mechanical treatment, Professor von Ziemssen introduced capillary tubes into the asepticised skin, fixed them with salicylate wool, and allowed them to remain *in situ* for twelve hours. In the case of interstitial nephritis, the various causes, such as alcoholic and metallic poisoning, gout, and syphilis, furnished particular indications. In excessive blood pressure, bleeding was useful. In cardiac excitement, ice bags and morphine were useful; and morphine and ice pills were beneficial in vomiting. Uræmia was best prevented by digitalis and stimulants (camphor, alcohol). During the attack, these drugs could be given by the rectum. In desperate cases, arterial bleeding and transfusion could be resorted to. In fibroid liver mineral waters were not good. A sojourn in southern regions was of benefit.

In the discussion which followed, Professor Ewald said that when milk was refused he used peptonised milk with great advantage. Iodide of potassium, to be of use, should be given in large doses. Professor Přibram, of Prague, remarked that in acute nephritis he observed strikingly good results from tannic acid; in chronic cases it was useless. Water containing carbonic acid should not be given in atrophic kidney, as hæmorrhage might be caused.

Acute Overstrain of the Heart and its Treatment.

Dr. Schott, of Nauheim, said Leyden, Fräntzel, and himself had described a number of cases of acute overstrain of the heart, which from a pathological standpoint placed its existence beyond doubt. He had made experiments with the view of producing acute overstrain of heart in healthy and vigorous men by making them struggle until dyspnœa came on. In a second number of experiments the body of the struggling person was compressed by a girdle applied below the arch of the ribs. The intracardiac blood pressure was thus increased, the action of the heart was rendered extraordinarily difficult, etc. Dr. Schott thus succeeded in producing the whole body of symptoms characteristic of acute overstrain of the heart, namely, augmentation of intracardiac blood pressure, dyspnœa, arhythmia of the pulse, tachycardia, etc., and, above all, dilatation of the heart in both directions, both the ventricles, and the atria. In the second series of experiments the heart sometimes assumed quite considerable dimensions. These conditions were exactly recorded by means of tables, pulse curves, measurings of the pulse pressure, etc. Dr. Schott then mentioned a number of cases in which symptoms of acute overstrain of the heart were produced by lifting heavy objects, climbing mountains, dancing, and particularly tight lacing, velocipede riding, etc. In healthy individuals, all the symptoms disappeared without leaving any trace; but when the

heart was functionally affected, either owing to defect of innervation, valve disease, or degeneration of the cardiac muscle, the disturbances might last for a long time, and increase to the most dangerous degree, even to death. Acute overstrain of the heart had also been observed in animals with symptoms similar to those in man. Treatment consisted in absolute rest and nourishing food. Morphine was recommended if severe pain was felt in the cardiac region, and hot poultices should also be applied.

THE SELECT COMMITTEE ON HOSPITALS.

PROPOSED EXTENSION OF INQUIRY.

Petition to the House of Lords.

The following form of petition is suggested, and may well be adopted by those members of the Association who desire to see the inquiry into the metropolitan charities, now being carried on by a Select Committee of the House of Lords, extended to the provinces. Such petitions should be written on one side only of a foolscap sheet of paper, and some at least of the signatures should be written on the same paper; to this subsequent lists may be attached, but not gummed:

In the House of Lords. Session 1890.

To the Right Honourable the Lords Spiritual and Temporal, in Parliament assembled.

The humble petition of the undersigned members of the medical profession sheweth as follows:

1. Your petitioners have learned with great pleasure that a Select Committee has been appointed by your Lordships to inquire with regard to all hospitals and provident and other public dispensaries and charitable institutions within the metropolitan area for the care and treatment of the sick poor.

2. Your petitioners deeply regret that the inquiry does not embrace the voluntary medical charities in the provinces.

3. Your petitioners would call your Lordships' attention to the fact that although there are over 800 medical charities in England, only about 200 of these are situated in the metropolis; and that of the 16,930 medical practitioners whose registered address was in England in 1886, only 4,467 resided in the metropolis.

4. Your petitioners respectfully call your Lordships' attention to the fact that the provincial medical charities are labouring under the same grave financial and other difficulties as those in the metropolis.

Your petitioners therefore humbly pray that your Lordships would be pleased to extend the inquiry now being made by the Select Committee already appointed by your Lordships so as to embrace the provincial medical charities.

And your petitioners will ever pray.

THIRD AND FOURTH MEETINGS OF THE COMMITTEE.

[Special Report.]

At the third sitting of the House of Lords Select Committee on Hospitals (Lord Sandhurst in the chair) Mr. Nelson Hardy, F.R.C.S.Ed., stated that with reference to the out-patient departments of hospitals, he held a strong opinion that there were defects in various particulars, especially at the large endowed hospitals. From personal observation and from what he had read and heard, he was of opinion that in many cases the treatment was unscientific, and in others wrong. From the Journal he quoted several instances in proof of the assertion. Such unscientific and wrong treatment, he thought, was unavoidable in the present overcrowded state of the out-patient departments. Many of the cases were trivial when they first came, but became serious because of improper attention. He had no doubt that there was some danger of infection arising from the crowded state of the out-patient department, and he knew of cases of whooping-cough mixing up with the other cases, and going to and from the hospitals in the trams and omnibuses to the danger of the occupants. As to the number of cases which had to be attended, he had heard one of the physicians of the London Hospital boast that he could see a case in less than a minute. One reason assigned for the out-patient department being necessary was for the instruction of the youth of the profession. The poor were attracted to the hospitals by the names of the eminent medical staff, but unfortunately they were only in very few cases treated by the staff.

The Chairman: What do you recommend for the reform of out-patient department?

The Witness: I am afraid that if my statements have b sweeping, my recommendations will be more sweeping. I do think it is of the slightest use, so far as the poor are concerned keep up out-patient departments. The poor can go to the Po law dispensaries, and other patients could be attended at the p vident dispensaries or at their homes. Witness continued, t from a student's point of view it would be all very well to li the number of out-patients to just sufficient to enable struction to be afforded to the students, but that would not be satisfactory from the patient's point of view. If all the o patient departments were closed, the provident and Poor-law pensaries between them would be able to provide for all th who now went to the out-patient departments.

Lord Cadogan: Your proposal is to abolish the out-patient partment except so far as consultative cases?

The Witness: Precisely; and three-fourths of the patie would then be transferred to the dispensaries. Taking the ele large hospitals with students, there would be about 400,000 o patients transferred. Witness said he did not think that wo cause at the dispensaries the same difficulty as he complained now at the hospitals—namely, that there would be such la numbers that the cases could not be properly attended to; in fa he was informed that there were medical officers connected w some of the Poor-law dispensaries who had not three fresh ca a week, so that they could well deal with an increased number patients. If the number of patients increased very much inde the Local Government Board could easily increase the medi staff of the dispensaries. If he had his way, he would limit number of out-patients at hospitals, and no one should be mitted unless he brought a note from some medical officer. present there was no uniform rule at the hospitals. To acqu that power he would suggest that all hospitals should be reg tered, and that there should be a Government inspection ev year, or oftener, if necessary. Witness was then examined some length with regard to the subject of special hospitals, a said that three-fourths of them could be done away with with the public suffering; in fact, he thought the public would ben by such abolition. The only special hospitals that had justif their existence were women's, orthopædic, and ophthalmic, a even of those there were too many. He did not think either ch or cancer hospitals were necessary; in both those cases they co be dealt with just as well at the large general hospitals as at special hospitals. He did not even think that children's hospit were necessary, for they should be sent to the general hospit in a number of which there were special wards for children. then proceeded at some length to read a number of cases of spe hospitals established within the past ten years, which he c tended were unnecessary. With regard to the cost of the bed the hospitals, he considered them extravagant beyond all bou taking them altogether. The cost per bed was, so far as co be ascertained, more than double the cost of the beds at the Po law infirmaries. However, it was exceedingly difficult to kn exactly what the cost was, as the accounts were made up in s diverse manners. With reference to hospitals for incurables, th he placed on a different footing, and they were quite necessa they were more in the nature of asylums. Many special hospit he believed, were started for the benefit of the secretaries or medical staff.

The Chairman: You would like, I understand, to see all hospitals having a uniform system of accounts?—Yes.

With regard to stimulants, the witness said it was a matte complaint that from the accounts it was impossible to ascert how much was expended on that item for the patients and h much for the staff.

Lord Cathcart: As to the calculations about the hospitals the data are not uniform the results can be only misleading?

The Witness: That is so; and it is for that reason that unifo accounts are necessary. He then gave some particulars of efforts made by medical men at different times to get reforms hospital abuses, and especially mentioned the work of the Brit Medical Association, and also of Sir W. Ferguson's Committee.

The Chairman asked if the object of all this was to prove t inquiry was necessary.

The Witness replied that that was the object, and also to sh that men most intimately acquainted with the defects were impot to secure reform, and that there must be some other power. great majority of the medical profession, he thought, excepti

haps, some connected with the special hospitals, desired to see eform.

ON the Committee resuming their sitting on Thursday, Mr. SFIELD stated that he had up to five years ago been an active mber of King's College Hospital. Since then he had not attended often, but was still acquainted with all the work of the hos-l. It was his strong opinion that there was a want of organi-on generally amongst hospitals, and in particular in regard to out-patient departments. At King's College Hospital during active connection with it there was an inquiry as to that de-tment, and an officer was appointed to ascertain the position circumstances of the out-patient applicants, with the result t there was a great diminution in the number of applicants. uiries made some years ago showed that some of the patients e treated very hurriedly; but, on the other hand, a very con-rable time was given to certain other cases which were consi-d interesting and valuable to the medical school. He agreed h Sir Spencer Wells, Sir William Ferguson, Mr. Timothy Holmes, others, that the patients ought to be subject to some machin-before they were allowed to go to the out-patient depart-nts. Hospital physicians were much afraid of any change, as were most anxious that important cases should not be ped. He considered that the out-patient departments should sed more for consultative cases. The general hospitals with ical schools attached were, as a rule, economically and well aged. The data upon which the accounts were based were erent, and the returns of the hospital committee as to cost of was not quite reliable. There should be some common sys-of treating accounts. He held the opinion that it would be a e thing to map out London into territorial areas for hospital poses. General hospitals were not working together, nor with special hospitals or dispensaries in their districts. The provi-t dispensaries should be affiliated with the general hospitals.

ord SANDHURST: Would not the removal of hospitals for itorial purposes be a gigantic undertaking?

e WITNESS: It would be a serious matter, but St. Thomas's was oved. The great increase in the value of land in certain parts ld make the removal in some cases less difficult. There should oubtedly be some central body (perhaps like the Charity Com-sioners) to exercise some control over the hospitals. Special pitals had been formed very much to the detriment of large eral hospitals. Infirmaries should be used as far as possible he promotion of medical education.

answer to the ARCHBISHOP OF CANTERBURY, the WITNESS ressed the opinion that subscribers' letters might be done y with in the case of general hospitals without affecting the tice at all. He said also that his remarks as to the weak nts in the out-patient departments applied also to casualties. dually all objection to entering the infirmaries was passing y. What was desired was to make the infirmaries State-aided pitals, rather than Poor-law institutions. He was in favour dmitting clinical teaching at the Poor-law infirmaries. It ld raise the character of the infirmaries and be very valuable he progress of medical knowledge, because so many cases lable for teaching were now excluded from ordinary pitals. If there was some system of payment there ld be no difficulty in providing additional hospital ac-modation for London if necessary. What was required was organisation of existing beds. That would do much to mitigate pressure. As to the question of the areas for any redistribu-of hospitals, the Poor-law areas should be adopted, but the tion of the hospital must be considered. The lock hospitals ld be affiliated to the general hospitals, and students should the advantage of visiting the hospitals without bringing the buildings together. There would be some difficulty in the of carrying out a territorial scheme, but that should not d in the way of a general reform of the medical charities, h were made for the public and for the poor, and mere vested ests should not stand in the way of a really sound reform. the support of hospitals and other charities, he could not say is absolutely wrong, although it was contrary to sound principle, person to send his servant to a hospital for relief, paying some-g for the relief. Some of the hospitals, no doubt, required a deal of improvement in regard to sanitary matters. The ary wisdom of a few years ago was the sanitary folly of to-in some cases. The medical staff at King's College were all un-but he could not say whether there was any remunera-to the staff at other hospitals. The surgeons certainly did not provide their own instruments. They were provided by the hospital. The latest improvements in surgical instruments were adopted at the large general hospitals, as the medical school authorities were anxious to improve the teaching. At the small hospitals such advance and improvement would probably not come so soon as at the large institutions. Undoubtedly the experiments made were for the benefit of the public as well as for the medical school and the patients. After speaking of the system of admission of patients at the lying-in hospitals, the witness gave evidence as to the objects of the Metropolitan Provident Medical Association, and said that they had not been met by the general hospital authorities in the endeavour to support an organised system of provident dispensaries. Both lay and professional individual members had looked with favour on the movement, but the medical officers generally had prevented any definite scheme of co-operation. There were now 15 of the provident dispensaries, but the progress of the system had been slow. The number of sham dispensaries had done them harm, and there was a certain class of practitioners practising among the poor at low ready money fees. They had started so-called medical provident societies, which were not provident in any sense, and scandals had from time to time occurred at those places, so that persons had been prejudiced against real dispensaries. The remuneration of medical men at provident dispensaries was taken out of the contributions of the members, and last year £1,955 was divided amongst 71 medical men. It would, he considered, be a good thing if all midwives were registered under some society.

Lord LAMINGTON: You talk of low-priced medical practitioners; but they cannot practise without a diploma.

The WITNESS: Many cases have come out in which medical men who are qualified have opened these doctors' shops, which, however, have been worked to a considerable extent by unqualified assistants, and the medicine is very bad. It is very difficult to prosecute, but I see that the medical profession are taking steps now. A great deal of valuable material for clinical teaching now runs to waste, and it would be very desirable that the hospitals of the Metropolitan Asylums Board should be made available for medical instruction.

Colonel MONTEFIORE was shortly re-examined as to the method of making up the accounts of hospitals, and urged that there should be a uniform system. He also corrected his previous evidence by stating that at several of the hospitals without schools there was some payment by the patients.

MEDICAL DEFENCE UNION.

METROPOLITAN DIVISION.

A MEETING of the Executive Committee was held at the offices of the British Medical Association, 429, Strand, on Thursday, May 8th, Dr. FANCOURT BARNES in the chair.

A letter was read from Dr. Mead, of Newmarket, acknowledging in appropriate terms the vote of thanks passed by the Committee to him at the last meeting for the great trouble he had taken and the amount of time and energy he had expended in organising the Branch.

The HONORARY SECRETARY (Dr. Campbell Pope) reported the very satisfactory progress of the Branch in numbers. The number of members up to date in the Metropolitan Division was 442.

Dr. BATEMAN made a statement calling attention to the immense numbers of unqualified men practising in the metropolis to the great injury of the profession, and gave several instances of a flagrant nature.

Dr. DE HAVILLAND HALL proposed, and Dr. MASTERS seconded, a resolution that the Honorary Secretary be empowered to call a meeting to discuss an alteration in the Medical Act with a view to the better protection of the public, and to afford greater security for practitioners in the exercise of their calling. This was carried unanimously, and it was determined to lay any resolutions passed by the proposed meeting before the General Council of the Union and the Parliamentary Bills Committee of the British Medical Association.

TO CORRESPONDENTS.

OUR correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

LIST OF AUTHORS AND OTHERS WHO HAVE PRESENTED BOOKS TO THE LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Ninth List.

Presented by JAMES ADAMS, Esq., M.D., Kent.

Some Remarks on the Important Changes which will be effected by the Lunacy Acts Amendment Act. 1890.

Presented by F. BAINBRIDGE, Esq., M.R.C.S., Gattonside, Hereford.

St. George's Hospital Reports. 5 vols. (To complete series.)

Presented by THOS. MACLAUGHLIN, Esq., L.R.C.P., Londonderry.

Hunter's Human Gravid Uterus. New Sydenham Society. 1851.

Presented by HERBERT W. PAGE, Esq., M.C., M.B., London.

Ranking's Abstract of the Medical Sciences. 44 vols. 1851-1872. (To complete series.)

Presented by WILLIAM ROBINSON, Esq., M.D., Stanhope, Darlington.

Endemic Goître or Thyreocele. 1885.

Presented by W. J. STEPHENS, Esq., L.R.C.P., Brighton.

Braithwaite's Retrospect of Medicine. 2 vols. (To complete series.)
Carpenter (W. B.). A Manual of Physiology. 1846.

Presented by A. SHEEN, Esq., M.D., Cardiff.

The Workhouse and its Medical Officer. 2nd edition. 1890.

Presented by JOHN WOODMAN, Esq., M.D., Exeter.

Braithwaite's Retrospect of Medicine. 40 vols. Vols. 9 to 48. (To complete series.)

Presented by P. W. WILLIAMS, Esq., M.B., Clifton.

The Medical Annual. 1890.

Presented by ERNEST HART, Esq., Honorary Librarian.

Academy of Medicine in Ireland (Transactions of). 1889.
American Association of Obstetricians and Gynecologists (Transactions). 1889.
American Gynecological Society (Transactions). 1889.
Bryant (T.). The Bradshaw Lecture on Colotomy, Lumbar and Iliac. 1890.
Cripps (Harrison). Cancer of the Rectum. 3rd edition. 1890.
——— On the Diseases of the Rectum and Anus. 2nd edition. 1890.
Duncan (J. Matthews). Clinical Lecture on the Diseases of Women. 4th edition. 1889.
Felkin (R. W.). Geographical Distribution of some Tropical Diseases. 1889.
Fenwick (Samuel). Clinical Lecture on some Obscure Diseases of the Abdomen. 1889.
Glasgow Medical Journal (General Index to the). 1828-1888.
Gross (F.). Nouveaux Éléments de Pathologie et de Clinique Chirurgicales. 1890.
Guy's Hospital Reports. 1889.
Hayes (S. Plym). Electricity and Facial Blemishes. 1889.
Illinois State Board of Health (10th Annual Report). 1890.
Keith (Skene). Introduction to the Treatment of Disease by Galvanism.
Kilsch (A.) et Kiener (P. L.). Traité des Maladies des Pays Chauds. 1889.
Langenbeck (Dr. Bernard von). Vorlesungen über Akiurgie. 1888.
Lewis (W. Beran). A Textbook of Mental Diseases. 1889.
Macfarlane (A. W.). Insomnia and its Therapeutics. 1890.
Mitchell (Clifford). Dental Chemistry and Metallurgy. 1890.
Monod (Ch.) et Terrillon (O.). Traité des Maladies du Testicule et des ses Annexes. 1889.
Moore (J. M.). New Zealand for the Emigrant, Invalid and Tourist. 1890.
Noel (The Hon. E.). The Science of Metrology or Natural Weights and Measures. 1889.
Ohio, State of: Fourth Annual Report of the State Board of Health. 1889.
Osborn (Samuel). Ambulance Lectures. 2nd edition. 1890.
St. Bartholomew's Hospital Reports. 1889.
St. Thomas's Hospital Reports. 1888.
Sheffield Corporation Water: Proceedings of a Committee appointed to inquire into alleged Lead Poisoning. 1890.
Snake Bites and their Treatment, By a Hindu. 1889.
Squire (F. W. and A. H.). Companion to the latest edition of the British Pharmacopœia. 15th edition. 1890.
Startin (James). Pharmacopœia of the London Skin Hospital. 1889.
Stretton (J. L.). A Course of Ambulance Lectures. 1889.
Thompson (Sir Henry). Modern Cremation, its History and Practice. 1889.
Walsham (W. J.). A Handbook of Surgical Pathology. 2nd edition. 1890.
Winckel (Dr. F.). A Handbook of Diseases of Women. 2nd edition. 1890.
Wolfe (J. R.). Original Contributions to Ophthalmic Surgery. 1890.

Pamphlets.

Brügelmann (W.). Uber den Hypnotismus. 1889.
Grasset (Professor J.). Leçons sur deux Cas d'Hystérie. 1890.
——— Leçons sur la Grippe de l'Hiver. 1889-90.

BOOKS NEEDED TO COMPLETE SERIES.

The Honorary Librarian will be glad to receive from any member of the Association copies of the following volumes needed to complete series in the Library.

American Gynecological Society Transactions. Vol. 10.
American Surgical Association Transactions. Vols. 4 and 7.
Braithwaite's Retrospect of Medicine. Vols. 6 and 98.
British and Foreign Medico-Chirurgical Review. October 1853 to October 1855 inclusive.
Dublin Journal of the Medical Sciences. All before 1872.
Edinburgh Medical Journal. Vol. 1; vol. 7 to 11, 1861; vol. 25 and 26; vol. 30, 1884, and upwards.
Edinburgh Obstetrical Society Transactions. Vols. 1, 2, 3, 5, 7, 12, 14.
Guy's Hospital Reports. Third Series. Vols. 2, 4, 5, 8, 11, 12.
Indian Medical Journal. Nos. 2, 3, 7, 8, 9, 11, 21, 22, 35, 50, and sin May, 1889.
Lancet (The). 1879-1880.
London Medical Record. All since 1885.
Mead (Richard). The Medical Works of. Vol. 1. Edinburgh. 1763.
Medical Society of London (Proceedings). Vols. 5, 6, 7, 9, 10, 11.
Medical Times and Gazette. Vols. 1 to 4.
Medico-Chirurgical Transactions. Vols. 1 to 30; vols. 71 and 72.
Middlesex Hospital Reports. Before and since 1886.
New Sydenham Society Publications. Vols. 1, 8, 9, 14, 17, 24, 27, 29, 34, 40, 44, 48, 56, 60, 64, 69, 70, 77, 81, 83, 85, 87, 88, 89, 90, 91, 93 to 99, 101 104, 106, 107, 108, 110, 118, 120 to 125, 127 and 128.
Obstetrical Transactions. Vols. 30, 31.
Ophthalmological Transactions. Vols. 3, 6, 7.
Pathological Transactions. Vols. 1 to 20.
Ranking (Dr.). Half-Yearly Abstract of the Medical Sciences since 1872.
Royal London Ophthalmic Hospital Reports. Any volumes.
St. Bartholomew's Hospital Reports. Vol. 8.
St. George's Hospital Reports. Vol. 10 and upwards.
St. Thomas's Hospital Reports. Vols for 1872, 1876, 1888.
University College Hospital Reports. All before 1885.
Yearbook of Pharmacy. 1888.
Yearbook of Treatment. 1884.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writi Rooms of the Association are now fitted up for the acco modation of the Members, in commodious apartments, at t offices of the Association, 429, Strand. The rooms are op from 10 A.M. to 5 P.M. Members can have their lett addressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

Meetings of the Council will be held on July 16th, and Oc ber 15th, 1890. Candidates for election by the Council of Association must send in their forms of application to t General Secretary not later than twenty-one days before e meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any law of the Association, who shall be recommended as eligible any three members, may be elected a member by the Council or any recognised Branch Council.

Candidates seeking election by a Branch Council should ap to the Secretary of the Branch. No member can be elected b Branch Council unless his name has been inserted in the circu summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary*

BRANCH MEETINGS TO BE HELD.

South-Western Branch.—The annual Meeting of the Branch will be hel the Ilfracombe Hotel, Ilfracombe, on Wednesday, May 21st, 1890, under presidency of Dr. Edwyn Slade-King, D.P.H. Notices of motions or com nications to be intimated to the Honorary Secretary without delay, and it facilitate arrangements if members will inform the Honorary Secretary as as possible if they hope to be present at the meeting, and join the excur proposed to be made on the following day. The following motion was pa at the Council meeting on May 2nd, 1888: "That inasmuch as the an meeting assumes more or less the character of a day of recreation, and wit view of encouraging the district meetings, the business of the annual mee shall be confined to the President's address, the business of the Branch, the hibition of cases or of specimens with notes, and the annual dinner." T members who have not yet paid their subscriptions are reminded that t became due in advance on January 1st.—P. Maury Deas, Honorary Secret Wonford House, Exeter.

Staffordshire Branch.—The third general meeting of the present ses will be held at the Bell Medical Library, Cleveland Road, Wolverhampton Thursday, May 29th. Mr. T. Vincent Jackson, the President, will take chair at 3 o'clock.

Metropolitan Counties Branch: East London and South Essex trict.—The annual meeting for the election of officers will be held at Royal Forest Hotel, Chingford, on Thursday, June 5th, at 6 P.M. At 6.15 members and their friends will dine together under the presidency of Dr. President of the Branch, who will be supported by several past presidents other leaders of the profession. Further particulars will be announced.—J. Hunt, Honorary Secretary, 101, Queen's Road, N.E.

ROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner will lace at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Queen Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., Hono- ecretaries.

ROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—The annual l meeting for the election of officers and committee for the ensuing year, held at the Holborn Restaurant, at 6.30 P.M., on Wednesday, May 28th. nual dinner, the price of which will be 7s. 6d. per head, exclusive of wine, ke place subsequently in the Duke's Saloon, at 7 P.M., the chair being by Dr. Ord, President of the Branch.—R. PERCY SMITH, Honorary ary, Bethlem Royal Hospital.

LAND BRANCH.—The annual meeting will be held at Lincoln on Thursday 26th. Gentlemen desirous of reading papers or exhibiting cases are re- d to communicate before May 26th with W. A. CARLINE, M.D., Lincoln, ary Secretary.

YORK AND NORTH LINCOLN BRANCH.—The annual meeting of this will take place on Wednesday, June 4th, at 1 P.M. With a view to in- g the interest in the meeting, the Council have determined to have a on instead of a dinner, to take place between the business part of the g and the papers. Gentlemen who wish to give papers, show cases, or e resolutions, are requested to communicate not later than May 25th with IARDY, Honorary Secretary, 80, Spring Bank, Lincoln.

H-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of the District will be held at the Kent and Canterbury Hospital, Canterbury, on ay, May 22nd, at 4 P.M., Mr. H. O. Preston in the chair. A tea will ace at the hospital at 5 P.M. Agenda (2 P.M.): Dr. Sheppard has kindly ted to take the members and friends round the Cathedral; (4 P.M.) the usiness of the annual meeting.—W. J. TYSON, Honorary Secretary of trict, 10, Langhorne Gardens, Folkestone.

H-EASTERN BRANCH: EAST SUSSEX DISTRICT.—A meeting of the above t will be held at the Calverley Hotel, Tunbridge Wells, on Thursday, May Meeting at 3.30 P.M. Dinner at 5.30 P.M., charge 6s., exclusive of wine. l Lammiman, Esq., will preside. The following papers, etc., are pro- —Mr. Alban Doran: Inflammation of the Uterine Appendages: its l and Surgical Treatment. Dr. Gorham: Some Points in the Science of nd Colours Demonstrated by the Rotation of Coloured Sectors. Dr. pher Vise: Chorea. Mr. Manser and Mr. Watson will show cases. Mr. man: Cases of Recovering Aneurysm of the Aorta, and of Serre's Opera- the Removal of the Lower Lip and Restoration.—T. JENNER VERRALL, ry Secretary, 97, Montpellier Road, Brighton.

H-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this will be held at St. Bartholomew's Hospital, Chatham, on Thursday, th, at 3.30 P.M., Deputy Surgeon-General J. H. Jeffcoat in the chair. ner will take place at the Bull Hotel, Rochester, at 6 P.M., charge 6s. 6d., e of wine. To facilitate the arrangements, gentlemen who intend to particularly requested to signify their intention to the chairman, Surgeon-General J. H. JEFFCOAT, Newlands, Maidstone Road, er, not later than May 27th. All members of the South-Eastern Branch itled to attend this meeting and to introduce professional friends. nications:—Mr. F. Bowreman Jessett: Some Observations on the l Treatment of Intestinal Obstruction. Mr. F. W. Penfold: Notes se of Aortic Aneurysm, with specimen. Mr. A. G. Foulerton: Notes of f Scleroderma; exhibition of patient.—A. W. NANKIVELL, Honorary y of the District, St. Bartholomew's Hospital, Chatham.

ST AND WEST HANTS BRANCH.—The next meeting will be held at Ring- Tuesday, May 20th. The business meeting will be held at the White otel, at 2.45 p.m. Discussion: The Cause and Treatment of Hæmor- Communications: Dr. McLean: On the Epidemic of Fever at Port- ring 1889. Dr. Lawrie: On the Application of Electricity by Apostoli's in Uterine Diseases. Dr. MacDonald: Remarks explanatory of the Act, 1890. Dr. Greves: Case of Aneurysm of the Third Part of the Arch Aorta (specimen). Specimen:—Dr. Lawrie: Uterine Polypus. Drive erley at 6 P.M. Dinner at 7.30 P.M., charge 6s. each, without wine. s intending to be present are request to communicate with Mr. Dyer by y, May 17th.—WILLIAM VAWDREY LUSH, M.D., Weymouth; and C. H. PARKINSON, Wimborne, Honorary Secretaries.

ANGLIAN BRANCH.—The annual meeting will be held at the Norfolk wich Hospital, Norwich, on Thursday and Friday, June 19th and 20th. f communications should be sent to Dr. BARNES, Eye; Dr. ABBOTT, e; and Dr. BEVERLEY, Norwich, Honorary Secretaries.

EEN, BANFF, AND KINCARDINE BRANCH.—The ordinary meeting of the will be held at 198, Union Street, Aberdeen, on Wednesday, May 21st, ., Mr. Fowler, President, in the chair. Business:—Minutes, etc. Turriff: 1. Dislocations in Early Life. 2. Notes on a Case of Colo- Mr. Alexander Reith: Exhibition of a New Microtome. Dr. Beveridge: lubfoot treated by Hüter's Modified Operation. Dr. Mackenzie Booth: n of Spinal Tumour, Successfully Removed from Cervical Region in a ROBERT JOHN GARDEN and J. MACKENZIE BOOTH, Honorary Sec-

BRITISH GUIANA BRANCH.

t quarterly meeting of this Branch was held on April 17th, sident, Surgeon-General R. GRIEVE, M.D., occupying the The following were also present: Drs. Anderson, Hill, n, Kennedy, Wallbridge, Williams, Ferguson, Castor, and Kennard. The minutes of the preceding meeting were read and confirmed.

Financial Report.—The report showed that at the beginning of the year there was a balance in hand of $62, and subscriptions received raised that amount to $429 32. The total expenditure reached $171 23, leaving a balance of $258 09. The report was adopted.

Yellow Fever.—Dr. WALLBRIDGE read a paper on yellow fever, which he described as a communicable disease due to a specific germ. Since 1881, last year was the only one in which yellow fever had been entirely absent from Georgetown. The most susceptible people were the Swedes, Norwegians, Danes, Germans, and Portuguese, black races, as was well known, enjoying complete immunity. He thought a heavy rainfall was always associated with a spread of yellow fever from infected cesspits. The lower contents of the cesspits, which had been subjected to the tropical heat, moisture, and lack of air, were stirred up and brought to the surface, and so flowed into fresh places. To guard against that, he would strongly recommend all such places to be thoroughly disinfected.—Dr. FERGUSON, in moving a vote of thanks to Dr. Wallbridge, spoke of the insanitary conditions in Georgetown. No one could visit the closets of the poorer people without being shocked at the existing system. It simply consisted of a hole dug in the closet, and that was drained out by another hole near the closet. Then it was covered with mud, which was dug over and over again, and it was difficult to see how these could be disinfected.—Dr. ANDERSON, in seconding the motion, said he would like Dr. Wallbridge to explain why there had been no yellow fever between 1868 and 1881.—Dr. CASTOR suggested that the incidence of the disease should be displayed in a map. —The CHAIRMAN said he had all along held that yellow fever was a communicable disease. There was absolute proof that the infected places, say cesspools or sewers, unless they were thoroughly cleared out, might remain infected for years, and there would be outbreaks year after year, which could only be accounted for in that way. He concluded by conveying the thanks of the meeting to Dr. Wallbridge.

Typhoid Fever in Georgetown.—The CHAIRMAN said that the question of cesspits brought to his mind another disease as to the existence of which in Georgetown he had till then had some doubt. That doubt had now been removed. A patient had recently been in the hospital suffering from what appeared to be typhoid fever; the diagnosis was confirmed by *post-mortem* examination.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.

THE third meeting of this District was held at the Great Northern Central Hospital, Holloway Road, N., on Thursday, May 8th, 1890; Dr. BRIDGWATER, J.P., Vice-President of the District, in the chair.

Communications.—Mr. R. H. STEWART, F.R.C.S.E., read a paper on Post-Nasal Growths, with illustrative cases, and showed new instruments for the various operations.—Dr. BEEVOR exhibited a case of Locomotor Ataxy without ataxy in a man who had since become blind.

Votes of Thanks.—Votes of thanks were passed to the gentlemen who had read papers, to the Chairman, and to the House Committee of the hospital for their kind reception.

NORTH OF ENGLAND BRANCH.

THE spring meeting was held at Sherburn Hospital, by the kind invitation of the Master of the hospital and of Dr. Booth, on Thursday, May 8th, at 3.15 P.M. Sixty members were present.

Specimens.—The following specimens were shown: Dr. HUME: A Coccygeal Cyst, causing symptoms of coccygodynia; also an Ovarian Cyst.—Dr. DRUMMOND: Pathological Specimens.—Mr. WILLIAMSON: Eyeball from a case in which the Optic Nerve was Divided by a Puncture.—Mr. MORISON: Meckel's Diverticulum; Ovaries and Tubes from a case of Hydrosalpinx.—Dr. MURPHY: A Hypertrophied Clitoris, removed by operation.

Papers.—The following papers were read: Dr. HUME: A Case of Ununited Fracture of the Ulna, successfully treated by grafting with rabbit bone. The case was discussed by Drs. GOWANS, ARMSTRONG, and MORGAN.—Dr. DRUMMOND: On the Prognosis in Croupous Pneumonia. Drs. HEDLEY WILLIAMS, GALLOWAY, and GIBSON took part in the discussion which followed.—Dr. MURPHY: Notes on a Case of Nephro-lithotomy.

Dinner.—After the meeting the members of the Branch, to the number of fifty, were entertained by the Master of the hospital and

Dr. Booth.—The PRESIDENT, in the name of the Branch, thanked the Master and Dr. Booth for their kindness.—Afterwards the the members were conducted through the hospital, the church, and the grounds.

METROPOLITAN COUNTIES BRANCH: WESTERN DISTRICT.

A MEETING of the above District was held at the Victoria Hall, Ealing, on Friday, April 25th; Dr. ORD took the chair. Fifteen members were present.

Paper.—Dr. CLEMENT GODSON read a paper on Cancer of the Cervix Uteri.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING of this District was held at the Greyhound Hotel, Croydon, on May 8th, Dr. PARSONS SMITH, of Addiscombe, in the chair. The minutes of the previous meeting were read and confirmed.

Heart Disease. — Dr. J. MITCHELL BRUCE showed specimens of heart disease, with microscopical sections illustrating them. The specimens included: Acute Endocarditis; Valvular Disease and its Results; Adherent Pericardium (including one enormous heart, which weighed 38 ounces); Syphilis (showing the pathological changes caused by this disease from obstruction of the coronary arteries by obliterative endoarteritis and its later results, through dilatation of the heart, leading to mitral regurgitation and cardiac dropsy); Dilatation and Tricuspid Regurgitation; Aneurysm of the Aorta; Ulcerative Endocarditis; Aneurysm of the Aortic Valve with Rupture.

Myxœdema.—Dr. H. MONTAGU MURRAY exhibited two cases of myxœdema and made remarks upon the features of the disease, such as the subnormal temperature, defective circulation, mottled skin, dark tints on the hands and feet, absence of the thyroid gland, masses of fat in the supraclavicular and infraclavicular regions, defective working of nearly all the functions, and feebleness of the mental powers. He showed photographs of the cases, and stated that warmth was the Alpha and Omega of treatment. —Dr. PARSONS SMITH, COLES, and T. H. GALTON made observations on the disease, the latter pointing out that a temporary residence in Switzerland caused, in some cases, an enlargement of the thyroid.

Muscular Atrophy.—Dr. J. FLETCHER LITTLE described the treatment of the forms of muscular atrophy, emphasising the need for early remedial measures to keep up as far as possible the nutrition of the affected parts. Besides maintaining the temperature and circulation, it was important to promote the flow of lymph from the lymph spaces, and for these purposes pressure, massage movements, as well as percussion, were needed, and the early use of electricity.

Nitrous Oxide as an Anæsthetic.—Mr. MORGAN HUGHES read a paper on the administration of nitrous oxide gas, showing the recent modifications in the apparatus used and the precautions necessary in giving the anæsthetic.

Dinner.—After the meeting eighteen members and visitors (including the Mayor of Croydon) dined together.

BRITISH MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 27, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Senior Professor of Medicine, Queen's College, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HEN BROADBENT, M.D., Physician to St. Mary's Hospital, London.

The scientific business of the meeting will be conducted r twelve Sections, as follows, namely:

A.—MEDICINE AND THERAPEUTICS.

President: Sir DYCE DUCKWORTH, M.D.
Vice-Presidents: E. RICKARDS, M.B.; D. DRUMMOND, M.D.
Hon. Secretaries: ISAMBARD OWEN, M.D., 40, Curzon Street, M fair, W.; C. W. SUCKLING, M.D., 103, Newhall Street, Birmi ham.

B.—SURGERY.

President: T. H. BARTLEET, F.R.C.S.
Vice-Presidents: BENNETT MAY, F.R.C.S.; J. G. SMITH, M.B
Hon. Secretaries: F. A. SOUTHAM, F.R.C.S., 13, John Street, M chester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingh H. G. BARLING, M.B., F.R.C.S., 85, Edmund Street, Birmingh

C.—OBSTETRIC MEDICINE AND GYNÆCOLOGY.

President: T. SAVAGE, F.R.C.S.
Vice-Presidents: C. J. WRIGHT, M.R.C.S.: J. MURPHY, M.D.
Hon. Secretaries: J. K. KELLY, M.D., Park Villa, Crosshill, G gow; C. E. PURSLOW, M.D., 192, Broad Street, Birminghan

D.—PUBLIC MEDICINE.

President: A. HILL, M.D.
Vice-Presidents: J. B. WELCH, M.B.; A. S. UNDERHILL, M.D.
Hon. Secretaries: L. C. PARKES, M.D., 61, Cadogan Square, S S. BARWISE, M.B., Clough View, Blackburn.

E.—PSYCHOLOGY.

President: F. NEEDHAM, M.D.
Vice-Presidents: S. H. AGAR, L.K.Q.C.P.; E. B. WHITCO M.R.C.S.
Hon. Secretaries: J. WIGLESWORTH, M.D., Rainhill, near Pre E. LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

F.—ANATOMY AND PHYSIOLOGY.

President: D. J. CUNNINGHAM, M.D.
Vice-Presidents: W. H. GASKELL, M.D., F.R.S.; B. C. A. WIN M.D.
Hon. Secretaries: F. J. ALLEN, M.B., Mason College, Birm ham; W. P. HERRINGHAM, M.D., 13, Upper Wimpole S W.

G.—PATHOLOGY.

President: D. J. HAMILTON, M.B.
Vice-Presidents: C. A. MCMUNN, M.D.; G. SIMS WOODHEAD,
Hon. Secretaries: S. DELÉPINE, M.B., 6, Chapel Place, Cave Square, W.; G. F. CROOKE, M.D., Edmund Street, Birming

H.—OPHTHALMOLOGY.

President: D. C. LLOYD OWEN, F.R.C.S.
Vice-Presidents: H. EALES, M.R.C.S.; J. B. STORY, M.B.
Hon. Secretaries: H. E. JULER, F.R.C.S., 77, Wimpole Stree E. W. W. WHITE, M.B., 72, Newhall Street, Birmingham.

I.—DISEASES OF CHILDREN.

President: A. H. CARTER, M.D.
Vice-Presidents: W. THOMAS, M.B.; W. PYE, F.R.C.S.
Hon. Secretaries: H. HANDFORD, M.D., 14, Regent Street, tingham; A. FOXWELL, M.B., 47, Temple Row, Birming

J.—LARYNGOLOGY AND RHINOLOGY.

President: J. ST. S. WILDERS, M.R.C.S.
Vice-Presidents: C. J. SYMONDS, F.R.C.S.; A. E. GARROD, M
Hon. Secretaries: E. H. JACOB, M.D., 12, Park Street, L SCANES SPICER, M.D., 28, Welbeck Street, W.

K.—OTOLOGY.

President: C. WARDEN, M.D.
Vice-President: G. W. HILL, M.D.
Hon. Secretary: R. K. JOHNSTON, M.D., 22, Lower Baggot Dublin.

L.—DERMATOLOGY.

President: JONATHAN HUTCHINSON, F.R.S., P.R.C.S.
Vice-Presidents: MALCOLM A. MORRIS, F.R.C.S.Ed.; H. RADC CROCKER, M.D.
Hon. Secretaries: E. G. SMITH, F.R.C.S.Edin., 41, Newhall Birmingham; T. COLCOTT FOX, M.B., 14, Harley Street, dish Square, W.

Honorary Local Secretaries:
R. SAUNDBY, M.D., 83A, Edmund Street, Birmingham.
JORDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham.
A. HARVEY, M.B., 358, Wheeler Street, Lozells, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.
9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.
9.30 A.M. Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. WALTER FOSTER, M.D., M.P.
9 P.M.—Reception by the Worshipful the Mayor of Birmingham in the Council House.

THURSDAY, JULY 31ST, 1890.
9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S. Presentation of the Gold Medal for Distinguished Merit to Surgeon T. H. Parke, A.M.S.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 1ST, 1890.
A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.
9 P.M.—Reception by the President of Mason College and Mrs. Lawson Tait.

SATURDAY, AUGUST 2ND, 1890.
Excursions.

THE ANNUAL MUSEUM.

onnection with the fifty-eighth annual meeting of the British ical Association, the Museum and Exhibition will be held in Queen's College, Paradise Street, Birmingham, close to the ding in which the sectional meetings will be held. The Museum be arranged in the following Sections:—

CTION A.—Food and Drugs, including Antiseptic Dressings other Chemical and Pharmaceutical Preparations. (Honorary etary, Dr. Stacey Wilson, 65, Temple Row, Birmingham.)

CTION B.—Pathology, comprising Casts, Models, Diagrams, aratus, Microscopical and Spirit Preparations, etc. (Honorary etary, Dr. G. F. Crooke, 2, Edmund Street, Birmingham.)

CTION C.—Anatomy and Physiology, comprising Special Disons, Methods of Preparation, Drawings, Models, and Microic Preparations. (Honorary Secretary, Dr. A. E. Mahood, n's College, Birmingham.)

CTION D.—Instruments and Books, including Appliances, ulance, Medical, Surgical and Electrical; Microscopes and otomes. (Honorary Secretary, Mr. Gilbert Barling, M.B., .S., 85, Edmund Street, Birmingham.)

CTION E.—Sanitary Appliances. (Honorary Secretary, Dr. A. ock Hill, 14, Temple Street, Birmingham.)

To Non-Professional Exhibitors.

consequence of the increasing cost of these exhibitions, ges will be made to exhibitors (other than members of the cal profession), according to the space occupied.

Regulations Regarding Exhibits.

Intending exhibitors must communicate with the Secretaries ch Section in which they propose to exhibit, and a brief ption of each exhibit for insertion in the Museum Catalogue be in the hands of the respective Secretaries before June

All exhibits should be addressed to the "Secretary of the um, British Medical Association, Queen's College, Birmingwith the name of the Section for which they are intended. ges should not be addressed to a firm's representatives at useum.

Communications on general matters connected with the um to be addressed to the Museum Secretary, Mr. Gilbert g, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

communications respecting advertisements in the Museum gue must be made to Mr. Edward B. Lawley, Queen's Col- Birmingham.

GILBERT BARLING, M.B., F.R.C.S. Hon. Sec.
BERTRAM C. A. WINDLE, M.A., M.D., Chairman.

SPECIAL CORRESPONDENCE.

PARIS.

Treatment of Rheumatic Paralysis.—The Vasomotor Nerves in Erysipelas.—Ophthalmological Congress.—Pseudo-Diphtheria of Scarlet Fever.—New Æsthesioneter for Leprosy.—Influenza and Surgical Operations.—Moist Heat as a Sterilising Agent.—A Too Candid Chemist.

DR. JULES MASCAREL, in a paper read before the Paris Biological Society, stated that rheumatic facial paralysis disappears in 40 to 48 hours when treated by acupuncture combined with a weak induced current. The current should not be applied longer than from four to five minutes, and its intensity should be regulated by the susceptibility of the patient. The treatment should be applied before food is taken, or two or three hours afterwards. Dr. Mascarel has adopted this treatment about eight or ten days after the onset of the paralysis; if the affection be of older date, he thinks it probable the results may not be so good.

M. Roger is engaged in a series of researches to determine the influence of the vasomotor nerves on the evolution of erysipelas. He inoculated eight rabbits under the ears with the streptococcus of erysipelas, and removed the superior cervical ganglion of one side. He observed that paralysis of the vasomotor nerves at first appears favourable to infection, but ultimately the ear on the side where the sympathetic has been cut quickly recovers, whereas the ear of the opposite side remains affected for a longer period. M. Roger also observed that paralysis of the vasomotor nerves is particularly favourable to diapedesis. This fact is of great importance now that M. Metchnikoff has defined the part played by the leucocytes is resisting microbian invasion of the organism.

At the Congress of the French Ophthalmological Society, M. Panas read a paper on abscesses of the frontal sinuses. He has studied this affection on different patients, none of whom exhibited any previous affection of the nasal fossæ, but there was one symptom which was invariably present, namely, violent pain in the track of the infraorbital and nasal nerves. M. Luys has three times cured blepharospasm with rotatory mirrors. M. Gillet observed that suggestion is equally efficacious; M Guende had seen an obstinate case of blepharospasm cured after hypnotism had been practised two or three times. M. Kalt observed that these cures are not persistent, and suggested it would not radically cure blepharospasm which had been treated ineffectually by other means.

MM. Bourges and Wurtz have carefully studied the pseudo-diphtheria of scarlet fever in the wards of the Trousseau Hospital. In consequence of the severe sore throats which occurred during the evolution of the fever the little sufferers were removed from the fever ward to the diphtheria pavilion. A bacteriological examination of the false membranes revealed the presence of the streptococcus pyogenes, either pure or mixed with microbes incidental to suppuration, but in no instance did they succeed in detecting the presence of the Klebs-Löffler bacillus special to diphtheria. In two cases of pharyngitis, with false membranes occurring later on in the course of the fever, the bacillus of diphtheria was detected in the false membranes. One of the children with false membrane presenting streptococci, who was placed in the diphtheria pavilion, was seized with croup and died. MM. Wurtz and Bourges conclude from their experiments that sore throat in the early stage of scarlet fever, however serious the symptoms may be, is not generally diphtherial, therefore children with scarlet fever should not be placed with those suffering from diphtheria.

At the Society of Dermatology and Syphiligraphy M. Quinquaud communicated the results of his recent researches on leprosy. He has had a dynamometric æsthesiometer made in accordance with his directions, which demonstrates the modification of sensibility in its different degrees occurring in leprosy. M. Quinquaud has detected the presence of Hansen's bacillus at the onset of these symptoms.

M. Verneuil considers that operations should not be performed during an attack of influenza. At a recent meeting of the Academy of Medicine he mentioned a case which he believed ended fatally because the operation (removal of a tumour from the breast) was not deferred until an attack of influenza had passed away. The patient, who was 44 years of age, was operated on

during convalescence, and died of pyæmia. Notwithstanding the healthy aspect of the tissues operated on, M. Verneuil argues that infection did not proceed from the wound left by the operation, but that the effect of the operation was to arouse the latent morbid elements lingering after influenza. M. Walther has observed that in cicatrisation the formation of healthy granulations is arrested during influenza. MM. Peyrot, Berger, and Yarre maintain that operations antiseptically performed are not followed by suppuration, whatever illness the patient may be suffering from, unless the region operated on be infected during operation.

The experiments of M. Strauss and other bacteriologists show that dry heat should not be used for sterilising. M. Soreil has invented an instrument for sterilising dressings by means of moist heat under pressure, and drying them afterwards. Old dressings, catheters, etc., sterilised by means of this apparatus, were free from micro-organisms, and remained so when they were sown with fresh bacteria.

M. Mougin, a chemist, has recently taken the public into his confidence as to the prices charged by different druggists for sulphate of quinine. His frankness on the subject has given umbrage to his colleagues. A number of students of pharmacy assembled in front of his shop crying out, "À bas Mougin!" The disturbance lasted for an hour, and the police had to be reinforced before they could disperse the crowd.

EGYPT.

Drainage of Cairo.—A Model Village.

A COMMISSION, presided over by Sir Colin Scott-Moncrieff, Under Secretary of State Public Works Department, has been occupied for the past three months in the consideration of the scheme presented by Mr. Baldwin Latham for the drainage of Cairo, and has now sent in a report to Government approving generally of the proposed plan, and recommending that immediate steps be taken to complete the preliminary detailed survey of the town. The financial aspect of the case is of the greatest importance. Under existing circumstances, there is little hope that Government could find the amount required; but if the exertions of Mr. Palmer, financial adviser, who has gone to Paris for the purpose, should be crowned with success, and the conversion of the debt become an accomplished fact, a portion of the liberated revenue will without doubt be devoted to rendering the capital of Egypt one of the best drained cities in the world.

The President of Council, Riaz Pasha, lately inspected a model village, constructed by the sanitary authorities near Abbasiyeh, for a number of Soudanese refugees, who had squatted near the English barracks, and whose huts were a great eyesore to the military authorities. Under pressure from the latter, a sum of £300 was given by the Public Works Department for the purpose of constructing a latrine for these poor people; but inasmuch as no provision was made for keeping it in order, the Sanitary Department proposed, if this sum were entrusted to them, not only to provide latrine accommodation for the refugees, but also to house them in a suitable locality where, unlike Abbasiyeh, they would have a good water supply. This has now been done, the total amount expended in building the village, which has house-room for ninety families, being considerably under the £300 originally intended for latrine accommodation only. Riaz Pasha was greatly pleased with his inspection, and expressed his intention of building a village on a similar plan for his tenants in the provinces. His Excellency subsequently visited the lunatic asylum, and was much struck with the perfect order and cleanliness that prevailed.

BIRMINGHAM.

Death of a Bonesetter's Patient.—Hospital Saturday.

THE art of the bonesetter was illustrated by a case which came before the Coroner at Coventry last week. A boy sustained a compound fracture of the forearm and was taken to one Bennett, who has acquired considerable notoriety in Warwickshire. He being out, his son attended to the case, and subsequently father and son acted together, but, becoming alarmed at the condition of the limb, advised the removal of the patient to hospital at the end of a week. The forearm was then red and swollen and deformed. The position was improved under an anæsthetic, though great pain remained, and five days later complaint was made of stiffness of muscles about the joint and of difficulty in swallowing. Death ensued from tetanus a week later. A *post-mortem* examination showed that the median nerve was compressed by th fractured radius, about two inches from the upper end of th bone, and that the nerve was imbedded in callus. Seeing the tetanus is every day more constantly attributed to wound infe tion, it is more than probable that careful antiseptic treatment this case from the first would have prevented the calamity whic ensued. The Coroner's jury returned a verdict of death fro lockjaw, with a rider regretting that the father did not call in medical man at once.

The Hospital Saturday collection eclipses all previous effort At the time of writing, more than £8,000 has been received, an there is little doubt that the total will amount to £10,000, if n more. This result is the more happy, inasmuch as fears have bee expressed that the movement for hospital reform would greatl damage the collection. It has been stated on more than one occ sion that workpeople, contributing to the fund, assume a right hospital treatment because of their contributions, and apart alt gether from the necessity of their cases. This tendency, it is sai produces overcrowding of the out-patient rooms by trivial case which are not really in need of the relief which hospitals a established to provide. The members of the Hospital Saturd Fund Committee somewhat indignantly deny the correctness this view; and it is the more creditable to them that, whilst t question is *sub judice* (the Mayor's inquiry being now carried out they should have made a more enthusiastic and successful effo than at any previous time.

CORRESPONDENCE.

"THE TRADE IN DEGREES."

SIR,—Being a British practitioner residing in Toronto, only short distance from the University of Trinity College, Toronto was naturally much interested in your article entitled "The Tra in Degrees," in the JOURNAL of April 5th, 1890.

Although entirely differing with "Trinity" as to the propri of a Colonial University conferring degrees in the very questio able way they have adopted—so utterly at variance with the tr spirit of a reputable university—yet it is unfair to accuse them "offering degrees for sale," or to call the eminent musicians w conduct the examination in England a board of "referees;" for, far as "standard" is concerned, the standard is a high enou one, and precisely the same as that reached by the Toronto can dates, at present some fifty in number.

As to the story about the M.D. for British practitioners of f years' standing, that is a myth. No one knows anything o here. Students for the degrees of M.D., C.M. have a four ye course, as in Britain, although the standard required is very adequate as compared with that of the British universities. is, however, quite up to that of the University of Toronto. T remark applies equally to all the degrees conferred in any facu Although defending Trinity University from the charge of c ferring bogus degrees, I, as an outsider, protest as vigorously anyone against a Colonial university conferring degrees on me England, *in absentiâ* and without residence, however high m be the standard.—I am, etc.,

AUSTIN D. ELLIS, M.B., C.M.Aber.,
Mem. Coll. Phys. and Surgs., On

Toronto.

*** Our correspondent will by this time have noticed that the JOURNAL of April 26th, page 996, we published the statem made on official authority, that Trinity College, Toronto, did hold examinations in medicine in this country. So far as it w this was an answer to the statement, which had appeared in s of our contemporaries, that the University of Trinity College prepared to grant the M.D. degree *in absentiâ* to British pra tioners on certain conditions. This alleged action appeared t welcomed in certain quarters, and we felt bound to enter *caveat* against it. The question of the legality of the Universi action in regard to musical degrees is, we understand, still pe ing at the Colonial Office. The term "bogus degrees," used by correspondent, was not applied to them in our article. The t "musical referees" occurs in the *Calendar* of the University.

SOCIETY OF APOTHECARIES AND ITS MEMBERS.

SIR,—At a Court of Assistants of the Society of Apothec of London recently held, it was resolved to make all past, pre and future examiners of the Society, and also the surgical aminers appointed from time to time by the Medical Cou

embers of the corporate body, on payment of a nominal sum, nd also every year to admit a limited number of its Licentiates the same privilege on payment of a moderate sum, and subject the Court of Assistants being previously satisfied of their fitness all respects to become Members of the Society.

The Court of Assistants feels that this important departure from ncient precedent will strengthen and enlarge the basis of the ociety, and afford a further proof of its desire to promote the in-rests of its Licentiates.

I may take this opportunity of stating that it is not only in eir behalf, but that of the whole medical profession, the Society now defraying at a heavy cost to itself the putting down of un-ualified practitioners, with the greatest success.—I am, etc.,

Blackfriars. JAMES RICHARD UPTON.

THE DISCUSSION AT THE MEDICAL SOCIETY ON ABDOMINAL SURGERY.

SIR,—I am not quite sure that Mr. Tait is accurate in stating at the general surgeon's mortality is nearer 40 than 30 per cent. y own experience of operations upon the abdomen and its con-nts is fifty-four cases, with a mortality of eight; five deaths oc-rred in cases of enterotomy and internal strangulation, seen at time when the operation gave little chance of recovery. If I not mistaken, these results will compare favourably with ose of Mr. Tait's first fifty.

Of course, a surgeon with a small number of cases may show a eater number of deaths by the accident of the class of cases of sease which he may have to deal with, and this is certain to be rrected where the number is larger. The fallacy suggested is ten ignored.

Mr. Robson is a general surgeon, one of the class denounced. . Tait has said that Mr. Robson submitted cases "rivalling ose of any living surgeon, and outstripping many;" but the ly conclusion he will draw is, "not that a general surgeon may abdominal operations successfully, but that Mr. Robson would ike "a most successful specialist." Of course; Mr. Tait would e to remove such a hostile concrete argument, and bring him o his own fold.—I am, etc.,

Dublin. WILLIAM THOMSON, F.R.C.S.

SIR,—Will you permit me as a general surgeon to say a word this subject? I have no doubt there is more abdominal surgery ne throughout the country by general surgeons than the unger London specialists are aware of, and perhaps even more an Mr. Tait himself thinks. I am also further of opinion that eir results, in recent years at least, are more favourable than statements in the JOURNAL of May 10th would lead us to pect.

Take my own case. I am a general surgeon attached to a hos-al of 150 beds, and have no special opportunities for practising dominal surgery, yet I find that my last 23 cases of abdominal tion have all been successful; the list includes 17 ovariotomies, ase of hydatid of omentum, hysterectomy, removal of uterine pendages, radical cure of large umbilical hernia, and cases of estinal obstruction. This, which has been my own experience, been pretty much that of my colleagues, and I have no doubt t of many other surgeons similarly situated. We cannot all pect the skill and experience of a Spencer Wells or a Lawson t, nor can our patients always obtain their services. I do not, wever, think that they always suffer in consequence, as (thanks the teaching of the gentlemen I have named and others) the eral surgeon is now so well informed as to enable him to oper-in abdominal cases with a large measure of success.

would further say, with regard to ovarian cases, that I believe n to be, as a rule, of a less serious type than formerly; the r cases have all been operated on, and the more recent ones e earlier for operation. I have no wish to underestimate difficulties of abdominal surgery, and certainly no wish to reciate the work of the eminent specialists who have done so h to advance this branch of surgery, but rather to point out a larger amount of good work is being done by the general geon than he gets credit for.—I am, etc.,

ifton, Bristol. NELSON C. DOBSON.

GASTRO-ENTEROSTOMY.

R,—In the JOURNAL of May 10th is a letter by Mr. F. B. ett, commenting on the paper read by Sir William Stokes e the Medical Society on April 28th, in which he speaks of the operation of gastro-enterostomy by means of approximation plates having been performed four times in England, with a successful result in three. I am able to add another case to the number, a fortnight having elapsed since the operation, the wound having healed and the patient having steadily improved since she has been able to take and retain food. I quite agree with the opinion expressed in the letter that in cases of pyloric cancer, unsuitable for pylorectomy, gastro-enterostomy by Dr. Senn's method affords a ready and effectual method of relief. I hope to report my case fully on a later occasion.—I am, etc.,

Leeds. A. W. MAYO ROBSON.

SIR,—In a letter published in the JOURNAL of May 10th, Mr. Jessett points out the importance of feeding these cases at an earlier date after the operation with suitable peptonised food. I wish to support his suggestion, having, like him, lost a case several days after the operation purely from exhaustion. The patient, a male, aged 60, admitted under my colleague Dr. Caton, was operated on by me at the Liverpool Royal Infirmary, on February 13th. For a week he was fed entirely by the rectum with peptonised foods. During this time he suffered greatly from thirst, and his emaciation increased. He was evidently living partly upon his own tissues, for he passed about 250 grains of urea each day. On the 20th, the day on which stomach alimentation was to be commenced, he suddenly failed. Up to this time he had not given us cause for much anxiety, and we believed that his recovery was assured. Now, however, the stimulant and food were without avail. It was too late, and he gradually died. At the *post-mortem* examination the operation appeared to be quite satisfactory. There was good union. The bone plates had entirely disappeared, and the silk ligatures were hanging loose in the opening.

The case was brought forward at the Liverpool Medical Institution, and will be published in the next volume of the *Liverpool Medico-Chirurgical Journal*.—I am, etc.,

Liverpool. F. T. PAUL.

THE PROPHYLAXIS OF CANINE DISTEMPER.

SIR,—Distemper in the dog is not an eruptive fever, it is a continued fever primarily of a catarrhal type, and analogous to the catarrhal influenza of the horse; its complications (often described at different phases of the disease) are secondary in origin, and due to the altered conditions brought about in the blood by the effect of the disease itself and by the incursion of other organisms—*viâ* the diseased nasal membrane—than those of distemper itself.

It has no characteristic eruption, and when an exanthem does make its appearance it is—if arising during the course of the disease—an intercurrent attack of variola canina; or, if arising as a sequel, an eczematous eruption due to the depraved condition of the vital fluid. In reference to the question of vaccination as a prophylactic, my experience extends far beyond that of Mr. Penberthy.

In the year 1866 I was asked by a gentleman (Captain Rigby), who resided in the neighbourhood of Liverpool, to send a supply of vaccine to his shooting establishment in the highlands of Scotland, as he had been recommended to vaccinate his dogs. I complied with the request so made, and at the same time carried out vaccination on other dogs; the result was decidedly unsatisfactory.

If a universal law existed to the effect that the virus of one disease was prophylactic to that of another, I could understand the adoption of such a practice as that of vaccination as a preventive of distemper; but, to be brief, as strangles in the horse is not prophylactic to influenza, or as foot and mouth disease is not prophylactic to pleuropneumonia, so vaccination was not in 1865-66 found to be prophylactic to cattle plague, nor is the virus of *rouget* protective against that of swine plague.—I am, etc.,

Edinburgh. THOMAS WALLEY.

THE INCREASE OF CONSUMPTION AT HEALTH RESORTS.

SIR,—In one of your annotations in a late issue you state that the tuberculous death-rate of the native population of San Remo has risen in ten years from 9 to 12 per cent. You also mention that Dr. Freeman contests the truth of these statistics, and believes that formerly cases of consumption were sometimes put down under another name, whereas now cases are returned as tuberculous which are not so, the Italian mind having become less frightened of the disease than in former times. Dr. Freeman is so

well acquainted with San Remo that full value must be given to his opinion, but the increase of consumption in the lower class of the native population of Mentone since it became a popular winter resort like San Remo is fully admitted by Dr. Henry Bennet and other Mentone doctors. The reason is not far to find. The peasant girls used to spend the day in carrying up to the hills stones, or earth, or manure; now many of them are shut up all day long in more or less small, dirty, sunless shops, where they breathe foul air and rebreathe their own breath. It would be simply miraculous to be able to avoid consumption under such circumstances. When not too far gone, some of these peasant girls have been known to recover health by returning to outdoor work in their sunny hills. In the same way, young German bakers, who were becoming consumptive in the bakehouse, have been known to recover health by trundling the baker's cart in London streets.—I am, etc.,

San Remo. EDWARD JOHN TILT.

THE SALE OF OPIUM.

SIR,—It seems to me that some action ought to be taken towards limiting the sale of opium and its alkaloid, morphine, to irresponsible persons. I have now under my care a patient who has been able to procure enough opium and morphine to poison half the neighbourhood. Can chemists who knowingly supply the drug in such large quantities, without a medical man's prescription or a sight of a hospital nurse's certificate, be prosecuted, and are their bills valid?—I am, etc.,

Bexhill-on-Sea. EDWARD H. RYAN-TENISON.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL WITNESSES.

QUESTOR asks if a practitioner qualified only in surgery gives evidence pertaining to an illness purely medical which he has treated, should he be paid by a coroner the usual fee (£1 1s.) for an act which, though not infrequent, is illegal; or should he be paid as an ordinary witness, whose time, however, may be important?

*** If the practitioner in question is duly registered he would doubtless be held to come within the definition of a "legally qualified medical practitioner" in the statute providing for the attendance of medical witnesses at coroners' inquests, and if he has been duly summoned as a witness by the coroner in the manner prescribed by such Act, he is entitled to the specified fee of £1 1s.

REFUSAL TO CONSULT.

POVERTY writes: Would you kindly advise me the course to take in the following. A family, B., have a medical man, X., attending a daughter. The eldest son, who is also head of the house, does not care for X., but called me in to attend himself. This I did, but during my visit was careful not to be drawn into any conversation or act *re* X.'s patient. The family then wished me to see the daughter after the son was well. This I refused to do unless in consultation with X. X. was written to, and his reply was that he could not meet a practitioner of the class of my humble self, but added in his letter to the family that if they liked he would take his father down with him to consult, and, as they knew, there was no better opinion than his to be had in England.

*** Comment on conduct as that alleged against Mr. H. H. is superfluous; it is self-condemnatory. We would advise "Poverty" to pursue the even tenour of his way, and persevere in the same honourable course as indicated in the above case.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY RANK.

RALPH writes: After months, during which I had no opportunity of seeing the JOURNAL, I have lately scanned the back numbers, with the many interesting letters on the serious subject of rank. I am glad to see that some of the Laodiceans who advocated compound titles are at last turning round, and are now recognising that there is no halfway house, but substantive rank or none at all. The idea that a medical any more than an engineer officer would scorn his scientific profession, if possessing substantive rank, is an unjust reflection.

It requires an unusually sharp ear to always catch the distinction between surgeon and sergeant-major, and I can give some instances. Lately, in booking from Sydney to New Zealand, I found my designation in the warrant to be "Sergeant"-Major, and the same mistake became so often repeated on voyages and at hotels that I ultimately dropped the designation altogether. At San Francisco my arrival was chronicled in the newspapers as that of "Sergeant"-Major, such a title as surgeon-major being foreign to American ears. In Mexico, when questioned on my title, I had to enter into lengthy explanations. On passage from New York I found myself in the printed list of passengers as "Major," the "Surgeon" being expunged. I took an early opportunity of correcting the mistake, as I did not want to sail (literally) under false colours. After all that, I say away with Surgeon-Major! Throw it to the dogs; I'll none of it!

COMPULSORY PROMOTION IN INDIA.

WE understand that, in response to memorials and personal representations against the compulsory promotion of brigade-surgeons in the Indian Service to the rank of deputy surgeons-general, the Government of India have conceded certain points. The right to decline was at first wholly denied by the authorities; but on being confronted with an Order as old as 1796—republished in 1851—recognising the right, they retreated, and now admit the rule may not be rigidly enforced in all cases. Nevertheless, they establish the principle that Government, and not the individual, will be judge of the circumstances in which promotion in certain cases may not be enforced.

THE CONTEMNED COMMISSION.

M.S., writing from India, says: The War Minister's action on the recommendations of the Commission has been received here with mingled feelings of despair and disgust—the former that such things can be in this enlightened age, the latter that medical officers should be compelled to fight for justice against such odds in high places.

He protests against two proposals of the Commission—the lowering of the standard of diplomas, and the giving of commissions without examination—both are unfair to those already in the service. The only way to meet combination against the medical officers is counter combination to stop the supply of candidates. Let these latter be duly informed of the hardships of foreign service, and the practical life-long exile from home and friends; let them know how pay evaporates in constant moves; let them, above all, know of the invidious distinctions between medical officers and others, not merely in military rank and titles and ordinary leave, but, shameful to say, even in sick leave contracted on service.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION.

RESULTS of biennial prize competition held at the Artist's Quarters, May 8th, 1890. Individual competition: Private E. C. Gates, 20th Middlesex R.V., highest possible marks, winner of Surgeon Pearce's prize. Detachment competition: 1st Artists' detachment, composed of Corporal Cooper, Lieutenant-Corporal Frost, Privates Allen and Sparks; 2nd London Scottish detachment, Lance-Sergeant Nicks, Privates Liddle and Wotherspoon, Private W. R. G. Brown, Artists'; 3rd Queen's Westminster detachment, Staff-Sergeant Everall, Private Grugeon and James, Private Corbet, Post Office Corps. Past members detachment competition: 1st detachment, Ambulance-Sergeant Nuding L.R.B., Ambulance-Corporal H. Bursell, Artists' 2nd; Corporal Painter E.L.E.V.; Private J. P. Dollman, Artists'; 2nd detachment, 4th Volunteer Battalion The Queen's Royal West Surrey Regiment, Lance-Sergeant Thatcher, Corporal Selth Cylist Strood, Private Lisle.

Examiners, Anatomy and Physiology: Brigade-Surgeon Giles, Welsh Border Brigade; Surgeon H. Stokes, L.R.B. Drill: Brigade-Surgeon O. M. White, East London Brigade; Surgeon H. A. Des Voeux, Queen's Westminster R.V.; Lieutenant A. Macluse, London Scottish R.V. First Aid: Surgeon-Major W. C. James, H.A.C.; Surgeon A. R. F. Evershed, 20th Middlesex (Artists') R.V. Referee: Surgeon Walter Pearce.

The competition was a very keen one, the drill of the two first detachments being very good. The official inspection of the present class will take place on Thursday next at the Artists' head-quarters, at 7.30 P.M.

THE WANTS OF THE SERVICE IN INDIA.

AN EXPERIENCED MEDICAL OFFICER writes to us: What the A.M.D. chiefly want in India is the granting of increased pay to brigade-surgeons and to surgeon-major in charge of station hospitals. Government has saved largely by the station hospital system, but by it the work of the senior officers has been enormously increased, and no increase has been made to their pay. The best men in the service are no better off than the worst, and there is no inducement to work well.

RANK FOR VOLUNTEER SURGEONS.

VOLUNTEER SURGEON-MAJOR writes: The attitude taken up by one or two of the staff at the War Office, who are known to be unduly prejudiced against the Medical Department of the army, is so unjust and so utterly unreasonable that it must be met by an unmistakable representation to the authorities of the deep feeling of disappointment and dissatisfaction that it has caused throughout the auxiliary services and the medical profession of the United Kingdom generally.

It has become a question of status and position, which affects all medical men, in or out of the services alike, and, as a Surgeon-Major of volunteers of many years' standing, I would earnestly urge my brother medical officers of the auxiliary services, and all medical practitioners generally, to aid our brethren of the Army Medical Staff and the Indian Medical Service by all the efforts in our power to obtain the military rank and title which they seek and to which they are fully entitled.

We in the Volunteers are at present a sham and an imposture, owing to our having neither substantive nor relative rank, and I consider it most undignified in us that we should consent to remain in such an anomalous position merely because one or two officers at the Horse Guards are jealous or prejudiced in the matter.

We stand second to no other branch of the service in our loyalty to the Queen Empress nor in our fidelity to duty; but the question seriously arises Is it to our advantage in our social life to belong to a service which denies our legitimate status, rank, and title in common with other commissioned officers therein, and which places upon us the brand of "sham" in a manner that is served out to no other branch of the army? This aspect of our position will have to be faced and dealt with, and to that end we would invoke the aid of every medical man on the *Register*.

A SHAM POSITION.

DISGUSTED, writing in a satirical vein, says: As "my military advisers" have decided that medical officers are unworthy of the rank which they themselves adorn (?), for pity's sake let us respect ourselves, and cease masquerading in the garb of our exalted superiors. Let us doff our uniform, and relinquish the badges of rank which we are told are without "meaning." I have no wish to be thought "like a monkey on a barrel organ" (*vide* one of the "military advisers'" own teachings). If our status depends entirely on ourselves let us trust to our civilian position, and not to the badges of a phantom rank.

must wear uniform let the word "relative" be carried on our shoulders to ow we are the sham and not the real exalted (?) ones.

WHY I RETIRED FROM THE ARMY MEDICAL DEPARTMENT.

RRESPONDENT answers the questions thus:

. Inferior position compared with other corps and departmental officers, want of real military rank and titles.

. Want of sufficient encouragement—no honours or rewards for good or tive service.

. Too much foreign service in unhealthy climates.

. Breaches of faith in increasing tours of foreign service, etc.

* Candidates who contemplate the Army Medical Service as a career would well to ponder the above succinctly put disadvantages.

CHANGES OF STATION.

following changes of station among the officers of the Medical f of the Army have been officially notified as having taken e during the past month:—

	From	To.
ty Surgeon-General F. W. Wade...	— ...	... Dover.
,, ,, S. Archer ...	— ...	... Chester.
,, ,, A. Allan, M.D.	Bombay ...	... Dublin.
de-Surgeon C. S. Close	Chester ...	... Jersey.
son-Major A. Lewer	— ...	... Winchester.
,, J. M'Gann	Aldershot...	... Dublin.
,, E. A. Mapleton, M.D. ...	— ...	... Hounslow,
,, J. Anderson, M.B. ...	— ...	... Aldershot.
on R. H. Forman, M.B.	Piershill ...	... Edinburgh.
R. D. Donaldson, M.D. ...	Dublin ...	... Ballaghaderreen
B. T. M'Creery, M.B. ...	Oughterards	... Dublin.
M. F. Macnamara	Dublin ...	... Birr.
S. Townsend, M.D.	Cork ...	... Bengal.
W. Dick, M.B.	Chester ...	... Hereford.
R. Kirkpatrick, M.B. ...	Leith Fort	... Edinburgh.
W. B. Thomson	York ...	... Leeds.
D. Semple, M.D.	Edinburgh	... Dunbar.
G. M. H. Colman, M.B. ...	— ...	... Edinburgh.
G. Nelis	Edinburgh	... Piershill.
C. W. Johnson, M.B. ...	Lichfield ...	... Carnarvon.
H. V. Dillon...	Portsmouth	... Malta.
G. Raymond, M.B.	Cork ...	... Youghal.
C. A. Stone, M.D.	Aldershot...	... Netley.
H. E. Winter	,, ...	... Devonport.

THE NAVY.

ollowing appointments have been made at the Admiralty:—F. H. Atkin- leet-Surgeon, to the *Howe*, May 9th; B. Renshaw, Fleet-Surgeon, to the *uke*, May 9th; T. E. H. Williams, Staff-Surgeon, to the *Garnet*, May J. C. Ferguson, B.A., M.B., Surgeon, to the *Howe*, May 9th; J. Shand, Surgeon, to the *Iron Duke*, May 9th; William E. Bennett, Staff-Surgeon, and William H. O'Meara, Surgeon, to the *Northumberland*, May 13th; Y A. Close, Fleet-Surgeon, to Haslar Hospital, May 13th; Henry Mac- LL, Fleet-Surgeon, to the *Vivid*, and for Keyhorn Naval Barracks, May John Mackie, Staff-Surgeon, May 14th; George F. Collins, Surgeon, *Rodney*, May 14th.

MEDICAL STAFF.

TY Surgeon-General A. Allan, M.D., who has recently returned from ay, has been appointed Principal Medical Officer, Dublin District.

uty Surgeon-General S. Archer has been appointed Principal Medical at Chester, and Deputy Surgeon-General F. W. Wade Principal Medical at Dover.

ade-Surgeon C. S. Close has succeeded Brigade-Surgeon R. W. Berkeley ior Medical Officer in Jersey.

rtermaster and Honorary Captain R. T. Osborne is granted the honorary f Major, in recognition of his services during the recent operations on the

eon-Major D. C. G. Bourns, and Surgeon F. A. Saw, M.B., who are in the Bengal command, have leave of absence for six months on medi- tificate.

eon T. R. Lucas, M.B., has been granted leave from Devonport to Sep- 2nd, in extension, for the recovery of his health.

eon-Major J. E. Fannin, ranking as Lieutenant-Colonel, is promoted to ade-Surgeon from April 4th, *vice* Robert Waters, M.D., placed on retired His previous commissions are dated: Assistant-Surgeon, October 1st, Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. He has record.

INDIAN MEDICAL SERVICE.

on P. O. W. Halley, Bengal Establishment, is appointed to the officiat- dical charge of the 10th Native Infantry, *vice* Surgeon-Major W. Duncan, proceeding on furlough.

eon-Major G. Bomford, M.D., Bengal Establishment, whose services en placed at the disposal of the Chief Commissioner of the Central Pro- by the Government of India, is appointed to be Civil Surgeon of Nagpore, igade-Surgeon J. F. Barter, who is retiring on a pension.

eon G. Shewan, Bengal Establishment, is granted furlough on medical ate for one year from the date on which he may be relieved by Surgeon- S. H. Dantra.

MILITIA MEDICAL STAFF.

on-Major T. B. Christie, M.D., C.T.E., 5th Battalion Rifle Brigade ly the Queen's Own Royal Tower Hamlets Militia) has resigned his com- , with permission to retain his rank and uniform.

THE VOLUNTEERS.

Mr. G. Mackay, M.D., is appointed Acting-Surgeon to the 1st Midlothian Artillery.

Surgeon-Major N. K. Marsh, of the 1st Lancashire Artillery, has resigned his commission, with permission to retain his rank and uniform; his appointment as Surgeon bears date February 10th, 1865; that of Surgeon-Major February 1st, 1889.

Honorary Assistant-Surgeon J. Stewart, M.D., 1st Fifeshire Artillery, has resigned his commission, dated September 5th, 1866.

Surgeon L. A. Weatherley, 1st Gloucestershire Artillery, has also resigned his commission, dated August 23rd, 1876.

Surgeon I. Mossop, 2nd West Riding of Yorkshire (Western Division Royal Artillery), is promoted to be Surgeon-Major, ranking as Major, from May 10th, 1890.

Lieutenant C. J. Watson is appointed Acting-Surgeon to the 1st Volunteer Battalion Norfolk Regiment (late the 2nd Norfolk). Surgeon Watson joined the corps as Second Lieutenant on August 27th, 1887, and was promoted to be Lieutenant on December 14th last.

Acting-Surgeon A. R. H. Oakley, of the 2nd London, is promoted to be Surgeon.

Mr. H. Kelly, M.B., is appointed Acting-Surgeon to the 1st Volunteer Battalion Highland Light Infantry (late the 5th Lanarkshire).

Surgeon and Surgeon-Major J. Dunlop, M.D., of the 3rd Lanarkshire, is appointed to be Brigade-Surgeon (ranking as Lieutenant-Colonel) to the Clyde Brigade Infantry Volunteers.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, May 8th.

Lunacy Jurisdiction of Justices.—Lord Barrington asked the Lord Chancellor whether the justices appointed under the Lunacy Act, 1889, had jurisdiction to make orders under the Lunacy Act, 1890, or whether it was necessary that they should be reappointed under the later Act.—The Lord Chancellor said the justices appointed under the Lunacy Act, 1889, had jurisdiction to make orders under the Lunacy Act, 1890; the jurisdiction established under the Act of 1889 was expressly preserved by Section 342 of the Consolidation Act. He understood that some doubts had been raised, and he thought it very important that it should be clearly understood that they had the same jurisdiction under the existing Act as they had under the statute by which they were appointed.

Monday, May 12th.

Open Spaces Bill.—This Bill passed through Committee on recommitment.

HOUSE OF COMMONS.—Thursday, May 8th.

The Army Estimates.—Mr. W. H. Smith, in answer to Dr. Farquharson, said he did not think it would be possible to take the Army Estimates before Whitsuntide.

The Education of the Blind and Deaf and Dumb.—Mr. W. H. Smith, in answer to Mr. Buchanan, said a Bill on the subject of the education of the blind and deaf and dumb had been drafted by the Education Department, and was now under the consideration of other departments which were concerned in the question. The Bill would shortly be introduced in another place.

Monday, May 12th.

Boy Labour in Mines.—Mr. Matthews, in answer to Mr. Howorth, said the collieries in Northumberland and Durham were worked by two shifts of men and one shift of boys daily. The hours of the boys were limited to ten a day or fifty-four a week. Those of the men had usually been eight hours', and in some cases seven hours', shifts. The work of the boys was not physically so severe as that of the men, and he was informed that to shorten the hours of the boys by their working two shifts would cause dissatisfaction.

Tuesday, May 13th.

Inspection under the Vivisection Act.—Mr. Matthews, in reply to Mr. Webb, said he was aware of the number of visits paid by the inspector, as stated in the last report. The words "from time to time" in the Act had been interpreted in the Home Office to mean once a year, and the Act did not contemplate that the actual experimentation should take place under the personal supervision of the inspector. He had no information in his possession which led him to think that the spirit of the Act was not effectually carried out. On the contrary, the reports made to the inspector of the various experiments, and often communicated to the scientific journals, showed that the conditions imposed by Parliament were loyally carried out. Should facts be brought to his knowledge showing that this was not the case, or that the existing provisions for inspection were unsatisfactory, he should not hesitate to apply for additional assistance for carrying out the Act.

Open Spaces Bill.—The report of amendments on this Bill was agreed to.

Alleged Overwork in Prisons.—Mr Matthews, in reply to Mr. Justin M'Carthy, said he was informed by the Prison Commissioners that no complaints as to the long hours of attendance and work had reached them from the warders of the local prisons in England.

Richmond Barracks, Dublin.—Mr. G. Elliot asked the Secretary of State for War whether the Richmond Barracks, in Dublin, had been passed as healthy; whether an officer of the 2nd Battalion King's Royal Rifles, quartered in these barracks, had recently been attacked by typhoid fever; and whether the barracks were now in a satisfactory sanitary condition.—Mr. E. Stanhope said he was sorry to say that an officer in these barracks was recently attacked with enteric fever. He had been on leave on three occasions during the previous month, and it was therefore possible that the disease was not contracted in the barracks. A good deal had recently been done to the drainage of Richmond Barracks, but until the works immediately contemplated were complete he could not say that he was satisfied that every effort had been made to avert the recurrence of this disease.—In reply to a further question on the Barracks Bill, Mr. Stanhope said the Royal Barracks and the Richmond Barracks, Dublin, would be dealt with this year.

Infectious Diseases (Prevention) Bill.—The promoters of this Bill have agreed, it is said, to abandon the fourth Clause, which provides that, where the outbreak of any disease is suspected by the medical officer to be due to the milk supplied by a particular dairy, the dairyman shall be obliged to supply a list

of his customers. Important amendments will be made in Clause 5, giving the medical officer power to inspect suspected dairies, and in the following Clause, which is substantially the same as Clause 4, but applies to establishments for washing and mangling. Mr. KELLY will move the omission of both Clauses on Report. The Report stage has been put down for June 11th, when, under the rule regulating private members' business after Whitsuntide, it will take precedence of the other Orders. There will, it is stated, be considerable opposition to this stage of the measure, and Mr. Kelly will move to omit all the Clauses except two.

OBITUARY.

ARTHUR JULIUS POLLOCK, M.D.St.ANDREWS, F.R.C.P.

WE deeply regret to have to record the death of Dr. Julius Pollock on Sunday last, May 11th, after an illness of a few days' duration. Dr. Pollock was one of the younger sons of the late Right Hon. Sir Frederick Pollock, Bart., Chief Baron of the Court of Exchequer, and was in his 56th year at the time of his death. His medical studies were pursued at King's College Hospital. In 1859 he obtained the diploma of M.R.C.S., and two years later took the M.D. degree of St. Andrews. He was elected assistant physician to the Charing Cross Hospital in 1866, and in 1870, on the creation of a third physiciancy, he became full physician. In this year he was also elected a Fellow of the Royal College of Physicians. His promotion in the hospital continued at the same rapid rate, for in four years from this time he became senior physician and lecturer on medicine, both of which posts he continued to occupy up to the moment of his death. He had previously held the lectureships first of pathology and subsequently of forensic medicine, and in this latter capacity did some good work with the late Dr. Guy in microphotography, in relation to some of the poisons. Dr. Pollock filled the office of Dean of the Charing Cross Medical School for five years, resigning in 1874, and being at once appointed treasurer of the school, a post he held for the rest of his life. Only last year he was elected a member of the Council of the Royal College of Physicians, an honour which he valued highly.

Besides the above mentioned appointments, he was also for many years physician to the Foundling Hospital and to the London Life Association. Dr. Pollock was not often seen at the meetings of the medical societies, nor did he write much, but his *Notes on Rheumatism*, published in 1879, show a thorough grasp of his subject, and are marked by clearness of expression and sound common sense. His introductory address inaugurating the first course of post-graduate lectures at the Charing Cross Hospital, some two or three years ago, was admitted by all who heard it to have been most masterly and in the best possible taste.

In person Dr. Pollock was considerably above the average height, and of a spare habit; his face was one of decided power, and his expressive features were strongly characteristic of the distinguished family to which he belonged, and he undoubtedly shared in and inherited the mental faculties with which his own branch of the family has been so peculiarly gifted. An honest and honourable man, he was of a generous and warm-hearted disposition, and, if sometimes a little impetuous, he was quite incapable of bearing any malice; of his kindness to friends and professional brethren in sickness or trouble many could bear willing testimony. With the students he was ever popular, both as a man and as lecturer, whilst his unswerving devotion to the interests of the School secured for him a lasting place in the memories of his colleagues. None but those who had the good fortune to sit with him at the committee table can ever fully know how deeply the School is indebted to his tact and persuasive eloquence in the councils of the governing body of the hospital. In this respect it may be said with perfect truth we shall not look upon his like again.

Dr. Pollock had an attack of influenza some little time back, and to some of his friends he seemed to have been failing since; but he was at work until May 5th, on the evening of which day he had a rigor, followed by pain in the left side, and on the succeeding day there were signs of left pleuropneumonia; the effusion steadily increased; there was albuminuria, which had existed for some time, but known only to a very few. Finally, despite the best efforts of his friends and colleagues, Dr. Green and Dr. Mitchell Bruce, pericarditis made its appearance, and he died of heart failure on the morning of May 11th. In accordance with his written instructions, a *post-mortem* examination was made, when there was found extensive effusion into the left pleura, with consolidation of the lower part of the left lung, and pericarditis with some effusion; the kidneys were decidedly granular, which no doubt was the main cause of the fatal termination of his illness.

The funeral took place on May 14th at Kensal Green, when the whole of the medical and surgical staff, several of the council of the hospital, and many of the students were present.

PROFESSOR ALESSANDRO TAFANI, M.D.,

Florence.

DR. ALESSANDRO TAFANI, professor of human anatomy and histology in the University of Florence, died of pulmonary disease on April 20th. He was born at Florence in 1851, and received his medical education in that city. After holding several minor posts he was in 1883 appointed extraordinary professor of topographical and microscopic anatomy. In 1886 he competed successfully for the professorship of anatomy at Genoa, but in the following year he was recalled to Florence to occupy the corresponding chair, being at the same time appointed director of the Anatomical Institute and teacher of anatomy in the Fine Arts Institute. His principal publications were essays *On the Organ of Hearing*, *On the Development of the Placenta in Mammals*, and other papers chiefly on development, which was a subject he took particular interest in. He was an indefatigable worker, and a very popular and successful teacher.

The funeral was attended by all his colleagues of the medical faculty of Florence, and his pupils insisted on carrying the coffin on their own shoulders. No fewer than four funeral orations were delivered over his grave.

PROFESSOR VICTOR BESSER, M.D.,

St. Petersburg.

PROFESSOR VICTOR BESSER, whom the *St. Petersburg medicinische Wochenschrift* calls one of the most popular and most beloved physicians of the Russian capital, died suddenly of heart disease on April 15th. He was born in 1825, at Kremenez, in the lyceum of which town his father was professor of botany. He received his preliminary education at Kieff, and afterwards studied medicine at the University of Moscow, where he obtained his professional qualification in 1851, taking his Doctor's degree three years later. In 1860 he was appointed ordinary Professor of General Pathology, Diagnosis, and General Therapeutics in the Military Medical Academy of St. Petersburg, and Physician to the Clinical Hospital. He held these appointments nineteen years. Since 1879 he had given his attention almost entirely to his private practice, which was one of the largest in Russia. He founded two bursaries in the University of Kieff, and was noted for the liberality of his donations to charitable and beneficent objects of all kinds.

Professor Besser's contributions to medical literature were chiefly on therapeutical and clinical subjects.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

MANAGEMENT OF INFECTIOUS DISEASES.

L.R.C.P.—We do not think it unreasonable on the part of the medical officer of health to require the adoption of a very common precaution, namely, the cutting off the air of the infected room from that of the house by means of a sheet saturated with a disinfectant. But as regards the adoption of this precaution, and also as regards the kind of disinfectant to be used and the exact method of its use, it is customary on the part of medical officers not to interfere with a practitioner, and of course the inspectors have no right to act except under the advice of their medical officer.

THE COLLEGE OF STATE MEDICINE.

AT a meeting of the Council duly convened, the following gentlemen were elected Associates of the College:—M. Cheale, Dip.StateMed., K. and Q.C.P., Uckfield, Sussex; F. S. Davár, D.P H., R.C.P. and S.Eng., Bombay; Surg. W. Dick, A.M S., Dip.San.Sci.Vic.Univ., Chester; Dr. J. Glais D.P.H.Camb., 76, High Street, Putney; J. W. G. Kealy, D.P. R.C.P. and S.Eng., Forton, Gosport; Surgeon-Major C. J. W. Meado I.M.S., D.P.H.Camb., Dacca, Bengal; R. L. Roberts, M.D., D.P.H.Cam Ruabon; Fleet-Surgeon J. D. Smith, M.D., D.P.H.Aber., Anlaby R Hull; P. C. Smith, M.A., M.B., D.P.H.Camb., Glasgow.

W. T. B.—If our correspondent attended the woman on a proper medical or he is entitled to the usual fee; as such an order, if not limiting the tr ment of the case, would, in our opinion, justify his setting the fractu limb.

HEALTH OF ENGLISH TOWNS.

wenty-eight of the largest English towns, including London, which have estimated population of 9,715,559 persons, 5,323 births and 3,586 deaths e registered during the week ending Saturday, May 10th. The annual of mortality in these towns, which had declined from 20.9 to 20.6 per 0 in the three preceding weeks, further fell to 19.2 during the week under ce, a lower rate than in any week since November last. The rates in the ral towns ranged from 10.5 in Huddersfield, 12.5 in Leicester, 13.8 in Wol- hampton and 14.4 in Bristol to 26.2 in Sheffield, 27.4 in Derby, 31.3 in chester, and 32.3 in Newcastle-upon-Tyne. In the twenty-seven provincial ns the mean death-rate was 20.9 per 1,000, and exceeded by 3.6 the rate rded in London, which was only 17.3 per 1,000. The 3,586 deaths regis- d during the week under notice in the twenty-eight towns included 403 h were referred to the principal zymotic diseases, against 400 and 418 he two preceding weeks; of these, 151 resulted from whooping-cough, 108 measles, 44 from scarlet fever, 43 from diphtheria, 36 from diarrhœa, 21 "fever" (principally enteric), and not one from small-pox. These 403 hs were equal to an annual rate of 2.2 per 1,000; in London the zymotic h-rate was 2.5, while in the twenty-seven provincial towns it averaged 1.9 1,000, and ranged from 0.0 in Cardiff, 0.4 in Bristol and in Nottingham, 0.6 in Huddersfield to 2.7 in Bolton, 3.0 in Sheffield, 3.9 in Salford, and 7.8 Derby. Measles caused the highest proportional fatality in Birmingham Derby; scarlet fever in Preston and Halifax; and whooping-cough in castle-upon-Tyne, Oldham, Plymouth, Bolton, Sheffield, Derby, and hton. The mortality from "fever" showed no marked excess in any of the ns. Of the 43 deaths from diphtheria recorded during the week under e in these towns, 25 occurred in London, 8 in Salford, 4 in Newcastle- -Tyne, 3 in Manchester, and 2 in Norwich. No fatal case of small-pox was tered during the week under notice, either in London or in any of the nty-seven provincial towns; and 2 small-pox patients were under treat- t in the Metropolitan Asylums Hospitals on Saturday, May 10th. These itals contained 1,014 scarlet fever patients on the same date, against 1,052 1,037 at the end of the two preceding weeks; 115 cases were admitted ng the week, against 83 and 84 in the two previous weeks. The death- from diseases of the respiratory organs in London was equal to 3.5 per , and was slightly below the average.

HEALTH OF SCOTCH TOWNS.

e eight principal Scotch towns, 893 births and 697 deaths were registered ng the week ending Saturday, May 3rd. The annual rate of mortality ese towns, which had been 26.0 and 24.2 per 1,000 in the two preceding s, rose again to 26.9 during the week under notice, and exceeded .3 per 1,000 the mean rate during the same period in the twenty-eight English towns. Among these Scotch towns the lowest death-rates recorded in Greenock and Perth, and the highest in Dundee and gow. The 697 deaths registered in these towns during the week under e included 104 which were referred to the principal zymotic diseases, l to an annual rate of 4.0 per 1,000, which exceeded by 1.8 the mean otic death-rate during the same period in the large English towns. The est zymotic death-rates were recorded in Paisley, Dundee, and Glasgow. 337 deaths registered in Glasgow included 22 from whooping-cough, m measles, 5 from scarlet fever, and 3 from "fever." In Edinburgh, 6 cases of measles, and 5 of whooping-cough were recorded. Ten deaths ted from measles in Dundee, and 2 from diphtheria in Leith. The death- from diseases of the respiratory organs in these towns was equal to 6.2 ,000, against 3.8 in London.

HEALTH OF IRISH TOWNS.

e sixteen principal town districts of Ireland the deaths registered during eek ending Saturday, April 26th, were equal to an annual rate of 25.7 per . The lowest rates were recorded in Armagh and Neury, and the st in Lurgan and Waterford. The death-rate from the principal zymotic es averaged 2.7 per 1,000. The 149 deaths registered in Dublin during the under notice were equal to an annual rate of 22.0 per 1,000 (against 24.5 6.5 in the two preceding weeks), the rate for the same period being 18.5 in on and 19.8 in Edinburgh. The 149 deaths in Dublin included 8 which ed from the principal zymotic diseases (equal to an annual rate of 1.2 per , of which 3 were referred to whooping-cough, 2 to measles, and 2 to er."

ring the week ending Saturday, May 3rd, the deaths registered in the n principal town districts of Ireland were equal to an annual rate of 23.7 .000. The lowest rates were recorded in Newry and Kilkenny, and the st in Lurgan and Drogheda. The death-rate from the principal zymotic es averaged 2.3 per 1,000. The 172 deaths registered in Dublin during eek under notice were equal to an annual rate of 25.4 per 1,000 (against nd 22.0 in the two preceding weeks), the rate for the same period being n London and 21.1 in Edinburgh. These 172 deaths included 13 which ed from the principal zymotic diseases (equal to an annual rate of 1.9 per , of which 4 were referred to different forms of "fever," 3 to diphtheria, to whooping-cough.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF LONDON.

MEETING OF CONVOCATION.

e meeting of Convocation, on May 13th, Mr. H. E. Allen, , was re-elected Clerk of Convocation.

e CHAIRMAN stated that since the report of the Annual Com- e had been drawn up, a letter from the Lord President of the cil, dated April 10th, had been received by the Senate, in- ng whether the University proposed now to present a peti- or a new charter, on the lines recommended by the Royal nission, and stating that, as petitions on the subject were ng before the Privy Council, it was important that no further delay should take place. The Chairman also notified the receipt by the Senate of a "protest" (to which were attached 595 signatures, mostly those of undergraduates of the University who are still students at the various London and provincial hospitals) in disapproval of the proposals respecting the examinations for the medical degree of the University. On the ground that the proposed changes, if effected, would act injuriously towards those who had been induced to follow the curriculum advised by the University in the past, the memorialists protested "against the new departure of the University in relaxing the requirements in arts and science from those who seek its coveted titles." The Chairman further said that a conference had been held with the authorities of University and King's Colleges, whose objections to the Senate's scheme of reorganisation were to be considered that week, together with the results of the conference of the Senate with the delegates of the Royal Colleges of Physicians and Surgeons. At that conference, the delegates of the Royal Colleges had exhibited a most fair and amicable spirit, which augured well for a happy conclusion of the question, so far as it affected those bodies. He trusted, in conclusion, that on June 24th, when another meeting of Convocation was to be held for the election of a member of the Senate in the place of Mr. Thiselton Dyer, that he might have something definite respecting the future of the University to lay before the meeting.

The report of the Annual Committee was received.

Sir P. MAGNUS moved the reception of the interim report of the Special Committee on the Constitution of the University, an abstract of which was published last week. He gave a detailed account of the various steps by which the present position of the question of the reorganisation of the University had been reached, and stated that nearly every important reform in the University had had its origin in Convocation. In fact, twelve years ago resolutions had been passed by Convocation in favour of reforms very similar to those now contemplated; and he thought that if the Senate had adopted those resolutions there would not have been any sign of that severe crisis through which the University was now passing and which was paralysing its action at the present juncture. The Commissioners thought that the University should restrict its area of action to the metropolis, and should not affiliate provincial colleges. This view was so strongly opposed by the Committee that it had been given up in the latest scheme. The Committee further deprecated the views of the Commissioners that the matriculation examination should be passed at the constituent colleges, and in this point also the Committee's views had prevailed. The Committee had further induced the Senate to place in their scheme the proposal to accept gifts, grants, etc., and to obtain power to appoint professors and lecturers, by which clause the University would be assisting the higher education of London. He considered, finally, that Convocation would be wise to make concessions to University and King's Colleges, in order to prevent the establishment of a second university, which would be a great calamity, though at the same time the cause of higher education in London would suffer if such great concessions were made as practically to hand over the university, bound hand and foot, to those two Colleges. The University itself, it must be remembered, had something very valuable to offer those Colleges in its very high prestige, and it owed it to itself and to the public not to part with its charge of the B.A. and other examinations unless it was quite certain that those to whom the charge was handed over would not lower the value of the degrees.

Dr. W. J. COLLINS seconded the proposition.

Mr. T. TYLER thought it was to be regretted that the Senate had not adopted the recommendation of the Royal Commission, and arranged with Convocation for a scheme for the reorganisation of the University.

Dr. T. B. NAPIER was surprised that members of Convocation took so little interest in this important question. He hoped the University of London would remain the only university in London, and not become the mere handmaid of University and King's Colleges. The higher education of London required that it should still retain its high position.

After some remarks from Mr. W. T. LYNN and another member, the proposition was carried *nem. con.*

Sir P. MAGNUS next moved: "That the Special Committee be reappointed, with power to confer with the Senate with respect to the schemes now under consideration for the reconstitution of the University." He understood that University and King's Colleges did not intend to press their claims, and did not think that

if they did do so Convocation would be prepared to adopt their proposals. He had also been surprised that the Senate had continued the negotiations with the Colleges for so long a time, and expressed a fear lest the Privy Council might take the matter into their own hands if the negotiations were still further protracted. Dr. COLLINS seconded the proposition.

Mr. T. TYLER moved a resolution postponing the motion, which, however, was ultimately agreed to.

Mr. J. E. H. COTTON moved: "That Convocation approves of the formation of reading societies by members of the University, to meet in the University building, with the ultimate object of proceeding to higher degrees, or simply of pursuing a course of advanced study." This proposition was seconded by Mr. PIPER, and carried.

Dr. W. J. COLLINS moved: "That in view of the recent changes made in the examination in subjects relating to the public health, this House respectfully urges upon the Senate the equity of conferring the degree M.D. (State Medicine) upon those who had previously been awarded the diploma in public health." Mr. HOARE seconded this proposition, which, on the motion of Mr. E. S. WEYMOUTH, was referred to the annual committee.

Dr. SANSOM proposed: "That this House disapproves of any such change in the regulations of the University as would reduce the standard of attainment for degrees in the faculty of medicine to a relatively lower level than that for degrees in the other faculties." He said that he did not wish to reduce the criterion of knowledge for the medical degrees, though the methods of procedure at the examinations might possibly be altered. It was most undesirable that there should be two grades for a Doctorate of the University of London, and he strongly deprecated the calling of the present doctors of medicine "M.D. (honours)." Dr. M. BAINES, Dr. W. J. COLLINS, and others supported the proposal, which was carried.

The CHAIRMAN announced the names of graduates elected to form the Annual Committee. In the Faculty of Medicine the following were appointed, namely:—M. Baines, M.D.; W. J. Collins, M.D., M.S.; J. Curnow, M.D.; G. Eastes, M.B.; H. G. Howse, M.S.; H. Morris, M.B.; R. Neale, M.D.; W. Hale White, M.D.

CAMBRIDGE UNIVERSITY.

IT is understood that the honorary degree of LL.D. will be offered to Sir Andrew Clark, F.R.S., President of the Royal College of Physicians, and to Mr. Jonathan Hutchinson, F.R.S., President of the Royal College of Surgeons. The day of the recitation of prize exercises, or *Comitia Maxima*, which falls this year on June 10th, will probably be chosen for the conferring of honorary degrees on these and other distinguished men.

THE meeting of the distributors of Crane's Charity, which makes grants for medical attendance and nursing to poor scholars of the University, is fixed for Tuesday, May 20th. Applications are to be made through the College tutors.

AT the Congregation on Thursday, May 8th, the following were admitted to the degree of M.B. and B.C.: F. W. Saunders, B.A., Trinity (*Thesis*, Paroxysmal Hæmoglobinuria); Eliot Curwen, B.A., St. John's College (*Thesis*, Hepatic Cirrhosis).

ON May 5th, the last matriculation of the year, thirty-six students were enrolled. This brings the total number admitted during the year to nearly 1020, a larger number than has ever hitherto been recorded.

THE lectures delivered before the University by Dr. Francis Warner, under the auspices of the Teachers Training Syndicate, on The Growth and Means of Training the Mental Faculty, have been published at the University Press.

UNIVERSITY OF DUBLIN.—At the first summer commencement (comitia æstiva priora) held in Trinity Term on May 7th, 1890, the following degrees were conferred in the Examination Hall of Trinity College by the University *Caput* in the presence of the Senate:

Baccalaureus in Medicinâ, in Chirurgiâ, et in Arte Obstetriciâ.—W. R. Miller.

Magister in Artibus.—J. F. W. Tatham, M.D.

Doctores in Medicinâ.—A. J. Campbell, W. R. Miller.

CONJOINT BOARD IN ENGLAND.—The Conjoint Examining Board in England has adopted a revised synopsis of subjects for the first Conjoint Examination in Chemistry and Chemical Physics. A comparison of the present with the past synopsis shows the following chief differences: 1. The arrangement of the subjects under five heads—*a*, Chemical Physics; *b*, Inorganic Chemistry; *c* Metals; *d*, Organic Chemistry; *e*, Practical Chemistry. 2. The complete enumeration under the head of "Metals" of such of their compounds as are required to be known. 3. The introduction of a few fresh subjects, of which all the important ones are underlined. 4. The omission of the alkaloids morphine, quinine, strychnine, and of certain inorganic substances of less interest to the medical student. The new synopsis appears to be more orderly arranged, and has the advantage of stating more definitely the substances, etc., which will be treated in the examination. It will come into force on and after May 1st, 1891.

ROYAL UNIVERSITY OF IRELAND.—Medical Degrees Examination, May, 1890. The Examiners have recommended that the following should be adjudged to have passed the Examination:

Upper Pass Division.—J. A. Browne, B.A., Queen's College, Belfast; *Eleonora L. Fleury, London School of Medicine for Women, and Royal Free Hospital, Gray's Inn Road, London; J. Hennessy, Queen's College, Cork; T. J. Lenehan, B.A., Carmichael College, and School of Physic, Trinity College, Dublin; A. B. Mitchell, Queen's College, Belfast; *J. R. Steen, Queen's College, Galway, and Edinburgh University; J. J. Tracy, Queen's College, Cork.

Those marked with an asterisk may present themselves for the Further Examinations for honours.

Pass.—J. Alexander, School of Physic, Trinity College, Dublin; J. Bennett, Queen's College, Belfast; W. A. Bullen, Queen's College, Cork; J. Caldwell, Queen's College, Belfast; F. A. Craig, Queen's College, Belfast; R. Creighton, B.A., Royal College of Surgeons and Carmichael College; S. de la Roche, L.H.C.E., School of Physic, Trinity College, Dublin; W. W. Duff, Queen's College, Belfast; R. H. Elliott, Queen's College, Belfast; T. Gash, Queen's College, Cork; D. Jamison, B.A., Queen's College, Belfast; P. R. Keary, Carmichael College; J. A. Kelly, Queen's College, Belfast; J. McGennis, Queen's College, Galway, and Catholic University School of Medicine; J. McNamara, Catholic University School of Medicine; J. S. Morrow, B.A., Queen's College, Belfast; P. J. Murphy, Catholic University School of Medicine; M. C. Staunton, Catholic University School of Medicine; J. Young, Queen's College, Cork.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the First Professional Examination, in Anatomy and Physiology, at a meeting of the Board of Examiners on May 12th, namely:

T. Carwardine, student of Middlesex Hospital; H. L. Lack, of King's College Hospital; C. H. D. Morland, of St. George's Hospital and Durham University; A. W. Peake and D. C. Rayner, of Bristol School of Medicine; and T. R. Taylor, of Guy's Hospital.

Ten candidates were referred for six months.

Passed on May 13th:

T. W. Beazeley, of Queen's College, Birmingham; J. G. Clegg and W. I. Montgomery, of Owens College, Manchester; A. E. Mahood, of Trinity College, Dublin and Birmingham; W. Selby and N. O. Wilson, of St. Bartholomew's Hospital; and R. H. A. Whitelocke, of Glasgow and Edinburgh Universities.

Thirteen candidates were referred for six months.

Passed on May 14th:

H. W. Armstead and C. P. Lukis, of St. Bartholomew's Hospital; and H. J. Ballance, of University College Hospital.

Thirteen candidates were referred for six months.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the stated Examinations for the Licences of the College held on Monday, Tuesday, and Wednesday, May 5th, 6th, and 7th, 18[illegible] the undermentioned registered medical practitioners were successful:

J. G. Boyce, L.R.C.S.I., Bristol; S. Gillman, L.R.C.S.I., Rathmines, Dublin; T. H. Hannigan, L.R.C.S.I., Drumcollogher, co. Limerick; Harris, M.R.C.S., Beaconsfield, Cape of Good Hope; M. O'Reilly, L.R.C.S.I., Coombe Hospital, Dublin.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen, having passed the necessary examination for the Fellowship, have been admitted by the President (Dr. Meldon) Fellows of the College:

T. S. Burnett, L. and L.M., R.C.S.I., Deputy Inspector-General of Hospitals and Fleets, R.N.; F. J. Doyle, L.R.C.S.I. and L.K.Q.C.P.I., Surgeon I.M.S.; F. T. Skerrett, L.R.C.S.I. and L.K.Q.C.P.I., Surgeon A.M.S.; J. Williamson, M.B. and Mast. Surg., Univ. Aberd., Surgeon Major A.M.S.; C. J. Holmes, M.D., M.Ch., Royal Univ., Irel., Surgeon A.M.S.; and R. R. Leeper, L.R.C.S.I., L.K.Q.C.P.I.

The following gentlemen passed the first half of the examination for Fellowship:

P. R. Dillon, L.K.Q.C.P.I., L.R.C.S.I.; and P. W. Maxwell, M.D. Edin., M. and Ch. Edin., M.R.C.S. Eng., L.K.Q.C.P.I.

The following gentlemen having passed the necessary Dental examination have been admitted Licentiates in Dental Surgery of the College:

S. A. T. Coxon (Wisbech), A. L. Harrington (Rochford), H. Hudson (Birmingham), T. Nottingham (Hull), and Mr. G. A. Story (Canterbury).

The following gentleman, having passed the necessary Public alth examination, has been granted the Diploma in Public alth of the College:
. C. Maybury, M.R.C S.Eng., L.S.A.Lond.

MEDICAL NEWS.

ADY WIMBORNE is, we learn, about to establish a new cottage pital at Poole for the benefit of the poor of the town.

A NATIVE gentleman of the Rangpur district in India has given 00 rupees towards the cost of completing the Lowis Sanium at Darjeeling.

THE next (eighth) meeting of the Italian Surgical Society will held at Rome in 1891. At the recent meeting at Florence it s decided to establish a journal devoted to Italian surgery.

THE Royal visit of Her Royal Highness the Princess Louise to quay was a great success. At the reception at the theatre, s. Richardson, the wife of Dr. J. B. Richardson, presented Her al Highness with a magnificent bouquet.

HE "Petitions Committee" of the Bavarian Chamber of Deies has declined to submit to the Chamber the petition of the man Ladies' Association of Leipzig, asking that the medical teaching professions should be thrown open to women.

T the "commencement" of the Meharry Medical College for groes, held on February 27th, diplomas in medicine were nted to fifteen candidates. Two "coloured persons" at the e time received diplomas in dentistry and one in pharmacy.

R. L. W. POPOW, Professor in the University of Warsaw, was April 14th appointed to the Chair of Therapeutics in the Mili- Medical Academy of St. Petersburg, left vacant by the death Professor Botkin.

HE Chenango County Poor House and Lunatic Asylum, near wich, New York, was on May 7th destroyed by fire, thirteen ons (including eleven idiots) being burned to death. The fire, ch broke out in the idiot department, is said to have been ed by one of the inmates trying to light a lamp.

ANITARY PLUMBING.—During last week there was a large atlance at the Guilds Institute of Plumbers, not only from don and the suburbs, but from Oxfordshire, Hertfordshire, p, Cambridge, Suffolk, Staffordshire, Berkshire, etc., who pre- ed themselves for registration. Two-thirds of the candidates eeded in passing the full examination.

accordance with resolutions passed by the Brussels Academy Medicine, the Belgian Government is about to forbid public ces of hypnotism. All who, "outside the lawful exercise of art of healing," hypnotise girls aged less than 18 years or ons in a demented state, will be punished with fines and imnment.

IE Holiday Colonies Association of Munich completed the decade of its existence with the close of last year. During time 1,718 children have been sent to the country for three ur weeks; in 1889 alone as many as 434 were thus enabled joy a beneficial change of air. It is satisfactory to learn that ections of society in the Bavarian capital show a steadily ining interest in the good work of the Association.

STIC DEGENERATION OF THE BRAIN.—Pick (*Arch. f. Psychi- u. Nervenkrankh.*, Bd. xxi) has made a careful study of eight in which multiple cysts were found in the brain. In his unt of their character, position, and varieties, and also in his ion that they are due to dilatation of the perivascular lymph es, he confirms the views of previous authors; and he con- s that the obstruction causing the dilatation of the spaces is o some congenital mischief.

E FIELDS OF VISION IN HYPNOTISM.—In a paper which ap- ed in the *Neurologisches Centralblatt* for April 15th, Moravosik ds the curious case of a hysterical woman, aged 23, whose of vision could, during the waking condition, be considerenlarged by various peripheral stimuli, such as the applicaof warmth to the skin, or a tuning fork to the ear; and, during the hypnotic state, a sad suggestion narrowed the field and a cheerful suggestion considerably enlarged it.

THE ladies of Austria are making a determined effort to carry the medical citadel by storm. On May 7th another petition was presented to the Austrian House of Deputies by Dr. Jaques on behalf of the Vienna Ladies' Association praying for the admission of women to the classes of the medical and philosophical faculties in the various Austrian universities. The petition bears the signatures of 3,619 ladies, including the members of the Association for the Extension of Female Education, the Association of Viennese Housewives, governesses, school teachers, etc.

RUSSIAN PUNISHMENTS FOR ADULTERATION.—Severe measures have recently been taken by the Russian Government against adulteration and the sale of injurious substances as food. Persons convicted of these offences will be liable to a fine of 300 roubles (£48), or to imprisonment for three months. For a second offence these penalties will be doubled, and a third conviction will entail the loss of civil and political rights. Mr. Bright's doctrine of *caveat emptor* evidently finds no favour in the eyes of the Czar. Our own "free and enlightened" country might with advantage take a hint from such truly benevolent despotism.

HEREDITARY HYPOSPADIAS.—In the May number of the *Revue Biologique du Nord de la France*, M. P. Delplanque publishes a curious example of family proclivity to hypospadias. In the father, aged 45, the opening of the meatus is merely situated rather more to the under aspect of the penis than usual, but the deformity is well marked in three of his sons, aged respectively 11½, 9, and 8. Next in age come three daughters, all perfectly well formed, and, lastly, a fourth son, recently born, who presents the same abnormality as his elder brothers.

PROFESSOR MAGNUS VON HUSS, one of the leaders of the medical profession in Sweden, died at Stockholm on April 22nd, in his 73rd year. He had taken a prominent part in the organisation of hospitals and in the improvement of medical education. He was the author of several valuable works on professional subjects, the best known among them being a treatise on *Chronic Alcoholism*, for which he was awarded the Monthyon prize by the French Académie des Sciences, and another on the *Endemic Diseases of Sweden*.

THE French Medical Press Association has finally decided that a general "boycott" of the Berlin Congress by the medical profession of France would be inadvisable. The reasons given for this wise step are characteristic. It is pointed out that the Congress is, in fact, a French institution, the first meeting having been held in Paris; and, furthermore, that it would not be seemly for Frenchmen to leave the Belgians, Swiss, Spaniards, and Italians, most of whom only speak French, helpless in a Babel of German and English.

MEDICAL FACULTY OF BUENOS AYRES.—The number of students in the medical faculty of the University of Buenos Ayres during 1889 was 430, being an increase of 8 as compared with the preceding year. Of these, 66 were foreigners and 46 were women. Of the latter, one went through the ordinary curriculum of a fourth year's student, and the others attended the obstetric classes. Between March 1st, 1889, and the corresponding date in 1890, 43 degrees of doctor of medicine were conferred. The faculty has asked the Government for a grant of 60,000 pesos (about £12,000) for the erection of new buildings.

INTERNATIONAL MEDICO-LEGAL CONGRESS.—Mr. Clark Bell, the President of the New York Medico-Legal Society, and the moving spirit of the late Congress in that city, is determined that the next Congress shall be a great success, and his arrangements for the meeting in 1892 are consequently in a very forward state. He has succeeded in securing the countenance of the American Government in support of the Congress, and there can be little doubt that the letter of Mr. Blaine expressing his personal sympathy with the objects and purposes of the meeting will bring in many adherents. At the Congress of 1889 some 400 members were enrolled, and it may be confidently anticipated that the June meeting in 1892, which will also be held in New York, will see a very considerable increase over that number. Mr. Clark Bell has of course been nominated to the post of President, and Dr. M. Ellinger to that of Secretary, and a goodly list of vice-presidents has already been published. The office of the Medico-Legal Society is 57, Broadway, New York, where all communications respecting the Congress may be addressed to one of the officers.

PRESENTATION.—Dr. W. J. Richardson, who has been conducting classes at Keighley in connection with a branch of the St. John Ambulance Association, has been presented by the members of his class with a case of surgical instruments and an electric battery. It was stated that 34 females had passed out of the 39 who had entered, and of 42 males examined 35 had been successful.

MEDICAL VACANCIES.

The following Vacancies are announced:

BARNWOOD HOUSE HOSPITAL FOR MENTAL DISORDERS, near Gloucester.—Junior Assistant Medical Officer. Salary, £100 a year, with board, lodging, and washing. Applications to Dr. Needham, Medical Superintendent.

BIRMINGHAM LYING-IN CHARITY.—Honorary Medical Officer. Applications to Cranmer Gell, Secretary, 71, Newhall Street, by May 19th.

BOROUGH OF BOLTON.—Medical Officer of Health and Public Analyst. Salary, £400 per annum. Applications to R. G. Hennell, Town Clerk, Town Hall, Bolton.

BRIGHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon, unmarried and under 30 years of age. Salary, £120 per annum, with furnished apartments, coal, gas and attendance. Applications to Burgess Smith, Secretary, 76, West Street, Brighton, by May 30th. Election June 6th.

BRIGHTON, HOVE AND PRESTON DISPENSARY, Queen's Road, Brighton.—House-Surgeon. Double qualifications. Salary, £140 per annum, with furnished apartments, coals, gas, and attendance. Applications by May 27th to the Assistant Secretary, J. W. Stride. Appointment on June 3rd.

BRISTOL GENERAL HOSPITAL.—Assistant-Physician Accoucheur. Applications by May 27th to the Secretary, W. Thwaites.

BRISTOL GENERAL HOSPITAL.—Ophthalmic Surgeon. Applications by May 27th, to the Secretary, W. Thwaites.

CANCER HOSPITAL (FREE) Brompton, S.W. — Assistant House-Surgeon and Registrar. Salary, £50 per annum, with board and residence. Applications to the Secretary by May 19th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, 233A, Gray's Inn Road. House-Surgeon, qualified. Rooms and board. Applications to the Secretary by June 7th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board and residence and allowance for washing, but no salary. Applications to the Secretary personally or by letter any day.

CROYDON GENERAL HOSPITAL.—House-Surgeon, single. Salary, £100, increasing to £120, with board and residence in the hospital. Applications to the Secretary, Alfred G. Roper, by June 2nd.

ENNISTYMON UNION.—Ennistymon Dispensary. Medical Officer. Salary, £100 per annum and fees. Applications to Mr. Henry P. Reilly, Honorary Secretary. Election on May 24th.

GREAT BERKHAMSTED RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary to be settled by Joint Committee. Application to H. M. Turner, Clerk to Rural Sanitary Authority, Watford.

HANTS COUNTY ASYLUM.—Third Assistant Medical Officer. Doubly qualified. Age not to exceed 27; unmarried. Salary, £100 per annum, increasing to £125. Applications to the Committee of Visitors, Knowle, Fareham, by May 21st.

HARTLEPOOL UNION.—Medical Officer and Public Vaccinator for the District of Greatham. Salary (exclusive of extras), £30 per annum. Applications to George Kilvington, clerk, West Hartlepool, by May 28th.

KENT COUNTY LUNATIC ASYLUM, Chartham, near Canterbury.—Second Assistant Medical Officer; must be registered. Salary, £120 per annum, with furnished apartments, board and attendance. Applications with testimonials by May 19th, to Allen Fielding, solicitor, Canterbury.

LANCASTER INFIRMARY AND DISPENSARY. — House-Surgeon. Unmarried. Doubly qualified. Salary, £80 per annum with residence, board, attendance, and washing. Applications, on forms to be obtained, must reach the Secretary by May 31st.

LONDON COUNTY ASYLUM, Colney Hatch, N.—Assistant Medical Officer. Salary, £150 per annum. rising £5 annually to £180, with board, furnished apartments, and washing. Single, not more that 35 years of age; doubly qualified. Applications (on forms furnished) to R. W. Partridge, Clerk to the Asylums Committee, 40, Craven Street, Strand, by May 22nd.

LONDON COUNTY ASYLUM, Colney Hatch, N.—Junior Medical Officer. Salary, £120 per annum, rising £5 annually to £150, with board, furnished apartments, and washing. Single, not more than 35 years of age; doubly qualified. Applications (on forms furnished) to R. W. Partridge, Clerk to the Asylums Committee, 40, Craven Street, Strand, by May 22nd.

LONDON COUNTY COUNCIL.—Medical Officer for District D of the First Brigade. Must be a qualified Surgeon. Remuneration at the rate of 20s. per annum for each man in the force (present number 78), to include cost of medicine and appliances. Applications to be addressed to the Clerk of London County Council, endorsed "Application for post of Medical Officer" by May 22nd.

MACCLESFIELD GENERAL INFIRMARY.—Junior House-Surgeon. Doubly qualified. Salary, £70 per annum, with board and residence in the institution. Applications to Chairman, House Committee, by May 17th. Election May 30th.

MATER MISERICORDIÆ HOSPITAL, Dublin.—Resident Surgeon. Must be a duly registered physician and surgeon. Salary, £50 per annum, with furnished apartments, attendance, light, and fuel. Applications to the Secretary of the Medical Board by June 1st.

NORTH LONDON CONSUMPTION HOSPITAL, HAMPSTEAD AND LONDON.—Resident Medical Officer, double qualification. Honorarium, £40 per annum, with rooms and board. Applications to Lionel Hill, M.A., Secretary, 216, Tottenham Court Road, London, W., by May 19th.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE.—Resident Dispenser, qualified. Salary, £75 per annum. Applications to Secretary, Ivy House, Lady's Lane, Norwich, by May 27th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, Rangoon Municipality, by June 1st.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.— House-Surgeon, required by July 1st. Must possess some knowledge of ophthalmic surgery. Applications to T. Beattie-Campbell, Secretary, by June 1st.

SALFORD ROYAL HOSPITAL.—Honorary Medical Officer for the Pendleton Branch Dispensary. Double qualification. Applications to Alexander Hay, Secretary, by May 18th.

WALLASEY DISPENSARY.—Assistant or Junior House-Surgeon, to visit and dispense. Unmarried; must devote his whole time to the duties. Salary £80 per annum, with furnished apartments, coal, gas, and attendance. Applications by June 22nd to the Honorary Secretary, Mr. William Heap, Elm Mount, Penkett Road, Liscard, Cheshire.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £80 per annum with board, lodging and washing. Applications to the Secretary, The Infirmary, Chichester, by June 11th.

MEDICAL APPOINTMENTS.

BARKER, Frederick, L.R.C.P., M.R.C.S., appointed Resident Medical Officer to the Lincoln United Friendly Societies.

BECKER, J., M.B.Edin., C.M., L.R.C.P.Lond', appointed Medical Officer to the 1st Ward of the Colchester Union.

BOTT, Henry, L.R.C.P., M.R.C.S., reappointed Medical Officer of Health to the Brentford Urban Sanitary District.

BOYD, James Paton, M.B., C.M., appointed Junior House-Surgeon to the Royal Hospital for Sick Children, *vice* R. Barclay Ness, M.A., M.B.

CULLEN, Dr., appointed Medical Officer to the Carrickmacross Workhouse.

DE DENNE, T. V., M.R.C.S., L.R.C.P., appointed Certifying Factory Surgeon to the Cradley Heath and Old Hill District, *vice* Hugh R. Ker, F.R.C.S.E., resigned.

ERSKINE, ROBERT, M.D.Qu.Univ.Irel., M.Ch. and L.M., reappointed Medical Officer of Health to the Camborne Local Board.

FARR, Septimus Briggs, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Andover Urban Sanitary Authority.

FAULKE, Herbert Charles, L.R.C.P. L.R.C.S Edin., appointed Medical Officer for the 3rd District of the Lexden and Winstree Union.

HAIG, Alexander, M.A., M.D.Oxon, F.R.C.P., appointed Physician to the Metropolitan Hospital, *vice* J. G. Dudley, M.D.Cantab, made Consulting Physician.

HASLETT, W. J., M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior House-Surgeon to the Poplar Hospital, London, E., *vice* J. C. H. Dickinson, B.A., M.B.Cantab., resigned.

HEATON, Charles J., M.R C.S.,L.R.C.P., appointed House-Surgeon to the Cancer Hospital, Brompton, *vice* George H. O'Reilly.

HOBBES, J. L., L.R.C.P.Edin., L.M., M.R.C.S., reappointed Medical Officer of Health to the Bromsgrove Rural Sanitary Authority.

HODGSON, Dr., appointed Medical Officer for the Cropedy District of Banbury.

HOLLIS, Elphinstone, M.D.Edin., reappointed Medical Officer and Public Vaccinator for Woodbridge.

HUBBARD, F. E., L.R.C.P.Lond.,M.R.C.S.Eng., L.S.A., reappointed Medical Officer to the Diss (Norfolk) Local Board of Health.

HUSBAND, C., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Ripon City Council.

JONES, Dr., Belle Vue, Hirwain, appointed Deputy Coroner to the South Division of Breconshire.

KENT, Charles A., B.Sc., L.R.C.P.Lond., appointed Second Assistant Medical Officer to the Infirmary of the St. Olave's District.

LAWSON, H. A., L.R.C.P. and S.Edin., appointed Medical Officer to the Poorhouse, Edinburgh, *vice* William Lundie, M.B., C.M., M.A., B.Sc.

LISTON, Henry, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Southwick District of the Sunderland Provident Dispensary.

LIVETT, H. W., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Wells Urban Sanitary District.

LUCAS, R. H., M.R.C.S., L.S.A., appointed Assistant Medical Officer to the Suffolk General Hospital.

MACLURE, Herbert W., M.B., M.S., M.A.Camb., appointed Junior House-Surgeon to the Western General Dispensary, Marylebone Road, *vice* O. Klose, M.B.Edin.

MORISON, John, M.D.Edin., M.R.C.S.Eng., D.P.H.Camb., appointed Medical Officer of Health to the St. Albans Rural Sanitary District, *vice* Dr. Thompson.

NESS, R. Barclay, M.A, M.B., appointed House-Surgeon to the Royal Hospital for Sick Children, Glasgow, *vice* James Watson, M.B., C.M., resigned.

O'FLAHERTY, George W., L.M., M.R.C.P.Edin., L.S.A., M.R.C.S.Edin., appointed Assistant Medical Officer to the Down District Lunatic Asylum, *vice* E. E. Moore, M.D., T.C.D.

PRIDEAUX, T. E. P., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Wellington Rural Sanitary Authority.

RISDON, William Newt, M.D.Lond., L.R.C.P., M.R.C.S., appointed Second Medical Officer to the Sun Life Assurance Office.

ROBINSON, Alfred, M.D., appointed Deputy Medical Officer of Health to the Rotherham Town Council.

SON, George Henkell Drummond, M.R.C.S., L.R.C.P., M.B.Lond., appointed House-Physician to the West London Hospital, Hammersmith Road.

E, Reginald, L.K.Q.C.P.I., L.R.C.S.I., appointed Medical Officer to the Middleton Cheney District of Banbury.

IRA, João, L.R.C.P. and S.Edin., L.F.P. and S.Glas., appointed Assistant House-Surgeon to the West Ham Hospital, Stratford.

T, George William, M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to the Methley Urban District.

LEY, P. Macleod, M.R.C.S., L.R.C.P.Lond., appointed Clinical Assistant to the Aural and Skin Departments, Westminster Hospital.

DIARY FOR NEXT WEEK.

MONDAY.

N POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Mr. Edmund Owen: Concerning the Epiphyses.

TUESDAY.

LOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Mr. Bruce Clarke: 1. Spontaneous Fracture of Renal Calculus. 2. Calcifying Sarcoma of Breast. Mr. James Berry: Fibrochondroma of Tongue. Dr. Rolleston: 1. Tubercular Strictures of Colon. 2. Volvulus of small Intestine. Dr. Colcott Fox: Bones from a case of Scurvy. Dr. Joseph Griffiths: 1. Carcinoma of Testis with Growth into the Inferior Vena Cava. 2. Simple Necrosis of Lumbar Vertebræ. Dr. Samuel West: Tumour in Portal Fissure growing into Vena Cava and Heart. Dr. Walter K. Sibley: Psorospermia in relation to Tumour Formation. Mr. T. Nunn: Cystic Disease of Breast complicated with Cancer. Dr. Handford: 1. Nephritis in Enteric Fever. 2. Polypi of Large Intestine. Dr. Hale White: Contracted Granular Kidney in young persons. Dr. Wheaton: Actinomycosis in a Child. Dr. Wethered: Intestine in Psilosis (tropical diarrhœa). Dr. Sidney Martin: Thrombosis of Innominate, Jugular, and Subclavian Veins causing Chylous Ascites. Dr. Delépine: Hemianopsia with softening of Left Cuneus. Mr. L. Bidwell: Fibroid Polypus of Trachea. Dr. Peeke Richards: Aneurysm and Embolism of Middle Cerebral Artery. Card Specimens.—Dr. Hale White: Dermoid Cyst attached to the Pericardium. Dr. Handford: 1. Carcinoma of Lung. 2. Contracted Granular Kidneys in a Child. Mr. Hurry Fenwick: Unusually large Urethral Calculi. Mr. A. F. Voelcker: Retroperitoneal Teratoma. Mr. Shattock: 1. Separation of Radial Epiphysis. 2. Necrosis in Ossifying Chondroma.

POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On Dementia. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Acne.

WEDNESDAY.

POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Cecil Y. Biss: On the Diagnosis of Pleural Effusions. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Q. Silcock: On Ophthalmoscopic Cases.

METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 7 P.M.—Mr. W. B. Tripp: Rainfall of the Globe. Mr. W. H. Dines: On Pressure Phenomena.

MICROSCOPICAL SOCIETY, 20, Hanover Square, 8 P.M.—Mr. E. M. Nelson: Micrometric Measurements with the Microscope.

THURSDAY.

POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, W.C.—Dr. Howard H. Tooth: On Affections of the Cranial Nerves. The New Infirmary, Paddington, 5 P.M.—Dr. Broadbent: Clinical Lecture on Medical Cases. 5 P.M.—Dr. Savill: *Post-Mortem* Examinations.

FRIDAY.

POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton. 4 P.M.—Dr. Cecil Y. Biss: On the Treatment of Pleural Effusions.

AL SOCIETY OF LONDON, 8.30 P.M.—Dr. F. R. Fairbank: A case of Retention of Urine from a Hydatid Cyst in the Pelvis. Mr. G. R. Turner: A case of Thyroid Tumour apparently Malignant which almost disappeared after Tracheotomy, and subsequently on re-growth was undoubtedly Sarcomatous. Mr. Bruce Clarke: A case of Urethral Stricture four years after Electrolysis: Encysted Vesical Calculi: three operations by Lithotrity and three by Suprapubic Lithotomy, one of which was performed through the Peritoneum. Mr. H. H. Taylor: Cases illustrating the treatment of Phthisis by the Inhalation of Superheated Air.

BIRTHS, MARRIAGES, AND DEATHS.

ge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., sum should be forwarded in Post Office Order or stamps with the notice not han Wednesday morning, in order to ensure insertion in current issue.

MARRIAGES.

Y—BRUNNER.—On April 22nd, at Witton Church, Cheshire, T. W. dey, M.R.C.S.Eng., The Poplars, Thrapston, to Grace, eldest daughter hn T. Brunner, M.P., Winnington Old Hall, Northwich, and 9, Ennis Gardens, S.W.

S—LILLY.—On the 7th inst., at Christ Church, Hampstead, N.W., by Rev. G. F. Head, vicar, Thos. Marsden, M.D., Bridgwater, to Agnes le, daughter of Edw. Lilly, J.P., Bridgwater.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headin s.*

QUERIES.

M.D. asks for information as to any cases of alcoholism of many years' duration in women who had been cured by any other means than by external restraint.

GRATES.

DR. J. H. SCOTT, M.K.Q.C.P. (Camberley, Surrey), writes: Will "A. T. W." kindly give the name and address of the makers of the "Sandringham Grate" recommended in the JOURNAL of May 3rd.

SURGEON would feel grateful to any member for advice as to the best way to harden and prevent objectionable perspiration from the feet. Alum, bismuth, lin. belladon., boracic acid, have all been used with but little result. So great is the heat from the feet that even expensive shoes crack and become useless after about six weeks' wear. Any advice about a ventilating shoe would be very acceptable.

ANSWERS.

A COUNTRY PRACTITIONER.—The question is not a medical one.

A MEMBER.—The Library of the British Medical Association is at present one for reference, and not a lending library.

MEDICUS (Dublin).—The English service in lunatic asylums is much the same as in the lunatic asylums of Ireland. The appointment of assistant medical officers usually rests with the medical superintendent. Promotion as a rule is slow, and political influence is happily of little account. Much depends upon individual effort and ability.

NATIONAL TEMPERANCE LEAGUE.—The Aubanel prize essay, by M. Paul Sollier, entitled, *Du Rôle de l'Hérédité dans l'Alcoolisme*, may be obtained at the office of the *Progrès Médical*, 14, rue des Carmes, Paris, or from MM. Lecrosnier et Babé, Place de l'École de Médecine, Paris.

NOTES, LETTERS, ETC.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

MR. ROBERT FREEMAN (Secretary) writes: I am desired to send you a copy of a resolution passed by the Council at their last meeting, namely:

"That the best thanks of the Council of the Royal Medical Benevolent College be given to the Editor of the BRITISH MEDICAL JOURNAL, for his kind advocacy of the claims of the pensioners and foundation scholars of the College."

ERRATA.—The following errata occur in Dr. V. D. Harris's paper in the JOURNAL of May 10th: P. 1062, column 2, line 26, for "1 to 5" read "1 to 0.5"; p. 1063, Table No. 3, omit "cannula trocar"; p. 1063, Table No. 10, for "bend" read "laud"; p. 1063, column 2, line 13 from bottom, for "operation" read "observation."—In the same number, p. 1068, col. 2, line 8, for "Corkey" read "Cockey."—Dr. Fredk. H. Alderson, referring to the report of the last meeting of the Harveian Society, says:—Please in my reply correct the words "*post partum*" for "*ante partum*." In all my cases of placenta prævia I have never had any flooding afterwards or any severe bleeding. I would also be glad to add in reply to Dr. Boxall I never advocated the removal of the fœtal part of the placenta, but that it was certain lobes (cotyledons) of the maternal face of the placenta, that is, the uterine and not the fœtal surface that had been removed.

AN APPEAL.

SURGEON-GENERAL W. CAMPBELL MACLEAN, C.B., M.D., writes: I have before me letters of a very distressing nature describing the destitute condition of an unfortunate member of our profession. There is a strong and well founded dislike, and something more, on the part of members of our honourable profession to vendors of secret remedies. Warburg, the author of the well known febrifuge that goes by his name, lay for many years under this reproach; but this reproach has long been taken away by the publication of the formula.

Be this as it may, through every channel open to me I have proclaimed the value of this remedy in malarial fevers, and honestly believe that it has saved a great many valuable lives. At the advanced age of 86, with a helpless widowed daughter and two children in bad health, Dr. Warburg now struggles in distress for the merest necessaries of life.

I am requested to say that subscriptions will be received in aid of this afflicted family by the Hon. Sydney Holland, 44, Bryanston Square, London, W., who will see that the money is applied in the best way for their relief.

VINEGAR IN URTICARIA.

DR. W. H. BROWNE (Aldbrough, Hull) writes: I notice an article in the JOURNAL of May 3rd respecting the external use of vinegar for urticaria, by Mr. J. S. Swain. May I point out that I have been in the habit of using for a number of years a 50 per cent. solution of toilet vinegar for this form of skin irritation; it is a most elegant and satisfactory preparation, and in the case of children acts like a charm.

Again, in my own case, I often suffer from a species of eczematous urticaria of the hands, from the handling of various powerful explosives in my labora-

tory, and the first application alone is often sufficient to stop all further irritation.

It is a well known fact, in some country districts, how much people suffer from that minute insect called the "harvest bug," the remedies for which, preventative and curative, are legion; in the majority of cases the preventative treatment is useless, but after the insect penetrates the skin (the so-called bite) the application of toilet vinegar in an undiluted form is one of the best applications that can be applied, and soon gives relief to the intolerable burning and itching sensation, which is particulary distressing in the case of children.

Antiseptic After-Treatment of Vaccination.

Mr. Robert Capes, M.R.C.S.Eng. (Kingston-on-Thames) writes: Dr. C. R. Illingworth, in his memorandum to you on this subject in the Journal of May 3rd, says: "No more than two small lines should be made.....Of course if the operator be a public vaccinator he will put four such marks on the child's arm." May I, through the medium of the Journal, ask the reason of this. In Shaw's *Manual of Vaccination Law*, p. 23, it is stated "that of those having two vaccine cicatrices 4.70 per cent. of the small-pox cases treated in the Highgate Small-Pox Hospital died; of those having four or more vaccine cicatrices only 0.55 per cent. died." If, as it seems reasonable to conclude from these statistics, the protective power of vaccination increases with the number of cicatrices, why should private patients be less protected than those who seek the services of the public vaccinator? At this time, when the opposition to vaccination is daily becoming stronger, medical men ought to do all in their power to carry it out efficiently, for every case of failure is but another stone torn from the foundation of this grand discovery. If two places are sufficient, then why should the poor be compelled to submit to four; but if it is a fact that four cicatrices are more protection, the course to be adopted seems plain. I feel sure that Dr. Illingworth, with his ten years' experience as a public vaccinator, must be able to throw considerable light on this subject, and give an opinion the weight of which will be felt by all who read it. What we want to know is whether four vaccination cicatrices are a better protection than two; whether there is more risk run in vaccinating in four places than in two; and, if so, whether the risk is equal to, or greater than, the benefit derived.

Dr. C. R. Illingworth (Accrington) writes: In reply to Mr. Barrett, permit me to say that he cannot prove his assertion that "inflammation due to the incision should follow upon the first day."

Again, public vaccinators are obliged by law to make at least four marks, whilst private practitioners need only make half a one for the most "successful" vaccination possible.

With regard to instruments, "taste" should be set aside for "efficiency with least mutilation of the patient," and a couple of needles put through a phial cork compare very favourably with some eight or ten instruments I have seen.

I find that a mixture of carbolised zinc and borax ointment, applied on the eighth day, effectually prevents erysipelatous or erythematous mischief, and it is most easily applied.

Pathological Society of London.

Member writes: The suggestions of the Council of the Society to which you referred recently were adopted at a special general meeting held on Tuesday, May 6th. In the course of the discussion reference was made to the question of the *Transactions* The Pathological, like all the other old metropolitan societies, excepting the Obstetrical, arranges its archives by each medical year. There are sundry advantages in publishing *Transactions* by the calendar year. The annual volume issued by a Society is at least as important as its meetings. It is constantly used for reference. Nothing is more irksome to workers and writers than the danger of misleading readers by misquoting the number or year of a volume. This accident is very liable to occur when *Transactions* are arranged by the medical year if the date on the back of each volume only represents the first half of that year. Thus the volume marked 1885 does not include papers read in the autumn of that year. In the case of the Obstetrical Society this source of error is impossible, as the volume marked 1885 is devoted to papers, etc., read between January and December in that year, inclusive. It is doubtful, however, if the other societies will imitate this practice, as the change from the old system would involve great, though temporary, inconvenience.

COMMUNICATIONS, LETTERS, etc., have been received from:

Professor R. Koch, Berlin; Our Vienna Correspondent; W. T. Brook, M.B., Oxford; Dr. C. R. Illingworth, Accrington; Mr. E. P. Hardey, Hull; Mr. T. Bell, Uppingham; Dr. R. J. Garden, Aberdeen; W. J. Richardson, M.B., Keighley; Mr. S. McBoyd, Southport; Dr. F. Beach, Dartford; Mr. W. H. Browne, Aldbrough; Mr. W. Sturges, Beckenham; Mr. G. H. Corbishley, Macclesfield; Dr. Ward Cousins, Southsea; Mr. A. E. Fletcher, London; The Secretary of the Children's Country Holidays Fund, London; E. A. Edelsten, M.B., York; Dr. R. Neale, London; Dr. O. Wood, London; Dr. E. Seaton, London; Dr. J. Anderson, Ulverston; Dr. G. H. Mackenzie, Edinburgh; Mr. G. B. Masson, Saxlingham; Dr. A. W. Edis, London; Dr. W. T. G. Robinson, Poole; Mr. R. Black, Brighton; Dr. G. Thin, London; Dr. J. W. Moore, Dublin; Dr. J. Morison, St. Albans; The Registrar of the Royal College of Surgeons in Ireland, Dublin; Sir William Roberts, London; Messrs. T. Christy and Co., London; Dr. R. P. Smith, London; Dr. Saundby, Birmingham; Mr. J. W. Leng, London; Mr. R. Sleman, London; Dr. Major Greenwood, London; Dr. T. D. Reed, Montreal; Dr. Munk, London; Dr. R. W. Burnet, London; Dr. H. Page, London; Dr. F. W. Wade, Birmingham; Mr. T. Walley, Edinburgh; Mr. Jonathan Hutchinson, London; Messrs. Charles Griffin and Co., London; Mr. L. Wickham, Paris; Sir James Paget, London; Messrs. Blondeau and Cie., London; F.R.C.S.; Mr. W. J. Hardy, London; Mr. J. Odling, London; Mr. P. R. Stevens, Staplehurst; Mr. E. Denison, Leeds; Mr. A. F. Williams, Guilsborough; Mr. Gerard Smith, Upper Clapton; T. D. Poole, M.B., Poulton-le-Fylde; Mr. L. Mark, London; Mr. P. E. Hill, Crickhowell; Mr. B. L. Tandy, Haverhill; Mr. J. H. Scott, Camberley; M.S.; Our Egyptian Correspondent, Cairo; Dr. H. F. A. Goodridge, Bath; Mr. S. Rumboll, Leeds; Mrs. F Pakenham, London; Mr. J. D. Hillis, Dublin; Dr. A. G. M. Hattie, Antigua Mr. R. Freeman, London; Mr. P. M. Yearsley, London; E. Lloyd Jones, M.B Leeds; Mr. T. Britton, Harrogate; Mr. N. Dobson, Clifton; Messrs. W. Bush and Co., London; Mr. J. A. Brand, London; Mr. G. H. Barlin Birmingham; Country Practitioner; Bengal Medical Service; The Secretar of the British Guiana Branch of the British Medical Association; Dr. Sheen, Cardiff; A Member; Surgeon-General Cornish, London; Mr. G. H Oliver, Vienna; Mrs. E. Harren, Worthing; A. D. Ellis, M.B., Toronto; D Rentoul, Liverpool; Mr. E. S. Bishop, Manchester; Lady George Hamilto London; Mr. J. Comley, Stockton-on-Tees; Mr. A. W. Mayo Robson, Leed Dr. J. G. McKendrick, Glasgow; Dr. C. E. Sajous, Philadelphia; Dr. Mitchell, Barnard Castle; E. F.; Dr. E. Berdoe, London; The Secretary the British Nurses Association, London; Mr. T. F. B. Logan, Southvill Dr. P. T. Duncan, Croydon; Mr. R. G. Kellett, Halstead; Dr. H. Wood London; Surgeon-Major; Mr. E. Kingscote, Salisbury; Dr. Edridge Gree London; Dr. J. Johnston, Bolton; Dr. T. More Madden, Dublin; D Maclean, Yeadon; Miss Webber, London; Mr. A. W. Harris, Southampto Dr. E. Thompson, Omagh; Dr. V. Lush, Weymouth; Messrs. Burrough Wellcome, and Co., London; Dr. Sinclair, Dundee; Mr. T. J. Verra Brighton; Mr. J. L. A. Aymard, Ipswich; Dr. Balding, Royston; Our Pa Correspondent; Mr. J. G. W. Bullock, Philipstown, Cape Colony; Mr. G. Crouch, London; Mr. R. Gubbins, Leeds; Aqua Pura; Mr. G. N. Robin London; Dr. E. J. Tilt, San Remo; Verb. Sap.; W. M. O.; Dr. J. Wharto Oldham; Dr. Blackman, Portsmouth; Dr. G. Balfour, Wimbledon: Dr. Campbell Pope, London; Mr. G. D. Deeping, Southsea; Mr. W. Marriot London; Lex; Dr. R. Bell, Glasgow; Observer; Mr. R. Ayton, Kilmarnoc Dr. G. B. Batten, London; Mr. C. C. Teacher, Edinburgh; Scrutato Critic; Dr. H. Cooper Rose, London; Professor M. Foster, Cambridge; Symes Thompson, London; Dr. A. Haig, London; Mr. T. V. de Denn Cradley; Dr. F. Halderson, London; Mr. G. E. Williamson, Newcastle-o Tyne; Jeyes's Sanitary Compounds Company, London; H. W. Seager, M.I Hampton Court; Dr. Harris, Southampton; Mr. H. E. Trestrail, Glasgo Dr. Arlidge, Stoke on-Trent; Mr. W. Allen, Higher Broughton; Mr. A. Frere, Clayton-le-Moors; Mr. T. Holmes, London; Dr. F. T. Paul, Liv pool; Mr. A. W. Barnley, Wigston; Surgeon-General Maclean, Southampto Mr. A. W. Nankivell, Chatham; Mr. Young J. Pentland, Edinburgh; Mr. W. Sandoe, Leicester; Mr. A. E. Barker, London; Mr. W. Heap, Liv pool; Mr. J. H. Dudgeon, Workington; Mr. A. B. Norman, Oakham; Mr. S. Ellis, Gloucester; Dr. W. T. Boreham, Torquay; R. B. Ness, M.B., Gl gow; Our Birmingham Correspondent; Dr. F. T. Heuston, Dublin; Mr. W. Marshall, Nottingham; Dr. J. Mackenzie Booth, Aberdeen; Dr. C. Adams, Sheffield; Dr. G. Henty, London; Dr. R. Orr, Glasgow; Dr. B. Y London; Mr. J. Ackery, London; Mrs. Sinclair, London; Mr. J. R. Upt London; Mr. C. A. Patten, Ealing; Mr. W. J. Haslett, Redruth; etc.

BOOKS, etc., RECEIVED.

On Unsoundness of Mind in its Legal and Medical Considerations. By J Hume Williams. London: William Clowes and Son. 1890.

A Manual of Clinical and Practical Pathology. By W. Essex Wynter, M and Frank J. Wethered, M.D. London: J. and A. Churchill. 1890.

Climatoterapia de la Tuberculosis Pulmonar en la Peninsula Española, Baleares y Canarias. Por Tomás Zerolo. Santa Cruz de Tenerife: cente Bonnet. 1889.

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A REPORT
ON
E DESTRUCTION OF MICRO-ORGANISMS DURING THE PROCESS OF INFLAMMATION.

By M. ARMAND RUFFER, M.A., M.D.Oxon.,
thologist and Registrar to the City of London Hospital for Diseases of the Chest.

attention of pathologists has often been arrested by the fact the introduction of a living contagium into animals gives to lesions differing in intensity, naked-eye and microscopical earances, according to the strength and quantity of the inocud virus, and also according to the species, age, etc., of the nal into which the virus has been, accidentally or artificially, oduced.

mong the lesions consecutive to the subcutaneous inoculation iving virus, none present a greater interest than those met at the spot where living micro-organisms have been introed under the skin. In some infectious diseases, diphtheria, for nple, the bacilli which are the primary cause of the disease found in the diphtheritic patch, that is, in the primary lesion there only. In other words, diphtheria is the type of a local ctious disease, the general symptoms being caused, secondarily, he absorption of the poisons secreted by the specific bacilli of itheria. In other infectious diseases—tubercle, glanders, for nple—the primary lesion is slight; the bacilli invade the sysby stages, and produce well-marked local pathological changes ne glands, spleen, liver, lungs, etc.; in fact, in every organ in ch, from mechanical or other reasons, the specific microanisms are temporarily arrested. Other micro-organisms, such hose of fowl-cholera when inoculated into non-resistant anis, give rise to no local symptoms whatever. The spot where virus is introduced shows no signs of inflammation other than e produced by the slight wound; but if the spleen, liver, neys of the inoculated animal be examined shortly afterds, the characteristic bacilli are found in enormous numbers very one of these organs. The infective process has then be- e general.

mong the micro-organisms which, when inoculated into anis, produce well-marked naked-eye and microscopical lesions he point of inoculation must be reckoned the characteristic lli met with in the disease generally called quarter-evil in country (*charbon emphysémateux*, *Rauschbrand*). This dis-, as Arloing, Cornevin, and Thomas have proved, is caused by a ific bacillus, to which these observers have given the name of *erium chauvoei*.[1] The bacilli are anaërobic organisms, and be cultivated in beef-broth or gelatine, provided these media e been freed from air by a stream of some inert gas such as rogen or ordinary coal gas. The bacilli closely resemble in earance those of anthrax, but differ from the latter in being motile, somewhat shorter and thicker. Lastly, the bacilli n contain well-defined spores at each end.

hen inoculated subcutaneously into non-resistant animals, is, in animals such as gninea-pigs, in which the disease ends lly, the bacilli produce a highly characteristic lesion at the t of inoculation. The lesion consists of a tumour containing a e amount of more or less clear fluid, in which float a small ber of amœboid cells. The neighbouring muscles are highly matous, owing to the presence of a large quantity of clear us fluid and migrating cells. In guinea-pigs the whole proseems to end there, for, although the animal invariably dies n a sufficient number of bacilli are introduced under the skin, the characteristic pathogenic micro-organisms are found at the point of inoculation only and nowhere else.

The inoculation into guinea-pigs affords, on account of the constant strength of the virus, excellent opportunities for studying the processes going on at the seat of inoculation. Arloing, Cornevin, and Thomas have shown that the muscles of animals which have died of quarter-evil dried at a temperature of 100° to 104° contain an attenuated virus. This virus, when inoculated into large animals, such as bullocks, produces a very mild form of the disease, from which these animals recover. By drying the virus at varying temperatures the same observers have obtained two kinds of virus, which I shall designate as A and B. The virus A is the stronger of the two, and, provided sufficient quantities of it are used, its subcutaneous introduction into a guinea-pig is followed by death of the animal after a period varying from forty to forty-eight hours. The virus B, on the other hand, when inoculated in small quantities, is followed by a passing temporary and localised lesion. When enormous doses of B are introduced subcutaneously, death follows in four, five, or six days. These two kinds of virus, when contained in a well-stoppered bottle and in a dry place, keep their virulence for any length of time. The dose of virus to be used can be accurately weighed, and by varying the strength and dose a mild or malignant, acute or chronic, form of the disease is produced at will.

By carefully studying the naked-eye and microscopical appearances of the point of inoculation, it is possible to answer the following question: "Is the inflammatory process going on at the seat of inoculation a protective process or not?" The answer to that question is, as we shall see, in the affirmative

The next query then is: "By what process or processes is the animal body protected against the invasion of the pathogenic micro-organisms?" Theoretically speaking, there are four ways in which the body may be protected:

1. "The bacilli may not meet in the surrounding media with the physical conditions and chemical materials necessary to their existence." It is clear that if micro-organisms do not find the necessary heat, moisture, and food, they must remain in the same latent condition as the dried virus. This is not the case, however. On the contrary, the bacilli are called into active life again as soon as they are introduced under the guinea-pig's skin.

2. "The tissues of the animal may mechanically impede the passing of bacilli into the system." It is a well-known fact that certain tissues oppose a mechanical barrier to the entrance of pathogenic micro-organisms. If not abraded, the surface of a healthy skin, with its thick layer of epidermis, is not easily penetrated by microbes, and the same may be said of the dorsal surface of the tongue. On the other hand, virulent bacilli, such as anthrax bacilli, which are endowed with slight power of movement only, when introduced under the skin, soon force their way through the loose meshes of the surrounding connective tissue into the neighbouring lymphatic or blood vessels. The bacillus of quarter-evil is endowed with considerable motility, and there is no reason to suppose that it could not penetrate into the blood or lymphatic vessels. The mechanical resistance of the surrounding tissues as a cause of immunity in this disease must, therefore, be excluded.

3. "The liquids which during the process of inflammation pass out of the vessels may have a toxic influence on the pathogenic bacilli," or

4. "The amœboid cells present in the primary lesion may take a share in destroying micro-organisms and arresting their progress."

I propose to show that the liquids of the guinea-pig's organism, far from having a deleterious action on the micro-organisms of quarter-evil are, on the contrary, an excellent cultivating medium for the latter. Further, I hope to prove that the destruction and arrest of micro-organisms at the point of inoculation are due chiefly, if not solely, to the action of the amœboid cells present in the inflammatory effusion.

I have to thank here the staff of the Laboratoire de Pathologie Générale in Paris for providing me with the necessary material and animals, although I alone am responsible for the views expressed in this paper.

The animals used in my experiments were always adult guinea-pigs. The mode of inoculation was the following: The animal being under the influence of ether or chloroform the hair was cut with scissors, the abdomen or back shaved and thoroughly cleansed with soap and water and a strong (1 to 500) solution of

[1534]

[1] he term bacillus chauvoei is a far better name for it, for the micro-organpresents all the characteristics of a bacillus, and I therefore adopt it.

corrosive sublimate. A small incision, about $\frac{1}{8}$ of an inch, was made with an aseptic knife, cutting through the skin and subcutaneous tissue until the muscular layer was exposed. The muscles were then separated from the subcutaneous tissue with the handle of the knife. A small but sufficent quantity of the powder, containing the strong virus (A), was introduced with the point of the knife between the muscles and subcutaneous connective tissue, the opening closed with a silk suture, cleaned with sublimate solution and covered with collodion. Needless to say, the small wound so made never showed the slightest trace of inflammation, and was always firmly healed by the next day.

At the end of twelve to eighteen hours a small hard swelling is formed at the seat of inoculation. This tumour is evidently fluid, and crepitates on pressure as if its contents consisted of gas and fluid. The swelling increases in size, and soon becomes harder and more resistant. The parts surrounding it are then considerably thickened, the walls of the abdomen, for instance, feeling twice as thick as natural. After twenty-four hours or so, the animal shows evident signs of a general illness; it refuses food, does not run away when touched, gets more and more drowsy and generally dies just within a period of forty-eight hours after the inoculation. The *post-mortem* examination was always made within ten minutes of the death of the animal.

On examining the tissues at the spot where the inoculation had been made, the remains of the powder containing the virus are found lying in a kind of cavity which is full of almost clear fluid. The walls of this cavity are lined by a thin, greyish and fibrinous layer. The muscles surrounding the cavity are highly œdematous, so that on cutting through them, a large quantity (10 ccs. to 20 ccs. or more) of clear transparent fluid may be collected. This fluid is, occasionally, strongly tinged with hæmoglobin. The muscles and neighbouring parts present no other naked-eye changes.

The nearest lymphatic glands are sometimes slightly enlarged, but the other internal organs appear quite normal as a rule. Occasionally, there is a very slight enlargement of the spleen, together with congestion of the liver and kidneys. Sometimes, on the other hand, the latter organs appear to be somewhat paler than natural.

The microscopical appearances are, however, of far greater interest. To study them fully, the development of the bacilli must be watched and the processes going on in the walls of the cavity containing the virus, in the surrounding muscles and other organs must be followed.

It has already been stated that the virus used is carefully dried, and, as bacilli require moisture in order to show any signs of life, we must suppose that their activity before inoculation is latent. If, twelve hours after the inoculation, a sharp capillary pipette is introduced into the centre of the tumour already formed, a little of the clear transparent fluid carefully drawn off and examined under the microscope, an enormous number of bacilli are found moving about in the liquid. Here and there a leucocyte is seen. As a rule the wandering cells met with at this stage are empty, but occasionally one holds two, three, or more bacilli in its interior (see Fig. A, Nos. 1, 2, 3).

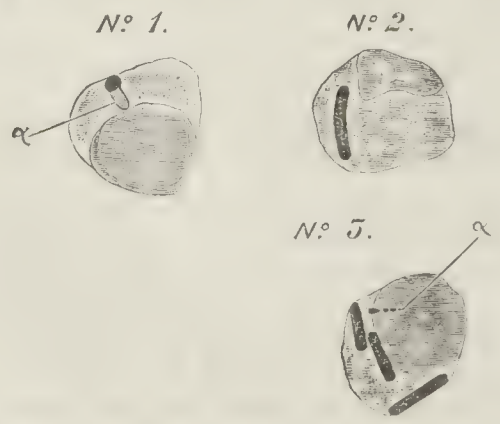


Fig. A. Serous exudation twenty-four hours after inoculation with virus A. Ve uvin and gentian-violet stain. Vérick microscope; oc. 3, × $\frac{1}{12}$; oil mmersion; Abbé's condenser. 1. Microphage containing (*a*) partially digested bacillus. 2. Microphage containing two bacilli joined end to end. 3. Microphage containing bacilli; *a* represents a bacillus in the ast stage of digestion.

In cover-glass preparations stained in an alkaline solution of methyl blue, or better gentian violet, the bacilli floating in the liquid are, to all appearances, perfectly normal and, according to the reagent used, stain of a very lovely dark blue or purple colou Most of the bacilli contained in the cells stain normally, but her and there an intracellular bacillus shows signs of degeneratio These signs of degeneration need not be insisted on here, as the will be fully described when the destruction of the bacilli takin place in the abscess wall is spoken of.

I must call attention here to a frequent source of erro when the object in view is to study in cover-glass preparation the relation of the cells to the micro-organisms they contai It is of great importance that the cover glass should not be passe through the flame, as the cells are frequently damaged, burs and their contents scattered by heat. Hence, instead of passin the cover glass through or holding it over a flame, it is bette to place it in an incubator for some little time and let it dry mor slowly. I feel convinced that some of the contradictory result obtained by observers who have studied the question of phagocyt are chiefly due to this error in manipulation.

A drop of the liquid in the tumour withdrawn and examined a the end of forty-eight hours, or immediately after the animal death, contains an enormous number of free bacilli. The fluid, a a rule, is somewhat turbid, owing to the presence of wanderin cells in fairly large numbers. These amœboid cells belong t the small variety (microphages), and are either uni- or multi nucleated. The nuclei possess hardly any intranuclear net work, and are surrounded by a small amount of protoplasm onl Many of these cells contain bacilli, some in enormous number as many as ten micro-organisms being sometimes enclosed in on cell. The micro-organisms in the liquid show no signs of degen ration, whilst some of the bacilli contained in the amœboid cel have clearly undergone a process of digestion. Floating in th liquid are seen remnants of the dried blood used for the purpose inoculation.

It would appear, therefore, that the fluid constituents of th inflammatory effusion, far from having any harmful or tox effect on the bacilli, have, on the contrary, the power of stim lating the latter into active life. The bacilli seemingly find the inflammatory fluid poured out around them all the conditio of heat, moisture, and food necessary to their existence. On th other hand, the amœboid cells of the inflammatory effusi have the property of taking into their interior and destroyi bacilli—a property of which we shall have more eviden presently.

In order to get a clear idea of the processes taking place the wall of the cavity—which, for brevity's sake, I shall call th abscess wall—this part and a few millimètres of the surroundi tissues must be removed immediately after death with sha scissors and plunged at once into absolute alcohol. After remai ing in this fluid for forty-eight hours at least, the alcohol extracted with chloroform or ether, and the piece of tissue soak in paraffin at 42° C. for twenty-four hours or longer. The se tions must be fixed on the glass slide by means of glyceri albumen and double stained with alum carmine and genti violet, or logwood and gentian violet. Both modes of staini give very good results; but whereas the carmine-violet sectio are, perhaps, prettier and clearer, the relation of the bacilli to t cells is more easily studied in the logwood-gentian-violet pr parations.

On microscopical examination, the free aspect of the absc wall is covered everywhere by an enormous number of bacil lying free in the coagulated exudation fluid, staining in a p fectly normal manner, and showing, to all appearances, no trac of degeneration.

The abscess wall itself consists of an innumerable number small migrating cells. Some of these amœboid cells have b one single nucleus, others contain two, three, or four nuclei. many, the nucleus has the triradiate aspect found in oth inflammatory conditions—for example, pneumonia. The amou of protoplasm round the nucleus is very small as a rule. Clo to the free surface of the abscess wall these cells are press together in enormous numbers, and so closely packed that t contours of each are scarcely to be recognised.

In the deeper regions of the abscess wall the cells are mass together less closely. The muscular tissue around contai within its meshes and between its fibres, a large number of sm round migrating cells. The latter are met with even in pla where not a single bacillus is to be seen. Here and there, especia in the deeper strata of the abscess wall, a few cells occur, which a larger, have a single clear vesicular nucleus, with a well-mark intranuclear network, surrounded by a large amount of coa

toplasm, and not infrequently contain in their interior rem-
ts of degenerated bacilli and leucocytes. These cells probably
resent the first stage in the development of macrophages. They
not attain their full size owing to the early death of the
mal. On the whole, macrophages play quite a secondary part
his disease.

Many leucocytes found close to the free surface of the abscess
ll contain in their interior a large number of characteristic bacilli.
vertheless, many micro-organisms remain quite free between
cells in the surrounding medium, which has been coagulated by
action of the hardening reagent (see fig. B, *f. b.*); but whereas
latter micro-organisms do not show signs of degeneration,
ny of those contained in the migrating cells have undoubtedly
lergone a process of disintegration. The number of micro-
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Fig. B.—Section of part of the abscess wall of a guinea pig which died forty-eight hours after the inoculation of virus A. Carmine and gentian-violet stain. Vérick microscope; oc. 1 × $\frac{1}{12}$; oil immersion; Abbé's condenser. M.F. = muscular fibres. Microph. 1, 2, 3, 4 = microphages containing bacilli. *f.b.* = bacilli lying free in the exudation fluid. For other particulars, see text.

. I have been unable to satisfy myself that the fixed cells of
connective tissue take any part whatsoever in the process of
mmation or in the destruction of micro-organisms.

e muscular fibres, even at some distance from the point of
ulation, are separated by a large amount of coagulated liquid,
hich float a few leucocytes. In sections stained with carmine
gentian violet no bacilli are met with between the muscular
lles, even where the œdema is most intense. The serous
ation and the emigration of white corpuscles in that situa-
are not, therefore, due to the presence of the bacilli as such,
o some other cause, most probably to the irritation produced
e absorption of the products of the life of micro-organisms.
e histological changes in the vessels and muscles need not
n us here, as they are immaterial to the object of this paper.
ymphatic glands, spleen, liver, heart, etc., if examined im-
mediately after death, contain no bacilli; at least, none could be seen on microscopic examination. From the many difficulties attending the making of cultures of the *bacillus chauvoei*, it would not be right to conclude that the various organs of the inoculated animal contain no bacilli at all, but we may conclude that, at any rate, the number of such bacilli is small.

The changes in other organs are so slight that it would serve no useful purpose to take up space in describing them. The spleen, however, presents some microscopical appearances, which, as far as I know, have never been described before. Kölliker was the first to demonstrate the fact that certain cells of the spleen have the power of taking into their interior and destroying red blood corpuscles. Lately, I have been able to satisfy myself that these cells are true amœboid cells, for not only do they destroy red blood corpuscles and leucocytes, but they absorb dead substances also, such as vermillion.[2] They are, therefore, true phagocytes.

In the spleen of guinea-pigs which have died of quarter-evil, the number of phagocytes holding partially digested red blood corpuscles in their interior is enormously increased, and I have, in one field of the microscope (oil immersion), and in a thin section, observed ten or more of these cells full of red blood corpuscles in various stages of degeneration. It appears as if, in the course of this disease, some poison is excreted by the bacilli which, entering the blood, weakens the resistance of red blood discs, and allows them to be more easily destroyed by the phagocytes of the spleen.

At the beginning of this paper, it was stated that it is possible to produce in guinea-pigs a mild form of the same disease, by using a weaker form of the virus, which I have called virus B. A small quantity of this virus—say 5 centigrammes—inoculated into an animal produces such an insignificant lesion that it is not easy to follow the struggle between amœboid cells and micro-organisms at the spot where the virus has been introduced. This difficulty is easily overcome by enclosing the virus in small glass cases, made by joining together with shellac two thin cover glasses; three sides being closed and the fourth left open, to enable leucocytes and inflammatory fluids to penetrate as far as the powder containing the bacilli. The introduction of a foreign body, like a glass case, acts as an irritant, and a few hours afterwards it is surrounded by an enormous number of migrating cells. The fluid constituents of the inflammatory exudation are drawn

[2] Unpublished observations.

by capillary force into the glass case, while some of the migrating cells also wander into it.

One of these glass cases filled to one-eighth of its height with the dried, weak virus, and carefully introduced under the skin of a guinea-pig's back, is at the end of twelve hours filled with a somewhat thick, turbid, greyish liquid. A drop of this fluid is drawn off with a fine capillary pipette, and fresh preparations made, whilst others are stained in the usual manner. The slides contain an enormous number of the characteristic bacilli exhibiting, in unstained specimens, the most lively movements, and to all appearances active and quite healthy. Occasionally, the micro-organisms form long chains of ten, fifteen, or more bacilli joined together end to end. In fresh preparations many leucocytes are also seen moving about in the liquid, of which many leucocytes are empty, but a few contain a varying number of micro-organisms, some of which are already degenerated.

The outer aspect of the glass case is covered with an enormous number of characteristic micro-organisms, which have found their way from the inner aspect of the glass case to the outer. A number of leucocytes are also seen in the same situation. Most of these are empty, but some are filled with micro-organisms presenting most varied signs of degeneration.

The tissue immediately surrounding the glass case, removed with a sharp pair of scissors, plunged into absolute alcohol and stained in the manner previously described, is found to consist of an enormous number of cells which have migrated out of the vessels owing to the irritation produced by the foreign body. No micro-organisms are to be detected in the lower strata of the wall of leucocytes surrounding the foreign body. In the part immediately touching the glass case some leucocytes contain numbers of micro-organisms, of which some are normal and some evidently degenerated.



Fig. C.—Section at spot of inoculation of a guinea pig. Killed forty-eight hours after the inoculation of virus B. Alum-carmine and gentian-violet stain. Vérick microscope; oc. 1 × $\frac{1}{12}$; oil immersion; Abbé's condenser. For other particulars see text.

If instead of placing the modified or weak virus B in a glass case it is simply inoculated under the skin and the animal killed forty-eight hours after the operation, the tumour formed at the point of inoculation is small, and consists mainly of a little gelatinous material. This tumour excised *en bloc*, plunged into absolute alcohol and examined in the same way as the other tissues, is found to consist of inflammatory fluid coagulated by the action of the alcohol, the remnants of the powder used for inoculation, and an enormous number of characteristic bacilli and migrating cells.

The bacilli present in the coagulated fluid of the inflammatory exudation are perfectly normal in size and appearance. Each particle of the powder containing the virus is surrounded as if by a cloak, by a thick layer of micro-organisms. The leucocytes in the neighbourhood are full, almost to bursting, with an extraordinary number of micro-organisms showing the most varied and typical forms of degeneration. In some sections it is impossible to find a single leucocyte which does not contain in its interior five, six, and sometimes as many as eighteen bacilli. The process of destruction when the weak virus is used exactly resembles the process of destruction when the strong virus is inoculated, but the destructive process in the case of the former is far more intense and far more localised than in the case of the latter.

It will be convenient to speak now of the forms of degeneration as seen in the micro-organisms of quarter-evil when they have been taken into the interior of lymphocytes. I will describe these changes as seen in preparations examined with a Vérick microscope, oil immersion, 1-12th or 1-13th, ocular 1 or 3 and Abbé's condenser. The bacilli not contained in cells I shall for brevity's sake call extracellular micro-organisms, whilst the bacilli in the interior of leucocytes must go by the name of intracellular micro-organisms.

The extracellular micro-organisms present in the coagulated exuded fluid, when carefully examined, consist of rods somewhat shorter and thicker than anthrax bacilli. Spores are not often present when the virus is inoculated into guinea-pigs. The bacilli stain of a deep blue colour with methyl blue and intensely red with fuchsin. The best method to stain sections, however, is to place them in alum carmine for ten minutes, wash in water and absolute alcohol and then to pass them through gentian violet, solution of iodine in iodide of potassium, water, absolute alcohol, and iilin - xylol, pure xylol, and finally pure terebene. The bacilli are of a deep purple colour, and stand out very sharply from the carmine stained cells.

The extracellular bacilli, though staining uniformly, are not all of the same length and not of the same thickness (see Fig. E, *a*, *b*, *c*). These differences in size are due partly to an actual difference in size, partly to two or more being joined together (see Fig. E, *d*), and possibly to the fact that some are placed more or less obliquely in the preparation. None show any signs of degeneration whatsoever.

The appearance of the intracellular bacilli is very different. A large number are, to all appearances, quite healthy (see Fig. B, *a*), stain uniformly, and are of normal size and shape. Here and there, however, an intracellular bacillus is found, which, instead of staining as deeply as the others, assumes a light purple tinge (see Fig. B, Microph. 1, 3, 4). This tint may be perfectly uniform, but at other times part of the bacillus only is stained of a dark purple colour, whilst other parts of the same micro-organism assume a lighter tinge (see Fig. C), and the most varied forms of degeneration can be observed.

Sometimes the centre of the bacillus takes up the colouring matter badly, whilst the periphery stains deeply still (see Fig. C, *a*, and Fig. D, No. 5, *c* and No. 2, *b*). The micro-organism then consists of a central, badly-staining core and a dark, deeply-staining sheath (see Fig. D, No. 5, *c*, No. 2, *d*, and Fig. C, *a*, *b*, *c*). Sometimes one edge only of the micro-organism retains the colouring matter deeply, whilst the remainder assumes a light purple colour. In another stage the whole bacillus is of a uniform pale-purple hue owing to the gradual breaking up and disappearance of the colouring matter in the sheath (see Fig. D, No. 4, *a*, *b*, Fig. C, *g*).

other bacilli the degeneration, marked by the loss of power of ig the colouring substance, begins at the periphery of the o-organism, the centre still retaining the colouring matter, le the edges remain unstained (see Fig. C, *e*, *f*). The central ured part becomes less and less in amount, so that a small ik of it only is left (see Fig. C, *g*, *h*). Later on the central part f breaks up, and forms a very thin, interrupted, irregular ik lying in the interior of a bacillus (see Fig. C, *i*).

ie process of degeneration in other bacilli affects the whole dth of the bacillus uniformly. One end of the bacillus stains ially, whilst the other end is of a pale, homogeneous colour Figs. B, C, Fig. D, No. 3, *a*). Sometimes an intracellular bacillus ists of a row of dots staining darkly, and embedded in a less ly-stained material (see Fig. C, *k*, *l*), or of parts dark and alternately (see Fig. D, No. 3*a*).

the same time that these changes take place in the coloration of bacilli, the latter under- lterations in shape and Whereas, the bacilli ent in the inflammatory are usually straight and rarely bent (see Fig. E, iany of the intracellu- bacilli are curved on iselves (see Fig. D, No. e, No. 4 *a*, No. 5 *a*). This etter seen in sections e at the point of inocu- n of animals inoculated the weak virus (B), in ch, as we have seen, the li have a tendency to together end to end. e intracellular rods are ly always curved, and ent a highly characteris- ppearance (see Fig. C,).

e intracellular bacilli ter stages of degenera- show a diminution in ness. Many are much ier than normal (see D, No. 1, *a*, *b*, and Fig. *f*, etc.); and whereas iminution in thickness me bacilli is uniform, hers it begins at one mity, the bacillus look- s if one end of it were eaten away (see Fig. 3, *c*, No. 2, *d*.) The urs of the intracellular - organisms also, in- of being sharply de- as in the extracellular li (see Fig. B, *f*, *b*), are ular, and their exact ne is by no means easi- de out (see Fig. D, No. see Fig. C, *n*). In a stage, the bacilli become thinner and thinner, more and more ular (Fig. C, *f*), and lose whatever power they still possessed aining colouring matter, so that, finally, nothing is left in ells but small dots (Fig. C, *p*, *q*, *r*, *s*, *t*, etc., also Fig. D, No.), some of which still retain more or less colouring matter, t others appear as light highly refracting granules, or very ods looking like the remnants of the sheaths of dead bacilli. asionally, intracellular bacilli are met with which, instead of g up aniline dyes, stain with carmine or logwood. Others partly with carmine and partly with the aniline dyes used, ng like little dots stained purple and red alternately. These tions in staining prove that intracellular micro-organisms t react like extracellular bacilli towards chemical reagents.

en a small dose of the weak virus is inoculated subcutane- , the struggle between leucocytes and bacilli is evident on the day or even later, but the number of micro-organisms gra- y diminishes, so that after the fourth day hardly any bacilli ound at the seat of inoculation. On the fifth day, the few bacilli which can still be seen are contained in migrating cells, and show evident signs of the most advanced degeneration.

The study of the initial lesion of animals in which a chronic form of the disease has been induced by the inoculation of large quantities of a weak virus (B) (0.40 centigramme or more) is not less interesting.

The animals inoculated with a strong virus perish so soon after the introduction that the struggle between the cells and micro-organisms is more or less one-sided, for, although the animal dies, most of the cells present at the point of inoculation are normal, and show no signs of degeneration. When, however, a chronic form of the disease is produced, many of the lymphocytes perish as the result of their struggle with the invading bacilli.

If the animal dies on the fourth or fifth day, sections through the exact spot where the virus has been inoculated show that the bacilli have infiltrated the neighbouring muscles to a far greater extent than in the acute form of the disease. Many bacilli are extracellular, lie in the coagulated inflammatory effusion, and are perfectly normal and healthy (Fig. E, *a*, *b*, *c*, *d*, *e*), staining well with aniline dyes, and retaining colouring matters in normal fashion. A few micro-organisms are contained within amœboid cells, and often present various forms of degeneration (Fig. E, *d.l.*^{3} *d.l.*^{4}); but whereas in the acute form of the disease most of the wandering cells are healthy, many of the cells met with in the more chronic affection are markedly degenerated. In other words, they become true pus cells—that is, dead cells.

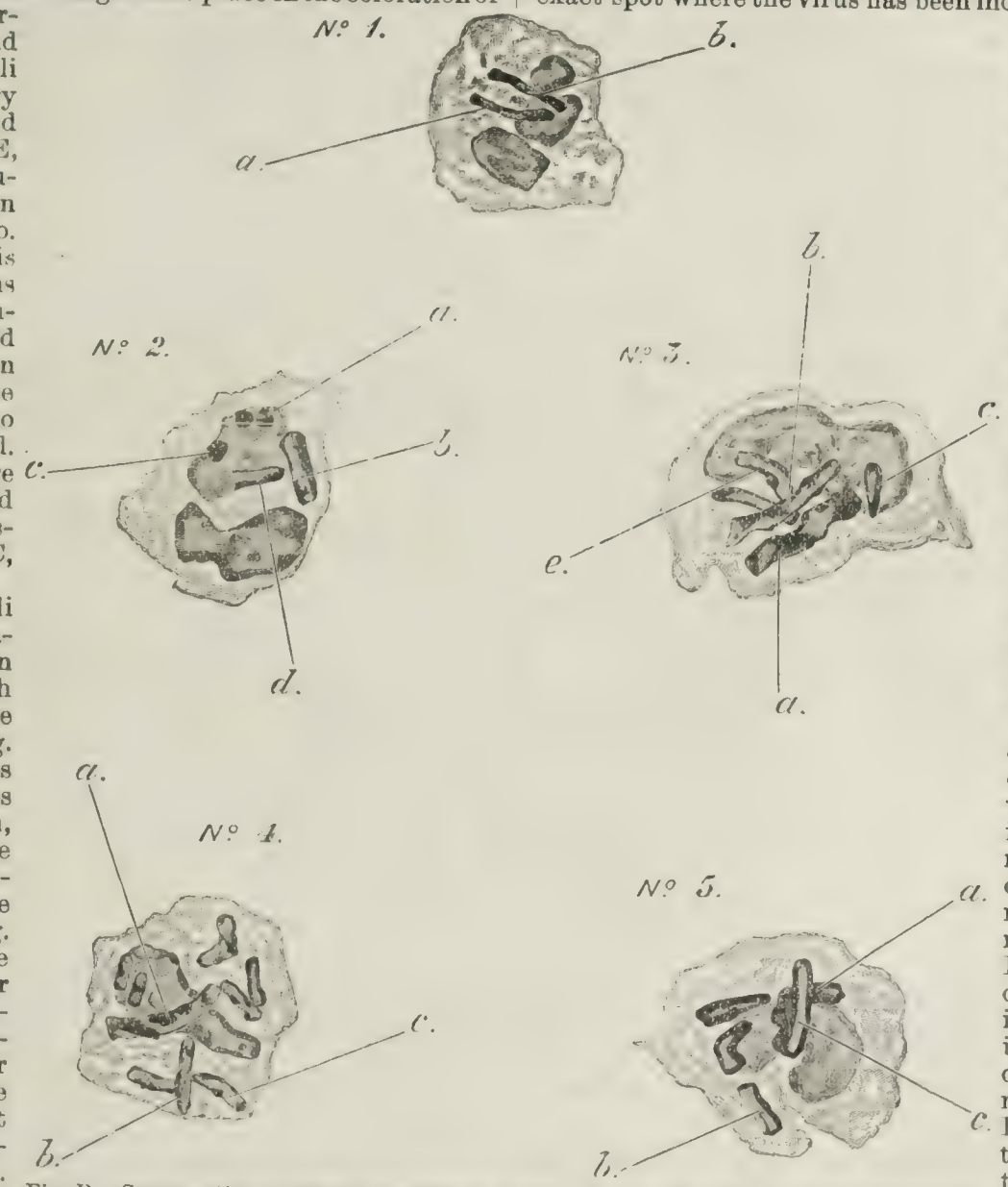


Fig. D.—Same section as the last, examined with oc. 3 × $\frac{1}{15}$. For other particulars see text.

The nucleus of such a cell, instead of staining deeply with carmine or logwood (Fig. E, *h.l.*), possessing a coarse intranuclear network, and being marked off sharply from the surrounding protoplasm, stains rather more diffusely (Fig. E, *d.l.*^{1}). The nucleus often shows signs of breaking up (Fig. E, *d.l.*^{2}), and in many cases is not marked off sharply from the surrounding protoplasm (Fig. E, *d.l.*^{1}). In later stages the nucleus undergoes distinct fragmentation, three or four fragments of nuclei lying in the protoplasm of the cell. In the last stage the nucleus disappears, nothing remaining but a pale round mass of protoplasm, which no longer takes up colouring matter. Not infrequently one of these cells is contained in a larger cell, possessing a clear vesicular nucleus, surrounded by a large amount of somewhat coarse protoplasm—in other words, it is taken into the interior of a typical macrophage.

Some of the dead lymphocytes contain bacilli which either appear healthy or, not infrequently, are more or less degenerated (Fig. E, *d.l.*^{3} *d.l.*^{4}). It might be supposed that these cells died owing to the entrance of bacilli into their protoplasm. Many degenerated cells, however, are found in which not a single living or dead bacillus is to be seen. These cells probably never contained bacilli, but perished as the result of the toxic influence of the poisons secreted by the micro-organisms surrounding them (Fig. E, *d.l.*^{1}, *d.l.*^{2}, etc.). In the chronic form of the disease, therefore, it is possible to follow the struggle of the bacilli and lymphocytes—a struggle in which the former and sometimes the latter perish.

I do not intend to discuss here what part phagocytes play in preventing the entrance of micro-organisms into the system in other diseases, or in destroying the vegetable parasites which have already invaded the animal body. Since Metschnikoff's first paper the literature on that subject has become so great that the space at my disposal would not suffice to give even a short summary of the facts contained in the various papers. I therefore intend to state here in a very few words the deductions which in my opinion are to be drawn from the experiments just described. I must, however, mention here that Rogowitch, in his paper on Quarter-Ill published in *Beiträge zur allgemeinen Pathologie* (V. iv, 4, p. 291) has stated that the leucocytes present in the inflammatory exudations contain no bacilli in their interior. I am quite unable to conceive how this author has arrived at this conclusion, for in not a single one of my experiments have I failed to find an enormous number of micro-organisms in the interior of leucocytes. Moreover, I have demonstrated this fact to several competent pathologists.

In the first place, it is clear that the fluids present in the inflammatory exudation have no toxic influence whatsoever on the pathogenetic bacilli which give rise to the disease called "quarter-evil." Not only is there no evidence to show that the fluids have the power of destroying micro-organisms, but they seem to have a stimulating effect on their growth, for the latent bacilli contained in the strong virus (A) are called into activity as soon as the dried virus is bathed in the inflammatory fluids present at the spot where the virus is introduced. On microscopic examination, the bacilli are found to be motile and present the characteristic staining reactions of healthy micro-organisms.



Fig. E.—Section of œdema of guinea-pig which died five days after the inoculation of virus B. Logwood and gentian-violet stain. Vérick's microscope; oc. 1 × $\frac{1}{18}$; oil immersion, and Abbé's condenser. *d.l.*, 1, 2. Empty pus cells. *d.l.*, 3, 4. Pus cells containing bacilli. *h.l.* Healthy leucocyte. *a, b, c, d, e.* Micro-organisms. For particulars see text.

Theoretical considerations suggest that if inflammatory fluids have any toxic action at all on the bacilli of quarter-evil, this action ought to attain its maximum when the weak virus (B) is inoculated. We see, however, that this supposed toxic action, if it exists at all, is not to be demonstrated by the means at our disposal, for the bacilli of the weak virus show signs of active life as soon as they are in contact with the *living* fluids of the inflammatory exudations. I have purposely called these fluids "*living fluids*," for I do not wish to imply that the same liquids, if taken out of the animal body, and after undergoing the peculiar changes which all protoplasmic fluids undergo outside the body, do not have a toxic action on pathogenic bacilli. The properties of *dead* or coagulated blood, for instance, are utterly different from those of *living* blood, and the physiological actions of the two fluids are also vastly different. Similarly, the *living* serum of the guinea-pig has no toxic influence on the bacilli of quarter-evil; but it would be unwise to argue from this that the *dead* serum of the same animals has no harmful influence on the same bacilli.

In the second place, it is evident that the amœboid cells which migrate to the place where the virus is inoculated arrest the progress of the bacilli and have the power of destroying them after taking them into their interior. The migrating cells, packed closely together, form a kind of living wall, through which micro-organisms can only penetrate with the greatest difficulty. Further, many lymphocytes contain bacilli in various stages of degeneration, and whereas enormous numbers of bacilli are present in the fluids of the inflammatory exudation, very few or none are found in the deeper parts of the tissue. The wall formed by the migrating cells has proved an almost impassable barrier to the micro-organisms. The localisation of the bacilli at the spot where they are introduced is, therefore, due to the action of the amœboid cells which have migrated to that point. In other words, inflammation in this disease serves a useful purpose. Clinically, the local lesion produced is a sign that the animal organism is fighting against the entrance of micro-organisms into the system.

In some diseases in which the inflammation at the point of inoculation (that is, soft chancre, diphtheria, quarter-evil) is well marked the whole process, as far as the penetration of the micro-organisms is concerned, ends there, though, in spite of this localisation, animals or man frequently die. For some diseases, the pyocyanic disease in rabbits and diphtheria, the death of the animal has been proved to be due to the formation and absorption into the system of poisons secreted by the specific organisms. The evidence that this is the case in quarter-evil also is not conclusive, but we may assume that the supposition is true here also, more especially if we remember that Roux and Nocard have proved that the pathogenic micro-organisms of quarter-evil secrete at the point of inoculation, a certain amount of chemical substances, which when injected in animals, confer immunity against quarter-evil. It may therefore be assumed that the same micro-organisms produce not only chemical *vaccinating* substances but also chemical *toxic* substances.

The bacilli contained in the weak virus are, as we have seen, called into life and activity as soon as they are introduced under the guinea-pig's skin, though the animal nevertheless, does not perish. It is difficult to explain the immunity which guinea-pigs possess against that particular kind of virus. To say that the animal does not die because the destruction of bacilli by migrating cells is more marked when the weak virus is used than when the strong virus is injected is not really solving the problem, for, although this is undoubtedly true, the question would then be: "Why do leucocytes show a preference for the bacilli contained in the weak virus?" I think that the question is to be satisfactorily answered by supposing that the bacilli contained in the weak virus either secrete the same poisons but in lesser quantities or other poisons which are less toxic than those secreted by the strong virus.

The activity of leucocytes is notably lessened by the action of some poisons—for example, quinine—and their movements are even totally arrested by such poisons. It is not too much to suppose that the bacilli contained in the strong virus secrete a substance which has a paralysing influence on the migrating cells present in the inflammatory exudation, and that the bacilli of the weaker virus secrete less of this substance, or perhaps none at all. It is impossible to prove or to disprove this theory at present, but it must not be forgotten that other micro-organisms may, by artificial means, be made to secrete certain substances or not. The bacillus pyocyaneus, for instance, which secretes a green colour

matter in the media in which it grows, and the bacillus or rococcus prodigiosus, which secretes a red colouring matter, if tivated at a high temperature loses the property of secreting ouring matter at all. The function of these micro-organisms can refore be altered by artificial means, and this alteration in func- n is inherited through countless generations. It may be as- ned, therefore—though this is merely a hypothesis—that the ıker virus (B) is so altered by the manipulations (drying, etc.) which it is subjected as to lose the power of secreting a large ntity of toxic substances. That the weak virus does not com- ely lose the power of secreting toxic substances is proved by fact that though life is greatly prolonged the inoculated ani- ls do perish ultimately when a large quantity of the virus is ected.

Conclusions.—1. The inflammatory process consecutive to the oduction of the bacilli of quarter-evil under the guinea pig's n is a protective process, and serves a useful purpose.

. The destruction of micro-organisms at the point of inocu- on is carried out entirely by the amœboid cells present in the ammatory exudation.

Note.—I beg to be allowed to express my best thanks to my nd, Mr. T. C. Beadles, who kindly drew most of the original ures for me from my preparations.

TWO CLINICAL LECTURES ON ALBUMINURIA.

Delivered at Guy's Hospital.

By JAMES F. GOODHART, M.D., F.R.C.P.,
Physician to the Hospital.

Lecture II.—The Vagaries of Renal Disease.

e vagaries of renal disease is a very interesting subject to the sician, few more so. He is ever being puzzled by them, and subject is one therefore of immediate importance.

he first point I will insist upon is the frequency with which ous disease of the kidney fails in symptoms. Cases of this d are so numerous that it almost seems unnecessary to give details, but I will just note a few. One case I have already ted in the previous lecture. Another was a young man, aged who had had syphilis, and who had a much enlarged liver and en. His urine was copiously albuminous, and one could not bt that this was due to a nephritis of some sort. Yet he ned in perfect health at that time, and so he ever afterwards ained; and although the albumen remained for a year or e, it ultimately all disappeared, and there was good reason uppose that the disease was due to a patchy affection such as escribed in my former lecture, for gummata formed now and in in various parts of his body. I regard the case as a good stration of the value of our visceral reserves. Take another e: a young fellow was under my care in John Ward, in 1886, h what was supposed to be acute nephritis. He had rather reme dropsy, and after some weeks of treatment he left the pital, as so many of these cases do, with his urine still albu- ous. Very opportunely for the purpose of this lecture, he ned up the other day. Since he left the hospital he says that as been very well, and he has enlisted in a cavalry regiment which he is now serving. When we came to examine him we nd his urine was still albuminous, the albumen being in some ntity; the heart's impulse was beyond the nipple; the pulse was ewhat hard; and there is no doubt that, notwithstanding his arent health, he is the subject of chronic parenchymatous hritis. Take another case of a different sort. A little girl whom w with Dr. Roper, of Lewisham, had had scarlatina; and hin a few days after hæmaturia supervened, and then suppres- n. She lay in bed with absolutely no symptoms of renal disease ept the two ounces or so of bloody urine—all she had passed he many hours preceding. Her condition was one of simple austion, and as she lay one could hardly believe her condition e desperate; yet she was dead before many hours had passed, the kidney, which by Dr. Roper's kindness I had an oppor- ity of examining, was one of the most extreme examples of nerular nephritis I have ever seen. I remember a similar case in a young adult in the out-patient room at Guy's Hospital. He was admitted and died very shortly afterwards, and here too the kidney was in an extreme condition of this kind. Of subacute cases again there are many in which the symptoms are urinary only. I have seen several where the attention has been drawn to the urine solely by the occurrence of hæmaturia, and the case has run its course, and sometimes a long one, without the occurrence of dropsy at any time. I am drawing just now upon my experience in children, because at that time of life renal disease without dropsy would be regarded by many as decidedly uncommon, and I will carry this record of child life still further, even into the region of the most chronic forms of disease. Here, as everyone knows in the adult, dropsy is often absent; one does not expect it so to be in children; but then one must at the same time say that the most chronic form of disease (the granular kidney) is not met with in childhood. However this may be, it is possible to overlook very chronic cases in children by reason of this very absence of symptoms, as the following striking cases will show.

A little boy, aged 6 years, was brought up by hand, and when the bottle was given up, he developed an intense thirst and polyuria, which had never subsided, and when I saw him he was drinking as much as a quart of water during the night, and the quantity by day was so great that it was not known. In early infancy he had had occasional attacks of sickness after excitement, and at three years a bad attack of sickness and fever, which some thought cerebral, others gastric. Later on he had an attack which Dr. Dring had very little doubt was meningitic in character; thereafter he had bad night terrors for more than a year, and latterly he had developed rather severe tetany.

He was a miserable little specimen, with a dry, wrinkled skin, which never perspired; he weighed only 31 lbs.; he was unhealthily precocious; his teeth were decayed; his heart and lungs normal; his retinæ normal; and I could find nothing tangible to explain the malnutrition until his urine was examined. This was found to be of specific gravity 1005, and to contain a good deal of albumen. He went on, Dr. Dring told me, for twelve weeks, the polyuria remaining on the whole the same, the albumen sometimes disappearing; but paroxysmally, almost punctually, once a month, he became worse: the urine became scanty, and contained so much albumen as to be nearly solid, and at the same time he would get a severe attack of what could only be called tetanus, so violent was the opisthotonos. He died in one of these attacks. Dr. Dring prevailed on the parents to allow a *post-mortem* examination, and this we made. The nervous system was quite healthy. The heart was widely dilated, large, and flabby. The kidneys were shrivelled and small, their capsules adherent and thick.

To complete the history of this case, and also of my most striking experience of chronic renal disease in young children, I may say that some few weeks after the death of this child, one of his first cousins was brought to me, because the parents feared it was affected in the same way. This child was a girl, aged $6\frac{1}{2}$ years, who, like the other, had since weaning developed an intense thirst. When $2\frac{1}{4}$ years, it was seen by Dr. Gee, as also again when 3 years old. Dr. Gee kindly told me that on the first occasion the urine was 1003; and on the second also 1003, with a trace of albumen. When I saw it three years and a half later, it was drinking six pints of fluid in the twenty-four hours, and, like its relative, it was a mite of a child for its age, and with a like harsh dry skin, which never sweated. The urine looked like water, was of a specific gravity 1004, and contained a sixth of albumen. Again, I cannot doubt, with this history before me, and that of the other case also, that this too is a case of chronic nephritis, but if so it is one without any characteristic symptoms.

Now these several cases together suggest that dropsy is an accident rather than any true measure of the acuteness of the disease, and the cases that are met with in the wards of a hospital confirm this in a very emphatic manner. A large proportion of the cases which enter a hospital come in with dropsy, and a history of recent illness, and are dubbed in consequence "acute" nephritis. The usual classification of Bright's disease is into "acute," "chronic parenchymatous," and "granular;" and the only, or at any rate the rough and ready, method of distinction between the acute and chronic parenchymatous is the duration of the dropsy If the dropsy be recent, the case is called acute; if it be of long standing, then the disease is called chronic; but this criterion is practically useless; at any rate, the large majority of the patients who enter the hospital at the onset of the anasarca, or within a short while after it, are not well when they leave, and in conse-

quence of this fact (and I do not think there can be any dispute about it) one of two conclusions presents itself: either that which I have just put forward—that the criterion made use of has played us false, and that the case supposed to be acute is not really so; or that acute cases accompanied by dropsy are likely to do badly. The latter alternative I reject, because it is not true of young subjects. And to show how important is this matter of age, let me say that of fifty-seven cases of renal disease associated with dropsy admitted into Guy's Hospital, which I analysed some time ago, forty left the hospital passing albumen still, and ten only left well, while of these ten seven were under 16 years of age. Whatever, then, may be the explanation, there can be no question that the age of the patient is, as a general rule, more helpful for prognosis than is the date of the onset of the dropsy. Upon this rule you will find me acting daily in the wards. When I am asked about the diagnosis, prognosis, or even treatment—for all are involved—of a case of renal anasarca, I ask what is the age of the patient. If this be under, say, twenty-five, there is a fair chance of the disease being acute, and the case is treated accordingly; if the case be of more advanced age, the treatment will require the consideration which I propose to give it towards the end of this lecture.

Another feature that may be called a vagary is intermission in the passage of albumen. It is not perhaps the rule, but it is exceedingly common. I alluded to this before, but it is puzzling enough to induce me to speak of it again; it applies to blood equally with albumen. Blood will come and go in the course of an attack of nephritis without any corresponding variation in the course of the symptoms, and without our being able to get any hint of value upon the course of the disease; albumen in like manner. I have seen a case of nephritis run on for months, with the urine containing now so much albumen as to be nearly solid; and, again, for several days perhaps hardly a trace. We do not know what the meaning of these variations is, but as I have already said, oscillation is a feature of all function, and these cases seem to me quite parallel with the extreme and unusual fluctuations that occur in the course of some febrile processes, and with which we are all familiar. These fluctuations of the temperature are not in themselves critical—indeed, they tend to appear when the vigour of the fever has spent its force; and so perhaps it is with these nephritic changes. Indeed, I think that if any conclusion is justified from the circumstance, it would be that the disease is then of a mild type, and is likely to do well eventually; and this is no contradiction to the position I have already taken up, that some cases of intermittent albuminuria end in a definite nephritis.

Another vagary that occurs to me is the occasional rapid recovery of cases that had seemed to have gone beyond the hope of it. This I should not suppose to be common to any marked degree, and yet in some measure it is, for who has not seen cases which, from the severity of the albuminuria, and the extent of the dropsy, might have been predicted not to be likely to live beyond a few weeks, and who have slowly pulled out of their graver troubles, and survived as chronic invalids for perhaps many years. The two most marked cases, however, of rapid recovery that I have seen were both in children, and both were boys. One, a child of 4½ years, was taken ill at the end of January, and at the end of May he was still passing much albumen, and his condition was still such as to cause grave anxiety. Within a week or ten days of this time, however, he improved so rapidly that all the albumen had gone, and his general condition had visibly bettered in corresponding fashion. I may anticipate thus much and say that we thought the improvement dated from an increase of the amount of whisky he was taking, and the introduction of meat into his diet. The other case was a boy, aged 3½ years, who was in the Evelina Hospital for ten months. The anasarca that this child suffered from was extreme, and the albumen also was in large amount, often as much as a third, and even a half. He had been ill for six weeks before he was admitted, and for four months afterwards he remained in much the same state as when he came in. I ought to say, however, that from the first the albumen showed the tendency to variation to which I have already drawn attention; one day it would be as much as a third, and perhaps the next a mere cloud. After four months of treatment his general condition decidedly improved, although the albuminuria remained much the same, and this for another four months when the albumen was still as much as a sixth. It then fell at once to a twenty-fourth, and within a few days had still further fallen to a mere trace, and at that it remained when he left the hospital. Cases of this kin are of exceeding interest from two points of view; in the firs place, they are most puzzling when you come to answer the ques tion, What was the nature of the disease? This last boy's bed letter is headed, as you might suppose, from what I have said "acute nephritis;" and if we interpret that in dead-house terms he had a large white kidney. I do not think that I had an doubt on that point for some six or, at any rate, four months ou of his stay in the hospital. But what is one to say now? Im provements of this kind are rapid enough to make one almos doubt whether there was any structural change, and I could cer tainly forgive a "liver doctor" were he to discourse in such a case upon some prolonged functional disturbance of that mighty organ as well explaining the intermissions, the preliminary im provement in health, and the final rapid cessation of the albumi nuria. Such cases as these are also interesting when we come t discuss the question of treatment, but this will come presently.

Another deviation from the natural course, so to speak, o nephritis is the occasional substitution of a state of low tensio for high. You all know by this time that the pulse of rena disease is a hard one, or, as it is called, one of high tension; an you also know that this condition fails for the most part i lardaceous disease of the viscera; but it also fails sometimes i other cases of nephritis, and when it does so the point is of im portance. I first learnt the value of this from a lecture of Dr Broadbent's, and I pass it on to you with an emphatic testimony to its worth. Dr. Broadbent remarked that when with albumi nuria this state of low tension exists the case is likely to do badly Speaking from memory I will not be sure that I include the whol of his position in this matter, but substantially this was the point Let me illustrate it by a case or two.

Some two or three years ago I was called into the country to see with my friend Mr. Fraser, of Romford, a lady of whom the fol lowing history may be told. She was 41 years of age, and ha had some rather prolonged uterine trouble months before; bu from this she had been for some time free, and, indeed, had, unde Mr. Fraser's care, been rapidly regaining her health. For a fort night, however, before I saw her, she had been losing her appetit and ground again; and vomiting had come on, ascribed by her t the appearance of her catamenial period, but by Mr. Fraser quit rightly to the presence of albumen, which had now for the firs time been found in her urine. The condition at the time of ou visit was as follows: Very pale, and face puffy; she felt exceed ingly ill, yet had no pain anywhere; she was quite collected, bu very restless, and her whole demeanour betokened extrem exhaustion.

There was no dropsy, but a urinous odour about he breath, and the urine was clear, pale, scanty, and whe boiled became solid with albumen. But the state of th circulation is the interesting point. The heart's impuls could not be felt; the sounds were feeble, and there was a occasional feebler and shorter beat, although it hardly amounte to the stagger that is so often met with in cases of renal diseas The pulse at the wrist was 80, and was quite soft and feeble. remarked at the time that the case seemed to me to be a typica one of renal disease with low tension, and this point weighe heavily in arriving, as we did, at a very unfavourable prognosi So badly, indeed, did we think of her that it was deemed advisabl not to leave her, the house being some miles in the country an out of reach. And the wisdom of this decision was shown by th sequel, for the poor woman died in the course of the night. Nov I do not mean to convey that all such cases die as rapidly as thi But even so, the prognosis is not good. I have seen several of more protracted kind, who, although living a long time, neve really showed any material improvement, and I will give a shor note of one of these. In the autumn of 1887 I saw with M Sandford Arnott, of Brixton, a young man, aged 24, who had en joyed exceptional health. So much so, that he had been good a a rifleman, as a cricketer, and as a football player, and as such h had been careless of exposure. He had felt some pain in his bac for two months, nothing much; and for a fortnight had fel nauseated, and dropsy had supervened. For this he had sough advice, but he had not at any time noticed anything wrong wit his urine. He was a pale, œdematous man. He said that he fel perfectly well, and only complained of the dropsy, he did no quite see the force of being kept in bed. His urine turned soli on boiling, but his pulse was soft and his heart sounds also; ther was nothing whatever of a renal character about them. I gave guarded prognosis, on account of the excessive amount of albu

en in the urine and the want of tension in the pulse; and here, ;ain, the result justified the opinion that we had formed. He ·ed about sixteen months after that time, and was under Mr. ·nott all that time, and, although all sorts of remedies were ied, his symptoms never abated one jot, and he gradually be- me worn out.

These are the chief points that can be taken up within the nits of our time, for there is still another question that I wish rticularly to introduce to your notice, and it is this: "Is the so- lled parenchymatous nephritis always inflammatory in its ture?" The importance of this is in its relation to treatment. m very doubtful whether it is always a true nephritis, and for ese reasons: 1. The appearance of the kidney so affected is very culiar. 2. Very similar ones are caused by acute poisoning with ·ohol, and I have shown that these cases, or at any rate some of m, are associated with acute albuminuria. 3. A somewhat ilar condition is produced by other poisons, such as arsenic or better known phosphorus. 4. Phthisis is prone to be associ- d with the same, and so, also, may anæmia be. Now some, if all, of these are difficult to associate with anything of the ure of inflammation, and a degenerative process seems to har- nise better with what is known of the variety of circum- nces which seem in some way or other to produce it. Then, in, the rapid recovery that is seen in some cases, and to which ave already alluded, is not easy to reconcile with an inflamma- y disease, whereas a simple degeneration of the epithelial sur- es is not only no bar to the rapid recovery, but may even be l to favour it.

ow this opens up the question of the best treatment of these es. The treatment of acute cases is not doubtful; they must ept warm and their kidneys eased of their work, except that iltering, as much as possible. And the various measures that ow upon this cannot be called in question. Such cases are t in bed, have sudorifics and hydragogue aperients, and their is restricted to non-nitrogenous matters in chief. And per- s, I may say, as I have been dwelling on the other aspect of l disease, that even acute cases are often slow, very slow, in very, and we must not lose patience too soon if the patient be he mend, however tardy it may be. I have known this im- ement so slow as to take a year, and yet to be so continuous be practically getting well all that time and to have been a plete recovery in the end.

ut what is the best treatment for chronic parenchymatous ritis? I see two classes of cases, those which are treated and e that are let alone. In the one class the patient is kept to bed, is rigidly dieted to the exclusion of strong meats and ks; they are sweated and purged upon occasion, and at the of many weeks or months they leave the hospital with "im- ed" written at the head of their report. They are improved me respects; generally the dropsy for which they came into ospital is less or gone, but the albuminuria is still much the . Those of the other group have general directions given to keep themselves warm, to live sparely, to take a tonic an occasional aperient; directions which they generally at- to very little. They continue their work all the time, and hey go on for a long time. And I find it difficult to say, from xperience to be gained in the wards, that they could have better had they adopted the more orthodox plan. It is ys a thankless task—as I have said elsewhere—to question alue of any particular treatment by drugs, for he who would ipt to find out the legitimate range of the effects of a drug is or that disease—in that in so doing he almost necessarily mscribes the range of action of the enthusiast—will probably d not to believe in treatment. But it is well to ask ourselves ionally what we are really sure of, for, unless we do, is a certainty of our being ultimately effaced by routine, here are few things worse than that for the patient. And I e to think that routine has laid too much hold upon us in disease. That we should study the individual before we ipt to treat his disease is true, more or less, of all diseases, believe it is never more true than for renal disease. For is no drug of which we can say that it will "go for" the in- ation; there is no drug that I know of that can be de- d upon to lessen the output of albumen. Thus it is that we to depend upon indirect measures, such as dieting, flushing ipes, sweating and purging, and tonics. And it is in just the ons to these measures that the individualism of the patient rs. And I should be glad to hear it stated on authority, it is difficult to find in books, that even such simple measures as these, valuable as they are in their place, are measures often of severity, to be applied with judgment, and are not to be distributed like an advertisement handbill to every case of Bright's disease. Who cannot recall the memory of cases where pulv. jalap. co. has done unmitigated harm? where vapour baths, instead of relieving, have increased the distress? where fluid diet as a means to diuresis has repeatedly upset what little power of digestion remained to the patient? where individualism revolted at the upset of habit? And I must confess, for my own part, that for these chronic cases I believe that a too restricted diet is far too generally prescribed.

I cannot say that I have seen much good done by cutting out all meat as well as the other more highly nitrogenised articles from the food of these cases; and I think I have seen some improve on an ordinary mixed diet taken in moderation, by the judicious and watchful use of stimulants, and by the administration of maltine and cod-liver oil; and I would say the same, although with far more limited application, for lingering cases of acute disease. For cases that are really acute I am a firm believer in the alkaline treatment advocated with special insistence by Sir William Roberts; in a milk diet varied as much as possible within its limits; in prolonged rest and warmth in bed. Where this treatment is well borne, as it is in some cases even for many months, and the albuminuria is gradually lessening, the treatment is obviously doing good, and there is no need to question its value. But I have in my mind cases where it has not so obviously done good—where a milk diet, to the exclusion of all other albuminous articles of diet, has not been well tolerated—and I apply to the works written by the men of light and leading, and I find no suspicion of a suggestion that a good slice of red meat and a little stout, or maybe a glass of good port, have in their experience ever been beneficial. And, although it may be said that no author could risk his reputation in legislating for exceptional cases, I am inclined to ask whether such as I have alluded to are so very exceptional, and whether for lingering acute and chronic cases the results of the orthodox treatment are sufficiently satisfactory to allow of a rest-and-be-thankful attitude. In talking of chronic cases, I must guard myself by saying that I am speaking only of "chronic parenchymatous nephritis;" the granular kidney would require distinct and separate consideration, and there are no doubt many such which are the better treated by allowing the patient but a very limited indulgence, at any rate in red meats. But even in such we can very easily push a good rule too far, and here, as in other cases, the utmost judgment is required to do the best for the individual as well as for his disease.

There is one other point in the treatment of chronic renal dropsy which is, I think, often overdone, namely, confinement to bed. Are such cases the better for being kept in bed? I do not think they are; at least, the comparison of the two classes of cases I have already alluded to is but niggardly in showing the benefit, if it does follow. Hospital patients settle this question without any difficulty on our part, for most of them cannot afford to remain in the hospital long, and so their period of bed is curtailed, and for those who would stay, the hospital is unable to find the requisite accommodation for any but a limited period. My own rule of practice, therefore, is this: for all cases a preliminary rest in bed for, say, two or three weeks. This enables us to determine the nature of the disease and its probable course; but when once this has been determined and the chronicity of the complaint settled, provided that the patient be clad warmly and all imprudent exposure guarded against, I think that a certain amount of exercise is beneficial.

A RECENT number of the *Correio Medico* of Lisbon gives some further particulars with regard to the arrest of Dr. Vicente Urbino de Freitas, Professor of Physiology, at Oporto on suspicion of having poisoned several members of his wife's family, particularly a nephew who died in the beginning of April. His illness and that of two other children belonging to the same family came on after eating sweets and almonds, which were sent to them by post. The total number of murders of which he is accused is seven. The motive for the alleged crime is said to be the acquisition of a large property by the removal of the nearest heirs. As Dr. de Freitas is one of the leading members of the medical profession in Portugal, the case has naturally created a great sensation among his countrymen.

INTUBATION OF THE LARYNX.

Report of 100 Cases: 38 per cent. Recoveries, with a Run of Seven Consecutive Successful Cases.

By WILLIAM HAILES, Jun., M.D.,
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The following is a report of 100 cases of intubation of the larynx for diphtheritic croup, with 38 per cent. recoveries, with a run of seven consecutive successful cases. I will not present all the cases in detail, but desire to make mention of certain cases which demand special notice owing to some unusual and interesting feature in connection with them. I have found, then, that the introduction of the tube is usually accomplished without much difficulty, and one becomes accustomed to perform it with ease and confidence. The extraction of the tube is also usually very readily and easily done; but occasionally considerable trouble is experienced owing to the head of the tube being partially covered by swollen membrane, etc.; obstinate resistance on the part of patients, etc. I am usually a little anxious about the extraction of the tube, but never have failed in getting it out, and now, after an experience of 100 cases, I find extraction almost as easy as introduction.

Case v. *Difficult Extraction.*—M. H., aged 2 years; diphtheritic patches upon tonsils and pharynx; duration of disease, three days; marked stenosis and recession of sternum, with cyanosis. Respirations, 45 per minute; pulse, 145. I intubated; dyspnœa entirely relieved, but patient continued restless and feverish; used rectal alimentation and fed by the use of the œsophageal tube. On the fourth day patient's symptoms became quite comfortable, but she was very weak. On the fifth day attempted to remove the tube, but after several trials failed; I could not succeed in uncovering the head of the tube on account of the swelling of the mucous membrane of the epiglottis and ary-epiglottic folds.

Thinking best not to try any more that day we desisted, and attempted its removal on the sixth day, with no better success than before. The child had such great power in the muscles of the tongue and constrictors of the larynx that every time an attempt was made to extract she would resist most stubbornly, preventing my reaching the head of the tube even with my finger. The little patient struggled and choked until she became markedly cyanosed; then followed a series of marked convulsions. We were obliged to stop. The child had ceased to breathe, and we inverted her, used artificial respiration, etc., and after very anxious moments she slowly recovered, and began to breathe regularly again, and we wisely concluded to allow the tube to remain at least for another day. I never had had such serious trouble before in extracting, and began to feel very anxious, although the tube could do no harm if it remained for weeks *in situ*. The parents were unreasonable, and said, "You put it in, take it out now." On the seventh day the last and successful attempt was made. Patient was chloroformed, and a double ligature was passed on each side of the frænum linguæ. In order to draw the tongue well forward and assist in lifting up the larynx a finger was applied to each side of the larynx to raise it still higher, and after repeated efforts we finally succeeded in extracting the tube. The patient made a good recovery, but the voice remained imperfect for several months, but is now normal. She passed through an attack of chicken-pox, and is now well.

Case x. *Recovery: Intubated Five Times in same Case on Second, Third, Fourth, Fifth, and Sixth Days.*—B. L. T., female, 5½ years, duration before intubation seven days; had great recession of sternum, cyanotic and restless. Intubated easily, with great relief of symptoms, but upon the second day the tube became plugged with membrane and mucus, and strangulation appeared imminent, when the child expelled the tube. The croupy respiration returned immediately, and I was again summoned. Thinking that we could delay with safety, I waited several hours. All urgent symptoms returned, and I was obliged to intubate to save the child's life. She immediately became comfortable, but fourteen hours later the tube became plugged with membranes and secretions, and was expelled again, and so repeatedly on the fourth, fifth, and sixth days. Each time I waited until urgency of symptoms demanded intubation and would brook no delay, the parents beseeching its performance. On the seventh day after the last expulsion she still had stridulous respiration, and it continued for more than a week afterwards, but not so as to demand intubation. All bad symptoms slowly disappeared, and she made an excellent recovery. This case demonstrates clearly the duration of stenosis during the attac and the wonderful efficiency of the tube, and shows conclusive to how great a degree we are dependent upon the instrumen and methods devised and perfected by the inventive genius ar delicate skill of Dr. Joseph O'Dwyer in the treatment of the difficult and desperate cases.

Case vi. *Recovery; was the Most Convincing of All, and Serv as a Type.*—B. A., aged 4½, had been complaining of croup f four days, and had gradually grown more and more croupy greyish white patches were on the tonsils, palate, and pharyn This case was extremely urgent in every particular—great res lessness and imminent suffocation. Intubated at once. Pr gnosis most unfavourable. The breathing was relieved immed ately. The respirations fell from 45 to 20, and the patient sle with mouth closed, but continued restless and feverish for sever days, when she gradually became comfortable, taking interest objects about her, at the close of the fifth day, when all dang seemed to have passed, and she suffered very little inconvenien from the presence of the tube, swallowing very well. The tu was removed without any trouble whatever upon the first intr duction of the extractor. The difficulty in breathing return directly, and the little girl cried out: "Oh, doctor, put it ba again, I can't breathe!" We soothed and watched her, and t temporary spasm of the glottis, which had been making t trouble, passed away. She was then able to "eat, drink, and merry," and is now perfectly recovered.

Cases ix, xi, xiv, xvi, xx, xv were apparently hopeless, bei called in consultation too late. They were cyanotic, with feel and irregular pulse, pulmonary complication, and septic poisonin and even unconscious—yes moribund—and I simply intubated satisfy the frantic parents, and left the string fastened to the e The helpless infants revived, became quite comfortable, parto of nourishment, and seemed to be on the way toward recove but died from pulmonary complications, some of them living fo days and a half after intubation.

Case xxxv. *Triple Cast of Larynx and Trachea down to furcation, with Intubation and Recovery.*—C. T., aged 5½. C sultation with Dr. Ullman. Showed croupy symptoms Octo 22nd, became rapidly worse, and was intubated on October 24 She coughed up a cast of the trachea through the tube (Fig. I, It came up in two pieces, and caused considerable dyspnœa

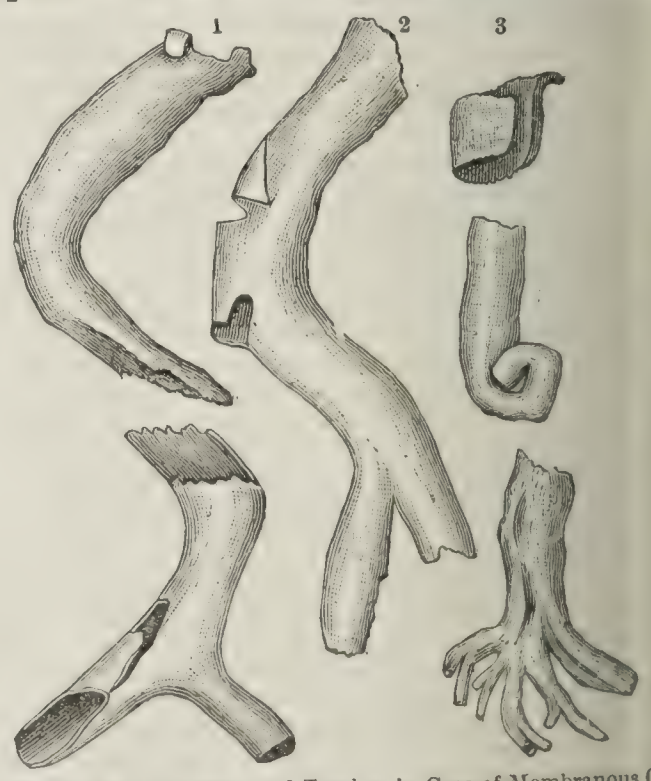


Fig. I.—Triple Cast of Larynx and Trachea in Case of Membranous Crou

symptoms of strangulation. Patient did not breathe well, tube was removed by extractor. Symptoms of stenosis retur immediately, and after a few hours was reintubated. Pat continued restless and feverish, pulse ranging from 150 to temperature 103½° to 101½°; respirations 55 to 35. Casts and a men in urine, and foul patches on tonsils, pharynx, and palate

October 25th. Respiration became laboured and rapid, an second cast of trachea (Fig. I, 2) was coughed up through the t Patient was nearly asphyxiated, but succeeded in coughing

e membrane and clearing her larynx. Patient still restless and erish; temperature 103°; respirations 45.

On Saturday, October 27th, at 1 A.M., the tube again became structed by a third cast of the trachea (Fig. I, 3). This ectually blocked up the tube, and the patient became cyanotic l in the last stages of strangulation, when the mother of the ld inverted the patient, and by means of her finger hooked ; the tube from the larynx, by getting her finger-tip under the id of the tube and starting it out of its place. The pressure of prisoned air behind it forced it up into the pharynx, and the ve mother grasped it and flung it upon the floor. Stenosis of ynx still present, rapid respiration, etc., but did not find it essary to intubate again.

The after-history of this unusual case is interesting. A severe nchitis, catarrhal and septic, supervened, and her course to- rd recovery was slow, complicated by a desquamative nephritis, h casts and albumen in urine, and anasarca of both extremi- s. She had paralysis of the muscles of deglutition; food, both ds and fluids, came through the nose. She also had strabis- s for several weeks. Almost complete aphonia was present. he finally made a very good recovery; her voice is returning, strabismus has disappeared, she swallows well, and her urine longer contains albumen nor casts, and, under tonics, etc., she in good condition, considering the severity of the ordeal ough which she has passed.

his is the only case of membranous croup in which I have ever n or heard of the membrane forming three times, and it is ious to note that the period of re-formation of the membrane about forty-eight hours; the last cast of trachea (Fig. I, 3) g more firm in consistency, it rolled up into a solid plug Fig. I, 3, middle fragment), and it was this piece which e so nearly causing the death of the little patient by strangu- on.

r. Joseph O'Dwyer is at work devising a certain improvement his tubes (Fig. II), which is designed to render extraction easy;

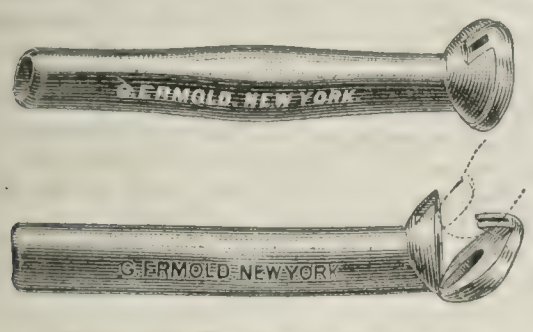


Fig. II.—Improved intubation tubes.

nsists of a hinged top with little sharp projections upon under side, in which to engage the finger-tip, so that the e or attendant can remove it by the hand alone, and without use of the extractor, in cases of sudden obstruction. He has constructed a set of tubes with no swelling in the centre, of e times the usual calibre, by using thinner material. This set r use in cases where loose membrane is present below the . The membrane can either be more easily expectorated by n of the larger passage, or having become plugged—the tube be readily expelled. Though it be rejected every few hours, arm will be done provided the operator be within reach; for quent cause of death is detachment of membrane and sudden cation from obstruction below the tube.

run of Seven Consecutive Successful Cases of Intubation of Larynx for Diphtheritic Croup.—I will report each of these in detail, so that an opinion can be formed as to everity of the cases, and the necessity for immediate instru- al assistance. I have never intubated unless there existed a urgent demand for it, nor have I ever refused to operate in of advanced laryngeal obstruction, no matter how hopeless ght seem—all these cases were seen in consultation with physicians.

SE I.—T. G., aged 3 years, male, seen in consultation with . K. Perry, who informed me that for three days and a half ittle patient had suffered from diphtheritic croup, with es upon tonsils, pharynx, etc. Patient was restless and anxious, marked stenosis of larynx and recession of sternum. The case nded immediate intubation. This was followed by great relief rofuse expectoration. He slept, and also partook freely of food, owing fairly well. On the fifth day I removed the tube with the extractor, all urgent symptoms having disappeared, but was obliged to reintubate, on account of recurrence of stenosis, but took out the tube on the eighth day, followed by complete recovery.

CASE II.—W. C., male, aged $3\frac{1}{2}$ years; consultation with Dr. Stillman. I had intubated a sister of the patient several weeks before for diphtheritic croup; she unfortunately died from sepsis on the fourth day. Owing to the death of this first child, when the second child was taken ill they very naturally sought other advice. Dr. H. Hun was called. The case progressed under their treatment in much the same manner as the other one, and on the afternoon of the third day Dr. Hun advised immediate tracheotomy. Dr. Balch was asked to perform the operation, but refused to operate on so marked a septic case, and advised them to come to me and ask for intubation. This occurred upon the morning of the third day. Not having very much confidence in intubation, they permitted the patient to become worse, and only upon the urgent solicitation of Dr. Stillman they consented to it as the very last resource. The doctor awakened me at 4 A.M. by telephone, and asked me to come down and do what seemed to me under the circumstances a death-bed intubation. I at first refused, because I supposed that the case was really past all help. The symptoms were all extremely urgent by this time, for the patient had been labouring for twenty-four hours with stenosis, recession of sternum, marked cyanosis, and imminent suffocation, and was rapidly becoming moribund, and I feared œdema of the lungs or an acute bronchopneumonia. The father was persistent in his demands, and I intubated; this was followed by immediate amelioration of all urgent symptoms. Dr. Hun visited the patient at 10 A.M. the following morning. He gave an unfavourable prognosis. He feared a food pneumonia, as the little patient did not swallow very well. The patient progressed very satisfactorily, partaking of food, both solids, semi-solids, and fluids freely; and on the fifth day, all unfavourable symptoms having disappeared, I removed the tube, but the croup was still present; and, after waiting for an hour or so, I was obliged to reintubate, on account of return of all the urgent symptoms, and in reality to save life. I removed the tube again on the eighth day, but was again obliged to reintubate, and allow the tube to remain two days longer; it remained out permanently on the tenth day, but the child continued croupy and partly aphonic for several weeks afterwards. Patient continued to improve, and made a complete recovery. He ate chicken, soup, sausage—in fact, anything and everything that he asked for, and in direct disobedience to my commands, but it did not seem to make any material difference in the result. He is now perfectly well.

CASE III.—T. S., male, aged 3 years 2 months. Seen in consultation with Dr. Lee More. Patient had exhibited croupy symptoms for several days, with patches upon tonsils and pharynx. There were marked stenosis of larynx and recession of sternum. Intubation gave immediate relief, and after profuse expectoration the child slept for four hours without awakening. This was the first good sleep that he had had for several days, he having had to stay awake to keep himself alive. The temperature was 103°, pulse 150. He progressed favourably, and on the fifth day I removed the tube, but was obliged to reinsert it until the eighth day, also until the twelfth day, the disease prevailing with marked severity through the whole of that time, and demanding the presence of the tube the whole of the twelve days. The patient made a good recovery, excepting that he could only speak in a whisper for several weeks afterwards, but he slowly regained his voice, and is to-day perfectly well.

CASE IV.—M. W., female, aged 3 years. Had been treated by five physicians. The croup had prevailed for about three days, and the father of the child, becoming frantic, had gone out into the street in a chance search for help; he hailed Dr. Boyd, who was driving by, and begged him to come and see his child. Dr. Boyd followed the father, and when he saw the child he said that he thought it was past all human help, but that there was one chance in a thousand that its life could be saved, and sent the father in search of me. Dr. Boyd saw the patient about 12 o'clock noon, and I did not see the case until 2.30 P.M. I found the patient in a dying condition, and suffering from extreme carbonic acid poisoning. She was blue, perfectly limp and insensible, with very laboured and shallow and feeble respirations. I informed the parents that I considered the case a perfectly hopeless one and beyond assistance. The respirations were growing perceptibly shorter every minute, and the patient was practically dead. The father pleaded with me to intubate, and at least save his child

from suffocation. I had previously explained to him the danger of œdema of the lungs, etc., or of the almost positive occurrence of a bronchopneumonia, which, after such harsh experience of the lungs in so extreme a case as this one had been, would be almost certainly fatal, but he still persisted. I had taken several of the members of my laboratory class over with me from the medical college, and thinking that perhaps they might be instructed by witnessing an intubation of the larynx, I consented to put in a tube. The patient was perfectly insensible and limp, and she was held in position for intubation by many hands, but the depression of the lower jaw by means of the gag proved sufficient to obstruct the feeble respirations, and the patient ceased to breathe while I was in the act of intubation. This accident had never happened to me before, and fearing unjust censure I quickly removed the gag, laid the child in a horizontal position, used restoratives and artificial respiration. After prolonged and continuous efforts we succeeded in re-establishing the feeble breathing. I was making preparations to quit the house, being content to leave matters at least no worse than I had found them, when the father again begged as before to do what I could to save his child, so I put the child in position once more and intubated as quickly as I could, and left the thread attached to the tube, and fastened to the ear of the child. She brightened up a little before my departure, and I returned in several hours, found her quite comfortable and breathing naturally. She had, however, bitten the thread in two, and had thrown part of it upon the floor, and had evidently swallowed the other portion, and as there was no unusual irritation in the throat, I did not attempt to ascertain exactly just where the remainder of the string had gone. The case progressed in the usual way, and I removed the tube upon the fifth day, and found several inches of the string still attached to the tube; it had been hanging down in the œsophagus, where it had done no harm. The case continued to progress, and made a perfect recovery.

This is the most extreme case that I have ever had or heard of in which complete recovery occurred, and I think all will agree with me in crediting to Dr. Joseph O'Dwyer's ingenuity the salvation of this case.

I have had somewhat similar cases, but with fatal results, one in which I was called, but found that the patient had actually ceased to breathe. The candles had been lit and the prayers were being said for the dead. I noticed, however, that the platysma myoides had not ceased its spasmodic contractions. Despatching the father hastily to my carriage at the door for my intubation case I hastily intubated. I employed artificial respiration, and succeeded in recalling the almost extinguished respiratory centres, and the little fellow returned to consciousness, and appeared to be out of danger. He partook of nourishment, talked, laughed, and expressed himself as being desirous of going for a drive, etc., but died of pulmonary complications thirty hours afterwards, to the extreme disappointment of his parents, but in strict accordance with my prophecy, which proved alas! too true.

CASE V.—T. B., male, aged 3 years, seen in consultation with Dr. Cook. Had had diphtheritic croup for three days and a half previously; had been in a regular croup-camp, with atomiser, steam, etc., but all the usual urgent symptoms prevailed without abatement. I intubated, and this was followed by marked relief and copious expectoration, and several hours of peaceful sleep. He partook of nourishment well, and on the sixth day, all signs being most favourable, I removed the tube, and pronounced the patient convalescent.

CASE VI.—W. D., male, aged 3 years 3 months, seen in consultation with Dr. Brown. Patient had shown croupy symptoms for several days, and became very markedly croupy, with restlessness, stenosis, and recession. I intubated, and obtained the usual relief. The patient at first swallowed badly, but soon learned to drink in the bent-forward position, and the case proceeded uninterruptedly for five days and a half. Upon removal of the tube by the extractor he, after a few minutes, quieted down, and made a perfect recovery, making a sort of typical case in every particular.

CASE VII.—F. B., male, aged 5 years 4 months, seen in consultation with Dr. Reynolds. He had previously been under the care of Dr. Dhevlin (uncle to the patient). He had gradually reached a most desperate condition. He was cyanotic, and his countenance expressive of great anxiety. He was restless, and had recession of sternum and marked stenosis. I visited him in the afternoon and advised intubation, but the parents would not consent. About 10 P.M. all symptoms were much more urgent, and the little fellow was dying fast; then the parents desired that I should intubat I did so, and he wore the tube for five days. His temperatu (104° F.) and pulse (140) were high, and he emaciated rapidly He was suffering from sepsis. He partook freely of stimulant quinine, etc.; was treated by corrosive sublimate internally, a locally by atomiser. After removal of the tube he was very weak; could not stand alone, and had a catarrhal or septic bronchitis, f which we were obliged to treat him for several weeks wi tonics, cod-liver oil emulsions, and wheat phosphates. His co valescence was slow, but he is now in very good condition conside ing his recent severe illness.

In the narration of the above cases it will be observed that th were for the most part exceedingly severe in their character, a it would seem like folly even to hope to save them all. In fa my experience has been more often the other way. Once I was unfortunate as to lose seven consecutive cases.

The one factor of the greatest success in the remarkal group of cases just related was the comparative slowness, notwit standing the severe and threatening nature, of the malady. afforded time in which to do good work. It will be noted th they were not proceeding with that frightful degree of rapidi with which some cases manifest themselves, for within a few da I have been called by two of our most experienced physicians intubate for croup, and before I could reach them, even when sponding within an hour and a half, both cases had terminat fatally.

Intubation is of great assistance in the treatment of diphtheri croup, but it cannot be expected to save more than a certain perce age of cases; all that intubation does is to keep the glottis open, that respiration can continue, and it is only an aid in the bat against sepsis, bronchopneumonia, etc. Some cases are from the v inception doomed, either from the rapidity with which they progressing, or the intensity of the morbid processes at work dying within twenty-four or thirty-six hours, and with the t perfectly free; while, on the other hand. I have had cases in wh it was necessary to keep the tube in the larynx twenty-three da the stenosis continuing during the whole of that time, and dema ing the presence of the tube to prevent suffocation, and yet patient was finally saved.

The operation of intubation requires from three to ei seconds for its performance; and so accustomed may one beco as to be able to intubate without the introducer. On one oc sion I had simply a tube with me, and as the case was v urgent, I intubated simply with my hands.

A word as to general results. In 100 consecutive cases diphtheritic laryngeal croup it has been my good fortune to h saved 38 per cent.

INTUBATION OF THE LARYNX.

BY G. HUNTER MACKENZIE, M.D.,

Laryngist to the Eye, Ear, and Throat Infirmary of Edinburgh; Correspon Member of the Société de Médecine Pratique de Paris, etc.

THE comparative study of intubation of the larynx on the hand, and of tracheotomy and laryngotomy on the other, by t who have had experience of these operations, shows that former has both advantages and disadvantages over the la It will probably be found that, especially in young children, advantages predominate and the results are better.

After intubation in membranous croup (diphtheria of larynx), I have seen bad results ensue from extension of membrane beyond the range of the tube—an occurrence w might, of course, also follow tracheotomy. This is indicated the usual signs of cyanosis, and in addition by a peculiar, labo "wheezy" expiration of gradual onset. It is of importanc recognise the signs of this extension, as one might otherwis apt to infer that the tube was at fault, and so have recourse fruitless tracheotomy; for intubation does not necessarily prec a subsequent tracheotomy. Certain disadvantages which ap tain more particularly to the operation of intubation are illustr by the following cases:

1. At the beginning of February of 1889 I intubated, at request of a practitioner, in the case of a child, aged 21 mo for "membranous croup." The insertion of the tube was follo by marked relief of the breathing, and all went well until a six hours afterwards, when, in my absence, profuse bleeding f the mouth and nose set in. The child died almost immedia

t day I made an examination of the larynx and tube. I id the latter plugged by a clot of blood. There was an erosion he inferior (posterior) laryngeal artery and vein on the left , but not sufficient, in my opinion, to account for the bleed-

As permission to make a complete necropsy could not be tined, I was unable satisfactorily to determine the true ce of the hæmorrhage. But this much I could make out, the tube as it lay in the larynx had nothing to do with its ation.

About the middle of the same month I was requested by an- r practitioner to insert a tube in the case of a child, aged 3½ s, who suffered from "croup." The immediate result of the ation was most satisfactory, and nothing could have been er than the ease with which the little patient breathed for it seventy-two hours. On the fourth day, in the absence of family physician, I was hurriedly sent for, and arrived only to that the child had died just before I reached the house. On oval and examination of the tube I found it blocked by a firm, sh, purulent mass, which was with difficulty removed, even immersion for some time in hot water. Inspection of the nx was not permitted.

ave been unable to find any record of a case similar to the in which the tube was blocked by a clot of blood. The fatal t in the second might, I now think, have been obviated by emoval of the tube on the third day. It had been my inten- to do so, but the patient at that time was progressing so factorily that I was induced to let well alone. It is now my to remove and examine the tube not later than forty-eight s after its insertion; should this be followed by laryngeal nœa, reinsertion can easily be effected. I venture to think in the majority of cases all the benefit that is likely to result have been accomplished within that period.

In the case of a child, aged 4½ years, I had considerable dif- y in inserting the tube, and indeed I was not by any means in that it was left in its proper position in the larynx. I fore allowed the silken thread to remain attached, brought t by the mouth, and fixed it by adhesive plaster round the

Several hours before death the child gnawed through the d, and the tube must then have slipped down the gullet, for, *st-mortem* examination, I found it lying in the lower section e œsophagus. A curious point was that the little patient able to drink without difficulty until a short time before . On making some experiments with the larynx after death nd it not an easy matter to introduce the appropriate tube, ccount of the narrowing of the supraglottic portion of the x from membrane and infiltration. I would here remark the endo-laryngeal distortion which sometimes ensues in heria (membranous croup), and which is best demonstrated e aid of casts of the larynx. This last case has hitherto been nly one in which I have encountered any real difficulty in ing the tube.

ave, on a very few occasions, seen the tube expelled by ing. The probability of this occurrence need not cause , as there is usually ample time for its reinsertion. On one ion, however, its ejectment was followed by immediate dyspnœa. Fortunately, I happened to be in the patient's at the time, and so was able to replace it at once.

difficulty in swallowing, which is always present to a r or less extent so long as the tube is in the larynx, is an ditional reason why the tube should not be left in an hour than is absolutely necessary.

ve elected in this short paper to bring forward some of the of failure in, and some of the drawbacks to, this operation, ing that a consideration of these will be more useful than an ative record of its advantages—of which it is not by any devoid. After a fair experience of it, I am inclined to that the operation is one which has made good its claim asonable trial at the hands of the profession. It is doubt- ill capable of improvement, especially in the matter of in- entation.

pared with tracheotomy, I would say that the advantages bation of the larynx might thus be summarised: (1) readier t of relatives, (2) greater ease and rapidity of operation, esthetic not necessary, (4) subsequent opening of the wind- not precluded. Its disadvantages are connected with (1) ition, and (2) blocking, coughing-out, or swallowing of the

Also, in cases of laryngeal diphtheria or membranous it may not permit of such free local treatment of the upper sage, and membrane might be pushed in front of the tube,

and so cause occlusion. I think the latter objection more of the nature of a hypothesis than of a well ascertained fact. False membrane in the larynx is usually very closely adherent to the subjacent structures, and its detachment is not so easily accomplished by artificial means as some objectors to intubation would have us believe. I am not conscious of having encountered this mishap.

ON MASSAGE OF THE MEMBRANA TYMPANI AND THE OSSICULA IN THE TREATMENT OF CHRONIC CATARRH OF THE MIDDLE EAR.[1]

By ADOLF BRONNER, M.D.,
Surgeon to the Bradford Eye and Ear Hospital.

THE most common cause of deafness is the so-called "chronic catarrh of the middle ear," or, as some call it, chronic non-suppurative catarrh, or chronic dry catarrh, or sclerosis, or hypertrophic catarrh, or ankylosis of the ossicula, or adhesive catarrh, or the old-fashioned name, chronic obstruction of the Eustachian tube.

No one can accuse the otologists of not having tried all conceivable kinds of remedies for curing this very common affection. They have blown air into the middle ear through the Eustachian tube with Politzer's bag or with the catheter; they have blown all kinds of fumes and vapours into the middle ear; injected many solutions; they have passed bougies, used electrolysis and electricity; they have incised the drumhead, cut through the posterior fold, divided the tensor tympani muscle; they have removed the whole of the drumhead and also the ossicula; they have even opened the mastoid antrum; they have used many local applications to the mastoid process, and given all kinds of medicines.

Professor Lucae, of Berlin, some years ago recommended as a new method that of compressing the air in the external meatus, thus pressing in the drumhead; and of rarefying the air in the external meatus, thus drawing out the drumhead. He, however, soon gave up this method, because, as he said, it gave rise to hyperæmia and inflammation.

Professor Delstanche, of Brussels, has since taken up this idea, and recommends it chiefly in cases of sclerosis or dry catarrh. He has suggested an instrument by which you can alternately compress and evacuate the air in the external meatus, thus moving the drumhead up and down and with it of course the ossicula. In order to avoid the possibility of irritating the drumhead too much, he has attached the apparatus to a Siegle's pneumatic speculum, so that you can, if necessary, carefully control and watch the operation. The apparatus can also be used as a powerful evacuator, in order to break down any adhesions of the drumhead.

Hommel[2] recommends pressing the tragus into the external meatus with the finger at the rate of 120 times a minute five to six times a day for one to two minutes. Several authors, among others Professor Rohrer of Zürich, have carefully tested this method, and without obtaining any good results. In fact, Rohrer tells me that in several cases the hearing became decidedly worse after this process.

In 1884 Professor Lucae[3] recommended the use of what he calls a "pressure probe" for the treatment of some cases of chronic catarrh of the middle ear. This instrument consists of a probe with an enlarged concave end, and attached to a weak spiral spring. The end, covered with cotton-wool or gum, is pressed on to the short process of the malleus, and moved up and down two to ten times, of course under guidance of the frontal mirror. In this manner you move the chain of ossicula, break down any slight adhesions, and loosen the joints of the ossicula. In some cases this is not at all painful, in others, however, very much so. The local application of cocaine does not seem to relieve the pain at all. Lucae only uses the probe in those cases of chronic catarrh in which Rinne's method is negative, and in which "speech" is imperfectly heard. He has only tried it in those cases in which the use of Politzer's method and the Eustachian catheter had failed to improve the hearing. Out of 44 recorded cases Lucae

[1] Read before the Leeds and West Riding Medico-Chirurgical Society.

[2] *Archiv für Ohrenheilkunde*, xxiii, 17; "Die mechanische Behandlung des Trommelfells und der Gehörknöchelchen."

[3] *Archiv für Ohrenheilkunde*, xxi, p. 84, "Über eine methode für mechanischen Behandlung der chronischen Beweglichkeitsstörungen im schallleitenden Apparat des Gehörgangs."

failed to improve the hearing in 7 cases. There was slight improvement in 14, much improvement in 10, and in 13 the improvement was very marked.

Eitelberg[1] reports on thirty cases of chronic catarrh in which he used Lucae's pressure-probe. He, however, treats indiscriminately all cases of catarrh, and not only those as selected by Lucae. In a few cases only was the hearing improved, but in no case did the improvement last for any length of time. He succeeded, however, in greatly relieving some cases of tinnitus.

I have in the last two years used Delstanche's and Lucae's instruments in many cases, chiefly in private practice. At first I used Delstanche's method alone, but without any good results. Lately I always first use the Eustachian catheter, then Delstanche's, and then Politzer's bag, at one sitting. The results have in many cases been very good indeed. Of course if used in the manner suggested, it is difficult to say if the improvement in hearing is due to the use of the Eustachian catheter or to Delstanche's, or to both. In several of the cases, however, I found that the use of the catheter alone had failed to improve the hearing.

Only in those cases in which the use of the catheter combined with Delstanche have failed to improve the hearing do I use Lucae's "pressure probe." I have tried it in 64 cases. In one case the deafness became decidedly worse, in 43 cases there was no or very slight improvement, and in 20 cases there was well marked improvement. In 5 of these cases the improvement was permanent, in 7 it lasted from 1 to 10 weeks, and 8 cases did not return, so that the hearing could not be tested again. I also tried the pressure-probe in several cases of tinnitus. In 3 cases there was decided and permanent relief, and in one case the noises stopped altogether. These were all cases in which, as before stated, I had used the catheter and Delstanche unsuccessfully. I followed the suggestion of Lucae, and only selected those cases in which Rinne's method was negative.

In spite of the many kinds of treatment of chronic catarrh of the middle ear, there are, however, many cases which we do not improve and many in which we do not even quite arrest the progress of the disease. But is this wholly the fault of the otologist? I think not. In most cases the patients do not come to us at the commencement of the disease, and only come when they are very deaf, that is, when well marked and often irreparable changes have taken place in the middle ear. How can we expect to improve the hearing in those cases, for instance, in which there is well-marked ankylosis of the ossicula, or where the ossicula are tightly bound down by adhesions, or where the membranes of the fenestra ovalis or rotunda are thickened or calcified? not to speak of those cases in which the disease has spread to the internal ear. I find, as a rule, that when a patient says he is "not at all deaf, but only slightly hard of hearing," he can hear the watch at about two inches on the bad ear, and four to twelve on the good ear, which, he says, is as good as ever it was. If you ask him how long he has been deaf, he will at first say some weeks, or, perhaps, some months, but he will soon concede that he has not heard quite so distinctly for some years. In many of these cases we improve the hearing to a certain extent; then the patient is lost sight of for some time; he comes again only when he is, if anything, deafer than he was before, and then deliberately accuses the otologist, not only of not having done him any good, but often, also, of having made him worse.

In treating chronic catarrh of the middle ear, it seems to me to be of great importance that the disease be discovered and treated early, and that the patient show himself, and, if necessary, be treated every five to six months. We could then arrest the progress of the disease in a great many cases, and often at least prevent the rapid increase of deafness.

There is, I know, a widespread and popular belief, even among medical men, that cases of chronic catarrh of the middle ear are incurable, and that it is useless waste of time and money to undergo any kind of treatment. Against this belief I should like most energetically to raise my voice in protest. I think it is the duty of every medical man to impress upon his patients not to think too lightly of a slight beginning deafness, but to be treated at once, and also to impress upon them that even if the treatment does not relieve the deafness, that it certainly tends to arrest its progress, and that thus the treatment ought to be repeated at certain intervals.

[1] *Zeitschrift für Ohrenheilkunde*, xiv, page 279. "Zur Behandlung von Mittelohrerkrankungen mittels der Lucaeschen Drucksonde."

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CASE OF COMPOUND COMMINUTED FRACTURE OF PATELLA, WITH AVULSION OF LIGAMENTUM PATELLÆ: REMOVAL OF THE ENTIRE BONE: RECOVERY WITH FREELY MOVABLE AND USEFUL JOINT.

THE injury occurred in a man, aged 40, and was caused by a f on the bare knee from a height of seventeen feet. Chlorofo was given, and, on examination, it was found that the ligament patellæ was torn from the tibia, and, together with the lower fr ment of the patella, was lying in a wound—about four inc long—which extended across the front of the knee-joint. Th was a smaller wound over the anterior tubercle of the tibia, skin around was grazed, small pebbles and road dirt be "ground" into the wound and surrounding parts. The lower fr ment and ligament, with two or three loose pieces of bone, w removed; the finger passed into the joint felt at either side sm hard bodies, which were dissected away with a certain amoun tissue, and proved to be small pieces of bone. A vertical incisi two inches long, was then made and the upper fragment (m than half the bone) was dissected out, a small piece being brok off one side. The joint was then well washed out, and wounds scrubbed with a hard nail-brush. An opening was m through the external lateral ligament at the most dependent p for a drainage tube, and another tube, passed up into the pate pouch, was brought out at the centre of the wound. The wo was stitched, dressings applied, and the limb laid on a M'Int splint. Full antiseptic precautions were taken. There wa good deal of pain for the first day or two, requiring morph The highest temperature was on the second day: Morning, 9 F.; evening, 101° F. (pulse 112).

A week after the accident the temperature and pulse were F. and 84, both morning and evening, and the appetite was g The dressings were changed as required, and the drainage tu gradually shortened, the anterior one being removed in two we the other, through which almost the whole drainage occurre in three weeks.

Six weeks and two days after the accident the patient got and, with the support of splints, could walk about. The j was freely movable without pain, and rapidly gained stren The splints were soon dispensed with, some cotton wool a bandage giving all the support required.

When seen ten months after the accident the patient c walk with perfect freedom and confidence, could go up and d stairs as usual, and was able to ride on horseback. The thing noticeable in his gait was a slight swinging movemen the leg as he brought it forward.

REMARKS.—The reasons which induced me to remove the w bone were: 1. That I might clean the joint and rend thoroughly aseptic. 2. To obviate, as far as possible, all a irritation from tension, or the separation of necrosed bone. examining the large fragment I found a pebble firmly fixed in cancellated tissue, which had escaped detection and could have been removed by irrigation, and which of course would caused trouble if it had been left behind.

JAMES ALTHAM, M. Penrith.

A CASE OF INFLUENZA AND APHASIA.

WHILE taking charge of the practice for Dr. Kebbell, the follo case, which may not be devoid of interest, came under my no

Mrs. W., aged 27, lives in a small low-lying village. Fa history good. Her mother and sisters are healthy; her fa died of dropsy, apparently of a hepatic nature. She has ha usual diseases of childhood, and has had five children. About t weeks prior to the present illness I attended her at her confinen which was normal, except perhaps that I was obliged to rup the membranes. Two days after confinement the temperature 100°, which I attributed to the breasts. This soon subsided. in eight days she was up and well.

On April 11th, she was cooking in a small room without a while a current of cold air was playing on the left side of her

a after her dinner she was seized suddenly with shivering, iness, and violent frontal headache. Her friends asked her she was, and she said, "I don't know, I feel queer." They her brandy and put her to bed, and soon after noticed that ad lost the power of speech, and fancied she was suffering a stroke. In the evening they rubbed oil over the left side r face and temple, which they thought was swollen. The fol- ng morning I saw her, found her in bed; the face was pale, but ips were not so pale in comparison. When asked how she was ted to her head. When I spoke she seemed confused, and ap- ed to be unable to understand a question unless it was re- d. She would make an effort to speak, and after fixing her would say after the lapse of a moment or two "yes," which ded as if it had a mark of interrogation after it. The word " was about all she could say. Temperature 100.2°, pulse ened and weak. A saline mixture and some quinine pow- were administered. She took the yolk of an egg with a little ly several times a day.

xt day I saw her, and she seemed to understand all that was on. Could say the word "better"; examination fatigued Complained of frontal headache by pointing to the head; erature 100°.

xt day condition improved. More composed; could say the "yes," "no," and "better." Temperature 99°.

o days after (16th) I asked her how old she was, when her (who was in the room) said "27," and then the patient said 27." When asked where her head ached she pointed to the ad and left temple and said "there." She answered better two or three questions were asked at a time. I asked her d, but she shook her head, smiled, and said "I know it." It red that she understood the meaning of printed words but not read aloud. She cannot write. When asked how many en she had she said "four," and pointed to the one in bed o say "four and this one"; she could not say "five." Can all her children except one, to whom she persists in giving a name. Could not name her sisters or her nurse; could say y such expressions as "go away," "no you don't," etc. erature normal, as are the rest of the systems. I was able o watch the case so far. In a letter dated May 9th, Dr. ll kindly wrote to me:—

s. W. is improving, is downstairs, can now call all her child- id husband by name. Last Saturday she read from the aper to me the prices of eggs and butter. She complains headache."

y mention that influenza in its various types was prevailing district, and that a woman who was nursing Mrs. W. was ly seized with epigastric pain, vomiting, bloody diarrhœa, n back and limbs and headache; she recovered under ent in three days. The case illustrates that there are centres connected with the mechanism of speech. What e tangible condition of the centres is difficult to say. The as pale, but it can hardly be inferred from this that there æmia of the centres. It was a remarkable fact that the could not say the names of her sisters and nurse, but was say the names of her children except one. It would appear some aphasic conditions, when the power of saying names as is returning, patients are able to speak those names hey have learnt most recently.

on-le-Fylde. THOS. DOBSON POOLE, M.B.ED.

THE VALUE OF THE JURY MAST.

OURNAL of May 3rd, a letter appears from Dr. Steele, of speaking favourably of Sayre's jury mast. I used the paratus up to January, 1884, when a paper appeared in RNAL by Elliott, of Clifton, recommending the "croquet ry mast. This I have ever since adopted, and find it much eferred to that spoken of by Dr. Steele. The support is rough, and the patient has the additional advantage of le to lie down with comfort.

LEWIS W. MARSHALL, Surgeon, Children's Hospital, Nottingham.

NAL AND DOMESTIC HYGIENE.—Princess Christian pre- a meeting of the National Health Society on May 16th, at ence of Dr. Symes Thompson, to consider the new scheme dvancement of the study of hygiene, which was described URNAL of May 17th, page 1157.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BELFAST ROYAL HOSPITAL.

SUPRAPUBIC LITHOTOMY: TWO CALCULI REMOVED FROM THE BLADDER OF A PATIENT ON WHOM MEDIAN LITHOTOMY HAD BEEN PERFORMED TEN MONTHS PREVIOUSLY.[1]

(Under the care of HENRY O'NEILL, M.D., Surgeon to the Hospital.)

J. B., aged 45, engine fitter, married, four children, was admitted to the Belfast Royal Hospital on September 16th, 1889, suffering from acute cystitis. He is of intemperate habits, and has suffered from gonorrhœa and rheumatism. He complained of frequent micturition, and severe pain at the end of the penis during and after micturition, or while walking over rough ground. Occasionally he had retention of urine. He had been ailing in this way for about two years. Ten months ago he had median lithotomy performed by one of my colleagues for calculus in the bladder, when a phosphatic calculus weighing 100 grains was removed. The symptoms were relieved for about two months, but returned again as severe as before the operation. The perineal wound had not quite healed on his again coming into the hospital, and a small stream of urine occasionally escaped through the perineal fistula during micturition. His health was now very bad. He was much wasted, and had little appetite.

I examined his bladder with the sound, and distinctly felt a calculus. As his bladder was very irritable I gave him sodæ biborat. 30 grains in half a pint of barley water three times a day, and kept him in bed. In five days the cystitis had gradually subsided.

September 26th. Assisted by Drs. Wheeler and Mackisack and Mr. A. B. Mitchell, chloroform was administered and suprapubic lithotomy was performed. I found no difficulty in opening the bladder, which I found contracted and greatly sacculated, and containing two phosphatic calculi close behind the prostate. These were removed easily with forceps, and when dried one weighed 100 grains and the other 16 grains. The bladder was thoroughly washed out with warm boracic acid lotion (2 per cent.). The wound in the bladder was sutured with eight chromicised catgut sutures, and the upper part of the skin bound with two chromicised catgut sutures. The skin wound measured $2\frac{1}{2}$ inches, the bladder wound 1 inch. The wounds were dusted with iodoform and dressed with wood wool tissue. An india-rubber drainage tube was inserted into the lower angle of the skin wound. A soft catheter was used every four hours to draw off the urine. Milk food was given every four hours. 8 P.M. Pulse 120, temperature 102°.

September 27th, 8 A.M. Pulse 120, temperature 100.8°. Restless during the night. 8 P.M. Temperature 102°.

September 28th, 8 A.M. Pulse 108, temperature 103°. Quin. sulph. gr.x given; wound dressed for first time; bloody discharge in the dressings. Wound looks healthy. Urine still drawn off every four hours with catheter.

September 29th, 8 A.M. Pulse 112, temperature 100.8°. Slept several hours last night. Enema of warm water (1 pint) given, and bowels were well moved.

September 30th, 8 A.M. Pulse 108, temperature 101.6°. Wound dressed; healthy. 8 P.M. Pulse 112, temperature 103.4°. Restless; quin. sulph. gr.x given.

October 1st, 8 A.M. Pulse 112, temperature 100.4°. Had a quiet night.

October 6th, 8 A.M. Pulse 96, temperature 99.4°. Slept well except for a severe cough due to bronchitis; wound dressed; urine escaping from the wound; bowels moved twice daily; appetite fair. Milk food continued. He states he is quite easy.

October 9th, 8 A.M. Pulse 96, temperature 99.2°. Catgut sutures in bladder absorbed. By the strain of coughing the bladder wound has opened, and the urine escapes freely through it. The wound was dressed as before with iodoform and wood wool, the skin around the edges being smeared with carbolic oils ($2\frac{1}{2}$ per cent.). A soft catheter was passed through the urethra and tied in, so that the urine passes through it freely.

[1] Read before a meeting of the North of Ireland Branch of the British Medical Association.

October 10th. Pulse 96, temperature 98.4°. Urine escapes through catheter chiefly when coughing is severe; a small quantity passes through the wound. He had a quiet night.

October 24th, 8 A.M. Pulse 92, temperature 98.4°. Urine passes through catheter; no pain in bladder; wound in bladder healed. Catheter now removed, and only passed every four hours.

October 31st, 8 A.M. Pulse 92, temperature 98.4°. No urine has passed through the wound since October 24th. Skin wound healthy and granulating, and general health much improved.

From this time onwards the wound gradually healed, and he was discharged on January 16th, 1890. The reason he remained so long was on account of the bronchitis from which he suffered. He went to work again in March, and continued at it for about three weeks, but had to leave off again on account of the bronchitis.

April 18th, 1890. He can now hold his urine from seven to nine hours without pain, and the wound near the pubes is firmly healed, except a small spot the size of a pin's head, from which a drop of pus escapes after severe coughing.

REMARKS.—The patient was shown to the members of the North of Ireland Branch of the British Medical Association on April 18th, and also the two calculi which were removed from the bladder. The patient is now quite free from pain in the bladder, and is able to retain his urine in the bladder from seven to nine hours without inconvenience, while before the operation three hours was the longest time, and often he could do so only for fifteen minutes, and this rendered his life miserable. His chief trouble now is from bronchitis, which prevents him from attending to his duties as an engine fitter. The reasons which led me to perform suprapubic lithotomy in this patient were: 1. The previous operation (median lithotomy, performed ten months before) did not entirely relieve his symptoms. 2. The bladder was more easily explored, and could be more thoroughly emptied and drained. 3. Less risk to the patient. The result of the operation has been quite as successful as could be desired.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 20TH, 1890.

W. H. DICKINSON, M.D., F.R.C.P., President, in the Chair.

THE business of the evening commenced with the unanimous election of Sir William Jenner, Bart., to be an honorary member of the Society.

The following reports of the Morbid Growths Committee were read: (1) on Mr. Robinson's case of Epithelioma of Lower Eyelid; (2) on Mr. Croft's case of Aneurysm and Sarcoma; (3) on Dr. West's case of Primary Carcinoma of Omentum; (4) on Mr. Sheild's case of Tumour of Muscle; (5) on Mr. Robinson's case of Duct Cancer of the Male Breast; (6) on Mr. Bowlby's case of Coccygeal Tumour.

Multiple Tubercular Strictures of the Colon.—Dr. ROLLESTON showed the following specimen: there were three well-marked but not extreme strictures of the large intestine (1) at the beginning of the ascending colon; (2) at the hepatic flexure; and (3) in the sigmoid flexure. In the recent condition, the surface of the bowel in the region of the strictures was of a dark purple colour with white spots imbedded in the firm cicatricial tissue which had replaced the epithelium. The strictures were annular, fairly sharply limited, extending half to three-quarters of an inch in the long axis of the bowel. There was a little local peritonitis, but no tubercles were visible on the outer surface of the colon. There were a few enlarged lymphatic glands attached to the outside of the colon. The mucous membrane of the colon between the strictures was extensively ulcerated. There was no dilatation of the colon behind the strictures. Microscopically, numerous giant cells were seen, together with extensive small-celled infiltration. There was no ulceration of the small intestine. At the apex of the right lung there was obsolete tubercle. There was an empyema on the left side. There was double psoas abscess with an iliac abscess on the right side. There was caries of the bodies of the fourth and fifth lumbar and fifth sacral vertebræ. There was lardaceous disease of liver, spleen, intestines, and kidneys. There was a Meckel's diverticulum thirty-five inches from the cæcum. There was diarrhœa during life, but no symptoms suggesting stenosis of the bowel. That there was no obstruction was shown by the con
tion of the colon, which, though somewhat collapsed distally, w
not dilated above the strictures. It was possible that the lardace
disease of the intestine, by keeping the fæces liquid, preven
any accumulation.—Mr. HARRISON CRIPPS thought that th
should be described as strictures in a tubercular subject. T
actual structure of the stricture was fibrous and in the muscu
coat. The primary cause was ulceration, but any ulceration wo
produce strictures like those shown. The old explanation
cicatricial contraction of ulcers did not hold good, for the thi
ening affected the whole lumen. He believed that it was dege
ration of a muscular hypertrophy. They commenced proba
as spasmodic strictures, which were started by the irritation of
ulcer, and then the hypertrophied muscle underwent fibroid de
neration. In knee-joint disease, the same thing happened to
thigh muscles.—Dr. HANDFORD said that he had shown a so
what similar case last year, in which there were strictures in
small intestine, in the descending colon, and in the rectum.
microscope had revealed caseation with giant cells, but no ba
had been found. Pulmonary tubercle had been present, and
submucous coat was more thickened than the muscular. On
the strictures seemed to have started from a caseous gland.—
H. H. TAYLOR thought that tubercular strictures of the intest
were decidedly rare.

Bones from a Case of Scurvy.—Dr. COLCOTT FOX presented
long bones of the lower extremities, and a humerus from a cas
scurvy, occurring in a boy aged 13 years, who had been in
Victoria Hospital for Children on several occasions, and at
died very suddenly. The illnesses were always of a similar
scription, and the first one recorded, said to be rheum
fever, occurred in 1884. Each time the boy was admitted he
very dirty and neglected, and complained of a gradual onse
langour and listlessness, pains, and sometimes swellings in
joints, a slightly raised temperature, intense tenderness w
being handled, stiffness and contraction of the hips, knees
ankles, sometimes spongy gums, on one occasion a hæmatom
the scalp, and a progressive atrophy of the muscles, and espec
the long bones of the lower, and to some extent of the upper
tremities. The boy lived on bread and butter, and occasiona
little gravy. He never took vegetables, milk, or meat. The
mortem examination disclosed extreme atrophy of the fibula
especially the tibiæ, the femora, and to a less extent of the h
of the upper extremity; wasting of the muscles; circumsc
scanty hæmorrhages beneath the periosteum of these bon
few clots between the left iliacus and the periosteum of the
and under the pericranium; small ecchymoses beneath the p
at the back of the thorax; separation of the lower epiphys
the tibiæ, and loosening of the upper ones of the femora. The
organs did not present any lesions of interest. These speci
were brought forward—first, to illustrate the extreme atrop
bones brought about by recurrent attacks of scurvy; secc
to illustrate the connecting links between the lesions se
adults and in infants. The clinical history was also very i
esting. During life the case was very puzzling, owing t
absence of œdema in the legs and of all noticeable hæmorr
and fibrinous exudation into the muscles, and of purpura
the time-honoured mistake was made of confounding it
rheumatism; but the various recurrent symptoms, such a
gradual onset in the winter months, the cachexia, the m
langour and listlessness, the sponginess of the gums an
breath, the pains in the limbs and joints, the flexion and co
tion of the lower extremities, the excessive tenderness, the h
toma of the scalp, etc., when considered in connection wit
post-mortem appearances, left little doubt as to the real n
of the case. Dr. Fox discussed the sub-periosteal hæmorrh
the separation of epiphyses, the stiffening and contraction
legs, and lastly, the extreme atrophy of the long bones, the
being attributed to the hæmorrhages beneath the periosteu
peated in successive years interfering with the nutrition
parts.

Calcifying Sarcoma of Breast.—Mr. BRUCE CLARKE sho
specimen of this nature, which was removed from a woman
46. She had noticed the growth for three years, but it had r
increased during the last few months. The tumour involv
whole of the breast. It was about the size of a small coc
It was believed to be fibrous or cartilaginous, and its calc
nature could be detected by palpation before an incisio
made. There were no enlarged glands in the axilla.
operation the tumour was found to be practically confined

st, except that it was so adherent to the subjacent pectoral cle that it had to be separated by means of a saw. The cut ace was hard and gritty like bone. The tumour consisted ost entirely of fibrous tissue, which was partly calcified. Only similar case had been recorded in the *Transactions* of the ety (vol. xxxiii) by Mr. Bowlby, in whose paper the existing ography was recorded. Those tumours that had been recorded been found liable to recurrence.

orospermia in Relation to Tumour Formation.—Dr. WALTER EY read a paper on these protozoa, which often occurred in the it's liver, giving rise to small tumours, which were sometimes aken for tubercle. He described and showed specimens from rp affected with these parasites. There were scattered ghout the muscles several tumours, some as large as marbles, these consisted entirely of clusters of these organisms en- l by the muscles, which had undergone waxy and fatty de- ation immediately around the deposits. Upon section these urs were very soft, friable, and granular. He next described ical specimen from a rabbit's liver, and showed how the pre- of these organisms in the bile ducts produced not only pro- tion of the endothelium, but also of the bile ducts them- s; in fact, gave rise to small adenomatous growths. He upon the close similarity of the appearances there met with, e showed specimens from an early stage of adenoma of the n liver, also produced by a proliferation of the bile ducts. ese two examples two completely different forms of tumours met with produced by the coccidia or by their spores, the spermia. In the fish the tumours consisted of masses of the isms, in the rabbit the organisms produced but a small part e tumour, the main bulk being formed by the increase of ular and fibrous tissue in relation to them, thus somewhat aching cancer in nature. He next mentioned the chief cal characters by which these bodies could be distinguished normal cells or pathological structures, the product, for in- e, of cell degeneration in their resistance to the action of and alkalies and most of the common colouring reagents, as carmine and hæmatoxylin. They might be stained by rt's method for staining micro-organisms by a prolonged n the aniline dye solution and a rapid and not complete re- of the colour by aniline oil. If previous to this process the were stained in picro- or alum carmine a good contrast stain roduced.—Dr. CROOKE, of Birmingham, had observed similar rances in rabbits, in which there had been numerous papilli- growths in the bile ducts.—Dr. DELÉPINE described how uestion was a repetition of what had occurred fifty years Dr. SIBLEY replied that Dr. Hake had described the con- in the rabbit at that time as cancerous, and had regarded ccidia as cancer cells.

tic Disease of Breast complicated with Cancer.—Mr. T. W. gave the history of a case of this nature—a case of cystic e of the left breast followed by atrophic scirrhus of the breast. The patient, a lady of delicate frame, had been the care of Mr. A. Roberts, of Kensington. The cystic had existed five years before the breast was removed by nn in July, 1885, a small tumour, accompanied by occa- sanguinolent discharge from the nipple, having been ed in 1881. The age of the patient at that date was 49 The general health, which was not good up to the time operation, considerably improved, and remained so until n 1888, when the patient appeared to lose all interest in d to fail greatly in health and strength. In April, 1889, hischief was diagnosed, and a trophic cancer was found to ized upon the right breast. The patient had concealed lr. Roberts that anything was wrong with the breast, con- tly the date of the commencement of the carcinoma was ain. Sections of the original cystic tumour had been made, further scrutiny, after seeing the cancerous condition of ht breast, Mr. Nunn thought that some of the appearances inoma were to be observed. (A drawing of one of these s and also other sections under the microscope were exhi- The course of the atrophic carcinoma in the right breast d in a complete wasting of the mammary gland, and in its vas found an indurated linear thickening, resembling of a cicatrix, running obliquely upwards towards the there was no ulceration. The patient in the present ed of exhaustion and failure of the functions of the heart gs in July, 1889, aged 57 years. A similar case of atrophic was reported and a woodcut given by Mr. Ernest Hart xiii, page 224, of the Society's *Transactions*, and cases of the association of cystic disease of the breast with cancer had been described (vols. xix and xxii) by the late Mr. De Morgan and Mr. Thomas Smith respectively; in the one instance, cystic disease of one breast was accompanied by cancer of the opposite breast; in the other instance, cystic disease seemed to have supplanted the cancer, which had become obsolete. Mr. Nunn said, as every year in the life of an individual modified the conditions of growth, might it not be that what was cystic disease at, say, 50, became at 60 years of age carcinoma? In the case reported, did the cystic disease override cancer in the left breast, or was the cancer of the right breast but another manifestation of a constitutional fault in the patient's system? The coincidence of cystic disease and cancer formed a point of importance in prognosis, and pointed to the necessity of taking all possibilities into consideration in giving a prognosis in cystic disease.—Mr. ROGER WILLIAMS had seen many cases of cysts in cancer of the breast. He doubted if the left breast in the case under discussion was really cancerous.

Post-Scarlatinal Cirrhosis of the Kidneys (Small White) in a Girl aged 12.—Dr. HANDFORD showed the kidneys and microscopic sections in this case. The patient had measles at $2\frac{1}{2}$ years of age, and scarlatina, followed by dropsy, at 3, nine years ago. After recovering from the dropsy she remained in average health till last winter, when slight œdema of the face and extremities was noticed, and she suffered from headache, vomiting, and frequent epileptiform (uræmic?) fits; but the latter had ceased for two months before the present exacerbation of illness, which began eleven days before admission. There was general slight œdema, earthy pallor, drowsiness, pulmonary œdema, dry pericarditis, extensive albuminuric retinitis of old date, but without much affection of vision, and troublesome diarrhœa. The urine was scanty, of specific gravity 1012, and contained 0.35 per cent. of albumen. No hyaline or fatty casts could be found, but there was abundant renal epithelium and epithelial casts. She died on the sixth day after coming into the hospital. At the necropsy the heart weighed 10 ounces, and the left ventricle was greatly hypertrophied. The right kidney weighed 2 ounces and measured $3\frac{1}{4}$ inches by $1\frac{3}{4}$ by 1, while the left weighed only $\frac{1}{2}$ an ounce, and measured 2 inches by $1\frac{1}{4}$ by $\frac{3}{4}$. The capsules were adherent, and were torn off with difficulty, leaving a rough pale surface. On section the surface was pale, smooth, glistening, and leathery, and no distinction could be observed between medulla and cortex. The pyramids could not be distinguished. Microscopic sections showed a diffuse nephritis, part of which was quite recent, and was most plainly indicated by an abundant infiltration of leucocytes, but much was of older date, and was indicated by fibrous tissue, which had compressed the tubules and glomeruli and reduced wide areas to little more than the condition of a cicatrix. The capsules of the glomeruli were slightly thickened, and the glomeruli were generally the parts least affected. In the cicatricial areas the tubuli were compressed and atrophied. The muscular coat of the arteries was much thickened. The abundance of the cellular infiltration made it probable that the disease had not progressed uniformly for the past nine years, but that a subacute interstitial nephritis had recently supervened upon disease of old standing. In addition to these scarlatinal cases it was probable that some of the "granular kidneys" in the young, or in those below middle life, were examples of "chronic indurative nephritis" originating in the diffuse nephritis of enteric fever; and Dr. Handford suggested that other cases of nephritis in the young appeared to have originated in a bacterial infection, shown by bacteruria, apart from the acute specific diseases.

Contracted Granular Kidneys in Young Persons.—Dr. HALE WHITE brought forward the case of a boy whose exact age was doubtful, but he was probably about 10 years old; he might have been a little older, but certainly had not reached puberty. He was admitted for anæmia; he had albuminuria, and the apex of his heart was outside the nipple. After death it was found that the kidneys only weighed two ounces and a half, and that they were in all respects typically granular. The heart was much hypertrophied for a boy of his age, as it weighed ten ounces. Dr. Hale White mentioned another case of a man, aged 30, who died of anæmia, and in whom the kidneys, which weighed six ounces, were typically granular; here also the heart was hypertrophied. The condition in the second case was rare, and extremely rare in the first.—The PRESIDENT thought that granular kidneys in young people were commoner than was usually supposed. He had recorded an extreme case in a child of 14 years.—Dr. WEST said that he had reported a case with typical casts in a person of

17.—Dr. CROOKE had once seen a case in a boy of 9, in whom the condition was believed to have been produced in sixty-eight days. It had followed scarlet fever, and he died from uræmia and œdema of the lungs. There was well-marked retinitis. He asked what condition the arteries were in, as he had not found arterial sclerosis in small white kidneys.—Drs. HANDFORD and WHITE replied that in their cases the arteries were sclerosed.

Tuberculosis with Aspergillus Niger simulating Actinomycosis.—Dr. WHEATON described the following case, which was primarily one of tubercle, in which a fungus (aspergillus niger) grew in the bronchi and lung, and simulated actinomycosis. The patient, aged 2½ years, when admitted presented signs of consolidation of the base of the right lung in front, and of the apex behind. Eight days later signs of breaking down appeared at the base of the right lung, posteriorly. Eleven days after admisson a white patch appeared on the left side of the base of the tongue; the temperature, which had hitherto not exceded 102.4°, rose to 103.4°, continued to rise, until on the thirteenth day it attained 105.4°, and later 106.4°. The white patch gradually spread all over the tongue and hard and soft palate, and an ulcer with a grey base appeared on the front of the lower jaw. The child died sixteen days after admission. On *post-mortem* examination the lower three-quarters of the right lung were consolidated. The consolidated patches were of a bright yellow colour, with greenish markings, and riddled with small cavities. Around the patches of consolidation were numerous small orange-coloured spots like grains of mustard, which could be picked out with a knife. At the posterior part of the base of the lung was a cavity with irregular walls; the walls were black in colour; the cavity communicated directly with the right bronchus. In the main bronchus were several white patches, resembling those on the tongue. The left lung contained scattered bronchopneumonic patches, and a few orange-coloured granules. On examining a scraping from the lung numerous rosette-like bodies were found, insoluble in alkalies and acids, also fragments of the mycelium of a fungus. The white patches in the bronchus were found to consist of mycelium of a fungus, which was undergoing fructification and throwing out hyphæ, from the ends of which rosettes of spores were developing. On staining sections by Gram's method the characteristic appearances of actinomycosis were found. On careful search a few tubercles were found in the lungs and mesenteric glands. The case was interesting from the peculiar character of the tubercular lesions, the close resemblance to actinomycosis both on microscopical and naked-eye examination, and the fact of their being most developed at the base of the lung. It might be a question whether the fungus caused the high temperature with which its appearance coincided. Cultivations in gelatine by Dr. Copeman had shown a similar fungus growing slowly, and not liquefying the medium.

Carcinoma of the Testicle.—Dr. GRIFFITHS showed a specimen of carcinoma of the testicle removed from a man, aged 44, who had noticed a small, hard lump at the lower part of that organ twelve months previously. The hard lump had grown steadily but more rapidly during the last four or five weeks. The cord was not implicated; the lumbar glands were replaced by a large irregular mass or growth, through which the inferior vena cava passed. This growth had entered into the lower part of the vein, and had grown in its interior so as to form an elongated pyramidal mass, with its apex towards the heart, partially filling the vessel; it had also grown into and penetrated the posterior wall of the second part of the duodenum, where it formed a ragged, ulcerated, projecting mass. There were a few secondary growths in the lungs. The growth involving the testicle showed in parts the typical microscopic structure (tubes lined by columnar epithelial cells) of a fibrocystic growth, and in others that of scirrhus or encephaloid cancer. All the secondary growths were carcinomatous in structure. Dr. Griffiths looked upon this case as an example of fibrocystic disease, changed in the course of its growth, through irregular proliferation and multiplication of the epithelial cells lining the tubules into a true cancer.—Mr. ROGER WILLIAMS had seen a case of cancer of the uterus which penetrated the ureter, and grew upwards along it in the path of least resistance.

Hemianopsia with Softening of the Left Cuneus.—Dr. DELÉPINE gave the following account. He said that Dr. Dickinson, under whose care the patient had been, had allowed him to bring before the Society the results of the *post-mortem* examination, and he was also indebted to his kindness for the clinical notes of the case. The patient, whose age was 56, had been admitted into St. George's Hospital on November 30th, 1889, with cardiac, renal, and nervous disorders. There was no history of gout, rheumatism, o syphilis. For twenty-two years he had been a teetotaller. O May 26th, 1889, he was suddenly seized with dimness of visio staggered, and had to support himself, but continued his duties o signalman for thirty-four minutes, and was able to walk home wit support. He was laid up for six weeks, after which he returned t work for a short time, but without being able to perform h duties satisfactorily. About three months before death, whil pulling at a lever, he suddenly felt as if "something had go with a snap in the back of his head," and had pain and dizzines After being in bed for a fortnight, he became an out-patient St. George's Hospital, under Dr. Owen, and was admitted o November 30th, 1889. A note taken on October 18th was as fo lows: "Giddiness of the head. Pain in the occipital region; pa of field of vision of the right eye gone." Right hand numb times. The state on admission was cardiac hypertrophy, wit irregular, rapid pulse, with occasional palpitations, and an occ sional systolic apical murmur. The urine contained a conside able quantity of albumen and a large number of hyaline cas The lungs were œdematous, with partial consolidation of t bases, and shortly before death there was evidence of pulmona apoplexy. The temperature was almost throughout subnorm The nervous symptoms were most interesting. Eight months b fore death, as already mentioned, he was attacked suddenly wit dimness of vision, without any serious loss of motor power; fo months later he had a second attack, with occipital pain; a fortnig later giddiness, but no vertigo, and loss of part of the field vision of the right eye, and he was found by Mr. Frost to have rig homonymous hemianopsia. Forty days before death he beca sleepless, restless, incoherent, and noisy. Four days later there w Cheyne-Stokes breathing, with noisy phonation. This attack f lowed shortly after an attack of cardiac palpitation and pain. always seemed most rational and quiet when the action of t heart was most quiet. No further symptoms appeared, but t patient gradually sank. The *post-mortem* examination was m twenty-eight hours after death, and revealed the following chang Lungs congested, with numerous small hæmorrhagic foci. Th was a large apoplectic block in the right upper lobe, and the lo lobe was partly consolidated. The left pleural cavity contai 55 ounces of blood-stained fluid; there were 6 ounces of sligh blood-stained fluid in the pericardium. The heart weighed 26 ounc both ventricles were much dilated. There were some adher thrombi found near the apex of the organ. The valves were roughened, but in the posterior and inferior part of the walls the left ventricle there was a large irregular patch, where nea all the muscular fibres had been replaced by a soft transluc fibrous-looking material, which was distinctly fatty in seve places. Some of the vessels ramifying in that region w obliterated, others were much distended with coagulated bl Th patch extended through the whole thickness of the m cardium and to the endocardium; over it were some adher clots. There were similar degeneration patches in the walls the right ventricle. The aorta was dilated with soft atheromat patches in the neighbourhood of the openings of the coron arteries. The liver was large and cirrhotic. The kidneys weig 14 ounces together, with adherent capsules and numerous sm cysts in the cortex, and both contained infarcts, which, howe on microscopic examination, were found to be really disten vessels filled with *ante-mortem* clot; the epithelium of the tub between these vessels would not stain, and was evidently d The epithelium was also partly fatty. There was very exten arterio-sclerosis, and some contained recent thrombi. The b was very soft, with thickened membranes, and vessels thicke by atheromatous degeneration, accompanied by fibroid and f changes, the result of slow obstruction of the vasa vasor There were many circumscribed patches of softening in var parts of the brain. The two most important areas affected w the greater part of the cuneus and the middle part of the infe frontal and posterior orbital convolutions. There was a small which had destroyed the greater part of the middle occipital volution, and one at the bottom of the fissure of Rolando oppo the posterior end of the superior frontal sulcus. The infe temporal convolutions were also in a state of atrophy. The showed the following points of interest:—(1) The close ana between softening of the brain, myomalacia cordis, and art sclerotic atrophy of the kidneys, and possibly also atheroma degeneration of arteries. (2) The distinct connection betwee cuneus and vision; the left cuneus was almost entirely destr with almost complete right homonymous hemianopsia.—

ODALL asked what were the conditions and reactions of the ils during life.—Dr. DELÉPINE answered that the right was ted, and that both reacted to light, which was what would be ected.

Disseminated Polypi of the Large Intestine becoming Malig-t.—Dr. HANDFORD showed this specimen, which was taken n the body of a woman aged 34. There was no history of ignant disease, and no other member of the family was known ave intestinal polypi. The duration was uncertain, but the rest polypus which was pedunculated, 3.75 centimètres in neter, and weighed 180 grains (in the spirit preparation), was ruded through a stricture of the rectum, removed six months ore the patient died. At the necropsy the liver contained rmous secondary growths of the same character as the stric- of the rectum (malignant adenoma), and weighed 7 lbs. 12 ozs. ttered throughout the large intestine, but chiefly below the dle of the transverse colon, were about 170 polypi varying atly in size, some senile, and some attached to pedicles up to ntimètres in length. At the middle of the transverse colon a second stricture originating from the base of a large sessile pus. The smaller polypi showed the structure of a simple noma, and consisted of a central core of connective tissue and d vessels, over which was spread the thickened mucous mem- ne containing innumerable Lieberkühn's follicles. But even in e some of the cysts had begun to widen out into larger spaces. he larger sessile polypus at the site of the stricture in the sverse colon, the transitional stages to a malignant growth d be traced. There was still a branching core or framework aining connective tissue and blood vessels. Between the ches of this framework the tissue consisted of large, irregular, h indented spaces lined with a single layer of columnar epi- ium. Between these very irregular spaces or cysts was a y cellular connective-tissue stroma. In places this stroma ained patches of irregularly placed columnar cells in complete der, and in other parts there was an indistinct alveolar ngement. Some portions of this polypus, of the rectal stric- and of the secondary growths in the liver were quite indis- uishable from one another. In all the columnar epithelium, ng as it lined cysts, remained in a single layer. This case ed to bear out the contention raised about laryngeal growths, in some instances simple polypi might eventually become ma- nt.—Mr. ROGER WILLIAMS took into consideration the asso- on of cancer with multiple polypi, and said that cancers had one point of origin in the tongue; the development of cancer associated with ichthyosis, and multiple initial lesions occa- lly occurred in the mouth and in the œsophagus.

ontaneous Fracture of a Renal Calculus.—Mr. BRUCE CLARKE red a small fragment broken off from a calculus. The frag- was rather more than a quarter of an inch in length. The nt from whom it was obtained had had symptoms of renal lus for several years, and had passed gravel on several occa- . Previous to the passage of the fragment in question he ad a most severe attack of renal colic.

crosis of a Portion of the Fifth Lumbar Vertebra. — Dr. FFITHS, of Cambridge, gave an account of a case of necrosis of tion of the fifth lumbar vertebra, due to simple suppurative nmation, consequent upon injury. It was the case of a hy young man, aged 24, who, two years before admission into nbrooke's Hospital, had had a severe strain of the back from hole weight of a steel railway rail being suddenly thrown his shoulders. Subsequent to this he suffered from psoas umbar abscesses, but there was no deformity of the spine. e and repeated hæmorrhage took place from the ulcerated al iliac artery, which was in the anterior wall of a pelvic ss, and caused death. A small scale of necrosed bone was in an abscess cavity between the bodies of the fifth lumbar rst sacral vertebræ. This necrosed bone was derived from pper of the two vertebræ, as the lower part was only ex- ed. The cancellous bone that bordered the abscess cavity two vertebræ was much condensed and sclerosed, this being simple inflammation (osteoplastic osteitis), and not com- ed with tubercle. Dr. Griffiths regarded this, although pos- g the clinical features of caries (tuberculosis) as quite dis- from that disease, both in its mode of origin and nature.— ATSON CHEYNE asked if the wall of the abscess had been ex- d for tubercle. The sclerosed lining never showed bacilli.— RIFFITHS had examined the walls of the abscess without able to detect tubercle.

two following papers were taken as read:

Volvulus of the Small Intestine.—Dr. ROLLESTON showed a specimen of volvulus situated 5¼ inches from the cæcum in the ileum. The following abnormal anatomical arrangement of the cæcum and of the lower end of the ileum appeared to have been instrumental in the production of this accident: The cæcum had not descended into the right iliac fossa, but lay over the right kidney; it was of the fœtal type; the vermiform appendix arose from the apex of the cæcum, and the pouches on each side of the anterior longitudinal muscular band were equal in size. The lower five inches of the ileum had no mesentery, the gut passed behind the peritoneum through the iliac fossa to reach the cæcum. At the point where the lower fixed portion of the ileum joined the remainder of the ileum which had a mesentery there was a sharp twist of the bowel. Above this point the bowel was distended and inflamed, while below the gut was greatly contracted and quite pale. The volvulus occurred over the right sacro-iliac joint. The specimen was taken from the body of a man, aged 58, who died in St. George's Hospital from intestinal obstruction.

Fibrochondroma of Tongue.—Mr. JAMES BERRY showed a fibro-cartilaginous tumour which he had removed from the tongue of a man, aged 49. It had been growing slowly for five years. It was situated on the right border of the tongue about half-way between the base and the tip. It had attained the size of a small hazel nut; it projected markedly from the tongue, to which it was attached by a slightly constricted base. On the surface it was smooth, and covered by mucous membrane, which moved freely upon it. On section, it was found to consist mainly of firm fibrous tissue, with a nodule of cartilage in the centre. Mr. Berry said that the chief interest of the specimen lay in its rarity, fibro-cartilaginous growths being very seldom found in this region. He had not been able to find any mention of a similar specimen in the *Transactions* of the Society. A few somewhat similar cases had been recorded by Weber, Bastian, and others, but in most of them the patient was much younger and the tumour probably congenital. This was certainly not the case with the specimen exhibited.

Card Specimens.—Dr. HALE WHITE: Dermoid Cyst attached to the Pericardium.—Dr. HANDFORD: 1. Carcinomatous Strictures of Rectum and Hepatic Flexure of Colon, Carcinoma of Portal Fissure, Disseminated Carcinoma of Liver, Impacted Gallstones. 2. Carcinoma of the Root of the Lung, Comparative Absence of Symptoms, Simple Gastric Ulcer, Death from Enteritis.—Mr. HURRY FENWICK: Large Urethral Calculi.—Dr. VOELCKER: Retroperitoneal Teratoma.—Mr. SHATTOCK: 1. Separation of Radial Epiphysis. 2. Necrosis in Ossifying Chondroma.—Mr. L. A. DUNN: 1. Multiple Polypi from Rectum. 2. Spinal Cord compressed by Sequestrum. 3. Spina Bifida.—Dr. MONTAGUE MURRAY: Seven specimens of Bothriocephalus Latus in a Single Patient.

HARVEIAN SOCIETY OF LONDON.

CLINICAL EVENING.

THURSDAY, MAY 15TH, 1890.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

Adhesion of the Soft Palate to the Pharynx, the Result of Syphilis.—Mr. J. ERNEST LANE showed a case in which complete adhesion had taken place between the free border of the velum palati and the posterior wall of the pharynx, so that the nasal and oral cavities were separated from one another posteriorly, a small aperture at the junction of the hard and soft palate being the only means of communication between the two. The cause of this deformity was a diffused syphilitic infiltration of the soft palate and of the pharyngeal wall; to this succeeded ulceration of the parts involved, and adhesion between the posterior pillars of the fauces and the wall of the pharynx. These adhesions gradually advanced inwards towards the middle line, the infiltrated tissue subsequently becoming converted into a tough, highly contractile cicatrix. Mr. Lane described this condition as one of considerable rarity, though partial adhesions were not uncommon. Loss of taste and smell usually resulted, and for the remedy of these conditions some operative measure might be deemed advisable, though in the present case the inconvenience was not sufficient to justify such a course. Mr. Lane also showed portions of the vomer and inferior turbinated bones which had exfoliated from this case.—Mr. R. J. CARTER showed a similar case in a cornet player, aged 32, who had had a primary sore sixteen years ago. The throat symptoms commenced eleven years after the initial manifestation. In this patient the face and scalp were covered with an ulcerating tubercular syphilide. The patient

was still able to follow his occupation as cornet player.—Dr. CLEVELAND and the PRESIDENT remarked on the cases.

Harelip and Cleft Palate.—Mr. EDMUND OWEN showed a case of harelip with cleft palate. The harelip had been cured, but the pins had been left in too long, so that unsightly scars were produced. Mr. Owen, who was not the operator, said that he had entirely discarded harelip pins, and obtained excellent results from carefully-inserted sutures.—The PRESIDENT said that for a quarter of a century he had given up using harelip pins. He asked whether the cleft in the palate had become smaller since the operation on the lips, as he found that this often happened in children owing to the increased pressure exerted by the lips and cheeks. He therefore postponed the operation on the palate until the child was a year old.—Dr. CLEVELAND and Mr. ROGER WILLIAMS spoke about the cause and size of the scars.

Migrating Œdema.—Dr. EWART showed a case of migrating œdema, pleural effusion of albuminuria, probably due to septic infection and to influenza, occurring in a man aged 37, previously healthy and strong, who was free from syphilis. He had an attack of influenza at the end of December, 1889, and at that time sustained a bruise and abrasion of the hand, which healed after slight suppuration. About January 16th he was seized with sudden pain at the right lateral base of the thorax, which persisted whilst an œdematous swelling gradually extended from that point into the armpit. This swelling disappeared with a rash, but was followed by an œdema affecting the limbs and trunk. No swollen veins could be discovered at any time, but the right arm was the seat of severe pain. Both bases of the lungs were œdematous, and large quantities of clear fluid were on four occasions removed from the left pleura. Albuminuria persisted throughout without any nephritis. There was great weakness and insomnia, which were but slightly relieved by alcohol and morphine, and for some time the patient's condition was desperate. It gradually became apparent that the symptoms were mainly cardiac, and a diagnosis was made of intracardiac thrombosis of the right side ushered in by some peripheral clotting. The administration of iodide of potassium to the extent of 60 grains in twenty-four hours was at once followed by marked improvement. —The PRESIDENT expressed his opinion that the œdema had been of lymphatic rather than of venous origin.—After some remarks by Mr. E. OWEN, Dr. EWART, in reply, considered the case to be best explained as one of blood change beginning in the lymphatic system, and leading to thrombosis of the right side of the heart.

Osteitis Deformans.—Dr. ROBERT MAGUIRE showed a case of this disease. The patient, a woman aged 49, had noticed some four months ago that her head was growing larger. Later her legs became affected; she now showed great thickening of both tibiæ, with the formation of irregular bosses on their anterior surfaces and some bowing of the bones. All the bones of the skull were thickened, but especially the frontal and parietal bones. All the affected parts were hot and tender, and the skin over them was congested. The patient complained of vague pains in various parts of her body, which were not felt in the affected bones unless they were pressed. The pains were worst in the early morning; they did not occur at night. There was no history of syphilis or rheumatism.—The PRESIDENT said that one of the five cases originally published by Sir James Paget had been in a patient of his own, and he had an opportnnity of following it out to the end. The patient became unable to move his legs and head, and went blind. The disease did not, however, shorten his life, as he lived to be over 70 years age, surviving the publication of his case for ten or twelve years. Two sisters, who were still living, were now beginning to show signs of the same disease. Of this family these were the only three members.—Mr. ROGER WILLIAMS and Dr. ALDERSON made remarks.

Mammary Tumour.—Mr. LOCKWOOD read a case of an unusual tumour of the mammary gland, and exhibited microscopic sections of the growth. The patient was over 40 years of age and married. The tumour had been growing for three months. After removal, it was found to be glandular and not encapsuled. It contained many cysts filled with slightly turbid fluid. The origin of the cysts was not clear, though they were probably retention cysts. The acini of the gland were in a resting condition, and were surrounded by a small-celled infiltration. The stroma of the tumour was like that of the normal mammary gland, and contained hardly any small-celled growth. Mr. Lockwood was inclined to believe the growth was the result of inflammatory processes.—The PRESIDENT thought it was a case of chronic inflammation with a retention cyst, and referred to a similar specimen in the Hunterian Museum.—Mr. ROGER WILLIAMS thought that it was an example of the somewhat neglected form of breast tumour termed by Billroth "induratio benigna."

Cases of Osteotomy for the Relief of Malposition after Fracture. —Mr. HOLDEN showed a seaman, aged 45, who fractured his right femur in July, 1889. He was treated on board ship by a long splint, but without extension. Seven days later he was conveyed on shore, and was treated in hospital with a long splint and ex tension. At the end of six weeks it was found necessary to re fracture the leg. On admission to St. Bartholomew's Hospital there was a shortening of two inches and a half in the injured limb The lower fragment at the seat of fracture was posterior to an overlapped by the upper fragment, and there was a huge mass o callus. On March 4th the bone was divided, and the leg was pu up in a long splint with a weight of seven pounds acting as m extension; this weight on the fourth day was increased to 16 lbs The patient got up on April 25th, and was then found to have onl half an inch shortening.

Ill-united Pott's Fracture.—Mr. LOCKWOOD showed a man aged 47, who suffered from a very ill-united Pott's fracture, whic prevented him from following his employment. The foot wa everted and displaced backwards to such an extent, that when a attempt was made to walk, the inner malleolus almost touche the ground. To relieve this condition both the malleoli wer sawn off, the ankle-joint being laid freely open. Rapid recover ensued, and at the end of a month the foot was put up in plaste of-paris.

A Case of Hyperplasia.—Dr. STEPHEN MACKENZIE showed case of a boy aged 16, whose growth had become arrested tw years and a half before; since then he had shown a great ove growth of fatty tissue. After bathing he contracted a col followed by "erysipelas" of the nose. Since then he had ha repeated attacks of erythema of the face. He was a quick, in telligent lad, with a red face and rough skin. There was general overgrowth of fat, which occurred as symmetrical pa in the neck. It was difficult to judge accurately of the size o the thyroid body, but it appeared atrophied. Dr. Mackenzie r garded the condition as a perverted tissue development, allied sporadic cretinism and myxœdema.

Addison's Disease of Long Duration.—Dr. STEPHEN MA KENZIE also showed a young man, aged 29, whose skin was muc bronzed, and whose labial and buccal mucous membrane w deeply pigmented. Accompanying the pigmentary change the were marked signs of asthenia, and he regarded the case as o of Addison's disease. It appeared to be of five years' duration Dr. SEYMOUR TAYLOR showed a woman, aged 42, who was suffe ing from languor and lassitude, with great mental depressio She had also shortness of breath on exertion. Examination reveal pigmentation in the various sites which were usually discolour in Addison's disease. Ten years ago she was in Guy's Hospit under the care of Dr. Wilks, who made a diagnosis of Addiso disease. Dr. Seymour Taylor thought that the case was in reali one of Addison's disease, though it might be in a state of qui cence, or even of absolute arrest. If tubercle were the necessa lesion of the adrenals in this disease, and knowing that tubercu disease of the lungs might become arrested, he thought that similar course of events might have occurred in the suprarer bodies of this patient. On the other hand there might be a m take in the diagnosis, though this was unlikely.—Dr. MAGUI related a case of Addison's disease with marked and typical p mentation, in which the patient—a woman—remained health at least he had always considered it to be an anomalous case Addison's disease, but Dr. Stephen Mackenzie pointed out th pigmentation such as was met with in Addison's disease also curred in pigmented people who were otherwise healthy, and thought that the two patients now shown might perhaps belo to this class of cases.—Dr. EWART said that he had seen calcare degeneration of the suprarenal capsules, and he believed that Taylor's explanation was a feasible one.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 14TH, 1890.

SIR T. CRAWFORD, K.C.B., M.D., President, in the Chair.

Enteric Fever in India.—Surgeon-Major R. PRINGLE, M.D., r a paper on enteric fever in India, treating of (1) its increase; the causes of this increase; (3) the remedies; and (4) the proba consequences. The first question to be decided was, whether t

creased prevalence of enteric fever were real or apparent, that due to the incorrect diagnosis and nomenclature of cases of alarial fever occurring for the most part in young soldiers cently arrived and imprudent or intemperate; remittent fevers suming a continued type. This latter was, indeed, the conclu- n of the Sanitary Commissioners, but it reflected gravely on the owledge and ability of medical officers of great experience at ge military stations, and could not be allowed to pass unchal- nged. The increase of enteric fever was, he maintained, real d indisputable, and its causes were to be found in the almost iversally polluted water supply. In spite of warnings and re- nstrances, little or nothing had been done to improve the water pply, though the conditions of the latrines, etc., were such as render them hotbeds of enteric fever should the disease once be roduced. Thus, at the important sanatorium of Mussooree, he l represented this in vain for many years; in 1865 he saw the t case, and in the following year his predictions were more n realised, but it was not until 1883 that as an elected member he municipality, and with no encouragement from the Govern- nt, he was able to obtain a supply unequalled in any other ian town, and that without any addition to the local taxation. tin, Chakrata, about forty miles from Mussooree, was selected . sanatorium, though, cold and bleak, it had absolutely nothing ecommend it except a magnificent water supply, 1,000 feet ve the station; but, incredible as it might appear, this had n neglected, and the water was carried by hand from a k below the barracks, without any pretence at puri- tion, though it received the surface drainage, excreta, filth from the dwellings above. Even an alarming outbreak nteric fever in 1888 had not induced the authorities to avail nselves of the absolutely pure water supply close at hand, or collect the rain water from the iron roofs, which was now ted. During the twenty years that he had been sanitary er in the Agra district he had maintained a constant super- on of the roadside wells, and his example had been followed where with the happiest results, but the matter had never taken up by Government in earnest. It had been urged by e who refused to recognise in foul water supplies the chief or in the propagation of the disease that the natives them- es, who had no other, did not suffer from enteric fever. He itted that they might be less susceptible than Europeans, but nosis was very difficult with them; their complexion rendered exanthemata obscure, and they succumbed early to fevers re any obvious lesions could be developed. He had, however, them die by thousands of an epidemic fever, probably enteric, e the characteristics of all others were wanting. Thus, in , out of a population of four millions in the districts of Meerut, arh, Etah, and Bulandshahr, no fewer than half a million shed, and miscarriages among women were so numerous as usly to affect the birth-rate. The remedies were obvious, ely, the provision of pure water supplies from mountain ms or deep wells at all military stations, and strict control e wells and tanks used by the native population, with more ition to general sanitation. The examples of Chakrata and orkee, once one of the healthiest stations in the North-West inces, on the one hand, and of Mussooree since 1883 and Cal- since 1870, on the other, were absolutely conclusive, while almost complete immunity enjoyed by the children in the ls showed that youth was not *per se* a cause of enteric fever. suspicious sources could not be avoided, as by soldiers on arch, the water should be boiled. The consequences of this stent apathy and neglect to provide pure water had been that sanatorium after another had become a focus of fever. ee presented one of the most recent and terrible examples, he annual loss of life among a soldiery, better and more than ever, would far outweigh any expenditure which pre- on for all time could possibly involve.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MAY 9TH, 1890.

ENRY E. ARMSTRONG, M.R.C.S., President, in the Chair.

ervations on the Factors determining the Plumbo-solvent n of Moorland Waters.—Dr. JOHN BROWN, of Bacup, a paper on this subject. Many deaths formerly—and even -certified as due to uræmic convulsions, epilepsy, menin- etc., were, he believed, incorrectly diagnosed. Thus, in a block of houses where four such had been returned within a few months, he found a number of cases of lead palsy and the water highly charged with lead. The water in these places was very soft, of but 2° or 3° of hardness, with little organic matter, little chlorine, highly aërated, and had always an acid reaction—due in some instances, perhaps, to sulphuric acid, but mostly, he believed, to some organic acid. At Bacup and Sheffield the water contained also much iron derived from the pyrites, to which Mr. Allen attributed the presence of sulphuric acid, which he was rather inclined to explain by the oxidation of the sulphurous acid in the air. From numerous experiments he concluded that the chief factor in the solution of the lead was not the acid but the oxygen; thus, plumbism was far more frequent in winter, when the temperature of the moorland surface water was not over 40°, than in summer, when, having, unlike spring water, the same temperature as the air, its power of retaining oxygen in solution was less. Delivery under pressure, especially when interrupted, favoured aëration, and was followed by plumbism. The reservoirs were not stocked with fish, as was always done when the water was drawn from sewage-polluted rivers, and when, notwithstanding the quantity of organic matter in it, it had little or no action on lead pipes. These facts, too, completely disproved Mr. Power's notion that bacteria played a part in the solvent action, since moorland water, especially in winter, contained scarcely any. Lead occurred in water as a hydrate in solution and a carbonate in suspension. The presence of iron or of lime increased while that of alkaline or earthy carbonates diminished its solvent action. Passed through carbon filters, which absorbed sometimes as much as six-sevenths of the oxygen, moorland water ceased to act on lead. Boring into the millstone grit yielded an abundance of water, containing, perhaps, not more than one-sixteenth of the oxygen in that from the moors, and perfectly safe; but if the moorland water were used at all, it should, he maintained, be filtered through carbon, or at least through "sand rock," and the reservoirs be stocked with fish.—Mr. WYNTER BLYTH expressed his belief that the organic acid in question was acetic, and Mr. CASSAL maintained that the oxidation of sulphides was a well-known fact; both speakers criticised Dr. Brown's chemical procedures and conclusions.—Dr. CORFIELD had had much experience of the waters of the Hastings sand, soft, acid, and containing a bicarbonate of iron. They dissolved iron, lead, zinc, and tin with surprising rapidity, compelling him to have recourse to slate or stoneware cisterns and wrought iron pipes coated while fresh from the foundry with Dr. Angus Smith's varnish. He believed that the chemically pure lead now imported from silver-yielding countries and cheaper than the impure lead obtained here, was more easily dissolved by both the acid and the oxygen, though he attached more importance to the acid.

Kodak Photographic Camera.—Dr. SYKES exhibited a new form of the Kodak photographic camera, which he believed would be found very useful to medical officers of health in representing the actual condition of insanitary premises. Besides the perfection of its mechanism, it presented an entirely new feature in the substitution for glass plates as a vehicle for the bromide of silver film of a flexible sheet wound off one spool on to another. Fifty larger or a hundred smaller pictures could thus be taken in succession without once opening the camera; while, for those whose time was otherwise engaged, the company would undertake the developing, printing, and mounting of the pictures.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 14TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Pessary.—The PRESIDENT showed one of his "buckle" (intra-uterine) pessaries which had been left *in situ* for upwards of five years without apparently causing any irritation. The only noteworthy point was a cretaceous deposit at the uterine extremity.—Dr. BANTOCK pointed out that such a deposit was usually indicative of ulceration.

The Aims and Present Position of Gynæcology.—Dr. R. T. SMITH in opening the postponed discussion on Dr. Lycett's paper observed that cases of cancer were comparatively rare, and the general practitioner often had no opportunity of diagnosing it in the early stage.—Dr. BARNES called attention to the utterly inadequate means of teaching gynæcology and obstetrics in this country, and insisted on the good work done by the special hospitals in educating the profession in the former. Whatever improvement had taken place in the general hospitals had been in consequence of outside pressure.—Dr. BANTOCK doubted whether

it was necessary or desirable that all practitioners should be gynæcologists. He did not think that a man without special experience would ever be justified in performing abdominal section.—Dr. BEDFORD FENWICK dissented altogether from Dr. Bantock's remarks in respect to the difficulties of training the general practitioner in gynæcology, and he referred to the plan adopted at the Soho Hospital with that object in view, which he took to show that if properly managed such training was practicable and thoroughly reliable.—Dr. MURPHY, of Sunderland, mentioned that he had been summoned before the board of his hospital on a charge of indecent exposure of patients, because he had invited the neighbouring medical men to see the result of three operations for restoration of the perineum performed by Mr. Tait.—Dr. EDIS concurred in Dr. Bantock's protest against the recommendation to resort to Porro's operation for placenta prævia, and he narrated the difficulties he had had to contend with when first he endeavoured to teach gynæcology at his hospital.—After some remarks by Dr. RUTHERFORD and Dr. FENTON, the PRESIDENT said he thought much might be done by demonstrations on the dead body, and he protested against the mutilations which were so largely practised without sufficient justification.—Dr. LYCETT replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

FRIDAY, MAY 2ND, 1890.

E. H. BENNETT, M.D., President, in the Chair.

Diphtheritic Micro-organisms.—Dr. M'WEENEY showed a section through the epiglottis of a child who had died from post-scarlatinal diphtheria. The patient had been admitted in the desquamation stage of scarlatina, suffering from a bad throat and albuminuria. After death the mucous membrane of the upper part of the larynx was found coated with a thin layer of greenish-grey exudation. The sections exhibited showed numerous micro-organisms in irregular masses, and also scattered through the almost structureless membranous exudation. Some of these were cocci, others bacilli; the cocci were scattered or in pairs, the bacilli were smaller in size than the Klebs-Löffler diphtheria bacillus, and were certainly not the same species, as, in addition to the difference in size, they also differed in the fact that the bacillus found by Dr. M'Weeney stained readily by Gram's method, whereas the Klebs-Löffler organism was at once decolorised by iodide of potassium. Cornil and Babes also described organisms found in cases of pseudo-diphtheritic laryngitis after scarlatina, but they seemed to have found chiefly cocci. Dr. M'Weeney also showed a cover glass preparation of a pure culture of the Klebs-Löffler diphtheria bacillus, showing the so-called "involution forms," and referred to the recent researches of Spronck into the subject, which had quite established its pathogenicity. A sterile filtrate of a pure culture would cause paralysis, closely resembling the post-diphtheritic paralysis in the human subject, and also albuminuria in rabbits.

Multiple Abscesses of the Liver.—Mr. JOSEPH REDMOND submitted a case of multiple small abscesses of the liver in a woman. When seen she was anæmic, wasted, and somewhat jaundiced in appearance, complained of severe pain over the liver, and stated that she suffered from gallstones. The liver was enlarged and tender. The *post-mortem* examination was made by Dr. M'Weeney. The right and left pleural cavities showed evidence of acute inflammation. The liver was enlarged; numerous small abscesses were detected, more especially in the left lobe. The gall bladder was full of small angular calculi. Cystic duct thickened but patent. The common bile duct was blocked by a calculus lying immediately behind the duodenal mucous membrane. — Dr. M'WEENEY said that he suggested the somewhat wild hypothesis that the gallstones might have caused ulceration of the common bile duct, and that micro-organisms might have made their way up, in spite of the supposed antiseptic action of the bile, and spread into the ordinary liver substance; but his belief was that the case was one of pyæmia.—The PRESIDENT regarded the abscesses in question as pyæmic.—Mr. REDMOND replied.

Round-celled Sarcoma of the Testis.—Dr. M'WEENEY showed a tumour of the testis removed from a patient, aged about 30, by Mr. Chance. He had first noticed the swelling about two years previously, and it had since increased gradually and painlessly, with absence of testicular sensation. No tubercular or syphilitic history of patient or family; no history of injury. The testis was enlarged to the size of a medium-sized orange; it was globular and hard. On section the substance was white, mottled with yellowish patches, which looked to the naked eye like caseated portions, and which, on microscopic examination, were fatty-degenerated and almost devoid of structure. There was no trace of tubercular new growth. The white tissue consisted of cells and a stroma. The cells were largish, oval, uni-nucleated, and offered little or no variation in size or shape. They did not lie in actual contact, but each was separated from its neighbour by a small quantity of homogeneous intercellular substance. Their characteristics were, on the whole of the connective tissue rather than of the epithelial type. The stroma was trabecular in character, the main trabeculæ being comparatively thick, and running a straight course through a considerable part of the sections. From them were given off more delicate bands, which in their turn gave origin to still more delicate ones—the same structure prevailing throughout—namely, round and spindle-shaped nuclei of various sizes, with little or no approach to the formation of fibrous tissue. The ultimate trabeculæ consisted of but one or two rows of spindle cells placed side by side and end to end. They were clearly distinguishable from the oval cellular elements above mentioned, which lay in groups of varying size (about a dozen together as a rule) in the ultimate meshes of the stroma. He was in some doubt as to whether the stroma did not represent that which in the normal testis, starting from the mediastinum, runs between the lobules, in which case it would seem to have increased, *pari passu*, with the tumour, or whether it was of entirely new formation, in which case the specimen would have to be looked upon as one of alveolar sarcoma, a neoplasm of some rarity in that situation. —Dr. PATTESON said that, judging from the general distribution of the stroma and the character of the cells, this disease was much more distinctly a carcinoma than a sarcoma. It was decided that the specimen should be sent to the Committee of Reference.

SOUTH INDIAN AND MADRAS BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

FRIDAY, OCTOBER 4TH, 1889.

Deputy Surgeon-General ROE, C.B., President, in the Chair.

Living Specimens.—Surgeon W. B. BROWNING showed (1) a man on whom he had operated for Inguinal Hernia, and afterwards removed his scrotum, which was elephantoid; (2) a lad, aged 16, upon whom he had successfully performed Osteotomy for Genu Valgum.—Surgeon J. SMYTH, M.D., showed a man suffering from Ainhum, the little toe of the left foot being affected.

Beri-beri.—Surgeon-Major M. S. EYRE read a paper on beri-beri; he distinguished two forms, the chronic and the acute, and observed that the acute as a rule supervened on the chronic. The patients as a rule were stout and well nourished. Anæmia was not a constant symptom, and when present varied in degree. Anæsthesia commenced in the forearm and legs, and spread gradually upward, involving the whole or part of the trunk; it was not present in all cases. The amount of œdema he had found usually very slight; it was first seen over the tibiæ and the sacrum, and in some cases extended to the face, chest and body. He had not detected physical signs of effusion into the serous cavities. Some of his cases had been characterised by a peculiar staggering, unsteady gait; inability to stand with the feet together and the eyes closed; and had the greatest difficulty in raising a cup full of water to the mouth, or in picking up a pin from a table. There was, however, no true paralysis. The acute cases of beri-beri were characterised by sudden and extreme dyspnœa, with rapid failure of the heart's action. The pulse was very rapid, small and weak; it quickly became weaker and weaker, until in many cases the patients became quite pulseless for an hour or so before death. No organic disease of any kind could be detected; the nervous, cardiac, respiratory, digestive and urinary systems being all normal. When the dyspnœa had once set in the case was hopeless. Nothing seemed to have the slightest effect, even in relieving the dyspnœa. Digitalis, ether, ammonia, and brandy given internally; subcutaneous injections of ether, had all been tried, but without the slightest effect. The paper included notes of a series of cases. In the treatment various tonics had been given, but the greatest benefit had resulted from the use of oleum nigrum ♏x t.d.—Dr. MAITLAND expressed surprise at the statement that anæmia was not always present.—Dr. BROWNING said that he had observed that anæmia was not always present; a great many cases had an ataxic gait, and when paralysis existed there was also delayed sensation. The sepoys attributed the disease to a fish diet.—D

criticised the theory which attributed the disease to the
ce of anchylostomum duodenale.—The PRESIDENT referred
aistory of a gaol in the Madras Presidency in which beri-
d been so bad that it was decided to abandon it, but an
tic superintendent had had all the walls scraped, and re-
ed, and the floors removed and relaid with such a beneficial
that the spread of the disease was for a time checked.
nigrum, which was extracted from an indigenous plant,
arlike odour, and if it had any good effect, it was prob-
ie to its acting as an antiseptic.
s.—Surgeon W. B. BROWNING related a case in which con-
iess was temporarily regained under treatment after a very
ose of opium.—Surgeon-Major ALLISON showed a drawing
dunculated Tumour growing from the Ankle.

FRIDAY, NOVEMBER 1ST, 1889.

oma of Leg.—Surgeon-Major W. R. BROWNE, M.D., ex-
l a male patient, aged 50, who had suffered from sarcoma-
sease in and about the right knee-joint for about one year.
ab was much swollen; the knee was large and soft; the
was much enlarged, being four inches broad and six inches
nd on its anterior surface was a small nodular hard mass,
was movable. The head of the tibia was enlarged to four
ts normal size; the head and shaft of the fibula were slightly
ed. A soft fluctuating tumour hung down from the popliteal
and was freely movable. The condyles of the femur could
felt. The leg was enormously misshapen and distorted, being
l when the patient lay down, and inverted when he walked
On manipulating the joint, which was wonderfully mobile
ount of the looseness of the ligaments, a grating could be
On the inner side the tendons inserted in the upper part of
ia stood out prominently, and some bony nodules could be
out them. A remarkable feature in the case was that there
pain.
s.—Surgeon-Major J. MAITLAND, M.D., related the sequel to
of Popliteal Aneurysm previously reported, and read notes
se of Inherited Syphilis.
ological Specimens.—Surgeon J. SMYTH showed the follow-
cimens:—(1) Syphiloma of Heart; (2) Aneurysm of Aortic

RTH OF ENGLAND OBSTETRICAL AND GYNÆCO-
LOGICAL SOCIETY.

FRIDAY, APRIL 18TH, 1890.

JOHN WALLACE, M.D., President, in the Chair.

imens.—Dr. ALEXANDER (Liverpool) showed a Ruptured
The patient had been in labour twenty-four hours, and
ad been given. Dr. Alexander found the child hydro-
c; he turned, and applied forceps to the after-coming head.
ncenta was exposed, when a mass of intestines came down;
rus was removed and the stump drawn down through the
; the patient made a good recovery. He had often thought
some cases the method of bringing the stump down
h the vagina would be useful.—Dr. CLARK (Huddersfield)
l a Uterus removed for Carcinoma.—Dr. BRIGGS (Liverpool)
ned a case of Chronic Inversion, and exhibited the Uterus.
AUDER (Manchester) read a note on a case of Peritonitis
cating Pregnancy. Dr. SINCLAIR also spoke on the case.—
XO ROBSON showed a Uterus surrounded by abscesses re-
by Hysterectomy, for fibroid tumour of the uterus with
pyosalpinx accompanied by one or more abscesses in the
igament, communicating with an abscess cavity in the centre
nyoma. The case showed that even in the presence of ex-
pelvic suppuration abdominal hysterectomy might be suc-
ly performed.—Mr. RUMBOLL (Leeds) showed an Infant
ith Facial Paralysis; the mother was a primipara with
; æquabiliter justo minor." She had been in labour twenty-
urs when forceps were applied, the head being above the
the pelvis. The child was born with paralysis of the left
erve. The peculiarity of the case was that the pressure
by the forceps was not on the facial nerve of the side
l.—After remarks by Dr. WILLIAM GAY, Dr. BRAITH-
said he thought pressure upon the facial nerve must have
oduced by the blood which had been squeezed out of the
e side of the head by the forceps.
rs.—Dr. LAUDER (Manchester) read a note on a case of
itis complicating Pregnancy, on which Dr. SINCLAIR made
remarks.—Dr. SINCLAIR (Manchester) read a paper on the Diagnosis of Gonorrhœal Infection in Women. Several typical cases were described. These had remained undiagnosed, although they had undergone more or less prolonged treatment. Many varied in the remoteness of the time of infection, from three months to eighteen years.—The paper was discussed by Dr. WALLACE, Dr. ALEXANDER, Dr. SCOTT and Dr. MARTIN; and Dr. SINCLAIR replied.

REVIEWS AND NOTICES.

WANDERINGS IN SEARCH OF HEALTH; or Medical and Meteorological Notes on Various Foreign Health Resorts. By H. COUPLAND TAYLOR, M.D., Fellow of the Royal Meteorological Society, etc. With Illustrations. London: H. K. Lewis. 1890.

FOR those who take an interest in foreign health resorts, Dr. COUPLAND TAYLOR has provided a very interesting and instructive volume. An invalid himself, and compelled on that account to relinquish professional work at home, he has sought, in various well-known resorts for pulmonary invalids, a climate in which he could lead an invalid life with the greatest amount of comfort and the least amount of risk. He has tried Bournemouth, the Riviera, the Engadine, Davos, Meran, the Canaries, and, finally, Madeira, in which, we are glad to learn, he has found the haven for which he has been searching. If, here and there, the sensitiveness of the invalid is apparent, it is rather an advantage than otherwise, for it is rarely we are able to obtain a record of the feelings of invalids during their enforced wanderings, corrected, as these are, by professional knowledge and wide experience; for Dr. Coupland Taylor, before he himself unfortunately became an invalid, had had opportunities of testing the value of sea voyages and of visiting Australia, New Zealand, California, Colorado, and other resorts, of which also he in these volumes gives brief but interesting and reliable sketches.

In the introduction he justly animadverts on the want of caution and lack of knowledge displayed by certain consultants in prescribing climate resorts to their patients. This is especially the case with phthisical patients; there are on record cases that have died a day or two after their arrival in an altitude where they were unable to breathe, and others who have actually died while traversing the mountain passes leading to these stations. In the latter cases, utter ignorance of the several modes of approach to a high mountain valley has sent a dying invalid 1,500 feet higher than the resort he was consigned to, while he might have reached it on the same level! Dr. Taylor mentions a case recently observed by him. A lady, whose own medical man was opposed to her leaving home, was advised to do so by a consultant: "She was carried from her room to the cab, from thence to the train, and from thence on board a steamer for a passage of some days' duration. On arriving at her destination, she was carried up to her bedroom at the hotel to die, far away from home and amongst strangers, only four days after her arrival."

The first chapter on "The Ocean as a Health Resort in Phthisis" is written with much care and judgment, and the great risks of the sea voyage are fully but not unduly insisted upon.

The next two chapters on "A Summer in the Engadine" and "A Winter at Davos" present a view of these high altitude resorts not altogether in agreement with that of their more enthusiastic advocates. As Dr. Coupland Taylor has lived through a winter at Davos, he has the best of rights to express an opinion. "With reference," he says, "to the winter climate of Davos, though there has been much said as to the hot sunshine, the cloudlessness and the intense blueness of the sky, the dry and still atmosphere, when once the true winter has set in, yet little has been said of the dreadful period generally preceding it, when the weather, for a month or six weeks, is as bad and as trying, save for the fogs, as anything to be met with in England.....Nor do we often hear of the disastrous effects of a bad winter there, when there is a continuance of such weather as generally precedes the snowfall, and the 'glorious winter weather' only occurs for a week or two at a time, with intervening longer periods of absence of sun, and the only too frequent presence of heavy snowstorms and bitterly cold winds." Referring to the statement that "more liberties can be taken in the air of Davos than anywhere else," Dr. Taylor states that his experience was "precisely the reverse, and nowhere have

I had to take so many precautions, or be so careful, as at Davos." His conclusion, from prolonged personal observations at Davos, was that the cure there was being "pressed too far," and that phthisical patients were being sent there "without due care and without first ascertaining whether they are suitable cases for such rigorous treatment;" he further refers to "several cases where profuse and persistent albuminuria has ensued on a residence at Davos." But Dr. Taylor, nevertheless, values duly the climate of Davos in suitable cases—namely, those phthisical patients who still retain considerable physical vigour and a sound and active circulation; but the more feeble, he thinks, would do better at once to seek lower altitudes and a warmer temperature, and he quotes with approval Dr. Burney Yeo's observation that "there frequently seems some special relation between the individual to be cured and the particular climate that will suit him, and frequently it is only by actual trial that such a relation can be discovered." The sum of Dr. Taylor's observations is that the climate of Davos proved entirely unsuited to his own case, as well as to many others that came under his notice.

The two succeeding chapters are devoted to a description of Madeira and the Canary Islands. Although at present there is a feeling of much irritation between Madeira and the Canaries, as rival health resorts, there can really be little doubt that the effect of public attention having been strongly directed to the admirable climate of the Canaries will be entirely to re-establish Madeira in even more than its former popularity—for the two places are exceedingly alike in climatic characters; and now that suitable hotels are being opened on elevated spots near Funchal, and invalids are no longer compelled to live in the town of Funchal itself, the old objections to Madeira as being relaxing and stuffy are practically removed. Dr. Taylor evidently prefers the island of Madeira to the Canaries, where, however, he passed seven months, chiefly at Orotava. Las Palmas, in Grand Canary, he thought "windy and dusty," and he considers Orotava to have many advantages over it, especially for pulmonary invalids. "With the single exception, as regards the climate, that there is a greater rainfall at Funchal than at Orotava, everything it seems to me," he observes, "is in favour of the former as regards the class of invalids which ought to be sent to these climates;" but, further on, he readily admits that "Teneriffe has great capabilities as a health resort in its dry and yet agreeable climate, though it still labours under many disadvantages through lack of development; these, however, are mostly removable by time and good management."

The remaining chapters are devoted to "The Western Riviera" and to "Some Miscellaneous Health Resorts," in which brief notices are given of Meran, Algiers, Arcachon, Pau, Biarritz, Bournemouth, Colorado, Australia, New Zealand, etc.

At the present moment, when it is often asserted that invalids are unwisely and unnecessarily sent to foreign health resorts when equally good results might be obtained at the towns on our own South Coast, it is interesting to note what so experienced a searcher after health and so competent and unprejudiced an observer as Dr. Coupland Taylor has to say on this subject: "There is certainly," he says, "one class of disease—that is, all chest complaints—which can in the majority of cases be more effectually treated by a judiciously chosen residence abroad than at home. Of this fact all who have any extended experience of foreign climates can scarcely have any reasonable doubt, notwithstanding the oft-quoted drawbacks to foreign residence, the reality of which no one wishes to deny; and it would be a great mistake if many who are able to leave England during the winter were not advised to do so."

Some admirable photographic illustrations give additional attractions to this interesting volume, and we congratulate Dr. Taylor on having produced a really valuable contribution to medical climatology, and on having turned his enforced leisure to such excellent account.

NEW ZEALAND: FOR THE EMIGRANT, INVALID AND TOURIST. By JOHN MURRAY MOORE, M.D. London: Sampson Low, Marston, Searle, and Rivington, Limited. 1890.

THIS work has both a general and a medical interest. It contains a great amount of information useful to the intending emigrant or tourist, and it contains also much valuable and necessary information especially addressed to the medical profession, and for the service of invalids.

This book, the author states in his preface, is the outcome of nine years of professional work in the colony, and it embodies t mature impressions and experienced observations of a skilled a competent observer. Of the twelve chapters of which it consi nine are devoted to subjects of general interest, and afford a la amount of useful information on the Maoris and their customs, the geographical configuration of the islands and their remarka natural scenery, on the settlement and cultivation of the land; the government of the colony, its public works and institutio productions, industries, and social life.

The remaining three chapters are chiefly devoted to medi topics, one dealing with the "Climates of New Zealand, Gene and Local;" another with "The Mineral Springs of New Zealan while the third is concerned with the "Professional Experienc of the author.

In the chapter on climate, the complaint is made that "fashi able consultants have not given sufficient attention to the diff ences of climate between (1) Australia, Tasmania, and N Zealand, and (2) between the different districts of the last m tioned colony. While Australia, as a whole, is a much dr country than New Zealand, less stormy and more suitable some forms of consumption, experience shows that it is so viol and sudden a contrast to the English climate as to make t transition injurious to many consumptive and debilitated in lids." In order to assist those who have to decide or advise such matters, the author has been at great pains to set forth only the characters of the general climate of New Zealand, also those that differentiate the four climatic zones into wh he divides the colony.

As no spot in the whole of the three islands is more than miles from the sea, its climate is insular and tolerably equal and on the whole not unlike the climate of Great Britain, warmer, as it lies within the southern temperate zone. The av age temperature for the whole year is, in the North Island, 5 in the middle (South) Island 52°. "In the northern part of North Island there is no true spring nor autumn, but only a season, November to April, inclusive; and a cold and wet seas May to October, inclusive. During three quarters of the y a healthy man may sleep out of doors with impunity to health furnished with simply a blanket and a mackintosh, anywher the North Island."

The mean daily range of temperature is from 15° to 20°, sh ing considerable equability of climate, but the mean annual ra fall varies greatly, from 25 inches at Christchurch to 112 at H tika; Auckland has 45 inches, Wellington 50, Napier 37, and D edin 32. New Zealand is not afflicted with disastrous droug like Australia, but, on the contrary, is, in some parts, distinc "rainy;" for example, in 1882 rain fell on 191 days in Auckla on 165 in Wellington, and on 187 in Dunedin, or on rather m than every other day!

Dr. MOORE's first zone extends from the extreme northerly p of the North Island southwards to just beyond Napier. Thi the warmest and mildest of the whole colony and the best clim in New Zealand, as the proximity of the sea, owing to the narr ness of this part of the island, tempers greatly the heat due to latitude. The rainfall is somewhat large—51.7 inches—but it f chiefly in winter, May to September. There are no frosts ab the coast in winter, and vegetation is luxuriant. This zone cludes Auckland, Taranaki, and Napier. It is a drawback Auckland that it has a clay subsoil which retains moisture predisposes to rheumatism, bronchitis, and sore throat, and in hot season the "muggy weather" is trying to nervous pers Consumptive patients—the author does not think the clim suitable to "tubercular phthisis"—should not arrive at Auckl earlier than October 15th to 20th, nor later than March 31st. climate of Taranaki is "more bracing and healthier," but try to chest invalids. Napier, on the opposite east coast of the isl has a drier climate than Auckland, and much lower rain namely, 37.26 inches. It suits asthmatics better than Auckla and it has the advantage of a well-managed mountain stat (Kuripapanga) fifty miles inland.

The author's second zone takes in the southern end of the N Island and about the northern one-third of the middle (So Island, and includes the capital, Wellington, and the towns Nelson and Picton. Its general climate "resembles that of south of England, but with keener winds and a far more bra atmosphere." Wellington, the capital, does not appear to h much to recommend it in point of climate; it is said to be " most breezy and earthquaky place in the colony." Its m annual rainfall is 51 inches, and its mean annual tempera

?. It is known in the colony as "Windy Wellington," and is ındesirable place for pulmonary invalids. The climate of ɔn appears to be much more genial "to [invalids suffering slow chronic consumption, rheumatism, and from senile y. Nelson offers a delicious and restful climate." It is sur-ded by mountains on all sides, and is known as "the garden ew Zealand." It is somewhat hot and "too sedative" in mer. "Children born in Nelson during the summer are never st." Its annual rainfall is large—61½ inches.

e third zone takes in the remainder of the South Island, and ıdes the towns of Christchurch, Dunedin, and Queenstown. stchurch is, according to our author, too hot in summer and old in winter. "Its climate is not conducive to the health ckly people or of young children from its extreme variability ıe same week or even in the same day." The climate of edin, though healthy, is somewhat severe, and the town is sed to strong winds. "There is a real winter here, of uncer-duration, July being perhaps the most severe month of the when sleet, snow, and hail descend with a charming variety. the only New Zealand city where I found it necessary to r an umbrella every day in the summer."

. Moore constructs his fourth zone out of a sub-alpine plateau e centre of the North Island. Here mountain air "particu-suited for asthmatic and emphysematous sufferers" can be d, and the region abounds in sulphur springs. But the weather is stormy "at all seasons." It appears, then, that New Zealand, ching, as it does, through nearly 13 degrees of latitude, has a in variety of climates, at one extreme warm and somewhat ing, at the other cold and bracing, and from its narrow in-conformation and the situation of its mountain ranges it considerable and in some parts a very large rainfall and a id atmosphere. It has been described as a "greatly improved ɔn of our own English climate."

Chapter v the author gives an account of the mineral springs ew Zealand. These appear to be very numerous and remark-The presence of sulphuretted hydrogen in those springs s very general, and must interfere with the medicinal ap-bility of many of them. In others their very richness in ral constituents must offer an objection to their use. They ɔo concentrated for most of the purposes for which mineral rs are employed internally. When one reads of waters con-ng 56 grains of bicarbonate of soda in a pint, 58 grains of ıates of iron and alumina to a pint, and of others containing able quantity of free sulphuric and hydrochloric acids, one clined to think that they might prove rather more active desirable. The thermal springs have, of course, the ad-ıge of their thermality, but here also we should be disposed nclude that the strong mineralisation of many of them was r a drawback to their general utility. For analyses and a led account of the applications of these remarkable springs ıust refer the reader to the work itself.

ıpter XII contains much information of great value to medi-en desirous of settling in New Zealand as to their prospects ccess, outfit, fees, and modes of introduction to practice; some instructive remarks on the diseases most common gst the natives and the colonists and on the kind of cases in ı the climate is likely to prove beneficial.

R DAS REISKÖRPERCHENHALTIGE HYGROM DER SEHNEN-EIDEN. Von Dr. EDWIN E. GOLDMANN, Assistenzarzt der rurg. Klinik zu Freiburg. Sonderabdruck aus *Beiträge zur hologischen Anatomie und zur allgemeinen Pathologie*, vii.

is an interesting contribution on the patho'ogy of those id conditions of joints, tendon sheaths, and bursæ which are cterised by the presence of what are known in this country e name of melon-seed bodies. Dr. GOLDMANN states that the ews that such bodies were either fibrinous clots or detached ial tufts have in most quarters been superseded by the con-ns of Neumann and König that they are of tuberculous origin, ue to the degeneration of granulation tissue. Several cases ıblished in this pamphlet in which inoculation experiments clinical and pathological observations tend to prove that rm of hygroma associated with the presence of melon-seed s is a tuberculous disease of the synovial membrane, leading inous degeneration of the tuberculous products, which de-ation takes place especially in those situations in which the tendons are subject to the greatest pressure in the performance of their mechanical functions. It is held that the structure of melon-seed bodies and the presence in them of tubercle bacilli show that they are detached masses of granulation tissue that has undergone fibrinous degeneration. Attention is directed to the strong contrast between hygroma associated with melon-seed bodies and the more frequently observed form of tuberculous disease which is marked by pulpy degeneration, the former condition showing but slight tendency to spread, and being readily amenable to simple operative treatment, whilst the latter has a relatively malignant character. An attempt, but not, we are disposed to think, a very satisfactory one, is made to explain how it is that tuberculous disease presents itself in the same structures in such diverse forms. Dr. Goldmann suggests that maintained function of a joint and free movement of its structures tends to set up fibrinous degeneration, whilst prolonged and complete rest favours rather the morbid change known as fungous growth or pulpy degeneration.

NOTES ON BOOKS.

The Biology of Daily Life. By JOHN HENRY NAPPER NEVILL, M.A. (London: Kegan Paul, Trübner, Trench and Co. 1890.)—This is a very funny book. Inasmuch as the author dates his preface from The Vicarage, Stoke Gabriel, we presume that he is a clergyman; on the title-page it is noted that he was "sometime a student of medicine in Trinity College, the Royal College of Surgeons, and the Meath Hospital, Dublin." His main endeavour is to uphold the view originated, we learn, by a certain Joseph Wallace, that the leucocyte is nothing more or less than saccharomyces cerevisiæ. "In thoroughly sterilised media," we are told, "leucocytes can be directly cultivated out of brewers' yeast, every precaution known to the microbe cultivator's science to prevent contamination or error being rigidly observed;" and vaccine lymph is in like degree a more or less simple cultivation of the leucocyte. Now the "yeast animalculæ" may enter the body by the stomach from the food, insinuating themselves readily into the capillaries, and passing into the life current. "The yeast lives at the expense of the blood proper, and thus establishes itself in the human organism as the physical basis of death. This is the 'white corpuscle' of physiology." Or it may be hereditarily transmitted. Thus briefly we have the origin of all diseases, with certain exceptions, "such as worms, whooping-cough, cholera, and, of course, mechanical injuries." Our author waxes poetic as he ponders over the infamy of the wretched white corpuscle:

> The white makes disease, but the red makes muscle;
> I would sooner have the red than the white corpuscle.

The so-called pathogenic micro-organisms are not pathogenic at all, nay, rather, they are a valuable and probably necessary part of the arrangements of Nature, promoting and facilitating salutary changes, and waging war against the deadly leucocyte. But it is needless to say more, or to explain how the writer, starting from Herbert Spencer, advances to Joseph Wallace, antivivisection, anti-vaccination, vegetarianism, antitobaccoism, teetotalism, and hatred of drugs and minerals, and ends by recommending a diet of distilled water and bread made out of sawdust. The whole is plentifully interlarded with quotations from Juvenal, Quain's *Dictionary of Medicine*, Virgil, Sir Henry Roscoe, *The Faëry Queen*, and Klein's *Micro-organisms and Disease*, and it may cordially be recommended for the breakfast table.

Essentials of Forensic Medicine, Toxicology, and Hygiene. By C. E. ARMAND SEMPLE, M.B. (London: Henry Renshaw. 1890). —This little book is intended partly as an introduction to the study of the more comprehensive treatises on these important subjects, and in that capacity it may possibly have its uses; it is certainly to be hoped that it will whet the appetite of its readers to search for further information than that vouchsafed in the exceedingly condensed chapters before us. The book is full of illustrations, many of which will certainly not be needed by the student who has arrived at that point in his career when as a rule he commences the study of forensic medicine.

THE late Mr. Handel Cossham is said to have left the bulk of his large fortune in trust for his widow during her life, after which it is to be expended in building a hospital at Kingswood, Gloucestershire.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

AN IMPROVED FORM OF RELAXATION SUTURE-PLATE.

THIS appliance has been contrived by Dr. Newton Albert Powell, of Toronto, Canada, and exhibited before the Ontario Medical Association. It is a modification of Sir Joseph Lister's button-suture plates, which perfectly replaced the obsolete quilled suture. It is far more satisfactory than long strips of adhesive plaster, which do little more than slide together the skin margins, allowing cavities to form within the wound for the collection of serum and the products of inflammation. The best-known form of suture plate—that originally devised by Sir Joseph Lister—is oval in shape, cut from sheet lead, and with lateral portions turned up at an angle, so that the wire can be made fast in a figure-of-8 around them.

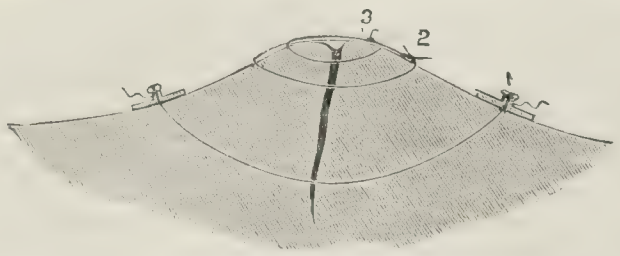


Fig. 1.—Diagram showing the course through a wound of (1) a relaxation suture; (2) an approximation suture; (3) a coaptation suture.

Next to these come the Macewen buttons, oval plates perforated with two holes close to the centre. In using them a doubled suture is passed, its ends threaded through buttons and then tied together, in a reef-knot at one side of the wound and a running reef at the other, so that the suture may be tightened or relaxed at any time without disturbing the healing process. Dr. Ogilvie Will has described a plate made of silver, with two projections around which the wire is to be wound.

To Drs. Getchel, of Philadelphia, and Geolet, of New York, we are indebted for plates which have nipple-like projections, intended to be compressed like perforated shot. For certain special uses they are admirable, but in general surgery there are two strong objections to the clamped-shot fastening. First, it is liable to slip; and secondly, when once adjusted it cannot subsequently be tightened or relaxed. Sheet lead in the making of any of these appliances is objectionable, since it blackens the skin and needs to be underpadded with gauze. A far better material is the "air chamber" or "suction" lead, which can be obtained from any dentist. Being roll-plated with pure tin on each side, it will not discolour, and the 18-gauge thickness is easily cut to any shape desired.

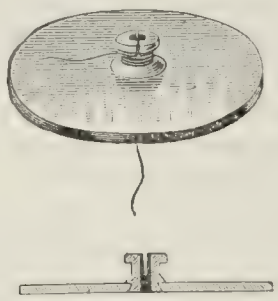


Fig. 2.

Dr. Powell's suture-plate is made of pure block tin. The base should be of oval form, and in diameter about half an inch. A projection, three-sixteenths of an inch in height, stands out from the centre of the plate. It has a shoulder where it joins the plate, and is perforated with a round hole from the under surface of the plate to its own apex. It is also cross-cut down to the shoulder in the short axis of the plate.

In using the plates, the wire or thread is passed through from below, bent into the slot, wound two or more times around the projection, and then carried across the projection through the slot again. This can be done more rapidly than it can be described, and does not need the guidance of the eye. The plates are equally well adapted for use with silkworm-gut or catgut, silk, or wi They can be sterilised by boiling and used indefinitely. They c be bent to fit irregular surfaces. They can be instantly fasten unfastened, tightened or relaxed, and cannot slip or bre Finally, they are inexpensive, costing in Canada $1.25 per doz J. Stevens and Son, of Toronto, and J. Reynder and Co., of N York, keep the plates in stock.

BYNOL.

MESSRS. ALLEN AND HANBURY, Plough Court, Lombard Str E.C., have succeeded in preparing a most perfect combination malt extract with cod-liver oil. Submitted to microscopical e mination we find that it is in such a fine state of division that particles are indistinguishable. It has a pleasant taste with any suspicion of cod-liver oil, and it possesses considera diastasic power.

FORCEPS FOR THE REMOVAL OF ENLARGED FOLLICL FROM THE PHARYNX.

THE accompanying diagram—half the natural size—represe an instrument I find most useful in the treatment of this troul some affection. It is the invention of my senior colleague, Dr C. Smyly, President of the British Laryngological Society.



The treatment of follicular pharyngitis consists mainly in stroying the enlarged glandules by caustic pastes or the galva cautery. An objection to the former method is the difficult limiting the caustic action to the diseased part. The galva cautery is unwieldy and expensive, and not always at ha morever, its use is not unattended with some danger, as the v has been known to fuse, and loss of voice result. A cicatrix so times remains after the application of the cautery, which is v irritating to the patient. The spoon-shaped forceps are free f these drawbacks, and will be found especially suitable for earlier cases. A 20 per cent. solution of cocaine having been plied, the forceps are introduced, the follicle seized vertically twisted off. The operation is simple, effectual, and painless. makers of the forceps are Fannin and Co., of Dublin.

JOHN D. HILLIS, F.R.C.S.I.,
Surgeon, Throat and Ear Hospital, Dubli

AUSTRIAN PINE PRODUCTS.

THE oil obtained by distillation from the leaf of pinus pun possesses antiseptic powers, and its vapour is used as a stimulant in chronic catarrhal affections; it is also applied ex nally in rheumatism. We have received from Mr. Joseph M Hearn Street, Curtain Road, E.C., specimens of his preparati for which he has adopted the designation "Austrian Pine." Mack states that his preparations are largely prescribed on Continent. He appears to possess special local advantages for distillation of this particular species of pine. The samples include pure essence of Austrian pine, which is an oil posses all the characters attributed to this body; a solution intende external application and vaporisation; capsules for internal ministration; an extract to be used for making baths; a pect syrup and paste, which are very palatable preparations; an excellent toilet soap.

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Ass tion desire to remind members of the profession engaged i searches for the advancement of medicine and the allied scie that they are empowered to receive applications for grants i of such research. Applications for sums to be granted at the annual meeting should be made without delay to the Ge Secretary, at the office of the Association, 429, Strand, W.C. plications must include details of the precise character and ob of the research which is proposed.

Reports of work done by the assistance of Association g belong to the Association.

Instruments purchased by means of grants must be returne the General Secretary on the conclusion of the research in therance of which the grant was made.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their espective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to he General Secretary, 429, Strand, London. Post-office orders hould be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 24TH, 1890.

THE COLLEGES AND THE ARMY MEDICAL SERVICE.

the JOURNAL for April 26th, p. 986, we published circular issued by the Royal College of Surgeons Ireland, drawing attention to the grievances of Army Medical Department in a succinct and lucid nner. It further submitted statements, and called returns, for the consideration of Her Majesty's Government, mbers of Parliament, and the other medical licensing bodies the kingdom. We trust these bodies will speedily follow the d thus given, and unite with the Irish College in collective ion on this pressing and important matter. Such action entirely within their province, and has been taken under ilar circumstances several times during the past thirty years. e recent open and covert attempts to lower and degrade the ny medical service not only affect an important section of members of the Colleges directly, but also indirectly and lexively the whole profession.

The arbitrary, and, as we maintain upon evidence, indesible withholding of sufficient and intelligible military status d titles from medical officers, is not merely a grievous intice to them, but a public slight and insult to the medical fession at large.

More especially are the Colleges called upon to take up the evances of their army medical brethren, because these ntlemen, in virtue of their position, cannot collectively fight ir own battle. But even if they were allowed to do so, re is little prospect of getting any redress from their litary superiors, the very men who are so persistently hostile to ir claims. This is clearly disclosed in the report of, and more ticularly in the evidence given before, Lord Camperdown's mmittee, which has been reprinted by the British dical Association with the permission of the Secrey of State for War. In that document we find the onents of the medical officers making statements which it uld not be difficult to show are illogical and inconsistent if irrelevant, but all conveying the impression that no definite tus will be conceded to medical officers unless under comsion. Lord Wolseley himself (Q. 1407 to 1410) does not itate to state and imply that he does not consider either officers or men of the medical department to be soldiers at and even likens their position in the field to civilian gon drivers attached to the army! When such ungenerous and preposterous views on the services of men who fully share in the work and dangers of the battlefield find expression in military high places, it is obviously idle to expect reform from such sources. Redress must be obtained through a less prejudiced medium—the fair-minded representatives of the nation—to whom the Colleges should appeal.

We feel well assured that if the report and evidence of Lord Camperdown's Committee are duly brought before Members of Parliament there will be many on both sides of the House ready to take the matter up and to insist on fair play being done, in spite of unwise military prejudices. Though the hostile evidence tendered to the Commissioners was most unrelenting, the small value they put upon it, even when coming from the mouths of the supposed highest authorities, is shown by the way they quietly put it aside and reported favourably on the claims of the medical officers. But, unfortunately, this did not prevent the War Minister from setting aside all the more important recommendations of the Commission, upon the plea that they gave offence to his "military advisers!"

However, whether these recommendations are to be approved or not, they cannot be burked. They stand in evidence for the use of the Colleges. The testimony of that most gallant and broad-minded soldier, Sir Donald Stewart, late Commander-in-Chief in India, in favour of giving proper rank and organisation to medical officers, can also be quoted. He sees no difficulty or danger in giving legitimate rank, titles, and organisation to the medical services, and surely his experience is at least as great as, if not greater than, that of our other generals.

Why should our country continue to stumble over this business? The Americans—a very practical people—and the majority of the Continental nations find no impediment or incongruity in giving due rank, titles, and organisation to their army medical services. The French War Ministry, after tentative trials has, as the only solution of a military difficulty, lately conferred complete autonomy, even financially, on the army medical service. Our authorities alone seem spellbound by worn-out military prejudices.

The grievances of our army medical officers are, as we have shown, real and material; but even if sentiment plays a part, should that have no place in their sense of self-respect and pride of manhood? They would not be worthy of succour or support if as men they meekly acquiesced in a position —openly paraded—of inferiority to their military comrades. It is essential to their efficiency and to the wellbeing of the army that our medical officers should respect themselves, and not feel in a humiliated position, whether of a social or a military kind.

We trust the Colleges will concentrate their efforts on direct and not on side issues. The first and chief step should be the formation of a consolidated Royal Medical Corps, after the model of the Royal Engineers; due status must follow after that. Let it also be clearly known that medical officers desire no military command outside their own corps and establishments. They want no rivalry; only fair and honest equality with the other branches of the army.

THE Working Classes Dwellings Bill was read a second time in the Commons on Wednesday.

CRIMINAL ANTHROPOLOGY.

PROFESSOR LOMBROSO'S studies have been principally prosecuted in what has been called "human degenerations"—idiocy, insanity, and criminality. His two great works, *L'Uomo Delinquente* and *L'Uomo di Genio*, after passing through many Italian editions, have recently been translated into French, though not as yet into our own language.

In the little book *L'Anthropologie Criminelle*[1] we have a summary of the views which are advocated in the *Archivio di Psichiatria e Scienze Penali*, and which are attracting increasing attention both in France and Germany.

Lombroso argues that an attentive study of the physical organisation of the habitual criminal shows him to belong to a degraded type of humanity, the product of hereditary degeneration. The peculiarities observed are not constant, but certain traits are repeated more often than with normal beings. By arranging these traits in the mind the type is conceived. To use the expression of Goethe, the type is the abstract and general image which we deduce from the observation of what is common and what is different. Lombroso acknowledges that his type fails completely in 60 per cent. of his criminals; in a few cases, too, individuals have most of the marks without being criminals; and one case has even been mentioned of an unfortunate man who bore all the stigmata of criminality without being a malefactor. Nevertheless, certain bodily peculiarities are found to be commoner with criminals than with normal individuals, and the occurrence of a greater number of these peculiarities makes him approach nearer the type. The principal of these stigmata are smallness of the head, asymmetry or abnormal forms of the skull, unequal size of the orbits, teeth irregularly placed, abnormal forms of the palate, and increased size of the lower jaw. There is also a great variety of irregularities in the shape and position of the external ears. The stature is generally low; left-handedness is commoner than in honest men, and in some cases the left hand is longer than the right, and the stride of the left leg is greater. The sensibility to pain is deficient, and the perceptions of taste and smell have been proved to be less acute than with ordinary beings. The brain of the criminal presents miscellaneous irregularities: various anomalies of the gyri have been pointed out by Professor Benedikt and others, and the relative size of the cerebellum to the cerebrum is increased. Peculiarities in the skeleton, such as asymmetry of the thorax and deficiency in the number of vertebræ, have also been noticed. The type is much more decided with the males than with the females of the criminal classes.

On the whole, if we demur to recognise a special type in criminals, we must at least grant that they often fail to reach the normal type of the human organism. These unfortunate beings are born with a weak intelligence, a shrinking from steady work, and if not a perverse tendency to wickedness, at least a weak power of resisting temptation. Most of the professors of the new science of criminal anthropology treat the criminal as one fatally born to prey upon society. Being mostly evolutionists, they regard the criminal class as an instance of atavism or reversion. As man has ascended in the ladder of being through the ape and the savage, his degeneration gives us the habitual criminal and the microcephale Lombroso tells us that tattooing is common with criminals a with savages, and triumphantly observes, if this be not an in stance of atavism, there is no atavism in science. It is un scientific to treat the habitual criminal as a responsible being he is the victim of a bad organisation, and if he is to be pun ished at all, it should be on a scale of severity diminishin with the depths of his "moral insanity." In fact, th wickeder he appears to be, the less he should be punished, o the less apt he is to regard punishment as a deterrent, th less he should get of it. Most of the writers of this nev school look upon the reformation of the habitual criminal a utterly hopeless. The occasional malefactor, or "criminaloid," has certain features of resemblance to his more typical brother Lombroso points out that there are many similarities betwee criminals and epileptics, and, on the other hand, a strain o epilepsy or insanity is often present in men of genius.

It appears to us that the views of this new school do no rest upon foundations laid with strict scientific exactness. W are willing to grant that criminals are often the victims o unfortunate heredity, frequently of inferior organisation, an mental instability. Unable to earn the necessaries of life i the stern competition of modern society, they try to gain precarious living by dishonest ways. They are not, like in sane people, at open war with their surroundings. They ofte have an environment of their own with which they are not i variance. They are educated in crime, or not educated at al What to do with this class, how to repress, reform, or get ri of them, are questions which require a great deal more know ledge than lies within the bounds of anatomy and physiology.

As for reversion, is it to be seriously maintained that th thieves in the worst quarters of our great cities are th analogues of the free savages who roam in the forests o prairies of America or Africa, or of our own ancestors, th ancient Britons or Germans? Would the burglar, the forge or the pickpocket fill the part of the Hottentot or the Re Indian? Or would the latter, if adopted amongst our crimina population, take deftly to thieving or burglary? Lombroso statement that in the microcephale we have a phenomenon bot of atavism and pathology is quite unproved. Vogt's attemp to trace an analogy in the cerebral structure as well as th habits of human microcephales and the anthropoid apes ha never been accepted by any scientific man who has seriousl examined the question. We should also ask if a careful ex amination of the bodily structure of the savages reveals the sam peculiarities of form and function as are found in the crimina of civilised Europe.

The habitual criminal, as described by Lombroso and h school, is a pathological product, the result of the corruptio of a complex civilisation. Such an outcome is not to be looke for amongst savage races. These philosophers acknowledg that society has a right to protect itself from criminals by im prisoning or putting them to death, but any moral indignatio at their misdeeds is treated as unreasonable. We are no entirely sure about the consequences of banishing all hatred o depravity even in visiting the offender with penalties accordin to law. It is scarcely to be denied that indignation again wickedness sometimes represses immoralities which do not com within the reach of the law. But while we feel inclined t

[1] *L'Anthropologie Criminelle et ses Récents Progrès.* Par Cesare Lombroso. Paris: Felix Alcan. 1890.

! back the over-great readiness of the criminal anthro-gists to come to fatalistic conclusions, we recognise the in-sting character of their observations, and the great ability originality of those engaged in the inquiry.

A FORGOTTEN MEDICAL WORTHY.

ILE law and theology value and reproduce the works of l thinkers, medicine seems careless of its past history. writings of bygone physicians and surgeons moulder neg-ed and almost forgotten on the shelves of a few public aries. Of course, the reasons for this condition of things not far to seek. Our medical ancestors valued authority ve all things. Every theory must be founded upon, or tered up by, the dicta of the ancient masters of the art. h John Hunter, however, original observation replaced tra-onal teaching, and such have been the discoveries of science e his day, so rapidly have facts accumulated, that even if had not imbibed his spirit of independent and critical re-ch, the march of events would have forced us to abandon groundwork and to build up new structures for ourselves resh foundations. As it is, except for the purpose of writing textbooks, the masterpieces of even a few years ago entirely neglected by medical men, and are practically as lete as the works of Hippocrates or Celsus. And yet from y points of view this ignorance of past literature is to egretted. If in science our predecessors were mere babes, rt they collected valuable maxims and observations. They iently supply clinical studies of much interest, and they d a field of almost untouched antiquarian research. They us the names of their patients in full, they supply details ctions or accidents long forgotten, and they mention the es of towns, villages, and streets which have since been ly altered. To the philologer, too, their publications are eat importance; local names for disease, local peculiarities alect occur upon almost every page, so that most certainly e is room among the number of societies whose titles mber our directories for a "Medical Antiquarian Associa-" whose chief duty shall be the republication of all those ngs of medical men in English which were issued during ifteenth, sixteenth, and seventeenth, and a selected num-f those published during the eighteenth and nineteenth, aries. The Early English Text Society has shown us a excellent example in this direction by publishing Vicary's *omie*, and Bullen's *Dialogue against the Fever Pestilence*, Professor Arber has practically demonstrated that the of antiquarian literature does not necessarily mean ruin. field is a clear one, the New Sydenham Society, the only which undertook, even in small measure, this class of having definitively abandoned it in favour of the transla-of foreign literature, while the increasing general culture edical men makes the financial success of such a society more probable.

r these reasons we hold that the accomplished author *he Account of the Life and Works of Maister Peter* would have performed greater service to medical litera-had he condensed his little book into an introduction and notes to a reissue of one or more of Peter Lowe's own works, which could probably have been published at little more expense than the present biography, and would have been a precious possession to many readers. But we must be content, with what we can get, and Dr. Finlayson's book is in all respects a good one as far as it goes. Originally delivered as an inaugural address to the Glasgow Medico-Chirurgical Society, in 1886, it has now grown into a complete biography and bibliography of the founder of the Faculty of Physicians and Surgeons of Glasgow.

The subject of the memoir was born, it is suggested, about 1550—though for our own part we should have been inclined to set the date of his birth some years further back—in a part of Scotland as yet unidentified. He appears to have gone abroad about 1565, and to have subsequently practised for thirty years in "France, Flanders, and elsewhere." In 1589-90 he was at Paris as Surgeon-Major to the Spanish Regiment. For six years afterwards he followed the fortunes of Henri IV through all his campaigns, and was Surgeon-in-Ordinary to that monarch. In 1595 he was in London, where he is said to have practised until 1597. In 1598 he was in Glasgow, though Dr. Finlayson has not succeeded in tracing the reason of his removal thither. He hazards a conjecture founded on the dedication of the 1597 edition of Lowe's *Translation of Hippocrates*, to "Robert Lord 'Sempile,' Sheriffe of 'Renfrowe,' and Baily of the Regalitie of Pastlay," etc., that he was a West of Scotland man, perhaps a native of Glasgow. We venture, however, to suggest that if our subsequent hypothesis of the reasons for Maister Peter's settlement in Scotland be rejected, a search into the whereabouts of Lord Sempile during 1597-8, as well as an inquiry into the names of the Scottish noblemen visiting England during that period, might throw light on the reasons of his removal to Glasgow, as it is most unlikely that he would have dedicated his *Chirurgery* to the Scottish King, and his *Translation of Hippocrates* to a local nobleman in Scotland, had he not at the time been in close communication with some Scotchman of importance, and actually intending to settle in that country, unless, indeed, as is not improbable, the first edition of the combined *Chirurgery and Translation*, though printed and the preface dated in London, was really issued in Glasgow, where he may have settled a year earlier than Dr. Finlayson suggests.

At any rate, we decline to believe that mere Scottish patriotism would have induced a surgeon practising in London to dedicate his important works to a personage so unpopular with the Queen of England as her probable successor was, and to a Scottish nobleman of merely local influence, unable to assist him at the English Court. His previous work, for example, published immediately after his arrival in London—that on the "Spanish Sickness"—was dedicated to one who was likely to be of use to its author, namely, Robert Devereux, Earl of Essex.

If Maister Lowe arrived in Glasgow in 1598, as suggested, he must have made marvellous strides in professional success. According to Dr. Finlayson, he was that very year appointed to attend the poor of the town. He himself speaks in 1612 of having complained to the King fourteen years before of the amount of ignorance and quackery which so injured the

count of the Life and Works of Maister Peter Lowe, the Founder of the y of Physicians and Surgeons of Glasgow. By John Finlayson, M.D. w: James Maclehose and Sons. 1889.

medical profession as to make remedy necessary, so that he had, on his immediate arrival in Scotland, secured the ear of the King; while in the Charter founding the Faculty of Physicians and Surgeons, issued to him in November, 1599, King James speaks of him as his "chirurgiane, and chief chirurgiane to our dearest son the Prince."

Taking into consideration the close connection which always existed between the Scottish and French Courts; the fact that, with the interval of at most three years, and probably less, he held two such important appointments as Surgeon-in-Ordinary to Henri IV of France and Chief Surgeon to Henry Stuart, afterwards Prince of Wales; the absence of reasons for deserting the French King and Court in order to commence practice in London; the short time he was there; his rapid recognition and promotion in Scotland, we should suggest a different reading of this part of his life from that supplied by Dr. Finlayson. Is it not possible that, in the absence of first-rate surgical skill in Scotland, James might apply to Henri for a competent surgeon to attend his son and heir; that Peter Lowe, with the Scotchman's proverbial love for his country, might seek and obtain from the French king the appointment; might make his way in the leisurely manner of travel common to the times to Glasgow through London, where he would stay in order to publish his two works, which could be done more conveniently there than in Scotland, and then dating them in London, but dedicating the more important one to his Royal Scottish patron and another to a nobleman of influence, proceed with them as his introduction to his important post?

There are in favour of this view the facts that, so far as we know, there is no proof that the jealous Company of Barber-Surgeons of London ever had Peter Lowe under their cognisance, as would have been the almost inevitable consequence of his commencing to practise surgery in London, and that, even when settled in Scotland, he still continued the publication of his works in London—a proof that a visit to the English metropolis was necessary for the original issue of his books, if, even when resident in Scotland, he could not get his printing done there. Since his Royal patrons removed finally into England in 1603, his effective appointment as Court Surgeon could not last many years, for English jealousy prevented the surrounding of James and his son by Scottish officials. Master Peter died in Glasgow in 1612, the same year as his young patron, Prince Henry, leaving behind him as his most effective monument the Faculty of Physicians and Surgeons, which he founded.

The extracts given by Dr. Finlayson from Peter Lowe's works make us regret their non-publication. The account of the "ignorant" who opened an aneurysm, so diagnosed by Master Peter and his friend Andrew Scot, in mistake for an abscess, is most amusing. We do not agree with Dr. Finlayson that in Lowe's "Discourse of the whole Art of Surgery," lib. v, cap. 40, p. 216, the author is referring to subcutaneous emphysema, but rather to that natural increase in a bronchocele which is frequently noticed after hard and prolonged labour.

Both type, paper, and outside appearance of this little biography are all that can be desired, while the photogravure and reproduction are excellent. We cordially recommend it to such of our readers as have antiquarian tastes, while it almo becomes a duty for every Licentiate of the Faculty of Phy cians and Surgeons to procure a copy, and so to show l loyalty to his College and his interest in its founder.

Lord Sandhurst, Chairman of the Select Committee of t House of Lords appointed to inquire into the general manag ment of Hospitals, will, we understand, take advantage of t Whitsuntide recess to visit the hospitals of Paris and Vienna.

The *Code of Medical Ethics*, by Dr. Styrap, has been, by perm sion, translated into Italian by Dr. Lodovico Caulliaux and pu lished by the brothers Rechiedei, of Milan—a fact which clearly i dicates that the rules therein laid down are adapted to the ethi needs of the profession under very varying circumstances.

GUY'S HOSPITAL.

At a meeting of the Court of Governors held at Guy's Hospi last week the following appointments were made in consequen of Dr. Pavy's retirement from the post of senior physician: Dr. Hale White to be full physician; Dr. J. W. Washbourn to assistant physician.

THE LONDON HOSPITAL.

The foundation and corner stone of the new building which is be erected at the London Hospital was laid by His Royal Hi ness the Duke of Cambridge on May 20th. The hospital n numbers 776 beds. The principal features of the new buildi will be a covered approach, a new and suitable receiving ro a new operating theatre, a clinical theatre, and a suitable cha all of which are necessary for the due working of the hospital.

BIRTHDAY HONOURS.

Among the birthday honours conferred by Her Majesty the Qu are the following: Sir Henry Wentworth Acland, K.C.B., Re Professor of Medicine in the University of Oxford, has b created a baronet of the United Kingdom; Surgeon-Major Alf Swaine Lethbridge, M.D., Bengal Medical Service, has been m a Companion of the Order of the Star of India; Morgan Sta laus Grace, M.D., Member of the Legislative Council of the Col of New Zealand, and Surgeon-General of the Local Military For and David Palmer Ross, Esq., M.D., M.R.C.S., Colonial Surgeon Sierra Leone, have been made Ordinary Members of the Third C or Companions of the Order of St. Michael and St. George. list of honours for Great Britain is singularly meagre, and scanty recognition of medical claims of a public and signal c acter will not fail to be noticed with regret, seeing the very duced number of medical baronetcies now extant.

ORCHITIS IN SMALL-POX.

Chiari has continued researches in this subject, which he published three years ago. He then compared the lesions in testis, which he held to be almost constant in small-pox, to lesions in the integument. He carefully examined the teste 62 patients, 13 during the period of eruption, 28 during supp tion, 14 during desiccation and desquamation, and 7 during co lescence from small-pox. In 45 of these cases orchitis was sent; only 10 were adults, but age does not seem to have special influence. When the testicles could be examined m scopically three zones could be distinguished in the testis, responding precisely to those of a variolous pustule, a ce zone where necrotic changes were complete, a middle where cells were destroyed and the connective tissue much infiltrated a peripheral zone where exudation was beginning. As this

orchitis does not appear to go so far as the suppurative stage, e destroyed elements must be absorbed. In a few cases, espeilly in those dying during the suppurative stage, micrococci ere detected. Professor Chiari considered that since orchitis as so common in small-pox, and since the lesions in the testis re so like those in the skin, inflammation of the testicle was a ie specific symptom of small-pox.

DINNER TO SURGEON PARKE.

DINNER will be given by members of the medical profession to rgeon Parke, A.M.S., in recognition of his devotion and disguished services in the Stanley expedition. It will be held at e Criterion on Friday, June 6th, at 7.30 for 8 P.M. Sir Andrew ark, President of the Royal College of Physicians, will take e chair. The following representative physicians and surgeons, ongst others, intend to be present: Sir Trevor Lawrence, M.P.; Sir escott Hewett, Sir James Paget, Sir Joseph Lister, Sir T. Spencer ells, Sir Dyce Duckworth, Sir E. Sieveking, Sir William ac Cormac, Professor Humphry, Drs. Russell Reynolds, Quain, ilks, Bridgwater, and Holman, Mr. Erichsen, Mr. Marshall, Mr. Holmes, and Mr. Macnamara. In consequence of the time ing short and Surgeon Parke's engagements so many only the ove date could be fixed for the dinner. Tickets (31s. 6d.) may procured on application to the Honorary Secretary of the nner Committee, Mr. Howard Marsh, 30, Bruton Street, Berkeley uare, W.

HYDROXYLAMIN IN SKIN DISEASES.

t. GRODDECK, who has published in the *Monats. f. prakt. Derm.*, l. x, No. 4, the results of experiments with hydroxylamin which had made in Schweninger's clinic at Berlin, is not able to nfirm the statements of Dr. Eichhoff and Dr. Fabry in favour of action in skin diseases. He finds that in a strength of 1 to 00 it is inert. In 2 to 5 in 1,000 it is occasionally irritant d has little therapeutic effect. In a 1 per cent. solution it is vays irritating. When employed for some time occasionally it s a curative effect, but always slower than chrysarobin or pyrollic acid. It is unfit for use in private practice, as the patients quire constant watching, on account of the danger of constitunal symptoms and of local dermatitis. In a subsequent num- of the same journal (No. 5, p. 219), Dr. Eichhoff criticises the icle in the previous number, and attributes Dr. Groddeck's want success to insufficient care in the use of the drug, and insists t the weaker lotions are used with great advantage if they are igently applied, particularly in psoriasis and tinea tonsurans.

IMPURITIES UNDER FINGER NAILS.

E progress of bacteriology has shown that aseptic surgery ans scientific cleanliness; the same lines of investigation show w very dirty people can be. Seventy-eight examinations of impurities under finger nails were recently made in the teriological laboratories of Vienna, and the cultivations s produced showed thirty-six kinds of micrococci, eighteen illi, three sarcinæ, and various varieties; the spores of amon mould were very frequently present. The removal all such impurities is an absolute duty in all who come r a parturient woman or a surgical wound. It is not ugh to apply some antiseptic material to the surface of dirt; impurity must be removed first, the hand antisepticised after. ne physicians, when intending to drain dropsical legs by acuncture or other methods, are very careful to use antiseptic ssings, and in such cases have the feet and toenails purified l rendered aseptic as far as possible. It is sometimes said t the scratch of a nail is poisonous. There is no reason to pect the nail tissue; it is more likely the germs laid in a wound from a bacterial nest under the nail. Children are very apt to neglect to purify their nails when washing hands; and this matter is not always sufficiently attended to among surgical patients. Personal cleanliness is a part of civic duty, and, as Dr. Abbott well expressed the matter in his address to teachers, should be taught to school children and insisted on in practice. The facts we have recorded might well form the text for a school homily, especially when any epidemic was in the neighbourhood.

THE PAPILLARY MUSCLES OF THE HEART.

AT a recent meeting of the Cambridge Philosophical Society, Mr. Adami communicated an important paper "On the Action of the Papillary Muscles of the Heart." By means of a special apparatus, which was described, Professor Roy and Mr. Adami have been enabled to study the action of the papillary muscles, and to show that these begin their contraction later than the bulk of the muscle fibres forming the ventricular wall. This being the case, a more perfect knowledge of the mechanism of the valves between the auricles and ventricles is obtained, and it is found that the forcible pulling down of these valves by the muscles exerts a very definite influence in modifying the contraction of the heart wall, and the intraventricular blood pressure. Further it can be shown that the so-called "apex wave," the first secondary wave of the pulse, is due to the effect of the sudden sharp contraction of the papillary muscles upon the mitral valves, and so upon the intraventricular blood pressure; and an explanation is gained of the meaning of the "anacrotic" pulse.

ANTIRABIC INOCULATION.

THE Pasteur Institute, which was opened in New York on February 18th under the direction of Dr. P. Gibier, had received no fewer than thirty applications for treatment before the end of the following month. Of this number, it was only thought necessary to submit nine to the prophylactic treatment. The animals which had bitten three of the nine were shown experimentally to have been rabid, and in the other six cases it was probable that the animals were rabid. The further working of this institute will be watched with great interest. Seven of Dr. Gibier's nine patients came from New York or the immediate neighbourhood, one from Maryland, and one from the distant State of Arkansas. During 1889, 236 persons residing in the Department of the Seine were treated at the Pasteur Institute in Paris; of this number only 3, or 1.27 per cent., died; 40 other persons were, during the same period, and in the same district, bitten by rabid dogs, of whom also 3 died, or 7.5 per cent. Special interest attaches to these statistics because the treatment in these cases could be undertaken without delay. In 1880, there were 4 deaths; in 1881, 21; in 1882, 9; in 1883, 4; in 1884, 3; in 1885, 22; in 1886, 3; in 1887, 9; and in 1888, 19. The Pasteur patients in the Department of the Seine in 1887 numbered 307 (3 deaths); in 1888, 385 (5 deaths); and in 1889, 236 (3 deaths).

ARISTOL IN DISEASES OF THE SKIN.

DR. EICHHOFF has, in the *Monats. f. prakt. Derm.* (No. 2, 1890, vol. x), published the results of experiments he has made with aristol, a combination of iodine with thymol, which he believes may take the place of iodoform in some cases, and which is free from the disadvantages of the latter. He has satisfied himself that aristol is a harmless drug, and it has the advantage of being odourless. He found it equal to iodoform in all cases in which he tried it, except in soft chancres. It acts more slowly than chrysarobin or pyrogallic acid in psoriasis, but has the advantage of not possessing the toxic effects of the latter, nor the disagreeable concomitants of the former. In parasitic skin diseases it is

equal to other known remedies, and is not irritating. In ulcers of the leg and in tertiary ulcerations it heals more quickly than any other known medicinal application, and he considers that in lupus it surpasses all remedies hitherto tried. The samples with which Dr. Eichhoff worked were sent him by Friederick Bayer and Co., of Elberfeld. He uses a 10 per cent. ointment with vaseline.

TREATMENT OF TABES DORSALIS.

PROFESSOR LEYDEN, whose monograph on *Tabes* is well known, has, after the lapse of twenty-five years, given us a further statement on the same subject. His work is reviewed in the *Therapeutische Monatshefte* for January, 1890. On the question of treatment we find that Dr. Leyden lays great stress on the use of warm baths (temperature 95°-86° F.), the duration of which should be 5-10-20 minutes. Three kinds of baths are employed —1, the simple warm bath; 2, brine baths containing CO_2; 3, sweating baths and vapour baths. The first and third kinds are suitable in the early stages of tabes, the second in the more advanced stage. Dr. Leyden considers that nerve stretching has once for all received its condemnation. He has not the least faith in suspension, and is in hopes it may soon disappear from the therapeutic stage. Of massage he speaks with indifference; of the electric treatment he says it must not be overrated.

KASR-EL-AINI HOSPITAL.

THE report of the Kasr-el-Aini Hospital, which has recently been presented, shows that during 1889 the benefits conferred by it on the Egyptian people have been even greater that in any previous year. With the object of extending the benefit of medical advice and treatment to the greatest possible number of people without making additional calls upon the revenue, the policy of diminishing the number of in-patients while increasing the number of out-patients has been adopted. The number of out-patients during the year was over 100,000, which is about one-third more than in any previous year. The diet scale of in-patients has been revised, with the result that the cost a head is little over fourpence a day, which even in Egypt must appear moderate. Special wards have been opened for abdominal operations and for midwifery cases, and a tent hospital for infectious cases has been established at Abbassiyeh. The out-patient department has been completely reorganised. It has been divided into three sections—medical, surgical, and ophthalmic, and a formulary has been drawn up. In future a small fee will be charged to patients in a position to pay, and it is hoped that in this way the out-patient department will be rendered self-supporting. The Foundling Department has also been reorganised, and wet nurses are now subject to strict examination and supervision. In this work of reorganisation great assistance was received from Miss Hughes, and her untimely death from enteric fever is felt as a great loss. A great deal has, however, been done with the assistance of Miss Hughes and her predecessors, and of two sisters appointed in December, 1888, to improve the nursing of the women patients. It is gratifying to read that the increase in the efficiency of the native Egyptian nurses has been very marked, many operation cases having been successfully nursed by the more experienced of them. From this brief sketch it will be seen that this hospital, under the able direction of Dr. Greene Pasha and his coadjutors, is not the least satisfactory and creditable results of the British occupation.

UNUSUAL TOLERANCE OF THE PREGNANT UTERUS.

THE following case is of considerable importance, both in a medico-legal and in a clinical and pathological sense. Dr. Charles Lang, of New York, relates, in the *Medical Record* of that city, that he was called, in May, 1889, to see a case which had been under treatment for three months. When the practitioner, Dr. S., first attended the patient she had been confined a few months previously. He diagnosed subinvolution and parametritis. The uterus was twice scraped with a Thomas's blunt-edged curette. Dr. S. and Dr. Lang saw the patient together, in conjunction with Dr. W., called in by the patient's husband. The uterus was found to be enlarged, as at a four months' pregnancy. Dr. S. then introduced the curette for the purpose of measuring the depth of the organ, and it passed in easily till the handle blocked up the os. The diagnosis of chronic metritis was "reluctantly made," none of the three physicians "being very clear about the case." Pregnancy, in their opinion, was excluded, both by the treatment and the previous history. Dr. W. afterwards informed Dr. Lang that the case being left largely to Nature and no more active treatment of the uterus being allowed, the patient was delivered of a healthy child late in September. Dr. Lang deserves credit for this candid record of an error in diagnosis which is more frequent than medical literature might lead us to believe. The fact that the sound often passes for its entire length into the uterus is well known to every physician and surgeon accustomed to the care of women subject to disease of the genito-urinary tract. In such cases the patient often experiences no pain, even when the sound is passing into the uterine cavity. Such a case contrasts strongly with the well-known painful phenomena observed in cases of dysmenorrhœa with ill-developed uterus. This passage of the entire sound implies either great enlargement of the uterus due to fibroid disease, pregnancy, perforation of the uterine wall by the sound, or passage of the sound along a dilated tube. The first condition can, under the circumstances, be diagnosed with comparative ease. The second relates to cases like that recorded by Dr. Lang. It is well known that perforation of membranes, or the passage of instruments between the uterine wall and the fœtal appendages, may fail to cause abortion; this fact must ever be borne in mind in cases where the sound passes far. The perforation of the wall of the uterus has occurred, and does not seem to be so deadly an accident as might be expected; indeed, some authorities speak of it as quite trivial. The same has been said of catheterisation of the Fallopian tube by the sound, and several British and German obstetricians maintain that under "certain" conditions (on the precise nature of which they appear very uncertain) the tube is quite sufficiently patulous to admit the passage of an ordinary sound.

COUNTY MEDICAL OFFICERS OF HEALTH.

THE well chosen title "Sanitary Aid Association" clearly defines the sphere of operation of an association such as that at Hastings which has for several years been known for its good and useful work. At its recent annual meeting the president, Dr. Bagshawe, gave an address which is of much more than local interest, and which, being delivered at the present time, is not unlikely to influence for good the policy of sanitary authorities with regard to the appointment of medical officers of health. Dr. Bagshawe sets forth, on the whole, with fairness the arguments in favour of appointing gentlemen who have been specially trained to sanitary work, and who will devote their "whole time to the work," a phrase which admits apparently of sufficient variety of meaning to allow of different kinds of appointments in the sanitary service. Hastings is a large borough, and being a health resort it especially depends for its good name and its general prosperity on the perfection of its sanitary arrangements. It would undoubtedly, therefore, be good policy for the authorities of such a town to offer a sufficient salary, and to require that their future medical officer should not engage in what is known as general medical practice. Thus far we are in accord with the President of the Sanitary Aid Association. But in his address Dr. Bagshawe goes further, and advocates the establishment of a combined district, of which

stings would be the centre. We are not in a position to discuss feasibility of this proposal, but we desire to refer to our note the JOURNAL of May 17th, under the heading of "County dical Officers of Health." It is a most important duty, belonging to the newly created sanitary authority for Sussex, namely, County Council, to take into its consideration the establishnt of all new sanitary appointments within the county, with a w to increasing the efficiency of the sanitary administration. s impossible this duty can be properly performed without the p of an experienced sanitary adviser, who will make it his iness to become intimately acquainted with the varying circastances of local sanitary administration, and who will thus able to render the Council valuable service in the exercise of of its most important functions. Dr. Bagshawe's proposal h regard to the formation of a combined district may, for all know to the contrary, be highly advantageous, but obviously s for the authority charged with the sanitary supervision of the nty to consider and decide upon the questions which such a posal must certainly give rise to.

HOSPITAL APPOINTMENTS.

CIRCULAR has been issued to the governors of the Bristol neral Hospital accompanying a form on which to express an nion in reference to two questions to be discussed at a special rd meeting to be convened shortly. These questions are (1) ether the electing body in whose hands lie the appointments to honorary medical and surgical staff shall be enlarged beyond present limits of 31 official and 21 non-official members; and whether the qualification for appointments on the honorary f shall include diplomates of Irish and Scotch Royal Colleges as l as those of the two colleges now granted special privileges, ely, the London Royal Colleges of Physicians and Surgeons. circular asking these questions is signed by 51 of the most minent citizens of Bristol, including the Mayor, the High riff, Sir George Edwards, all the five members of the consulting f, and a considerable number of the clergy of all denominas. The governors were supplied at the same time with a ument issued by the Irish Medical Schools' and Graduates' ociation, setting forth the case of the Irish diplomates rately.

E PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

annual dinner of the Pharmaceutical Society of Great Britain held on Wednesday, May 21st, Mr. M. Carteighe, President of Society, in the chair. Among those present were Sir Dyce kworth, Mr. J. Hutchinson, Mr. T. Holmes, Dr. R. Quain, Dr. H. Dickinson (President of the Pathological Society), and Dr. quharson, M.P. Mr. Jonathan Hutchinson, in replying to the t of "The Medical Profession," said that comparing the posi- of pharmacy now with what it was thirty-five years ago, he sure that, without any flattery, the whole of the medical pro-on had great reason to be thankful to the Pharmaceutical So-y of England, which was rapidly elevating what was at one time mble into a science. Sir Dyce Duckworth also responded. Quain, in proposing the toast of the evening, "Prosperity to Pharmaceutical Society of Great Britain," spoke in high terms he work done by the Society. He mentioned that there were 5,000 persons in close connection with this Association, the cts of which were to protect their interests and to advance knowledge. Many of the pharmacists who were now coned with this Society were second to none in Europe. The rman, in responding, said that it was true that in their corpocapacity they had endeavoured to do something for the adcement of medicine. They did not desire to be in any way rivals of the medical profession, and they would repress any encroachments upon its domain. Their sole desire was that they should become qualified dispensers of medicine. The toast of "The Guests" brought the proceedings to a close.

THE CHAIR OF COMPARATIVE ANATOMY AT OXFORD.

A DECREE has been passed by Convocation to proceed to the election of a Deputy Professor of Comparative Anatomy, owing to the continued illness of Professor Moseley. The emoluments have been increased by a special grant to £700 per annum. Several names have been mentioned in connection with the appointment, amongst them being those of Professors Ray Lankester and Milnes Marshall.

STIMULANTS IN WORKHOUSES.

THE *Halifax Guardian* gives a long account of a discussion on a motion by a member of the Halifax Board instructing the medical officer to dispense with the use of intoxicants as far as possible, and where possible to administer other medicines. There are three different questions involved in a discussion of this kind. These are the gift of liquor to pauper inmates for work done, the beer allowance to the staff, and the administration of alcoholic liquors as medicine to the sick poor. Over the two first practices the guardians have jurisdiction, and it is to be hoped that they have thoroughly set right these matters before concentrating their attention on the details of medical treatment. Dr. Dolan gave an excellent exposition of his method of prescribing alcoholic beverages, and we are glad to note that all the guardians expressed their full confidence in his judgment. Though the resolution was unanimously agreed to, it was expressly declared that there was no reflection on the medical officer. This is gratifying, but we regret that there should have been any mention of an "instruction." The medical officer alone is responsible for the treatment of his patients, and is the judge of what remedies those under his professional care require. We gladly note the gradual diminution of the amount of alcoholic drinks consumed in workhouses for all purposes, and a corresponding decrease in the quantity used in hospitals, which affords convincing proof that the medical officers of both classes of institutions are quite alive to the latest therapeutic advances.

PRESENTATION TO M. PASTEUR.

THE Pasteur Institute in Paris will be on Saturday the scene of an interesting ceremony. Mrs. Priestley will present to M. Pasteur the album which she has been engaged during the past two years in compiling, as a testimony of the high appreciation in which the labours and services of the great humanitarian biologist are held by the English-speaking peoples. The album contains the signatures of most of the best known persons in science, art, literature, public services, politics, and society in England and America, and the dedication runs thus: "To Louis Pasteur, these signatures are affixed from friends and admirers in the British Empire and America in gratitude for the great services he has rendered to science and in the mitigation of human and animals' suffering." This dedication is beautifully illuminated by Mrs. Traquair. The long list of signatures is headed by the Prince and Princess of Wales, and the Princess gracefully adds her opinion that Pasteur is "the benefactor of the human race." The views of the signatories are also frequently expressed in apt quotations from ancient authors or in original sentences, and in almost every language, living or dead. Thus Mr. Poole gives his salutation in Arabic; and from the British Museum comes the following, written in hieroglyphics by Mr. Wallis Budge "Praises and adorations to thee, oh servant of the gods, writer, knower of all things, lord of all doings, skilful in heart, able with

the fingers, driver away of diseases from the limbs of men, who maketh dogs to live, the great one, shepherd, child of the sun (may the gods give to him life like the sun for ever).—From the hands of the Librarian, head of the seat of books and of all things marvellous in the land of England, which is called the British Museum, and from the chiefs of divisions under his hand." Canon Williams, of Oswestry, writes in Welsh:—"Physician great, yea, truly great, boundless the gift and the beneficence; tender to those in trouble. With guidance wise to ease mankind." The pages of this unique album are beautified by sketches and drawings by well-known artists. Sir Frederick Leighton contributes a beautiful female head, Alma Tadema a pencil sketch, Du Maurier a pen and ink sketch, and other contributions are made by MacWhirter, Sir Noel Paton, Rudolf Lehmann, Mrs. Alma Tadema, Mr. Farquharson, Mr. Felix Moscheles, and Mr. Broughton. One of the most touching tributes is the MS. of an original composition of music by Lady Thompson, entitled, "La Sympathie."

FRACTURE OF THE LARYNX AND TRACHEA.

A REMARKABLE case of fracture of the larynx has recently been reported by Dr. Carlos M. Desvernine, of Havana.[1] The patient was a man who came under Dr. Desvernine's observation for the first time at the end of 1887. In 1878, being then 15 years of age, he was struck by the crossbar of a trapeze over the region of the larynx. The immediate symptoms were hæmorrhage from the mouth, with intense pain in the throat, dysphonia and slight dyspnœa. The difficulty of breathing became gradually worse; there was some emphysema of the neck, and tracheotomy had to be performed twelve days after the accident. Except for a certain tendency to catch cold, he remained in good health for several years. When he came under the notice of Dr. Desvernine, he was suffering from well marked pulmonary phthisis. He had dispensed with the tracheotomy tube for three or four years, and breathed through a circular aperture hardly 5 millimètres in diameter externally. The voice was hoarse but intelligible, deep in tone and monotonous in *timbre*. On laryngoscopic examination the cords were seen to be completely fused together, forming a uniform plane surface, smooth and red like the rest of the mucous membrane, and presenting a tiny orifice close to the anterior commissure. Posteriorly the arytenoid cartilages were fixed in the adducted position. During phonation the patient closed the tracheal aperture, and the ventricular bands came slowly together in the middle line, so as to form a false glottis, the edges of which were arched upwards, in the antero-posterior direction, as if by muscular contraction. The infraglottic region presented no abnormality beyond a diminution in size, owing to thickening of its walls. Dr. Desvernine proposed to divide, *per vias naturales*, the adhesions which bound the cords together; but the operation was declined, and the patient died of phthisis in 1888. On *post-mortem* examination the line of fracture was seen to have extended from above downward in the middle line, involving the whole of the thyroid and cricoid, and the four upper tracheal cartilages. The ventricular bands were found developed to double their ordinary thickness. This was due to hypertrophy of the muscular fibres in the bands and in the aryteno-epiglottic folds. The condition of the glottis was as above described, the crico-arytenoid articulations being firmly ankylosed, and the dilator, adductor, and tensor muscles much atrophied. Microscopic examination of the vocal cords showed that their amalgamation was the result of acute inflammation. The case is interesting as proving that in some cases the ventricular bands may to a certain extent take on the action of the true cords, and serve for the production of voice. The air came through the small aperture (measuring 2 millimètres in length and $1\frac{1}{4}$ in breadth) at the anterior commissure, and the ventricular bands were distinctly seen to vibrate during phonation; on the patient withdrawing his finger from the aperture in the trachea, movement and sound alike ceased. Dr. Desvernine is inclined to believe that the phthisis was an indirect result of the accident from the insufficient aëration of the lungs and the proneness to catarrh induced by the condition of the larynx.

[1] *Revista de Ciencias Medicas*, March 20th and April 5th.

THE PREVALENCE OF ENTERIC FEVER IN MELBOURNE.

DR. SPRINGTHORPE has, in a communication to the *Melbourne Herald*, placed the Royal Sanitary Commission appointed to inquire into the causes of the prevalence of enteric fever in Melbourne under cross-examination. Some of the questions he asks would be considered very suitable for the examination of candidates for the diploma in public health in this country, but we are bound to say that if the candidates did not give better answers than the Commissioners they would have small chance of obtaining the diploma. For example, one question asked is: How do you discover whether water contains the typhoid poison or not? The answer given (according to Dr. Springthorpe) by the Commissioners is: By analysis. Now it should be generally known by those who profess to understand sanitary questions that the poison of enteric fever cannot be detected by means of analysis. A few years ago the medical officer of the Local Government Board caused some experiments to be made. Small quantities of the discharges containing the enteric fever poison were added to samples of London drinking water, and sent to various well-known analysts for report. The analysts applied their usual methods to the estimation of the organic and inorganic matters contained in the water, but those methods would not enable them to distinguish innocent from harmful organic matters. Ten years ago an epidemic occurred at Caterham under circumstances that left no room for doubt that the pollution of an enormous volume of water with a minute quantity of organic matter containing what are supposed to be the germs of enteric fever is sufficient to give to the water an infective quality. Bacteriologists have cultivated an organism which is said to be constantly found in the bowel discharges of enteric fever cases, though they are not as yet in a position to say that this organism has been proved to be the cause of the disease. The Melbourne Sanitary Commissioners should know that the first thing to be done in the case of an outbreak or epidemic of enteric fever is to ascertain the actual cause of the epidemic, and this can only be done by skilled medical inquiry such as those which are conducted by the Medical Department of the Local Government Board in England. The efforts of a sanitary authority should constantly be directed against the potential causes of the disease, but outbreaks of enteric fever have been known to recur several times whilst authorities have been discussing the potential causes which may be more or less remediable. The thing to be done is to find out the actual cause of the epidemic prevalence of the disease and stop it if possible.

THE TREATMENT OF ACUTE GONORRHŒA.

IN the *Archiv für Dermatologie und Syphilis*[1] appears a paper by Dr. Friedheim, containing an elaborate account of a large number of experiments made in the clinic of Professor Neisser, of Breslau, with the view of determining the best method of treatment in acute gonorrhœa. The object aimed at was to find the local application which possessed in the highest degree the power (1) of killing the gonococci, (2) of influencing the inflammatory phenomena, (3) of promoting epithelial desquamation, and thereby securing mechanical elimination of the micro-organisms. Among the numerous drugs experimented with were various preparations of mercury, including the perchloride and salicylate, perman-

[1] 4 Heft, 1889.

e of potash, iodoform, boric acid, pyrogallic acid, resorcin, rin, thallin, and many others. But of all those now tried st results, as tested by the microscope, were obtained from tion of nitrate of silver, of a strength varying from 1 in 4,000 2,000. The treatment is begun by the injection of this n in the ordinary way, from four to six times a day, the being that at first the discharge becomes more abundant, r, and more purulent; but in about four days the secretion shes, becomes thin, and contains a quantity of epithelium. nococci also diminish in a remarkable manner, and after days disappear altogether. When this has taken place, the r of injections of nitrate of silver is reduced to two and ards to one daily; and other injections, such as boric acid e preparation of zinc, are used as well. But, in spite of the total disappearance of the discharge, the one daily injec- the nitrate of silver is to be kept up for many weeks. In where the nitrate of silver could not be borne even in weaker ns than those above mentioned, salicylate of mercury, or , or the chloroborate of sodium was substituted with a cer- mount of success; and in the very rare cases in which no cterial injection could be tolerated, internal remedies were d to. Of these, cubebs, turpentine, oil of gaultheria, oil of -wood, kava-kava, ichthyol, creolin, and copaiba were but among these copaiba alone, and that only in some cases, und to have any decided effect on the gonococci. As regards nger of complications from the use of the nitrate of silver ons, it was found that this mode of treatment was really the reventive. Thus, among 1,200 cases of gonorrhœa treated in s ways, there were 164 of epididymitis, but in 142 of these ididymitis was present when the patient first came under ent; while of the remaining 22 cases, only one was being l with nitrate of silver. The total number of cases given in le which is appended to Dr. Friedheim's paper as having reated by nitrate of silver injections is 318, and in 237 of it is stated that the antibacterial action of the drug was

SCOTLAND.

ROYAL SOCIETY OF EDINBURGH: RELATIONS OF THE AUDITORY NERVE.

eventh ordinary meeting of the Royal Society was held on 9th, under the presidency of Professor Chrystal, LL.D. ry notices of Dr. Edmund Ronalds and Professor Donders ommunicated. A paper on the synthesis of sebacic acid was y Professor Crum Brown and Dr. Walker. An important nication on the roots of the auditory nerve and their con- ns was submitted by Dr. Alex. Bruce. Dr. Bruce showed a r of sections with the oxyhydrogen light to substantiate w that some of the already described connections of the y nerve were the result of insufficient or incorrect observa- He further indicated that a definite chain of connection e traced between the nucleus of the cochlear division and cleus of the sixth nerve of the same side, and between the s of the semicircular division and the funiculus cuneatus posterior portion of the spinal cord.

HOSPITAL CHANGES IN EDINBURGH.

anagers of the Royal Infirmary of Edinburgh have further ed the efficiency of the Throat and Ear Department by g the post of assistant-surgeon, to which Dr. R. Mackenzie on has been elected. It is urged by some that the managers to consider the question of dividing the duties of the office, conjunction of throat and ear must very shortly come to be d as antiquated and anomalous, at least in so large a teaching centre as Edinburgh, where an educated and intelligent specialism is needed in teaching. But the principle of efficient assistance to the chief medical officers is a thoroughly good one, and might safely be extended more completely in every department of our large hospitals, so that in the absence of the superior there might be no suspicion of the work falling into the hands of less efficiently experienced substitutes. Dr. Mackenzie Johnston has resigned his post of physician to the Royal Hospital for Sick Children, and a canvass for the vacant post is in progress.

HIGH MORTALITY IN EDINBURGH.

THE mortality of the City of Edinburgh for the past month has been considerably higher than that of the corresponding month for some years past. The pronounced increase is largely traceable to deaths resulting from respiratory sequelæ of measles.

THE ELECTION OF RECTOR OF ABERDEEN UNIVERSITY.

THOUGH the term of office of Mr. Goschen, the present Lord Rector, expires in October, there is little movement among the students as to a probable successor. Both political parties in Glasgow and Edinburgh have had their candidates in the field for some time. There is a feeling in Aberdeen that a local man who could attend the meetings of court should be elected. The name of an emeritus professor has been pretty freely mentioned, but no definite action is likely to be taken for some months yet.

FIFESHIRE MEDICAL ASSOCIATION.

THE annual meeting of this Association was held in the Duncan Institute, Cupar, Fife, on May 9th. Dr. Constable, Leuchars, President, occupied the chair, and amongst those present were: Dr. Spence, Burntisland; Dr. Niven, Newburgh; Dr. Turnbull, Fife and Kinross Asylum; Dr. Macdonald, Cupar; Dr. Sneddon, Cupar; Dr. Caw, Cupar; Dr. Douglas, Cupar; Dr. Mackay, Falkland; Dr. Orr, Tayport; Dr. Palm, Largo; Dr. Balfour Graham, Leven; Dr. Moir, St. Andrews; Dr. John Moir, St. Andrews; and Dr. M'Nab, Dysart. An interesting programme had been arranged, but the whole of the time was occupied by an important debate on the first subject. The President introduced a discussion on "The Duration of Infection in Infectious Diseases." Ultimately the conclusions arrived at by the Public Schools Medical Officers' Association of England were considered, and it was agreed to take the opinion of the entire members of the Association as to the advisability of promulgating them as a standard scale for general use in the community of Fife. The members afterwards dined in the Tontine Hotel; Dr. Constable presided, while Dr. Spence, Vice-President, acted as croupier.

THE EXAMINATION FOR D.P.H., GLASGOW.

WE are informed that a memorial will be presented to the General Medical Council next week with regard to the examination for diplomas in Public Health by the University of Glasgow on October 15th and 16th, 1889. The memorial is signed by Dr. John Glaister, Professor of Medical Jurisprudence and Lecturer on Hygiene, St. Mungo's College, Glasgow; Dr. J. C. McVail; Dr. Eben. Duncan, Professor of Medical Jurisprudence, Anderson's College; Dr. C. R. Macdonald, and Mr. Anthony Milroy, of Kilwinning. The memorial sets out the opinion of the memorialists—first, that the examination in question "was insufficient to warrant, in respect of its having been passed, the granting of any registrable qualification," the papers set to be answered in writing being incomplete, and no practical examination having been held; secondly, that the examination "failed to rank in comparison with the examination of any other university or college or corporation in Great Britain or Ireland for diplomas in the same subject; and thirdly,

"that it placed certain of the successful candidates in a position involving much hardship." In explanation of this, it is stated that no fewer than twelve candidates had not passed the final professional examination, and that their names not having been on the *Medical Register* on January 1st, 1890, they cannot, according to the regulations laid down by the General Medical Council, have their diplomas in public health registered. The memorialists also state that, "of fifty-seven candidates who gave in their names for the examination, fifty-five presented themselves and fifty-five passed," and pray the General Medical Council "to appoint an independent Committee of Inquiry."

IRELAND.

SURGEON PARKE.

It is announced that Surgeon T. H. Parke will be present at the annual dinner of the College of Surgeons on May 31st. This opportunity will be taken to present him with the Honorary Fellowship of the College, which was voted by the Council last March. It is expected that there will be a large gathering on the occasion to welcome the distinguished guest.

ROYAL COLLEGE OF SURGEONS.

The annual meeting of the College will be held on Saturday, May 31st, and the election of officers will take place on the following Monday. Several new candidates have presented themselves for the Council, amongst them being Dr. Frazer, Dr. Heuston, Dr. T. Myles, and Dr. Thompson, of Omagh. The President, Dr. Meldon, will present himself a second time for the chair, in accordance with the wishes of a large body of Fellows, who desire to see the decision of 1883 in favour of a biennial presidency put into force. Mr. Croly, the Vice-President, will contest the presidency, and for the vacancy in the vice-chair Messrs. R. H. Moore and W. Carte are candidates. The struggle for the two offices will be very keen, and it is impossible to forecast the result. Mr. Moore is the leading dental surgeon in the city, and he is supported by all the influence of his *confrères*. Dr. Carte was formerly in the Army; he has medical charge of the military pensioners at the Royal Hospital, and is surgeon to Kilmainham Gaol. He has no seat on the Council at present.

THE LATE DR. W. K. SULLIVAN, PH.D., PRESIDENT, QUEEN'S COLLEGE, CORK.

The following resolution has been passed by the Council of Queen's College, Cork:

That the Council desire to express their deep sorrow at the death of William Kirby Sullivan, the President of the College, and to convey to his family their sympathy with them in their present bereavement. The Council hereby place on record their sense of the devotion to the College displayed by the late President during the period of seventeen years in which he presided over it, and the energy and wisdom which he brought to bear in developing its resources and increasing the advantages which it would offer to its students. They feel quite unable to express adequately their conviction of the loss sustained by themselves and the entire College through the removal from amongst them of one of whom the strength of his character and his generous sympathies exercised so beneficial an influence.

Professor Sullivan was buried on May 15th in the new cemetery, Cork. The students of the Queen's College attended in a large body, and the coffin was borne from the residence of the deceased to the bier by a number of scholars. Preceding the coffin walked the workmen of the College, and following it the chief mourners. Next came the professors wearing their college gowns, then the the students, who were succeeded by the leading city merchants and many members of the learned professions; the Mayor was also present, attended by the mace bearer.

SMOKE ABATEMENT.

A public meeting, largely and influentially attended, was held a the Mansion House on Wednesday to promote the national wor undertaken by the Committee for Testing Smoke-preventing Ap pliances.

The Lord Mayor presided, supported by Lord Derby, Lor Howard of Glossop, Earl Fitzwilliam, Sir F. Abel, Sir H. Rosco M.P., and Sir Douglas Galton; and letters regretting their in bility to attend were received from the Duke of Westminste Lord Rayleigh, Lord Rosebery, Lord Cross, Lord Percy, Lor Egerton of Tatton (the President of the Committee), and th Mayors of Manchester, Salford, Sheffield, Nottingham, an Leicester.

The Chairman, in opening the proceedings, said he thoug that everyone must appreciate the importance of, and the nece sity for, the purest air we could possibly obtain.

Mr. A. E. Fletcher, Her Majesty's Chief Inspector of Alka works, and chairman of the executive of the Committee for Tes ing Smoke-Preventing Appliances, said the Committee did n wish to recommend any particular appliance, nor did they stan forward as inventors.

Lord Derby then proposed a resolution approving the objec of the Committee as stated. He thought that the diminution smoke and its necessary accompaniment, dirt, was a matter whic concerned everyone, except those who were fortunate enough t live away from great towns. Indifference was the real difficult which they had to encounter, but in England anything whic came to be recognised as a want was eventually supplied. Th expenditure of fuel in creating dirt—for that was what it cam to—was a waste of fuel itself, and the injury caused to proper was not inconsiderable. He believed that more than three-fourth —he would say something like nine-tenths—of the smoke fro collieries and factories was absolutely preventable, though son trouble and outlay would be required. Possibly more stringe legislation would be needed, but let them first try the experimen of enforcing the laws which they already had.

Lord Howard of Glossop, seconded, and Professor Chandl Roberts-Austen supported the resolution, which was carri unanimously.

On the motion of Sir Henry Roscoe, M.P., seconded by E Fitzwilliam, and supported by Alderman Bowes (Salford), resolution was next passed in favour of raising a fund to meet t expenses of the work.

Mr. Ernest Hart, in proposing the third resolution, sa that the Committee must beware of slaying the slain. T Smoke Abatement Institution had, at great cost, and with t aid of the most accomplished experts, provided nearly all t scientific and practical information which could be desired the subject of the abatement of smoke from factories. Almo every kind of factory was now carried on in London smokeless and by reference to the reports of that institution, of whi he had the honour to be chairman, and the report on t Smoke Abatement Exhibition, information would be found whi would preclude any manufacturer from pleading impossibiliti as the ground for exemption. Industrial smoke was a pu superfluity, and this he claimed that he and his colleagu had demonstrated scientifically and practically in Lond which was now almost wholly free from industrial smo Much, however, remained to be done in enlightening pub opinion on this subject, and in putting pressure on man facturers, and especially on the local authorities who h the administration of the Act in the provinces, and who many places were not only supine but absolutely hostile. Th would be the most useful direction in which the influence of t Committee could now be employed. Household smoke was equa preventable, but until public opinion demanded that it should prevented with a force sufficient to exert pressure on the Legis ture and the County Councils, little could be done. Private dividuals and institutions had done nearly all that was possi and he claimed to have demonstrated that, as Professor Rober Austen had just said, the production of smoke was not only u necessary, but, with the present state of knowledge, criminal. recent Committee of the House of Lords had reported in a li sense, and it ought to be made an offence by law.

The Mayor of Rochdale and Mr. T. C. Horsfall afterwa addressed the meeting, and a vote of thanks to the Lord Ma closed the proceedings.

INTH CONGRESS OF INTERNAL MEDICINE AT VIENNA.

(Continued.)

The Innervation of the Heart.

L. Romberg and His, of Leipzig, described experiments on innervation of the heart. They had studied the embryology ne nervous system of the human heart, and their results were ariance with the opinions commonly held as to the physio- cal function of the cardiac ganglia. The first formation of the iac nerves appeared to be at the end of the fourth week. glion cells became detached from the funiculus marginalis of sympathetic nerve, and immigrated into the heart. The nerve s which connected these cells with the funiculus marginalis together with the fibres from the vagus, to which the gan- n cells themselves stood in no relation. In the further de- pment sympathetic ganglion cells exclusively immigrated into heart. The nervous system, the development of which rred during the second and the commencement of the third th, consisted of a plexus on the posterior surface of the nding aorta (*plexus aorticus profundus*). Inferiorly it ended he ganglia of the atria; it sent besides a plexus rich in glia between the ascending aorta and the ductus Botalli (*plexus icus superficialis*). From the latter the plexus coronarius took in. The ganglia of the atria stood in no close relation to the ricles. The ventricles remained free of ganglia. The cardiac glia were thus parts pushed forward by the sympathetic glia. The latter, according to the investigations of Onodi,[1] nged to the territory of the posterior roots, hence to sensitive system. The same was true of the cardiac glia, which originated from the sympathetic ganglia. the cardiac ganglia were sensory; and unless it was ended that the same ganglion cell could at the same time sensory and motor, which was an untenable view, the iac ganglia possessed no motor functions. They thus were ier automatic cardiac centres nor active agents in inhibiting celerating the beat of the heart. Dr. Romberg particularly hasised the fact that the heart of the embryo contracted hmically long before it had nerves or ganglia, and referred to ldridge's experiments.[2] It might, perhaps, be that the cardiac glia conveyed to the central nervous system the "unconscious ations" (*unbewusste Empfindungen*) which reflexly regulated eat of the heart through the vagus and the accelerator nerves, dominated the size of the system of the blood vessels. As the thesis of an automatic nerve centre of the heart had thus to andoned, the rhythmic action of the heart could only be ex- ted by an "automatia" of the cardiac muscle itself. Such an omatia" was more easily comprehensible from the anatomical physiological properties of the cardiac muscle. The cardiac le is the automatic motor of circulation, without being irri- l to move by nervous elements. The cardiac muscle thus ap- s to be of a greater importance pathologically than heretofore. reas the changes of the cardiac ganglia, owing to their com- ted action, did not permit of a clear explanation of the patho- al irregularities of the cardiac function, whereas the effect of ac poisons could not easily be referred to an influence on the ac ganglia, the examination of the cardiac muscle will in e more frequently reveal the cause of the morbid action of eart. Dr. His showed photographs and wax models bearing e embryology of the cardiac nervous system.

Pemphigus.

ofessor Mosler, of Greifswald, said it was a common question her pemphigus should be reckoned among the infectious ses or no. He showed photographs of a patient, aged 42 , who was quite healthy when the affection began and in a the disease had first developed over the lower extremities. disappearing spontaneously, the disease recurred, and gradu- spread over the whole body. Pemphigus vulgaris benignus ne transformed into pemphigus pruriginosus, as a number bjective disturbances came on, particularly tenderness over xcoriated parts, sleeplessness, and finally trophic disturb- . The formation of vesicles occurred symmetrically, and in in a similar way to herpes zoster along the course of certain s. Dr. Löffler made cultures of the contents of the vesicles, o specific micro-organism was found. Inoculations of the contents were made on both arms of a healthy medical student, but without result. Taking into account the intermittent course of the affection and the fact that large doses of atropine had no effect, the muriate of quinine was given, namely, 40 grammes of hydrochloric quinine in five weeks. The patient, after this treatment, seemed to be perfectly cured; but several relapses of a mild form still occurred later on. In the case of a woman affected with pemphigus, burning pains along the course of the corresponding nerves occurred twenty-four hours before the appearance of the vesicles; besides this, headache, general *malaise*, etc., were present. Over the thigh the pains corresponded to the course of the external cutaneous nerves and the nervi cutanei medii, and over the chest, the intercostal spaces, and the arm they followed the branches of the cutaneous nerves. At intervals of from eleven to seventeen days the formation of the vesicles occurred regularly. The concomitant symptoms suggested a neurosis. Several cases had been recorded in which pemphigus occurred as a complication of pre-existing neuroses. Professor Mosler said the cases which he had seen led him to believe that certain forms of pemphigus—and among these also the apparent true pemphigus—could not be considered as an independent affection but as symptoms of a vasomotor neurosis. He had also come to the same conclusion as to a case of pemphigus chronicus malignus which he had recently published in the *Deutsche med. Wochenschrift*. In that case bacteriological examination had also been negative in its results, and the same was true of the injection of the contents of the vesicles in a healthy ape.

Professor Schwimmer, of Buda-Pesth, said that during the last four years he had seen twelve cases of pemphigus, of which four were submitted to *post-mortem* examination. He had come to the following conclusions: 1. Pemphigus was a tropho-neurosis; when it occurred, it was only a symptom of a central affection. 2. The point of departure had to be sought for in the central organ, particularly the medulla spinalis. The affection of the peripheral nerves was probably an acute degeneration.

Professor Kaposi said that in the course of twenty-one years, and in 50,000 cases of skin disease—from which 6,000 cases of small-pox had to be eliminated—he had met with 210 cases of pemphigus. All possible forms of the affection were illustrated by these cases. All the patients had formerly been healthy and robust, and were not at all the subjects of nervous predisposition. There were cases which preserved one single form during the whole of life, and, on the other hand, there were cases in which all types of pemphigus were successively observed. In one series of cases neuroses in the clinical sense, and in another neuroses in the sense of cutaneous affections were noted. Cases of pemphigus, however, also occurred in which neurosis could almost certainly be excluded from a clinical point of view, and in which the disease produced the impression of an infectious malady. From an etiological standpoint, there were, indeed, some cases which led one to think of a participation of the central nervous system, but in many other cases there was no reason whatever to admit such a causal connection. The mortality was only 7 per cent.

Remarks were also made by Dr. Ehrmann, Professor Neumann, Professor Weber, and Dr. Purjesz, and Professor Mosler, in reply, read the following letter from Dr. Schulz, of Berlin, who was carrying out experiments at the Hygienic Institute of that city: "In August of last year I had the opportunity of isolating from the contents of the vesicles of pemphigus acutus neonatorum, almost in pure culture, a micro-organism, which was later on cultivated in several generations, and finally inoculated on myself. No proper formation of vesicles occurred, but an inflammatory process, with subsequent slight suppuration and healing under a little scab, were observed. The micro-organism in question was then inoculated on three other persons, and no other results than the above mentioned inflammatory reaction supervened; it must be emphasised that no formation of vesicles was observed in this case either."

Effect of Drugs on Intestinal Absorption.

Dr. S. Leubuscher, of Jena, said that, according to recent experiments, intestinal absorption was no longer looked upon as a simple physical process, but as a function of the living epithelial cell of the intestinal wall. Thence everything which influenced the living activity of the cell must also exert an influence on absorption. These effects might either be due to an influence on the protoplasm of the cell or to disturbances of the circulation, or to an influence on the nervous system. As to the first mentioned point, the experiments were conducted in such a way that a strong

[1] *Archiv für mikroskop. Anatomie*, Band 26.

[2] Du Bois-Reymond's *Archiv für Physiologie*, 1883.

solution of an inorganic acid was injected into a ligatured intestinal coil in a living animal, and, after sufficient cleaning, a certain quantity of a solution of grape sugar was poured into the same coil. The absorption of the grape sugar was constantly diminished. With regard to the second point, the arteries leading to a ligatured coil in the mesentery were ligatured in one case, and in another the veins were ligatured. On one occasion anæmia and in the other instance hyperæmia were thus produced. In both cases of disturbance of circulation, particularly the last form, the absorption of grape sugar and that of a solution of iodide of potassium was considerably interfered with. As to the third point, the experiments were not yet concluded. After those preliminary experiments it seemed probable that a number of drugs would also exert an influence on intestinal absorption. To test the intensity of absorption, grape sugar and solutions of iodide of potassium were used; as drugs, quinine, opium, morphine, alcohol, glycerine, besides weak solutions of common salt and the water of the Mühlbrunn of Carlsbad, were used. Two coils of the same length were ligatured in dogs and cats. Into one of these an aqueous solution of iodide of potassium or grape sugar was injected, and into the other the same substance, with the addition of a drug. There was a difference in the intensity of absorption, pointing to the influence of the drug. The experiments were continued on dogs with intestinal fistulæ produced by the Thiry-Pela method. It was evident from these experiments that quinine, opium, and morphine diminished absorption even in feeble concentrations. Morphine had the same effect even when it did not come into direct contact with the mucous membrane, but was only applied subcutaneously. Alcohol, in slight concentrations (from $\frac{1}{2}$ to 2 per cent.), increased the intensity of absorption; in large quantities it diminished it more and more. Glycerine was indifferent; a slight addition of common salt increased absorption. Mühlbrunn of Carlsbad had no effect. As to the iodide of potassium, the experiments carried out on man showed that the diminution through the saliva in alcoholic solutions of a strong concentration was impaired. When men drank iodide of potassium in aqueous alcoholic solution, or in glycerine solution, or in Mühlbrunn of Carlsbad, the quantity of iodine secreted through the urine was, on the average, increased. Milk diminished this secretion.

NURSING IN WORKHOUSE INFIRMARIES.

Among the movements that are on foot for bringing trained nurses within the reach of all classes, the much needed work of the Workhouse Infirmary Nursing Association among the poor is worthy of every support. This Association was founded in 1879, to supply boards of guardians with competent and duly trained nurses. It was felt (1) that the present state of nursing in the majority of workhouses is capable of improvement; (2) that it was desirable to promote the employment of paid and efficiently trained nurses in all such infirmaries; (3) that the appointment of a hospital-trained lady superintendent, to be at the head of each staff of trained nurses, is essential for the efficiency of the system. The success which has attended the operations of the Association during its ten years of active work (which has only been limited by the funds at its command) is shown by its last yearly report, from which we gather that the total number of probationers trained by the Association since its foundation has been 108; the total number of nurses appointed, 288; the number of applications received, 342. In 1884 the Hampstead Guardians, and in 1887 the St. George's-in-the-East Guardians, placed the nursing arrangements of their infirmaries in the hands of the Association, and since then all vacancies in the nursing staff of these institutions have been supplied by this Association.

Applications are still received largely in excess of the number of nurses that can be supplied. During 1889, 89 applications were received (this being more than double the number of 1888), and only 53 nurses could be supplied; of these, 19 were probationers trained by the Association.

Through a special donation from Lady Wantage, there has been an increase in midwifery training; this greatly facilitates country appointments. The following extract is from the recent report:

"Our work from the beginning has included country unions, and we supply a large number of these regularly. Their requirements are, however, somewhat different from London infirmaries, and we are obliged to spend a considerable sum annually on special training. The results are very satisfactory. We are anxious to continue this most needful work if our funds increase. Hitherto the average annual income has not exceeded £250, and it has required very careful management to accomplish the amount of work above recorded."

An appeal is made to boards of guardians to support the efforts of the Association in providing trained nurses for their unions. The Local Government Board have, it is stated, not only given a proof of their official confidence by stating, in answer to an application, that they are "prepared to sanction without further inquiry the appointment of nurses who are recommended by the Workhouse Infirmary Nursing Association," but readily give their sanction to subscriptions to its funds. The Association, in return, undertakes to supply nurses, whether in London or country. They are frequently called upon to send temporary nurses during illness or local pressure of work, and this help is said to be much appreciated by boards of guardians, who are not only saved the delay and expense attendant on advertising, but they are provided with a higher class of nurse than they are likely to obtain through other means. It was felt that some systematic inspection of the nursing in the county infirmaries was necessary, and this want, as regards the nurses of the Association, has been met by the appointment of Miss Wood as visiting inspector.

Dr. Bridges, in a communication addressed to the Chairman of the Metropolitan Asylums Board on the qualifications of matrons at fever hospitals, says: "1. A trained nursing staff should be placed both in the wards of the hospital, and, when off duty, under the supervision of a highly-qualified officer of their own sex. 2. Their subordination to such an officer need not, and in practice does not, in any way interfere with their implicit obedience to the directions of the medical staff in the treatment of their patients."

If a trained matron be necessary in a fever hospital it is contended she is much more so in a Poor-law infirmary, and in a deputation to the President of the Local Government Board in 188 the Workhouse Infirmary Nursing Association urged this pressing necessity. The system of permanent or long-continued night duty, so trying to nurses, has been changed at St. George's-in-the-East and Whitechapel Infirmaries, where the nurses now take alternate day and night duty for three or four months at a time. This plan will, it is hoped, be adopted by other unions, as the constant night duty is both prejudicial to the health and detrimental to the general efficiency of the nursing staff.

The evils of pauper nursing have, without doubt, vastly diminished of recent years, but there is still room for a greatly improved state of things by the employment of a superior stamp of trained nurses in our infirmaries. This, the Workhouse Infirmary Nursing Association, with its influential general and working committees, is doing, and it may be hoped that so good a work will not be restricted for the want of the necessary funds for its accomplishment.

Keynsham R. S. D. (Population, 28,438).—*Typhoid Outbreaks. Filth Removal Unsatisfactory.*—In his excellent annual report for 1889, Mr. J. C. Heaven devotes himself principally to a consideration of the recommendations made by Dr. Blaxall in his recent report to the Local Government Board on the sanitary condition of this district, and of the way in which those recommendations could the most readily be carried out. Some very important improvements have been under consideration, but, except in the matter of water supply in one or two localities, no practical work was effected. As regards the vital statistics of the year, there is little of interest to record. The death-rate (16.3 per 1,000) approached very nearly to that of the country generally, and the zymotic rate was 1.01 per 1,000. Though there were several outbreaks in various localities, there was none serious or attended with much mortality. A number of cases of typhoid fever, scattered over the district, point to very widespread conditions favourable to this disease. Although there are some populous localities in the district, there is very little sewerage. The sewers and drains which do exist are not in all cases satisfactory, whilst sometimes they constitute an actual danger. For excrement disposal the filthy cesspit still reigns supreme, with all its attendant offensiveness and danger to health from pollution of air, soil, and water, for in most instances the receptacle is seldom cleansed, and, being pervious, its contents soak away. It is the exception to find one ventilated, except through the privy or some drain leading to it. The dry-earth system has been adopted in several cases, but might with advantage be more generally substituted for the existing cess-pits.

HE SELECT COMMITTEE ON HOSPITALS.

FIFTH AND SIXTH SITTINGS.

e House of Lords Select Committee on Metropolitan Hospitals, d their fifth sitting last Monday (Lord SANDHURST in the chair), en evidence was given.

r. HUGH WOODS said he practised in Highgate; he had studied Trinity College, Dublin, and held a degree in both medicine surgery. He considered his practice was interfered with by general hospitals, and he knew they were spoken of bitterly practitioners in the neighbourhood. The principle of provident pitals he quite approved. He had no practical experience of London hospitals. As soon as he came to London he went private practice. He had been two years in London, and had several years practice in South Wales.

he CHAIRMAN: You are hardly then in a position to speak of hospitals of London?

he WITNESS: I have studied the question, and consequently w a good deal about in. Witness continued, that although he sidered the cost of administration of the London medical rities excessive, it was difficult to ascertain the cost with racy.

ord CADOGAN: In fact the accounts are valueless?

he WITNESS: Practically.

ord KIMBERLEY: Would you be in favour of an official audit ccounts so as to be all made on one basis?

he WITNESS: Decidedly, there should be some general uniform em. Witness, in reply to other questions, said he was sure hospitals were very injurious to the practice of the general titioner. The hospitals were more costly than the infirmaries. re was one reason why they should be more costly, and that was better supply of nurses. But still the cost was, he thought, h too high. The witness stated that it was an almost inable rule in the metropolitan hospitals that the members of staff should hold a diploma from the College of Surgeons, or College of Physicians in London.

ord KIMBERLEY: Are you speaking of a rule or a practice?

he WITNESS: Of course each hospital has its accepted rule, the rules have this point in common in almost every case.

there an absolute rule in all or most of the hospitals in Lonthat every practitioner who is admitted to the hospital should e a London diploma or do you say it is the general practice he hospitals to appoint only those with such a diploma?—re is such a rule.

n absolute rule?—An absolute rule with a few exceptions.

nd that you consider a grievance?—I do.

ne WITNESS also said that the general medical teaching at the don hospitals was on a bad and unsatisfactory system. It led ne indefinite multiplication of small medical schools to the rioration of the education given. The number of students for whole of London was not more than would suffice to form e satisfactory medical schools.

ord THRING: You think there ought to be three medical ols in London, either belonging or not to a central school with ions to the hospitals to enable them to give clinical teaching.

ne WITNESS: Yes; a little rivalry is useful. He then read a tion from the BRITISH MEDICAL JOURNAL of August 10th, , protesting against the system of hospital management as ng for a full and impartial inquiry.

r EDMUND HAY CURRIE was then examined. He said he had connected with the London Hospital for 30 years, and joined Metropolitan Free Hospital to work out the provident prin-. At the London Hospital there were 700 beds and about 00 registered out-patients. A system of inquiry had been lished there, and 800 inquiries made last year.

e CHAIRMAN: Is not that a small number of inquiries out of a large number of patients?

e WITNESS: Yes. I have not much faith in that part of the iry, although it was well conducted. Every patient, he said, treated at the London Hospital, and then inquiry was made as s possible; but he did not think any system of that kind was y efficacious. He did not consider that anyone should go to London Hospital to be treated free except for the preservaof life, because it was governed by a charter. Therefore they d not very well alter the rules and regulations, and take away rivileges of the governors of sending patients. There were are beds at the hospital—in fact, another hospital was even red. There was a cry of want lower down, nearer the eastern dary. A case where life was concerned was never refused at the London Hospital. Undoubtedly the hospital was sometimes overcrowded. On one night there had been thirty cases of broken legs taken in. If he had to set about working the hospital on a provident system, he should take care that there was affiliated to it a certain number of provident dispensaries; and for a mile radius he would district the population to the hospital, and that would give about 750,000 persons to the institution. Everyone should be required to systematically pay a small fee, and they should first be seen by a doctor appointed by a committee. The hospital should be as it were their family physician. Such a system would be better for the patient, especially in regard to treatment. He did not believe that the out-patients were habitually seen by students. The present free system of treating out-patients would starve the local practitioner, and so would the provident system to some extent, but a carefully-regulated scale of pay would overcome the difficulty. The London Hospital authorities were getting alive to the enormous abuse of allowing anyone to walk in for relief. In the Poor-law infirmaries, there was no one to look after the medical men, and no one to prevent experimenting upon cases, but at the hospitals the medical staff dare not try an experiment, because there were too many students looking after them. He would not like to say that the Poor-law infirmaries were undermanned, but he thought they all wanted looking after, and it was not therefore right for a medical man to be in charge of such an immense place without some outside medical power coming in. After speaking of the need of a good system of nursing at the medical charities, the witness said it would distinctly benefit the profession if infirmaries were thrown open to the students.

The CHAIRMAN: For a complete medical education of medical gentlemen, they should have full access to the asylums?

The WITNESS: Most decidedly, both to the sick asylums and Poor-law infirmaries. He continued that he was in favour of having clinical teaching in asylums, as it would bring into the hospital a higher class of medical practitioner. The waste of instruction going on at the Poor-law infirmaries, sick asylums, and infectious hospitals, was such that he could not understand how it had been allowed to go on for so long. The patients could easily make complaints if necessary. The facilities were so easy that he did not think there was any real suffering. There should in every hospital be a definite person to whom complaints should be made. At the London Hospital bodies were never opened without the consent of the nearest relative. The nurses there were of such a superior character that they would not tolerate anything of the kind. There was a strong feeling among the poor against going to the Poor-law, and he believed that a stigma of pauperism was attached by the poor going to the Poor-law. That feeling was increasing.

The CHAIRMAN: A previous witness has stated that the feeling is decreasing.

The WITNESS then gave a short historical account of the Metropolitan Hospital, especially dealing with its conversion into a provident institution, remarking that no new hospital should be established unless on the provident principle. The hospital had a district of a mile radius, comprising Bethnal Green, Shoreditch, Haggerston, and Dalston within the circuit, and there was about a quarter of a million of poor persons in the radius. The poor came and paid their contributions, but he would in any other scheme have a system of collection. They were entitled to be seen at the hospital by paid medical men living within the district, and having a private practice. The scale of subscription was: adults 1d. a week, or 4d. a month; children 2d. a month each, or 6d. a month would include all children in a family under the age of 16. There was an entrance fee of 6d. for every single person or for a whole family, except in the case of members of benefit societies, who were not required to pay an entrance fee, but whose other payments would be the same. The system had been started about two years. No single person was allowed to join the provident scheme if he earned more than 21s. To see that that was carried out, searching inquiries had to be made. Although to some extent they might be, they were not much abused. Probably a good many went to the dispensary rather than to the general practitioner, because the poor had greater confidence in a hospital. The Metropolitan Hospital provident system was not yet paying its way. The numbers were not yet sufficient. The system was very young, and wanted working on a little more comprehensive scale. The persons on the books of the hospital were chiefly those in regular employment, and he did not think it included many of the shifting population. When he joined it he

suggested that the system should go on for three years to see how it worked, before any change was made. It would greatly increase if the fees were collected at the contributors' own houses by women. He should consider the movement a failure if they did not get 50,000 members. The amount obtained from the provident department of the hospital was only a small part of its whole income; but besides benefiting the poor by creating the spirit of independence, the charitable public would be more inclined to support an institution which encouraged providence.

Lord WINCHILSEA: Whg do you fix the limit of 21s.? Is it to benefit and protect the local practitioners?

The WITNESS: Yes. The committee were going to try and make the management more popular by having representatives of those who contributed. It was contemplated reserving certain beds for persons who would pay the whole or portion of the cost.

Lord THRING: Do you not think there is a great want of paying hospitals in the metropolis where the higher class may pay and have good accommodation?

The WITNESS: Yes.

Lord KIMBERLEY: There are medical clubs in your district?

The WITNESS: Yes.

Lord KIMBERLEY: Have they any relation to your hospital?

The WITNESS: At present no, but we hope they will. We are following that question out.

AT the sitting on Thursday, Mr. BRUCE CLARKE, F.R.C.S., Assistant-Surgeon at St. Bartholomew's, and Surgeon at the West London Hospital, stated that he and another member of the staff had to deal with the surgical casualty patients at St. Bartholomew's, one taking the males and the other the females. Great care was taken to ascertain whether any of the casualty cases were suffering from any serious ailment. There were about 250 to 260 patients seen in an hour, but there were between 40 and 50 persons to attend to them. There were 10 house-surgeons, and under them about 40 dressers working under supervision.

The CHAIRMAN: So that when we hear about 60 patients being examined in an hour, it by no means signifies that they are seen by one medical man?—Certainly not, so far as St. Bartholomew's is concerned.

And it is erroneous to say that each patient has only a minute's treatment?—Certainly. So far as surgical cases, absolutely.

The WITNESS continued that it was practically impossible for students to see patients on their own responsibility, so far as supervision could prevent it. Some of the applicants came with trivial complaints, but not a large proportion of cases. A few might be able to pay for treatment, but there was a system of inquiry by a responsible official. Of course, it was somewhat erroneous to judge by dress and appearance, and the system was of comparatively small value.

The CHAIRMAN: Do you suggest any plan by which the indiscriminate admission of all classes might be remedied?

The WITNESS: I am afraid I am hardly prepared to suggest any plan, unless it was a gigantic system of ascertaining the circumstances of the patients.

In reply to Lord CADOGAN, the Witness said he signed the petition to the House of Lords because he thought a certain number of cases went to hospitals with trivial ailments, and there was also a widespread feeling that some of the patients who came could afford to pay. He thought the general system of hospital management in London was defective and required examination. A very much more satisfactory system than the present would be that the cases should be recommended by medical men.

The WITNESS, in answer to Lord KIMBERLEY, expressed the opinion that, from the candidate's point of view, the system of election to medical appointments at St. Bartholomew's was not satisfactory. He did not, however, think that any exceedingly good medical man would lose an appointment by reason of not being a successful canvasser.

Lord THRING: Do you think it right that a surgeon should be elected by a medical committee?

The WITNESS: They are not elected at St. Bartholomew's by the medical committee, but their recommendation should have considerable weight. Anybody besides medical men might be guilty of favouritism.

Do you suggest there should be a university in London to which all medical students should belong; that they should have a technical education at the university, and then be parcelled out, by some arrangement between the authorities of the university and the hospitals, for clinical instruction at the hospitals?

A university for London to which students should belong is one of the most important questions of the day. There was, he continued, much misconception prevailing as to the supervision of students. They were much more strictly supervised than was generally imagined.

Lord CADOGAN: I understand you to say that if medical schools were not associated with the hospitals, the lecturers would be inclined to teach rather the scientific than the practical principles?

The WITNESS: I think, perhaps, there is a little misconception on that point. I only object to a medical university which would be attended by officers who are entirely outside hospitals.

Sir MORELL MACKENZIE stated that he had great experience in the hospital question, having been connected with the London Hospital and also with special hospitals. In the interests of both the profession and the public, both general and special hospitals were required for educational purposes. There were special departments at general hospitals, but they had not been very successful. The general hospital special departments had not treated the patients suffering from special diseases nearly so successfully as at the special hospitals. In spite of the system of payment generally in operation at the special hospitals, a good many poor persons came, preferring to be treated there than at general hospitals.

The CHAIRMAN: Would you like to see the system of payment extended?

The WITNESS: Yes, to all hospitals.

Would that not have this result—that a good many poor patients would be crowded out in favour of those who pay?—I do not think so. Witness continued that all the special hospitals were more or less necessary. He would not like to see any restrictions placed upon the building of additional special hospitals. London drew from the whole country, and the building of new special hospitals was not, speaking generally, more than was required for the increase of population. One of the legitimate grounds of objection to special hospitals was that the number of beds was so small that the cost of each occupied was very large. That also was equally a ground of objection to small general hospitals. If at the special hospitals the patients could be better cured (as was the case) than at the general hospitals, that was a good reason for their existence. It did not follow that the cheapest hospital was the best. The cost per bed at general hospitals varied as greatly as the cost of the beds at different special hospitals. He thought the internal management of London hospitals might be immensely improved. The special hospitals had for a quarter of a century proved their great value, and now the general hospital authorities wanted to establish special departments, and the necessity of special hospitals was deprecated. Although he had retired in 1875 from the London Hospital he was on the honorary staff. The out-patient department was enormously crowded, and a good many went who were only suffering from indigestion, bronchitis, and really ought not to go to the hospitals, for they prevented some who were considerable sufferers from being properly attended. There should be a very strict inquiry as to the need and circumstances of the patients. The difficulty of inquiry was the extent of organisation which would be necessary. The immense out-patient department on the medical side of hospitals was not necessary for the teaching of students, as was urged by many. As a matter of fact, the student was not required to attend the out-patient department.

The CHAIRMAN: As to the appointment of practitioners at hospitals. What is the system at the London Hospital?

The WITNESS: The mode of appointment is, I think, defective in this way: A man cannot, as a rule, be connected with the permanent staff of the hospital unless he be a Fellow of the College of Surgeons or a Member of the College of Physicians, whereas he might hold a much higher diploma—he might hold a high position in the University of London, or at Oxford or Cambridge, but unless connected with one of the Colleges, which was a much lower degree, he could not be appointed. In the same way that applied to a Dublin or a Scotch diploma.

Does that exist in London as a rule?—It exists in London. It is part of the old system. It exists in the London Hospital and all London hospitals.

Owing, you say, to the protective system, some of the best men are excluded?—Yes, I think so. There were, witness continued great disadvantages in having the enormous buildings. There would be a great saving and improved sanitary condition brought about if the general hospitals could be removed into the country and others built in London on a small scale.

In reply to Lord CADOGAN, the witness said there was mor

llingness to make everything in a special hospital secondary the cure of the patients, and they were more liberally treated ere than at the general hospitals. He thought children's hostals were very necessary, because they were a great trouble to her patients and disturbed them very much. The children also ten suffered from infectious diseases.

Answering Lord SPENCER, the witness stated that students from neral hospitals went to the special hospitals for educational rposes. The College of Surgeons did not require a special exination, and the students went to special hospitals to acquire owledge of special diseases after passing their examinations. was sure that direct benefit had arisen to the science of surry by the creation of special hospitals. A good many diseases ere now cured which were not cured formerly.

Lord SPENCER: Has that arisen from the establishment of ese special hospitals?—Yes.

In reply to Lord WINCHILSEA, the witness said that the estiated number of out-patients at the hospitals in London of over million was, he thought, very much exaggerated, otherwise one t of every four of the metropolitan population would be an outtient. He thought it would be rather difficult to submit the ecial hospitals to any kind of public inspection.

Are not the special hospitals often controlled by practitioners ose eminence in the profession is not a sufficient guarantee to e public that good treatment would be secured?—I think that ay be so sometimes; but special hospitals would compare vourably with the general hospitals, taking them all round. He ntinued that provident dispensaries did not lend themselves uch to special hospitals because of the expensive treatment at ose hospitals.

Lord LAMINGTON: Are not the special departments at general spitals under the charge of specialists?—Not so much I think they ought to be.

Lord MONKSWELL: Do you think the resources of science are t sufficient to enable an old hospital, built under the old insanitary conditions, to be made healthy?—It could not be made so althy as a smaller hospital built in a salubrious situation in the untry.

The WITNESS further stated that if there could be a fairly ornised central authority of an impartial character, he should be ad to see one whose duties should be to arbitrate in cases of spute or scandal, and to arrange as to the publication of acunts. There was a general tendency for young doctors to become ecialists when they first started. That he considered wrong. ey should study general diseases before practising as specialists. ter a large experience of general diseases they would not be ely to forget what they knew, although practising as specials. Special hospitals could not very well accept the provident stem as it had hitherto been carried on. The rates for the ecial hospitals would have to be much higher.

The CHAIRMAN: Do you prefer the schools as they are attached the hospitals?—There is a terrible loss of power now. It is a stake; they should be amalgamated. The ten or eleven schools e now competing one against another, and competing for fees. e interests of the different hospitals prevent assimilation and corporation of the hospitals.

The Committee then adjourned to June 9th.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

ETINGS of the Council will be held on July 16th, and Octo- r 15th, 1890. Candidates for election by the Council of the sociation must send in their forms of application to the neral Secretary not later than twenty-one days before each eting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-w of the Association, who shall be recommended as eligible by y three members, may be elected a member by the Council or by y recognised Branch Council.

Candidates seeking election by a Branch Council should apply the Secretary of the Branch. No member can be elected by a anch Council unless his name has been inserted in the circular mmoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 29th. Mr. T. Vincent Jackson, the President, will take the chair at 3 o'clock.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The annual meeting for the election of officers will be held at the Royal Forest Hotel, Chingford, on Thursday, June 5th, at 6 P.M. At 6.15 the members and their friends will dine together under the presidency of Dr. Ord, President of the Branch, who will be supported by several past presidents and other leaders of the profession. Further particulars will be announced.—J. W. HUNT, Honorary Secretary, 101, Queen's Road, N.E.

METROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner will take place at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Queen Anne Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—The annual general meeting for the election of officers and committee for the ensuing year, will be held at the Holborn Restaurant, at 6.30 P.M., on Wednesday, May 28th. The annual dinner, the price of which will be 7s. 6d. per head, exclusive of wine, will take place subsequently in the Duke's Saloon, at 7 P.M., the chair being taken by Dr. Ord, President of the Branch.—R. PERCY SMITH, Honorary Secretary, Bethlem Royal Hospital.

METROPOLITAN COUNTIES BRANCH: WESTERN DISTRICT.—A meeting will be held on Friday, May 30th, at the Horbury School Room, Notting Hill Gate. Dr. Ord, President of the Branch, will take the chair at 8.30 P.M. Dr. Buzzard will read a paper on Alcoholic Monoplegia in Diabetes.—C. A. PATTEN, Honorary Secretary.

MIDLAND BRANCH.—The annual meeting will be held at Lincoln on Thursday June 12th. Gentlemen desirous of reading papers or exhibiting cases are requested to communicate before May 26th with W. A. CARLINE, M.D., Lincoln, Honorary Secretary.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting of this Branch will take place on Wednesday, June 4th, at 1 P.M. With a view to increasing the interest in the meeting, the Council have determined to have a luncheon instead of a dinner, to take place between the business part of the meeting and the papers. Gentlemen who wish to give papers, show cases, or propose resolutions, are requested to communicate not later than May 25th with E. P. HARDEY, Honorary Secretary, 80, Spring Bank, Hull.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will be held at St. Bartholomew's Hospital, Chatham, on Thursday, May 29th, at 3.30 P.M., Deputy Surgeon-General J. H. Jeffcoat in the chair. The dinner will take place at the Bull Hotel, Rochester, at 6 P.M., charge 6s. 6d., exclusive of wine. To facilitate the arrangements, gentlemen who intend to dine are particularly requested to signify their intention to the chairman Deputy Surgeon-General J. H. Jeffcoat, Newlands, Maidstone Road, Rochester, not later than May 27th. All members of the South-Eastern Branch are entitled to attend this meeting and to introduce professional friends. Communications:—Mr. F. Bowreman Jessett: Some Observations on the Surgical Treatment of Intestinal Obstruction. Mr. F. W. Penfold: Notes on a Case of Aortic Aneurysm, with specimen. Mr. A. G. Foulerton: Notes of a Case of Scleroderma; exhibition of patient.—A. W. NANKIVELL, Honorary Secretary of the District, St. Bartholomew's Hospital, Chatham.

EAST ANGLIAN BRANCH.—The annual meeting will be held at the Norfolk and Norwich Hospital, Norwich, on Thursday and Friday, June 19th and 20th. Notices of communications should be sent to Dr. BARNES, Eye; Dr. ABBOTT, Braintree; and Dr. BEVERLEY, Norwich, Honorary Secretaries.

BIRMINGHAM BRANCH.—The annual meeting of the Birmingham and Midland and Counties Branch will be held at the Medical Institute on Thursday, June 12th, at 4 o'clock in the afternoon, when the ordinary business will be transacted and an inaugural address delivered by the President-elect of the Branch, Mr. Alfred Freer, F.R.C.S., of Stourbridge; and after the meeting the members will dine together at the Great Western Hotel at 6.30; tickets, exclusive of wine, 6s.

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, May 28th, at 7.30 o'clock, W. Johnstone Fyffe, M.D., President. Dr. F. T. B. Logan will call attention to the attitude of the Bristol magistrates towards the local medical men under the new Lunacy Act, and will propose a resolution thereon. The evening will be devoted to a discussion on Epidemic Influenza, which will be introduced by the President.—Dr. E. MARKHAM SKERRITT and Mr. R. J. H. SCOTT, Honorary Secretaries, Clifton.

SOUTH MIDLAND BRANCH.—The annual meeting of this Branch will be held at Springfield House, Bedford, on Thursday, June 12th, under the presidency of David Bower, M.D. Gentlemen wishing to read papers, cases, etc., are requested to communicate as early as possible with the Honorary Secretary. The following have been promised:—Mr. W. H. Bull: A Tariff of Medical Charges for the South Midland Branch. Dr. Newman: Treatment of Retention of Urine due to Prostatic Enlargement by External Urethrotomy. Mr. G. H. Percival: On Salufer and Salol as Antiseptic Dressings.—C. J. EVANS, Northampton, Honorary Secretary.

SPECIAL CORRESPONDENCE.

LIVERPOOL.

The Abattoirs Lease.—The Medical Examination of Prisoners.

THE question of the renewal of the lease to the Abattoir Company of their present premises came before the City Council for final decision on May 7th. It will be remembered that the Finance Committee recommended that the lease should not be renewed after its expiration in twenty years, but that the Council had refused to act on the committee's recommendation, and had referred the question back to them. The Finance Committee adhered to their former recommendation, which was again brought up at the meeting on May 7th. At the same time a memorial against the renewal of the lease, signed by 337 medical men in Liverpool and the neighbourhood, was received; while a memorial, signed by 2,650 owners, shopkeepers, tradesmen, and residents in the neighbourhood, was read, praying that the abattoirs might not be removed. The sanitary objections to retaining the abattoirs were well set forth by the proposer and seconder of the motion, which was, however, strongly opposed on financial grounds, and was lost by 25 votes to 16, its opposers including two medical members of the Council. It was afterwards resolved that, in the event of the renewal of the leases, a provision should be inserted that if from any cause the abattoirs be required to be removed by the Council or other authority at any time after the expiration of the present lease, no compensation for trade disturbance should be claimed by the company. During the discussion the unfounded statement was made, and unfortunately was allowed to pass unchallenged, that many of the signatures to the medical petition were those of students at the hospitals.

Mr. F. W. Lowndes, who has for many years acted as surgeon to the police, has once more pointed out to the profession the risks that may be incurred by the unwary practitioner in making a medical examination of prisoners or other persons suspected of crimes. Mr. Lowndes reminds practitioners that neither a magistrate's nor a coroner's warrant authorises a medical man to examine without the expressed consent of the party who is to be examined. His omission to obtain this consent renders him liable to an action for assault. It is not enough that the subject should offer no resistance; he must give his voluntary consent to undergo examination.

CORRESPONDENCE.

THE PROVIDENT PRINCIPLE IN HOSPITALS.

SIR,—Lord Derby presided the other day at a dinner in aid of the Metropolitan Hospital, an institution in which the "provident principle" has recently been adopted, largely on the initiative, and following the ideas, of Sir E. Hay Currie. It has become as much a commonplace to talk of the common sense of any speech of Lord Derby as his lordship says it has become to talk of the useful work of our hospitals; and therefore we need not say that his remarks were lucid and put one side of the case, and that probably the most popularly useful side, very plainly before the public, namely, the injurious effect of indiscriminate medical charity. But those who dwell on this aspect of the question only have by no means exhausted the subject. It is true enough that the ordinary diseases of the working classes may fairly be expected to be provided for by themselves, if they are in good work, or by the public Poor-law dispensaries if they are not; and such diseases are not adapted for hospital treatment, nor can they be cured by half a minute's interview and a bottle of physic a week. But there are plenty of cases of a more or less exceptional nature, in which the advice of the general practitioner has been sought in vain, or which are of a special character, or which are so severe as to require admission into the hospital. The first of these classes require a consultation, as similar cases do in the higher walks of life, and should be sent to the out-patient room for the advice of the medical officer there, either in personal or epistolary communication with the usual medical attendant of the patient; the second must be sent to the appropriate special department, under similar conditions; the third must be sent into the wards.

It is, as I understand, the peculiarity of this institution that it endeavours to supply these three requirements. The out-patient department for ordinary diseases is a provident dispensary, officered by the general practitioners of the district, and the beds are reserved (exclusive of accidents) for these contributing members, who have a right to admission when they require it, and who are attended by hospital physicians and surgeons elected for that purpose.

The only objection which, as far as can be seen, can properly be made to such a system is that the fees may have been fixed so low, or the rules for admission to the advantages of the provident system may be so lax, as to cause injury to the medical men of the neighbourhood, and there was certainly a considerable opposition to the hospital on its first formation on this ground. It may be hoped that this was due to misunderstanding, and that the opposition has therefore ceased; and, if so, the experiment appears to be a good one, and one likely to lead to interesting results. Those who are labouring for the reform of the out-patient system are often spoken of as opposed to out-patient practice. If there are any such persons, I, at any rate, am of a precisely opposite opinion. What is wanted is to improve that practice in every respect—to assimilate it, in fact, to that which prevails among richer people. The hospital patient should have his usual family doctor who looks after him in all the ordinary ailments, and gives him that home-treatment which is the most appropriate to such ailments. In the less ordinary emergencies above alluded to, he ought to have a deliberate and efficient opinion, instead of the cursory glance which is all that nine-tenths of our out-patients now receive. The system of charging small fees to out-patients is so far from satisfying these requirements, that it seems to aggravate all the evils now existing, and to introduce fresh evils of its own.

It is much to be desired that the rules and practice of the Metropolitan Hospital will be fully discussed before the Lords' Committee, its defects (if it has any) exposed and put in a way of reformation, and its merits made useful for introducing self-help in sickness among the poor (but not pauper) class, and for bridging over in some sensible and practical way the gulf which now divides the paying from the eleemosynary system of medical relief. The Committee which is now sitting will be eminently useful for this and kindred purposes.—I am, etc.,

A HOSPITAL SURGEON.

DANGERS OF GEYSER BATHS.

SIR,—As I was in the chair on the occasion to which you refer in the article on the above in the JOURNAL of May 17th, and also gave evidence at the inquest on poor young Chapple, perhaps you will permit me to add another word of caution for the benefit of those who still continue to use these dangerous contrivances. What you say about the importance of properly constructed funnels, with means of ingress for air and of exit for the products of combustion is doubtless quite correct, but the problem of how to accomplish

effectually is not so easy as may at first be thought. There is ally no fireplace in bath-rooms, nor is there always a construc- of the house adapted to the use of hopper-shaped ventilators he ceiling. Besides which such ventilators should not depend their action on what are called "extracting cowls" (which ays require a certain amount of wind to set them in motion), should be self-acting from the heat of the gas apparatus. e we are confronted by the difficulty that in the act of heating er by a "geyser" the gas is cooled, and thus rendered too vy to readily escape by the funnel usually provided. The iculty, however, is not insuperable, and I commend it to the ntion of the parties most interested, whether they might not ure the proper action of a ventilating funnel by providing an and, or other separate burner, for the sole purpose of main- ing an upward draught in the funnel, and which shall not be l for the purpose of heating water. As I have before pub- ed, I now repeat that a good constant draught in the funnel ich is indispensable) must be guaranteed before any "geyser" aratus is safe to use in an ordinary bath-room, and that means ensuring it must be provided by all manufacturers who do not h to be responsible for further homicides, or to be excused en they occur) on the ground that they themselves are behind educated public in knowledge of their own speciality.—I am,

pper Norwood. EDWARD HAUGHTON, M.D.

THE DISCUSSION AT THE MEDICAL SOCIETY ON ABDOMINAL SURGERY.

R,—In a centre like Birmingham we are surrounded by spe- ism of all kinds, and we are so impressed by the success ught about by the subdivision of labour that we can no longer eve in the same man forging anchors and making hair springs watches. What is true in the iron handicraft is and must be in the handicraft of surgery.

Dublin there is room for at least two or three men to devote nselves exclusively to abdominal surgery.

r. Thomson's allusion to my first fifty cases is no argument, use to make any contrast with those and his own first fifty s, he ought to be working with the clamp and be under thirty rs of age, as I was, without all the light which has been shed n the matter for the last fifteen years.—I am, etc.,

irmingham. LAWSON TAIT.

R,—It seems a strange outcome of the discussion, this war nst specialists. One cannot understand the sudden attack. t is wanted? To abolish gynæcology as a speciality because eral surgeons, on account of the teaching they have obtained specialists, can sometimes do gynæcological operations suc- fully? Surely this is not meant seriously. A general practi- er could never hope to have the same skill as a specialist in nosis or treatment; neither could a general surgeon as a rule ct to get sufficient work to make him expert as an abdominal eon. And to continue. for that matter neither can every æcologist expect to become an abdominal surgeon. A man is a good surgeon in any branch has probably in him the ing of a good surgeon for any other branch; and I have not slightest doubt that Mr. Tait, if he chose to practise, could utate a leg or do an operation for cataract as well as anybody. this is not the question. It is a general one, namely, Is it to be a specialist to do one thing well, perhaps excellently ? or is it better to go on mending broken legs, setting de- ed spines, excising carious joints, exploring the brain, operat- for squint, doing ovariotomies and hysterectomies, to be, in t, a "Jack-of-all-trades and master of none?"—I am, etc.,

asgow. J. STUART NAIRNE, F.R.C.S.Ed.

THE WORKING OF THE NEW LUNACY ACT: A WARNING.

R,—I was called a few days ago to see a patient in the north ondon, who was suffering from an acute attack of insanity. had escaped from the custody of her friends, and had made tic attempts to waken up certain of their neighbours in the t, under the delusion that something dreadful was going to en to one of them. Failing to gain admittance at one house went to another, where she was most humanely taken in cared for, and, although a comparative stranger to the occu- s, they sent for the doctor, who gave her a sleeping draught. following morning I was sent for to give an opinion as to the state of her mind. I advised her immediate removal to a lunatic asylum, and, together with the medical man who had also seen her, certified as to her mental state. She could with difficulty be retained from rushing out of the house, and it was a case requiring prompt action. Armed with the two medical certificates and the petition to a justice, duly signed, the husband of the patient called upon a justice to obtain the necessary order for the patient's admission into Bethlem Hospital. The justice at first said he had not time to do it then, and, after some supplication on the part of the distressed husband, he was told by the justice that his "lunch was ready!" The petitioner thereupon informed the justice that this was a matter of more importance than his worship's lunch, whereupon he (the petitioner) was told to get an urgency order, as the justice must have time to look at the Act. Another justice was applied to, and he at once said he did not understand the duties required of him under the Act. I advised the county court judge should be applied to, but that worthy stipendiary, without delay, sent to the petitioner a certificate according to the Act, to the effect "the signing of the order would interfere with his judicial functions!" and there was an end of the matter as far as he was concerned.

I then told the petitioner the justice to whom he first applied should be appealed to again, and it should be explained to him that an urgency order would entail the additional expense of fresh medical certificates within seven days; and at last, after several hours of unnecessary delay, the justice signed the admission order, and the patient was admitted into the hospital.

It seems really incredible that an acute case of insanity, about which there could not be a shadow of a doubt, should be refused an order for admission into an hospital for nearly twelve hours, because the justices do not understand their duty.—I am, etc.,

T. OUTTERSON WOOD, M.D.

Margaret Street, W.

ALCOHOL IN WORKHOUSES AND GENERAL HOSPITALS.

SIR,—At the present time there is considerable activity amongst teetotalers on the alcohol question, and at meetings of boards of guardians all over the country the subject is being discussed. In some unions alcohol has been entirely dispensed with; in other unions the consumption has been reduced to a minimum, and guardians naturally are desirous of knowing why it is certain medical officers can dispense with the use of stimulants whilst others employ them. At Leeds we are told the expenditure has been reduced from £1,000 to 7s. 8d. At Burnley no alcohol has been consumed for fifteen years, and other unions are quoted in support of the contention that alcohol is useless in the treatment of disease. The general hospitals throughout the country have very materially reduced their expenditure on alcohol in all its forms, but the general hospitals have not abandoned its use *in toto*. The class of cases in the union infirmaries are exactly identical with those in the general hospitals. The workhouse medical officer has to treat pneumonia and other acute diseases, and grave surgical operations are performed at many union hospitals. At the Leeds General Infirmary alcohol is used. Must we conclude that the staff of the Leeds General Infirmary are wrong in continuing this agent, and that we must look to the Leeds Workhouse as our guide in the matter; and as alcohol can be done away with in the Leeds Union Hospital, so it ought to be done away with in the Leeds General Infirmary?

This is a plain way of stating the case, looking at it from one aspect. And what is true of Leeds is true of other towns where there is a workhouse on teetotal principles, and a general infirmary conducted on temperance principles. Is alcohol useful in the treatment of disease? Is it a medicine? Has it any value like the other poisons? Is there hardship to the sick poor in refusing to supply it to them in our union infirmaries? Are medical officers of union infirmaries carrying out the scientific treatment of disease by withholding alcohol under all conditions, or are they simply swimming with the tide of opinion, with boards which favour economy and teetotalism? If a medical officer uses stimulants in his private practice and refuses it to his patients in the union infirmary, I consider he is inconsistent and unconscientious, and the sick poor must suffer. I do not assert that such is the case—I only put it as a possibility that, to save controversy or friction, some medical officers may solve the problem in a very simple way by cutting off alcohol absolutely in their infirmaries. It is unpleasant for medical officers to have to enter into explanations of their modes of practice, and to undergo, as it were, a re-examination in the principles of medicine; there is the temptation

to avoid all this by going with the stream. The surgeons appointed to general hospitals have not to undergo this ordeal, and their practice ought certainly to be as representative as that afforded by the experience of union infirmaries.

We must face the matter, and endeavour to solve the difficulty of reconciliation between these two opposing systems. We ought by this time to know something of alcohol, as we know something of arsenic, prussic acid, morphine, and we should not be content at leaving in the hands of laymen the treatment of the sick poor. I am satisfied that alcohol is useful as a medicine, and that as I cannot dispense with it in private practice, I cannot omit it from my therapeutical system in workhouse practice. One great argument advanced by teetotalers is that 90 per cent. of the patients owe their admission to union infirmaries to drink? Is this statement true?—I am, etc.,

M.D.

OUT-PATIENT DEPARTMENTS.

SIR,—The Select Committee on Hospitals will assuredly turn professional and public attention once more to this important topic. Reform becomes necessary, but local by-laws or general legislation do little good, because the fault lies, not in systems or persons, but in conditions which never change.

The limiting of clinical instruction for students would be a grave step. So good is the clinical teaching in most British and Irish medical schools that our country is full of well-educated medical men alike fitted for hospital and for private practice. This state of things is of great benefit to the community. The curtailing of clinical material would infallibly result in a deterioration of future medical talent. Again, the presence of students in the out-patient room is, on the whole, to the advantage of the patients. The medical officer on duty is bound to teach and hence to attend to each patient; he is ashamed to hurry. For an irresponsible young student is a far more candid and dangerous critic than any official overseer or censor. Mr. Bousfield was right in advocating the admission of clinical teaching at Poor-law infirmaries. The opponents of that measure are made up of persons who dislike the medical profession as a profession for various well-known reasons, and of a timid class who scent out a rise of the rates in every proposed improvement in Poor-law matters. Altogether, then, the curtailing of hospital out-patient departments would do more harm to the poor than good, and the extension of clinical teaching to hospitals and infirmaries not associated with schools would prove of great benefit to the needy.

As to the out-patients themselves, the public think—first (and rightly)—of excluding persons who can afford to pay; and, secondly, of preventing the access of more patients than can be thoroughly attended to within a given time. To counteract all these real or supposed evils, various remedies have been proposed. The presence of a lay overseer of any kind is open to numerous objections. He must perform his functions either in the out-patient room itself, or in the patient's waiting room, or in the secretary's office. If he station himself in the out-patient room, the patients look upon the fact as a breach of confidence. They are great experts in detecting a non-professional person, and naturally object to talking before him about delicate matters. In the waiting room, an overseer is less objectionable; but experience has shown that his object is easily defeated. Cunning, well-to-do patients readily pretend to be legitimate objects of charity, whilst a layman cannot decide if a chronic case be too long under treatment. In the secretary's office more good can be done, but the official is too far off; besides, he is there very accessible to rich subscribers, who can write to him, begging—not always without threats of withdrawal of subscriptions if their request be not granted—that their servants be seen to in the out-patient room. This is one of the very worst abuses of medical charity. Altogether, however, the lay administration of out-patient departments is best conducted from the board room or secretary's office.

Treatment by students is by no means so very unsatisfactory, but, in the interest of patient and student, it is far better that the student should never attend a patient excepting under the eye—literally—of a house-surgeon or house-physician, or member of the assistant staff. Unfortunately, qualified officers of the grades just mentioned are nearly always overworked, and hence—as it is better that patients be seen by students than not attended to at all—arises an evil so often deprecated. An intelligent system of registration of out-patients by the hospital secretary, and an increase in the assistant staff, appear to offer the best chances of reform. As to the abolition of the out-patient department, excepting for consultative cases, the idea is chimerical. The expression "consultative cases" would be impossible to define, and would be made far too restricted in some hospitals, and much too elastic in others. Above all, the poor prefer to come to hospitals for out-door relief, and their preference must not be disregarded.—I am, etc.,

HAUD IGNARUS MALI.

PYLORECTOMY AND GASTRO-ENTEROSTOMY.

SIR,—I was glad to find that another case of gastro-enterostomy for pyloric carcinoma had been performed successfully by Mr. Mayo Robson, and I would urge the importance of all cases, whether successful or not, being reported, so that we may be able to judge as to the usefulness of the operation—first, in relieving suffering; secondly, in prolonging life.

I shall be glad, therefore, if all surgeons who have performed the operations of "pylorectomy" or "gastro-enterostomy" will be good enough to report the same through your columns or send a brief account of their cases to me.

I would again draw attention to the importance of adopting either kangaroo tendon or chromicised catgut for the sutures passing through the coats of the stomach and intestine, instead of Chinese silk. In the case reported by Mr. Paul in the JOURNAL of May 17th, which died on the eighth day, he reports at the *post mortem* examination the bone plates had entirely disappeared, but the silk ligatures were hanging loose in the opening. The same state of things was found in the case of mine which died on the sixth day. This specimen I showed at the Medical Society. In another case reported to me, which died four months after the operation, the silk ligatures were still present.

These ligatures, therefore, must be a fruitful source of irritation and, situated as they are at the artificial pylorus, may be the means of arresting the passage of food into the intestine, and the patient lives sufficiently long may form the nucleus for a gastrolith.

In all my experiments I used chromicised catgut, and found in every case it lasted a sufficiently long time to allow of firm union taking place between the serous coats of the two portions of intestine to be united. After death no trace of it was to be found.

I have adopted this form of suture in my last cases of gastro-enterostomy with most satisfactory results.—I am, etc.,

Upper Wimpole Street, W. FRED. B. JESSETT.

NAVAL AND MILITARY MEDICAL SERVICES.

THE BARRACK BILL.

ON a previous occasion we congratulated Mr. Stanhope on his determination to grapple in a comprehensive fashion with the pressing evil of old and insanitary barracks; and on his statement that the highest sanitary authorities and practical architects and builders would be consulted before money was spent on new structures. We now have before us a copy of the Barrack Bill itself, and of reports made to the Secretary of State for War, and presented to Parliament, as to buildings and plans of building for barrack purposes, by Messrs. Richard Creed, Frederick Thomas Pilkington, and G. W. Haward Trollope. The Bill itself is of course a purely technical document, dealing with land and works, expenses and supplemental matters connected with transfers and title deeds. It is to the report of the gentlemen named we wish to draw attention, as a valuable document, coming from specialists of the first rank, Mr. Creed being Architect Inspector to the Board of Agriculture; Mr. Pilkington architect to the Artisans, Labourers and General Dwellings Company, Limited, and to the Middle Class Dwellings Company, Limited; and Mr. Trollope, a high authority on practical building.

The two first make a conjoint report, dating from December last, upon (A) buildings already erected at Aldershot; and (B) plans of building proposed to be erected. Under the first head they report upon:

1. *A Block of Officers' Quarters.*—The buildings consist of ground and first floor flanked by commanding and field officers' quarters; they pronounce the materials employed and the design to be economical, and the whole good; but say some slight improvements might be made in the proportion of the rooms, and the placing of the doors so as to allow of a better position for the bed.

2. *A Hut for Forty Men.*—A brick built ground floor building containing two apartments for men, and a bedroom for a non-

mmissioned officer; the roof of felt. This structure, the type the reconstructed camp, is declared to be economical in design id construction, but slates are recommended in place of the felt ofing. The heating is declared defective.

3. *A Block of Married Soldiers' Quarters.*—Brick built and ated; of two floors each, containing four quarters, two on each or, and served by one staircase. The building is pronounced bstantial, and accommodation sufficient for a small family, but t enough when by reason of age or numbers additional bed-oms are required; future buildings should provide against this ant in a certain proportion of the quarters. The waste of space passages is condemned, and the area of the living rooms de-ared to be disproportionate to the bedrooms; provision should so be made for a small larder opening to the outer air, and more tention paid to the most convenient position for door and fire-aces.

4. *Canteen and Recreation Room.*—Good all round, with the ex-ption of the felt roofing.

5. *Sergeants' Mess; Stores; Workshops, and Stables.*— Eco-omical in design and material; paving clinkers should be substi-ited in the stables for absorbent concrete.

This constitutes the report and criticism of the architects on ie shells of the buildings, so to speak.

Mr. Trollope also inspected these buildings as long ago as June st, and it is well to consider his report in conjunction with that the architects. He declares the latest approved Aldershot hut r forty men to be all that can be desired in design, construction, id materials, with one exception—the roofing with tarred felt, hich he condemns, as do also the architects. He says it is a ievous error and a false economy to put a temporary roof on a ibstantial building, when an additional £20 would have slated ch hut, which would soon be recouped in saving on repairs and minished risks from fire. It is just in such a matter as this that ie value of these expert opinions come in. Private builders ould not think of putting an unsightly, inflammable, and tem-orary roof on a substantial and permanent brick structure. But ir War Office authorities are unfortunately ever driven to wasteful lf measures, through the paring and squaring of estimates and idget votes. Mr. Trollope's opinion was asked as to whether iere would be any advantage or economy in building two-storeyed its, and his answer is, None, unless economy of space is desired, hich of course it is not at Aldershot. He is in favour of a erandah to part of each hut, which would add greatly to the mfort of the men, though somewhat increasing cost. He con-ders the plan of the married quarters admirable, and, having ated roofs, are not open to objection in that particular; but he commends certain economies in construction. The walls are too ick, and he would build them thinner in cement, and thereby crease the floor area.

In place of the Scotgate ash stone which is specified for the ason work, he recommends artificial stone such as is at present ed with much success in industrial blocks of buildings in Lon-n. Mr. Trollope also inspected the laundries and officers' quar-rs, and says, excepting minor points, it would be difficult to ggest improvements either in plan or materials.

On the question of cost of buildings he makes the exceedingly tisfactory statement:—"I have no hesitation in saying that in ch case the country is receiving very good value indeed for the oney expended." Such a statement as that ought to satisfy or lence the most exigent of Mr. Stanhope's economists.

Neither of the reports touch, except indirectly, on the strictly nitary aspects of the building, which we suppose will be dealt ith by the revived Sanitary Commission which has been promised. t some valuable and suggestive remarks are made on the heat-g of the buildings, especially the huts, which command atten-n. We alluded in a previous article to the primitive and miser-ly imperfect system of heating barrack rooms which has hitherto evailed. Even with a roaring and wasteful fire at one end of the om water might almost freeze at the other; chills were inevit-le, chest diseases the consequence. The architects state some the buildings show a "lamentable deficiency" in the matter of eating, and recommend "a central system of heating by means of adequate steam boiler with steam pipes," which would not ly provide for warmth, but subserve "for cooking, scullery, and undry purposes." They recommend "the steam should be con-icted to the various buildings by pipes coated with a non-con-icting material, and laid in brick channels on concrete founda-ns, carefully covered in, with ample means of access to the pes." Also, "that the fire chambers of all the coppers and boilers should be closed, and a system of steam coils fixed inside the cop-pers and boilers to take the place of the fires." They recommend steam to be used in the laundries and kitchens for both boiling and drying operations, and also instead of stoves for drying the men's clothes. We may be assured that these recommendations, coming as they do from such a high source, can be practically carried out with economy and effect according to the latest and most approved methods.

The architects declare it impossible to effectually and equally heat a large room or hut by means of open fires or stoves; but this can readily be effected by means of steam radiators in the window recesses; but they would add "small open fireplaces, which, while imparting cheerfulness, also provide for ventilation." Mr. Trollope is apparently of the same opinion, and likewise points out that even if hot air stoves could warm an Aldershot hut in theory, it could not work well in practice "on account of the way fuel is issued." A room or hut with a full complement of men gets an abundance of fuel, because it is issued so much per head; but if a few men only occupy a big room they are starved. This is a charming example of War Office method; the heating of a given apartment does not depend upon the necessities of the case, but upon some easy means for keeping Commissariat accounts!

The architects inform us they attended at the Horse Guards and inspected the plans of buildings proposed to be erected under the Barrack Bill. The first was "a two-storey barrack block for two sergeants and 84 or 112 men." Upon this they make an entirely favourable report. The next was "a block of officers' quarters, revised design." This also, with certain minor improvements, is commended. The next, "A new design for married soldiers' quarters and warrant officers' quarters." Three plans, A, B, and C, were submitted, and all declared undesirable on account of several faults in design. They were dismissed with this general remark: "All these plans allow too large an area to the living rooms to the sacrifice of the bedrooms."

We fear this is an objection which extends to a very large number of civil houses. How often do we see houses with large and pretentious "reception rooms," as they are grandly called, and miserable poky bedrooms? It never seems to occur, either to builders or occupiers, that about one-third of a person's total existence is spent in bed; and therefore a bedroom should have some proportionate relation to this great fact. We should have liked some more information as to the materials used or proposed to be employed in these new barracks. Glazed bricks and tiles, cement, tesselated floors, fire-clay pipes, etc., all occur to us, and which enter largely into what constitutes the superior cheerfulness, cleanliness, and healthfulness of modern dwellings.

The question of sites, drainage, water supply, ventilation, etc., is all-important. Probably we shall have all this discussed in a sanitary report from the Commission before alluded to; meanwhile we have put our readers abreast of what has as yet been effected under the Barrack Bill.

DOCTORS OR OFFICERS?

M.D. Oxon. writes: The cry of certain medical officers for army rank goes on unceasingly, though it is obvious to those whose eyes are not blinded that it only diminishes the low esteem in which they—not I—say they are already held. Rank and military title may be desirable for medical officers, but those who are crying out for it are too obviously not animated by a purely public spirit—they are doctors proud of being officers, not officers proud of being doctors. "This shows the contempt in which the term 'doctor' is held," says N.[1] The term "doctor" is certainly not held in contempt in civil life (compare "parson" and "lawyer"), and if it is so held in the army I have not found it so. Doubtless there must be something wrong in the "doctors," for your correspondent is surely not so shortsighted as to imagine that contempt would be turned into respect because "doctors" were called "captains," "majors," etc. If there is any contempt, it is for those "doctors"—and I believe they are few—who are doctors in no sense but that of being qualified to practise—men who are not learned, and who take no interest in the study and treatment of disease.

Let those who wish to improve the position and reputation of medical officers leave rank alone for the present, and devote themselves to their profession. They will gain most influence by successful treatment of disease witness Surgeon Parke.

*** We publish the above to show that there are members of our profession evidently still unable to grasp the true bearings of the army medical controversy. We must remind our correspondent that the army is a large and influential factor in our social system, and that any slight or degradation inflicted on its medical officers cannot but injuriously affect the dignity of our profession in civil life; the honour of one is equally that of the other. Now it is just those medical officers who are most jealous for the honour and rights of their profession that claim due military rank and titles in the army; it is just those, we can vouch for it, who are the most accomplished and devoted—and there are many—to their noble profession, who resent most

[1] JOURNAL, May 10th, 1890, p. 1106.

the gross and gratuitous slights which the dominant military hierarchy seek to inflict on them. Let the civil members of our profession make no mistake, the most capable medical officers in our army are the most soldierly; no incompatibility exists between the two functions. The most dangerous and insidious military opponents of the medical officers are those who have ever on their lips honeyed expressions about the nobility of the "doctor's" profession, and yet lose no opportunity of slighting and insulting those who practise it—that is the condition of affairs alluded to by "N.," which our correspondent quotes. Surely a little reflection would make matters clear to our correspondent. In what position would he wish our army medical officers to be? Would he wish them to be civilian doctors in broadcloth while carrying out all the duties, even command of their own men, and sharing in all the dangers of soldiers? Would he order them to face wounds and death in the battlefield, and yet forego the status and honour which are justly accorded to all military men for such personal risks? Military rank, status, and titles, although absolutely necessary in defining position from the drummer boy to the field-marshal, are neverthless purely artificial. Would our correspondent have medicine, because it is a noble civil profession, to take a "back seat" when it becomes organically associated with arms? Military status does not depend upon the utility or nobility of a civil profession with which it may be brought in contact. The bar is a noble profession; not a few military and even medical officers are barristers; but while that distinction may be of value to them as men, it in no way affects their military rank. Engineering is a grand profession, and our Royal Engineers are about the most competent and capable body in existence, yet their army rank is held entirely apart from engineering: they, like the doctors, are doubtless proud of their profession, yet it is none the less necessary for them, as part of the army, to possess clear and definite military rank and titles, which, by the way, were long withheld from them by the very class and caste who now seek to withhold them from medical officers. The Engineers at one time had to struggle against privilege and prejudice just as the doctors do now. It is not so much the doctorship as the manhood of our medical officers which is at stake in this controversy. As educated and high-spirited gentlemen, surely we in civil life cannot ask them meekly to acquiesce in an inferior status in the army, not merely to their combatant brothers and cousins, but to relatives who happen to be in other departments, such as the pay, ordnance, and commissariat, who never go under fire, and whose duties are far less military than theirs. This controversy affects a large and important section of our medical brethren, vitally in the regular army, materially in the volunteers; and let us remind our correspondent that only the wearers know where the shoe pinches. His question should not have been "Doctors or Officers," but "Doctors and Officers." And we would further remind him that however much our profession may be esteemed by the public, none of its members have ever yet been offered a seat in the House of Lords, while that august assembly is open to every other profession, calling, or trade in the land. There are disabilities both in military and civil life towards our profession that require readjustment.

HOSPITALS IN THE FIELD.

CRITIC.—The transport attached to a bearer company and field hospital is, of course, of vital importance. In the *Manual for Field Service*, as at first issued, it is laid down that the transport officer is responsible that the horses are harnessed and the wagons ready to be packed at the appointed time, but not a word that he is to be under the command of the medical officer. But this state of ambiguity was so outrageous that in an amended order it is laid down that he (the transport officer) is "to take orders" from the medical officer; he is not, indeed, placed under him, as would have been straightforward, but such would have been too great a shock to "my military advisers."

THE ABOLITION OF MILITIA SURGEONS.

FAIRPLAY remarks, in answer to "W. K. C.," that "the spoliation of the militia surgeons was one of the inducements offered to the authorities to grant the Warrant of 1879." Even if so, army medical officers had nothing to do with it; they had no option but to take over the militia duties. Was it not notorious that before that Warrant militia surgeons did often not turn out with their regiments, and so threw the work on the Medical Staff. Or sometimes they appointed young civil surgeons to fill their place.

RANK AT THE STATION MESS TABLE.

SURGEON-MAJOR writes that he had occasion some time ago to refer this question to headquarters, and was informed that medical officers were entitled to all the privileges of rank and position at mess, according to the dates of their commissions, in common with all other officers of the army. Medical officers are apt to permit themselves to be relegated to a position which is not theirs, through ignorance or vagueness in the regulations, and by acquiescence in the injustice, rather than refer the circumstances to higher authority, drift into an uncertain position, which is readily taken advantage of by others. It would be better if, when in doubt, they should make a proper reference to headquarters.

*** Our correspondent is no doubt right, from a certain point of view, that medical officers should assert themselves in matters of rank (if they can name it) more than they do. But we know self-assertion is most hateful to many men. The true solution is not reference to an indifferent or hostile headquarters, but rank so unmistakable and self-evident that no reference is required.

MILITARY TITLES.

SCRUTATOR says: While every one of the military medical officers examined by the Camperdown Committee were dissatisfied with the present condition of the Medical Staff, it is worthy of note that the older ones who had ceased to do executive duty before 1879, when the discipline of the Medical Staff Corps came into the hands of the medical officers, recommended compound titles. Whereas those who had had practical experience since that date, all recommended ordinary military status in a separate corps.

THE CAMPERDOWN AND MORLEY COMMITTEES.

LEX remarks: Contrast the evidence given by the same combatant persons before the two Committees. Defective discipline in the Medical Staff Corps was the theme before Lord Morley's Committee; but not a word about that before Lord Camperdown's. Why? Because any reference to it before the latter would have tended to show that due military status and titles were necessary for medical officers in carrying out their limited command. Verily, these cunning witnesses, if not candid, are wise in their silence!

THE NAVY.

THE following appointments have been made at the Admiralty:—JOHN J. LOFTUS, M.B., to be Surgeon and Agent at Roundstone, May 13th; HENRY S. JACKSON, Surgeon to the Haulbowline Hospital, May 15th; EVAN ST. M. NEPEAN, Surgeon to the *Vernon*, May 15th; JOHN OTTLEY, Surgeon to the *Landrail*, May 16th; W. REID, M.D., Fleet-Surgeon, and P. B. HANDYSIDE, Surgeon, to the *Camperdown*, May 22nd; J. M'C. MARTIN, Surgeon, to the Royal Marine Light Infantry, Portsmouth Division, May 22nd.

MEDICAL STAFF.

BRIGADE-SURGEON R. W. BERKELEY has been placed on retired pay. He entered the service as Assistant-Surgeon April 22nd, 1858; became Surgeon March 1st, 1873; Surgeon-Major April 1st, 1873; and Brigade-Surgeon September 9th, 1885. He has no war record in the *Army Lists*.

Surgeon W. P. G. GRAHAM, M.B., has been seconded for service with the Egyptian army.

Surgeon-Major R. SMITH and Surgeon H. SAUNDERS, both stationed at Malta, have leave of absence, the former to England till August 14th on urgent private affairs, the latter till August 14th on private affairs, with permission to travel in Italy, Switzerland, Germany, and France.

Surgeon J. W. COCKERILL, doing duty in the Madras command at the station hospital at Mandalay, is directed to do duty at Toungoo, Upper Burmah.

Surgeon-Major CHARLES QUARRY, who was serving on the Madras Establishment in medical charge of the station hospital at Cannanore, died of pneumonia on April 14th, in his 44th year. He entered as Surgeon on February 3rd, 1878, and became Surgeon-Major twelve years thereafter. He served with the Nile expedition in 1884-85 (medal with clasp and Egyptian bronze star), and with the Soudan Frontier Field Force in 1885-86.

INDIAN MEDICAL SERVICE.

DEPUTY SURGEON-GENERAL W. R. RICE, M.D., Bengal Establishment, who entered the service as Assistant-Surgeon November 20th, 1886, is promoted to be Surgeon-General from March 29th last. He was in the Indian Mutiny campaign in 1857 (medal).

Brigade-Surgeon J. G. PILCHER, Bengal Establishment, who dates as Assistant-Surgeon from October 1st, 1860, is promoted to be Deputy Surgeon-General from March 29th. He has no war record.

The retirement from the service of Surgeon-General Sir B. SIMPSON, M.D., K.C.I.E., Bengal Establishment; Surgeon-General G. BIDIE, C.I.E., Madras Establishment; and Brigade-Surgeon G. D. RIDDELL, Madras Establishment, all of which have been already announced in this JOURNAL, has received the approval of the Queen.

Brigade-Surgeons G. F. OLDHAM and E. A. FITZGERALD, of the Bengal Establishment, both of whom entered as Assistant-Surgeons, July 27th, 1859, have retired from the service. Brigade-Surgeon Oldham served with the 1st Goorkhas in the operations in the Malay Peninsula in 1875-76 (medal with clasp), and with the same regiment in the Afghan war with the Thull Chotiali Field Force (medal). Brigade-Surgeon Fitzgerald has no war record.

Surgeon A. R. EDWARDS, Bengal Establishment, is permitted to resign the service from April 16th, and which he entered October 1st, 1885.

Surgeon W. C. VICKERS, Madras Establishment, recently arrived from England, is directed to do duty in the Belgaum and Bengalore districts.

Surgeon JAMES KERNAN, Madras Establishment, Acting Civil Surgeon of Cannanore, and a son of the Hon. M. Justice Kernan, who recently retired after a long service as a Judge of Madras High Court, died on April 16th of influenza aged 33. His commission dated from October 1st, 1881.

Inspector-General JOHN SCOTT, late of the Bombay Establishment, died in London on May 17th, in his 86th year.

THE VOLUNTEERS.

SURGEON-MAJOR (ranking as Lieutenant-Colonel) J. FINEGAN, 5th Volunteer Battalion King's Liverpool Regiment (formerly the 18th Lancashire), has resigned his commission with permission to attain his rank and uniform. His service dates as Surgeon from December 8th, 1864, and Surgeon-Major from February 1st, 1889.

Acting-Surgeon C. R. WHITTY, M.D., 3rd Volunteer Battalion Norfolk Regiment (late the 3rd Norfolk), is promoted to be Surgeon.

Acting-Surgeon C. J. SUTHERLAND, 5th Volunteer Battalion Durham Light Infantry (late the 5th Durham), has resigned his appointment, which was dated November 8th, 1884.

Mr. JAMES MACDONALD, M.B., is appointed Acting-Surgeon to the 1st Volunteer Battalion Border Regiment (late the 1st Cumberland).

ARMY MEDICAL RESERVE.

SURGEON AND HONORARY SURGEON-MAJOR J. J. SAVILLE, North Somerset Yeomanry, to be Surgeon-Major, ranking as Lieutenant-Colonel.

Surgeon T. PHILIP, M.B., 1st Volunteer Battalion Argyll and Sutherland Highlanders (late the 1st Renfrewshire), and Acting-Surgeon W. J. LAUDER, M.D., 2nd Volunteer Battalion Scots Fusiliers (late the 2nd Ayrshire), are appointed to be Surgeons, ranking as Captains.

MEDICO-LEGAL AND MEDICO-ETHICAL.

AN ILLEGAL AGREEMENT.

M. writes: A. is an unqualified man who fits up a surgery and dispensary, and employs B., a qualified man, to attend at the surgery and to work the practice generally. On employing B. an agreement is duly signed between him and A., in terms of which B. is paid a salary by A. for the work which he does, and B. is by that agreement bound over not to practise, after the expiration of engagement, within a certain radius for a certain period. Does the fact that A. is not a qualified practitioner interfere with the validity of the agreement, and leave B. at liberty to practice according to terms of the agreement, or is the agreement referred to less valid than it would be if A. were a qualified man?

*** No qualified medical man ought to enter into such an agreement, which is, on the face of it, one to "cover" unqualified practice, and if brought to the notice of the General Medical Council would be severely visited. We are advised that such an agreement could not, according to English law, be enforced by A., who, as an unqualified man, is unable to practise, and has therefore no interests which require protection in relation to the subject matter.

In such a case we think the Courts in England would hold the contract to restrain B. from practising to be unreasonable, even if it did not declare the contract to be void on the ground of public policy, as being injurious to the interests of the public.

DOORPLATES.

H. D. asks: Which is correct for the plate on one's door, to put, Mr. Smith, Surgeon, etc., or A. B. Smith, Surgeon, etc.?

*** "A. B. S." will act advisedly in not omitting the prefix of "Mr."

VESTED INTERESTS IN PATIENTS.

DELTA writes: A. and B. are two neighbouring practitioners who have met in consultation several times every year for some time back. A. is in attendance on a Mr. ——, and at the request of the patient calls in B. in consultation. Before leaving the house after the consultation, the patient asks B. to attend him, which he refuses to do in the presence of A., as he says, "You are A.'s patient." In about three weeks time Mr. ——, not improving, quickly sends A. written notice that he is going to try another doctor. A. discovers that B. is in attendance. A. has paid B. for the consultation out of his own pocket, and besides has a considerable bill against Mr. ——, which still remains unpaid. A. does not object to B.'s attendance after proper written notice, but as B. knew the circumstances of the patient to be poor, and that A. had paid the fee out of his own pocket, it seems a scarcely fair proceeding to take the case.

*** Assuming that the above is a fair representation of the facts of the case there can, we think, be no doubt that although B.'s course of action was within the strict letter of professional rule, it evinced a regrettable lack of the true ethical spirit, otherwise he would have firmly declined attendance except in consultation with A., and in thus fulfilling the medico-ethical and the moral law of doing as he would be done by, he would have avoided the risk of an interruption to their friendly communion, for, we need scarcely add, that the loss of amity is but ill compensated for by the acquisition of a patient. With reference to the payment by A. of the consultant's (B.) fee, we may remind him that there is no professional obligation whatever on the family doctor to do so out of his own pocket, and that the simple duty which in consultation cases devolves upon him is to intimate to the patient, where necessary, what the usual or expected fee is, and, as far as possible, to see that it be paid at the time, unless, for financial or other valid reasons, deferred payment be deemed expedient.

A. and Mr. O. H. H.—Although we have failed, after a careful examination of Dr. A.'s statement with that of Mr. O. H. H.'s, which appeared in the JOURNAL of May 10th, on the "Question of Vested Interests in Patients," to discover any material points of difference as to the reported facts on which our comments were based, it may be well to observe that medical men cannot, under the circumstances therein related, be too chary in accepting as *de facto* patients persons who, to their knowledge, have antecedently been attended for a lengthened period by other practitioners still resident within reasonable visiting distance. At the same time, in the case in question, we have a strong impression that the father's assigned reason for the change of doctor—namely, that a nearer one was desirable, as asserted in "Mr. O. H. H.'s" letter—will prove the true one, his (the father's) subsequent statement to "Dr. A." to the contrary notwithstanding. Be that as it may, we are unable, in view of the urgency of the case and "Mr. H.'s" pressing note, to accept, as a legitimate plea for the objectionable delay, "Dr. A.'s" allegation that ere he could accede to the solicited consultation it was necessary that he should receive the father's instructions.

CHANGE OF ADDRESS.

Y. Z. asks whether it is proper etiquette, when removing from one house to another, to notify it to the public in the local paper? Is it wrong?

*** To notify a change of professional residence through the medium of the daily press, or otherwise than *vivâ voce*, or by an autograph or a *fac simile* of a written note and its circulation, strictly limited to the *de facto* patients of the transmitter, is contrary to accepted professional rule.

MAGISTRATES AND THE NEW LUNACY ACT.

T. B. L. (Bristol).—1. There does not appear to be anything in the Acts to justify insistence that the petition be presented at the court house "at the time the magistrates are sitting;" in fact, the order of the "judicial authority," "shall be obtained upon a private application by petition accompanied by a statement of particulars and by two medical certificates on separate sheets of paper." The "judicial authority" signing the order may be a justice of the peace specially appointed annually by the justices of every county and quarter sessions borough, or may be a judge of county courts, or may be a magistrate having jurisdiction where the lunatic is.

If the justices at Bristol have not made a special appointment of justices to make reception orders under the recent Acts, it would be well for those aggrieved to make representation to the Lord Chancellor (under Section 10, Subsections 3 and 4, Act of 1890), who has the power of appointing such justices. The second medical certificate cannot, we think, legally be ignored; it is a necessary part of the "application" (as above) required by the Act, and, as our correspondent rightly says, "must be presented with the petition." The Act says the "judicial authority.....shall be assisted, if he so requires, by the same officers as if he were acting in ordinary jurisdiction, and their assistance under this Act shall be considered in fixing their remuneration." This would appear to give them a right to expect some increase of an annual salary, but there is nothing we can find in the Act to authorise a fee to the "magistrate's surgeon," or to the "magistrate's clerk," to be demanded of the relatives of the lunatic or alleged lunatic.

REMOVAL OF PAUPER LUNATICS TO ASYLUMS.

W. M. O.—In the cases of unmanageable pauper lunatics in a workhouse who require to be removed to a county asylum, under the new Acts 1889-1890, "the medical officer of the workhouse shall forthwith give notice in writing to a relieving officer of the union to which the workhouse belongs, that a pauper in the workhouse is a lunatic, and a proper person to be sent to an asylum, and thereupon the like proceedings shall be taken by the relieving officer and all other persons for the purpose of removing the lunatic to an asylum, and within the same time, as by this Act (1890) provided in the case of a pauper deemed to be a lunatic and a proper person to be sent to an asylum, and, pending such proceedings, the lunatic may be detained in the workhouse." In such case the justice who is acting in the matter "shall call in a medical practitioner" to examine the alleged lunatic, and, if necessary, certify that he is a lunatic, etc., and the reference in the Act of 1889 to 16 and 17 Vic., c. 97, shows clearly that no alteration was intended by the framers of the recent Acts to be made as regards the medical man who should be called in to certify under the particular circumstances above referred to, and who, naturally, as heretofore, would be the workhouse medical officer. The new provision (in the section) for a medical certificate from a medical practitioner not an officer of the workhouse, has nothing to do with the kind of case above referred to, for it only concerns cases in which a lunatic is detained more than fourteen days in a workhouse, and even then a certificate is also required from the workhouse medical officer, as also is an order by a justice.

ADVERTISING BY HANDBILL.

R. G. asks if he would incur the displeasure of the Medical Council by sending out handbills noticing the opening of a dispensary, but not having name or qualification attached.

*** Although a condemnatory monition for the proceeding suggested by "R. G." would not fall within the sphere of duties imposed on the General Medical Council by the Medical Act, such a step on his part could not fail to be taken cognisance of by the local profession, and tend to engender an adverse feeling towards him. Need we say more?

THE L.S.A.LONDON.

POVERTY.—The person referred to in the circular forwarded is a licentiate of the Society of Apothecaries, whose licence has been granted since June 30th, 1887. He does not, therefore, lay himself open to any legal proceedings by styling himself "Physician and Surgeon," which is, however, a title more properly belonging to the licentiates of the College of Physicians, London, diplomates of the Colleges of Physicians and Surgeons, or of a joint board of two such colleges.

CHARGES TO MASTERS AND SERVANTS.

U. U. writes: I charged 7s. 6d. for visits and the same for each bottle of medicine supplied to some patients injured on the Manchester and Sheffield Railway Company; the company refuse to pay more than 2s. for medicine and 3s. 6d. for visits. The company says the patients would not have paid me more if they had been private patients, which is true. Would you advise me to sue the company? They have always paid me the 7s. 6d. fees before for similar cases.

*** There are one or two factors to be borne in mind when endeavouring to answer this question justly: first, the nature and severity of the injuries; and, secondly, the fact that the charge made to the poorer classes for medical attendance must not always be accepted as just remuneration. For instance, if we attend a servant at his master's request, we claim more from the master as our due than we should charge and accept from the servant if he were himself responsible for our payment. These are unwritten laws by which medical men are guided. The charge for attending an injured person might, if the fee had to be paid by the patient, who was in poor circumstances, be 3s. 6d., otherwise a charge of 7s. 6d., including medicine, would not be unreasonable if the railway company were responsible. In spite of this, however, we question whether our correspondent would be well advised to appeal to the law.

WHITE LION PRIVATE MEDICAL CLUB.

W. W.—The prospectus issued by the enterprising promoter of this is unique of its kind. It is accompanied by a lithographed letter, issued by a gentleman styling himself "Solicitor to the White Lion Private Medical Club," who informs us that the physician to the club, besides being a B.A. and B.Sc., is an M.D., which the circular states is "acknowledged as the highest medical standard." The terms are put down on the prospectus as one guinea per annum, payable in advance, or 24s. per annum payable in quarterly instalments, and the club is evidently intended to attract by its comparative

cheapness members of the public who are well able to pay the ordinary fees. Among some of the advantages promised to members are: Art. 2. Permission to send messages in urgent cases by telegraph. Art. 6. Members "shall receive in every respect the same attendance and the same medicines as private patients paying the highest fees." Art. 9 is specially worthy of attention, as something quite original in club practice. "Whenever the life of one of the members is in danger, one or several consultations with one of the leading medical men in London will be granted to him without any charge whatever." Art. 10 promises to a member in epidemic times "medicines necessary to protect himself against contagion."

We find in the prospectus depreciatory allusions to the clubs popular among the working classes, with insinuations as to the honesty of our professional brethren who attend to these; yet we are of opinion that hardly one of them but would have blushed at the idea of issuing to his members a prospectus with such palpable pandering to popular ignorance, and we think the inhabitants of Sloane Square and the vicinity will have ample intelligence to gauge at its true worth the scientific character of such a venture as this.

It calls for remark that no names appear on the prospectus; there is, therefore, no person *primâ facie* made responsible to intending members, who are invited to subscribe a proposal for membership, and to remit a subscription for one year or one quarter as the case may be.

MEDICAL EVIDENCE AT INQUESTS.

A QUESTION of custom affecting the medical profession was raised at an inquest held on May 9th at South Bank, Middlesborough, on the body of a man who had died from syncope. The inquiry was conducted by Mr. Henry Mackereth, deputy coroner, Middlesbrough. Medical evidence was given by Dr. Steele, but before it was received, Dr. Shelton, at present *locum tenens* for Dr. O'Riorden, asked permission to inform the jury that he was the first medical man called to the deceased (who had died at a workmen's institute), and when he arrived deceased's heart was still beating, but it shortly afterwards ceased. He considered that he should be called to give evidence, such being the custom all over England and Ireland. Mr. Mackereth replied that such was not the case. The custom here was for the coroner to say what medical gentlemen should be called, and he had requested Dr. Steele to make the examination. Dr. Steele had done so, and he would now take his evidence.

*** We may point out that by the 21st section of the Coroners' Act, 1887, it is enacted as follows: "Where it appears to the coroner that the deceased was attended at his death or during his last illness by any legally qualified medical practitioner, the coroner may summon such practitioner as a witness; but if it appears to the coroner that the deceased person was not attended at his death or during his last illness by any legally qualified medical practitioner, the coroner may summon any legally qualified medical practitioner who is at the time in actual practice in or near the place where the death happened." Under these circumstances, it is usual for the coroner to summon the medical witness who was first called to see the deceased person, and in the case in question Dr. Shelton was not only first in attendance, but had the advantage of examining the deceased shortly before death. Subject to the law as stated above, the coroner does possess a discretionary power in the summoning of medical witnesses, but at the same time he cannot refuse to accept the evidence of anyone who may tender it at the inquest.

UNIVERSITIES AND COLLEGES.

CAMBRIDGE UNIVERSITY.

THIRD EXAMINATION FOR THE DEGREE OF M.B.—Easter Term, 1890. Part I. Surgery and Midwifery. The following have been examined and approved:

Attfield, Pet.; Batten, Trin.; W. H. Beaumont, Down; Bennetts, Caius; Bradley, Caius; F. W. Burton, Joh.; Buss, Sid.; A. E. Carruthers, Christ's; Cowell, Joh.; Earl, H. Cav.; Fosbery, non-coll.; Fyffe, Caius; Gillam, H. Cav.; Gillett, Sid.; Gimson, H. Cav.; Grabham, Joh.; Greaves, Caius; Hale, King's; J. B. Hall, Pemb.; R. H. Hull, Pemb.; Hardy, Jesus; S. N. Harrison, Trin.; Head, Trin.; J. Lea, Caius; D. S. Long, Caius; P. C. Low, Clare; J. E. Molson, Emman.; Molteno, Clare; Panting, King's; E. P. Peck, Christ's; Pethick, Down; J. C. Richardson, Caius; Rouillard, Caius; Shaw, King's; W. W. Simmons, Joh.; H. A. Smith, Trin.; H. E. Smith, Caius; Stubbs, Trin.; Sutton, Clare; Swayne, Trin.; R. S. Thomas, Jesus; Treadgold, Down; Waggett, Pemb.; Wellford, Trin.; C. P. White, Clare; Wilks, Caius; W. Winslow, Caius.

A SCHOLARSHIP in Experimental Physics has been founded by the late Mrs. Clerk-Maxwell. The value is about £170 a year, and it is tenable for three years. The student is to devote himself to research in electricity, magnetism, or heat, and must have worked for at least a term in the Cavendish Laboratory of the University.

IN addition to Sir Andrew Clark and Mr. Jonathan Hutchinson, the list of persons proposed for honorary degrees on June 10th includes Mr. H. M. Stanley, Dr. John Evans, F.R.S., Professor J. J. Sylvester, F.R.S., and Mr. A. J. Ellis, F.R.S.

PROFESSOR CAYLEY has generously offered to the University a donation of £500 towards meeting the expense of the new library buildings.

THE PROPOSED NEW REGULATIONS FOR THE NATURAL SCIENCES TRIPOS.—The proposal to take into account in the Natural Sciences Tripos, Part II, the work which a candidate might previously have done in a university or college laboratory has not met with much favour with members of the Senate. Th discussion brought out the fears that are felt lest the examinatio should cease to command the high degree of confidence it inspire if the new departure were made. Mr. Bateson, of St. John College, Balfour Student in Comparative Anatomy, while feelin some diffidence in criticising, said that a general principle wa involved, and one with the possibility of wide application. Th proposal was very simple in its nature, and in the restricted for it took was a comparatively small thing, but it did, in fact, touc the whole system of the examinations of the University. At pre sent those examinations were well understood; their weak point and their strong points and their fallibility were well known an understood throughout the educational world. They judged man by what he could show during the time of the examinatio without any regard to his previous history. The proposal in volved inquiry into his previous history and into the modes i which he had learned what he knew. It proposed to giv teachers a certain power to help men in the Tripos Examinatio He thought it most undesirable to give any such power, especiall as it was known that this proposal was only the remains of larger proposal, to make the teachers a court of appeal agains the mistakes of examiners. In practice the scheme suggeste would be found very difficult to work, for so much would tur upon the interest taken in the several students by the teacher and it would be found impossible to make commensurable the re spective recommendations given to the several students. Tha the Board felt these difficulties clearly was shown, he thought, b the very restricted form in which they had made their proposa If it was said that the higher parts of practical chemistry wer not suitable for examinations in the ordinary way, he thought followed that they were not subjects in which it was possible t class men in the ordinary way. Perhaps in such cases the metho of certificates might be better than the method of examination But if the teachers could alter a man's place in the Tripos, th Tripos would cease to be unimpeachably pure. Further, th result of this proposal, if it were adopted, must be to make th superintendence of the men's work more formal than at present it would be necessary to schedule the instruction given. This, s far as it had gone already, had resulted in great loss of freshnes of teaching, and he strongly deprecated its being carried furth still.

ABERDEEN UNIVERSITY.

ATHLETICS.—The Aberdeen University clubs have been givin a good account of themselves in the matches this season. Athlet men are in active training for the University sports which are take place to-day, and which this year for the first time are to held in the recently-opened grounds of the University.

SPECIAL SUBJECTS.—The optional courses on Dermatology, I sanity, Eye, Ear, and Throat are being largely attended this sessio It is gratifying to observe that yearly a larger number of studen and recent graduates are seeing the advantage of attending the courses. A number of students have intimated their intention entering for the diploma in Insanity granted by the Psychologic Society. Owing to the changes recently made by the Gener Medical Council, comparatively few students are this year takin up the subject of Public Health.

EXAMINATIONS.—The Medical Committee of the Universit Council have submitted an interim report in which they urge th the preliminary examinations in Medicine should be passed e tirely before matriculation; that professional examinations shou be conducted publicly, and that additional examiners should appointed.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The arrang ments for the summer lectures at the Royal College of Surgeo are as follows: Mr. William Henry Battle, F.R.C.S., will gi three lectures on Some Points relating to Injuries to the Head, Monday, Wednesday, and Friday, June 2nd, 4th, and 6th; M Walter Pye, F.R.C.S., three lectures on The Growth-Rates of t Body, and especially of the Limbs, in their Relation to the Natur and Surgical Processes for Rectification of Deformity, on Monda Wednesday, and Friday, on June 9th, 11th, and 13th; Mr. Jol Langton, F.R.C.S., three lectures on The Etiology of Hernia, a its Bearing on the Treatment of the Disease, on Monday, Wedne day, and Friday, June 16th, 18th, and 20th; and Dr. Willia Hunter (Arris and Gale Lecturer), three lectures on Ptomaines their Nature and Actions, on Monday, Wednesday, and Frida June 23rd, 25th, and 27th.

ıe following gentlemen passed the First Professional Examion in Anatomy and Physiology for the Diploma of Fellow at eeting of the Board of Examiners on May 15th:

A. Peters, student of Toronto Medical College; W. F. Cholmeley and A. S. Blackwell, of St. Bartholomew's Hospital; H. W. Kendall, of Middlesex Hospital; E. W. G. Masterman, of Edinburgh and St. Bartholomew's Hospital; C. B. T. Musgrave, of University College; A. G. Welsford, of Cambridge and London Hospital; and J. G. Turner, of St. Thomas's Hospital.

ight candidates were referred for six months.

ıssed on May 16th:

T. Hamilton and T. D. Lister, of Guy's Hospital; W. E. Miles and H. J. Walton, of St. Bartholomew's Hospital; and B. G. Heather, St. Thomas's Hospital.

even candidates were referred for six months.

ıssed on May 19th.

W. Gibson, of Middlesex Hospital; E. W. A. T. Warner, of King's College; L. Rogers, of St. Mary's Hospital; J. H. Muncaster and A. H. Daldy, of Guy's Hospital; C. F. Wrightman and C. Addison, of St. Bartholomew's Hospital; T. L. Pennell and F. V. Bunch, of University College.

n candidates were referred for six months.

ssed on May 20th.

H. C. Staveley, of St. Thomas's Hospital; A. N. Weir, E. Henry, and P. Furnivall, for St Bartholomew's Hospital; E. W. Selby, of University College.

even candidates were referred for six months.

ENS COLLEGE, MANCHESTER.—A syllabus of the post-graduate ses which are to be conducted at the Owens College during present session has just been issued. It is arranged so as to from the scientific to the practical aspect of the problems to scussed. To take an example, the brain and spinal cord are ed of in the following order: the anatomy and development rofessor Young, the physiology by Professor Stirling, the dis- and their medical treatment by Professor Ross, and the dis- and their surgical treatment by Professor Hare. Besides there are to be demonstrations on the Physiology of Diges- by Professor Stirling; on Bacteriology, by Professor Dresch- Pathology of the Respiratory Organs, by Dr. Harris; Tu- s, by Professor Young; Climatology, by Professor Leech; rs, by Dr. Graham Steel; Operative Surgery, by Professor ; Clinical Gynæcology, by Professor Sinclair; together with nstrations on some specific subjects in medical jurisprudence, ses of the eye and skin. Altogether the programme is a very ctive one, and it cannot fail to prove highly useful to those can find the necessary leisure to attend such courses.

OBITUARY.

WALTER PEARCE, M.D., M.R.C.P., B.Sc., ETC.

with the deepest regret that we have to record the terribly n death of Dr. Walter Pearce, which occurred on the after- of May 15th at St. Mary's Hospital, where, in a sudden s of uncontrollable despondency, he shot himself.

Pearce, who was born in 1854, began his career by going gh the whole course in general and special science at the School of Mines, and subsequently took the Bachelor of e degree at the University of London. He then determined pt medicine as his profession, and threw himself with ardour he work. He became a student at St. Mary's Hospital, ly passed all the preliminary examinations, and finally ob- the M.D.Lond. With the thoroughness that characterised hing he did, he immediately took not only the diploma in ry Science at the University, but also that in Mental Medi- f the Medico-Psychological Association. Probably not many has ever pursued so conscientiously the task of educating lf to become a physician of wide knowledge. In the course work, he filled all the responsible positions at St. Mary's al, including that of Medical Superintendent, and in was appointed Assistant-Physician to the same insti- , and later he became medical tutor. Of the manner ich he did his work in each position, of the extreme ss he showed towards his patients, and the interest he took e who worked with him, it is hardly necessary to speak, as who knew him failed to feel it, and to appreciate his self- ing generosity. As a physician, his one idea was how to most those who came to him for help; as a colleague, his endeavour was to assist and to further every work and re- ot a few of which he was the first to initiate) which might ned for the advancement of his hospital and medical school.

So far we have only touched in the briefest manner on his professional life. Dr. Pearce was best known by his remarkable devotion to the furtherance of social schemes of national improvement. At immense cost of time, energy, and his own resources, he organised temperance bands, indeed teaching them himself for years, and then, when obliged to live continuously in London, still lent, as far as he was able, his invaluable aid to the same cause. With characteristic energy, he joined the volunteer force; he became surgeon to the Artists' Volunteers, and took much interest in the Volunteer Medical Staff Corps. Here his powers of organisation, his great popularity and enthusiasm, contributed to the success of the movement, and at this present time he was conducting a series of lectures for volunteer medical officers, some of whom came hundreds of miles to attend. His assistance and advice in all that concerned ambulance work was always at the disposal of the JOURNAL, and we were in the habit of referring to him for much of the information so often sought on this head by correspondents.

Now all this valuable work is at an end, and it is only left to his friends to regret what might have been had the malady from which he was suffering not received a sudden exacerbation.

From the above brief account, some idea may be formed of the continual pressure of work and anxiety in which he lived, to which causes the sad fatality we record was very greatly due. From the time when preparing for a severe examination he over-read himself, a despondency, which recurred in periods of overwork or passing trouble, was observed by those most intimate with him; and though during the brief months of his married life this appeared to have completely left him, it was again somewhat aroused after the strain of the winter's work. A short holiday greatly improved his spirits, and it was hoped that he would entirely regain his usual frame of mind, when a terrible shock, caused by the misconduct of a friend, for whose welfare he considered himself in some degree responsible, proved too much for his sensitive nature.

CYRIL WILLIAM JECKS, M.D.LOND.

IT is with great regret that we announce the death of so young and promising a physician as Dr. Cyril Jecks, the late resident medical officer of University College Hospital. On Sunday, May 12th, he was seized with a very acute form of diphtheria, and on the following Thursday the disease spread to the larynx, necessitating tracheotomy. Cerebral complications occurred, and proved fatal on the fifth day from the commencement of the illness.

Two days previous to the onset of the disease he was making a *post-mortem* examination on a somewhat similar case, and probably to this cause his fatal illness may be attributed.

Dr. Jecks entered the Faculty of Medicine, University College, London, as a student in 1881, and he terminated an academical career of brilliant and uniform success by graduating M.D.Lond., 1888.

Dying so early in his professional life, Dr. Jecks had no opportunity of making a name in medical literature, but he deeply impressed his colleagues and teachers with his unusual capacity and enthusiasm for the science of medicine. For clinical medicine, to which he especially devoted himself, he displayed a marked talent, and his power of accurate diagnosis in difficult cases amounted almost to an instinct. Second only to his interest in clinical medicine was his zeal for pathological anatomy, to which he probably owed his untimely death.

By his immediate friends he was valued, even beyond his scientific attainments, for his unaffected bearing and the thorough sincerity which characterised all his dealings with them. His invariable courtesy and uniform geniality of manner to all with whom he came in contact obtained for him a popularity which is given to very few. As resident medical officer, Dr. Jecks was held in the highest esteem, and the institution has sustained a loss which will with difficulty be replaced.

SAMUEL R. PERCY, M.D., NEW YORK.

THE death is announced of Dr. Samuel R. Percy, for many years Professor of Materia Medica in the New York Medical College, College of Dentistry and the American College of Veterinary Surgery. We learn from the *Boston Medical and Surgical Journal* that he was born in Somersetshire in 1816. He early displayed extraordinary powers as a linguist and made the acquaintance of Washington Irving, on whose advice he emigrated to America when eighteen years of age. He at first sought fortune in the

West, and spent a considerable time among the Indians; but in 1837 he returned to New York, and organised a small-pox hospital under the direction of Dr. Rockwell. Subsequently he entered the chemical laboratory of Professor John Torry, and eventually graduated in medicine. He was engaged in general practice, but devoted himself especially to the study of chemistry and therapeutics. His most important public work was in connection with an investigation, made in 1858 by the New York Academy of Medicine, into the nature of the milk supply of New York. It was found that in and around the city no fewer than 11,000 cows were fed on swill, and as a result of this agitation their owners were all compelled to abandon the practice.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW EAR HOSPITAL.—The annual report of this hospital states that during the year 900 patients presented themselves for treatment, an increase of 89 on the previous year; of these, 56 were taken into the house. Some increase has been made in the accommodation available for patients by the addition of a ward of six beds, and an operating room has been fitted up.

CORK MERCY HOSPITAL.—During the past year close on 7,000 patients were attended and prescribed for in the extern department, showing how that most valuable part of the work done was recognised by the public. An application will be made to the Corporation and to the County Grand Jury for grants towards the maintenance of the hospital.

THE PROVIDENT DISPENSARY SYSTEM AND THE SELECT COMMITTEE ON HOSPITALS.

MR. T. A. COLLINSON (Hanwell) writes: Doubtless many of your readers have noted, with more or less interest, the proceedings of a Royal Commission of Inquiry into the management of the metropolitan hospitals, which is now being held. Many like myself, young general practitioners, may have observed with something of dismay the evident tendency on the part of many of the witnesses, notably the representatives of the Charity Organisation Society, to put forward as a panacea for the abuse of hospital charity the system of provident dispensaries.

Now it certainly appears to me—and it would be interesting to have the opinion of other general practitioners on the point—that, great as is the evil of abuse of the out-patient department, it is small as compared with that of the proposed extension of the provident dispensary. At present it is stated that a number of patients in excess of one-quarter of the whole population of the metropolis is being treated by our hospitals; of these, I venture to say that at least one-half are, either by their circumstances or the nature of their ailments, unsuited for such treatment; and with a little care in the way of inquiry into their means, and the requirement of a recommendation from a medical man, might at once be eliminated. For whose benefit, then, is the establishment of provident dispensaries proposed? Surely not for the mass of the profession, already suffering from undue and degrading competition. Is it then for the benefit of those patients already alluded to, many of whom are unquestionably able to pay a modest but adequate fee as private patients, and many of whom are suffering from ailments more fancied than real? Or is it not for the benefit of that large and highly respectable class of the community, who desire to pose as benefactors at a minimum cost to themselves? Surely with the paupers provided for by our Poor-law system, and the class immediately above them by our great hospitals, the medical needs of the rest of the community may safely be left to the action of the ordinary laws of supply and demand. The sixpenny doctor is vigorously denounced, and justly so, but is the provident dispensary, with its 2d. per week per family, any more worthy of sympathy? As there is an institution of this sort within half a mile of me, which treats families (frequently of clerks, small shopkeepers, and skilled artisans) for the remunerative charge of 8d. per month, I perhaps speak feelingly on the point.

Inevitably in course of time, the lower middle classes, finding they can easily gain admission to provident dispensaries, will come to consider that the paltry fees paid there represent the market value of the services rendered to them; and the consequent result directly to the profession, and indirectly to the public, will be to the last degree injurious. Discriminate selection of suitable cases among the applicants for out-patient treatment, and not the "small charge" system of provident institutions, degarding alike to recipient and donor, is, in my opinion, the only true remedy.

I must apologise for the length of my communication, but hope you will find space for its insertion, as the subject is one of sufficient importance to merit full discussion in your columns.

THE EVELINA HOSPITAL.

THE Lord Mayor, in presiding at the festival dinner in aid of the funds of the Evelina Hospital for Sick Children, spoke of the excellent work done by the institution during its twenty-one years of activity. The cost of maintaining the establishment amounted to £5,000, towards which Baron Ferdinand de Rothschild (after whose daughter the institution was named) contributed an income of £2,000, and his family £1,000. The hope was expressed that large employers would follow this example in helping the children of those around them. Subscriptions to the amount of £1,000 were announced.

A STATIONARY POPULATION.—The birth- and death-rates for the City of London were shown by the last fortnightly return to be equal—namely, 14.15 per 1,000 of the population per annum.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, May 16th.

Open Spaces Bill.—This Bill was read a third time and passed.

HOUSE OF COMMONS.—Thursday, May 15th.

Deaths from Privation in London.—On the motion of Mr. TALBOT, the House agreed to an address for a return of the number of deaths in the metropolitan district in the year 1889 upon which a coroner's jury have returned a verdict of death from starvation or death accelerated by privation.

Monday, May 19th.

Housing of the Working Classes.—Mr. RITCHIE obtained leave to introduce two Bills—one to amend the Acts relating to artisans' and labourers' dwellings and the housing of the working classes, and the other to consolidate the Acts on those subjects; and the Bills were brought in and read a first time.

Tuesday, May 20th.

Barrack Hospital.—Mr. STANHOPE, in reply to Dr. TANNER, said the hospital accommodation at the Curragh and at Belfast would be enlarged in accordance with modern sanitary rules; and wherever barracks are constructed, any hospital accommodation which might be required in connection with them would be built after the most approved modern methods.

Overcrowding of the Troopship "Malabar."—Dr. FARQUHARSON asked the Secretary of State for War whether he would direct an inquiry to be made into the circumstances under which H.M.S. *Malabar* recently arrived in England with 500 invalids on board, of whom 100 or more were very ill, and about 4 were absolutely helpless. Whether the actual hospital accommodation on board consisted of a cabin capable, when absolutely crammed, of holding 2 berths arranged in two tiers, and whether, under these conditions, erysipelas spread so rapidly that it was necessary to leave some cases behind at Aden with the view of trying to stop the further progress of the disease. Whether the surplus sick had to be put up in cots slung along the port side of the main troop deck, where they were insufficiently protected from cold, and exposed to the dust and dirt of coaling. And whether he would try and arrange that future invalids should be conveyed in troopships properly adapted for the care of the sick.—Mr. E. STANHOPE said the embarkation of troops in India was entirely regulated by the Government of India, and when his attention was drawn to the apparent overcrowding of the *Malabar*, he requested the Secretary of State for India to give the matter his consideration. As a result an investigation was now taking place.

Wednesday, May 21st.

Midwives' Registration Bill.—Mr. H. PEASE briefly moved the second reading of this Bill, and remarked that it was proposed in the interests of the poorer classes of the community. The Bill had been submitted to various medical bodies, and their counsel had been taken in drafting it; in fact, some of the clauses had been drawn up by them.—Sir R. LETHBRIDGE, in seconding the motion, said he earnestly hoped the House would pass the Bill unanimously. He appealed to Dr. Tanner, who had an amendment on the paper to reject the Bill, not to oppose the measure, for it was one of great importance to the poor and the labouring classes in the country. The object of the Bill was to ensure that the poor should have the advantage of at least some portion, however slight, of that enlightenment and scientific knowledge which were at the command of the wealthier classes, and that they should not be left without some protection at all in regard to ability or character in midwives. The hon. member opposite might say that midwives were employed in the place of medical men and that medical men ought always to be engaged in such cases. But this argument involved an absolute impossibility. There were not sufficient medical practitioners in the country to enable every woman in the lower ranks of society to avail herself of the assistance of one in her time of need; but, even if there were, it was obvious that the cost involved would place it out of the power to do so.—Dr. TANNER said he had received representations from medical men stating that the passage of this Bill would deprive them of much legitimate practice which they at present enjoyed.—Sir W. FOSTER said the Bill was intended to protect life by securing the employmont of competent persons. At present the poor incurred great risks from the ignorance of untrained women, especially in reference to the communication of infectious diseases.—Mr. BRUNNER said he should consent most reluctantly to the second reading of the Bill.—Sir G. HUNTER supported the Bill.—Mr. BRADLAUGH said the Bill would interfere too much with the liberty of the subject, and he did not see that there was any connection between medical skill and the certificate of good moral character required by the Bill. While the hon. member was speaking Mr. DIXON-HARTLAND moved that the question be now put.—The SPEAKER, however, declined to apply the closure.—Mr. BRADLAUGH protested against such a question being decided after a few minutes' conversation, and after speaking when the clock pointed to half-past 5, and the debate stood adjourned.

Buildings (Sanitary Registration) Bill.—The order of the day for the second reading of this Bill was discharged, and the Bill was withdrawn.

Pauper Lunatic Asylums (Ireland) (Officers' Superannuation) Bill.—The House went into Committee on this Bill, but, after some discussion, Mr. SEXTON objected to proceeding further, and the Committee was adjourned.

QUACKERY IN ITALY.—The Italian Superior Council of Health has been occupying itself with the question of the suppression of quackery in Italy. The new law on "the illegal exercise of the health-giving arts" is very stringent in its provisions against unqualified practice, and if the medical authorities could be got to enforce it quacks would speedily find Italy an unprofitable field for their nefarious husbandry. Since the beginning of this year 420 persons have been prosecuted under the new sanitary law, and in many cases, although the offence has been clearly proved, the defendants have escaped punishment. The Council appeals to the Minister of Grace and Justice to instruct judges and magistrates, in such cases, to carry out the law in its full strictness.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

NOTIFICATION OF INFECTIOUS DISEASE.

Chairman of the Metropolitan Asylums Board stated, at a ting of the Board held on May 17th, that under the Notifica- of Diseases Act the numbers of the weekly notifications had vn a continual increase, rising from 360 in the first week of l to 446 on the 10th of the present month. The admissions of r cases had been this year 1,909, as against 1,147 in the cor- onding period of last year, and 2,229 in 1868.

VACCINATION AND SEPTICÆMIA.

ERARD SMITH (Upper Clapton) writes: I have been shown a report in a al paper of a series of cases of serious septicæmia, twenty-one in number, of them fatal, which followed on vaccination with lymph from the vernment Vaccine Office. The cases occurred at the villages of Stoke, otesam, Poringland, and Framingham, in March of the present year. Such atement should surely be thoroughly investigated, for if the fault was in lymph, I for one should completely lose such confidence as remains to in the Government supplies of lymph. At the present time, also, it is y important that we should not avoid the fullest investigation into all es of doubt thrown on vaccination, for vaccination is for the first time now ag examined in a critical scientific age.

* We have before stated our opinion that cases such as that mentioned our correspondent should be made the subject of inquiry. If the medical cer of health for the district is, as he ought to be, a trained sanitary ex- t, he would seem to be the proper person to make the investigation.

TEMPORARY CUSTODY OF PAUPER LUNATICS.

TFUL writes: I should be very glad to know whether, under the recent acy Act a lunatic, after the reception order has been signed, may be brought a workhouse (admitting that there is accommodation) for any period ter two days, just to suit the convenience of the relieving officer, instead eing removed "forthwith" to the asylum? If he can be legally so ad- ted, must the medical officer of the workhouse examine the lunatic on ing in and going out, and give certificates as to the lunatic being free m injury or not? The lunatic is supposed not to have been resident in workhouse.

* The case mentioned by "Doubtful" is supposed to be a pauper case. t is so:

The justice making the order may suspend execution of the order for a period, not exceeding fourteen days, as he thinks fit, and in the mean- e may give such directions or make such arrangements for the proper and control of the lunatic as he considers proper.

If satisfied that it is expedient for the lunatic's welfare, or for the public ty, that the lunatic should forthwith be placed under care and control, a ice can sign an order to send the lunatic to the workhouse of the union, porarily, whether a reception order to an institution for lunatics has been ed already or not.

If satisfied that it is for the lunatic's welfare, or the public safety, a re- ing officer can take the patient for three (or four) days to the workhouse; ng him before any proceedings (as to order, etc.) can be taken under the

But there does not appear to be any provision for taking the lunatic e by the authority of the relieving officer after the order of reception to um has been made (as in the case referred to by "Doubtful").

POOR-LAW APPOINTMENTS.

wishes to know, Can a L.R.C.P.Lond. and L.S.A.Lond., both under the regulations, hold a union appointment under the Local Government d? Can L.S.A. (under the new examination) hold such an appointment?

The rule is that every union medical officer must be qualified to prac- both medicine and surgery. An L.R.C.P.Lond. is eligible for the ap- ment, so also is an L.S.A., if his diploma was granted on or after July 887, but not otherwise. Under very special circumstances the guardians appoint as district officer a medical man registered with one qualifica- only.

HEALTH OF ENGLISH TOWNS.

g the week ending Saturday, May 17th, 5,646 births and 3,704 deaths egistered in twenty-eight of the largest English towns, including Lon- nich have an estimated population of 9,715,559 persons. The annual mortality in these towns, which had declined from 20.9 to 19.2 per a the four preceding weeks, rose again to 19.9 during the week under The rates in the several towns ranged from 11.9 in Birkenhead, 13.1 hton, 15.5 in Nottingham, and 16.0 in Portsmouth and in Huddersfield in Sheffield, 28.6 in Sunderland, 32.4 in Bolton, and 35.0 in Man- . In the twenty-seven provincial towns the mean death-rate was 22.0 00, and exceeded by 4.7 the rate recorded in London, which was only r 1,000. The 3,704 deaths registered during the week under notice in enty-eight towns included 467 which were referred to the principal diseases, against 418 and 403 in the two preceding weeks; of these, ulted from whooping-cough, 130 from measles, 55 from scarlet fever, 50 iarrhœa, 44 from "fever" (principally enteric), 38 from diphtheria, and e from small-pox. These 467 deaths were equal to an annual rate of 1,000; in London the zymotic death-rate was 2.6 while in the twenty- seven provincial towns it averaged 2.4 per 1,000, and ranged from 0.2 in Hull, 0.6 in Halifax, 0.7 in Leicester, and 0.8 in Brighton to 3.7 in Birmingham, 3.8 in Manchester, 4.5 in Cardiff, and 9.9 in Derby. Measles caused the highest proportional fatality in Wolverhampton, Cardiff, Birmingham, and Derby; scarlet fever in Manchester, Oldham, Sunderland, and Bolton; whooping-cough in London, Cardiff, and Derby; and "fever" in Norwich. Of the 38 deaths from diphtheria recorded during the week under notice in these towns, 21 occurred in London, 8 in Salford, 3 in Manchester, and 2 in Liverpool. No fatal case of small-pox was registered during the week under notice either in London or in any of the twenty-seven provincial towns; and 3 small-pox patients were under treatment in the Metropolitan Asylums Hospitals on Saturday, May 17th. These hospitals contained 1,030 scarlet fever patients on the same date, against numbers declining from 1,052 to 1,014 at the end of the three preceding weeks; 124 cases were admitted during the week, against 84 and 115 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 3.5 per 1,000, and corresponded with the average.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, May 10th, 912 births and 625 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had been 24.2 and 26.9 per 1,000 in the two preceding weeks, declined again to 24.2 during the week under notice, but exceeded by 5.0 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Perth and Edinburgh, and the highest in Dundee and Glasgow. The 625 deaths registered in these towns during the week under notice included 118 which were referred to the principal zymotic diseases, equal to an annual rate of 4.6 per 1,000, which exceeded by 2.4 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Dundee, Leith, and Aberdeen. The 278 deaths registered in Glasgow included 22 from measles, 16 from whooping-cough, 5 from scarlet fever, and 4 from "fever." Five fatal cases of whooping-cough, and 5 of measles were recorded in Edinburgh; 10 deaths from measles occurred in Dundee, and 9 of whooping-cough and 6 of measles in Aberdeen. The death-rate from diseases of the respiratory organs in these towns during the week under notice was equal to 5.0 per 1,000, against 3.5 in London.

In the eight principal Scotch towns, 863 births and 534 deaths were registered during the week ending Saturday, May 17th. The annual rate of mortality in these towns, which had been 26.9 and 24.2 per 1,000 in the two preceding weeks, further declined to 20.6 during the week under notice, but exceeded by 0.7 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Perth and Edinburgh, and the highest in Aberdeen and Glasgow. The 534 deaths registered in these towns during the week under notice included 76 which were referred to the principal zymotic diseases, equal to an annual rate of 2.9 per 1,000, which exceeded by 0.4 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Aberdeen, Glasgow, and Leith. The 241 deaths registered in Glasgow included 20 which resulted from measles, and 8 from whooping-cough. Four fatal cases of measles and 4 of whooping-cough occurred in Edinburgh; 3 deaths were referred to scarlet fever in Leith, and 6 to whooping-cough in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 4.2 per 1,000, against 3.5 in London.

HEALTH OF IRISH TOWNS.

IN the sixteen principal town districts of Ireland the deaths registered during the week ending Saturday, May 10th, were equal to an annual rate of 25.9 per 1,000. The lowest rates were recorded in Lisburn and Lurgan, and the highest in Londonderry and Wexford. The death-rate from the principal zymotic diseases averaged 2.3 per 1,000. The 160 deaths registered in Dublin during the week under notice were equal to an annual rate of 23.6 per 1,000 (against 22.0 and 25.4 in the two preceding weeks), the rate for the same period being 17.3 in London and 19.0 in Edinburgh. The 160 deaths in Dublin included 10 which resulted from the principal zymotic diseases (equal to an annual rate of 1.5 per 1,000), of which 3 were referred to different forms of "fever," 3 to whooping-cough, and 2 to measles.

MEDICAL NEWS.

IT is announced that an International Congress of Medica Women will be held at Chicago in 1892 or 1893.

MR. J. RENSHAW, L.D.S., of Rochdale, has been appointed Honorary Secretary of the Midland Branch of the British Dental Association.

THE Medical Society of Warsaw has received the sum of 10,000 roubles from a person who wishes to remain anonymous, with a request that the money may be applied to the improvement of the sanitary condition of the town.

DR. PAUL ZIMMERMANN, of Odessa, died on April 17th, at the age of 79. He received his medical education at Moscow, where he graduated in 1833. In conjunction with Dr. Mien he translated Rokitanski's *Pathological Anatomy* into Russian.

THE medical faculty of the newly-founded University of Lausanne consists of seven ordinary professors, each of whom is to receive a salary of from 4,000 to 5,000 francs (£160 to £200), together with students' fees.

THE meeting of the British Association at Leeds will begin on September 3rd, when the retiring President, Professor W H. Flower, will resign the chair in favour of Sir Frederick Abel, who will deliver the inaugural address.

A COMMITTEE has been formed at the Sorbonne for encouraging foreigners to study at the University in Paris. M. Pasteur is president. It is proposed to give special facilities to foreign students immediately on their arrival in Paris.

M. TERRIER has been elected a member of the French Academy of Medecine in the Section of Surgical Pathology. The other candidates were MM. Perier, Berger, Nicaise, Horteloup, and Terrillon. M. Terrier received 571 votes out of 730.

PRESENTATION.—Dr. John Davies, J.P., Maesteg, has been presented by the Llynvi workmen (North Navigation Collieries) with a brougham, and his wife with a very beautiful *épergne* and tea tray. Dr. Davies has acted as chief surgeon to Llynvi workmen for twenty-one years.

PROPOSED ABROGATION OF THE MUZZLING ORDER.—It is reported that the Board of Agriculture will shortly issue an amended order with reference to the muzzling of dogs in the home counties, the effect of which will be to dispense with the muzzling order, and to substitute a regulation providing that every dog shall wear a collar inscribed with the owner's name and address.

IF a sufficient number will take advantage of it, a special steamer will be run from Leith to Hamburg to convey travellers *en route* to Berlin to attend the International Medical Congress. Any Scotch members proposing to attend should communicate at once with Dr. G. A. Gibson, 17, Alva Street, Edinburgh, secretary of the Scottish Committee.

THE Pharmaceutical Society of Great Britain held an interesting *conversazione* in Bloomsbury Square on Tuesday, May 20th, the guests being received by the President and Mrs. Carteighe. In both the old and new buildings a variety of scientific instruments and specimens were exhibited, including the phonograph, the seed and seedlings of the sugar cane, etc.

DR. W. R. SMITH, on his recent appointment as medical officer to the London School Board, was allowed to hold his professorship of King's College; but it was left to the Board to say whether he should also retain the office of medical officer of health for Woolwich. The Board, at a meeting last week, gave the desired permission.

DEVON AND EXETER MEDICO-CHIRURGICAL SOCIETY.—A meeting of this Society was held at the Devon and Exeter Hospital on May 16th, Dr. Henderson in the chair. Mr. J. D. Harris opened a discussion on the use of the forceps in midwifery, and an interesting discussion followed. Dr. Davy read notes of two cases treated by large doses of iodide of potassium, and Dr. Blumfield a case of acute ascending spinal paralysis.

THE SANITARY INSTITUTE.—At a meeting of the Council, held on May 14th—Sir Douglas Galton, K.C.B., F.R.S., in the chair—a scheme was adopted for periodical examinations for inspectors of nuisances at various centres throughout England. Mr. Arthur Cates, F.R.I.B.A., Mr. Alfred E. Harris, L.R.C.P., and Mr. S. W. North, M.R.C.S., F.G.S., were elected Fellows. Four members and twenty-four associates were also elected. Twenty-three applications were read for election at the next meeting.

THE instruction of the deaf is a question of much prominence at this moment. On May 12th, the Pure Oral Institution, which has its home in Fitzroy Square, held a festival at the Hôtel Métropole. Next week, the Ealing College for training teachers on the same method has its annual meeting at Lambeth Palace. This extra activity in the cause has its warrant, for no one can read the report of the Royal Commission on the Education of the Deaf, and not see that an immense stimulus to what once was known as "the German system," but is rapidly assuming universal prominence, has been given by that report.

THE "MOORBATH" AND ITS SUBSTITUTE.—Many have wondered at the general fondness for moorbaths, often called mudbaths, in Germany, and various are the virtues ascribed to them. Dr. Jacob, of Cudowa, now declares they have no particular merit of any kind. A bath containing clay mud, and therefore devoid of the supposed chemically irritating substances in a "moorbath," has exactly the same effect. Dr. Jacob considers that the concentrated essence of moor, kept at certain bathing establishments, is utterly useless, and the result of superstition.

THE Association of Medical Men of the Department of the Seine, which was founded by Orfila in 1833, held its fifty-seventh annual meeting on May 11th, under the presidency of Professor Brouardel. The report stated that during the year the receipts had amounted to 55,897 francs, of which 43,800 francs had been expended in the relief of distress. Assistance had been given to 4 members, 57 widows or families of members, and to 30 other persons belonging to the medical profession of Paris or the department of the Seine. Two pensions of £48 a year had been granted to aged and infirm members.

ALVARENGA PRIZES.—At a meeting held on April 10th, the Hufeland Society decided to offer two prizes for the best essays on the following subjects: 1. The influenza epidemic of 1889-90. A historical summary of earlier epidemics should first be given, then an account of the spread of the affection over the earth in 1889-90, and, lastly, an analysis of the etiological conditions, pathology and treatment of the disease and its sequelæ. 2. The legal responsibility of a medical man as regards the administration of chloroform and other anæsthetic vapours. Each prize consists of the sum of 700 marks (£35). The essays (which may be written in English, German, or French) must be sent to Professor Dr. Liebreich, 34A, Dorotheenstrasse, Berlin, N.W., before April 1st, 1891. The names of the successful competitors will be published on July 14th, 1891.

SMALL-POX IN ITALY.—At a meeting of the Italian Consiglio Superiore di Sanità, held on May 6th, the Director of Public Health presented a report on the sanitary condition of the kingdom. From this it appeared that, while the state of things generally was highly satisfactory, the diminution of small-pox had been particularly gratifying. Whilst the number of cases notified in January, February, and March, 1889, had been respectively 5,234, 4,276, and 4,210, in the corresponding periods of 1890 the numbers had been 2,317, 1,241, and 1,618. This decrease was to be attributed to the steadily-extending use of vaccination and revaccination, and to the facilities for the supply of excellent lymph from the State vaccine institution, which during the first quarter of the present year had sent out enough to vaccinate 145,000 persons.

THE PUBLIC HEALTH MEDICAL SOCIETY.—A meeting of the Council of the Society of Medical Men, possessing registrable qualifications in public health, was held at 131, Great Russell Street, on May 15th. June 15th was fixed for the annual general meeting to be held at the Holborn Restaurant. At 7 P.M. on the same day, the President, Sir Charles Cameron, will take the chair at the annual dinner. The Dinner Committee reported that already upwards of fifty promises to be present had been received from members and their friends, among the latter being Surgeon Parke, of the Stanley Expedition. It is hoped that gentlemen holding public health qualifications will embrace this opportunity of meeting for consideration of the many important questions affecting their interests. The following gentlemen were elected members of the Society: Drs. J. Anderson, J. Glaister, J. A. Maden, J. M. Miller, J. Home Hay, J. Stiell, and N. Raid.

THE SALE OF PATENT MEDICINES IN ITALY.—Italian proprietors of patent medicines and pharmaceutical "specialities" are finding out that, so far as their trade is concerned, the gold age is past and the iron age has begun. Under the new sanitary regulations which recently came into force in Italy no preparation of the kind can be sold unless it has been approved of by the Superior Sanitary Council. Not long ago that body rejected no fewer than 200 "specialities," and, on May 13th, it refused sanction to all those submitted to it, on the ground that "contained remedies which cannot be used except under the direction of a medical man." Many were absolutely condemned as being either dangerous or composed of substances not possessing the virtues attributed to them. The Council further decided that "specialities," being of the nature of preparations made up according to prescription, should be sold only by qualified pharmacists.

BIG FEES.—The Vienna ophthalmic surgeons who have had the wife of the Shah under their care have each received £800 for their services. This is altogether eclipsed, however, by some fees recently paid in Russia. Professor Sklifossowski, of Moscow, who recently operated on a wealthy inhabitant of Odessa for cataract of the hip, is said to have received a fee of 11,000 roubles (£1,222), which, with rare generosity, he has since handed over to the University of Odessa for the foundation of a bursary in its new medical faculty. The fortunate surgeon further improved the shining

ar of his visit to Odessa by earning the trifling additional honorium of 2,000 roubles (£222) for operating on a lady for cancer. ese fees, however, are for the elect. In Russia, as elsewhere, rank and file of the profession earns little beyond a bare livelood, many practitioners having to be content with an average arly income of 600 or 700 roubles.

THE LATE DR. KÜCHENMEISTER.—The *Berliner klin. Wochenrift* of May 5th gives some interesting particulars as to the tinguished helminthologist whose death was recently announced in the JOURNAL. Though best known for his researches tænia mediocanellata and other parasites, he was a practical ysician with an unusual range of scientific interest. He was of the first of his countrymen to understand the importance ovariotomy, and the first operation of that kind performed in many was done at Dresden at his instigation by an assistant of Spencer Wells. To Küchenmeister is due the introduction of treatment of diphtheria by limewater, which has been generally adopted throughout Germany. He also displayed considerable ingenuity in inventing and modifying surgical instruments; haps the best known of his titles to fame in this line is the aratus for plugging the nostrils in epistaxis, known as the *neurynter*—a name which must have cost almost as much able to invent as the thing it was meant to designate. During last fifteen years of his life Küchenmeister came much before German public as an ardent apostle of cremation, and, in accordance with his wish, his own body was cremated at Gotha.

MEDICAL VACANCIES.

he following Vacancies are announced:

OUGH OF BOLTON.—Medical Officer of Health and Public Analyst. Salary, £400 per annum. Applications to R. G. Hennell, Town Clerk, Town Hall, Bolton.

GHTON AND HOVE LYING-IN INSTITUTION.—House-Surgeon, unmarried and under 30 years of age. Salary, £120 per annum, with furnished partments, coal, gas and attendance. Applications to Burgess Smith, ecretary, 76, West Street, Brighton, by May 30th. Election June 6th.

GHTON, HOVE AND PRESTON DISPENSARY, Queen's Road, Brighton. —House-Surgeon. Double qualifications. Salary, £140 per annum, with urnished apartments, coals, gas, and attendance. Applications by May 7th to the Assistant Secretary, J. W. Stride. Appointment on June 3rd.

STOL GENERAL HOSPITAL.—Assistant-Physician Accoucheur. Applications by May 27th to the Secretary, W. Thwaites.

STOL GENERAL HOSPITAL.—Ophthalmic Surgeon. Applications by May 27th, to the Secretary, W. Thwaites.

NCER HOSPITAL (FREE) Brompton, S.W.—Assistant House-Surgeon and Registrar. Salary, £50 per annum, with board and residence. Applications to the Secretary by June 9th.

RICK-ON-SUIR UNION, Portlaw Dispensary District.—Medical Officer, with a salary of £80 per annum as Medical Officer, and £20 per annum as Medical Officer of Health, and fees. Applications to W. Malcomson, Honorary Secretary, Milfort, Portlaw, by May 30th.

YAL LONDON OPHTHALMIC HOSPITAL, 238A, Gray's Inn Road. House-Surgeon, qualified. Rooms and board. Applications to the Secretary by June 7th.

NTY DOWN INFIRMARY, Downpatrick. — Assistant Surgeon, etc. Salary, £83 per annum, with board, residence, etc. Applications by June 7th.

NDON GENERAL HOSPITAL.—House-Surgeon, single. Salary, £100, increasing to £120, with board and residence in the hospital. Applications to the Secretary, Alfred G. Roper, by June 2nd.

BY AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Second Assistant Surgeon; age 25 to 40. Salary, £160 per annum, rising to £250 (outdoor), and midwifery fees. Applications to the Secretary, Mr. J. Bullivant, 58, Abbey Street, Derby, by June 7th.

RSET COUNTY ASYLUM, Dorchester.—Assistant Medical Officer; unmarried. Salary to commence at £120 a year, with board, etc. Applications to the Medical Superintendent by June 3rd.

STERN DISPENSARY, Leman Street, Whitechapel.—Physician; Fellow or Member of a Royal College of Physicians in the United Kingdom. Honorarium, £50 a year. Applications addressed to the Secretary to reach the Dispensary before June 5th.

RTLEPOOL UNION.—Medical Officer and Public Vaccinator for the District of Greatham. Salary (exclusive of extras), £30 per annum. Applications to George Kilvington, clerk, West Hartlepool, by May 28th.

WINGS URBAN SANITARY AUTHORITY.—Medical Officer of Health. Salary, £150 per annum. Applications by May 30th, addressed to the Clerk.

NCASTER INFIRMARY AND DISPENSARY. — House-Surgeon. Unmarried. Doubly qualified. Salary, £80 per annum with residence, board, attendance, and washing. Applications, on forms to be obtained, must reach the Secretary by May 31st.

EN'S HOSPITAL FOR WOMEN AND CHILDREN.—Honorary Surgeon, qualified for not less than seven years. Applications to the Secretary, Frederick Kirby, by June 9th.

AL MISERICORDIÆ HOSPITAL, Dublin.—Resident Surgeon. Must be a duly registered physician and surgeon. Salary, £50 per annum, with furnished apartments, attendance, light, and fuel. Applications to the Secretary of the Medical Board by June 1st.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Junior House-Surgeon; double qualifications. Salary, £30 for six months; another six months (as Senior) at £40. Applications by June 6th to the Secretary, Alfred Nixon, 27, Clement's Lane, E.C.

NORTH RIDING OF YORKSHIRE.—Medical Officer of Health for the Riding; qualified to practise medicine, surgery, and midwifery. Remuneration, a fixed fee of £100 per annum, and 5 guineas per day (to include expenses) for every day's services, with leave to hold other appointments. Applications to William C. Trevor, Deputy Clerk of the County Council, Clerk of the Peace Office, Northallerton, before June 30th.

NORWICH FRIENDLY SOCIETIES' MEDICAL INSTITUTE.—Resident Dispenser, qualified. Salary, £75 per annum. Applications to Secretary, Ivy House, Lady's Lane, Norwich, by May 27th.

PARISH OF ST. LEONARD, Shoreditch.—Resident Assistant Medical Officer for Workhouse and Infirmary; doubly qualified. Salary, £100 per annum, increasing to £120, with rations, furnished apartments, and washing. Applications on prescribed forms, endorsed "Resident Assistant Medical Officer," to reach the Clerk, Robert Clay, 213, Kingsland Road, E., by May 26th.

RANGOON MUNICIPALITY.—Health Officer. Salary, Rs. 600 per mensem, rising by annual increments of Rs. 50 to Rs. 1,000. Private practice debarred. Applications to J. Short, Secretary, Rangoon Municipality, by June 1st.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Anæsthetist. Applications to Conrad W. Thies, Secretary, by June 4th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Dental Surgeon. Applications to the Secretary, Conrad W. Thies, by June 4th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—Assistant Physician; Fellow or Member of Royal College of Physicians, London. Applications to the Secretary, John Harrold, by June 3rd.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.— House-Surgeon, required by July 1st. Must possess some knowledge of ophthalmic surgery. Applications to T. Beattie-Campbell, Secretary, by June 1st.

WALLASEY DISPENSARY.—Assistant or Junior House-Surgeon, to visit and dispense. Unmarried; must devote his whole time to the duties. Salary, £80 per annum, with furnished apartments, coal, gas, and attendance. Applications by June 22nd to the Honorary Secretary, Mr. William Heap, Elm Mount, Penkett Road, Liscard, Cheshire.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £80 per annum, with board, lodging and washing. Applications to the Secretary, The Infirmary, Chichester, by June 11th.

WEST RIDING ASYLUM, Wakefield.—Two Resident Clinical Assistants. Applications should be forwarded immediately to the Medical Superintendent.

MEDICAL APPOINTMENTS.

ATKINSON, Francis Edward, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Craven Comb (Skipton Rural) District for three years.

BROWNE, Samuel, M.D.Qu.Univ.Ire. and M.Ch., appointed Medical Officer of Health to Leamington Priors, *vice* J. S. Baly, M.R.C.S., L.S.A., deceased.

CARGILL, L. V., M.R.C.S., L.R.C.P., L.S.A., appointed Ophthalmic Clinical Assistant, King's College Hospital.

CHAFFEY, Wayland C., M.D.Lond., L.R.C.P., M.R.C.S., appointed Acting Physician to the Royal Alexandra Hospital for Sick Children, Brighton, *vice* J. Ewart, M.D., etc., promoted to Consulting Physician.

COLWELL, J. K., appointed Public Analyst to the Clerkenwell Vestry.

COURTENAY, Kilcoursie J., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glas., appointed Medical Officer to the Workhouse and No. 2 District of the Wimborne and Cranborne Union, *vice* S. G. Parkinson, M.R.C.S., L.S.A., deceased.

CREAGH, William, L.R.C.S.I., L.S.A.Lond., reappointed Medical Officer for Lullington and District, Burton-on-Trent Union.

ESLER, Dr. Alfred W., appointed Honorary Consulting Medical Officer to the Heathcote Hospital, Victoria.

FINLAY, David W., B.A., M.D., D.P.H.Camb., F.R.C.P.Lond., appointed Medical Officer of Health to the Harrow Local Board, *vice* T. W. Thompson, resigned.

GILBERTSON, J. H., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of the 2nd District of the Hitchin Union.

GILLESPIE, William Henry, L.K.Q.C.P.I., L.M., L.R.C.S.I., reappointed Medical Officer and Public Vaccinator to the 4th (West Bradley) District of the Shepton Mallet Union.

GREENLEES, Thos. Duncan, M.B., C.M.Edin., Assistant Medical Officer, City of London Lunatic Asylum, appointed Medical Superintendent of the Grahamstown Asylum, Cape of Good Hope, *vice* Robert Hullah, M.D., deceased.

HEELAS, Walter W., L.R.C.P., M.R.C.S., L.S.A., appointed House-Physician to the Royal Hospital for Diseases of the Chest, City Road, *vice* Mr. Percy J. Kingston.

HOLDERNESS, J. C., M.R.C.S., L.R.C.P., appointed Fourth Assistant Medical Officer to the London County Asylum, Hanwell.

HOPKINS, Dr. George Herbert, elected Resident Medical Officer to the Swansea Hospital, *vice* Dr. Horatio E. Rawlings, resigned.

HORSFALL, Henry, M.D.St.And., M.R.C.S., reappointed Medical Officer of Health to the Bedale Rural Sanitary Authority.

KNIGHT, H. E., M.B.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Stockton-on-Tees Hospital and Dispensary.

LOWNDS, H. A., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Farnley Tyas Local Board.

MACCALL, Wm. N., M.D., C.M.Glas., appointed Consulting Physician at the Manchester Clinical Hospital for Women and Children.

MACSWEENY, William, M.D.Roy.Univ.Ire., appointed Medical Officer for Killarney.

MASTERMAN, G. F., L.K.Q.C.P.I., M.R.C.S., L.S.A., reappointed Medical Officer of Health for Stourport.

MONTEITH, James, M.B. and C.M., appointed Medical Officer to the Pearl Fisheries, North-West Coast of Australia.

MORGAN, George, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., appointed Assistant Surgeon to the Royal Alexandra Hospital for Sick Children, Brighton.

NEAL, Fred. A., M.B.Edin., appointed to the Colonial Medical Service in British Guiana.

O'LEARY, P. J., L.R.C.P., L.R.C.S Edin., appointed Medical Officer of Health and Public Vaccinator to the Kanturk District.

RAILTON, T. C., M.D.Lond., M.R.C.P., F.R.C.S.Eng., B.Sc.Vict., appointed Honorary Physician at the Manchester Clinical Hospital for Women and Children, *vice* Wm. N. Maccall, M.D., C.M.Glas., made Consulting Physician.

RICHMOND, Richard, M.B., C.M.Edin., appointed Medical Officer of Health to the Dunmow Rural Sanitary Authority, *vice* Basil Ronald.

ROLLESTON, Humphry Davy, M.A., M.B.Cantab., M.R.C.P.Lond., appointed Assistant Physician to the Metropolitan Hospital, Kingsland Road, *vice* Dr. Haig, resigned.

SPENCER, Walter, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer and Public Vaccinator for the Gringley District of the E. Retford Union, *vice* W. K. Lockhead, L.R.C.P., L.R.C.S.Edin., resigned.

THOMAS, W. J., M.D., M.B., C.M., appointed Fifth Assistant Medical Officer to to the London County Asylum, Hanwell.

THURSFIELD, William Nealor, M.D.Edin., M.R.C.S.Eng., appointed Medical Officer of Health to the County Council of Shropshire.

TOMORY, J. Kay, M.B.Edin., appointed Medical Officer to the Parish of New Abbey.

VALENTINE, E. Wm., M.R.C.S., L.M., L.S.A., reappointed Medical Officer of the Sixth District of the Shepton Mallett Union.

WASHBOURN, J. W., M.D.Lond., B.S., M.R.C.P., F.R.C.S., appointed Assistant to Guy's Hospital.

WHITE, W. Hale, M.D.Lond., F.R.C.P.Lond., M.R.C.S.Eng., appointed Physician to Guy's Hospital.

WRIGHT, Thomas Nesbitt, M.R.C.S., L.R.C.P.Lond., appointed Assistant Medical Officer to the Plumstead Infirmary, Woolwich Union, *vice* Dr. P. W. Thompson.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On Delusional Insanity. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Pemphigus.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Professor Humphry: Senile Changes: Hypertrophy and Atrophy of the Skull. Dr. Robert H. Bakewell: On the Cure of Leprosy. Sir Wm. Roberts: A Contribution to the Chemistry of Gout.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Cecil Y. Biss: On Pneumothorax. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: On Ophthalmoscopic Cases.

BRITISH GYNÆCOLOGICAL SOCIETY, 8 P.M.—Dr. A. W. Edis: On the Diagnosis and Treatment of Obscure Cases of Metrorrhagia.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, W.C.—Mr. Victor Horsley: On the Surgery of the Brain and Spinal Cord. The New Infirmary, Paddington.—4 P.M. Mr. Jonathan Hutchinson: Clinical Lecture on Surgical Cases.—5 P.M. Dr. Savill: *Post-Mortem* Examinations.

FRIDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Sick Children, Great Ormond Street, 2 P.M.—Mr. Bernard Pitts: Demonstration on Selected Cases from the Surgical Out-patient Department. Hospital for Consumption, Brompton, 4 P.M.—Dr. Cecil Y. Biss: On Chronic Pneumonia and its Results.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTHS.

FERGUSON.—At Cutch Bhuj, on April 23rd, the wife of Surgeon-Major J. E. Ferguson, I.M.D., of a daughter.

GORDON.—On May 16th, at Rockfield, Maghull, Liverpool, the wife of J. F. Gordon, M.D., of a daughter.

PULLIN.—On May 14th, at Weston-super-Mare, the wife of Dr. Pullin, of Flora Place, Plymouth, of a daughter.

MARRIAGE.

BUTT—AMBLER.—On April 23rd, at Gulzarbagh Church, Patna, Bengal, by the Rev. S. Bruce-Austin, Frank Kernot Butt, L.R.C.P., etc., of Calcutta, only son of Charles Kernot Butt, of Hampton Hill, Middlesex, to Kathleen Marie, eldest daughter of Charles Ambler, Esq., of Monghyr, Bengal.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic) M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women) S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W. 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o. 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic) F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except S. 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F. 1. o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W. Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F. Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Electric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W. Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

MUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE FFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN : RECEIVED ON THURSDAY MORNING.

MUNICATIONS respecting editorial matters should be addressed to the Editor, , Strand, W.C , London; those concerning business matters, non-delivery the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, rand, W.C., London.

rder to avoid delay, it is particularly requested that all letters on the itorial business of the JOURNAL be addressed to the Editor at the office of e JOURNAL, and not to his private house.

HORS desiring reprints of their articles published in the BRITISH MEDICAL URNAL are requested to communicate beforehand with the Manager, 429, rand, W.C.

RESPONDENTS who wish notice to be taken of their communications should henticate them with their names—of course not necessarily for publication.

RESPONDENTS not answered are requested to look to the Notices to Corre- ondents of the following week.

USCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CUMSTANCES BE RETURNED.

LIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers Health if they will, on forwarding their Annual and other Reports, favour with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special artments of the* JOURNAL *are devoted, will be found under their respective din s.*

QUERIES.

asks for the name of the best small textbooks on zoology to use while ending first session lectures.

ICIAN asks if there be any home where a girl, aged 19, who is strumous l of weak mind, can be taken in for a small payment or by election. She knit and sew. Not an asylum or workhouse.

asks whether, after circumcision in a case of phimosis, the result of ereal disease, there is any risk of the cicatrix contracting round and con- cting the penis, or of its preventing erection.

THE EXAMINATION OF BREAD.

MBER asks for the best work on the examination of bread, or tests for good d.

* We are not acquainted with any small work treating specially of the mination of bread. The most comprehensive work upon bread and bread king is probably that by Mr. W. Jago, F.I.C., published by the author at ghton. The analysis of bread is, of course, dealt with in the various works n food analysis; it requires considerable analytical skill and experience, we cannot recommend the application of popular "tests," which always illusory results, except in the most experienced hands.

SICKNESS PAY AND THE INCOME TAX.

H. asks whether the amount of premiums paid for sickness pay in the ical Assurance Society can be included in the "deductions for life in- nce" in the income-tax return.

* We have referred this letter to Mr. C. J. Radley, Secretary of the Medi- ickness, Annuity, and Life Assurance Society, 26. Wynne Road, Brixton, ., who writes: The question raised was submitted to the Commissioners land Revenue at Somerset House, and referred by them to their solicitor. ntually it was decided that only premiums for a deferred annuity or life rance were exempt from income tax, and that where a compound ium was paid in which sickness pay was included, the secretary must be ied to for a certificate as to the manner in which such premium was led. *Per contra*, the secretary was informed that amounts received by nembers as sickness pay need not be included as income in any return might make.

ANSWERS.

PERSPIRING FEET.

rites: If "Surgeon" will wear low shoes, wool socks, and dust the feet twice a day with iodol, he will soon have his feet as hard, sweet, and rtable as he could wish, if "Surgeon" derives as much benefit from plan of treatment as the writer.

IN ORMSBY (Dover) writes: "Surgeon" will find the following a never- g remedy: Wash the feet at night with very hot water, put on white l socks, and immerse the feet, thus covered, in methylated spirit, poured asin; wear the socks all night; they will soon dry in bed. During the ng wear cotton socks and common felt slippers, and keep the socks con- ly saturated with spirit. In a week the cure will be complete. The best ated boots are made of stout canvas, such as is used in tennis shoes, tan ck. They can be made in any fashion, and will be found a great rt.

AN OLD MEMBER recommends "Surgeon": R Liq. plumb. diacet., acid. carbolic. āā 3ij; aq., ad. 3ij. M. One teaspoonful to be mixed with a pint of warm(ish) water, and the feet washed every morning and dried with a soft towel.

MR. ALFRED E. BARRETT, M.R.C.S.Eng., etc. (Holland Park, W.), writes: If your correspondent "Surgeon" will wash the feet night and morning with soap and water, and, after careful drying sponge them over with the following lotion, he will find relief: R Plumbi acet. 3j; acet. distill. 3j; sp. vini methylat., 3ij; aq., ad 3xvi; S. ft. lotio. I have found this so efficacious that I use no other treatment. It will be found mentioned in the JOURNAL for October 30th, 1880. Shoes are preferable to boots, but whichever are used I recommend those of buckskin, which is very soft and easy to the feet. I get them from E. Irons, 140, High Street, Notting Hill, who makes a speciality of them, and his ingenious method of ventilation would probably suit your correspondent. The inner sole has several perforations communicating with the outer air by a tube in the heel. Patients have expressed the greatest comfort from the use of these boots.

NOTES, LETTERS, ETC.

THE ROSE AND COOPER DEFENCE FUND.

SIR,—You may remember the account of an action for libel which was brought by a Mrs. Somerville against us, arising out of certificates of lunacy having been given by us some six years previously in the case of the plaintiff. The account of the case appeared in the JOURNAL in November last. An attempt was made by us to quash the action in its inception, on the plea that it was not commenced within a year after the release of the patient (8 and 9 Vict., c. 100, Sect. 105), but as the plaintiff's counsel said that he intended to establish conspiracy, the judge decided that the case should be tried on its merits—hence the delay, and trial before the Lord Chief Justice, together with all the attendant expenses. Judgment was at once recorded in our favour with costs on the higher scale, but as the plaintiff has nothing, we shall have to pay all our own costs. The taxed law costs alone amount to £151 4s., besides many other expenses, and the loss resulting from frequent attendance at court *cum multis aliis*.

As two of the oldest members of the Association, we have no hesitation in asking you to allow this note to appear in your next issue, and further to request that on receipt of the list of the names of contributors you will permit them to be acknowledged in the usual way. The following medical friends are not only anxious to subscribe, but express their willingness to receive contributions, namely: Dr. Evershed, Rosslyn Hill, N.W., Treasurer; Dr. Pidcock, Downshire Hill; Dr. Miller, Rosslyn Hill; Dr. Evans, Thurlow Road; Dr. Andrews, Prince Arthur's Road; Dr. Heath Strange, Belsize Avenue; all of Hampstead.—We are,

H. COOPER ROSE, M.D.
HERBERT COOPER, M.R.C.P.

SIX YEARS IN BED: AN APPEAL.

MR. JONATHAN HUTCHINSON (15, Cavendish Square, W.) begs to acknowledge the receipt of the following contributions in aid of Dr. C.:

	£	s.	d.
Dr. Busteed	3	3	0
Dr. Bright	2	2	0
Dr. Edmunds	2	2	0
Mr. M. Lewis	2	2	0
Dr. Coates	1	1	0
Dr. Wood	1	1	0
Mr. Henry Ward	1	1	0
K.	1	0	0
Y. B. A. L.	0	10	6
Dr. Churchill	2	10	0
Dr. Roe	1	1	0
Dr. Rogers	1	1	0
T. L. H.	0	10	0
Mr. A. de St. Dalmas	5	5	0
Dr. Parsons	1	1	0
W. A. E. W.	1	0	0
Dr. G. Brown	1	0	0
Dr. T. F. Forster	0	5	0
Mrs. Sinclair	0	10	0
Mr. W. L. Chubb, Sandgate	1	0	0
A. W. W.	0	10	6
Mr. D. H. Fowler, Cirencester	3	3	0
Dr. E. A. Snell, 70, City Road, E.C.	1	1	0
Mr. H. Stear, Saffron Walden	1	1	0
Mr. W. G. Burnie, Bradford	2	2	0
"Sympathy"	1	1	0
J. T.	5	5	0
Dr. Sedgwick, Boroughbridge, Yorks	2	2	0

ANOTHER APPEAL.

MR. EDWARD EAST (16, Upper Berkeley Street, Portman Square, W.), Treasurer of the "Danaher Fund," would thank the Editor of the JOURNAL to insert the list of subscriptions received to date, and begs to briefly recapitulate the points of the case. Husband paralysed, mind and body, and utterly helpless for over a year; wife partially paralysed since the birth of her youngest child and unable to earn anything, and four children requiring support.

Mr. East earnestly begs for further contributions from the profession towards this very necessitous case.

	£	s.	d.
"K.," 11, Crescent, Taunton	1	0	0
Arthur G. Wood, Esq.	1	1	0
W. Morrant Baker, Esq.	2	2	0
Mr. Sinclair	0	15	0
N. Davies-Colley, Esq.	1	1	0
John Croft, Esq.	2	2	0
A. Darlow, Esq.	2	2	0

MR. HUTCHINSON wishes to acknowledge the receipt of the following contributions in aid of Mr. J. W. Danaher:

	£	s.	d.
Y. B. A. L.	0	10	6
Dr. Churchill	2	10	0
Dr. Roe	1	1	0
H. Stear, Esq., Saffron Walden	2	2	0
J. T.	5	5	0

DILATATION INSTEAD OF SUPPORT OF THE PERINEUM.

DR. H. ERNEST TRESTRAIL, M.R.C.P., F.R.C.S. (Physician to the Glasgow Hospital for Diseases of Women) writes: Large and sound practical experience is a far safer basis for the formation of rules of practice than any amount of theory and argument. Many a useful remedy, mode of treatment, and even surgical procedure, has been written down and passed into disuse, simply because men "full of learning," but of slight personal practical knowledge and experience, could not satisfactorily explain its action in accordance with the theories they had adopted.

From the letters of Drs. Fairland, Swan, Eades, Hebert, and Duke, published in the JOURNAL, and of several others which I have received, there can be no doubt that when the parts have been dilated as suggested by me, a ruptured perineum is a very rare occurrence indeed. My own experience, from a personal attendance upon over 3,000 cases of confinement, has fully satisfied me that dilatation, and not support, is the safeguard of the perineum, and the fact that I hardly ever have a case of rupture is my answer to those who, like Dr. Benington, would warn me against "an attempt to forestall Nature," or who would kindly suggest that "those cases which appear to have benefited by this treatment are those which would have done perfectly well if left alone.'" Statistics, however, also prove very much to the contrary.

If this treatment was advocated by the ancients, who possibly were more expert than we now are in the use of manual aid during labour, as they had not the forceps to fall back upon, it is a great pity that their practice has been discredited by modern writers who have so persistently advised the support of the perineum, instead of the gradual dilatation of the soft parts, where interference is really necessary.

All I claim is that I was the first within recent times to advocate dilatation instead of support, and to bring the subject prominently before the profession. Dr. Duke, however, now again attempts to claim a priority, simply because some years later he wrote saying that he confines the use of my plan of dilating to the duration of a pain. As reasonably might someone now claim to have discovered the use of chloroform simply because he administers it according to his own fancy.

The muscles of the perineum are often powerful, resistant, and rigid, and have to be tired out before dilatation can be effected, so that if the pains are short, or we are only called in at a late stage of the labour, as occurred in the case which I reported when I first brought this subject before the Obstetrical Society of London in 1875, dilatation to be of any use must be continued beyond the pains. But under ordinary circumstances it is sufficient if used even occasionally during a pain. It is not enough, however, just to pull back the perineum and to relax it again immediately, and this is what I intended to convey by the expression "continuous extension." Such details of the application of the principle of dilatation will occur to every practitioner.

No management of the head, however excellent in itself, can alter the simple fact that under the most favourable circumstances the external parts have to open up to a certain size. They are generally capable of being gradually dilated to this extent without injury, but very frequently the time the pains allow for the head to effect this is not sufficient, and the weakest point gives way. Support of the perineum has in practice proved to be a failure, but dilatation in the hands of those who have exclusively used it has undoubtedly been a great success.

The number of ruptured perineums one sees in gynæcological practice is really pitiable, and this has induced me again to call attention to the subject.

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

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REPORTS
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OF THE
BRITISH MEDICAL ASSOCIATION.

REPORT ON
HE MORPHOLOGY AND DEVELOPMENT OF THE BLOOD.

By ALEXANDER EDINGTON, M.B., C.M.,
me Surgical Fellow; Assistant to the Professor of Surgery, Edinburgh University; Lecturer on Bacteriology, Edinburgh Medical School.
(From the Surgical Laboratory of the University of Edinburgh.)

ate years the subject of blood, its morphology and develop-t, has attracted the attention of observers, both at home and ad, in an unusual degree; but while this has resulted in a iderable amount of observations being published, I feel that statement of Virchow, that "The whole history of the red cor-le is still invested with a mysterious obscurity, inasmuch as positive information has, even at the present time, been ob-ed with regard to the origin of these elements. We know in the first months of the existence even of the human ryo divisions take place in the cells, whereby an increase in number of those present in the blood itself is produced. But this time all is obscure, and this obscurity indeed corresponds ty exactly with the period at which the corpuscles in the d of man and the mammalia cease to exhibit nuclei. We can say that we are acquainted with no fact whatever which ks in favour of a further development, or of a cell division in blood, but that everything points to the probability of a ly from without,"[1] is in a sense as true now as then, though hopeful that the following observations may add consider-to our knowledge of this most interesting and important ect.

out three years ago I had begun a series of investigations on subject of suppuration, when I found that certain questions ch I desired to answer must ever remain obscure until such as further light could be thrown on the development of cer-of the cells of the blood. Such information not being forth-ing, I was forced to turn my own attention to the subject, what result this report may show, and I must offer this as excuse for having taken up a research of a kind which, pro-y speaking, is somewhat out of the domain of my usual line ork.

he blood, as everyone is aware, consists of a fluid, the liquor uinis, in which there float certain cellular bodies, the red and e corpuscles. I hope to show that there are present in the d, besides the red and white corpuscles, other two kinds, ther with a variable amount of an amorphous and granular erial.

hat I have now to say will be understood to apply only to the d of man.

ed Corpuscles.—These are circular, homogeneous, discoid es, having on either side a shallow saucer-like depression, or, se the familiar definition, they are circular, biconcave, non-eated discs, with a peculiar somewhat greenish-yellow colour. somewhat recent publication we are told by Mosso[2] that the ncave condition is a pathologically induced condition, and properly the real form is spherical. I cannot conceive how one can be excused for making such an erroneous statement, do not consider it necessary for me to attempt to disprove an rvation which is contrary to our best knowledge, and when biconcave condition is a time-honoured fact. Their diameter s considerably, even in the same drop of blood; but while we estimate the average as something between 7.5μ and 8μ, it is non to find in perfectly healthy individuals corpuscles as l as 4μ, and others as large as 9μ.

cently Hayem[3] has stated that he finds the average to be between 7.2μ and 7.8μ. He describes them as the great, the medium, and the small. The great have a diameter of 8.5μ; the very great, 8.8μ. The medium are 7.5μ in diameter; the small, 6.5μ; and the very small in normal blood, 6μ. In 100 globules he finds as follows: 75 medium, 12.5 great, and 12.5 small. All smaller than these he calls "dwarf" and those above 9.5μ "giant" corpuscles. I believe, however, that it is scarcely correct to hold such a standard, as between meals there is to be noticed a distinct variation in the aggregate size, the minimum occurring soon after a meal, while the maximum occurs at the end of a period of fasting. I have also observed that they are diminished in size at the termination of the period of acute fever after an exanthem, while they attain their maximum during the height of the feverish stage. They are not only relatively but absolutely small in septic conditions after such condition has lasted for some time.

They are considered by certain authorities to be devoid of any investing membrane; but I am very much inclined to take an opposite view as the result of observation, first, of the effect upon them of reagents, and secondly, from the observation of their development. If one places some blood in hydrocele fluid of such a density that the hæmoglobin of the corpuscles is not at once discharged, it will be noted that after some little time they assume a cupped form, and it may be frequently noticed that this is associated with the production of a dark-coloured spot, which almost simulates a nucleus. This spot will be found to occupy what one might consider as the hollow of the cup; but attentive observation will show that, with the production of this dark-coloured spot, the remainder of the body of the corpuscle has appreciably lost colour, and on careful focussing it may be noticed that this red material is lying outside the body proper of the corpuscle, and only prevented at this stage from diffusing into the surrounding liquid by the fact of its being withheld by the presence of a very delicate membrane. This is best made out if one examines such a corpuscle when it is lying on its side, with the red-coloured spot occupying an eccentric position; then, on focussing down from the one edge to the other, the fine membrane may be seen and followed, stretching across the cup, as it were, from one side to the other. If this is a veritable membrane, however, it would seem that it is formed merely by a condensation of the stroma of the corpuscle, as it breaks down like it, but takes an appreciably longer time to do so.

The corpuscles are liable to considerable changes of form under the action of reagents. Apart from the "crenation," which occurs as the result of the addition to blood of a fluid of greater density—such as a strong saline solution—there may frequently be seen in freshly-drawn blood certain of the corpuscles which have assumed a spinous form; this has been considered as a condition due to an active contraction of the stroma. I have frequently seen such a change followed by a flattening of the corpuscle, and it would seem to be a condition analogous to rigor mortis, as it comes on under conditions of death, and, like it, passes off after a time, leaving the globule in a hyperflaccid state. The same state may be produced, as is well known, by the discharge of a Leyden jar through them. In both cases the corpuscles, after this condition has been reached, tend to adhere and subsequently to fuse together.

That this condition is not always due to an osmotic change is clearly proved by the following observation: I had added to a drop of fresh blood an equal volume of a $\frac{1}{8}$ per cent. solution of dahlia in ordinary water. At once, upon adding this to it, almost all the red corpuscles suffered a sudden swelling, followed as usual by diffusion of their hæmoglobin; but some corpuscles are always found in such a case to withstand the aqueous action for many hours, and in this case I noticed, when examining the blood six hours later, that several of those which still possessed some colour, were in this crenated condition. Moreover, Hayem has observed in the blood of young embryos certain of the nucleated red corpuscles which evinced a distinct contractility of their protoplasm.[4]

White Corpuscles.—These bodies, as seen in human blood, are few in number as contrasted with the red corpuscles. They have been for a considerable period of time regarded as simple protoplasts,[5] but recently it has been asserted that they possess a distinct cell wall.[6] Max Schultze, and more recently Hayem,[7] describe three forms in human blood: 1. The smallest spherical forms,

[1] Virchow's *Cellular Pathology*, p. 233, Sydenham Society.
[2] (A.), Die Unwandlung d. rothen Blutkörperchen in Leukocyten u. die Nekrobiose, etc., *Virchow's Archiv path. Anat. u. Phys.*, Bd. cix.
[3] Hayem (G.), *Du Sang*, Paris, 1889.
[4] Hayem (G.), *Du Sang*, 1889.
[5] Quain's *Anatomy*, 9th edit. Landois and Stirling's *Physiology*, 1889.
[6] Hayem (G.), *Du Sang*, 1889. Professor Rutherford's *Lectures*, 1889.
[7] Hayem (G.), *Du Sang*, 1889.

always smaller than the average red corpuscle, having one or two nuclei and very little protoplasm, in diameter 6μ to 7.5μ, and being not at all amœboid. 2. Forms about the size of an ordinary red corpuscle, possessing a variable amount of finely granular protoplasm and an irregularly formed nucleus. 3. Larger forms, in

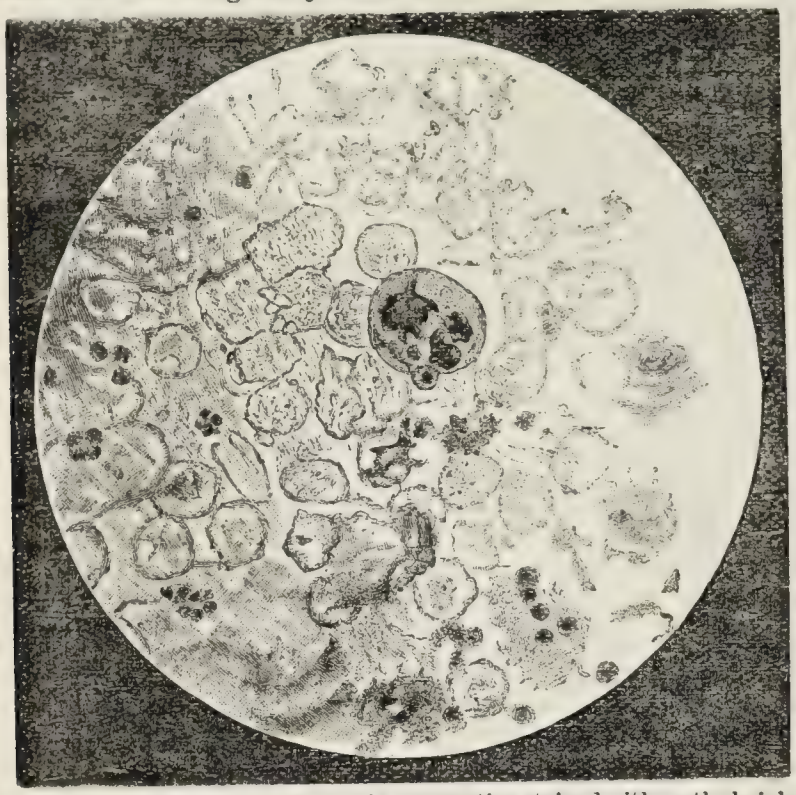


Fig. 1.—From a microphotograph of a preparation stained with methyl violet. There is to be seen a multinucleated white corpuscle, and scattered over the field numerous albocytes, more or less changed by the use of the aqueous solution.

size 10μ or more, and having very granular perinuclear protoplasm. These two latter forms are distinctly amœboid. In addition, however, to the foregoing, Hayem has pointed out subvarieties: (1) one which he considers belonging to the first variety, rare in human blood, having a very granular protoplasm, which is some-

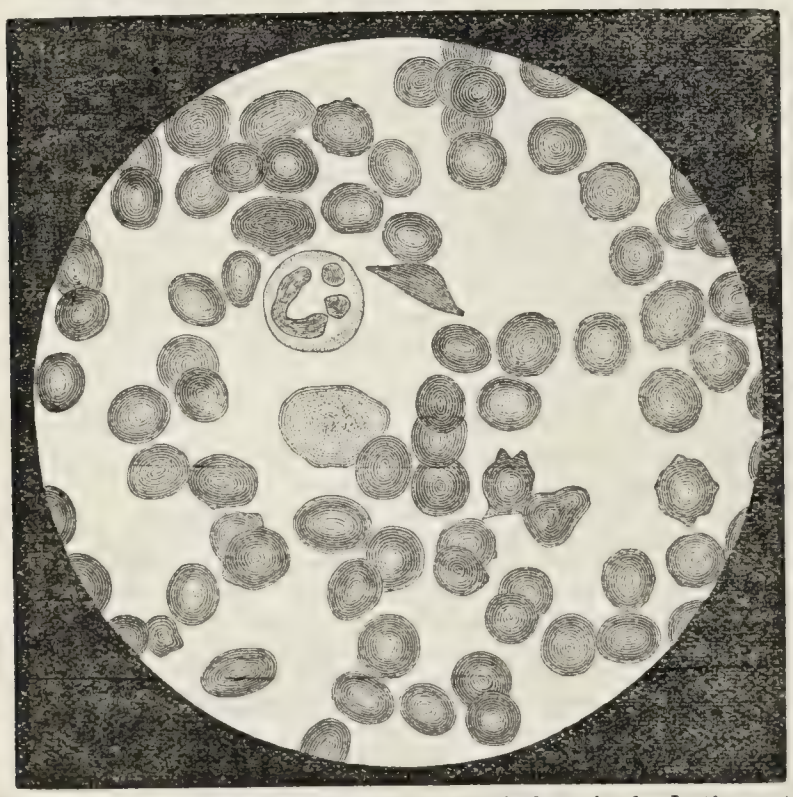


Fig. 2.—Another dried film preparation, similarly stained. In the centre is seen a white corpuscle with several nuclei and a matricyte.

times lightly charged with hæmoglobin; (2) a form described by Max Schultze,[8] smaller in size than the large amœboid forms, but possessing very fine protoplasm. With regard to the development of the white corpuscles, no very definite statements are usually made, and such, for the most part, are to the effect that we are in-

[8] Max Schultze, *Arch. f. Anat.*, 1865.

debted for their origin to gland cells, as it has been shown that th efferent vessels of such glands contain the white cells in greate abundance than the afferent. I have to ask, however, if this is th only method of origin, or the most important? In order to answe this, I will first describe the observations which I have made o

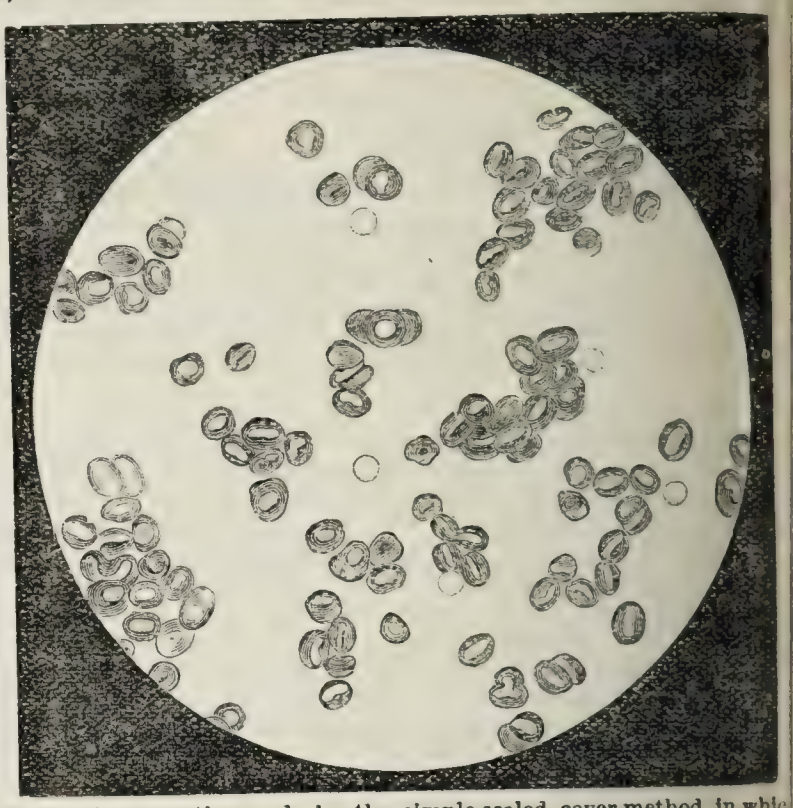


Fig. 3.—A preparation made by the simple sealed cover method, in whic may be seen several albocytes which have been photographed, purposel slightly out of focus.

the morphology and mode of origin of these corpuscles. Very lit information is to be gleaned from the study of these bodies fresh blood. Under such conditions they are seen as simple g translucent bodies, having a varying granularity of structure, a it is not always easy even to detect the presence of a nucleus

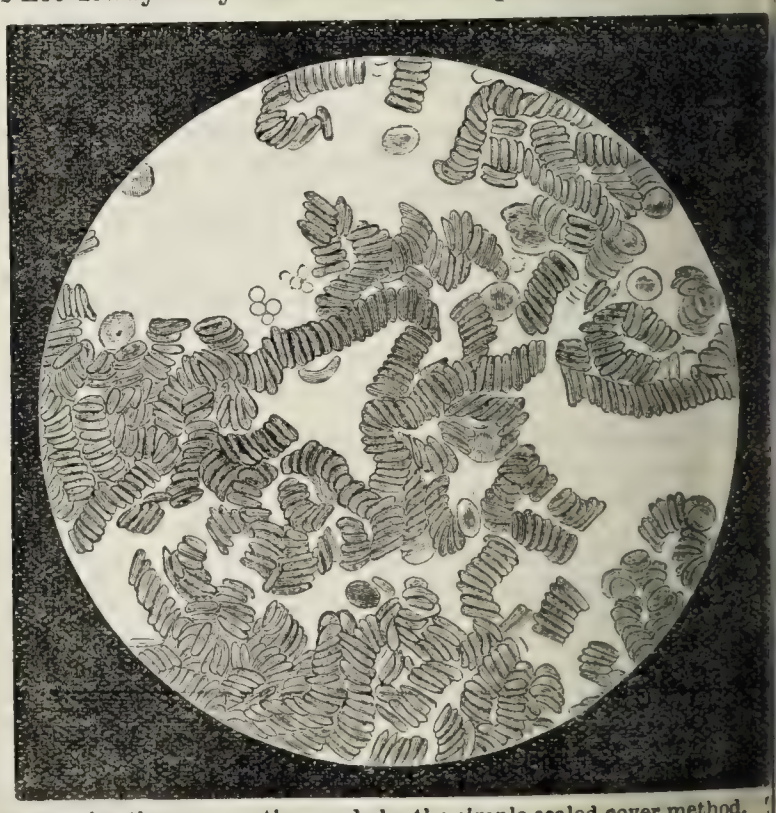
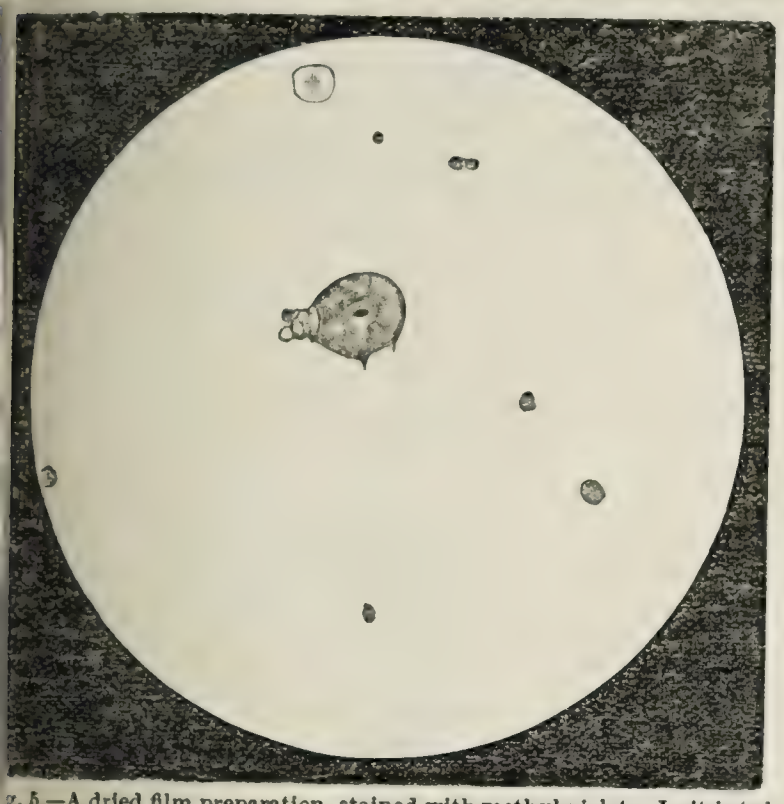


Fig. 4.—Another preparation made by the simple sealed cover method. the left, in the upper part, a small group of albocytes are plainly visib as photographed.

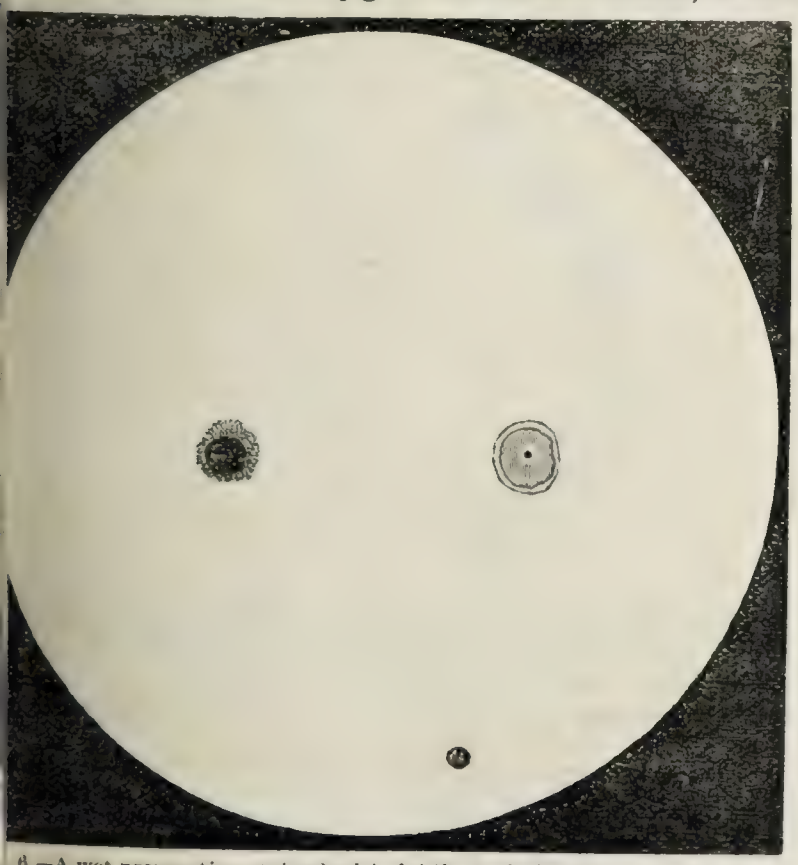
less the stage is warm or the blood is kept on the slide for an h or more before making observations. After some little time, t usually spread themselves out, and then, if the illuminatio carefully attended to, one may see, at least in the less gran kinds, either one or more nuclei. In order to learn more of t structure, one is compelled to make use of some method by wh

ey may be stained. Of all staining agents, the aniline dyes will found most serviceable for this purpose, and of these I have nd dahlia, fuchsin, methyl violet, methyl blue, and safranin the et useful. One may examine blood either in dried films on er glasses, or may add to fresh blood some indifferent more or



g. 5.—A dried film preparation, stained with methyl violet. In it is to be seen a matricyte in the act of rupturing to set free the albocytes, as photographed.

preservative fluid. After a considerable amount of experi- ıation I have come to the conclusion that no method known ıtirely free from objection; and, therefore, in order to arrive ny satisfactory explanation of what one sees in blood, it is essary to make use of a very great number of methods, in order



. 6.—A wet preparation stained with dahlia, and photographed to show the difference between the matricyte and the uninuclear white corpuscles. One of each is seen in the same field.

to better eliminate all chances of fallacy. The methods h I now mostly make use of by preference are three in number, namely, 1, the sealed cover method; 2, the dried film method; 3, the wet method. The sealed cover method is as follows:

A very small drop of blood is drawn from a finger which has been previously well cleaned with absolute alcohol. By means, then, of a lance-pointed needle, a puncture is to be made, and, on a drop issuing, it is to be directly, with as great a rapidity as possible, transferred to a clean cover glass, which is at once turned over on to an equally clean slide. As soon as this has been done, it is to be sealed by passing around its edge a brush carrying a sufficiency of canada balsam, when the slide is ready for immediate and prolonged examination. The best results in this way are obtained when the drop of blood is so small that it, by capillary attraction, is just able to reach to the edges of the cover glass. The subsequent microscopic examination will soon show whether one has succeeded or not, as, if rouleaux are freely forming, it is evident that too large a drop of blood has been used. The formation of rouleaux does not of itself absolutely preclude the possibility of observing certain elements of the blood, but it always indicates that a considerably thick film has been used, and, as I shall also show, to a considerable extent hinders certain observations. The

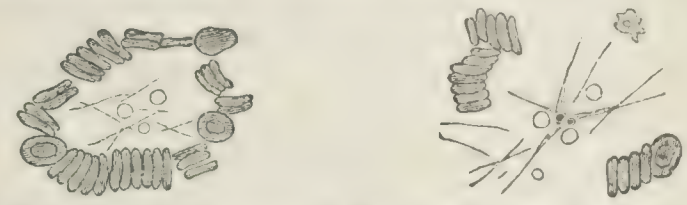


Fig. 7.—A preparation by the simple sealed cover method, in which a few albocytes are seen.
Fig. 8.—A similar preparation, but in which there are in addition a group of hæmatoblasts present.

second method is a well-known one, now that the examination of sputa, etc., for bacteria is so much undertaken by the practitioner. It is carried out as follows: Two cover glasses are made scrupulously clean, and on to one of them a drop of blood is received, when the other is immediately superimposed, and, on the film having spread to the edge of the covers, the one is at once, with one steady sliding movement, pulled from off the other. In making use of this method, it is well to note that no pressure should be applied to the covers, the film being made by capillary attraction only. If more pressure than this be given to the film, there is a grave possibility of certain elements being severely altered, if not, indeed, utterly destroyed. Hayem[9] makes use of a smoother,

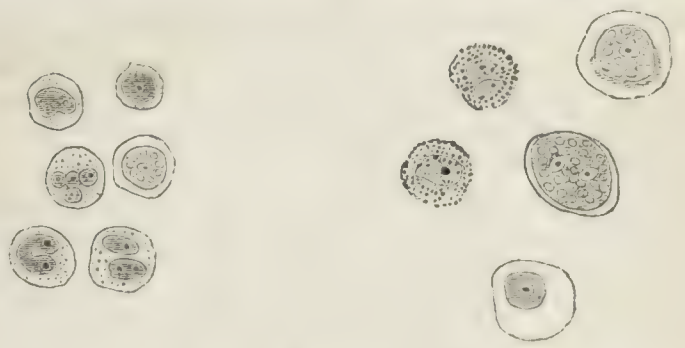


Fig. 9.—A preparation by the wet method, in which there may be seen one matricyte and several white corpuscles, the latter of which are seen in various stages of division, and in all nucleoli are observed.
Fig. 10.—A similar preparation showing the effect produced after two days' staining by the wet method, on two granular white corpuscles and three matricytes.

in the form of a rod which is passed over the drop, in order to make a thin film; but I question if this is satisfactory, as there is always a possibility of too much pressure being thus applied. After having got the film made, it is without loss of time to be dried, and in practice one finds that this is best done by holding the cover about a foot above a Bunsen burner. After being dried it is to be transferred to the staining agent. Here one has the alternative of using either an aqueous or an alcoholic solution of the stain. I usually float one of the cover glasses in an aqueous, and the other in a saturated alcoholic, solution of the same stain, by which means one is enabled to discount the aqueous action on the one hand, and the alcoholic on the other. If an aqueous stain is employed, the formula which I make use of is: Take of any one of the following stains: fuchsin, dahlia, safranin, methyl violet, or methyl blue, 2 grammes; absolute alcohol, 20 cubic centimètres; distilled water, 100 cubic centimètres.

If an alcoholic stain is wanted it is prepared by adding a quan-

[9] Hayem (G.), *Du Sang*, 1889.

tity of the stain to some absolute alcohol, and letting it stand several days, during which time it is repeatedly shaken, care being taken to see that more stain has been added to the alcohol than it can dissolve. All stains should be carefully filtered at the moment of being used and while the film is staining the dish in which it is placed, which should only have a capacity of one fluid drachm, must be carefully protected from dust, and, what is of still more importance, from possible oxidation of the stain, by a piece of glass which has been accurately adjusted to cover it.

After the film has been stained—which in the case of aqueous stains occupies a period of three to five minutes, while in the case of the alcoholic the film may be left in the stain from one to five minutes, dependent on what one wishes to observed—the cover-glass is lifted out and carefully and fully washed in filtered water until no more stain is seen to flow away from it, when it is left to stand on its edge on a piece of bibulous paper until it is completely dry. After this one holds the cover at a considerable distance above a Bunsen flame just to insure absolute dryness, when the film side is turned over upon a small drop of xylol canada balsam, laid on a slide, and the film is then ready for observation.

In the case of the wet method, a small drop of blood is placed on a slide, to which is then added an equal amount of a certain staining mixture, a cover-glass applied and sealed with canada balsam in the same manner as in the sealed cover method.

The stains which I have used for this are as follows:

1. *Dahlia Stain.*—This is simply an aqueous stain made by the formula previously detailed, but diluted to $\frac{1}{100}$ of its strength by the addition to it of ordinary tap water. It is well to keep it for some time, and to filter it carefully before use.

By the use of the dried film method one learns very much more of the corpuscular nature of blood than might be expected. One notices that the conditions of the nucleus in the white corpuscle is subject to exceeding great variation. In normal blood the nuclei vary in number with a characteristic regularity proportionate to the condition of the perinuclear protoplasm from one to four, more are frequently to be seen, but I consider them as variations from the normal.

The first to which notice may be directed is that one in which we may readily discern a single comparatively large nucleus of a spherical form, surrounded with a zone of perinuclear protoplasm. Next there is that in which the nucleus is somewhat larger, and of an oval form, while the surrounding protoplasm is somewhat larger in amount than the preceding form. In another we may observe that the nucleus is somewhat kidney-shaped. Another shows the nucleus as if about to become bent upon itself, while in still another we find that the nucleus is really bent upon itself, forming in this way a somewhat horseshoe-like form. Looking still further we notice some in which the single horseshoe form presents the appearance as if the nucleus was about to divide just at the centre of the horseshoe. These complete the forms assumed by the single nucleus. We have now to deal with those in which two nuclei are present. The first is that in which the two nuclei are close together, arranged in a somewhat horseshoe-like form, and in some cases actually showing a slender bond of connection. In another we find the nuclei somewhat larger, and almost spherical. Next we notice those in which the two nuclei are becoming somewhat oval. Then we may see others in which the nuclei are each becoming somewhat constricted at their centres. These complete the binuclear forms. Now those with three nuclei may be considered; and we notice that in those, as a rule, while two of the nuclei are small and spherical, the other is like one of the last binuclear forms we have considered, namely, constricted in the hourglass-like form. We now come to those in which four nuclei are to be seen, and here the first that I shall draw attention to is that in which the four nuclei are arranged in sets of two, each set of which has a somewhat hourglass-like form, the two bulbs of the hour glass being the nuclei, which are still connected by a few stained threads. In other words, we may sum up these observations by saying that we have seen that from the first form, namely, that which consists of a single nucleus surrounded by a fine zone of perinuclear protoplasm, all the other forms are derived by a characteristic regular method of division. (See Fig. 11).

Structure of the Nucleus.—As made out by staining with aqueous fuchsin, or, still better, by aqueous methyl blue, we note that it is enclosed within a definite nuclear membrane, consisting of a chromatic substance. This membrane is extensile, and presents a considerable opposition to aqueous action, and in a film which is coagulating it is one of the last structures to break down, even lasting longer than the contents of the nucleus itself. Further ascertained in this way, the membrane and nucleus of uninuclear white corpuscle is the most resistant. Within the nucleus we may observe, by means of the same staining agents, somewhat reticular structure, which, in the case of those stained blue, may well be compared to a fine blue-stained net, enclosing what looks like clear unstained spherical or oval bodies. The nuclear membrane is readily stainable by the stains which have been mentioned. It is stained very deeply by the methyl violet and dahlia, less deeply by fuchsin, safranin, and methylene blue. When treated by the wet method, using either the compound blue of which the formula will be afterward stated, or the dahlia stain

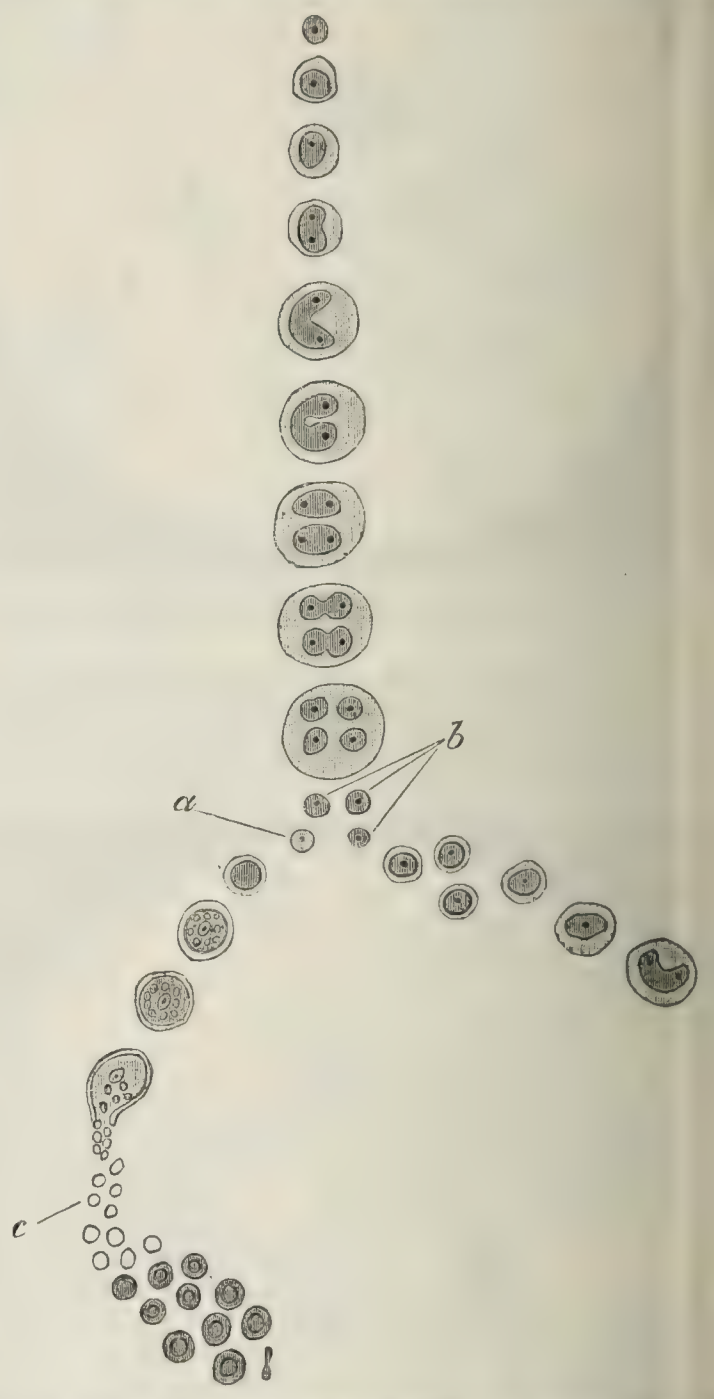


Fig. 11.—A semidiagrammatic scheme representing the development of the blood corpuscles. *a*. A free daughter nucleus, becoming converted into a matricyte. *b*. Free daughter nuclei, developing again into white corpuscles. *c*. Albocytes.

we are able easily to see that each nucleus contains within it a well-defined, small, deeply-staining body, which, I have no doubt, is the nucleolus. This body seems, in certain of the corpuscles which I shall immediately describe, to contain within itself another body, which may be an endo-nucleolus. The position of the nucleolus is in most cases an eccentric one, but the endo-nucleolus, when observable within the nucleolus, is usually central.

The perinuclear protoplasm differs, as has been stated by numerous observers, in granularity. It is, as a rule, fine granular or almost homogeneous in the uninuclear forms, but from this stage onward it becomes progressively more so. There are to be seen some which possess this granularity in a very high degree, and have been already noticed by Ehrlich and later

yem. The granules of this latter variety have little affinity either iodine or rosaniline. As they do not take on the osmic d reaction, they cannot be deemed to consist of fat. The former hority has shown that they have a particular affinity for eosin, while this is so Hayem shows that they cannot be held to sist of hæmoglobin, as they are not dissolved by such liquids dissolve hæmoglobin. I have, however, observed that they have affinity for hæmoglobin. This may be easily seen if one prepares lide by the sealed-cover method and leaves it to stand for some le time, when, on some of the hæmoglobin of the red corpuscles coming diffused, it may be noticed that these granules take on ecided yellow tint. Hayem considers them as melaniferous, t I am not certain that he is justified in so doing.

What is the meaning of this division of the nuclei of the white puscles? It has been asserted by numerous authorities that it a degenerative or necrobiotic change, but the characteristic ularity of the process is evidence sufficient against this. As is ll known, this phenomenon in other cells is followed by ision of the cell itself. Such a process has been looked for e, but the only statement of an affirmative kind is by Klein.[10] ave myself endeavoured to find some evidence that might tify me in making such a statement, but have never seen it. would even go farther now and say that such a phenomenon in white corpuscles of man does not occur at all.

The primary lymphatic corpuscle may be looked upon as a cell ich possesses a large nucleus, relatively to its surrounding toplasm. If, then, the origin of the white cells is to be ascribed the glands, how are we to account for the several nuclei which to be so easily demonstrated within many of them? If such a dition has arisen by a division of the primary nuclei, are we consider it as evidence of progressive growth, or to hold with se who say that it is a condition of retrogressive metamorsis associated with degenerative change. Loscher and Lambl[11] that many of the white corpuscles undergo fatty degeneration l perish in the blood, others divide soon after reaching the neral circulation, and that this division proceeds from the cleus. In other cells they say that the nuclei may be observed be getting smaller and to gradually disappear. They further nclude that a considerable portion of the white corpuscles circuing in the blood are to be looked upon as simple cells without y use, "a sort of rubbish or superfluous ingredient" which it is the benefit of the system to be as quickly rid of as possible. arton Jones considered that the multinucleated condition was to the action of reagents.[12]

The first hint which I obtained as to the true condition of the e was from observations made with the dried film method. om this I learned that one is able to detect certain changes ocring in the perinuclear protoplasm of the white corpuscles, ich progress coincidently with the division of their nuclei. I e observed that in the uninuclear cells the protoplasm is small amount, but that it increases with the number of nuclei which formed. When, however, the full number of nuclei have been med, it is noticeable that the protoplasm begins to stain less dily, as if indeed it were becoming dissipated.

Further observation has shown me that this is the correct view, I am able to find free nuclei in the blood as observed by the ne method, so that I have concluded that the life-history of the ite corpuscle begins with the uninuclear condition from which successive stages it arrives at that of the multinucleated cell. en this stage has been reached, the nuclei are set free by the toplasm being used up or otherwise dispersed, and the nuclei in a condition to act their parts as uninuclear cells. From s view it is evident that white corpuscles may be reproduced m pre-existing cells within the general circulation. We shall later that the white corpuscles have a much greater and much re important function than even this to perform. I shall, howr, at this stage leave the white cells to pass to the considera- of another element which has been described as one of the stituents of the blood, namely, those which have been variously ominated as "blood plates," "hæmatoblasts," "elementary puseles," "globulins," etc.

There exists in the blood a great quantity of granular material, separate granules of which vary considerably in size. Donne,[13] 1842, described such under the name of "globulins," and con- ered them as the material of which the white corpuscles were formed. The method used by him for their demonstration[14] consisted in treating the blood with water. In 1847, Zimmerman[15] described under the name of "elementary granules" certain small bodies about 1μ in size, which he considered to be normally present in the blood. According to Hayem, his methods consisted in defibrinating the blood and then treating it with water, or in letting the blood coagulate, and subsequently examining the serum which issued from it. He believed that the small bodies which he thus saw, by progressive increase in size, ultimately became red corpuscles. M. Ranvier in 1873 published a statement to the effect that they were in all probability small fibrinous grains. Max Schultze[16] later more minutely described what are in all probability the same bodies, occurring in the blood of young and old in the form of small masses of colourless particles of unequal dimensions, occasionally seen separate but more frequently united into groups, with irregularly defined edges, and within which the separate elements were held together by means of an interstitial finely granular substance. He described the single elements themselves as colourless, homogeneous or finely granular, and but little refractile. They did not appear to be symmetrically formed, being sometimes angular, and when so having a more granular aspect and a sharper outline. After some little time they began to break down and dissolve into fine granulations of different sizes. More recently similar bodies have been noticed by Riess, Vulpian, and Ranvier, and still later Hayem has redescribed them under the name of "hæmatoblasts."[17]

The last observer describes them as being extremely "vulnerable," and states that for this reason it is necessary to observe them just at the moment of their issuing from the blood. He directs that cover glasses and slides should be carefully cleaned with alcohol or ether and left to dry, when four small drops of paraffin are to be placed upon the slide in such a manner that they may act as little feet to support the cover glass, and keep a small, almost capillary, space between it and the slide. Then on a puncture being made of the finger, the blood is so to be received upon the slide that it runs in by capillary attraction under the cover glass. He then states that a high (?) magnification is to be used, namely, a 2 or 3 ocular and 7 objective of Nachet. The blood corpuscles will be seen rushing about, and among them will be noticed "very small corpuscles resembling small red globules, very delicate and pale. Immediately on being perceived, they begin to change there; they become spinous, adhere to the cover glass, bend themselves, become pale through losing a part of their substance, and have a tendency to adhere to corpuscles, which they encounter in such a manner as to form a mass. Sometimes they arrest the passage of one or two red corpuscles which adhere by some point of their periphery, whilst the current seeks to drag them on, taking immediately a pearlike form. After some little time, the red corpuscles disengage themselves in order to form rouleaux, and the small elements in question remain isolated, or form chaplets or masses. By this time they have become profoundly altered and almost irrecognisable, but one has been able to observe their presence, follow their transformations, and to convince oneself that in addition to the red and white corpuscles the blood contains other peculiar corpuscles which alter themselves very rapidly." Hayem believes these bodies to be the germs of the red corpuscles, and to become such by successive stages.

Bizzozero has in a similar way referred to these bodies, and while he cannot hold with Hayem that they are the embryonic forms of red blood corpuscles, he considers them as the agents which directly excite fibrin formation. Eberth and Schimmelbusch believe that the formation of white thrombi are due to them. In 1878, Norris[18] described what he styled the invisible or colourless corpuscle, which he later detailed in a work on the physiology and pathology of the blood. The bodies which he drew attention to were, however, later shown by Mrs. Ernest Hart[19] to be simply red corpuscles which had been by the author's method deprived of their hæmoglobin.

I have thus fully referred to these various descriptions in order that they may not be confounded with the new blood corpuscles which I am about to describe.

A New Blood Corpuscle.—There are to be observed in normal blood certain peculiar corpuscles which are undoubtedly the

[10] Quain's *Anatomy*, 9th ed., vol. ii, p. 32.
[11] Loscher and Lambl, rev. in *Med. Times and Gazette*, 1861.
[12] Wharton Jones, *Phil. Trans.*, 1846.
[13] Donne, De l'Origine des Glob. du Sang, *Comptes Rendus*, 1842.
[14] Donne, *Cours de Microscopie*, Paris, 1844.
[15] Rust's *Mag. f. d. gesam. Heilk.*, Bd. 66, Heft 2, 1846.
[16] Max Schultze, *loc. cit.*
[17] Hayem (G.), *Du Sang*, 1889.
[18] Norris, *The Physiology and Pathology of the Blood*, 1882.
[19] *London Medical Record*, January 15th, 1880, and October 15th, 1882.

young forms of the ordinary red corpuscle. In order that they may be distinctly seen it is necessary that a good optical combination be made use of. For this purpose I have been in the habit of selecting Zeiss's E objective with a 3 or 4 ocular, but for the most accurate delineation of them the 2 mm. apochromatic objective (oil immersion) with the 4 or 8 compensation eyepiece is preferable. It is also well to use an Abbé's illuminator, or preferably an achromatic condensing system (Zeiss's). In using either of the latter a diaphragm of about $\frac{1}{4}$ inch diameter and one of $\frac{1}{5}$ inch should be used, but until the observer has accustomed himself to seeing them it is better to use a smaller diaphragm ($\frac{1}{8}$ inch diameter). The method of preparing the blood is most simple, it is that which has before been described as the simple sealed cover method. The principal thing to be attended to is to see that a very thin film of the blood is being used. At first when observation has begun they may not be easily seen, as their refractive index is almost identical with that of the serum in which they float, but after a little time they appear as small, very delicate, beautifully spherical corpuscles, measuring in size from 1μ to 4μ, the average being about one-third the diameter of a red blood corpuscle. Little by little their outlines become more apparent, until at the end of twelve hours they are sharply defined. It is necessary to point out that it requires very delicate focussing and the use of some form of mechanical stage is of the very greatest service. When out of focus they appear as badly-defined grey spheres, of which it is not possible easily to define the contours, but when sharply in focus their areas are clearer than that of the surrounding field. They have nothing whatever to do with fibrin formation, and do not at all tend to dissolve as the hæmatoblasts of Hayem are said to do. In a slide so prepared they may be seen even after the lapse of a week if the sealing of balsam has been so complete as to prevent the blood from drying up. After two or three days, nevertheless, one observes that these corpuscles, when grouped together in close contact, suffer individually from mutual pressure, just as the red blood corpuscles do when they have been kept for some little time. If one adds to the blood hydrocele fluid, of which the density has been a little lowered, and which has had added to it some methylene blue stain, it is often possible to see that they suffer from osmotic change, just as the red cells do. In such a case, after they have become somewhat swollen by the absorption of the fluid, it may be seen that suddenly the contained material is, as it were, torn from its connection with the periphery of the cell, and becomes retracted to one or other side, and then takes on to a slight extent a blue staining, tending to show that there is a definite stroma, which is closely connected with the investing membrane. In making such observations I have been struck with the fact that where rouleaux of red cells are prevented from forming by the thinness of the film, little or no fibrin threads form. I must, however, emphasise that even in cases where fibrin is formed these small corpuscles are yet to be seen, and, as far as it is possible to see, they are in no wise affected by its formation. They may even be obtained from blood which has coagulated in thick films. The use of saline solutions tend to utterly destroy them, but in films of blood which have been dried and stained it is quite possible to see their remains, which appear as somewhat circular slightly irregular rings with a somewhat ragged interior; in fact, they are acted upon very much as are the red blood corpuscles themselves. Of all the blood corpuscles the smallest red are, as a rule, those which are the most tenacious of form and other natural characteristics when removed from the circulation, and these corpuscles are equally if indeed not more so. It is possible to see that the larger of them are distinctly discoid, and one can follow easily their transition up to the condition of the true red blood corpuscle. I therefore hold that the red blood corpuscles of man are developed from smaller cells, which are at first colourless, and as far as I can perceive spherical, but which by progressive increase in size and by the acquirement of hæmoglobin become fully developed red cells. As it is clear that the terms "blood plates" or "hæmatoblasts" are inapplicable to them I would suggest for them the name of *albocytes*, from the fact that they are in their pristine condition colourless.

The Origin of these Small Blood Corpuscles.—When one examines dried films of blood which have been stained, it is curious to note that these cells are often found arranged in more or less spherical groups, and I therefore thought that it was most probable that they were developed within some cell which, by its rupture, gave rise to the corpuscles and this peculiar arrangement of them. I endeavoured for a very long time unsuccessfully to find such a hypothetical cell, until the examination of an immen number of slides gave me at last the cell of which I was in searc I have since seen several of them, but the one from which Fig. is photographed is by far the best demonstration of the act of pa turition. It will be noticed that the central part of this cell occupied by a dark stained spot, which for some time puzzled m but which is now, however, fully explicable and most easi demonstrated. If one wishes to see this cell it is best to mal use of the wet staining method, and to use either the $\frac{1}{50}$ per cen dahlia stain, or the following compound blue stain: 2 per cen aqueous methyl blue solution, 5 cc.; 2 per cent. aqueous methy violet solution, 1 cc.; distilled water, 50 cc. If a drop of this soluti be added to an equal volume of blood on a slide, which is th sealed with canada balsam, and subsequently examined, it will seen that the white corpuscles gradually become deeply stain by it, and as they are staining, it will be easy to see that each the nucleoli, of which there is one present in each resting nucle divides into two before division of the nucleus itself occurs; b it will also be noticed that gradually another cell is coming in view as its nucleus acquires a faint blue colour, contrasting wi the deep violet colour that the nuclei of the white corpuscles ta on.

I should here note that the colour reactions, both of the dah stain, as also that of compound blue stain, are very much simil but of the two I prefer the compound stain for the demonstrati of the cell to which I most desire here particularly to allude.

The slide should be allowed to stand for a period of twel hours in order that the cells may be permitted to stain fully, b they may be seen in a few minutes after the stain has been add to them. The uninuclear white corpuscles take on the stain ve deeply, and a narrow zone of protoplasm may be seen to surrou them; after a time, however, this zone presents a very ragg outline, and ultimately it may entirely break down and disappe This serves, in a great measure, to distinguish them from the ne cells. These latter cells possess a very large nucleus, whi is surrounded with a very sharply defined thin zone of protopla enveloped in a distinct membrane, which remains almost inta for a very long time indeed. The nucleus stains faintly, and its central part there may be noticed a clearer oat-shaped bo fairly defined, within which there is situated absolutely central a smaller, dark-stained point, the body previously alluded to occurring in the cell seen in the dried film.

In all probability this small dark-stained body is not a nucleol but an endo-nucleolus, the nucleolus being the clearer oat-shap area which encloses it. Within the nucleus, and surrounding t nucleolus, there may be seen a considerable number of clear, i defined, small spherical bodies, the young albocytes, which beco liberated in the blood under conditions which we at the prese time have no means of knowing. As these cells may be look upon as mother cells, I propose for them the term of *matricyt* With regard to the period of rupture, I have noticed that th are very few albocytes to be seen in the blood during a period fasting, but they are very soon seen after a meal has been tak I have recently devised an experiment to show that the albocyt are really produced by the rupture of certain cells containi them. If one draws blood from the finger, and immediately brin it in contact with a cover glass in such a manner that the drop blood suffers no compression from the finger or glass, and if t finger carrying the drop be then moved all over the surface of t glass, a somewhat thick film of blood will be deposited there This must be done so rapidly that the blood is prevented fr drying, and the cover glass is then to be deposited film side upp most in a small glass dish, which can be firmly closed by a gl cover. Within this glass dish there should be previously plac a small piece of moistened blotting paper, in order that the fil may be kept in as nearly as possible a natural condition of mo ture. This dish then should, with its contained film, be placed an incubator, and kept at a temperature of 35° C. for one two days, after which it is to be taken out, dried, and then stain with an aqueous 2 per cent solution of methyl blue, after which is to be washed, dried, and mounted on a slide with canada balsa At the same time as this blood was prepared, another drop shou have been taken, which should have been dried and stained once for purposes of control.

In the immediately prepared film one may notice but few alb cytes, and not a great deal of granular material, but on exami ing the film which has been incubated, one will be struck wi the number of albocytes, and there will be observed considerab numbers of empty envelopes, from which it is evident that th

e emerged. In films of blood simply sealed with balsam the ocytes may be distinguished from the granular matter of the od by the fact that the granules of the latter possess a peculiar enish, refractile appearance, while this is not at all apparent he case of albocytes. It is well, however, to note that the granu- matter is very frequently to be seen beside them. So much is sometimes the case that at one time I was not clear that they e not developed in some way from it. I, however, was entirely to disprove this by placing slides under the microscope, and, careful and prolonged watching, observing that they frequently eared in spaces where there was no granular material present atever.

he granular material of the blood seems to be of two kinds, of which, probably the hæmatoblasts of Hayem, is quite evi- tly associated with fibrin formation, and which tends to break n in the way Hayem describes. But there is another kind ch does not so break down, and which takes on such forms it might easily be mistaken for bacteria or monads. This er kind of granules I have observed to be extruded from the te corpuscles while they were undergoing amœboid move- t. On being liberated they perform gyratory movements, and e away across the field. They may also be noticed in active ement evidently of a Brownian or molecular kind, even after lapse of some days. I am convinced that both kinds have the e origin, namely, from the white corpuscles, because if one is a film of blood which has been for some time coagulated, may observe that all around the white corpuscles there is to een an areola of delicate fibrin filaments, just in the same way hey appear around the hæmatoblasts. So that it is quite t to believe that the white corpuscles are the chief agents in cing fibrin formation, and of these corpuscles that the granules he essential cause. The other granules to which I have drawn ation are, I believe, of a similar nature, but being older, and ably undergoing some degenerative change, have lost their er of inducing fibrin formation.

ON CHLOREMIA[1] AND ITS TREATMENT.

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finition.—A blood disorder, either idiopathic or associated other ailments, consisting essentially of a greatly diminished ntage of hæmoglobin, and of a variable decrease in that of ed corpuscles. In simple chloremia the leucocytes appear to affected either in number or shape to an appreciable extent. ring the past year a large number of cases of chloremia, ly idiopathic, have been admitted into the Sussex County ital, and of the total number twenty-five were placed under are. The following paper epitomises the chief points of in- t in the records of these cases. For the original notes and e numerous observations on the blood, many of which I had portunity of verifying at the time they were taken, I am in- d to Mr. Gerald Hodgson, the house-physician.

iology.—As regards sex, the whole of the patients were females. I ought perhaps to qualify this statement at the outset by saying that in selecting the material for the present essay I took those cases only in which chloremia appeared to be the chief disorder from which the patient suffered, omitting all others wherein the blood disorder was palpably subsidiary to disease elsewhere. Further observations will probably show that chlore- mia is very commonly associated with chronic wasting diseases; indeed, I have met with several such cases, but have not included them here. Nearly all the patients were between the ages of 18 and 25. The youngest was 16, and two only were over 30. Nine- teen of the women resided in Brighton or its neighbourhood, and the same number were in domestic service, including two cooks, two nurses, one laundry and one stillroom maid. Brighton houses are much crowded together, especially in the older and more valuable parts of the town; and herein we shall find several probable factors in the causation of chloremia. The buildings are lofty, the stairs are steep, and the living rooms of the servants are generally below the surface of the ground, and consequently often dark, damp, and ill-ventilated. As to the effect of constant stair- climbing upon the circulation in this disorder I shall write further on. The relative value of the remaining factors in its causation will be here considered. If we divide the year into six-monthly periods at the equinoxes, we shall find chloremia more prevalent during the half-year including the winter solstice than it is in summer time. In the cases we are at present considering twenty, or 80 per cent., were admitted between the months of October and March inclusive. My colleague, Dr. A. J. Richardson, in a paper read before the local Medico-Chirurgical Society,[2] found that the maximum number of cases of chlorosis was reached among the out-patients in January, and the minimum in July, and he draws attention to the occurrence of the maxima and minima of tem- perature and of actinic activity of sunlight in these months. De- ficient sunlight, by favouring the existence of dampness and its concomitants, may indirectly assist in the production of this dis- order, but that it does so directly I do not believe. In order the better to ascertain how far exposure to bright sunlight affected patients suffering from chloremia, several of those placed under my care were for the first week of their stay placed in a bright and airy ward on a light diet, and confined to bed. No other treatment was resorted to, if we except the subjective effects of small doses of coloured water. The percentage of hæmoglobin was estimated on their admission and at the end of the first week. The gain in the amount of hæmoglobin—for there invariably was a slight gain under these conditions—was compared with that of corresponding periods in the after-treatment of the case. The greatest recorded increment under these circumstances was 2 per cent. Under treatment with suitable ferrous salts a similar im- provement has been noted in twenty-four hours. I do not, there- fore, consider that we shall be justified in ascribing any extensive influence to the direct action of sunlight. On the other hand, dampness and deficient ventilation in the living rooms probably assist in promoting this disorder; these objectionable features are always exaggerated in winter, when doors and windows are tightly closed. Absence of regular exercise in the open air will of course favour the malign influence above mentioned; and among the classes from which the present cases were mostly selected, outdoor exercise was rarely obtainable in winter. I imagine that insanitary conditions, exaggerated at certain periods of the year by want of sunshine, will sufficiently account for the cyclical variation observed in statistics of this disorder. I do not think that a low atmospheric temperature *per se* conduces to the development of the affection, or we should expect paupers who are most unfavourably placed for resisting climatic influences of this description to be more frequently affected than domestic servants, who for the most part are fairly well tended in this re- spect; but this is not the case. Among Dr. Richardson's patients laundry hands were the most numerous, and in my own experience domestic servants. Most observers admit that the disease is least common in the lowest stratum of society, and this immunity of its members may be secured by enforced activity in the open air.

Although there was slight actual arthritis with acid perspira- tion in only two cases during stay in hospital, the rheumatic dia- thesis and rheumatic family history were common to many patients. As will be more fully detailed elsewhere, attacks of tonsillitis and of phlebitis were among the most frequent compli- cations. Erythema nodosum made its appearance in one case, and there was a history of chorea in another. By rheumatic diathesis

though deprecating the unnecessary introduction of new words into ific language, I think that I am justified in offering the word "chloremia" bstitute for the clumsy and inaccurate terms and paraphrases which have this purpose heretofore. Why medical writers have not adopted this efore now (for many have doubtless thought of it) instead of those com- in use is possibly from a mistaken idea that χλωρός means green. The at chlorosis, one form of chloremia, is still known as the "green sick- gives colour to this supposition. Χλωρός, although associated frequently oung and budding plants, does not denote any particular colour, but the light reflex observable especially on pale viscid substances. Hesiod 3, χλοερὸς ὄζος) applies the term to a young bud; some shoots in early , those of the horse chestnut, for instance, are remarkable for their glisten- pearance. In a fragment of Pindar (148, Donaldson's ed.) the poet speaks of the Lapithæ as thrashed with glistening pine rods (χλωραῖς ἐλάταισι), shoots of conifers often sparkle with terebinthine exudation. Homer the epithet twice (*Il.* 11, 631, and *Od.*, 10, 234) to honey; and Sophocles and χλωρόν (*Ajax*, 1064). In another fragment of a drinking song Pindar : τᾶς χλωρᾶς λιβάνου ξανθὰ δάκρυα, golden tears of the glittering frankin- He also mentions the pale glittering dewdrops (*N.* 8, 69). Sophocles applies the term to pallid blood, the result of investment with a poisoned *Trach.*, 1055). Finally, Thucydides, in a description of the symptoms of stilence which broke out in the second year of the Peloponnesian war 49) places χλωρὸν σῶμα, in opposition to ὑπέρυθρον, flushed, and πελιτνόν, Here I take the expression to mean a sallow skin bedewed with sweat. The quotations will sufficiently show that in the word "chloremia" we have which expresses the colourless appearance of the blood in this disorder onsiderable accuracy. By omitting an aspirate and a diphthong in the of the word chloremia a clumsy Grecism is converted into a neat and eable epithet.

[2] JOURNAL, 1889, vol. i, p. 1061.

I do not wish to imply that these patients seemed to be peculiarly liable to attacks of acute rheumatism, because it was not the case.

Symptoms.—As the symptoms of idiopathic chloremia have been repeatedly described by previous writers, and are for the most part sufficiently well known, I shall only briefly allude in the following paper to the more striking symptoms of the disorder, whilst I propose giving a detailed account of the less known phenomena associated with its incidence. Extreme breathlessness on exertion was a general and distressing symptom. It was accompanied with pallor rather than lividity of the face. The respiratory rate was usually somewhat accelerated; in twelve of the cases it was 24 and upwards. On the other hand, physical signs denoting lung mischief, either acute or chronic, were rarely present. In one case only did slight basal pneumonia complicate matters for a few days; in three others the apical expiratory sounds were somewhat prolonged and harsh. On the other hand, a short dry cough was common. The pulse also was rapid, and readily accelerated. The rate was upwards of 100 in more than half the cases, twenty-four hours after admission. The arterial tension was notably increased in five of the women. The radial was, however, usually soft and compressible. Palpitation was a common and distressing symptom, occurring, associated with dyspnœa, upon the least exertion. The superficial veins were readily distended, and their coats flaccid. Well-marked episternal pulsation was noted in seven cases. The venous hum, called *bruit du diable*, was by no means constant. During their stay in hospital, four patients had more or less extensive thrombosis of the veins of the lower limbs; and in one a clot blocked the right femoral vein throughout.

There were usually evidences of some downward and outward displacement of the heart's apex, which in about half the cases beat on admission in a line with the left nipple. The heart's sounds were altered in character in 23, or 92 per cent. of the patients. The murmur was systolic in nearly every instance, and the point of loudest intensity was, with few exceptions, in the second left costal interspace, about an inch from the junction of the third cartilage with the sternum; this position corresponds closely to the auricular area of Naunyn and Balfour, and it lends some colour to the latter's theory as to the causation of the *bruit*.[3] The murmural area was extensive; as a rule, it frequently included the præcordial, left scapular, and episternal regions, and the *bruit* was occasionally heard along the large vessels at the root of the neck. In character the murmur varied from a soft and blowing hum in a few cases, to the rough and harsh twang of the many. Creaking, leathery sounds were rarely heard over the area of the aortic valves. These were readily mistaken for pericardial friction sounds; they were, however, speedily amenable to general treatment and to rest in bed, and were not followed in either of the two instances that came under my notice by any sequelæ pointing to the presence of inflammatory products within the pericardial sac. Whether this to-and-fro, leathery creak is simply "hæmic" or due to some abnormal condition of the fibrous structures at base of the heart, or to other causes, I cannot determine; but I do not imagine it to be inflammatory in origin. The heart's impulse against the chest walls was mostly diffused and heaving, a further evidence of some dilatation of the right cavities to that already given. I believe that this condition of the heart is aggravated in domestic servants by much stair-climbing. Œdema of the ankles was an occasional symptom; it was associated with reduplication of the second sound over the aortic area and increased arterial tension in one case, but without kidney complications apparently.

The blood was repeatedly examined in twenty cases, and the percentage of hæmoglobin carefully estimated by Mr. Hodgson with a Gowers's colour test apparatus. This constituent was found to be below a healthy standard in every instance. In nineteen patients at some part of their sojourn in hospital, the hæmoglobin, so tested, did not approach within 50 per cent. of the normal amount; and in nine it did not reach 25 per cent. The lowest estimate was 12 per cent. in one of these patients. The red corpuscles were also diminished in number, in one case only to the extent of 50 per cent.; usually they were between 70 and 80 per cent. of the health number. Their aspect was frequently abnormal. Bodies with irregular outlines, crenated edges, and granular contents were often visible. It is doubtful, however, how far these appearances were produced by the reagents (sod. sulph. gr. civ, acid. acet. ♏ lx, aq. ʒ vi) used to dilute the serum, and by other abnormal conditions associated with the exposure of a drop of blood on a microscopic slide. Repeated investigation showed clearly that in any particular blood sample the amount of hæmoglobin was not entirely dependent on the percentage of red corpuscles which were in it. For example, the blood sample above mentioned, which was estimated to contain only 12 per cent. of hæmoglobin, had 56 per cent. of red corpuscles; whilst another specimen, containing a percentage of 22 of the former constituent had 50 per cent. of red corpuscles. In two cases only, one of which had lymphadenomatous tumours in the groin, were the number of leucocytes increased per hæmic unit. In seven cases the spleen was easily palpable, and was tender on pressure. These symptoms subsided after awhile in each patient. The thyroid body was enlarged in one, and she was suffering from exophthalmos also.

Anorexia and parched lips were common at the height of the disorder. The mucous membrane of the mouth was pale, and the appearance of tongue was variable. The tip and dorsum were often redder than was the rest of the buccal membrane. Five of the patients had acute tonsillitis whilst they were in the hospital; one had had previous attacks of this malady. Pain and tenderness in the region of the stomach after solid food was an early and persistent symptom in the majority of cases, and nausea and vomiting were frequent. Moderate constipation, that is to say when the bowels are naturally relieved every third or fourth day was the rule among these patients, as, I believe, it is amongst the majority of young women at their ages. Some few cases of extreme irregularity of the bowels, with obstinate constipation, were met with, but these were by no means the most severe cases of chloremia also. Autoinfection from retained fæcal matter is not commonly productive of this blood disorder, else it would doubtless be far more prevalent than it is. In the urine of eight patients there was a "faint trace" of albumen on admission; this disappeared after awhile. The specific gravity varied from 1007 to 1030. Sugar was never detected. The lymphatic glands were notably enlarged in one woman. The liver was rarely altered in size apparently, and bile was not found in the urine, yet the complexion was often sallow.

Menstruation was regular in nine cases. There was more or less irregularity in the remainder. Amenorrhœa of from two to six months' duration before admission occurred in six cases. The catamenia were usually scanty, and frequently associated with leucorrhœa.

Patients admitted with simple chloremia generally stated that they had been in failing health for some months previously, suffering from lassitude, breathlessness on exertion, and loss of memory. They had a dull, heavy look, answering questions slowly, and, although not actually deaf, the hearing was in most cases obtuse. Headache was frequent, and usually frontal. Hyperæsthesia of the skin was a common symptom. The knee-jerk was, as a rule, not conspicuously affected; occasionally it appeared to be somewhat intensified. Dilated pupils, with sluggish reactions, were observable in many cases. Pallor of the conjunctiva and of the fundus, with dilatation of the discal veins, was also common. In one case only did I perceive any hæmorrhages, blurring of the edges of the disc, or other signs of papillitis. My colleague, Dr. A. Richardson, however, had a case wherein the inflammatory condition was well marked. I believe that such cases are rare. Many of the girls were hysterical, and had neurotic personal history. The unstable condition of the pulse rate, and the ease with which it was accelerated, possibly bespoke a functional change in the cardiac nervous cycle.

In every case, with one exception, the bodily temperature rose to 99.0° F. and upwards during the height of the attack. The thermometer registered in two-fifths of the cases from 100° to 10[illegible] at least once during the stay in hospital. The pyrexial state rarely exceeded thirty-six hours, and it seldom recurred in uncomplicated cases after the usual routine of dietary and treatment had fairly commenced.

Treatment.—No drug in my own experience, which is not by any means a small one, is so valuable for the treatment of idiopathic chloremia as carbonate of iron, and the powder saccharate, freshly prepared, gave the best results. It should be given after meals in drachm doses, three or four times daily. I have repeatedly observed that the hæmoglobin was increased 20 per cent. and upwards in the course of a week of this treatment, with a corresponding amelioration of all the symptoms. When the stomach is irritable, patients sometimes experience some nausea at first after taking the powder. This disagreeable symptom usually subsides when two or three doses have been administered. If it does not do so the iron may be given with advan-

[3] *Lancet*, 1877, ii, p. 385.

e in an effervescent saline draught, the powder being added just ore it is swallowed. Under this treatment the smaller the per- tage of hæmoglobin, and the greater the requirements of the tem at any given time for the iron salts, the more rapidly were y apparently assimilated. For the first week after admission ain of 20 per cent. of hæmoglobin was not unusual. As the entage of hæmoglobin in the blood increased under the ad- inistration of iron, the weekly improvement was more gradual. en the hæmoglobin was within 50 per cent. of the standard ntity the weekly gain never exceeded 10 per cent. Above 60 cent. the hebdomadal improvement was still less marked, until rcentage of 80 was occasionally obtained, beyond which treat- it failed to produce appreciable change in the blood consti- its. Hæmoglobin contains between 0 4 and 0 5 per cent. of and it is therefore theoretically correct to administer iron salts n it is deficient in quantity. In addition to other advantages large doses of iron administered in most cases sufficiently ulated the bowels without the assistance of purgatives. When obstinate constipation an occasional aperient was necessary, -drachm doses of the liquid extract of cascara sagrada at bed- were given. Coincidentally with the marked improvement ne colour of the blood there was a small increase in the per- age of red corpuscles. It was, however, apparent that in this rder, besides the loss of a certain number of these bodies, there an actual blanching of the remainder. When from inflam- ory complications the temperature continued for a period e the normal, the improvement in the health of the patients less rapid, but none the less certain. In the case of lymphoma in that of incipient Graves's disease above alluded to, treat- t did not raise the percentage of hæmoglobin much beyond 50. e medicinal treatment was in every case supplemented by ral days' rest in bed; during this period the patients were d on a low diet, consisting usually of three pints of milk, one eef-tea, and custard pudding. Subsequently, on getting up, mostly had fish diet.

JSATION OF REDUCED ARTERIAL TENSION, ETC., BY MERCURY.

By A. HAIG, M.D.Oxon., F.R.C.P.,

cian to the Metropolitan Hospital, and to the Royal Hospital for Children and Women.

now well known that one of the effects of calomel taken in lly is to very greatly increase the flow of urine. This was ght prominently forward by Jendràssik in an article in the *sch. Archiv für klin. Med.*, April, 1886. It is also well known it increases the urea, and it has been argued by several rs[1] that the excess of urea is the cause of the diuresis. I presently, however, attempt to give a different explanation. s further been shown by Dr. Broadbent, in his most interest- roonian Lectures of 1887, that mercury (calomel or blue pill) s arterial tension, and is most useful in many conditions as- ted with high arterial tension. Since I have become inte- l in the action of uric acid on the arterial tension[2] the way hich mercury produces these effects has seemed to me to be ry great importance, for it seems to me that calomel acts in natter just like other drugs, about which I have previously en, and when it reduces the amount of uric acid in the urine n the blood it produces at the same time a fall of arterial on and a feeling of bright mental activity and well-being, as liaphoresis, diuresis, and increased flow of saliva; and to at- t an explanation of its mode of action is my object in the nt paper.

. 1 shows the result of one of my first experiments with el, made several years ago. On day 1.—Uric acid is above and the amount of urine was 1,300 centimètres: on days 2, nd 5, $\frac{1}{10}$ grain of calomel (finely divided) was taken four in the day.

day 2 uric acid is brought down to the level of the urea, h, as urea and acidity have fallen, one would have expected of uric acid; and this is one of the peculiarities of calomel, s fall of uric acid is apparently not produced by any effect idity. On day 3 there is a rise of urea due in part, I think, to the action of calomel, and partly due to some extra exercise on days 2 and 3. Uric acid is a long way below the urea, which is, I think, the effect of calomel, some of the uric acid formed being, as I have suggested, converted into urea.[3]

The urinary water has run up to something over 2,300 centimètres, a very marked diuresis; and this occurs on the second day of the action of calomel—a fact noticed by Jendràssik, who, however, used much larger doses than I have.

On day 4 there is still considerable diuresis, and uric acid is still below the urea, which, however, has fallen considerably.

On day 5 there was a further fall of all curves, but uric acid is still below urea.

On day 6 there is a change. Three-fifths of a grain of calomel were taken in the day. There is a slight rise of urea, but a fall of acidity, and the bowels were relaxed. With this there is a sharp rise of uric acid, which exceeds its natural relation to urea by something over 3 grains.

On day 7 there is a rise of urea and acidity, and uric acid is somewhat nearer urea, though still high above it, and the bowels are still relaxed. Exercise probably accounted for the rise of urea.

It is interesting to note that on days 6 and 7 there was no rise of urinary water. In spite of the rising urea, it continued to fall. If, as some would say, the rise of urea was the cause of the diuresis on day 3, why was there no diuresis on days 6 and 7?

Some might say that the bowels being relaxed, so much water was removed by purgation that none was left for the kidneys to excrete; but this was not the case as regards Fig. 1, as the bowels were simply relaxed, and on only one day (7) did they act twice, but there was no purgation sufficient to remove any appreciable quantity of water.

There is another action of purgation which has been noticed by previous observers, namely, that calomel being very insoluble, any increase of peristalsis may cause the sweeping out of much of it, and interfere with its absorption, so that there is here possibly another explanation of the effects obtained on days 6 and 7 in Fig. 1.

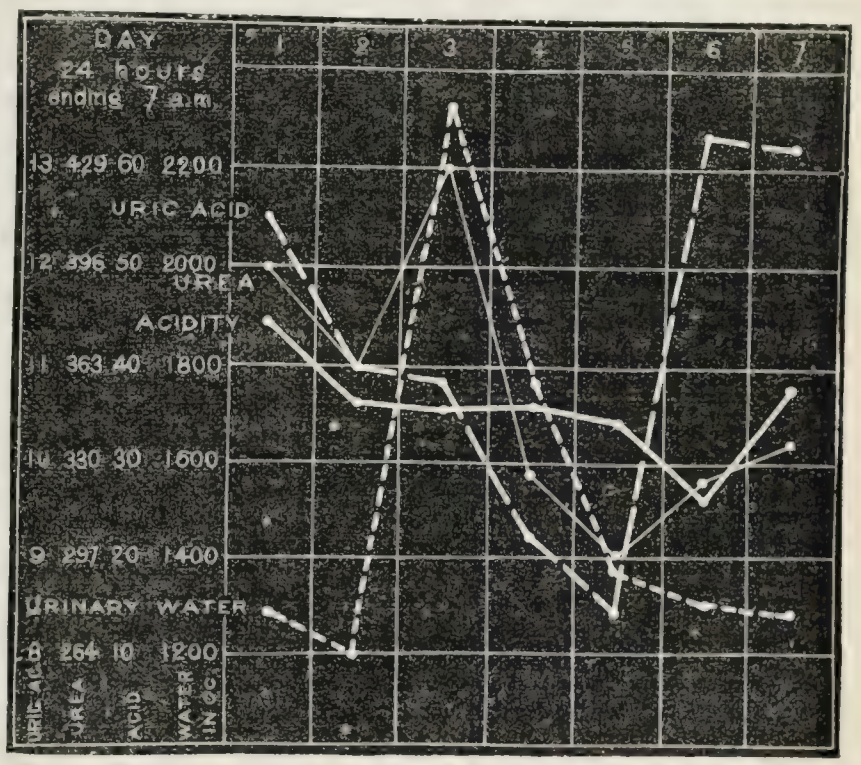


FIG. 1.—Days 1 and 7, no drugs. Days 2, 3, 4, 5, $\frac{1}{10}$ grain calomel four times a day. Day 6, $\frac{1}{5}$ grain calomel three times a day.

In regard to this point, I have always been careful to take the small doses used in a state of fine division, so as to facilitate absorption, hence probably my comparatively important results.

It will, I think, be apparent later on that the different position of the uric acid on day 3, as compared with days 6 and 7, gives us the key to the cause of the presence or absence of diuresis; on day 3, with low uric acid, there would be low arterial tension, and on days 6 and 7, with high uric acid, high arterial tension.

Fig. 2 shows again the effect of a small dose of calomel, but here we are dealing with the excretion of uric acid, urea, and urinary water from hour to hour.

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e, *Practitioner*, vol. ii, 1886, p. 170; and Mitchell Bruce, *Yearbook of Treatment*, 1886.

[2] JOURNAL, vol. i, 1889, p. 291.

[3] See "Formation and Excretion of Uric Acid as Elucidating its Action in the Causation of Disease," Wood's *Medical and Surgical Monographs*, February, 1890.

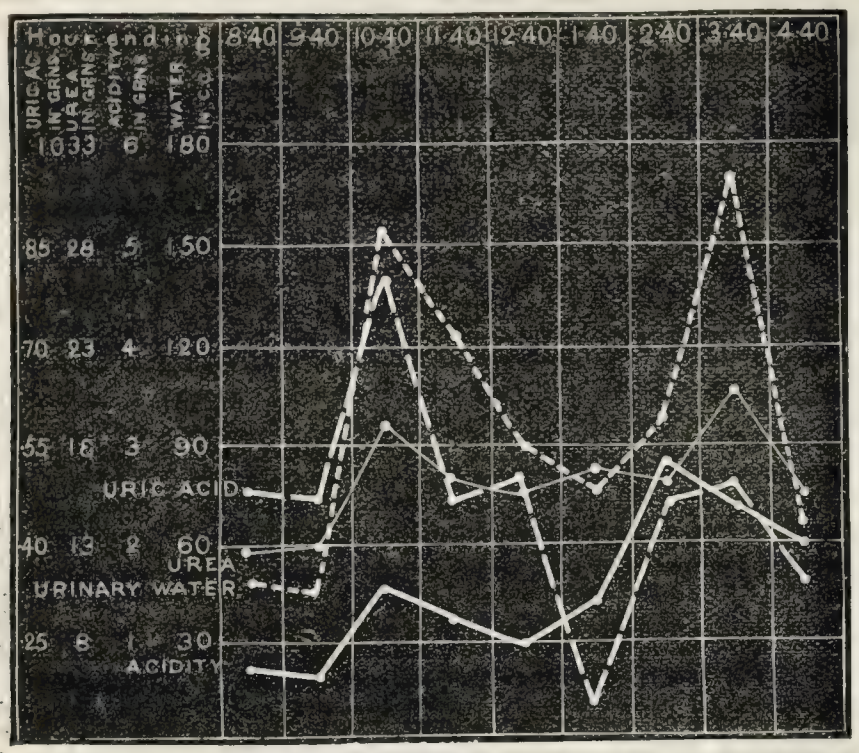


FIG. 2.—9.40 A.M. breakfast ended, and ½ grain calomel taken. Lunch ended 2.5 P.M. Total urinary water 876 cubic centimètres. Total urea 151 grains. Total uric acid 4.32 grains. Relation of uric acid to urea 1 to 35.

The result, however, is practically the same as over the longer periods of Fig. 1. In the second hour after the dose of calomel the uric acid falls below the urea, and practically stays there all the rest of the day; there is a well-marked rise in urea, and some rise in acidity, though I doubt if this is sufficient to account for the whole diminution in the excretion of uric acid. The amount of urea in the hours from 7.40 A.M. to 4.40 P.M. is 151 grains, uric acid 4.32 grains, relation of uric acid to urea 1 to 35, amount of water 876 cubic centimètres.

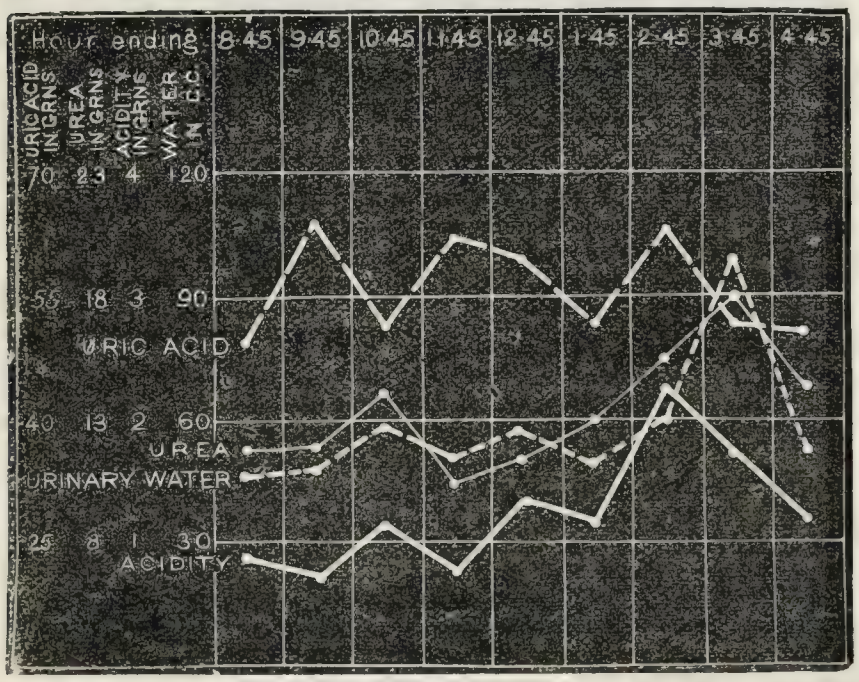
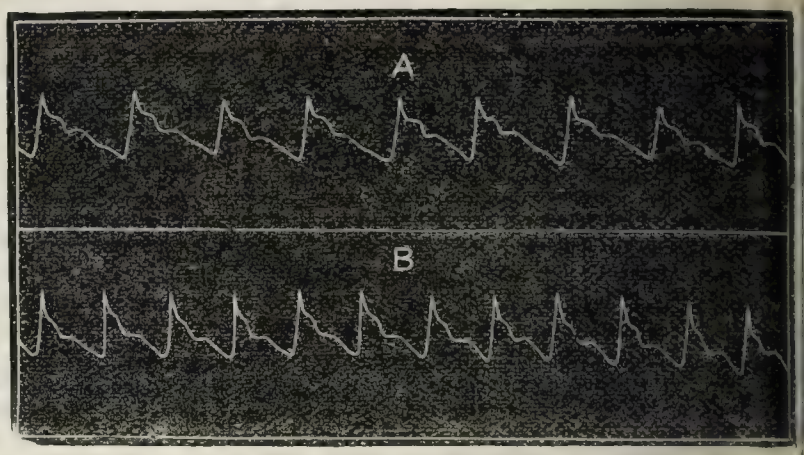


FIG. 3.—Breakfast ended 9.50 A.M. Lunch ended 2.10 P.M. Two and a half miles sharp walking 3.0 to 3.45 P.M.; perspiration, and low tension pulse after walk. Total urinary water 527 cubic centimètres. Total urea 118 grains. Total uric acid 5.0 grains. Relation of uric acid to urea 1 to 23.6.

We now come to Fig. 3, which is a curve of these excretions in the same period of another day, only this time no calomel is taken, and the difference is at once apparent.

I may say that my experience leads me to believe that Fig. 3 represents an almost absolutely normal excretion for the hours concerned; as is natural, the morning acidity is low (alkaline tide of Sir W. Roberts), and as a result, uric acid is above urea the whole time. Urinary water is low, and the only time it runs up at all is at 3.45, when for a moment uric acid is below urea. Total urea of these hours is 118 grains, total uric acid 5 grains, relation of uric acid to urea 1 to 23.6, that is, the ordinary plus excretion of the alkaline tide. Total water 527 cubic centimètres, as compared with 876 centimètres in the same hours under calomel.

With regard to pulse tension it will, I think, be sufficient if I give two traces in Fig. 4, A, taken during the plus excretion



uric acid in Fig. 3 and B, taken during the minus excretion of uric acid under calomel, Fig. 2; the difference is fairly marked but the reduction of tension by calomel is already well known.

Fig. 5 is another control experiment, and represents the urine

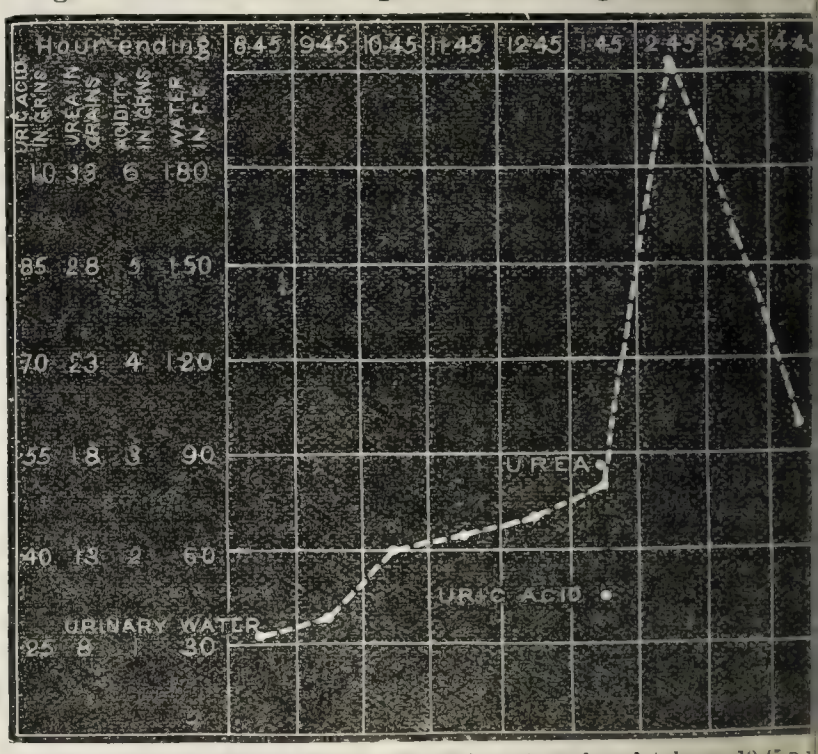


FIG. 5.—Breakfast ended 9.45 A.M. and ½ grain calomel taken. 12.45 P.M. Saliva freely excreted; perspiration easily induced. Lunch ended 1.3 P.M. Forty minutes walking, 3.5 to 3.45 P.M. Urinary water in 9 hou 798 cubic centimètres. Urea of whole 24 hours 304 grains. Uric acid whole 24 hours 7.4 grains. Relation of uric acid to urea 1 to 41. U nary water of 24 hours 1,800 cubic centimètres; of previous 24 hours 9 cubic centimètres.

water on the same hours of another day after a similar dose calomel to that taken in Fig. 2. The periods of diuresis vary somewhat, probably from unintentional variations in the amount fluid taken, or rather in the time in which it was taken; but water in the corresponding nine hours was 798 cubic centimèt as compared with 876 cubic centimètres in the other calomel F and 527 cubic centimètres in the normal curve Fig. 3. In the h ending 1.45, Fig. 5, the uric acid and urea were also estimated, the uric acid is seen to be a good way below urea as it was in previous calomel curve Fig. 2, and differing in this respect marke from the same hour in the normal curve Fig. 3, which show plus excretion.

Again, the total urea of the twenty-four hours on the day fr which Fig. 5 is taken was 304 grains, uric acid 7.4 grains, relat of uric acid to urea 1 to 41, so that the calomel had here brou uric acid below urea just as it did on several days in Fig. 1. urinary water on this day was 1,800 cubic centimètres agai 900 cubic centimètres on the previous day, when no drug taken.

The facts then seem practically constant, and I have m curves showing much the same thing as those I have given, s of them obtained several years ago. But, like most other dr

effects of calomel are only constant under the same conditions. r instance, it cannot cause diuresis when the system is in want fluid; but when a dose of calomel has been taken, and has re-ced the arterial tension, any fluid that is then swallowed will s out in all directions in the urine, sweat, and saliva, all these retions becoming at once more copious and more fluid. On the er hand, when arterial tension is high and the vessels contracted, ter taken is retained in the body often for many hours, and the ne, perspiration, and saliva are alike scanty. But I shall have ny facts with regard to these matters to bring forward in a ure paper.

The points of greatest interest at present lie rather in the ex-nation which these facts afford us with regard to the question, w does the action of calomel on the excretion of uric acid bear the lowering of arterial tension, which it is known to produce? v does it help to explain the diuresis, which is equally well-wn, and is plainly visible in the above figures?

n a paper on uric acid and arterial tension in the JOURNAL, , vol. 1, page 291, I have said, "I conclude from the facts, e of which I have given in this paper, that *cæteris paribus* rial tension varies with the amount of uric acid that is circu-ng in the blood"; and I also remarked that excess of uric in the urine above the relation to urea of 1 to 33 may egarded as an index of some excess of uric acid in the blood. follows from this that calomel which reduces the amount of acid in the urine reduces it also in the blood, and will con-tently lower the arterial tension, which it is well known to do. ne action of calomel in regard to arterial tension is thus seen e a single instance of a general law: that all substances which ce the amount of uric acid in the blood lower arterial tension. ith regard to diuresis, I believe the same may be said, that again the action of calomel is only an instance of a general rule. would lead me too far to give all the facts and figures in my ession, which I believe are quite sufficient to prove this; but nwhile I will merely say that, so far as I know, all substances h diminish the excretion of uric acid and its amount in the d, thus bring about a reduction of arterial tension, and cause ne same time diuresis. This is, I believe, the explanation of copious flow of pale urine, which it is well known often fol-an attack of migraine (uric acid headache); here, as the uric is driven out of the blood by acids, opium, etc., and the head-is cured, there is a very great reduction of arterial tension, diuresis is the result.

e same is seen after some attacks of epilepsy, and has been ed recently by M. Féré,[4] and I believe this is due to the same as in the case of the headache.[5] A similar diuresis has also noticed by Dr. Buzzard in his most interesting address to the eian Society[6] as occurring in some cases of vertigo, and I d quite agree with him that this vertigo may in some cases e to excess of uric acid in the blood.

e well-known diuresis and diaphoresis of opium admits, as now be seen of a similar explanation, as I have pointed out t reduces arterial tension by driving uric acid out of the .[7] It may be interesting to note here that Jendrassik has ed out that opium may be given to relieve the intestinal produced by large doses of calomel, and that it in no way eres with the diuresis; I think that any one who will look paper on opium above referred to, will have no difficulty in g why this should be the case.

thus see that calomel, like acids, opium and other drugs which uric acid out of the blood, produces a fall of arterial ten-nd diuresis, and it also occasions those bright and happy l conditions which are I believe in most cases the result, as s the sign of relief from high arterial tension and its effect circulation of the brain; and I have heard of a man who ually takes a dose of calomel to clear his brain for work, s so many take opium in one form or another for the same e.

impression is that the action of calomel in this matter as ls uric acid is a twofold one, its first effect is I think to n metabolic processes, especially in the liver, and to con-certain amount of uric acid into urea. (A conversion the ence of which I previously suggested in a paper on the in-e of acids and alkalies on the excretion of uric acid, *Journal of Physiology*, vol. 8, p. 216); and this results in a rise of urea and acidity; the diminished uric acid in the urine and blood being partly the result of conversion into urea, and partly the result of retention by the rising acidity, and that there is some retention is at least probable from the high rise of excretion on days 6 and 7, Fig. 1, when calomel was causing relaxation of the bowels and a fall of acidity.

The acidity however is apparently distinctly raised by calomel when it does not purge, for the acidity of the calomel day in Fig. 2 is 13.7 grains, and on the normal day, Fig. 3, 11.2 grains for the same hours.

I am not however so much concerned with the exact explanation of this action of calomel, which I have no doubt will be much elucidated by further experiments, as with the fact that it does diminish the uric acid in the urine and the blood, and thus comes into line with acids, opium and other drugs about which I have written, all of which having a similar action on uric acid have also a similar action on pulse tension and the flow of urine.

One of the most interesting confirmations of the truth of what I have been saying with regard to pulse tension and diuresis, is to be found in the careful experiments of Dr. Lauder Brunton. On the action of drugs on the excretion of the kidney,[8] as he shows that both with digitalis and with erythrophleum, when the blood pressure is at its highest, the urinary water is at its lowest, and he gives a diagram showing this, and also that when the effects of the drug are coming to an end, the fall of blood pressure is accompanied by copious diuresis.

This is precisely what I have found with uric acid, whenever by acting on uric acid I raise arterial tension I at once diminish the urinary water watched from hour to hour, or ten minutes to ten minutes, as in Dr. Brunton's figure just referred to, and conversely when by driving uric acid out of the blood and urine I lower the arterial tension, I at once increase the urinary water, and the increase is very commonly a large one, as for instance a rise from 53 cubic centimètres in one hour to 234 cubic centimètres in the next, no fluid having been ingested since the previous evening, some nine hours before the beginning of the experiment. This was a result I obtained on one occasion by lowering the tension with a small dose of opium.

It seems, then, that high tension means, as I have long believed that it does, contraction of all the peripheral arterioles, those of the kidney among the number, with consequent diminution of the urinary water; thus, we see that in periods of high tension water that would otherwise be excreted is held back in the body, and when the tension falls the kidney arterioles are relaxed and it at once passes out in full stream.

I would not like to assert that excess of urea in the blood does not cause diuresis, and as a matter of fact I know that in the excretion of urine from day to day any large rise of urea is almost sure to be accompanied by a rise of acidity—the acid and the urea coming, I suppose, from the same source—and the rise of acidity drives the uric acid out of the blood and urine, thus reducing arterial tension and promoting diuresis, but this is at best an indirect action. On the other hand, however, it appears to me that, even if one admits that urea does cause diuresis, one is still far from being able to explain all the facts of the case. What, for instance, is to be said about the diaphoresis and increased flow of saliva which accompany the diuresis? Will excess of urea in the blood explain them?

Is not the dry mouth accompanying a uric acid headache well known? I at least have had plenty of experience of it, and there is no doubt as to the high tension which accompanies it. Again, is not the diaphoresis of opium as well as its diuresis in evidence? do they not occur along with relaxed arterioles and low tension? and, conversely, are not the headache depression, dry mouth, and scanty urine which follow on the morning after a dose of opium described in every textbook? and is not the pulse which accompanies them one of high tension?[9] It seems to me that contraction or relaxation of arterioles is adequate to explain all the facts —that this will account for the alterations of all the excretions, which, so far as I know, occur together, and that the condition of the arterioles, as I previously said, depends *cæteris paribus* on the amount of uric acid in the blood.

It thus appears to me that the action of mercury in reducing arterial tension and producing diuresis can be fully and completely explained by its action on uric acid.

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[4] *Progrès Medical*, vol. ii, 1888, p. 452.
See my paper in the *Neurologisches Centralblatt*, March 1st, 1888.]
[6] *Lancet*, vol. i, 1890, p. 179.
y paper the Influence of Opium and Morphine on Uric Acid, JOURNAL, November 30th, 1889.

[8] *Pharmacology and Therapeutics*, p. 377 and elsewhere.
[9] See my paper on Opium, JOURNAL, November 30th, 1889, Fig. 3.

A CASE OF MULTIPLE TUBERCULAR TUMOURS IN THE BRAIN OF A CHILD AGED SEVEN AND A HALF MONTHS; WITH REMARKS.

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The case which is now to be recorded occurred in the private practice of my friend Dr. Alexander Morton, of Crosshill, to whom I am indebted for a careful account of the clinical history. While agreeing in most of its details with the descriptions usually found in the books, the case is at the same time worthy of record on account of the very early age at which an advanced tuberculosis of the brain became developed. Henoch[1] states that among fourteen of his cases "there were twelve between 9 months and 2 years of age," and he points out that "the assertion of Rilliet and Barthez that this disease is never observed before the third year, is to be explained by the circumstance that these authors only saw children over 2 years of age in their hospital." Ashby and Wright,[2] in their section on tumours of the brain, while not committing themselves to any specific statements as regards age, write as follows: "No age is exempt; tubercular tumours have been found in infants a few months old, though they are more common somewhat later." Eustace Smith,[3] referring to the opinion already noted that cerebral tuberculosis is rare under 2 years of age, states his belief that "the occurrence of the disease in infants is more common than has been supposed;" and he supports his opinion by recording two cases in which tubercular tumours were found *post mortem*, at the ages of 12 and 6 months respectively. Adolf Baginsky,[4] while acknowledging that the rule is to find the disease during childhood, refers to three of his own cases, in which the ages were 7, 11 and 18 months respectively, the two latter having been verified by *post-mortem* examination. Steffen[5] of Stettin, in discussing the age at which cerebral tumour is likely to occur, remarks that during the first year of life the number of cases is generally small, and confined, with the exception of a few cases of sarcoma, to tubercle. Most writers on cerebral tuberculosis make mention of the remarkable case recorded by Demme,[6] in which a tumour the size of a hazel nut was found in the brain of an infant aged 23 days, whose mother suffered from tuberculosis. In this case the disease must have commenced during intrauterine life.

From this short analysis of opinion with regard to the question of age, it will be seen that it is at least uncommon to find cerebral tubercle showing itself before the fifth month of extrauterine life.

Clinical History by Dr. Alexander Morton.—J. McN. was born of healthy parents on March 26th, 1889, and was to all appearances a perfectly healthy child. She became plump and strong, and continued to thrive until she was about five months old. About this time she was pitched out of her cradle by an older child and fell on her head, but her mother declares that it was not a severe fall, nor did she cry much in consequence. A few days afterwards she was vaccinated with calf lymph and seemed perfectly well, but nothing was said by the mother about the fall. Three weeks later—namely, on September 20th, 1889—she was brought to me that I might see her arm and sign the vaccination paper. I at once observed that there was something wrong with the child; she seemed dull, heavy, and listless. The right side of her face was quite expressionless. There was occasional nystagmus and squinting. The right pupil was distinctly smaller than the left, but contracted equally with the other on exposure to light. I found on inquiry that for several days previously she had been observed to put her hand to her right ear, and was inclined to rub that side of her head against the shoulder of anyone who held her. For some days afterwards she remained in ver much the same condition, only that she seemed to suffer mor pain than before, especially in the neighbourhood of the right ea As the pain increased daily, and as the membrana tympani wa very red and inflamed, Dr. James Erskine punctured the drum but nothing save a few drops of blood came. The puncture ap peared to give some relief, however, but only temporarily; th child did not cry so constantly or so piteously as before. Abou this time paralysis of the orbicularis came on, so that the righ eye remained permanently open. The left arm and left leg woul at one time hang quite limp and apparently paralysed, and a another become rigid. The anterior fontanelle was slightly de pressed at first, but latterly the depression became very marked

Dr. Gemmell saw the child on October 9th, 1889, three week after its illness commenced. Although it had by this time re fused the breast, and would take nothing but a little port-win and sherry whey, it had not lost flesh much, so that Dr. Gemmel was hopeful that there might be no tubercular mischief, and th the symptoms might in course of time pass off. The preci cause, as well as the nature, of the mischief in the brain was, admitted, obscure, and at this time there was nothing abnorm to be found in the chest or abdomen. About a week afterwar a cough started and continued, sometimes very severe and pe sistent, until about twenty-four hours before her death, thr weeks later. Only a few moist *râles* were to be heard in t chest, scattered over both lungs. During the last fortnight of h life she was only slightly sensible, and could swallow very litt Cheyne-Stokes respiration was observed from time to time. T abdomen became latterly very much retracted and depresse The bowels were moved daily without much trouble. The ch had vomited but once, and that before she came under my noti Death took place on November 9th, 1889.

Post-mortem Examination.—A day or two later, at Dr. Morto request, I made a *post-mortem* examination, of which the follo ing is an account: The body was much wasted, and presented t usual appearances of infantile atrophy. The dura mater was firm adherent to the internal surface of the calvarium. The cereb tissue was somewhat soft, and the surface of the convolutions w rather intensely injected. On removing the brain, it was fou to be the seat of multiple caseous formations, which, in some stances, had broken down into a greenish granular semi-fl material. The tubercular nodules, which varied in size fro small pea to a large hazel nut, were found chiefly in the follow situations: 1. In the pons Varolii two nodules, one on either s of the middle line, that on the right side being the larger of two. 2. A nodule about the size of a split pea in the left lobe the cerebellum on its under surface. 3. A nodule the size o hazel nut in the upper and anterior portion of the cerebell where it formed the anterior extremity of the roof of the fou ventricle. 4. Nodules, each not less in size than hazel nuts, w also found in the left optic thalamus, and in the floor of the fou ventricle. Several very small nodules were also found in differ parts of the cerebrum, there being no fewer than six tumo of considerable dimensions, as detailed above. The lateral v tricles were much distended, and contained a large quantity clear fluid, which escaped during removal of the brain. The me branes and vessels at the base of the brain were normal. T lungs, with the exception of one point at the junction of upper and middle lobes of the right, were quite non-adherent. this point, however, a caseous ragged cavity, capable of holdin small walnut, was opened into. The lungs generally were be with small, opaque, hard, caseous tubercles, which were easily projecting through the pleural surface, and which presented the characters of chronic miliary tuberculosis. The lymph glands surrounding the bifurcation of the trachea were found be much enlarged and extensively caseous. Some of them w very intimately related to the walls of the great veins of region. Under the microscope the usual appearances of case tubercle were discovered, with here and there traces of c mencing calcareous infiltration. The heart presented a nor appearance. The liver, kidneys, and spleen, on being remo from the body, were found to have healthy naked-eye charact On microscopic examination, however, a few miliary tuber were found in the kidneys, and the liver was seen to be the sea a moderate fatty infiltration.

I subjected, in the fresh state, a scraping from one of the ca ous nodules in the lung to the Ziehl-Neelsen method, and, on amining the specimen, found large numbers of tubercle bac After careful hardening in alcohol, my assistant, Dr. Cha

[1] *Lectures on Children's Diseases.* Translated by John Thomson, M.B. London: The New Sydenham Society, 1889, p. 274.

[2] *The Diseases of Children, Medical and Surgical.* London: Longmans, Green, and Co., 1889, p. 377.

[3] *A Practical Treatise on Disease in Children.* London: J. and A. Churchill, 1884, p. 330 *et seq.*

[4] *Lehrbuch der Kinderkrankheiten für Aerzte und Studirende.* Berlin: Friedrich Wreden, 1889, p. 408.

[5] *Gerhardt's Handbuch der Kinderkrankheiten.* Fünfter Band, Erste Abtheilung, Zweite Hälfte, Tübingen, 1880, p. 548.

[6] *Jahresber. d' Berner Kinderspitals.* Quoted from Henoch.

orkman, prepared microscopic sections of one of the nodules in ıe pons Varolii, which were likewise subjected to the Ziehl-eelsen method. On examining a number of the sections so eated the tissue was found to be teeming with most typical bercle bacilli.

In this case it is obvious, I think, that the cerebral condition is it one of the local manifestations of a grave general disease, a sease which at once removes the lesion of the central nervous stem from that class of cases in which, by the aid of localising mptoms, operative interference might, perhaps, be contemplated. ıe cerebral disease was but the expression of a constitutional ate, and it is interesting to inquire what determined the develop-ent of so extensive a tuberculosis in the brain. In this regard e history of a fall on the head shortly before the symptoms anifested themselves is of some importance. Ashby[7] writes:—The most common tumour to follow a blow is a tubercular mour, but then tubercular tumours are vastly more common than hers." I think it not at all unlikely that there may be an inti-ate causal relationship between the development of a local berculosis in the brain and a blow on the head. In a child pre-posed to tuberculosis (in that state of constitution favourable to e reception and growth of tubercle bacilli) the fall may have used punctiform lacerations or bruises of the cerebral tissue, in ich bacilli, carried by the blood, might settle and thrive, ing to the diminished resisting power of the injured parts.

The localising symptoms in the present case were somewhat nfusing, but, as Henoch points out, to attempt to localise the uation of a scrofulous tubercle in the brain must always be a tter of some difficulty and doubt, not only because the tumours frequently latent, but also because of the occurrence of cases cerebral tuberculosis in which the nervous phenomena pro-ced are at variance with those of experimental research.

In the present case there were localising symptoms, although doubt they were somewhat confusing, and so the case is an ex-ption to what Henoch believes to be the rule, namely, that ultiple tubercle is far more subject to latency than the solitary m.

The nervous phenomena observed by Dr. Morton and recorded in report, were such as in the main to point to a tumour in the ighbourhood of the pons Varolii. The facial paralysis, the pillary phenomena, the squinting, the nystagmus, and the ggestion contained in the history of the possible occurrence in course of the case of a crossed paralysis, all pointed to such a ality. It was, perhaps, not possible to have made a more urate diagnosis in the circumstances.

Of interest also in connection with the question of localisation the situation of a nodule in the left optic thalamus, a condition ich, in cases recorded by Henoch[8] and Ashby,[9] has been found be associated with chorealike movements of the opposite side the body. In our case there were no symptoms of this kind; t Henoch has also met with cases of tubercular tumour of the ic thalamus, in which choreic movements have been entirely ent. The facts of localisation in the present case, however, hough very interesting, are of but little practical importance en they are considered in connection with the large number cerebral tumours, and the very extensive tuberculosis of other ans.

Rilliet and Barthez are of opinion (and Henoch agrees with them) at cerebral tubercle is most frequently latent, when at the same ıe there is advanced tuberculosis with caseation of other organs. e latency refers to the occurrence of nervous symptoms, and in s respect our case must be regarded as an exception to the rule, ause along with advanced caseation in the lungs and bronchial nds, and with miliary tubercles in the kidneys, very decided vous manifestations were developed.

The question of the original site of tubercular formation in es of scrofulous tubercle of the brain is one of very consider-e importance from a nosological point of view. A study of ebral tubercle as it occurs in children at once suggests the in-ry as to whether, in the majority of such cases, we are justi-l in regarding the tubercular lesion of the brain as the primary t of disease. In a number of cases the location of tubercular mations in the brain must often be determined by circum-nces more or less accidental in their nature, and certainly in case just recorded I think it must have been so. The bronchial nds were the seat of advanced tubercular disease, and it is extremely probable that here we have the starting point of the whole series of tubercular changes found in the case. Under these circumstances we are justified in concluding that the accident of a fall upon the head, which the child sustained, determined the development of the tubercular tumours in the brain; and I think it not at all unlikely that in a large number of cases of cerebral tubercle, a similar succession of events will be found. Support is given to this opinion by an examination of 13 cases recorded by Henoch. In 8 of these 13 cases there were well marked tubercular changes in other organs besides the brain, and in 4 of the 8 cases the bronchial glands are described as caseous. In 5 out of the 13 cases the condition of other organs as regards tubercle is not mentioned, although it does not of necessity follow from this that the tubercle was solely confined to the brain. From a nosological point of view it follows, therefore, that in a considerable number of cases cerebral tubercle cannot be classified as a primary disease of the brain, and that its clinical significance is entirely subordinate to that of the general tubercular state. As regards prognosis, the outlook is almost necessarily hopeless, notwithstanding the fact that cases may sometimes extend over a year or two, and that occasionally tubercular nodules may become quiescent and undergo cretaceous change. Ashby and Wright record an interesting case of this kind.[10]

Notwithstanding the comparative frequency with which natural cure of tuberculosis by calcification takes place in other organs, the occurrence of this happy result seems in the case of the brain to be very rare, and the wide experience of Henoch yields only two cases. In the practical management of cerebral tubercle the possibility of such an issue should be kept in view, and treatment should be directed not so much to the local condition as to the general tubercular state.

[7] *Loc. cit.*, p. 377.
[8] *Loc. cit.*, pp. 278-283.
[9] *Loc. cit.*, p. 381; also Baginsky, *loc. cit.*, p. 418.

MEMORANDA:
MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

THE ADMISSION OF ASEPTIC AIR INTO THE PLEURA.

IN his paper on the treatment of pleurisy with effusion, Dr. Harris says "I am in accord with those who do not look upon the entrance of air, if aseptic, in small amount with any apprehension under such circumstances. Theoretically, indeed, it would seem to be a good thing, as it would diminish the partial vacuum set up by the removal of fluid."

I would go further, and urge from practical experience that in cases in which aspiration of the pleura leads to distress or dyspnœa, the unpleasant symptoms may be relieved by the admission of air, and the operation continued without any evil result. I have recorded in the *Edinburgh Medical Journal*, November, 1886, cases in which this was done, the utmost care being taken to ensure asepsis. The precautions taken by me consisted in compressing the india-rubber tube of the aspirator, and directing a spray upon its extremity before detaching it from the aspirator, and then placing several folds of antiseptic gauze over the end of the tube before relaxing the compression on the tube. The air admitted into the pleura was thus purified by passing through both carbolic spray and gauze, the latter serving as a mechanical filter.

I feel sure that the use of this simple expedient obviates the objections which arise to the use of the aspirator in some cases of pleuritic effusion, and which are summed up in these words quoted from Dr. W. Henry White: "The instrument can be made to exert so great, so unnecessary, and so injurious a pressure within the chest, that more fluid is evacuated than is prudent, and consequently its reaccumulation, if not transformation into empyema, is encouraged, whilst cough and other disagreeable and urgent symptoms may be induced."

After the free admission of air there is, of course, no pressure. By antiseptic precautious the fear of empyema is removed, and there can be no imprudence in evacuating all the fluid that can be evacuated, while the cough and other disagreeable symptoms, if they should arise, are at once relieved by the admission of air. Certainly a patient with a partially re-expanded lung and the seat of the pleural cavity occupied by innocent aseptic air, which will readily be absorbed, is in a far preferable position to one with the

[10] *Loc. cit.*, p. 382.

remainder of the cavity occupied by the effusion left after partial aspiration, and still more to one whose lung is left in some part under the strain of an undue atmospheric pressure by reason of the lung failing to re-expand in place of the evacuated fluid.

Wigton, Cumberland. THEOBALD A. PALM, M.A., M.D.

TREATMENT OF OBESITY.

I BEG to report a further list of cases, some treated by other practitioners, and a few extreme ones of my own.

No.	Sex.	Before Treatment. Weight.	Before Treatment. Abdominal Girth.	After Treatment. Weight.	After Treatment. Abdominal Girth.	Period.	Treated by.
		St. lbs.	Inches.	St. lbs.	Inches.	Days.	
1	M.	13 13½	41½	11 11	33½	66	Dr. Julian Willis, Maida Vale
*2	,,	14 1	—	12 6½	—	66	Dr. Neil, Oxford
3	F.	13 5	43½	11 13	37½	35	Dr. Wilson, Stockton-on-Tees
*4	M.	15 1	45	13 4	39½	66	Dr. Sprigge, St. Barford, Hunts
5	,,	15 0	—	12 3	—	42	Dr. Fraser, Leigh, Tonbridge
*6	F.	12 4	38	10 8	32	60	Dr. German, Seaforth, Liverp'l
*7	M.	20 5	58	16 10	42½	66	Mr. Potter, Kensington Infy.
8	,,	14 2	—	12 4	—	42	Dr. Trinder, Tutbury, Burton-on-Trent
*9	,,	15 8	43½	14 7	40	56	Dr. Parsons Thornton, Southport
*10	F.	14 5½	45¾	12 1	41	66	Dr. Warner Lacey, Woolwich
11	M.	16 11	46	15 2	44	60	Dr. Farrer, Brighouse, Yorks.
*12	F.	12 12	—	11 8	—	66	Dr. Farrar, Gainsboro', Lincs.
*13	,,	16 5	55¼	15 0	49	56	Dr. Hall, Leeds
14	M.	15 8	44	14 4¼	39½	35	Mr. Pugin Thornton, Cantrb'y.
15	,,	15 11	47	13 12	39½	66	Mr. Pearl, Sydenham
*16	,,	13 4	43	12 8	38	60	Dr. Richmond, Warrington
17	,,	12 12	41	11 12½	36½	35	Dr. Owen, Hackney
*18	F.	13 10¾	45¾	12 2¼	41	66	Dr. Gifford, Darwen, Lancs.
19	M.	12 12	41	11 12½	36½	61	King's College Hospital, Professor Rose's ward
20	F.	14 11½	56½	13 13½	52	35	Dr. Guillemarde, Southsea
21	M.	18 9	48½	15 9	41	66	Dr. Daniel, Epsom
*22	F.	Lost 30½ lbs. in w	eight &	12 ins. in	girth		Dr. T. G. Bailey, Crewe
23	M.	22 4	59	18 3	47½	66	
24	,,	21 4	56½	16 8	43½	66	
25	,,	20 4	54½	17 10	42½	66	Completed course in India
26	F.	15 3	48	13 4½	39½	66	
27	M.	17 5	42	14 12	35	66	
28	F.	13 8	41	11 2	34½	66	
29	M.	18 2	47	16 0	32½	66	
30	,,	24 3	59½	19 2	48¼	66	
31	F.	15 1	43½	12 3	37	66	
32	M.	19 3	49	16 5½	34	66	

* Treated in consultation by letter.

REMARKS.—No. 1. Five months after completing treatment having resumed ordinary diet, no increase of bulk or weight. 5. Partial treatment only. 7. Pauper in infirmary; by the kindness of Mr. Potter this man, age 66, was carefully dieted, overtaxed heart and lungs, four months after finishing treatment weight and bulk stationary and out at work. 10. Heart and lungs seriously affected, attacks of syncope from fatty degeneration, much relieved by treatment. 15. Eighteen months after finishing course, weight and bulk not increased and general health very greatly improved, exercise and activity generally rendered comfortable. 16. Through the kindness of Professor Rose, I was enabled to treat this man in King's College Hospital. He was admitted suffering from a number of fatty tumours. Father, mother, brothers, and sisters, all very thin; thirteen years ago took service at a London dairy, for many years delivered milk served to confectioners who supplied ample quantities of pastry. Two tumours were removed by Professor Rose prior to my seeing the case. Under a nitrogenous diet he became reduced and the tumours became soft and smaller. Unhappily the man was later on allowed out daily for exercise, and he succumbed to beer; the sister of the ward also found pastry and sweets in his locker, so that no reliable data can be gleaned from this patient's treatment except that, partial as it was, an evident effect was obtained. 22. Dr. Bailey sent a rough report adding: "The patient is gradually regaining weight, but I must say she eats any quantity of sweets, of which she is fond."

I have had under observation, in consultation and otherwise, over 400 cases. Dr. Herschell, of Finsbury Square, has raised an important question as to how long a pure nitrogenous diet may be persisted in without injury to the kidneys. My experience has taught me that an animal diet is safe for any period, as long as a large amount of fluid is taken; this is especially shown in cases of extreme obesity, where the stored carbon is ample for a time to maintain a healthy life. In conclusion, I beg to thank most sincerely those medical friends who have sent reports to me.

Chancery Lane. W. TOWERS-SMITH.

DISLOCATION OF THE HIP-JOINT IN A YOUNG CHILD.

THE comparative rarity of dislocation of the hip-joint in childhood has been recently commented upon, and I have thought that the notes of the following case might prove to be of interest.

J. M., aged 5 years, on May 12th, 1888, was playing with other children on a steep mountain side; he was carrying another child on his back when he was violently thrown over by a playfellow; he fell sideways and received the bulk of the shock on his right knee, the limb at the time being considerably abducted. I visited him shortly after the accident, and he presented all the classical features of dislocation on to the dorsum ilii; the thigh was flexed and the limb adducted and rotated inwards, and there was shortening to the extent of an inch and a half.

He was placed on a low table, and reduction was readily effected (without the aid of anæsthesia) by manipulation—that is, flexion in the adducted position, circumduction outwards, and extension. The limb was put in a splint for three weeks, and the subsequent progress was satisfactory.

Aberavon. ARNALLT JONES, L.R.C.P.Lond., etc.

POISONOUS EFFECTS OF EXALGINE.

HAVING had several cases of neuralgia recently, I have been able to confirm Dr. Fraser's experience of exalgine in these cases, as published in the JOURNAL of February 15th.

Mrs. A., aged 29, anæmic, of neurotic temperament, was the subject of an attack of severe neuralgia on April 18th. The pain was described by her as "extending all over the head." It seemed to start from the stumps of two right upper molar teeth, and accordingly she had these removed by the dentist. As, however, the pain was not relieved, I was called in to see her on the third day of the neuralgia. I found her distracted with pain, depressed in spirits, with a weak pulse of 110 per minute and a temperature of 99.4°; tongue clean. There was a slight swelling over the right canine fossa. The gum of the right upper maxilla was somewhat turgid, really from the presence of an artificial tooth plate. The patient complained of tenderness all over the scalp, more marked on the right side, especially on pressure over the right supraorbital and infraorbital foramina. She had always suffered from dysmenorrhœa, which I had been able to relieve by moderate doses of tincture of pulsatilla with acetate of ammonia, a treatment suggested by Dr. James Braithwaite at a meeting of the Yorkshire Branch. The monthly period was due, and commenced a little before the neuralgia appeared, and with the occurrence of neuralgia of the head and face the period stopped.

The treatment in this case was not easy. Both iron and quinine in any form produced severe headache. It was with considerable hope that I prescribed one grain of exalgine at bedtime. This, however, only produced a momentary relief, the pain returning as violent as before, and she passed a restless, sleepless night. I increased the dose to 2 grains every four hours. This only gave temporary relief. The drug produced no effect so far as the circulation and respiration were concerned, and there was no particular effect upon the skin. The patient suffered from heat and perspiration, which I attributed to weakness from loss of sleep and reflexly from pain.

The neuralgia and sleeplessness, now of five days' duration, being still present, a single dose of 4 grains of exalgine was given, and produced a marked relief of pain and a continuous sleep of about two hours' duration, coming on about twenty minutes after the administration of this dose. My patient declared that though asleep she was semi-conscious, and knew what was going on around her. As the neuralgia recurred on awaking, I ordered 4 grains of exalgine to be given every four hours. The patient was induced to take a pill containing quinine, iron, and valerianate of zinc three times, and afterwards four times, in the day, and 2 grains of quinine once daily, the quinine being relieved by a 10-grain dose of antipyrin.

On two occasions, the pain being very severe, as much as 5 grains of exalgine were administered. On both occasions the effect was similar, and is described by the patient in these words:

entirely lost all feeling for about ten minutes, I should think, t, of course, it appeared to me a much longer period; then, ving recovered partial consciousness, I felt suspended in air, radual sinking into space, no feeling, no pain but quite numb, though a cut or any sensations of pain of any kind would not ve been felt. My eyes appeared to be very much enlarged, no tinct sight, but an appearance like misty vapour before the eyes. e neuralgia returned on becoming conscious about four hours er taking the medicine. It was like coming to life after a dead nt."

The neuralgic pain ceased in ten days from the commencement the attack, and its cessation was marked by the reappearance of menstrual flow. The patient was then advised to take once re the water of one of our ferruginous springs, and has made ood recovery.

Exalgine in this patient acted simply as an analgesic, and I ieve it did so to a great extent by some special action on the tral nervous system, chiefly on the cerebrum. I am quite in ord with Dr. Gubb that it is very necessary that in the admini- tion of newly introduced remedies, whose physiological action not fully worked out, small doses only should be administered irst, that any idiosyncrasy may be detected at the outset.

Tarrogate. A. W. HINSLEY WALKER.

REPORTS

ON

EDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GREAT NORTHERN CENTRAL HOSPITAL.

CASES OF OPERATION FOR THE RELIEF OF STRANGULATED HERNIA TREATED WITH THE DOUBLE CYANIDES OF ZINC AND MERCURY.

(Under the care of Mr. LOCKWOOD.)

[From notes by Mr. SANTI.]

T November Sir Joseph Lister communicated to the Medical iety of London his latest observations upon a new antiseptic. then pointed out that, although the well-known sal alembroth sing had answered most requirements, yet it had been found ting in some particulars. The solubility of its active in- lient rendered it at times inefficacious, and when the dis- rges from the wound had taken up a quantity of perchloride nercury from the dressing they became highly irritating. As lence of this Sir Joseph Lister said that he had seen "after the oval of the mamma, when the first dressing was changed on following day, that there has been over the scapula and the ghbourhood a huge blister." Having had several cases in ch blistering was caused by the alembroth dressing, an early ortunity was taken of trying the effect of the new dressing. This sists of a gauze prepared with a mixture containing as its ve ingredient a so-called double cyanide of zinc and mercury, of a powder containing the same substance. The layers of ze next to the wound are washed in a solution of carbolic acid, 20; this washes out the corrosive sublimate, which, though ent in small amount, might irritate the wound to some extent. powder, moistened with a weak solution of corrosive sub- te, may be rubbed in hairy parts, when it will convert the s into an antiseptic dressing. After obtaining the gauze and der from Messrs. Morson and Son, of Southampton Row, they used according to the above directions in the two following s. But before giving the details of them it is needful to add all the instruments, silk, and sponges were prepared with the rigorous precautions, and that the field of operation was oughly shaved, scrubbed, and washed with perchloride lotion, 1,000.

SE I.—A. M., aged 50, married; strangulated femoral hernia he left side. She first noticed this during an attack of consti- on and vomiting, which began forty hours before admission. n seen, she was deeply under the influence of opium, and not h exhausted by the vomiting. The abdomen was slightly dis- ed, but there was no sign of peritonitis. Chloroform having administered, the following operation was performed: A skin ion was made towards the outer side of the sac, which was opened, the constriction divided, and the gut replaced, all in the usual way. Next, the neck of the hernial sac was transfixed with sterilised silk and tied. The body of the sac, which was very much bruised and frayed, and which was very thin, was removed. The ligatured neck was then pushed within the abdomen, and the two ends of its surrounding ligature carried, at separate points, through the abdominal wall and tightly tied. Finally, the femoral ring was closed as much as possible by sutures passed through Hey's ligament, and through the pubic portion of the fascia lata, those two structures being brought close together. The wound was then closed with silk sutures passed rather deeply; irrigated with perchloride lotion 1 in 2,000, and well dried; the pubes and fold of the groin dusted with double cyanide powder, and a quantity of double cyanide gauze and an outside dressing applied; and, finally, two or three Martin's rubber bandages, for the exclusion of air and for abundant pressure, were firmly adjusted.

There was some shock after the operation, and on the following evening (twenty-four hours after) the temperature was 100° F.; next day it was normal, and remained so until convalescence. The dressing and skin sutures were removed on the eighth day, when the wound was healed. However, the notes say that the morning after the operation there was a rash of angry-looking pustules beneath the edge of the dressing. These pustules caused some pain and discomfort, and the night after their appearance the temperature was 100° F. In other respects the recovery was perfect, the bowels acting on the fifth day, after castor oil. The patient writes to say that she wears no truss, and has no return of the hernia or trouble of any kind.

CASE II.—This case was of a more serious kind. The patient, S. G., was a big and burly man, aged 40, who followed the occupation of a brewer's drayman. He drank nine pints of beer daily, sometimes more. He had a very large right complete inguinal hernia, which he had, so he says, noticed six months. He had never worn a truss, and when admitted the hernia was acutely strangulated, but something went back during taxis. As his symptoms continued, and as the sac was still very tense, herniotomy was performed as follows. An incision was made over the external ring, and the sac opened. A big loop of small intestine, about eighteen inches, was found adherent to the back of the sac by firm inflammatory adhesions. The portion of sac to which the gut adhered was dissected up, and, after a great many bleeding points had been tied with fine silk, it was dusted with iodoform and returned with the gut into the abdomen. The sac, which was thick and very adherent to the constituents of the cord, was then cut across at its neck, which was freed, transfixed with sterilised silk, and ligatured. The ligatured neck was next pushed within the abdomen, and fixed by passing the ends of the silk through the abdominal wall, and fixing them there. The traction of the hernia had quite obliterated the inguinal canal, but a strenuous attempt was made to replace the conjoined tendon by suitable suturing, and afterwards the external abdominal ring was reduced to its proper dimensions. The fundus of the sac was so adherent to the pampiniform plexus and other constituents of the cord, that no attempt was made to remove it. The wound was irrigated, drained, and sutured, the fold of the groin and scrotum dusted with the double cyanide powder, and a dressing of that material firmly applied with the assistance of Martin's bandage. Drainage was used because of the oozing from the veins.

The next day the wound was dressed, as discharge had come through, and the drainage tube was removed. Two days after the patient urinated over the dressing, which had to be replaced. A fortnight after the operation the last dressing was removed, the wound being healed. The second day after the operation his temperature was 101°, and there was an abundant pustular eruption around the edges of the dressing, but after this the temperature remained below 100°. He verged upon delirium tremens for a few days, and was very low and depressed from the deprivation of his accustomed stimulants. He was seen six weeks afterwards, and said he was doing his work without a truss. His abdominal ring and canal were firm and strong, with no return of the hernia; but, as his employment consisted in lifting beer barrels, he was advised to wear a truss whilst at work.

REMARKS BY MR. LOCKWOOD.—So far as the healing of their wounds is concerned, the foregoing cases may be claimed as successful. But I was disappointed in the occurrence of the pustular eruption. The latter, however, was confined more to the margin of the dressing than to the region of the wound, and it did not seem more than an inconvenience to the patient. It is said by

Mr. Watson Cheyne that the contents of these pustules are quite sterile, and I regret that I missed the opportunity for their bacteriological examination. The cause of the pustules was not clearly apparent, although they were most abundant in the places where the powder had been dusted. Great care was taken not to leave any of the perchloride lotion upon the skin or in the wound. It may be remembered that one of these wounds was drained and that the other was not. Provided that the operator has confidence in the sterility of his wound, drainage seems quite uncalled for. In the case of the drayman, entire confidence in this respect was not entertained, because the wound involved the scrotum, which is particularly hard to clean; moreover, another factor came into play, namely, the lacerated condition of the tissues and veins behind the sac. I am now accustomed to use drainage with great reluctance and in cases of doubt, because the presence of a tube entails the redressing of the wound before it is entirely repaired. It was judged that the femoral hernia in the first case was due to relaxation of the pelvic peritoneum, and therefore, after the sac had been removed and the femoral ring closed, there seemed no stronger reason for a truss on one side than upon the other. In the case of the drayman, it was judged, from measurements of the length and height of the mesentery in closely similar cases, that the suspension of his mesentery was beginning to fail, and that therefore it would be rash to trust to the suturing of the abdominal wall during the severe exertion of lifting beer barrels. It is also to be noted that the hernia had been so much neglected that a perfect curative operation could hardly be achieved. Such a case as this ought not to be classed with an operation upon a young person with congenital hernia which has not been neglected, and in whom the defect is solely a congenital one of the abdominal wall, capable, like a harelip, of complete cure by a thorough operation for the obliteration of all the sac, especially of its mouth; the closure of the internal ring; and lastly, the restoration of the inguinal canal and external ring.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 27TH, 1890.

TIMOTHY HOLMES, M.A., F.R.C.S., President, in the Chair.

Senile Hypertrophy and Senile Atrophy of the Skull.—Professor HUMPHRY, in this paper, directed attention to two changes of opposite nature, not uncommon in the skulls of elderly persons, both of which were peculiar to that part of the skeleton, and both of which were rather difficult of explanation. One consisted of an increase of thickness and an increase of density, and, therefore, an increase of weight, which seemed to be attributable to a shrinking of the brain with consequent lessening of pressure and increase of congestion of the vessels of the skull which were supplied from the interior; this congestion leading to bone deposition on the inside and condensation of the diploë, and affording a remarkable contrast to the rarefaction and lightening of the bones in other parts of the same subjects. The other change consisted in atrophy from without, contrasting with the atrophy in other bones which proceeded in the main from within. The skull became smaller and lighter, the outer table of the vault approaching the inner, and the skull-wall being consequently reduced in thickness. This change might take place uniformly, or it might proceed in some parts more than in others. The most common parts for the extreme thinning were the parietal bones on the sides of the sagittal suture, midway between it and the tubera, causing the remarkable symmetrical depressions of which many specimens existed. The case was given of a woman, aged 90, in whom death was caused by fractures, from a fall, taking place through these depressions. Instances were mentioned in which the two changes, the thickening from within and the condensation, on the one hand, and the thinning from without with the parietal depressions, on the other, were coincident. In default of other good cause for the formation of the parietal depressions, the effect of the pressure of the occipito-frontalis tendon was suggested for consideration.—Mr. EVE felt certain that workers in museums and pathologists in general would feel grateful that Professor Humphry had at last agreed that senile atrophy could take place in the skull; he was formerly the chief advocate that the changes which had been described were due to congenital defects. In February of the present year he showed some similar skulls at the Pathological Society, and claimed that the changes met with were due to senility. He had met with incurvation of the internal surface at a point which corresponded with the depression on the outer surface of the cranium. He thought it due to atrophy of the brain followed by falling in of the skullcap over a corresponding area. Professor Humphry had always found the internal surface of the depression smooth, but this was contrary to his own experience, as in some Egyptian skulls the depressed surface was marked by minute foramina for blood vessels, showing that there had been an osteoporosis in the first instance.—Dr. HEYWOOD SMITH asked for information respecting the effects of repeated pregnancies on the bones of the skull.—Professor HUMPHRY stated that he was unable to answer the question as to the effects of pregnancies, as there was no history in most of the cases. His conclusions differed from Mr. Eve's; the surfaces were sometimes porous, but were usually quite smooth, showing that deposition went on *pari passu* with absorption. There was no deposit on the interior to correspond with the external depression. He could not agree with Mr. Eve's suggestion that this was the point in the parietal bone which was the last to ossify.

On the Cure of Leprosy.—Dr. R. H. BAKEWELL, in this paper gave a short sketch of the clinical and anatomical features of leprosy, in which he noted that the extensive lesions of the skin led finally to implication of the kidneys. Treatment, therefore could only be successful if it was commenced in the early stages and Dr. Beauperthuy's rule was not to treat a case at all when the mouth had become involved. The author had chiefly followed out the treatment of this physician. He reported upon his method to Parliament, and his report was published in a Blue Book now in the Society's library. The method comprised three parts: 1. Hygienic or dietetic, including removal to a healthy locality, good diet, cleanliness, separation from other lepers, and protection from infection by mosquitoes. 2. The use of external application especially the oil of Cashew nut (*Anacardium occidentale*) generally, of nitrate of silver to anæsthetic parts, and of liniments to other parts. 3. Internal medication by small doses of alkaline salts. Beauperthuy used mercuric chloride, which the author has not found of value. Most reliance was placed upon the external treatment. The oil of Cashew nut produced sufficient irritation to cause slight oozing, which went on for a day or two, and then dried and left a scab. When this fell off the tubercle was diminished in size. The process was repeated two or three times. In more chronic cases with much anæsthesia a mixed solution of nitrate of silver and copper gave the best results. Care must be taken not to apply the oil over too large a surface—for example, never more than six inches square. The author urged that treatment, both medical and hygienic, should be vigorously carried out in the early stage.—Mr. MACNAMARA could not agree with the author's views as to the curability of leprosy. He had never seen a case which was even relieved by treatment, though it was true that there was a quiet stage during which an apparent improvement took place. When once established the disease advanced from bad to worse.—Dr. THIN insisted that occasionally the skin lost its anæsthesia and became sensitive, and the spots disappeared; this was generally due to the use of some external irritant. He thought the disease might be arrested, and mentioned that Mr. Hutchinson had shown such a case to the Society. The woman was now well, whereas twenty years previously she was afflicted with marked tubercular leprosy.—Dr. ABRAHAM thought that a cure ought to be attempted, though it was not always easy to recognise the earliest symptoms. The disease was probably not curable, though it might abort and die out. The drug preferred by lepers themselves was chaulmoogra oil.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 23RD, 1890.

CHRISTOPHER HEATH, F.R.C.S., President, in the Chair.

Retention of Urine from a Hydatid Cyst in the Pelvis.—F. R. FAIRBANK (Doncaster) reported this case. The patient was a man aged 65. He was seen in July, 1879. He suffered from repeated attacks of retention, and at last a catheter could not be passed into the bladder. The symptoms being urgent a trocar was passed *per rectum* into what appeared to be the bladder, when about four ounces of an opaline fluid ran away. A No. 8 catheter could now be passed into the bladder, and about a quart of dark-coloured urine was drawn off. The difference between the two fluids was striking. A second cyst under

bdominal wall in the left iliac region was aspirated, and it roved to be a hydatid. About six months afterwards he passed ith his urine several hydatid cysts, four of which were camined, and were the size of ordinary walnuts partially col·psed. After the lapse of ten years he had been examined, nd there were no signs of either the cyst in the iliac region · that between the bladder and the rectum. The prostate as not now enlarged. He had an imperfect recollection of a nall round tumour in the region of the liver, which disap-eared many years ago. References to similar cases were given. -Mr. W. H. BENNETT remarked that such cases were rare, ough hydatid cyst was given as a cause of retention of urine. e had seen such a case in a man aged 50, whose bladder was pparently much distended; nor was it diminished after the use the catheter. He had, therefore, punctured *per rectum* and ithdrawn three pints of hydatid fluid of specific gravity 1006. s the cyst did not shrivel, he then laid it open from the rectum nd drained it for a week. It discharged for six months, after hich the cyst could not be felt. In one recorded case death was aused by a hydatid pressing on the ureters, and in another case he cyst ruptured into the rectum.

A Case of Thyroid Tumour, apparently Malignant, which all t Disappeared after Tracheotomy: Renewed Growth in an Un-oubted Sarcomatous Form.—Mr. G. R. TURNER read notes of this ase. C. P., aged 62, was admitted into St. George's Hospital on eptember 5th, 1888, with a thyroid swelling of six months' rowth causing, by its pressure on the trachea, considerable yspnœa. The latter was relieved by chloroform and the inhala-on of oxygen gas until early the following morning, when acheotomy was performed. The trachea was pressed over to the ft side and was opened behind the manubrium, so far from the rface that no ordinary tracheotomy tube being possible, a o. 12 gum catheter was used instead. The thyroid tumour was aken both by its history and appearance to be malignant. It ecreased, however, in size after the tracheotomy, and all but dis-peared. There was no evidence of any cystic, inflammatory, or ood extravasation enlargement in the tumour. The isthmus was ot divided at the tracheotomy; there was no excessive discharge om the wound during convalescence. The woman remained ell until the end of October. Some albuminuria which was pre-nt on her first admission disappeared in about a week's time, nd was not afterwards noted. She had no general or local dema at any time. In the early part of November the tumour rew again rapidly, and on the 8th of that month an operation r its removal was attempted, but its connections were found to e such as to forbid this. The swelling had the same naked eye ppearances as when seen during tracheotomy. A portion re-oved was examined microscopically by Dr. Delépine, who pro-unced it undoubtedly sarcomatous; this was subsequently veri-ed at the *post-mortem* examination. A second tracheotomy on ovember 16th was followed by a second shrinkage of the tumour, ue this time to a rapid disintegration of its cells. There was a ery foul discharge from the wound. The patient eventually be-me unable to take food, and died on December 15th, nine onths after first noticing the swelling. *Post-mortem* examination owed the thyroid body, which was hardly enlarged at all, to be cupied by, indeed, almost replaced by, a breaking down sarcoma-us mass which had infiltrated the trachea and neighbouring ructures, but of which there were no secondary deposits else-here. The first tracheotomy scar was found passing through e seventh, eighth, and ninth rings. The question as to the ori-nal nature of the growth was discussed, and possible causes for s disappearance considered. Cases of disappearance of sarco-ata after erysipelas, recorded by Bruns,[1] were quoted, and those cases of malignant disease of the thyroid where acheotomy was extremely difficult or impossible a free divi-on of the fascia and parts over the tumour was advocated.—. BOWLES (Folkestone) stated that last year, when visiting Pro-ssor Kocher's clinical wards at Berne, for the purpose of investi-ting the connection of the ablation of the thyroid body with yxœdema, he had seen a case from which a malignant yroid gland had been removed for impending suffocation nine onths previously. Tracheotomy was attempted, but unsuccess-lly; the tumour was then dissected out, but in the middle of the eration life was in such danger that a large part of the thyroid rtilage was at once removed; and eventually, with the tumour, e greater part of the length of the trachea—the back of it alone maining with a small portion of the thyroid cartilage. The man wore a silver tube, and could make himself very well under-stood, although both vocal cords were absent, and only cicatricial tissue existed in the place of the normal trachea. There was no evidence of any return of the disease. —Mr. ROGER WILLIAMS asked whether the possibility of the affection having been due primarily to an inflammatory affection of the larynx had been quite excluded in Mr. Turner's case? He suggested that the lesions might be thus explained, especially if they admitted suppuration in the cavity.—Mr. TURNER, in reply, said the possibility of the tumour being of an inflammatory nature had crossed his mind at the time, but might be altogether dismissed. There were no local signs of inflammation, no excessive discharge from the trachea, nor on its being opened up. He could not account for the sudden disappearance of the tumour.

Urethral Stricture Four Years after Electrolysis: Encysted Vesical Calculi: Three Operations by Lithotrity and Three by Suprapubic Lithotomy, one of which was Performed through the Peritoneum.—Mr. BRUCE CLARKE showed a patient who had been under his care four years before with urethral stricture, and who had been treated by electrolysis, with the result that a No. 2 English would now pass easily. About a year later he was found to have cystitis, which eventually turned out to be due to an encysted vesical calculus. This was removed by supra-pubic lithotomy, and he made a good recovery. In April, 1888, his symptoms again returned, and lithotrity was performed on three occasions during the next few months, more than an ounce of calculous matter being evacuated on one occasion. In January, 1889, as his symptoms returned with greater severity, suprapubic lithotomy was again performed; but the peritoneum was adherent to the pubes, and the operation had therefore to be performed through the peritoneum. Calculous matter was again removed, and also at the beginning of the present year, since which time he had been much better in health, and his urine had been clearer than it had been during the previous three years.—The PRESIDENT said that the case was valuable as showing some of the difficulties encountered in clearing the bladder of a stone. Sometimes it would happen that one surgeon could not find a stone and that another surgeon later on might discover it at once. Encysted calculus was not nearly so uncommon as it was gene-rally supposed to be; and in such a case the calculus might be sometimes in the cyst, sometimes out of it, and then, later, in it again, and quite inaccessible. In a case described at the Society by Mr. Buckston Browne a year before that very circum-stance had happened; he (the President) had not seized a stone that was afterwards crushed elsewhere. He asked Mr. Clarke if, on the first occasion of opening the bladder in his patient, he had explored the bladder with his finger, and had found the cyst in which the calculus was afterwards discovered.—Mr. BRUCE CLARKE said that on the first occasion he not only could put his finger into the bladder, but he could also see into it and into the sacculus; and he could certainly say there were no other calculi in the bladder at that time. One point that was quite surprising was the extreme rapidity with which the calculi afterwards formed.

Cases Illustrating the Treatment of Phthisis by the Inhalation of Superheated Air.—Mr. H. H. TAYLOR read a paper on this sub-ject. Four cases of pulmonary phthisis had been so treated, two complicated with laryngeal phthisis. The air was inhaled at about a temperature of 300° F. The inhalations appeared to cause no inconvenience, neither the temperature, pulse, nor respirations increasing, nor did the skin act more freely. The results obtained were insufficient to base any definite statement as to the value of this treatment Two cases of pulmonary cavities, which had been tapped and drained, were then made use of in order to determine as far as possible if the heated air extended beyond the bronchi. The communication between the mouth and the cavities was very free. A thermometer in each case was placed in the cavity, but after inhaling air at a temperature of 300° F. only rose one degree in one case; in the other there was no result at all. It would thus appear that the air was quickly cooled down to the normal tem-perature of the blood, and never reached the smaller tubes above that temperature. If this were the case it completely disposed of any theory that this treatment could have a specific effect on the course of phthisis.—The PRESIDENT asked what was the theory in respect of which the treatment by superheated air was adopted?—Mr. TAYLOR said that Dr. Weigert, who had introduced the treatment, believed that hot air killed the bacilli, and that continuous inhalations of hot air might produce that effect. In further reply to the President, he stated that the sputa had been

[1] *Monatsh. für prakt. Derm.*, Bd. viii, No. 4.

examined after the inhalation in America, and the bacilli were not found to be diminished in number.—Dr. MACFARLANE knew of one case in Essex treated after this manner in which the results were quite negative.—Dr. DAWSON WILLIAMS said that Dr. Cranstoun Charles had considered that he obtained good results. He (the speaker), however, thought it improbable that the air when it reached the lungs was at a high temperature, and experiments in America seemed to show that no good could be expected from the treatment.

Report on Incubation and Infective Periods.—The PRESIDENT mentioned that the committee appointed by the Society under the presidency of Dr. W. H. Broadbent, to make a report on the duration of the periods of incubation and infectiousness of the commoner infectious diseases, had received a considerable number of returns, but would particularly ask for additional reports of cases showing these periods in typhus fever, enteric fever, whooping-cough, varicella, cholera, and influenza.

The Society then adjourned until October next.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 2ND, 1890.

H. CAMPBELL POPE, M.D., President, in the Chair.

The Urticaria of Infancy and Childhood.—Dr. COLCOTT FOX said that the affection was not to be regarded as a concurrence of two diseases—an inflammatory papular one and an urticaria—nor as essentially a prurigo with some secondary wheals, but that it was the urticaria of infancy and early childhood. The special feature of this affection was that on account of the ready response of an infant's skin to any irritation, an inflammatory papule was developed in each wheal, and was left on the subsidence of the wheal. Though this complicating inflammatory lesion was usually papular, it was sometimes vesicular, pustular, or bullous, and occasionally these several phases could be seen in the course of a single case. The affection had no direct relation with vaccinia, varicella, measles, or scarlatina; the etiology of the affection, the diagnosis from scabies, varicella and prurigo, and the treatment were then discussed.—Dr. ABRAHAM found a tar bath for about ten minutes the best thing to allay the irritation.—The PRESIDENT said these cases depended upon a combination of circumstances, one of which was gastro-intestinal irritation. He thought children were benefited by chicken or veal broth, and Dr. Cheadle's gluten food. Magnesia was more useful even than bismuth and applications of tar.—Remarks were also made by Dr. POTTER, Mr. KEETLEY, and Dr. DREWITT; and Dr. FOX replied.

Local Treatment in Hay Fever and Paroxysmal Sneezing.—Dr. SCANES SPICER read a paper on this subject, in which the advantages of local treatment by galvano-cautery, etc., were pointed out.

Paroxysmal Heart Hurry associated with Floating Kidney.—Dr. A. SYMONS ECCLES said the coincidence of extreme rapidity of the heart's action with floating kidney (4 cases), dilatation of the stomach (2 cases), and profuse menorrhagia at the menopause (2 cases), had induced him, in default of pathological evidence to the contrary, to regard prolonged irritation of the abdominal sympathetic, either continuous or intermittent, as a probable cause of paroxysmal tachycardia resulting from reflex inhibition of the vagus or stimulation or fatigue of the vagus centre, or from the reference of irritation of the sympathetic periphery in the abdomen to the cardiac accelerator fibres of the sympathetic, in the same way as might frequently be noticed in regard to cerebro-spinal nerves of sensation. Illustrative cases were related.—Dr. SEYMOUR TAYLOR was convinced of the frequent association between lesions of abdominal viscera and so-called functional disorders of the heart. In some cases, where the primary lesion was removed, subsequent restoration of the heart's action occurred.

Specimens.—Pathological specimens were exhibited by Mr. H. P. DUNN.—Mr. LLOYD showed an entire Membranous Cast from a Uterus.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, MAY 7TH, 1890.

T. CHURTON, M.D., Vice-President, in the Chair.

Nephrolithotomy.—Mr. LAWFORD KNAGGS reported a successful case of nephrolithotomy in a patient who had suffered from symptoms for eight years, and in which heavy percussion over the left loin elicited a sharp cutting pain, as pointed out by Mr. Jordan Lloyd. He remarked upon the close association between gout and renal calculus; drew attention to the importance of teaching patients who had been successfully relieved of a renal calculus to supervise their own urine, as suggested by Sir William Roberts; and discussed the relative merits of abdominal exploration, and exploration of each kidney in turn through a lumbar incision, in cases where it was doubtful which kidney contained the stone.—Mr. MCGILL alluded to the uncertainty of needle exploration, and advocated an exploratory lumbar incision. In any serious doubt as to the side affected he considered that an exploration by abdominal section was unjustifiable.—Mr. MAYO ROBSON, speaking of exploratory operations in which a stone was not found, said that with one exception all cases of this kind within his own experience had been completely and permanently relieved of their symptoms. He mentioned a case of his own in which all the characteristic symptoms were present, including blood in the urine. He cut down upon the kidney in the loin with a view to nephrolithotomy. The wound in the kidney bled profusely and uncontrollably, and he was driven to perform nephrectomy. No stone was found in the kidney after removal, but the patient made a good recovery and was entirely relieved of his symptoms. He asked, in view of such experiences, whether these operations were not sometimes undertaken hastily, and whether in many cases it would not be worth while to wait for a time in the hope of a spontaneous cure. Another possible advantage in waiting might be an increase in the size of the stone, rendering it easier of detection.—The CHAIRMAN asked if there was any justification for the performance of these operations unless, amongst other symptoms, there was blood in the urine. He mentioned a case under his own care three years ago where with all the symptoms, including hæmaturia, an exploratory operation was performed. No stone was found and the patient remained unrelieved.—Mr. PURDY referred to a case of his own in which there were severe symptoms of renal calculus. The patient eventually passed a very small calculus by the urethra.

Laryngeal Phthisis.—Dr. TREVELYAN read a paper on this subject. The discrepancy in the statistics as to the frequency of the disease was attributed to its greater prevalence in some localities than in others. After remarks on the principal features of the disease, attention was drawn to the importance of examining the larynx in cases of suspected pulmonary phthisis. Two important points had to be considered in the prognosis: (1) the cicatrisation of the ulcers themselves, and (2) the so-called cure of the disease. Tubercular ulcers certainly did heal; but as to the second point the cure of laryngeal phthisis must be looked upon as one of the rarest of events. The best results in treatment were obtained by lactic acid. The application must be thorough, and preceded by a cleansing of the parts, and perhaps by the application of cocaine. Other remedies were iodoform and menthol. Creasote, carbolic acid, and balsam of Peru had been tried—curetting the ulcers followed by the application of lactic acid recommended itself. Cocaine and morphine were palliatives.—After remarks by Dr. LODGE and Mr. SHANN, Dr. JACOB said cases of laryngeal phthisis might be roughly divided into those in which there was comparatively little pulmonary disease, in which active treatment should be used, and those in which the lung trouble was extensive, and only palliative measures could be adopted. In a paper read before the Society two years before, he recommended boracic acid and iodoform as a local remedy: he was now using principally menthol. He had had some good results from curetting and lactic acid. In case of painful deglutition, cocaine spray should first be tried, and morphine if this failed. Patients could frequently drink more comfortably with the head held low. He thought laryngeal phthisis much more common in Leeds than in London.—Dr. W. GRIFFITH thought there was great difficulty in ascertaining the extent of the pulmonary lesion when there was much laryngeal stenosis, the tubular breathing being marked by the laryngeal sound.—Dr. BARRS agreed as to this, and thought the stenosis produced an emphysematous condition which marked the ordinary pulmonary signs of phthisis.

Enlarged Liver with Increase of White Blood Corpuscles.—Dr. BARRS described a case in which enlargement of the liver associated with a large increase of the white blood corpuscles disappeared under treatment by arsenic and iron.—The CHAIRMAN compared the case with those in which a very extensive lymphatic enlargement simulating lymphadenoma had disappeared under the use of arsenic.

Cases.—Mr. MAYO ROBSON showed a patient from whom a large Spina Bifida was removed a fortnight before. The sac was

also shown.—Dr. GRIFFITH showed a case of Myxœdema in a woman of 50. The case was of five years' duration, and came on after a reputed attack of enteric fever, which followed a month after confinement.

Specimens, etc.—Mr. MCGILL showed Villous Growth of Bladder removed by suprapubic operation.—Mr. MAYO ROBSON showed two specimens of Myoma of the Uterus removed by Hysterectomy.—Mr. C. T. WRIGHT showed some Vaginal and Intrauterine Irrigation Tubes of Glass and Celluloid.

REVIEWS AND NOTICES.

THE HUMAN FOOT: ITS FORM AND STRUCTURE, FUNCTION AND CLOTHING. By T. S. ELLIS, M.R.C.S. London: J. and A. Churchill. 1889.

THERE is much to look at carefully in this book, for it aims at being a textbook for students in medicine, art, and technical industries—to say nothing of the public generally. The military authorities, moreover, are to be taught the error of their ways by reading the work and accepting the author's views of how the foot should stand. Perhaps the most important aspect of the author's inquiry relates to the surgical physiology of the foot, and to this we notice first. He has already, in various journals,[1] called attention to the treatment of deformities by means of the use of the muscles which mechanically act upon the deformed parts, and we are inclined to think he has struck upon an important principle. The haste with which it is thought necessary to obtain cures by operative means nowadays makes surgeons often unwilling to adopt slower methods, and no doubt time is an expensive luxury for hospital patients and hospital authorities. This seems an explanation of the comparative commonness of excision of the hip and osteotomy and similar operations among the poorer class of cases rather than among well-to-do private patients. But it must be recognised that a cure without operation is more likely to be lasting and thorough in many cases; and when the arch of the foot has been tampered with by removal of bone, we are not sanguine of the results being so satisfactory after a lengthened lapse of time, as appears in the earlier reports. Whether the treatment of knock-knee by muscular exercise will prove as successful as the author has been with flat-foot is not so clear. We may notice, in passing, that the use of massage for painful flat-foot has lately been strongly advocated by Landerer, of Leipzig; but in Mr. ELLIS's book and pamphlets the method adopted is different in principle and more philosophical. He condemns the use of artificial supports for the arch, and trusts to the strengthening of the arch by the tie-rod action of the tendon, of the flexor longus hallicis in particular—by standing on the toes, dancing, etc. In this principle he is supported by Mr. Roth and Mr. Pye in the treatment of spinal deformities; for these, as well as many other surgeons, trust rather to muscular action than to mechanical support. The tie-rod or bowstring action of muscles is the key to Mr. Ellis's principle of treatment, and it is interesting to find that he has worked it out originally in his own case. The arch of his foot was crushed by a horse's hoof, and he is convinced that the calcaneo-scaphoid ligament was torn and the bones displaced. After several years' ineffectual treatment by splints and mechanical support, he thought out the principle he now advocates, and in the course of a few months could hop over a footstool, and has never had a relapse to his former painful and almost useless condition of foot. It may, however, be suggested that the condition of the foot was such as any experienced surgeon would look upon as allied to those cases of joint adhesion and fibrous tendon matting which are likely to be benefited by forcible flexion and muscular action. But anyhow his procedure was philosophical and successful, and we are glad to see the principle urged in allied cases.

Looking now at the book before us as intended to be an accurate and popular work on the anatomy and physiology of the human foot, we find a good deal that is not so satisfactory. The anatomy, however, is generally good and well illustrated from Holden; but the author has peculiar views on the main function of the arch being for the passage of tendons and blood vessels into the foot, and that the foot is not naturally turned (when standing) with the toes rather directed outwards. He confines his ideas to the foot-joints alone, and loses sight of the eversion of the foot by the mechanism of the knee-joint as well as the ankle. Consequently, he argues that the inner sides of the feet should be kept parallel in standing, and calls this position "four square." The military authorities are recommended to adopt this position for soldiers when standing; and we hardly think it will recommend itself for steadiness, or on physical or physiological grounds. To get the same steadiness as from the ordinary angular position of the feet would involve a positive straddle. Similarly he recommends a different walk, the foot not to be turned from the direct forward line and the toes pointed downwards, and in this latter he does not differ from the drill sergeant and dancing master. The lengthening of the arch in standing and its shortening by the tie-rod action of the muscles is not clearly given, on account of the rather vague use of the term "walking." He does not seem inclined to allow as much increase in the width of the foot as we think occurs in standing, and does not recognise the spreading action of the toes by the rotation of the front end of the astragalus and os calcis. We should have been glad to see some experimental results of measurement of both these arches, as also some inquiry to clear his argument about the position of the foot in walking, standing, etc.

The value of the great toe as a propeller and of the other toes as graspers of the ground is well argued, and that hammer toe is due to faulty boots we are also inclined to agree with; but in the diagrams relating to the mechanism of the metatarso-phalangeal joints the vertical arrow is intended to show a vertical pressure of the weight of the body, which certainly does not rest on these joints, to keep them down. The longest toe, he thinks, is the great toe, and with this most anatomists would agree. More might, we think, with advantage be given of the mechanics of the tarsal joints and of the architecture of the cancellous tissue to make the description complete. As we would expect, he condemns the pointed, symmetrical, and high-heeled boot, and recommends those made on rational lines—with a straight inside, with sole not too thick for flexion, and with a broad low heel. He also depicts a new form of last, and a "pedostat" or foot measurer. Socks, too, should be of the same shape as the foot, and not centrally pointed, and he prefers a separate stall for the great toe. If the material be of an absorbent nature, the socks can be exposed to the air and sun to purify and dry, and the dust be shaken out, and this is better than washing, and certainly more practical in camping out or campaigning—to say nothing of being cheaper. The reference to faults in the anatomy and mechanics of the foot, as shown by sculptors, ought to stimulate them to look carefully into the matter, and no doubt they will have something to say in their own defence.

That the author has in some matters taken an erroneous view of the mechanism of the foot, and that therefore his conclusions are in some respects faulty, and not likely to influence public opinion, must be urged, and we do not think the military authorities will alter the style of marching or standing to the author's; but his views of the treatment of flat-foot and similar deformities are well worthy of attention. And his recommendations as to the shape and character of clothing for the feet are practical, and will do good if attended to by the public and by the trade. But these conditions have been given before by scientific men; it is to be hoped that the principle involved in "gutta cavat lapidem non vi sed sæpe cadendo" may prove efficient.

We may notice, finally, that the principle of muscles acting together to produce an effect, which the author seems to think an original idea, has been held by most anatomists; and, moreover, that all muscles act with their opponents for steadying the joints during action. In quarrelling with Parkes's statement that, "in the action of walking, the foot expands in length and breadth—in length about one-tenth, in breadth even more," he means to imply from his subsequent remarks, that this increase was supposed to occur when the weight was taken on the ball of the great toe; but this does not seem reasonable, though Camper's diagram supports such an idea. In explanation of Fig. 24, page 10, reference is made to some "short lines" which are not obvious to us; but the diagrams are generally good and descriptive.

The book is to be recommended as containing much that is original and much that is useful, though we have been compelled to draw attention to some doubtful features. It forms pleasant reading for those who have a deeper knowledge of anatomy and anatomical terms than we fancy the public generally possess; but it will make the reader think for himself, and not be the blind slave of custom.

[1] Preventive Surgery as Illustrated in Knock-knee and Flat-foot. JOURNAL, June 30th, 1888. On the Nature and Treatment of Flat-foot. *Edin. Med. Journ.*, Jan., 1890. Deformities of the Great Toe. JOURNAL, May 28th, 1887.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SPRING SESSION 1890.

Tuesday, May 27th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

The Registration of Diplomas obtained in Victoria and New South Wales.—The Foreign Medical Register.—The British Medical Register.—Disciplinary Cases.—The Midwives' Registration Bill. Diplomas in Public Health.—Preliminary Education.—Professional Education and Examination.—The Apprenticeship Question.—The Five Years' Curriculum and its Utilisation.

President's Address.—The PRESIDENT, in his address, commenced by observing that, following the examples of the dependency of Ceylon and the colony of New Zealand, two other of our great colonial possessions—namely, Victoria and New South Wales—have applied for and obtained the sanction of the Privy Council to come under the provisions of Section 11 and 17 of the Medical Act of 1886, which relates to the registration of medical diplomas in the special *Colonial Register*. On its part the Council, by acquiescing in the worth of such diplomas and authorising their registration, will be instrumental in realising a professional federation in respect of the healing art, which will now anticipate, but which must have accompanied, that complete federation towards which the attention of the most thoughtful minds both at home and in our colonies is now being directed. The *Foreign Medical Register* still has but a theoretical existence. The radical differences in the constitution and habits of different peoples, as well as certain national and professional interests, are opposed to the immediate establishment of exact mutual rights and privileges in regard to our profession. It is understood that the Swiss and French difficulties are to be met temporarily by the long since suggested method of granting limited personal local licences, although ultimately special examinations in each country will be insisted on. He again found it necessary to urge on the members of the medical and dental professions generally that they should not omit to communicate to their respective Registrars their acquisition of additional titles, their change of residence, or any other matters which may require correction. Setting aside certain trivial, intangible, or inadequately supported complaints of misconduct, there were only two cases to be brought under notice in which registered practitioners had forfeited their diplomas. The legal proceedings recently instituted by Mr. Partridge against the Council had again failed, and the cumulative decisions of several judges had at length so far defined the rights and strengthened the position of the Council that there was now an improved prospect of a wider and fuller recognition of its powers, and of a consequent diminution of resistance to its authority. During the recess Mr. Henry Fell Pease, M.P. for Cleveland, Yorkshire, as the promoter of a Bill which had been brought by him before the House of Commons for the registration of midwives, invited the President to join a Committee engaged in considering the principles and details of such a measure, but the President had not thought it advisable to join the Committee. By order of the Council, the several resolutions relating to this subject, whether passed by it recently or some years back, were sent to Mr. Pease, and the special resolution agreed to by the Council on November 29th last, expressing its opinion of the grave importance of securing competent midwives, for the poor especially, and urging on the Government to promote legislation on this subject, had been communicated to the Lord President. Sir Charles Lennox Peel's reply justifies some expectation that, should Mr. Pease's Bill be defeated or dropped, the Government may frame and carry a suitable measure embodying this long-delayed social improvement. It was satisfactory to find that the action of the Council, in its endeavours to secure adequate knowledge and experience from recipients of registrable diplomas in sanitary science or public health, had led to reasonably good, if yet incomplete, results, regard being had to existing, and at present uncontrollable, local conditions. Without exception, those bodies have left unquestioned the intrinsic importance of the proposals embodied in the rules adopted by the Council. According, however, to high legal authority, the Council has no power to "impose" such rules upon the qualifying bodies, but the conjoined London Colleges, which had obtained this opinion, had themselves approved and practically adopted the Council's own rules. It was not the idea of the Council to enforce a rigid uniformity in the modes of education and examination for these titular distinctions, which it has the power of registering or of declaring unsuitable for registration. Its object was, in fact, to indicate clearly its expectations as to a proper standard of requirements, and it was gratifying to find that, though in a few instances regrettable exceptions as to certain details have for the present to be allowed, yet by some bodies an even higher standard of training and testing will be insisted upon for specific academic degrees in public health or State medicine. Finally, it might be claimed that the action of the Council had rendered it impossible that any retrograde step in this now specialised sanitary science education and examination should be taken in this country. In the opinion of counsel, however, the Council had no direct power to inspect the examinations held by the medical authorities for their sanitary science or public health diplomas. This special alleged inability, the President considered, fully justified the vigilance of the Council in every possible mode of exercising its influence in regard to these sanitary titles. It was not quite four years since the Council considered and revised its recommendations on the subject of the preliminary education of intending medical students; and, on general grounds, it was undesirable that too frequent changes should be recommended. But at a moment when the Code now adopted for the primary education of the people exhibited much less of its previous scholastic or pedagogic type, and had had imparted to it a more elastic and practical character, and when, also, the associated examinations, inspections, and rewards would follow suit, it was not unfit that the Council should at least take note of any obvious weakness to be detected either in the system or in the results of the preliminary education at present available for the purposes of medical students. The influence of these changes, however, will probably not be so strongly felt in regard to the general scheme of subjects which the Council, after no fewer than ten different discussions between 1876 and 1886, had approved, but it would rather result in such practical modifications as would necessarily be brought to the notice of the numerous bodies charged with the duty of conducting the examinations for the higher middle-class education of the country. Still more complicated problems relating to the systems of professional education and examination would be brought before the Council in connection with the reports of the two standing committees on those subjects. Two associated propositions should be steadfastly held in view: (1) that medicine and surgery were practical arts, which, though to a certain extent empirical, were really founded on many general and special sciences; and (2) that, as those sciences advanced, they must, as the real basis of these twin arts, be faithfully taught, whilst the practice of those arts must be studied and pursued in every available place and by the most realistic methods. The old system of pupilage or apprenticeship—admirable and useful in some respects, but wasteful and obstructive in others—served, doubtless, to perpetuate and hand down much useful knowledge, but tended to reduce medical and surgical practice to a series of traditions, or even to a similitude of actual trades. Its complete revival as a general and compulsory condition of a professional education was not to be expected or desired. Even if the corporations were to agree to attempt this step, the universities could not be expected to follow them. The general adoption of a five years' curriculum of scientific culture, practical instruction and actual individual work, offered, as it appeared to him, the most available means of remedying the imperfections of the present system. The Council had, by its important resolution of November, 1885, already moved in this direction; and the definite expression of an unqualified approval of it just now would have great weight, especially as the proposal had been in principle approved by several of the qualifying authorities. This proposed period of five years was not more than equal to that consumed by the old systems of apprenticeship or pupilage, if to it were superadded the medical school and hospital work. Under this assumed extension of the period of professional education the claims of science, supported by the ardent advocacy of its teachers, would be sure of due recognition; but the special needs of practical medicine and surgery would require to be jealously safeguarded, including all such sound traditions and utilitarian methods as had stood the test of experience in the past. The diminution of systematic lectures would doubtless, by itself, most materially

providing time for intermediate though intermittent practical teaching; but it would form no permanent substitute for a prolongation of the entire period of study, and the consequent readjustments in the whole scheme of education and examination thus rendered possible. It was possible to point to Continental authority and practice for this uniform compulsory extension of the period of medical and surgical study; but a really excellent mode of utilising a five years' period, with its associated periodical visits, would be found in an interesting communication, describing the curriculum and examinations now enforced by the University of Melbourne for its degrees of Bachelor of Medicine and Bachelor of Surgery. If it should be held by the Council necessary that more attention must be paid to the demands of special departments of medicine and surgery—such, for example, as lunacy and ophthalmology—and if a larger acquisition of knowledge in regard to fevers and common diseases were also insisted upon by the examining boards, and if in every department, both of teaching and examination, a practical treatment and a judicious evolution and continuity of subjects were to be provided for, a longer period than that now occupied would have to be allotted to this seriously expanded amount of work.

On the motion of Sir JOHN SIMON, a vote of thanks to the President for his address was agreed to, and it was ordered to be entered upon the minutes.

The Council then proceeded to the appointment of a "business" committee.

The Examination for D.P.H. Glasgow.—On motion from the CHAIRMAN, as a matter of urgency, it was agreed to receive and enter upon the minutes certain communications in reference to the University of Glasgow and their examination for diplomas in public health.

Yearly Tables.—The following yearly tables were then ordered to be received: *(a)* showing results of professional medical examinations during 1889; *(b)* showing results of preliminary examinations during 1889; *(c)* showing exceptional cases in regard to length of courses of study during 1889; *(d)* showing results of professional dental examination during 1889; *(e)* showing results of competition for commissions in the Medical Department of the Royal Navy; *(f)* showing results of competition for commissions in the Medical Staff of the Army.

Dr. LEISHMAN suggested that in future returns should also be provided in respect of the numbers of diplomas issued in public health, and also as to the appointments in the Indian Medical Service.—A resolution to this effect was proposed and agreed to.

Extension of Medical Curriculum.—Communications from the Royal College of Physicians of London and from the Royal College of Surgeons of England, in regard to the extension of the medical curriculum, to the effect that the two Colleges awaited a further report from the Committee of Management before taking any action in the matter, were ordered to be received and entered in the minutes.—On the motion of Sir WILLIAM TURNER, it was agreed to refer these communications to the Education Committee.

Withdrawal of Qualifications.—Two communications from the Royal College of Surgeons of England announcing that the names of Mr. William Montague Hall Welby and Mr. East Apthorp had been removed from the list of Members of the College were received and ordered to be entered upon the minutes.

Dr. COLLINS alluded to a case recently reported in the JOURNAL in which the Master of the Rolls had expressed the opinion that the Council ought not to proceed to remove the names of persons from the *Register* merely on the strength of their names having been removed from the roll of any particular licensing body. He raised this question because he wished to know what steps it was proposed to take in reference to the persons concerned in the present instance.

Dr. HERON WATSON pointed out that all that was before the Council for the time being was whether they were going to erase the particular qualification.

The REGISTRAR pointed out that both the persons referred to had two qualifications, and that the question of the erasure of their names from the *Register* did not therefore occur.

Dr. GLOVER wished to know why the matter in respect of Mr. Welby had not been dealt with in November. The Council of the College of Surgeons had removed the name of Mr. Welby in July last, and had notified it on the 15th; the consequence was that Mr. Welby's name still appeared on the *Register*. He reminded them that they had a certain responsibility in connection with these cases, especially where the name remained on the *Register* in virtue of another qualification. He asked, then, why the case had not been dealt with in November; and, secondly, what further course it was proposed to take in regard thereto.

Sir WILLIAM TURNER said that these communications involved two questions: one in reference to the removal of the qualification, and as to that there could be no question; and, secondly, as to whether the Council was of itself to take further action about removing the name from the *Register*. He was proceeding to discuss their powers in this respect, when the PRESIDENT requested strangers to withdraw.

On strangers being readmitted it was stated that the Council had decided to strike out the qualification in respect of these two persons, reserving the question of any subsequent action for consideration at the November meeting.

Death Certificates: The Medical Register.—On the motion of Mr. WHEELHOUSE the reply of the Registrar-General to the resolution of the General Council requesting that the certificates of cause of death might be numbered, and a memorandum kept of the number of certificates distributed, was ordered to be received and entered upon the minutes. In this letter the Registrar-General, while expressing himself unable to support the proposition to distribute copies of the *Medical Register* to all registrars of births and deaths, consents to have the forms and books of forms numbered. Some correspondence with the Treasury in reference to the issue of the *Medical Register* to registrars of births and deaths, to the effect that the Lords Commissioners of Her Majesty's Treasury did not feel warranted in acceding to the request, was also ordered to be received and entered on the minutes.

Dr. GLOVER thought the thanks of the Council were due to the President for the great trouble which he had personally taken in this matter. He expressed the hope that something might still be done by requesting local authorities to furnish registrars with a copy of the *Register*, with which object in view he proposed later on to bring forward a motion.

Diplomas in Sanitary Science.—A report was brought forward from the Executive Committee in reference to the exceptions which should be admitted in special cases to the rules for the registration of diplomas in sanitary science, and the following resolution passed by the Committee was brought forward for adoption. "That on production in each case of the diploma, and on payment of the registration fee, the diplomas in sanitary science held by the following persons, either already registered as medical practitioners or hereafter entitled to be so registered, be registered as additional qualifications, followed by a list of names of such "diplomatates" from the Victoria University, the University of Glasgow, the King and Queen's College of Physicians in Ireland, and from students of the University of Edinburgh, the latter requesting that the courses of special laboratory instruction completed or begun before June 1st, 1889, or (in reference to sixteen of them) which had been commenced in October, 1889, might be accepted as admitting to examination for a registrable qualification in public health.

Sir JOHN SIMON observed that the individual reasons for these exceptions had not been specified.

Dr. STRUTHERS pointed out that the gentlemen in question had done the laboratory work before graduating, and that did not accord with his notion of what had been remitted to the Executive Committee. He urged that the University he represented had most faithfully carried out the representations of the Council, and if a side door were to be opened he had no doubt they could send up a batch of applicants from Aberdeen.

Dr. MACALISTER observed that in the communication above referred to from Glasgow it was said that some of the students were under a hardship in consequence of the action of the University. He asked whether the ten names admitted to registration as exceptions were the same as those included in the memorial forwarded from Glasgow. He agreed with Sir John Simon that some details of the grounds for the action of the Executive Committee should be given, confidentially or otherwise.

Dr. HERON WATSON proposed as an amendment that the matter should be referred back to the Executive Committe.

The amendment was seconded by Sir WALTER FOSTER.

Mr. MACNAMARA, speaking in support of the amendment, said that grave charges had been brought against the University of Glasgow in reference to these qualifications in State medicine, and if the Council sanctioned an exception in favour of these ten names, there would still remain forty-five men who would feel

aggrieved if they were treated differently. He thought, therefore, the matter had better be referred back to the Committee.

Dr. STRUTHERS pointed out that some of these gentlemen were stated to have begun their laboratory studies in October, although the resolution of the Council bearing thereon was passed in June, 1889.

The Rev. Dr. HAUGHTON, speaking to the amendment, asked for further information, and urged that members of the Executive Committee should he allowed to come forward and explain fully and frankly which of them was responsible for the use of the word "diplomatate," embodied in the resolution, which he characterised as a monstrosity. He protested against such a word going forth with the sanction of the Council.

After some discussion the original motion was withdrawn by the consent of the Council, and the amendment to refer the matter back to the Executive Committee for particulars as to the reasons for exceptions was agreed to.

Dr. ATTHILL moved, and Mr. MACNAMARA seconded, that a communication from the King and Queen's College of Physicians of Ireland, asking for recognition of a diploma in State medicine to be granted by the College in combination with the Royal College of Surgeons in Ireland, under Section 21 of the Medical Act, 1886, be received and entered upon the minutes.

This having been agreed to, Dr. ATTHILL moved a resolution in favour of acceding to the request. He explained that the communication arose out of a desire on the part of these two bodies to raise the standard of diplomas of State medicine by means of a conjoined examination. He pointed out that at present the diploma in public health in State medicine of the College of Physicians, as well as that of the College of Surgeons, was recognised, and though they were not at liberty to refuse to grant the single diploma to persons duly qualified to register additional qualifications, it was hoped that the greater weight attaching to the diploma of the two colleges would induce candidates to submit to the conjoined examination.

Dr. HERON WATSON asked why, in the regulations for this examination under the head of medical jurisprudence, the detection of the more common poisons by chemical analysis was excluded.

Dr. ATTHILL pointed out that this detail came under the head of chemistry.

Dr. GLOVER asked what proportion the fee for this examination bore to that of the present single diploma. He also raised the question as to the non-return of part of the fee to unsuccessful candidates.

Dr. ATTHILL said he thought the fee for the single diploma was five guineas (that for the double diploma being ten guineas). He suggested that the question of fees was not for the Council to consider. But he observed that they always made a point of returning the fees to unsuccessful candidates.

It was pointed out to Dr. Atthill that it was formally stated in the draft regulations that fees were not returned.

The Rev. Dr. HAUGHTON remarked on the fact that it was not proposed to abolish the single diploma, and observed that three diplomas in public health by these two bodies was somewhat in excess of requirements. He pointed out that at Trinity College no charge was made for the examination.

Mr. BRUDENELL CARTER suggested that a candidate who was rejected at the conjoined examination might possibly think it worth his while to present himself for one of the single diplomas.

Dr. GLOVER thought the arrangment for conjoint action was very creditable to both the bodies. He considered it quite inadmissible, however, that the single examination of the Colleges should be allowed to continue after the establishment of the conjoined examination.

Mr. MACNAMARA expressed great surprise that the slightest hesitation should be shown in ratifying such a movement. He observed that as the Royal College of Surgeons in Ireland had left the appointment of examiners to the College of Physicians, it might be inferred that the former body did not intend issuing their single diplomas any more.

The Rev. Dr. HAUGHTON raised the question as to whether either body could issue a single diploma which would be registrable.

Sir WILLIAM TURNER pointed out that the question of sanitary diplomas was quite distinct from the registration of medical qualifications.

The motion was then agreed to, the PRESIDENT observing that it must be left to the good sense of candidates as to whether they would go to the single Colleges or take the double diploma. He thought the single diploma would probably die out.

Dr. STRUTHERS moved that a communication from the University of Aberdeen, accompanying regulations for the diploma in public health, be received and entered on the minutes.

This having been agreed to, he moved a resolution that the accompanying regulations should be considered as deserving of recognition under the Medical Act, 1886.

Dr. HERON WATSON asked how it was that the regulations contained no allusion to medical jurisprudence.

Dr. MACALISTER pointed out that medical jurisprudence stood in no necessary relationship to public health, and was a subject moreover, in which the candidates, being necessarily graduates in medicine, would certainly have passed an examination in due course.

The resolution was then agreed to.

Communication from the Royal College of Physicians of London—A communication from the Royal College of Physicians of London, accompanying a report of a joint committee of the Royal Colleges of Physicians and Surgeons, in reference to the recent action of the Council in the matter of the registration of diplomas in State medicine was brought forward for the purpose of being received and entered upon the minutes. In this it was stated—

"That the Colleges have noticed the unprecedented course taken by the General Medical Council in dictating to the Licensing Bodies the conditions on which the diplomas in State medicine are to be granted, in order that they may 'deserve' recognition in the *Medical Register*, and having obtained from high legal authorities the opinion that the course in question is not justified by the terms of Section 21 of the Medical Act, 1886, they place on record their disapproval of the action taken by the General Medical Council.

"The Colleges, however, being of opinion that there is no prospect of any opportunity arising for a repetition of the proceedings of the Council in question, and therefore of the present action being quoted as a precedent, and being, moreover of opinion that the proposed conditions of study and examination are in themselves unobjectionable, considers that it is undesirable to take further action."

Mr. BRUDENELL CARTER moved that the Council pass to "the next question."

Sir WALTER FOSTER moved that the communication be received and entered upon the minutes. He thought it merited to be placed on record as a charming example of the dual style in correspondence. He remarked that one paragraph began with an expression of indignation and ended by a disapproval of the action of the Council. Then the report terminated in the most delightful acceptance and recognition of the complete goodness of everything that had been recommended, which amounted to a thorough justification of the action of the Council in the matter. He said it reminded him of a gentleman who had a particularly shrewish wife, who was continually writing letters to which her husband found it necessary to add a suitable postscriptum in order to mitigate the effect.

Dr. HERON WATSON seconded the motion to place the communication on record. He thought the report might be described as having been written by someone over whom the College had no moral control.

Dr. STRUTHERS thought it would be unduly severe on the bodies to place it on record.

The Rev. Dr. HAUGHTON thought the correspondence might be taken to show the value of "high legal opinions" which had not been tested in a court of law.

Dr. MITCHELL BANKS thought the report was an unfortunate one, and very undignified, and he preferred to take no notice of it.

The PRESIDENT called attention to the fact that Mr. Carter's proposal "the next question" must take priority.

Sir JOHN SIMON, in supporting Mr. Carter's view, pointed out that the Council had not wished to dictate. They had simply declared what would guide their future action under Section 21 of the Medical Act, 1886. The bodies in question were entitled to confer their diplomas on what terms they pleased, but it would be for the Council to decide as to whether they would be admitted to registration. Possibly the Colleges were indifferent to registration.

Mr. CARTER'S motion was then put to the vote and carried.

On the motion of Dr. HERON WATSON, the numbers and nam

f those who voted for and against the motion were taken own.

Registration of Diplomas of Foreign and Colonial Practitioners.—Sir WILLIAM TURNER moved that the following report of the xecutive Committee be received and entered on the minutes:

"The Executive Committee report that, having received from ıe Privy Council Office an Order in Council, applying Part II of ıe Medical Act (1886) to the Colony of Victoria, they have con-dered an application from Mr. H. B. Allen, Professor in the Uni-ersity of Melbourne and Dean of the Faculty of Medicine of the niversity, for the recognition of the degrees in medicine and ırgery of that University, and their registration in the *Colonial 'egister* under Section 13 of the Medical Act (1886), such applica-on being based on the grounds (1) that Part II of the Medical ct (1886) has been extended to Victoria; (2) that the University as duly incorporated in 1853; (3) that its Medical School con-ains some 250 students; (4) that it is the only institution having ower to grant medical or surgical qualifications in Victoria; (5) ıat its medical and surgical degrees are complementary, and—hen taken together, as they usually are—constitute a complete ıalification in medicine, surgery, and midwifery; (6) that the ourse, which extends over five years, must be commenced by atriculation, and students must attend hospital practice during ur years, and must complete three courses of dissections, and ıat, having considered these documents, they passed the follow-g resolution: 'That the evidence afforded in the preceding atement and in the Melbourne University Calendar is such as satisfy the Committee that the said degrees in medicine and ırgery, taken conjointly, are a sufficient guarantee of the pos-ssion of the requisite knowledge and skill for the efficient actice of medicine, surgery, and midwifery, and the Committee commend to the Council that these degrees of the Melbourne niversity be registered on the separate list of practitioners in e *Colonial Register*.'"

moving the resolution he spoke highly of the educational urse of the University of Melbourne, and urged that the resolu-on of the Executive Committee should be approved.

Dr. HERON WATSON seconded the motion, but called attention the expression "taken conjointly," in reference to which he ointed out that in the communication from the Secretary it was ated "that the medical and surgical degrees are complementary, id when taken together, as they usually are, constitute a com-ete qualification," etc. He suggested that on application for gistration inquiry should be made as to the two examinations ving been taken conjointly in order to ensure that the candidate as duly qualified in accordance with the Medical Act, 1886, in edicine, surgery, and midwifery.

A long discussion then ensued as to the right of the Council to sist upon the diplomas in medicine and surgery being taken njointly, it being urged on the one hand that the Medical Act quired the candidate to submit to examinations in all the sub-cts at the same time; while, on the other, it was contended that e date of passing the respective examinations was indifferent, ovided that on applying for registration the candidate was en-led to adduce evidence of being qualified in medicine, surgery, d midwifery.

Sir WILLIAM TURNER suggested that the substitution of the pression "held conjointly" for "taken conjointly" would meet e difficulty.

Dr. HERON WATSON, as seconder, declined to accept the sugges-n, and Sir WILLIAM TURNER adhered to his original motion.

Sir JOHN SIMON then moved as an amendment that the resolu-n of the Committee read "held conjointly."

The PRESIDENT having put the amendment to the vote declared to have been carried.

On the motion of Dr. HERON WATSON, the names and numbers those who voted for and against were taken down, on which it peared that 12 members had voted for, and 15 against, the endment.

The amendment was therefore declared to have been lost.

Dr. BRUCE then moved as a further amendment that the rds "taken conjointly" should be left out of the original olution.

The Standing Orders having been suspended to allow the com-tion of the business, the amendment was put to the vote, when PRESIDENT declared the numbers to be equal.

On the motion of Dr. WATSON, the names and numbers of those ing for and against were taken down, when there were 15 ces for and 13 against.

The amendment was therefore declared to be carried.

The PRESIDENT then put the original resolution, less the words "taken conjointly," as a substantive motion, and this was agreed to.

The Council then adjourned.

Wednesday, May 28th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

The Case of Fraudulent Entry on the Register.—The first business was the consideration of the case of Richard Jones Owen (registered as Mem. R. Coll. Surg. Eng. 1861, Lic. Soc. Apoth. Lond. 1861), who had been summoned to appear before the Council on Wednesday, May 28th, at 2 o'clock, to answer the following charges, as formulated by the Council's solicitor: "(*a*) That he wilfully procured his name to be registered in the *Medical Register* under the Medical Act (1858), by making, or producing, or causing to be made or produced, false representations contained in an instrument in writing signed by him, dated the 2nd of March, 1887, and forwarded by him to the General Medical Council, and purporting to be an application for restoration to the *Medical Register*. (*b*) That he had been guilty of infamous conduct in a professional respect, the particulars of which conduct were that he made and subscribed the said false representations, and thereby procured the registration of his name in the *Medical Register*, and had, since the registration of his name, practised as and held himself out as being a duly qualified registered medical practitioner."

Mr. FARRAR, the solicitor of the Council, made a statement to the Council bearing on the facts of the case, which were as follows; A Mr. Richard Jones Owen, registered as M.R.C.S. and L.S.A., was registered in 1862, he then living at Leamington. He subsequently left that town and was for some time medical officer in the Army. Subsequently, as he did not reply to the application of the Registrar concerning his address, his name was removed from the *Register* in accordance with the regulations. In 1885 an application was received by the Registrar purporting to emanate from the said Richard Jones Owen, requesting that his name might be restored to the *Register*, and, after the accomplishment of the usual formalities, this was done, the address then being given as 128, Farmouth Street, Liverpool. It had subsequently transpired that the person Owen, who was practising in Liverpool under the name of Richard Jones Owen, had been a student in 1879 at the Liverpool School of Medicine, but had left without obtaining any diploma. In 1885 this person was proceeded against by the vaccination officer for having signed certificates, not being a duly registered practitioner. He explained this by saying that his name had been allowed to drop out of the *Register*, and he promised to apply to have it restored. After the name had been restored he altered his signature from Richard Owen to Richard J. Owen, and no exception was taken to his signature. This person was at present on bail under a charge of perjury before the Coroner, and his case was to come before the magistrate that day (Wednesday). Mr. Farrar produced a declaration from the Mr. Richard Jones Owen who was registered in 1862, disclaiming any knowledge of the person residing in Liverpool, and pointing out that he was the only person of the name who obtained his diplomas in 1861. Mr. Farrar observed that, from the documents in his possession, it was clear that the defendant had practised as a qualified medical man, by virtue of his having got on the *Register* by this pretence. A registered letter addressed to him, containing the summons to appear before the Council, had been opened and returned with the endorsement "returned by M. Jones." He pointed out that the questions before the Council were two in number: First, as to whether they considered the case sufficiently proved to direct the name to be removed from the *Register* for fraudulent representation, and, secondly, as to the question of policy, whether they would order his prosecution. He observed that it was difficult to imagine a more direct attack on the *Register*; but, on the other hand, it had been the invariable practice of the Council to enter upon no prosecution which could be conveniently conducted by other people. It was suggested that the Public Prosecutor might be called upon to take up the case, and that of course was one way in which justice might be obtained. He submitted to the Council, therefore, (1) whether the case was proved, and (2) whether, if proved, they thought fit to take the name off the *Register*. He observed that the real man did not apparently want to be on the *Register*; at any rate, no application had been received from him to that effect.

After some discussion as to the course to be pursued by the Council, Dr. ATTHILL moved a resolution to the effect that it having been proved to the satisfaction of the Council that this gentleman's name had been entered fraudulently upon the *Register*, the Registrar be directed to erase it therefrom.

Sir WALTER FOSTER proposed that strangers should be ordered to withdraw.

Sir JOHN SIMON submitted that this was not a case within Section 14 of the Standing Orders. The question was raised under Section 26 of the Medical Act, but Section 14 of the rules applied to Section 29 of the Act. It was not a question of a registered medical practitioner having misconducted himself, but as to whether a certain person calling himself A. B. or C. having fraudulently got on to the *Register* should be removed therefrom. It was merely a question of correcting the *Register* by expunging the name of a "poacher."

Dr. QUAIN urged that the next step must certainly be to prosecute the man either through their own solicitor or through the Public Prosecutor, but he questioned whether they could take off the name since it was that of a man who was entitled to be registered.

Mr. BRUDENELL CARTER pointed out that as no application had been made by the real Richard Jones Owen to have his name restored to the *Register*, his name was not entitled to figure thereon.

Dr. HERON WATSON said the case came under Sections 39 and 40 of the Medical Act, which bore on the case of persons who had obtained admission to the *Register* by false or fraudulent representations, for which the penalty was a term not exceeding twelve months' imprisonment. He said that the proper course would be to treat him as a person who had been guilty of a misdemeanour. He pointed out in reference to the second paragraph of the charge that the defendant could not properly be accused of infamous conduct from a professional point of view, since he was not a medical man. He urged that it would be extremely unfortunate to allow this man to escape from the hands of the police, and suggested that orders should be telegraphed to the Liverpool police to detain him on this fresh charge.

Mr. MACNAMARA said it had not been satisfactorily proved that the person had any right to the name of Jones Owen at all. He urged that they would not be entitled to remove that name from the *Register* without the consent of its legitimate bearer.

Mr. FARRAR pointed out that when a man forged a bill he did not usually do so in his own name. He confessed that he did not know whether the defendant's name was really Jones, but that was not a matter of any importance.

Dr. MACALISTER, who seconded the motion, pointed out that the phrase "fraudulently entered upon the *Register*" seemed to imply that the Registrar had committed the offence. He thought the word should be "incorrectly," which occurred in the Act.

The resolution, subject to several verbal alterations, was then agreed to.

Strangers were then ordered to withdraw, while the Council proceeded to deliberate *in camerâ* upon the question as to the prosecution of the defendant.

Strangers having been readmitted, the PRESIDENT announced that the Council had decided to bring the case to the notice of the Public Prosecutor.

Petition from Mr. J. F. Leeson.—A petition from Mr. J. F. Leeson (removed from the *Register* in November last for acting as cover to a "medical electrician") for the restoration of his name to the *Medical Register*, supported by four testimonials, three of which were from medical practitioners in Bradford, was ordered to be received and entered upon the minutes. The petitioner expressed his regret at having acted unprofessionally, and appealed to the Council to enable him to gain his livelihood by restoring his name to the *Register*.

Strangers were ordered to withdraw, and on their readmission it was announced that the consideration of this petition had been deferred to the next ordinary meeting of the Council.

The Case of James McCully.—A report by the Executive Committee was received and entered on the minutes on an appeal for restoration to the *Medical Register* from James McCully (formerly registered as Mem. R. Coll. Surg. Eng. 1864, M.D. Q.Univ.Irel. 1864), whose name and qualifications were erased on November 22nd, 1887, by order of the General Council, in consequence of his having been convicted of misdemeanour (Minutes, vol. xxiv, p. 292), referred to the Executive Committee by the General Council in the following resolution passed on November 28th, 1889 (Minutes, vol. xxvi, p. 163): "That this case be referred to the Executive Committee for inquiry and report to the Council at its next session." The Committee reported that James McCully was invited to attend before the Executive Committee on February 24th 1890, but that he did not appear; and that, accordingly, they had nothing further in the shape of evidence in this case to lay before the General Council.

Examinations for Diplomas in Public Health at the University of Glasgow.—Sir WALTER FOSTER moved that a Committee be appointed to inquire into the allegations of the petition with reference to the examination for diplomas in public health held by the University of Glasgow in October, 1889, to take evidence and examine documents, if necessary, and to report to the Council. The Committee to consist of the following members: Sir Dyce Duckworth, Dr. Haughton, Dr. Bruce, Mr. Brudenell Carter, and Dr. Struthers. In proposing this resolution, he observed that it was the most serious matter that had come before the Council since he had been a member. They had printed in their minutes a copy of the memorial that had been sent to them with reference to the action of one of the licensing bodies. That memorial contained very serious allegations against the University of Glasgow. He would be very sorry to believe such allegations, and it was because he was anxious that they should be disproved, that he urged steps being taken to have this memorial inquired into. He pointed out that the fact of fifty-five candidates having all been successful was certainly calculated to excite surprise in the minds of observers. Among the gentlemen who passed the examination were some who, not having a medical qualification enabling them to be put upon the *Register*, found themselves in this peculiar position, that having passed the examination in public health of the University of Glasgow, giving them the right to the diploma, they were unable to register it, and, by the rules of the Council, such diplomas could not be registered after January 1st, 1890. They would consequently have to go in for another examination, and acquire another diploma in public health.

Dr. CAMERON said that no one wished to prejudge the finding of the Committee, least of all himself; but it was impossible to disguise the fact that the matter then under their consideration was one which had given rise to a good deal of feeling in the West of Scotland, especially among the Fellows of the body which he had the honour to represent, which was the only other body in the West of Scotland entitled to confer sanitary qualifications. Believing that Sir Walter Foster's motion offered the best possible means of settling the question, he had great pleasure in seconding it. He observed that it was difficult to say what exact meaning the memorialists desired to attach to the expression "independent Committee;" if, however, they desired that the Committee should consist of persons entirely free from any suspicion of local prejudice and feeling in the matter, then Sir Walter Foster had made an admirable selection.

The Rev. Dr. HAUGHTON protested against being nominated to serve on the Committee without his consent having been obtained, especially in a matter of so much delicacy. Moreover, he claimed the right to oblige the mover of the proposal to join the Committee in lieu of himself. At the same time, he was prepared to support the motion. He asked whether the Committee would be expected to see the candidates' answers to the questions as well as the questions themselves.

Sir JOHN SIMON justified the selection of Dr. Haughton, on the ground that it was customary in such cases to appoint a representative from each province of the kingdom, and stated that Dr. Haughton was eminently qualified to serve on the Committee. He urged that the matter was of extreme urgency, and he hoped that the Committee would report in time for the Council to take action in the matter during the present session. He commented on the old word "expiscation" used in the memorial.

Mr. BRUDENELL CARTER suggested that the expression of the memorialists that the Committee should do what was right and necessary for the "expiscation" of the whole truth, probably meant to convey that the Committee was not to be bound by strict legal rules, but was to be entitled to apply "fishing" interrogatories.

Mr. MACNAMARA urged that Sir Walter Foster should be the chairman of the Committee. He said that he had himself visited the examination in surgery of the University of Glasgow, and no more admirable examination he had never seen.

Dr. HERON WATSON heartily approved of the motion, but asked what the Committee would do if they were met by a refusal to produce the candidates' answers to the questions. He doubted

ether it would be possible for the Committee to report to the ncil in time for them to take action during the present session.
ir WILLIAM TURNER pointed out that the appointment of the nmittee might lead to a very long and elaborate inquiry. He erved that the University of Glasgow had been communicated h, and he thought they ought to await the reply.
ir WALTER FOSTER thought the Committee might take the ly of the University of Glasgow into consideration, and report reon at once. Should it appear necessary to proceed further he matter, he thought that no trouble or expense should be red. It was because it might turn out to be a big inquiry, t he himself avoided serving on the Committee, from simple bility to devote the necessary time and attention to the ter; his whole leisure for the next two months would be oc- ied in preparing for the approaching meeting of the British lical Association at Birmingham.
r. GLOVER did not think the inquiry would necessarily be an ensive matter.
r. STRUTHERS thought that far too much had been made of memorial. He thought it would have been better to refer it he Executive Committee, and await the reply of the Univer- . Whatever might be the case with regard to the facts alleged, did not like the tone of the document, which sinned against injunction to wash one's dirty linen at home. At the same e he admitted that the inquiry had to be made, though he ght they should await the reply of the University.
n the Rev. Dr. HAUGHTON proposing to introduce an amend- t to place Sir Walter Foster on the Committee—
r WALTER FOSTER consented to serve on the Committee dur- the present session of the Council.
ne motion was then put to the vote and was agreed to, with dissentient (Dr. Pettigrew).
idwives' Registration Bill.—Some correspondence submitted he direction of the President, in regard to the Midwives' istration Bill, was ordered to be received and entered on the utes.
spection of Examinations for Higher Registrable Qualifica- s.—A communication from the Royal College of Surgeons in nd embodying an expression of opinion on the part of the ncil of the College that it was the duty of the General Medical ncil to ascertain whether the conditions upon which the er registrable qualifications were granted were such as to le them to be entered on the *Medical Register*, and request- the institution of visitations for that purpose, was brought ard by Mr. MACNAMARA (seconded by Sir WALTER FOSTER) he purpose of being entered upon the minutes.
r WILLIAM TURNER objected to the communication being ed on the minutes, on the ground that it contained a statement was not in accordance with fact, it being no part of the duty ne Council, imposed on it by the Medical Acts, to carry out inspections.
. ATTHILL said that the same subject had come before the ncil of the body he represented, and he had been instructed to est the Council to inspect their examinations for the higher omas. He regretted the wording of this letter because, so far e could see, such inspections were no part of the duty of the ncil. At the same time, he appealed to the Council to allow letter to go upon the minutes in order to testify to their ety for these examinations to be inspected.
. MACNAMARA said he did not think it would have been neces- to argue in favour of the letter being received and entered the minutes. He appealed to Sir William Turner to allow usual course to be adopted, and so spare the Council the re- s he would otherwise be called upon to make.
. WALTER FOSTER supported the proposal for the very reason hich Sir William Turner objected.
. WILLIAM TURNER said he would not object to the letter ap- ng upon the minutes if the statement were appended that Council of the Royal College of Surgeons in Ireland altogether pprehended the position of the General Medical Council in ct of these inspections.
. JOHN SIMON supported the reception of the communication.
. MACALISTER pointed out that the Council had yesterday ned to place on record a mere expression of opinion on the part other body in respect of the duties of the Council, and he urged this communication was on the same footing. He therefore d "the previous question," and this was put to the vote and ed.
moval from Students' Register. — Mr. MACNAMARA, in accordance with notice, asked the President what powers, if any, the Council possessed in the case of medical students whose names appeared in the *Students' Register*, and who had been convicted in a court of justice of misdemeanour. He urged that the *Students' Register* having been created by the Council it followed as a natural consequence that they had the right to remove the names of students from the *Register* who had been convicted of certain offences. He alluded to two cases which had occurred in Dublin, which pointed to the desirability of their being enabled to prevent certain persons subsequently obtaining any medical qualification.

The PRESIDENT read a legal opinion drawn up by the legal adviser of the Council, to the effect that the Council had no power to remove from the *Students' Register* the names of medical students convicted of misdemeanour or other serious misconduct, but that the Council would be perfectly justified in calling the attention of the licensing bodies to any such cases which came to the knowledge of the Council.

The Council then adjourned.

Thursday, May 29th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

Finance Report.—The report of the Finance Committee, which showed an increased income and a decreased expenditure, was presented by Dr. QUAIN, and adopted.

Glasgow University.—The answer of the Senate of Glasgow University to the memorial respecting examinations in sanitary science was received and ordered to be entered on the minutes.

Education Committee Report.—On the motion of Dr. STRUTHERS, the report of the Education Committee was received, and entered as an appendix to the minutes.

Dr. STRUTHERS, in moving that the Council should resolve itself into a committee of the whole Council for the consideration of the recommendations of the report, said the Council was aware that for a number of years the question of improving medical education had been before the Council. It had been remitted on several occasions to the Education Committee, and they had made three several reports. There had been complaints that towards the end of the curriculum there was a want of the practical element in medical education—what might be called the clinical part. On the other hand, complaints had been made of deficiency in the preliminary scientific part of medical education. These were the two points of view from which the report of the committee had been drawn up. They had directed their attention first of all to improving the school part of the general education and the preliminary scientific part of the education, to which they also attached importance, and then afterwards to improving the final part—the clinical part. He might mention that the report was the outcome of a great deal of labour and deliberation on the part of the committee. Nearly the whole of their report hung upon the proposal to add a fifth year to the course of study. There had long been a demand for this additional year of study, and of course that was a very serious proposal. The Committee felt the responsibility of making such a recommendation. As the President had pointed out, it was undesirable to meddle with and alter the conditions of medical education from time to time. The question had now been thoroughly threshed out, so far as committees and reports could do so, and they had arrived at a stage when they could face and settle the question. This Council was the body to lay down the law on the subject.

The Council then resolved itself into a general committee for the consideration of the recommendations of the Education Committee.

Dr STRUTHERS, speaking to the first recommendation "that the course of professional study after registration should occupy at least five years, on condition that the fifth year should be devoted entirely to clinical work as subsequently defined," pointed out that it was a serious matter to impose upon the student the expense and loss of time involved by an additional year; but it had been generally recognised that the student was deficient in practical clinical work, and the only way to remedy the defect was by adding to the curriculum a year, which should be devoted exclusively to clinical work as provided for in a subsequent recommendation. It was essential that the student should be protected against any more lectures. He would protest against its going abroad that the Council was disposed to sanction such an addition to the curriculum unless it were studiously hedged in and reserved for practical work. In reply to Sir William Turner, he

said that the recommendations as to the mode of employment this additional year would be discussed separately in due course.

Mr. MITCHELL BANKS said he had great pleasure in seconding the proposal. He pointed out that the question was not exactly a new one, for it had been gradually led up to by members of the Council for a good many years past. It was his duty to anticipate the objections that were sure to be made against the innovations. One was that such an additional requirement might have the effect of restricting the supply of medical men, but he urged that the profession was now overstocked to the detriment of both the profession and of the public. Then it might be said that poor students would be prevented going on with the course, but he thought that men who were in such financial straits would possibly do well to take to some other method of earning their livelihood.

Sir JOHN BANKS said that in every other country in the world the medical curriculum lasted at least five years. In Austria it was five years, in Holland six, in Belgium seven, in Denmark five, in Norway seven, and in Sweden, where the medical profession stood higher than in any other country in the world, it lasted ten years. As to poor students, in some countries students, before they were accepted, were obliged to prove they had a certain amount of means. After a very long experience, he advocated the proposed extension of the curriculum to five years.

Mr. WHEELHOUSE also supported the recommendation, on the ground that of recent years medical education had been retrograding rather than advancing. When he entered the profession he had to devote eight years to his curriculum. During five of these he was under apprenticeship, and in that period he gained valuable knowledge, which he could not have acquired in any other way. In the present state of medical science it was simply impossible for any student during a four years' course of study to acquire the knowledge which was necessary to enable him to practise his profession in safety to the public and credit to himself. On that ground he was very anxious to see the curriculum extended in the way proposed. The additional year should be devoted to practical work. If it were so he considered it would be quite enough to replace all the advantages that were obtained by the old system of apprenticeship.

Dr. ATTHILL held it to be impossible that any young man should attain anything like a satisfactory knowledge of the numerous subjects upon which he had to be examined in four years. But the proposed extension of time ought to be accompanied by several safeguards to compel the student to study regularly, consistently, and perseveringly. They must take care to test the progress of education by regular, systematic, sessional examinations.

Sir JOHN SIMON urged that they should first assert the broad principle, and discuss conditions afterwards. One of the conditions upon which he would strongly insist was that the course of study should be tested by intermediate examinations. The course to take in this matter was the course which had been pursued in regard to public health diplomas. The Royal College of Physicians had misunderstood the action of the Council in that matter. They thought this Council was dictating, but it did not dictate. It had a position independent of, and more or less in control of, the separate bodies. It had to act upon its own opinion. It was for this body, as Dr. Struthers had said, to lay down the law on the fundamentals of medical education. If this body unanimously, or nearly unanimously, put on record its opinion that the minimum course of study ought to be five years, of course there could be no doubt that in general the medical authorities would act in conformity with that opinion. With respect to this proposition that five years' study was necessary, he was ready to put down his foot, and he hoped the Council would take that view. It might be that the medical profession would become a costlier one for the mass of the people to enter. But out of poverty and even penury men had risen to the highest positions in other professions, and he did not see why that should not continue to be the case in regard to the medical profession.

In reply to some remarks by Sir WM. TURNER, Dr. STRUTHERS said he wished to make it clear that the study of chemistry, biology, etc., would be included in the curriculum.

Mr. MITCHELL BANKS added that the matter had been fully discussed in Committee, and it had been generally agreed that the holding of a degree in science or arts ought to count for one year of the curriculum.

Sir WALTER FOSTER asserted that the possession of a degree in arts should reckon for a year of professional study. While he agreed that five years was necessary for the acquisition of a proper knowledge of medicine, he confessed that he had very little sympathy with the policy of the Council in the past. He thought the policy of directing attention to the details of medical education was a wrong one; the proper function of the Council being to make sure that the examinations were such as to secure a proper standard of excellence. It was not impossible to make the examinations answer this purpose. So long as they adhered to the policy of bolstering up monopolies they could never hope to attain the standard of Continental education. The result of the conjoint schemes had not been satisfactory, and the condition of things at present in the multiplicity of diplomas was decidedly worse than twenty years ago. As it would be difficult to break away suddenly from the existing policy of the Council, he agreed that the addition of a year was desirable. If the Council would only bring about a State examination in medicine they would, by putting an end to the downward competition of the licensing bodies, do a great thing for the advancement of medical education. He would divide up the *Students' Register* into sections according to the stage of the curriculum, and men would only be permitted to pass from one division to the other on producing evidence of having passed the necessary examination. The general standard of preliminary and professional education had been raised vastly during the last thirty years, yet the condition of things in the medical practice in our large towns was unprecedentedly bad. He thought the cause of this downward competition was far deeper than methods of study, and he did not think that enhancing the difficulties would check it.

Dr. HERON WATSON thought the possession of a degree in arts by medical men generally would tend to enhance their social status.

The first recommendation of the Committee was then passed by the Council in committee *nemine contradicente*.

Dr. STRUTHERS then moved the next recommendation, namely: "Four of the five years should be passed at a school or schools of medicine recognised by any of the licensing bodies mentioned in Schedule (A) of the Medical Act, 1858."

Sir JOHN SIMON asked if it would be necessary that persons studying physics should attend a medical school.

Dr. STRUTHERS said the Committee contemplated that the first year might be passed at any school where the sciences were thoroughly taught, although they might not be medical schools.

Dr. KIDD moved as an amendment to leave out the words "four of the five years," and insert in their stead "at least four winter and three summer sessions." He believed this would afford ample opportunity for obtaining the necessary training.

Dr. GLOVER seconded the amendment.

Dr. MACALISTER pointed out that the word "sessions" would not be understood at Cambridge. They would be more consistent he thought, if they used the calendar method of counting time. "Years" was common English as applied to any part of the country, whereas "sessions" applied to localities only.

After some further remarks by Mr. MACNAMARA, Mr. MITCHELL BANKS, Dr. MACALISTER, and other members, the amendment was put to the vote and negatived.

The Council then resumed the discussion on the original recommendation, which, as amended by Sir Dyce Duckworth, read as follows: "The first four of the five years should be passed at a school or schools of medicine recognised by any of the licensing bodies mentioned in Schedule A of the Medical Act (1858), but the first of these four years may be passed at a university or teaching institution recognised by any licensing body where the subjects of chemistry, physics, and biology are taught."

Sir WALTER FOSTER proposed as an amendment: "Provided always that in case of graduation before the commencement of medical studies the time to be spent at a recognised medical school may be three years." He regretted that no sufficient inducement was offered to students to take their degrees in arts before commencing their medical studies. In studying law the holders of arts degrees were allowed to take a year off, and he thought a similar attraction should be held out to enter the medical profession.

Dr. STRUTHERS objected to the amendment.

Dr. HAUGHTON said he could understand the proposal as applied to a degree in science, but not in arts.

The amendment was then put to the vote and negatived.

The original motion having been withdrawn in favour of the modification proposed by Sir Dyce Duckworth was then agreed to.

The Council then adjourned.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SCRIPTIONS to the Association for 1890 became due on January . Members of Branches are requested to pay the same to their spective Secretaries. Members of the Association not belong- to Branches are requested to forward their remittances to e General Secretary, 429, Strand, London. Post-office orders ould be made payable at the West Central District Office, gh Holborn.

The British Medical Journal.

SATURDAY, MAY 31ST, 1890.

MUZZLING OR REGISTRATION?

Board of Agriculture has seen fit to cancel the existing s or muzzling order, so far as it refers to certain districts, o substitute for it a system of registration by means of s bearing the names and addresses of owners of dogs. unintelligent treatment of so serious a matter as the ex- ion of a deadly disease calls for vigorous protest on the of medical and veterinary practitioners whose experience e question gives preponderating weight to their advice. s within the last few years been demonstrated *ad nauseam* muzzling, and nothing but muzzling, can be an adequate y for the spread of rabies, and that, to be permanently ual, it must be accompanied by a rigid system of quaran- The Board of Agriculture by its action in December last wledged the efficacy of the muzzle, and yet, although is a disease which affects human life, and which could ept from our shores by a complete and comprehensive re, the department has adopted the old lame and halting of partial muzzling without quarantine. That policy s has failed, and it always will fail, in producing perma- benefit.

gistration has been tried, and has been found wanting. adopted in Vienna in 1886, but after a year's trial the broke down so signally, that the more scientific method gain resorted to, and for the last three years rabies has kept out of that capital by the use of the muzzle. Regis- was tried in Baden, and there achieved partial success by such unscrupulous and immediate slaughter of dogs as not be tolerated in this country. It was also enforced lgium between the years 1875-80, during which time was in course of eradication in Holland by muzzling. markably interesting series of maps exhibited by Dr. appelle, of the Hague, at the International Congress in n, show that nearly the whole of the cases that occurred land towards the end of that period were contracted the registered dogs on the Belgian frontier. Again, ation was tried in our own country last year, at Brad- nd ended by eight persons being bitten by a rabid dog, nt to M. Pasteur for treatment. Positive evidence, there- xists to prove the utter inadequacy of registration as a to the desired end.

the present juncture, when we are threatened with a which must inevitably bring about a recurrence of out- breaks of rabies and hydrophobia, it will be of value to recall the services which the muzzle has rendered to us in London. Thus, the deaths from hydrophobia were: In 1884 (no muzzling), 9; in 1885 (no muzzling), 27; in 1886 (muzzling enforced), 9; in 1887 (no muzzling), 2; in 1888 (no muzzling), 3; in 1889 (muzzling enforced after July 31st), 10; in 1889, muzzling enforced), no deaths. The 9 deaths in 1886 were all caused by bites inflicted before the muzzling order of December, 1885, so that the year 1886 really occupies the same position as the present year in its exemption from a death-rate obtained by a period of muzzling. Since the existence of the present rabies order, no fewer than 61 dogs certified to be rabid have been seized by the police. It is easy to imagine what the death-rate in London would have been by the present time but for the protective measure to which we owe our immunity. In fact, so thoroughly has the muzzle performed its work here, that not a single English patient has been sent to Paris since the end of February, although before that time some hundreds of persons bitten by dogs sought the aid of the Pasteur Institute. Evidence of the value of quarantine is overwhelmingly strong, and the experience of Australia, of New Zealand, Scandinavia, and other countries proves that wherever it is adopted rabies can be kept at arm's length.

With such instructive facts before us it is difficult to understand the position now taken up by the Board of Agriculture. It is no light matter to play fast and loose with a subject which concerns the life and death of our fellow creatures, and it is the height of folly to have alternate hot and cold fits with regard to rabies and the method of its suppression: to go to enormous trouble and expense to stamp it out, and then, when only half the work is done, to relax all efficient preventive precautions, to calmly fold our official hands and await the next recrudescence of the disease. There can be no question that if muzzling and quarantine were enforced Great Britain might in future be wholly free from rabies and hydrophobia. If, however, the half-measure of registration be resorted to it can only be a question of time before another epidemic will arise, and the present work of extirpation have to be undertaken *de novo*.

DIPHTHERIA IN DOMESTIC ANIMALS.

In a recent article[1] it was pointed out that a series of facts accumulated by the observations of epidemiologists pointed very strongly to the conclusion that certain domestic animals were liable to suffer from diphtheria, and were capable of communicating the disease to man; some bacteriological observations by Dr. Klein, which were in striking confirmation of this theory, were also noted. The same observer made a communication to the Royal Society on May 22nd which advances the matter still further. He believes that not only cats, but cows also, are liable to suffer from diphtheria. This is an observation of striking importance, for as is well known, some epidemics of diphtheria have been traced to the milk supply. One of the most recent—that at York Town and Camberley, in the neighbourhood of Farnham—was most carefully investigated by Mr. W. H. Power, who brought forward very strong evidence to prove that the milk had acquired the quality of infectiousness before leaving the dairy farm,

[1] JOURNAL, May 10th, p. 1081.

and that people who drank much milk were much more liable to suffer than those who drank little. As to how the milk acquired this property of infectiousness, however, nothing had been certainly ascertained; and Dr. Klein's observations, therefore, are not only important but novel. He inoculated two perfectly healthy cows with a broth culture of the pathogenic bacillus derived from human diphtheria. On the second and third days there was a soft tender swelling at the place of inoculation, which reached its maximum at the end of a week, and then gradually became smaller and firm. The animals had a raised temperature, and left off feeding on the second or third day, then to all appearance recovered; but on the eighth or tenth day they were attacked by slight cough, which gradually increased. Both became emaciated; one died on the fifteenth day, the other was killed (being very ill) on the twenty-fifth day. During the illness both animals had an eruption on the teats and skin of the udder, which appeared in successive crops. From one of the cows on the fifth day milk was drawn from a healthy teat, the milker's hand having first been thoroughly disinfected. From this milk cultivations were made, and it was found that thirty-two colonies of the diphtheria bacillus, without any contamination, were obtained from a single cubic centimètre. The bacillus was also found in the eruption on the udder, and fluid from the eruption was capable of producing a disease in calves characterised by a similar eruption, together with severe broncho-pneumonia and fatty degeneration of the kidney. These two lesions—broncho-pneumonia and fatty degeneration of the kidney—are those observed both in the spontaneous diphtheria of the cat, and in the disease produced in that animal by inoculation; the symptoms in the cat are, in fact, mainly those of lung disease.

An accident carried the experiment a step further. The two cows above mentioned were kept at the Brown Institute, and on the fifth day after inoculation, when the diphtheria bacillus was found in the milk drawn from one of the cows, orders were given that the milk should be thrown away. The attendant, however, chose to consider that the milk would be good enough to feed cats, and accordingly gave some of it to two of these animals which had been at the Brown Institution for several weeks, and were in good health. Within a day or two these two cats sickened, and, after suffering for several days from symptoms like those of spontaneous cat diphtheria, died. This was at the end of March. Between the beginning of April and the beginning of May fourteen cats became similarly affected, some more severely than others, and some died with the characteristic morbid changes.

THE LIVERPOOL ABATTOIR.

It is with a feeling of profound regret that we take note of the decision of the Liverpool City Council to renew the lease by which the Abattoir Company hold their present premises, a decision that constitutes a severe check to the progress of sanitary improvement. Liverpool was at no distant time pre-eminent among populous cities for its high mortality; but, thanks to the enlightened views of those in authority, recent years have witnessed a steady improvement in this respect. Insanitary dwellings have been pulled down, the sewerage system has been extended and improved, wise by-laws have been framed to regulate the construction of new dwellings, and the sanitary arrangements of houses have been placed under vigilant inspection. The result has been a steady and notable decline in the death-rate, which now bears favourable comparison with the death-rate of most other large centres of population.

It has, however, been perceived by the medical officers of health for many years that the presence of the city abattoir and the offensive trades connected therewith, constituted a bar to sanitary progress, which could only be overcome by their removal to some place outside the city. These premises are held by a lease which has still twenty years to run, and it was generally supposed that, even if no effort were made to terminate the lease before it ran out, the possibility of granting a renewal would not be entertained. Many facts, statistical and otherwise, which have from time to time been made known and mentioned in the JOURNAL, established a strong case against the abattoir in its present position, and its condemnation was ratified by the Finance Committee, who recommended, by nine votes to three, that the Council should decline to renew the lease. Finally, a memorial to the same effect was presented to the Council, signed by 337 medical men in Liverpool and the neighbourhood.

In arriving at a decision in this matter, at variance, not only with the expressed opinions of a succession of medical officers of health and of the majority of medical men, but also with its own line of action in recent years, it seems to us that the Council has attached undue weight to considerations of temporary financial expediency, such as the amount of fines that would accrue to the Corporation on the renewal of the lease, and the possible falling off in the rates in the neighbourhood if it were refused. At the same time the weight of medical opinion was unduly disregarded. One member alleged that the memorial had been signed by a number of students walking the hospitals, upon whom pressure had been brought to bear—a statement utterly without foundation—while another expressed his position by saying he "preferred bread and cheese to physic." The lease that it has been decided to grant is for a period of seventy-five years, and he would be a rash prophet who would undertake to foretell what will be the attitude not only of scientific minds, but also of the popular towards questions such as we have been considering, long before this term has expired.

While we deeply deplore the check the cause of public health has sustained, we still see a ray of hope for the future in the subsequent amendment carried by the Council, which was to the effect that if at any time after the expiry of the existing lease the abattoir be required to be removed by the Council or other authority, the Company shall be entitled to no compensation for trade disturbance. Much may happen even before the present lease has expired, but whatever the fate of the abattoir question may be, we trust the sanitary authorities in Liverpool will never relax their efforts to maintain a high standard of health in the city, and that they will continue, as hitherto, to receive the cordial support of the medical profession.

THE album which we described last week was presented to M. Pasteur on Friday last, by Dr. and Mrs. Priestley. Lord Lytton, Sir Frederick Pollock, the Hon. Allan Herbert, M.D., and others witnessed the presentation.

POISONOUS AND DEFENSIVE ALBUMOSES.

E very interesting paper by Mr. E. H. Hankin, which was olished in the JOURNAL of October 12th, 1889, will be re-mbered by our readers; he succeeded in rendering mice and bits immune to anthrax by treating them with an albumose ained from cultivations of the anthrax bacillus.

Dr. Sidney Martin, one of the research scholars of the tish Medical Association, communicated to the Royal iety, on May 22nd, the results of a research commenced r a year ago, at the instance of the medical officer to the al Government Board. Dr. Martin's research has been of omprehensive and thorough character; he has used as the d in which to grow the bacillus a solution of pure alkali-umen made from serum, with the addition of mineral salts ing the composition of the salts of the serum. After being wed to grow for ten days or a fortnight, the bacilli were ered off through porcelain, and the fluid filtrate chemically mined; he found it to contain leucin and tyrosin, an alka-, and three proteids, namely, proto- and deutero-albumose, a trace of peptone. The alkaloid yields a strongly alka- solution, and is a powerful base, readily forming salts h acids; its solutions give reactions with certain of the inary tests for alkaloids, namely, precipitates with phospho-gstic, phospho-molybdic, and phospho-antimonic acids, and n platinic chloride; the sulphate crystallises in small dles or prisms, the oxalate in long branching needles or plates. The two albumoses are strongly alkaline, and do lose this quality when treated with absolute alcohol, ben-, chloroform, or ether, nor when dialysed for long periods. ir alkalinity therefore appears to be an inherent quality, Dr. Martin suggests that this may explain their toxic pro-ies, the alkaloid being in a nascent condition in the albu-e molecule. The bacillus he supposes forms the alkaloid n the albumose, while it is possible that the living tissues e a similar action when the albumose is introduced into a ng animal, for subcutaneous injection of the albumoses pro-es the same effects as subcutaneous injection of the alka-, only less rapidly. If a mouse is injected with the an-x alkaloid it becomes ill immediately, grows more and e sluggish, and finally comatose; about one two-hundredth ne body weight was found to be a fatal dose, killing in n two to three hours.

he lesions found after death were enormous local subcu-ous œdema, with congestion, and sometimes thrombosis of small veins; the spleen was congested, and in some cases h enlarged; occasionally peritoneal effusion was present. fatal dose of the albumoses was from twice to three times of the alkaloid, and the animal survived for twenty-four s or longer. The symptoms were the same: sluggishness eeded by profound coma; there was local œdema at the t of inoculation, and in some cases enlargement of the n. Cultivation experiments made from the spleen showed no organisms were present. Smaller doses produced a subcutaneous œdema, with some sluggishness, ending in very. It ought to be added that boiling for a short time nished, without completely destroying, the toxicity of the moses.

t the same meeting of the Royal Society Mr. E. H. Hankin, who also receives a grant from the Scientific Grants Committee of the British Medical Association, reported the results of some extremely interesting and suggestive experiments which he has made, in the Pathological Laboratory of Cambridge University, on a proteid body extracted from the spleen and lymphatic glands of cats. He found that this body—a globulin—has the power of killing certain pathogenic bacteria. The globulin appears to be identical with Halliburton's cell globulin β, a substance which that author believes to be fibrin ferment. This globulin can be precipitated with alcohol, and dried without losing its germicidal characters. The method employed was the same as that used by Buchner when testing the bacteria-killing power of blood serum. Mr. Hankin's results appear to have a great theoretical interest, as shown by the conclusions which he draws from them, which are as follows: 1. That Halliburton's cell globulin β possesses a bacteria-killing power. 2. That this power appears to distinguish it from fibrin ferment. 3. That this bacteria-killing power is of the same nature as that possessed by blood serum as described by Buchner, Nissen, and Nuttall. 4. That this power of the serum is probably due to the same or some allied substance. 5. That inasmuch as it is possible to obtain from cells that are or can become phagocytes a substance having bacteria-killing powers, we may suppose that phagocytes can not only kill microbes that they have ingested, but also do this by breaking down and liberating their contents.

It is obvious that this discovery throws a new light on Metschnikoff's phagocyte theory, and points to an explanation of the *rationale* of pus formation. Apparently we are dealing with a natural antiseptic—a substance produced by the organism to protect itself against microbes, and the question arises whether its administration can have an effect in modifying the course of the disease. Mr. Hankin's results in this direction, though entirely of a preliminary nature, are not without interest. Though in some cases an injection of cell globulin after anthrax inoculation produced no noticeable effect, in other cases the life of the animal was prolonged, and on its death the bacilli showed different signs of degeneration, and many of them were included in phagocytes.

Mr. Hankin's work seems to indicate that in the conflict between the organism and the microbe both parties choose their weapons from the same armoury, namely, that of poisonous proteids.

A MONUMENT to the memory of Dr. Franz Anton Mesmer, from whom "mesmerism" derives its name, was unveiled at Dresden on May 26th.

WE greatly regret to have to announce the death of Mr. R. H. S. Carpenter, the well-known founder of the Medical Alliance Association.

As at present arranged the Twelfth Congress and Exhibition of the Sanitary Institute will be held at Brighton from August 25th to 30th, under the presidency of Sir Thomas Crawford, K.C.B.

M. PASTEUR has, in reply to a request from the Odessa Town Council, recommended Dr. Bardach for the post of Director of the Bacteriological Laboratory of that city. Dr. Bardach's work, as head of the Antirabic Institute, has been remarkably successful.

THE contest for the vacant seat on the Senate of the University of London will lie between Dr. J. S. Bristowe, F.R.S., and Sir Philip Magnus.

THE Sultan of Zanzibar has conferred on Surgeon Parke the Order of the Brilliant Star of Zanzibar, as a token of his appreciation of the good services which he rendered in the recent Stanley Expedition.

THE vacancies on the staff of the London Hospital, caused by the resignation of Dr. Langdon Down and Mr. Walter Rivington, have been filled up by the appointment of Dr. Sansom, Assistant Physician, to be Physician; and of Mr. Hurry Fenwick, Assistant Surgeon, to be Surgeon.

THE French Government is, it is stated, encouraging French physicians to attend the Berlin Medical Congress, and in order to give proof of its sincerity in this direction, four military surgeons of high standing have been ordered to represent the French army at the coming gathering of medical men.

IT is considered in Calcutta that the proposed leper legislation is as remote as ever, for although the local government have reported on the Bill, it has been decided not to move in the matter till the medical authorities at home have decided whether or not leprosy is contagious.

THE meeting in support of the International Congress of Hygiene and Demography announced to be held at the Mansion House on Thursday next, June 5th, has been postponed until Thursday, July 3rd, and the General Committee meeting summoned for Wednesday, June 4th, will not meet on that day.

AT a recent meeting of the General Committee of the North Staffordshire Infirmary it was resolved to make certain alterations in the constitution of the medical staff. It is intended that there shall be in future two physicians and two assistant physicians, two surgeons and two assistant surgeons, and, with the view of developing the eye department, that an ophthalmic surgeon and an assistant ophthalmic surgeon shall be appointed.

WE deeply regret to announce the death of Dr. Robert C. R. Jordan, for many years lecturer in the medical school of Birmingham, and physician to the Children's Hospital. Dr. Jordan, who practised for thirty-three years as a physician in Birmingham, recently retired to Teignmouth, receiving on his retirement a strong public testimony of the affection and esteem in which he was regarded both by his professional and public friends.

DEGREES FOR LONDON MEDICAL STUDENTS.

A VERY important meeting of the Senate of the University of London will be held on Wednesday next. The report of the Special Committee on the various proposals which have been made, especially those of the Royal Colleges of Physicians and Surgeons, and of University and King's Colleges, will be presented, and a full discussion will probably take place. It is anticipated that the Senate will, without much delay, make a further communication to the bodies interested, indicating the concessions which it is prepared to make.

THE ALLEGED COMMUNICATION OF LEPROSY BY INOCULATION.

AN account of the present condition of Keanu, the Hawaiian who was inoculated with leprosy by Dr. Arning, was published in the JOURNAL on April 19th, 1890. By the courtesy of the Editor of the *Occidental Medical Times*, we are now enabled to give the result of the microscopical examination of the scar of this inoculation. The piece of skin had been excised by Dr. S. Bourne Swift, and preserved in alcohol. It was examined by Dr. D. W. Montgomery, Professor of Pathology in the University of California, who reports that lepra bacilli were observed in large numbers, scattered about singly, and also collected in bunches in the so-called "lepra cells." Most of the bacilli and all the "lepra cells" were found deeply situated in the true skin. Single bacilli were found in large numbers in the papillary layer lying directly against the bases of the first layer of the rete Malpighii.

SHORT HOURS OF WORK.

TIME for physical recreation is one of the great desiderata of modern life. The prospects of improving the lot of shop assistants in this way are good. Mr. Blundell Maple's Bill—which is introduced as an alternative, and in opposition to the more comprehensive measure of Sir John Lubbock—goes far in the desired direction, inasmuch as it proposes to entitle each paid shop assistant who has been three months in the same situation to have a weekly half-holiday, commencing at 4 o'clock. The day is to be selected by the employer, but the assistant is to receive not less than three days' notice. This Bill will not compel shops to be closed.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY'S HOUSE.

FOR some reason which has not been altogether explained, it was found that the new meeting hall of the Royal Medical and Chirurgical Society in Hanover Square was not quite so well adapted to speaking as was desirable. The advice of Professor Dewar, of the Royal Institution, has been taken in this difficulty, and he suggested certain alterations, especially the use of draperies under the roof, which have produced a most beneficial effect. Probably when the walls are thoroughly dry, and the hall completely furnished, its acoustic properties will leave little to be desired. The new reading room has now been for some time in use—long enough to prove that the arrangements are admirably adapted to meet the convenience of Fellows desiring to make use of the library.

TEMPERANCE AND LONGEVITY.

THE superior insurance value of temperance lives has long been a favourite topic and an established conviction of a large and important section of the medical profession. The annual meeting of the United Kingdom Temperance Institution once more gives support to this conclusion. During the year, 557 members died; ten deaths were the result of accident, three being in the temperance and seven in the general section. The expected claims in the temperance section were 307 for £75,916, whereas the actual claims had been 184 for £43,874. This, it was observed, afforded a remarkable contrast to the state of things in the general department, where the anticipated claims were 378, for £89,448, whereas the actual had been 326, for £70,050. Eight annuitants had died, their average age being within a fraction of 79 years. One of the speakers pointed out that the lightness of the mortality had been marvellous, although the influenza epidemic had somewhat spoiled their calculations. The report was unanimously adopted.

SUPERVISION OF OCEAN STEAMERS.

WE learn from an article in the *Medical Record* of New York that Dr. William M. Smith, health officer of the port of New York has presented a very important report on the want of proper medical supervision in the Atlantic steamships. He gives some striking instances of the dangers caused by the lax manner in

ch infectious diseases are dealt with. Like most others who given attention to this subject, he is of opinion that a medi- narine service ought to be instituted, and that a surgeon ld be discharged from office only as the result of charges e and sustained before a Government board. The present tisfactory status of ship surgeons is a subject which demands attention of the profession in this country, and the work is in which the British Medical Association through its Parlia- ary Bills Committee may bear a part. There is little doubt the letter of the law is frequently violated, and its spirit more often. Dr. Leet has published certain instances of in- ion, but what is wanted at the present stage are further ples from other sources.

IODS OF INCUBATION AND OF INFECTIOUSNESS OF INFECTIOUS DISEASES.

ie last meeting of the Clinical Society an *ad interim* report e Committee of the Society appointed to inquire into the subjects was read. It stated that the Committee had re- d a considerable number of returns, but desired additional ts of cases showing the periods of incubation and infectious- in typhus fever, enteric fever, whooping cough, varicella, ra, and influenza. In making this want known to our rs, and requesting them to supply the Committee with any that bear upon the subject of inquiry, we take the oppor- y to remark that the Committee consists of Dr. W. H. Broad- (Chairman) and ten other members, and that Mr. Shirley hy and Dr. Dawson Williams are the Honorary Secretaries, of whom all communications should be sent at the address Society, 20, Hanover Square, London, W.

JECTION OF BRITISH DIPLOMAS IN BRITISH COLUMBIA.

ttention of the General Medical Council may with advantage led during its present session to the communication from Mr. Williams, L.R.C.P., M.R.C.S., which we publish in another n, concerning practice in British Columbia, from which it rs that registered British practitioners are now not entitled h to practise in British Columbia, but are compelled to pass mination there in preliminary as well as final subjects. ly are British diplomas thus disqualified from taking effect ritish colony, but it appears that a plain intimation is given he intention is not only to set up an independent standard ge of the fitness of medical men possessing a double British ia to practise, but in effect to employ, also, such legisla- ith the view of prohibiting practice where it is considered cal interests require such prohibition.

ALLANT CONDUCT OF A SHIP'S SURGEON.

interesting account of the foundering of the *Dacca* given dy passenger in the *Daily News* of May 28th special praise n to the surgeon, Dr. William Hickling. His coolness when p struck gave confidence to the poor frightened passengers, whom were 400 emigrants. Dr. Hickling exerted himself uring clothes and lifebelts for them, saw every soul off the nd with the captain was the last to leave the ship. When ached the lighthouse he had all the sick taken up to a room top, and as the writer says, "considering all things, the ement was marvellous." She adds: "The doctor's work has ncessant, and his is the greatest responsibility.....Too much cannot be given to the doctor for his unremitting care of ne. He had to be all over the ship telling everyone to get eir clothes and on deck.....Some of the men tried to rush oats, but the doctor threatened to put a bullet into the an who got into a boat until every woman was off.....We had some sick on board, and the doctor saw those off first, himself carrying a girl out of the female hospital and putting her in the boat." The profession may well be proud of such a member, and we welcome this additional proof among thousands of others that by sea as by land doctors, though "non-combatant," are always among the first to face death in the discharge of their duty.

THE CASE OF DR. FREITAS.

In addition to its other remarkable features, the alleged case of poisoning by a medical man in Portugal is exciting much interest among toxicologists in that country, as it is suspected that pilocarpine was the substance used in committing the crimes. The specific charges against Dr. Vicente Urbino de Freitas are that he poisoned a brother-in-law, A., and a nephew, B., and that he attempted the lives of two nieces in the same way. The two latter escaped owing to their having obstinately refused the medicine prescribed for them, or to having taken a smaller dose of it. A.'s death is supposed to have been caused by pilocarpine given in hypodermic injections, and B.'s by sweets containing some toxic agent, or by a poisoned enema. The theory of the prosecution is that the sweets were impregnated with pilocarpine with a Pravaz's syringe. The editor of the *Coimbra Medica*, however, who has had an opportunity of examining some of the sweets that were given to B., states that he could not discover any sign of their having been punctured, nor did analysis reveal anything more than some harmless curiosities of the confectioner's art. The defendant admits that he injected pilocarpine more than once into A., although he was not his regular professional attendant, but he asserts that he did so for a definite therapeutical purpose. However the case may be decided, it cannot fail to be one of exceptional scientific interest, on account of its being the first, so far as we know, in which pilocarpine has figured in the law courts as an instrument of murder, and on account of the difficulty of showing that the drug was the actual cause of death, and that it was administered with homicidal intent. Dr. de Freitas is professor of physiology in the Medico-Chirurgical School of Oporto, and author of works of leprosy, etc.

TRUTH ABOUT THE SMOKE NUISANCE.

The new attack on the smoke nuisance promoted in London by the meeting at the Mansion House last week has done something to recall the attention of Londoners to a subject on which they with good reason incessantly grumble, but as to which they seem alike incapable of individual action and unwilling to promote legislation. However useful that meeting may be in stimulating action in the Black Country, which suffers from industrial smoke, London will and can benefit very little thereby, unless it be well understood that industrial smoke, that is, smoke from factories or works of any kind, no longer plagues London. The work of the Smoke Abatement Institution, its resulting influence on public opinion, and the information afforded by the long and costly series of tests carried out in connection with the Smoke Abatement Exhibition, have, through the agency of the police and the Home Office, and through the energetic action of the Smoke Inspector, Mr. W. R. E. Coles, practically freed London from factory smoke. There are exceptions and imperfections due in some measure to the singular indulgence shown by some police magistrates to a certain proportion of offenders and partly to the ancient and imperfect character of the Acts defining the metropolitan area in relation to smoke abatement. These exceptions, however, are so small in relation to the great smoke production, that Londoners may at once make up their minds to the fact that nearly all that can be done towards clearing the London atmosphere of factory smoke of any kind is being done. The smoke cloud of London is produced by the extravagant and unscientific methods of burning bituminous coals in open grates, which is universal

throughout the metropolis. A Select Committee of the House of Lords recently reported on this subject, and their conclusions not only demonstrated the facts which we have stated, but showed that, unless some steps are taken to promote legislation against the present method of burning coal in private houses, no improvement can be looked for. On the contrary, the constant deterioration of the London atmosphere and the constant increase of the smoke nuisance must be expected. The legislation proposed has been of a tentative character, namely, to give to local authorities, when they choose to use it, the power to require that any new house erected should use one or other of the methods known to be capable of heating a house without smoke production, such as the employment of any of the patterns of improved grates by which bituminous coal can be burnt with little or no smoke, the use of anthracite coal, or of gas, or of water. This measure was favourably regarded by many of the vestries, and passed the second reading in the House of Lords. It was thrown out by the influence of Lord Wemyss and others, who regarded any such legislation as an infraction of the private rights of the builder and the householder. So long as this spirit prevails Londoners must expect to suffer in an increasing degree. If there be any difficulty in abating factory smoke in manufacturing towns there is certainly none in London, and, here at least, the talk of new tests or new reports is, as the greatest living authority on the subject, Professor Roberts-Austen, has said "to slay the slain." Mr. Ernest Hart, as Chairman of the Smoke Abatement Institute, pointed out that it is the London householder who is the sole cause of the smoke nuisance in London, as he is the main sufferer by it. No remedy will have any appreciable effect which does not recognise and deal with this fact.

RESTRICTION OF HYPNOTIC PERFORMANCES.

We are very glad to see that a protest which we have repeatedly raised against the practice of hypnotism as a public entertainment is being pretty widely echoed by intelligent writers and thinkers throughout the country. The example of the regulations adopted in more than one Continental country might well be followed here. We can see no reason why the Home Secretary, armed as he is with powers for controlling public entertainments, should not forthwith prohibit hypnotic exhibitions as contrary to public policy, dangerous, and unedifying. Since the time when Mesmer, Braid, and Elliotson brought to notice in succession the subjective phenomena, of the meaning of which Braid alone appears to have possessed an approximately accurate appreciation, quacks and impostors have been quick to add imposture to empiricism, and to traffic in a practice which the most careful investigators in all countries have agreed to be one of very rare and irregular utility, and fraught with many dangers to the nervous equilibrium and psychological soundness of the subject. Hypnotism is apt to be a dangerous mental poison, and as such it needs to be fenced round with as many restrictions as the traffic in other kinds of poison. Narcotics of any kind are not to be handled by the ignorant, and are liable to reckless abuse by the feeble in mind or body.

A PATRIOTIC PROPAGANDA.

That is a very noble form of patriotic propaganda which has been adopted by a committee of scientists and men of letters in Paris, with M. Pasteur at their head. They propose to enlarge and develop the hospitable facilities for study and research which the colleges and laboratories of France already offer to foreign students. Already the Sorbonne and the University of Paris admit advanced students from all parts of the world to the lecture rooms and laboratories with unexampled generosity, and in many cases free from even the customary local fees, which are often almost nominal. It has been pointed out in our columns that in the laboratories of Pasteur, Ranvier, and others foreign researchers find not only a free welcome, but an ample provision of instruments and material for research. To spare no effort to make Paris an active centre of literary culture and scientific research; to utilise the admirably organised and munificently extended buildings (which the State has lately enlarged) for the attraction of foreign students, is an intelligent and well-inspired competition of the Latin with the Teutonic race. Unfortunately such professional colleges, lecture rooms, and laboratories of higher study hardly exist in this metropolis. So far as they are to be found, and in their own way, they are private enterprises supported by fees, and costly both to English and to foreign students. State-aided education or research does not flourish in this country in its higher grades, and thus the path of research is often thorny and costly, even to indigenous students. Our biological students are, with few exceptions, apt to go abroad to "finish their studies," and, except for a few places and a few men, it may be said that the main contributions to new biological knowledge come from the State-aided schools of the foreign universities. English private munificence looks askance at scientific study, of which it knows nothing and hears nothing. America is forging rapidly ahead by the aid of enlightened founders such as Johns Hopkins, and we are falling behind in the race.

AN ORGANISED OUTBREAK OF LUNATICS.

An extraordinary scene in a lunatic asylum is described by the Paris correspondents of the daily press. It is stated that on Sunday last an outbreak took place in the refectory of the Bicêtre Asylum, where a lunatic who had often to be kept in a padded room complained that a new keeper had deprived him of a portion of food to which he was entitled. The complaint, it is said, was well founded. As the dish was being fetched the madman lost patience and dashed the plate before him against the wall opposite. Five others followed his example, and then ran to pitch everything they could lay their hands upon out of the window. M. Pinon, the governor, was called, compulsion of a violent kind never being allowed unless by his order. As he entered the refectory a dish was broken on his head, and he and a keeper who was with him had difficulty in escaping with their lives. The mad people tore down the iron bars which form a partition between their part of the hall and a section where other patients were dining. They then got to the keepers' rooms, and seizing knives and razors went to cut the throats of those who denied them their liberty. Troops were summoned from the fort, and arrived as the mutineers had got possession of the kitchens and courtyard. When twenty soldiers with fixed bayonets entered the latter there was a sudden collapse. The six ringleaders dropped their knives and razors, begged pardon, and submitted quietly to be taken to their cells. Nearly all the keepers were seriously injured; one was beaten with a chair and his arm broken in two places. A madman named Jolly rifled a desk of bank notes all of which he ate.

THE GOLFER'S EYE.

A correspondent in the *Field*, under the heading "Accuracy in Golf Play," calls attention to the fact that many persons have unequal sight in the two eyes, and suggests that this may be one of the chief causes of differences in the accuracy with which various players "drive" the ball. It is easy, however, to attach too much importance to this. In the first place, such an inequality as would prevent binocular vision is not nearly so common as is often supposed; and, in the second place, it is doubtful whether, when it exists, it has any appreciable effect upon the play. The writer instances the case of shooting in support of his contention, and says that men whose left eye is the stronger can never learn to shoot accurately from the right shoulder. We assume that he

aking only of target shooting. In this it is necessary that the which "aims" should be in the line of the "sights" on rifle, and also should be able to see the point aimed In shooting from the right shoulder, the right eye alone be in this position. If the sight of this eye is good enough to see the target, it may still indicate the proper vation by means of the "sights," while the point in the horital plane to be aimed at is found by the other eye; most ple, however, who have their right eye very inferior to their , would "suppress" the images formed on its retina, and with h, aiming from the right shoulder would be impossible. In f there is nothing analogous to true aiming. If we analyse the ion of "driving," it would seem that the player first fixes on point towards which he intends to drive his ball, and adapts position to this; he then fixes his gaze on the point on his ball ich he intends to strike, and keeps it thus fixed while he swings body round to get the necessary impetus for the stroke. Evitly here an active association of hand and eye is needed, such nly comes by practice, but it may be doubted whether the ilar position gives any real advantage to one eye over the r. In any case the advice to the player to keep his best eye he ball is entirely superfluous, for if he has binocular vision ad better use both eyes, and if he has not, he will instincly use the better eye, even when both are open.

THE SAD STORY OF THE "MALABAR."

STANHOPE has promised in the House of Commons that an stigation shall be made concerning the painful allegations ting to the treatment of sick soldiers on the *Malabar*. following description of the accommodation for invalids on d the troopship *Malabar*, which we are able to give from the of an eye-witness, furnishes ample justification, if such were led, for the questions asked in the House by Mr. Monro Fern and Dr. Farquharson. We hope that not only will the iry be minute and searching, but that steps will be taken to ent the repetition of a state of matters so discreditable to the an Government. Our correspondent writes:

M.S. *Malabar* brought home some 500 invalids; of these r more were very ill, and about 40 absolutely helpless. The al hospital accommodation is a large cabin on the starboard capable of holding about 35 if absolutely crammed, the hs in this hospital being arranged in 2 tiers. The suffering he wretched occupants was beyond description. A man st dead, say, from liver disease, had to occupy a berth placed ath that of a comrade eaten up with acute phlegmonous erysas, and this last disease was present in such a terrible form some patients were landed at Aden to prevent the absolute tion of the hospital. To supplement these 35 berths, cots to be slung forward at the port side of the main troop deck, this extemporised hospital was screened off from where 400 slept and ate by a partition of canvas. The main troop deck er 100 feet in length, and the ports have to be kept open for ilation, except when the weather is stormy, and as there is vay of warming such a place, the sick, coming from a hot te, are exposed to the bitter winds of the Mediterranean and hannel in the coldest season; and, again, they are absolutely otected from the filth of the coaling, and have to lie with hair and faces and clothes covered with dust and dirt, the y of which no one could realise who was not an eye-witness. ms curious to the onlookers of so much suffering why there d not be troopships for the conveyance of invalids fitted requisite arrangements for their help and comfort. Nothing exceed the kindness of the doctors, but what could they do st such odds?

mment on this is needed; the simple facts speak eloquently emselves.

POISONING BY COPPER.

case which we report elsewhere of a trial for the adulteraof tinned peas with copper will, so far as its result is con, probably be a surprise to most of our readers. So many successful prosecutions under the Food Adulteration Act have taken place for this very same offence, and been followed by conviction and the imposition of a fine, that a verdict of "not proven" in a case medically (not legally, of course) as clear as the noonday, will naturally excite comment. It might have been thought that it would be sufficient in such cases to demonstrate the existence of copper in the peas to ensure conviction, and that the effects of such an article of food were too well known and too generally admitted to be matters of expert evidence, but in this case the witnesses were examined and cross-examined at some length as to the poisonous effects of copper, and it was stated—though we do not know how much foundation there is for the assertion—that in France it is no longer illegal to adulterate articles of food with copper; this, however, even if true, does not justify a similar adulteration in this country. The case broke down on a purely technical point. It appears that the inspector purchased three tins, and that one of the tins remained unopened at the time of the trial; the sheriff therefore held that the requirements of the Act as regards a portion of the sample had not been complied with, and declared the charge not proven, thus affording an excellent illustration of what may euphemistically be termed the niceties of the law. An unusual case of copper poisoning has just been reported from Birmingham, where a young man, much addicted to chocolate cream, has lost his life with symptoms of copper poisoning, the chocolate having become impregnated with copper from the mould in which it was made.

THE DERBYSHIRE INFIRMARY.

WE learn from the *Derby Express* that a special meeting of the Governors of the Derbyshire Infirmary was held on May 22nd, Sir William Evans, Bart., the President of the Infirmary, occupying the chair, to consider a report by Messrs. Young and Hall, architects, on the estimated expenditure for putting the infirmary into good sanitary condition. It will be remembered that a few weeks ago Dr. Seaton made a report, at the request of the Governing Board, upon an outbreak of illness among the nursing staff which was traceable to defective drainage. His report disclosed many very grave sanitary defects in the drainage and ventilation of the whole building, and he gave the opinion that structural alterations of so extensive a character would be required, that eventually it might be found expedient to replace the old infirmary by an entirely new hospital, "at once healthy and commodious, on the present unrivalled site." The estimates of the architects were before the meeting, and it appears that to carry out the works of demolition, reconstruction, and provision of extra accommodation would involve an expenditure of £50,000, while the cost of providing an entirely new hospital for 200 beds would be £60,000. On the submission of the report Mr. Boden, a gentleman who has taken a great interest in the welfare of the institution, moved the following resolution: "That in view of the grave defects which have been discovered in the existing building, a special committee, to be called the Building Committee, be appointed to consider the best course to be adopted in the present crisis by rebuilding or remodelling the present infirmary or otherwise, and that such committee have full power to obtain whatever professional or other advice and assistance they may deem necessary, and report to a future general meeting of the governors." In moving his resolution, which was carried by a large majority of those present, Mr. Boden is reported to have said that he should go on the committee with the idea of the hospital remaining on the present site if financial considerations made it possible to do so. The importance of maintaining the Derbyshire Infirmary or General Hospital in its present admirable situation was referred to by some of the governors, and from the report of the proceedings at the meeting it does not appear likely that they will easily relinquish the great advantage they at present possess. Arrangements have been made for the

reception of urgent surgical and medical cases in temporary buildings, or, during the summer, under canvas, so that the committee specially appointed will have sufficient time for inquiry and deliberation.

HOSPITAL ADMINISTRATION IN EGYPT.

COMMENT has recently been made in our pages on the high state of efficiency of the Kasr-el-Aini Hospital at Cairo, and the good work which has been done throughout Egypt in the reorganisation of the various institutions for the care of the sick, and especially the great change which has occurred in the management of the Lunatic Asylum at Abbassiyeh. The names of two Englishmen come prominently forward in this good work. The reorganisation of the Lunatic Asylum at Abbassiyeh was commenced in 1883 by Mr. F. M. Sandwith, who subsequently became Sous-Directeur des Services Sanitaires, in consequence of grave charges brought against that institution by the *Egyptian Gazette* and an official memorandum from the then Principal Medical Officer of the Egyptian Army. Mr. Sandwith completely revolutionised the asylum, and, though much has been done since, the foundation of all was laid by him. The changes in the Kasr-el-Aini Hospital, wellnigh incredible to those who knew the old institution, have been made by Mr. H. Milton, whose self-denying labours alone have made them possible. He went out to Cairo in 1884, lived for some years in the hospital itself, and refused the splendid temptations to lucrative private practice, in order to devote himself more completely to his arduous task. He has trained nurses, personally supervised the minutiæ of the huge hospital under his care, lectured on surgery and anatomy, given instructions in making *post-mortem* examinations; in fact, he has himself fulfilled the functions of a whole hospital staff; and it is to his unceasing labours that the reform is mainly due. Since his appointment as official English head of the Services Sanitaires Greene Pacha has aided this good work, the foundation and building up of which have been so well carried out by Mr. Milton and Mr. Sandwith, of whose unostentatious efforts their professional fellow-labourers have good cause to be proud.

THE DEAF NO LONGER DUMB.

THANKS to the exertions of Sir William Dalby, Dr. Armitage, Dr. Symes Thompson, and other members of our profession, in concert with many eminent philanthropists, immense progress has been made of late years in this country in the oral system of teaching, whereby deaf children by watching the lip movements of their teachers and of each other learn fluent speech. A very interesting exhibition was given of the results of this system of tuition of deaf children at the recent meeting of the Ealing College, one little girl of about nine years of age having learnt within a fortnight to repeat, in a perfectly audible voice, certain letters of the alphabet and to write them down with chalk on a blackboard. Amongst those who had been longer and more completely taught, and who would once have been condemned to the terrible isolation implied in the descriptive label "deaf and dumb," it is scarcely an exaggeration to say that conversation was carried on with little more difficulty than would have been experienced had the pupils been gifted with the sense of hearing. Like admirable results are being obtained in other institutions throughout the country. It is greatly to the credit of leading members of the Jewish community that it has been in the first instance mainly owing to their enlightened generosity and perseverance that the successful adoption of this method of teaching has been acclimatised in this country. Before many years, it may be hoped that the deaf will no longer anywhere be dumb; and it is suggestive of a means by which the prophylaxis of deafness itself may be largely diminished, to know that a large proportion of the hopelessly deaf are so as the sequel scarlet fever. That is a disease of which, by notification and is lation, the enormous ravages in this country may yet be large reduced; while it is possible that a close and early attenti during and immediately subsequent to the illness may in a ce tain proportion of cases of scarlatina prevent an extension of t ear mischief to the point which leads to irremediable mischief.

BACTERIOLOGY AND EPIZOÖTICS.

AT the anniversary general meeting of the Royal Agricultur Society some interesting information was furnished in the annu report, which indicates that this powerful and wealthy Society recognising the importance of extending its work in the directi of scientific investigation of the etiology and prophylaxis of z zoötic disease. Investigations, it was stated, had been carried during the last six months in reference to the conditions un which tuberculosis was communicated from one class of anim to another, and from man to the lower animals, and also in rega to the micro-organisms of pleuropneumonia, and the effects inoculation. The action of the various organisms found in swi which had died of swine fever had been tested by experiments feeding and inoculation, but no organism had yet been isola which was capable of inducing typical swine fever or pleu pneumonia. Those investigations would be continued. T arrangements for the establishment of a department of scient research at the Royal Veterinary College, under the grant from Society, were proceeding, and it was expected that the Depa ment would shortly be in full work.

SCOTLAND.

EDINBURGH UNIVERSITY COUNCIL AND EXTRA-MURAL TEACHING.

AT the adjourned meeting of the Edinburgh University Cou held on Friday, May 30th, the committee appointed at meeting on April 15th last to consider what further commun tion should be made by the Council to the Universities Comm sioners on the subject of graduation and extramural teach present their report. The report of the meeting is necessa delayed till next week.

THE LORD HIGH COMMISSIONER AND THE MEDICAL PROFESSION.

THE Marquis of Tweeddale, the Lord High Commissioner to General Assembly of the Church of Scotland, received the Fell of the Royal Colleges of Physicians and of Surgeons at a levé Holyrood Palace on Thursday, May 29th. The Presidents, V Presidents, Treasurers, and Secretaries of the two Colleges w also the Marquis's guests at dinner. Dr. Hamilton Ramsay is usual, Purse Bearer to his Grace.

LADY STUDENTS AND HOSPITAL TRAINING AT EDINBURGH.

THE lady students consider they have good cause for complain the way their interests are treated in Edinburgh. The only hosp which has been placed at their disposal—with the probabilit qualification—is Leith Hospital, whose claims to recognition teaching hospital are extremely doubtful. Various attempts h been made to improve their position by endeavouring to h the immense resources of the two poorhouse hospitals thrown to them, but technical objections have been pressed, which a generous policy would have wisely waived. The lady stud have, however, been fortunate in obtaining permission to at the Children's Hospital, and there seems every likelihood that

rectors of the Maternity Hospital will be similarly provident. ere can be little doubt that a strong wave of feeling in favour of couraging ladies to study medicine is rising in the North, and, he ways and means for doing so efficiently are not found in inburgh, they will be found elsewhere.

FINAL EXAMINATION AT EDINBURGH.

E final examinations at Edinburgh University are in progress. e number of candidates is 303. It is still matter for serious ment that the examination should be allowed to occupy so g a period. Between clinical, written, and oral work the nal" man is liable to be called up at varying times during the ater part of the summer session. Thus, for the average man, final summer is practically rendered useless, as it is an nitted fact that the greater portion of the men devote themres largely to cramming. This serious evil could be remedied the institution of a larger board of examiners and better ngements. It is reported that the number of medical students riculated at Edinburgh during the past year exceeds last year's res by 175.

POST-GRADUATE CLASSES IN EDINBURGH.

as been decided by the Association of Post-Graduate Teachers dinburgh that no post graduate course will be given under r auspices this year. Many reasons for omitting the course session have been adduced, but it appeared likely that a ber of those who had prelected on former occasions would not vailable, and so it has been thought better to miss a year, in belief that next year's course will be thereby strengthened. he other hand, it has been freely urged that this is a mis-, having regard to the success which had attended previous ses. It is, therefore, understood that, while no formal anncement of post-graduate courses will be issued by the Asso-on, a number of post-graduate classes will be formed about nd of September, of which separate announcement will be e in the advertisement columns of the JOURNAL. The classes formed will be in most cases limited and arranged on special ects for the benefit of graduates who do not desire a general ewash, but come to Edinburgh really to study a given branch ically.

UNIVERSITY VOLUNTEERS.

SDAY, May 22nd, was Queen's birthday in Edinburgh, and a er of the medical teachers wisely included Friday, so that ixty gallant members of the Medical Staff Corps who ened at Kinross till the end of the week were none the losers gh their courageous efforts at the sham fight on Saturday. orps was under the command of Dr. Hepburn. Everything d off most satisfactorily, and the corps may be heartily atulated on the appearance they made. Both the Univerompanies, the Artillery at Aberdeen, and the Medical Staff are undergoing training preparatory to the inspection will soon be held. Both companies are numerically com- and are in good form. The Medical Staff Corps purpose g a few days' march out in a week or two. Final arrangehave not been completed, but it is expected that the march e up Dee-side. In addition to this, a detachment is this gain to be sent to Aldershot for a week's training in camp. teering is very popular in the University at present, and largely due to the great interest which the officers—Captain M.D.; Lieutenant Ramsay, M.D.; Surgeons Macgregor, l, Booth, and De Lessert—take in the corps.

ANATOMY FEES AT ABERDEEN.

TON has arisen between the recently appointed Professor tomy (Dr. Reid) and the advanced students about the fees for permission to walk the anatomy museum and rooms. Dr. Reid insists that for this privilege students must pay the practical class fee of two guineas each session. The students, on the other hand, contend that as they have already paid from ten to fourteen guineas each for this privilege no further fee should be exigible. The question is at present under consideration by the Medical Faculty. The Medical Committee of the General University Council recommend that a perpetual anatomy ticket should be issued as is at present done by the directors of the Royal Infirmary.

COUNTY MEDICAL OFFICERS.

THE Public Health Committee of the Aberdeen County Council have agreed by a majority to recommend the Council not to proceed at once to the appointment of a county medical officer, as the opinion appeared to be gaining ground that it might be advantageous for the Councils of neighbouring counties to combine in this appointment, but in the meantime the Committee should be authorised to employ, if need be, a duly qualified man in a consultative capacity during the first six months. The Committee ask power to proceed with the arrangements for the appointment of a county sanitary inspector, whose services should be wholly at the command of the Council.

ATHLETICS AT ABERDEEN UNIVERSITY.

IN connection with the recently-formed Athletic Association, sports were held on Friday and Saturday afternoons at the University Grounds, Old Aberdeen. The sports were held under S.A.A.A. rules, and the weather being very favourable, there was a large turn-out of the professoriate, students, and the general public. There were thirty-four events, for most of which there were many entries, and in several cases the competition was very keen indeed. The tug-of-war, in which a team from the Medical Staff Corps was ultimately successful, attracted much interest. In nearly all the flat races Mr. Peter Harper was easily first; the other principal prize winners were Messrs. A. V. Trow, J. H. M. Daire, A. Wood, and A. B. Dalgetty. The prizes were distributed by Miss Stewart, daughter of the Lord Provost. Altogether the sports were very successful, and will do much to encourage athletics in the University.

THE SPREAD OF INFECTIOUS DISEASE.

DR. RUSSELL, medical officer of health of Glasgow, in his latest report to the Health Committee, gave another illustration of the ways in which infectious disease is spread. Two young women, employed in fishmongers' shops, had suffered from scarlet fever, and had returned to the shops while desquamation was yet going on. In this condition they were found, and were removed to hospital. The facts were stated by the mother and daughters in a way which left the impression of perfect unconsciousness of the nature of the disease, or the gravity of the risks to which they exposed not only the public but their own health. Had the girls been dairymaids, or milk girls, the result to the consumers of milk would have been calamitous. As it was, it is impossible to say what had been the effect upon the customers of these shops and the public generally.

POOR CHILDREN'S FRESH AIR FORTNIGHT, GLASGOW.

THIS scheme for sending children of the poor into the country or to the coast for a fortnight in summer, which has been only two or three years in operation, is each year being extended. Last year 500 children were sent away every fortnight, and a total of 3,521 in the season. This year the scheme is already in operation and the first detachment of children has been sent off. The committee in charge have also taken a farmhouse in the neighbour-

hood of one of the Clyde lochs to be used as a cottage home. The agencies for brightening and improving the lives of the very poor are multiplying in our great cities with wonderful rapidity of late years, and this is one of the most valuable of them.

CONVALESCENT HOME FOR THE GLASGOW WESTERN INFIRMARY.

THE Glasgow Western Infirmary has recently, by the generosity of Sir William Hozier, of Mauldslie Castle, been put in possession of a convalescent home, to be used as an adjunct of the infirmary. The building is at Lanark, and was originally erected at a cost of £5,000 as militia stores for the county. It is surrounded by ground to the extent of 1½ acre, and the donor is about to put the building into proper order for its new purpose. At the meeting of the managers of the infirmary, at which the gift was announced, strong expression was given of the indebtedness of the infirmary for the gift, and of the great value it would be in the work of the institution.

IRELAND.

BRIGADE-SURGEON MCFARLAND has been re-elected President of the North of Ireland Branch of the British Medical Temperance Association.

THE discussion in Committee of the Pauper Lunatic Asylums (Ireland) (Officers' Superannuation) Bill was resumed in the House of Commons on Thursday, May 22nd, when progress was almost immediately reported.

THE DINNER TO SURGEON PARKE.

THE dinner at which Surgeon Parke will be entertained at the College of Surgeons this evening (May 31st) promises to be a successful affair. A large number of Fellows have intimated their intention to dine on the occasion. He will be presented with the Honorary Fellowship, which has only been conferred on forty-nine distinguished persons, of whom at present eighteen are living.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

IN addition to the candidates for the Council of the College of Surgeons already announced, Dr. C. B. Ball, Mr. J. B. Story, and Dr. Kelly (Drogheda) have come forward. Dr. Kelly was active on a past occasion in obtaining for country Fellows the right of voting by papers.

THE ROYAL LLEGE OF SURGEONS IN IRELAND.

THE first public distribution of medals and prizes in connection with the schools of the Royal College of Surgeons took place on Tuesday at the College, St. Stephen's Green. The members of the Council and the professors of the College, as well as a large number of visitors, attended. The majority of the visitors were ladies, and they showed a keen interest in the proceedings, especially the presentation of the prizes to the successful female students. Mr. Austin Meldon, President of the College, occupied the chair.

HOSPITAL SATURDAY IN BELFAST.

SATURDAY, May 24th, was selected this year as the day for the annual appeal in the streets on behalf of the Royal Hospital. The amount realised was £327. This represents a substantial increase upon the previous year, but cannot be considered a creditable amount for so wealthy and progressive a city as Belfast.

PHARMACY ACT (IRELAND) 1875.

A BILL to amend this Act passed the second reading recently i the House of Commons. By it every chemist and druggist wh has been practising in Ireland as a principal on January 1st, 188 or who has practised as a principal during a period of nc less than five years at any time previous to that date, shall b entitled to be registered as a chemist and druggist under the Ac on complying with the following provisions:—1. He shall withi a year from the passing of this Act make application in writin to the registrar to be registered. 2. Such application shall b accompanied by a statutory declaration of the applicant in th form set out in Schedule A to the Act. 3. A fee of half a guine to be paid to the treasurer. Everyone who commences afte January 1st, 1889, shall in addition be examined with respect to h knowledge of English orthography, paying for such examination fee of two guineas, besides a further fee of half a guinea for bein registered. Every person registered under this act as a chemi and druggist shall be qualified to be elected an Associate of th Pharmaceutical Society. No person to assume the title of regi tered druggist or chemist and druggist in Ireland, or sell poison unless registered. The penalty for each offence is £5.

THE ROSE AND COOPER DEFENCE FUND.

LAST week we published a letter from Drs. Cooper Rose a Herbert Cooper, of Hampstead, in which they asked the professi to assist them in defraying the costs of an action brought agai them some months ago in respect of certificates of lunacy sign by them in good faith six years previously. The case, a repo of which appeared in the JOURNAL of November 2nd, 1889, w one of a kind which has unfortunately been too common in rece years, and the Lord Chief Justice, before whom it was tried, once gave judgment for the defendants. Though triumphant successful in vindicating their professional character, the gentlemen have been saddled with their own costs and oth expenses, amounting in the aggregate to about £200. Ma members of the Association will, we believe, desire to respond the appeal made by two senior and well esteemed fellow membe who, in addition to the pecuniary burden cast upon them, ha had to endure much mental anxiety during so long a period doing what they honestly believed to be both a private an public duty. Their appeal has the support of the leading pr titioners in Hampstead.

DR. ARTHUR EVERSHED (29, Rosslyn Hill, Hampstead, N.W.), Hon. Treasu to the fund, acknowledges the following donations received or promised to May 28th:

	£	s.	d.
Sir Morell Mackenzie	2	2	0
Dr. James Andrews	2	2	0
Dr. Edmund Gwynne	2	2	0
Dr. George Harley	1	1	0
Messrs. Lane and Monro	5	5	0
Dr. Andrew Miller	5	5	0
Dr. Pidcock	1	1	0
Dr. John Shaw	3	3	0
Dr. Heath Strange	2	2	0
Dr. Arthur Evershed	5	5	0

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Asso tion desire to remind members of the profession engaged in searches for the advancement of medicine and the allied scien that they are empowered to receive applications for grants in of such research. Applications for sums to be granted at the r annual meeting should be made without delay to the Gen Secretary, at the office of the Association, 429, Strand, W.C. plications must include details of the precise character and obj of the research which is proposed.

Reports of work done by the assistance of Association gr belong to the Association.

Instruments purchased by means of grants must be returne the General Secretary on the conclusion of the research in therance of which the grant was made.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

nual Report of Council.—Separate Examinations by the olleges of Physicians and Surgeons.—Irish Diplomates and nglish Hospital Appointments.—The Biennial Presidency.

s annual meeting of the Fellows of the Royal College of Surns in Ireland will be held this day (Saturday, May 31st), at 3 ock. The report, which will then be submitted for approval, es a history of the proceedings of Council for the past year.

n important question is raised in the report in reference to the nting of diplomas by the College of Surgeons and the College of ysicians separately. At the meeting of the Council on May t, 1889, a communication was read from the College of Physis asking the Council for assent to that College examining a didate for its licence who was not a registered practitioner. the terms of the Medical Act a diploma so granted, not being ed upon conjoint examination, would not be registrable, notstanding which the candidate desired to obtain it. Furthere, by the terms of the scheme for conjoint examination ween the Colleges, each College is debarred from examining applicant separately whose name is not in the *Medical ister*. This question had been already raised by this College, Council having, on December 15th, 1887, addressed to the Col- of Physicians a communication requesting the assent of that ege to the examining of registered dentists who, having com- ed two-thirds of their surgical courses, desired to obtain the ers testimonial of the College separately. To that request the ege of Physicians, by a letter of January 7th, 1888, declined to ede, and this College has therefore been unable since then to y out its own regulations for the grant of the licence in denry. The request of the College of Physicians to be allowed to nt a diploma to a non-registered person was referred to the Comtee of Management, who, on July 4th, 1889, recommended that applicant should not be admitted to separate examination, ch recommendation the Council approved, though being still of nion that it is competent for this College to examine separately ractitioner who is registered either as a surgical or a dental ctitioner.

With reference to the exclusion of gentlemen holding the diplo- of Irish colleges from hospital appointments in England, the ncil report that they have communicated with various hospital norities, and that they had asked the Medical Council to send tors to the Fellowship Examination; but that the Medical ncil had declined to do so, as this was no part of their duty. ommittee was appointed to consider the whole subject. Meanle, the Council has again informed the General Medical Council it was believed to be their duty to visit the examinations of odies which grant higher diplomas. The total receipts were 76 19s. A sum of £11,000 is invested in various securities.

r. W. Stoker has given notice of five motions in reference to mode of carrying out the system of biennial presidents.

CHOLERA IN THE EUPHRATES VALLEY.

EN some months ago the Turkish authorities asserted the nction or non-existence of cholera in Syria, while Russian ular agents maintained that it was still hovering about on borders of the Persian and Ottoman empires, we expressed our viction that the subsidence of the epidemic was merely what ht be expected at that season, and that it would reappear the return of spring. And so it is; cholera is reported now aving broken out on the Imperial domains of Djedil and in village of Bellek, near Bagdad, where six persons have died of thirteen attacked. Bagdad was the headquarters of the emic last year, whence it was carried by the river boats far he Tigris. We believe that the Foreign Office received infor- on of its occurrence as far north as Diarbekr and Erzeroum, gh in the latter case it was more probably conveyed by road Tabreez.

it, though it may thus appear to have receded, such a phenon would be without precedent. When, in 1847, it seemed to de India from Turkestan, or, in 1865, it appeared in Armenia it had ravaged Constantinople and Saloniki, it was not ating but performing a flank movement, and doubling on its advance, as we have seen in the spread of influenza to India Australia after it had overrun all Europe.

Cholera requires human intercourse for its conveyance, certain meteorological and local conditions for its development, and the ingestion of specifically infected water, etc., for its communication. Thus, while it will cross the Atlantic in a fortnight, it marches by slow stages through lands where railways are still unknown, retiring into winter quarters when traffic and travel are suspended, to reopen the campaign with the return of warm weather, which is naturally earlier in the south and the plains than in northern or mountainous regions.

In the winter of 1846-7 it had reached precisely the same points as it did last autumn, and in like manner withdrew for a time to the lower valley of the Euphrates and Tigris, recrossing the mountains and plateau of Armenia in the spring, reaching Astrakhan and Taganrog in July, and Moscow and St. Petersburg in September, when, with the approach of winter, it disappeared only to break out with renewed intensity, and, as it had travelled with tenfold greater rapidity along the good military roads between the Caucasus and the capitals than it had previously done through Persia, so when once it touched the margin of the restless life and commercial activity of Europe it was drawn into the vortex, and there was not a country or large town but had been invaded before the summer was over.

If we may venture to prophesy, we would say that it will not proceed further up the Tigris Valley, but, travelling by the Euphrates, will be next heard of at Aleppo, and perhaps Beyrout, it will enter Egypt *viâ* Jeddah and Suez, and then leave Alexandria for the Levantine and Mediterranean ports. From Tabreez it will take the route *viâ* Erzeroum and Trebizond to Constantinople, and Odessa, and by Baku, Tiflis, Derbent, and Astrakhan over Russia.

INFLUENZA IN INDIA.

The Introduction of Influenza.

Surgeon-Major P. M. Ellis, M.S. (Kamptee, Central Provinces) writes:—

The belief which seems to exist in some quarters as to the marked influence of meteorological conditions on the production and spread of influenza will, I think, hardly find support in the experience afforded by the widespread distribution of the disease in this country under very varying conditions of soil and temperature. The history of the epidemic in India all tends to show the influence of human intercourse on the spread of the disease. Appearing first in Bombay at the latter end of February or early in March, it seems to have been very closely connected with the movement of European troops, its almost simultaneous appearance at Delhi, Lucknow, and the large military stations in Northern India being probably attributable to the arrival of drafts from England, which at that season of the year are constantly pressing up country to join the various regiments. At this station, which is off the main line, the first three or four cases were clearly importations, and the disease did not appear in an epidemic form until fully a month after its period of maximum prevalence in Bombay, and its first appearance at hill stations seems to have been still later, and to have been connected with the annual migration from the plains. It is difficult to find any meteorological conditions common to such places as Simla, with its cool and temperate climate; Bombay, with its warm and moisture-laden atmosphere, and a station like this with its hot dry climate and a temperature of over 100° in the shade. No doubt the meteorological conditions of the locality may modify the symptoms of the disease, since one of its most marked features here has been a very severe and paroxysmal cough, in some cases almost suggestive of that of whooping-cough—a symptom which I have not seen commented upon by observers in England, and with which the extreme dryness of the air may have had something to do. Natives have suffered even more severely than Europeans, fatal cases amongst the latter having been extremely rare. The worst cases that I have seen have been those which were complicated by a localised pneumonia, and in all recovery took place. The one feature which appears to have been common to the disease everywhere has been the extreme debility which follows even a comparatively mild attack.

Influenza in a Native Regiment.

Surgeon F. Wyville Thompson, M.B. (Surgeon 22nd P.I., officiating 2nd Goorkhas, Dehra Dun) writes:—

The 2nd P.W.O. Goorkhas occupy the very healthy semi-hill station of Delna Dun, in an elevated valley at the foot of the hills

in the North-West Provinces. There are no British troops. The 1st battalion only is at present in the station, the 2nd battalion being away on field service. Influenza has been prevalent in the neighbourhood for some weeks before the regiment was attacked. The first cases appeared on March 25th, and then the disease spread rapidly, nearly half the men being affected by April 1st. The very great majority had it in so mild a form that they never reported sick, but continued to do their duty, which was made as light as possible during the epidemic. Out of a strength of 900 men in the battalion, the number of cases actually admitted to hospital was only 84, while it is estimated that two-thirds of the total number had been affected more or less up to the end of April. The bulk of the cases admitted were discharged from hospital after a detention of from three to ten days. In uncomplicated cases the disease resembled ordinary intermittent fever, accompanied by the additional symptoms peculiar to the epidemic. From the examination of the temperature records of all the cases admitted, it was found that in most instances there was a clear intermission of normal temperature for some hours every morning, accompanied by some lessening of the headache and body pains. This intermittent temperature does not apparently agree with the features of the disease in Europe, and is probably owing to the assumption of a malarial type by the epidemic, as might be expected among the natives of India. The evening temperature varied from 100° to 103° for two or more days, according to the severity of the case, and then fell gradually to normal. Those few cases in which the temperature remained constantly above normal for several days were complicated by broncho-pneumonia. The symptoms were pretty regular, the following being the chief: Fever, great prostration, vertigo, frontal headache, bronchitis, pain in the limbs and back, loss of appetite, epistaxis, hæmoptysis, and congested throat. Bronchitis was always present, with a profuse discharge of sputum, often tinged with blood. There was no coryza or lachrymation, and although Goorkhas are peculiarly liable to conjunctival inflammation, it was never associated with the influenza. Sudden attacks of vertigo and epistaxis on parade were frequent. In many cases the men fell forward so suddenly as to injure their faces on the ground. In others a stream of blood suddenly gushed from the nose, and it was a noticeable fact that such cases quickly recovered after the bleeding.

The only serious complication which occurred was in six cases, where it took the form of a peculiar bronchopneumonia. In these the temperature continued high for many days, with rapid, soft pulse, and extreme prostration, several painful spots in the chest, a short painful cough with expectoration of rusty or dark-green sputum, and very confused physical signs. Occasionally slight dulness could be detected over a small area, with fine crepitations, but usually the sounds were bronchitic *râles* and coarse crepitations, with no marked variation in the vocal resonance, notwithstanding the pneumonic sputum.

Up to the present date (May 1st) there have been no fatal cases, and the epidemic is practically over. None of the Europeon officers or their families were attacked.

THE "BRITISH PHARMACOPŒIA."

I.

In his report for 1889 on the *British Pharmacopœia* for 1885, addressed to the General Council of Medical Education and Registration of the United Kingdom,[1] Dr. Attfield gives a series of descriptive and critical notices and comments on such original researches published during the past year as have a direct bearing on the text and contents of the *British Pharmacopœia*, each notice being intended to promote some proposed improvement in a future edition.

He mentions that during the past year several new pharmacopœias have either been published or announced to be in course of revision; thus he reports that after an interval of twenty-one years, another Austrian pharmacopœia has been completed. Amongst its newly introduced remedies are antifebrin, antipyrin, lanolin and strophanthus. A new Danish pharmacopœia is being prepared. A third edition of the German pharmacopœia, containing only new medicines that are "universally recognised," may be expected during the present year. A Spanish pharmacopœia was issued not long ago. A revision of the Swiss pharmacopœia is being conducted. Active steps are being taken for the issue of the seventh decennial revision of the pharmacopœia of the United States. It is to be regretted that this pharmacopœia has no Sta recognition accorded to it; hence as compared with our volun in this country, it is seldom found in the library of the Americ pharmacist, medical practitioner, or student. As a cons quence of its limited sale, it can only be produced for three four times the price of the *British Pharmacopœia*. Dr. Attfie has received from the chairman of the Revision Committee the United States pharmacopœia a printed copy of a "Digest Criticisms" of that pharmacopœia; a voluminous collection short notices, without comment, of all the researches and su gestions that have been published respecting the pharmacopo during the past ten years. The sifting of this collection will t the skill and energy of a committee for some months to come.

After five years of preparation, and after the lapse of eighte years since the issue of the previous edition, a new Dutch pharm copœia has been published in the vernacular, the *Nederlands Pharmacopee*. A Latin edition, the *Pharmacopœa Nederlandica*, h also been issued. Notices of the work will be found in the *Chem and Druggist* of November and December, 1889. As compared wi the previous edition it is, Dr. Attfield considers, perhaps less ed cationally useful, but possesses increased practical value. T chemical substances are amply described and characterised, b the processes for their production are, as a rule, omitted. Qui an international character is given to the volume. Antifebri antipyrin, and other new remedies are introduced, and antisep cottons (gossypia) and gauzes (tela) are included.

The pharmacopœias alluded to in the previous paragraph ha been revised within periods of from ten to twenty-one years. to the number of years a pharmacopœia should remain in fo before renewal, it would be generally recognised as undesira to trouble medical men and pharmacists to revise their wh knowledge of official remedies more often than once in ten yea while, on the other hand, there is some risk of a pharmacopo becoming, as a whole, almost useless after twenty years. T previous *British Pharmacopœia* was in force from 1867 to 188 eighteen years—an *Addendum* being issued in 1874, seven ye after the publication of the *Pharmacopœia* itself. The pres *British Pharmacopœia* will not be five years old until the autun at about which time the *Addendum* of new remedies now receivi preliminary consideration by the Pharmacopœia Committee will, Attfield believes, probably be ready for publication. Apparen the minimum period that should elapse before another *Bri Pharmacopœia* is published is quite five more years. If 1 should be considered too early for entire revision, a second *Add dum* might then, he considers, be issued, and entire republicati be postponed until, say, the first day of the new century. E then the current *British Pharmacopœia* will only have reac the age of fifteen years and three months, as against the eight years of its predecessor.

[1] Spottiswoode and Co. London. 1890.

Antirabic Inoculation at Palermo.—Statistics publis in the *Riforma Medica* of May 20th by Drs. L. de Blasi G. Russo Travali show that 156 patients were treated in the A rabic Institute at Palermo between March 1st, 1889, and the of February, 1890. In 86 of these it was proved experimenta that the animal which inflicted the bite was rabid; in 2 oth the same conclusion was drawn from the fact that persons bit at the same time and not treated died of hydrophobia. Of whole number of patients 143 were bitten by dogs, 7 by cats, 1 an ass, 1 by a mule, 3 by calves, and 1 by a rabbit. The vari of animals is greater than is usual in such reports, the case of rabbit being especially remarkable, inasmuch as the manner which it had contracted the disease is unknown. Drs. de B and Travali say that the case is the first one recorded in whic rabbit has been the subject of rabies "of the street." None of patients died, and in the three years during which the instit has been in existence, out of 292 cases treated (in 224 of which nature of the disease was proved experimentally) there have b only 4 deaths. Two of these occurred at the beginning of 1887 the first batch of 66 cases, a rate of mortality of 3.03 per ce in the remaining 382 cases the death-rate has been only 0.52 cent. The treatment adopted is somewhat more "intensive" t that of M. Pasteur, the length of the course being now twen two days.

German Hospital at Zanzibar.—The Emperor of Germ has contributed 20,000 marks to the fund for building a German hospital at Zanzibar under the auspices of the East Afri Protestant Missionary Society.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MBERS are reminded that the Library and Writing oms of the Association are now fitted up for the accomdation of the Members, in commodious apartments, at the ces of the Association, 429, Strand. The rooms are open m 10 A.M. to 5 P.M. Members can have their letters lressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

ETINGS of the Council will be held on July 16th, and Octo- 15th, 1890. Candidates for election by the Council of the ociation must send in their forms of application to the ieral Secretary not later than twenty-one days before each ting, namely, June 25th, and September 4th, 1890.

ny qualified medical practitioner, not disqualified by any by- of the Association, who shall be recommended as eligible by three members, may be elected a member by the Council or by recognised Branch Council.

andidates seeking election by a Branch Council should apply he Secretary of the Branch. No member can be elected by a nch Council unless his name has been inserted in the circular moning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

ETROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner will place at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Queen e Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., Hono- Secretaries.

ETROPOLITAN COUNTIES BRANCH: WESTERN DISTRICT.—A meeting will eld on Friday, May 30th, at the Horbury School Room, Notting Hill Gate. Ord, President of the Branch, will take the chair at 8.30 P.M. Dr. Buzzard read a paper on Alcoholic Monoplegia and Neuritis in Diabetes.—C. A. EN, Honorary Secretary.

ETROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DIS-.—The annual meeting for the election of officers will be held at the l Forest Hotel, Chingford, on Thursday, June 5th, at 6 P.M. At 6.15 the members and their friends will dine together. The President of the ch, W. M. Ord, M.D., will preside, and will be supported by Sir Guyer er, K.C.M.G., M.D., M.P.; Sir W. Mac Cormac, President-elect; Dr. C. ie Sewell, past-President; Dr. T. Bridgwater; Dr. J. S. Bristowe; Dr. W. son, R.N.; Mr. A. Durham; Dr. F. de Havilland Hall; Mr. Ernest Hart; . E. Herman; Dr. Stephen Mackenzie; Mr. C. Macnamara; Dr. F. T. rts; Dr. A. E. Sansom; Mr. S. Sibley, Mr. Noble Smith, and others. ts 8s. each. Morning dress. Members intending to be present are re- ed to communicate with the Honorary Secretary as early as possible, but ater than Monday, June 2nd. As time is limited it is particularly re- ed that no after-dinner speech shall exceed five minutes.—J. W. HUNT, rary Secretary, 101, Queen's Road, Dalston, N.E.

DLAND BRANCH.—The annual meeting will be held at Lincoln on Thursday 12th. Gentlemen desirous of reading papers or exhibiting cases are re- ed to communicate before May 26th with W. A. CARLINE, M.D., Lincoln, rary Secretary.

ST YORK AND NORTH LINCOLN BRANCH.—The annual meeting of this h will take place on Wednesday, June 4th, at 1 P.M. With a view to in- ng the interest in the meeting, the Council have determined to have a eon instead of a dinner, to take place between the business part of the ng and the papers. Gentlemen who wish to give papers, show cases, or se resolutions, are requested to communicate not later than May 25th with HARDEY, Honorary Secretary, 80, Spring Bank, Hull.

T ANGLIAN BRANCH.—The annual meeting will be held at the Norfolk orwich Hospital, Norwich, on Thursday and Friday, June 19th and 20th. es of communications should be sent to Dr. BARNES, Eye; Dr. ABBOTT, tree; and Dr. BEVERLEY, Norwich, Honorary Secretaries.

MINGHAM BRANCH.—The annual meeting of the Birmingham and Mid- nd Counties Branch will be held at the Medical Institute on Thursday, 12th, at 4 o'clock in the afternoon, when the ordinary business will be cted and an inaugural address delivered by the President-elect of the h, Mr. Alfred Freer, F.R.C.S., of Stourbridge; and after the meeting the ers will dine together at the Great Western Hotel at 6.30; tickets, ex- e of wine, 6s.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in Manchester on Wednesday, July 4th, at the usual hour. Gentlemen wishing to read papers, make communications, or show cases, are requested to communicate with the Honorary Secretary at once, so that the circulars convening the meeting may be sent out in a complete form.—CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Cardiff on Friday, June 27th. Further particulars in circulars.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

NORTHERN COUNTIES (SCOTLAND) BRANCH.—The annual meeting will be held in the Royal Hotel, Inverness, on Thursday, June 12th, at 6.40 P.M. Dr. White, Elgin, president.—Notices of communications should be sent at once to J. W. NORRIS MACKAY, M.D., Honorary Secretary, Elgin.

YORKSHIRE BRANCH.—The annual meeting of this Branch will be held on Wednesday, June 25th, at 3 P.M., at Leeds, when the officers of the Branch and the representatives of the Branch on the General Council will be elected. Members intending to read papers are requested to communicate with the Secretary on or before June 15th.—ARTHUR JACKSON, Secretary, Sheffield.

SOUTH MIDLAND BRANCH.—The annual meeting of this Branch will be held at Springfield House Asylum, Bedford, on Thursday, June 12th, under the presidency of David Bower, M.D. Gentlemen wishing to read papers, cases, etc., are requested to communicate as early as possible with the Honorary Secretary. The following have been promised:—Mr. W. H. Bull: A Tariff of Medical Charges for the South Midland Branch. Dr. Newman: Treatment of Retention of Urine due to Prostatic Enlargement by External Urethrotomy. Mr. G. H. Percival: On Salufer and Salol as Antiseptic Dressings. The President invites the members to luncheon at 1 o'clock, and will be glad of a reply from those gentlemen intending to be present. He will also provide conveyances from and to the stations.—CHARLES J. EVANS, Northampton, Honorary Secretary.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

THE adjourned annual meeting of the district was held in the Literary Institute at Newport on May 15th, the President, Dr. ALFRED HOLLIS, being in the chair, and Drs. Pletts, Graves, and Robertson, and Messrs. Burrard and Hex being present.

Election of Officers.—President-Elect and Representative on the Council of the Branch: W. E. Green. *Vice-President:* Evelyn Rich. *Honorary Secretary and Treasurer:* Robert Robertson, M.D. (re-elected).

Next Meeting.—A Committee consisting of Drs. Pletts and Groves, with the President, was appointed to make all necessary arrangements for the meeting of the Southern Branch at Newport on June 26th.

SOUTH EASTERN BRANCH: EAST KENT DISTRICT.

THE annual meeting of this District was held at the Kent and Canterbury Hospital, Canterbury, on Thursday, May 22nd, at 4 P.M., Mr. PRESTON in the chair. The accounts of the financial year were read and passed.

Election of Honorary Secretary.—Dr. Tyson was re-elected on the motion of Mr. GEORGE RIGDEN, seconded by Dr. HACKNEY.

Future Meetings.—The following places were chosen for the meetings in 1890 and in 1891: Deal in September, Canterbury in November, Faversham in March, and Canterbury in May.

Chairman for Next Meeting.—Dr. Hughes was chosen chairman for the Deal meeting in September next.

Cases, etc.—After the official business of the meeting was over, Dr. GOGARTY showed three interesting cases, one of Pseudo-Hypertrophic Paralysis in a boy, one of Enlarged Spleen in a man, and another of Aortic Aneurysm in a man.—Mr. WHITEHEAD REID showed a pathological specimen of Ovarian Cyst with twisted Pedicle.

Tea.—A tea took place after the meeting in the board room of the hospital.

Visit to Cathedral.—At 2 P.M. Dr. SHEPPARD met the members at the cathedral, and gave a most interesting account of many points connected with the history of the cathedral.

SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT.

A MEETING of this District was held at the Calverley Hotel, Tunbridge Wells, on Thursday, May 22nd. Mr. C. LAMMIMAN, who occupied the chair, opened the meeting with a few remarks.

Election of Honorary Secretary.—Mr. Verrall was re-elected for the ensuing year.

Communications.—Mr. ALBAN DORAN read an address on Inflammation of the Uterine Appendages: its Medical and Surgical Treatment.—Mr. GORHAM read a paper on Some Points in the Science of Light and Colour, demonstrated by the rotation of coloured sectors.—The CHAIRMAN showed a case of Aortic Aneurysm, which first came under observation four years before,

and which appeared to be slowly curing itself, no treatment having been adopted. He also showed a successful case of Serre's Operation for the Removal and Restoration of the Lower Lip. The operation had been done ten days previously, and the deformity was hardly noticeable.

Next Meeting.—It was decided to hold the next meeting at Eastbourne, probably in August.

NEW SOUTH WALES BRANCH.

THE tenth annual meeting of the Branch was held in the Royal Society's Rooms, Sydney, on Friday, March 7th, Dr. FIASCHI, President, in the chair. There were thirty-five members present.

The minutes of the previous meeting were read and confirmed.

New Members.—The PRESIDENT announced the election of the following new members: Dr. Douglas, of Clarence River, and Dr. Foord Hughes, of Petersham.

President's Address.—The PRESIDENT delivered the annual address. The year had been one of marked success. There were 129 members on the roll, and the average attendance of members at the general meetings had largely increased.—Dr. CHAMBERS proposed, and Dr. KNAGGS seconded, a vote of thanks to the retiring President (Dr. Fiaschi) for his interesting and able address. Carried.

Balance Sheet.—Dr. CRAGO read the balance sheet, which showed that the Branch had a credit balance of £152 16s. 10d.

Officers and Council.—The following gentlemen were elected councillors for the ensuing year: Drs. Fiaschi, Hankins, Scot Skirving, Crago, Worrall, W. J. O'Reilly, Quaife, Jenkins, Knaggs, and Chambers. The officers were then elected as follows: *President:* George T. Hankins, M.R.C.S. *Vice-President:* Dr. Scot Skirving. *Hon. Treasurer:* Dr. Crago. *Hon. Secretary:* Dr. Worrall. *Auditors:* Drs. Ellis and Clubbe.

JAMAICA BRANCH.

A GENERAL meeting of this Branch was held at Kingston on November 27th, 1889, Dr. F. H. SAUNDERS, President, in the chair, and Drs. Henderson, Da Costa, L. M. Clarke, Turton, A. R. Saunders, Hon. J. C. Phillippo, and Plaxton being present. The minutes of the meeting of October 16th were confirmed.

Proposed Medical Benevolent Fund, etc.—The PRESIDENT proposed the formation of a Medical Benevolent Fund for the relief of members and their families in case of need. He suggested that the rate of contribution should be £1 the first year, and 5s. a year afterwards. Mr. Cooke's proposal that a Pathological Museum should be established was, in the absence of that gentleman, postponed, and Mr. Calder's proposal that a Medical Library should be formed was referred to a Committee.

Communications.—Dr. PHILLIPPO read notes of a case in which he had cured leprosy with gurjun and chaulmoogra oils. The patient had suffered from leprosy for some years, and was very weak. In September, 1879, Dr. Phillippo ordered an inunction of equal parts of gurjun oil and lime water to be rubbed well in twice a day. A teaspoonful of the same emulsion was given three times a day in a wineglassful of milk, or in syrup. This treatment was continued till the middle of 1881. The oil had a curative effect on the ulcers, but the patient's general condition became steadily worse. He then began to take chaulmoogra oil internally; the gurjun inunction was persevered with at the same time. From that date he began to mend, and in 1885, as far as could be judged, was cured, remaining well up to date (November, 1889). Dr. Phillippo attributed the result to the thoroughness with which the treatment was carried out by the patient's mother.—Dr. A. R. SAUNDERS related a case in which hypertonic paraplegia followed a railway accident, and discussed the pathology of the condition.—Dr. J. A. L. CALDER gave details of a case in which a black, aged 36, received a blow with a stick on the right parietal bone, and after recovering from the immediate effects of the injury remained well for nearly five years, when he was suddenly seized with pain at the site of injury and a swelling the size of a crown piece, and very tender to the touch, appeared at the spot. Pressure thereon caused numbness of the face and right arm, but there was no inequality of pupils and no decisive sign of pressure on the brain. Trephining was performed, and it was found that the coverings of the right parietal bone had separated from it, and the bone itself was loose in texture. There was no adhesion of the dura mater, but its surface was covered with about a teaspoonful of soft, gelatinous material; the dura itself appeared to be detached from the bone almost beyond view. It was almost black, and pulsated freely, but did not rise into the opening. The patient was discharged in a week. Fragments of exfoliating bone had since come away, but the wound was not yet closed. Extravasation of blood had doubtless taken place between the dura mater and the bone at the time of the injury, and this led to caries and the condition described.

BRITISH MEDICAL ASSOCIATION

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 27, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Senior Professor of Medicine, Queen's College, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women, Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HENRY BROADBENT, M.D., Physician to St. Mary's Hospital, London.

The scientific business of the meeting will be conducted in twelve Sections, as follows, namely:

A. MEDICINE AND THERAPEUTICS.—*President:* Sir DYCE DUCKWORTH, M.D., LL.D. *Vice-Presidents:* EDWIN RICKARD, M.B.; DAVID DRUMMOND, M.D. *Honorary Secretaries:* ISAMBARD OWEN, M.D., 40, Curzon Street, Mayfair, W.; CORNELIUS W. SUCKLING, M.D., 103, Newhall Street, Birmingham.

Two subjects have been set down for special discussion: 1. Functional Disorders of the Heart. 2. The Varieties of Hepatic Cirrhosis.

The discussion on (1) will be opened by the President on Wednesday, July 30th, at 10 A.M.; that on (2) by Dr. Saundby on Friday, August 1st, at 10.30 A.M. Professor Gairdner, Dr. Rickard, Dr. Broadbent, Sir Walter Foster, and Dr. Sansom have already expressed their intention of taking part in the former; Dr. Drummond and Dr. Goodhart of joining in the latter discussion.

B. SURGERY.—*President:* T. H. BARTLEET, M.B., F.R.C.S. *Vice-Presidents:* BENNETT MAY, M.B., F.R.C.S.; J. GREIG SMITH, M.B., F.R.S.E. *Honorary Secretaries:* F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 3, Paradise Street, Birmingham; H. G. BARLING, M.B., F.R.C.S., 8, Edmund Street, Birmingham.

It has been determined to bring forward for discussion the following subjects: 1. The Surgery of the large Arterial Trunks, to be introduced by Mr. Timothy Holmes (London), Mr. William Thomson (Dublin), Mr. T. H. Bartleet, Mr. Bennett May, Mr. Alfred Willett, Mr. C. A. Ballance, Mr. Damer Harrison, Mr. Jordan Lloyd, and Mr. Vincent Jackson. 2. The Operative Treatment of Acute Intestinal Obstruction due to Internal Strangulation, to be introduced by Dr. J. Greig Smith, Sir William Stokes (Dublin), Mr. Mayo Robson (Leeds), Mr. Kendal Franks (Dublin), Mr. Stanmore Bishop (Manchester). Mr. Lawson Tait, Mr. E. Atkinson, Mr. Bruce Clarke, Mr. Bennett May, Mr. Thornley Stoker, Mr. H. Ormsby, Mr. Jordan Lloyd, Mr. F. B Jessett, Dr. Ward Cousins, Mr. Cleland Lammiman, Mr. W. D. Spanton, and Mr. F. Marsh will speak on this subject. It is hoped that Dr. Senn, of Milwaukee, will also take part in this discussion.

The following papers are announced:

ATKINSON, E., M.R.C.S. On Nerve Grafting.

CLARKE, Bruce, M.B., F.R.C.S. Obscure Bladder Affections and their Examination by the Cystoscope.

DAVIES-COLLEY, J. N. C., M.B. On a Method of Closing the Hard Palate by a New Operation.

FENWICK, Hurry, F.R.C.S. The Influence of Electric Illumination of the Bladder upon our Knowledge and Treatment of Urinary Disease.

TT, F. B., F.R.C.S. The Surgical Treatment of Carcinoma of the Pylorus l Intestines.
ONS, Inglis, M.D. On the Arrest of Growth in Cancer by the Interrupted taic Current.
ON, A. W. Mayo, F.R.C.S. Tapping and Draining the Ventricles in certain es of Brain Disease.

OBSTETRIC MEDICINE AND GYNÆCOLOGY. — *President:* MAS SAVAGE, M.D., F.R.C.S. *Vice-Presidents:* CHARLES J. GHT, M.R.C.S.; JAMES MURPHY, M.D. *Honorary Secretaries:* . KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, ., 192, Broad Street, Birmingham.

rangements have been made for the following important ects to come under discussion: 1. On Modern Methods of aging Lingering Labour, to be opened by Dr. W. S. Playfair. n the Importance of Gonorrhœa as a Cause of Inflammation ie Pelvic Organs, to be opened by Dr. George Granville Ban- . 3. On the Relief of Labour with Impaction by Abdominal ion as a Substitute for the Performance of Craniotomy, to be ed by Dr. Murdoch Cameron.

e following gentlemen have already promised to take part in above mentioned discussions: Dr. Auvard (Paris), Dr. Elder tingham), Dr. Imlach (Liverpool), Dr. Aust Lawrence (Bristol), myly (Dublin), Mr. Lawson Tait, Dr. J. R. Morison (New- e), Dr. Braithwaite (Leeds), Dr. A. V. Macan (Dublin), Cullingworth (London), Dr. Goodell (Philadelphia), Dr. R. N. e (Cambridge), Dr. J. Inglis Parsons (London), Mr. R. O'Calla- n (Carlow), Dr. M. Handfield Jones (London), Dr. More Madden lin), Dr. A. Duke (Dublin), Mr. A. Freer (Stourbridge), Mr. . Morgan (Lichfield), Dr. Fancourt Barnes (London), and Dr. y Hart (Edinburgh).

is proposed that a series of Clinical and Operative Demon- ions shall be given on the morning of each day before the of the Section begins by Dr. Savage, Mr. Lawson Tait, and . W. Taylor.

ie following papers have been announced:

ANTYNE, J. W., M.D., F.R.C.P.E., and WILLIAMS, J. D., M.B. Some oints in the Histology and Pathology of the Fallopian Tubes.
OUR, A. H. F., M.D. Results from the Study of Labour, Especially of the ond Stage, by Means of Frozen Sections and Casts.
Robert, M.D. (Glasgow). On the Pathogenesis and Treatment of horitis.
s, John W., M.D. (Belfast). On the Treatment of Puerperal Eclampsia.
RON, Murdoch, M.D.Glasg. On Cæsarean Section with three successful s. [Dr. Cameron will also show a Pair of Axis Traction Forceps.]
, Alex., F.K.Q.C.P.I. Delivery in Difficult Cases of Impaction by the elp of Tractors and Belt. Some Original Instruments will also be shown.
IS, Robert P., M.D. (Philadelphia). A Communication in connection with discussion on Cæsarean Section.
, D. Berry, M.D.Edin. On the Displacement of the Placenta in Extra- ine Gestation.
, M. Handfield, M.D. On Two Cases of Ovariotomy, Complicated by the ence of Fibromyomata of the Uterus.
EN, T. More, M.D. On the Pathology and Treatment of Displacement of Ovaries.
AN, Herbert M., M.R.C.S. (Lichfield), will Show a Pair of Axis Traction eps in connection with Dr. Reid's paper.
E, J. S., F.R.C.S.Ed.(exam.). Some additional points in the Surgical tment of Cancer of the Uterus, with a retrospect of the twenty three s reported at the meeting of 1889.
W. L., M.D.Glasg. On a Simple Form of Axis Traction Forceps.
UL, R. R., M.D. (Liverpool). On the Registration of Midwives and their er to Practise Independently of the Profession.
Lawson, F.R.C.S.Eng. A Record of 219 Cases of Operation for Removal ie Appendages for the Treatment of Uterine Myoma, performed between h 16th, 1883, and December 18th, 1888, giving the subsequent history of ases, from twenty months up to seven years subsequent to the operation.

PUBLIC MEDICINE.—*President:* ALFRED HILL, M.D. *Vice- lents:* JOHN BURGES WELCH, M.B.; A. S. UNDERHILL, M.D. *rary Secretaries:* LOUIS C. PARKES, M.D., 61, Cadogan Square, SIDNEY BARWISE, M.B., Clough View, Blackburn.

following topics for papers have been suggested as likely to o useful and interesting discussion: 1. Prevention of Pollu- f Rivers (*a*) by Paper Works; (*b*) by Dye Works. 2. Smoke ment. 3. Lead Poisoning from Water. 4. Methods of Dis- ing Air from Small-pox Hospitals. 5. Treatment of Sewage. Compulsory Notification Act.

following papers have been announced:

IER, Wilfred W. E., M.B., B.A.Cantab. Medical Officers of Health and tious Diseases in Board Schools.
N, Surgeon-General C. A., M.D., C.B., Q.H.P. The More Recent Phases e Hydrophobia Controversy.
ROCK, James, M.D., B.Sc. The Electrical Treatment of Sewage.
, B. H., M.D., D.P.H. The Compulsory Notification Act.
, Edward, M.D., F.R.C.P. Clinical Instruction at Fever Hospitals in ction with the operation of the Compulsory Notification Act.
SERGEANT, Edward, L.R.C.P., D P.H. The Prevention of Pollution of Rivers.
THOMSON, Theodore, M.A., M.B., D.P.H. (Sheffield). Lead Poisoning from Drinking Water.
THRESH, John C., M.B., B.Sc. Pollution of Streams from Paper Refuse.
THURSFIELD, W. N., M.D., D.P.H. The Etiology of Outbreaks of Typhoid Fever in Rural England.
WALLEY, Thomas, Principal Royal Veterinary College, Edinburgh. Meat Inspection.
WARNER, Francis, M.D., F.R.C.P. The Examination and Report upon the Condition of Children in Schools.

E. PSYCHOLOGY. — *President:* FREDERICK NEEDHAM, M.D. (Gloucester). *Vice-Presidents:* S. H. AGAR, L.K.Q.C.P. (Henley-in-Arden); E. B. WHITCOMBE, M.R.C.S. (Birmingham). *Honorary Secretaries:* JOSEPH WIGLESWORTH, M.D., Rainhill, Lancashire; EDMUND LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

The Section will be opened with an address by the President. A discussion will be arranged on the proposal made to the London County Council to establish a small hospital for the insane in London.

The following papers have been announced:

HYSLOP, T. B., M.D. Sunstroke and Insanity.
KERR, Norman, M.D. Should Hypnotism have a Recognised Place in Therapeutics?
TUKE, Hack, M.D. (Title not received.)
WARNER, Francis, M.D. Development in Relation to Brain and Nutrition.

F. ANATOMY AND PHYSIOLOGY.—*President:* D. J. CUNNINGHAM, M.D. *Vice-Presidents:* W. H. GASKELL, M.D., F.R.S.; B. C. A. WINDLE, M.D. *Honorary Secretary for Anatomy:* W. P. HERRINGHAM, M.D., 13, Upper Wimpole Street, W.; *Honorary Secretary for Physiology:* F. J. ALLEN, M.B., Mason College, Birmingham.

The following subjects have been selected for discussion: 1. The relation which Examinations in Anatomy and Physiology bear to the teaching of these subjects. 2. The value of Nerve Supply in the determination of Muscular Homologies and Anomalies. 3. The Evolution of the Vertebrate Nervous System.

BIRMINGHAM, Professor A. E. I., M.B. 1. The Position of the Human Bladder in Subjects of Different Ages. 2. The Morphology of the First Lumbar Vertebra. 3. The Anatomy of the Upper Limb in Cases of Congenital Absence of the Radius.
CUNNINGHAM, Professor D. J. A Stage in the Growth of the Primate Brain.
LLOYD, Jordan, F.R.C.S. (Birmingham). Casts of the Kidney Pelvis.
SCOTT, Professor J A. Lantern Demonstration of Photomicrographs intended for Histological Teaching and Research.

G. PATHOLOGY.— *President:* D. J. HAMILTON, M.B. *Vice-Presidents:* C. A. MCMUNN, M.D.; G. SIMS WOODHEAD, M.D. *Honorary Secretaries:* SHERIDAN DELÉPINE, M.B., 6, Chapel Place, Cavendish Square, W.; GEORGE F. CROOKE, M.D., 2, Edmund Street, Birmingham.

The following gentlemen have already promised to give demonstrations on the result of their recent investigations in various branches of Pathology:—

Subsection A.—Professor D. J. Hamilton: Introductory address: Pathology of Dyspepsia. Dr. H. Dickson: The Tongue in Disease. Dr. J. H. Payne: The Bacillus of Rhinoscleroma and its Demonstration. Professor E. Crookshank: Horse-Pox. Dr. M. A. Ruffer: Destruction of Micro-organisms by Leucocytes. Messrs. Ballance and Sherrington: On Leucocytes.

Subsection B.—Dr. Sims Woodhead: Diseases of the Lungs (chiefly Tuberculous). Mr. Watson Cheyne: Tubercular Diseases of Bone. Professor MacFadyean: Comparative Pathology of Tuberculosis. Mr. Adams Frost: Morbid Condition of the Fundus Oculi. Dr. F. W. Mott: Pathological Relations between the Cells and the Fibres of the Spinal Cord. Dr. Alexander Bruce: The Nucleus of the Third Nerve and its Circulation.

Subsection C.—Dr. MacMunn: The Spectroscope in Medicine. Dr. A. Haig: The Estimation of Uric Acid in Disease. Dr. S. A. M. Copeman: Improved Methods for the Examination of the Blood in Disease. Dr. Sidney Martin: The Pathology of the Proteids of the Body.

All these communications will be illustrated by practical demonstrations, such as projection of spectra, microscopical specimens, photographs, diagrams, etc., on the screen, chemical experiments, exhibition of microscopical and other specimens, models, casts, etc.

In order to insure the bringing forward of each demonstration at the hour appointed, a certain amount of time will be set apart at the end of each meeting for the discussions of the facts brought forward.

H. OPHTHALMOLOGY.—*President:* D. C. LLOYD OWEN, F.R.C.S.I. *Vice-Presidents:* HENRY EALES, M.R.C.S.; JOHN B. STORY, M.B. *Honorary Secretaries:* HENRY E. JULER, F.R.C.S., 77, Wimpole Street, W.; E. WOOD WHITE, M.B., 72, Newhall Street, Birmingham.

Mr. Priestley Smith will open a discussion on Myopia: its Causes, Prevention, and Treatment. Mr. Edgar Browne, Henry Eales, G. Glascott, and G. Hartridge have promised to take part in the discussion.

The following papers have been announced:

CANT, W. J., M.R.C.S., L.R.C.P. A New Syringe for Extracting Soft Matter in Cataract Operation.
EALES, Henry, M.R.C.S. (Title uncommunicated.)
EDRIDGE-GREEN, T., M.D. The Quantitative Estimation of Defects of Colour Perception.
GROSSMANN, K., M.D. 1. Colour Blindness. 2. Blennorrhœa Neonatorum.
MCHARDY, Malcolm, F.R.C.S.Edin. The Treatment of Immature Senile Cataract.

I. DISEASES OF CHILDREN.—*President:* ALFRED HENRY CARTER, M.D. (Birmingham). *Vice-Presidents:* WILLIAM THOMAS, F.R.C.S. (Birmingham); WALTER PYE, F.R.C.S. (London). *Honorary Secretaries:* HENRY HANDFORD, M.D., 14, Regent Street, Nottingham; ARTHUR FOXWELL, M.B., 47, Temple Row, Birmingham.

It is proposed to discuss the following subjects:—I. The Affections of the Lymphatic Glands in Childhood. (1) The Treatment of Simple and Suppurative Adenitis. (2) The Diagnosis of Glandular Enlargements due to causes other than simple inflammation. (3) The relation of Strumous Adenitis to Tubercle. (4) Tabes Mesenterica. II. (1) The Operations for the Radical Cure of Hernia in Children and their value. (2) The Surgical Questions involved in the Practice of Excising Joints the seat of Disease in Childhood. Mr. Watson Cheyne will join in this discussion. III. The Claims and Limitations of Physical Education in Schools.

The following papers have been announced:

MADDEN, Thomas More (Dublin), M.D. 1. On the Strumous Glandular Diseases of Childhood and their Relation to Tubercle. 2. On the Use and Abuse of Physical Education in Schools.

J. LARYNGOLOGY AND RHINOLOGY.—*President:* JOHN ST. SWITHIN WILDERS, M.R.C.S. (Birmingham). *Vice-Presidents:* CHARTERS JAMES SYMONDS, M.D., F.R.C.S. (London); ARCHIBALD EDWARD GARROD, M.D. (London). *Honorary Secretaries:* ERNEST HENRY JACOB, M.D., 12, Park Street, Leeds; SCANES SPICER, M.D., 28, Welbeck Street, Cavendish Square, W.

The following subjects have been chosen for special discussion: 1. The Treatment of Laryngeal Disease in Tuberculosis. 2. The Etiology, Significance, and Treatment of Spurs and Deflections of the Nasal Septum.

At the completion of these discussions, the time of the Section will be devoted to the reading and discussion of independent papers having reference to the special subjects embraced by the Section.

Dr. Clifford Beale (London), Dr. Walker Downie (Glasgow), Dr. R. Ellis (Newcastle), Dr. William Hill (London), Dr. Greville Macdonald (London), Dr. Hunter Mackenzie (Edinburgh), Dr. David Newman (Glasgow), Dr. Scanes Spicer (London), Mr. Charters J. Symonds (London), and Dr. W. McNeill Whistler (London), have promised to take part in one or both of these discussions.

The following papers have been announced:

BALL, J. B., M.D. On Cough as a Sympton of Nasal and Pharyngeal Affection.
BRONNER, A., M.D. Some Common Affections of the Pharyngeal Tonsil and their Relation to Diseases of the Ear, Throat, and Nose, with Special Reference to the so-called "Relaxed Throat."
DOWNIE, Walker, M.D. Some Unusually Large Nasal Polypi.
HILL, William, M.B. On Pharyngeal Tenesmus.
KANTHACK, A. A., M.D. On the Structure of the Vocal Cords.
MACDONALD, Greville, M.D. The Question of Excising the Tonsils.
NEWMAN, David, M.D. Malignant Diseases of the Nasal Fossæ.
SAVILL, T. D., M.D. A case of Abductor Paralysis.
SPICER, Scanes, M.D. 1. Some Points in the Differential Diagnosis of Syphilis, Cancer, and Tuberculosis of the Throat. 2. Medicated Nasal Cylinders in the Treatment of Hay Fever, Ozæna, Catarrh, etc.
SYMONDS, C. J., F.R.C.S. The Treatment of Ozæna.

K. OTOLOGY.—*President:* CHARLES WARDEN, M.D., F.R.C.S.Ed. *Vice-President:* WILLIAM HILL, M.B., B.Sc. *Honorary Secretary:* ROBERT KERR JOHNSTON, M.D., 22, Lower Baggot Street, Dublin.

The following subjects are proposed for special discussion: 1. Intranasal Disease in relation to Deafness, excluding Post-nasal Catarrh and Adenoid Growths, to be opened by Mr. Lennox Browne, F.R.C.S.Edin. (London). 2. The Etiology of Tinnitus Aurium, to be opened by Dr. H. Macnaughton Jones (London). 3. Vasculitis and Deafness, to be opened by Dr. R. T. Cooper (London).

The following gentlemen hope to take part in the discussions: Dr. Prosser James (London), Mr. T. Mark Hovell (London), Dr. Cresswell Baber (Brighton), Dr. Richard Ellis (Newcastle-on-Tyne), Mr. H. Bendelack Hewetson (Leeds), Dr. J. Ward Cousins (Portsmouth), and Dr. Farquhar Matheson (London).

It is proposed to reserve the third meeting of the Section for the reading and discussing of Miscellaneous Papers.

The following papers have been announced:

COUSINS, J. Ward, M.D. 1. New Method of Removing Foreign Bodies from the Meatus. 2. The Value of Artificial Tympanic Membranes.

Dr. J. Ward Cousins has promised to demonstrate on some patients the Use of his Antiseptic Artificial Drumhead.

L. DERMATOLOGY.—*President:* JONATHAN HUTCHINSON, F.R.S. (London). *Vice-Presidents:* MALCOLM A. MORRIS, F.R.C.S.Ed. (London); H. RADCLIFFE CROCKER, M.D. (London). *Honorary Secretaries:* GILBERT SMITH, F.R.C.S., 41, Newhall Street, Birmingham; THOMAS COLCOTT FOX, M.B., 14, Harley Street, Cavendish Square, W.

It is hoped that there will be a demonstration of living cases, of drawings, and of microscopical specimens each morning. The greater part of the time daily will be devoted to the discussions on the following subjects: Wednesday morning, July 30th, Alopecia Areata, introduced by Dr. Radcliffe Crocker. Thursday morning, July 31st, Vaccination Rashes, introduced by Mr. Malcolm Morris. Friday morning, August 1st, Treatment of Eczema, introduced by Dr. Unna (Hamburg).

The following papers have been announced:

BULKLEY, —, M.D. (New York). Notes on Feigned Eruptions.
MAPOTHER, E. D., M.D. Treatment of Psoriasis by Mercury.
SHOEMAKER, J. V., M.D. (Philadelphia). Explanation of the Sudden Blanching of the Hair.
WALSH, D., M.D. (Birmingham). Dermatitis as an Excretionary Symptom.

Honorary Local Secretaries:

R. SAUNDBY, M.D., 83A, Edmund Street, Birmingham.
JORDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham.
A. HARVEY, M.B., 358, Wheeler Street, Lozells, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.

9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council, Reports of Committees; and other business.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.

9.30 A.M. Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by B. WALTER FOSTER, M.D., M.P.
9 P.M.—Reception by the Worshipful the Mayor of Birmingham in the Council House.

THURSDAY, JULY 31ST, 1890.

9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S. Presentation of the Gold Medal for Distinguished Merit to Surgeon T. H. Parke, A.M.S.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 1ST, 1890.

10.30 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.
9 P.M.—Reception by the President of Mason College and Mrs. Lawson Tait.

SATURDAY, AUGUST 2ND, 1890.

Excursions.

THE ANNUAL MUSEUM.

IN connection with the fifty-eighth annual meeting of the British Medical Association, the Museum and Exhibition will be held in the Queen's College, Paradise Street, Birmingham, close to the building in which the sectional meetings will be held. The Museum will be arranged in the following Sections:—

SECTION A.—Food and Drugs, including Antiseptic Dressings and other Chemical and Pharmaceutical Preparations. (Honorary Secretary, Dr. Stacey Wilson, 65, Temple Row, Birmingham.)

CTION B.—Pathology, comprising Casts, Models, Diagrams, ratus, Microscopical and Spirit Preparations, etc. (Honorary tary, Dr. G. F. Crooke, 2, Edmund Street, Birmingham.)
CTION C.—Anatomy and Physiology, comprising Special Dis- ons, Methods of Preparation, Drawings, Models, and Micro- c Preparations. (Honorary Secretary, Dr. A. E. Mahood, n's College, Birmingham.)
CTION D.—Instruments and Books, including Appliances, ilance, Medical, Surgical and Electrical; Microscopes and otomes. (Honorary Secretary, Mr. Gilbert Barling, M.B., .S., 85, Edmund Street, Birmingham.)
CTION E.—Sanitary Appliances. (Honorary Secretary, Dr. A. ck Hill, 14, Temple Street, Birmingham.)

To Non-Professional Exhibitors.

consequence of the increasing cost of these exhibitions, es will be made to exhibitors (other than members of the al profession), according to the space occupied.

Regulations Regarding Exhibits.

ntending exhibitors must communicate with the Secretaries ch Section in which they propose to exhibit, and a brief ption of each exhibit for insertion in the Museum Catalogue be in the hands of the respective Secretaries before June

ll exhibits should be addressed to the "Secretary of the m, British Medical Association, Queen's College, Birming- with the name of the Section for which they are intended. ges should not be addressed to a firm's representatives at useum.

ommunications on general matters connected with the m to be addressed to the Museum Secretary, Mr. Gilbert g, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

ommunications respecting advertisements in the Museum gue must be made to Mr. Edward B. Lawley, Queen's Col- Birmingham.

GILBERT BARLING, M.B., F.R.C.S. Hon. Sec.
BERTRAM C. A. WINDLE, M.A., M.D., Chairman.

SPECIAL CORRESPONDENCE.

PARIS.

aths in Measles.—Influenza Rash.—Urethral Staphylococci. ic Acid in Epithelioma.—Albuminuria and Morphine ia.—Hysterical Monoplegia.—The Action of the Positive on Microbes.—A Curious Case of Mercurial Stomatitis. ori Resin.—Anemonine.—Kola Nut.—General News.

ULAFOY, at the Société Médicale des Hôpitaux, read notes ase of measles, which he described as hypertoxic, and ning the life of the patient, a girl, aged 16. Her condition ly changed on the sixth day; the temperature suddenly ie pulse was 130 to 140 per minute; a very small quantity was passed, and delirium set in. These symptoms in- in gravity, and were accompanied by cardiac syncope. gh menstruation had commenced, the patient was placed d bath 24 Centigrade (75.2° F.). She was seized with a shivering fit, but the temperature immediately fell. She ot in the bath for a quarter of an hour, and the improve- as manifest, notwithstanding the shivering fit, which nly when she was taken out. On the eleventh day the ere discontinued; on the seventeenth day the temperature Centigrade (98.6° F.). M. Duponchel has also treated ult patients suffering from measles with cold baths. nperature was above 41 Centigrade (105.8° F.). Im- nt was observed almost instantaneously. M. Hu- considers the important symptom in these serious measles to be the syncope of the heart; for this he adminis- y from 2 to 3 grammes of caffein by hypodermic injec- has for the last seven years adopted this treatment in s diseases, and found the results excellent. The caffein e tried before the bathing.

g 219 cases of influenza, M. Barthélemy met with fourteen ig cutaneous eruptions. This rash may appear in severe attacks of influenza. In appearance, it resembles that of ver; it may be localised on the arms and legs, or dis- er the body.

M. Ebaud has found in the normal male urethra a staphylococcus presenting the same characteristics as the gonococcus, and cultivated in the same way. M. Ebaud thinks that this staphylococcus which develops under the same conditions as a saprophyte in the normal urethra, is capable, under the influence of certain yet undefined conditions, of setting up blenorrhagia.

M. Arnozan has treated eight cases of epithelioma of the face of sebaceous origin with acetic acid, with excellent results. Suppuration was arrested, and ultimately cicatrisation ensued. The patient can apply the treatment, and dressings are rendered unnecessary.

M. Huchard has met with ten cases of albuminuria in morphinomaniacs, ending in uræmia; Löwenstein records six or seven similar cases. M. Huchard's researches demonstrate that morphine is one of the agents which most effectually lower the temperature, and thus induce these forms of renal disturbance resulting from arterial "hypotension." In interstitial nephritis, an affection characterised by strong arterial tension, morphine produces less disturbance than in parenchymatous nephritis. In 1883 M. Huchard indicated the danger resulting from arterial "hypotension" produced by morphine. That substance causes congestion in different organs, and especially in the kidney, which may lead to parenchymatous nephritis.

At a recent meeting of the Société Médicale des Hôpitaux, M. Ballet showed a man with hysterical monoplegia of the left arm, accompanied by muscular atrophy; the patient exhibited the stigmata of hysteria, with hemianæsthesia of the left side and restricted field of vision.

MM. Apostoli and Laguerrière, in a communication read before the Académie des Sciences, on the action of the positive pole of a galvanic current on microbes, and especially on the bacteridia of charbon, state that the positive pole alone kills or lowers the vitality of pathogenic organisms; interpolar action and the negative pole do not exercise any influence. The continuous current of a strength of from 50 to 300 milliampères has not any action *sui generis* on microbe cultivations in a homogeneous medium. The action of the positive pole is due to the fact that it decomposes substances, and sets free the acids and oxygen contained in them.

M. Augagneur, of Lyons, has stated before the Lyons Society of Medical Science that he has treated a syphilitic patient, subject to attacks of ulcerated stomatitis, after two mercury injections, one of 6 grammes, the other of 3 grammes. These were generally induced by a blow on the buttock, the region where the injections were made. He had a more than usually severe attack after falling one day on that part, and M. Augagneur made an incision in the tissues round the puncture left by the injecting needle, until he came to the gluteus maximus, in which he made an incision, and, by pressure, squeezed out mercury. After this operation, stomatitis disappeared.

M. Formet has tested the resin of raori in his military hospital at Noumea; it is also called "Sydney gum, baume Calédonien" (Caledonian balsam). All antiseptic substances can be mixed with this resin, which forms a coating over wounded surfaces. In cutaneous affections it is of great service; likewise in treating sprains and fractures when the limb must be kept rigid.

M. Bovet has treated thirty-four cases of uterine affections with anemonine, and has observed that in sericus cases it acts as an energetic analgesic agent; in simple cases, such as difficult menstruation with or without leucorrhœa, the menstrual flow was induced at regular periods unaccompanied by pain. MM. Baz and Dormant have cured blenorrhagic orchitis with the same substance.

M. Lapicique, at the Biological Society, stated that during ten months he travelled in the Vosges, taking kola nut every day. Last year he repeated the same experiments taking caffein. The results were the same, with the exception that smaller doses of kola nut than caffein must be taken.

The new policlinic established at the rue Mazarin was opened a few days ago. The staff is composed of MM. Butt for Skin Diseases and Practical Chemistry; Natier, Laryngology, Otology, and Rhinology; Arthanel, Nervous Diseases; Bacchi, Ophthalmology; Olivier, Gynæcology; Gillet, Diseases of Children; Chaby, Diseases of the Mouth. Out-patients are seen daily from 9 to 3 o'clock. There are not any wards for in-patients; those who are too ill to go to the consultations will be treated at their own homes. Practical and theoretical lectures are organised for students.

The Minister for Foreign Affairs, following the advice of the Public Health Committee, has forbidden the Algerian population

to take the pilgrimage to Mecca next July. Last year this pilgrimage was also forbidden for the same reasons—the presence of cholera at Mecca.

VIENNA.

Ranula Glandulæ Nuhnii.—Retinal Hæmorrhage in Hydracetin Poisoning.—Ligature of Nutrient Arteries in Goître.—Electro-Puncture in Aortic Aneurysm.—Regeneration of the Liver after Resection.

At a recent meeting of the Society of Physicians of Styria Professor Wölfler, of Graz, showed a baby, aged 9 months, which was affected with ranula glandulæ Nuhnii. The swelling was congenital, and was situated under the tongue. It was as large as a nut, and had not increased to any great extent. It was sharply limited, presented fluctuation, and was transparent. Its white and jelly-like contents contained flat epithelia.

Dr. A. Grünthal, in a recent number of the *Centralblatt für Augenheilkunde*, describes a case of hæmorrhage from poisoning with hydracetin. A medical student suffering from psoriasis, who had been fruitlessly treated with the usual drugs, took hydracetin without observing the necessary precautions as to dose. Within four days he rubbed about 30 grammes of hydracetin, in a 20 per cent. lanolin ointment, over his whole body. After some days he fell ill with cyanosis, vomiting, and fever, which amounted to 40° C. The urine had the mahogany-brown colour such as described by Œsterreicher, and contained much albumen. On the tenth day severe epistaxis came on, and the next day the patient complained of a dark cloud before his eye. He became markedly anæmic. On examination by Dr. Grünthal vision was found to be normal in both eyes, and ophthalmoscopic examination revealed two small retinal hæmorrhages in the left eye. Each of these was about one-fourth of the size of the papilla. The field of vision in the periphery was normal. A scotoma was also detected in the left eye. After four weeks the hæmorrhages were absorbed, and the general condition of the patient improved. In five weeks he was well. In poisoning with hydracetin Paul Guttmann has proved that there is a decomposition of the red blood corpuscles, and the retinal hæmorrhages in the case just related may be explained by decay of the red blood corpuscles and an alteration of the blood vessels thus produced. The same conditions also give rise to retinal hæmorrhage in general blood diseases, such as pernicious anæmia, scurvy, etc.

At the nineteenth meeting of German Surgeons, Professor Rydygier, of Cracow, said that during the last two years he had treated twenty-one cases of goître by the method suggested by Wölfler, of Gratz. Ligaturing the arteries on one side only or the lower blood vessels alone was insufficient. The same was true of the method recommended by Kocher, of Berne, namely, first to ligature the afferent blood vessels of the large portions of the goître, as an extensive collateral circulation was established in the meantime. Professor Rydygier stated that in his opinion cystic and fibrous goîtres are not suitable for Wölfler's operation; it should be reserved for well vascularised parenchymatous goîtres. Dr. von Eislsberg, of Vienna, said that ligaturing the afferent arteries in goître had been practised seven times altogether in Billroth's clinic. All of these were cases of parenchymatous goître abundantly vascularised. In three, enucleation had to be performed within three years; four were permanently cured.

At the same congress Professor Tillmanns related a case of aneurysm of the ascending aorta, which he had treated since April, 1888, by electropuncture, in thirteen sittings, at intervals of from three to five and eight days. At the commencement of the treatment there was a prominent tumour, 4 centimètres long and 6 centimètres broad. The patient had severe pain in the arm, and suffered from sleeplessness and giddiness. Both the tumour and the symptoms had entirely disappeared two years since, and the sac of the aneurysm had shrunk to a great extent. He employed the anode of a battery of from 10 to 20 elements, using Stöhrer's rheostat to weaken or increase the current. He introduced very slender needles with antiseptic precautions. The needle was inserted to about 5 centimètres from its top. The cathode, with a plate, was applied in the neighbourhood of the swelling. Immediately after introducing the needle contraction of the aneurysm and diminished pulsation were noted. After each sitting, which lasted from five to ten minutes, the patient was put to bed, and an ice bag was applied. In the case shown there was considerable subjective amelioration already after the eight sitting, and objectively it was seen that the tumour had grow more solid. Professor Tillmanns believed that definite cure o aortic aneurysm could seldom be effected by electropuncture, bu that considerable relief of all the symptoms could frequently b obtained.

At the same congress Dr. Ponfick related his experiments n resection and spontaneous regeneration of the liver substanc They were undertaken from a physiologico-pathological point o view, but were also of interest surgically. Operations on th human liver were rare. This was due to the large surface of th serous membrane adhering to that organ and to the "quasi central position of the liver with reference to the circulator system. Ponfick's experiments led him to consider these ap prehensions as groundless. The bile ducts proved to be of insig nificant importance, and to have no considerable influence on th function of the liver. The experiments, which were carried ou on rabbits, were as follows: When the fourth part of the liv was removed, the organ was ligatured with catgut. The system disturbance was but slight. After the removal of half of th liver, anorexia and nervous symptoms came on soon after th operation. The animals, however, soon recovered. When thre quarters of the liver substance were removed, the animals seeme very weak at first, but the vast majority of them recovered afte a certain time, and showed no bad after-effects during sever months after the operation. Ponfick believed that a further r moval of the liver substance in man was impossible. It could n be proved what was the effect of this operative interference the circulation and the secretion in the rest of the organ, as a ne formation of hepatic substance—a sort of "liver-generation," Ponfick designated it—occurred very quickly. When gradual r moval of parts of the liver at intervals of from three to four da was practised, the remaining part was invariably found to ha considerably increased. The more radical the operation the mo active was the new formation, so that within five days 80 p cent. of the liver had formed anew. The organ finally even e ceeded its original size. The experiments thus showed that t liver could regenerate itself to an almost unlimited extent, a that the organism was not very unfavourably affected thereby.

SWITZERLAND.

Hypnotic Suggestion in Eye Disease.—Rumination in Man.—C genital Occlusion of the Posterior Nares.—Luciusquelle Wa in the Gastric Affections of Phthisis.

Dr. E. Rittzmann, of Zurich, reports two cases of eye dise cured by hypnotic suggestion. One was that of a nervous hou maid, aged 35, suffering from idiopathic or hysterical blepha spasm of the left eyelids, which had previously been treated vain by local antiphlogistic remedies, injections, electricity, a blepharotomy (performed twice). The other patient, a ma servant, aged 18, had hyperæsthesia of the retina, accompanied congestion of the conjunctiva, with hazy vision, scintillation, a various morbid sensations about the eyes. Treatment with z lotion, douches, cocaine, etc., had utterly failed to afford rel Both patients were hypnotised by Professor Forel, of Zurich, all their troubles (including non-ocular ones, such as headac loss of appetite, insomnia, etc.) were "suggested away." In b a striking improvement was noticed even after the first sittin complete and apparently permanent cure ensuing in the f patient after five, in the other after two sittings. Both won were immediately able to resume their work. In the bleph spastic patient a subsequent tarsorrhaphy (for the purpose of recting some defects left by the blepharotomies) was perfor painlessly under hypnotic suggestion.

At a recent meeting of the Gesellschaft der Aerzte in Zürich Leva showed a case of rumination in a man aged 22. From to 30 minutes after each meal the ingested food continued to up into the patient's mouth, to be masticated and swallo again and again, the lad relishing the cuds all through. The cess lasts from seventy to ninety minutes. In the case of liq food the rumination begins earlier, but ends more quickly. ingestion of a litre of milk is followed, on an average, by fif ruminations; that of a chop with a roll by about twenty- The patient has no control over the process. A careful exam tion of the pharynx, gullet, and stomach failed to reveal anyt abnormal. The lad's appetite was excellent, but there now and t occurred eructations, and, though very rarely, vomiting, his bo

ing rather costive. He states that the rumination had first peared about six years before his coming under observation, hen he had been in the service of a very stingy master. The eals being scarce and the lad's appetite very keen, he acquired e habit of swallowing again the morsels of food which came up to his mouth.

A monograph on congenital occlusion of the posterior nares has st been published by Dr. A. Schwenat, of Basle. It is based on irty-two cases, eight being in human and lower animal fœtuses, d twenty-four having been met with in practice. The examiation of the fœtuses showed that they belonged to the category rhinocephali, and especially to that of cebocephali, presenting unklike nasal cavities, occluded mostly both posteriorly and teriorly. Of the twenty-four rhinological cases only in a w was there any concomitant developmental anomaly of e frontal, nasal, and orbital regions. The occlusion was in most all cases bony, though varying in thickness. In fact, in ly one case, that of a newborn infant, which lived only a few ys, was the occlusion membranous. Clinically, the defect was aracterised by the same respiratory troubles and alterations of ice as are observed in cases of postnasal adenoid vegetations, well as sometimes by slight exophthalmos, a narrow, high, perndicular forehead, and anosmia. The most important symptom, wever, in the newborn was incapacity of sucking. The best eatment is said to consist in destroying the occlusion by lvano-cautery and subsequently inserting a tube to keep the ssage open. The operation gives, on the whole, satisfactory sults. Referring to Dr. Schwenat's work, Dr. Jonquière, of rne, observes that the subject fully deserves the attention of the actitioner, "since many an infant may perish simply in consence of the defect remaining unrecognised."

At a meeting of the Aerztlicher Verein Graubuendens Dr. Volad, of Davos-Doerfli, read a paper in which he emphatically remmended the Tarasp Luciusquelle as an excellent remedy for spepsia and gastric catarrh in patients suffering from pulonary phthisis. The water should be well warmed (by imersing the bottle in hot water) before use. The dose is half a ttle, which should be taken on an empty stomach before breakst. After a course of eight successive days the treatment should suspended for an equal period of time. The good effects of ciusquelle are thought to be due to its richness in chloride of lium, sulphates, and carbonates.

THE CANARY ISLANDS.

e Record of the Season at Orotava.—Meteorology.—The Status Quo and Prospects.—Grand Canary.—The New Hotel.—Steamers.—Canary Wine.

E season at Orotava, 1889-90, has been on the whole a favourte one. Most of the patients have done remarkably well.

This year's experience confirms the view that Orotava is spelly suited for those invalids who still retain vigour enough for mmock exercise at least; better still if they can ride. The mber of visitors has been in excess of the number at any preus time, but the hotels are better organised, and are meeting pressure easily.

The beginning of the season was spoilt by a rumour in England t there was an epidemic of scarlet fever. Some cases occurred Santa Cruz, being probably imported from Plymouth, and an glish child contracted the disease mildly here. The infection not spread; unfortunately the rumour did, until the outbreak s labelled epidemic.

With this exception, Orotava has well maintained its reputation freedom from zymotic disease. Even the local diarrhœa has n very little heard of here. During the last week, some fever-colds have appeared, which are apparently representative of influenza in a modified form.

As regards weather, the latter half of November and most of cember were cold and wet for Orotava, but January was a ely month; 188 hours of sunshine were recorded. Rain fell on y five days, and on three of these the amount was quite insigcant. Some of the night temperatures were low, the thermeter falling once or twice to 48°. The dryness of the atmoere was variable, but sometimes there was no more than from to 50° of moisture in the air.

The backward position of the new Grand Hotel building is a rce of surprise to everyone. The directors still feel confident having it ready for next season. Looked at from a sanitary point of view, the delay is advantageous. By the time the hotel is occupied the walls will have been up from twelve to eighteen months, and will be thoroughly dry. The importance of not allowing a consumptive invalid to occupy a damp house is fully recognised. Had the new hotel been opened this season Orotava might not have had the good record to which I have alluded. The new church is to be begun in a few days; only £100 is now wanting of the estimated cost.

The complaint of dulness is still heard, but only from those who are not well enough to enjoy ridings, picnics, balls, etc. The balls especially have been numerous and brilliant. Riding paper chases have been introduced and proved a successful novelty. There have also been waxworks, tableaux vivants, a lawn tennis tournament, and a fancy fair. Some national sports, such as tilting at the ring (*sortija*) and wrestling (*lucha*) are in contemplation. The Carnival was actively participated in by many of the visitors, and the square in front of the "marchesa" presented the appearance of a stormed city. Still for the feeble ones the dulness remains. Though £10,000 a year is being spent in Orotava by the English, and probably £20,000 more would be if a few palpable defects were remedied, the authorities are doing absolutely nothing to render their town attractive. The streets are dirty, shockingly paved, and badly lighted. The disgusting state of the mole deters many from using it as a promenade. There is no bathing accommodation. No band plays, and there is no market or central place of attraction to draw loungers.

As regards food, considerable improvements have been effected. The hotels are better supplied, and some of the shopkeepers are slowly awaking to the necessity of keeping such commodities as good English cheese, bacon, ham, etc. Great efforts are being made to form a company to import and store in a refrigerated chamber the best English mutton, game, butter, etc. It is hoped the company will be at work next season; if so, the food problem will be solved.

The irregularity of the mails continues. Repeated remonstrances have been addressed to England to the Postmaster-General. Every week a steamer leaves England for Teneriffe, which does the journey in four days and a half or five days and a half. None of these carry letters unless specially addressed. The mails go by slow boats, which take a week to go to Grand Canary, where they often lie for nearly another week before they are brought back here. Surely this statement alone convicts the Post Office of incompetence or penuriousness.

The number of permanent English residents—which, when Mr. Ernest Hart brought these islands prominently into notice four years since by his letters in the JOURNAL, was limited to one family—is now about 100. Rents have advanced considerably, but the place is still cheap compared with the Riviera. A few new villas are being built, but more are badly wanted, as many of the present ones are not suitable for invalid wants—indeed, were never intended for winter residences.

To sum up. Orotava maintains its reputation in regard to climate and to brilliant results in the way of cure, but is retarded in its progress by the apathy by which its defects are left unremedied. Some of this is doubtless due to the poverty of the landed interests, owing to the successive failures of the vines and the cochineal crops. Some of it is due to an idea that consumption is infectious. This leads a strong party to discourage the introduction of large numbers of persons with that disease.

Grand Canary has also had a considerable accession of invalids this year; and the new hotel promises to afford excellent accommodation, which was greatly needed for invalids and visitors. The design of this hotel and its site are both excellent, and Grand Canary, which possesses a beautiful climate, interesting scenery, and opportunities and facilities for delightful drives, will no doubt now be much more generally included in the winter holiday of visitors to Madeira and Orotava than hitherto. The three places—Madeira, Orotava, and Grand Canary—constitute a cluster of health resorts which are sure to become more and more popular as years go on. The number of first-class steamers which now call at these ports offers every facility to visitors for travelling under circumstances most favourable to health. The general prosperity of the islands will no doubt be greatly increased by this acquisition of European intelligence and capital. There is, moreover, a revival of trade in an important direction, which will add to the resources of the country, and so contribute to its development The Canary wines have an ancient reputation in England. The famous Canary sack with which readers of Shakespeare and of Elizabethan literature are familiar was a dry (*seco*) wine of a sherry

character. "Canary sack" is now likely to renew its ancient fame and popularity. Teneriffe wine had also formerly a great reputation in this country, and at one time old Teneriffe was the favourite drink throughout the navy. The vine flourishes admirably on this soil and in this climate, and the skill with which the extensive vineyards are now cultivated in Grand Canary, and the introduction of the latest knowledge, both in growth and in the making of pure wine by the Estufa method, has resulted in the production of a pure, wholesome, and delicious wine of the sherry character, which is not only largely consumed here, but is being extensively exported to Europe. Its cost is so moderate that it is understood that Canary sack (the pure juice of the grape, well made and reasonably matured) can be exported at such a rate that it can be sold in Europe at the extraordinarily cheap rate of 12s. a dozen. Under these circumstances a large and growing market is being secured for it, and in the development of the Canary vineyards and the deserved popularity which the Canary sack appears to be likely to obtain in Europe lies a source of increasing prosperity and useful development for these Fortunate Islands.

CORRESPONDENCE.

THE LEPROSY CASE AND MEDICAL INSPECTION OF EMIGRANTS AT LIVERPOOL.

SIR,—It is a matter of duty to warn the young ship-surgeons in the Atlantic passenger trade of the unfortunate fact that a genuine case of leprosy, in the person of a respectable Swedish emigrant, arrived last month from Sweden, travelled across England undetected, in Liverpool mixed with other steerage passengers, escaped the notice of the medical officials of the most experienced and fashionable Atlantic Steamship Company, and passed the medical inspection on the sailing day for Boston by the Board of Trade's Medical Emigration Inspector as only a case of skin disease. On shipboard she was in constant contact with other passengers until detected by the United States quarantine doctor at Boston. She was then immediately isolated, not allowed to land on American soil, pronounced to be a case of genuine leprosy by the Boston scientists, and sent back to Liverpool by the same company at no inconsiderable expense and loss of prestige. The enclosed cuttings from the local newspapers will show the natural anxiety of the editors to throw doubt upon the diagnosis, but even the Board of Trade officials have joined in the consensus of the Liverpool medical evidence that the Boston doctors were correct in their opinion. On my personal inspection of the case with the senior surgeon of the workhouse hospital, the patient's face alone, without looking at the ulcerated finger-joints, satisfied me that she was suffering from genuine leprosy. I had studied the disease in India and Mauritius when in the Army Medical Service.

May I suggest that the record of this case in the JOURNAL will have the practical result of inducing the great shipping companies to afford sufficient time for these important medical inspections? Any undue haste on the part of the lay shipping officials, naturally anxious to get their passengers quickly "passed by the doctor," is liable to hurry the young surgeon in the discharge of this international duty, bearing in mind that he has no *locus standi*, and that in the eyes of the shipowners to "fill up the ship and make her pay" is probably of more importance than attention to hygienic precautions by the irresponsible ship-surgeon of to-day.—I am, etc.,

Bootle. C. H. LEET, F.R.C.S.

THE NATIONAL LEPROSY FUND.

SIR,—With the object of eliciting by correspondence as much information as possible on the subject of leprosy, it is proposed, as a preliminary investigation, to address a series of questions to the officers of the various leper asylums, and to others who may be able to throw some light upon the matter.

I am requested to ask you to allow me to invite the co-operation in this inquiry of those of your readers who, from their knowledge of the disease, may be in a position to offer suggestions as to methods of inquiry and as to points for elucidation.

Any observations with which the Committee may be favoured will be gladly received, and incorporated in the *Journal of the Leprosy Investigation Committee*, of which the first number will be shortly published.—I am, etc.,

PHIN. S. ABRAHAM (Medical Secretary)

1A, Adam Street, Adelphi, London.

THE REPRESENTATION OF DUBLIN UNIVERSITY.

SIR,—I observe with regret the retirement of that eminent Dublin surgeon, Mr. W. J. Wheeler, who was a candidate to represent the University of Dublin in Parliament. He was waited on by a deputation on Saturday, May 24th, and induced to adopt this course. He had a very large number of supporters, and if he had gone forward would have had a reasonable prospect of success.—I am, etc.,

T. LLEWELLYN NASH.

Dublin.

DIAGNOSIS OF PANCREATIC TUMOUR.

SIR,—In the discussion at the Medical Society on abdominal section Mr. Treves stated "that he believed no case of tumour of the pancreas had ever been intentionally operated upon in this country, for the disease had not been diagnosed." Last year I had under my care in Guy's Hospital a patient with an abdominal cyst lying behind the stomach, which was recognised as a pancreatic cyst. My colleague, Mr. Jacobson, performed abdominal section, attached the cyst to the edges of the wound, and successfully drained it, the patient having left the hospital quite well after a few weeks. The details of the case will be fully published.—I am, etc.,

St. Thomas's Street, S.E. G. NEWTON PITT.

"THE WORKING OF THE NEW LUNACY ACT: A WARNING."

SIR,—Under the above heading Dr. Outterson Wood, in the JOURNAL of May 24th, gives an instance of the working of these Acts in private practice. The following is an example which has just occurred in a hospital, and I think its importance will be readily recognised:—

S. T. was brought up from Croydon and admitted into the Cancer Hospital, under a medical certificate, on May 2nd. Her mental condition was not alluded to in the certificate, and was not at first apparent. She was found to be suffering from an ulcerated scirrhous growth on the right breast, and also from advanced tubercular disease of the opposite lung. In the day time she was fairly quiet, but at night continuously howled and screamed; attempted to use her spittoon for the purpose of defæcation, had paroxysms of maniacal excitement—during which two nurses were obliged to hold her down by main force—and so on. As she had been placed in a large ward with thirteen other patients, and as the hospital contains no provisions for the isolation of insane patients, the state of things may be imagined. It was necessary first to communicate with the husband at Croydon. He promised to come up and remove her, but failed to do so. Next the relieving officer was sent to, without result. After repeated and urgent messages to the parochial authorities two medical officers and a justice of the peace appeared on the scene. By this time (May 18th) the grievance in the ward had become so intolerable that the patient had been placed in a room specially reserved for abdominal operations, where she required the continuous attendance of two nurses, thus considerably taxing the resources of the nursing staff. The medical men considered that the woman was undoubtedly insane, but as she appeared to be "under proper care and control," within the meaning of the Act, the justice of the peace did not feel able to order the woman's removal. There was also some question as to her physical fitness. She was rapidly becoming weaker, but when the parochial authorities were first applied to no difficulty on that score could well have arisen, as the woman had recently been brought a long distance from the country. Death terminated the case on May 21st.

The above shows the awkward consequences of inadvertently admitting lunatics into hospital, and the difficulty in procuring their removal thence to places suitable for their accommodation. Unless a remedy be speedily found very disastrous results may naturally be looked for at no distant date. The question appears to turn on the interpretation to be placed on the words in the Act "under proper care and control," obviously of somewhat doubtful meaning if it be conceded that such care is procurable in an institution in no way destined for the accommodation of lunatics.—I am, etc.,

Gloucester Place, Portman Square, W. HERBERT SNOW.

PTOMAINE OR PTOMINE?

SIR,—Medical science is responsible for many a barbarous word, at hardly any is more objectionable than the term ptomaine. ducated men should be ashamed to use it, and if they will but ake the effort they may find it not yet too late to improve its rm. The full form of the word (from πτῶμα, stem πτωματ-) ould be ptomatine; but as the Greek language allowed the aug- enting syllable to be dropped, it would be justifiable to make it omine. As a parallel we have (from the stem αἱματ-) hæmor- age instead of hæmatorrhage. We have rightly coined both ematin and hæmin, but hæmain would be intolerable, as is omaine. These remarks apply equally to the word leucomaine, hose preferable form would be leucomine. It would help to re- ove one of the blots from our medical and chemical vocabulary British medical men would persistently use the words ptomine id leucomine instead of their barbarous forerunners.—I am, etc.,

Mason College. F. J. ALLEN.

THE ALLEGED INCREASE OF CONSUMPTION IN SAN REMO.

SIR,—I was rather surprised by reading Dr. Arthur Hill assall's letter published in the JOURNAL of May 10th, p. 1104, the "alleged increase of consumption in San Remo." In it it is ated that the "statistics" given by the authorities of San Remo e "most unreliable," because "from the method of certifying e causes of death in San Remo, and some other Italian towns, curate returns are impossible."

By what Dr. Hassall says, it appears that he does not know at the method by which our returns are obtained. The "medico- croscopo" has not the duty of giving the cause of the death, as . Hassall affirms, but only that of recognising if the alleged dead really dead. The cause of the death is always given by the edical man who treated the disease on a card furnished by the vernment, which is duly filled, and then sent to the local autho- ies, where it is transcribed on the register, and afterwards rectly sent to the General Direction of Statistics in Rome.

As you see, things are substantially different to what was stated Dr. Hassall; I can assure you that nothing can be more reliable in our returns of causes of deaths, as in all our country the same iform method is employed. It may be that some mistakes may ppen on the part of the medical man who treated the disease; t, as it is evident, this happens everywhere.—I am, etc.,

Università di Perugia.
Laboratorio di Materia Medica. G. RUATA.

THE MANAGEMENT OF IMPACTED LABOUR.

IR,—In reference to "An Address on the Surgical Aspect of pacted Labour," delivered to the Southampton Medical Society Mr. Lawson Tait, and published in the JOURNAL of March 22nd , it is of such importance as to require the most serious con- eration of the profession, and the closest scrutiny of the Ob- rical Society.

surgeon of eminence many years ago brought forward the ration of excision of the bulb of the clitoris as a remedy for terical epilepsy. At first his plan was more or less accepted, I believe I was the first to take a contrary view, and in a er to the *Medical Times and Gazette* said it would be more ionable to amputate the patient's hands, they being the active nts, and the clitoris only the passive agent, in the results. ers followed, and the Obstetrical Society pronounced against operation.

re Mr. Lawson Tait's operations justifiable? I think not. ing my career I have had under my care from other ical men and in my own practice several women with racted pelves, and I have brought on labour some five- -twenty or more times. I have saved about half the dren, and I have had no fatality with the mothers. oman, however, contracted in the antero-posterior diameter, bring a fifth-month fœtus into the world. The induction labour is no very great risk to the mother, and when diameter is three inches or thereabouts, it gives the child od chance of life at the thirty-second or thirty-fourth week estation. It does not require any very exceptional skill or oundings, and it leaves the woman as she was, without e least interfering with natural belongings. But look at ab- nal section and amputation of the uterus. Comment is un- sary. Except when pregnancy has been allowed to advance in a deformed dwarf, then such practice may be had recourse to. I have successfully delivered a woman by craniotomy at or about term with a diameter that did not exceed two inches; that is all very well known to the profession. As for carrying out the same practice in placenta prævia, it is more than questionable, and the sooner the profession gives its authoritative opinion on the prac- tice the better.—I am, etc.,

Lindfield. WM. ELLIOTT PORTER.

THE PUBLIC HEALTH MEDICAL SOCIETY.

SIR,—Will you kindly allow me, on behalf of the Council of the above Society, to inform those of your readers who possess a public health qualification that the Society will be very glad to see them at their annual meeting dinner on Thursday, June 5th, at the Holborn Restaurant, at 7 P.M.?

The Council are of opinion that it is very desirable that an effort should be made by those gentlemen possessing public health diplomas to meet together once a year. Full information can be obtained on application to the Secretary, at 101, Great Russell Street, Bedford Square, W.C.—I am, etc.,

CHARLES A. CAMERON, President.

MEDICO-LEGAL AND MEDICO-ETHICAL.

COPPER IN TINNED PEAS.

AT the Glasgow Sheriff's Court recently, Robert Man, grocer, of Rutherglen, was charged with selling to an inspector three tins of preserved green peas which contained copper, and which were, therefore, injurious to health, whereby he rendered himself liable to a penalty of £50. The vendor pleaded "Not guilty," and, the purchase having been proved by the inspector, the certificate of Mr. Tatlock, the City Analyst, was put in, from which it appeared that the sample examined by him contained copper, equivalent to 1.54 grain of crystallised sulphate of copper per pound

Dr. Ebenezer Duncan, called in support of the prosecution, stated that he considered that the presence of this amount of copper rendered the peas injurious to health. He stated that sulphate of copper was a poison in poisonous quantity, this quantity depending upon whether it was taken in one dose or systematically; that, while disagreeable consequences might follow from the ingestion of a single fairly large dose, when taken regularly in small quantity, as might be the case with these peas, constipation would result, and in the case of a child or weakly person it would act as a serious irritant. Upon a very delicate person the peas might have a very injurious effect. A person might take at a single meal a third of one of the tins, representing about half a grain of sulphate of copper. The object of adding the copper was probably to preserve the colour of the peas. Such an article should not be sold as food; through carelessness in preparation, it was quite possible that considerably higher amounts of copper might be added, thus exposing the public to still more serious risks. In cross-examination, the witness stated that probably a minute quantity, say a tenth of a grain of copper, would not be injurious. Sulphate of copper was given as a drug in certain cases up to 2 grains as a dose. Anything above 2 grains would probably produce vomiting. The witness did not think that it had been shown that copper was not a cumulative poison, and had not heard of a "French professor who with his family took sulphate of copper for a year without injurious effects," and was not aware that the prohibition of the use of copper salts for foods had been withdrawn in France. He did not think that sulphate of copper would be found in peas which had not been adulterated, and he did not believe that copper was naturally present in nearly all cereals, including peas. No such thing had been proved. He had not had experience of the effects of repeated doses of copper salts on persons in ordinary health, but was speaking from general medical knowledge and reading: a fair inference, in some directions, as to the effects on persons in ordinary health could be drawn from the effects on sickly persons. It would be injurious to a person in ordinary health to take a third of a pound of these peas, containing about half a grain of sulphate of copper. A thing given as a tonic in cases of disease might certainly be regarded as injurious to a healthy person.

Dr. J. M. Buchanan generally corroborated what the previous witness had said.

Dr. Littlejohn, Medical Officer of Health for Edinburgh, stated that 1.54 grain of sulphate of copper to a pound of peas would render them injurious to health. There was no necessity for adding such a drug to peas. The effects of small doses of sulphate of copper was to produce irritation of the stomach and indigestion; when taken in continuous small doses, it produced feverish symptoms, and ultimately general emaciation and death. The continuous use of small quantities was more dangerous than occasional ingestion of large ones. By the former, the constitution would be undermined; by the latter, violent symptoms, such as vomiting, would be caused. The sale of such peas should not be allowed. The witness placed no reliance upon the report of the alleged experiments with sulphate of copper alluded to during the examination of Dr. Duncan. He considered that much of the indigestion following banquets and high-class dinners resulted from the use of copper utensils for cooking.

Mr. Borland, who defended, said that he had no witnesses to call, as the professors he meant to bring forward wanted twenty guineas for giving evidence, and his client could not afford "to throw away" so much money. He then called the Sheriff's attention to the fact that one of the three tins bought by the sanitary inspector had never been opened, and held that, as its contents had not been analysed along with those of the other two tins, the analysis was not a fair one, and that, therefore, the case had broken down.

The Sheriff said that the contents of the unopened tin were part of the

sample purchased by the sanitary officer, and that, as it had not been analysed, the requirements of the Act had not been observed. He therefore found the charge "Not proven."

CONTRACTS NOT TO PRACTISE.

A SUBSCRIBER.—We do not remember the action to which our correspondent alludes. If the plaintiff was nonsuited, there must have been special features in the case. A contract in partial restraint of practising, founded on a good and valid consideration, and where there is a fair and reasonable ground for the restriction, will be maintained. On the facts stated by "Subscriber," we think an injunction could be successfully claimed. An action would have to be brought, and the matter, therefore, had better be placed in the hands of a solicitor.

MEDICAL TARIFFS.

THE most practical reply that we can make to our correspondent's inquiry will be to refer him to the review of the *Medico-Chirurgical Tariffs*[1] (prepared by the late Shropshire Ethical Branch), which appeared in the JOURNAL of April 14th, 1888, from which we transcribe the following remarks:

"There is also a tariff of surgical fees. For a long list of operations and manipulations these *Tariffs* are the only authoritative document of the kind in existence in this country, and their general applicability and justice are further shown by the fact that they have been translated into French..... The thanks of the profession are due to the author for the trouble which he has taken to render them absolutely reliable."

In answer to "F. P. A.'s" second question, we may note that, so far as we are aware, registration of a partnership is not necessary.

DUTIES OF PARTNERS AS TO CLUB-PATIENTS.

A. B. C. asks for an opinion on the following case: A. and B. are partners in general practice. A. holds a Foresters' court in his own name, but the court have agreed to consider B.'s services as equivalent to A.'s. B. was called to see one of the members of the court in passing the place three miles and a half distant from the village where the firm reside, and, from a misunderstanding, did not call again. The man got worse; and, as B. had not called, A., when visiting a few doors off the member's house, was told that the man was dangerously ill, and requested to see the man. A. refused. B. afterwards called again, and the man was then dying. (A. had not told B. that he, A., had been asked to see the patient.) B. considers that as A. was legal surgeon to the court, the member was entitled to his services, and also that A. should, in common courtesy, have seen the patient for B., even if B. had been his opponent, much more as B. was his partner.

*** We would express a hope that "A. B. C." has either been unintentionally misled, or that the facts of the case have been distorted by the sorrowing friends of the deceased; otherwise A.'s refusal to see the patient under the pressing urgency would constitute a grave dereliction of duty to a suffering fellow-creature, and of moral obligation to the members of the Foresters' court, as their *de facto* medical officer. The fact, moreover, of A. being the senior partner of B. renders the alleged refusal, and its attendant omission of a clear duty, more or less inexplicable; hence our unwillingness to accept unreservedly the inculpating statement in question.

RAILWAY COMPANIES AND HOSPITALS.

A. B. writes: I am surgeon to one of our wealthy railway companies in a district where there are no large hospitals. In the event of injury to their *employés*, the company agree to pay for my first attendance only; for any subsequent treatment the men are themselves responsible; and, if they are treated in the hospital, I am in the habit of making no further charge, because they all belong to the class for which the hospital was built. Now, in the event of the company sending to our small local hospital a private person, for whose injury they acknowledge their responsibility, am I entitled to make a reasonable charge to the company, such as I should make to the person if attended at his own home? The company has no agreement with me on the subject, and we have no paying patients at our hospital.

*** "A. B." does not state how the hospital in question is supported, or in whom the control and management is vested, or on what rules it is governed. The persons in whom the control is vested (assuming they have power under the rules) should intimate to the railway company that in future no private person would be received without payment for medical and surgical attendance and (?) for maintenance. We quite concur with "A. B." in thinking that the company ought to be made to pay, and, on the facts stated, should have done so voluntarily.

A CIRCULAR.

"DEAR SIR,—I have much pleasure in informing you that I have secured the services of Mr. ——, so well and favourably known in this neighbourhood during the last six years, as my medical assistant. Of course I shall continue my attendance as before to all but those patients who may prefer the services of my assistant.—I am, dear sir, your obedient servant, ———."

*** In giving publicity through the columns of the JOURNAL to the above notification, which has, we regret to be informed, been unwisely printed and circulated in a certain district by a legally qualified practitioner, we deem it right, in the interest of the profession and of the public, to remark that it is stated to have special reference to an unqualified assistant whose services had been reluctantly dispensed with by a neighbouring practitioner, in consequence of representations made to him to the effect that, in availing himself of such assistance, he was not only acting in contravention of professional ethics, but in opposition to the emphatically expressed views of the General Medical Council in relation to the employment of unqualified assistants, and in defiance of the attendant risks.

[1] The *Tariffs* are published by Mr. H. K. Lewis, 136, Gower Street, W.C., at 2s. nett.

The ethical professional objections to such a circular lie on the face of it. Further, as a friendly monition, we think it judicious to advert to the fact that a duly qualified registered practitioner cannot recover any charge in a court of law for professional services, etc., wholly rendered by an unqualified assistant; and that in relation to the law, as defined by Lord Chief Justice Coleridge in Howart *v.* Brearley, an unqualified man is *de facto* nothing more than "the ministering hand of the directing brain of the qualified man."

CONSULTANTS AND PRESCRIPTIONS.

MEMBER BRIT. MED. ASSOC. writes: If a general practitioner send a patient to a consultant with a note of introduction, requesting the consultant to send him a letter, stating his opinion of the case and the treatment advised, should the prescription be given to the patient, or sent with consultant's letter to the medical man?

*** We have referred this question to an eminent consulting physician in London, who writes: When a patient is sent to a consultant under the circumstances mentioned by a "Member Brit. Med. Assoc.," the consultant should send by post his reply to the practitioner, stating his opinion of the case and his views generally as to the treatment required. If the patient obtain a formal prescription, he may use it, and no longer see the local practitioner, which is a hardship—and a very unfair one. It can only be met by the consultant not writing a formal prescription at the moment.

NAVAL AND MILITARY MEDICAL SERVICES.

THE WORK OF THE CAMPERDOWN COMMITTEE.

E. F. writes: With reference to the letter from Mr. Macnamara on the subject of Lord Camperdown's Committee in the JOURNAL of May 10th, and the statement he quotes to the effect that "its work is practically a failure," may I be allowed to say that such a statement, even if it were accurate, would be most unjust and ungenerous? Mr. Macnamara and his colleagues have performed a work of incalculable value, and the medical staff can never be sufficiently grateful for the record made in their favour.

What are the points made by the Committee?

1. They have placed on official record the fact that "grievances" really exist. 2. They have recommended certain practicable and reasonable improvements, which, when adopted, will go far to remedy recognised wrongs. 3. They have proved that the regulations regarding pay and pensions cannot safely be tampered with. 4. They have not added to our burdens (except in the increased age for the selected surgeons-general, and the three years' service for pensions), a boon for which we can hardly be too grateful, considering the pressure that was made to influence them adversely to us.

The medical staff should act on the lines Mr. Macnamara has indicated in his letter. Study the evidence given before the Committee (every officer should possess a copy of it), and then it will be recognised that although we may have "grievances," our own armour is not faultless; that we have weak spots within our administration, which it would be well for us to remove.

MAJOR-GENERAL SIR R. BULLER'S EVIDENCE.

A CORRESPONDENT draws attention to the statements made by this distinguished officer before the Camperdown Committee, and says some of his facts are both inaccurate and misleading. He quotes as follows:

(Q. 1505.) The "camel" anecdote would be amusing if true, but at most it is only founded on a joke, and in any case unworthy of record in grave evidence.

(Q. 1511.) When questioned about making the rank of medical officers more clear, he diverged irrelevantly into the difference of pay between them and combatant officers as follows: "Sir Thomas Crawford and myself, nearly may be of the same rank; he will retire on £1,125 a year, and I should get no more than £650." Let us examine this parallel and contrast. Sir Thomas Crawford: Age in 1890, 66 years; age on joining service, 24 years; total service, 41 years; pay as Director-General, £1,500. Sir R. Buller: Age in 1890 51 years; age on joining service, 18½ years; total service, 32 years; pay as Quartermaster-General, £2,100. The pay here is certainly in favour of the latter; but the matter of pension is entirely misleading, as Sir Thomas Crawford's is special after seven years as Director-General. If any comparison is to be made it must be between the higher grades in the combatant and medical branches, as follows: Generals, £900 to £1,000; Lieutenant-Generals, £750 to £850; Major-Generals, £600 to £700; Surgeon-Generals, £730. Wherein is the great difference here? The Surgeon General, moreover, does not earn his pension until about 60; Major-General Buller had his rank at 45, after twenty-six years' service. He should have studied Appendix 18, the actuarial report, before venturing on such comparisons of pay and pension.

Q. 1512.) When asked whether ordnance store officers were now called colonels, lieutenant-colonels and majors, said: "They have the relative rank I think."

(Q. 1513.) But they call themselves such?—"You would not write to them as such."

(Q. 1514.) They have honorary rank?—"But a soldier does not recognise honorary rank," etc.

(Q. 1516.) Honorary rank would carry with it a military title, would it not —"Well, it is not recognised as such; it is laughed at."

(Q. 1517.) But an officer who has honorary rank has the right to style himself, say upon his card, an officer of that rank which he holds?—"Well, he is always laughed at if he does; it is not supposed to be right," etc.

Fancy such frivolous statements from the Quartermaster-General of the Army. Coming from a less responsible source they would only have been viewed as the eccentric opinions of an individual. Honorary rank and title are *bonâ fide* on whomsoever conferred, be he regimental colonel, quartermaster, or departmental officer, and are scrupulously used not only by a courteous people, but officially.

The Royal Warrant defines rank to "be held to mean in the case of an officer the highest permanent rank held by him while serving, whether sub

tantive, brevet, or honorary." That is plain enough, if language has any meaning.

There are many old colonels retired with the honorary rank of Major-General; it will be news to them to learn they are but impostors and objects of derision if they use the title expressing their honorary rank. Why, Major-General Sir William Crossman himself is one of these, yet he is properly and scrupously described by his honorary rank as a member of the Committee.

Suppose an officer of the rank of captain is transferred to the pay or ordnance departments, are all the advances he subsequently receives in honorary rank and title to be considered absurd and "laughable?"

It is impossible to take the Quartermaster-General's evidence on these points seriously; it looks like an official joke, and not a good one either!

"MILITARY INSTINCTS."

MR. SAP. writes: This, the latest result of evolution, would appear to possess certain eccentricities not contemplated by the revered Darwin. The question of medical officers being entitled to military rank lies in a nut, which I heard very neatly cracked in a pithy post-prandial speech, *ut. seq.*:

"Gentlemen, imagine a British force going into action. Where is the schoolmaster? In his office, checking certificates of education. Where is the baymaster? On board the transport, checking A. F. No. 1505. Where is the commissariat officer? At the supply base, testing the last issue of ration rum, to see how much it is above proof. Where is the chaplain? On his knees in a tent, miles in the rear, invoking success for the British arms. Where is the surgeon? In action with his battalion!"

VOLUNTEER MEDICAL STAFF DINNER.

SURGEON-MAJOR W. R. SMITH, M.D. (101, Great Russell Street, W.C.) writes to remind volunteer medical officers that their annual dinner will take place on Saturday, June 7th, at 7 P.M., at the Holborn Restaurant, under the presidency of the Director-General, Army Medical Staff.

The Mess Committee trust that a large number of the officers of the Volunteer Medical Staff will endeavour to be present. The guests include the Secretary of State for War, Earl Brownlow, the Under-Secretary of State for War, the Presidents of the Royal Colleges of Physicians and Surgeons, Surgeon T. E. Parke, and many others.

Tickets (7s. 6d. each) can be obtained of the Manager, The Holborn Restaurant.

THE NAVY.

The following appointments have been made at the Admiralty:—SAMUEL [illegible]YS, Staff-Surgeon, to the *Builfrog*, May 31st; EDWARD J. BYDEN, Surgeon, to the Cape of Good Hope Hospital, May 24th; MICHAEL O'BRIEN, Surgeon, to the *Pheasant*, May 24th; EDWARD H. MEADEN, Surgeon, to the *Triumph*, May [illegible].

MEDICAL STAFF.

SURGEON-MAJOR A. ANDERSON, who is serving in the Bengal command, has [illegible] to England for six months on medical certificate.

The undermentioned gentlemen serving in the Bombay command are posted as follows: Brigade-Surgeon R. P. FERGUSON, to the medical charge of the [illegible]on hospital at Poona; Surgeons T. F. W. FOGARTY and C. R. BARTLETT, [illegible]neral duty in the Bombay district.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON J. F. BARTER, Madras Establishment, has retired on a pension of £700 per annum. He entered the service as Assistant-Surgeon, July [illegible], 1859, and became Brigade-Surgeon, March 26th, 1886. He has no war [illegible]rd.

Brigade-Surgeon W. DYMOCK, Bombay Establishment, has also retired from service, on a pension of £700 a year, with an extra pension of £100 a year. [illegible]commission as Assistant-Surgeon dates from February 10th, 1859; that of [illegible]ade-Surgeon, May 20th, 1886. During the Indian Mutiny campaign in [illegible]he served with the Kattywar Field Force against the Wagheers, and was [illegible]nt at the capture of Dantal Hill.

[illegible]rgeon J. J. PRATT, Bengal Establishment, supernumerary civil surgeon, [illegible]d class, is transferred from Nynee Tal to Kheree.

[illegible]rgeon-Major R. V. POWER, M.D., Madras Establishment, medical officer [illegible] Native Infantry, is appointed to the officiating medical charge of the 29th [illegible]ve Infantry.

[illegible]rgeon E. L. C. SMITH, recently appointed to the Bombay Establishment, is [illegible]d to general duty in the Bombay district.

The undermentioned officers, all of the Bengal Establishment, have leave of [illegible]ce on private affairs for the periods specified:—Surgeon-Major R. JAME[illegible] M.D., Deputy Sanitary Commissioner for the North-West Provinces and [illegible], for 213 days; Surgeon-Major E. MAIR, M.B., Superintendent of the Cen[illegible]nd District Gaols at Bareilly, for 215 days; Surgeon-Major D. F. KEEGAN, [illegible], Residency Surgeon at Indore, Central India, for one year and 182 days; [illegible]eon-Major M. D. MORIARTY, M.B., for 240 days.

[illegible]rgeon-Major A. S. REID, M.B., Bengal Establishment, Medical Officer 2nd [illegible]lion 4th Goorkhas, has leave to England for 272 days on medical [illegible]icate.

[illegible]rgeon C. H. L. MEYER, M.D., Bombay Establishment, Professor of Physi[illegible] and Histology at the Grant Medical College, also has leave for six months [illegible]edical certificate; and Surgeon T. R. MACDONALD, M.D., Bengal Estab[illegible]ent, Superintendent of the Central Gaol at Nagpore, has leave for one [illegible]n medical certificate.

THE VOLUNTEERS.

[illegible]G-SURGEON J. J. NEVILLE, of the 9th Lancashire Artillery, has resigned [illegible]appointment, which bore date May 12th, 1886.

[illegible]ing-Surgeon E. H. EDLIN, 2nd Devonshire (Western Division Royal [illegible]ery), has also resigned his commission, dated July 16th, 1887.

THOMAS LOWE LAXTON is appointed Acting-Surgeon to the 2nd Volunteer [illegible]lion Somerset Light Infantry (late the 2nd Somerset), and Mr. ARTHUR [illegible] MCDONALD BENTLEY, M.D., to be Acting-Surgeon to the 13th Middlesex [illegible]n's Westminster), both from May 24th.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

THIRD EXAMINATION FOR THE DEGREES OF M.B AND B.C. Easter Term, 1890. Part II. The following have been examined and approved:

Barclay-Smith, Down; Bindloss, Joh.; F. W. Burton, Joh.; Cresswell, H. Cav.; Daggett, Caius; Dalton, Trin.; W. B. de Jersey, Pemb.; Dixon, H. Cav.; Dumergue, Corpus; Durham, Christ's; Fletcher, Trin.; Foster, Trin.; Handson, Caius; Long, Caius; Muir, Trin.; H. W. Nix, Caius; Pilcher, Clare; Rouillard, Caius; J. W. Russell, Trin. H.; T. W. Scott, Caius; H. A. Smith, Trin.; Swayne, Trin.; Trevithick, Trin.; Tuppen, Caius; G. H. Wickham, Caius; E. C. Williams, Christ's; Yeoman, Caius.

AT the congregation on May 22nd the following were admitted to the degrees of M.B. and B.C.: T. W. Lambert, B.A., Pembroke (thesis, That Pylephlebitis is a Distinct Disease); C. E. Williams, B.A., Caius (thesis, The Causes of Death in Typhoid Fever).

DR. HILL, Master of Downing College, announces that he and Mr. Colbeck will hold a class in practical histology during the long vacation.

THE General Board of Studies recommend that the annual stipend of Mr. Gadow, University Lecturer in Advanced Morphology, be raised from £100 to £150 for two years, from Midsummer next; that the annual stipend of Mr. Barber, Demonstrator in Botany, be raised from £100 to £150 for two years, from Midsummer next, and that an additional demonstrator in chemistry be appointed for one year, from Michaelmas next, with a stipend of £100.

THE business rooms of the University being at present widely scattered and very incommodious, a Syndicate has been appointed to consider the question, and recommend that the south wing of the front building of the Pitt Press be converted into rooms for the accommodation of the various bodies carrying on the administration of the University.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen having passed the required examinations, obtained on May 22nd the diploma of Licentiate in Public Health of the College:

S. P. Hallaurs, M.B., C.M.Edin., Harle Syke, near Burnley; J. B. Ronaldson, F.R.C.S.Edin., Ennerdale, Haddington; M. J. Oliver, M.B., C.M. Edin., Lochside, Kelso; J. N. Burns, M.B., C.M.Edin., 46, Warrender Park Road, Edinburgh; D. C. Longden, M.B., C.M.Edin., 137, Warrender Park Road, Edinburgh; S. B. Burns, M.B., C.M.Edin., Mauldslee Cottage, Carluke; J. C. Wood, L.R.C.P.and S.Edin., 32, Frederick Street, Sunderland; C. Mackenzie, M.B., C.M.Edin., High Street, Tain.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, May 22nd.

Infectious Diseases (Notification) Act.—Mr. RITCHIE, in answer to Mr. BRUNNER, said: The Local Government Board have been informed that 469 urban sanitary authorities, 331 rural sanitary authorities, and 18 port sanitary authorities have adopted the Notification of Infectious Diseases Act, 1889. This makes a total of 818 authorities who have adopted the Act. The total number of urban, rural and port sanitary districts is 1,624.—In reply to further questions, he said no doubt the time would arrive when it must be considered whether the Act ought not to be made compulsory; but he doubted whether it could be done so soon after the passing of the Act. The population, according to the census of 1881, of the districts of which the Act was in force, exclusive of the metropolis, was 15,463,000. There were also 56 towns, with a population of 3,751,000, where, under the provisions of local Acts, the system of notification was in operation. The result was that out of a total population, according to the census of 1881, of 25,970,000, the population subject to a system of notification was now 19,214,000.

Friday, May 23rd.

Working Classes Dwellings Act.—This Bill was read a third time.

Bow Cemetery.—Mr. MATTHEWS, in reply to Mr. C. GRAHAM, said Bow Cemetery had been placed under regulations sufficient to prevent any injury to the public health, and the inspector had instructions to satisfy himself by occasional visits that those regulations were duly and fully observed.

Reports of Medical Officers of Health.—Mr. ROWNTREE asked the President of the Local Government Board if arrangements could be made to furnish copies of the medical report of the Local Government Board to the medical officers of health in the more important centres of population without imposing upon them the cost of procuring them as private individuals.—Mr. RITCHIE replied that the Local Government Board only received a limited number of copies, which they distributed among those medical officers of health who had taken a special interest in the matters dealt with. He was fully aware that the reports referred to would be of considerable assistance to the medical officers of health in connection with their duties, and he thought that the sanitary authorities would be justified in purchasing copies for the use of the authorities and their officers.

THE contributions towards a memorial of the late Professor Richard von Volkmann at Halle already amount to 8,500 marks (£425).

OBITUARY.

PROFESSOR FRANCESCO SCALZI, M.D., ROME.

DR. FRANCESCO SCALZI, Professor of Pharmacology in the University of Rome, who died recently, was a notable figure in Italian medicine of the present day. He was born at Rome in 1821, and, after a brilliant career as a student, graduated as Doctor of Medicine in the University of that city in 1848. In 1852 he was appointed Assistant Professor of Materia Medica, and in 1856 he became titular professor by competition, his exercises on that occasion—an extempore address in Latin on the medical uses of mineral waters, and an essay on the method of examining patients—winning him great applause. At that time all lectures in the Roman University were delivered in Latin, and Scalzi distinguished himself not less by the fluency and elegance with which he wrote and spoke that language than by the soundness and brilliancy of his scientific teaching. In 1865 he founded the *Giornale Medico di Roma*, and took a leading part in the institution of the Roman Academy of Medicine. On the establishment of the Kingdom of Italy, in 1870, he was confirmed in his professorship by Royal decree, and continued to hold it till the end of his life. He was also Director of the San Spirito Hospital from 1877 to 1888, a member of the Supreme Sanitary Council for nine years, a Communal Councillor, etc. For his services to science and to the community he was named a Knight of the Order of St. Gregory the Great.

To Scalzi is due the credit of having introduced the experimental method of studying the action of drugs into Italy. In connection with his Chair, he established an Institute of Experimental Pharmacology and Toxicology in 1876. Some years earlier he had founded a Pharmaceutical Museum, which is acknowledged to be the best of its kind in Italy.

Scalzi's literary activity was prodigious, his published works numbering 112, and treating of a great variety of subjects. In 1860 appeared the *Synopsis Pharmacologiæ Generalis*, written in Latin, and in 1870-71 his great work, the *Trattato di Materia Medica*, which, in addition to the fulness and accuracy of its technical details, has a special value as containing a history of pharmacology, which is practically a history of medical treatment. Among his other writings are essays on the Calabar bean, the secretion of milk, the pathogenesis of intermittent fevers, cholera in Rome, consumption of tobacco in Rome, rabies, transfusion of blood, etc.

Scalzi was an ardent patriot, and he carried this feeling into the realm of science, claiming for Italy a number of discoveries which the world persists in attributing to workers of other nations. His learning was vast and his industry heroic; but it may be doubted whether he might not have put to more profitable use the time which he spent in seeking to prove that Andreas Cesalpinus discovered the circulation of the blood; that to Cesare Magati is due the aseptic treatment of wounds; to Flajani the introduction of the antiseptic system (which, however, has recently been claimed for Hippocrates by Professor Anagnostaki, of Athens), and to Fontana the use of hypodermic injections.

Scalzi was an ardent sanitarian, and wrote much on subjects connected with hygiene and vital statistics with special reference to Rome and the "Agro Romano." He was an indefatigable worker, and almost literally died in harness.

JAS. PATON BRAMWELL, M.D, L.R.C.S.EDIN.

MUCH regret is felt at the death of Dr. Bramwell, which took place at his residence, Perth, on the morning of May 19th. The deceased gentleman was well known, not only in Perth, but throughout the whole country north of the Forth, having been in practice for nearly fifty years, during which period he enjoyed the reputation of being a most skilful surgeon, and conducted many surgical operations of a very difficult character. He had taken the first prize for anatomy, and the first prize for practical anatomy at Edinburgh.

Dr. Bramwell had been one of the visiting surgeons to the Perth City and County Infirmary for nineteen years, and for some years senior surgeon. He was elected president by the Perthshire Medical Association several times, and read many interesting papers at its meetings. Dr. Bramwell conducted a large private practice, and was held in high esteem by a wide circle of patients and friends. He had been in failing health for the past year, and at last passed away suddenly. He leaves a widow, three sons, and two daughters. One of his sons, Dr. J. M. Bramwell, is in practice at Goole. Among the contributions of Dr. Bramwell to our pages were "Case of Traumatic Aphasia," 1868; "Blood-letting as a Remedy in Scarlatinal Dropsy," 1870.

HOSPITAL AND DISPENSARY MANAGEMENT.

PROVIDENT HOSPITALS.

DR. HUGH WOODS (Highgate) writes: In the report of my evidence before the House of Lords Committee in the JOURNAL of May 24th occurs the following passage: "The principle of provident hospitals he quite approved." This is not accurate. I said that I had no personal experience of the working of provident hospitals, but that they were spoken of as bitterly as other hospitals by general practitioners in their neighbourhood. I said, further, that I quite approved of the provident system in principle, and if properly carried out, but that unfortunately the provident dispensaries, like the hospitals, put no efficient check on the circumstances of patients admitted. I pointed out the prevalence of what is practically a provident system in iron and coal districts. The "protest" from the JOURNAL of August 10th, 1889, which I put in evidence, signed by over fifty general practitioners in North London, including myself, contains the following statement:

"We also maintain that however philanthropic may have been the motives which led to the foundation of pay hospitals and pay wards, the result of their formation has been that many patients have been taken out of our hands without any necessity, and without any corresponding advantage accruing to the patients themselves."

Would not this apply to the Metropolitan Hospital? My own view is that if a hospital receives any payment at all from patients, it ought to be worked entirely on commercial principles, and not appeal for charitable contributions to enable it to undersell all those who, practising individually, cannot obtain the profits of mendicity without the disgrace of it, as the begging institutions unfortunately can do with far too great ease.

The Metropolitan Hospital has the same exclusive rules with regard to its staff as have other hospitals. Are we general practitioners meekly to hand over our patients to those who possess the profitable monopoly of charitable funds wherewith to overcome the competition of medical men who wish to earn a livelihood while relieving the sickness of the working classes? The salaries of hospital secretaries and the maintenance of expensive institutions eat up more than the narrow margin of profit on which private practitioners are accustomed to subsist. Subscribers to hospitals ask why their handsome donations do not rightly entitle them to send their servants to them for treatment. Simply because the medical man who attends the servants of the rich ought to be paid for his work. And if provident hospitals intervene so as to make a medical man take a lower fee than is just, they deserve the uncompromising hostility of the profession. The labourer is worthy of his hire.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HOSPITALS FOR INFECTIOUS DISEASES.

U. B. T.—The distance which should intervene between infectious disease hospitals and roads or dwellings is not prescribed by any Act of Parliament or order of the Local Government Board; but in the official memorandum on the subject, issued by the Medical Department of that Board, it is recommended that an interval of not less than 40 feet should be everywhere interposed between every building used for the reception of infected persons or things and the boundary of the hospital site, and that this boundary should have a close high fence. The department also recommend, as the result of the investigations made by Dr. Thorne, Mr. Power, and other of their inspectors, and also the report of the Royal Commission of 1882 on Hospitals, that sites for hospitals designed to receive small-pox require a very much larger space about them than sites for other infectious diseases hospitals.

LUNACY AMENDMENT ACT, 1889.

DISTRICT MEDICAL OFFICER writes: A district medical officer, who is not the workhouse medical officer, receives a "justice's order" to visit and examine two alleged lunatics in the workhouse with a view to their removal to the county asylum; one of them he certifies is insane, the other one he does not.

1. Is the medical officer entitled to his "fee" in the latter case, the same as he is in the one he gives a certificate for removal? 2. Can the justices chosen under Section 10 permanently appoint a surgeon to visit and examine an

ertify in all cases of pauper lunatics which may require removal to the ounty asylum? 3. Is it necessary for the workhouse medical officer to cer- ify in addition to the district medical officer, who is requested by a "jus- ice's order" to visit and certify for a lunatic's removal from the workhouse? . What should the fee be for certifying in each case?

*** "District Medical Officer" is referred to the reply to "W. M. O.," page 223 of JOURNAL for May 24th. The fee, equitably, should accrue as well in he case not certified as in the one certified, but probably could not be laimed. The certificate from a workhouse medical officer as well as from e outside practitioner is required only when the object of the certification der is to detain the lunatic in the workhouse, not to remove him from it. he fee shall be what the guardians deem to be a "reasonable remuneration."

REMOVAL OF PAUPER LUNATICS TO ASYLUMS.

UERIST" is referred to page 1223, column 2, of the JOURNAL for May 24th, r the reply to a question similar to "Querist's." The reply is to W. M. O.," and is headed as above.

HEALTH OF ENGLISH TOWNS.

wenty-eight of the largest English towns, including London, which have estimated population of 9,715,559 persons, 5,574 births and 3,475 deaths registered during the week ending Saturday, May 24th. The annual of mortality in these towns, which had been 19.2 and 19.9 per 1,000 in two preceding weeks, declined again to 18.6 during the week under notice. rates in the several towns ranged from 9.4 in Huddersfield, 14.6 in Ports- th and in Bristol, and 15.0 in Wolverhampton to 24.2 in Halifax, 24.8 in y, 26.7 in Sunderland, and 28.0 in Manchester. In the twenty-seven incial towns the mean death-rate was 19.8 per 1,000, and exceeded by 2.7 1,000 the rate recorded in London, which was only 17.1 per 1,000. The deaths registered during the week under notice included 432 which were red to the principal zymotic diseases, against 403 and 467 in the two eding weeks; of these, 143 resulted from measles, 142 from whooping-cough, om scarlet fever, 38 from diphtheria, 33 from diarrhœa, 23 from "fever" cipally enteric), and 2 from small-pox. These 3,457 deaths were equal annual rate of 2.3 per 1,000; in London the zymotic death-rate was 2.8, in the twenty-seven provincial towns it averaged 1.9 per 1,000, and ed from 0.4 in Bradford and in Nottingham, 0.6 in Huddersfield, and 0.7 ymouth and in Leicester to 3.4 in Salford, 3.6 in Cardiff, 3.8 in Liverpool, 8 in Derby. Measles caused the highest proportional fatality in Lon- Liverpool, and Derby; whooping-cough in London, Norwich, Oldham, rd, Bolton, and Derby; and "fever" in Birkenhead. Of the 38 deaths diphtheria recorded during the week under notice in these towns, 24 red in London, 4 in Salford, 3 in Liverpool, and 2 in Manchester. A case of small-pox was registered during the week under notice in Lon- and 1 in Hull, but not one in any of the other provincial towns; and 5 pox patients were under treatment in the Metropolitan Asylums Hos- on Saturday, May 24th. These hospitals contained 992 scarlet fever nts on the same date, against 1,014 and 1,030 at the end of the two pre- g weeks; 95 cases were admitted during the week, against 84, 115, and the three previous weeks. The death-rate from diseases of the respira- organs in London was equal to 3.5 per 1,000, and was below the average

HEALTH OF SCOTCH TOWNS.

ng the week ending Saturday, May 24th, 856 births and 580 deaths were ered in the eight principal Scotch towns. The annual rate of mortality ese towns, which had declined from 26.9 to 20.6 per 1,000 in the three ling weeks, rose again to 22.4 during the week under notice, and exceeded per 1,000 the mean rate during the same period in the twenty-eight English towns. Among these Scotch towns the lowest death-rates recorded in Edinburgh and Leith, and the highest in Glasgow, Aber- and Dundee. The 580 deaths registered in these towns during the under notice included 118 which were referred to the principal zymotic es, equal to an annual rate of 4.6 per 1,000, which exceeded by 2.3 the zymotic death-rate during the same period in the large English towns. ighest zymotic death-rates were recorded in Glasgow, Aberdeen, and e. The 245 deaths registered in Glasgow included 19 which resulted whooping-cough, 10 from diarrhœa, and 2 from diphtheria. Eight fatal f measles and 7 of whooping-cough occurred in Edinburgh. No less than ths from measles were recorded in Dundee; and diphtheria caused 3 in Aberdeen. The death-rate from diseases of the respiratory organs e towns was equal to 4.7 per 1,000, against 3.5 in London.

ng the week ending Saturday, May 17th, the deaths registered in the principal town districts of Ireland were equal to an annual rate of 21.8 00. The lowest rates were recorded in Sligo and Cork, and the in Galway and Wexford. The death-rate from the principal zymotic s averaged 1.7 per 1,000. The 152 deaths registered in Dublin during ek under notice were equal to an annual rate of 22.5 per 1,000 (against 23.6 in the two preceding weeks), the rate for the same period being London and 16.0 in Edinburgh. These 152 deaths included 12 which from the principal zymotic diseases (equal to an annual rate of 1.8 00), of which 4 were referred to different forms of "fever," and 3 to

BERLIN CONGRESS.—We are requested to state that at the tion to be held in connection with the forthcoming Congress lin, the German Imperial Health Office will be specially re- ted. The Medical Department of the Prussian Ministry of vill also display in the fullest detail the organisation and nery of the medical service of the army, and all the larger n States will give as complete a view as possible of their y systems and institutions. Foreign exhibitors are in- that they must send in their applications, with the neces- rticulars, to the Austellungsbureau, 19, Karlstrasse, Berlin, efore June 15th.

MEDICAL NEWS.

COLONEL NORTH has subscribed £500 towards the liquidation of the debt of £2,000 incurred by the French Hospital in London.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—The annual distribution of prizes will take place on Tuesday, July 1st. Sir Henry Roscoe, M.P., F.R.S., will preside.

A NEW University "Poliklinik" of Orthopædic Surgery was opened at Berlin on May 22nd. Dr. Julius Wolff has been appointed chief surgeon to the institution.

H.R.H. THE DUKE OF CONNAUGHT on Wednesday, May 21st, opened a hospital at Victoria, British Columbia, which has been completed in commemoration of Queen Victoria's jubilee.

A "CENTRAL medical office" has been established at Kasan (European Russia) for the collection of reports as to epidemics and diseases of any kind that may be prevalent in the province.

AT a recent conference of French lawyers the following subject was discussed: "Has the Faculty of Medicine the right to make anatomical experiments on an executed criminal, in spite of the last wishes of the said criminal?" The question was decided in the negative.

MEDICAL SOCIETIES IN RUSSIA.—The total number of medical societies in Russia is 105, of which 8 were founded in 1889. St. Petersburg heads the list with 18 societies, then follows Moscow with 7; then Kieff and Sarator, each with 3; then Tikslaiev, Odessa, and Warsaw, each with 2.

THE Hamburg Cremation Society has now acquired a suitable site for the erection of a crematory and columbarium at Ohlsdorf, permission to that effect having recently been granted by the Senate. Only members of the Hamburg State Union, however, will be allowed to be cremated there.

BEQUESTS.—The late Miss Marianne Phillips, of the Lees, Folkestone, and of Leamington, has bequeathed to the Darneford Hospital, Leamington, £1,500; to the Convalescent Hospital at Folkestone, £1,000; to the Royal Hospital for Incurables, and to the new hospital at Folkestone, £500 each.

MEDICO-PSYCHOLOGICAL CONGRESSES.—The first annual Congress of French Alienists will be held at Rouen; it will open on August 4th. The Association of American Alienists will hold a Congress at Niagara Falls, N.Y., under the presidency of Dr. Godding, Director of the Washington Asylum, on June 10th.

IT is announced that at Buffalo, U.S.A. there is a bicycle club entirely composed of medical practitioners. It would be interesting to know whether they visit their patients on their bicycles, and, if so, whether the "doctor's buggy"—as it is called in America—has been consigned to the limbo of obsolete instruments.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—At the last meeting of the Medico-Psychological Association, the following were elected members: James Ross, M.D.Aber., F.R.C.P.Lond.; Robert Reid Alexander, M.D.Aber.; Douglas Hamilton Anderson, M.D., C.M. Edin.; Telford Smith, M.D.Dub.; William Johnson Smyth, M.B., C.M.Edin.; John Turner, M.B., C.M.Aber.

THE new Hygienic Institute of the University of Halle was formally opened a week or two ago. An address was delivered by the director, Professor Renk. The institute has a lecture room which can accommodate 60 students, with chemical, physical, and bacteriological laboratories for practical courses, and a special laboratory for the professor and his assistants.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The Cavendish Lecture will be delivered by Professor Ogston at the West London Hospital on June 6th, at 8.30. Subject: "Unrecognised lesions of the labyrinth." The dinner of the Society will take place on June 11th at the Criterion Restaurant, at 7.30, when the President, Dr. H. Campbell Pope, F.R.C.S., will take the chair.

HYGIENE IN ODESSA.—The Odessa Medical Board recently suggested to the local chief of police that henceforward all bakers in the town should be compelled to insist on all journeymen in their employ producing a medical certificate of health. A similar measure has been already introduced in regard to the slaughter-houses of the town.

THE University of Dorpat conferred 131 medical diplomas between September 1st, 1889, and February 1st, 1890. Among these were 16 degrees of Doctor of Medicine; 31 of *Arzt*, or "medical practitioner;" and 6 of *Kreisarzt*, or "district doctor." The others included 6 licences as dentist and 7 as midwife, the balance consisting of various diplomas and licences in pharmacy.

THE METROPOLITAN WATER SUPPLY.—The inquiry about to be made by the Corporation of London into the charges made for water in the City and elsewhere in the metropolis, and other matters incident to the question of the water supply, was formally opened at Guildhall last week, when, after arrangements as to procedure had been made, it was adjourned over Whitsuntide. Surgeon-General Sir W. Guyer Hunter will preside over the investigation.

ELECTRICITY IN HISTOLOGY.—Minor (*Neurologisches Centralblatt*, May 15th, 1890) has discovered that muscle and nervous tissue can be hardened very quickly in potassium bichromate if a constant current is allowed to flow through the fluid. He has operated chiefly upon spinal cords, and finds that if the cord be attached to the positive pole it will be hardened in four or five days, and that it will be a dark brown; its histological structure is not in any way impaired. If it is attached to the negative pole it becomes soft and of a light yellow colour.

GRATUITOUS MEDICAL RELIEF IN FRANCE.—M. Constans, the French Minister of the Interior, will shortly introduce into the Chamber of Deputies a Bill providing that every indigent sick person shall be gratuitously provided by the commune or department in which he resides with medical treatment either at home or, if that is impracticable, in a hospital. A gratuitous medical service will be organised in each department under the authority of the prefect. In each commune, or union of communes, there will be a dispensary for out-patients, and each commune will be attached to an infirmary and general hospital.

A TELEGRAM from Constantinople under date of May 15th says that a disease believed to be cholera has broken out on the Imperial domains of Djedil and in the village of Bellek, near Bagdad. Of thirteen persons who were taken ill, six are stated to have died, the symptoms being those of cholera. Dr. Elisseneff left St. Petersburg on Tuesday, May 20th, on an official mission of sanitary inspection on the frontiers of Asia Minor on account of the reported outbreak of cholera at Bagdad and Mosul. He will also visit the Persian frontier.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—At the annual general meeting of this Society, which was held on May 16th, the report stated that ten meetings had taken place during the year, the average attendance of members having been 41. The Society now has a membership of 232. The sum of £71 15s. 1d. was spent on books and periodicals during the past twelve months. The following gentlemen were elected office-bearers for the ensuing year: *President:* Dr. Churton. *Vice-Presidents:* Dr. Rabagliati and Mr. Wm. Hall. *Treasurer:* Dr. Eddison. *Honorary Secretaries:* Dr. Jacob and Mr. Wa d. *Librarian:* Dr. Barrs. *Auditor:* Dr. Braithwaite. *Committee:* Dr. Allan, Dr. A. Bronner, Dr. Cameron, Dr. Chadwick, Mr. Hartley, Dr. Johnstone, Mr. Porritt, Mr. Mayo Robson, Mr. Stanger, Dr. Swann, Mr. C. J. Wright, and Dr. Young.

THE WORKHOUSE INFIRMARY NURSING ASSOCIATION.—On Friday, May 9th, at Queen's Gate Hall, South Kensington, the above association held its annual gathering. Over sixty nurses were able to attend, and after tea these received the medal granted by the association to nurses who have been for some years connected with it, and many of their number also received a gratuity in money. Music and other amusements were provided for their entertainment. The nurses appeared in their uniforms, and the party was altogether a success. The chief feature of the evening was the presentation of an illuminated address to Miss L. Twining, by Mr. W. Bousfield, on her retirement from active work. It contained many signatures, among others Sir James Paget, Dr. Downes, Dr. Symes Thompson, etc. Several friends of the Association were present, including Lady Wantage, Lady Montague, etc.

TRAINED NURSES FOR THE SICK POOR.—A crowded drawing-room meeting was recently held in 11, Downing Street, at the invitation of Lady Lucy Hicks-Beach and the Hon. Mrs. John Dundas, to advocate the cause of organised effort for bringing good trained nurses within the reach of the sick poor in rural districts. Amongst the speakers were the Earl of Yarborough, Lady Victoria Lambton, Mrs. Malleson (the secretary of the association), and Dr. Lowe, of Lincoln. Sir Henry Longley, who was in the chair, said at the close of the meeting that it would in many cases be possible for the Charity Commissioners to give assistance towards the support of sick nurses in poor districts. Princess Mary of Teck, the Countess of Yarborough, Lord Brassey, Lady Louisa Egerton, Mrs. Jeune, and many sympathisers were present, and resolutions in support of the object of the meeting were unanimously passed.

EPSOM COLLEGE NATURAL HISTORY SOCIETY.—We have received the first report of the above Society for the year ending Christmas, 1889. It is an interesting record of the observations in ornithology, geology, and botany made by the boys and their teachers in the neighbourhood of Epsom College, and speaks well for the scientific enthusiasm of the members of the Society. As the preface says, while excellent educational work can be done in the laboratory and the lecture room, it is desirable to supplement this with field work, to awaken an interest in the study of Nature out-of-doors, and to cultivate a taste for pursuits which will always be at hand for recreation, for relief, and for the formation of friendships on the basis of interests in common. The list of botanical observations in particular is singularly full, and tells with much eloquence of many healthful excursions under wise guidance. In the best interests of Epsom College, we trust this first report will be followed by many others, and that the Natural History Society may continue to be a powerful factor in the scientific development of the school.

CONVALESCENT HOME FOR TRAINED NURSES.—A drawing-room meeting in support of a scheme for founding a convalescent home and holiday house for trained nurses was held at the residence of Lord George Hamilton on May 17th. Princess Christian occupied the chair. Sir James Paget moved a resolution pledging the meeting to support the establishment and maintenance of a holiday home of rest for nurses. He said great advances had been made during the last fifty years in the knowledge and skill of the nursing profession. This advance was of a material assistance to the public as well as to the medical profession. The Bishop of Ripon, in seconding the resolution, expressed the hope that it would develop into a home with numerous branches throughout the country. Miss Catherine Wood (honorary secretary to the British Nurses' Association) made an urgent appeal for support for a home of this kind, pointing to the fact that in place of eight hours' labour nurses had frequently to labour twenty-four hours. The resolution having been carried, Dr. Dick (Director General of the Navy) moved, and Lady Audrey Buller seconded, a vote of thanks to Lady George Hamilton for granting the use of the Admiralty Rooms for the meeting, which was unanimously agreed to. Sir Joseph Fayrer, Bart., moved a vote of thanks to Prince Christian for presiding, which was carried by acclamation, and the proceedings then terminated.

MEDICAL VACANCIES.

The following Vacancies are announced:

BRISTOL GENERAL HOSPITAL.—House-Surgeon. Salary, £120 per annum, board, lodging, and washing. Double qualification. Applications with certificate of registration to be addressed to the Secretary, William Thwaite, by June 16th.

CANCER HOSPITAL (FREE) Brompton, S.W.—Assistant House-Surgeon and Registrar. Salary, £50 per annum, with board and residence. Application to the Secretary by June 9th.

CARRICKMACROSS UNION (Donaghmoyne Dispensary).—Medical Officer. Salary, £115 per annum, with fees. Applications to Mr. William Jones, Honorary Secretary, Tievadina. Election on June 7th.

CASTLEBLAYNEY UNION (Crossmaglen Dispensary).—Medical Officer. Salary, £120 per annum, and fees. Applications to Mr. P. McConville, Honorary Secretary. Election on June 6th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, 238A, Gray's Inn Road.—House-Surgeon, qualified. Rooms and board. Applications to the Secretary by June 7th.

CENTRAL LONDON THROAT AND EAR HOSPITAL, Gray's Inn Road.—Registrar and Anæsthetist. Small honorarium. Applications to the Secretary.

CENTRAL LONDON THROAT AND EAR HOSPITAL, Gray's Inn Road.—Three Clinical Assistants, qualified. Applications to the Secretary.

CHARING CROSS HOSPITAL, Strand, W.C.—Assistant-Physician with University degree, Fellows or Members of the Royal College of Physicians, London. Applications to the Treasurer by June 7th.

CHARING CROSS HOSPITAL, Strand, W.C.—Assistant Surgeon-Dentist. M.R.C.S.Eng. and L.D.S.—Applications to the Treasurer by June 7th.

CHARING CROSS HOSPITAL, Strand, W.C.—Anæsthetist, qualified to practise. Applications to be addressed to the Chairman of the Medical Committee by June 7th.

TY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board and residence, and allowance for washing provided. No salary. Applications to Storrar-Smith, Secretary, 24, Finsbury Circus, E.C., by June 13th.

TY OF LONDON LUNATIC ASYLUM, Stone, near Dartford, Kent.—Assistant Medical Officer; single; not less than 25 nor more than 35 years of age. Single. Salary £150 per annum, with board, lodging, washing, and attendance. Applications by June 10th to Henry F. Youle, Clerk to the Visiting Committee, City of London Lunatic Asylum, Guildhall, London, E.C., from whom the necessary forms of application can be obtained.

UNTY DOWN INFIRMARY, Downpatrick. — Assistant Surgeon, etc. Salary, £63 per annum, with board, residence, etc. Applications by June 12th.

OYDON GENERAL HOSPITAL.—House-Surgeon, single. Salary, £100, increasing to £120, with board and residence in the hospital. Applications to the Secretary, Alfred G. Roper, by June 2nd.

RBY AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Second Assistant Surgeon; age 25 to 40. Salary, £160 per annum, rising to £250 (outdoor), and midwifery fees. Applications to the Secretary, Mr. J. Bullivant, 58, Abbey Street, Derby, by June 7th.

RSET COUNTY ASYLUM, Dorchester.—Assistant Medical Officer; unmarried. Salary to commence at £120 a year, with board, etc. Applications to the Medical Superintendent by June 3rd.

STERN DISPENSARY, Leman Street, Whitechapel.—Physician; Fellow or Member of a Royal College of Physicians in the United Kingdom. Honorarium, £50 a year. Applications addressed to the Secretary to reach the Dispensary before June 5th.

NCASTER INFIRMARY AND DISPENSARY. — House-Surgeon. Unmarried. Doubly qualified. Salary, £80 per annum with residence, board, attendance, and washing. Applications, on forms to be obtained, must reach the Secretary by May 31st.

EDS HOSPITAL FOR WOMEN AND CHILDREN.—Honorary Surgeon, qualified for not less than seven years. Applications to the Secretary, Frederick Kirby, by June 9th.

ICESTER INFIRMARY.—Honorary Assistant-Physician. Applications to the Secretary, 24, Friar Lane, Leicester, by June 2nd.

NDON HOSPITAL, Whitechapel Road, E.—Assistant Physician. Applications to the House Committee by June 17th. Election June 24th.

NDON HOSPITAL, Whitechapel Road, E.—Assistant Surgeon. Applications to the House Committee by June 17th. Election June 24th.

TER MISERICORDIÆ HOSPITAL, Dublin.—Resident Surgeon. Must be a duly registered physician and surgeon. Salary, £50 per annum, with furnished apartments, attendance, light, and fuel. Applications to the Secretary of the Medical Board by June 1st.

RMANTON URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £40 per annum. Election June 2nd.

RTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Junior House-Surgeon; double qualifications. Salary, £30 for six months; another six months (as Senior) at £40. Applications by June 6th to the Secretary, Alfred Nixon, 27, Clement's Lane, E.C.

RTH RIDING OF YORKSHIRE.—Medical Officer of Health for the Riding; qualified to practise medicine, surgery, and midwifery. Remuneration, a fixed fee of £100 per annum, and 5 guineas per day (to include expenses) for every day's services, with leave to hold other appointments. Applications to William C. Trevor, Deputy Clerk of the County Council, Clerk of the Peace Office, Northallerton, before June 30th.

TTINGHAM CHILDREN'S HOSPITAL, Nottingham.—Medical Officer; double qualification. Applications by May 31st to the Chairman of the Board.

TTINGHAM CHILDREN'S HOSPITAL, Nottingham.—Ophthalmic Surgeon; double qualifications. Applications by May 31st to the Chairman o the Board.

FORD UNIVERSITY.—Deputy Linacre Professor of Human and Comparative Anatomy. Salary, £700 a year. Applications to the Registrar of the University by June 21st.

ISH OF FARR, Sutherland.—Medical Officer. Salary, 100 guineas per annum. Single. Applications to Chairman of Board, John Box, House of Tongue, Sutherland.

AL FREE HOSPITAL, Gray's Inn Road.—Anæsthetist. Applications to Conrad W. Thies, Secretary, by June 4th.

AL FREE HOSPITAL, Gray's Inn Road.—Dental Surgeon. Applications to the Secretary, Conrad W. Thies, by June 4th.

AL HOSPITAL FOR DISEASES OF THE CHEST, City Road.—Assistant Physician; Fellow or Member of Royal College of Physicians, London. Applications to the Secretary, John Harrold, by June 3rd.

AL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.— House-Surgeon, required by July 1st. Must possess some knowledge of ophthalmic surgery. Applications to T. Beattie-Campbell, Secretary, by June 1st.

FORD ROYAL HOSPITAL.—An Honorary Medical Officer for the Pendleton Branch Dispensary; double qualification. Applications, with certificates of age and registration, etc., to the Secretary, Alexander Hay, by June 16th.

LASEY DISPENSARY.—Assistant or Junior House-Surgeon, to visit and dispense. Unmarried; must devote his whole time to the duties. Salary, £50 per annum, with furnished apartments, coal, gas, and attendance. Applications by June 22nd to the Honorary Secretary, Mr. William Heap, Elm Mount, Penkett Road, Liscard, Cheshire.

T RIDING ASYLUM, Wakefield.—Two Resident Clinical Assistants. Applications should be forwarded immediately to the Medical Superintendent.

T SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £80 per annum, with board, lodging and washing. Applications to the Secretary, The Infirmary, Chichester, by June 11th.

MEDICAL APPOINTMENTS.

ABERCROMBIE, John, M.D.Cantab., F.R.C.S., appointed Physician to the Charing Cross Htspital, *vice* A. Julius Pollock, M.D., F.R.C.P., deceased.

ADKINS, A. J., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

ANSON, G. E., M.A., M.D., B.C.Cantab., L.R.C.P., M.R.C.S (Extension), appointed House-Surgeon to St. Thomas's Hospital.

AYMER, James, M.B.Ed., C.M., reappointed Medical Officer to the Parochial Board of Bervie.

BENSON, Henry Thomas, L.S.A., appointed Medical Officer for the St. Nicholas Second District of the Spalding Union.

BRISTOWE, H. C., M.B.Lond., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Eye, St. Thomas's Hospital.

BUNCOMBE, William Dewey, L.R.C.P., M.R.C.S., appointed Assistant Medical Officer to the Infirmary of the City of London Union, Bow Road, *vice* William Gem, L.R.C.S.I., L.K.Q.C.P.Irel., L.M., resigned.

COBBETT, L., B.A.Cantab., L.R.C.P., M.R.C.S.(Extension), appointed Non-resident House-Physician to St. Thomas's Hospital.

COWEN, T. P., L.R.C.P., M.R.C.S.(Extension), appointed House-Surgeon to St. Thomas's Hospital.

DICKSON, T. H., B.A.Cantab., L.R.C.P., M.R.C.S.(Extension), appointed Assistant House-Physician to St. Thomas's Hospital.

FENWICK, E. Hurry, F.R.C.S.Eng., Assistant-Surgeon to the London Hospital, appointed Surgeon to the Hospital, *vice* Mr. Walter Rivington, F.R.C.S., resigned.

FREEMAN, J. P. W., M.D.Durh., M.R.C.S., appointed Medical Officer to the 4th District of the Andover Union.

FRIPP, A. D., M.B., B.S., appointed Demonstrator of Anatomy at Guy's Hospital.

GERVIS, H., M.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S.(Extension), appointed House-Surgeon to St. Thomas's Hospital.

HARWOOD, Charles, M.D., L.R.C.P.Edin., reappointed Medical Officer to the Shardlow District of the Shardlow Union.

HUGHES, A. E. Prest, L.R.C.P., M.R.C.S.(Extension), appointed Clinical Assistant in the Special Department for Diseases of the Eye, St. Thomas's Hospital.

JOHNSON, S. Pearson, M.B., C.M.Edin., appointed Medical Officer to the 7th District of the Bedminster Union.

LAMBERT, T. W., B.A.Cantab., L.R.C.P., M.R.C.S.(Extension), appointed House-Surgeon to St. Thomas's Hospital.

LATTEY, Arthur, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Banstead District of the Epsom Union.

LEECH, Priestley, M.B., B.S.Lond. Univ., F.R.C.S.Eng., appointed Honorary Medical Officer to the Halifax Infirmary, *vice* F. E. Macaulay, M.R.C.S., L.S.A., deceased.

LOW, H., M.A., M.B., B.C Cantab., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Skin, St. Thomas's Hospital.

LUCY, Reginald H., M.B.Edin., F.R.C.S.Eng., appointed Assistant-Surgeon to the South Devon Hospital, Plymouth.

MARTIN, Christopher, M.B., C.M.Edin., appointed an Honorary Medical Officer to the Birmingham and Midland Hospital for Women.

MUNRO, Archibald Campbell, M.B., B.Sc., C.M., L.R.C.P., appointed Medical Officer of Health to the Borough of Jarrow.

NEWNHAM, W. H. C., M.A., M.B.Cantab., M.R.C.S.Eng., elected Assistant-Accoucheur to the Bristol General Hospital.

NIX, H. W., B.A.Cantab., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

OSBURN, H. B., L.R.C.P., M.R.C.S., appointed Resident Accoucheur to St. Thomas's Hospital.

PAPILLON, Thomas Alex., L.R.C.P., L.M.Edin., appointed Medical Officer for the Empingham District of the Oakham Union.

ROBERTS, J. Black, M.B., C.M.Ed., appointed Public Vaccinator to the Nottingham Union, *vice* G. B. Powell, deceased.

SANSOM, A. E., M.D. F.R.C.P.Lond., Assistant-Physician to the London Hospital, appointed Physician to the Hospital, *vice* Dr. Langdon Down, resigned.

SEDDON, H. B., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Medical Officer to the York Dispensary, *vice* Mr. Arthur Badcock.

SIM, James Brown, M.D., L.R.C.S., appointed District Medical Officer to the Nottingham Union, *vice* G. B. Powell, deceased.

SKINNER, Ernest William, M.B., C.M.Ed., appointed Medical Officer of Health to the Rye Union Rural Sanitary Authority, *vice* Drs. Woodhams, Harris, and R. V. Skinner.

STABB, W. Wilking, B.A., M.B., B.C.Cantab., appointed Resident House-Physician to St. Thomas's Hospital.

STOKES, W. G. G., B.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Senior Obstetric Clerk to St. Thomas's Hospital.

SULLIVAN, F. W., L.R.C.S.I., L. and L.M.K.Q.C.P.I., appointed Certifying Factory Surgeon for the Navan District.

TAYLOR, T. P., M.R.C.S.Eng., L.S.A., appointed Public Vaccinator to the Braintree Union, *vice* his father.

TEICHELMANN, Ebenezer, L.K.Q.C.P.Irel., M.R.C.S.Eng., appointed Medica Officer to the Workhouse, Parish of Birmingham.

TOLLER, S. G., L.R.C.P., M.R.C.S.(Extension), appointed Resident House-Physician to the St. Thomas's Hospital.

TOWNSEND, Arthur A. W., M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior Assistant Medical Officer to the Barnwood House Hospital for Mental Disorders, *vice* Graham H. Reynolds, M.B.

TURNER, Nathaniel H., M.R.C.S., L.S.A., L.R.C.P.Lond., appointed Honorary Medical Officer to the Birmingham Lying-in Charity, *vice* W. S. Mann.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Lubbock on Wasting in Children.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. W. H. Battle: On Some Points Relating to Injuries to the Head. Lecture I.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Mr. Leonard Matheson: On Some Practical Points in the Relation of the Upper to the Lower Teeth. Dr. Silk: Notes on a Series of 1,000 Nitrous Oxide Administrations Recorded Systematically. Mr. Sydney Spokes: On a case of Faulty Development of Enamel. Mr. Alfred Smith: Notes of a case of Epulis.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On General Paralysis of the Insane. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Summer Eruptions.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. D. Ferrier: The Croonian Lectures on Cerebral Localisation. Lecture I.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Mr. R. J. Godlee: On Surgery of the Thorax. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: On Ophthalmoscopic Cases.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. W. H. Battle: On Some Points Relating to Injuries to the Head. Lecture II.

OBSTETRICAL SOCIETY OF LONDON, 20, Hanover Square, W., 8 P.M.—Specimens will be shown by Mr. J. Bland Sutton and others. Dr. Dakin: Dissection of a Fœtus the subject of Retroflexion, Ectopia Viscerum, etc. Dr. E. Sinclair Stevenson: Case of Spurious Pregnancy Simulating Ectopic Gestation. Dr. Lewers: On Plugging the Uterus in Severe Cases of *Post-partum* Hæmorrhage. Dr. Boxall: Fever in Childbed; General Hygiene and Antisepsis.

THE HOSPITALS ASSOCIATION, Middlesex Hospital, 5 P.M.—Annual meeting. Under the presidency of Dr. J. S. Bristowe, F.R.S.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, W.C., 2 P.M.—Dr. Ormerod: On Peripheral Neuritis. The New Infirmary, Paddington, 4 P.M.—Mr. Jonathan Hutchinson: Clinical Lecture on Surgical Cases. 5 P.M.—Dr. Savill: *Post-Mortem* Examinations.

FRIDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton, 4 P.M.—Mr. R. J. Godlee: On the Surgery of the Thorax.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. W. H. Battle: On Some Points Relating to Injuries of the Head. Lecture III.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTHS.

BROWNE.—On the 19th instant, at Warwick, the wife of Dr. S. Browne, Medical Officer of Health, Leamington, of a daughter.

BURNET.—At 6, Upper Wimpole Street, W., on the 23rd May, the wife of R. W. Burnet, M.D., of a daughter.

PANTON.—On the 21st instant, at Moss House, Bolton, the wife of J. E. Panton, M.D., of a daughter.

MARRIAGES.

DUNCAN—HULME.—On the 27th instant, at the Church of St. Philip and St. James, Oxford, by the Rev. E. Dermer, assisted by the Rev. W. S. Hulme, brother of the bride, Horace Duncan, B.A.Cantab., M.B.London, second son of Dr. James Duncan, of Henrietta Street, Covent Garden, to Elizabeth Gertrude, eldest daughter of the late Rev. S. J. Hulme, M.A., formerly Rector of Bourton-on-the-Water.

HALL—ALLMAN.—May 21st, at Christ Church, Linnet Lane, by the Rev. Robert Irving, M.A., Ben Hall, M.B.Lond., of Bodenham, Herefordshire, to Carrie, daughter of George William Allman, Alexandra Drive, Sefton Park. No cards.

HERN—BROCK.—On the 23rd instant, at Teignmouth, S. Devon, John Hern, M.D.Ed., F.R.C.S.E., M.R.C.S., of Darlington, eldest son of John Hern, of Staverton House, Ashburton, and Scobetor Widecombe in the Moor, Devon, to Minnie, younger daughter of the late James Brock, of Coombe, Teignmouth.

DEATHS

BRAMWELL.—On the 19th May, at his residence, 17, Barossa Place, Perth, James Paton Bramwell, M.D., L.R.C.S.Edin., in his 67th year. Deeply regretted.

CAMPBELL.—On the 26th instant, at 14, Lennox Street, Edinburgh, John Campbell, M.D., R.N., for many years Medical Officer of Her Majesty's Prison, Woking.

DEVIS.—On May 27th, 1890, at Hapsburg House, Wells Road, Bristol, Cecil Mawe, the youngest son of Alice and Chas. J. Devis, M.R.C.S.Eng., etc., lately of Charters Towers, Queensland, aged 15 months.

WRIGHT.—On May 13th, at 253, Eccles New Road, Manchester, Catharine Elizabeth, the beloved wife of Gaskoin Wright, L.R.C.P.Lond., M.R.C.S.Eng., and daughter of Francis Denton, Southport. Aged 29.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

FEHLING'S SOLUTION.

M.D. writes: Some years ago there appeared in the columns of the JOURNAL a formula for Fehling's solution made with glycerine, which I found to answer admirably and to keep indefinitely. Unfortunately, I have forgotten the formula, and should be greatly obliged if any member would inform me in what old number of the JOURNAL this appeared.

GERMAN BATHS FOR RHEUMATISM.

E. F. D. writes: A patient of mine, a lady, is about to visit Germany, and as she has a tendency to rheumatism she is desirous of trying some baths. E. F. D. asks for any information as to the places most likely to be beneficial to her in this respect, and the nature of the baths in such places?

*** Bad Gastein, Wildbad, both indifferent thermal baths; Wiesbaden, hot chloride of sodium baths. Pine baths are prepared at all these places. For further information refer to Macpherson's *Baths and Wells of Europe*, and Burney Yeo's *Climate and Health Resorts*.

ANSWERS.

M.D. BRUSSELS.—The particulars required will be found in the JOURNAL of March 2nd, 1889, p. 471.

G. J. C.—A leaflet containing an epitome of facts relating to the influence of compulsory vaccination was prepared by the National Health Society, 4, Berners Street, W., and approved by the Local Government Board.

CIRCUMCISION FOR PHIMOSIS AFTER SYPHILIS.

DR. JOHN ORMSBY (Dover) writes, in reply to "S. X.:" It is impossible for contraction to occur if circumcision be performed by "Ricord's" method. I can answer for the satisfactory results of many cases done after venereal disease in some cases where the prepuce—anteriorly—had even become a mass of contracted fibrous tissue. Of course the primary disease should be cured first.

TREATMENT OF PERSPIRING FEET.

DR. MANSEL SYMPSON (Lincoln) writes: "Surgeon" does not mention having tried boroglyceride (though he has tried boric acid) for the complaint. Several times in the pages of the JOURNAL I have recommended this drug for the treatment of profuse perspiration of the feet, following Dr. Whitla's advice in his admirable little volume, and it has had the best results in my own practice and in that of others. The method of application is simple: soak a pair of socks in a saturated solution of boroglyceride; let them dry, wear them for a day or two (according to the amount of perspiration) and then change for another pair similarly treated. The fœtor, so disagreeable a feature of these cases, disappears, and the perspiration will decrease in a few days.

BRIGADE-SURGEON (Army, Retired) recommends a solution of chromic acid 3 to 5 per cent., the best to harden and prevent perspiration of feet. [Recent reports of experiments by German army surgeons, noticed in JOURNAL (both numbers). Coloured socks should be tabooed, and plain white ones well steeped in solution of boracic or chromic acid, often changed, and, in summer, cloth boots.

NOTES, LETTERS, ETC.

EPITHELIOMA PRIMARILY AFFECTING THE TONSIL.

DR. HERBERT SNOW (Gloucester Place, W.) writes: The cases recently reported under this title by Dr. Sheen and Dr. Downie appear to me a little doubtful unless a careful examination of the condition of the tongue in the vicinity of the lesion was made—which, from the published accounts, is not obvious. I have seen a large number of cases of tongue epithelioma commence close to the root of that organ or its under surface, and thence quickly extend to

tonsil and its vicinity. The primary infiltration long continues as a small puckered induration, very easily overlooked; whereas the deposit in the tonsil and pillars of the fauces (although secondary to the former) is often much more marked and conspicuous. When the tonsil is primarily attacked by malignant disease, the probabilities would seem largely in favour of the latter originating from the glandular parenchyma, which constitutes the bulk of this structure.

Thermogenesis and the Motor Levels.

Dr. C. R. Illingworth (Accrington) writes: Dr. MacAlister refers to the theory propounded by him in 1887. Permit me in your columns to point out to him that in his thermometric experiments at that time he did not consider the effects of circulating blood corpuscles upon his thermometer bulbs. His conclusion, therefore, that "the muscles are the chief furnaces of fever" was fallacious.

*** A reference to Dr. MacAlister's original paper, and to those of Meade Smith and Lukjanow in Du Bois Reymond's *Archiv*, seems to show that the effects of the circulation on thermogenesis in muscles have been very fully studied by these observers.

An Appeal.

Mr. Jonathan Hutchinson (15, Cavendish Square, W.) wishes to acknowledge the following further contributions in aid of Dr. C.:

	£	s.	d.
Dr. Davies-Colley, 33, Harley Street, W.	1	1	0
John Shaw, Esq., Hampstead, N.W.	2	2	0
Dr. Ledlard, Carlisle	2	2	0
Dr. Sewill, 40, Wimpole Street, W.	2	2	0

Dilatation instead of Support of the Perineum.

Dr. Thomas More Madden (Dublin) writes: The subject referred to under this heading by six of your correspondents in the Journal of May 17th is one of considerable practical importance, and hence having probably had as much experience of the different methods recommended for the prevention of perineal laceration during labour as most of them, I venture to add to the number of those who desire to take part in the discussion of the question. In this connection the causes of perineal rupture can hardly be altogether eliminated from consideration, as they appear to have been by some of the writers who now advocate or oppose either of the two methods discussed. Without entering at large into the causation of this accident, it may be premised that its occurrence may result: 1. From disproportion between the size of the fœtal head and that of the vulvar orifice. 2. From rigidity of the perineum. 3. From too rapid delivery, either natural or assisted, by the head being forced through, before the normal stretching or dilatation of the soft parts, by which alone delivery can be safely accomplished, has taken place. It is surely obvious that no one rule of practice can apply equally to circumstances so different. Hence to my mind the present controversy as to the respective advantages of retraction and support of the perineum, each of which is apparently regarded by its special advocates as a general rule of practice to adopt for the prevention of perineal injury during labour, appears to be somewhat of a waste of time and energy.

In the majority of cases I believe that neither one nor the other will be found necessary. In some instances retraction during the pains is distinctly indicated. In others the prevention of one of the most miserable accidents that can befall a woman, that is, laceration extending through the perineum into the rectum, can only be obviated by judiciously supporting the perineum (during the pains only, of course), so as at the same time to resist the pressure of the down pressing head, until time has been afforded for sufficient dilatation. Whilst in other cases again a far better method than either of those before mentioned, is that suggested more than a century ago by Sir Fielding Ould, of Dublin, which in an improved form was revived by Dr. Roe, and again by myself in observations on "Bilateral Incision of the Perineum as a Means in some Instances of Preventing Laceration," which may be found in the *Transactions of the Dublin Obstetrical Society* of ten years since.

It would be impossible to enter, in a short letter such as this, into the consideration of the various circumstances that may render each of these methods most suitable. I was hitherto under the impression that the method of preventing laceration in some cases by intermittent traction on the perineum was first suggested about seven years ago by Dr. Duke, and the same view is evidently held by my friend Dr. Parvin, of Philadelphia, as in his classic work on *The Science and Art of Obstetrics*, Edinburgh Edition, 1887, p. 410, Professor Parvin says: "Duke draws back the perineum with the left thumb, or with the first two fingers of the right hand during a pain. This method is begun as soon as the head is engaged in the pelvic cavity." Dr. Trestrail, in his paper on The Treatment of Rigid Perineum and the Avoidance of its Rupture, read before the London Obstetrical Society in 1875, and published in their *Transactions*, p. 61, describing a case in which dilatation of the perineum was most successful, goes on to say: "With this view I pitched three fingers into the posterior commissure, and kept up pretty firm continuous extension, first with one hand and then with the other, and in less than half an hour the outlet was very considerably dilated." This method seems quite different from the method of extension recommended several years ago in Dr. Duke's letter on the subject, in which he advises this extension to be made "during a pain, and only while it lasts, in order to imitate Nature as much as possible, the action of the uterus being intermittent, and so practically analogous to the intermittent traction which I advise."

As I myself consider continuous traction on the perineum quite as objectionable, on several grounds, as its continuous support could be, I am glad to see that Dr. Duke's view, above quoted, as to the retraction of the perineum, in any cases in which it may be thought advisable, being only made during the pains, is now apparently held by most of the writers who are at present discussing this question.

Alexander Duke, F.K.Q.C.P.I., Ex-Assistant Master Rotunda Hospital (Dublin), writes: In justice to myself, will you kindly allow me to state that I had never either heard or read Dr. Trestrail's published account of his plan of "dilatation of the perineum" when I published mine. I think it quite necessary to state this in self-defence, as his last letter would seem to imply that I had read his description, and endeavoured to improve on his plan.

I again state that mine is entirely different, and evidently considered superior to his by such an authority as Dr. Parvin, of Philadelphia, who makes no allusion whatever to Dr. Trestrail's plan, so that I still maintain my plan of preventing laceration originated with me.

Dr. F. R. Humphreys, L.R.C.P.Lond. (Queen's Crescent, N.W.), writes: I do not see a method I frequently employ—of dilating the vagina by means of an air ball—mentioned by anyone in the discussion of this question. I was led to use it by noticing that, if the membranes were left unruptured till they had dilated the vagina as occasionally occurs, the labour is easy, and the perineum fairly safe. The air ball should be greased and placed at the upper end of the vagina as soon as the os begins to dilate. The degree of distension of the ball may be used as a means of regulating the pains. The air ball is eventually forced out of the vagina by the contraction, apparently, of its own muscles, at about the time that the os becomes fully dilated; the head is then rapidly born. This is especially of use in lingering first confinements. The ball has to be removed if it provokes tetanic action.

The Flesh of Animals inoculated with Anthrax or Malignant Pustule as Food.

Dr. Charles Bell Taylor (Nottingham) writes: As I find that the practice of inoculating beasts and sheep intended for human food with anthrax, charbon, splenic fever, or malignant pustule—for the disease is known by all these names—has been adopted to a certain extent in this country, and is likely to increase, may I ask for space in your columns in which to call attention to the great danger and manifest impolicy of the process?

It appears to have been established that the inoculation, when not fatal, confers a certain amount of protection against a second artificial inoculation; but the protection, such as it is, only lasts for a few months, or for the season in which it has been practised, and Koch's experiments have proved that it is of little avail against natural infection (which takes place through the intestines), while the proportion of deaths caused by the inoculation itself is as great as that arising from a notoriously infected pasture. It has also been demonstrated that the health and vital power of the animals subjected to inoculation, and who recover from the process, are so depressed that they die in very large proportion from various other diseases (from which non-inoculated animals are free), and during the progress of which their secretions and discharges are probably infective of anthrax.

The Hungarian Commission which sat to consider this question decided to absolutely prohibit the practice by private individuals, and Dr. Koch, the great German authority on such matters, has warned us that "the preventive inoculation of M. Pasteur cannot be considered practically utilisable on account of the insufficient protection which it gives against natural infection, on account of the short duration of that protection, and on account of the danger to which it subjects men and other non-inoculated animals." Dr. Klein also—and I can quote no higher authority—who has most carefully investigated this subject on behalf of the English Local Government Board, tells us that "this country is comparatively free from anthrax, and that therefore the introduction of the so-called 'vaccin charbonneux' is most dangerous and capable of producing incalculable mischief."

I may add that, of all bacilli, the bacillus of anthrax is one of the most tenacious of life; it subsists for years on pastures exposed to all weathers, and, as is well known, retains its infective properties for prolonged and indefinite periods in the hair, the wool, and the hides of animals who have suffered from the disease. It multiplies also enormously when inserted into the animal organism, and is only to be destroyed in meat or milk intended for human food by a degree of heat to which certain portions of cooked food are frequently not subjected.

Surely, here are reasons enough for prohibiting a practice which, as Dr. Klein has truly remarked, "is most dangerous and capable of producing incalculable mischief."

Practice in British Columbia.

Mr. John Robert Williams, L.R.C.P.Lond., M.R.C.S.Eng. (Driard Hotel, Victoria, B.C.), writes: I do not know whether there has appeared in your paper any notification of the alteration of the Medical Act of British Columbia. An Act passed last week repeals Section 30 of the Medical Act of 1886, which section gave all registered British practitioners the right to have their names placed on the register of British Columbia without having to pass an examination here. Now everyone wishing to practise here will be compelled to pass an examination in preliminary as well as final subjects before he can do so.

On April 26th, in a conversation with Dr. McGuigan, of Vancouver, who was President of the last British Columbian Medical Council, I asked him if the general practitioners of British Columbia think themselves better qualified to judge of the fitness of a man to practise than the British examining bodies, and he very candidly replied that they do not, but that they are going to use the examination to prevent the profession being overcrowded; in other words, they intend to turn into a floodgate, to dam back opposition, an examination which the Legislature ordered to prevent ignorant men imposing on the public.

I came out here intending to settle in British Columbia, but after this plain notification from an examiner that no one will be allowed to pass if there is not more practice than the present practitioners think they can attend to, I consider that I shall only be throwing my money away if I pay the examination fee.

As I was passing through Victoria on April 30th, I thought I would call on Dr. Milne, the registrar of the province, and ask his reason for the change in the Act, so I put to him the same questions as I put to the president. "Do the Medical Council of British Columbia think themselves better qualified to judge of the fitness of a man to practise than the examining boards of Great Britain?" His prudence being greater than that of the president, he answered that they do think they are more capable, for they have had a number of very crude men out from England.

Dr Milne is M.D., C.M., Victoria University, Canada, and he has, I believe, practised since he qualified in Victoria, British Columbia, which in 1882, the year Dr. Milne graduated, had a population of 7000, and is now supposed to contain about 15,000 inhabitants. The Medical Council, the members of which are the examiners, for the present year was elected on April 28th; it is composed of the registrar, who heads the poll; the late president, who considers it the duty of the examiners to protect the incomes of the present practitioners; and five other gentlemen. None of them hold a British quali-

fication; six are Canadian graduates, and the seventh graduated at the University of California in 1865. They are all general practitioners; five practise in Victoria or Vancouver, each of which towns has a population of about 15,000; one practises in New Westminster, with a population of 5,000; and the last practises at Kamloops, which has a population of less than 2,000.

Coincidence of Influenza in England and America.

Dr. M. A. Veeder (Lyons, New York, U.S.A.) writes: In reading the account of the epidemic of influenza in the district of Melton Mowbray published in the Journal for April 12th, I have been much impressed by the closeness of the correspondence of the symptoms with what was observed in this locality, and likewise by the exact correspondence of time. The first unmistakable case at Lyons, N.Y., of which I have any knowledge was seen on December 21st, and had then been in progress for two or three days. Other cases followed immediately, and were associated with the first one, all the clerks in the establishment being affected within a few days. This was in the village. At the same date there were two or three isolated cases at a distance of four or five miles in the country, the facts in reference to which came to my knowledge subsequently. The disorder spread in a very irregular way, becoming most widely prevalent about the middle of January, although cases continued to be numerous in February. Its extension in the country districts was evidently much slower than in the village, cases among farming people continuing to come under observation after it had almost ceased to prevail in the village. Thus the dates recorded in connection with the outbreak at Melton Mowbray fit almost exactly that at Lyons, N.Y., and vicinity in every particular. This certainly is very remarkable, these localities being many thousands of miles apart. Under such circumstances, and considering the manner also in which the disease spread locally, it has seemed to me that if contagion were the means of its conveyance, it may have been distributed through the agency of the mails, thus accounting for the establishment of isolated centres of infection in country districts, as well as its spread almost simultaneously in towns and villages remote from each other. It was noted, in some instances at least, that mail clerks were amongst those first affected.

The Antiseptic After-treatment of Vaccination.

Dr. C. W. Sessions Barrett (Hinckley) writes: As Dr. Illingworth in his letter in the Journal of May 17th has misquoted me, he has probably misread me. It is no wonder, therefore, that he has misunderstood me. Inquiry in some districts where vaccination is very strongly resisted will lead to different views with regard to what is "obliged" by law.

I shall leave Dr. Illingworth to use his own instruments. Surely Dr. Illingworth does not wish us to believe that the evil resulting from the performance of the primary operation, with the introduction of septic matter, will wait eight or more days before appearing in evidence against the operator, any more than is the case in other wounds inflicted with dirty instruments.

Dr. C. R. Illingworth (Accrington) writes: Mr. Capes judges rightly that statistics point to the value of four marks. The Sheffield inquiry proved it even more strongly than Shaw's *Manual*. But as long as private practitioners are allowed to vaccinate, so long will vaccination be imperfectly done. The operation is so simple that any apprentice can do it as easily as his master. Hundreds of unqualified men are putting on one mark every day of the week; but public vaccinators, if employing a deputy, must choose a qualified man, who shall perform the duty "only on those occasions when it is absolutely impossible for the public vaccinator to be present himself."

I find that four marks cause less inflammatory disturbance than two, providing that cross-cutting be avoided; and it has been abundantly shown that the protection from four marks is practically complete.

To Correspondents.

Our correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

COMMUNICATIONS, LETTERS, etc., have been received from:

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THE CROONIAN LECTURES ON CEREBRAL LOCALISATION.

Delivered before the Royal College of Physicians of London.

By DAVID FERRIER, M.D., LL.D., F.R.S.,

Physician to King's College Hospital, and to the National Hospital for the Paralysed and the Epileptic, Queen Square.

Lecture I: Introductory.

Mr. President and Gentlemen,—While highly appreciating the distinguished honour of being appointed Croonian Lecturer of the College of Physicians, I must confess to having undertaken the onerous duties of the office with considerable hesitation and trepidation, for, though the subject which I have chosen is one to which I have devoted a good deal of attention, and which, in one of its aspects, namely, The Localisation of Cerebral Disease, I have already had the honour of discussing before you as Goulstonian Lecturer, yet, considering the enormous amount of work that has been done in this department in recent years, and the numerous problems which still remain unsolved, I have felt that, with my other duties, time and strength would scarcely permit me to do justice to my subject. I could not feel satisfied with merely repeating the views which I have elsewhere, and at various times, expressed on this subject, and which, to many of you at least, are sufficiently well known; therefore it seemed necessary that I should, for the purpose of these lectures, undertake new investigations, in order to throw light, if possible, upon some of the points which are still in dispute. But to compress into practically a few months of otherwise fully occupied time what might well be the undivided labour of a long period has proved a difficult task, and I have fallen far short of what I had hoped to accomplish, though I trust that some of the results at which I have been able to arrive may contribute towards a solution of some of the vexed questions. I purpose in these lectures to sketch the evolution of the doctrine of cerebral localisation, to indicate the principal data on which it is based, and to discuss, in the light of the most recent investigations, the evidence for and against the existence of specific centres, and their exact position in the cerebral cortex.

Before considering the facts bearing directly upon the specific localisation of function in the cerebral cortex, I think it advisable —nay, even necessary—to consider the effects of ablation of the cerebral hemispheres in different classes of animals. A due consideration of these phenomena affords, I think, a satisfactory explanation of the chief objections which have been urged against localisation in general, and, at the same time, also renders unnecessary certain hypotheses as to the functional substitution of one part of the cortex by another, which have been—and, in my opinion, rightly—regarded by the opponents of localisation as altogether subversive of its fundamental principles.

Recent researches on the effects of the removal of the cerebral hemispheres by improved methods have necessitated some important modifications of the doctrines which, up to quite a recent date, have been generally entertained on the subject.

Let us begin with fishes. When in osseous fishes the ganglia which correspond morphologically to the cerebral hemispheres of the vertebrates) are entirely removed, there is little, if anything, to distinguish them from perfectly normal animals. They maintain their natural attitude, and use their tails and fins in swimming with the same vigour and precision as before. It has generally been said that brainless fishes possess no spontaneity, but seem as if impelled by some irresistible impulse (occasioned by the impressions communicated to the surface of their bodies by the water in which they are sustained) to swim until they are exhausted by pure neuro-muscular fatigue. In their course, however, as was shown by Vulpian, they do not blindly rush against obstacles, but turn to the right or left, according to circumstances, as if still possessed of some sense of vision. Vulpian says[1] "In fact, when the cerebral hemispheres have been removed from a fish which does not readily succumb to this kind of operation (a frog, for example), not only may it be urged to move by bringing an object before its eyes, but I have proved that it avoids obstacles; for, by placing a stick to the right or left, a few centimètres from its eye, I have frequently caused the fish to turn in the opposite direction."

Steiner[2] does not admit the absence of spontaneity in fishes so operated upon, for he has seen that they occasionally remain at the bottom, at other times balance themselves at various heights in the water, and now and then swim about freely, without any obvious alterations in the conditions by which they are surrounded. He has also shown, and in this he has been confirmed by Vulpian[3] that they not only see, but are able to find, their food. If worms be thrown into the water in which they are swimming, they immediately pounce upon them. If a piece of string similar in size to a worm be thrown in, they are able to detect the difference, and either disregard it entirely, or drop it after having seized it. Not only do they seize their food, but they discriminate between different kinds, selecting some, and rejecting others. They even to some extent distinguish colours, for when one red and a few white wafers are thrown into the water, the fish almost invariably selects the red in preference to the white.

From these facts it would appear that the fish without cerebral hemispheres can see, distinguish colours to some extent, catch its prey, discriminate between different kinds of food, direct its movements with precision, and, in fact, behave to all appearance like a normal animal. The only difference observed by Steiner was that brainless fishes appeared more impulsive and less cautious than those which had not been operated upon.

What has been said above applies, however, only to Teleosteous fishes. Quite different results appear to follow removal of the cerebral hemispheres in Elasmobranchs. Thus the dog-fish, according to Steiner,[4] after this operation is entirely deprived of spontaneity, and is quite unable to find the food (sardines) by which it is surrounded. The difference between the two orders of fishes is, however, more apparent than real, for the dog-fish is guided mainly by its sense of smell, while the activity of the osseous fish is conditioned more especially by vision; hence, in the dog-fish, removal of the cerebral hemispheres, which are almost exclusively related to the sense of smell (Fig. 1.—A),

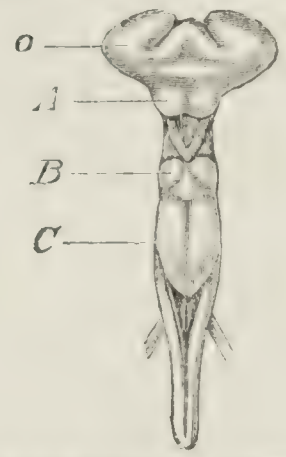


Fig. 1.—Brain of dog-fish (after Steiner). A, cerebral hemisphere; B, optic lobe; C, cerebellum; O, olfactory lobe.

abolishes all the reactions conditioned by this sense; while in the osseous fish, the primary visual centres (optic lobes), being intact, the ordinary modes of activity, which are conditioned mainly by the eyes, continue to all appearance unmodified.

Frogs.—According to the researches, more particularly of Goltz[5] and Steiner,[6] frogs deprived of their cerebral hemispheres behave, *cæteris paribus*, essentially like fishes similarly treated; they maintain their normal attitude, and resist all attempts to overthrow their equilibrium. If laid on their backs they will turn over and attempt to regain their ordinary position. If the basis of support on which they rest is tilted in any direction, they will clamber up, forwards, or backwards until they gain a position of stability. Their powers of locomotion are retained, and their limbs are co-ordinated with precision. If a foot be pinched, or any irritation applied to the posterior part of the body, they will hop away; thrown into the water they will swim, and continue swimming until they have reached the side of the vessel, up which, if possible, they will clamber and rest in peace. It would

[1] *Système Nerveux*, p. 689.

[2] *Die Functionen des Centralnervensystems; Zweite Abtheilung: Die Fische*, 1888.

[3] *Comptes Rendus*. Tome 102 and 103, 1886.

[4] *Op. cit.*

[5] *Functionen der Nervencentren des Frosches*, 1869.

[6] *Physiologie des Froschhirns*, 1885.

in fact be difficult, so far as their movements and response to peripheral stimuli are concerned, to distinguish between a normal and a brainless frog. If the back be gently stroked the frog will answer uniformly with a croak, as if of pleasure or enjoyment. If the animal be put in a vessel containing water, the temperature of which is gradually raised, it will jump out as soon as the bath becomes uncomfortably hot. If placed at the bottom of a pail of water, it will ascend to the surface to breathe. If the vessel be inverted over a pneumatic trough and filled with water, sustained by barometric pressure, the frog will ascend to the top as before, but not finding there the oxygen necessary to satisfy its respiratory craving, it will work its way downwards, and ultimately succeed in making its escape out of the vessel on to the free surface of the trough. Like the fish, the brainless frog undoubtedly possesses some form of vision; it does not, when urged to move, rush blindly against an obstacle, but will leap over it, or turn to the right or left, or otherwise avoid it. In all these respects a brainless frog behaves like a normal one, but one noteworthy difference has been signalised by most observers—namely, that the brainless frog, unless disturbed by some form of peripheral stimulus, will remain for ever quiet on the same spot, until, in fact, it becomes dried up and converted into a mummy. All spontaneity—that is, varied activity under apparently the same external conditions—appears to be annihilated; its past experience has been blotted out, and it views with indifference signs and threats which would formerly have made it flee. It is also generally stated that the brainless frog has lost its instincts of self-preservation, and either feels no hunger or possesses no power to satisfy its physical necessities, so that it dies in the midst of plenty. The more recent experiments, however, of Schrader[7] would seem to show that removal of the hemispheres deprives the frog neither of spontaneity, nor of special instincts, nor of the ability to feed itself; for he has observed brainless frogs which have been kept alive for long periods, apparently "spontaneously" jump from the pier of a galvanometer, absolutely free from all tendency to vibration, alternate between land and water in the aquarium, crawl under stones, or bury themselves in the earth at the beginning of winter, and, when cautiously submerged under water, begin to swim exactly like normal frogs under the same conditions. These frogs also, after the period of hybernation, or in the summer, when their wounds were entirely healed, diligently caught the flies that were buzzing about in the vessels in which they were kept. It would appear, therefore, if these observations are correct, that the principal points of distinction between the brainless and the normal frog—namely, the absence of spontaneity and the power to feed itself, which are said to especially characterise the former—are no longer capable of being upheld, and that the brainless frog behaves precisely like the brainless fish above described.

Birds.—Let us now proceed to consider the effects of the removal of the cerebral hemispheres in birds, the next higher class of vertebrates, and more especially in pigeons. These have been rendered familiar to all by the classical researches of Flourens;[8] but though the picture he has drawn has been accepted as in the main correct, there have been, and there still are, some differences of opinion as to the facts, and more particularly as to their mode of interpretation. There is, however, no doubt that after this operation pigeons show no disturbance of station or locomotion. They maintain their normal attitude, and resist all attempts to overthrow their balance. Left to themselves they appear, at first at least, to be plunged in profound sleep. From this condition they are easily aroused by a gentle push or pinch. When so urged they march forwards, and should they happen to step over the edge of the table, on which they are placed, they will flap their wings and regain their base of support. Thrown into the air they fly with all due precision and co-ordination. After each manifestation of activity so induced they subside into their original state of repose. Occasionally, and apparently without any external stimulus, they may look up and yawn, shake themselves, dress their feathers with their beaks, move a few steps forwards or backwards, especially after defæcation, and then settle down quietly, standing sometimes on one leg, sometimes on the other. They are altogether unable to feed themselves; but, if fed artificially, deglutition, digestion, and nutrition go on in a normal manner, and the animals may be kept alive for an indefinite period. Flourens was of opinion that the removal of the cerebral hemispheres annihilated all the senses, and rendered the animals blind, deaf, and devoid of smell, taste, and tactile sensibility. These conclusions were, however, disputed by Magendie, Bouillaud, Cuvier, and, in particular, by Longet[9] and Vulpian.[10] Longet found that the animals appeared to see, inasmuch as they would follow the movements of a flame held in front of their eyes at a sufficient distance to prevent all sensation of heat, and also when urged to move, occasionally at least, avoided obstacles in their path. Also they started at loud sounds, such as a pistol shot, made in their immediate vicinity; and from their movements and gestures appeared to feel impressions made upon the nerves of common sensation. As regards the senses of taste and smell, he found it impossible to arrive at any definite conclusions in animals of this order, and looked upon the statements of Flourens as not supported by convincing evidence. Longet believed that the removal of the cerebral hemispheres annihilated only perception proper, as distinct from crude or brute sensation, which had its centre in the mesencephalic ganglia.

The question as to the sense of sight in brainless pigeons has been much discussed, that is, whether not mere impressionability to light exists, but as to whether the animals see, in the sense of being able to guide their movements in accordance with their retinal impressions. McKendrick[11] was of opinion that removal of the one cerebral hemisphere caused blindness in the opposite eye; and Jastrowitz,[12] from his own experiments, arrived at the same conclusion (on this see further below). The experiments of Blaschko,[13] under the direction of Munk, led to no very definite conclusions on this point, though it seemed as if the removal of the one hemisphere did not cause total blindness in the opposite eye. But Munk himself[14] has made it the subject of a considerable number of experiments. He found that in a certain number of pigeons, from which he had attempted to remove the cerebral hemispheres, vision was not entirely abolished, and the animals were able to avoid obstacles placed in their path. Careful investigations, however (*post mortem*) revealed the fact that in such cases the hemispheres had not been entirely destroyed, vision continuing to some extent in the eye opposite the hemisphere, the extirpation of which had not been absolutely complete. In those cases, however, in which not a trace of either hemisphere was allowed to remain, blindness was complete and absolute. These animals, in their attitude and reaction to peripheral stimuli, etc., exhibited the symptoms already described. The brightest light, however, caused no result beyond contraction of the pupil. The animals, when urged to move, ran against every obstacle which came in their way. When thrown into the air, they flew with retracted head and half-raised trunk, outstretched legs, and dashed against obstacles, or fell bump on the ground and slid a considerable distance before coming to a standstill.

The phenomena described by Munk certainly indicate total blindness on the part of his pigeons, and he is of opinion that all those who have held that ablation of the cerebral hemispheres does not cause total blindness are in error, owing to the fact of the extirpation of the hemispheres not having been complete. Schrader, however,[15] describes the phenomena which he observed in two pigeons, from which, according to the *post-mortem* examination of von Recklinghausen, he had entirely removed every portion of the cerebral hemispheres. None of the cortex remained, but only minute remnants of the cut cerebral peduncles, which were, moreover, in a state of softening. These pigeons, within a few days after the operation, behaved in such a manner as can only be explained by their still retaining some form of vision. For they not only avoided obstacles in their path, or in their flight, but appeared able to fly from one place and alight securely on another. These flights were mostly, if not entirely, caused by conditions calculated to induce a change of position, such, for instance, as mounting them on a narrow basis of support, or putting them through balancing experiments. They never on any occasion spontaneously flew upwards from the ground.

With respect to the sense of hearing, Schrader verified in some of his animals the observations of Longet, that loud sounds, like the explosion of a percussion cap, caused a sudden start, but beyond this there were no signs of impressionability to auditory

Physiologie des Froschgehirns, *Pflüger's Archiv für Physiologie*, 1887, Band 41.

[8] *Système Nerveux*, 1842.

[9] *Anatomie et Physiologie du Système Nerveux*, 1842.

[10] *Op. cit.*

[11] Observations and Experiments on the Corpora Striata and Cerebral Hemispheres of Pigeons, Royal Society, Edinburgh, 1873.

[12] Ueber die Bedeutung des Grosshirns, *Archiv. für Psychiatrie*, 1876.

[13] *Das Sehcentrum bei Fröschen*, Berlin, 1880.

[14] "Uber die centralen Organe für das Sehen und das Hören bei den Wirbelthieren; *Sitzungsberichte d. Berlin Akademie d. Wissenschaften*, July, 1883.

[15] Physiologie des Vogelgehirns, *Pflüger's Archiv*, Bd. 44.

timuli. If the results described by Schrader are correct, and of his the description given by himself and von Recklinghausen eems to leave little room for doubt, we shall then be obliged to lass birds with fishes and frogs, which without doubt retain their ense of sight, and guide their movements accordingly, notwithtanding the complete removal of their cerebral hemispheres.

Mammals.—While removal of the cerebral hemispheres (includng corpora striata) in the lower vertebrates is compatible with urvival for a considerable length of time, the case is different ith mammals. In these the operation causes fatal shock, or is ollowed by secondary effects which result in speedy death. For his reason it has not been found possible to determine, as in the ower vertebrates, what functions, after considerable lapse of ime, might still be exhibited by the lower centres in the entire bsence of the higher. The mammals on which the operation as succeeded best have been chiefly of the lower orders, such as bbits, guinea-pigs, and rats. When the hemispheres have been moved from a rabbit or a guinea-pig, the animal, at first utterly rostrate, begins after a varying interval, say from half an hour more, to exhibit a capacity for the performance of actions of a nsiderable degree of complexity. The muscular power of the mbs has, however, become enfeebled to a noteworthy extent, and, latively, much more so in the fore than in the hind limbs. It , nevertheless, able to maintain its equilibrium, but sits huddled , while the legs tend to sprawl, or are planted in unnatural sitions. It resists attempts to overthrow its balance, and if sturbed regains its former attitude. If the foot or tail be nched, the animal will bound forward in its characteristic mode progression, and again settle down when the effect of the stiulus has worn off. It may shake its ears, slightly change its sition, rub its snout with its paws, or scratch its body, and ain subside into a condition of perfect quiescence. The pupils ntract when a light is thrown into the eye, and the eyelids wink hen the conjunctiva is touched. Loud sounds will cause the rs to twitch, or provoke a sudden start. According to Longet, locynth placed in the mouth will cause movements of the ngue and organs of mastication, in all respects resembling ose of disgust, and efforts to get rid of the nauseous taste. mmonia held before the nostrils will cause a sudden retraction the head, or induce the animal to rub its nostrils with its ws. Not merely does it respond by movements to a pinch or ick of its foot or tail, but, if the stimulation be more severe, it ll utter repeated and prolonged cries of a plaintive character. l spontaneity seems to be abolished; but it is usual for the anils, after the period of quiescence has passed, to make apparntly spontaneous running movements, which, however, are nd to depend upon irritation caused by the secondary changes up in the wound.

Whether after removal of the cerebral hemispheres rabbits and ier rodents can see, is a question which has been the subject of ely controversy between Christiani and Munk.[16] Christiani, after eful severance of the hemispheres and corpora striata immediately erior to the optic thalami, states that he has seen rabbits pass repass obstacles such as legs of chairs and tables, and is of opinion t, though they do not see like normal rabbits, they are still e to guide their movements in accordance with retinal impresns. Munk, on the other hand, denies the accuracy of istiani's experiments, and holds that rabbits, after removal of cerebral hemispheres, are absolutely blind, and show no indicas whatever that they are influenced by light, except as regards contraction and dilatation of the pupils. He believes that the arent avoidance of obstacles by Christiani's rabbits was a pure ident, as the obstacles did not happen to lie in their path.

he question is one which cannot be said to be definitely settled, ugh the facts mentioned in respect to fishes, frogs, and birds ld incline one to believe that Christiani's results and conclus may have a solid foundation. On this point, however, and others relating to the sensory and motor faculties of brainless nmals it is difficult to arrive at altogether satisfactory conions, as they, unlike the lower vertebrates, have as a rule so dily succumbed to the operation. Hence the lower animals' res have no time to recover from the shock which must necesly ensue from such a violent rupture of the solidarity prely existing between them and the highest centres. As the se of death in mammals seems largely dependent upon ndary (inflammatory and other) consequences, and not on the e fact of removal of the hemispheres themselves, it is much to esired that some method may be discovered whereby the animals may be maintained alive longer than has hitherto been found possible. The nearest approach to this has been attained by Goltz,[17] who has made a series of careful observations on dogs for prolonged periods, after very extensive destruction of both cerebral hemispheres. Though the destruction has been far from complete in any case, yet the phenomena described by him teach lessons of the utmost importance in the comparative physiology of the brain. Goltz himself has utilised these experiments as the bases of his polemic against cerebral localisation, but we may, for the time, abstract from their bearing in this direction, and consider the facts themselves which he has recorded.

Goltz[18] thus describes a dog in which he had by repeated operations destroyed a large extent of both hemispheres. The amount of primary destruction, together with the secondary atrophy so induced, was so great that the whole brain weighed only 13 drachms instead of 90, which should have been the weight of a normal brain in an animal of the same size. This dog had a profoundly demented, expressionless face. Left to itself it wandered about restlessly, paying no attention to what was going on around it. All its movements were awkward and unsteady, but it exhibited no complete paralysis. It slipped, however, on a smooth surface, and its legs tended to sprawl from under it, so that it would fall upon its abdomen. From this position it would recover itself and again begin its walk. It had the utmost difficulty in feeding itself, though it could find its food when placed in the customary corner of its cage, yet it seemed unable to find it when placed in an unusual position, and even when the food was brought directly under its nose it would snap aimlessly as often outside the dish as in it. It was utterly unable to use its paws for holding and gnawing a bone. It paid no attention to strangers, men or animals; did not wince at the brightest light suddenly thrown in its eyes, and exhibited no fear at any kind of threat. Though it appeared absolutely blind, yet numerous and varied experiments demonstrated that it was able to guide its movements by sight. It did not run against obstacles as it invariably did when its eyes were blindfolded. It was not deaf, for it could be waked out of sleep by a loud sound, but the character of the sound made no further impression upon it. It did not heed tobacco smoke or chloroform vapour, and would eat a piece of wood as readily as a bone. It did not appear to be influenced by the proximity of another dog. It exhibited no emotion of anger when another stole its food, nor did it express pleasure in the usual way by wagging its tail. Its cutaneous sensibility was everywhere diminished, but no part was absolutely without feeling. If its foot was severely pinched it would draw its leg back and bite angrily.

The symptoms exhibited by this dog and another similarly operated upon are thus summed up by Goltz: "Both animals were essentially only wandering, eating, and drinking reflex machines. Both were utterly indifferent to man and beast. Both had obtuseness of all their senses. Each had sensation in every part of its skin, and effected movements with all its muscles. Neither exhibited any expression of pleasure; on the other hand, both were easily roused to wrath. Both were profoundly demented."

The impairment of all the sensory and motor faculties in these and other dogs operated upon by Goltz—in which it is certain that not one of the specific centres was entirely destroyed—would without doubt have been more profound than in rabbits and guinea-pigs had it been possible to extirpate the hemispheres entirely. And when we come to consider the effects of partial cerebral lesions in man, we shall see reason for believing that if in him the whole of the hemispheres were removed, providing this were compatible with life, there would be such complete and enduring paralysis of motion, and annihilation of all the forms of sense, that scarcely a trace would remain to those responsive and adaptive reactions which survive the removal of the cerebral hemispheres in animals lower in the scale.

It thus appears that, notwithstanding the complete extirpation of the cerebral hemispheres, animals, in proportion to their lowness in the scale, besides duly retaining and regulating all their organic functions, remain possessed of varied powers which may be classed generally under the heads of equilibration, co-ordination of locomotion, emotional expression, and adaptive reactions in accordance with impressions made upon their organs of sense. These are organised in the mesencephalic and spinal centres in the highest degree in fishes, frogs, and pigeons; to a less degree in the lower mammals, and least of all in monkeys and man.

[16] *Physiologie des Gehirnes*, 1885.

[17] Verrichtungen des Grosshirns, *Pflüger's Archiv*, 1876-1888.

[18] *Op. cit.*, p. 134.

I do not intend on the present occasion to enter on a consideration of the respective *rôles* of the spinal, cerebellar, and mesencephalic centres in the regulation of these different forms of activity. We may—practically in some and theoretically in all—separate the mesencephalon and spinal cord into a congeries of individual centres, each with its own afferent and efferent nerves, co-ordinating synergic movements, each in its own province, and all co-operating together harmoniously by means of commissural or intracentral fibres. The individual metameres form units in a complex whole, acted on by the nerves of special sense, and subordinate to the supreme nerve centres, through which the adaptation of the organism to its environment is effected. Nor will I enter on a discussion of the vexed question as to whether the actions of the lower centres are indicative or not of intelligence. Most of the differences on this point turn mainly on the meaning of terms. If, with Mr. Romanes, we regard fluctuating adaptation to external conditions as the criterion of intelligence, we shall certainly not be able to deny that the actions of the lower centres are indicative of intelligence in this sense. For the observations of Steiner, Schrader, and others on the lower vertebrates, show that forms of activity which we are accustomed to regard in man as exclusively cerebral, and indicative of conscious discrimination, are capable of being manifested by these animals in the entire absence of their cerebral hemispheres. Nor can we say that spontaneity, which we have also been accustomed to regard as conditioned by the cerebral hemispheres, is entirely abolished in brainless animals; for we see that, without any apparent change in external conditions, they move spontaneously, and comport themselves not unlike normal animals. We can, however, in most cases, if not in all, refer these so-called spontaneous movements to immediate ento- or epi-peripheral impressions; whereas, in normal animals, though their so-called spontaneity is primarily derived from a similar source, the connections are more remote and far more difficult to trace.

These and other similar facts lead to the conclusion that between the simplest reflex action and the highest act of intelligence there is no essential difference—each passing by insensible gradations into the other. We can infer only, we can prove nothing conclusively, regarding the existence of states of consciousness in others than ourselves, and less easily in the case of the lower animals than in man. But we are entitled to say that the activity of the lower centres does not affect the consciousness of the individual; for, when by lesion of the internal capsule the sensory tracts are cut off from their cortical connections, the individual has absolutely no consciousness of impressions made upon his organs of sense, so that we may conclude that, in man at least, states of consciousness are indissolubly connected with the activity of the cerebral hemispheres.

The results of ablation of the cerebral hemispheres indicate nothing for or against the doctrine of functional localisation, nor do the experiments of Goltz in the least degree militate against the existence of specific centres; for if, even after complete bilateral extirpation of these centres, the functions which survive do not transcend those capable of being manifested in the entire absence of the cerebral hemispheres, there still remains the question whether the lesions have not caused a loss or paralysis of something of a higher order. That this is so is capable of ample demonstration, of which not the least part has been contributed by the very facts which Goltz himself has ascertained through the numerous and varied devices which he has so ingeniously contrived. It is no explanation of the defects which admittedly result from removal of the cerebral hemispheres to say that they are caused by a loss of intelligence. This is merely restating the facts in a more metaphysical but less intelligible form. We are not, however, dealing with metaphysical terms when we are studying the effects of lesions of the cerebral cortex. We are dealing with material entities connected with sensory and motor tracts, and it is our object to determine, if possible, what are the anatomical and physiological factors which are co-related with the functions which we generalise under the head of intelligence; and there appears to be nothing which can *a priori* be urged against the notion that the various factors of intelligence have their substrata in definite regions specifically related to certain motor and sensory functions. Flourens, as is well known, denied every species of localisation in the cerebral hemispheres. To this conclusion he appears to have been led not more by his own experiments than by the prevalent conceptions as to the unity and indivisibility of the mind, and as a reaction against the organology of Gall and his followers. To Gall, however, let us in passing pay the tribute that in his analysis he followed strictly inductive methods, and made many observations of enduring value; though his synthesis of the brain as a congeries of separate organs, each autonomous in its own sphere, and all mysteriously inherent in some unifying, immaterial substratum, has failed to commend itself to the scientific world. Flourens thus sums up his conclusions:—

"Thus one may remove, anteriorly, or posteriorly, from above, or from the side, a considerable portion of the cerebral lobes without destroying their functions. Even a small portion of these lobes, therefore, suffices for the exercise of their functions. In proportion to the extent of the removal, all the functions become impaired, and gradually fail; and beyond certain limits they are altogether annihilated. The cerebral lobes, therefore, co-operate as a whole in the full and complete exercise of their functions. Finally, when one form of perception is lost, all are lost; when one faculty disappears, all disappear. There are, therefore, no special seats either of special faculties or special perceptions. The faculty of perceiving, judging, and willing one thing resides in the same region as that of perceiving, judging, and willing another; consequently, this faculty, essentially one, resides essentially in one organ."[19]

Though the doctrines of Flourens met with general acceptation, they were contested on experimental grounds by some physiologists, more particularly by Bouillaud.[20] The experiments of Bouillaud on pigeons, dogs, and rabbits led him to conclude that destruction of the anterior lobes alone caused symptoms of profound dementia. Though the animals were able to feel, see, hear, smell, and to execute a number of spontaneous and instinctive movements, they were unable to recognise their relations to the objects by which they were surrounded. They were unable to feed themselves, and had in general lost all reasoning powers. An animal, said he, in which the anterior lobes have been destroyed, "though deprived of the exercise of a more or less considerable number of intellectual acts, continues to enjoy its sensory faculties; a proof that 'sensation' and 'intellection' are not one and the same function, and that they have separate localities." Bouillaud's results have, I think, received confirmation and elucidation from my own experiments on monkeys, as well as those of Goltz and Schrader on dogs and pigeons. Bouillaud, however, did not consider that his own experiments had done more than merely raise the question of localisation, and it was generally believed that, so far at least as experimental data were concerned, the doctrine of specific localisation had no secure basis of support. From the clinical standpoint, however, facts were continually being presented which seemed altogether unintelligible except on some theory of localisation; and clinical observers, such as Bouillaud himself, Andral, and others, wisely suspended their judgment until further facts should be brought to light, which might serve to explain the apparent irreconcilable discrepancy between human pathology and experimental physiology.

Bouillaud[21] recorded certain clinical facts which seemed to indicate a connection between lesions of the anterior lobes and loss of speech, thus affording some confirmation of the theories of Gall on the subject. Dax (1836) established the special relation of aphasia to right hemiplegia and lesions of the left hemisphere; but the connection between aphemia, or aphasia, and lesion more particularly of a definite region of the left hemisphere, namely, the base of the third frontal convolution, was first pointed out by Broca (1861). Broca's observations have since been amply confirmed by clinical and pathological research, and further elucidated by physiological experiment.

The next great advance in cerebral localisation was made by Hughlings Jackson (1861),[22] who, from a study of the forms of epilepsy, now appropriately known by his name, furnished cogent reasons for believing that certain convolutions near, and functionally related to, the corpus striatum had a direct motor signification. By irritation or "discharging lesions" of these convolutions, localised, or general unilateral convulsions of the opposite side of the body were induced. Owing, however, to the fact, as Hughlings Jackson has remarked, that "the damage by disease is often coarse, ill-defined, and widespread," the determination of the functions of the brain by the clinico-pathological method has made comparatively little progress, there being apparently no constant uniformity between the seat of the disease and the sym

[19] *Op. cit.*, p. 99.

[20] "Rech. Exp rim. sur les Fonctions du Cerveau, et sur celles de sa Portion antérieure en particulier." *Journ de Physiol. Expérim.*, 1830, T. x, p. 91.

[21] *Archives de Médecine*, 1825.

[22] *Clinical and Pathological Researches on the Nervous System.*

oms manifested. The difficulty of discriminating between the rect and indirect effects of cerebral lesions has furnished Brown-quard[23] with arguments in favour of his peculiar views, that all s symptoms of cerebral disease are due to some dynamic in-ence exercised by the lesion on parts situated at a distance id always apparently out of reach), which are credited with the nctions lost or otherwise disturbed.

A glance at the accompanying diagram (Fig. 2) founded by ner[24] on the examination of a number of cases of lesion of the t hemisphere will show you the extraordinary diversity in posi-n of those accompanied by practically the same symptom. It ll be seen, for instance, that though the lesions which cause ection of the upper extremity are mostly grouped in a certain gion, yet there is scarcely a point on the convexity of the hemi-ere lesion of which has not caused a similar result. These and ch like are the data on which Exner has founded his theory of *olute* and *relative* centres; absolute centres being those de-uction of which invariably, relative centres being those de-uction of which only frequently, induces the same symptom. e distinction appears to me to have no valid foundation. Mere quency is not a sufficient basis on which to found causal rela-nship. For, if the called relative cen-s can be, and have n times out of num-, destroyed without disturbance of the ction with which y are supposed to related, and if the l function can be nihilated while the tive centres are in-t, it is obvious that relationship is no-ng more than mere ncidence or juxta-ition.

he whole aspect of ebral physiology pathology was re-utionised by the dis-ery, first made by sch and Hitzig in),[25] that certain de-te movements could excited by the di-application of elec-al stimulation to nite regions of the ex cerebri in dogs. these experiments now of historic rest, I extract the mpanying figure . 3) and the de-otion, in their own ds, of the facts ch they had at that time ascertained.

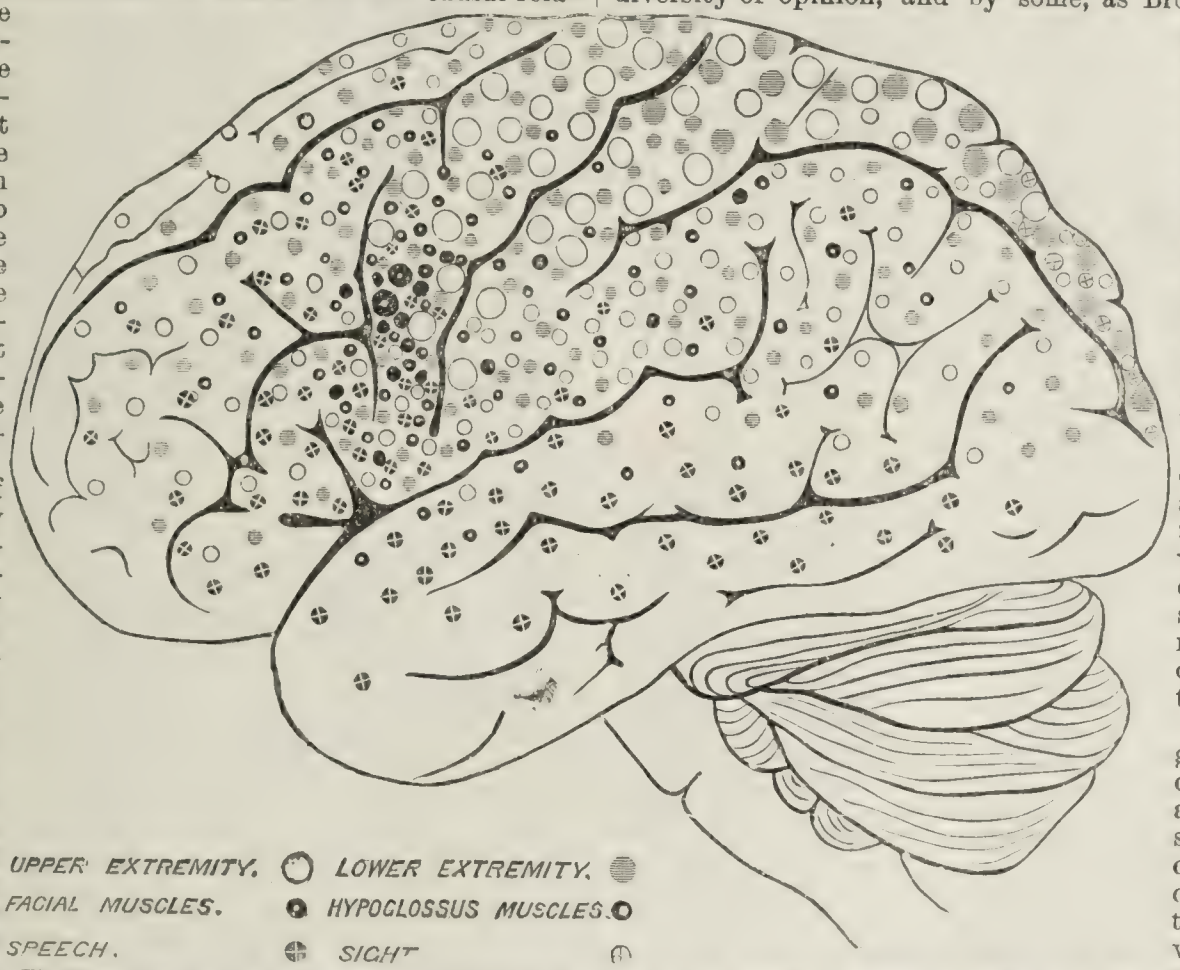


Fig. 2.—After Exner's Tafel xxv. The diagram is marked with larger and smaller circles of the same order. The larger circles indicate the absolute centres, the smaller the relative centres. The intensity of the latter is indicated by the closeness of the circles to each other.

The centre for the neck-muscles (Fig 3 *a*) lies in the lateral p of the prefrontal gyrus at the point where the surface of this c rolution abruptly descends. The outermost extremity of the p frontal gyrus contains, in the neighbourhood of the lateral e of the frontal fissure (Fig. 3 *b*) the centre for the ex-ors and abductors of the fore limb." Somewhat behind same, and nearer the coronal fissure (Fig. 3 *c*) lie ruling centres for the flexion and rotation of the limb. T centre for the hind leg (Fig. 3 *d*) is also found in the p frontal gyrus, but nearer the middle line than that of the f leg, and somewhat further back. The facial (Fig. 3 *e*) is nervated from the middle part of the super-Sylvian gyrus. T region generally has an extension of over 0.5 centimètre, a stretches before and behind the bend over the Sylvian fissure. W nust add that we did not always succeed in getting the neck-cles in action from the first mentioned point. The muscles of the back, tail, and abdomen we have often enough excited to contraction from points lying between those marked, but no circumscribed point from which they could be individually stimulated could be satisfactorily determined. The whole of the convexity lying behind the facial centre we found absolutely unexcitable, even with altogether disproportionate intensity of current."

The subject of the electrical excitability of the cortex and its signification was next taken up by myself in 1873,[26] more particularly with the object of putting to experimental proof the views of Hughlings Jackson in reference to the causation of unilateral epileptiform convulsions. While amply confirming these doctrines in all essential particulars, my attention became specially directed to the question of definite localisation, and I was led minutely to explore, not only the hemispheres of dogs, but also those of monkeys and various other orders of vertebrates. Similar researches have been undertaken and published in almost every country, and by experimenters too numerous to mention, but nowhere with greater care and detail than by Beevor, Horsley, and Schäfer[27] in our own. The facts revealed by electrical exploration of the hemispheres have been, and still are, the subject of considerable diversity of opinion, and by some, as Brown-Séquard,[28] are regarded as of no greater significance than the contortions which may be induced by tickling the sole of the foot. There cannot, however, be a doubt that from them, and the further experiments to which they have pointed the way, has sprung the whole modern doctrine of exact cerebral localisation.

Before discussing the different specific reactions and their functional significance, it will be desirable to enter on a brief consideration of the characters and conditions of the excitability of the cerebral cortex.

In normal states the grey matter of the cortex is entirely or almost entirely, insensible to mechanical stimulation. Luciani, however, states that though the convexity of the hemisphere does not react to this form of stimulation, yet he has been able to produce movements of the opposite limbs by irritation of the walls of the crucial sulcus. Couty[29] also states that he has found the convolutions mechanically excitable after ligature of the cerebral arteries. Whether we accept these statements as being strictly accurate or not, it is certain, as was shown by Franck and Pitres,[30] that when the cortex has become inflamed and congested by exposure or traumatic lesion, it becomes irritable to mechanical stimulation, and may respond not merely by partial movements of the opposite limbs, but also by a unilateral epileptic fit. This is, in fact, the experimental induction of the discharging lesions described by Hughlings Jackson. It is also held by some—for example, Landois[31]—that the cortex is chemically excitable: a fact, however, which may be due to the inflammatory condition of the tissues thereby induced. The most effective excitant is the application, by closely approximated electrodes, of a galvanic or

ysiological Pathology of the Brain, *Lancet*, 1876, and *Archives de Physiologie*, 1877-1890.

[24] *Localisation der Functionen in der Grosshirnrinde des Menschen*, 1881.

[25] *Reichert, u. Du Bois-Reymond's Archiv*, 1870, Heft 3.

[26] Experimental Researches in Cerebral Physiology and Pathology, *West Riding Lunatic Asylum Reports*, vol. iii, 1873.

[27] *Phil. Trans.*, 1888.

[28] *Archives de Physiologie*, January, 1890.

[29] *Comptes Rendus*, March, 1879.

[30] *Archives de Physiologie*, 1883.

[31] Abstract in *Neurolog. Centralblatt*, 1890, p. 145.

faradic current of moderate intensity. Fritsch and Hitzig, in their researches, employed the former, but preference has generally been given by other experimenters to the faradic current as being the best calculated to elicit the characteristic reactions of the cortical centres. When an animal is sufficiently narcotised to abolish all restless or spontaneous movements—and the anæsthesia must not be too profound, otherwise all reactions cease—the application of the electrodes to different regions calls forth definite motor reactions with such uniformity that, when once the limits of the said region have been accurately defined, one may confidently predict the exact movement which will occur in animals of the same species. This is a fact which is beyond all dispute, and has been frequently demonstrated by myself, Horsley, and others, and, indeed, may be regarded as an ordinary lecture experiment.

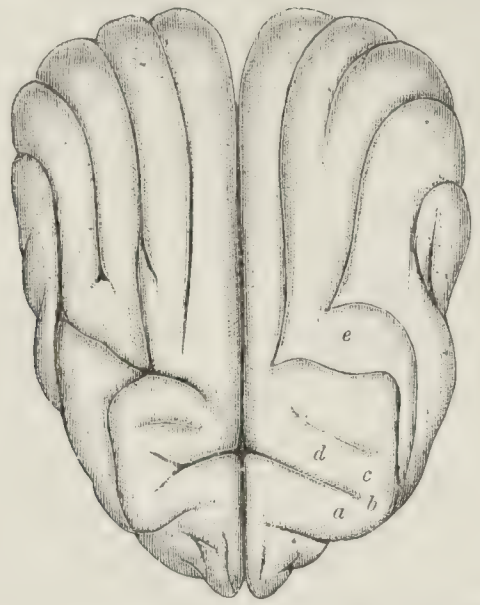


Fig. 3.—Centres of the brain of the dog according to Fritsch and Hitzig.

Couty[32] is perhaps the only physiologist whose results appear to contradict the above statement; but as his experiments were performed on animals not narcotised, it is probable that any irregularity in the effects of excitation was due to spontaneous movements on the part of the animal. Some variations from absolute uniformity may, however, occur from want of symmetry in the convolutions, and still more from changes in the excitability of the cortex. These are particularly apt to occur after repeated exploration, so that a mixture of effects may be produced by diffusion of the current from the one centre into others which have been rendered hyperexcitable by previous stimulation. The lateral diffusion of the current, which always occurs more or less, is the chief obstacle to the precise delimitation of the cortical centres by the method of excitation. Hence the limits of a region may be somewhat differently given by different experimenters; but, making due allowance for all these sources of error, it has been found possible to arrive at a remarkable degree of harmony as to the locality and extent of the respective areas. The extrapolar diffusion of current which can be demonstrated in the brain, as in other animal tissues, has been regarded by Dupuy[33] as an insuperable objection to the theory that the results of application of the electrodes to the cortex are due to stimulation of the cortex itself; and attempts are made to explain them away by mere physical conduction of the currents to centres and tracts at the base of the brain. But no satisfactory explanation can thus be afforded of the manifest differences in reaction which follow the application of the electrodes to regions in close proximity to each other, nor of the total absence of reaction when the electrodes are placed on the island of Reil, which is nearer the base of the brain than other regions which act uniformly and without fail.

The chief objection to the direct excitability of the cortex itself is found in the fact that, even after removal of the cortex, similar reactions are still obtainable when the electrodes are placed on the subjacent medullary fibres. This was first pointed out by Burdon-Sanderson,[34] and has been confirmed by all subsequent experimenters. After removal of the cortex, however, the medullary fibres lose their excitability, like motor nerves separated from the anterior cornua of the spinal cord, so that, after a lapse of four days, no reactions can be produced by the strongest stimulation. This fact completely disposes of the physical-conduction-to-the-base-of-the-brain hypothesis. It has thus been satisfactorily established that the cones of medullary fibres, corresponding to the respective cortical centres, are functionally differentiated like the cortical centres themselves, and, as has been shown by Franck and Pitres,[35] and more recently, with greater detail, by Beevor and Horsley,[36] maintain their individuality, and are echeloned in definite and regular order in the internal capsule.

On the accompanying figure (Fig. 4), kindly supplied me by

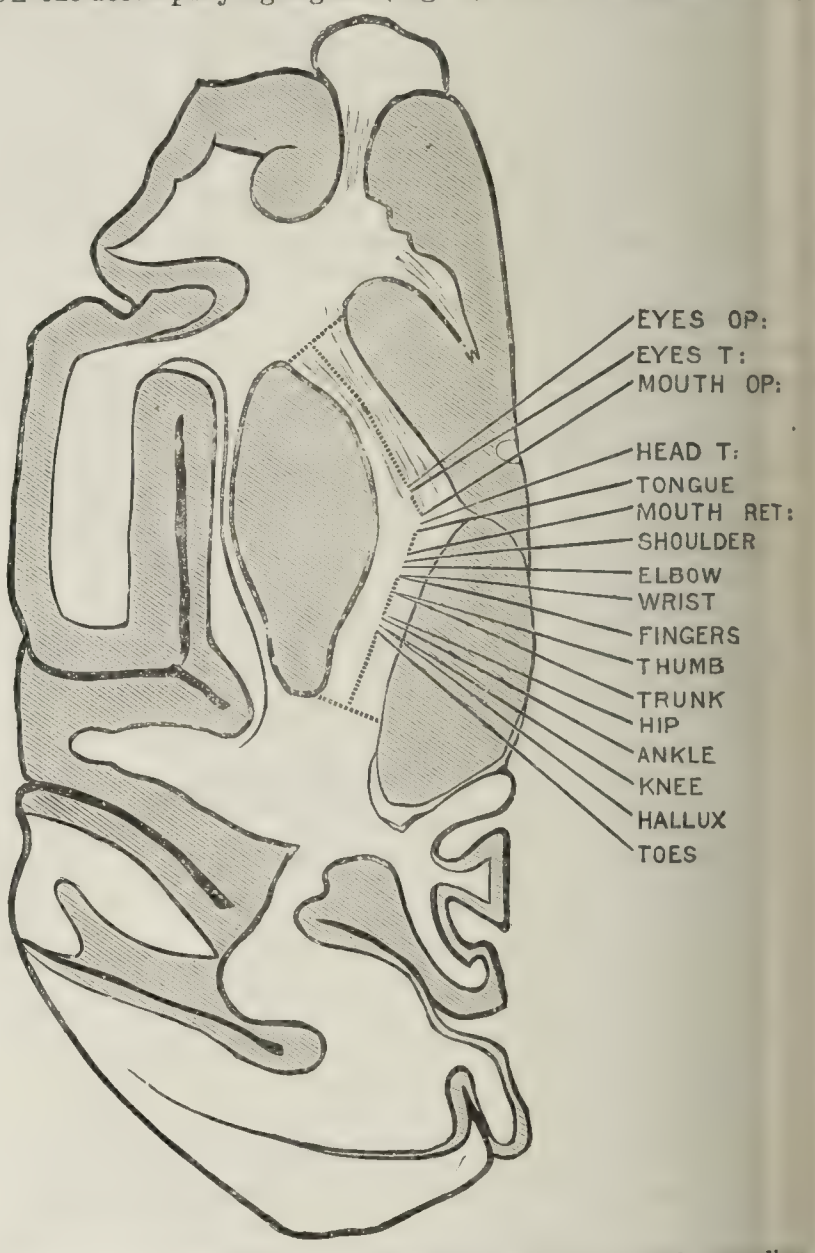


Fig. 4.—Arrangement of the motor fibres of the internal capsule, according to Beevor and Horsley.

Dr. Beevor, are marked the points on the internal capsule from which, according to their recent researches, minimal stimulation excites the respective movements which are indicated on the margin. But it does not follow, because the medullary fibres are excitable, that the corresponding cortical regions are unexcitable, and that the current merely passes through them. It is *a priori* more likely that there is also functional differentiation of the cortical centres to which they are distributed, and that the grey matter is, under normal conditions, the natural excitant of the reactions which we are able to produce by artificial stimulation with the electric current. And a comparison of the respective reactions of the cortex and medullary fibres indicates such differences as can only be explained on the supposition that the cortical centres are themselves excitable.

First, as regards the relative excitability of grey matter and subjacent medullary fibres. This is a point on which there are some differences of opinion, but Putnam found[37] the medullary fibres less excitable than the cortex, so that in order to produce the customary reaction, it was necessary to use a much stronger

[32] Le Cerveau Moteur, *Archives de Physiologie*, 1883.
[33] *Examen de quelques Points de la Physiologie du Cerveau*, 1873.
[34] *Proceedings Royal Society*, June, 1874.
[35] *Comptes Rendus de la Société Biolog.*, 1877.
[36] *Proceedings Royal Society*, No. 286, 1890.
[37] *Boston Med. and Surg. Journal*, 1874.

rrent than before. This has been confirmed by Franck and tres, who have further shown that the diminished excitability nnot be accounted for by mere shock or hæmorrhage, inasmuch the neighbouring grey matter acted as readily as before. They ve further given reasons for believing that the contrary results tained by Richet,[38] and Bubnoff and Heidenhain[39] are due to e action on the cortex of the chloral and morphine der which their experiments were performed. These agents, ithout doubt, paralyse the excitability of the grey matter, was noted by Fritsch and Hitzig, in their experiments, at the anodal closure was a more effective stimulus than e cathodal—a fact which might be interpreted as signifying at the real stimulus proceeded from the virtual cathode in the eper layers of the cortex, or termination of the medullary fibres. is, however, has been shown by Gerber,[40] not to be uniformly e case. Gerber finds that when the cortex is in a normal state e cathode is the more effective stimulant, but that when changes ve occurred from long exposure the anode predominates. These periments would, therefore, indicate that in the normal condi- n of the brain the laws of galvanic excitability are the same as motor nerves.

Another important difference between the reactions of the cor- and the subjacent medullary fibres, which was first pointed t by Franck and Pitres, is that the time lost between the ap- cation of the stimulus and the occurrence of muscular contrac- n is much greater in the case of the former than the latter. is interval, after deducting the time necessary for the trans- ssion of the impulse through the spinal cord and motor nerves, licates a retardation in the cortex of 0.045 second. After re- val of the grey matter and application of the electrodes to the dullary fibres, the period of retardation diminishes to 0.030 cond, that is, about one-third less, and this difference is put at a nsiderably higher figure by Bubnoff and Heidenhain.

The signification of this fact is that the grey matter of the cor- does not behave like an inert layer, which merely allows trans- ssion of the electric current to the medullary fibres, but, like ter nerve centres, stores up and transforms the stimuli which it s received into its own energy.

There is also a characteristic difference between the muscular ves registered on stimulation of the cortex and medullary res respectively. In the latter case the curve rises abruptly, l is of short duration; while in the former it rises more gradu- y, is more prolonged, and frequently marked by the occurrence a secondary tetanus, which latter is altogether peculiar to the tex, and is never seen when the medullary fibres alone are nulated. The cortex is apt, after repeated stimulation, or after receipt of a succession of stimuli, each insufficient to produce ction, to respond by tonic, followed by clonic, spasms of the related muscles of a truly epileptic type. These convulsions d to spread and become generalised in the order and sequence ginally described by Hughlings Jackson. They never occur on nulation of the medullary fibres alone, apart from the inter- tion of the grey matter of the cortex on the one side or the er, and cannot be produced if the cortical centres are entirely troyed on both sides. The duration of the effects of stimula- n of the medullary fibres is strictly proportional to that of the aulus which is applied to them. We shall also see as we pro- l that the effects of localised destruction of the cortex are the nterpart of those of irritation, however induced, and we may n this conclude that there is the same functional differentia- n in the cortex as in the medullary fibres, even if the facts ch I have just mentioned should not be regarded as of them- es completely establishing this proposition.

[38] *Sur les Circonvolutions Cerebrales*, 1879.
[39] *Pflüger's Archiv. f. Physiologie*, 1881.
[40] "Beiträge zur Lehre von der electrischen Reizung des Grosshirns," *Pflüger's Archiv für Physiologie*, Band 39, 1888.

HOOPING-COUGH IN PARIS.—At a recent meeting of the Council Hygiene of the Department of the Seine, a report was presented M. Ollivier which showed that 520 children had died of whoop- cough in Paris during 1889. Of these, 13 were aged less than month, 207 between one month and a year, 142 between one two years, 142 between two and five, and 16 between five and years. The Council passed a resolution that the disease should ooked upon as a very serious illness in children under two s of age, and that cases should be isolated for at least fifteen after the disappearance of the whoop, or, if possible, till the gh has finally ceased.

A CASE OF GASTROSTOMY.

By A. W. MAYO ROBSON, F.R.C.S.,
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ALTHOUGH gastrostomy for non-malignant obstruction is a fairly successful operation, when performed for cancer of the œsophagus it is one of extreme fatality. Any means, therefore, which will help to reduce the mortality may be worth recording.

The patient whose case is related below was operated on by a method first suggested by Mr. Greig Smith, and described by him in his work on *Abdominal Surgery*. After the operation the patient lived in a state of comparative comfort for eleven months, during the whole of which time he never took a particle of food except through the artificial opening into the stomach. By this method of suture the peritoneal coat of the stomach is kept in apposition with the parietal peritoneum in a continuous circle for some distance from the point where the stomach is to be opened. The insertion of two loops of silver wire, as suggested by Mr. Bryant, serves to mark the spot at which the stomach is to be opened, and by means of these wires the stomach can be manipulated whilst the silk suture is being applied. With a round needle threaded with from 12 to 15 inches of moderately thick silk, a continuous suture is passed in the anterior wall of the stomach, in a circle of about 2 inches in diameter under the peritoneal coat, taking up a little of the muscular layer as well, the suture being made to emerge and leave a loop at every three-quarters of an inch of the circle, thus leaving about six loops protruding from the serous surface of the stomach. (Fig. 1).

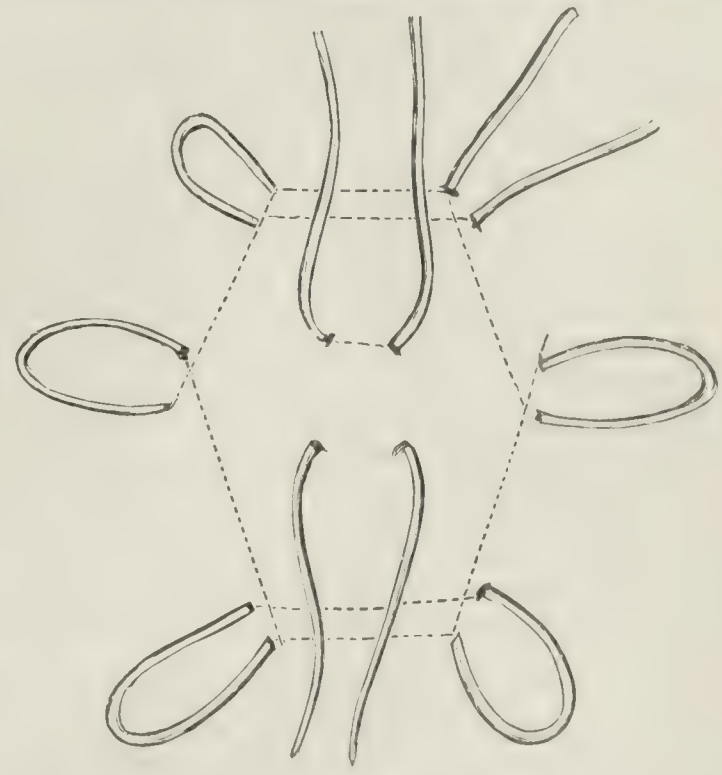


Fig. 1.

At corresponding situations on the skin, about half an inch from the edge of the wound, a handled needle with a hooked eye is pushed through all the layers of the abdominal walls, catches up the loops, and brings them to the surface of the abdomen one after another. As each loop is drawn up a piece of elastic tubing or a piece of catheter is slipped into it. The loops are then moderately tightened over the catheter by pulling at the ends of the silk. Finally, the ends of the silver suture are hooked under the catheter, serving to keep the exposed parts well up in the gaping wound. (Fig. 2). It will thus be seen that by this method of fixing the stomach accurate peritoneal apposition is obtained over a large space, and the stomach is not dragged out too far, thus lessening the risk of a dribbling fistula. Moreover, the method is rapidly and easily carried out.

History of the Case.[1]—T. O., aged 51, admitted to the Leeds In-

[1] Notes furnished by my house-surgeon, Mr. Frank Hudson.

firmary April 18th, 1889, under Dr. Churton's care, and transferred to Mr. Mayo Robson for surgical treatment May 29th. The patient had been married twenty years. No history of any venereal disease, or of swallowing any hot or caustic fluid. Five months before admission he began to have difficulty in taking solid food, which frequently regurgitated, and was at times returned by vomiting. This lasted for several weeks, when he was somewhat better for a short time; the vomiting, however, returned, and regularly persisted after every meal. For some little time before admission liquids as well as solids were rejected. He had lost flesh considerably.

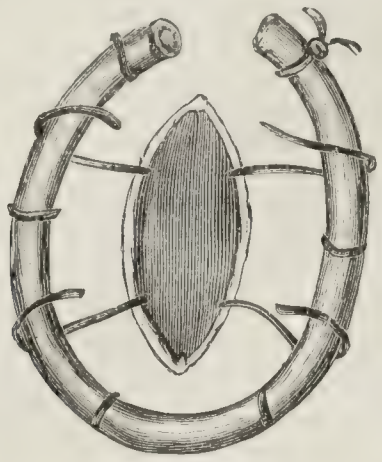


Fig. 2.

On admission the patient was very thin and wasted. He vomited immediately after taking any kind of food or liquid, but had no pain before, during, or after vomiting. The abdomen was flaccid, and he had no pain in the epigastrium. On attempting to pass œsophageal bougies they were always arrested at a point $12\frac{1}{2}$ inches from the teeth, and not even the smallest could be passed through the stricture. When transferred to the surgical ward no food had entered the stomach for several days, and he was being fed by nutrient enemata.

Operation May 30th.—The usual antiseptic precautions were adopted, the abdomen having been purified by a carbolic dressing worn during the previous twelve hours. The patient was anæsthetised with the A.C.E. mixture. A vertical incision of 3 inches, starting from just below the costal margin, was made along the outer border of the left rectus. After the parietal peritoneum had been incised to the full extent of the wound, it was sutured to the skin margin; the stomach was then fixed to the abdominal wall in the manner described at the beginning of the paper. The wound was dressed with a layer of sal alembroth gauze, over which was placed a large pad of salufer wool.

May 31st. The patient passed a fair night, the nutrient suppositories and enemata having been given every four hours alternately. Temperature normal.

June 1st. No pain or sickness, pulse fair, temperature normal; enemata continued.

June 2nd. Patient rather weaker, and complaining seriously of thirst, which was relieved by the injection of a pint of tepid water into the bowel.

June 3rd. Enemata not retained; temperature normal; patient feeling weaker. A small opening was made into the stomach by means of a tenotomy knife. A No. 4 catheter was passed through the opening, and the following fluid introduced into the stomach at 11 A.M. by means of a funnel and india-rubber tubing attached to the end of the catheter: beef-tea, 3 ounces; condensed peptonised milk, 3 drachms; brandy, 3 drachms; water to 6 ounces. 3.30 P.M. Beef-tea, 5 ounces; peptonised milk, 5 drachms; Brand's essence, $\frac{1}{2}$ ounce; brandy, 4 drachms; water to 11 ounces. 9 P.M. Beef-tea, 4 ounces; peptonised milk, 5 drachms; yolk of one egg; Brand's essence, $\frac{1}{2}$ ounce; brandy, 1 ounce; water to 12 ounces. 11 P.M. Patient felt very comfortable since being fed.

June 4th. Had a good night, and expressed himself as feeling very well. Fed by the funnel and tube with: milk, 8 ounces; beef-tea, 5 ounces; Brand's essence, 1 ounce; yolk of one egg; brandy, 4 drachms, at 9.15 A.M. Milk, 8 ounces; brandy, $\frac{1}{2}$ ounce; beef-tea, 4 ounces; yolk of one egg, at 1.30 P.M. Brandy, $\frac{1}{2}$ ounce; milk, 6 ounces; beef-tea, $5\frac{1}{2}$ ounces, at 5.30 P.M. Milk, 8 ounces; brandy, $\frac{1}{2}$ ounce; yolk of one egg; Brand's essence, $\frac{1}{2}$ ounce; beef-tea, 3 ounces, at 9.30 P.M.

June 5th. Had a good night, was fed through the tube every four hours with the same kind of food; 12 ounces at 9 A.M., 13 ounces at 1 P.M., 14 ounces at 5 P.M., and 13 ounces at 9 P.M. The patient had improved steadily ever since the stomach had been opened. He usually complained of a sense of fulness just at the time of the fluid being introduced.

June 8th. Sutures removed; slight discharge of gastric juice from stomach, hence a larger catheter was employed.

June 14th. Patient was allowed to sit up, and was fed every four hours through the tube.

June 24th. A short celluloid tube with a stopper was fitted into the wound, and the patient could take it out and reintroduce it for himself, and by taking out the stopper he could easily feed himself through the opening. He was made an out-patient, having gained half a stone in weight, and looking and feeling comfortable.

When seen in August, he had gained over a stone in weight, and seemed very happy and comfortable, which condition continued up to February, 1890, when his general health again began to fail, and he died at his own home from exhaustion, due to the gradual progress of the original malignant disease of the œsophagus on April 11th.

CHRONIC INTESTINAL OBSTRUCTION FOLLOWING INJURY: LAPAROTOMY.

By R. HAMILTON RUSSELL, F.R.C.S.Eng,
Melbourne, Victoria.

The following case came under my care on board Messrs. Green and Co.'s ship, *Carlisle Castle*, during a recent voyage from London to Melbourne.

The patient, A. L., was an ordinary seaman, aged 17. On October 10th, 1889, while working on the forecastle head in heavy weather, a big sea came over, carried him off his legs, and narrowly missed washing him overboard. In the effort of saving himself he was severely strained and hurt, the right leg seeming to be the part most injured. He turned into his bunk, and three or four hours later pain came on in the abdomen and back. This pain became steadily worse, and was of a dull aching character, felt chiefly in the hypogastrium. No vomiting or nausea; micturition normal.

On October 12th I first saw him, and he gave the above history. He complained of abdominal and lumbar pain; the pain in the leg was gone.

On examining the abdomen, the appearance was quite natural; some tenderness on pressure all over, most marked, however, about the umbilical and hypogastric regions; no distension, no rigidity, no tumour; palpation and percussion revealed nothing abnormal; face not expressive of marked distress or pain; tongue clean and moist; pulse remarkably slow, 60. On standing up he was unable to straighten the trunk completely, but walked in a slightly bent attitude, and the attempt to walk greatly aggravated the pain. He had previously always enjoyed excellent health; never had typhoid or any other fever, nor had he ever had any abdominal trouble before. Bowels always regular, and had been so up to the date of the accident.

October 13th. Black draught ℥ ij given in the morning; effect apparently *nil;* the appetite was fair, but thirst was rather troublesome; urine somewhat scanty and high-coloured; general condition unchanged.

October 14th. Ol. ricini ℥ j before breakfast had no effect, but a drop of croton oil given during the afternoon caused a marked aggravation of the pain, and the face began to assume a somewhat distressed look; no action of the bowels took place, however. given one-sixth of a grain of opium every hour; diet, arrowroot and milk in small quantities. Until this day I had not seriously suspected the presence of intestinal obstruction.

October 15th. Fair night; pain much relieved; volunteered that the medicine had caused him to pass more water; told me he had passed small quantities of flatus at times during the last few days. On examining the rectum, well-marked "ballooning" was discovered, the finger seeming to enter a larger cavity; copious enema administered with long tube without effect.

October 19th. Patient had been taking opium and resting in his bunk since last note; the general condition was unchanged; pain and tenderness was diminished; he slept fairly; no nausea or vomiting; facial expression placid, and he lay and read during the day; he had occasionally passed a little flatus. I thought

yself justified in again trying a purgative, and gave ol. ricini ℥i nd ol. tiglii ♏j; this produced a scanty evacuation, but there as a slight increase in the pain and no amelioration of any of ıe other symptoms. Examination of the abdomen gave the same egative result as before, but he still suffered the same dull ragging pain of which he had complained all along. Opium nd general treatment by rest continued.

October 26th. He seemed so well, with the exception of the mparatively slight pain, that I gave him a calomel and jalap ırgative the evening before, followed by a saline in the morn-ıg, and a slight action of the bowels resulted; the pain minished, and I hoped that the obstruction had been over-ome. Opium discontinued.

October 27th. Allowed to get up a little; but that seemed to ıuse a return of the pain, and he still was unable to straighten ımself properly.

October 28th. Pain much worse; face distinctly anxious; course again had to opium and confinement to the bunk.

October 29th. Vomited for the first time; pain was not so much lieved by opium as formerly.

October 31st. Slight vomiting again; there had been no passage flatus during the last few days.

November 3rd. Slight vomiting recurred; patient was wandering e previous night; the abdominal symptoms were unchanged; e pain still persisted but was never violent, and was controlled opium; the face, however, was beginning to look haggard and awn.

November 5th. Some vomiting again; patient wandered a good al at night but was calm and placid during the day.

November 6th. As he was obviously losing ground, I explained e case fully to him, and placed before him the reasons for and ainst immediate operation, leaving the final choice to him tirely. Without hesitation he elected to undergo operation at ce. As the weather was calm and favourable, I determined t to delay a day, and at 2 P.M., with the aid of two lay assist-ts, I put the patient under chloroform in my own cabin, and ened the abdomen through the linea alba by a three-inch cision below the umbilicus. Examining first the cæcum, I und nothing wrong there; but on turning to the sigmoid flexure d descending colon, the latter portion of bowel seemed to be duly fixed in its upper part, and, making slight traction upon I experienced a sensation as of something suddenly giving ıy, releasing that portion of bowel, which was then readily awn forward into view. It was then seen that the transverse lon was occupied by a dense mass of fæcal accumulation, the rmation of which had evidently been caused by an obstruction the region of the splenic flexure. Immediately below the fæcal ıss the bowel was deeply furrowed transversely, an appearance used, as it seemed to me, by the bowel having been acutely xed at this spot; there were no other markings sufficiently ell-defined to throw any further light on the cause of the ppage. The lower part of the descending colon, together with e sigmoid flexure and rectum contained small scattered frag-ents of fæcal matter. Having endeavoured unsuccessfully to certain more as to the mode of production of the lesion by sertion of my hand, but, having satisfied myself that, whatever e cause of the obstruction had been, the bowel was now free, I osed the wound in the usual manner and dressed it with lint pped in iodised water. The patient was then carried back to s bunk in the forecastle. Pain severe after operation. Morphine e-third of a grain hypodermically.

November 7th. Bilious vomiting severe; catheter passed at 4 d 10 A.M.; the pain from which he suffered constantly before e operation had gone completely; troublesome thirst; sipped ld water occasionally, but took nothing else.

November 8th. Sickness gradually passed off, and he began to ke a little food, and on November 9th he had a mutton chop for ıner.

November 11th. Five days after the operation, he complained of in exactly similar to that from which he suffered before the eration, and during the morning he had a sensation as though a rd mass had moved down towards the rectum, upon which the in disappeared: a simple enema brought away a large quantity fæces.

November 12th. Return of pain in the morning, followed by other copious motion; castor oil ℥ss given in the evening, ısing two good actions.

From this time forward, progress was uninterrupted. All the tches were removed on the tenth day, by which time the wound was soundly healed. There was no sign of febrile disturbance throughout. On the 17th he appeared on deck in a reclining chair, and on November 24th, as soon as the ship was at anchor in Hobson's Bay, he was allowed to get up and walk about with a broad piece of strapping as an abdominal support. He subsequently, at my suggestion, obtained his discharge from the ship, and exchanged sea-life for a less arduous one on shore.

REMARKS.—The case presents many features of clinical interest. A case of genuine intestinal obstruction, distinguished by a marked absence of the symptoms usually associated with that condition, with the exception of obstinate constipation and some not very severe pain, must under any circumstances be a matter of interest; the fact that it should have followed immediately upon, and presumably have been caused by, a violent injury, makes it yet more remarkable. For many days I was uncertain whether I really had to deal with a case of mechanical obstruction at all. I regret that at the operation I failed to ascertain the exact anatomy of the obstruction; my belief is that the great bowel must have slipped through a rent in the mesentery, and that the obstruction was caused by kinking of the bowel rather than by its constriction. This would seem to explain the passage of flatus and the occasional production of a scanty motion by purgatives in the earlier days, which occurrences would become more difficult later as the fæces became massed up behind the obstruction. I must say I failed to find any rent or opening through which the bowel could have slipped, but such might easily escape a mere exploration with the hand; while this hypothesis seems best to fit in with the clinical features of the case, and also the extreme facility with which the bowel was released at the operation.

I may mention that the fortunate result was furthered in no small measure by the zeal and care with which the patient was tended by one of his brother tars.

A SUCCESSFUL CASE OF INGUINAL COLOTOMY FOR ABSENCE OF RECTUM IN A CHILD FIVE DAYS OLD.

BY T. ARTHUR HELME, M.D., M.C.,

Resident Obstetric Surgeon, St. Mary's Hospital, Manchester; formerly Honorary Physician to the Women's and Cowgate Dispensaries, and Assistant Lecturer on Midwifery and Diseases of Women and Children, Edinburgh.

COMPLETE obstruction of the bowels in the newborn child is a not very rare occurrence, dependent on one or other of a variety of pathological conditions. Most commonly the cause is found in the imperfect development of the lower bowel. It is a matter of importance, whenever the bowels of a newborn child do not move naturally, to make a careful examination for any gross lesion of the anus or rectum before proceeding with purgative treatment; otherwise the only result may be to aggravate the child's suffering and precipitate the commonly fatal issue. The history of the case I now relate suggests the necessity of this precaution, and at the same time the successful result of the operative treatment adopted shows what may be hoped for from timely interference.

A male child, aged 5 days, was brought to me on the evening of April 18th, 1890, with the following history. The child was born on the evening of April 13th, when it presented every outward appearance of full and healthy development; the mother was a strong and healthy young woman of 26, and this her first child. Two days later, April 15th, as the bowels had not yet moved, castor oil was administered. The desired effect not being brought about, the castor oil was repeated several times on the three succeeding days, and on the evening of April 18th, as the bowels still remained obdurate, the nurse was ordered to give the child a soap-water enema. As this could not be satisfactorily done, the child was brought to me; it presented a most pitiable appearance, its face was pinched and emaciated, its arms and body in constant movement, its legs repeatedly drawn up in a piteous manner on to the abdomen, while it gave out a continuous moan; evidently the child was in extreme pain. On examination, the abdomen was found to be greatly distended, the walls so thinned that the intestinal coils could be seen and their movements watched.

The perineal region presented a normal appearance, but on introducing the little finger into the anus I found that the canal

was blocked by a membranous septum about half-an-inch from the skin surface. No bulging could be felt during the child's straining, from which it was evident that the lower end of the rectum was not in contact with the septum. Nevertheless, I decided to puncture the membrane. No escape of intestinal contents followed; I therefore carefully dilated the opening already made, and introduced my finger into the peritoneal cavity. This examination confirmed my opinion; the rectum was altogether wanting, the blind bulging extremity of the sigmoid flexure being felt at the pelvic brim. I decided, therefore, to perform an inguinal colotomy.

The operation, after washing the anal depression with weak sublimate solution, and introducing a strip of iodoform gauze, was done in the usual way on the left side. The abdominal wall was incised down to the peritoneum, the incision being about one inch and a half in length, parallel to the outer part of Poupart's ligament, and commencing externally a little above the anterior superior spine of the ileum. After compressing one or two bleeding points the peritoneal sac was carefully opened, when the bowel immediately presented in the wound. Two firm silk sutures were passed through the skin and parietal peritoneum of the one side of the incision (the muscular tissue being avoided) through the bowel and then through the peritoneum and skin of the other side. The bowel was then incised longitudinally for half-an-inch, the silk sutures hooked up in a loop, divided, and tied on their respective sides; additional sutures were put in, completely closing the peritoneal sac. An immense quantity of material escaped from the bowel.

For several days after the operation there was considerable redness encircling the wound, and some sloughing of cellular tissue around the adherent peritoneal surfaces. Gradually, however, this healed, while the child, fed on peptonised milk, throve well, and was discharged in an excellent state of health on the seventeenth day after operation. The mucous membrane had retracted within the bowel, and the wound had healed perfectly. The sound introduced through the false anus passes in a downward direction for little more than half-an-inch, striking there the blind extremity of the colon.

This condition, complete development of the anus with absence of the rectum, is rare. It is one that is likely to mislead the practitioner unless a very careful examination is made. Even on careful inspection the child appears to be perfectly developed, and unless the finger is passed into the anus the cause of the obstruction cannot be ascertained.

The history of this case of obstruction in the newborn child serves to emphasise the necessity of a careful digital examination of the bowel before resorting to any medicinal treatment. After the condition has been recognised the choice of operation seems to me a simple one. There are two alternatives, inguinal or lumbar colotomy, but the three facts, namely (1) the small amount of space available; (2) the frequency with which one finds a long mesocolon in the infant, and the consequent displacement of the colon; (3) the relatively large size of the kidney, and the consequent risk of injuring it, turn the balance in favour of opening the bowel in the groin.

ON THE DIAGNOSIS AND TREATMENT OF METRORRHAGIA.

By ARTHUR W. EDIS, M.D.Lond., F.R.C.P.,
Senior Physician to the Chelsea Hospital for Women; late Obstetric Physician to the Middlesex Hospital.

Everyone engaged in the daily routine of practice must frequently have met with cases of severe uterine hæmorrhage which puzzled him not a little, both as to their diagnosis and treatment, caused him much anxiety and worry at the time, and possibly led to much unpleasantness. With the hope of throwing some light upon the nature of these difficult cases, I offer the following remarks, trusting they may prove of service to some.

Of all the organs of the body, the uterus alone is subject to periodical hæmorrhages as a natural physiological process, during some thirty years of the individual's existence. This function is influenced by many and various conditions, both general and local, often exceedingly difficult to understand.

Menorrhagia must not be regarded as a disease or entity *per se*, for which one method of treatment is universally applicable, nor is it necessarily an invariable evidence of disease, for it may be merely an expression of constitutional or general vascular tension, the uterine mucous membrane acting, so to speak, as a safety valve, the hæmorrhage being positively beneficial, and affording us a useful hint as to treatment.

In attempting to deal with these cases, our first object should be to arrive at a correct diagnosis of the predisposing and exciting causes, for, until this be determined, any treatment must be empirical, and we are just as likely to be doing harm as good in attempting to repress the hæmorrhage by ordinary routine treatment.

The principle of diagnosis by exclusion is one which approves itself to many, and for general purposes is to be commended, determining, in fact, to what cause the loss is not due. This, of course, can only be done by knowing beforehand what are the most likely causes of severe uterine hæmorrhage—the possibilities, so to speak—and then eliminating one after the other, until we have left only two or more probabilities. It is more especially in attempting to deal with a symptom like this that we see the importance of the gynæcologist being a good all-round general practitioner, with special experience in uterine disorders, not a mere specialist, who can see nothing amiss in a patient except through a vaginal speculum.

Before even attempting to make a local investigation of the pelvic organs, we should be careful to exclude any general constitutional conditions, such as are not infrequently met with from impairment of the function of the heart, liver, or kidneys, aggravated, it may be, by the injudicious employment of alcohol, which had been prescribed with a view of relieving the more distressing symptoms.

Some of the most difficult cases, as regards diagnosis, occur at or about the so-called climacteric period. Terminal floodings are by no means infrequent. A patient becomes irregular, passes over an interval of several months without seeing anything, and then has profuse uterine hæmorrhage. This may merely imply the lessening of arterial tension at the surface of least resistance—Nature's method of affording relief—or it may be evidence of hepatic congestion due to the abuse of alcohol, a miscarriage, or the first indication of commencing malignant degeneration of the cervix uteri.

We should always endeavour to get as clear and concise a history as possible, but be careful to elicit facts and not be misled by theories. Having satisfied ourselves, so far as possible, that the hæmorrhage is due to some local and not constitutional condition, we must then endeavour to determine the exact nature of this lesion.

Speaking generally, the most frequent local causes of metrorrhagia will be found to be threatening miscarriage; retained products of conception from incomplete abortion, or retention of a small portion of placenta; subinvolution with granular erosion or laceration of the cervix uteri; villous endometritis; hæmatocele; new growths in the form of polypi, fibroids, or malignant disease of the fundus or cervix uteri; retroflexion of the uterus, with or without prolapse of one or both ovaries.

Exceptionally we must not overlook the possibility of extra-uterine gestation, cystic degeneration of the villi of the chorion, and inversion of the uterus. The mere fact of a patient going even a few weeks beyond the ordinary time at which the menstrual period should have recurred, and then coming on profusely unwell, should put us on our guard as to the possibility of a miscarriage.

If pain of a colicky nature on either side of the abdomen has preceded the loss, ectopic or extrauterine gestation should be suspected, and the symptoms carefully inquired into. The presence of some enlargement behind or to one side of the uterus would still further point to such a condition being present.

In case of hæmatocele the attack occurs, more or less suddenly at or about a menstrual epoch, producing well marked symptoms of shock, fainting, and pelvic discomfort. There is generally a history of chill, as from sitting on damp grass or getting wet, undue or prolonged fatigue or other likely cause of that nature.

Any one of the causes mentioned being sufficient to cause excessive loss, it follows that a coincidence of two or more of these conditions will be still more likely to keep it up; and herein lies an important hint for treatment.

A patient may be the subject of intramural fibroid of the uterus for years without necessarily suffering from excessive loss, but if

s not infrequently happens, the endometrium becomes affected ith villous degeneration, metrorrhagia often becomes a marked ymptom.

Where hysterectomy is not deemed advisable, or the patient re- ises all idea of operation, curetting the uterine cavity or apply- ig some strong styptic may effectually prevent the recurrence of rofuse hæmorrhage, and thus prove of much service in removing ie symptom for which we were consulted. Again, a patient may ave had a fibroid tumour for years without any very urgent ymptoms, but errors in diet, and undue stimulation by alcohol, ay induce severe hæmorrhage. Careful attention to the former id abstention from the latter, may make all the difference as to ie loss incurred.

Treatment.—A correct diagnosis being the first and most im- ortant element of treatment, it follows as a matter of course that aving ascertained the presumed cause we know then what our an of action should be. Still there are some practical hints hich may be found to be of value to some. Where the hæmor- age results from constitutional or general conditions it is not ways wise to attempt to check the flow at once, unless it is pro- icing such an effect upon the system generally as to suggest the pediency of arresting it at all hazards. In certain cases of eart disease uterine hæmorrhage, in place of aggravating, seems relieve the cardiac symptoms, and should not therefore be astily repressed. Strophanthus, digitalis, and aconite here ove most useful. Where the action of the liver seems to be at ult, attention to diet, abstention from alcohol, and the adminis- ation of a few grains of calomel or pil. hydrarg. or euonymin, llowed by a brisk saline aperient, will probably be indicated. albuminuria be present, or the kidneys seem to be at fault, courage vicarious action of skin and bowels by means of dia- oretics and purgatives, and follow out any other indications ggested. In cases of menorrhagic chlorosis, bromide of potas- um in half-drachm doses has proved of service, iron being ven between the periods with strychnine; attention being also ven to ordinary hygienic details, avoidance of tight lacing and ysical overwork. It is well to remember that hæmophilia, urvy, malaria from residence in damp or marshy districts, lead isoning, and other unusual conditions will occasionally explain e presence of metrorrhagia. The mere recognition of the use will be at once a suggestion as to the proper course of eatment.

Where uterine hæmorrhage persists, notwithstanding the em- oyment of constitutional measures, and there is no apparent al cause to account for it, we should without further delay late the cervix uteri and explore the interior of the uterus. merous instances have been recorded of patients dying from un- ntrollable hæmorrhage, where a *post-mortem* examination re- aled the existence of some intrauterine growth, such as a poly- s or submucous fibroid, retained product of conception, or fun- id condition of the endometrium, which could readily have been moved or dealt with had appropriate measures been adopted in ne, and the patient's life thus saved.

The mere fact of inserting a sponge tent into the cervix uteri rests the hæmorrhage for the time being, and facilitates subse- ent exploration of the uterine cavity. As to any risk of reflux rough the Fallopian tube, as sometimes spoken of, it is a mere ionary objection, and need not deter us from employing dilata- n in suitable cases. Plugging the vagina is a very unscientific ocedure, as well as being unsatisfactory and inefficient. It ould seldom, if ever, be resorted to.

It would clearly be impossible in these brief remarks to indi- te in detail the methods of local treatment, such as curetting villous endometritis, removing polypi, operating for cancer, the e of electricity in cases of myoma, the best method of dealing th cases of incomplete abortion, or replacing an inverted uterus. we have once clearly made out the indications for treatment the t is merely a matter of detail. But now and again instances cur where no assignable cause, either constitutional or local, a be made out, and where remedies fail to restrain the hæmor- age. In such cases the hot vaginal douche may prove of service. even washing out the uterine cavity with hot water through a uble current catheter, provided the cervix be patulous enough to mit it. Should this fail it may be considered requisite to wash t the interior of the uterus with a strong solution of iodine or n. As a *dernier ressort*, the insertion of a sponge tent into the rvix uteri may be effected.

The reliable remedies at our disposal for checking or arresting erine hæmorrhage are really very few. Ergot is unquestionably one of our most potent; hydrastis Canadensis is a valuable agent, and far too little generally known. In cases of myoma it often proves of service when ergot has failed. Hamamelis, which forms the basis of the American nostrum hazeline, is sometimes useful. Quinine and strychnine, alone or in combination, often succeed in checking or arresting hæmorrhage in those cases where the system is much depressed from repeated or prolonged losses. Bromide of potassium in cases of ovarian irritation, and even in hæmatocele, possesses the power of checking hæmorrhage equal, if not superior, to that of any remedy we possess. Chlorate of potash in combination with ergot has lately been strongly recommended. Opium is beneficial in cases where the loss has already been severe. Sulphuric acid and opium used to be, and still is, with some practitioners, a favourite remedy; so, also, acetate of lead and opium in form of pill.

The ordinary astringents, such as gallic and sulphuric acid, have really very little influence in restraining hæmorrhage, and are far too often relied upon. Iron is often of much benefit in those cases where the loss has been very profuse, as in myomas, and the blood has become so attenuated as to pass readily through the capillaries. Digitalis, in combination with iron, proves most valuable in cardiac complications.

In place, however, of attempting empirically to deal with the effect, we should always endeavour to arrive at a definite opinion as to the cause of the hæmorrhage, and, if we can deal with this satisfactorily, the treatment is very simple.

MEMORANDA;

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

ALBUMINURIA WITHOUT DROPSY.

DR. GOODHART'S lectures, recently published in the JOURNAL, recall to my mind two cases which appear to me worth reporting.

The first was a girl, aged nearly 14, who was brought to me as an out-patient at the Hospital for Sick Children in May, 1887. She was suffering from diarrhœa and vomiting; there was no œdema; and the appearance was by no means anæmic. The temperature (taken in the morning) was subnormal. Careful examination showed no evidence of lung disease. There was certainly no more wasting than might have been accounted for by the persistent diarrhœa. The illness appeared to have commenced five years before with headache and sickness; the patient had never been really well since. No œdema had ever been observed. So far as I could gather, the urine had never been tested until the patient came under my care. I found it contained more than half its volume of albumen, that is, on complete subsidence after boiling.

The treatment which gave most relief was the administration of jaborandi, the patient being kept in bed. When free diaphoresis was established by this means, the diarrhœa became much less and the appetite improved. Œdema, which had appeared since the first observation, while the patient was under other treatment, wholly disappeared again; and the quantity of albumen was sometimes as low as one-seventh, although it rose again at times to one-half. The dose of jaborandi was seven minims of the tincture three times daily, increased gradually to twenty minims as tolerance of the drug was produced by continued administration. The improvement, however, though sufficiently marked, was only temporary. In August the diarrhœa returned, in spite of free diaphoresis maintained by the jaborandi. And this continued more or less until the patient ceased to be under my care in November. Not long afterwards she died. No *post-mortem* examination was obtained.

My second case was that of a young man, aged 20, who came before me as a candidate for life insurance. The most careful inquiry failed to elicit the slightest evidence of ill-health in any way. His complexion was healthily florid; his muscles were well developed and powerful; he was an enthusiastic football player. Nevertheless, the urine contained one-third of albumen; and from September, 1889, to January, 1890 (after which I lost sight of the patient), the urine never contained less than one-fourth of albu-

men, and sometimes more than half. Specimens procured at all times of the day were taken. That passed before breakfast contained rather less than was found later in the day. Vegetarian diet did not affect the quantity of albumen; neither did any of the drugs that I prescribed. In the meantime the patient's health continued to all appearance absolutely perfect. On November 23rd he astonished me with the information that he had got married a few days before. His albuminuria was in no way affected by this event.

The second case was a very remarkable one. The albuminuria was certainly not to be described as "cyclic;" it was persistent. The quantity of albumen was very great; and yet the patient continued to go about his ordinary business entirely unconscious of the slightest deviation from perfect health.

The first case was not so extraordinary; but its history suggests practical lessons too obvious to need pointing out.

FREDERIC C. COLEY, M.D.,
Physician to the Hospital for Sick Children, Newcastle, and Northern Counties Hospital for Diseases of the Chest.

SEQUEL TO A CASE OF GASTRO-ENTEROSTOMY.

IN the JOURNAL of February 8th, 1890, is recorded my case of gastro-enterostomy for unremovable malignant disease. The improved state of the patient, as there detailed, was maintained until about two months after the operation, when a change occurred; he complained of almost constant pain, took very little nourishment, had fluctuations of temperature, got weaker and weaker, and died on April 24th, four months after the operation.

At the *post-mortem* examination (twenty-four hours after death) the jejunum was found firmly adherent to the stomach, but the opening from the stomach into it (the jejunum) was firmly closed—so firmly that the only indication to the naked eye as to the spot where the incision had been was the presence of unchanged silk sutures, the ends hanging free into the stomach. There were no traces of the bone plates. Water injected through the pylorus ran freely through the bowels. The malignant mass had broken down considerably, its centre being occupied by about an ounce of pus; the duodenum and head of the pancreas were involved. The liver had, scattered through its substance, numerous round white tumours, varying in size, softening in their centres. Right kidney healthy; left kidney, capsule adherent to pelvis, containing a small quantity of pus.

The specimen is now in the Museum of University College, Liverpool.

The remarkable points are the closing of the opening at the time the patient seemed to be, and expressed himself as, improved, and also the presence of unchanged silk sutures after four months, pointing to the desirability of adopting Mr. Jessett's suggestion by using some less permanent material in future cases.

GEO. S. STANSFIELD, M.R.C.S., etc.,
Honorary Surgeon Birkenhead Borough Hospital.

VENESECTION IN PUERPERAL ECLAMPSIA.

I THINK the following case worth recording as an argument in favour of venesection in suitable cases of puerperal convulsions. M. B., aged 29, was confined of a living male child in the evening of June 23th; she was attended by a midwife, and everything passed off normally. I was summoned to her at 3 A.M. the following morning, as she felt in very great pain all over. On my arrival, I found she was suffering from flatulence, accompanied by nausea and pain in the stomach. I administered a carminative and calomel 5 grains. I saw her at 9.30 the same morning, and found that convulsions had commenced at 6 A.M., that these had occurred every twenty minutes, and lasted some three minutes. She was a stout, muscular, florid, full-blooded woman, and when I saw her was unconscious, foaming at the mouth, very restless, and continually throwing herself about, vomiting freely green-stained mucus, with a pulse of 100°. I at once injected a quarter of a grain of pilocarpin, and waited a quarter of an hour. Another violent convulsion then occurred. As it was impossible to administer anything by the mouth on account of the vomiting, and having no chloroform with me, I bled her from the arm to twelve ounces. The effect was immediate: the patient became quiet, the vomiting to a great extent ceased, and she lay quietly in bed. I then left her, and returned in four hours' time to find that she was much quieter, more conscious, and that she had only been convulsed three times since the bleeding, and at greater intervals. She shortly after regained perfect consciousness, desired to be changed, and passed a good night, but was perfectly oblivious of all that she had passed through. I examined the first specimen of her urine that I could obtain, but found no albumen.

Should I have another such case, I shall feel very disposed to try the same treatment again, as it proved so satisfactory. I may say that when able to swallow, I gave her every four hours a mixture containing 20-grain doses of chloral and 30 grains of bromide.

Harwell, Berks. RICHARD RICE, M.R.C.S., L.S.A.

DEAFNESS TREATED BY PILOCARPIN.

AFTER Mr. Field's communication in the JOURNAL of May 17th, the following notes of a case of deafness treated by pilocarpin will not be without interest to the profession. I have made very careful observations daily, but as those of every third day clearly show the steady improvement that was made I only for the sake of brevity mention these.

J. C., aged 13, has always had very imperfect hearing; when 5 years old was tested by Dr. McBride, and found able to hear a watch at only three inches from both ears. In January of the present year he had a very severe attack of measles, and after recovering from this was found to hear worse than before, namely, he could only hear a watch at $1\frac{1}{2}$ inch. By means of Politzering this distance was increased to $3\frac{1}{2}$ inches.

On March 13th he was taken to see Dr. McBride, and at his suggestion pilocarpin was injected daily, commencing on March 15th. The distances on the respective days being:

	Right.	Left.
March 15th ...	$2\frac{1}{2}$ inches ...	$3\frac{1}{2}$ inches
„ 18th ...	$5\frac{1}{2}$ „ ...	$5\frac{1}{2}$ „
„ 21st ...	$9\frac{1}{2}$ „ ...	$7\frac{1}{2}$ „
„ 24th ...	10 „ ...	$8\frac{1}{2}$ „
„ 27th ...	16 „ ...	$16\frac{1}{2}$ „
„ 30th ...	28 „ ...	20 „
April 2nd ...	44 „ ...	46 „
„ 5th ...	48 „ ...	48 „

The last injection was made on April 5th, there being in all 21 injections. The dose at first was one-twelfth grain, but this was soon increased to one-sixth, and later to one-fifth grain.

After stopping the treatment I examined daily for five days, the distance remaining the same. A month after this I again examined and found them not only to have maintained the improvement, but to be slightly better—50 inches from both ears. The power of hearing conversation is also very markedly improved, but not to the same striking extent to which his power of hearing a watch is.

The case is probably one of mixed middle and internal ear deafness, the bone conduction being much diminished. There were no unpleasant symptoms arising from the treatment.

Edinburgh. JAMES C. DUNLOP, M.B., M.R.C.S.

INTUSSUSCEPTION SUCCESSFULLY TREATED BY INJECTION OF AIR.

ON May 9th I was asked to see a child aged 10 months. The mother stated that about seven hours before I saw it the child woke up suddenly from sleep and commenced screaming. Sickness occurred very shortly afterwards, and within three or four hours blood and mucus were passed from the anus. When I saw the child it appeared very restless, tossing about in its mother's arms and then apparently dozing off for a few minutes. It was unable to retain any food; pulse small and very rapid; blood and mucus, without any fæcal matter, were passed from the anus during my examination.

On examining the abdomen, I noticed a mass in the left hypochondriac region, which appeared to be connected with the intestine, and which the mother said she was sure had not been there early in the day. Feeling confident that it was a case of intussusception, I procured a long rubber tube. I may mention that, being without tubing, I had to do the best I could with tubing used for keeping draughts from penetrating windows and doors.

Under chloroform, with the help of the mother I passed two to three feet of the tubing, and by means of a Higginson's syringe I pumped into the intestines as much warm water as they would retain. I then manipulated the mass through the abdominal

l; this, of course, expelled the water. This process was ated several times, but without much success. I then pro- led to pump in air with the same apparatus, blowing the omen as full as possible, and then manipulating as before. er this treatment I was rewarded with feeling the mass lually decrease, and finally, after an hour and a half, I dis- tly felt the gut slip into its right position. Within five utes about an ounce of loose fæcal matter was passed. The d was practically well within a few hours without further tment.

was interested to learn that the parents had lost a child a years ago with exactly the same symptoms. The child died he fourth day. No examination of the abdomen was made, the cause of death was certified to be "inflammation of the els."

xted, Surrey. EDWARD P. FURBER.

REPORTS

ON

DICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUY'S HOSPITAL.

O CASES OF SUBDURAL ABSCESS RESULTING FROM DISEASE OF THE ANTRUM AND MIDDLE EAR.

(Under the care of W. ARBUTHNOT LANE, M.S.)

E I.—O. V., a girl aged 8 years, was admitted on March 20th, . She had had measles three years ago. In January last she plained of pain in and behind the right ear. This soon dis- ared. Five days before her admission she was again attacked this pain, and a swelling appeared over the mastoid area. discomfort experienced was not great, so little indeed that ne morning before her admission she passed a school exami- on. On admission she was found to have a fluctuating swell- over the mastoid process. There was no optic neuritis, nor discharge from the meatus. She could apparently hear fairly with the right ear. The membrana tympani was thickened opaque, but no perforation was observed. She was put under roform, and the mastoid area was freely exposed. The abscess een the soft parts and the bone was seen to communicate with vity in the apex of the mastoid process by a ragged aperture. emoving the bone forming the wall of the cavity it was found about seven-eighths of an inch long and five-eighths of an broad, and to occupy the whole of the mastoid process. It lined by a pyogenic membrane, which was removed. It was observed that the lateral sinus and the adjacent dura mater ed the posterior and inner walls of this cavity, which appeared ave contained pus for many weeks. The sinus was not mbosed. The bony walls were removed so that a cavity no er remained. Opening into its upper and inner part there an aperture so small as not to admit an ordinary probe. This nto the mastoid antrum, which was about half an inch in eter, and deeply placed and filled with caseous material. cavity was also obliterated by bevelling the bone freely away s margins. A tube was inserted, and daily irrigation pursued. child left the hospital on May 13th, wearing the tube, and felt scomfort from it.

SE II.—W. R., a man aged 23, was admitted on March 22nd, 1890. ad had small-pox about twelve years ago, and since then had red from a discharge from the right ear. Five years ago he n to suffer from noises and giddiness. This continued for years, and was relieved by the removal of a polypus from the us. In July, 1889, he had an abscess behind the ear; this opened. A fortnight ago another polypus was removed, and as sent on to Guy's Hospital.

admission he was found to have no headache or loss of r. The optic discs were normal. He complained of noises ie right ear, which was quite deaf. Pulse was regular, 80. e was a purulent discharge from the meatus, into the lumen hich a mass of granulation tissue projected from its posterior The membrane was completely absent. About two inches id the meatus there was a small sinus which entered the for a quarter of an inch.

was anæsthetised, and the mastoid area freely exposed. Pus was found to escape from the mastoid foramen, and a probe suitably bent could be passed through this foramen, and made to enter the petrous bone through a hole in its posterior surface, the dura mater apparently forming the inner wall of a sinus of considerable area. The whole of the bone between the mastoid foramen and the antrum was removed with a gouge, or rather with several, since the osseous tissue, being very dense, blunted them rapidly. By this means the whole bony outer wall of the sinus was exposed, together with the entire circumference of the antral cavity. The dura mater forming the inner wall was covered by a thick soft pyogenic membrane, which was scraped away. It was then seen that about three-quarters of an inch of the lateral sinus was exposed, and that it had apparently for a very considerable period (probably since July, 1889) formed a portion of the wall of an abscess cavity. It was not thrombosed. The antrum was about as large as a kidney bean, and was very deeply placed; it extended a considerable distance into the petrous bone, and a probe could readily be passed through the aperture in the posterior wall of the petrous bone both from and into the antrum. By gouging extensively, the edges of the antral cavity were bevelled down as much as its deep position would allow; it was filled with foul-smelling caseous material, and its floor was carious. A silver drainage tube was fastened in, and thorough irrigation established. He left the hospital on May 7th, wearing the tube, with instructions to continue the frequent irrigations.

I would particularly call attention to the fact that, though the lateral sinus had for a considerable period of time formed a portion of the wall of an abscess cavity in both these cases, no thrombosis ensued; and that, though the dura mater alone entered into the formation of the same wall, there was no evidence of optic neuritis in either patient at the time of observation.

I will not enter into the causation of the subdural abscesses, or the *rationale* of the treatment adopted, as I have discussed them fully in a recent paper[1] in the JOURNAL.

COLONIAL HOSPITAL, PORT OF SPAIN, TRINIDAD.

HÆMOPHILIA OCCURRING IN MALARIA.

(By W. V. M. KOCH, M.B., Government Medical Officer, Assistant Surgeon, Colonial Hospital, Port of Spain.)

L. J., female, aged 6 years, was admitted on April 8th, 1890, with the following history.

On April 6th she had an attack of fever, probably intermittent. This abated on the 7th, but she was peevish and irritable, and not her usual self, but she made no complaint. About midnight she was suddenly seized with a profuse and uncontrollable flowing of blood from the mouth, which continued unabated until her admission at 7.30 A.M. Up to this time she had been fairly healthy, having slight attacks of fever, and a few months ago she had an attack of profuse hæmorrhage from the gums, which yielded to treatment.

On admission she was very weak and inclined to be drowsy, and there was a continuous oozing and welling out of blood from the mouth. A careful examination of the gums and fauces revealed nothing. Her temperature was high, about 101° F.; the gums were firm, not spongy, but the incisor teeth were loose. The blood, of which a large quantity was oozing out, was darkish in colour, unmixed with froth, and apparently quite pure; the face was puffy—she was anæmic, in fact; lungs and heart were normal; no cough, no pain; no nausea or vomiting; bowels had not been moved, nor had she micturated. She had a subcutaneous injection of ergotin at once administered, was given ice to suck, had an ice-bag over chest, and took a mixture consisting of ext. ergot. liq. and ac. sulph. arom. in water every hour. The oozing of blood seemed to abate to a slight extent, and she dozed until about 3.30 P.M., when there was a recurrence of it. The heart's action was forcible and rapid, her skin was hot and moist; she had passed water.

The same treatment was continued except that she had stimulants administered. Her condition then rapidly underwent a change; the oozing of blood continued uncontrollable, clotting sometimes in the mouth. Pulse became feebler, about 140 to 160. She had a motion of the consistence of tar. Her jaws were rigidly clenched, and she became collapsed, and died at 1.45 A.M. on the 8th.

Post-mortem Examination made Seven Hours and Three Quarters

[1] The Treatment of Suppurative Inflammation of the Mastoid Process, associated with Disease of the Middle Ear, JOURNAL, March 29th, 1890.

after Death.—The body was that of a fairly-nourished girl, with no marks of disease on it; face swollen; both lungs were anæmic; heart substance and valves normal; kidneys anæmic; spleen enormously congested, hyperæmic, and enlarged; liver anæmic; the gums, larynx, pharynx, stomach, and œsophagus showed nothing abnormal.

REMARKS.—The chief feature that calls for comment was the uncontrollable nature of the hæmorrhage which issued from the mouth, and the failure of detection of its site of origin. No bleeding points could be detected at all. The quantity of blood which was poured out must have been quite twenty or thirty ounces at a rough guess, and the blood was decidedly venous, not arterial. Even a careful *post-mortem* examination failed to give any clue as to where the blood may have come from. The anæmia of the viscera was what one would expect in such a case, but the enlargement and hyperæmia of the spleen coexisting with this general anæmia was remarkable. The exclusion of all other possible causes for the hæmorrhage and the nature of the blood, its venosity, its freedom from admixture with foreign substances, in conjunction with the history of a previous attack of bleeding from the gums leads me to the conclusion that this was a case of hæmophilia occurring in a malarial subject. Careful inquiry into the personal history of the mother gave negative results. She could not remember any bleeders in the family. But generally I may remark that it is a most difficult matter to get any satisfactory family or personal history from the Creoles of this island. Another feature deserving of a moment's notice was that the patient was a female. The proportion of females to males attacked in hæmophilia is 1 in 11, according to Legg; or 1 in 13, Fagge; and the attacks which are usually hæmorrhages from mucous surfaces generally occur in childhood in them. The prognosis is always grave. A third feature of note was the condition of the spleen—the hyperæmia and enlargement. This was undoubtedly indicative of a malarial cachexia, which was shown by the occurrence of fever at various periods, and even preceding the prodromal symptoms of the hæmophilia. This interesting coexistence of hæmophilia with malaria is, I think, worthy of record in the JOURNAL.

REPORTS OF SOCIETIES.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 28TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

On the Diagnosis and Treatment of Metrorrhagia.—Dr. EDIS read a paper on this subject, which is published at p. 1298.—Dr. FANCOURT BARNES mentioned two cases to show how difficult it was in some cases to make sure that all the placenta had been removed in cases of metrorrhagia due to retention of the product of conception.—Dr. MANSELL-MOULLIN insisted on the difficulty of distinguishing climacteric hæmorrhage from that due to malignant disease of the uterus. He also called attention to cases of abundant hæmorrhage at the onset of the catamenia, which was occasionally so severe as to produce a fatal result. These cases would have to be dealt with on the same principles as guided them elsewhere.—Dr. FENTON mentioned two cases of intractable hæmorrhage which had resisted all other methods of treatment, but which, in his hands, had been permanently relieved by removal of the ovaries.—Dr. HEYWOOD SMITH observed that many of these cases were associated with elongation or other abnormality of the oviducts or ovaries.—Dr. R. BARNES pointed out that uterine hæmorrhages were often associated with derangements of the circulation, which tended to right themselves either by hæmorrhage from the nose, the uterus, or elsewhere, a fact which he thought might be taken as an indication for treatment. He mentioned several cases of severe hæmorrhage at puberty, and remarked that removal of the ovaries must be looked upon as a last resource in cases of hæmorrhage due to fibroids.—Dr. INGLIS PARSONS said that he had under observation a large number of cases of fibroid treated by electricity. He mentioned two or three cases in which this treatment had given good results in arresting the hæmorrhage, though he was not prepared to affirm that the relief was certain to be permanent.—Dr. BANTOCK said that hæmorrhage in young subjects was often associated with constipation, and was relieved by saline chalybeate aperients. He called attention to the curious fact that in retained placenta the portion of the placenta which protruded from the os underwent decomposition, while the portion inside the uterus was often not affected. He spoke very highly of the effects of the tincture of the muriate of iron in arresting symptoms of pyæmia, and observed that small doses of ergot often diminished the hæmorrhage while large doses had a contrary effect. He had failed to get any benefit from the bromides, and agreed that sulphuric acid, gallic acid, etc., were of little use.—Dr. EDIS replied.

REVIEWS AND NOTICES.

RECHERCHES CLINIQUES ET THÉRAPEUTIQUES SUR L'ÉPILEPSIE, L'HYSTÉRIE ET L'IDIOTIE. Par le Dr. BOURNEVILLE, Médecin du Bicêtre, et MM. COUBARIEN, RAOULT et SOLLIER, internes. Tom. ix, avec 25 figures. Aux Bureaux du *Progrès Médical*. Paris: 1889.

THIS book is composed of two parts; the first gives an account of the work done at the Bicêtre during the year 1888; the second consists of a series of papers by Dr. BOURNEVILLE and his assistants.

Dealing with the first part, we find that the patients are divided into three groups: 1, infant idiots, uncleanly in their habits, epileptic or not so, but infirm; 2, infant idiots, uncleanly or clean in their habits, epileptic or not so, but healthy; 3, clean healthy children, imbecile, backward, epileptic, and hysterical, or not so. The first group is divided into two categories, one of which is composed of infirm children, unclean in their habits, the other of children quite incurable. The latter can only be nursed and kept clean; the former, by means of a series of exercises, at last become able to walk and are sent to school. The second group attend the *petite école*, and are taught by women. All are exercised in Pichery's system of gymnastics, and 36 go to the workshops for half an hour a day; they are also taught lessons on cleanliness, lessons on things, and go for walks, during which questions are put to them. The gymnastic apparatus and the method of using it are described and illustrated. The education of the hand, and especially of the sense of touch, is completed by exercises with little wooden cylinders and wooden spheres, to which have been added during the year exercises on rough and smooth articles and lessons on weight. Those who cannot speak are put through a series of word gymnastics. The third group are taught lessons on things and lessons such as are in use in primary ordinary schools. The higher class of patients are taught carpentering, shoemaking, sewing, basketmaking, chairmending, and brushmaking. There had been 4 cases of measles and some cases of disease of the eye during the year. On December 31st, 1888, 378 patients were under care. There had been 22 deaths, the causes of which are given in a table containing many interesting details.

The two chief additions which have taken place are the erection of a new pavilion of dormitories and a pavilion of cells. The writer of this review had an opportunity of seeing both last year. The pavilion of cells is intended for violent patients, many of whom become so after epileptic fits. The cells differ from the others (1) in the appearance of the doors and the method of inspecting the patients, (2) in the mode of lighting, (3) in the absence of angles and the casing of the walls in cement, (4) in the composition of the bed, (5) in the absence of all means of suicide.

The clinical part commences with an account of 4 cases of sporadic cretinism, which Dr. Bourneville describes under the name of "idiocy with pachydermatous cachexia." The history of these cases and the well-known features are given. They have a pale, heavy, puffed-up face; chronic lesions of the eyelids, which are swollen (in many cases the eyelids have been healthy); flat nose, thick lips, and very large tongue; carious teeth, irregular in form and position; hanging cheeks; sparse, short, coarse stiff hair; short neck, thyroid gland imperceptible to the touch; rounded breast, back curved inwards, an enormous prominent abdomen, and sometimes umbilical hernia; large superior and inferior limbs; broad, swollen, thick hands and feet; chilliness, absence of hair from the armpits and pubes, pale waxy skin, slight desquamating; a mètre in height; and intellectually the symptoms of complete idiocy. Dr. Bourneville's observations appear to him to justify the creation of a particular form of idiocy under the name of idiocy with pachydermatous cachexia, joined with the absence of a thyroid gland. The observations of Curling, Hilton Fagge, Fletcher Beach, Bouchard, and others are referred to.

Drs. Bourneville and Coubarien give an interesting paper on part which consanguinity plays in the etiology of epilepsy, steria, idiocy, and imbecility. A table of 926 cases is given, ich shows a history of consanguinity in 38, or 4.1 per cent. om these must be deducted 3 in which the parents were either rd or fifth cousins, and 3 in which the degree of blood relation- p was not noted. A percentage of 3.76 is then arrived at, a mber which differs little from that given by Boudin, although proportion of 1.5 to 4.5 indicated by Darwin is said to be rer the truth. In England inquiry into this subject has again l again been made, and recent researches show that, as far as ots and imbeciles are concerned, the proportion of consanguine- to other marriages varies from 1.5 in pauper imbeciles to 5 or er cent. in the higher classes. Excluding the 3 cases in which parents were third or fifth cousins, it was found that some editary weakness was present in the remaining 35, but not in al proportion.

Two tables are drawn up, one giving the history of 7 patients which hereditary unsoundness is little marked, and one em- cing 28 cases in which hereditary weakness is very noticeable. Bourneville concludes that hereditary predisposition to nervous ease is a more important factor than consanguinity in the pro- tion of those diseases, and that it is not just totally to con- m consanguineous marriages where both parents come from d stock. The same opinion is held in this country.

Epilepsy and Fronto-facial Asymmetry is the title of a paper Drs. Bourneville and Sollier. In 1877 Lasègue formulated the ory that all idiopathic epilepsies present fronto-facial asym- ry. This was denied in 1878 by M. Garel, but the researches both were defective, as neither employed the graphic method he study of the question. For some time past it has been the om at the Salpêtrière and the Bicêtre to take a cast of all eased patients. Two considerable advantages are derived n this method: in the first place, as a necropsy has been le in all cases, it is known whether the epilepsy is due to anic disease of the brain or not; and secondly, an apparatus be better applied to a cast which faithfully represents Nature a to the living subject. An apparatus was devised by one of Bourneville's assistants, and thirty casts of epileptic patients e graphically examined, with the result that all, with one eption, presented marked fronto-facial asymmetry.

In the course of the investigation it was discovered that young pathic epileptics who had died before the consolidation of the e of the cranium presented asymmetry to a marked degree. question arose whether the arrest of development of the nium reacted on the brain and determined the epilepsy, or ether the brain, modified by epileptic seizures, caused an st of development of the cranium. It is more natural to pose that the cranium, whose development is secondary to of the brain, could not develop if the organ which it con- s does not increase in size. Cranial asymmetry, then, accord- to Dr. Bourneville, is the consequence and not the cause of epilepsy, or at least it coincides with it. It is an interesting ical fact that, in the great majority of cases, idiopathic eptics present fronto-facial asymmetry, and this should guide prognosis, diagnosis, and treatment.

The remainder of the work is occupied with an account of the t of the bromide of nickel in epilepsy, from which we learn little benefit is derived from it, and with a description of an cile boy, aged 14 years, in whom, in addition to the usual ptoms, kleptomania, self-abuse, and sodomy were practised, finally the patient took syphilis. Evidently the material at Bicêtre is utilised by Dr. Bourneville to the utmost extent.

SURGERY OF THE KIDNEYS; being the Harveian Lectures, 89. By J. KNOWSLEY THORNTON, M.C., Surgeon to the maritan Free Hospital; Consulting Surgeon to the Grosvenor ospital for Women, and to the New Hospital for Women, etc. neteen Illustrations. London: Charles Griffin and Co. 1890.

SE Lectures are of high interest for two distinct reasons. In irst place, the author is the stoutest upholder of the spray, set aside by its original projector. Secondly, Mr. THORNTON strong views as to the position of the incision which must be e in order to remove the kidney, views opposed to those of of the other authorities on renal surgery. Over and above e considerations, we may add that the name and experience of uthor confer on the Lectures the stamp of authority.

The book itself is not amongst the finest specimens of binding and typography, hardly worthy, in short, of its subject and its author, though its form is convenient and it cannot be called bulky. The illustrations are mostly rough, handy diagrams. The Table of Contents consists of a syllabus of the three Lectures which make up the entire work. In a future edition we hope to see an index. Of the letterpress we can only speak in terms of commendation. As renal surgery is a wide subject, our remarks must be confined to those questions which, for reasons already given, are of especial importance as bearing directly on the author's special views.

Mr. Thornton explains at considerable length the present state of his belief in the efficacy of the carbolic spray. To the objection that much stronger solutions than the steam saturated with carbolic acid fail as germicides, the author replies that the vitality and resisting power of the tissues are overlooked by those who argue in that fashion. The vital action is much aided when the germs of infection are already weakened by soaking in a strong antiseptic before they are delivered over to the tissues. This weakening may not kill the germs, but it renders them a much easier prey to the active leucocytes. In the tapping of cavities filled with putrefiable fluid the spray and the asepticised trocar and cannula are of the highest value. If an open cannula be used some air must enter the cavity, and that air may contain the dry or moist germs of simple putrefaction or of some more deadly process. Hence must follow deleterious changes in the contents of the cavity. The author bases these assertions on the fact that he has tapped "every conceivable variety of cavity" with antiseptic precautions, and yet no putrefaction has followed; whilst, on the other hand, he has seen others perform exactly similar tapping with a carefully purified instrument, but with no spray, and the procedure has been shortly followed by putrid suppuration.

The relative advantages of abdominal and lumbar nephrectomy are explained by Mr. Thornton, who is strongly in favour of the former. He regrets the absence of statistics relating to after-histories of cases of nephrectomy. The patients had their kidneys opened and recovered, so say many surgeons of their own and of others' practice. But, asks Mr. Thornton, were they cured of their renal diseases? Anybody with moderate anatomical knowledge can remove a kidney, or extract a stone from that organ, but the author wants to know how far patients are saved alive or cured by those operations. Mr. Thornton unhesitatingly affirms that, as a precise and scientific operation, there is no comparison between abdominal and lumbar nephrectomy. In the abdominal operation, if the incision be made along the outer border of the rectus, the kidney is soon reached and the renal vessels and ureter easily brought under command, and with little or no disturbance of the intestines and peritoneal cavity. As the opposite kidney can be explored through the wound, the danger of removing the wrong kidney—a sad accident not unknown—is thereby prevented. Mr. Thornton raises seven objections to lumbar nephrectomy, which include the impossibility of exploring the opposite kidney, and the fact that the best surgeons have sometimes been unable to find the very kidney that they cut down upon through the loin. Mr. Thornton, however, admits that there are certain conditions in which the lumbar operation may properly be performed, notably cases in which a lumbar incision and drainage having failed, the extirpation has to be undertaken with a fœtid sinus already extending from the loin into the interior of the kidney. The lumbar incision is also preferable in some kinds of wound of the kidney.

For fuller information as to the opinions of the author on the above and other important disputed questions in renal surgery, we must refer the reader to the *Surgery of the Kidneys* itself. Within barely one hundred pages he will find a comprehensive review of a branch of the surgical art which but a few years since was in its most rudimentary stage, whilst now, thanks in no small degree to the author, nephrectomy and nephrolithotomy have become well established operations.

ELECTRICITY IN GENERAL PRACTICE. By W. BOLTON TOMSON, M.D. London; Baillière, Tindall, and Cox.

THE continuous production of works on the subject is no doubt determined by the growing tendency to regard electricity as a useful, if not indispensable, agent in the practice of medicine. The complexity and the difficulty of the subject are a spur to industry in authorship. Every science which deserves the name

has in it something of complexity, for which the only clue is a sound training.

The greatest difficulties which electricity presents arise from want of familiarity with its laws. If it is to be adopted as a resource open to physicians and surgeons generally—a resource to be employed in a manner rational and not discreditable—a solid groundwork must be provided, and the recipient should be, as in other cases, the student and not the practitioner. While there are many books on electricity written for medical men, there are few which merit the name of medical electricity. The author of the present work has avoided the familiar title; indeed, he lays no claim to it; his scope is purely technical. It must be admitted that it is also sufficiently extended. He shows the construction of the battery and the commutator in detail, treats of the constant current, cautery, electro-magnet, electrolysis, induction coil, and electric lighting, and under each heading "are described (1) the special difficulties which the battery has in each case to contend against; (2) how they can be overcome; (3) the advantages of the commutator." To this is added an account of body resistance and a description of accumulators. All this is summed up in forty-six pages, and addressed to a class of readers whose minds are admittedly a *tabula rasa*, highly receptive, but uncontaminated with previous information.

There is no need to point out that the herculean task is not quite satisfactorily performed. The writer shows evidence that he is himself well instructed in the use of electrical apparatus, and has brought to its selection a sound and well trained judgment; but he seems to have forgotten the pains he was at to acquire it, and so loses that kind of sympathy which brings the teacher's mind in relation with his pupil's. He is not what he seeks to be—a guide. It is inseparable from the conception of such a book that there are constantly recurring implications of principles which it would have been better to express, since not everyone is familiar with them, and elliptical expressions which even the instructed thought will find it hard to follow. The book is an ambitious effort towards the *multum in parvo*, and it is hardly a success. It certainly does not provide that "rational knowledge" which it promises. There are others which will be more easily read for the very reason that they are much longer. Of this it may be said that it would be unintelligible to all who were not sufficiently well informed already, and to them it is superfluous.

ELEMENTARY MANUAL OF MAGNETISM AND ELECTRICITY. By Professor JAMIESON, M. Inst. C.E. London: Charles Griffin and Co. Part I. Magnetism.

STUDENTS of natural science are indebted to Professor JAMIESON for an admirable introduction to magnetism and electricity. The manual is divided into three parts, each published separately, and at a price which brings it within the reach of everybody.

Its subjects are generally thought to involve a good deal of difficulty, a conception which very frequently corresponds to a dearth of adequate and attractive teaching in the earlier stages of instruction. This is well supplied by the present manual. It is the production of a skilled and experienced teacher, and it embodies the method which has answered the test of experience in his hands.

It covers the elementary stage of the Science and Art Department's examination, and since this is generally admitted to be a good test of efficiency, it follows that a book which is based upon it as this is will be amongst the best for all purposes. From an examinational point of view its value is enhanced by a judicious selection of questions which are appended to each of the short lectures into which it is divided. These are in each case preceded by a specimen question answered in detail, to serve as a guide to the student. Directions are given for the construction of apparatus, and laboratory work is properly made a conspicuous feature in the course mapped out.

Part I (Magnetism) consists of eight short lectures in which the properties of magnets natural and artificial are first exhibited and illustrated by a series of simple experiments. The laws of magnetic force, the molecular theory of magnetisation and of magnetic induction are reached in easy sequence, and the phenomena from which they are deduced are constantly impressed upon the reader. At the same time allusion is repeatedly made to the apparatus or contrivances in which the principles under discussion find their most useful application. The last two lectures, dealing with the earth as a magnet and the construction and use of the mariner's compass, are all the more intelligible from the lucidity of the parts which have preceded them.

The style throughout is vigorous, the language homely and impressive, and there is nothing in the book which is superfluous.

NOTES ON BOOKS.

The Nursing Record Series of Manuals and Textbooks. No. I. Lectures to Nurses on Antiseptics in Surgery. By E. STANMORE BISHOP, F.R.C.S. (London: Sampson Low and Co.—It is rather unfortunate that the *Nursing Record's* intention of issuing a complete series of nursing works should have been presaged by this manual, for if it is a sample of those which are to follow, some risk will be run of elevating nursing from a fine art to a special science. The book consists of three lectures on antiseptic surgery, and had they been intended for advanced students interested in bacteriology no exception could be taken to the subject matter. The researches and experiments of Klein, Hueten, Chauveau, and Tillmanns are well described, as well as the microscopic phenomena which occur in septic and aseptic inflammation, but is it necessary that a nurse should burden herself with this knowledge? No doubt, in her work, she is all the better for having an elementary acquaintance with the causes which contribute to soil the atmosphere and prevent wounds from healing, but this knowledge is contained in nearly every textbook and is supplied by every instructor. The vast majority of nurses can take a practical and intelligent interest in their work without cognisance of the minute pathological changes occurring in tissues; and so long as they value the virtues of cleanliness and prophylactic properties of fresh air and antiseptics, no medical man may find fault with them. We would desire, however, to do justice to Mr. Bishop's little book. It is excellent in its way and contains numerous coloured reproductions of photographs of bacteria and other microscopic illustrations, besides much information both of a theoretical and practical character which will prove useful to the student, not excluding the nurse, if she has the time to study and capacity to understand it.

Man Wonderful: Manikin. Arranged by A. GARDENIER (New York: Fowler and Wells Co. 1890.)—This so-called manikin is a very well-arranged series of anatomical plates, superimposed in such manner that by lifting up the respective leaves the external anatomy and the relative position of the viscera are clearly shown; it thus constitutes a chart of the human body. It is intended for popular use, and has a little accompanying handbook or key, which will no doubt be found very useful for teaching in ordinary schools, where this subject is too much neglected.

MEDICAL MEN IN GERMANY—From official statistics it appears that at the end of 1889 the number of medical practitioners in Germany was 18,467, as against 17,690 at the end of 1888, showing an increase of 777, or 4.4 per cent., a rate of growth five times higher than that of the general population. Taking the various States separately, Prussia has 10,667 doctors; Bavaria, 2,23[illegible] Saxony, 1,328; Baden, 763; and Würtemberg, 676. As regards the relation of medical men to the population, there are in the German Empire as a whole, 3.92 doctors to every 10,000 inhabitants, the corresponding ratio in 1888 having been 3 77, and in 1887, 3.[illegible] The figures for individual States, however, show great irregularities of distribution. Thus in Hamburg the proportion of doctors to inhabitants is 6.61 in 10,000; in Lübeck it is 5 91; Mecklenburg-Strelitz, 5.90; in Bremen, 5.47; in Hesse, 4.93; Brunswick, 4.80; in Baden, 4.77; in Saxony, 4.18: in Bavaria 4.12; in Prussia, 3.74; in Alsace-Lorraine, 3.61; and in Würtemberg, 3.39. In Berlin the proportion is 9.32 in 10,000, or nearly one doctor for every 1,000 persons. The death-rate among German practitioners was not quite 2 per cent. in 1889, as against 2 68 in the previous year.

THE movement set on foot by the late Professor von Wahl for the mitigation of the scourge of leprosy in the Baltic provinces of Russia has been enthusiastically taken up by the medical profession and many Government officials and prominent members of the general public at Dorpat. Sites for two leper houses in Livonia have been granted by the local authorities, and the building of these institutions will be forthwith proceeded with.

GENERAL COUNCIL
OF
EDICAL EDUCATION AND REGISTRATION.

SPRING SESSION 1890.

Friday, May 30th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

e Council in committee resumed the consideration of the ommendations of the Education Committee, together with Interim Report on Clinical Work and Systematic Lectures, eived and entered on the minutes on May 31st, 1889.

irts Study and the Curriculum.—Sir WILLIAM TURNER brought vard a motion to the effect "that a year spent in the study of sics, chemistry, and biology by graduates in arts and science any university should be regarded as one of the five years of lical study."

r. PETTIGREW, in seconding the motion, urged that the Council ht to do its utmost to encourage students to take degrees er in arts or science, and he believed the effect of this motion ld be in that direction.

r. STRUTHERS objected to general education being allowed to roach on time which ought to be devoted to professional ning, and moved as an amendment that one year should only ounted as part of the five years' curriculum in the event of the lent having first passed a preliminary examination in general cation, which would be recognised by the Council for registra- as a medical student.

r JOHN SIMON seconded the amendment.

r. LEISHMAN proposed that the resolution should read: "That luates in arts and science of any university recognised by the ncil, provided an examination in physics, chemistry, and ogy forms part of the examination for the degree in question, be held to have completed the first of the five years of medi- study."

r WILLIAM TURNER, with the consent of the Council, with- his resolution and substituted that proposed by Dr. SHMAN.

r. MACNAMARA asked that it should be made clear that ever period of study was allowed off the curriculum must taken place subsequent to registration.

ie Rev. Dr. HAUGHTON said he objected to the word "recog- d," and he declared his intention of moving as an amendment the word "British" be substituted for "recognised."

discussion ensued as to whether such study should or should be recognised prior to registration.

ie PRESIDENT pointed out that a university graduate must ssarily have passed such an examination in preliminary edu- on as would be recognised by the Council. Should such a ent not have registered it would be in the power of the Ex- ive Committee to antedate the certificate of registration.

. MACALISTER pointed out that the passing of such an exami- on as would be recognised by the Council was not an exchange term for registration. Registration afforded a convenient al date for various purposes, but was not an essential of cal education. Hence the period of medical study, in the of science graduates, should be reckoned from the date when reliminary examination was passed, and not from the some- accidental date of registration.

ter some further discussion, Dr. STRUTHERS's amendment was to the vote and lost.

e original motion by Sir WM. TURNER, modified in accordance Dr. LEISHMAN's suggestions, was then agreed to.

. STRUTHERS then brought up the third recommendation:—
at the fifth year should be devoted entirely to clinical work general hospital or public dispensary recognised by any of licensing bodies mentioned in Schedule A of the Medical Act), or as pupil to a registered practitioner."

. BRUDENELL CARTER proposed as an amendment that the mmendation should read "general or special hospitals,

. WHEELHOUSE and Dr. BATTY TUKE objected to the intro- on of the word "special."

. MACALISTER pointed out that in the matter of fever and -in hospitals the Council had more than once recognised the y of special hospitals; hence he did not think they should to including them by name.

Dr. KIDD said that the word "general" might be left out altogether.

Mr. MITCHELL BANKS said the greatest latitude ought to be left to the student at this period of his education, for he was by that time the best judge of what he ought to do.

Mr. CARTER agreed to modify his amendment to read, "at one or more public hospitals or dispensaries."

Mr. MACNAMARA thought it would be better to leave these details to be settled by the medical authorities of the three kingdoms.

After some further discussion, Mr. CARTER'S amendment, as modified, was agreed to.

Dr. BATTY TUKE then moved as an amendment, "That the fifth year should be devoted mainly, but not entirely, to clinical work in a public hospital or dispensary, or as pupil to a medical practitioner holding a public appointment, to be approved by the Council." He urged that the original resolution as it stood was utterly objectionable, and in certain respects ridiculous. He pointed out that though the hospital and dispensary had to be recognised, no provision had been introduced to secure that the practitioner was in a position to conduct the education and training of a pupil.

Dr. MOORE said the effect of this pupilage would be to convert the student into a sort of unqualified assistant.

Dr. KIDD agreed that this pupilage with a general practitioner was an impractical and foolish proposal.

Mr. WHEELHOUSE said the requirements had purposely been made as elastic as possible, in order that the student might acquire that information which was not to be got in hospitals, but in the homes of the people and the practice of the general practitioner. He pointed out that the men would have had three years' scientific training in the hospitals.

Dr. GLOVER opposed the blotting out of the provision with respect to study in a dispensary or pupilage with a medical practitioner. He spoke highly of the Irish dispensaries as a school for experience. He deplored the idea that seemed to prevail that so little was to be got out of medical practitioners for educational purposes. He urged that this opinion was peculiarly deplorable on the part of teachers. He pointed out what an important part pupilage played in legal education. He pointed out, too, that no man was exempted from the pupilage, even though he be a graduate. He submitted that the advantage of pupilage was not less in medicine than in law. It was, therefore, retrograde and disrespectful to the general practitioner to suggest that he was unable to impart any useful information. If this were taken to be a desirable feature, then the profession in Ireland would doubtless rise to it. He observed that it was proposed to restrict the term general practitioner to those who held public appointments, but he thought this might safely be left to the students to choose the men best able to give most experience. If, however, a safeguard were desirable, he thought the proviso embodied in a previous resolution of the Council, "either holding such public appointment or having such opportunities of imparting practical knowledge as shall be satisfactory to the Council," would answer all requirements.

Sir JOHN SIMON said that until the licensing bodies would undertake the visitation of the places where the instruction was imparted, he did not see how to get out of the difficulty. The systems in the three parts of the kingdom were so different, that no one set of words could be made to apply to all at the same time.

Mr. MACNAMARA said for years he was a dispensary doctor. Many a time the number of patients was such that the time devoted to each case was ridiculously small, and would effectually preclude any clinical instruction. He did not wish to strike out the general practitioner in so far as it applied to England and Scotland, but he urged that pupilage was utterly inapplicable and impracticable in Ireland. He therefore felt it to be his duty to protest against opening that door in Ireland. He moved to substitute for "with a general practitioner" "or in such other manner as may seem fit to the respective local medical authorities in the three divisions of the kingdom, subject to the approval of the General Medical Council." If the plan seemed to commend itself to them, it would then be adopted. He earnestly appealed to the Council not to enforce the plan in Ireland now that he had warned them against the difficulty attending it. The only safe plan would be to leave it in the hands of those who were cognisant of the circumstances.

The Rev. Dr. HAUGHTON seconded the amendment.

Sir WALTER FOSTER regretted to hear such a statement re-

specting dispensary practice in Ireland, for his experience was at variance therewith. He was willing to consent to the insertion of the words "subject to the approval of the licensing bodies." He desired to give the student the permission to go to a practitioner if he wished to. Where it was undesirable his teachers would dissuade him from doing so. But he urged that it was necessary for the student to pass a certain period with a practitioner, as then he might acquire that practical training which he would not acquire at the hospital however carefully trained. He would learn how to manage patients, a factor in his subsequent success not less important than his scientific knowledge.

Dr. COLLINS said that there were men in Ireland who could instruct pupils, but he thought there ought to be a control "recognised by one of the local authorities."

Mr. P. TEALE said that unless a man passed some time with a general practitioner, there was a danger of his never overcoming that initial rigidity which resulted from the hospital training.

The PRESIDENT pointed out that the propriety of allowing pupilage with a general practitioner had been formally recognised by the Council on a recent occasion, hence he thought it had better be left in the hands of the examining bodies. He pointed out that the conjoined Colleges of London had a rule couched in these very terms, but it was practically a dead letter, no one ever having applied in virtue thereof. He suggested that they should incorporate the past resolution as to six months' pupilage with the present motion. It would be impossible for the Council to act in the manner suggested in Mr. Macnamara's resolution.

Mr. MACNAMARA and Dr. HAUGHTON consented to strike out the proviso requiring the approval of the Council.

The PRESIDENT pointed out that this was only a recommendation, and not a vital point to be insisted upon.

Sir JOHN SIMON said it was a recommendation indeed, but the recommendations of the Council were mandatory.

Dr. HERON WATSON pointed out that the principle of recognising the ordinary practitioner as a teacher was only admitted by the Council with difficulty. In fact, the pupil would become only an unqualified assistant, a very unsatisfactory position for anyone. He urged that an unqualified assistant was not to be distinguished from an unqualified practitioner. He then recapitulated the objections which had been urged, in previous reports to the Council, to the employment of unqualified assistants. He protested against the reintroduction of a state of things which he hoped was a thing of the past. He asked whether they were to go back and undo all they had done to stamp out unqualified assistantship.

Dr. GLOVER rose to a point of order. He said that Dr. Watson was recapitulating arguments which had reference to a point definitely settled by the Council in the past, and not relevant to the question before them.

The PRESIDENT declined to rule Dr. Watson out of order.

Dr. WATSON, continuing his arguments, read from vol. xx of the minutes the following description of the duties of an unqualified assistant:—"1. To see patients at his master's house under supervision, and to carry out in his master's absence treatment according to instructions, that is, to carry on the work of dispensaries and branches under similar restrictions. 2. To keep the books and bring in to his employer all the cash he received. 4. To extract the teeth of casual patients, and to act as midwife under supervision. 5. To perform *post-mortem* examinations. 6. To dispense medicines ..... and convey them to the patients' homes when necessary ..... He may also sell over the counter, clean out the surgery, wash the phials, keep the instruments in order, and answer the night bell. 7. To drive his employer or himself ..... to groom the horses, saddle them, and put them up when no one else can be found to do it, and generally to perform the duties of a "gentleman help." He is the living representative of the "squire" or "page" of the Middle Ages, and of the "apprentice" of the last generation, and asked whether it was to be supposed that anything useful was likely to result from such a training. He hoped, therefore, that Dr. Moore's amendment to strike this phrase out would be adopted.

Dr. GLOVER read from volume xxiii a special proviso, excepting medical practioners who were training pupils from the penal clauses of the Council in respect of the employment of unqualified assistants.

Mr. MITCHELL BANKS said the objection hitherto entertained to pupilage was that the curriculum was not long enough to allow of it, but now they had added a year this difficulty was overcome.

Dr. WATSON asked whether it was for the good of the practitioner or the pupil?

Mr. BANKS and Dr. GLOVER: Of the pupil!

Mr. BANKS, continuing, said the plan was not forced upon Scotland or Ireland, but was left perfectly optional.

Dr. BRUCE urged that a man who had undergone a period of pupilage was likely to be vastly more useful as a practitioner than one who went straight from the hospitals. He would know, for one thing, how to treat patients who had nothing the matter with them. He insisted upon the beneficial influence that intimate contact with an older practitioner would have on the younger man. Moreover, the pupil would have to place himself in touch with the patients. He urged that the system was not only possible but desirable in Scotland.

Dr. STRUTHERS thought that those who had been attached to great hospitals and teaching institutions all their lives were apt to exaggerate the importance of their training. He, however, recognised the value of such a period of pupilage with a general practitioner, and he deprecated Mr. Macnamara's remarks anent the ability of the general practitioner to teach.

Dr. KIDD protested against devoting the fifth year to pupilage with a general practitioner. It would be like a sculptor who employed an apprentice to finish off his work. He urged a period of six months at the end of the third year, if such a period of pupilage were indispensable. In any case, he desired to retain the fifth year to finishing work.

Mr. BRUDENELL CARTER insisted on the difference between sanctioning the employment of an ignorant unqualified assistant and that of a highly trained man shortly to be qualified. He thought the training with general practitioners was particularly valuable as accustoming the man to deal with the most various contingencies at a moment's notice. He said that the general practitioner was the most valuable member of the profession, from being accustomed to act and think for himself. At the same time he admitted that certain restrictions as to the taking of pupils were desirable. He therefore concurred in Mr. Banks's proposal.

Dr. MOORE'S amendment to omit the words "or as pupil to a general practitioner," was then put to the vote and negatived.

The standing orders having been suspended to allow the other amendments to be put,

The PRESIDENT read Dr. Tuke's amendment as modified: "That the fifth year shall be devoted to clinical work at one or more public hospitals or dispensaries recognised by any of the licensing bodies mentioned in Schedule A of the Medical Act (1858), provided that of this period six months may be passed as pupil with a legally qualified medical practitioner holding public appointments, or possessing such opportunities of imparting practical knowledge as may be satisfactory to the medical authorities."

This amendment was then put to the vote and carried, 18 voting for and 8 against.

It was then put as a substantive motion.

Sir WALTER FOSTER moved an amendment to the substantive resolution, on the ground that Dr. Tuke's resolution was cutting away the liberty which it had been wished to leave students with reference to the disposal of the final years. He therefore moved: "That the whole of the fifth year should be devoted to clinical work, etc."

Mr. WHEELHOUSE emphasised the fact that in voting on the amendment they would be voting on the question of liberty for the fifth year *versus* compulsory restrictions.

Dr. STRUTHERS said the resolution that had just been passed would largely neutralise the wishes of the committee in respect to the use to be made of the fifth year. He said no practitioner would take a pupil for six months.

This amendment was put to the vote and lost.

Dr. TUKE'S amendment was then adopted as a substantive motion, and the Council adjourned.

Saturday, May 31st.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

The Council in Committee resumed the consideration of the recommendations of the report of the Education Committee, together with the Interim Report on Clinical Work and Systematic Lectures.

Dr. LEISHMAN moved the fourth recommendation, "That the number of systematic lectures in each course, especially in winter, may with great advantage be restricted to two or three weekly, and that the time so gained should be devoted to class examination, tutorial instruction, and practical work." He pointed

t the regulations of some of the licensing bodies provided that certain definite subjects instruction should consist of 100 lec-es, and, on other subjects, of fifty lectures. These regulations re absolutely imperative on the professors conveying such in-mation as they had to convey in this form of lectures. Although did not view these regulations with much favour, he was not posed to approve of the proposal to reduce the number of lec-es unless he had some assurance that the time thus set free uld be suitably employed. The object was not to diminish the e devoted by teachers to teaching, but to give them a voice as he disposal of the time. What he suggested was that instead 'lectures," the rule should read "lectures or classes."

Dr. PETTIGREW seconded the motion, remarking that improved tbooks had largely contributed to rendering systematic lec-es unnecessary.

Dr. STRUTHERS moved as an amendment to leave out the latter t of the recommendation, and to limit it to the proposition t two or three lectures weekly were sufficient. The lectures Scotland were certainly in excess. He urged that the discus-n must certainly be superfluous, for the minds of members st by this time be made up as to the relative value of system-lectures and practical work.

Sir WILLIAM TURNER objected to any attempt on the part of a olution to go into details, which he thought ought to be left to medical authorities. He urged that the system of lecture *à rance*, which prevailed in Scotland, was based on long tradition, was presumably adapted to the genius of the nation. More-r, if the Scotch medical public thought a change desirable they ld bring this about without coming to the General Medical ncil. He thought that the resolution passed by the Council he last session insisting on the necessity for restricting the nber of systematic lectures was as far as they could safely go. asked Mr. Macnamara how many courses of lectures men were uired to attend in Dublin.

Mr. MACNAMARA: One in anatomy, one in surgery, and one in ctical surgery.

Sir WILLIAM TURNER said he would be prepared to put his nion into the form of an amendment if necessary.

Dr. WATSON said he would second the amendment.

Mr. MITCHELL BANKS observed that the Scotch lecturer ap-red to be a sort of man-eating tiger among lecturers. He said had heard of being preached to death by wild curates, but an n more terrible catastrophe would be to be lectured to th by Scotch professors. He himself had narrowly escaped fate, and only attributed to a strong constitution his having rived the courses of lectures on botany, zoology, and chemistry, ch were inflicted upon him. He knew many of his friends bore indelible marks of the infliction, and whose days had n, or probably would be, shortened thereby. He urged there-that some restriction was indispensable.

Sir JOHN SIMON said the great object was to secure that the appy student should have an alternative, and not be bothered leath by tiresome professors. It was absurd to require him attend lectures on subjects which might equally well be ned from textbooks. He thought the proper thing was to e the student himself to decide how much of this systematic ring he required for his intellectual nourishment. He urged the abundance of systematic lectures was certainly in excess equirements.

Mr. PETTIGREW agreed that it was absolutely necessary to pro-the student.

Dr. WHEELHOUSE referred to the previous resolution of the ncil affirming the desirability of restricting the number of ematic lectures, and said the only question was as to how best ffect this.

Sir GEORGE MACLEOD said there was a danger that if the sys-atic lectures were suddenly cut down the clinical lecturers ld find themselves obliged to take to delivering systematic ures. There were points that could only be properly taught ystematic lectures, and if this were not done, then the clinical urer would find himself obliged to supplement the deficiency. lenied that the place of systematic lectures could be taken by books. He agreed, however, that it was desirable they should e the permission to use the time to be devoted to teaching in way they thought best.

Mr. MACNAMARA said the present-day student never read a book properly so called, but only used cram books; hence he red that systematic lecturing was more than ever necessary.

Sir JOHN SIMON proposed as an amendment, seconded by Mr. TEALE: "That regulations requiring attendance on systematic courses of lectures ought not to require attendance on more than two or three lectures weekly in any one course, nor an attendance upon more than two or three lectures on any one day."

This was put to the vote and agreed to.

Dr. Leishman's proposed amendment having been withdrawn, and Sir William Turner's having been ruled out of order, Sir John Simon's amendment was put and agreed to as a substantive motion.

Dr. STRUTHERS then brought forward recommendation No. 5, "That due time should be set aside for practical work, and that attendance on the practical courses should be carefully ascertained and certified. By a practical course is understood one in which work is done by the student himself, under the direction of a duly qualified teacher," which was agreed to without much discussion.

The sixth recommendation then came on: "That in order to promote a practical system of clinical teaching, the requirement should be specified to mean attendance on 'hospital practice, with clinical instruction.' Ample time should be set aside for hospital work, and means should be taken to ascertain regularity of attendance in the wards and out-patient departments. Every candidate for the final professional examination should be required to give evidence that he has had sufficient opportunities of practical study, and has acted as clinical medical clerk and surgical dresser."

Dr. KIDD moved as an amendment: "That all certificates of hospital attendance should certify that the candidate has had sufficient opportunities of practical study, and that he has taken records of cases and dressed surgical cases to the satisfaction of the physicians and surgeons in charge, stating the number and nature of the cases so attended; such statements to be certified to by the physicians and surgeons respectively." He pointed out that his suggestion was based upon what had been the practice for many years in Dublin. He said there was a great deal of difficulty in getting men to attend hospital practice.

Dr. MOORE said the only reliable safeguard was a sufficiently severe clinical examination.

Sir GEORGE MACLEOD said that if the teacher did his work properly there would be no difficulty in getting the men to attend regularly.

After some further discussion and a protest by Sir W. FOSTER against the policy of going into details and attempting to teach teaching bodies how to teach, Dr. Kidd's amendment was put to the vote, and almost unanimously negatived.

The PRESIDENT then brought forward the original motion, which had been modified and remodified to read as follows: "In order to promote a practical system of clinical teaching, the *Regulations* should specify attendance in 'hospital practice, with clinical instruction.' Ample time should be set aside for hospital work, and means should be taken to ascertain the attendance in the wards and in the out-patient department. Every candidate presenting himself for examination at the end of the fifth year should be required to prove that he has had sufficient opportunity for practical study."

The resolution, as modified, was agreed to.

Dr. GLOVER then moved, as an addition to Recommendation No. 6, to insert after the words "practical study," by filling up the following schedule: *The Schedule.*

*Diseases.	Number of cases seen by the Candidate.	Period of such Studies.	Certification of Practitioner or Teacher under whose Supervision such Cases have been seen.
Infectious Diseases:			
Continued Fevers ...			
Scarlet Fever			
Diphtheria			
Measles			
Infantile Diseases			
All sorts of ordinary cases —General Practice ...			
Insanity			
Midwifery and Puerperal and Gynæcological Disease			
Eye Disease			
Skin Disease...			

* The infectious diseases not to be studied at the same time as the student is attending midwifery or puerperal cases.

He pointed out that as it was impossible to examine students in these subjects it was doubly important that the facilities for training should be more than ever insisted upon. He urged that it was necessary to ensure a much more abundant and comprehensive clinical experience than was at present obtained. He therefore asked the Council to order the schedule to be appended to this recommendation.

Mr. WHEELHOUSE seconded the motion, and insisted upon the necessity of seeing that students had obtained clinical experience in this class of cases.

Mr. MITCHELL BANKS did not think that any good could result from offering to the licensing bodies such a scheme as that comprised in Dr. Glover's proposal. He wished every proposal emanating from the Council to be such as to secure the cordial approval of the teaching and licensing bodies, and this he feared could not be the case with the proposal in question, which, moreover, they would be unable to enforce.

Mr. BRUDENELL CARTER observed that the schedule comprised "eye disease," and he pointed out that diseases of that organ were already made the subject of examination; at any rate he had been asked to furnish subjects for clinical examination.

Dr. MACALISTER criticised the terms of the schedule, and doubted whether it could ever be practicly enforced. He mentioned that one of the inspectors of the surgical examinations reported that a candidate was practically asked whether he had ever seen a case of the comparatively rare operation of resection of the knee joint, and he replied that he had seen "hundreds." Such a student, if he were asked how many he had seen of "all sorts of ordinary cases," would probably reply "millions." While fully appreciating the wise idea underlying Dr. Glover's proposal, he felt that it could not be realised in this particular manner.

Dr. LEISHMAN said that while he was willing to give every credit to Dr. Glover for his good intentions in respect of the object he had in view, as a teacher and as one who had had some experience of the subject he said that he could easily imagine the most ludicrous incidents as the result of an endeavour to put the proposed schedule in force. The thing would be so difficult to carry out, and would be such a bore to both student and teacher, that it would be sure to become a farce, or, still worse, an utter sham.

Sir DYCE DUCKWORTH urged that, as it was, the clinical cases employed for examination purposes by the Conjoint Board comprised nearly every ill that flesh was heir to. He thought the student had every opportunity of becoming familiarised with the graver diseases in the wards and with the lighter ailments in the out-patient department. Moreover, special arrangements had recently been made for the purpose of allowing London students to see infectious cases. In none of the examinations on which he had served as examiner—and they were several in number—had there been any limit in respect of clinical material. There was one great fallacy that seemed to underlie the views of various members in dealing with this question, and he pointed out that they could never hope, whatever the curriculum, to turn out men, newly qualified, with the tact, judgment, and experience of a practitioner of twenty years' standing.

Dr. GLOVER expressed his regret at the hostile attitude with which his schedule had been received. He urged that they had gone very intimately into the subject as to how, where, and when physics, chemistry, and biology should be taught, and yet they seem disinclined to do anything of the kind for such an important branch of knowledge as that comprised in the schedule which he had suggested as an addendum to the recommendation. He expressed his willingness to adopt suggestions to improve or modify the schedule, or in any way to bring it into conformity with the wishes of members. All he wished was that the principle of the thing should receive the sanction of the Council. If preferred, he would withdraw his motion, so that it might be brought up later on in an amended form.

The PRESIDENT said that it would perhaps be better to get a definite expression of opinion from the Council on the principle underlying Dr. Glover's motion.

He therefore put the motion to the vote, when it was defeated by a large majority.

The Council then adjourned until Monday.

Monday, June 2nd.

JOHN MARSHALL, F.R.C.S., F.R.S. President, in the Chair.

THE Council met in Committee to continue the adjourned consideration of the recommendations in the Report of the Education Committee.

Dr. STRUTHERS brought forward the seventh recommendation to the effect: "That the regulations of the examination bodies and of schools should be so framed that attendance on systematic courses may be concluded at the end of the fourth year of study."

Mr. WHEELHOUSE seconded the motion, which was agreed to forthwith.

Dr. STRUTHERS then moved the eighth recommendation, that "With the view of securing attention to practical work in education, the time devoted to the practical part of the examination in all the subjects should be extended."

Mr. WHEELHOUSE, in seconding the motion, suggested that the written examinations might conveniently be carried on at the various medical schools instead of the present plan of centralising the examinations in one place. He pointed out that the questions might be sent down by the examiners to accredited authorities, and the examination conducted under their supervision.

The motion was put to the vote and agreed to, if not unanimously, at any rate without opposition.

Dr. STRUTHERS next moved the adoption of the ninth recommendation, that "The examination in the elements of physics, chemistry, and biology should be passed before the beginning of the second winter session."

To this Dr. BATTY TUKE moved as an amendment that the word "biology" should be omitted. He urged that they had come to the conclusion that an extension of the curriculum was indispensable because it had become incapable of holding all that had been put into it within the last few years. He maintained, therefore, that to insist upon biology at the very beginning of the course would tend to neutralise to a serious extent the benefit which they hoped to derive from the extension.

Dr. HAUGHTON, in seconding the amendment, said it was an imposition on the public to say that they taught their students physics, chemistry, and biology. It was at the best a mere superficial veneering or varnish that could be obtained in twelve months.

Dr. PETTIGREW reminded the Council that they only aimed at securing a knowledge of the rudiments.

Mr. MITCHELL BANKS said that it was idle to attempt to make a chemist or a biologist, and, therefore, only the rudiments were recommended to be insisted upon. He thought this fact ought to be brought to the notice of examining bodies whose questions in botany and chemistry were the terror of the student. He appealed to the teaching bodies to restrict this requirement for the preliminary examination to the elements only of the respective sciences.

The amendment was then put to the vote and negatived.

Dr. HAUGHTON moved, as another amendment, to include the study of elementary mechanics in the list of subjects which should be passed before the beginning of the second winter session, and after a desultory discussion, Dr. STRUTHERS agreed to incorporate the suggestion in the motion. The amendment was consequently disposed of by a process of absorption. The original motion, as modified, was then agreed to.

Dr. STRUTHERS then moved the tenth and last recommendation that "Subsequently there should be an examination at the end of each year of study arranged so as to secure due continuity and sequence of study; and all examinations, except one of a clinical and practical nature and in midwifery, should be passed before the final year intended solely for clinical work."

Dr. STRUTHERS said they had avoided going into detail as much as possible. He explained that they had felt compelled to put midwifery into the last examination because the man would only have attended his midwifery cases during the last year.

Sir WILLIAM TURNER said he did not altogether like this recommendation, for he did not believe that it was likely to be conducive to sound education. It would have for effect to put the student in a constant examination fever. He urged that examinations tended to disorganise study very materially, and he looked upon them as the great bugbear of education, especially if they were to be pushed still further. He asked whether he could introduce an amendment expressive of these views?

The PRESIDENT pointed out that the recommendation really comprised two sections, which he suggested had better be discussed separately.

Dr. STRUTHERS, however, urged that if this course were followed the second half should have priority. He declined to move

e first half, of which he said he personally did not approve.
Dr. CHURCH said he was not disposed to support the second part the proposal and then to find that he had pledged himself to e principle of yearly examinations. He suggested that it would desirable to obtain a distinct expression of opinion on the part the Council in support of this principle of yearly examitions.
Dr. WILKS deprecated any further interference with details. said he did not think the recommendation was practicable.
Dr. ATTHILL, in order to clear the air, proposed that the recomndation be divided into two parts, and that the first part be ken first.
This was seconded and agreed to.
As Dr. STRUTHERS still declined to bring forward this portion the resolution,
Dr. ATTHILL moved: "That there should be an examination at e end of each year of study, arranged so as to secure due conuity and sequence of study." He entirely dissented from the ndemnation passed by Sir William Turner on the system of exinations. He suggested that what Sir William would prefer s possibly that students should sit out the 50 or 100 lectures each course, and then enter the profession without any examition at all. He urged that they had given a good deal of time discussing the length of the curriculum and the number and ojects of systematic lectures, and it was at least as important at they should take care that the time was properly and usely employed. He avowed himself a freethinker in the matter medical education, not caring where or how the student obned his information, whether at a licensed or an unlicensed hool of medicine. He admitted that competitive examinations re open to objection, but these were not competitive examinans. He urged that the yearly examination was the rule in ry public school. He said the Council could hardly consent to cline to affirm a principle which promised to do so much to ure uniformity of training and the useful employment of the ne.
Dr. BRUCE seconded the motion, and urged the necessity of ving the examiners at liberty to ask questions in all the subts, so that the student might not consider himself at liberty to get what he had learned.
Mr. MACNAMARA said he was old enough to remember when only examination was a qualifying examination, and he erted that the consequence of that system was that men sted the first year or two, and then had to come to him to be rammed" for the examination, and it had been his duty to bene acquainted with the fads of the examination so as to pull m through somehow or another. He ventured to assert that one would assist to bring back such a state of things which d been done away with under the new scheme of the conjoined leges. The great thing was to prevent a man going on to the ond subject before he had passed in the first.
Dr. KIDD said the plan had been in operation at the Dublin lege for the last nine years. He claimed that it gave teachers etter grasp of the students, and prevented the latter wasting ir time. He strongly supported the proposal.
Dr. LEISHMAN said that as his colleagues on the Committee d unceremoniously thrown over this portion of the recomndation, he felt at liberty to follow his own inclinations in the tter. He objected to the rigidity of the rules which they proed to impose, and urged that it was undesirable to interfere re than was necessary with existing regulations, which proed that there should be at least three professional examinas; but as they had provided for an additional examination the end of the fifth year, he moved that "there should be at st four professional examinations, etc.," leaving it to the rective bodies to arrange the details of the examinations. He nted out that it was not only necessary to prevent a student ing the second examination before having passed the first, but prevent his taking up the subject to study for the second exaination until he had passed the first examination by not allowit to count.
Dr. PETTIGREW seconded the amendment.
Dr. ATTHILL declared his readiness to withdraw his motion in our of Dr. Leishman's suggestion, in order to save the time of Council.
Sir JOHN SIMON suggested the introduction of the words "irrective of the qualifying examination."
Sir WALTER FOSTER thought the time was perhaps hardly ripe such a resolution, and cautioned the Council against going too much into detail. He suggested that the matter might be brought up again at some time in the future. He admitted that he was favourable to this plan of periodical examination, but thought it might be premature at the present moment.
Dr. STRUTHERS said he did not agree with the proposal.
Sir JOHN SIMON insisted that the most important point was that the student should not be allowed to count study under Section 2 until he had passed the examination in Section 1.
Mr. WHEELHOUSE agreed that it was desirable to interfere as little as possible with existing arrangements. They had already made a special first year's examination and also a fifth year's examination. He suggested that the examination in educational subjects, such as physics, etc., should be cleared off at the end of the first year; then he would let the first examination in anatomy and physiology as it now stands (with the English examining bodies) come at the end of the third year; the subject of medical and surgical pathology being taken at the end of the fourth. The fifth, as stated, would be a clinical year, including midwifery. He conceded that it was hardly the duty of the Council to go into such close details, and for that reason he was prepared to adhere to the terms of Dr. Leishman's motion.
Dr. LEISHMAN, in reference to the employment of the term "qualifying examination," said that presumably all examinations were, in a sense, qualifying examinations.
Dr. WATSON protested against the constant reiteration of examinations, which he said harassed the student and took his mind from work. He considered examinations as a very imperfect way of attaining the object in view, which he thought might be better done if the resolution did not bear on the number of examinations, but stipulating simply that until each examination had been passed the student should not be permitted to take up the subjects of the subsequent examination. He pointed out, moreover, that examinations were costly things, and if the number of examinations were augmented the cost to the student would, in many instances, be increased *pari passu*. He would regret if the action of the Council excited hopes in the breasts of examiners that any increase in the number of examinations was likely to result in a great addition to their income. This, however, was not to be feared at universities. In conclusion, he said he believed it was undesirable to lay fresh burdens on the backs of students, and he advised that they should extract from the various resolutions such points as were calculated to prove of real advantage.
Dr. PETTIGREW said that too frequent examinations were a burden on both the examiners and the examinees. Some students had bad memories, and on these the plan of having few examinations at long intervals would press hardly, while others would feel acutely the enhanced cost of repeated examinations.
The Rev. Dr. HAUGHTON cautioned the Council against going too much into detail in the use of examination in education. He observed that the value of examination as a means of education had been the subject of very animated discussion, not only in the medical but in the general press, and he saw with pleasure that a reaction had set in against the system which Lord Brougham had introduced. He observed that certain members of the Council were like boys who pulled up the radishes now and again to see if they were growing. Mr. Macnamara had seemed to intimate that frequent examinations would pave the way to constant feuds between parents and children, but he did not see why this should be the case. He had always been his son's best adviser in such matters, and certainly, with all deference to the Council, he thought that if a man wanted advice and counsel, that body was the last to apply to. He said that the examiners were usually men of many years' standing, and were often unable to grapple with the teaching of the younger men who taught things which were unheard of when they (the examiners) learned their medicine. Science had materially changed within the last few years, and the struggle was not between the examiner and the candidate, but between the examiner and the "coach" who endeavoured to find out his weak points.
Dr. LEISHMAN'S amendment, which had, with the consent of the Council, been substituted for the original motion, was then agreed to.
Dr. STRUTHERS then brought forward the second paragraph of the original (tenth) recommendation, that "All examinations, except one of a clinical and practical nature and in midwifery, should be passed before the final year intended solely for clinical work." While he had pleasure in proposing this motion, he cautioned them to be careful not to run their heads against the provision of the

Medical Act (1886) which insisted on the last examination being a "qualifying examination in medicine, surgery, and midwifery."

Dr. KIDD, seconded by Dr. MOORE, moved as an amendment that "All examinations, except the qualifying examination in medicine, surgery, and midwifery, should be passed before the final year, and this qualifying examination should be of a clinical and practical character."

Mr. B. CARTER objected to any such precise instructions. He said that if an examiner were to be constructed out of a piece of tin or a watch spring, such details might be necessary, but looking at him as a human creature brought into relation with another human creature for the purpose of endeavouring to ascertain that second human being's abilities for the discharge of certain functions, he ought to be allowed to be guided by the special conditions of environment. Some examiners would do better in one way, while others preferred a different plan, and he urged that a certain latitude should be accorded. He proposed to introduce an amendment embodying these views.

Dr. WATSON hoped that whatever decision they arrived at they would make the fifth year the crowning year of the students' career, so that when sent out into practice they might be well qualified to exercise their profession.

Dr. LEISHMAN, by way of explanation, said that the difficulty arose in defining exactly what constituted a qualifying examination under the Medical Act. For that reason he should support Mr. Carter's proposals.

Sir WALTER FOSTER insisted on the necessity of giving the examiner the option of rejecting the candidate should he be found to be ignorant of the subjects of the earlier examinations, so that the last examination might be said to be a qualifying examination in the strict sense of the term.

After some further remarks by Sir JOHN SIMON and Sir W. TURNER,

The PRESIDENT said the Medical Act (1886) required a final qualifying examination in medicine, surgery, and midwifery, leaving it to the discretion of the examiners as to how far they would take up the subjects of the earlier examinations.

Sir JOHN SIMON said he would second Mr. Carter's amendment.

The PRESIDENT then read the original motion as brought forward by Dr. Struthers, to which there were two amendments, one by Dr. Kidd, given above, and one by Sir Walter Foster, "That the last or qualifying examination, passed after the fifth year, should be a practical examination in medicine, surgery, and midwifery."

Sir WILLIAM TURNER raised the legal question as to the power of the Council to subdivide the qualifying examination into two parts with a year interval, and suggested the propriety of adjourning the further discussion for the purpose of obtaining the opinion of counsel in the matter. He observed that if the Council sent down a resolution which turned out to be *ultra vires*, it would damage their prestige with the examining bodies. He asked whether counsel's opinion had not already been taken on this point last year.

Sir JOHN SIMON said it would be indispensable to point out to their legal advisers exactly where the difficulty lay.

Dr. STRUTHERS urged that if it were decided to obtain such opinion this should be done during the present session, or otherwise the time devoted to the debate would have been wasted.

Mr. MACNAMARA protested that it did not really seem necessary or desirable to obtain counsel's opinion on such a point.

Sir DYCE DUCKWORTH said it would be impossible for any lawyer to give an opinion on this point. It was for the Council to decide what constituted a qualifying examination, and if the Council could not do this certainly no one else could.

Dr. QUAIN urged that the language of the Act was as plain as it could be, and he did not see any necessity for taking counsel's opinion.

Dr. HERON WATSON said that counsel's opinion had already been obtained on two occasions on this point, and had been strongly against the possession by the Council of any such power.

Sir WALTER FOSTER said that the opinion obtained in reference to the examinations of the Apothecaries' Society did not bear on this point.

The Standing Order having been suspended to allow this point to be settled—

The PRESIDENT put it to the Council whether counsel's opinion should be obtained in reference to the question raised by Sir William Turner, and the Council decided in the negative.

On motion from the chair, the Council then resumed.

Dr. GLOVER asked whether the Chairman of the Business Committee could give any information as to when the present session was likely to come to an end.

Mr. WHEELHOUSE said that it was not in his power to answer the question.

The further consideration of the motion and the amendment before the Council was then postponed, and the Council adjourned.

It was stated that the man Owen, the charge against whom in connection with alleged fraudulent entry in the *Register* was considered by the Council on Wednesday, May 28th, had failed to put in an appearance at the police court at Liverpool, and was reported to have left the country.

Tuesday, June 3rd.

JOHN MARSHALL, F.R.C.S., F.R.S., in the Chair.

ON reassembling, the Council forthwith resolved itself into Committee to complete the consideration of the last paragraph of the last (tenth) recommendation of the Education Committee.

Dr. STRUTHERS, seconded by Mr. WHEELHOUSE, moved that "all examinations except one, mainly of a clinical and practical nature in medicine, surgery, and midwifery, should be passed before the final year intended solely for clinical work."

Sir JOHN SIMON though the proposal was inexpedient.

Sir WILLIAM TURNER urged that they had all along been drawing too sharp a line between the principles and practice of medicine and surgery. He therefore suggested that the word "solely" should be struck out. He thought that more latitude should be left for the different bodies throughout the country, once the question of a fifth year of medical study was decided.

Dr. LEISHMAN deprecated the severance of the theoretical study from the practical work of the last year, though he said he would yield to no one in his desire to see that students should be tested in practical work.

Sir JOHN SIMON asked against whom the motion was directed. He thought the principle of the motion was a bad one, and altogether beyond the limits of the duties of the Council. He asked whether anyone was disposed to question the practical nature of the final examination as at present conducted. Moreover, the last year of the curriculum was even now devoted almost exclusively to practical work. He appealed to his friend the Chairman of the Education Committee not to press the point.

In the absence of Sir Walter Foster, Dr. BRUCE moved: "that the last or qualifying examination to be passed after the fifth year should be a practical examination in medicine, surgery and midwifery." This, however, fell through for want of a seconder.

Dr. MACALISTER (in the absence of Mr. Carter) brought forward Mr. Carter's motion: "that all examinations except the examination in medicine, surgery and midwifery, should be passed before the commencement of the final year intended for clinical work."

This was duly seconded and agreed to, and was then adopted as a substantive motion.

Recognition of Hospital Attendance Abroad.—Dr. TUKE, in the absence of Sir John Banks, brought forward a motion: "That it be a recommendation that the fifth year of medical study may be passed in attendance on the clinic of a Continental hospital recognised by the licensing bodies mentioned in Schedule A of the Medical Act (1858)."

Sir WILLIAM TURNER suggested that, instead of "Continental," the expression should be "foreign and colonial." He was prepared to second the motion.

Dr. MACALISTER suggested that Continental hospitals were already recognised by the medical bodies, and, therefore, such a resolution was unnecessary.

On the representation of the PRESIDENT, that the ground was already covered, Dr. TUKE consented to withdraw his motion.

Age of Qualification.—Dr. KIDD, seconded by Dr. MOORE, proposed: "That it be a recommendation that, in view of the extension of the curriculum to five years, no degree or licence to practise medicine and surgery before the candidate shall have attained the age of 23 years shall be conferred."

Sir WM. TURNER pointed out that the additional year would of necessity raise the age of qualification. Such a specific recommendation, therefore, was uncalled for. He said that some of the ablest men that had passed through his hands had been able to graduate at the earliest age. Under these new regulations, the man beginning his medical studies at 17 could not graduate before 22. He strongly deprecated an arbitrary measure to keep such men back.

Dr. PETTIGREW hoped the motion would not be passed. H

ught it would be a grievous matter in some instances if it were sed. He pointed out that some persons were as far forward at as others were at 50. It would be a serious thing to keep back se who might after all be the best men.

he motion was ultimately negatived by a large majority.

Ir. MITCHELL BANKS wished to introduce the following ion: "That the General Medical Council should give the ious licensing bodies clearly to understand that they will con- r their recommendations as to a five years' course of study, as to the use to be made of the fifth year of study, as binding n these bodies, and that if any licensing body shall refuse to y them into practical effect, the Council will feel bound to g into operation the powers granted them by Section 20 of the lical Act (1858)."

r. LEISHMAN thought such a motion had better be brought up he report stage, but the PRESIDENT pointed out that it com- ed a novel principle which had not been referred to the Com- ee; hence he ruled that it could not now be proposed.

r. BANKS regretted this ruling, as it would preclude his bring- forward the motion later on.

eport on Preliminary Examination.—Dr. STRUTHERS then ght up that part of the report of the Education Committee ing on preliminary education. He observed that the standard ted upon by the Council was ridiculously low, and educational es could not be expected to raise their standard of preliminary ation while the Council set such a bad example. He observed he anticipated objection to the proviso as to writing from tion, and this he was prepared to abandon if necessary.

r. MACALISTER said he had asked the opinion of a past presi- of the Council on the subject of the recommendations of the mittee, and it was to the effect that while those in respect of essional examination were good and to the point, in those ing to English the Council were going too much into detail. ointed out that a man might have an excellent English edu- n, and yet not be able to show that he had passed an exami- n in writing from dictation; indeed, he himself would be gible were such a restriction enforced. Then, with regard to ing the derivation of words, this gentleman had observed it must be of doubtful utility so long as men high in the ession wrote aneurysm with an "i," and spoke of "epilepti- attacks." He suggested that the only effectual way would be stitute visitations of these examinations. He pointed out that us examination might nominally comply with the most de- l requirements, and yet be distinctly inferior to another that ot so comply. He urged that the motion was one of which ouncil could not approve.

B. CARTER said the wording of the resolution gave evidence its framers would not have been able to pass such an ex- ation in the English language.

HERON WATSON urged that it was at least as important he prescription should be legible as that it should be cor- written.

KIDD compared the requirements of the Council in the r of a knowledge of English with those for admission to the Constabulary, the latter, he said, being far more severe than st imposed upon candidates wishing to enter the medical sion.

STRUTHERS explained that it was the object of the Com- e to raise the standard of the examination.

PRESIDENT said he had considered it better to allow the sion to go on, but he thought that it was going a little too He, however, maintained every word he had said in his s as to the deplorable condition of things in this respect. If uncil chose to appoint an inspector that was one thing. He sted, however, that perhaps the most simple way would be e Council to instruct him to draw up a circular, calling tention of the different bodies to the feeling of the Council matter.

WALTER FOSTER proposed, in accordance with this sug- n, that the President be instructed to call the attention of rious bodies to the matter.

GLOVER asked whether in the past a request had not been sed to the examining bodies asking them in cases where the ate showed ignorance in the matters comprised in the pre- ry examination to ascertain where the preliminary examina- id been passed, and to report the same to the Council. He whether any such reports had been received. (The REGIS- No.) Then it might fairly be said that the boards had in their duty.

With the permission of the Council, Dr. STRUTHERS withdrew that part of the recommendation bearing on the details of the examination in the English language, and the President was requested to communicate the views of the Council to the bodies concerned.

The next recommendation provided that Latin, including grammar, translations from specified authors, and easy translations of passages not taken from such authors. Dr. STRUTHERS pointed out that this involved no change in existing regulations.

After a little desultory discussion this was agreed to.

Paragraph 3 of the first recommendation was to the effect that: "(3) Mathematics, comprising (*a*) arithmetic, (*b*) algebra, as far as simple equations, inclusive, (*c*) geometry, the subject matter of *Euclid*, Books I, II, and III, with easy deductions," should form part of the preliminary examination in arts.

Dr. STRUTHERS said that, with the exception of mechanics, this was the only point in which they had ventured to improve the examination, namely, they had insisted on three books of Euclid instead of one. He said that he had looked over a good many examination papers, including those set at the junior local examinations which were passed by little boys, yet the test exacted by the Council was inferior to them in severity.

Dr. HAUGHTON moved, but immediately withdrew, an amendment to include all the books of Euclid. The original motion then was agreed to as it stood.

The fourth paragraph of the recommendation bore on the optional subjects, which were enumerated by the Committee as Greek, French, German, Italian, and logic.

Sir WILLIAM TURNER protested against the words "or any other modern language" being left out, and he moved an amendment to have them reinstated.

Dr. MACALISTER said that the Committee had not given any reasons for altering the existing state of things.

Dr. STRUTHERS consented to insert the words, and the motion was then agreed to.

Dr. CAMERON raised the question as to the subject of logic, which, he said, was not worthy, as it was usually taught and examined in, to figure among the optional subjects. After some discussion on the subject his amendment to this effect was negatived, and the motion by Dr. Struthers affirming the maintenance of this subject among those which are optional for the student was agreed to.

Dr. STRUTHERS next introduced the second recommendation, having reference to the preliminary education: "That the list of examinations at present received as fulfilling the conditions of the Council as regards preliminary education be revised by the Education Committee, so as to include only those the standard of examination of which, in the specific subjects of preliminary examination, comes up to the standard considered desirable by the Council; and that it be an instruction to the Education Committee to consider the whole conditions under which the examinations are conducted and the candidates passed in the various subjects."

After a little discussion this was agreed to.

On the motion of the CHAIRMAN of the BUSINESS COMMITTEE, the Committee of the whole Council reported progress, and the Council resumed, it being understood that the report as agreed to in Committee would be brought up for adoption by the Council on the morrow.

The Council and Higher Diplomas.—Mr. MACNAMARA brought forward the motion which stood in his name, to the effect: "That the duty having been imposed on the General Medical Council by Section 3, Subsection 2, of the Medical Act (1886), of securing the maintenance of a standard of proficiency from all candidates at the several qualifying examinations, such as sufficiently to guarantee the possession of the knowledge and skill requisite for the efficient practice of medicine, surgery, and midwifery, this Council cannot view with favour conditions imposed on candidates for important medical and surgical appointments in the United Kingdom who have passed the examinations conducted under their supervision, which would imply that the said candidates, if successful in their candidature, would be incompetent to discharge the duties devolving on them with efficiency."

The PRESIDENT said that the question was one that the Council could not deal with, and he did not see what good any expression of opinion on the part of the Council could do. He therefore suggested to Mr. Macnamara that the best thing would be to drop the subject.

Mr. MACNAMARA said he would be glad to have the opportunity of showing that the Council had the duty of dealing with the

question. He said that the matter was one that had excited a very general interest among members of the profession and in the medical press. It involved very important considerations as to the way in which the Council discharged its duties. The duty of the Council was to see that every person who had passed a qualifying examination was competent to discharge the duties of his calling. In the matter of surgery it was their duty to secure that every man who qualified was competent to amputate Her Majesty's leg, should that very undesirable contingency come to pass. He quoted from the press to show what the feeling was in this respect, and as to the best means of remedying a crying injustice. It was the duty of the Council to prove that the aspersions cast upon the diplomas of the Irish Colleges were quite uncalled for. He observed that the present condition of things reposed on a trilemma. One leg of the trilemma was an attempt to maintain the English monopoly, the second leg was a racial prejudice, and the third—the only one that would be justifiable—was the allegation of incompetency. He said that he could assert without fear of contradiction that persons holding qualifications to practise from the Irish Colleges had gone through as severe a testing an examination as any in the other divisions of the kingdom. Any reflection on the value of these qualifications to practise was a reflection on the way in which the Council discharged its functions. He asked members to state their opinions frankly, but not to adopt the cowardly tactics of proposing the previous question in order to shelve it.

Dr. ATTHILL seconded the motion, observing that the injustice was so flagrant that argument was scarcely called for. He concurred in the reasons which had been so eloquently brought forward by Mr. Macnamara. He said that it was comprehensible that in a local election the local man should get the votes, but he protested against men being excluded from becoming candidates on any such reason.

Sir WILLIAM TURNER said that it was in no wise his wish to cast any reflection upon the Irish examinations, but as he was strongly of opinion that it was no part of the duty of the Council to attempt to regulate the terms upon which candidates should be admitted to compete for such appointments, he should move "the previous question."

The motion "to pass to the next order of the day" was agreed to, and the matter dropped.

Certificates of Moral Character.—Mr. MACNAMARA then brought forward a motion: "That it be recommended to the several medical authorities to require of candidates for their several registrable qualifications certificates of good moral character, signed by the deans, or secretaries, or other proper officer of the schools at which they may have studied, and also signed by a magistrate or clergyman." He alluded to several cases in which men who had been guilty of grave delinquencies had by changing schools been enabled to qualify—a possibility which he thought it was to the interest of the profession to prevent, and he suggested that the simplest means would be to require the production of a certificate of moral character.

The motion was seconded by Dr. COLLINS.

Dr. PETTIGREW spoke against the proposal, which he thought might give rise to a good deal of misunderstanding.

Sir WALTER FOSTER suggested at any rate the reference to clergymen and magistrates might advantageously be left out, to which Mr. Macnamara intimated his willingness to assent.

The motion was then put to the vote, when the numbers of those voting for and against proved to be equal, whereupon the President gave his casting vote against it, observing that in so doing he did not wish to be understood to disapprove of the object, but that he thought that this was not the best way to attain it.

Examination in Public Health of the University of Glasgow.—Sir WALTER FOSTER brought forward the report of the Committee which was appointed to consider the memorial which had been forwarded to the Council, containing serious allegations on the way in which the examination in public health of the University of Glasgow of October, 1889, had been carried out. He observed that the committee had inspected the documents, and had obtained supplementary information by telegraph as to the duration of the examination. They had inquired into the requirements for that examination, and had then endeavoured to ascertain how far these requirements had been fulfilled. Having done this, they had noted that certain of the requirements had not been observed in the examination papers, and after careful consideration of all the circumstances, they had agreed upon the following report:

"The Committee, having examined the documents referred to, and considered the examination papers of the Glasgow University Examination for Diplomas in Public Health held on October 15th and 16th, 1889, are of opinion that the said papers were not a sufficient test in respect to a written examination for the granting of a qualification in public health, more especially as they did not include either an examination in the duties of health officers or in a knowledge of leading sanitary Acts or in vital statistics, as embraced in the regulations for obtaining a qualification in public health in the University of Glasgow, as entered in the minutes of the Council on February 15th, 1887 (vol. xxiv, pp. 63, 64), and recognised by the Council on February 21st, 1887 (vol. xxiv, p. 144). Moreover, having regard to the important nature of the subjects omitted from the written examination—held on October 15th and 16th, 1889—when considered in connection with the small number of examiners and the large number of candidates, and the time occupied in the oral examination, the Committee are further of opinion that the deficiencies of the written examination could not have been satisfactorily supplied by the oral and practical examination as described."

He said they had arrived at this conclusion with great regret, considering the high position occupied by the University as a school of medicine, but the circumstances were such as to leave them no other alternative.

Sir DYCE DUCKWORTH seconded the motion to adopt the report.

Dr. HERON WATSON moved, as an amendment, that the report be sent to the parties interested without comment.

A discussion arose on a point of order as to whether the Council was justified in dealing with a report which they had not made their own; but the PRESIDENT thought the proposal ought to be allowed to stand.

Dr. WATSON, continuing, said it was not his object to throw any discredit upon what had been done by the Committee; on the contrary, he thought they were under a debt of gratitude to the Committee for the way in which they had discharged their duties. He pointed out, however, that it was a very serious matter to adopt the report. He thought that the Committee had advanced in hot haste, and this was to be explained by the desire to bring forward the report during the present session. He urged that the conclusions of the Committee were not based upon facts broad enough to justify them. He concurred in the report up to a certain point, but he maintained that the last part had been arrived at too much on inference. He said that the proper thing would have been to afford the incriminated examiners an opportunity of explaining their conduct; for after all it was the examiners who were to blame, if blame there were, and it was unjust to condemn them unheard.

Sir WILLIAM TURNER seconded the amendment.

Dr. PETTIGREW hoped the Council would be slow to adopt the report on such manifestly insufficient data, and he urged that it was not in accordance with their rules to go back on a past examination, at which no visitor had been present.

Mr. BRUDENELL CARTER unsuccessfully moved the suspension of the standing orders in order to carry forward this business. He then proceeded to comment upon the report, which he said erred if anything, on the side of indulgence. This was the first occasion on which the Council had been brought face to face with a flagrant instance of insufficiency of an examination, and he thought it was incumbent on the Council to deal with it as it deserved. The Council had to do with the University, and not with the examiners, who would have to answer to the University for their conduct. He quoted a passage from the resolutions of the Council to show what was the standard to be attained at these examinations. He pointed out that, in spite of the resolution of the Council to that effect, the examination question did not comprise any laboratory work at all. The rules as to education did not, it was true, apply to men on the *Register* before a certain date; but the rules as to the examination applied with equal force to everyone, whether registered or not. He commented on the statement contained in the reply received from the University, that the candidates were examined "on a great variety of models." He asked whether they were to suppose that there were models of insanitary houses, and that the ability of the candidate to detect sanitary defects could be tested by any such ridiculous means. He compared the examination as a whole with that which obtained at Aberdeen, where there was a whole day's examination in laboratory work and another devoted to the inspection of insanitary houses. He thought it was monstrous to suppose that

stions which could have been answered by a schoolboy could aken to answer the requirements of the Council in this very ortant matter. He pointed out, moreover, that no questions been set on the subject of the duties of the medical officer of th. He urged that to adopt the course suggested by Dr. Wat- would bring disgrace and difficulty upon the Council. They ld be told that they were not fit to be trusted with great re- isibilities. If, as he trusted would be the case, the amendment e negatived, it was his intention to move at the proper moment the Council, having adopted the report, should forward this rt to the Privy Council for its decision; and that, until such sion had been made known, the Registrar be instructed not to it to registration any diplomas in public health emanating 1 the University of Glasgow.

ie Rev. Dr. HAUGHTON said he had given the greatest atten- to the questions that had been brought before the Committee, he thought they had come to a very proper conclusion. They not asked for any further information, for the simple reason they required none. He maintained that the questions set in written papers were such that the fact of having passed on 1 left the candidates still unworthy to occupy a position on *Register*. He said that the questions left three vital subjects gether untouched.

ie standing orders not having been suspended, the Council ad- ned at the usual hour.

Wednesday, June 4th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

ublic Health Examination of the University of Glasgow.—Dr. GHTON, continuing his remarks, said the matter was the most us that had come before the Council since he had been a ber. At the same time, it was a subject upon which the less said on either side the better, but the amendment left them members of the Committee) no option but to fight it out. He ed to inform the mover and seconder of the amendment of a to which he otherwise would not have referred, namely, that eport was decided upon unanimously by the six presumably rtial, intelligent, and competent members of the Committee. efuse to adopt the report would be to offer a marked affront Committee which had been chosen by the Council to perform delicate, difficult, and unpleasant duties. He denied that ommittee had acted with heat. They had acted in a judicial city, and they had found that the examination was inferior in the subject which it professed to embrace. He said he e as an examiner with a good deal of experience, and he l not conceive of the defects having been made up in the part of the examination. He urged that unless there was a al interposition of divine Providence on that occasion in ir of the candidates it was absolutely impossible that 55 out should qualify and not one come to grief.

WILLIAM TURNER discussed the points insisted upon in the orial, and urged that the conclusions had been arrived at on ly insufficient bases. He said it was at least peculiar that wo representatives of the University of Glasgow sitting in Council should not have been appealed to for further in- mation—information which he said was absolutely necessary, without it he would not feel justified in voting for the adop- of the report. He denied that the effect of Dr. Watson's on was in any case to shelve the report. He allowed that xamination in question was not one that was worthy of the ersity of Glasgow, but he thought it would be sufficient to he attention of the University to the report. He pointed hat the proper remedy for any shortcomings would have an appeal to the Universities Board, which would have had the ntage of being able to investigate the matter on the spot in- of a necessarily imperfect inquiry conducted 400 miles .

JOHN SIMON said he thought it would have been better for who opposed the motion to have met it with a direct nega- and not attempt to postpone the matter by a side wind. He ssed the circumstances, concluding by saying that he should inly vote for the adoption of the report, but whether adopted t he should certainly move that the recognition of the sani- diplomas of the University of Glasgow be suspended.

LEISHMAN addressed himself first of all to the task of assur- he Council that nothing was further from the intentions of niversity than to go behind or evade any of the resolutions of the Council. He questioned the power of the Council to take such a course, and urged that by entering the memorial upon the minutes they had, at any rate, created what might prove to be a very inconvenient precedent. He said that Mr. Carter had imparted a good deal of exaggeration, and even caricature, into his speech of yesterday, and he protested against such a powerful weapon as caricature being resorted to to influence the minds of members in such a matter. He denied that the examination, deficient as it may have been, was of the contemptuously low standard which Mr. Carter seemed make it out to be. He frankly admitted that when he saw the list of successful candidates he was "staggered," and so were many of his colleagues, and they inquired into the matter, but they were told that the men had obtained the necessary marks, and had therefore been passed. He indignantly repudiated the insinuations comprised in the memorial that the University had deliberately altered the regulations in order to get the better of the resolution passed by the Council. He pointed out that a list of fifty-five candidates necessarily comprised men of very different standing, but of that number there were many who were as highly qualified as anyone could desire in this respect. Yet they, equally with the others, would suffer from the slur cast upon the sanitary diplomas of the University by these proceedings. He confessed to great sympathy with the candidates who thus found themselves placed in a very awkward position. He read a letter from several gentlemen (graduates) offering to attend and give evidence of the *bona fides* of the examination if called upon so to do. He would support Dr. Watson's amendment, but he would have preferred to have met the motion with a direct negative. He denied that the non-adoption of the report involved any slur on the Committee. It amounted simply to this, that the Council expressed no opinion thereupon. He urged, in conclusion, that there was room for feelings of generosity and consideration in arriving at a conclusion.

Mr. MACNAMARA said he should support the motion to adopt the report, but spoke highly of one of the examiners.

Dr. CAMERON regretted that he could not reconcile any other course, with his sense of duty, than that of supporting the adoption of the report, though he declined to commit himself to any steps which that adption might subsequently be held to justify.

Sir WALTER FOSTER, rising to reply in support of his motion, explained that he and his colleagues on the Committee had endeavoured to preserve an impartial attitude, and had carefully abstained from any communication with those gentlemen connected with the University of Glasgow. If they had applied to them for information they would have felt called upon to do the same for the memorialists. He said that three courses were open to the Council in respect of the report: (1) to refuse to adopt it, that is to reject it; (2) to refer it back to the Committee for further evidence, a course which would involve a delay of several months; or (3) to adopt the report and send it to the bodies with such remarks as might be deemed necessary. The only object of the middle course taken by Dr. Watson was to place the Committee in a very delicate position. If they adopted the amendment, they would practically introduce into the dispute the Committee as a third party. First, they would have the memoralists; secondly, the University; thirdly, the Committee, whose report found against the sufficiency of the examination, and would without the support of the Council be placed with all the responsibility of defending the finding to which it came in the discharge of a most grave and unpleasant duty.

The PRESIDENT said he would not make any remarks, but he should record his vote, and this would express as strongly as anyone could wish his opinion on the question before them.

Dr. WATSON'S amendment "That the report received and entered upon the minutes of the University of Glasgow's Public Health Diploma Committee be forwarded without any expression of opinion to the Senatus Academicus of that University, and that the same be intimated to the memorialists and to the Secretary of the Public Health Medical Society" was then put to the vote and rejected by 17 votes to 5.

The adoption of the report was then agreed to.

Recommendations of the Report of the Examination Committee.—On the proposal of Sir DYCE DUCKWORTH, the Council went into committee to consider the recommendations of the Examination Committee.

Sir DYCE DUCKWORTH then brought forward the first recommendation, which, for convenience sake, he divided into two parts. The first part sets forth that "the system of compensation as between the different subjects of the qualifying examination

in medicine, surgery, and midwifery stands condemned as contrary to the Medical Act of 1886, and your Committee begs leave to urge that the Council should formally direct the attention of the several medical authorities to this fact."

This was agreed to without discussion.

He then brought forward the second part: "That the marks for clinical medicine and surgery should be equal to those for the written and oral portions taken together." He urged that no excellence in the written papers ought to be allowed to compensate for any shortcomings in the clinical and practical part of the examination.

Dr. GLOVER, Mr. MACNAMARA, Sir GEORGE MACLEOD and others made remarks on the wording of this part of the resolution.

Dr. CHURCH moved as an amendment: "That the marks for the written and oral examination in medicine at the final examination should not exceed those of the clinical and practical portions of the examination."

This was negatived, and the original recommendation, as modified, was adopted.

Sir DYCE DUCKWORTH, in reporting "That the Committee is also strongly impressed with the necessity for insisting that candidates should have held one or more of the offices of clinical, obstetrical, out-patient, and *post-mortem* clerk, and dresser to both out- and in-patients, and directs the attention of the Education Committee to this matter," observed that they were only formulating certain general rules.

A desultory discussion ensued, when it was pointed out that, as the motion was after all only to direct the attention of the Education Committee, it was unnecessary to discuss the details.

It was then agreed to.

The REGISTRAR read the third recommendation: "That the practice of different authorities varies on the question whether a student who fails to satisfy the examiners in each of these several subjects of medicine, surgery, and midwifery should be referred on all of them or only on those in which he fails. Your Committee recommends that some general principle should be adopted with reference to this question, and suggests that an average percentage of not less than 65 marks should exempt from re-examination on the subject or subjects on which the pass percentage is attained, supposing that the pass marks are 50 per cent."

Sir DYCE DUCKWORTH, in proposing the adoption of this recommendation, pointed out the differences that existed in the practice in this respect, and said the matter had been suggested from an examination of the inspectors' reports.

Rev. Dr. HAUGHTON said he agreed with the principle underlying the recommendations, but he said that it was undesirable that any arbitrary number of marks should be fixed, seeing that marking was such a variable quantity. He thought it would be better to leave it to the discretion of the examiners.

Sir DYCE DUCKWORTH said that the number of marks was purposely put high because it was proposed that only candidates who had done something more than merely pass in this or that subject should be exempted from re-examination in that subject or subjects.

Dr. STRUTHERS insisted upon the necessity for bringing about a uniform system of marking. He wanted an absolute system, not a merely relative one.

The PRESIDENT, in putting the resolution to the vote, thought it would best be subdivided. He therefore put the first half, and this was passed.

A good deal of discussion took place on the second part of the recommendation, in which Dr. PETTIGREW, Dr. LEISHMAN, Dr. CHURCH, and others joined.

Dr. LEISHMAN pointed out that the part they had agreed to was not a recommendation, but a statement of fact.

Dr. WATSON thought the moment was inopportune for such a categorical resolution, since it might prove to be inoperative.

Dr. LEISHMAN asked a percentage of what. Was it a percentage of the three subjects?

Sir DYCE DUCKWORTH declined to withdraw the recommendation, which he said had been deliberately arrived at in Committee, and he thought it was the duty of the Council to take action thereon.

Dr. CHURCH said something ought to precede the intimation that the student must present himself in all three subjects when he first came up for examination.

Dr. GLOVER thought the proposal was considerate and fair to students.

Some discussion ensued as to whether the percentage should be 60 or 65, but, on Sir DYCE DUCKWORTH insisting, the point was dropped.

The motion was then agreed to.

Dr. WATSON asked whether, and if so when, the Council proposed to say definitely whether the subjects of medicine, surgery and midwifery were to be considered one and indivisible.

The PRESIDENT said that the subject might be raised by member, or he might be requested to obtain legal opinion thereon

Dr. WATSON said he would propose a resolution to that effect.

Dr. STRUTHERS pointed out that the question as to obtaining a opinion had been decided adversely on the previous day. He did not think a legal opinion would be any good, though he admitted that the question was one upon which the Council ought to pronounce definitely.

The PRESIDENT suggested to Dr. Watson that his motion should be placed on the agenda for the following day.

On motion from the Chair, the Council in Committee reported progress, and the Council resumed.

Report of Executive Committee.—Mr. WHEELHOUSE moved the adoption of the report of the Executive Committee in reference to exceptions made by them in special cases as referred to the registration of diplomas in sanitary science.

Dr. HAUGHTON pointed out that the Executive Committee had no powers to come to a definite decision on the subject of the exceptions. He proposed to take the various paragraphs of the report *seriatim*.

Sir WILLIAM TURNER said that, as he read the terms of the reference, the Executive Committee were to decide these cases on exception and report the same to the Council. He certainly did not take it to mean that any approval on the part of the Council was necessary.

Sir JOHN SIMON regretted to say that he thought Sir William Turner was correct in his contention, and that the Council had not been sufficiently guarded.

Mr. WHEELHOUSE asked permission to withdraw the motion to adopt the report.

Dr. STRUTHERS said that looked like an attempt to escape criticism, and so far as he was concerned he objected to the report being withdrawn. He assured the Executive Committee that the criticisms would be made somehow.

The PRESIDENT observed that it was free to any member to propose a motion on the subject by giving notice, but that this could not be done then.

With the permission of the Council, the proposal to adopt the report was then withdrawn.

The following communications and documents were, by successive votes, ordered to be received and entered upon the minutes.

1. Report of Education Committee on a commission from the local authority for Glasgow under the Public Health (Scotland) Act referred to them for consideration and opinion. The report expresses approval of the opinion expressed by the local authority that "no qualification in medicine ought to be registered which is granted without evidence of clinical instruction in infectious diseases," and advises that Recommendation No. 17, adopted by the Council on May 26th, 1888, be amended accordingly.

2. Communication from the Education Committee in reference to communication from the Royal University of Ireland relative to the fact that natural philosophy was no longer a compulsory subject at the matriculation examination.

3. Memorial presented to the President and members of Council by forty-seven unqualified assistants of over twenty years' standing begging for the institution of modified examinations in order to admit them to the *Register*.

4. Communication from the Royal University of Ireland in reference to certain difficulties which are likely to arise in Ireland in carrying out some of the regulations of the Council with regard to diplomas in State medicine.

Dental Business: Registration of Higher Dental Diplomas.—Mr. MACNAMARA asked the following question: "That while recognising the fact that such are not registrable in the *Medical Register*, whether the titles conferred by the several medical authorities subsequent to the passing of the Medical Act (1858) but not conferred in accordance with the provisions contained therein, said titles being conferred on registered dentists on after *bonâ fide* examination, are or are not registrable in the *Dentists' Register* as additional qualifications under the provisions of Clause 6 of Section 11 of the Dentists' Act (1878) which are as follows: 'The General Council may, if they think fit, from time to time make, and, when made, revoke or vary, orders for the registration in (on payment of the fixed fee by the order

d the removal from the *Dentists' Register* of any addi-
nal diplomas, memberships, degrees, licences, or letters
d by a person registered therein which appear to the Coun-
to be granted after examination by any of the medical
thorities in respect of a higher degree of knowledge than is
uired to obtain a certificate of fitness under this Act.'"
said it was a very praiseworthy ambition, and one which, if
cticable, should be encouraged. He discussed the meaning of
term "higher title," and denied that this meant necessarily a
her title in dentistry. In reference to the diploma in surgery,
pointed out that they might be admitted to the *Dentists'*
gister, although, as they would not have been granted in con-
mity with the Medical Act (1886), this would not confer any
ht to practise.

he PRESIDENT said it was a rather complicated question, but
y had some precedents to guide them. He pointed out that
opinion of their legal advisers was adverse to the possession
the Council of the power to register additional diplomas in the
ntists' Register, but the Council, in the exercise of its power, had
ided to do so, so that this question need not now be raised.
s power had been exercised not only in regard to surgical but
espect of medical diplomas. Mr. Macnamara had raised the
stion as to whether the Council would consent to register in
Dentists' Register single diplomas not issued in accordance with
Medical Act (1886). He pointed out that none of the privi-
es of the licensing bodies had been extinguished in so far as
grant of the single diploma was concerned; all that had been
e was to provide that they would not be admitted to registra-
n in the *Medical Register*. The question was whether this
stituted any reason for not recognising them in the *Dentists'*
nister. He asked the Registrar to read a report which had
n prepared on the subject.

HE REGISTRAR referred to the various resolutions of the
ncil authorising the registration in the *Dentists' Register* of
plemental medical and surgical qualifications. Such entry
ferred no right to practise, and the Medical Act (1886) did not
clude the admission of such qualifications to the *Dentists'*
nister. The second point was one to be decided by the Council.
was agreed to place this statement on the minutes, to pave
way for any motions next day.

Ir. MACNAMARA had given notice of his intention to ask,
ough the President, whether it was or was not the opinion of
Council that with the object of raising the status of registered
tists facilities should be afforded them of obtaining such ad-
onal titles after sufficient examination.

he PRESIDENT said that it would not be for him (the
sident) to elicit an opinion, and he suggested that it should
rought forward in the shape of a motion on the following day.
o this Mr. MACNAMARA agreed.

r. GLOVER asked by what authority and after what kind of
stigation men were admitted to registration under Clause 37
he Dentists' Act (1878). He pointed out that the number of
who had obtained registration under the apprenticeship clause
larger than the number admitted with diplomas (312 as com-
d with 248); and he said that the facility with which men
e admitted had given rise to a great deal of dissatisfaction
ng those who had gone to the trouble and expense of obtain-
a diploma.

he PRESIDENT asked the Registrar to read the reply which had
drawn up, from which it appeared that every application for
stration was made the subject of special investigation. No
had been fixed for the period of time during which this
se was to remain in force, consequently they were not entitled
fuse to register such applicants as made out their case. He
details of the way in which this clause worked at some
th, and said that by process of time the number of applica-
s was getting less, only ten having been received during five
ths.

he Council then adjourned.

Thursday, June 5th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

the Council reassembling, Dr. QUAIN asked the Chairman of
Business Committee (Mr. Wheelhouse) whether there was any
pect of the business of the session being brought to a close at
nd of that sitting?

r. WHEELHOUSE thought that if members would concentrate
attention on the matters before them, there was every pro-
lity of the business being got through.

Dr. QUAIN said then he would make out the cheques accordingly.

Sir JOHN SIMON observed that in this case if the Council sat the next day, there would be no further payments.

Report of Education Committee.—Dr. STRUTHERS moved: "That the resolutions passed by the Council in Committee in regard to the report of the Education Committee be adopted."

Dr. BATTY TUKE suggested the introduction in the resolution bearing on professional education after the word "dispensaries" of the words "home, foreign, or colonial."

Dr. QUAIN seconded the motion.

Dr. WATSON thought that if permission were given to students to go abroad after passing the examination at the end of the fourth year, there would be a danger of their attention being distracted from their work.

Dr. STRUTHERS said that these hospitals were already recognised by the medical authorities.

Sir JOHN SIMON moved that the resolution read "that the fifth year should be devoted to clinical work at one or more of such public hospitals or dispensaries, British or foreign, as may be recognised, etc."

Dr. TUKE agreed to accept Sir John Simon's amendment, and this was agreed to, only Dr. STRUTHERS dissenting.

Dr. LEISHMAN moved, in reference to paragraph *e* (see p. 1307), that the words "were to involve attendance beyond two or three subjects on any one day" be deleted. He said he had made a calculation, and found that it would be almost impossible to cover the ground laid down in the regulations subject to the restriction of time.

The Rev. Dr. HAUGHTON said that the only difficulty would be obviated if they set aside the fiction that physics, chemistry, and biology could be regarded as medical study. If excluded, there would be ample time for the proper subjects to be taken.

Sir WM. TURNER said that he had felt the proposal to be impracticable all along.

Dr. STRUTHERS agreed that this portion of the clause might lead to some confusion, and perhaps difficulty.

The motion to delete the words was then agreed to.

Sir WM. TURNER then moved that the first part of the resolution be also deleted. This was seconded by Mr. MACNAMARA.

Dr. STRUTHERS opposed the motion, saying that the measure had been carefully considered by the Education Committee and by the Council in Committee.

Sir JOHN SIMON, Dr. QUAIN, Dr. PETTIGREW, and others continued the discussion at some length.

Sir WILLIAM TURNER suggested that it would be sufficient to adopt the words "that it is desirable that the number of systematic lectures be restricted."

Mr. MACNAMARA agreed to this suggestion.

Sir GEORGE MACLEOD spoke strongly against the resolution, and said that they would find it impossible to get through their work with such a restriction. He urged that, if lecturers were left at liberty to exercise a discretion as to the number of lectures, there would be no ground for complaint. He did not wish to be obliged to deliver a hundred lectures, but he did not consent to be limited to two or three.

Dr. STRUTHERS said the present system was altogether a wrong one. He observed that in most cases the students had the lectures in their pocket to which they were required to listen, hence it was an unnecessary waste of time.

The amendment that the Council merely express an opinion that "the number of systematic lectures be restricted" was negatived.

The Rev. Dr. HAUGHTON wished to introduce the word "professional" in the clause, so as to read "in any one professional course." He said this would put biology, etc., outside the restriction, for it was quite impossible to teach these subjects in a year with such restrictions.

Dr. STRUTHERS energetically declined to accede to the suggestion.

The Rev. Dr. HAUGHTON said he did not think it was worth insisting upon.

On the suggestion of Dr. QUAIN, and after much discussion, the words "two or" be deleted, so that the resolution read "not more than three lectures, etc."

The motion was then agreed to.

Dr. LEISHMAN moved that the word "qualifying" in Clause *k* be omitted. This was agreed to.

A proposal by Dr. PETTIGREW to add the words "or assistant" after the word "teacher" in Clause *f* (see p. 1307) was negatived without discussion.

Mr. WHEELHOUSE moved "That the final examination must not be passed before the close of the fifth year of medical study." On the suggestion of Dr. WATSON the words "in medicine, surgery, and midwifery" were added, and the motion, as amended, was agreed to.

New Edition of Recommendations.—On the motion of Dr. STRUTHERS it was agreed to order "That a new edition of the Recommendations of the Council (as modified by the resolutions of the Council in its present session) be prepared by the President, with the assistance of the respective chairmen of the Education and Examination Committees, and be issued as soon as found practicable."

A "consolidation clause" was introduced by Sir JOHN SIMON, in order to make it clear which matters the Council were prepared to insist upon and regard as "essential."

Sir WM. TURNER called attention to the fact that the very first paragraph proposed to render the resolutions of the Council operative from the present time. He asked Sir John Simon to say definitely what course he proposed to adopt in case of non-compliance with this clause. Would he bring the matter to the notice of the Privy Council? In such case he warned him that he would have to drag every one of the Scotch universities before the Privy Council, for not one of them would be able to conform to any such requirement. These universities worked on ordinances which could not possibly be changed under a year.

Under these circumstances, Sir JOHN SIMON asked for and obtained permission to withdraw the motion.

Dr. STRUTHERS (seconded by Dr. PETTIGREW) moved: "That any report of the Executive Committee in regard to exceptions, in special cases, to the rules of the Council for the registration of diplomas in sanitary science, under the minute of the Council, clause 7, page 172, vol. xxvi, shall require to be adopted by the Council before any proposed exemption shall take effect."

Dr. BATTY TUKE objected to the motion, on a point of order, on the ground that it was going behind an unrescinded resolution of the Council, and impugned the powers of the Executive Committee.

The PRESIDENT ruled that the motion was in order.

Mr. MACNAMARA proposed as a preamble, "That the resolution of the General Council of November 30th, 1889, be rescinded and, etc." This was embodied in the motion by consent.

Sir WILLIAM TURNER said the words "in future" should be inserted to make the meaning quite plain.

Dr. HERON WATSON said it might be better to reconsider the whole policy of relegating duties of this kind to committees. It would be necessary to make it clear whether the Executive Committee was to be an executive committee properly so called, or merely a kind of extended business committee.

Mr. BRUDENELL CARTER said he had strongly protested against the very powers being conferred which had now proved the cause of so much inconvenience.

Sir JOHN SIMON said the Council could not dispense with the services of committees, but might in future show a little more caution in framing their references.

SIR WALTER FOSTER said the powers conferred were essentially ephemeral in their nature.

The motion, as amended, was then agreed to.

Clinical Instruction in Infectious Diseases.—Dr. STRUTHERS (seconded by Mr. WHEELHOUSE) moved: "That no qualification in medicine ought to be registered which is granted without evidence having been afforded of clinical instruction in infectious diseases." Provision had been made at all the Scotch schools for instruction in this respect. He observed that this course of instruction must be regarded as "essential" by the Council.

Dr. GLOVER said he would support the resolution, which he hoped would be agreed to without discussion.

Sir WILLIAM TURNER concurred in the resolution, but criticised the way in which it was expressed.

Mr. MACNAMARA said these facilities had been in force for years in the Irish schools.

The PRESIDENT pointed out that, as the subject was one in which it was practically impossible to test the candidate's knowledge by examination, it was doubly important to insist upon educational requirements.

The motion was then adopted.

On the motion of Dr. LEISHMAN, seconded by Sir WALTER FOSTER, it was resolved to request the President to forward a special communication to the Local Sanitary Authority of Glasgow, enclosing a copy of the preceding resolution.

Report of Examination Committee.—Sir DYCE DUCKWORTH brought forward a motion: "That the resolutions passed by the Council in Committee from the Report of the Examination Committee (see pp. 1313 and 1314) be adopted by the Council."

The clauses were agreed to seriatim until the Council came to Clause *e.* (see third recommendation, p. 1314).

Sir DYCE DUCKWORTH then proposed in lieu of Clause *e.*, the following resolution: "That a percentage of not less than 60 per cent. on each of any two subjects should exempt from re-examination in each of those two subjects in which 60 per cent. or more had been obtained.

This lead to a great deal of discussion.

Ultimately the substituted resolution was agreed to by the Council.

System of Marking.—On the motion of Dr. GLOVER the Council agreed to recommend to the examining bodies the use of a percentage system of marks, and, for the purpose of facilitating the work of the Council's inspectors, that uniform "pass marks" of 50 per cent. be adopted.

Date of Enforcement of Resolutions.—Dr. STRUTHERS (seconded by Sir JOHN SIMON) moved: "That the resolutions of the Council on preliminary and professional education and examination, passed June 4th, 1890, be transmitted to the several medical authorities, with the expression of the hope of the Council that regulations in harmony with them may be brought into operation on and after January 1st, 1892." He pointed out that these resolutions would not apply to any student actually on the *Register*, or entitled to be registered. He thought that a period of twelve months would give time to the various bodies to alter their regulations.

Some discussion took place on the subject of the date to be fixed. Dr. GLOVER suggested October, 1891; Dr. HAUGHTON suggested January 1st, 1892; and the latter proposal was ultimately adopted.

Dr. LEISHMAN asked what was meant by recommendations "taking effect."

Dr. STRUTHERS pointed out that some of the resolutions were mandatory, and others merely of the nature of recommendations. The "consolidation clause," which had fallen through in consequence of a technical *hiatus*, made this clear, and he regretted that it had not been passed.

On Sir WALTER FOSTER'S suggestion the further consideration of the matter was postponed, in order that the "consolidation clause" might be adjusted and brought in again.

Diplomas in State Medicine.—Sir JOHN SIMON moved: "That the Council's resolution of November 30th last (see Clause 9 of the minutes of that day), suspending the operation of the Council's previous rule (*d*), relating to diplomas of State medicine (see minutes, vol. xxvi, p. 118), be now declared to be of no further force."

Dr. LEISHMAN argued that the difficulties which led the Council to suspend the enforcement of the resolution were still existent. He would move the "previous question."

After some discussion, Sir JOHN SIMON withdrew the motion.

Rev. Dr. HAUGHTON moved: "That the prayer of the Royal University of Ireland (see Clause 16 of minutes of June 4th) cannot be complied with, inasmuch as it is at variance with the regulation made by the Medical Council that an interval of twelve months must elapse between obtaining a registrable classification in medicine, surgery, and midwifery and registration in public health. He explained that the communication in question in reality asked to be dispensed from the necessity of allowing a year's interval between obtaining a qualifying diploma and entrance for the examination in public health. He regarded this proviso as one of great importance, and as one which ought to be insisted upon. He asked permission of the Council to congratulate Sir John Simon upon the appearance of a work which was remarkable for the intimate knowledge it showed of the subject of which it treated, and also remarkable in respect of the English language.

The motion was then adopted, and the request was consequently refused.

Dental Business.—A motion was brought forward by Mr. MACNAMARA, asking the Council to express an opinion that with the object of raising the status of registered dentists, facilities should be afforded them by the medical authorities of obtaining such additional titles after sufficient examination as are mentioned in Subsection 6, of Section 11, of the Dentists' Act.

The PRESIDENT explained that by approving of facilities being

orded, the Council would practically express their approval of e Colleges issuing their special diplomas for dentists.
This was agreed to.
A proposal by Dr. LEISHMAN that the attention of the Dental mmittee be called to the frequency with which the names of tain persons are still entered on the *Dentists' Register* under ction 37 of the Dentists' Act (1878) was ruled out of order as erring to the Dental Committee matters which it was not within ir competence to consider.
The Council then adjourned until Friday.

The British Medical Journal.

SATURDAY, JUNE 7TH, 1890.

THE GENERAL MEDICAL COUNCIL.

THE FIFTH YEAR OF MEDICAL EDUCATION.

E subject which has occupied the greatest share of the ention of the General Medical Council during the past week, l which is undoubtedly of most interest to the medical ly at large, has been the consideration of the report of Education Committee. That report has occupied the ention of the Committee for a considerable period, and its irman, Professor Struthers, collected for its use a mass of eresting information concerning the curricula of the Conti- tal schools. The Council, having resolved itself into com- tee, carefully went over this report, altering and amending ere it saw fit.

The general outcome of its deliberations is pretty much to effect: It is laid down as a fundamental principle that the rse of professional study should occupy five years, of which first four should be passed in a recognised school of medi- . The student, however, should be allowed to spend his year at any recognised teaching institution where physics, mistry, and biology are taught; and any graduate in arts cience, who may have given proof of having studied these jects, and of having been examined in them for his degree, ld be held to have completed the first of the five years of ly.

he Council then went on to recommend that the fifth year ld be devoted to clinical work in a hospital or dispensary, the proviso that six months of that year may be spent he student as pupil to a practitioner recognised by the ical authorities. We think it a wise and reasonable thing the practitioners should be thus licensed or registered, use it will do away with all fear lest there should be found who would simply take the fees of idle students, never ble themselves to teach them anything, and merely supply onest certificates. The Council then make a dead set at baneful custom of excessive lecturing, giving it as their ion that two or three lectures a week in any one course is ient, and that the arrangements of study should be such ot to involve attendance on more than two or three sub- at one time.

In the next place the licensing bodies are urged to set more time for practical work, and to see that attendance the same is carefully certified; indeed, it is urged that regulations of the examining bodies should be so framed that attendance on systematic courses of lectures should be finished by the end of the fourth year, so that the fifth may be left quite free for clinical work. With regard to the examination in physics, chemistry, and biology, it is recommended that it be passed before the beginning of the second winter, and the Council expressly speak of the subjects just mentioned as the elements of physics, chemistry, and biology. On this point some very severe remarks were made on the absurd demands made on the student's time and capacity by the excessive importance attached to botany and zoology. There cannot be a doubt that in some universities the subject of botany has been pressed in a most harassing manner upon the student. The curious thing is that the physicist, the chemist, the zoologist, and the botanist too often take an utterly mistaken view of their relation to the medical student. In their eagerness to magnify these individual subjects, they expressly announce their intention that, if they are to do their duty, they must make the unhappy youth of 19 an accomplished physicist, chemist, zoologist, and botanist. They utterly ignore the fact that the unhappy lad wishes to be made a medical practitioner. They cannot be brought to understand that these subjects are merely intended to be eye-openers—to be a kind of alphabet by the aid of which the student may be able to spell out his human anatomy and physiology when he comes to them.

It is very satisfactory to find that the Council distinctly recognises the proper part which should be played by the preliminary sciences, and distinctly announces its opinion that only the elements of these sciences should be taught and examined upon.

In conclusion, in order to emphasise the value which it attaches to the final year being really and truly devoted to clinical work, a recommendation is made that all examinations, except the final examination in medicine, surgery, and midwifery, should be passed before the commencement of the final year.

Taking them all round, the recommendations of the Council are distinctly in harmony with the spirit of the best and most practical modern teaching. They say, in effect, that the medical student should have such a moderate amount of general scientific training as should help him on to the study of the special scientific parts of his profession, while they indicate that the additional time, now placed at his disposal, should be unreservedly given over to such practical study of disease as may enable him to enter the world at the end of his five years competent to be entrusted with the care of the lives and welfare of the lieges.

And now, what will be the outcome of all this? Hitherto the General Medical Council have contented themselves with giving gratuitous advice of the most costly nature. That a good deal of this advice has percolated downwards is no doubt true, and we do not mean to deny that it has not had a good effect. But the percolation has been a very, very slow affair. There has been an enormous expenditure of talk and money and energy with very little result. It has been a carefully transmitted tradition that the Council should never get beyond the stage of recommendation. The effect of this depressing tradition has been that one of its oldest and most respected members positively described it the other day as a

"somewhat flabby body." Now we are far from wishing that the Council should ever become meddlesome or tyrannical, but we would gladly see it, as the representative body of our profession, possessed of something beyond a mere *vis inertiæ*. No body which really possesses power, and yet refuses to exercise that power in a judicious and salutary manner, can ever command respect. It is quite true that the Council has no direct power to enforce its recommendations, but the Act of Parliament of 1858 says that if the "course of study" of any licensing body is not satisfactory it can hale that body before the Privy Council. What more does it want? Will any licensing body try conclusions with the Privy Council when the General Medical Council have reported that that body is unsatisfactory? We think not. We would urge, then, that the question of the five years' curriculum should be placed on a different footing from that of mere advice or recommendation, and should be considered as an order or command. The speeches of Professor Struthers and Mr. Mitchell Banks, who moved and seconded the adoption of the extended course of study, amply demonstrated its absolute necessity, and any licensing body that may refuse to adopt it can only do so from the sordid desire to undersell its competitors. We hope, therefore, that the Council will for once put down its foot, and distinctly say that in so paramount and essential a matter it will insist upon being obeyed. Such a step will not render it unpopular, but will raise it in the respect of the profession.

We cannot conclude our remarks without noticing that the new element in the Council has departed from the ancient habit of squabbling about petty differences between the schools of the three countries, and has thrown itself heartily into the consideration of how best to raise the standard of professional education, and how best to purge the *Register* of all quacks and offenders against professional honour and decency. We would wish them to have every encouragement in their present line of action, and express our great satisfaction that our medical parliament is steadily rising to the exigencies of the occasion and striving to be in the van of medical progress.

THE NEW ATTACK UPON FACTORY SMOKE.

THE new endeavour to deal with this old evil is marked by at least one novel feature. The promoters of the present movement are somewhat divided in opinion as to the course to be pursued. This may seem unfortunate, but we think it will be found conspicuously advantageous. What is wanted is a more intelligent treatment of the subject, and especially a fuller recognition of the real obstacles to progress. Hitherto there has been nothing to disturb the tranquillity of the reformers in their relations to each other, and there has been a somewhat paralysing agreement among them as to ways and means whenever the subject has been discussed publicly. Not only have the same things been repeated and the same arguments used, but there has been an almost parrot-like iteration of the cry for more testing of appliances as the only means of securing the desired end.

Doubtless it was eminently wise and helpful to the object for the original Smoke Abatement Committee in 1880, when setting out upon a systematic crusade against smoke, to organise the exhibition of appliances for preventing smoke, which was held at South Kensington in the following year, and to test all the appliances of that date and to report upon their merits. This was a good starting point; and it may be conceded that it was also wise for the Smoke Abatement Institution, which was incorporated to succeed the original Committee and carry out their work, to maintain the system of testing and reporting upon the appliances brought out for a series of years after the original exhibition, so that the direction and advantages of subsequent invention might be shown to the world. But the wisdom of this policy of the past by no means justifies faith in its application to the future. The one thing which reformers are slowest to realise is that their propaganda to be successful must be progressive. Herein lies the issue between the active advocates of smoke abatement; and herein, we believe, lies also the prospect of advantage to the public from the dissension which has arisen between the parties.

This difference came into prominence at the recent meeting at the Mansion House, whereat Lord Derby and other representatives of the Manchester section of the smoke abatement party insisted on repeating the old cry of the need for more testing of apparatus; while the London section, headed by Professor Roberts-Austen (than whom there is probably no more practical authority), and Mr. Ernest Hart, proclaimed with no uncertain sound that that policy was practically played out. The possibility of burning coal smokelessly and the principles which govern the operation of complete combustion are already widely known, not only among chemists, engineers, and makers of appliances, but among the manufacturers themselves, most of whom are perfectly well aware that smoke can be prevented, and how it can be accomplished. In fact, nearly everybody now recognises, as an abstract truth at any rate, that smoke is preventable.

So far as manufacturers are concerned, their sources of knowledge have been immensely enlarged of late years by the labours of the brothers Siemens and other eminent scientists, and also, as Professor Roberts-Austen pertinently pointed out, to no small extent by the tests and reports of the Smoke Abatement Committee and others during the past ten years.

The fact is, as Mr. Hart expressed it, that "what is wanted is not so much additional tests—there are few if any new kinds of apparatus to test—as considerably increased public interest in the matter, greater willingness on the part of manufacturers to adopt the methods already proved efficient, greater independence on the part of smoke inspectors and local sanitary authorities, and, lastly, greater legislative powers to compel smoke producers to discontinue their present wasteful and injurious manner of obtaining heat."

Speaking broadly, there is not a mill-owner in Lancashire or elsewhere who does not know that smoke is preventable, and that he could prevent it forthwith if he would make the necessary effort and expenditure. In fact, the Manchester party fully admit this, for Lord Derby said "nine-tenths of the smoke is absolutely unnecessary and preventable; only some trouble and outlay is required to prevent it." His lordship went further, and cited the case of a tenant of his own who had prevented smoke for thirteen years, and had, to use his own words, "made it pay."

What is mainly wanted is not, speaking generally, more information to guide, but more *will* to determine, the action of facto

wners; and, sad though it may be to have to admit it, this ll is very often only to be brought into operation through legal mpulsion. London is a standing example of what can be done put down factory smoke by a steady application of the ex- ing law. There is still need for improvement in London elf, for the reason that a large part of the metropolis is now tside the operation of Lord Palmerston's Acts; that several ades and callings are not included; and that, from a flaw the langurge of one of these Acts, smoke on the Thames is actically unchecked.

Still, where the Acts are operative, it is a rare thing to see smoky chimney, even in works as large as many, if not most, those in Lancashire; and what is possible in London is, of urse, possible in Manchester and elsewhere.

There is no doubt that the systems of preventing smoke ry considerably among themselves in their adaptability to ren trade processes, as well as in their cost and other points t these are questions which concern the users and not the blic. If it can be shown—as it undoubtedly can—that oke is preventable from the mills of Lancashire, there ought be but comparatively little trouble in securing its preven- n if public attention be intelligently directed to the sub- t, and the necessary appeal made to public opinion and the r. If the reformers would steadily confine their attention these two objects they might, in a comparatively short time, away with the smoke from factory chimneys at any rate.

There would still remain the difficulty of smoke from nestic chimneys, against which, at present, there is no law. e London party on the Committee insist that the question domestic smoke should be kept to the front, for the in- nce this must necessarily, if indirectly, exert on the minds factory owners, magistrates, legislators, and the public at ge. Legislation against domestic chimneys may well be treated about to come, if not actually come, within the region of ual politics, in view of the evidence on the subject given 1888 before the Select Committee of the House of Lords Lord Campbell's Bill; and the important fact mentioned Mr. Hart, at the Mansion House, that upwards of 50,000 ses in London are stated already to have smokeless chim- s, chiefly by the use of gas and coke, instead of coal fires.

HE WORKING OF THE NEW LUNACY ACT.

RE has been a good deal of trouble and friction in the king of the provisions of the New Lunacy Act, which came into operation on May 1st. The difficulty has arisen e as much with respect to pauper as to private patients, ough this may be only apparently and not really the case, much as in most private cases in which difficulty arises publicity does not occur which so often attends any hitch respect to pauper cases.

t a recent meeting of the Toxteth Guardians, the subject of a ution was the great difficulty found by the relieving officers taining the required signature of a justice of the peace for emoval of dangerous lunatics to an asylum, and the pre- of a magistrate or justice of the peace on the Board was ed to be desirable. It was stated, in the course of the te, that there were several dangerous lunatics in the work- e, who could not be moved, in consequence of the inability fusal of the magistrates to see the lunatics and sign the necessary certificates for their removal. Also that a relieving officer had been engaged for two days in trying to get the signature of a magistrate; and that an absolutely dangerous lunatic, who ought to have been sent to an asylum, was taken to the county-sessions house, accompanied by a medical man, who was medical officer to the workhouse, and a relieving officer; and yet, after waiting for three hours and a half, these officers failed to obtain the signature to an order of removal. During that space of time the workhouse was necessarily without its medical attendant, and the district deprived of the services of an available relieving officer for any emergency that might arise. It was also stated that six magistrates knew their position in regard to these dangerous lunatics, but would not have them at their houses, and would not go to the workhouse to see them.

At the Northwich Union, a relieving officer reported that he had taken a lunatic, not a pauper, to the county asylum under Section 13 of the Lunacy Act, 1890. The lunatic was reported, as not being under proper care and control, to a justice specially appointed under the Act. This justice signed the order on the certificates of two medical practitioners; and it is stated that the form prescribed in the Act itself was the one filled in, and properly so. Two weeks afterwards notice was received that the Commissioners in Lunacy raised objections to the patient being detained in the asylum, on the ground that the order was not the statutory one for a pauper. Consequently the relieving officer was obliged to go to the asylum, remove the patient, take him from the country to the town-hall of the city, and there have the formalities executed necessary for placing him as a pauper lunatic in the asylum, although his friends were willing to pay for his maintenance. The clerk was directed to write for instructions to the Lunacy Commissioners.[1]

In the metropolis, Mr. Sheil recently drew the attention of the police to the opinion expressed by several other stipendiary magistrates that a medical man should be in attendance at the court, ready to give evidence before the magistrate in cases of lunatics found wandering and charged by the police. It appeared that the police authorities had recently given an order that under no circumstances was a medical man to be called by the police to certify to the state of a person's mind before the charge was heard by the magistrate, who also, of course, had the power to direct a medical examination to be made.

EXPERIMENTS ON ANIMALS.

Miss Frances Power Cobbe, as is reasonable and natural, publicly criticises from her own point of view the recent report of Mr. Erichsen, inspector of experiments performed on living animals under licences granted under the Act 39 and 40 Vic., cap. 77.

Miss Cobbe professes to have read the vivisection report "very carefully," and yet it escaped her notice that the assistant-inspector entered upon his duties at the end of April, and, therefore, his report covers eight months only, of which two are vacation months, when all laboratories, etc., are shut. As a matter of fact, there were only 154 days on which inspections were possible, and not 311, as Miss Cobbe alleges.

[1] *Liverpool Courier.*

This is an unimportant matter, and we should not mention it except to show the absolute carelessness and recklessness of this lady's statements. If in these 154 days 68 visits of inspection were made at places as widely separated as Plymouth and Aberdeen, Liverpool and Cambridge, we do not think that there has been any want of zeal on the part of the officials.

Miss Cobbe regards all vivisectors as criminals, who ought to be subjected to a system of espionage. This was not the intention of the Act; the duty of the inspectors being to inspect the places where experiments are carried on, and not to overlook the experiments themselves. Such an inspection as Miss Cobbe professes to desire would be quite impracticable, and could lead to no result, as must be evident from a consideration of the following facts:

It appears that 1,417 experiments were performed in 1889. Of these, 644 were inoculations occupying a few seconds each, and for these inspection could hardly be seriously urged; 75 were lecture experiments carried on in practically public places. The remaining 719 were performed in the ten working months of about 260 days, which gives less than three experiments per diem in all the forty-three licensed places collectively scattered over England and Scotland. In other words, there were on an average seventeen experiments in each licensed place in the course of a year; so that the inspector paying a chance visit might visit on the same day (though probably not at the same time) as an experiment once in fourteen times. It is needless to say that Miss Cobbe would not countenance any carefully prearranged visits such as must be made if the inspector is to see the experiment. The proposition is an idle one, and even if it were feasible is perfectly unnecessary.

Miss Cobbe appears to think that the short report of Dr. Poore appended to Mr. Erichsen's report is the only report that was made by the assistant-inspector. Her carefulness was not sufficient to catch the sentence: "The above visits have each been severally reported with such detail as was necessary," and again, "I have had to make only one report on a case of temporary neglect to comply with the provisions of the Act." It is but too evident that Miss Cobbe has not read the report with care, and that her criticisms of Mr. Erichsen and Dr. Poore are neither wise nor well-founded.

The second part of Miss Cobbe's letter is important because it appears to give a clue to the parentage of a pamphlet entitled *Veracity*, in which extracts from reports of the inspectors are printed parallel with what are alleged to be extracts from the published writings of physiologists and others who hold licences under the Act.

This pamphlet was printed anonymously, and it is only from the internal evidence afforded by her letter in the *Times* that we gather that Miss Cobbe is the authoress. We are sorry for it. This pamphlet is apparently meant to convey the impression that animals are tormented without anæsthetics, and that operations are performed under curara only. Any candid person will find in the original papers which Miss Cobbe professes to quote distinct statements as to the use of anæsthetics, which statements she either omits or professes to disbelieve. They will also find that curara was used once or twice only with the sole object of carrying on artificial respiration and anæsthetisation with regularity and ease, and it was never used except on an animal already anæsthetised. The use of curara as an anæsthetic is distinctly illegal, and it is evident that if there were any truth in the allegation made in the pamphlet called *Veracity* and again in the letter to the *Times*, the enemies of vivisection should have taken out a summons against the defaulter.

This pamphlet is so full of inaccuracies that it is difficult to suppose the author guilty only of carelessness.

H. R. H. the Archduke Karl Theodor of Bavaria, doctor of medicine and ophthalmologist, celebrates his fiftieth birthday on August 9th.

A FURNACE will shortly be erected in the Central Cattle Market at Berlin for the burning of carcasses condemned as unfit for human food.

WE are requested to state that the Library of the Obstetrical Society of London, 20, Hanover Square, W., will be again open to Fellows on Monday next, June 10th.

THE annual meeting of the Birmingham and Midland Counties Branch will be held at the Midland Institute, Birmingham, on Thursday, June 26th, at 4 P.M., not on June 12th as previously announced.

THE degree of M.D. *hon. causâ* will, we understand, be conferred, on June 26th, by Trinity College, Dublin, on Richard Quain, M.D.Lond., F.R.S., and on Mr. John Marshall, F.R.S., President of the General Medical Council.

AT the tenth Congress of the South German, Austrian, and Swiss Aural Surgeons, held at Nürnberg in Whitsun week, a motion was brought forward by Professor Walb, of Bonn, and Dr. Truckenbrod, of Hamburg, that a German Otological Society should be established. The proposal was unanimously agreed to, and a committee appointed to carry it into effect.

PROFESSOR HUXLEY was the recipient, at the anniversary meeting of the Linnean Society, of the Linnean medal, instituted three years ago with a view of conferring honour on distinguished biologists. On the first occasion, which was the centenary celebration of the Society, two medals were bestowed, one on Sir Richard Owen, the other on Sir Joseph Hooker. Last year the award was made to a botanist, Professor Alphonse de Candolle. It is interesting to note that three out of the four distinguished biologists are medical men.

THE Lord Mayor, as Chairman of the Hospital Sunday Fund, forwards to us a communication calling attention to the importance of Hospital Sunday (June 8th). He mentions that there are now 93 hospitals asking help from the Hospital Sunday Fund, besides 20 homes or institutions for the care of convalescent patients sent from London, making 113 in all. There are also no fewer than 56 dispensaries applying for awards. To cover the remaining outlay made by these institutions during the past year £100,000 is wanted.

AN afternoon conference (promoted by the Church of England Temperance Society, Junior Division) on Alcohol and Childhood will be held at Sion College, Victoria Embankment, on Tuesday, June 10th, at 3.30. The Duke of Westminster will preside, and among those who are announced to speak on the subject are Sir

V. Acland, Bart., Dr. Barlow, Dr. Bernays, Dr. Cheadle, Mr. J. t, Dr. Langdon Down, Dr. Dukes, Dr. More Madden, Dr. ges, and Dr. Wilks. A conference on the same subject will be held at the Church House, Dean's Yard, Westminster, on same day at 11.30 A.M., the Bishop of London in the chair.

IE testimonial to Professor John Wood, F.R.S., subscribed to is colleagues, friends, and pupils, was presented to him pri- ly at his residence on May 28th by a deputation consisting of Principal of King's College and Secretary of the Fund. The entation consisted of an illuminated address, with the names he subscribers appended, and a handsome selection of silver- e.

THE CROONIAN LECTURES.

onsequence of the attendance of the President, Sir Andrew k, being required at Cambridge on Tuesday, June 10th, when proposed by the University to confer on him the honorary ee of LL.D., Professor Ferrier's second Croonian Lecture, h had been fixed for that day, stands postponed to Thursday, 12th instant.

CHOLERA IN TURKEY.

latest bulletins issued by the Turkish Sanitary Board show 1. On April 25th a case of cholera occurred at Mossul. 2. On 27th three other cases followed, one of them rapidly ending ath. 3. The disease again broke out in the town on May 13th. ere were also rumours that cholera had made its appear- in various villages situated in the neighbourhood of Mossul. sual, the authorities establish quarantines. The Russian rnment has sent Dr. Elïséëff to Persia and Turkey to watch eport on the march of the epidemic.

MUZZLING OR REGISTRATION?

re glad to see that the leading organs of the great class of owners and dog lovers, who have raised the question, are oughly with us in the view which we take of the ill-advised n of Mr. Chaplin removing the muzzling order. The *Fan- Gazette* has an excellent and most sensible article on the ct, which ought to convince Mr. Chaplin and his advisers the course which they are taking is not only unwise and erous, but uncalled-for by educated public opinion, and op- to the wishes of those who really know most about dogs ove them best.

EGREES FOR LONDON MEDICAL STUDENTS.

GELY attended meeting of the Senate of the University of on was held on Wednesday last (June 4th), when a prolonged ssion took place on the amended report of the Special Com- e charged with the duty of preparing a scheme which shall the recommendations of the Royal Commission on University tion in London and embody the good points in the various es submitted to the Senate by University and King's Col- and by the Royal Colleges of Physicians and Surgeons. We e that, on the whole, it may be said that the report was ted by the Senate. It will be communicated immediately to rious bodies interested. So far as the two Royal Colleges are rned the Senate, we understand, approved of the formation onjoint Board of the University and the two Colleges for the nation of M.B. All details of the question remain, of course, settled hereafter, but it is satisfactory to find that the nego- is are prospering, and that the prospect of an agreement be- the University and the two Royal Colleges is relatively

STREET AMBULANCE SYSTEM FOR LONDON.

AT the sixth annual meeting of the Hospitals Association, Dr. J. S. Bristowe presiding, it was announced that thirty-nine ambulance stations had now been established and fully equipped at suitable points in the metropolitan area. Of these, twenty are at fire brigade stations and twelve at hospitals. The cost of each station was £18, and the annual maintenance amounts to £2 15s. Anyone desiring to endow a station can do so by payment of £100 in instalments extending over three years, when he will have the privilege of naming the station. The meeting was warmly congratulated on the success of this excellent piece of work, which has been largely due to the generosity of Mr. Bischoffsheim, and also on the marvellous success of the National Pension Fund for Nurses, which this Association has been instrumental in establishing, and which has proved a great blessing to this large and deserving class of workers. Dr. Bristowe was re-elected President.

HERPES ZOSTER IN INFLUENZA.

AMONG the innumerable complications and sequelæ of influenza rashes and skin affections of various kinds have not been wanting. Urticaria, ecthyma, scarlatiniform, morbilliform, and polymorphous erythema, erythema nodosum, roseola, erysipelatoid dermatitis, purpura hæmorrhagica, herpes of the lip, nose, and cheek, with several anomalous eruptions, have been reported by different observers. To this formidable list must now be added herpes zoster. At a meeting of the Medical Society of Bologna on March 28th, Dr. G. Finzi reported a case in a girl of 15, who, after recovering from a severe attack of influenza, was seized with neuralgic pain, accompanied by a pricking and burning sensation, shooting from the back round the right side. On being seen five days later, a chain of herpetic vesicles was found extending along the seventh intercostal space, the lymphatic glands in the axilla being swollen and tender, and pressure along the course of the seventh intercostal nerve making the patient scream with pain. In from eight to ten days the vesicles disappeared, the whole duration of the symptoms having been about a fortnight. At the same meeting Dr. Camillo Moglia reported a case of herpes zoster corresponding to the eleventh intercostal nerve of the right side in a girl of 18, in whom the disease appeared at the beginning of an attack of influenza, and lasted a month. Another case in which "bilateral universal" herpes zoster (which, from the description, seems to have been a vesicular eruption all over the body) showed itself on the fourth day of influenza is recorded by Dr. Luigi Pennetti in the *Riforma Medica* of May 29th; the eruption recurred in a milder form after a second attack of influenza. Altogether the herpes zoster lasted twenty-five days. In Dr. Finzi's case antipyrin relieved the pain, but Dr. Moglia's patient proved refractory to treatment.

EPIDEMIC SCARLET FEVER AND THE CLOSURE OF SCHOOLS.

IT frequently happens, when scarlet fever has attained a prevalence that causes it to be regarded as epidemic in an urban district, that a panic sets in and there is a demand for the closure of schools. Something of this kind seems to have occurred lately at St. Helen's. A special meeting has been held by the Health Committee to meet the school managers of the town who came in force to represent their views with regard to the closure of schools in the town, on account of the prevalence of scarlet fever in a quarter known as Little Cowley Hill. The medical officer of health had reported that the epidemic was limited to this part of the town, and he had recommended that the schools in the neighbourhood should be closed. But the resolution of the Committee to whom he reported appears to have embraced a wide area, and to have included in the list of schools to be closed some in the

vicinity of which there were no cases of scarlet fever. The closure of schools is at all times a measure of doubtful value for the limitation of scarlet fever. One of the chief advantages expected from the early and systematic notification of infectious diseases is that school authorities may become informed through the sanitary authorities of cases of scarlet fever occurring at the homes of children attending Board schools. In this way children may be stopped from going to school if they are at all likely to carry infection with them. This is a reasonable and practicable measure of precaution; but in towns it is of doubtful advantage to the public health to close a school because there are cases of fever in the vicinity, seeing that the children are sure to play together in the streets where they live. Sometimes the number of absentees is so great when scarlet fever is very prevalent, that the school naturally closes itself, but when the absentees are but a small proportion of the whole number of school children, it is doubtful whether in towns the risks of the spread of infection are diminished by preventing the children congregating at the schools.

PROPOSED CEMETERY AND CREMATORIUM.

We have seen a prospectus of the "New London Cemetery and Crematorium, Limited," proposing to establish a new cemetery on a plot of fifty-two acres of land near Mitcham, Surrey. The directors propose also to erect a crematorium thereon, alleging as a reason that the nearest is at present twenty-four miles distant from London. The names of many of the prominent supporters of cremation are cited in support of the system. It appears to be a most undesirable proceeding to devote more land so near to our rapidly increasing metropolis to burial purposes. The suburbs will soon be densely populated, and such a cemetery will soon become practically intramural and a source of danger. The transport of bodies by rail also is quite as easy for fifty miles and upwards as for ten, and much better accomplished than by road conveyances. Waste land at a distance ought to be utilised, and not plots of the most valuable, whether regarded as fertile land or as building land, lying near our gates.

STRYCHNINE BONBONS.

It is to be hoped that there is no foundation for the statement in American papers that the new sensation for American ladies is the use of strychnine lozenges as a pick-me-up. They are described as small doses of putty-coloured grey, each containing one-thirtieth of a grain. At any rate it is exceedingly desirable that the allegation that these lozenges are to be regarded as a safe tonic, with a bracing effect after fatigue, should not be accepted by English men or women as having a particle of truth. Strychnine is one of the most dangerous of poisons, and it has the peculiar property of being accumulative in effect. The thirtieth of a grain is a large medicinal dose, and in excess of the ordinary dose given under the most careful medical supervision, and anyone who began the practice of using this most dangerous of poisons as a pick-me-up at all, would very soon find its ill-effects; and in anything like the dose mentioned these effects would probably lead to fatal accidents. The theatre and the sermon at church are described as places or occasions of *ennui*, in which the strychnine bonbons are particularly grateful. But any who adopted the system might easily become the subject of a sensational domestic drama, and their place in the church before long would only be as a passing prelude to doleful funeral service.

OPEN SPACES FOR LONDON.

With reference to the important proposals now under the consideration of the Board of Agriculture, which will, if passed, have the effect of dedicating about 2,700 acres around London to the public for open spaces for ever, we understand that the required number of ratepayers of the parish of Epsom have presented a memorial to the Board of Agriculture praying the Board to make a scheme for the regulation of Epsom Downs and Common. A large public meeting at Mitcham, at which there were about 400 persons present, unanimously resolved to present a similar memorial to the Board for the regulation of Mitcham Common, which for some years has been the subject of litigation, the title of the action being Bidder *v.* Bridges. Banstead Downs, Park Down, Burgh Heath, and Banstead Heath have also been the subject of litigation for upwards of twelve years, in which the commoners finally and most triumphantly won their case. The commoners and ratepayers here have also presented a memorial to the Board. With regard to Hackney Marshes a public meeting was held in Hackney not very long since, under the chairmanship of Sir Charles Russell, M.P., when resolutions were unanimously passed to a similar effect, it being proposed in this case that the London County Council should be the managing body. Nothing, however, of any definite shape has yet issued from the Board of Agriculture, and it would be premature, therefore, to discuss the particulars of the schemes.

THE COMING ELECTIONS AT THE COLLEGE OF SURGEONS.

Mr. Marshall, Mr. Power, and Mr. Croft retire from the Council next July by rotation, having been elected in 1882. Mr. Marshall was first elected as a "substitute member" in 1873, and re-elected in 1874 and 1882. Mr. Power was also first admitted to the Council as a "substitute member" in 1879, and re-elected in 1882. Mr. Croft was elected for the first time in 1882. None of these members seek re-election, and in so acting they have shown a spirit worthy of imitation. The following candidates intend to offer themselves for election. The dates refer to the year in which each candidate took the Fellowship: Walter Rivington (1863); R. Brudenell Carter (1864); J. Langton (1865); E. Bellamy (1867); Marcus Beck (1869); W. Mitchell Banks (1869); Lawson Tait (1871). The election will take place on Thursday, July 3rd, and it must be remembered that applications from candidates must be received by Monday, June 9th. We may remind all who desire to vote by voting paper that the Secretary of the College has duly issued forms of application, and a voting paper will be sent to any Fellow who forwards to the Secretary the form which he has received not later than ten days before the date of election. We trust that this new arrangement will not be overlooked, and that all Fellows who cannot conveniently come to London to vote will avail themselves of it.

REMARKABLE EXAMPLE OF ADIPOCERE CONVERSION.

In consequence of the works undertaken by the Clerkenwell Vestry for widening the roadway by the side of St. James's Church, Clerkenwell, it has been necessary to disturb a great many graves and vaults in the churchyard. Mr. Irons, the surveyor to the vestry, has exercised great care and vigilance to secure that the exhumed bodies shall be transferred to another part of the churchyard with becoming respect. It happened, however, recently that a grave was opened in which were several coffins buried at the latter part of the last century, and underneath one of these was a coffin, inscribed with the date 1793, the lid of which fell off in the process of exhumation. To the surprise of the workmen, the corpse appeared to have but recently been buried. It was that of a finely-developed woman of about 35 years of age, and bore but slight evidence of having lain in the grave for a hundred years. So far from showing signs of returning to its native dust, it appeared to have turned into a dirty white wax. Mr. Irons invited a number of medical men to examine the body under the church of St. James's, where it awa

rment. On a careful inspection, it was evident that the se was almost entirely converted into adipocere—skin, fat, cles, and bones. With the exception of the leg bones and the ds, the whole substance of the frame was transformed into substance. The features were perfectly distinguishable, and person who had known the deceased in life would have ily identified her. The hair was partly covered by a closely- ng cap; the teeth were all in place; and the bust, which was formed, retained its shape as at the moment of interment. hips were solid and firm, and the thighs had not wasted with apse of time; indeed, the whole frame had lost but little of outward form. Parts of the extremities were extremely le, but the head and thorax were firm and solid. The nal organs had apparently for the most part perished. The itions favourable to saponification usually given in works rensic medicine were not all present in this instance. The e was dry and the coffin well preserved except the lid. The ct was exceedingly well nourished but not overfat. The a of the grave was fourteen feet. The discovery is interest- as showing the possibility of the great length of time g which bodies may be preserved by their conversion into ocere.

THE LAWS OF DIPHTHERIA.

Cox, medical officer of health for Mid-Cheshire, has lately essed some remarks to the Altrincham Union Rural Sanitary ority, which, if correctly reported in the *St. James's Gazette*, ve fear, calculated to give a wrong impression. He is stated ve said that the cause of diphtheria was to be found in the of cleanliness in the people. He apparently attributes heria to the foul smells which result from dirty habits and itary dwellings. It is impossible not to sympathise with ox in his desire to inculcate habits of cleanliness among the e of his district, but we think this may be done without in- g the cause of scientific research. In speaking of scientific igations and reports which have been lately published as ming statements made on insufficient evidence," he is excit- prejudice against a kind of sanitary work in which some of lleagues have greatly distinguished themselves, and which, d of being discouraged, should be promoted by all legitimate s. The causes of diphtheria are very obscure, and the study etiology is as much needed now as when Sir John Simon, years ago, issued his *Heads for Local Inquiry in Districts Diphtheria has been Epidemic.* At the present day authori- the United States are sending over their representatives to ain what we are learning in this country about the causes of ase, the prevalence of which in some parts of America they ite unable to account for. The medical officers of health ge country districts, or combinations of districts, should be contribute experiences which in the aggregate would be le. We believe that Dr. George Turner, and others, who or several years had special opportunities for observation, one so.

NARCOTIC SOOTHING POWDERS.

important evidence which the wives and mothers of the ng classes might well take to heart was given before Mr. n Hicks by Dr. Walker, at an inquest held at Wimbledon on dy of a child a year old. It was, according to the *Standard* admitted by the mother that she had, without any medical been in the habit of giving teething powders to her n, and, although it was not shown in the present case that ad been occasioned by these powders—for the child suc- d to congestion of the lungs and brain—Dr. Walker testified ium, a drug which enters into the composition of most of owders, was about the worst thing possible, as it was apt to bring about congestion of the lungs and brain. The coroner said that he knew by experience that these powders were, at any rate, no good; but, in some instances, positively bad. Our contemporary judiciously observes that soothing powders and syrups, teething powders, and the like, are composed of ingredients calculated not to cure, but simply to bring on a lethargic dulness to pain; and temporary ease and quiet are often obtained at the expense of serious and even vital injury to the general health and constitution. This cannot be too strongly impressed upon the women of the working classes, who, in their anxiety to soothe the pain of their infants, to allay their restlessness, and to secure the quiet at night so essential for the well-being of the wage-earner of the family, are apt to administer these opiates. Such nostrums should never be administered except upon medical advice; and if women would but visit dispensaries, or their club doctors, instead of trusting to quack medicines, many an infant life now sacrificed would be saved. There is, however, another aspect to the question which is of practical importance, and which deserves attention: Were the powders in question labelled poison? If not, Does not the recent decision that patent medicines containing narcotics and other poisons should be so labelled, bear directly upon the sale of this and other similar products?

HOW FEVERS ARISE AND SPREAD.

Mr. Edward Jones, a member of the Metropolitan Asylums Board (the infectious hospital authority for London) was summoned before Mr. Kennedy at the North London Police Court a few days ago for not complying with an order of the Islington Vestry to disinfect two rooms in a house owned by him in Rotherfield Street. According to the reports before us, it was stated in evidence that there had been fever in the house, and that although the infected rooms had been fumigated the walls had not been stripped, and that "there were a dozen papers on the walls." These rooms, therefore, were only partially disinfected, and until the papers had been stripped off and burnt, and the walls, ceilings, and floors washed, they could not be considered free from danger. Mr. Collingwood, the Chief Inspector for Islington, rightly observed that paper was known to hold infection tenaciously, and that disinfection was never considered satisfactory until the papers had been stripped off and burnt. If the rooms had been let to fresh tenants in their imperfectly disinfected state, some poor people might have been stricken with fever, and we think that praise is due to the vigilant sanitary officer for having exposed the shortcomings of the landlord in this particular case. The fact of the latter being a member of the Asylums Board makes his offence especially inexcusable. He belongs to a board to whom all cases of fever in London are reported with the object of preventing their spread by all practicable measures. As a member of that Board, it might have been expected that the defendant would have been eager to adopt the measures of precaution which are required by all sanitary authorities. The magistrate ordered the necessary work to be carried out.

INSANITARY RESTAURANTS.

Under the above heading the *Globe* has published a useful article which will, we hope, engage the serious attention of the sanitary authorities for Oxford Street, the Strand, Holborn, and Fleet Street, and thus lead to much needed improvements. An adventurous correspondent has penetrated into the kitchen of a foreign restaurant, and has described his experience in a way that does not furnish pleasant reading for those who resort to these establishments for their meals. The basement room to which he gained access was ill-ventilated and badly lighted. The floor was badly paved, and coated with black greasy filth. Rats were "quite at home," and two of these creatures were swimming at the top of the fluid in the wash-tub at the time of the correspondent's visit.

Beetles were climbing on the walls and crawling over the floor and ceiling. The drains were offensive, and the closet (which appears to have been in the room) was described as being "scantily concealed by a piece of sacking covered with vermin." All bakehouses are now under special sanitary regulations, and are subject to frequent inspections. The kitchens of the foreign restaurants should also be under regulations, and subject to inspection by the officers of the sanitary authority. Our contemporary has done a good service in directing public attention to the filthy and insanitary condition of these places in which food is prepared, and we hope to hear that the authorities of the districts in which restaurants are mostly found have called on their officers for a report on the sanitary condition of their basement premises, in which, no doubt, there will be found many nuisances injurious to health. There is ample power to inspect any premises in which there is reason to suspect the existence of nuisances injurious to health, and there can be no doubt that an inspection of restaurant kitchens is greatly needed.

THE VOLUNTEERS' EYESIGHT.

WE notice in the *Daily Telegraph* a suggestion that the eyesight of volunteers should be tested, and a standard of vision insisted upon equal to that required for the militia. There can be no question that the man whose vision does not reach this very modest standard would be very inefficient as a combatant. It is said that 10 per cent. of would-be recruits are rejected on account of visual defects. We strongly suspect that numbers of these fail to pass the test from nervousness or stupidity, and not from any real defect of eyesight. But however this may be, the case of the volunteers differs in several respects. In the first place, as men join the volunteer force, as a rule, at some expense to themselves, few who find that they are really inefficient would care to continue in the force. Moreover, with men of good average intelligence there is not the same objection to the use of glasses, as is believed to hold good in the case of privates in the regular army. On the other hand it must be admitted that as the nature of the volunteer force is likely in actual warfare to give more scope to individual action, its efficiency will very largely depend on the maintenance of a high standard of shooting. If, therefore, any test of eyesight for the volunteers is to be instituted, we should advocate a high standard, but permit this to be attained by the aid of glasses, if necessary.

OVARIOTOMY PER RECTUM AFTER LABOUR.

DR. ALEKSENKO recently described in a Russian journal of obstetrics and gynæcology a curious instance of prolapse of a dermoid tumour after labour. The patient was a tailoress, aged 25; she had already borne three children. Labour took place at term; the os dilated very slowly. At the end of twenty-two hours the temperature rose to 104°, and a rigor occurred. Four hours later the forceps were applied, and the child was extracted; then a swelling presented through the anus. This swelling was covered with a reflection of rectal mucous membrane, which showed numerous ecchymoses, and a pedicle, "the thickness of a goose-quill," could be traced upwards from the swelling, and to the right. After the removal of the placenta the pedicle was ligatured by transfixion and divided; its raw surface was sewn up with catgut. The torn rectum was sewn up after the stump had been powdered with iodoform and replaced. It is not clearly stated whether the tumour (which proved to be a dermoid ovarian cyst) had been forced through the rectal wall during labour, or whether the wall of the bowel was divided in order to reach the tumour and secure the pedicle. The patient recovered without any stricture of the rectum developing through cicatrisation. Only two cases of prolapse of ovarian cysts have been described—Kluisken's, mentioned by Madame Lachapelle, and a second described by Mr. Stocks, of Salford, in the JOURNAL, vol. ii, 1875, p. 487. In Mr. Stocks's case the prolapse of the cyst had lasted eleven years; the tumour was of the size of a cocoanut. An incision was made on the anterior aspect of the prolapse, parallel to the axis of the bowel. The cyst was removed after the pedicle had been secured by a strong hempen ligature, one end of which was left hanging out of the wound. The patient recovered, slight prolapse of the rectum remaining. Mr. Stocks's case has not escaped the notice of Dr. Aleksenko, of Kieff.

ABUSE OF PURGATIVES.

PROFESSOR SÄNGER, at a meeting of a medical society at Leipzig, spoke very strongly on the abuse of purgatives. He complained that not only did the public buy immense quantities of aperient pills, draughts, and waters, but that practitioners also pandered disgracefully to the craving for instantaneous relief from constipation, so common amongst patients. Quack laxative medicines were advertised in every newspaper, on walls, in stations, and on the trees and rocks in romantic districts of Europe frequented by tourists. The competition in invention of a new secret purgative was very keen. In this respect, a Polish doctor was not wise in his generation. This gentleman who, according to Dr. Sänger, appeared to have no special anxiety about his patients' vermiform appendages, prescribed gravel, and boasted that he had already prescribed whole cartloads; but a drug which anybody could scrape up in his garden could not be patented, and therefore would never gain the confidence of the public, who love mystery in purgatives as in other matters. Professor Sänger said that the abuse of these drugs caused, not habitual constipation, but rather "artificial constipation." The evil was most prevalent amongst women with chronic pelvic diseases, real or imaginary. He ordered, in such cases, that all purgatives be discontinued. He never had bad results, even when constipation lasted for over a week. Belladonna was the only drug he ever used when flatulence, etc., set in, and when the constipation lasted for very long. He objected to dieting, which kept up a pernicious feeling of invalidism, and finding that the patients drank little water, he made them take several glasses of filtered water daily, when fasting; occasionally whey or buttermilk was given as a change. Fruit, brown bread and exercise were recommended. Professor Sänger found this treatment far better than massage, visits to watering places, enemata, and other familiar means to the same end. In the long run his patients had natural actions of the bowels, and were cured of their invalidism.

SCOTLAND.

THE Lord High Commissioner and the Marchionness of Tweeddale have, during the past week, shown further interest in medical charities by visiting others of the hospitals, and by opening a bazaar held on behalf of the Women's Hospital.

EDINBURGH UNIVERSITY COUNCIL.

THE adjourned meeting of Edinburgh University General Council was not a representative one, for of some 6,000 graduates only 1 attended, and at the hour fixed for the meeting the Chancellor, Principal, Rector, Senatus Academicus were conspicuous by their absence. Subsequently Professor Simon Laurie appeared, and was called to the chair. A protest was then lodged against the validity of proceeding with the meeting, on account of the number present not reaching the statutory quorum. A letter was read from the Secretary of the Universities Commission intimating that objections to the proposed transference of the patronage of the chairs of humanity, civil and natural history, and chemistry

St. Andrews University, from private individuals, must be lged within three months. The report to which reference was de in the JOURNAL of last week was presented by Mr. Æneas ckay; it embodies the views of the Committee on the proposed anges in the curricula for graduation in different faculties. The mmittee indicates its approval of the scheme suggested by e Faculty of Medicine, but states its preference for the recogni- n of qualification in public health by diploma rather than by e institution of another degree. As the report was one of much portance, and required much careful consideration, Mr. Mackay ught that they must content themselves that day with sub- ting the report. It was therefore agreed that the report be eived and considered at the statutory meeting of the Council October next. Meanwhile, it is hoped that the Business Com- tee will use every endeavour to have the report brought under notice of members of Council.

ABERDEEN UNIVERSITY COURT.

KEITH, Aboyne, who was only recently appointed as one of Examiners in Medicine, has tendered his resignation to the rt on account of professional engagements. The consideration he resignation and the appointment of a successor were, on motion of Dr. Matthew Hay, deferred to the next meeting of University Court.

EPIDEMIC DISEASE IN DUNDEE.

NDEE is threatened with a serious outbreak of measles and let fever. During last month 474 cases of measles were re- ted, against 223 in April, and 51 in May of last year; and of let fever there were 32 cases, against 21 in April, and 17 in y of last year, while the total number of epidemic cases for the th was 531. In all 63 deaths occurred from such causes— rom measles, 11 from whooping-cough, 3 from diphtheria, and om scarlet fever.

GLASGOW UNIVERSITY AND THE DIPLOMA IN PUBLIC HEALTH.

Senate of Glasgow University have replied to the charges ained in the memorial impugning the value of the examina- for diplomas in public health held last October. In answer he charge that there was no practical examination, they state the regulations, which order that the examinations shall be ten, oral, and practical, were obeyed in every respect, that candidate was subjected to a practical examination by means great variety of models, and that the candidates were required roduce evidence that either during their medical studies, or equently, they had attended a course of lectures in which ial instruction was given in public health, and a course of ytical chemistry specially bearing on the subjects of examina- . In explanation of the large number of candidates who ented themselves, all of whom passed, the Senate referred he renewed interest directed to the subject by recent legisla- the inducement offered by the certainty of a large number of tary appointments speedily falling to be made in terms of the l Government Act, and the incentive to candidates to come up ially well prepared, since failure at this time would bring under the operation of the new regulations, involving six velve months' extra study; while they also reply that they obviously compelled to pass every candidate who came up he required standard irrespective of numbers. The Senate ier point out that the regulation that candidates who had no ification to practise would be admitted to the examination, but d not receive the diploma till they were registered, was made months before the regulations of the Medical Council were d, and could not, therefore, have been made to evade these ations, and that the Executive Committee of the Council ac- ceded to every request to register the diplomas as soon as the candidates obtained registration as medical practitioners. Finally, they urge that it is doubtful whether the Council can institute an inquiry into a past examination, and that the proper way of securing efficiency of examination is for the Council to appoint visitors to be present and report—an inspection the Senate will always gladly welcome.

PROFESSOR CLELAND ON UNIVERSITY REFORM.

PROFESSOR CLELAND, F.R.S., of Glasgow University, has followed the lead of Dr. Finlayson, and has issued a pamphlet on *Some Points Bearing on University Reform*. He offers remarks, based on a forty years' experience of university life, seven as a student, six as a demonstrator, and nearly twenty-seven as a professor and examiner in different universities. As regards the teaching staff, he points out the question for the national welfare is not so much how to get men to teach classes as how effectually to endow research. The emoluments attached to chairs ought not, therefore, to be cut down, but maintained as prizes to stimulate workers throughout the country; and what besides are needed are fellowships to induce workers to remain in connection with the university. Private benefactors would do well to cease endowing bursaries to coax men from their proper occupations, and instead to endow lectureships and fellowships, and thus strengthen the university by keeping its best *alumni* around it continuing their work. He holds that the assistant is not an independent teacher, that the professor is responsible for the work done by him, but that he ought certainly to have a definite status and a guarantee of a minimum salary by the professor. As regards degrees, he argues very convincingly that an arts degree, as a guarantee of a sound general education, ought not to be obtained without a certain amount of knowledge of ancient and modern languages, mathematics, metaphysical speculation and laws of thought, the laws of matter, and the laws of living bodies. While, he says, it is impossible in common decency to maintain that total ignorance of any of these six groups of subjects is permissible in the recipient of such a badge of culture as an arts degree, a three years' course of study may be lightened in respect of some of them by acceptance of previous tuition, tested by examination, and that high proficiency might be demanded in one or more subjects along with a more general idea of the remainder. He urges a five years' course of medical training, the first three years being given up to an uninterrupted study of natural history, chemistry, anatomy, and physiology; while the last two are occupied with the more practical subjects; and that the examination in the former subjects should be passed before study in the practical subjects is permitted. In this connection he points out very forcibly the great disadvantages of the present system of four professional examinations, since it keeps the student always preparing for examination instead of studying for the sake of education, and encourages the forgetting of one subject passed before he has time to appreciate its application to others, while it tends to make the examinations in individual subjects unnecessarily severe. Amid the enormous mass of detail, pertinent or otherwise, with which those interested in university education are already almost overwhelmed, Dr. Cleland's contribution to the question of reform will be welcomed, offering as it does a foundation of broad, coherent, and intelligible principles, reasonably and practically laid down.

IRELAND.

THE operation of Cæsarean section was performed on May 16th in a case of greatly contracted pelvis by Dr. Albert Mouillot, of Gorey, assisted by Drs. Acheson and Pounden. Both mother and child (a female) were saved.

IRISH MEDICAL ASSOCIATION.

THE special meeting of this Association, at which Dr. Jacob's proposals for reorganisation were carried, was, it now appears, illegal. The question was referred to counsel, who gave it as his opinion that not only was the meeting illegal, but that its proceedings could not govern the ordinary procedure, as heretofore, of the annual general meeting. Counsel further stated that any member taking part or assisting in the carrying out of proceedings at the annual meeting under the alleged altered rules would lay himself open to bear the costs of such proceedings as might be taken, besides pecuniary liability to members whose rights might be infringed. The annual meeting was accordingly held under the ordinary rules on Monday, June 2nd, Dr. David Jacob, of Maryborough, presiding. Many of the old councillors who had resigned were re-elected; Dr. Chapman, the honorary secretary, was induced to continue in office; and Dr. A. H. Jacob's suggestions were referred to the new Council for report. The probability now is that matters will proceed smoothly. The Council is not opposed to extending the privilege of voting by post to the members, and some other alterations may be made which will meet with general approval.

ELECTION OF PRESIDENT AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS, IRELAND.

THE election of officers of the Royal College of Surgeons took place on Monday, June 2nd. Much interest was aroused by the fact that Dr. Meldon, the outgoing President, had offered himself for re-election at the request of a large number of Fellows, in view of the resolutions passed by the Fellows in favour of a two years' term in the chair. Mr. H. G. Croly, of the City of Dublin Hospital, the Vice-President, also offered himself, with the result that he was elected by 138 to 101 votes. For the vice-chair there was also a contest between Mr. W. Carte and Mr. W. Moore, when the former was elected. The Council for the year was chosen as follows: A. H. Corley, William Colles, Edward Hamilton, Sir Charles Cameron, William Thomson, William I. Wheeler, Henry Fitzgibbon, Sir George Porter, Bart., Kendal Franks, Rawdon Macnamara, George H. Kidd, P. C. Smyly, J. K. Barton, Henry R. Swanzy, E. H. Bennett, John B. Story, Charles B. Ball, Richard F. Tobin, and R. Theodore Stack. On the declaration of the results a vote of thanks to the outgoing President was proposed by Mr. Wheeler and seconded by Dr. David Jacob.

DUBLIN DINNER TO SURGEON T. H. PARKE.

A LARGE company gathered at the College of Surgeons on Saturday, May 31st, to meet Surgeon Parke, on his return from Africa. The Fellows, examiners, and professors, and their guests numbered 134, but it was found necessary to close the list earlier in the week, as all the space in the Board Room had been by that time allotted. Amongst those present were General Keith Fraser; Dr. Sinclair, P.M.O., Ireland; Sir Geo. Porter, Bart.; Colonel Dalrymple, D.A.G.; Colonel Duncan, D.A.A.G.; Sir C. Cameron; Sir W. Stokes; Sir W. Kaye, C.B.; Sir Geo. Owens; Sir R. Jackson, C.B.; Brigade-Surgeon Hamilton; and many medical officers of the garrison. The President (Dr. Meldon) proposed Surgeon Parke's health, and then presented him with the Honorary Fellowship of the College. Mr. Parke had an enthusiastic reception on rising to reply, and he was evidently deeply touched by the enthusiasm of those present. He gave a brief sketch of his travels, his own work being modestly passed over, while he spoke with warmth of his leader, Mr. Stanley, of his brother officers, and of the devotion of the Zanzibaris. General Fraser made a warm and generous reference to the military valour of medical officers, the courage with which the confronted the dangers of the field, and the fact that in one campaign the medical officer alone had won the Victoria Cross. The anomalous fact that to army medical officers substantive rank and titles in accordance with their military grade are denied, was thus brought into great prominence. A pleasing incident was the proposing of the health of Surgeon Parke's father, who saw his son there for the first time since his return from Africa. Several other speeches were delivered by General Fraser, Dr. Sinclair, Sir George Porter, Mr Thornley Stoker, Sir W. Stokes, and others. The evening was altogether a most agreeable one.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual meeting of the Royal College of Surgeons in Ireland was held on Saturday last, when the report, an abstract of which has already been published, was submitted and adopted. A series of motions regarding the biennial presidency was submitted by Mr. W. Stoker. They expressed disapproval of canvassing, and provided that the Vice-President should hold office for two years. With regard to the presidency, it was proposed that in January of each year the Fellows should meet and select from the past presidents—one of whom the existing president should be deemed to be—a gentleman to serve a second time in the presidential office. The motions were seconded by Sir Charles Cameron. Mr. William Thomson proposed an amendment to the effect that the chair should first be offered for a second time to the president in possession, and that in the event of his declining to fill it for a second year, a selection might be made from the past presidents. This amendment was seconded by Sir W. Stokes, and was carried, with a rider proposed by Mr. Corley, that the Council should be requested to have the by-laws changed accordingly.

NEW BACTERIOLOGICAL LABORATORY.

AN interesting ceremony took place last week in the Mater Misericordiæ Hospital, Dublin, for the purpose of inaugurating a new bacteriological laboratory in connection with the Catholic University School of Medicine. Archbishop Walsh, in taking the chair, expressed the satisfaction with which, at the instance of Dr. M'Weeney, he had been able to devote for the purpose of the establishment of a bacteriological museum and a laboratory for bacteriological research, a special fund which he held in trust for the benefit of the University. He said that he believed he was correct in stating that this medical faculty was the first in Ireland to include such a department within its sphere of educational work. He quoted the following words from the Encyclical Letter of the Pope: "*Nihil est philosopho utilius quam naturæ arcana diligenter investigare, et in rerum physicarum studio diu multumque versari*," and expressed his hope that the labours of this school in this most advanced field of modern scientific research would bring credit to the University. Dr. M'Weeney, a former student and scholar at the University, who pursued biological and bacteriological studies abroad, gave an able address, calling attention to the intelligent and munificent interest shown by the State authorities on the Continent in constructing from the public funds laboratories supplied with apparatus and with trained assistants, and affording the means of living to bacteriological students and professors. The result had been that while many British names were honourably connected with bacteriological research, it had been left to Pasteur, Brieger, Koch, and Rosenbach, and other Continental observers to carry off the chief laurels and to confer the greatest boons on science and humanity. The laboratory, which is well arranged, is liberally fitted up with suitable apparatus for study and research.

SUBSCRIPTIONS towards the proposed memorial of George Simon Ohm at Munich are pouring in rapidly. The city "colleges" have given 2,000 marks (£100) to the fund.

NINTH CONGRESS OF INTERNAL MEDICINE AT VIENNA.

(Concluded.)

Strophanthin.

Dr. A. Rothziegel, of Vienna, gave an account of experiments with strophanthin, which he had carried out for a long time, in conjunction with Dr. v. Koralewski in Professor Drasche's clinic. The single dose was from 2 to 3 decimilligrammes, and the daily dose from 1½ to 3 to 5 milligrammes. The drug was given either in the form of drops or according to the formula:—℞ Strophanthin from 0.003 to 0.005 grammes, distilled water or laurel water 10.0. From 10 to 20 drops every two hours. It was also administered in the form of capsules of 3 decimilligrammes, or in hypodermic injections of 5 decimilligrammes. The results were as follows: 1. The circulatory system was very favourably influenced, the effect chiefly consisting in strengthening and regulating the pulse. The pulse became stronger even after small doses (from 2 to 3 decimilligrammes), and in a very short time (from 5 to 10 minutes). The arhythmia of the pulse was influenced later, in most cases on the second or the third day after the administration of the drug. The effect, in general, occurred later than after the use of digitalis, but when the drug was further continued, its effect lasted for a considerably longer time, and also persisted for a certain time after its discontinuance. It was particularly the disturbances of the heart's action which occurred in various organic diseases of that organ, and especially dyspnœa and palpitations, which were favourably influenced by strophanthin. 3. The urinary secretion was considerably increased after the administration of strophanthin, but not so much as by digitalis or tincture of strophanthus. The increase also persisted for several days after the discontinuance of the drug, and seemed to be due to increase of the blood pressure, rather than to a direct effect on the kidneys. 4. Gastric disturbances were exceedingly rare, and, when these occurred, strophanthin was administered in capsules, and was well borne. Increase of appetite was frequent. The action of the bowels and perspiration were not influenced by strophanthin. 5. The nervous system was influenced indirectly by the regulation and strengthening of the cardiac activity. 6. A cumulative effect was not observed after the use of strophanthin. 7. Subcutaneous injections of aqueous solutions—in 5 decimilligramme doses—produced rapid and permanent strengthening of the pulse, and when carried out under strict antiseptic precautions no local or general irritative symptoms were observed. 8. The tincture of strophanthus was on the whole preferable to strophanthin; it was more certain, rapid, and energetic in its effect, especially as regards the urine. Where, however, neither the tincture nor digitalis was well borne, strophanthin was often a useful substitute. 9. The indication for strophanthin in valvular affections, with and without affections of the myocardium, as well as in organic affections of the cardiac muscle alone, was insufficiency of the heart's action with the symptoms resulting therefrom. In acute and chronic Bright's disease, as well as in pleurisy, strophanthin was a diuretic only when the scantiness of the urinary secretion was due to cardiac insufficiency. In tubercular pleurisy it had no effect.

The Effects of Extirpation of the Cœliac Plexus.

Dr. Peiper, of Greifswald, read a paper on this subject. Recently Dickinson and Schapiro had stated that degenerative changes in the cœliac plexus should be looked upon as the etiological factor of diabetes insipidus. Pincus, Samuel, Budge, and Lewansky had observed almost the same symptoms after extirpation of the cœliac plexus. All the animals experimented on died of profuse diarrhœa. This symptom was also observed by Schapiro in his patients suffering from diabetes insipidus. Munk and Ebstein had found diabetes mellitus and atrophy of the pancreas after extirpation of the plexus of the ganglia. Dr. Peiper extirpated the cœliac plexus in fifteen rabbits under strict antisepsis; of these eleven survived the operation for at least three or four weeks. The other four animals died partly from the ether narcosis and partly from hæmorrhage or peritonitis. In the animals which survived great emaciation occurred without any other symptoms. In no animal did diarrhœa supervene. On *post-mortem* examination there was no hyperæmia of the abdominal organs. Diabetes insipidus was not observed. Mellituria was most frequently noticed in the first days after operation. In one case in which extensive resection of the splanchnic nerve was performed the sugar in the urine amounted to from 2.5 to 4 per cent. In none of the cases was there atrophy of the pancreas. Aceton was found only in a few cases; albuminuria was present in only two. Four rabbits, which were still living after from two to four months, were killed. The *post-mortem* examination revealed no particular changes. The seven animals which died showed symptoms of marasmus, which seemed to show that the extirpation of the ganglia had caused serious disturbances of digestion. The acetonuria observed now and then was due to the increased decomposition of the organic albumen. The experiments refuted the opinion that diabetes insipidus is due to functional order of the cœliac plexus, and that profuse diarrhœa, atrophy of the pancreas, or diabetes mellitus follow extirpation of the ganglia.

Tendon Reflexes.

Dr. Sternberg, of Vienna, read a paper on this subject, based on observations made on 1,500 patients in the clinics of Professor Meynert and Dr. Redtenbacker. The object of the experiments was to determine the "components" constituting the tendon reflexes, that is, the effects produced by shaking of the muscle, the tendons, the bone, etc., and to separate these various phenomena from each other. In this way he succeeded in showing that the so-called tendon reflexes consists of two phenomena, namely, a bone reflex and a pure muscle phenomenon, which, most probably, is also a reflex. The bone reflex consists in the fact that a shock to the bone, particularly in the direction of its longitudinal axis, irritates the nerves of the periosteum and the articular surfaces, and this produces a contraction of all the muscles belonging to the bone. The muscle-reflex consists in the fact that a stretched muscle becomes contracted when a shock is transmitted to it in the longitudinal direction. The tendon only plays a mechanical part. No reflexes originate from the nerves of the tendon. The existence of reflexes of the fascia cannot be proved. In contractures occurring after localised cerebral affections in various diseases of the spinal cord and in articular processes, the tendon reflexes are invariably increased. In contractures which occur in large cerebral hæmorrhages, cerebral tumours and abscesses, uræmia and meningitis, and paralysis agitans, the tendon reflexes are never increased, and very frequently are diminished. These two forms of contracture can occasionally be distinguished by the tendon reflexes. In conclusion, Dr. Sternberg pointed out that when all the precautions recommended by Schreiber and Jendrássik for the examination of the tendon reflexes were observed, complete absence of the tendon reflexes was much more seldom found than on less careful examination.

THE INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY: LONDON, 1891.

The success of the International Congress of Hygiene and Demography, to be held in London next year, of which the Prince of Wales has just accepted the presidency, is greatly to be desired. As England has taken the lead in sanitary science and administration it may be expected that the Congress will be one of great magnitude and importance. All the leading medical and learned bodies concerned in sanitary science and its applications in all parts of the world have appointed delegates, and the general committee and list of delegates is already very extensive and imposing. The previous Congresses have been held in Brussels, Paris, Turin, Geneva, the Hague, and Vienna. At the Vienna Congress all the European governments sent delegates, as well as several of our own Colonies, and over 2,000 members were present.

The aim of the Congress is to awaken public interest in the progress of hygiene and demography; by which latter term is understood the study of the life conditions of communities from a statistical point of view; to afford persons interested in these subjects an opportunity of meeting, and, by conference and debates, of elucidating questions relating to hygiene, demography, and public health.

A meeting will be held at the Mansion House on July 3rd to raise a fund to defray the necessary expenses. The cost of such a congress amounts to many thousand pounds. For the International Medical Congress, which meets this year in Berlin, a sum of £10,000 has been raised, partly by a vote of the Municipality of Berlin and partly from private sources. An equal sum has been given by the Government. In England we shall have to depend mainly upon subscriptions from corporations, municipalities, and individuals, and it may be hoped that the City of London will set an example according to its municipal traditions by heading the

list with a sum which will stimulate other donors to adequate liberality. It will be a public misfortune if the funds are not forthcoming to carry out this important Congress on a scale corresponding to the leading position which this country has long occupied in sanitary science, and to its traditions of public hospitality and private munificence.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE summer provincial meeting and dinner of the Association were held on June 2nd, in the Pump Room Hotel, Bath. There were present: Dr. GILBART SMITH, in the chair; Dr. Elliott, Clifton; Dr. W. H. White, London; Dr. Davison, Bournemouth; Dr. Heath, St. Leonard's; Dr. Thos. Webster, Redlands; Dr. John Broom, Clifton; Dr. A. B. Brabazon, Bath; Surgeon-Major Rahilly, A.M.S., Weston-super-Mare; Mr. Albert Coppinger, Bath; Dr. P. S. Abraham, London; Dr. Macnaughton Jones, London; Mr. Jas. Stewart, Clifton; and Dr. Cagney, London.

After the transaction of some official business, the Chairman of Council, Dr. MACNAUGHTON JONES, gave a summary of the work done by the Council since the last general meeting on March 17th, in connection with the exclusion of Irish diplomates from the honorary staff of English hospitals. He reported that the Council had issued a circular to all the governors of the Bristol General Hospital, pointing out the injustice of the restrictive rules in force. The Council had also been in communication with the Irish colleges in relation to this matter, and had brought the report of the Chairman of the Governors of the Bristol General Hospital under the notice of the governing bodies of the Irish medical corporations. The King and Queen's College of Physicians (Ireland) had issued a statement to the governors of the Bristol General Hospital, showing the conditions under which their Membership was attainable, and the very severe restrictions imposed on Members. The Royal College of Surgeons in Ireland had appointed a committee to take action in reference to the same subject. The honorary consulting staff of the Bristol General Hospital did not approve of the restrictive rules, and had expressed their disapprobation by a circular letter to the governors, in which, among other matters, the injustice of such prohibitive regulations was pointed out.

On the motion of Dr. BRABAZON, seconded by Dr. BROOM, a vote of thanks was passed to the Council for its action in the matter.

In the evening, thirty-two members and guests dined together in the Pump Room Hotel. It was stated that the Association now numbered upwards of six hundred duly qualified medical men.

THE MEDICAL BENEVOLENT SOCIETIES.

THE BRITISH MEDICAL BENEVOLENT FUND.

DURING the present year the work of this fund has gone on in its usual quiet manner. Owing to the increased interest upon investments and death vacancies the committee have been able to elect 12 fresh annuitants—5 in January and 7 in May. In the Donation Department 85 applicants out of about 100 have been deemed eligible, and have received relief in sums varying from £3 to £20. The lamented death of Mr. G. C. Jonson, Chairman of Committee, has been felt as a serious loss by his colleagues, and at the monthly meeting on May 27th, Sir JAMES PAGET, Bart., President of the fund (who was in the chair), alluded to the loss the fund had sustained, to the many good qualities shown by Mr. Jonson, to his generosity and eminent business capacity, and concluded by saying that it was thought that something should be done to perpetuate his memory, and asked the opinion of the meeting.

Dr. BRIGHT read some letters he had received.

Dr. BROADBENT proposed and Dr. HOLMAN (who promised the cordial co-operation of the Epsom College Council) seconded a resolution: "That a fund be raised in connection with the British Medical Benevolent Fund and the Royal Medical Benevolent College in commemoration of the late Mr. G. C. Jonson, Chairman of Committee of the fund, and Chairman of the College Council."

This was supported by Sir A. CLARK, who instanced the loving nature of Mr. Jonson's work, and how he followed up the fortunes of those helped by his means for a long time after the immediate necessity for so doing had passed.

After some remarks from Dr. HARE, who expressed a wish that Mr. Jonson's connection with the Charles Bailey Charity should be noted, Sir A. CLARK proposed; "That the fund so raised should be invested for the purpose of founding a scholarship in Epsom College, the nomination to which shall be vested in the Committee of the British Medical Benevolent Fund."

This was seconded by Sir EDWIN SAUNDERS, and the Committee then proceeded with the ordinary business of the meeting, and voted grants amounting to £100 to applicants whose cases were before them.

This fund is the only one which provides immediate help and uses the subscriptions entrusted to the Committee without any salaried officer except the collector, all the work being done by members of the profession without any reward beyond the merit of the action. Subscriptions are asked for and may be sent to Dr. Sidney Phillips, Hon. Financial Secretary, 62, Upper Berkeley Street, W.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE annual meeting of this Society was held in the College of Physicians, Dublin, on June 2nd. Dr. G. F. DUFFEY, Vice-President, presided. From the report read by Dr. J. W. MOORE, it appeared that the very limited amount at the disposal of the committee, and the number and urgency of the claims that come before them, are often a source of great perplexity, and it is much to be regretted that a fund so carefully administered should be so limited in its operation. Since 1848, when the first annual distribution of the Society's fund took place, the sum of £35,902 10s. has been expended in relief of those for whose benefit this society was founded. This year grants amounting to £996 15s. are recommended, making a total of £36,809. A subscription from each member of the profession in Ireland would make a considerable increase to the fund, and would enable the committee to give relief to their poor and necessitous brethren in a manner more adequate to their wants, and more worthy of the dignity of the profession.

The past year began with a smaller balance to the credit of the fund than in 1888-89 by £80, and the excess of grants over this balance amounted to £233, the corresponding sum for the preceding year having been only £76. There was a slight increase in dividends and interest; donations were less by £271. The total of grants (£996 10s.) awarded by the committee was less by £191 than those of the previous year, and far below the needs of applicants, but not less than financial prudence demanded. The sanctioned grants will require an immediate disbursement of £660 10s., and the working expenses of the fund have also to be met. Eight *ad interim* applications for relief were received since the last annual meeting. Sums amounting to £72 10s. were granted to those cases the special circumstances of which required immediate assistance; 3 of them, being ineligible, were refused. Eighty-five applications for assistance have been considered by the committee, of which 12 were new. They consisted of 4 from medical men, 73 from the widows of medical men, and 8 from their orphans. The usual resolutions commending the Society to the support of the profession were passed.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of the members of this Society was held at 20, Hanover Square, on May 22nd, Sir JAMES PAGET, President, in the chair. From the report for 1889, read by the SECRETARY, it appeared that the number of members was 333, an increase of 8 during the year, 24 having been elected and 16 having died or resigned. The number of widows receiving grants was 62, the same as in 1888; three fresh cases had been taken on, and three widows had died or become ineligible for further grants. Fourteen orphans were on the books of the Society, an increase of 1. A sum of £2,741 had been expended in grants, and the expenses of the year had been £306 18s. 3d. Legacies amounting to £1,085 had been received, and the funded property had been increased by the purchase of £1,140 13s. 6d. Birmingham Corporation Three per Cent. Stock. Mr. Fuller was elected a vice-president, and Dr. Cribb, Dr. Pollock, Mr. Willett, Dr. Savory, Dr. Roberts, and Mr. Gould were elected directors in the place of the six senior, who retire by rotation. An extraordinary grant of £26 was made at the meeting to a widow. Questions were asked as to the different amounts awarded to the widows

ceased members, and it was explained that these depended in eat measure upon the actual wants of the several widows, which ere ascertained by careful inquiry. Every widow coming within e limits of the by-laws, which rendered ineligible those who ssess £80 or more a year, had a claim on the Society, but the aounts granted were much greater than those which could be rived from any friendly society which was not possessed of such nds derived from charitable gifts as the Society had. Votes of anks were passed to the editors of the medical journals for eir kind assistance in making known to the profession the work- gs of the Society. A vote of thanks to the President closed the eeting.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

EMBERS are reminded that the Library and Writing ooms of the Association are now fitted up for the accom- odation of the Members, in commodious apartments, at the ices of the Association, 429, Strand. The rooms are open om 10 A.M. to 5 P.M. Members can have their letters dressed to them at the office.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

ETINGS of the Council will be held on July 16th, and Octo- r 15th, 1890. Candidates for election by the Council of the sociation must send in their forms of application to the neral Secretary not later than twenty-one days before each eting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by- v of the Association, who shall be recommended as eligible by y three members, may be elected a member by the Council or by y recognised Branch Council.

Candidates seeking election by a Branch Council should apply the Secretary of the Branch. No member can be elected by a anch Council unless his name has been inserted in the circular mmoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

E Scientific Grants Committee of the British Medical Associa- n desire to remind members of the profession engaged in re- rches for the advancement of medicine and the allied sciences, t they are empowered to receive applications for grants in aid such research. Applications for sums to be granted at the next nual meeting should be made without delay to the General retary, at the office of the Association, 429, Strand, W.C. Ap- cations must include details of the precise character and objects the research which is proposed.

Reports of work done by the assistance of Association grants ong to the Association.

nstruments purchased by means of grants must be returned to General Secretary on the conclusion of the research in fur- rance of which the grant was made.

ICES OF BRANCH MEETINGS intended for insertion in the JOURNAL of the ent week should be forwarded, addressed to the Editor, so as to reach office not later than mid-day Wednesday of that week.

BRANCH MEETINGS TO BE HELD.

ETROPOLITAN COUNTIES BRANCH.—The annual meeting and dinner will place at the Holborn Restaurant on June 10th.—NOBLE SMITH, 24, Queen e Street, W.; H. RADCLIFFE CROCKER, M.D., 121, Harley Street, W., Hono- Secretaries.

AST ANGLIAN BRANCH.—The annual meeting will be held at the Norfolk Norwich Hospital, Norwich, on Thursday and Friday, June 19th and 20th. ces of communications should be sent to Dr. BARNES, Eye; Dr. ABBOTT, ntree; and Dr. BEVERLEY, Norwich, Honorary Secretaries.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Medical Institute on Thursday, June 26th, at 4 o'clock in the afternoon, when the ordinary business will be transacted and an inaugural address delivered by the President-elect of the Branch, Mr. Alfred Freer, F.R.C.S., of Stourbridge; and after the meeting the members will dine together at the Great Western Hotel at 6.30; tickets, exclusive of wine, 6s.—ROBERT SAUNDBY, M.D. and JORDAN LLOYD, F.R.C.S., Honorary Secretaries.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in Manchester on Wednesday, July 4th, at the usual hour. Gentlemen wishing to read papers, make communications, or show cases, are requested to communicate with the Honorary Secretary at once, so that the circulars convening the meeting may be sent out in a complete form.—CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Cardiff on Friday, June 27th. Further particulars in circulars.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

NORTHERN COUNTIES (SCOTLAND) BRANCH.—The annual meeting will be held in the Royal Hotel, Inverness, on Thursday, June 12th, at 6.40 P.M. Dr. White, Elgin, president.—Notices of communications should be sent at once to J. W. NORRIS MACKAY, M.D., Honorary Secretary, Elgin.

YORKSHIRE BRANCH.—The annual meeting of this Branch will be held on Wednesday, June 25th, at 3 P.M., at Leeds, when the officers of the Branch and the representatives of the Branch on the General Council will be elected. Members intending to read papers are requested to communicate with the Secretary on or before June 15th.—ARTHUR JACKSON, Secretary, Sheffield.

SOUTH MIDLAND BRANCH.—The annual meeting of this Branch will be held at Springfield House Asylum, Bedford, on Thursday, June 12th, under the presidency of David Bower, M.D. Gentlemen wishing to read papers, cases, etc., are requested to communicate as early as possible with the Honorary Secretary. The following have been promised:—Mr. W. H. Bull: A Tariff of Medical Charges for the South Midland Branch. Dr. Newman: Treatment of Retention of Urine due to Prostatic Enlargement by External Urethrotomy. Mr. G. H. Percival: On Salufer and Salol as Antiseptic Dressings. Dr. Price: The Arsenic Industry of Cornwall. Mr. Skelding: A short paper on The Treatment of Typhoid Fever. Mr. Kinsey will exhibit: Specimens of Perforating Ulcer of Foot, and of Charcot's Joint. Mr. Milligan will show: Two Ovarian Tumours successfully removed from the same patient; and a Specimen of Ruptured Intestine. The President invites the members to luncheon at 1 o'clock, and will be glad of a reply from those gentlemen intending to be present. He will also provide conveyances from and to the stations.—CHARLES J. EVANS, Northampton, Honorary Secretary.

MIDLAND BRANCH.—The annual meeting will be held at the General Dispensary, Lincoln, on Thursday, June 12th, at 2 P.M. After the transaction of the usual business, the following papers will be read and discussed:—Dr. H. Handford: Granular Kidneys in Childhood. Dr. Handford will also exhibit photographs and drawings of Hydroa Vacciniforme (Bazin) and Elephantiasis Arabum treated by Martin's bandage. Mr. C. J. Bond, F.R.C.S.: Note on Perchloride of Mercury Tablets for making Antiseptic Solutions. Mr. W. J. Cant will show the following cases with short notes: (1) Cataract Extraction without Iridectomy; (2) Conical Cornea treated with Actual Cautery; (2) Thoracic Aneurysm; (4) Lupus Erythematosus treated by Blistering. L. W. Marshall, M D.: On Stone in Children. Luncheon will be provided by the President-Elect at the Great Northern Hotel at 1 P.M. The dinner will take place at the Great Northern Hotel at 5 P.M.—W. A. CARLINE, M.D., Lincoln, Honorary Secretary.

SOUTHERN BRANCH.—The seventeenth annual meeting will take place at the Bugle Hotel, Newport, Isle of Wight, on Thursday, June 26th, 1890. The general meeting will be held at 1.15 P.M. (Refreshments will be provided between 1 and 3.) In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers are requested to forward at once the titles to the Honorary Secretary. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by Dr. Joseph Groves (the President-Elect), at 2.30. During the afternoon the members are invited to visit Carisbrooke Castle and several places of interest in the locality. The dinner will take place at 5.30 P.M. Tickets 6s. each, excluding wine. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Dr. J. M. Pletts, Ryde, on or before Wednesday, June 25th.—J. WARD COUSINS, Honorary Secretary and Treasurer.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting of this Branch will be held at the Salop Infirmary on Tuesday, June 24th, at 3 P.M. Papers will be read by Mr. Bennett May, Dr. Charnley, etc. After the meeting the annual dinner will be held; tickets, exclusive of wine, 6s. Members having any papers to read or communications to make will kindly give notice, on or before Saturday, June 14th, to the Honorary Secretary, J. ALLEN BRATTON, College Hill House, Shrewsbury.

SOUTH-EASTERN BRANCH.—The forty-sixth annual meeting of this Branch will be held in the Board Room of the Royal Surrey County Hospital, Guildford, on Wednesday, June 11th, at 2.45 P.M. The President-Elect invites members and their friends to luncheon at his residence, White Hall, from 12.30 to 2 P.M. After the meeting the members are invited to join: 1. A visit to the Surrey County Asylum at Brookwood, by invitation of Dr. Barton, Resident Medical Officer. 2. Visits to various points of interest in the town of Guildford, namely, (*a*) the wards of the hospital; (*b*) the castle caverns and keep; (*c*) Archbishop Abbot's Hospital and St. Mary's Church. Dinner will be served at 7 P.M. at the Angel Hotel. Tickets, exclusive of wine, 6s. 6d. each. Carriages will meet members at Guildford Station at 12.30 and 1.10 P.M., and

will also convey them from White Hall to the meeting at the hospital after luncheon.—CHARLES PARSONS, M.D., Honorary Secretary, 2, St. James's Street, Dover.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The annual meeting of this Branch will be held at the Castle Campbell Hotel, Dollar, on the afternoon of Tuesday, June 17th, at 3.45 P.M., under the presidency of Dr. Strachan. The office-bearers for the ensuing year will be elected, and Dr. Strachan will read a paper on The Health Conditions of School Life. A discussion on The Present Position of Medical Officers under the Public Health Acts will be introduced by Dr. Wickham. The annual dinner will be held after the meeting. Tickets 5s. each.—C. J. LEWIS and J. PEAKE, Honorary Secretaries.

CAMBRIDGE AND HUNTINGDON BRANCH.—The annual meeting of this Branch will be held, in conjunction with the East Anglian Branch, at Norwich, on Thursday and Friday, June 19th and 20th respectively. A full circular with the agenda and full particulars will be forwarded in a few days.—BUSHELL ANNINGSON, Honorary Secretary, Walthamsal, Barton Road, Cambridge.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The summer meeting of this Branch will be held in the Kintore Arms Hotel, Inverurie, on Saturday, June 21st, at 1 o'clock P.M., Dr. Fowler in the chair. Business: 1. Minutes, etc. 2. Exhibition of various old Scotch and local objects of interest, with description of the same, by Dr. F. Maitland Moir, Aberdeen. A four-in-hand coach will, if the weather be favourable, start from the corner of Market Street at 10.45 A.M. for the conveyance of members to Inverurie *vid* Tyr Baggar, Blackburn, and Kintore, arriving at 12.45. The coach will leave Inverurie on the return journey at 6 P.M. Fare for coach and aërated waters, etc., *en route*, 5s. per head. Dinner in the Kintore Arms Hotel, Inverurie, at 1.30 P.M.; price (inclusive of attendance, but exclusive of wine), 3s. 6d. per head. N.B.—In order that suitable arrangements for coach, refreshments, and dinner be made, members intending to be present are urgently requested to signify their intention of so doing as soon as possible.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

DORSET AND WEST HANTS BRANCH.

THE spring meeting of this Branch was held at Ringwood on Tuesday, May 20th; Dr. E. M. SPOONER, President, in the Chair. Twenty-nine members and one visitor were present.

Officers and Council.—Dr. E. W. Batterbury, of Wimborne; Dr. C. Childs, of Weymouth; Dr. J. Davison, of Bournemouth; Mr. H. G. Dyer, of Ringwood; Mr. W. E. Good, of Dorchester; Dr. J. C. Leach, of Sturminster Newton; and Dr. W. V. Snow, of Bournemouth, were elected members of the Branch Council for the ensuing year.

Representative on the Council of the Association.—Mr. C. H. Watts Parkinson, of Wimborne, was re-elected.

Representative on the Parliamentary Bills Committee.—Mr. C. H. Watts Parkinson was re-elected.

New Members.—The following gentlemen were elected: Mr. Alfred Emson, of Dorchester; Mr. Arthur Frederick Stevens, of Buckland Newton; and Mr. Arthur Heygate Vernon, of Bournemouth.

Next Meeting.—It was decided to hold the summer meeting at Bournemouth on July 23rd.

Medical Officers of Health to County Councils.—It was resolved unanimously, "That this meeting is of opinion that the appointment of a medical officer of health by the County Councils in accordance with Section 17 of the Local Government Act, 1888, is most desirable, and should be carried out in the counties of Hants and Dorset."

Case.—Mr. H. G. DYER showed a patient upon whom Lumbar Colotomy had been performed after eleven days' intestinal obstruction due to a bony growth pressing on the rectum.

Papers.—The following papers were read: Dr. MCLEAN: On the Epidemic of Fever in Portland during 1889.—Dr. LAWRIE: On the Application of Electricity by Apostoli's Method in Uterine Disease.—Dr. GREVES: Case of Aneurysm of the Third Part of the Arch of the Aorta. Specimen shown.—Dr. MACDONALD: Remarks explanatory of the Lunacy Act, 1890.

Votes of Thanks.—Votes of thanks were passed to Mr. Nunn for his services as President, and to the Earl of Normanton for his kindness in again affording the members the pleasure of visiting his house, picture gallery, and grounds.

Excursion and Dinner.—After a pleasant drive to Lord Normanton's residence at Somerley, the members returned to Ringwood and dined together at the White Hart Hotel.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.

THE annual meeting was held at the Holborn Restaurant on May 28th.

Officers and Committee.—The ballot was taken for Officers and Committee of the District for the ensuing year, and the following were unanimously elected. *Vice-President of the District:* Dr. J. W. J. Oswald, *vice* Dr. F. Taylor. *Representative of Branch on Council:* Mr. J. Brindley James. *Honorary Secretary:* Dr. H. W. G. Mackenzie, *vice* Dr. Percy Smith, resigned. *Committee:* Messrs. H. H. W. Button, L. A. Dunn, A. P. Hills, J. Marshall, Herbert Taylor, G. H. Wilkins, and Dr. Percy Smith.

Votes of Thanks.—Dr. OSWALD and Mr. J. BRINDLEY JAMES moved votes of thanks, which were carried by acclamation, to Dr. Frederick Taylor and Dr. Percy Smith for the way in which they had respectively filled the offices of Vice-President and Honorary Secretary during the past three years.

Dinner.—The members subsequently dined together, Dr. ORD, President of the Metropolitan Counties Branch, taking the chair, supported by Dr. F. Taylor and Dr. J. W. J. Oswald, Mr. J. Brindley James, and other prominent members of the District. In proposing the toast of the South London District, Dr. ORD drew attention to the successful character of the meetings that had been held in the past year, and Dr. FREDERICK TAYLOR replied.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of this District was held at St. Bartholomew's Hospital, Chatham, on May 29th, Deputy-Surgeon General J. H. JEFFCOAT in the chair.

Next Meeting.—It was resolved that the next meeting be a conjoint one with the East Kent District, and that it be held at Maidstone in November. Mr. A. H. B. HALLOWES was unanimously nominated for the chair, and consented to occupy it on the occasion.

Communications.—The following papers were read and discussed: Mr. F. B. JESSETT: Some Observations on the Surgical Treatment of Intestinal Obstruction.—Mr. F. W. PENFOLD: Notes on a Case of Aortic Aneurysm, with Specimen.—Mr. A. G. FOULERTON: Notes of a Case of Scleroderma. This patient was exhibited and excited considerable interest.

Dinner.—Twelve members dined at the Bull Hotel, Rochester.

GLOUCESTERSHIRE BRANCH.

THE annual meeting of the Branch was held at the Bell Hotel, Gloucester, on Tuesday, May 20th. The President, Mr. H. E. WADDY, was in the chair, and upwards of twenty members were present.

The minutes of the last meeting were read and confirmed.

The SECRETARY presented the balance sheet for 1889.

Officers and Council.—Proposed by Mr. WADDY, seconded by Dr. HENLEY, that Dr. Soutar and Mr. Bower be elected scrutineers for 1891. Carried.—Proposed by Mr. WADDY, seconded by Dr. WILSON, that Dr. Needham be elected as the representative of the Branch on the Council of the Association and on the Parliamentary Bills Committee. Carried.—The following officers were declared duly elected for 1890-91: President, Dr. Watters (Stonehouse, Glos.); Honorary Secretary, Mr. G. Arthur Cardew. Dr. Rook, Cheltenham; Dr. Inglis, Cheltenham; Dr. Clark, Gloucester; and Mr. Bower, Gloucester, were elected to the four vacant seats on the Council.

Paper.—Dr. GREIG SOUTAR (Barnwood House, Gloucester) read a paper on Incipient Insanity, which was followed by a discussion in which Dr. EAGER (Northwoods, Bristol), Drs. HENLEY, CLARBATTEN, ELLIS (Gloucester), Drs. WILSON and SMITH (Cheltenham), and others took part.

Dinner.—The dinner took place at the Hotel, and was well attended.

SPECIAL CORRESPONDENCE.

PARIS.

How to Render Instruments Aseptic.—Vegetable Diet as a Therapeutic Agent.—Different forms of Purulent Pleurisy and the Microbes.—Etiology of Glanders.—Goat Vaccine.—General News.

ACCORDING to M. Albarran metallic instruments may be made aseptic by exposure to a temperature of 150° C. (334° F.) for half an hour in a sterilising stove, followed by immersion in an antiseptic solution. If there is no sterilising stove at hand the instruments should be kept immersed during several hours in a 5 per cent. carbolic acid solution. Catheters made of gum and catgut are sterilised with more difficulty. The following means can be used: (1) by sulphurous acid, Guyon's apparatus; (2)

maining for twenty minutes in an *autoclave*, at 120° C. (280° F.), by placing the catheters in glass tubes with wool stoppers, hich are kept for half an hour in a dry stove at 150° C. (334° F.). y boiling the catheters for half an hour sometimes they are rendered eptic, but this is not a certain method. The two following ethods M. Albarran recommends as good: An alcohol injection assed through the catheter; immediately afterwards an injection 1 in 1,000 corrosive sublimate; the instrument should then be mersed for one hour in a solution of mercuric chloride of in 1,000, without adding alcohol. An injection of alcohol is assed through the catheter; afterwards mercuric chloride, 1 in 1,000. he instruments are immediately afterwards boiled for twenty inutes, and it is necessary that they should be well covered with ater.

M. Dujardin-Beaumetz recently gave a clinical lecture on therauutical vegetarianism. He began by saying that ptomaines and ucomaines play an important part in auto-intoxication characristic of so many affections. Gastro-intestinal disorder and conestion of the liver apparently result from the accumulation of xic substances in the organism. The symptoms of gastric neurthenia and anuresis with sluggish kidneys are produced by ucomaines and ptomaines. M. Dujardin-Beaumetz believes that these affections, and in all such, vegetable diet would be prerable to animal food. Vegetable tissues undergo less change an animal tissues; the latter become quickly decomposed and oduce numerous toxic substances. Milk, eggs, vegetables, and uit constitute a diet which is sufficiently nourishing and suitle in cases where there is an accumulation of toxic substances, ther from renal or gastric derangement. In kidney disorder sulting from interstitial or catarrhal nephritis, in dilatation of e stomach, in putrid diarrhœa, in acute gastritis, in dyspepsia ue to a modification of the gastric juice, vegetable diet gives od results.

M. Netter maintains that all forms of purulent pleurisy are of icrobic origin, but that the microbes producing them are of any different kinds. He has made a bacteriological examinaon of 109 cases of different kinds of purulent pleurisy, and und in them pneumococci, pyogenic streptococci, pyogenic staylococci, bacillus tuberculosis, Friedländer's encapsuled bacillus, eudo-typhoid bacillus, micrococcus tetragenes, spirilla, filaments leptothrix, and saprogenic bacteria. Some of these were only et with in combination with other more common species of bacria. M. Netter divides purulent pleurisy into four classes: 1, at due to pneumococcus; 2, to streptococcus pyogenes; 3, to progenic organisms; 4, to the bacillus of tuberculosis. They are agnosed by bacteriological examination.

At a recent meeting of the Academy of Medicine, M. Cornil gave account of M. Babes's researches on the bacillus of glanders, hich show that this micro-organism, when obtained from pure ltivations, can penetrate the healthy tissue of animals, and thus use glanders. Rubbing in pomatum containing the bacillus rely succeeds, and only when the virus is very active, and obined from a perfectly fresh cultivation. M. Nocard has repeated Babes's experiments, and two guinea-pigs out of five were inted by rubbing with a pomatum containing the bacillus.

M. Hervieux, in a lengthy paper on goat vaccine, read before e Académie de Médecine, comes to the following conclusions: goat inoculated with cow's or human lymph furnishes nph exactly similar to that of the cow; vaccination direct from e goat succeeds as well as from the cow if the lymph is used ite fresh. Vaccination with goat's lymph after it has been used vaccinate a human subject gives the same results as cow's nph. In consequence of the discussion at the Academy of edicine concerning goat's lymph, MM. Bertin and Picq asked at their *pli cacheté* deposited at the Academy last January should opened. Its contents may be summed up as follows: tuberculis may be transmitted to the human subject by cow's lymph. ats which are refractory to tuberculosis should be substituted cows; the latter may be tuberculous, and yet be apparently perfect health. MM. Bertin and Picq are continuing their eximents on the cow and the goat to ascertain if tuberculosis can transmitted either by virus or vaccine.

The Municipal Council have decided to construct a second umbarium at the Mont Parnasse Cemetery. Several provincial vns are about to follow the example set by Paris.

The sixth centenary of the University of Montpelier passed off lliantly. It is whispered that decorations of the Legion of nour will be presented to some foreign as well as French entists.

SHEFFIELD.

The late Dr. de Bartolomé.—Diminution of Lead in the Water Supply.—The Society for Prevention of Cruelty to Children.—A Pétroleuse.

In previous letters have been mentioned the losses the profession has sustained in the death of some of its junior members. Now it is the removal of the senior member and the leader of the profession that has shed a gloom over us. Dr. de Bartolomé, at the age of 77, passed away on the morning of June 2nd. Though at an advanced age, it is not long since he was active in his practice and among his medical brethren. Two days before his death he was visiting patients. Little more than a year ago his failing health necessitated his retirement from the post of physician to the General Infirmary, which he ably and honourably filled for more than forty years. The success of the Association meeting in 1876 in Sheffield owed much to the ability and urbanity with which he filled the Presidential chair. His work in and for the profession, and his association with the medical schools, together with the many sterling features in his character, are subjects which must find mention in any notice of his life. In Dr. de Bartolomé the profession in Sheffield feel they have lost a member of whom they were justly proud. His honesty and manly professional rectitude, as well as his many estimable personal qualities, endeared him to all senior as well as junior. It is given to few men to enjoy such unquestioned confidence as for many years has been rendered to him as the leader in local medical matters.

A correspondent from Chapeltown writes to the *Daily Telegraph* on the satisfactory progress that has been made in treating Sheffield water for preventing it acting on lead. Samples have, he says, contained traces of lead, which now are practically harmless, whilst others have shown over $\frac{1}{10}$ of a grain per gallon, which is above the safety limit. Two months ago the same water supply contained $\frac{1}{10}$ of a grain per gallon. The correspondent, Mr. J. Smellie, claims some credit for suggesting the use of carbonate of lime as a cheap and effective remedy, and believes that if it is added in greater quantity now, the action of the water on the lead pipes will cease. Anyway, from this it appears that the plan of the Water Committee is thus far satisfactory.

The first annual report of the local branch of the Society for Prevention of Cruelty to Children has been issued. It is a record of most satisfactory work; 96 cases have been inquired into; of these 62 were warned, 14 dismissed after inquiry, and 20 prosecuted. In a local case recently a woman has been committed on a charge of manslaughter.

Instances of the dangers resulting from the careless use of paraffin lamps are of by no means infrequent occurrence. Lamp throwing is a different matter. A woman, in her anger, took up a paraffin lamp to throw at a man, but it exploded, and the contents went over her own body. She was admitted to the public hospital with severe burns on the arms, face, and chest.

CORRESPONDENCE.

THE WORKING OF THE NEW LUNACY ACT.

Sir,—Dr. Outterson Wood has done good service in sounding the note of warning contained in his letter under the above heading. It is indeed most pernicious that such conduct should be exhibited by the specially appointed justices. It is, however, exactly what one would expect; they dislike the duty, and many of them think, and think rightly, that the duty ought not to have been thrust upon them. I am sorry Dr. Wood (who is usually so well informed) has fallen into an error in one paragraph. The Act of 1890 does not continue the provision of the old Acts requiring two fresh medical certificates within seven days after a patient's admission on an urgency order. The simplest course to pursue in such cases is for one of the medical men, in addition to his ordinary certificate, to fill up another (which may be an exact copy with the urgency paragraph added) to sustain the urgency order. There is nothing in the Act to prevent the usual medical attendant signing the ordinary and the urgency medical certificates, and indeed it is proper that he should do so. The moral to be drawn from Dr. Wood's experience is that English medical men should do as their colleagues do in Scotland—send most patients to asylums on urgency orders, and leave the justice's order to be obtained afterwards by the relatives and the asylum authorities, who can give full directions as to the filling up of the petition.

This would also ensure the cases coming before the justices acting in the asylum district, who would be accustomed to the work. It would be advisable, however, to have both ordinary medical certificates filled up before the patient is removed.—I am, etc.,

Springfield House Asylum. DAVID BOWER, M.D.

SIR,—There ought surely to be no difficulty as to the meaning of the words "under proper care and control."

In the course of two or three years' work as house-surgeon in hospitals, it was more than once my misfortune to admit a lunatic into a general ward, and I know only too well both the effect on the other patients and the awful irritability caused in dementia by the attentions of a nurse unskilled in that particular class of case.

It would be interesting to know what Dr. Snow's justice of the peace would have said from the bench to a man who had engaged a surgical instead of a monthly nurse, and had lost his wife in consequence?—I am etc.,

Bassingbourne. PHILIP H. KIDD, M.B.

MANAGEMENT OF IMPACTED LABOUR.

SIR,—Dr. W. Elliott Porter asks the question: "Are Lawson Tait's operations justifiable?" and then he says he thinks not, because he has had under his care from other medical men and in his own practice several women with contracted pelves, and in whom he has brought on labour some twenty-five or more times. Such a conclusion is simply a specious misrepresentation of what I said. In only one of my cases was there any choice between induction of premature labour, and the operation which I performed in that case, after careful consultation between the patient's medical adviser, her husband, and herself, the unanimous election was that she should have a living child. She was therefore allowed to go on to the full time, and had the operation successfully performed. Her child is still living, having grown a fine healthy boy, and I think she and her husband had a perfect right to choose between the murderous operation and that which gave both lives. If the patient, on the contrary, were to elect to have artificial labour induced at a time when the child would not live, no one could complain of the choice; but that mothers do desire to have living children is conclusively proved by the fact that at the present moment I have waiting under careful watching no fewer than three cases who prefer, with full knowledge of the facts and with the perfect concurrence of their ordinary medical advisers, to wait for the performance of the operation, which I shall perform upon them in due course. In none of the three cases would it be possible for a living child to be born.

As for the carrying out of the same proceeding for placenta prævia in an emergency, the question can only be settled by an accurate knowledge of the mortality of this terrible complication. When I repeat that I have had the lamentable experience of an association with seven cases in which all the patients have died, I think I am perfectly justified in voting for any kind of change of treatment which will offer a prospect of a modification of these results.

The quotation of any number of cases of women who have repeatedly had premature labour brought on is no argument upon the question. In these cases there is a choice: the choice lies with the patient; but in cases which are met with at the full time the decision must lie between a murderous eviscerating operation and the operation of removal of the pregnant uterus, which promises to have a far lower mortality. I do not in the least degree object to any kind of criticisms of my proposal, but these criticisms must be based upon what I say, and not upon what others imagine I say. Previous assertions as to the inaccuracy attributed to me concerning craniotomy statistics have been efficiently set at rest by Dr. Swayne, and the final judgment of the profession will not depend upon *a priori* statements, but upon the firmer basis of empirical results.—I am, etc.,

Birmingham. LAWSON TAIT.

ALLEGED INCREASE OF CONSUMPTION IN SAN REMO.

SIR,—The statement has been widely circulated that consumption has greatly increased amongst the native population of San Remo, and this in consequence of the influx of consumptives from abroad. The purpose of my letter was to elicit the proof or evidence, especially statistical, on which the statement is based. Dr. Ruata, in his letter, does not address himself to this point at all.

Whatever may be the reliability of the statistics of mortality throughout Italy, the facts as regards San Remo are as I have stated. Some considerable time since I was furnished with the official particulars of the deaths of 1,412 persons, of which 208 related to foreigners. Not one of the certificates of death was signed other than by the "medico-necroscopo," nor can I call to mind a single instance in which a certificate was attested by the medical man in attendance. In the case of 52 foreigners, whose deaths were entered on the register, there were no corresponding certificates at all; and I may mention that during the twelve years I have practised in San Remo, I have never been required to furnish a certificate of death.

I might enlarge on this subject, but that is not my purpose which was, and is, to elicit the statistical or other trustworthy evidence on which the alleged increase of consumption in San Remo is based.—I am, etc.,

Lucerne. ARTHUR HILL HASSALL.

THE SALE OF POISONS TO IRRESPONSIBLE PERSONS.

SIR,—I wrote the Pharmaceutical Society concerning the above and received a reply to the effect that the Society would take action against any of their members who had infringed the Pharmacy Act of 1861.

As the secretary had misunderstood my meaning, the following two letters passed between us:

1. Copy of letter dated May 23rd, 1890, to Richard Bremridge Esq.

DEAR SIR,—There has been no infringement of the provisions of the Pharmacy Act of 1868.

But a patient of mine has been able to obtain, since July last (1889), about £20 worth of opium and morphine from three chemists.

Now, what I want to know is, whether your Society is willing to help on any movement for putting the sale of opium in such large quantities to irresponsible persons under stringent restrictions? Surely that one person can legally be supplied with £20 worth of a poisonous remedy points to the uselessness of the Act in its present form.

I am laying the matter before the British Medical Association with a view to getting it placed in hands which can procure legislation on the subject.—I remain, very faithfully yours, EDWARD H. RYAN-TENISON.

2. Copy of letter dated May 27th, 1890, to Edward H. Ryan-Tenison, Esq.

DEAR SIR,—In reply to your inquiry, I have every reason to believe that the Society would give due consideration to any reasonable proposition for the amendment of the law as to the sale of poisons.—I am, yours faithfully,

RICHARD BREMRIDGE.

It is therefore plain that the Pharmaceutical Society are willing to help forward any remedial legislation on the above point.—Yours, etc.,

Bexhill-on-Sea. EDWARD H. RYAN-TENISON.

A DISCLAIMER.

SIR,—My attention has been called to a pamphlet entitled "The Successful Treatment of Leprosy, by P. G. Unna; with Notes by J. L. Milton," etc. I desire to have it understood that I know nothing whatever of this publication, and that the use of my name on its title page is wholly unauthorised and unwarranted.—I am, etc.,

Hamburg. P. G. UNNA.

THE DISCUSSION AT THE MEDICAL SOCIETY ON ABDOMINAL SURGERY.

SIR,—I think Mr. Nairne is hardly fair in accusing the general surgeons of attacking the specialists; they have merely been defending themselves from the attack which Mr. Lawson Tait led against them, and have carefully avoided wounding their adversaries.

No doubt, as he says, it is better to be quite efficient in one trade than "Jack of all and master of none;" but it is better to be master of all a trade than a foreman in one of its branches only.

When your correspondents place the specialist's skill in diagnosis and treatment so far above that of the general surgeon, they forget that there are two sorts of specialists—the one, most eminent and necessary, that comes by a gradual but natural process of evolution from the best of the general practitioners; the other the artificial specialist, who is so either because he is not a good enough man for a general practitioner, or thinks himself wasted as such. One of this class probably could not, as Mr. Lawson Tait would put it, make both an anchor and a hair spring for a watch—a feat that any good engineer would be quite capable of performing; though no doubt the man who had made nothing but

r springs, being ignorant of the broad principles by which he did would not be able to forge an anchor.

A general surgeon is like the Nasmyth hammer that can as ily forge the armour plate of a ship as it can crack a nut, and may, like the hammer, by force of circumstances, have in time devote himself more or less exclusively to one class of work; n he becomes a specialist of the first class. The great laws of gery have not been brought to light by specialists, but general ctitioners of that art; but, according to Mr. Lawson Tait, there uld and should be no such men, for every patient, having the t done for himself, would go to the specialist for that particu- part of his terribly differentiated organism which troubled ; and there is now hardly any part which has not some para- c specialist peculiar to it.—I am, etc.,

reshford. CHAS. E. S. FLEMMING.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL AID SOCIETIES.

SICIAN AND SURGEON.—We cannot say there is anything unprofessional the acceptance of such an appointment as our correspondent refers to; at e same time, we think there are many medical men who would hesitate fore doing so, as, to mention no other reason, the scale of fees it pays to its edical officers cannot be said to enhance the dignity of the profession. As opening to practice, it would depend upon the character of the town d the number of medical men practising there, and the appointment in estion could only be an introduction to the lowest class of practice, while would certainly render our correspondent, to say the least, very unpopular th his brother practitioners in that locality, as it is most likely that this iety is only advertising for a medical man because none of the local prac- ioners will accept the appointment.

BOARDER OR PATIENT?

RY writes: A gentleman has a sister who is a widow and has one child, and possessed of independent means; she is insane, but not violent or dan- rous to others. He wants to place her (with a nurse to look after her) in e house of a lady who has furnished apartments, with board, etc., to let, t does not want to have her certified or to take any legal steps. Can the ly who has the apartments receive her into her house under these circum- nces without incurring any legal responsibility? She has not, of course, y licence from the Commissioners of Lunacy for the reception of insane rsons.

** No; she cannot be legally received and detained in the manner men- ned. Liability to prosecution for misdemeanour would be incurred.

THE CARRIAGE TAX.

. would be glad to know if he be liable for a second tax. His gig having ken down, he took another one of his own until the first one came m the coachbuilder. The spare one was never out until the other broke vn.

** It would appear that there is nothing in the Inland Revenue Acts to mpt "A. K." from liability to pay the tax claimed in respect of the riage temporarily brought into use, and we are advised that the autho- es can require him to pay.

UNQUALIFIED PRACTICE.

V. W. MARKS appeared last week before Mr. Raffles, at the Liverpool City ice Court, to support a charge against Richard Jones Owen, formerly ctising as a physician and surgeon in Farnworth Street, Kensington, of ing committed wilful and corrupt perjury by falsely alleging himself to a duly qualified practitioner. Owen, who had entrusted his defence to Quilliam, had been twice before the court and remanded, on the last sion being admitted to bail, himself in £50 and two sureties in £20 each. his name being called in court yesterday he failed to respond, and Mr. ks said he had heard that Owen had absconded. One of his sureties, ry Humphreys, Farnworth Street, in reply to an inquiry from the Bench, he did not know where Owen was at present. He had sought for him could not find him. On the application of Mr. Marks, the recognisances e estreated and a warrant was issued for Owen's apprehension.

AVAL AND MILITARY MEDICAL SERVICES.

AN ARMY MEDICAL GRIEVANCE.

RONG feeling exists in the Army Medical Department that officers who failed to pass the examination for promotion the rank of surgeon-major, and who subsequently qualified king the diploma of F.R.C.S., should be placed in their proper ion of seniority on the brigade-surgeon's list. We can best rate the nature of the grievance by quoting a particular case. geon-major of long standing and good service fails to pass terary test. Four years later a new regulation is framed, allows him to produce an alternative Fellowship qualifica- and, having obtained this, he is at once promoted to brigade- on's rank. But during these four years of supersession juniors have jumped over his head, younger officers have become deputy surgeons-general, and he finds himself forty-four places lower down than he would have been had good fortune enabled him to satisfy the requirements of the examining board. This is quite hard enough; but Mr. Stanhope's recent decision makes the claim to equitable treatment far stronger. For, in accordance with the recommendations of Lord Camperdown's Committee, it has now been decided to abolish the promotion examination; and this unfortunate gentleman has, therefore, been condemned to lose four years' seniority for failing to undergo a test which has now been condemned as useless and unnecessary. In every other respect he is fully qualified to occupy the position which he now holds, and the punishment of his former failure is out of all proportion to the offence. The *Broad Arrow* lately did good service by directing public attention to this question, and we have received letters which have convinced us that the criticisms of our contemporary were well found. Five or six officers in all are suffering from the decision of the authorities; and in the case of one or two of them, the altered place on the list which they are compelled to occupy effectually bars the way to future promotion. Simple justice requires that they should not be made the victims of red tape regulation, and suffer professional ruin because they did not succeed in doing a thing which never was a real test of efficiency, and which has since been condemned by its own sponsors.

It will do little or no harm to anyone else if these officers obtain the seniority which in equity belongs to them, and we hope that their grievance will not be forgotten when the medical vote comes up for discussion in the House of Commons.

INDIAN MEDICAL SERVICE.

BENGAL MEDICAL SERVICE writes: As an examination for twelve appointments in the Indian Medical Service is advertised, I think it is only fair to lay the following facts before intending candidates for commission, so that they may know what to expect on arriving in India. These points are not mentioned in the "information" supplied by the India Office.

Surgeons on first arrival are "attached" to regiments, that is, they serve under a senior medical officer and get 317 rupees and 8 annas per mensem. They hold the "relative rank" of captain, and are under the same rules as the "staff corps"; but a lieutenant in that corps, or even a probationer having a lieutenant's rank, draws more pay than 317 rupees 8 annas. After being "attached" he is put in officiating medical charge of a regiment This means 386 rupees and 10 annas per mensem. However far off the regiment may be from the place in which he first was, the surgeon must pay his own travelling expenses, which in India are very high. He is not told how long he is likely to be in one place, but may suddenly receive orders to go elsewhere at any time. For fully three years, as I know from personal experience, he will be in a constant state of uncertainty, not knowing how long he may be in any given place, but being transferred from regiment to regiment without the least warning in most cases. While going from place to place his pay drops to 317 rupees and 8 annas, the 386 being drawn the day after taking over officiating charge. The rule being that when going to higher pay the surgeon must travel at his own expense, care is usually taken that one regimental charge is handed over (and the pay dropped to 317 rupees) before orders are received to take another officiating appointment; so that it is evident one has to incur additional expenses when drawing less pay.

If officers are married, they have to pay for their wives' travelling expenses, except when not going to higher pay. As this exception practically never holds good, the cost necessarily is considerable. I have known five transfers in one year, and this is by no means uncommon. Quarters are never provided, so that the surgeon, on arrival at a new place, may have great difficulty in finding accommodation. Apartments at a mess may be available; not always. Married officers are often greatly inconvenienced, having literally no house or accommodation available, and are frequently dependent on strangers, whose assistance is not invariably given willingly. The excuse is that the medical officer is so constantly being changed, that they do not know what to do. The regiment with which I am at present has had eight others in medical charge during twelve months past; I am the ninth. Married men take a house, hire furniture, and think to settle down, but may be suddenly sent off, and then the whole process of moving and giving up house has to be gone over again. The authorities seldom or never give any information as to where one has to go, the usual order being to report arrival at the headquarters of a district, and there await further orders. In consequence, luggage, etc., cannot be sent on in advance. These inconveniences could easily be avoided.

Being "regimental," unlike the Medical Staff, we have to subscribe to the mess, to the band, and to various other funds, which the members of the sister service have not to do. Yet the permanent "combatant" officers say we "do not belong to the regiment," and even to the permanent medical officer are sometimes distant because he "does not belong to them." The question was put to the commanding officers as a body whether they desired the Service to be non-regimental (like the "Staff"), but they objected.

A surgeon gets a "permanent regiment" after about three years of moving about. In former times, he was appointed at once to his regiment on coming out, but that rule is completely altered. Most officers put their names down for the "civil side," that is, for employment as civil surgeons in charge of towns. Then they are entitled to private practice, and gain much wider experience in all branches of the profession than could be possible when with a regiment. Civil appointments, however, are not obtainable under two years of military service according to the rules. In reality, three or four years must be spent before one gets them.

With regard to subscriptions, we pay them at the same rate as captains do;

but this seems absurd when our pay on joining is below that of a lieutenant. New arrivals often express regret at not knowing what they had to expect; and I hope that you will kindly make the above facts known for the guidance of those who intend going up for the examination in August.

A ROYAL MEDICAL CORPS.

M.S. writes: All now agree that the Medical Department must be counted a corps, on lines similar to the Royal Engineers, with substantive rank, but limited powers of command. This can only be attained by: 1. Pressure from the schools. 2. Parliamentary influence. The following is suggested:

1. Maintain the Medical Staff Defence Union under auspices of British Medical Association.
2. A Central Committee of retired medical officers to be appointed.
3. Officers on full pay at home and abroad to collect subscriptions limited to £1 per annum, and forward to Central Committee.
4. Brief statements of the questions at issue to be printed and forwarded to Members of Parliament.
5. Fuller statements to be circulated amongst members of the Association, with a request that they would use all their political interest to attain the desired ends.
6. The schools of the United Kingdom to be informed by printed notices of the importance of the question at issue, and the absolute necessity of candidates not coming forward, reasons being given why they should not join the service under existing conditions.

This is all-important. Close the supply for even two years and the authorities must give way; but if the supply cannot be entirely cut off, the idea must be abandoned. A supply of an inferior class, socially and professionally, is just what the authorities would welcome, as giving them just grounds for refusing the claims of medical officers. Systematic organisation is now required; who will come forward and undertake it?

JUNKERISM.

OBSERVER writes: There are many things connected with the German system of government with which we cannot be enamoured, but there is one which most persons can admire—the will and ability of the German Emperor to "sit on" the Junkers of his army. What an advantage it would be if some one in high authority in England could "sit on" our military Junkers.

PUPILS AT THE ROYAL SCHOOL FOR DAUGHTERS OF OFFICERS.

M.D. points out that in the returns from this school is a table. "Rank of Parents of the Pupils," in which medical officers are placed last of all, under paymasters, quartermasters, commissaries, riding masters, veterinary surgeons, and chaplains. This clearly shows that, in the opinion of the functionaries who compile the table, medical officers have no rank at all, or at all events, are inferior to every other grade in the army. This will please "my military advisers!"

THE NAVY.

THE following appointments have been made at the Admiralty: JOHN LAMBERT, Fleet Surgeon, to the *Tamar*, May 27th; JAMES L. SMITH, Surgeon, to the *Humbert*, May 27th; ROBERT W. BIDDULPH, Staff Surgeon, to the *Assistance*, temporarily, May 29th; PHILLIP N. RANDALL, Surgeon, to the Chatham Hospital, May 30th; GEORGE G. BORRETT, Surgeon, to the *Duke of Wellington*, additional, May 30th; HENRY T. KELSALL, Surgeon, to the *Invincible*, additional, May 30th; WALTER H. S. STALKARTT, Surgeon, to the *Vivid*, additional, May 30th; GEORGE A. S. BELL, Surgeon, to the *Wildfire*, additional, May 30th; JOHN A. KEOGH, Surgeon, to the *Excellent*, additional, June 4th; RICHARD BARNARD and EDWARD CUFFEY, Surgeons, to Plymouth Hospital, May 30th; WILLIAM W. JACOBS, Surgeon, to the *Wildfire*, June 4th.

MEDICAL STAFF.

BRIGADE-SURGEON JAMES FORBES BEATTIE, M.D., has gone on retired pay. His commissions are dated: Assistant Surgeon, September 30th, 1863; Surgeon, March 1st, 1873; Surgeon-Major, April 28th, 1876; and Brigade-Surgeon, June 27th, 1888. He served in the Ashanti war in 1873-74 (medal): in the Afghan war in 1878-80, including the defence of Candahar (medal); and in the Egyptian war of 1882, during which he was present at the battle of Tel-el-Kebir (medal with clasp and Egyptian bronze star).

Surgeon S. O. STUART has been posted to the Cambridge Hospital, Aldershot, for duty, and has been succeeded in the medical charge of the 2nd Infantry Brigade at Aldershot by Surgeon-Major G. R. RAE, Surgeon-Major A. H. ANTHONISZ, M.B., taking Surgeon-Major Rae's position as Medical Officer to the third station hospital at Aldershot.

Surgeon-Major W. E. RIORDAN, ranking as Lieutenant-Colonel, is promoted to be Brigade-Surgeon, *vice* R. W. Berkeley, retired; dated May 6th, 1890. Brigade-Surgeon Riordan's previous commissions are dated: Assistant-Surgeon, September 30th, 1864; Surgeon, March 1st, 1873; and Surgeon-Major, September 30th, 1876. He served in the Egyptian war of 1882 (medal and Khedive's Star), and in the Soudan campaign in 1885 (clasp).

INDIAN MEDICAL SERVICE.

DEPUTY SURGEON-GENERAL W. F. DE FABECK, M.D., Madras Establishment, is appointed Surgeon-General with the Government of Madras. He entered the service as Assistant-Surgeon January 29th, 1857, and rose to Deputy-Surgeon General March 28th, 1886. He was in the Eastern campaign in 1854-55, including the siege of Sebastopol and the assault on the Redan (medal with clasp), and in the Indian Mutiny campaign in 1857-58 (medal). It will be remembered that Deputy Surgeon-General Donnelly was recently appointed to the post now given to Surgeon-General De Fabeck, but that the Government of India refused its sanction on account of age, Dr. Donnelly being in his 60th year. Dr. De Fabeck was 56 last month.

Surgeon A. S. FAULKNER, F.R.C.S, Bombay Establishment, medical officer 19th Native Infantry, is reappointed officiating Agency Surgeon at Ulwur, during such time as Surgeon A. W. D. Leaky, F.R.C.S., may officiate as Residency Surgeon at Hyderabad.

Brigade-Surgeon H. GRIFFITH, Madras Establishment, has retired from the service on a pension of £700 per annum, from April 30th. He entered as Assistant-Surgeon July 27th, 1859, and rose to Brigade-Surgeon March 28th, 1886. He has no war record.

The services of T. W. STEWART, Madras Establishment, are placed at the disposal of the Government of India in the Home Department.

The services of Surgeon J. L. T. JONES, M.B., Bombay Establishment, are placed at the disposal of the Government for employment in the Civil Department.

Surgeon B. B. GRAYFOOT, Bombay Establishment, medical officer 24th Native Infantry, and Acting Secretary to the Surgeon-General with the Government of Bombay, is appointed to the medical charge of the 10th Light Infantry, vice Surgeon A. C. Thompson, dead.

Surgeon M. B. BRAGANZA, Bombay Establishment, officiating in medical charge of 24th Native Infantry, is confirmed in that appointment, *vice* Surgeon Grayfoot, transferred to the 10th Light Infantry.

The undermentioned officers have leave of absence as specified: Brigade-Surgeon A. BARRY, M.D., Bombay Establishment, for one year on medical certificate; Surgeon-Major G. H. PEEVOR, Bengal Establishment, in medical charge of the 1st Battalion 4th Goorkha Regiment, for one year; Surgeon-Major G. GRIFFITH, Bengal Establishment, Deputy Sanitary Commissioner North-West Provinces and Oude, for one year and 180 days on private affairs; Surgeon-Major W. H. THORNHILL, M.D., Madras Establishment, medical officer 27th Native Infantry, for one year; Surgeon-Major J. LANCASTER, M.B., Madras Establishment, District Surgeon at Vallore, for eighteen months on private affairs.

It is reported from India that orders regarding the redistribution of the military medical administrative staff there, and including all subsidiary modifications of existing arrangements necessitated thereby, are about to be issued applicable to the three Presidencies.

THE VOLUNTEERS.

THE undermentioned gentlemen are appointed Acting-Surgeons to the corps specified: DAVID RICE, 1st Worcester Artillery; JOSEPH GEORGE MCCANN, 5th Volunteer Battalion King's Liverpool Regiment (late the 18th Lancashire); GEORGE ARTHUR BROWN, 2nd Volunteer Battalion South Wales Borderers (late the 1st Monmouth); EDWARD ELLIS, 1st Volunteer Battalion Duke of Wellington's West Riding Regiment (late the 4th West Riding of Yorkshire).

Surgeons R. MUNRO, M.D., and W. WILSON, 1st Volunteer Battalion Royal Scots Fusiliers (late the 1st Ayrshire), are promoted to be Surgeons-Major ranking as Majors; and Surgeon A. BLAIR, of the same battalion, is promoted to be Surgeon-Major, ranking as Lieutenant-Colonel.

Surgeon H. J. JOHNSON, London Division of the Volunteer Medical Staff, has resigned his commission, which was dated May 5th, 1888.

Mr. DAVID WALLACE, M.B., is appointed Acting-Surgeon (supernumerary) to the Edinburgh Division of the Volunteer Medical Staff Corps.

Brigade-Surgeon J. L. W. WARD, of the Severn Brigade Infantry Volunteers, has resigned his appointment, on which he entered on February 8th last.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

THE honorary degree of D.C.L. will be conferred, at the commemoration Encænia, upon Sir W. Turner, Professor of Anatomy at Edinburgh.

WADHAM COLLEGE.—There will be an election to four scholarships on December 6th, 1890. Candidates must not have exceeded 19 years of age on December 6th. The value of the scholarships is £80 a year, inclusive of rooms and of all allowances. They are tenable in the first instance for three years, but in the case of all scholars whose conduct and industry are satisfactory this term will be prolonged to four years, to which for special reasons a fifth may be added. In the election to one of the exhibitions, preference will be given to any candidate who shall undertake to read for honours in natural science from the time of his admission into college, and to proceed to a degree in medicine in the University of Oxford. Candidates are requested to call on the Warden on Wednesday, November 26th, at 5 P.M., bringing testimonials of good conduct and certificates of date of birth. The examination will begin on Thursday, November 27th, at 9.30 A.M., and will probably occupy four days and a half.

UNIVERSITY OF LONDON.

M.B. EXAMINATION.—At the May examination the following candidates were examined and approved:

First Division.—E. R. C. Earle, University College; H. M. Evans, University College; J. McD. Gill, Guy's Hospital; H. H. Horden, University College; S. H. Jones, St. Thomas's Hospital; R. E. Lord, B.Sc., Owens College and Manchester Royal Infirmary; E. S. Pasmore, University College; E. N. Reichardt, St. Bartholomew's Hospital.

Second Division.—M. Bannister, Owens College and Manchester Royal Infirmary; H. J. Blackler, Guy's Hospital; L. T. F. Bryett, King's College; S. Bueno de Mesquita, Guy's Hospital; A. H. Davis, St. Bartholomew's Hospital; A. C. Frames, St. Bartholomew's Hospital; L. E. Hill, University College; T. W. Hinds, University College; K. McLaren, St. Bartholomew's Hospital; E. A. Sadler, Queen's College, Birmingham; Shaw, Westminster Hospital.

SOCIETY OF APOTHECARIES OF LONDON.—May, 1890. Pass list. The following passed the Examination in Surgery:

Eden, W. A., King's College
Elam, W. H., F.R.C.S.Eng., Charing Cross Hospital
Farquharson, W. G. R., St. Mary's Hospital
Hardy, F. W., St. Bartholomew's Hospital
Harrison, A. T., Guy's Hospital
Horsman, W. H., University College
Lathbury, F. R., London Hospital
Naden, P. T., Queen's College, Birmingham
O'Sullivan, C., London Hospital
Spence, D. B., London Hospital

The following passed the Examination in Medicine, Forensic Medicine, and Midwifery:

Brohier, L. C., M.R.C.S.Eng., Ceylon Medical College and Middlesex Hospital
Cohen, I., Charing Cross Hospital
Elam, W. H., F.R.C.S.Eng., Leeds and Charing Cross Hospital
Hardy, F. W., St. Bartholomew's Hospital
John, H. W., Guy's Hospital
Spence, D. B., London Hospital

The following passed in Medicine and Forensic Medicine:
tel, N. P., Guy's Hospital
Parker, G. R. W., Cambridge University and St. Thomas's Hospital

The following passed in Forensic Medicine:
ate, G. H., London Hospital

The following passed in Forensic Medicine and Midwifery:
Kretser, E. C., L.M.S., Ceylon Medical College

The following passed in Midwifery:
itley, W. L., Owens College, Man-
Guinand, P., University College
ester

The following gentlemen having passed the Qualifying Examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and have been admitted as Licentiates of the Society:
Messrs. Bate, Bentley, Cohen, De Kretser, Elam, Guinand, Hardy, Harrison, Horsman, Lathbury, Parker, Spence.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At a meeting of the Faculty held on June 2nd, Mr. Joseph Peake, L.P.S.G., having passed the necessary examination, was admitted a Fellow.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, June 2nd.

Lepers in Jamaica.—Mr. GOURLEY asked the Under-Secretary of State for the Colonies whether he was aware that in the island of Jamaica there was a considerable population of lepers, the number of which was daily increasing in consequence of there being no law compelling them to remain in the hospital until cured; and whether he could see his way to recommend the Governor to introduce a law compelling the isolation of people who might be suffering from leprosy.—Baron H. de WORMS said there was a considerable number of lepers in certain districts of Jamaica, but the Secretary of State was not aware whether the number was increasing. The question of the compulsory isolation of lepers was under the consideration of the Governors of Jamaica and other West Indian Colonies.

OBITUARY.

MARIANO MARTIN DE BARTOLOMÉ, M.D.EDIN.

The sudden death on June 2nd, at the age of 76, of Dr. de Bartolomé, will come as a shock to the large number of attached friends among he counted among the Council and Vice-Presidents of the British Medical Association, who had long been intimately associated with him in the course of the affairs of the Association, in which he held so high a position and took so lively an interest. His death will be deeply mourned by the great body of practitioners in his own district and throughout the Association, to whom he was known as a kindly and warm-hearted friend; a man of great independence, straightforwardness, and a warm supporter of the best traditions of professional life.

Though advanced in years and suffering occasionally, and sometimes acutely, from an affection of the heart, which he was aware had a serious meaning, Dr. de Bartolomé remained until last an active and energetic physician, deeply interested in the institutions of Sheffield. He had lectured in the Medical School since 1845, and during that period had given more than 1000 lectures, and had been attached as physician to the Sheffield Infirmary from 1843 until about eighteen months ago, when he felt the necessity of retiring from his public engagements. He was at that time senior physician to the infirmary and president of the medical school, having been largely instrumental in obtaining the funds necessary to erect the new buildings in Leopold Street, which were finished in the summer of 1888, and opened on November 29th of that year by a *conversazione*, at which Sir Andrew Clark was present and delivered an address. In November 1888, a portrait of himself as president was presented to Dr. de Bartolomé, and by him to the school, when he recalled the fact that that was his jubilee year in Sheffield, in which he had resided for fifty years; and in handing to the Council the portrait which had been presented him, he said: "I wish that my portrait to remain in the midst of its givers—those friends whom I have so sincerely and fervently loved."

Dr. de Bartolomé was born a Spaniard, his father being Civil Governor of the province Segovia, and he had been gazetted to a commission in a hussar regiment when the Spanish revolution, brought about by the despotism of Ferdinand VII, and the confiscation of the estates of Bartolomé, drove his father into exile, from which his brothers returned to fill high offices in the Government.

Dr. de Bartolomé adopted the medical profession, matriculating at the University of Edinburgh, and became naturalised as an Englishman. He took his M.D. degree in 1830 with honours, and earned the confidence and friendship of Sir Robert Christison, whose assistant he became in the laboratory and lecture room. He settled at Sheffield in 1838, and occupied the same house for forty-five years. He took the deepest interest in the medical school and hospital, taking an active part in all the arrangements for developing the usefulness of those institutions. At the same time he gained the goodwill and respect of his profession by his high standard of professional integrity, and by his invariable readiness to counsel and assist younger men. As a member of the Council of the British Medical Association he showed himself loyal, energetic, firm, and independent in judgment. He was one of the most steadfast upholders of the work of the Medical Reform Committee, and never failed to respond to the summons of Dr. Waters, however inconvenient and costly the journey to London and consequent absence from his local professional duties might be.

When the Association went to Sheffield, in 1876, for its annual meeting, Dr. de Bartolomé was selected by the profession of the district for nomination as President, and the nomination was unanimously and cordially accepted by the Council. He had the honour to succeed in the presidential chair his old master, Sir Robert Christison, and he showed himself in every way worthy of the honour conferred upon him. His hospitality, his energy, his courtesy, and his policy as chairman, were universally recognised, and he did much to make that meeting one of the most brilliant in the records of the Association. His life was full of honours; in addition to those which we have mentioned, the pupils of the medical school presented him, in 1864, with a handsome piece of plate in recognition of his services. He held some of the highest offices in the craft of Freemasonry, and a presentation portrait of him, subscribed for by a number of his brethren, hangs in the Masonic Hall. Dr. de Bartolomé was President of the Sheffield Athenæum, being rarely absent from the chair at its annual meetings, and when he retired from that position a few years ago a testimonial, of which he was the recipient, indicated the high appreciation in which his services were held.

Dr. de Bartolomé was twice married and leaves a widow, the daughter of the late Mr. Samuel Jackson, with a family of eight, four sons and four daughters. He died accompanied by all that makes old age most honourable and tolerable—troops of friends, honoured, esteemed and beloved by all his fellows, and surrounded by all the pleasures of recollection which a long life spent in a career of honourable usefulness can give. His name will long be remembered with affection and esteem in this Association.

ROBERT C. R. JORDAN, M.D.LOND., M.R.C.S., L.S.A.

DR. ROBERT C. R. JORDAN, whose death we chronicled last week, was born at Teignmouth in 1825, the son of a solicitor and of a well-known Devonshire family. He was educated at the Grammar School at Exeter, and in his twenty-first year was entered as a medical student. His early career was a promising one; he took the Warneford prize and other distinctions, and was appointed house-physician to King's College Hospital. He took the licence of the Apothecaries' Company in 1849, receiving at the same time the prize in botany. In 1851 he was elected an associate of King's College. In 1852 he took the degree of M.B. and obtained the gold medal in physiology. His first connection with Birmingham was as medical tutor at Queen's College, where his work was rewarded by the remarkable success of his pupils. On the formation of Sydenham College, which was closely associated with the General Hospital, Dr. Jordan was elected to the chair of physiology—at first singly, and afterwards in conjunction with Mr. T. H. Bartleet—and this post he continued to hold until the amalgamation of the Queen's and Sydenham Colleges, and the consequent formation of one medical school in Birmingham. In 1853 Dr. Jordan proceeded to the degree of M.D.; and about the same time he did excellent work as a teacher of the ladies' class in physiology at the Midland Institute. When the Children's Hospital was founded, mainly through the exertions of Dr. Heslop, in 1863, Dr. Jordan was elected honorary physician to the new charity, which for twenty years profited by his skilful and unremitting services.

On retiring from its active work, he accepted the post of consulting physician. He was lecturer on the diseases of children at Queen's College, and in 1883 was appointed Ingleby lecturer at the College for the year, when he chose "scarlet fever" as the subject of his discourses.

Dr. Jordan successfully practised as a physician for thirty-three years in Birmingham, during which period his services were in considerable request by persons of all classes. Of his attendance on the poor it is said that there were few men in the profession who did more gratuitous work. In this connection a local journal thus speaks of him: "That this lifelong habit brought practice and ensured gratitude need not be said; but it did not lead to an adequate professional income, for though he had many patients in the wealthier classes, Dr. Jordan was too self-sacrificing and too sympathetic to make money largely; while his attention was sedulous, his fees were moderate, and, as we have mentioned, his skill was constantly exercised without remuneration of any kind." The unfavourable state of Dr. Jordan's health at length compelled his removal to Teignmouth, and this occasion was chosen by his many friends for presenting him with an address (couched in terms of affectionate regard), together with a sum of money.

ROBERT HENRY SPENCER CARPENTER, L.R.C.P.Lond., L.S.A.

Mr. R. H. S. Carpenter, whose death we announced with regret last week, was born in the year 1823, and died May 14th, 1890, in his 67th year. His father was a medical man in extensive practice in Bristol, who sent him to Durham University to be trained for the medical profession, with the view of succession to his practice. But before Mr. Carpenter had taken his diploma his father died. He practised for some time in Durham, and then in London in the East End, and subsequently at Brixton.

Mr. Carpenter was an indefatigable and enthusiastic supporter of the rights of general practitioners, and in that capacity showed untiring zeal, and attained no small success. In the year 1877 he founded the East London Medical Association, and as the moving spirit of this Association he initiated and successfully carried on between sixty and seventy prosecutions against illegal practitioners, obtaining important decisions, and ultimately succeeding in so successfully maintaining the rights of registered practitioners and in protecting the public against the illegal practice of unqualified persons and quacks of all descriptions as to have established a solid claim on the gratitude both of the profession and the public. The prosecutions which he undertook were always most carefully investigated, and in the large majority of instances he obtained a verdict with costs, thus carrying out his great work with very little cost to his friends or to the profession. He was one of those who from the first warmly appreciated the importance of the penal clauses in the Apothecaries' Act, and he spared no effort to secure the insertion of a much more stringent and effective penal clause than that contained in the General Medical Acts, either in their original or in their amended form. Unfortunately, however, the Government could not be persuaded to accept this view, and notwithstanding his efforts, those of his friends, and of the Reform Committee of the British Medical Association, it was not found possible to obtain so thorough a protection of the public and so stringent a measure of general co-operation as was desired by all, and as would undoubtedly in the end have proved beneficial to the public interest.

His admirable zeal was unfortunately not always coupled with discreet moderation, or with due recognition of the good intentions of others associated in like objects, but who yielded more readily than he did to the stern logic of facts, and who refused to stop the cause of medical reform altogether in order to obtain the particular boon at which he aimed. Even those, however, whom he attacked most bitterly and in the least measured terms on these subjects knew how to make allowance for the excellent motives which underlay his impetuous and unmeasured onslaughts; and few, we may imagine, if any, have thought the worse of him for the strong language in which he was apt to indulge and the unreasonable imputations which he did not hesitate to put forward, knowing well that it was a case in which zeal outran discretion, and in which passionate desire to promote a particular reform which he prized above all others had blinded him to the injustice of the reproaches which he freely scattered. An excellent practitioner, a staunch friend, unceasing in his charities, tender-hearted to the sufferings of others, and with a purse ever open to the appeals of distress, whether among patients or professional brethren, Mr. Carpenter unhappily lacked the business faculty needed to provide against the darkening future threatened by approaching age and increasing infirmities. During the last few years his health did not permit him to meet all the exigences of practice; and the provision by insurance which he had made for his family at death was unhappily allowed to lapse.

GEORGE T. FINCHAM, M.D., F.R.C.P.Lond., Consulting Physician to the Westminster Hospital.

Dr. G. T. Fincham died suddenly at his residence, 13, Belgrave Road, on June 1st. Dr. Fincham was one of that limited class of physicians represented in his generation by G. Budd, Watson, and G. Burrows—men who combined high literary culture with a thorough practical knowledge of medicine in the broadest sense of the term. Men of this stamp have in our time by their example and influence done much to elevate and ennoble the profession to which they belonged; and to them the honour is largely due of having raised the Royal College of Physicians of London to the high position it has taken within the past twenty-five years. From a professional point of view, Dr. Fincham appeared to the greatest advantage at the bedside of his patients; his mind was then intent upon working out the nature and bearing of the symptoms presented by the patient under his care; and when he had satisfied himself, often after a long and exhaustive inquiry, as to the nature of the disease, his advice as to its treatment was eminently judicious, and delivered with that kindness and delicacy of feeling which was so marked a feature of his character. It was, in fact, as a teacher of clinical medicine in the wards of his hospital that Dr. Fincham was best known; there the student attending his practice learnt thoroughly to appreciate the value of Dr. Fincham's opinion and of his method of arriving at an accurate diagnosis, especially in obscure cases of disease. His pupils thus learned to place implicit confidence in his judgment, arrived at after an exhaustive study of the history of the case and the appearance and the physical signs presented by his patient. Beyond this Dr. Fincham's example of kindness and tenderness to his patients in the wards made a strong impression upon the minds of younger men; in truth, he was a high-minded gentleman as well as a learned physician, loved and respected by all who knew him; he has left behind him a very large circle of professional friends; and we venture to say that few, if anyone, has passed through so long a medical career against whom less evil has been thought or spoken.

Dr. Fincham, as will be seen from the record of his career, devoted no inconsiderable portion of his time to the work of the College of Physicians; his opinion and advice were often sought and always readily given to those who guided the destinies of the Corporation, for in him everyone felt they could place absolute confidence; selfishness, and all that belongs thereto, were absent from his nature, his first and chief aim being to promote the interests of his profession and of his College.

Dr. Fincham was educated at Westminster, King's College, and St John's College, Oxford, and subsequently at St. George's Hospital, Paris, and Dublin; he passed his examination in Arts in 1841 at Oxford; graduated M.B. in the same university in 1843, and M.D., 1847; M.R.C.P.L., 1844; Fellow, 1855; Censor of the Royal College of Physicians in 1872 to 1874, again in 1877; Council, 1876, 1883, 1885; Examiner in Medicine, 1881 to 1883; Senior Censor, 1883; Vice-President, 1885. He was appointed Assistant Physician to Westminster Hospital 1853, and Physician in 1858; Consulting Physician, 1883; he was also Lecturer at the Westminster Hospital Medical School, on the Principles and Practice of Medicine.

The Hessian Chamber of Deputies has voted 735,000 marks (£3,675) towards the erection of a Clinic of Mental Diseases in the University of Giessen.

The brothers Peter, Alexander, and Wassili Bachruschin, to whom the city of Moscow is indebted for the erection of a hospital for chronic diseases, have lately given 350,000 roubles for the construction and endowment of an asylum for incurables, which is to accommodate 150 patients.

A beautifully-tinted glass window has, we learn, been placed in the Salford Royal Hospital and Dispensary by Mr. Andrew Boutflower, M.R.C.S., L.S.A., in memory of his father, the late Mr. John Boutflower, who was connected with the hospital for over sixty years, and for forty-four years its senior surgeon.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

E MEDICAL OFFICER OF HEALTH FOR THE NORTH RIDING.

IE eight months since the County Council of the West ing of Yorkshire appointed Dr. Whitelegge their medical officer ealth, under Section 17 of the County Local Government Act, salary of £800 without investing him with any local admini- tive functions or superseding any of the existing officers; ointing him, in fact, as he should be, their adviser in all sani- y matters affecting one of the largest and most populous areas he country. The North Riding has now followed their example, ar as availing themselves of the powers accorded by the clause, the terms are most extraordinary: "A fixed salary of £100 annum, with 5 guineas (including expenses) for each day's ices, and leave to hold other appointments." It will be seen nothing more than the £100 is certain, as in the few places re payment has been by fees the advice of the medical officer been very rarely sought. We must express our surprise that an arrangement should have received the sanction of the al Government Board, for a district having a population not h under 400,000 could certainly afford to pay an adequate ry, the more so as there are not already any highly paid ers of health in it, as there are in the West Riding and the ining county of Lancashire.

is, to say the least, a retrograde step, and indeed scarcely sistent with the regulations issued by the Local Government rd for the guidance of all medical officers of health, urban or l. Their duties, as therein laid down, are partly consultative dvisory and partly supervisional and inspectorial. The former indeed, provided for by the fees, but it is utterly unreason- to suppose that for £100, the salary of a junior office clerk, man could keep himself acquainted with the sanitary con- ons and health of an area of over 2,000 square miles and more 80 from east to west, conduct constant as well as periodical ection, and maintain regular communications with the local tary authorities and medical officers. As the appointment not be made until after the end of June, the Council have to reconsider their resolution and to offer a more adequate salary, requiring the whole time of the medical officer. This se would be far preferable to making an appointment which ll really practical purposes would be illusory, except in extra- nary contingencies, as widespread epidemics, which in a dis- containing only two towns of any size—Scarborough and llesbrough—are not likely to occur.

POOR-LAW OFFICERS' SUBSTITUTES.

RKHOUSE MEDICAL OFFICER asks whether he can claim his usual con- t fee for midwifery from the guardians for a case which is attended by his lified assistant, who is recognised by them as his substitute.

* We believe that the fee can be claimed under the circumstances ed.

'OOR-LAW MEDICAL OFFICERS AS COUNTY COUNCILLORS.

asks whether a medical man holding a district and workhouse appoint- t under the Local Government Board is disqualified from sitting as a nty Councillor for the district in which this union is situated. On 34 of W. A. Holdsworth's *Introduction and Notes on the Local Government* is a clause that seems to bear on this.

* We are not aware of any express statutory provision or of any judicial sion on this question, and this reply, therefore, is not altogether free from ot; but we are advised that an office held under a body separate and dis- t from the Council (as in this case the board of guardians) is not a place rofit within the meaning of the Local Government Act (1888), and the incorporated therewith, so as to disqualify the holder for election as a nty Councillor, notwithstanding the fact that the remuneration for such e may in part be derived from a grant by the Council.

medical officer of health is of course disqualified.

PAUPER LUNATICS.

ATOR writes: Prior to May, 1890, the certificates of all pauper lunatics filled up by the medical officer of the union in whose district the pauper ed. Since the passing of the new Lunacy Act the borough magistrates decided that union medical officers shall no longer be called upon to large this office, and have appointed, or are endeavouring to appoint, medical men in the town to perform this function. According to the r of the Act, they seem to be within their rights; but was it ever ded by those who drew up the Bill that union medical officers should be entirely superseded in the matter of filling up certificates, whilst the penalties attaching to their office regarding lunatics remain unaffected? 1. Have the borough magistrates the powers they now arrogate to themselves? 2. If so, what redress have union medical officers?

*** The justice may call in such medical practitioner as he thinks fit to act in the cases referred to—the justice, namely, before whom the case of an alleged pauper lunatic is brought. But obviously it was never intended by the framers of the Act to exclude the medical officers of union districts. These medical officers, indeed, have special duties imposed upon them in the recent Act, and to stop them from certifying in these or similar cases is not consistent. The relieving officers also have great discretionary powers in dealing with some cases of lunacy under Section 20 of the Lunacy Act of 1890.

STIMULANTS IN WORKHOUSES.

M.O. writes: As the wording of a paragraph in the JOURNAL of May 24th may extend a misinterpretation of the Consolidated Orders, Art. 108 (4), which is already too common, it might be well to point out that the gift of liquor to paupers for work done depends entirely upon the written recommendation of the medical officer. The guardians have only a discretionary power to act upon it or not. This recommendation should be made only when the medical officer is satisfied that, owing to the nature of the work on which a pauper may be engaged, an allowance of fermented or spirituous liquors is necessary for the preservation of his health.[1] And, if question arise, the medical officer may be required to justify such recommendation.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, May 31st, 4,619 births and 3,310 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 19.9 and 18.6 per 1,000 in the two preceding weeks, further declined to 17.8 during the week under notice, a lower rate than in any week since October last. The rates in the several towns ranged from 11.7 in Nottingham, 13 4 in Cardiff, 14.5 in Leicester, and 15.2 in Plymouth to 23 5 in Halifax, 23.8 in Preston, 25.9 in Newcastle-on-Tyne, and 28.7 in Manchester. In the twenty-seven provincial towns the mean death-rate was 18.8 per 1,000, and exceeded by 2.2 the rate recorded in London, which was 16.6 per 1,000. The 3,310 deaths registered during the week under notice included 396 which were referred to the principal zymotic diseases, against 467 and 432 in the two preceding weeks; of these, 122 resulted from measles, 118 from whooping-cough, 56 from scarlet fever, 46 from diphtheria, 35 from diarrhœa, 18 from "fever" (principally enteric), and 1 from small-pox. These 396 deaths were equal to an annual rate of 2.1 per 1,000; in London the zymotic death-rate was 2.5, while in the twenty-seven provincial towns it averaged 1.8 per 1,000, and ranged from 0.0 in Halifax, 0.6 in Wolverhampton, and 0.7 in Portsmouth, in Leicester, and in Oldham to 3.2 in Liverpool, 3.4 in Salford, and 4.1 in Derby. Measles caused the highest proportional fatality in London, Liverpool, Birmingham, and Derby; scarlet fever in Manchester; and whooping-cough in Norwich, Sheffield, and Derby. The mortality from "fever" showed no excess in any of the twenty-eight towns. Of the 46 deaths from diphtheria recorded during the week under notice in these large towns, 25 occurred in London, 5 in Manchester, 4 in Salford, 4 in Liverpool, 2 in Brighton, 2 in Birkenhead, and 2 in Hull. A fatal case of small-pox was registered during the week under notice in Huddersfield, but not one in London or in any other of the large provincial towns; 5 cases of this disease were under treatment in the Metropolitan Asylums Hospitals on Saturday, May 31st, of whom 2 had been admitted during the week. These hospitals contained 1,014 scarlet fever patients on the same date, against 1,030 and 992 at the end of the two preceding weeks; 98 cases were admitted during the week, against 124 and 95 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 3.1 per 1,000, and slightly exceeded the average.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, 864 births and 603 deaths were registered during the week ending Saturday, May 31st. The annual rate of mortality in these towns, which had been 20.6 and 22.4 per 1,000 in the two preceding weeks, further rose to 23.3 during the week under notice, and exceeded by 5.5 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Greenock and Paisley, and the highest in Aberdeen and Glasgow. The 603 deaths registered in these towns during the week included 114 which were referred to the principal zymotic diseases, equal to an annual rate of 4.4 per 1,000, which exceeded by 2.3 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Aberdeen, Glasgow, and Dundee. The 290 deaths registered in Glasgow included 29 which resulted from measles (against 20 and 18 in the two previous weeks), 13 from whooping-cough, and 4 from diphtheria. In Edinburgh 9 fatal cases of whooping-cough were recorded; and 17 deaths resulted from measles in Dundee. The death-rate from diseases of the respiratory organs in these towns was equal to 4.0 per 1,000, against 3.1 in London.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

TORQUAY (Population, 25,000).—*Low Death-rates: Dangers of Wells in Towns.*—Mr. P. Q. Karkeek's report for 1889 is a very satisfactory record. The mortality of the year was below the average, there was little or no epidemic sickness, and the sanitary condition of the district was good. Some interesting particulars are given of the circumstances attending cases of scarlatina, which serve to illustrate the advantages of early notification, and show from what remote and varied sources infection may be spread.

[1] See *Glen*, pp. 121-22.

The number of deaths from all causes was 370, and, deducting 60 deaths of visitors, the death-rate stands at 12.4 per 1,000. The zymotic rate was only .3 per 1,000, the lowest of any seaside health resort in the kingdom. Once more was illustrated the danger of using water from a well in a town which is permeated with drains. In the case in question the water of the well was celebrated for its coolness, brightness, and freshness. But, on four cases of enteric fever occurring amongst those who resorted to it, Mr. Karkeek discovered that, a drain in its vicinity having become choked, an overflow of sewage had taken place into the well. The well was closed, but the case is a good illustration of the tenacity with which some people cling to dangerous, shallow wells, even when a safe supply is available.

CHELTENHAM (Population, 47,200).—*Slow Convalescence from Scarlet Fever: Scarlet Fever and Diphtheria should be kept apart, and separately isolated: Cancer Mortality.*—The statistics for 1889 show that the health of this town was exceptionally good, in spite of the occasional outbreaks of zymotic disease which Surgeon-General Roch has to record. The death-rate (15.3 per 1,000) was considerably under the average of previous years, and the zymotic rate was the lowest recorded since 1883. Although 30 cases of scarlatina occurred, principally during the months of October and November, none proved fatal. A remarkable feature in the epidemic was the length of time that infection seemed to cling to the convalescent patient. Mr. Roch cites a case in which, fifty-three days after its invasion (the attack being a mild one) and a fortnight after the child had been pronounced perfectly safe, she communicated the disease to her sister, although there was not the slightest vestige of desquamation or sore throat to be seen. The only remnant of delicacy was an unpleasant odour from the breath—which was beyond doubt the immediate cause of transmitting the disease—proceeding from the vocal cords below the range of ordinary observation. There were 11 cases of diphtheria, of which 2 proved fatal. Mr. Roch urges the need of provision for the isolation of cases of this disease, he being of opinion that they should never be brought into contact or associated with scarlatina cases. He suggests, therefore, that in view of the far greater likelihood of an outbreak of diphtheria than of small-pox, some part of the present small-pox hospital should be set apart for the reception of diphtheria patients—a course which would render that institution of far greater service to the public than it is at present. Forty-five deaths from cancer are recorded.

MEDICAL NEWS.

DR. LONDON, of Carlsbad, has had the Knight's Cross of the Order of Isabella the Catholic conferred on him.

THE Worshipful Company of Grocers have granted a donation of £50 to the funds of the National Truss Society.

THE collections of the Southampton Hospital Sunday Committee amount this year to £1,183, the largest sum collected in any year.

DR. FRIEDRICH SALZER, well known as having been Professor Billroth's chief assistant for many years, has been appointed Professor of Surgery at Utrecht.

DRS. Giovanni Gigli, Ettore Gallone, and Giovanni Quirico (of Rome), and Dr. Francesco Albani (of Casalmonferrato), have been named Knights of the Order of the Crown of Italy.

PROFESSOR VON DITTEL, the distinguished Vienna surgeon, will celebrate the fiftieth anniversary of his graduation as doctor of medicine on June 9th.

DR. LAVERAN, of the Val-de-Grâce Hospital in Paris, has received a prize from the French Institute for his researches on the hæmatozoa of malaria.

CARDINAL LAVIGERIE is having negroes trained as medical practitioners at Malta, and several have already completed their education and proceeded to Central Africa.

AN Intercolonial Australasian Medical Congress will be held in Sydney, probably in September or October, 1891. The President-elect is the Hon. Dr. MacLaurin.

TESTIMONIAL TO DR. T. J. STAFFORD.—Dr. Stafford has been presented with an address, a service of silver, and a cheque for £100, by his medical brethren in Boyle, co. Roscommon, on his appointment as Medical Inspector, Local Government Board.

IRISH LUNATIC ASYLUMS.—His Excellency the Lord Lieutenant has authorised the expenditure of a sum of £3,600 in repairs on the Castlebar Asylum, of £250 on Clonmel Asylum, and £600 on Waterford Asylum.

MADAME DÉODOR, who died at Nancy on May 11th, has left 800,000 francs (£32,000) for the foundation of a hospital in that town, to be called by her maiden name (Léonie Bruillard Balbâtre).

AT the recently established Pasteur Institute in Buda-Pesth Professor Högyes has inoculated 32 persons since April 15th. Poo patients are lodged in a hospital, and kept under supervisio during treatment.

MR. LEWIS, of Gower Street, sends us an interesting mezzotin reproduction of the famous portrait of Hunter by Sir Joshu Reynolds, of which the line engraving by Sharp is much valued and is becoming scarce.

THE Duchess of Albany distributed the certificates granted b the Oxford Corps of the St. John Ambulance Association in th Corn Exchange, Oxford, on the evening of June 2nd. Sir Henr Acland presided.

THE Wladimir Order of the Second Class has been conferred o Dr. Kanzler, director of the Katharine Children's Asylum in S Petersburg, in recognition of his fifty years of work in the publi service.

THE foundation stone of the sanatorium which the Salford Co poration are about to erect in Eccles New Road, on a site adjoi ing the Trafford estate, was last week laid by Alderman A. Dickins, ex-Mayor and Chairman of the Health Committee. Th building will cost between £40,000 and £50,000.

BY a recent decree everyone who wishes to practise dentistry a "phlebotomy" in Italy must henceforth have taken a legally reco nised degree in medicine and surgery. Dentistry will, for the futur be taught in the surgical department of such medical faculties possess the necessary equipment for the purpose.

COUNTESS BROWNLOW opened last week a hospital at Woodha Spa, Lincolnshire, which has been erected by public subscripti in order that the poor may participate in the benefit to be deriv from the mineral waters. The Princess of Wales has consented become patroness of the hospital which is to be called t Alexandra.

AT the general monthly meeting of the Royal Institution, he on June 2nd—Sir James Crichton-Browne, M.D., LL.D., F.R.S treasurer and vice-president, in the chair—Mr. C. J. Cullingwort M.D., F.R.C.P.; Mr. Jonathan Hutchinson, F.R.S., F.R.C.S.; a Mr. Rudolph Messel, Ph.D., F.C.S., were elected members of t Institution.

DURING the early months of the present year, Hove enjoyed almost total immunity from infectious sickness. Only five cas belonging to the zymotic class (one being an imported case typhoid fever) were reported during the first quarter, and the was no death. Three deaths were refered to influenza, but in ea instance the disease was complicated by lung disease.

A RECENT report of the St. Petersburg Town Council shows th between May 21st, 1882, and April 1st, 1890, trichinæ were fou on microscopic examination in 458 pigs in the slaughter-hou of that city. Trichinæ were also found in 21 specimens of bac during the same period. During April of the present year alo the carcasses of 8 pigs were condemned on the same ground.

PRESENTATIONS.—At a distribution of certificates and medalli to the successful pupils of the Paris Centre of the St. John Amb lance Association, Dr. Barnard, the Honorary Secretary of t Centre, was presented with a valuable surgical instrument, in cognition of his services as lecturer to the first class, held und the auspices of the Centre.—Dr. Wm. Taylor, on resigning t Chairmanship of the Cardiff Free Library and Museum Committ has been presented with an address expressive of the appreciati of the invaluable services rendered by him during his term office.

HORSEFLESH AS FOOD.—The sale of horseflesh as human fo was authorised in France in 1856; the consumption in Paris alo amounted to 4,500,653 kilogrammes in 1886. At Berlin 7,(horses are slaughtered for food every year; at Vienna 6,271 w

osed of in the same way in 1887. In Italy horseflesh can be ully sold as human food; the town where it is most largely n is Milan.

IE Royal Humane Society have awarded their bronze medal Iubert A. Bray, physician and surgeon at Cape Juby, on the Coast of Africa, for the following act of bravery: The ship *ra* was nearing the port of Arrecife, Lanzarote, one of the ry Isles, when Dr. T. Russell Cruise fell overboard. Mr. Bray ped overboard after him, and succeeded in supporting him picked up by a boat.

IVERSITY OF TÜBINGEN.—The total number of students in University of Tübingen this summer session is 1,416, of whom belong to the medical faculty. The building of a new clinic mental diseases has been commenced, and one for diseases of en is so far advanced towards completion that it will be ed in the coming winter session. A new operating theatre been added to the surgical clinic.

TROPOLITAN CONVALESCENT INSTITUTION. — One of the est of the convalescent institutions which now take so lead- part in hospital relief in this country is the convalescent tution at Walton, with its branches at Kingston Hill dren), and the seaside branch at Bexhill. This institution rated this week its jubilee. During its fifty years' existence s helped no fewer than 111,000 patients.

E CYPRUS SOCIETY.—At a meeting of the Cyprus Society this , it was announced that the immediate objects undertaken the creation of a Gordon Memorial Cottage Hospital at Cairo, estimated cost of £1,500, and the appointment of two lady es to go out to Nicosia, at a cost of £180 per annum. One , trained at St. Bartholomew's Hospital, has already been out, and it is desired to send out three more ladies, with a to training the native women to the work, and also for ing out the religious and educational work which the Society mplates.

SECTION OF STOMACH FOR SIMPLE ULCER.—At the recent an Surgical Congress, Professor Postempski showed a lad, aged n whom, after every kind of medical treatment had been tried purpose, he had excised a "round ulcer" by resection of the ior wall of the stomach near the pylorus. Examination of lcer after removal showed that perforation was on the point king place. The patient got up on the tenth day after opera- there had been no return of the vomiting which previously led him, and he was gaining weight.

E trustees of the late Mr. J. A. Longmore have offered to give 0 to the building and furnishing fund of the Longmore Hos- for Incurables, Edinburgh, on whose behalf an appeal was tly made for subscriptions to add a new wing to the present ing. The entire amount required for this purpose is esti- d at £15,000. The late Mr. Taylor, of Starley Hall, left £3,000 d the work, which, with the £5,000 to be given by the es, leaves £7,000 still to be got; of this £300 has already received, and a lady has promised to give £500.

ERARY INTELLIGENCE.—The first number of a new medical , the *Medicinische Revue für Balneologie, Hydro- und ano-Therapie Diätetik und Hygiene*, with an "inset" en- "*Curorte Zeitung*," appeared at Vienna on April 15th. The is Dr. A. Kállay, of Carlsbad, and among his collaborators rs. Harvay (? Harley) and Mapother, of London; Professors kiewicz, of Cracow; Benedikt, Lewandowski, v. Stofella, and tter, of Vienna; Liebreich and Senator, of Berlin; Rossbach, nna; Mosler, of Greifswald; Cantani, of Naples, etc.

ALL-POX MORTALITY IN SWEDEN.—The statistics of small- n Sweden are instructive, as showing in a most conclusive er the effect of vaccination in mitigating the scourge. From o 1800 the death-rate from small-pox was 165 per 100,000 of opulation. In 1801 optional vaccination was introduced and nall-pox mortality fell to 90 per 100,000 during the following ears, and to 21 per 100,000 in the six years after that. From when vaccination was made compulsory, to 1883, beyond year the official records from which these figures are , do not extend, the average death-rate from small-pox has 18.2 per 100,000 inhabitants. In many single years the rate een as low as 3, 2, or even 1 per 100,000.

fourteenth annual meeting of the British Medical Temper- Association was held on May 30th; Dr. B. W. Richardson, the President, in the chair. The report showed that 29 new members and 25 new associates (the latter being abstaining medical students), had joined during the year, the total enrolled being 411 members and 130 associates. The report referred to the important investigations on the use of alcohol in workhouses and in hospitals, the former showing that in the all but unanimous opinion of the medical officers it is unnecessary for healthy paupers at any age; and the latter that there is, as a rule, much less used now in hospitals than in 1863. The publication of the endorsement of the medical declarations against alcohol by upwards of 600 medical men was also referred to, and the prize written competition on alcohol by medical students in London, Edinburgh, Glasgow, and Belfast. The income for the year was £65 9s. 6d., and the expenditure £69 11s.

DOCTORS IN FRANCE.—Official statistics show that the number of doctors in France and Algeria was 10,600 in 1847; 11,254 in 1866; 10,743 in 1876; 11,643 in 1881; and 11,995 in 1886—figures which seem to indicate that, contrary to the experience of several other countries, the number of medical men in France is even more stationary than its general population. This fact is all the more evident when the steady diminution in the number of practitioners holding the restricted licence of *officier de santé* is considered. The number of these in 1847 was 7,500; in 1866 it was 5,568; in 1876, 3,633; in 1881, 3,200; and in 1886, 2,794. In the new law regulating the practice of medicine, which it is expected will be passed before long, it is proposed to suppress the class of *officiers de santé;* but it is clear from these figures that, in the natural process of professional evolution, they are fast being eliminated as "unfit." It is remarkable that though the number of doctors has increased so little, the number of medical students has almost doubled in the last ten years, there being 6,455 now in the whole of France, as against 3,500 in 1879.

ASSOCIATION OF THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.—A general meeting of the Association of Fellows of the Royal College of Surgeons of England will be held in the rooms of the Medical and Chirurgical Society, 20, Hanover Square, W. (hired for the occasion), on Saturday, June 14th, at 4 o'clock. The following gentlemen have been recommended for election to the Committee and various offices, etc.:—*President:* Mr. G. D. Pollock (London). *Vice-Presidents:* Mr. Timothy Holmes (London); Mr. Walter Rivington (London). *Treasurer:* Mr. John Tweedy (London). *Honorary Secretary:* Mr. Herbert William Allingham (London). *Committee:* Mr. William Adams (London), Mr. W. Allingham (London), Dr. Robert Barnes (London), Mr. W. K. Barnes (London), Mr. E. R. Bickersteth (Liverpool), Mr. Bruce Clarke (London), Dr. W. J. Collins (London), Dr. Ward Cousins (Portsmouth), Mr. J. Couper (London), Mr. W. T. Crosse (Norwich), Mr. Richard Davy (London), Mr. Alban Doran (London), Mr. Victor Horsley (London), Mr. Jordan Lloyd (Birmingham), Mr. J. H. Morgan (London), Mr. A. T. Norton (London), Mr. Mayo Robson (Leeds), Mr. Manley Sims (London), Mr. C. Steele (Bristol), Mr. W. T. Square (Plymouth), Mr. Lawson Tait (Birmingham).

PRIZE ESSAYS.—The following prizes are offered by the French Medico-Psychological Society in 1891: 1. Aubanel prize of 2,500 francs (£100) for an essay on insanity in old persons; 2. Belhomme prize of 800 francs (£32) for an essay on vision in idiots and imbeciles; and the Esquirol prize of 800 francs (£32) for the best essay on some point in mental pathology. The essays should be sent to Dr. A. Ritti, general secretary, before December 31st, 1890. The Belgian Royal Academy of Medicine offers a prize of £20 for a demonstration, by original research, of the mode of formation of the red and white blood corpuscles; the papers must be sent in by December 15th, 1890. A prize of £20 will be awarded for an essay elucidating the nature and etiology of cancer, and the prophylaxis of the disease; one of £20 for an essay showing the causes of the development of diphtheria in Belgium and the means of checking its spread; and one of £60 for an essay embodying clinical facts, and, if necessary, experiments in elucidation of the pathogenesis and treatment of epilepsy. Consolation prizes of from £12 to £40 may be awarded to unsuccessful competitors whose essays appear to deserve recognition. A sum of £1,000, in addition to the £60 prize, may be given to an author who should achieve a radical improvement in the treatment of diseases of the nervous centres, as, for example, by the discovery of a curative remedy for epilepsy. A prize of £30 will also be given, under the will of the late Dr. da Costa Alvarenga, of

Piauhy (Brazil), "to the author of the best paper or work on any branch of medicine (the choice of subject being left to the writer)." The essays for the four last mentioned prizes must be sent in by February 1st, 1891. The essays may be written in Latin, French, or Flemish, and should be addressed to the Secretary of the Academy at Brussels.

THE MEDICAL PROFESSION IN FRANCE AND GERMANY.—During the academic year 1888-89 the number of candidates admitted to the degree of doctor of medicine in France was 625. Of these, 399 received their diplomas from the Paris faculty, 77 from that of Montpelier, 66 from that of Bordeaux, 47 from that of Lyons, 18 from that of Nancy, and 18 from that of Lille. In Germany, during the same period, the degree of M.D. was conferred on 1,030 persons—201 receiving it from the University of Würzburg, 128 from Berlin. 114 from Munich, 82 from Bonn, 80 from Greifswald, 58 from Kiel, 47 from Erlangen, 46 from Strassburg, 44 from Freiburg, 39 from Jena, 32 from Halle, 29 from Königsberg, 28 from Tübingen, 26 from Göttingen, 22 from Marburg, 19 from Breslau, 17 from Giessen, 17 from Heidelberg, and 1 from Rostock. No medical degree was granted by the University of Leipzig. A comparative view of the number of students who graduated in medicine during the last four years in the two countries respectively shows that the overcrowding of the profession, in Germany, to which attention was publicly called not long ago, is not exaggerated. During 1885-6, the degree of M.D. was conferred on 546 candidates in France and on 685 in Germany; the corresponding numbers being 624 and 847 in 1886-87, and 642 and 935 in 1887-88. In Germany, as has been shown above, the cry is still "they come." The population of France is thirty-eight and that of Germany forty-five millions.

THE MEDICO-LEGAL SOCIETY OF NEW YORK.—Mr. Clark Bell, in his tenth inaugural address at the last general meeting of the New York Medico-Legal Society, was able to point to a remarkably prosperous year's work, including as it did the first international congress on the subject of medical jurisprudence. The roll of the Society has been increased by about 150 members, and now numbers the very large total of 743 members, of whom 527 are active, 204 corresponding, and 12 honorary. A considerable number of papers have been read and discussed at their meetings and published in the Society's *Journal*, and the Society is continuing the publication of a selection of the papers that were read in the earlier days of the Society's work before the *Journal* was founded. The work the Society now has on hand is twofold—namely, to prepare for a second international congress, to be held in New York in 1892, when we have no doubt that no efforts will be wanting to make the gathering one of real importance. The other work is to promote the study of medical jurisprudence, especially in America, and to endeavour to get the subject made compulsory both at the examinations and in the lecture rooms of the schools of medicine and law. For their success in this they have our best wishes; the subject has always, or at any rate for a long time, been compulsory with us, and its importance cannot be overestimated. It is the one which brings the medical profession into closer contact with the general public, and one which affords the greatest opportunities to the practitioner to bring credit or discredit on his calling, according to the skill or ignorance he displays. For the third year in succession the Society is displaying the great liberality and public spiritedness in offering two prizes, of the value of 150 dollars respectively, for the best essay on any subject connected with medical jurisprudence. The papers must be sent in before April 1st, 1891, to the President of the Society, 57, Broadway, New York, the only condition being that competitors shall enrol themselves as members of the Society. The awards in the case of the last competition have not yet been made known.

MEDICAL VACANCIES.

The following Vacancies are announced:

BRISTOL GENERAL HOSPITAL.—House-Surgeon. Salary, £120 per annum, board, lodging, and washing. Double qualification. Applications with certificate of registration to be addressed to the Secretary, William Thwaites, by June 16th.

CANCER HOSPITAL (FREE) Brompton, S.W.—Assistant House-Surgeon and Registrar. Salary, £50 per annum, with board and residence. Applications to the Secretary by June 9th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, 238A, Gray's Inn Road. House-Surgeon, qualified. Rooms and board. Applications to the Secretary by June 7th.

CENTRAL LONDON THROAT AND EAR HOSPITAL, Gray's Inn Road.—Registrar and Anæsthetist. Small honorarium. Applications to the Secretary.

CENTRAL LONDON THROAT AND EAR HOSPITAL, Gray's Inn Road.—Three Clinical Assistants, qualified. Applications to the Secretary.

CHARING CROSS HOSPITAL, Strand, W.C.—Assistant-Physician with University degree, Fellows or Members of the Royal College of Physicians, London. Applications to the Treasurer by June 7th.

CHARING CROSS HOSPITAL, Strand, W.C.—Assistant Surgeon-Dentist. M.R.C.S.Eng. and L.D.S.—Applications to the Treasurer by June 7th.

CHARING CROSS HOSPITAL, Strand, W.C.—Anæsthetist, qualified to practise. Applications to be addressed to the Chairman of the Medical Committee by June 7th.

CHARING CROSS HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy. Honorarium, £150 per annum. Applications to the Dean, J. Mitchell Bruce, by June 19th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board and residence, and allowance for washing provided. No salary. Applications to Storrar-Smith, Secretary, 24, Finsbury Circus, E.C., by June 13th.

CITY OF LONDON LUNATIC ASYLUM, Stone, near Dartford, Kent.—Assistant Medical Officer; single; not less than 25 nor more than 35 years of age. Single. Salary £150 per annum, with board, lodging, washing, and attendance. Applications by June 10th to Henry F. Youle, Clerk to the Visiting Committee, City of London Lunatic Asylum, Guildhall, London, E.C., from whom the necessary forms of application can be obtained.

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.—House-Surgeon; unmarried. Salary, £100 per annum, with board, lodging, and laundry. Knowledge of Welsh desirable. Applications to Mr. H. Howell, Secretary, 11, Morley Street, Carmarthen, by June 17th.

CO. DOWN INFIRMARY.—Registrar. Compounder of Medicine, and Assistant to Surgeon. Salary, £63, with board, fuel, and washing. Candidates, who must possess a surgical diploma, should apply to Mr. G. W. O'Flaherty. Election on June 14th.

CO. MONAGHAN INFIRMARY.—Surgeon. Salary, £92 6s. 2d. per annum. Applications to J. H. Swan, Resident Surgeon. Election on June 11th.

DERBY AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Second Assistant Surgeon; age 25 to 40. Salary, £160 per annum, rising to £250 (outdoor), and midwifery fees. Applications to the Secretary, Mr. J. Bullivant, 58, Abbey Street, Derby, by June 7th.

DERBY AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Senior Resident Medical Officer. Age not under 30 or over 35. Salary, £280 per annum, with house rent and taxes free, midwifery fees, and cab hire. Applications to the Secretary, Mr. J. Bullivant, 58, Abbey Street, Derby, not later than June 21st.

DERBYSHIRE GENERAL INFIRMARY.—Resident Assistant House-Surgeon (175 beds). Board and washing and bonus of £10. Applications to House-Surgeon by June 21st.

HORTON INFIRMARY, Banbury.—House-Surgeon and Dispenser; qualified. Salary, £60 per annum, with board and lodging. Applications by June 1 to C. H. Davids, Honorary Secretary, 27, Marlborough Road, Banbury.

JARROW-ON-TYNE MEMORIAL HOSPITAL.—House-Surgeon; double qualifications. Age not under 25 years. Appointment for three years at a progressive salary of £130, £150, and £170 respectively, with board and lodging in the hospital. Applications by June 18th to James Campbell, Secretary.

LEEDS GENERAL INFIRMARY.—Honorary Surgeon. Applications, addressed to the Treasury at the Infirmary, and marked "Private," should be sent in not later than June 13th.

LEEDS HOSPITAL FOR WOMEN AND CHILDREN.—Honorary Surgeon, qualified for not less than seven years. Applications to the Secretary, Frederick Kirby, by June 9th.

LONDON HOSPITAL, Whitechapel Road, E.—Assistant Physician. Applications to the House Committee by June 17th. Election June 24th.

LONDON HOSPITAL, Whitechapel Road, E.—Assistant Surgeon. Applications to the House Committee by June 17th. Election June 24th.

LUTON FRIENDLY SOCIETIES MEDICAL INSTITUTE.—Resident Medical Officer. Salary, £180 per annum, rising to £220, with residence. Form of application to be obtained from the Secretary, Thomas Keens, 12, Guildford Road, Luton, Beds.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich, S.—Junior Resident Medical Officer. Salary, £30 per annum, with board, attendance, and washing. Applications to the Honorary Secretary by June 13th.

NORTH RIDING OF YORKSHIRE.—Medical Officer of Health for the Riding; qualified to practise medicine, surgery, and midwifery. Remuneration, a fixed fee of £100 per annum, and 5 guineas per day (to include expenses) for every day's services, with leave to hold other appointments. Applications to William C. Trevor, Deputy Clerk of the County Council, Clerk of the Peace Office, Northallerton, before June 30th.

OXFORD UNIVERSITY.—Deputy Linacre Professor of Human and Comparative Anatomy. Salary, £700 a year. Applications to the Registrar of the University by June 21st.

PARISH OF FARR, Sutherland.—Medical Officer. Salary, 100 guineas per annum. Single. Applications to Chairman of Board, John Box, House, Tongue, Sutherland.

PRESTWICH LOCAL BOARD.—Medical Officer of Health for the District. Salary, £30 per annum. Applications to the Chairman of the Board by June 10th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Senior Resident Medical Officer. Applications to the Secretary, Conrad W. Thies, by June 18th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—An additional Assistant Surgeon; a Fellow of the Royal College of Surgeons of England. Applications to the Secretary, Conrad W. Thies, by June 24th.

ST. MARY'S HOSPITAL, Paddington, W.—Physician in charge of Out-Patients. Fellow or Member of one of the Royal Colleges of Physicians of the United Kingdom. Appointment for five years. Applications to Thomas Ryan, Secretary, by June 12th.

WORD ROYAL HOSPITAL.—An Honorary Medical Officer for the Pen-leton Branch Dispensary; double qualification. Applications, with certificates of age and registration, etc., to the Secretary, Alexander Hay, by June 16th.

MEN'S HOSPITAL SOCIETY.—House-Surgeon for the new Branch of he Society at the Royal Victoria and Albert Docks. Must be M.R.C.S. Applications by June 9th to P. Michelli, Secretary, Greenwich, S.E.

VERSITY COLLEGE, LONDON.—Resident Medical Officer. Applications to J. M. Horsburgh, M.A., Secretary, by June 9th.

LASEY DISPENSARY.—Assistant or Junior House-Surgeon, to visit and dispense. Unmarried; must devote his whole time to the duties. Salary, 80 per annum, with furnished apartments, coal, gas, and attendance. Applications by June 22nd to the Honorary Secretary, Mr. William Heap, Elm Mount, Penkett Road, Liscard, Cheshire.

T SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £80 per annum, with board, lodging and washing. Applications to the Secretary, The Infirmary, Chichester, by June 11th.

T LONDON HOSPITAL, Hammersmith Road, W.—House-Physician. Appointment tenable for six months. Board and lodging. Applications to R. J. Gilbert, Secretary-Superintendent, by June 19th.

T LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon for six months. Board and lodging. Applications to R. J. Gilbert, Secretary-Superintendent, by June 19th.

MEDICAL APPOINTMENTS.

TT, Henry Kingsmill, B.A., B.Ch., M.D.Dub., appointed Third Assistant Medical Officer to the Hants County Asylum.

RD, Charles Edward, M.R.C.S., L.S.A., reappointed District Medical Officer o the Yeovil Union for three years.

KWAY, Archibald Birt, M.R.C.S., L.R.C.P., appointed Medical Officer to he Town of Muttaherra, Queensland, *vice* Dr. Wilkie, resigned.

WOOD, James Watson, L.F.P.S.G., L.M., L.S.A.Lond., M.San.Inst., reppointed Medical Officer of Health for the Bourne Rural Sanitary District.

ESS, H. C., L.S.A., appointed Resident Dispenser to the Norwich Friendly ocieties' Medical Institute.

ET, Robert William, M.D.Aberd., C.M., M.R.C.P.Lond., appointed Physician to the London Life Association, *vice* Dr. Arthur Julius Pollock, eceased.

ER, W. B., M.D., elected House-Physician to the Belfast Royal Hospital, ice Dr. McQuitty, whose term of office has expired.

RT, C. T., M.D., C.M.Edin., appointed Assistant Medical Officer to the ondon County Asylum, Colney Hatch.

OR, Edward, L.R.C.P.Edin., L M., L.F.P.S.Glas., reappointed Medical fficer of Health to the Ripley Urban Sanitary Authority.

RS, Arthur G. R., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer or the No. 2 (Market Weighton) District of the Pocklington Union, *vice* lfred Jackson, L.R.C.P., L.R.C.S.Edin., deceased.

BROUGH, John William, M.D.Durh., M.R.C.S., L.S.A., appointed Medical fficer to the Earsdon District of the Tynemouth Union, *vice* P. Alexander, .R.C.P., L.R.C.S.Edin., resigned.

ERSON, A. E., M.B., C.M.Aberd., Ballymeanoch, Lochgilphead, appointed ledical Officer to Poltalloch and to the Parishes of Kilmartin and Craigish, Argyllshire, *vice* Dr. F. L. Roberts, deceased.

ARD, Thomas, M.B.Glas., C.M., appointed Medical Officer to the Clun nion.

AND, Thomas, L.R.C.P., L.R.C.S Edin., L.F.P.& S.Glas., appointed Governent Medical Officer, British Guiana.

SON, Fox Turner, M.R.C.S., L.R.C.P.Lond., appointed Resident Medical fficer to Walton Workhouse, Liverpool.

E. Whitfield Dawson, M.B.Durh., M.R.C.S.Eng., L.S.A., appointed edical Officer for the 2nd District of Wortley.

RTHY, Dr., appointed Medical Officer for the Tuosist Dispensary District, ce Dr. Geoffrey M'Carthy, deceased.

ASTER, A., L.R.C.P.Edin., appointed Medical Officer for the Omagh No. 2 ispensary District, *vice* John McClung, L.K.Q.C.P.I., L.R.C.S.I.

E, William Daly, L.S.A., reappointed Medical Officer and Public Vaccinator to the Dispensary District of Greatham, Hartlepool Union.

P, John, M.D., appointed Medical Officer for the 4th District and orkhouse of the Cheltenham Union, *vice* H. E. Jessop, L.R.C.P.Edin., eceased.

LLS, William John, L.R.C.P.Edin., L.M., M.R.C.S.Eng., appointed Honory Medical Officer for the St. Ives Union District.

, William John, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer the Pontefract Dispensary, *vice* George Wills Blomfield, L.R.C.P.Lond., .R.C.S.Eng., resigned.

ON, Charles S., M.R.C S.Eng., L.R.C.P.Lond., appointed House-Surgeon the Brighton, Hove, and Preston Dispensary, *vice* Mr. W. W. Scott.

. James Humphry, M.B., C.M.Aberd., appointed Assistant Medical fficer to the Stirling District Asylum, Larbert, *vice* A. Griffiths, M.B.

ER, Cyril H., B.A., M.B.Cantab., M.R.C.S., appointed Ophthalmic Surgon to the Bristol General Hospital, *vice* W. P. Keall, deceased.

, E. E., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. omas's Hospital.

, E. Russell, L.K.Q.C.P.Irel., M.R.C.S.Eng., appointed Medical Officer d Public Vaccinator for the Bramley District of the Bramley Union, e Charles Slesser, M.D.Aberd., resigned.

IMAN, Edward, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A., appointed Medical fficer and Public Vaccinator for the Heckington District of the Sleaford nion, *vice* W. W. Stables, L.R.C.P.Edin., M.R.C.S.Eng., resigned.

WILL, John C. Ogilvie, M.D.Aberd., and C.M., appointed Consulting Surgeon to the Royal Infirmary, Aberdeen.

WOODFORD, E. R., M.D.Aberd., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Ventnor Local Board.

WOOLLCOMBE, Walter L., L.R.C.P.Lond., M.R.C.S.Eng., appointed Assistant Surgeon to the South Devon and East Cornwall Hospital, Plymouth.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Dr. Lubbock on Wasting in Children.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. W. Pye: On the Growth Rates of the Body and especially of the Limbs in their Relation to the Natural and Surgical Processes for Rectification of Deformity. Lecture I.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On General Paralysis of the Insane. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Parasitic Affections of the Skin.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Sir William Roberts: A Contribution to the Chemistry of Gout. Mr. Clinton T. Dent and Mr. W. C. Bull: Analysis of Four Hundred Cases of Amputation, with special reference to the Causes of the Diminution of Mortality.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND, Hanover Square, W., 8.30 P.M.—Mr. Theodore Bent: The Nomad Tribes of Asia Minor. Mr. Bernard Hollander: A Contribution to a Scientific Phrenology.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Acland: On the Elements of Prognosis in Tubercular Disease of the Lungs. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: On Ophthalmoscopic Cases.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. W. Pye: On the Growth Rates of the Body and especially of the Limbs in their Relation to the Natural and Surgical Processes for Rectification of Deformity. Lecture II.

BRITISH GYNÆCOLOGICAL SOCIETY, 8 P.M.—Council. 8 30 P.M.—Mr. Bowreman Jessett: Some Points in the Surgery of the Intestines.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, W.C., 2 P.M.—Mr. W. Adams: On the Surgery of Deformities due to Paralysis. The New Infirmary, Paddington, 4 P.M.—Dr. Broadbent: Clinical Lecture on Medical Cases. 5 P.M.—Dr. Savill: *Post-Mortem* Examinations.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. D. Ferrier: The Croonian Lectures on Cerebral Localisation. Lecture II.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Patients and Card Specimens at 8 P.M. Exhibition of Portrait of the late Professor Donders, by Sir William Bowman, Bart. Mr. Kenneth Scott: Cases of (1) Double Cataract; (2) Iritis (card). Dr. J. Collins: Cases of Persistent Capsulo-pupillary Membrane (card). Mr. Gunn (for Dr. Werner): Vascular Abnormality (card). Mr. Stanford Morton: Tumour of Plica Semilunaris (card). Mr. Lawford; Embolism of a Branch of the Central Retinal Artery (card). Papers:—Mr. McHardy: On Artificial Maturation Cataract (concluded). Mr. Snell: On Artificial Ripening of Cataract. Discussion on Artificial Ripening of Cataract by Messrs. Critchett, Browne, Tweedy, Berry, Mackinlay, Cowell, Hill Griffiths, Brailey, and Priestley Smith. Dr. Bronner: Concussion of the Eyeball. Dr. Sharkey: On Graefe's Sign.

FRIDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton, 4 P.M.—Dr. Acland: On the Pathology, Diagnosis, and Treatment of Hæmoptysis.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. W. Pye: On the Growth Rates of the Body and especially of the Limbs in their Relation to the Natural and Surgical Processes for Rectification of Deformity. Lecture III.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in current issue.

BIRTH.

MACPHAIL.—At Rowditch, Derby, on May 28th, the wife of S. Rutherford Macphail, M.D.Edin., of a daughter.

MARRIAGE.

DINGLEY—WADDY.—On May 29th, at Finsbury Park Wesleyan Chapel, by the Rev. James Crabtree, assisted by the Revs. W. G. Beardmore and J. T. Waddy, Allen Dingley, F.R.C.S.Lond., eldest son of Mr. William Dingley, of 277, Camden Road, N., to Emma Louisa (Louie), eldest surviving daughter of Mr. S. D. Waddy, Q.C., M.P., of 1, Gloucester Gate, Regent's Park.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F. 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH T OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS C BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Edit 429, Strand, W.C., London; those concerning business matters, non-delive of the JOURNAL, etc., should be addressed to the Manager, at the Office, 4 Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on 't editorial business of the JOURNAL be addressed to the Editor at the office the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDIC JOURNAL are requested to communicate beforehand with the Manager, 4 Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications shou authenticate them with their names—of course not necessarily for publicati

CORRESPONDENTS not answered are requested to look to the Notices to Cor spondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER A CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Offic of Health if they will, on forwarding their Annual and other Reports, favo us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which spec departments of the* JOURNAL *are devoted, will be found under their respect headings.*

QUERIES.

DR. LAWSON, who has lately returned from Candelo, N.S.W., is requested communicate with Dr. Lane, Murray Crescent, Milford Haven.

PHYSICIAN writes: Will anyone kindly inform me as to the best treatment scurvy of the gums in a child of 9 years, apparently in good health?

DISPENSING CABINETS.

F.R.C.S. would be glad to know where he could obtain a small and not expens portable dispensing cabinet suitable for dispensing occasionally and emergencies.

CAN SLEEP-WALKING BE PREVENTED?

MEDICUS would be much obliged for information or suggestions with regard sleep-walking. He has been liable to it all his life, but during the last two three years it has become an almost nightly occurrence. He will, af sleeping for a variable time—never more than three hours—suddenly st up and walk about the room with some delusion in his mind that the hou is on fire, etc. If questioned, he tells some lie to account for his somnam lism, and, after turning the gas up, he will wake up, go to sleep again, a perhaps in a few minutes he will repeat the performance. He has marr within the year, but is rather worse. He notices that when his digestio which is weak, is wrong, he is not so well; but, though he has tried vari plans of diet, he does not improve, and bromide, which he has taken, has effect. There is no history of insanity on either side.

ANSWERS.

M.B.LOND.—Ladd's *Elements of Physiological Psychology* is published by Lon mans, Green, and Co., price 21s.

M.B., C.M.—A memorandum as to colonial surgeons can be obtained on app cation at the Colonial Office; and for information as to the D.P.H. of Lond University, our correspondent should apply to the Registrar of the Univ sity, Burlington Gardens.

FEHLING'S SOLUTION.

MR. C. W. DEAN (Lancaster) writes: I think "M.D." will find the modifi tion of Fehling's solution he requires in the JOURNAL for March 27th, 18 page 587. It is Cresswell's, and is most satisfactory. I have used it constan since that date and have never known it fail.

DR. C. J. LEWIS (Stirling) also sends the reference.

*** The directions there given for preparing the solution are as follow About 35 grammes of copper sulphate are to be dissolved in 200 cubic cen mètres of glycerine and 100 cubic centimètres of water; 80 grammes sodium hydrate dissolved in 400 cubic centimètres of water are then ad and the mixture boiled. After boiling, the solution is made up to 1 l with distilled water. Dr. Cresswell directs that, if required for clinical p poses only, the above quantity should be diluted to 1,250 cubic centimèt and states that 10 cubic centimètres will then be approximately equal t centigrammes of sugar.

THE STUDY OF HYPNOTISM.

A STUDENT.—The most useful works in English for anyone seeking knowle of the medical applications of hypnotism are: (1) Beraheim, *Suggestive The peutics*, translated by C. A. Hasler, New York, 1889, 1 vol. sm. 8vo. (2) Bi and Féré, *Animal Magnetism*, translated from the second French editi London, 1888, 1 vol. (International Scientific Series). (3) Moll, *Der Hyp tismus*, Berlin, 1890 (which will be published in English in the series of C temporary Science, price 3s. 6d., in a few weeks). For those who do not w to confine themselves to English: Forel, *Der Hypnotismus, seine Bedeutu und seine Handhabung*, Stuttgart, 1 vol., 1889; Liébeault, *Le Sommeil Provo et les Etats Analogues*, Paris, 1889, 1 vol.; *Revue de l'Hypnotisme*, Paris, 18 (monthly, 75 centimes).

L.R.C.P. Examination.

:ON should apply to the medical school where he obtained his education dvice in respect to this examination. It is always dangerous for any- who has been for long absent from the schools, to present himself before board of examiners "after a course of reading alone." We made com- ts on this question (which is undoubtedly of great interest to all who, establishment in practice, desire higher degrees) under the head R.C.S. Examination," in the JOURNAL, May 10th, p. 1118. The advice of individual who happens to have passed is not always trustworthy.

NOTES, LETTERS, ETC.

UM.—In Dr. T. A. Palm's memorandum on the Admission of Aseptic into the Pleura, JOURNAL, May 31st, page 1245, third line from the om, for "seat" read "rest."

: Intermediate M.B. Examination of the University of London.

OLOGY writes: A candidate for the Intermediate M.B.Lond. may, if he ses, postpone his examination in physiology; but if he takes up all the ects, and happens to be rejected in that particular subject, he is allowed redit for the remaining three, but must go through them all again. Can ody give an explanation that is at all rational why this should be? To he regulation appears absolutely childish. Why cannot the candidate ted only in physiology be treated as if he had postponed it?

A Dejected Candidate.

xaminer in art anatomy at South Kensington sends us the following etic refrain, which had been placed at the end of a candidate's paper:

"Fytte I.
I'm a miserable muddler;
I don't know any more.
You've hit my very weakest point,
And my heart is very sore.

Fytte II.
I knew the arm, I knew the leg,
But you have not come near it;
So I deserve to fail, I s'pose,
And try and grin and bear it."

ould it be any consolation to our lugubrious poet, we are inclined to he (or she) may pass.

Support Instead of Dilatation of the Perineum.

R. ILLINGWORTH (Accrington) writes: Permit me, although very late, to ess my opinion that Mr. Trestrail's method will not find general accept- . It involves extremely "meddlesome midwifery," which is bad. I tain that the management of the head is not only (to quote Mr. Tres-) "excellent in itself," but all-sufficient; and this is partly effected by orting the perineum. The "support," when firmly given, passes ugh the perineal structures right upon the bregma, and thus helps to nt extension of the head at the ostium. All that is needed, in addition, e vigorous traction, in an antero-posterior direction, of the occipital por- of the head, thus keeping the cervico-bregmatic diameter parallel to the of the outlet, and securing the birth of the occiput and nucha before ose and chin.

. F. C. Eagle (Bethnal Green Road, E.) writes: I should like to record xperience on this subject. I have attended about 3,000 cases of mid- y, and have, where occasion seemed to demand it, practised digital ation of the perineum for nearly twenty years. I may add I have known midwives who have been in the habit of doing the same thing. I con- am at a loss to discover what there can be novel in this simple and us procedure. Surely any person of average intelligence finding the ure through which a body has to pass too small, would naturally vour to increase the same by stretching, with the view of allowing such more space.

. Trestrail may depend upon it this practice was tried long before he was However, whether this be so or not matters little. The point, I take Is digital dilatation an advantage and an aid? Does it increase the eter of the aperture sufficiently, and in time to permit the impeded body s with ease and without loss of continuity of the tissues joining the eum?

adly speaking, I should say, No. The amount of stretching one is able duce in the majority of cases is infinitesimal; the dilatation to be of se has to be kept up continuously and for a considerable time; and in of very energetic uterine action—and these are the cases in which rup- nore commonly occurs—the child is expelled with irresistible force, long the stretching process is sufficiently accomplished. The disproportion, etween the presenting part and the soft tissue outlet is in many cases at that further stretching is inadmissible, it being impossible under any nstances to prevent a rent occurring, the muscular fibres having already d to their fullest extent. Then, again, the continual stretching is irk- to the patient. It makes the parts tender and irritable, and dissipates of the lubricating secretion, causing more or less local dryness. Many ts object to be what they term "being pulled about," at least during the al of a pain, and their friends join them in suggesting that the sufferer l be allowed "a little rest."

these and other reasons I rarely have recourse to this practice, not ing that digital dilatation is of very little real value, and that it is pro- characterised, although somewhat low down in the scale, as "meddle- midwifery."

"A Forgotten Medical Worthy."

ES GILROY (Ecclefechan) writes: In your interesting leader on "A ten Medical Worthy," in the JOURNAL of May 24th, you say: "At any e decline to believe that mere Scottish patriotism would have induced eon practising in London to dedicate his important works to a per- so unpopular with the Queen of England as her probable successor was, and to a Scottish nobleman of merely local influence, unable to assist him at the English Court."

The word "merely," I make bold to say, was never more misapplied. Scottish patriotism was not such a "merely" trivial affair then. I suppose you know, as every student of Scottish history is aware, that up till the time in question England and English, and all contained under such terms, were referred to in Scottish State papers as "our enemies of England." For my own part, I see nothing unlikely in the hypothesis that Scottish patriotism was the moving power with Peter Lowe.

He is careful to inform us on the title pages of his books that he is a "Scottish man"—pretty much in the same spirit, evidently, as St. Paul when he avowed himself "a citizen of no mean city." Without actually perusing Peter Lowe's works one cannot say a great deal more; but I opine the matter might be greatly elucidated by a philological survey of his books. The Scottish language had at that time a medical vocabulary with words peculiar to it. They are originally French mostly, and a most interesting study they are. The key to the question lies here: Francisque Michel, in his article on Medicine, tells us that "the surgeon was 'chirurg giane,' 'chirurgeon,' 'chirurginar,' 'scherurgian' (Fr. 'chirurgien'). When he performed an operation he had to apply *sanourous* (Fr. 'sain') balsams to 'panse,' 'pense' (Fr. 'panser') the wound. The human body, whose members as well as itself in different states, bore names borrowed from the French. Man makes his first appearance 'vivual,' 'vivuallie' (Fr. 'vivaule'). The mother gazes on the child's *volt* (O. Fr. 'volt,' visage); examines whether the little stranger is *cam*-nosed (Fr. 'camus,' flat-nosed) or 'gash gabbit' (Fr. 'gauche'), and in the joy of her heart calls it *mupetigage* (Fr. 'mon petit gage'). The nurse fondles it as *pytane* (Fr. 'petit un' or 'peton'). When old enough to observe it begins to 'gruntle' (Fr. 'grondiller'). The crown of the head is 'palaet,' 'pallat' (O. Fr. 'palet'). The jaws are 'jowis' (Fr. 'joues'). Between the jowis is the gab," etc.

Many years ago a British statesman whose memory is yet green—or, rather, yellow—publicly, in his rectorial address at Glasgow, said: "Nowhere does the sentiment of patriotism beat more strongly than in the heart of a Scotsman. It is as strong on the banks of the Ganges as on the banks of the Clyde, amid the speculative turmoil of Melbourne as in the commercial activity of the city of Glasgow."

In conclusion, let me add that those licentiates of the faculty you refer to as having antiquarian tastes, or other, will have a difficulty in obtaining Dr. Finlayson's book. It promises to be as rare as the works of Peter Lowe, judging from the trouble I had in obtaining it.

A Census of Diseases.

The proposal to require a statement as to religious belief in the census returns has raised a storm of opposition in this country; but in the United States it is proposed to ask questions of a still more intimate nature. One question to which it is proposed to require an answer is, "Whether suffering from acute or chronic disease, with name of disease and length of time afflicted." As the return is to be made by the householders themselves, the replies received are likely to be more curious than valuable. Another question is, "Whether defective in mind, sight, hearing, or speech, or whether crippled, maimed, or deformed, with name of defect." The proposals irresistibly recall the schedule which the late Artemus Ward drew up for the guidance of census enumerators.

A Case of Symmetrical Gangrene (Raynaud's Disease?) Two Hundred Years Ago.

Mr. G. Birt, M.B.Lond., writes: In olden times the clergy were the educated people in the country, and they were often acute observers. I copy this almost verbatim from a well printed little book entitled *A Discourse Concerning God's Judgment*, by Simon Ford, D.D. Concerning the man whose hands and legs lately rotted off in the parish of Kingswinford in Staffordshire. The narrative is by J. A. Illingworth, B.D.

"John Duncalf, aged 20, a wheelwright's apprentice, was sent to the House of Correction for stealing iron on October 14th, 1675, but was set at liberty the week following, pretending to be sick. He then gave himself up to licentious courses—namely, idleness, stealing, lying, cursing, swearing, drunkenness, and uncleanness, but not committing actual fornication, etc. He could both read and write. About January 6th, 1677, he stole a bible and sold it for 3s., and when he was accused of the theft he cursed himself, wishing his hands might rot off if it were true. Immediately after the cursing he had an inward horror and trembling upon him, and within a few days his flesh began to look black at the wrists, and so continued divers weeks before it did sensibly rot. He then went to work with a joiner at Dudley, but feeling weak and faint, and fearing an ague or fever, about a fortnight after, on Shrove Tuesday, he tried to go home to his friends, but being unable to walk any further he laid himself down in a barn, and there continued two days and two nights before he was found. He was then taken charge of by the parish authorities.

"About March 28th his flesh began to rise in great lumps or knots at the wrists and knees, and, after a little time, to break and run, and, shortly after, to shrink from the bones at those places, with an abundant discharge of white, extremely offensive, putrid matter, and exquisite pain. About April 20th many little worms came out of the rotten flesh. Upon May 8th both his legs were fallen off at the knees, which the poor man perceived not till his keeper told him and showed them to him; and his right hand hanging only by some ligament, by a little touch of a knife was taken off also, the other hand at the same time being black as a shoe, and not much unlike to the outside of a dried neat's tongue for toughness and hardness. This hand hanged on a long time by some such thing as the former. Although putrid matter frequently issued from these places, he had not so much pain, and his stomach was good; he did digest such meat as he took, and he had evacuations by 'siege' and urine as in health. At last his flesh began to waste and his spirits to fail. On June 21st he was insensible, and died the same day."

Another eye-witness says when he first saw him in March he looked in a vigorous state of body and of healthy constitution, but his hands and legs were deprived of sense and motion, and were blackish and dying, and about each wrist and knee there was a circle that divided the sound from the dying parts; above these circles there brake out sores, discharging horribly stinking sanies. The limbs before they fell off became black and hard like mummy. After the limbs fell off the sores looked raw but sweet, no stink, but discharging thick pus; but having no help from art or medicine (save what the application of leaves of mullin afforded), some weeks after there issued the same thin stinking humour as before, which soon put a period to his life.

A Case of Tic Doloureux.

Mr. Frederic C. Wood (Nottingham) writes: A boot and shoemaker, aged 53, first came under my care last autumn, complaining of severe pains in the right side of his head; he had for the last four years been under my predecessors for the same complaint, generally coming on during spring and autumn. When first I saw him the pains in his head were of the most agonising description, coming on at intervals of about ten minutes; during the paroxysms he would pace up and down the room, raving like a madman; bromide and chloral gave him the greatest relief he ever experienced, and for two or three months after the attack he was taking large doses of arsenic. During the middle of March of this present year I was again sent for, only to find him in precisely the same condition as he was last autumn; he was then very thin, and presented a careworn appearance, so I advised him to have all his teeth out, seventeen in number, without delay, to which he readily consented. Accordingly, I proceeded to put him under chloroform; he took the anæsthetic remarkably well; Messrs. Wing, surgeon-dentists, then removed the whole of the teeth, seventeen in number, Dr. Watkins also assisting; hæmorrhage being restrained as they went along, by means of perchloride of iron. He very quickly recovered from the effects of the operation, and at the present time he is looking remarkably well and has had no return of the pains whatever. This was clearly an aggravated form of tic douloureux, and I have every reason to believe the effects of our operation will be permanent.

Irish Diplomas and English Hospitals.

Dr. D. A. Sheahan (Portsmouth) writes: It is a source of great gratification to the medical profession at large, but more especially to the Irish section of it, to see the various and high honours that are being conferred on Surgeon T. H. Parke—honours which are certainly well deserved, not only in consequence of his heroic exploits in the Stanley expedition, but still more so because, on Stanley's own evidence, he, by his unremitting attention and skill, saved the lives of many members of the expedition as well as that of the great explorer himself.

Mr. Parke, thus famous for his great professional skill under most trying circumstances, is a Licentiate of the Royal Colleges of Surgeons and Physicians of Dublin, and as such is, with hundreds of his countrymen, together with our brothers north of the Tweed, ineligible for the position of surgeon, or even assistant-surgeon, in most English hospitals. Is not this a shame? Why should this great man, who in the darkest part of the Dark Continent, away from the leaders and resources of the surgical art, successfully combated disease, not be recognised as able to fill with honour the post of surgeon to an English hospital with all the resources of science and civilisation at his back? I therefore submit that the proper recognition of Surgeon Parke's worth is not in present bustle and turtle soup, but in opening to him and those equally qualified the highest surgical offices in this country. Englishmen may laud a Captain Kane or a Surgeon Parke, but this counts for little if they still persist in placing Irishmen and Irish institutions at a disadvantage.

Let the Association grant Surgeon Parke its medal if it will, but let it first use its great influence to place him on an equality with Englishmen, which will be only when those barriers of prejudice and selfishness which surround English hospitals have been swept away.

COMMUNICATIONS, LETTERS, etc., have been received from:

C. H. Taylor, M.B., Derby; Dr. Thomas Ireland, Prestonpans; Dr. C. R. Illingworth, Accrington; Dr. Murrell, London; Dr. Myers, London; Mr. W. T. Freeman, Reading; Dr. J. W. Lane, Milford Haven; Dr. W. P. Herringham, London; P. H. Kidd, M.B., Bassingbourne; Mr. Adami, Cambridge; Mr. R. L. Whigham, London; Mr. G. N. Robins, London; Dr. G. P. Rugg, London; Mr. H. Greenway, Plymouth; A. Mouillot, M.B., Gorey; Mr. W. L. Woolcombe, Plymouth; Mr. C. Legg, Stamford; Mr. F. T. Jackson, Liverpool; The Publishers of the *Chemist and Druggist*, London; Our Paris Correspondent; Mr. J. Gilroy, Ecclefechan; Dr. J. J. Ridge, Enfield; Mr. R. Rice, Harwell; Dr. W. A. Carline, Lincoln; Dr. E. P. Philpot, Bournemouth; Dr. A. H. Hassall, Lucerne; M. O.; Mr. W. J. H. Fletcher, Uttoxeter; Surgeon L. W. Swabey, Punjab; Professor Tillmanns, Leipzig; Dr. G. A. Atkinson, Newcastle-on-Tyne; Dr. A. Ogston, Aberdeen; Mr. L. Carr, Peterborough; Dr. R. Paramore, London; Madras Medical Service; An Unlucky Brigade-Surgeon; The Secretary of the Metropolitan Hospital Sunday Fund, London; Dr. F. P. Atkinson, Surbiton; Mr. L. Strong, Cosham; Dr. Silles, Wimbledon; Mr. A. Wood, London; A Workhouse Medical Officer; Mr. B. W. Thomas, Welwyn; J. A. Mackenzie, M.B., Balham; Dr. T. A. Palm, Wigton; Mr. W. D. Brydone-Jack, Vancouver; Dr. Seaton, London; Mr. A. W. Nankivell, Chatham; Mr. J. M. MacLaren, St. John, N.B.; Dr. G. V. Poore, London; Mr. B. Shadwell, Manor Park; Surgeon-Major M.S.; Dr. Abercrombie, London; Surgeon-Major N. Leacher, Punjab; Surgeon H. Herbert, Aden; Mr. G. S. Stansfield, Birkenhead; Mr. G. Nussbaum, London; Our Swiss Correspondent; Mr. G. A. Staff, St. Ives; Dr. C. Parsons, Dover; Brigade-Surgeon A. A. Gore, Alexandria; Dahl's Agency, London; Dr. A. W. Renny, Watford; Mr. J. W. Burdwood, Bourne; Mr. E. Millais, London; Professor McKendrick, Glasgow; Mr. W. Roger Williams, London; Messrs. G. Gale and Son, Leeds; Dr. J. Rorie, Liff; Dr. Bateman, Norwich; Dr. Brownrigg, Milford; Member B. M. A.; Lord Ripon, Ripon; Mr. T. M. Watt, Hovingham; Dr. W. Sykes, Mexborough; Mr. C. R. Crawford, London; Surgeon T. H. Parke, London; Professor Attfield, London; Mr. C. W. Dean, Lancaster; Dr. W. R. Parker, Kendal; Mr. F. Broadbent, Newark; Mr. H. Fletcher, Ambleside; Mr. W. J. Richardson, Ravensthorpe; Mr. J. Griffiths, Cambridge; Dr. A. C. Miller, Fort William; Messrs. J. Haddon and Co., London; Dr. Mickle, London; Mr. T. S. Ellis, Gloucester; Mr. N. E. Davies, Sherborne; Wm. Ball, M.B., Hounslow; Mr. A. G. R. Foulerton, Chatham; Dr. E. Slade-King, Ilfracombe; Dr. F. C. Coley, Newcastle-on-Tyne; Dr. Major Greenwood, Londo Dr. D. W. M. Turpin, Alvaston: Mr. F. Marsh, Birmingham; Mr. J. Bla Sutton, London; Surgeon M.S.; Mr. W. J. Haslett, London; Mr. J. B son, Sheffield; Dr. Lush, Weymouth; Messrs. Ewart and Son, London; R. P. Smith, London; Mr. E. Hurry Fenwick, London; The Income T Repayment Agency, London; The Secretary of the University of Londo Mr. J. E. Garner, Preston; Dr Arthur Evershed, London; Dr. J. Cagn London; Sir Joseph Fayrer, London; Dr. D. Bower, Bedford; Mr. E. Ryan-Tenison, Bexhill-on-Sea; Dr. R. W. Burnet, London; Mr. J. Sheppa Bristol; Mr. H. Marsh, London; Dr. S. W. Bryant, Tavistock; No. 29; T. Buzzard, London; Mr. W. Thwaites, Bristol; The Registrar of Royal College of Surgeons in Ireland, Dublin; Query; Mr. C. E. S. Fle ming, Freshford; Dr. Barnard, Paris; Messrs. Gardner and Son, Ed burgh; I. M. D.; Mr. A. Thomson, Huntley; Mr. J. M. Richards, Londo Messrs. G. Van Abbott and Co., London; Mr. P. S. Hutchinson, Londo M.D., Brigade-Surgeon; Dr. Fletcher Beach, Dartford; Professor Corfie London; Mr. G. Rendle, London; Professor Burdon Sanderson, Oxfo Dr. A. W. Dingley, London; Mr. A. D. Barron, London; Mr. Law Tait, Birmingham; Messrs. Street and Co., London; Mr. H. Custance, London; Miss Wilson, London; The Registrar of the Ro College of Physicians, London; D. C. L.; Mr. T. D. Finucane, Blackro Dr. Wm. Thorburn, Manchester; Mr. W. Bullivant, Derby; Mr. W. Rent Knaresborough; Mr. T. Lumsden, Gateshead; Dr. C. J. Lewis, Stirling; W. H. Fenton, London; Mr. G. A. Walker, Darlington; Dr. R. Wade Sava London; Mr. B. Holmes, London; Dr. Cranstoun Charles, London; Dr. Z. Hebert, London; Mr. E. J. McWeeney, Dublin; Mr. W. M. Banks, L don; Mr. A. P. Fiddian, Cardiff; Dr. R. Bell, Glasgow; Mr. W. Downi Aston; Mr. A. B. Druitt, Dunstable; Mr. T. Keens, Luton; Mr. S. T sidder, Bournemouth; Dr. P. G. Unna, Hamburg; Mr. G. W. Blox London; Messrs. Drew and Son, London; Dr. R. Quain, Londo Dr. Balding, Royston; Mr. F. G. Harvey, London; Dr. Leslie Phil Birmingham, etc.

BOOKS, etc., RECEIVED.

The Doctor in Canada. By Robert Wynyard Powell, M.D. Montreal: Pri by the Gazette Printing Company. 1890.

A Manual of Pharmaceutical Testing for the Man of Business and his A ants. By Barnard S. Proctor, F.I.C. London: Offices of *The Chemis Druggist*.

Dental Surgery for Medical Practitioners and Students of Medicine. By A Barrett, M.B., M.R.C.S., L.D.S.E. Second Edition. London: H Lewis. 1890.

The History of the Medical School, afterwards the Durham College of M cine at Newcastle-upon-Tyne, for Forty Years, from 1832 to 1872. By D Embleton, M.D., F.R.C.P. Newcastle-upon-Tyne: Printed by A. Sons, and Co. 1890.

The Colours of Animals, their Meaning and Use. By Edward P. Poulton, F.R.S. London: Kegan Paul, French, Trübner and Co. 1890.

Proceedings of the New York Pathological Society for the Year 1889.

The Modern Malady. By Cyril Bennett. With a Preface, by H. Tib M.D. Price 6s. London: Edward Arnold. 1890.

Character as Seen in Body and Parentage. By Furneaux Jordan, F.R New Edition. London: Kegan Paul, Trench, Trübner and Co. 1890.

Health Springs of Germany and Austria. By F. O. Buckland, B.A., London: W. H. Allen and Co. 1890.

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REMARKS
ON THE
EPORT OF THE SECOND HYDERABAD CHLOROFORM COMMISSION.

By JOHN G. McKENDRICK, M.D.,
Professor of Physiology in the University of Glasgow;
JOSEPH COATS, M.D.,
Pathologist to the Western Infirmary, Glasgow;
AND
DAVID NEWMAN, M.D.,
Surgeon to the Western Infirmary (Outdoor Department) Glasgow;
Members of the British Medical Association Committee on Anæsthetics.

Work of the Commission.—The Dangers of Chloroform.—Its ction on the Heart.—Liability to Sudden Fall of Blood Pres- re.—Gradual Fall constantly observed.—Chloroform or As- yxia?—The Relative Importance of Heart and Respiratory ailure.—Points of Agreement.

E desire, in the first instance, to congratulate the members of Hyderabad Chloroform Commission on the completion of an stigation of great importance to humanity. It reflects much it not only on the members of the Commission who carried the experiments, but also on the Government of His Highness Nizam, his Prime Minister Sir Asman Jah, and especially on geon-Major E. Lawrie, whose zeal and energy originated and essfully carried out the Commission. The completion of a ntific investigation of such magnitude, and with the aid of all refinements of a modern physiological laboratory in the capital e largest native Indian State, is an event of historical import- , and may be regarded as an earnest of the time when East and t will co-operate for the advancement of science.

The report of the Hyderabad Chloroform Commission ap- ed in the *Lancet* of January 18th, 1890 (vol. i, 1890, p. 149). Reports of the British Medical Association's Committee was ted in the JOURNAL, vol. i, 1879, pp. 1, 103, and 921; and in ii, 1880, p. 957.

We have to thank Dr. Lawrie for kindly submitting to our ection the kymographic tracings of blood pressure taken by Hyderabad Commission. These convey an idea of the mous amount of work done by the Commission, work involv- great expenditure of time and energy, and demanding high nical skill. We delayed the present remarks till we should the opportunity of examining these tracings, and we have e the examination with a view to adjusting our points of rence and bringing out our points of agreement.

The main point of difference between the Commission and the sh Medical Association Committee has reference to the action loroform on the heart. This will be taken up afterwards; while, we may note that in our report we fully recog- l the danger from failure of the respiration,—a fact which the erabad Commission has omitted to allude to in referring to eport. Thus, in our report we say: "Chloroform may cause h in dogs either by primarily paralysing the heart or the res- ion." "In most cases respiration stops before the heart's n." "The danger of death from stoppage of the respiratory tions must be borne in mind in every case in which anæs- cs are given," etc. These sentences show that we recog- l the danger to respiration. At the very beginning of our t we state: "Without going into detail, we may say that it became apparent to us that chloroform administered to dogs abbits has a disastrous effect on the respiratory centres; it is to kill one of these animals by pushing the chloroform till ration is paralysed. In observing the rate of the heart during experiments, it could often be determined by auscultation its contractions were maintained after respiration had ceased. as apparent, however, that even when failure of respiration more directly the cause of death, the heart was to some ex- simultaneously affected; and there were even cases in which heart appeared to fail at least as soon, if not before the hing."

is evident from this that we regarded the danger to respi- n as a proved, and, indeed, a well-recognised fact; and our al object was to investigate the question of how far chloro- form was dangerous to the heart. The result of our inquiries was to convince us that danger to the heart is at least an occasional occurrence, and one to be kept in mind in watching a patient under the influence of chloroform. In summing up, we put the matter thus: "The chief dangers are (1) sudden stoppage of the heart; (2) reduction of the blood pressure; (3) alteration of the pulse-respiration ratio; and (4) sudden cessation of the respiration." In this enumeration we did not intend to place the phenomena in the order of their relative frequency or importance, although we admit the sentence might bear this interpretation were it not taken in connection with the statements quoted above from the beginning of the report. The question, then, narrows itself down to this. Does chloroform ever kill by paralysing the heart? We assert that it may do so; the Hyderabad Commission hold that it never does so, and that it always kills by paralysing the respiratory centres, or, in their own words, referring to experiments without recording apparatus: "In every case in which chloroform was pushed the respiration stopped before the heart."

5. Before entering on an examination of the Hyderabad observations, we may reiterate some of the points which our experiments seemed to bring out:—

(*a*) We showed that chloroform vapour has a paralysing effect on the muscular tissue of the heart, and indeed on all kinds of protoplasm, when directly applied. When the heart of a frog was exposed to the direct action of chloroform vapour, it "became rapidly weaker till it ceased beating." As regards the action on the mammalian heart, we make the following quotation from our report: "With a similar view, a method was devised for warm-blooded animals. Rabbits were first used, and afterwards dogs. The animal was anæsthetised, then the trachea was opened, a tube introduced, and artificial respiration begun by means of a double-acting pump (one cylinder forcing air in and another sucking it out). By an arrangement of india-rubber tubes, chloroform or any other anæsthetic could be introduced in the circuit between the pump and the trachea. It is to be understood that, in these experiments, the air passing into the animal's lungs was saturated with the vapour of the substance used. After artificial respiration had been set going, the heart was exposed by an incision in the middle line, which was carried by a pair of blunt scissors or bone-forceps through the ensiform cartilage and lower part of the sternum. This was effected generally with no serious bleeding. It soon became apparent that, when chloroform is given in this way, there is at once a most serious effect on the heart; the right ventricle almost immediately begins to distend, the heart presently stops, with the right ventricle engorged with blood. The heart has often, in the case of rabbits, virtually come to a stand-still within a minute of the introduction of chloroform by the method described. The contrast was most striking when ether was used instead of chloroform, the other steps in the experiment being the same. Ether may be given for an indefinite period without interfering with the heart. We kept up artificial respiration with ether in the circuit for an hour, not including twenty minutes occupied in producing anæsthesia, and at the end of that time the exposed heart was beating as vigorously as at first."

It might be objected to these experiments that the dilatation of the heart, especially of its right cavities, may be due to asphyxia, but the fact that the heart is not affected in the same way by ether as by chloroform, although the other conditions of the experiment are precisely similar, meets that objection.

(*b*) During the operation of registering the blood pressure either by the mercurial or by the spring kymograph, we observed in several instances, both in rabbits and in dogs, and especially in dogs, even when the blood pressure was not very low, a sudden failure of the heart's action. This effect was a common occurrence during the administration of chloroform, especially in the earlier stages or when the animal was recovering; it rarely happened with ethidene, and we never observed it with ether. This effect is well seen in the blood pressure tracings from the rabbit, G and H.[1] During deep narcosis, these sudden variations do not occur. We were quite aware of the fact that these effects might be held to be due to a reflex mechanism, irritation of sensory nerves of the outer openings of the respiratory passages stimulating the inhibitory centre of the vagi in the medulla, and thus retarding or even arresting the action of the heart. Whatever may be the explanation, the fact remains that at certain stages in chloroform narcosis there may be sudden falls in blood pressure due to interference with the heart's action, and no one will deny that this is a serious state of matters.

[1] JOURNAL, vol. ii, 1880, p. 966.

(*c*) We have seen in more than one instance the blood pressure of the dog become enormously reduced, and the pulsations become so infrequent as to be virtually ineffectual while respiration continued. A record of this experiment produced the "Glasgow trace," as it is termed by the Hyderabad Commission.[2] The explanation of this trace is of great importance, and on this point we venture to differ from the Hyderabad Commission, as will appear further on.

6. The principal points in which the Hyderabad Commission differ from us are (i) the question of how death occurs under the administration of chloroform, whether the danger is only of failure of the respiration, or whether there is danger also on the side of the heart; (ii) the explanation of the sudden effect on the heart sometimes occurring under the influence of chloroform, and observed equally by the Hyderabad Commission and by us, but ascribed by the Commission to asphyxia and by us to a peculiar, and apparently capricious, influence of chloroform.

(i) In the report of the Hyderabad Commission it is stated that chloroform "causes a gradual fall in the mean blood pressure..... As this fall continues the animal first becomes insensible, then the respiration gradually ceases, and, lastly, the heart stops." This is regarded as the normal course of events, and in confirmation of it reference is made to Experiments 168, 169, and 170. We have carefully examined these tracings, and others of a similar character. Like our own tracings, they show that, under the admistration of chloroform, the blood pressure is continually lowered, and that when chloroform is pushed the depression is apt to assume what the Hyderabad Commission admit to be a "dangerous" degree. These tracings seem to us in themselves to show that chloroform when pushed has a disastrous effect on the heart as well as on the respiration.

In most of the experiments two different kinds of tracings were taken, one by Ludwig's and another by Fick's apparatus. The Ludwig curve shows more particularly the blood pressure, while the Fick tracing, taken while the Ludwig tracing is suspended, shows specially the excursions produced by the individual pulsations of the heart. What we notice, especially in 169 and 170, is that there is a gradual fall of the blood pressure, occupying four minutes in the one case and five and a half in the other. Fick tracings, taken at intervals, show not only a reduction of pressure, but a very striking diminution in the force of the pulsations. By the time the breathing stops the pressure is reduced almost to zero, and the Fick tracings, taken immediately after the cessation of the breathing, show the merest indication of movements in the heart; whose pulsations are reduced in number to less than half. So far as the efficiency of the heart is concerned in carrying on the circulation, it has virtually ceased to act by the time the respiration has stopped, and we are inclined to believe that the inefficiency of the circulation may be, at least in part, the cause of the cessation of the respiration—this opinion being based on the fact that the fall in blood pressure is so extreme before the respiration stops as to interfere with the proper nutrition of the respiratory centres.

(ii) In paragraph 30, section (8) of the Hyderabad Report it is said that "the effect of involuntarily holding the breath.....is much more remarkable, the pressure often falling with great suddenness, while the heart's action is markedly slowed." Further on, in Section (12), they say: "Complete, or almost complete, asphyxia, as by forcibly closing the nose and mouth, or closing the tracheal tube after tracheotomy, has an effect similar to but more marked than that produced by holding the breath, and the character of the tracing corresponds precisely to that produced by irritation of the peripheral end of the cut vagus. The pressure falls extremely rapidly, sometimes almost to zero, and the heart's action becomes excessively slow, or even stops for a few seconds. If the Fick trace of Experiment 148 be compared with the photographic reproduction of Trace A of the Glasgow Committee it will be seen that they are identical, and that the slow action of the heart with great fall of pressure, which the Glasgow Committee attributed to some capricious action of chloroform upon the heart, was undoubtedly due to asphyxia." A number of tracings are adduced by the Hyderabad Commission in confirmation of these statements, and these we have carefully examined, with results different from those arrived at by them.

In the first place, in Experiments 103, 119, and 157, quoted in Note 10 of *Lancet* Report, we have sudden falls of pressure, and opposite some of these, not all, there is the note "holding breath." Thus, in 103 (Ludwig), between Fick 20 and 21, there is a very sudden fall, at the bottom of which is noted "holding breath."

[2] See Trace A, JOURNAL, vol. ii, 1889, p. 962, which we have here reproduced.

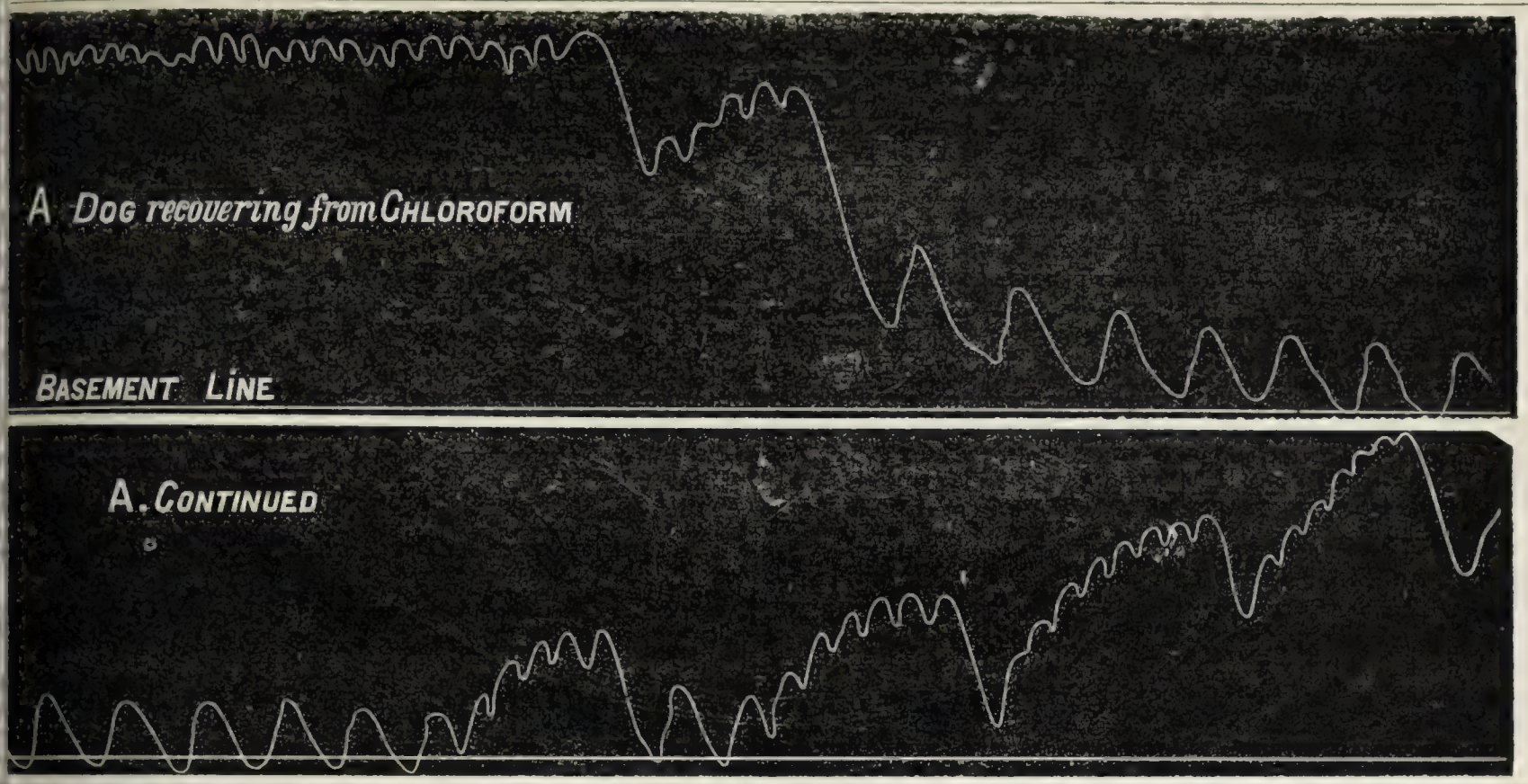
Again, Trace 119, Fick 2, shows a sudden fall, and in the Ludwi trace we have a similar note. It is the same with 157, Fick (not Fick 4, as in Report of Commission). But these sudden fall of pressure are not confined to occasions when the animal hold its breath.

An examination of Trace 157 is very instructive in this respec Soon after the commencement of this tracing there is, as show in the Ludwig trace, a sudden fall of blood pressure, with th note, "taking off gag he suddenly held his breath, and pressur fell." There was then a slight recovery of pressure, an trace Fick 2 was taken, which starts from a low pressure, an shows a tracing somewhat like our A. Further on in the tracin comes Fick 4, which is very like that of Fick 2, so like that th Commission in their Report have misplaced the numbers, but th animal is distinctly noted as "struggling, but not holding breath It is noted, however, that chloroform is being given "with th cap closely applied." If we add to this that in the cases note the fall of blood pressure seems to have been almost simultaneou with holding the breath, the effect on the heart can hardly be re garded as the result of asphyxia, as asphyxia is well known t induce reduction of blood pressure only after a considerable tim (See further on.)

Turning to the experiments referred to in Section 12, where th breathing was artificially interrupted, we have been astonishe to find that the traces do not bear out the statement of the paragraph. For example, take Experiment No. 150. The fo lowing facts are noted in regard to it. (*a*) Near the beginnin of the trace we find that "holding nose and mouth" produce a distinct fall, not nearly so abrupt or great as in our A, as in observations under "holding the breath." (*b*) Again, 11.55, pressure has greatly fallen under the influence of chlor form, which has rendered the animal insensitive, before the no and mouth are stopped; the fall continues, but not with any a proach to the rapidity of those previously mentioned under "hol ing the breath." (*c*) Further on, at 12.5-30, after the animal ha partly recovered, and when chloroform is being given with "lo of air," and with the animal "just insensitive," stopping the nos and mouth produces a much more gradual fall than in the pr vious two occasions, apparently because the animal is less affect by the chloroform. (*d*) Again, at 12.9 30, the chloroform pushed with the cap crammed over the nose, but the respiratio is not obstructed, and there is a fall similar to that in *b*. (Still further on, at Fick 7, we have "mouth and nose closed," bu there is scarcely any effect on the blood pressure, and very litt on the pulsation. (*f*) At Fick 10, chloroform having been stopp awhile, holding mouth and nose produced little effect on th pressure, but distinct slowing of the pulse. After this the va are cut, and the experiment need not be followed further.

No. 151 brings out similar facts, namely, that when chlorofor is pushed, whether the nose and mouth be held or not, the bloo pressure falls, and there is the additional fact that this seems depend very little on the action of the vagi. Thus, soon after t beginning of the trace there is the note "stop nose and mouth which is followed by a slight fall. One minute after this t Fick tracing 3 shows great slowing of the pulse. Then the va are cut. Chloroform is given at 3.55, and there is the usual fa to be followed by a rise when the chloroform is stopped. T pressure rises till 3.58, when Fick 4 is taken. After this the no and mouth are again held, but there is little effect on the pressu for more than two minutes, after which the fall is somewh rapid (from Fick 4 to Fick 6) till the nose and mouth are aga set free. This shows the true asphyxia curve, the fall in pre sure not occurring for two minutes after the respiration was c structed.

No. 148 is mentioned as an example of asphyxia by obstructi the nose and mouth, and the tracing is described as "identica with our A. We recognise a resemblance to our trace in the Fi tracings 2 and 6, but in these the chloroform is being pushed, a there is no obstruction to the respiration. The place where the is such obstruction is before Fick 17. At 3.54.15 we ha "asphyxia by holding mouth," and there is a gradual fall three-quarters of a minute, when Fick 17 is taken. The Fi tracing does not show the fall, and has no particular resemblan to our A, while the Ludwig trace shows that the fall here is, as other cases of asphyxia, greatly slower than ours, taking thre quarters of a minute to accomplish a less fall than was attain in ours in about seven seconds. (Note that the drum in our o servations revolved very much faster than in theirs. The time given by a chronograph showing half-seconds in our Trace C.)


A Dog recovering from Chloroform
Basement Line
A. Continued
on
Dog with Chloroform
Signal on
off
Chronograph ½ Seconds
Basement Line
C Continued
C. Continued
off-Respiration continues

We turn now to our own tracings, from the examination of which the Hyderabad Commission infers that the sudden fall in blood pressure is due to asphyxia. It has been indicated above that the fall in blood pressure due to asphyxia is not sudden, but follows some time after the interruption to the respiration. This applies to our tracings; but, besides that, they show in their very form that there was here no asphyxia. In order that our statements may be followed we reproduce the Tracings A and C.

In Trace A it will be observed that the beginning of the fall is associated with what we take to be a respiratory curve, that is to say, after the fall has begun, as shown by the sudden dip, there is a gradual rise with five pulsations of the heart which is clearly identical with the respiratory curves further on in the trace, when the pressure is beginning to rise (see A, continued). It is to be noted that this tracing was taken at a time when the administration of chloroform had been stopped for two minutes.

If any doubt exists as to Trace A, none can exist as to Trace C. This records an observation on the same dog as Trace A, made on the same day after a partial recovery of the animal, and it forms a continuation of the same tracing. Two things will be observed in this tracing. In the first place, it is definitely noted on the sheet "Respiration Continues," although the heart is at a standstill. But, in the second place, the curve itself shows that there was no asphyxia. In the second block of C, there are the most obvious respiratory variations in the curve, and these continue right on till the rapid fall sets in. This tracing is so important that we may repeat here our original remarks on this observation:

"It is to be remembered that this animal got chloroform in the usual way, by a cloth saturated with the agent being held over his mouth and nose. He received no overdose, and the administration only lasted seventy seconds. As bearing on at least one mode of death under chloroform, the relation of the heart's action to respiration is of particular significance. The blood pressure is enormously reduced, and the pulsations have become so infrequent as to be virtually ineffectual, yet respiration continues. But respiration stops forty seconds after the heart has resumed, the pulsations being still, however, so ineffectual that the pressure is even *minus*. We believe that the legitimate inference to be drawn is that the stoppage of respiration was not due directly to the chloroform, the inhalation of which had ceased for about forty-eight seconds. It seems likely that the failure of the heart in the first instance, and the insufficiency of its subsequent pulsations, were the cause of the failure of respiration. In such a state of the circulation, the respiratory centres would probably be insufficiently supplied with blood, and be consequently liable to cease acting. In this case, if death had occurred, it would only apparently have been due to the failure of the respiration, the primary failure being that of the heart. To what extent this may apply to human cases we do not venture to speculate."

7. We now come to a very interesting point, namely, that of determining the relative effects of a diminished activity of the heart or a diminished activity of respiration in bringing about a fatal result. In this connection, the report of the Hyderabad Commission contains many valuable suggestions. We both observed that there is still a fall of pressure after the animal had ceased to inhale chloroform. Thus, in the first recorded experiment of the British Medical Association Committee, it is noted: "Chloroform was given, and during deep anæsthesia a cannula was introduced into the carotid artery, and connected with the kymograph. By the time connection with the kymograph was established, no chloroform had been given for about two minutes. On first making the connection, the pressure registered 104 millimètres, which may be regarded as nearly normal; but now, without any fresh dose, the pressure rapidly fell to zero, with a remarkable retardation of the heart."[3] We quite agree with the Hyderabad Commission in the view that "this after-fall is probably due to absorption of a portion of the residue of chloroform in the air passages after the stoppage of the inhalation." The Hyderabad Commission, however, hold that "slowing or temporary stoppage of the heart in chloroform administration is not dangerous," and that the "controlling influence of the vagus on the heart is a safeguard, and that it is the exhaustion of the nerve which is dangerous." Their theory is that when the inhibitory action of the vagus (which is known to be intermittent and not continuous) is called into play, the heart does not beat so quickly nor so strongly, that less chloroformed blood is transmitted to the respiratory centres, and that, consequently, these centres are not then in danger of sudden arrest. Further, that if the vagus irritation ceases, or if the vagu becomes exhausted, the heart "bounds on again," and "the bloo then becomes quickly saturated with chloroform, and an overdos is at once conveyed to the nerve centres." This ingenious vie has much to support it, and we think that much credit is due t the Hyderabad Commission for its suggestion, as it undoubtedl explains the beneficial action of atropine as an adjunct to chloro form administration. We would remark, however, that in ou opinion the Hyderabad Commission attach too much importanc to it, and that it does not account for the facts in each case. Fo example, we observed in one case, after stoppage of respiratio while the heart continued beating, that respiration was spon taneously resumed; and we supposed that by the cessation of re spiration, less chloroform was taken into the blood, so that in short time the respiratory centre recovered. In this case the hear was pulsating vigorously after stoppage of respiration, but, as th chloroform in the air passages was taken up and quickly elimin ated and decomposed in the blood, the respiratory centres reco vered. When, however, they recovered, breathing recommenced more chloroform was introduced, and again there was danger t the respiratory centres and to the heart. Chloroform, no doubt is taken from the pulmonary air cells by diffusion, and this will b facilitated by inspiration, possibly by expiration; at all events, th rapidity of absorption will not be the same when the pulmonary air cells are quiescent as when they are expanding and contractin in inspiration and expiration. Thus the movements of respiratio will affect the amount of chloroform absorbed, and, if respiratio becomes feeble, or even ceases, less chloroform will be taken u and time may be allowed for both the respiratory centres and th heart to recover. Thus the number and volume of the respirator movements affect the quantity of chloroform absorbed and th number and volume of the heart beats affect the quantity chloroform sent to the nerve centres. It is clear, therefore, tha the problem is more complicated than as stated by the Hydraba Commission, and that the physiological action will depend on s many factors as to make it extremely unlikely that the course o events will be the same in each case. Thus we have (1) the con dition of greater or less asphyxia, as effected by the quantity o air mixed with the chloroform vapour; (2) the occurrence of an inhibition of the vagus, as affecting the number and volume o the heart beats, and thus the amount of chloroform reaching th nervous centres; (3) the number and amplitude of the respirator movements, as affecting the amount of chloroform absorbed int the blood; (4) as we hold, the specific action of chloroform o the muscular structure and intrinsic nervous mechanism in th heart; and (5) the influence on the vasomotor centre, as a facto in producing the great fall in blood pressure. We think the Hy derabad Commission attach too much importance to one commo mode of death, failure of the respiratory centres, and while w agree generally with their conclusions, which in many respect are similar to our own, we consider it unwise and unsafe in prac tice to pay no attention to the state of the circulation, and t observe respiration alone. We also consider it unwise to conve to the public, even through the profession, the notion that th administration of chloroform is a proceeding in which there i practically no danger. At the same time, we thankfully admi that the number of deaths following the use of so potent an agen has been remarkably small, even in the hands of those who pa little or no attention to the condition of circulation. As a matte of common prudence, and especially seeing that when respiratio fails we can employ artificial means for its restoration, while i the heart fails, little or nothing can be done to avert a fatal issue it is incumbent on every one giving chloroform to watch both th pulse and the breathing.

It may here be noted that our observations are in complet accord with those recorded by Drs. Wood and Hare, of the Un versity of Pennsylvania, published in the *Medical News* of Feb ruary 22nd, 1890, and reprinted in the *Provincial Medical Journa* April 1st, 1890. The results of numerous experimental observe tions are embodied in the following paragraph:

"The experiments which we have given show that chloroform acts as a powerful depressant poison upon both respiration an circulation, that sometimes the influence is most felt at the hear and death results from cardiac arrest; that in other cases th drug paralyses primarily the respiratory centres, whilst in othe instances it seems to act with equal force upon both medulla an heart. So far as practical medicine is concerned, it makes litt difference whether the heart stops before or just after respiratio so that those case in which cardiac and respiratory arrest a

[3] JOURNAL, vol. ii, 1880, p. 962.

ost simultaneous are, for the purposes of the clinician, the
e as those in which heart arrest precedes respiratory paralysis.
ally, the general results of our new experiments also coincide
ı our previous experience in the laboratory, and with what
elieve to be the general belief of physiologists—that cardiac
st is specially prone to occur when chloroform is administered
dly and in a concentrated form."

It will probably serve a useful purpose, seeing that the points
which we disagree with the Hyderabad Commission have been
orth in some detail above, if we now state in a summary form
more important matters on which we are agreed.

) We are agreed that death from chloroform occurs by failure
espiration, and that this is probably the most frequent mode
eath.

ı) We are agreed that chloroform causes a gradual fall in the
d pressure as registered by kymographic tracings from the
tid artery. This is the normal effect of chloroform.

ıı) We are agreed that when chloroform is pushed this gradual
may be so great as to become in itself "dangerous." This is
itted in Paragraph (8) of the Hyderabad Report, where they
e that after an animal has been involuntarily holding its
th "the gasping respiration which succeeds then causes very
d inhalation of chloroform, with immediate insensibility and
pid fall of blood pressure, *which quickly becomes dangerous.*"
e italics are ours.)

v) In addition to this, which we may call the normal effect of
roform on the heart and blood pressure, both of us observed
liarly sudden and unexpected falls of pressure, with slowing
he heart. We are agreed that this phenomenon occurs, and
Hyderabad tracings show that it is frequent. We differ as to
ause of its occurrence, the Hyderabad Commission ascribing
asphyxia, while we contend that neither in the time of its
rrence after holding the breath nor in its general characters
it correspond with the fall of pressure due to asphyxia.
tever be the explanation, the occurrence is in itself suffi-
tly serious, and should not be minimised as forming one of
sources of danger in the administration of chloroform.

THE CROONIAN LECTURES
ON
CEREBRAL LOCALISATION.

Delivered before the Royal College of Physicians of London.

By DAVID FERRIER, M.D., LL.D., F.R.S.,
sician to King's College Hospital, and to the National Hospital for the Paralysed and the Epileptic, Queen Square.

Lecture II.

President and Gentlemen,—I will now invite your at-
ion to a brief consideration of the phenomena of electrical
ation of the brain of the monkey, more especially as deter-
ed by my own experiments, and those of Horsley, Schäfer and
vor, which, though in all essentials confirming mine, have been
ked out with more elaborate detail and minuteness.[1]

eginning anteriorly we find that what is generally termed the
rontal lobe—that is, all in advance of a line drawn at right
es to the anterior extremity of the precentral sulcus—gives
r very doubtful, response to electrical stimulation.

etween this line and that of the precentral sulcus continued
ards to the longitudinal fissure, there is a region or area (1, 2,
5; Figs. 6 and 7, head), stimulation of which causes open-
of the eyes, dilatation of the pupils, and movements of the
l and eyes to the opposite side. This area has been further
rentiated by Beevor and Horsley, according to the primary
ements which result from minimal stimulation of the points
cated on their diagram (Fig. 8). The corresponding region in
brain of the dog is (12, Fig. 9). No similarly differentiated
re is seen in the cat (Fig. 10) or rabbit (Fig. 11).

the upper extremity of the central convolutions (ascending
tal, ascending parietal, and postero-parietal lobule) (1, 2, Fig. 5;
Figs. 6 and 7), and extending over the margin of the hemi-
re into the posterior part of the marginal convolution, or
central lobule, electrical stimulation causes movements of the
r *extremity*. The movements vary according to the position of the electrodes on this area. Behind the fissure of Rolando the movements are chiefly, or exclusively, of the foot or toes. Anterior to the fissure of Rolando they are combined with flexion of the leg and thigh. With minimal stimulation the movements may be still further differentiated (Fig. 8), and, in particular, the great toe can be excited to movement separately by stimulation at the upper extremity of the fissure of Rolando. The corresponding region in the brain of the dog, cat, and rabbit, is indicated by 1, Figs. 9, 10, 11.

Below the leg area, and partly in front of it, and occupying the middle third, or rather two-fourths of the central convolutions, there is a region stimulation of which causes movements of the upper extremity (3, 4, 5, 6, *a*, *b*, *c*, *d*, Fig. 5, and arm, Fig. 6). In this area it is possible to differentiate, more or less completely, movements of the upper arm (protraction and retraction); movements of the forearm (flexion, supination, etc.); and of the wrist, fingers and thumb. The proximal movements are represented most in the upper part of this region; the distal movements, that is, those of the fingers and thumb, most at the lower part.

By minimal stimulation at the lower extremity of the intra-parietal sulcus the thumb may be individually thrown into the action (Fig. 8). The corresponding region in the brain of the dog is that indicated by the numerals 4 and 5 situated on the post-crucial division of the sigmoid gyrus (Fig. 9), and by the same numerals on the brain of the cat (Fig. 10), together with *a* situated on the anterior extremity of the second external convolution. Stimulation of this latter point causes protrusion of the claws; an action comparable to the movements of the wrist and fingers excited from the lower part of the ascending parietal convolution in the monkey. The corresponding region in the brain of the rabbit is indicated by the same numerals (4, 5, Fig. 11).

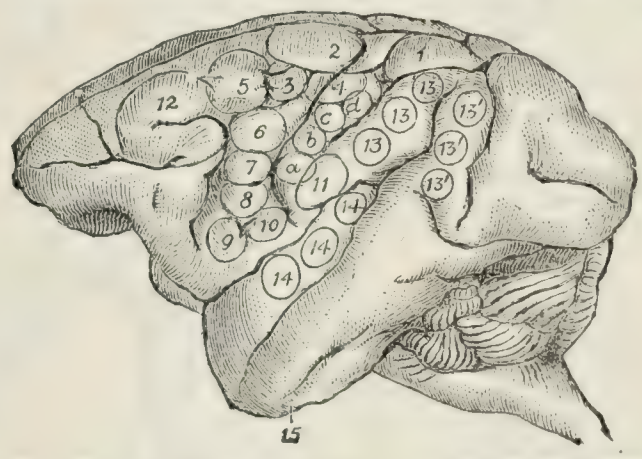


Fig. 5.—The left hemisphere of the monkey. 1. The opposite hind limb is advanced as in walking; 2, flexion with outward rotation of the thigh, rotation inwards of the leg, with flexion of the toes; 3, the tail; 4, the opposite arm is adducted, extended, and retracted, the hand pronated; 5, extension forwards of the opposite arm; *a*, *b*, *c*, *d*, movements of fingers and wrist; 6, flexion and supination of the forearm; 7, retraction and elevation of the angle of the mouth; 8, elevation of the ala of the nose and upper lip; 9 and 10, opening of the mouth, with protrusion (9) and retraction (10) of the tongue; 11, retraction of the angle of the mouth; 12, the eyes open widely, the pupils dilate, and head and eyes turn to the opposite side; 13 and 13′, the eyes move to the opposite side; 14, pricking of the opposite ear, head and eyes turn to the opposite side, pupils dilate widely.

Below the arm area, and occupying the lower third of the central convolutions, there is a region stimulation of which causes movements of the face, mouth and tongue. In the upper part of this area can be differentiated centres for movements of the upper facial muscles (7, 8, Fig. 5) in front of, and platysma (11) behind the fissure of Rolando. The corresponding region in the brain of the dog, relatively much larger than in the monkey, is indicated by the numerals (7, 8, Fig. 9), and the same indicate the homologous regions in the brain of the cat (Fig. 10), and rabbit (Fig. 11). In the lower portion excitation causes movements of the mouth and tongue; protrusion of the tongue being generally caused by stimulation anteriorly (9, Fig. 5), and retraction by stimulation posteriorly (10, Fig. 5).

It has further been demonstrated by Semon and Horsley [2] that excitation of the lower extremity of the ascending frontal convolution causes phonatory closure of the vocal cords. The phonatory closure of the vocal cords was first demonstrated ocularly in the dog, on irritation of the pre-sigmoid region, by Krause,[3] though I

[1] sley and Schäfer, *Phil. Trans.*, B. 20, 1888; Beevor and Horsley, *Phil. Trans.*, B. 1890.

[2] On the Central Motor Innervation of the Larynx, Journal, December 21st, 1889.

[3] *Pflüger's Archiv.*, 1883.

had many years previously,[4] given audible demonstration of the same fact by showing that stimulation in this neighbourhood not infrequently caused barking; and similar effects (spitting, mewing) by stimulation of the homologous region in the brain of the cat. I also pointed out that the movements occurring on stimulation of this part were distinctly bilateral, an effect which Krause, Horsley, and Semon, have found to be true also of movements of the vocal cords.

The areas for the head and eyes, arm and leg, extend over the margin of the hemisphere into the mesial aspect or marginal convolution. These I had to some extent noted in my first experiments, but a more thorough exploration of the reactions of this region was first made by Horsley and Schäfer.[5] Excitation of this convolution from before backwards (see Fig. 7), causes movements of the spine, tail, and pelvis; behind these, extension of the hip, flexion of the leg, and lastly, movements of the foot and toes. These movements are not, however, always clearly differentiated, as they are apt to run into each other, and to be complicated by secondary movements of the various segments of the limb.

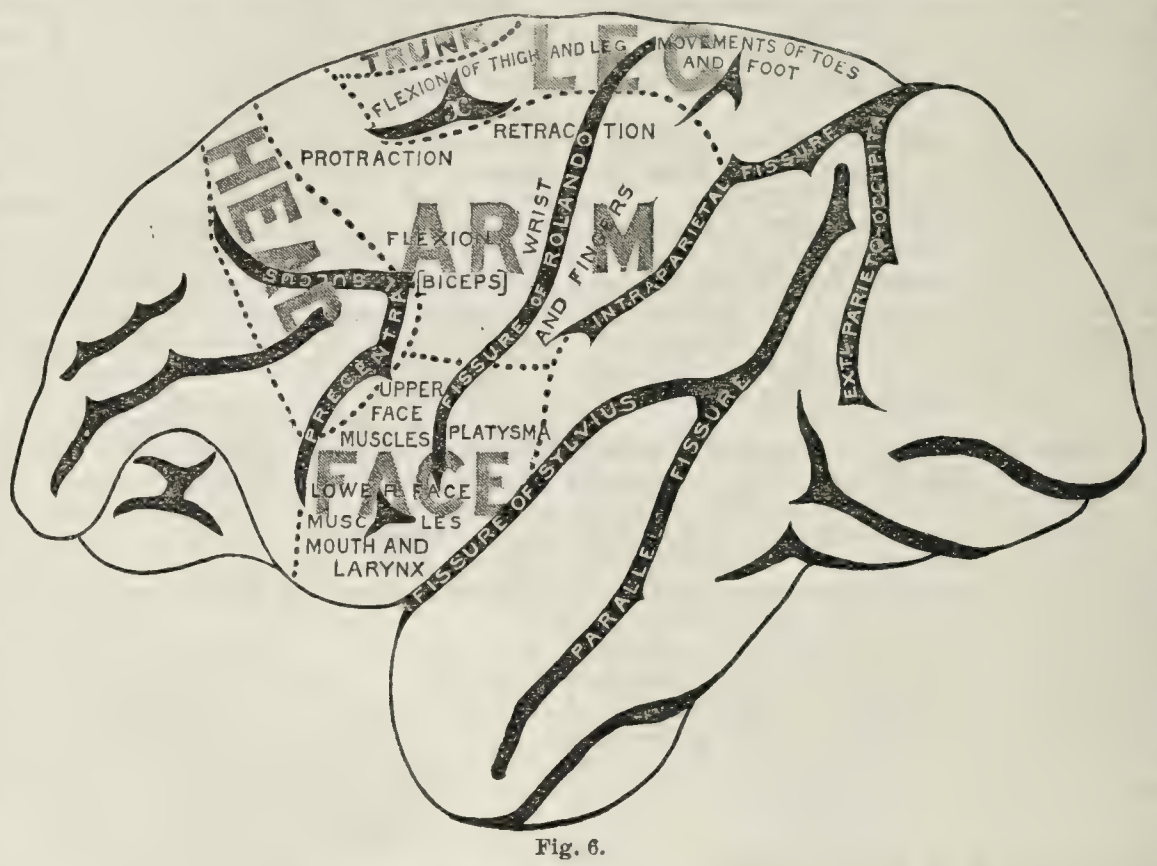


Fig. 6.

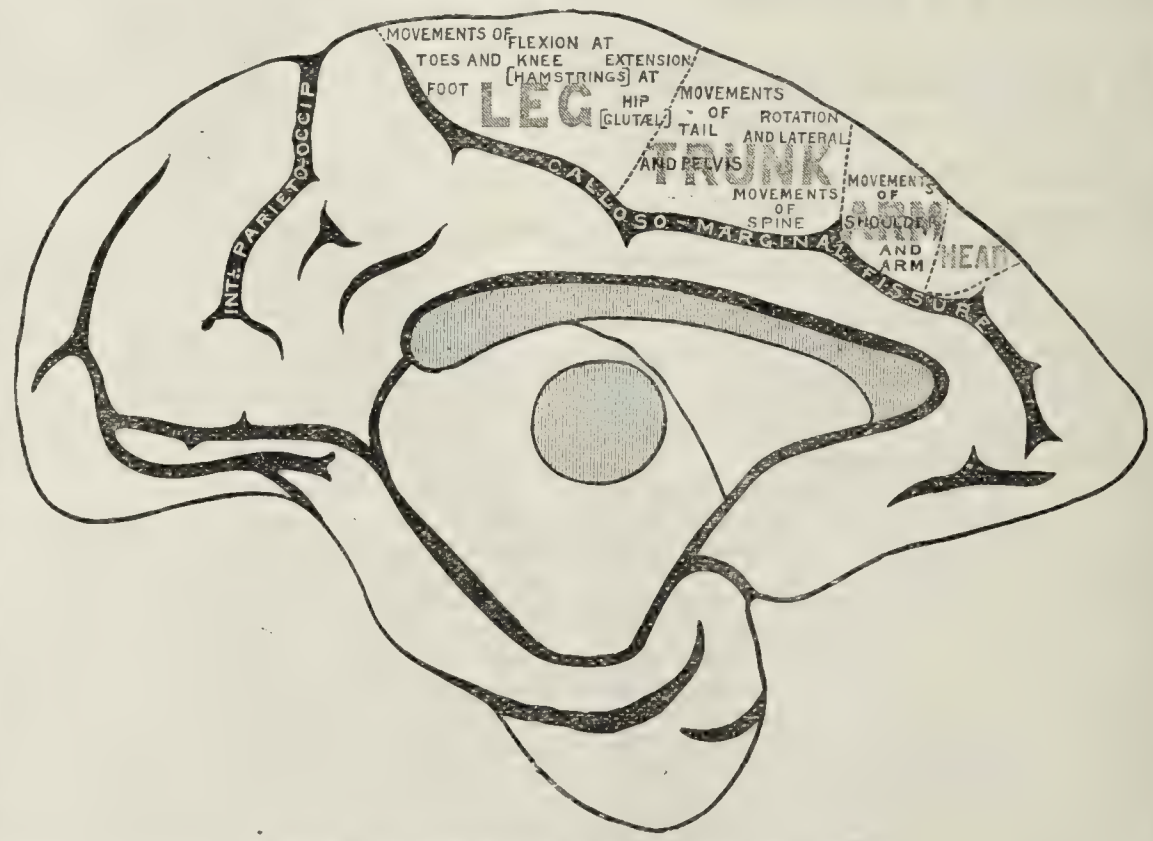


Fig. 7.—The motor areas according to Horsley and Schäfer.

Stimulation of the angular gyrus, *pli courbe* (13' 13, Fig. 5), causes movements of the eyeballs, and occasionally of the head, to the opposite side, generally combined with an upward or downward direction, according as the electrodes are on the anterior or posterior limb of this gyrus. The condition of the pupils is not constant, occasionally they are contracted. The corresponding region in the brain of the dog is indicated by 13 (Fig. 9), situated on the second external convolution, and the homologous region in the brain of the cat (Fig. 10), and the rabbit (Fig. 11), is indicated by the same numerals.

Excitation of the occipital lobe appeared in my earlier experiment to yield negative results. But Luciani and Tamburini[6] occasionally obtained movements of the eyeballs similar to those occurring on excitation of the angular gyrus, though less marked. And Schäfer[7] describes similar movements as occurring fr stimulation of different parts of the occipital lobe and nei bouring regions. My own experiments on several monke though not opposed to those of Schäfer, are more in harmo with those of Luciani and Tamburini, and show that, thou movements of the eyeballs may be obtained by excitation of occipital lobe, they are, as a rule, less constant and less eas excited than from stimulation of the angular gyrus.

Stimulation of the superior temporal gyrus (14, Fig. 5) cau pricking of the op site ear, opening of eyes, dilatation of pupils, and direct of the head and e to the opposite si Precisely the same action occurs af stimulation of posterior limb of third external con lution of the brain the dog (14, Fig. and so also in brain of the cat (F 10), and homolog region of the brain the rabbit (Fig. Sometimes only mo ments of the ear caused, and sometim the animal attem to bound off the ta as if suddenly start

Stimulation of hippocampal lob or anterior extrem of the hippocam gyrus in monke dogs, cats, and r bits causes precis the same result namely, torsion the nostril on same side—as if fr irritation appl directly to the nos itself. Irritation the gyrus hip campi occasiona caused moveme such as might conditioned by dir irritation of the posite limbs; but yond this I have been able to obt any constant react from stimulation the rest of the te poral lobe or ot portions of the cort

Such is briefly summary of the p nomena of electri irritation of the ferent regions of cerebral cortex. Th results, apart fr the interpretat which we put up them, indicate so form of functio differentiation; and it is obvious, on comparing the c responding areas in the brain of the monkey, dog, and rabbit, that there are great differences as regards th relative extent, and the character of the movements w which they are in relation. Whether complete parallelism obta

[4] *West Riding Asylum Reports*, 1873.
[5] *Phil. Trans.*, vol. 179, 1888.
[6] *Sui Centri Psico-Sensori Corticali*, 1879.
[7] *Proc. Roy. Soc.*, 1888.

een the brain of the monkey and the brain of man is a tion which, until recently, could only be answered by reference ne facts of localised lesions. Bartholow[8] and Sciamanna[9] observed movements of the opposite side of the body on ulation of the cortex through the dura mater—the former in se of cancerous ulceration and the latter in a case of trening. But their results, though so far in accordance with e of experimentation on monkeys, were lacking in precision. ntly, however, surgeons have on several occasions resorted to le faradisation of the cortex, in order to define accurately the ons which they have desired to extirpate for the cure of focal psy. One of these has been reported by Horsley, and several rs have been quoted by Mills in his valuable memoir on bral Localisation in its Practical Relations.[10] In one case the r halves of the two central convolutions—the posterior mity of the second frontal and the posterior superior corner ne third frontal convolution—were exposed in the left hemire. "Careful examinations were made with the faradic nt applied to the cortex with the view of locating the proper es for excision. Four distinct responses in the shape of ite movements were obtained after several trials; these were the most anterior position at which movements resulted, obtained application of the current caused movement of the left elbow, both flexion and extension, and of the shoulder, which was raised and abducted. Below the region, where the hand movements were excited, the application of the current produced an upward movement of the whole of the left face." These results correspond very closely with the position of the various centres as already defined.

In another case, reported by Lloyd and Deaver,[12] an area was exposed in the right hemisphere corresponding to the junction of the middle and lower thirds of the central convolutions. When the electrodes were applied to a point just posterior to the fissure of Rolando the movements which occurred were in order—flexion of the thumb on the palm, flexion of the fingers, flexion of the wrist, extending to flexion of the elbow. At a point in front and below stimulation caused contraction of the facial muscles of the opposite side.

In a fourth case, reported by Nancrede,[13] movements of the thumb were induced by stimulation of a region corresponding to the second lower fourth of the ascending parietal convolution. All these results are in close harmony with those obtained on stimulation of the cortex of the brain of the monkey, and we have therefore every reason to believe that, *cæteris paribus*, the functional relations of the human cortex are identical with those of the lower animals.

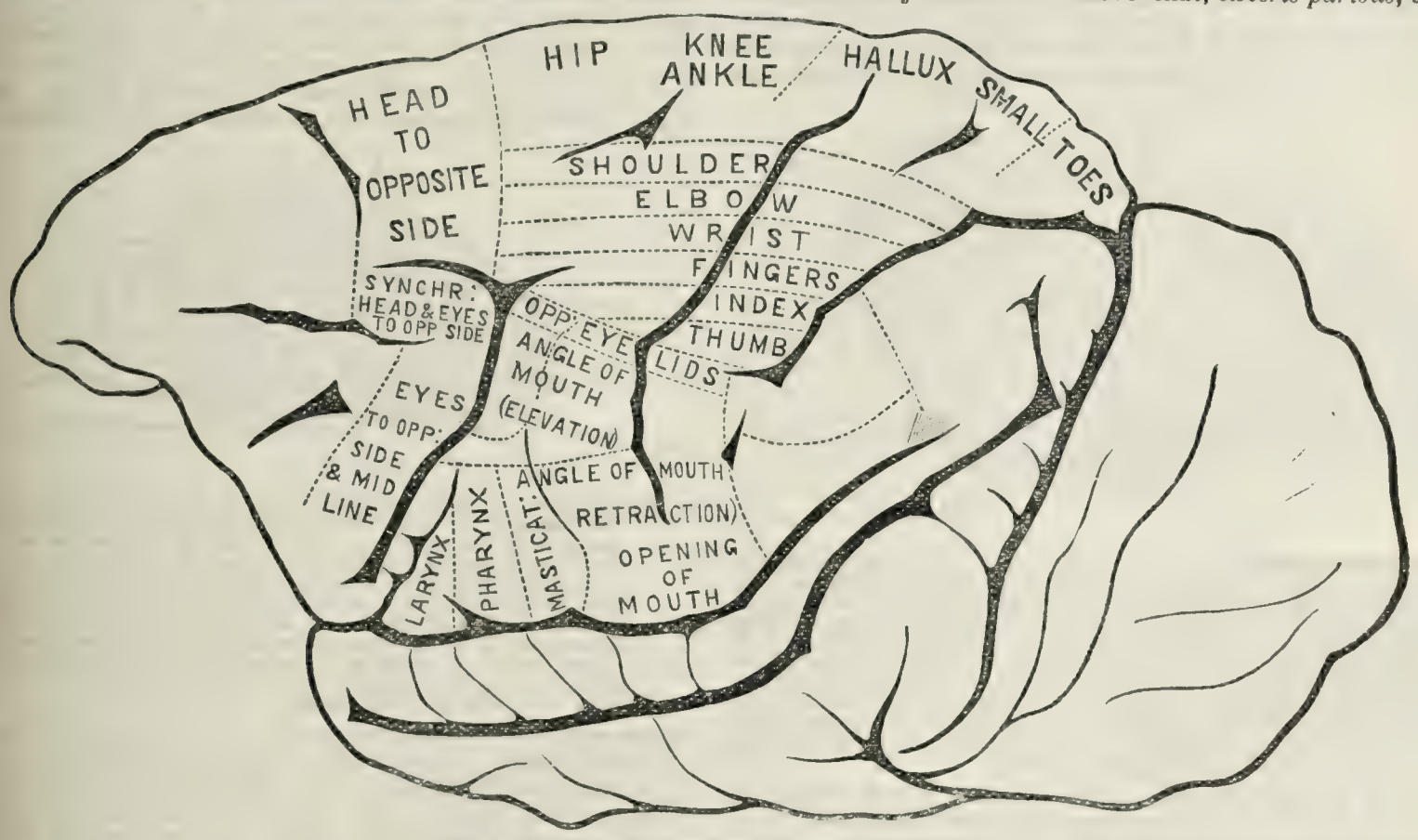


Fig. 8.—Motor areas according to Beevor and Horsley.

ict conjugate deviation of the head to the opposite side; little below and behind this point, drawing of the mouth ards and upwards; (3) above this spot for movements of the of the mouth, about half an inch, extension of the wrist and rs was produced; (4) behind and above the latter point, ict flexion of the fingers and wrist. Continuing and increashe faradic application at this last determined point, the s, thumb, wrist, and forearm were successively flexed, and whole extremity assumed the 'wing-like' position. The of events, according to three persons who were present, and observed the patient's spasms, being exactly that which had noticed at the beginning of his convulsive seizures."

a second case reported by Keen:[11] "On touching the cortex the electrodes at a position which apparently corresponded e anterior portion of the pre-Rolandic convolution, just be- the precentral fissure, movements of the wrist and fingers produced. The hand moved in extension in the mid-line and e ulnar side at different touches, the fingers being extended eparated. Above the region in which these movements were

[8] *Amer. Journ. Med. Sciences*, April, 1874.
[9] *Arch. di Psichiatria*, 1882.
d before the Washington Congress, September 19th, 1888; reprinted in *Brain*, 1889.
[11] *Amer. Journ. Med. Sciences*, November, 1888.

So far as the excitation method is concerned, we are entitled to say that, whether the individual segments of a limb are separately localised, or are represented, more or less, throughout a common area, the areas as a whole are completely differentiated from each other. No movements of the leg result from irritation of the facial centres, nor of the face from the leg centres. The face area and leg area are thus entirely differentiated from each other, and from the oculo-motor area. What is true of centres widely apart is doubtless true of centres which are in close proximity to each other. The fact that stimulation of the margin of a given area is apt to produce joint movements of this and the adjoining area must not be taken to imply that this portion subserves conjoint functions—say of the arm and leg, or arm and face.

The true explanation appears to me to be that the excitation method is unable completely to differentiate the boundaries of the respective centres. Regions which are in the closest proximity to each other, anatomically and functionally, are apt to be discharged together by diffusion of the stimulus. Nor, even if we are unable to entirely dissociate the centres from each other by the destructive method, are we on this ground entitled to conclude that there

[12] *Amer. Journ. Med. Sciences*, November, 1888.
[13] *Medical News*, November 24th, 1888.

is any functional fusion between the two; for a destructive lesion, however small, situated on the margin of any given centre, is calculated to affect the functions of more than one. Facts will be adduced as we proceed which to my mind justify the conclusion that the areas as a whole are as completely differentiated from each other as the limbs themselves, or one organ of sense from another.

We have seen, however, in respect to the individual movements of a limb, that though one particular movement can frequently be isolated by minimal stimulation of a definite point within the general area, yet the same movement may occur along with others when another part of the area is under stimulation. This may be interpreted either on the supposition that the particular movement, say of the thumb, is represented throughout the whole of the arm area, or that it is only a case of diffusion of the stimulus from one part to another. It is difficult to decide which of these views is the correct one, and it may be that neither accurately represents the whole truth. For the reactions of the limbs which result from stimulation of the cortex are not mere muscular contractions, but synergic movements co-ordinated into acts; and inasmuch as has been shown by Professor Yeo and myself,[14] the same muscles or muscular groups enter into the composition of the different movements innervated by the respective motor roots of the brachial and crural plexuses, so the same muscular groups may have a multiple representation in the various sub-

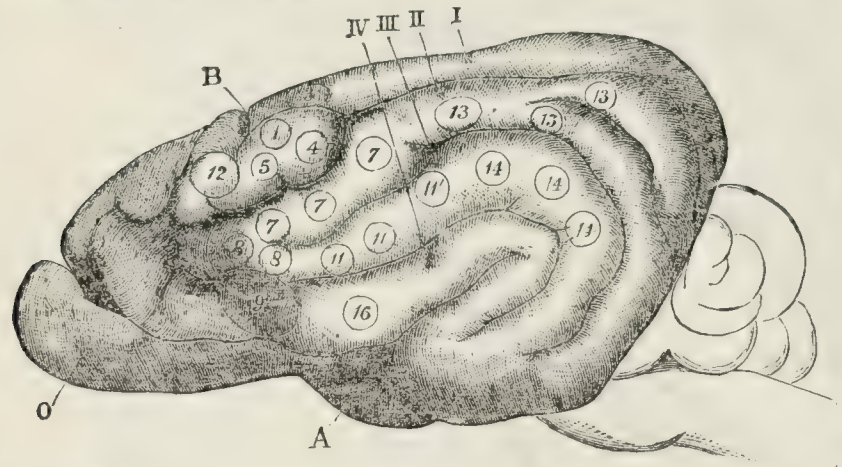


Fig. 9.—Left hemisphere of the brain of dog. 1. The opposite limb is advanced; 3, lateral or wagging motion of the tail; 4, retraction with adduction of the opposite fore limb; 5, elevation of shoulder, and extension forwards of the opposite fore limb; +, flexion of the paw; 7, action of the orbicularis oculi and zygomatics; 8, retraction and elevation of the opposite angle of the mouth; 9, opening of the mouth and movements of the tongue; 11, retraction of the angle of the mouth; 12, the eyes widely opened with dilatation of the pupils, with movement of the eyeballs and head to the opposite side; 13, movement of the eyeballs to the opposite side; 14, pricking, or sudden retraction, of the opposite ear; 15, torsion of the nostril on the same side.

divisions of the general area. And it would appear that in the cortical areas there is a much greater differentiation than in the respective segments of the brachial and crural enlargements of the spinal cord. But in my opinion any further multiple representation outside the general area of a limb is altogether opposed to the facts of localisation as determined either by the methods of excitation, or destruction, or both.

We have next to inquire into the important and much disputed question as to the signification of the motor reactions which result from electrical stimulation of the different cortical regions. Though many of the movements are evidently such as may be termed purposive, it does not follow that they are indicative of direct stimulation of motor regions in the strict sense of the term, for the movements may be the result of some psychical condition incapable of being expressed in physiological terms; or they may be reflex, and thereby not differing essentially from those resulting from peripheral stimulation; or they may be motor in the sense of being due to irritation of parts in direct connection with the motor tracts and motor nerves, or they may be partly one and partly the other. The method of excitation itself is not competent to solve these questions, and requires as a complement the strictly localised destruction of those areas, stimulation of which gives rise to definite motor reactions.

A careful consideration of the reactions in different orders of animals, and the fact that similar movements are in some cases

[14] *Proc. Roy. Soc.*, 1881, The Functional Relations of the Motor Roots of the Brachial and Lumbo-sacral Plexuses.

excitable from different cortical regions, led me to believe th they might have various significations, and I formed the hypoth sis that some might be due to stimulation of motor regions prop while others might be looked upon as the associated expressi of subjective sensation. On this hypothesis I instituted localis destructive experiments, and thus determined the existence sensory or perceptive centres respectively related to the differe forms of sensibility, as well as of centres more especially, not exclusively, motor in character. The existence of distin sensory centres has been confirmed by succeeding physiologi and clinical research, and I have the satisfaction of thinking th such errors as I have committed in the delimitation of the vari sensory regions have been errors more of omission than of co mission, and that the localities in which I originally fixed respective sensory areas correspond in part at least with the po tion assigned to them by the most reliable experimental clinical methods.

The Visual Centres.—I will first call your attention to the actions occurring on stimulation of the occipito-angular region monkeys, and its homologue in the lower orders of animals. reactions, as we have already seen, are movements of the eyeba and occasionally of the head to the opposite side; and frequen also of the pupils, not always uniform in character, being so times contraction, at other times dilatation. These movement have found to be most easily and most uniformly excited from anterior and posterior limbs of the angular gyrus. As a r along with the lateral movements there is upward direction wh

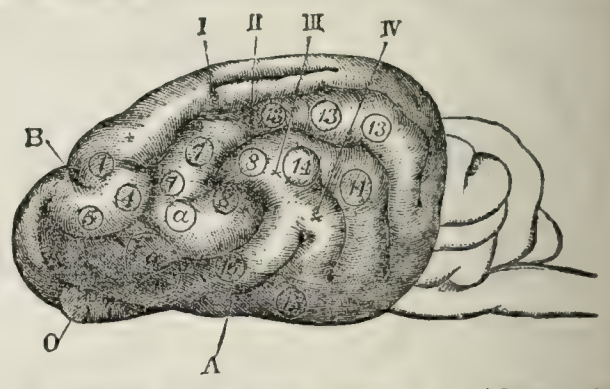


Fig. 10.—Left hemisphere of the brain of the cat. 1. Advance of the opp site hind limb; 4, retraction and adduction of the opposite foreleg; elevation of the shoulder, with flexion of the forearm end paw; clutching or grasping action of the paw, with protrusion of the claw 7, elevation of the angle of the mouth and cheek, with closure of t eye; 8, retraction, with some degree of elevation of the angle of t mouth, and drawing downward and forward of the ear; 9, opening the mouth and movements of the tongue; 13, the eyeballs move to t opposite side; 14, pricking of the ear, and head and eyes turn to t opposite side; 15, elevation of the lip and torsion of the nostril on t same side; divergence of the lips.

the anterior limb, and downward when the posterior limb of gyrus is excited. Movements of the eyeballs are also obtaine as Luciani and Tamburini first pointed out, from irritation of occipital lobe. Schäfer, who omits the anterior limb of the ang gyrus, though I have found this as excitable as the rest, obt downward movements of the eyes on stimulation, not only of posterior limb of the angular gyrus, but also of the upper en the middle temporal gyrus, that part of the occipital lobe im diately behind the external parieto-occipital fissure, and on e side of the internal parieto-occipital fissure. He obtains upw movements on stimulation of the under surface of the occip lobe, the lower part of the mesial aspect of this lobe, and of lower margin of the convex surface. He obtains a simple lat movement of the eyes on excitation of the rest of the con aspect of the occipital lobe and a narrow strip of the mesial face along the margin of the great longitudinal fissure. middle portion of the mesial surface does not appear to be cluded in this scheme.

My hypothesis that these movements of the head and eyes the signs of the arousal of subjective visual sensation, and du associated action of the frontal or subcortical oculo-motor cent has received confirmation from the experiments of Schäfer on latency periods of the ocular movements following excitatio the frontal and occipito-temporal regions respectively.[15] result of this comparison made in a number of monkeys wa show that the latent period is longer by some hundredths second in the case of stimulation of the occipital lobe than of oculo-motor centre of the frontal area; thus indicating tha

[15] *Proc. Roy. Soc.*, February 13th, 1888.

ormer case the nervous impulses must be transmitted through ast one more nerve centre than in the latter. This would with the hypothesis that in the one case the movements reflex, and in the other direct. The fact that the ocular ments are still obtainable on stimulation of the occipito-lar region, after complete removal of the frontal regions, s that they are not necessarily indicative of the associated n of these cortical centres, but may be due, if they are not ys so, to excitation of the oculo-motor centres of the corpora rigemina.

nillo[16] has found that severance of the fibres of association een the occipital lobe and the frontal region does not prevent ccurrence of the ocular movements; while Bechterew[17] and [18] have found that the movements are entirely annihilated verance of the subjacent medullary fibres. It is contended anillo and Bechterew that the movements cannot, therefore, garded as indicative of subjective visual sensation; but this d not be disproved even if the movements still continued removal of the grey matter, for the excitation of the medul- fibres would be equivalent to excitation of the cortex itself. ay assume with Munk that there are radial or centrifugal between the occipital cortex and the oculo-motor centres; hat excitation of the central expansion of these tracts would ice practically the same effect as stimulation of the centres which they are in relation.

e occipito-angular region is the visual area of the cortex. lete destruction of this area in the one hemisphere causes anent hemianopia to the opposite side by paralysis of the sponding halves of both retinæ; while bilateral destruction s complete and enduring blindness of both eyes. Apart from ss of vision, there are no other sensory or motor defects. The oility of the eyeball is intact, and the ocular movements are utely unimpaired. There is no impairment of the sensibility tor power of the limbs. The other special senses are un- ed. If the destruction of the occipito-angular region is in- lete, unilaterally or bilaterally, the resulting hemianopia in ne case is not enduring, nor is the blindness permanent in ther.

re is, however, scarcely a particular of the above general nent which has not been controverted; but I am of opinion very one of them is in accordance with the evidence fur- d by strictly localised and carefully observed lesions of this n.

my earlier investigation, I was led to believe that the angular lone constituted the visual centres, a conclusion which I ed on the positive effects of lesions of the angular gyri and niformly negative results of destruction of both occipital except when the lesions trenched on the parieto-occipital e. In the latter case it appeared to me that the imperfec- of vision or occasional total blindness were due to inter- e with the functions or the connections of the angular gyri selves. I show you here a photograph of the brain of f my earlier experimental animals.[19] Both occipital lobes removed at the same time. Some encephalitis ensued, caused extension of the primary lesions. You will see n the right side, not only the whole occipital lobe, but also f the posterior limb of the angular gyrus has been removed. e left side the angular gyrus is intact, superficially, but the llary fibres of the cut surface bulge considerably, owing to matory hernia. Notwithstanding this extensive bilateral , the animal, within an hour of the operation, gave clear ice of the retention of vision; for it made grimaces, and ran when threatened. Subsequent examination revealed the at vision, though good, was impaired, as indicated by some of precision in laying hold of objects offered it. But, be- this slight defect in vision, there was no impairment of the l's faculties in other respects, and it continued well until its after a second operation three weeks subsequently, in which eater part of both frontal lobes were removed. This second ion caused no further impairment of the animal's vision— of great importance in reference to the question of the rela- f the frontal lobes to the sense of sight.

much as in this animal, as well as in others, in which r symptoms occurred, the lesions implicated the region of the parieto-occipital fissure and angular gyrus, I attributed the impairment of vision to this cause; for, when the line of section of the occipital lobes was well separated from this fissure, no impairment of vision was perceptible. Thus the occipital lobes were exposed on both sides in a monkey, and the surface destroyed by the cautery, which was also passed deeply into the interior of the lobes so as to break up the medullary fibres. The operation was completed at 3 30 P.M. The following are the notes of the animal's condition:—

"4.10 P.M. The animal, after lying in a state of stupor till now, begins to move, but staggers a good deal. The eyes are open and the pupils dilated. It indicated consciousness by turning its head when called to.

"5.45 P.M. Gives emphatic evidence of sight. Ran away when I approached it, carefully avoiding obstacles. Seeing its cage door open, it entered and mounted on its perch, carefully avoiding the cat which had taken up its quarters there. Tried to escape my hand when I offered to lay hold of it, but picked up a raisin which I had left on the perch."[20]

Notwithstanding the extensive destruction of both occipital lobes in this case, the animal, in a little more than two hours after the operation, gave the most emphatic evidence of precise vision.

In another case in which the occipital lobes were severed by a perpendicular section a quarter of an inch posterior to the parieto-occipital fissure,[21] the animal, notwithstanding the removal of at least two-thirds of both occipital lobes, gave clear evidence of vision within half an hour after the operation. In another monkey in which my colleague, Professor G. F. Yeo, removed about two-thirds of both occipital lobes, the animal within two hours after the operation was able to pick up minute objects lying on the floor.[22]

I show you here also a photograph of the brain of a monkey in which the left occipital lobe was removed by an incision immediately posterior to the parieto-occipital fissure. In this case, owing to the dressings having been torn off, the wound became septic and the animal died on the fifth day. On the day after the operation, however, no imperfection of vision could be discovered; for the animal took things offered it on the right or left front, and was able to run about the laboratory in every direction, passing among chairs and other articles of furniture without ever once knocking its head on one side or the other—actions which were altogether inconsistent with the existence of hemianopia.

You will see that the margin of the plane of section, which bulges considerably from hernial protrusion, corresponds nearly with the external parieto-occipital fissure.[23] These experiments illustrate the negative effects of unilateral and bilateral lesions of the occipital lobe. I had found, however, in my earlier experiments that destructive lesions of the cortex of the angular gyrus on the one side caused temporary complete loss of vision in the opposite eye, so that the animal responded to no test of vision, and, when urged to move, ran blindly against every obstacle in its path,[24] and that, when both angular gyri were similarly destroyed, complete blindness ensued in both eyes.[25]

The following observations were made on a monkey whose angular gyri were destroyed on both sides with the galvano-cautery. It was at once let loose, but appeared scared, and would not stir from its place. It was therefore for some hours impossible to obtain any satisfactory information as to its powers of vision. The pupils were contractile to light, and a light flashed in the eyes caused some wincing. When a piece of apple was dropped near it, so as to come in contact with its hand, it took it up, smelt it, and ate it with signs of satisfaction. Hearing was acute, and it turned its head and replied when called to by name. With the exception of reluctance to move from its position, arising evidently from a sense of insecurity, there was nothing to indicate decisively that the animal was blind. But I had found that this animal was very fond of sweet tea, and would run anywhere after it. I therefore brought a cup of sweet tea, and placed it to its lips, when it drank eagerly. The cup was then withdrawn and placed in front of it, a little distance, but the animal, though from its gestures intensely eager to drink further, was unable to find

[16] *Archives de Neurologie*, vol. xviii, 1889, p. 145.
[17] *Neurolog. Centralblatt.*, September 15th, 1889.
[18] *Sitzungsberichte der Akad. d. Wiss. zu Berlin V.*, January 16th, 1890.
[19] Experiment XXIV, *Phil. Trans.*, vol. clxv, part 2, 1875.
[20] Experiment XXII, *Phil. Trans.*, vol. clxv, part 2, p. 25.
[21] Experiment XXIII, *Phil. Trans.*, *sup. cit.*
[22] Experiment IX, *Phil. Trans.*, 1884.
[23] See Fig. 1, Plate 20, *Phil. Trans.*, part 11, 1884.
[24] See Experiments VII, VIII, IX, *Phil. Trans.*, vol. clxv, 1875.
[25] Experiment X, *op. cit.*

the cup, though its eyes were looking straight into it. This test was repeated several times, and with exactly the same result. At last, on the cup being placed to its lips, it plunged its head in, and continued to drink till every drop was exhausted, while the cup was lowered and drawn half way across the room. Next day the animal still continued blind, and paid no attention to threats, grimaces, or other means of appeal to its sense of vision. It was then killed, in order that the position and extent of the lesions might be accurately determined before secondary inflammatory processes could have advanced. These had already begun, but were confined to the angular gyri, which were somewhat swollen and raised, and to the adjoining anterior margin of the occipital lobes, and with slight implication of the posterior margin of the left ascending parietal convolution. The destruction was purely cortical, the grey matter alone being disorganised, and on the angular gyri exclusively.

These facts seemed to me to justify the opinion that the angular gyri were the visual centres, each being in relation with the whole of the opposite eye, since the effect of unilateral extirpation was for the time total blindness of the opposite eye, and not hemiopia. And it further seemed as if the rapid recovery from unilateral lesion were due to the compensatory action of the other gyrus; inasmuch as bilateral destruction caused total blindness in both eyes of a more enduring, and, as I ventured to suppose, probably permanent, nature. But further investigation on animals kept alive for much longer periods than were compatible with the exact limitation of the lesion under old surgical methods showed that this conclusion was erroneous. My later investigations, in conjunction with Professor Yeo, under strictly antiseptic precautions, proved that the results of unilateral and bilateral extirpation of the angular gyrus, though entirely in harmony with my previous researches, were more temporary than I had previously found, and that bilateral destruction did not cause permanent total loss of vision.[26] In illustration I would quote the details of the following experiments.

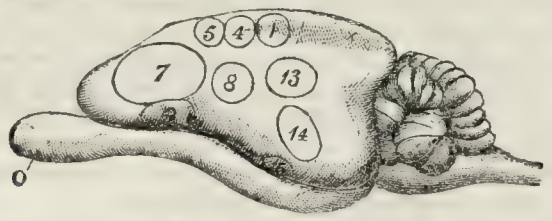


Fig. 11.—Left hemisphere of the brain of rabbit. 1. Advance of the opposite hind leg; 4, retraction with adduction of the opposite fore limb; 5, elevation of the shoulder and extension forward of the fore limb; 7, retraction and elevation of the angle of the mouth; 8, closure of the opposite eye; 9, opening of the mouth, with movements of the tongue; 13, forward movement of the opposite eye, occasionally turning of the head to the opposite side; 14, sudden retraction and elevation or pricking of the opposite ear; 15, torsion or closure of the nostril.

In one animal the left angular gyrus was cauterised with the galvano-cautery. "The left eye was secured, and the animal allowed to recover from stupor. At the end of half an hour it was evidently wide awake, but would not move unless touched. At this time it was removed from its cage and placed on the floor, whereupon it began to grope about in a sprawling manner, knocking its head against every obstacle. After some minutes of this behaviour it subsided, and refused to move. It made no sign of fear at threatening gestures, and did not wink at a thrust of the finger at its eye until the finger almost touched the conjunctiva, when the usual reflex closure occurred. Half an hour later the same tests were employed, with precisely the same indications of total loss of vision. At the end of still another half hour, while it was lying quietly in its cage, it was gently laid hold of without noise to attract its attention, whereupon it bounded away with an expression of fear and surprise, and ran full tilt against the leg of the table, where it remained groping and sprawling for a few minutes. It then started off, and this time ran against the wall, against which it sprawled helplessly. Similar things were repeated. It gave no sign of perception when it was cautiously approached without noise; but when a slight noise was made with the lips quite close to it, it darted off and came against the wall as before, where it lay down. Half an hour later, while it was resting quietly in a corner with its eyes open, the light of a lantern was flashed in its eyes, but it gave no sign. Creeping up to it cautiously without exciting its attention the observer made a slight whisper close to its face, whereupon it peered eagerly, but evidently remembering the results of running away it crouched down and would not move. Half an hour later, when it w quiet in its cage, it started suddenly on being touched, a ran its head into a corner, where it crouched.

"Next day, its left eye being still closed, it showed unmista ably the possession of vision with the right eye. It laid hold things as usual, and ran about the laboratory in every directio passing obstacles right and left with perfect precision, and duc ing its head to pass underneath bars as it ran along the top the waterpipes of the laboratory. No defect of vision, amblyop or hemiopic, could be detected."[27]

In another animal, the left angular gyrus was cauterised up the parieto-occipital fissure, the posterior part of the corpus ca losum being also divided at the same time.[28]

"The left eye was securely closed, and the animals allowed recover from its narcotic stupor. In half an hour it began to mo about spontaneously, although rather unsteadily. An hour and half after the operation it walked about the laboratory, knocki its head against legs of chairs and other obstacles in its pa When a piece of apple was held under its nose it grabbed it a ate. It continued to walk about here and there, every now a then coming to a dead halt full tilt against the wall. Three hou after the operation it again, in running about the laboratory, ca full tilt with its snout against the wall, where it rested. While was resting quietly we crept up to it; but the animal, thou with eyes wide open and looking towards us, made no sign of p ception. Threatening grimaces were likewise without effe but on making a noise with our lips the animal seemed alarm peered forwards, and yet, though it came close to our faces, seem to see nothing. It was tried to right and left in the same w but there was no sign of vision to one side or the other. Ne day, the left eye being still closed, the animal ran about in eve direction, ducking under bars, passing objects right and left w the utmost precision, and never once knocking against anythi one side or the other. Not the slightest impairment of vis could be detected, and it was able to pick up the minutest obje lying about its cage or thrown down near it."

It was first shown by Munk[29] that the permanent effect of co plete unilateral extirpation of the visual sphere was not compl blindness of the opposite eye, but homonymous hemianopia, fr paralysis of the corresponding sides of both retinæ. This eff he obtained by section in the line of the parieto-occipital fissu and he localised the visual sphere exclusively in the occipi lobe, regarding the angular gyrus as the "sensory sphere" of t eye. Owing, however, to the fact, as he himself admits, t secondary inflammation and extension of the primary lesion ge rally, if not universally, followed his operative procedure, Mun experiments cannot be relied upon when it is a question of exact delimitation of any given area. It is a reasonable supp tion that Munk's operations for removal of the occipital l would be the cause of secondary implication of the angular gy or its connections. The question as to the exact delimitation the visual sphere, whether it is confined only to the occipital lo according to Munk, or embraces also the angular gyrus, accord to my view, and the respective relations of the angular gy and occipital lobe to the eyes has been the subject of investi tion by numerous physiologists: Luciani and Tamburin Luciani,[31] Horsley and Schäfer,[32] Sanger-Brown, and Schäfe Lannegrace,[34] Gilman Thompson and Sanger-Brown,[35] and is s a matter on which opinions are far from being in accordance.

Luciani and Tamburini, and Luciani have arrived at the c clusion that the visual centres are not confined to the occip lobes, but embrace also the angular gyri, though the former lieved that the effects of unilateral destruction of the angular gy were hemiopic rather than amblyopic. The experiments of Hors and Schäfer and of Sanger-Brown and Schäfer are of great va as, owing to the use of antiseptic precautions, and the full det and figures which illustrate the experiments, their facts are av able for all inquirers. Horsley and Schäfer record several exp

[26] See Experiments III, IV, V, VI, *Phil. Trans.*, vol. ii, 1884.

[27] Experiment V, *Phil. Trans.*, vol. ii, 1884.
[28] Experiment VII, *op cit.*
[29] Ueber die Functionen der Grosshirnrinde, 1881.
[30] *Sui Centri Psico-Sensori Corticali*, 1879.
[3.] On the Sensory Localisations of the Cortex Cerebri, *Brain*, July, 1884
[32] A Record of Experiments upon the Functions of the Cerebral Cortex, *Trans.*, vol. clxxix, 1888, B. 20.
[33] Functions of the Occipital and Temporal Lobes of the Monkey's Brain, *Trans.*, vol. clxxix, 1888, B. 30.
[34] Influence des Lésions Corticales sur la Vue, *Archives de Médecine Exp mentale*. 1889.
[35] The Centre for Vision. *Researches of the Loomis Laboratory of the Me Department of the University of the City of New York*, No. I, 1890.

ts on the occipital lobe on one or both sides. The follow- experiment (XXIV), which I give in their own words, is cially worthy of note. "The whole of the left occipital lobe removed by an oblique incision along the parieto-occipital re. The piece removed included the extremity of the posterior u of the lateral ventricle, which was thus freely opened. No onsequences resulted from this, however, and when on the day the dressings were removed the wound was found to be oletely healed. Result, no muscular paresis. The animal is to have some disturbance of visual consciousness of the ges of objects which fall upon the left side of the retinæ; for bject, such as a raisin, presented to it on the right side of the al line, is either not noticed or its nature is not readily recog- l. This condition, which was very marked at first, gradually oved, until three months after the operation it could no er be determined." Other portions of the hemisphere, as n in the figure, were removed, but into the results of these not necessary for me here to enter. The appearance of the is given in their figures (24A and 24B), of which one sents the under surface, and, as the authors themselves "the representations are mainly of interest as showing ompleteness of removal of the frontal and occipital lobes, he limits of the lesion upon the under surface of the hemi- re."[36]

veral others are recorded in which the lesions, unilateral or eral, trenched on the parieto-occipital fissure and region ne angular gyrus, and in none of these was hemiopia or ness absolute or permanent. In one case (Experiment I), in which both occipital lobes (external and posterior surfaces part of the under surface) were removed, with an interval urteen days between the two operations, there seemed to re- a general impairment of visual perception, without, so far uld be made out, absolute blindness in any part of the field sion, but of this they cannot speak with certainty. On the val of the right angular gyrus complete left hemianopia was result, which lasted, without any sign of improvement, until animal's death, three months afterwards. Horsley and er's experiments, therefore, in which the lesions of the occi- lobes were perhaps more extensive than any of those de- ed by Yeo and myself—my earlier experiments excepted— that at most the hemiopic disturbances are transient, while, e first case referred to, there appears to have been complete val of the occipital lobe, and yet the hemiopia was not of anent duration. Destruction of the angular gyrus, in com- ion with the occipital lobe, was the only lesion which caused manent result. Their conclusions, as stated in their own s, are as follows:—

ur experiments upon the occipital region, although few in er, seem to link together the conclusions arrived at by Munk, y Ferrier and Yeo as the results of their experiments. They ate that both the occipital lobes and angular gyri are con- d with visual perceptions in such a manner that each oc- l region is connected with the corresponding lateral half of retina, and that a part only of the cortex of the region in ion is able to take on in great measure—how completely t be determined in animals—the functions of the whole. s in conformity, also, with the results of Luciani. So far as cipital lobe alone is concerned, our observations confirm the nent of Munk that the effect of this lesion is to produce a pic disturbance of visual consciousness. But the imperfect which remains after removal of both occipital lobes (see 25 and 26) suggests that the area which is concerned visual consciousness is not confined to those lobes, as was ed by Munk, but extends over into the angular gyrus, per- at hemiopia being produced by the subsequent removal of convolution. It will, however, be necessary that further ex- ents should be undertaken, in order to determine more pre- , not only the extent, but also the relative importance of terior, posterior, and mesial portion of the visual area of the ."[37]

[36] P. 35.
[37] *Op. cit.*, p. 19.

AINS.—Riches treats sprains, of however severe a character, quarter of an hour's daily immersion in hot water, an india- r bandage, and daily massage. He reports (*Jour. de Méd. que*) rapid and brilliant results.

OFESSOR KAHLER, of Vienna, who has been suffering from fects of an attack of diphtheria, is now fully convalescent.

A CLINICAL LECTURE
ON A
CASE OF VEGETATIVE AORTIC VALVULITIS
WHICH PROVED FATAL BY EMBOLISM, ANEURYSM, AND RUPTURE OF THE LEFT PROFUNDA FEMORIS ARTERY.

Delivered at St. Bartholomew's Hospital.

BY SIR DYCE DUCKWORTH, M.D., LL.D.,
Honorary Physician to H.R.H. the Prince of Wales; Physician to, and Lecturer on the Practice of Physic in, St. Bartholomew's Hospital.

GENTLEMEN,—I propose to take for the subject of my lecture to-day the case of J. R., who was admitted under my care in John Ward on March 8th last. Many of you will remember this patient. His symptoms at first were in no way specially noteworthy, being such as we commonly meet with in cases of heart disease due to disorganisation of the aortic valves, and that the case gave me no unusual anxiety is proved by the fact that I allowed a candidate for one of our scholarships to examine him only a few days before his death, which, as we shall find, was not only rather sudden, but due to a very uncommon cause.

As you are aware, I prefer to make my clinical lectures as practical and demonstrative as possible, but it is not always possible to bring patients into this theatre, and if I confined myself to cases which I could only show here—or, indeed, during life—you would lose some of our most instructive experiences. My senior house-physician, Dr. Willoughby, has kindly written out the clinical notes of the case for me, and they well record the leading features of it. I will read them to you.

J. R., 26, lighterman, admitted March 8th, 1890. *Present Illness* began two months ago with severe cough and pain in cardiac region. Cough and pain have remained till the present. Has "laid up" since, and has suffered from pain in head, throbbing of heart, cough, spitting of phlegm with occasionally a little blood, and short breath. No swelling of feet. *Past History.*—Rheumatic fever when 9 years old; good recovery. No other illness since. Has been lighterman since age of 13 (thirteen years' hard work). Gonorrhœa three years ago; no syphilis. Always temperate. In August, 1889, rowed 2½ miles' race on the river (great strain). *Family History.*—Father has gout; mother has morbus cordis; one brother had "rheumatics." *Present Condition.*—Strongly built man; malar capillaries injected; lips anæmic. Pulse 112, "water-hammer;" well-marked capillary pulse. Temporal arteries tortuous. Fingers clubbed. Respirations 20. Coughs and spits scanty mucus. Temperature normal. The whole body pulsates visibly. Heart: apex beat fifth space, 1 inch outside nipple line; cardiac dulness begins at third cartilage, and goes straight to apex, not across to the right; cantering action of heart at apex, no murmur; at right base loud double murmur, loudest at mid-sternum, and the diastolic murmur conducted down sternum, the systolic up the carotids. Lungs, abdomen, and extremities natural. Bowels open regularly. Urine 1020, acid, trace of albumen.

March 18th. Sudden pain in left knee yesterday, lost again in the evening. To-day slight dull pain along inner part of thigh. No œdema of leg. To inner side of femoral artery a cord felt (? thrombus internal saphena vein). Some streaks of blood coughed up.

March 19th. Increased pain last night down left thigh. Temperature 101°. Heart apex rather farther out, 1½ inch outside nipple line.

March 24th. Nightly pain in left thigh, better during the day. No œdema of leg. On auscultating femoral artery the shock of the pulse is followed by short *bruit*.

March 26th. More pain last night. The double murmur is heard more plainly at the apex, conducted there from the right base. Pulse 88. Temperature not high since the 19th.

April 2nd. Pains had continued, but had been less in severity. Heart-apex only half an inch outside nipple line. (The spleen was felt one day about this date.) Scarcely any pains in leg. No cord felt. Pulse 92, regular.

April 8th. Until last night no change. Pain had almost disappeared, but gradually came on towards evening, and became severe at night. Slept with the aid of chlorodyne. A cord felt in the situation of the internal saphena vein.—7.15 P.M. Sudden great increase in pain, causing the patient to shriek out. On examination five minutes later, much swelling was seen on the inner side of the upper third of the affected thigh. This swelling ended abruptly below, was very tense, did not pit on pressure, and extended into the perineum. Pain intense. Profuse perspiration. A quarter of a grain of morphine given hypodermically. Later in the evening the swelling had extended downwards. The swelling seemed to be about three-quarters of an inch thick, that is, would have increased the diameter of the leg quite 1½ inch. Not quite half the thigh affected. The pulsation continued in the anterior and posterior tibial arteries all through till death.—Midnight. Some swelling has appeared nearer the knee, not continuous with that above; same character; no reddening. Another hypodermic injection of morphine given.

April 9th. 4.30 A.M. Slept off and on till now. Pain less, but still severe.—5 A.M. Complains of lumbar pains. Nothing abnormal found except in leg. The cardiac pulsation seems to shake the whole bed. Profuse perspiration.—6 A.M. Complained of faintness and of feeling "lost." Died at 6.10; no struggling; no loss of speech; no apparent paralysis.

Except for the rise to 101° on the 19th, temperature normal throughout.

Treatment.—Iron, spirit of chloroform, liniment and ext. belladonna locally to leg; chlorodyne for sleep, also other soporifics and local anodynes.

Post-mortem Report (Dr. Haig).—Body fairly nourished; rigor slight; left thigh obviously larger than the right. (Examination of the head not allowed.) Chest—Lungs: Some slight adhesions of the left lung; no fluid in either pleura; slight congestion in both lower lobes. Heart: Adherent pericardium; lax and old adhesions all over; weight, with adherent pericardium, 31 ounces; right side small, left large and thick; mitral valve normal, except as to the aortic cusp, which was thick and had ragged vegetations on the aortic surface; mitral orifice admitted four fingers; aortic valves incompetent, edges fringed with vegetations, some of them a quarter of an inch long; on the endocardium of the septum, below the aortic valves, was a patch of rough vegetations half an inch square. Vessels: Along the course of the aortic and left iliac vessels the glands were enlarged; no clots or other abnormality of the veins; on cutting into the adductor region of the left thigh, a large extravasation of blood was met with; this extravasation was situated mostly in the adductor region, and close to the bone; it extended backwards and pressed on the sciatic nerve in a large part of its course; the hamstring muscles were not affected; the blood, which was arterial, had penetrated between the fibres of the muscles with great force; the clots were removed in handfuls; the area of extravasation corresponded with the area of the swelling noticed during life; the profunda femoris artery was dilated in part of its course into a small aneurysm, which burst and led directly into the extravasation, and a pale adherent thrombus was found in the vessel close to the femur. Liver: 64 ounces. Spleen: 24 ounces, soft, no infarcts. Kidneys: together, 15 ounces, hard, capsules slightly adherent, no infarcts.

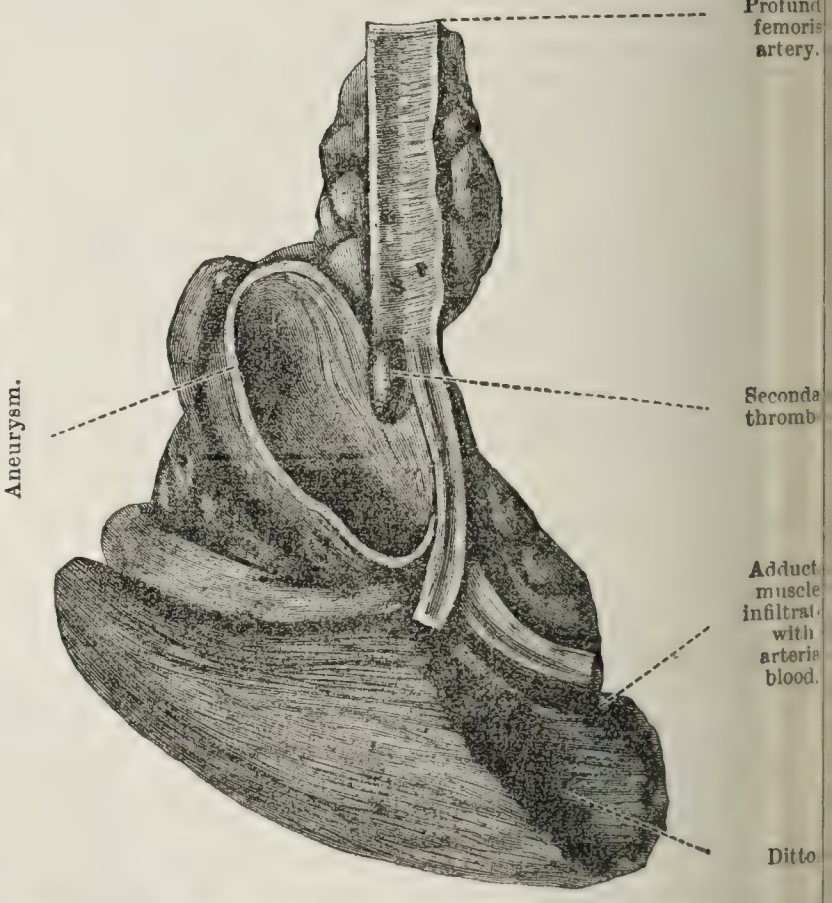
As I remarked just now, the physical signs in this man betokened the presence of diseased aortic valves. I will add, further, that they did not plainly indicate the existence either of pericardial adhesions which, as you are aware, are not certainly to be made out during life, or of proliferative valvulitis. In the latter condition, according to my experience, one is apt to note murmurs of a peculiar thrilling or musical character. There were none such in this instance.

Again, the idea of ulcerative, or at any rate of septical (infective), endocarditis did not occur to me, because there was practically an absence of pyrexia throughout the illness, and there were no indications of dissemination of infarcts in any organs of the body.

To be sure, the spleen became palpable at one time, and that might have been taken as evidence of such a condition, but the necropsy showed that there were no infarcts in that organ, nor in any other viscus.

I was, indeed, hoping that this poor man was gaining ground, and would be so far benefited by rest and treatment as to gain his living for a time in some tranquil occupation, though certainly not as a lighterman. You know that those who follow this tryin work commonly do so at great risk to their circulatory systen These men undergo great physical strain in rowing, they eat an they drink enormously, and often become the victims of cardia valvular, and aneurysmal disease in consequence. One can onl hope that steam power may come in course of time to be applie to this particular traffic on our river, and so all this suffering b averted.

The first untoward event in the case was the onset of pain i the left thigh, and I thought I noted a cordlike fulness at th site of the saphenous opening. A few days later, the femor vein appeared to be hard. The femoral artery never ceased t pulsate very violently, exhibiting the characteristic throb m with in cases of well-established aortic reflux, but not affordin to my ear, at all events, the peculiar diastolic *bruit* first describe by M. Duroisiez, and recognised confidently by my colleague, D Gee, in these cases. Certainly, I believed the trouble to be in t venous and not in the arterial circulation, and I treated it wit suitable posture and applications of belladonna. The veins we not, however, involved, as was proved at the necropsy. For ov three weeks there was localised pain, sometimes very severe, b no œdema appeared in the distal parts of the affected limb. C the twenty-second day came the final and most severe attack pain, accompanied with great and well-defined swelling below t groin. The latter was obviously a blood-tumour of arterial origi but the source of it could not be plainly determined during lif Death occurred partly by exhaustion and partly by syncope. was a most painful one, and hardly palliated by full doses morphine.



What was the origin and what was the mechanism of t untoward event? The former is not far to seek, and the latter now well recognised as a pathological process. My belief is t particles of fibrin were shed from the aortic valves, and plugg a portion of the left profunda femoris artery. In course of ti the nutrition of the arterial wall suffered, whence softeni aneurysmal dilatation, and ultimately rupture of it. You aware that aneurysmal dilatation of an artery may be set up embolism, and in this fashion are sometimes produced several sm aneurysms, with especial frequency, however, in the cereb arteries. I have known this process to occur in arteries such the brachial and its branches, of which Mr. Langton had an ample not very long since. The embolus is commonly arrested the bifurcation of an artery, and secondary thrombus may proc into the branch thus blocked.

Though grave enough, such events are perhaps less momento than those which ensue on the lodgment of infecting and sep

ts. In this case an abscess forms, and the poison of pyæmia thus circulated. The necropsy showed that the left profunda noris artery had been the seat of a small aneurysm about the e of a hazel nut, and that this had burst at last into the muscles the thigh. In this way a column of blood was driven with uliar force with each pulsation and injected into the muscles, npressing suddenly the anterior crural and the great sciatic ves. This fully accounted for the agonising pain experienced. this case there was no reason to believe that the valvular dis- e was of infective character; or, in other words, that it was an tance of so-called ulcerative or malignant endocarditis. The nical, no less than the *post-mortem*, evidence was against this w of the case. In a mechanical sense, the profunda femoris ery presents a favourable position for an obstructing embolus, l I think it probable that a secondary thrombus may have ex- ded from this vessel along the external circumflex artery.

And now in respect of treatment of this and such like cases. I ret to say there is little to be done. The indication is to secure t and to maintain good nutrition of the cardiac walls. Without exact diagnosis we acted rightly in this case. And here I would serve, by way of parenthesis, that you will often have to treat es in which you are unable to make a complete or accurate gnosis. You are not to withhold measures of relief from any ient because you do not know exactly with what you have to al. Remember that our business is always to do our best cording to the light we have, and hence we have often to pre- ibe for symptoms whose full significance we have imperfect owledge of. We must feel our way with caution and hope in e to gain more insight, and we can often do good.

The modern therapeutist is too much disposed to hold his hand l, in deference to what he calls scientific practice, to wait, do hing, and let Nature take charge. But unfortunately Nature not always kind, and in her workings causes much suffering l misery, which, as practitioners of medical art, we can surely netimes relieve. I would, therefore, urge a little less science l a good deal more art in many points of practical medicine at present time. Our forefathers had more of the art than we ve, and we have lost it in proportion as we have striven to be vays scientific. Never be ashamed to say you do not know. know a good deal and we shall know more, but we must help patients as far as we can, and often while in ignorance of ch that is going on.

n this case, then, in respect of treatment I find no room for ret. I do not see that more could have been done to afford ief or to ward off the rupture of the small aneurysm. I pass nd the specimen that you may study it for yourselves, and Mr. rk has made a drawing which is reproduced on the preceding ge. I could wish to tell you something more encouraging in res- t of the treatment of such cases as these, but I know not where find it. Happily they are not common, and it is, at any rate, couraging to know that many cases of aortic disease follow a pier course than this untoward one. Why in one case there uld be this proliferative (vegetative) form of endocarditis, and others no such overgrowth should occur we do not know, but is probably a matter of tissue proclivity and personal peculi- ty.

To trace the processes back somewhat remotely, we may say t, with care to avoid undue strain and exposure, rheumatic ease may be averted or held in check, and that with strict aperance in all things, many of the worst effects of cardiac l vascular disease may also be kept in abeyance. In some of se cases benefit may be had from the employment of iodide of assium and iron, and the undue action of the heart may be derated, provided always the patient is sufficiently fed and rished, by aconite given carefully and its effects frequently ed.

Five or ten minims of the tincture may be added to any other dicine which is employed, and in aneurysms which are accom- nied by a frequent pulse I have found on several occasions ch relief from this drug. It cannot, however, be employed ile treatment after Tufnell's method is being carried out, since patient is insufficiently nourished to bear it with safety. A s which well illustrates this you may see in No. 5 bed in John rd at the present time.

USPENSION.—Tiberghien (*Ann de Méd. et de Chir*, Bruxelles, 0, p. 21) reports excellent results from suspension in twenty- cases of locomotor ataxy with various complications.

PSILOSIS (LINGUÆ ET MUCOSÆ INTESTINI).

(With Chromolithograph.)

By GEORGE THIN, M.D.

In temperate and cold climates diseases of the respiratory organs are common, and diseases of the intestinal canal in adults in comparison rare. In tropical and subtropical climates, on the contrary, the relation is reversed. I once took occasion to express this fact by remarking that in the tropics disease strikes below the belt. But although cough is a symptom common to various affections of the respiratory organs, we do not use such terms as "the pulmonary flux of cold climates," or "arctic cough," whilst in regard to the intestinal derangements of tropical countries we do not seem to have got beyond the primitive stage designated by such expressions as "tropical diarrhœa," or "the intestinal flux" of hot countries.

The intestinal canal of an adult man is about eight mètres long. Nearly every disturbance of the structure or function of this long tube is attended by fluid discharge from some part of the mucous membrane, that is, by diarrhœa; but it does not require much consideration to understand that the flux may be produced by diverse causes acting in different parts of the canal. In the *Practitioner* for September, 1883, I published a short and very incomplete paper on an intestinal affection known in the East as "Indian sprue," the term given to it by the Dutch physicians of Batavia, where the disease is common, and who appear to have been the first to consider that there is a specific affection with symptoms which separate it from other forms of intestinal disease attended with diarrhœa. In the *Practitioner* for 1887 I published a series of papers giving a fuller account of the literature of the disease so far as it was known to me, and more particularly reporting in detail six cases of the affection which had been treated by myself.[1]

Briefly summarised, psilosis may be described as a chronic affection of the intestinal tract unaccompanied by fever (or any abnormality in the urine), with a remarkable and unusual disposition to an affection of the tongue and buccal mucous membrane, and with tenderness in the gullet. There is no blood or mucus in the stools, and no straining. As a rule the diarrhœa is not acute, or in any sense of the word severe, although it may be so paroxysmally. The motions may be considered characteristic. They are either of a pale straw, yellowish colour, frothy, quite unformed (in the first stages being chiefly passed in the early morning), or (and this is especially so in chronic cases which have lasted some time) they consist of a greyish-white pultaceous mass, often in a state of apparent fermentation, the motion being found covered with froth.

In some cases the symptoms in the tongue and mouth are particularly troublesome, the patient being unable to swallow anything that is hot either by temperature or seasoning, and even the weakest alcoholic drinks are not tolerated. A remarkable peculiarity of the affections of the tongue and mouth is their fugitive character. The tongue or mucous membrane may become the seat of an eruption which is almost herpetic at the outset, soon leaving the surface bare; or the whole tongue, or patches of it, may simply become gradually red and bare. In early cases this appearance may entirely disappear in a few days, but eruptions on the tongue and mouth frequently precede the relapses which are so common. The disease begins insidiously, is usually very chronic, and even after it is apparently cured the patient is very liable to a relapse. While it continues the patient becomes more and more emaciated, and often extremely anæmic. There is no jaundice and no bile in the urine, which is usually light coloured. The liver has a tendency to become smaller, and often becomes very much shrunken.

It has been long recognised from the clinical symptoms that certainly in the mouth, and probably in other parts of the canal, there was bareness or rawness of the mucous membrane, and it was to express this condition that I ventured to propose the term "psilosis" in order to invite the attention of observers to one of the

[1] These papers were republished by Messrs. Churchill in a small pamphlet, entitled, *Psilosis or Sprue; its Nature and Treatment*, and I wish to refer such of my readers as are interested in the subject to the *Practitioner* or to this pamphlet. I am obliged to lay particular stress on this reference, as the space now at my disposal does not permit me to discuss at present either the symptoms or the treatment.

most characteristic symptoms of the malady. I have had recently further opportunities of studying this disease, and, incomplete as these studies are, I believe it will be advantageous to publish some of them in order to suggest criticism and stimulate observation. Through the medium of the JOURNAL I hope that they will reach observers who are now treating cases both in England and abroad.

Psilosis, although not a very common disease, certainly cannot be considered rare. It constitutes a danger which specially threatens middle-aged and elderly residents in the Straits, in Batavia, in certain parts of China, in Ceylon, and probably some other parts of India. In patients who do not do well it is an exceedingly wearing and distressing malady, and in elderly or exhausted constitutions, the chances of rapid recovery are by no means so great as they are in younger people. The marvellous manner in which many of the patients recover when put on milk diet is one of the most striking things connected with the disease. The great majority of young patients, and many even of the elderly ones, respond at once to a diet of this kind properly carried out. Unfortunately the patients frequently do not consent to the necessary restrictions until the disease is comparatively far advanced: but even then in many of the younger patients, and in not a few of the older ones, a satisfactory cure may be obtained. A good result, however, cannot be reckoned on with certainty.

In the present paper it is my object to direct attention to two conditions which are probably peculiar to psilosis. One of these —the state of the tongue—I have thought it well to illustrate in the coloured drawing which accompanies this paper. The other point to which I now direct attention is the pathology of the disease. In 1888 I felt compelled to state that I was able to say almost nothing about its pathology and absolutely nothing of its pathological histology.

The patient, to whose kindness I am indebted for permission to have the drawing made which is reproduced in the accompanying plate, is a middle-aged man, who had spent the best part of twenty years in the south of China. After the first ten years' residence he visited England, and whilst at home suffered from unmistakable symptoms of psilosis, from which, however, he quite recovered, and then returned to China. After his return he was from time to time the subject of intestinal irritation, which disappeared on milk diet. He finally returned to England three years ago. When the cold weather began, the first winter after his return, the symptoms from which he suffered ten years previously returned; his digestion and general condition became bad, and he passed about three somewhat loose motions daily. When I first saw him, six months afterwards, he had lost two stones in weight, was free from fever, had an exhausted, worn appearance, and had not passed healthy motions during the whole winter. He was passing two to three motions daily, sometimes large in quantity, described as being yellowish in colour and of the consistence of jam. I purposely omit at present important details in connection with the case in order to devote the available space to the description of the tongue. The third time I saw him I described it as follows:—

"The whole surface of the tongue is smoother than natural, not furred, with a few cracks; but, taken as a whole, it is neither red nor glazed. On the surface of the right side, near the middle, there is a deep sinuous cleft extending longitudinally for over an inch. This cleft is very red, and has the appearance as if it bled slightly. Under the tongue in front there are several projecting pustular appearances and several rose-coloured or raw-looking patches. These make the tongue so tender that he cannot protrude it. On the inner surface of the under lip there are several small red patches and two pustules. The mucous membrane of the cheeks and roof of the mouth is very pale and anæmic. On the right side, in the centre of the cheek and extending backwards, there are several patches of a dark rose colour, the borders of which are not well defined."

The patient steadily improved under appropriate diet, and four weeks after the above description was written I noted regarding the tongue that "the fissure which bled on the surface is hardly to be detected. The surface of the tongue is pale; certain parts have a pinkish colour and are without fur, other parts having a deep red and spongy appearance. The point is a deep pink and raw looking. On the right side, extending from where the fissure was to the edge of the tongue and dipping under the edge, is a deep red surface. The pustules that were under the tongue have disappeared, and he can now protrude it." The claret-coloured and irregular patches on the cheeks were smaller, and there were fewer of them than on the previous occasion. After this time the patient improved rapidly, and the tongue got so well that, although I had made arrangements to have it drawn, the delay of one week was sufficient to render the appearance too indistinct to be valuable.

The general condition improved even more rapidly than that of the tongue. Within eight weeks of his being put on milk diet he had gained a stone in weight and passed healthy, formed motions. He passed successfully through the various gradations of diet described in the pamphlet to which I have referred, and became comparatively well. Unfortunately he had a relapse during the following winter, and I saw him in the end of December in a condition very similar to that for which he first consulted me—the condition being that of typical psilosis. The state of the tongue continued to vary for some time, improvement not supervening so rapidly on milk diet as it did on the former occasion. During a period of exacerbation in the condition of the tongue a drawing was made by Mr. Burgess. About this time my notes described the tongue as follows:—

"The upper surface is of a pale, pinkish-rose colour, the reddest parts running indefinitely into the whiter parts; not glazed. On the under side of the tongue on each side of the raphé there are circular, macerated-looking spots, deeply red, with small white patches. On the left side of the tongue, on the under surface, there is an irregular patch, nearly as large as a sixpence, distinctly limited on its borders with little islands of white epithelium in it. The borders are slightly whitish, the other parts are of a deeper red than usual. There is a similar patch under the right surface of the tongue. On the soft palate there are several erythematous patches." The patient was still free from fever, passing, on an average, two pulpy, whitish grey, offensive motions daily, sometimes partially formed, and the condition generally was that recognised as characteristic of the disease in its full development. There has been in both attacks a history of the usual sensitiveness to acrid or hot substances, with more or less tenderness of the tongue.

It is characteristic of the state of the tongue in this disease that it varies rapidly. Within a week of the time that the drawing was made, the upper surface was much less cracked and altogether smoother, and the white and red patches on the under surface of the tongue had almost entirely disappeared, both the upper and under surfaces presenting simply a uniform rosy tint, deeper than that of the healthy tongue, with a smoother surface and with the cracks fewer and shallower than is shown in the drawing. This rapid change in the condition of the tongue is remarkable, and, so far as I am aware is peculiar to this affection. In patients who do well under treatment, of whom fortunately there are many, well-defined appearances as characteristic as those shown in this drawing often disappear within ten to twelve days. It is of importance that attention should be directed to this point, as one case has come under my observation in which the disease was mistaken for syphilis and the patient subjected to antisyphilitic treatment.

A case that unfortunately ended fatally under my care in the beginning of this year enables me to throw some light on the symptoms of this disease, particularly those that characterise the advanced stages. I saw the patient, a man about 57 years of age in this country some five or six years ago. Although previous to that time he had suffered from severe attacks of renal calculus and, apparently, gallstones, he looked healthy and well, and much younger than his age. When he came this time under my care, he was in a hopelessly exhausted condition, and I am indebted to Dr Henderson, of Shanghai, and Mr. Low, who took charge of him on the passage to England, for valuable notes connected with the case. Briefly stated, the main facts are as follows:

In the winter of 1887 he was very severely chilled by exposure amongst ice and subsequent travelling in the extreme north of China. After that time, he ceased to notice perspiration, and had occasional attacks of diarrhœa. In March, 1889, still in the extreme north of China, he had a severe feverish illness, after which diarrhœa was very marked. At this time he lost 65 lbs. in weight in three months. Change of air was tried without benefit. Dr Henderson, who happened to be at Chefoo in August, 1889, saw him there, and, from the notes with which he has kindly furnished me, I find that the diarrhœa continued severe, the motions being liquid, pale yellow in colour, scanty, sometimes very frothy and offensive, but containing no blood. The patient was thin, anæmic, and sallow. The tongue was pale, smooth, and polished with lines on the surface. No aphthæ.

Dr. Henderson again saw him in October, at Shanghai, when motions are described as being either liquid and yellow, or cker and offensive, sometimes pale, sometimes watery. The se averaged 86 to 88, and the temperature always remained mal, or below normal. Mr. Low, who took charge of the patient m Shanghai to England, states that there were at first from to five motions daily, the discharge being loose, yellow, some- es pasty, sometimes frothy and bad smelling; the tongue being cribed as glazed, and red without papillæ. His general condi- a steadily deteriorated during the voyage, and in December, ie time after leaving Bombay, as he appeared to be sinking. . Low put him on a pure milk diet with a little arrowroot, and ilst on this diet the motions became thicker and the tongue so red. He began to sleep better and feel better. After a week the diet the tongue is described as being pale with some illæ, the temperature remaining normal; pulse about 88.

On January 23rd, the weather became very rough, and the ient was in consequence much worse, shallow ulcers appearing the tongue and the side of the mouth. With a temporary tement of the storm the patient at once improved, but the ather in the Mediterranean having become again stormy, he much weaker, the diarrhœa became greatly aggravated, and arrived in England in a state of extreme exhaustion and pro- tion, passing frequent watery, odourless motions. The tongue s pale red, smooth, and free from fur. On the inner surface of lower lip there was an eruption, herpetic in character, about size of a fourpenny piece. With care and rest in bed, and k diet, the diarrhœa diminished in intensity, and the watery ions gave place to yellow fæculent discharges. The patient's ngth steadily deteriorated, and he became the subject of ex- ne sleeplessness and feelings of intense *malaise*, and he died austed a fortnight after he landed. The progress downwards tinued without intermission from the time he came under my ervation, the symptoms from sleeplessness and nervous exhaus- n being of an exceedingly painful kind. During life a cardiac rmur was recognised. One of the chief features of the case intense thirst. The mouth, but more particularly the throat, very sensitive, and occasional small quantities of champagne, n which he got considerable relief, could only be swallowed en considerably diluted with water. Dr. Wethered was so d as to undertake the necropsy and the histological examina- n of the tissues. How fortunate it was that this task fell to hands will be best understood after his report has been read, by those readers who are most conversant with work of this d. Dr. Wethered's report is as follows:—

athological Report.—The necropsy was made on January 25th, , thirty-six hours after death; rigor mortis was well marked, body was greatly emaciated; the rib cartilages were ossified. opening the abdominal cavity nothing unusual was noticed he position of its contents; the intestines were of a peculiar vnish-yellow colour. On exposing the thoracic cavity, the rt was observed to be almost covered by the lungs, which e emphysematous and rather œdematous. Both pleuræ con- ed about half a pint of clear fluid, but there were no adhesions ther signs of pleurisy, except at the base of the left lung, ch was firmly adherent to the diaphragm, but this condition evidently of old standing. There was an adherent pericar- n, these adhesions also being not of recent origin; they ex- led all round the heart, and there was about half a drachm of r fluid between the adhesions. The heart was small in size firmly contracted; there was still a fair amount of fat round the substance appeared normal to the naked eye. The right cle contained a small quantity of soft red clot, but the other ties were empty. The mitral orifice admitted the tips of two ers with difficulty, but no vegetations were seen on the s, although the edges were thickened. All the other valves e healthy. The aorta was slightly fatty. The liver was and friable, but exhibited no change of structure. e was slight perihepatitis, and at the margin of the right lobe e evidences of some old fibroid change, with dilated bile ducts. e was a fair amount of fat in the omentum. The spleen was Both kidneys were healthy; the capsules peeled easily. The reas was rather shrunk. A small calculus was found in the der. Digestive tract.—The tongue was clean, papillæ rather rged, and the epithelium in some places seemed to be absent. walls of the œsophagus were a little thickened, but showed ther change to the naked eye. The stomach showed some *-mortem* digestion, and its surface was covered with an excess of mucoid-like material. The intestines gave a peculiar velvety feel to the hand, as though there was some thickening of their coats, but this was afterwards shown not to be the case. The walls of the duodenum were thin, and the whole of the interior lined with a thick layer of mucoid material, which could be easily scraped off, leaving the mucous coat of the intestine exposed. The

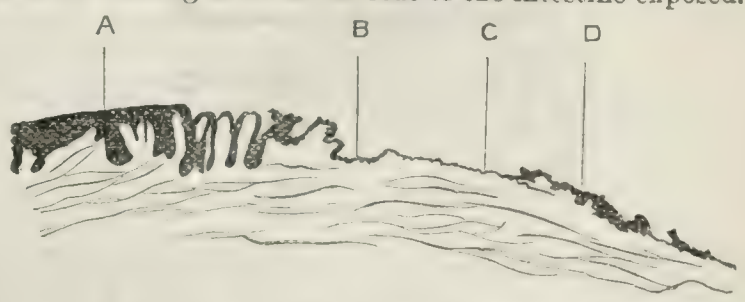


Fig. 1.—Vertical section through part of the tongue. A, normal epithelium; B, epithelium partially destroyed; C, a point where the epithelium has disappeared; D, partially broken down epithelium (low power).

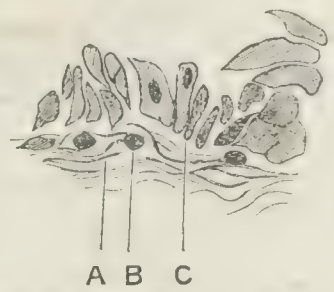


Fig. 2.—The part marked as B in Fig. 1 as seen by a high power. A, connective tissue of the tongue; B, leucocyte; C, partially detached epithelium. Hartnack VIII. Eyepiece 3, tube in.

walls were so thin as to be perfectly translucent, and the finger could be distinctly seen through them. No other change was apparent to the naked eye. The jejunum and ileum showed similar appearances, the characteristic features being the layer of mucoid-like material and the thinning of the walls. It was this

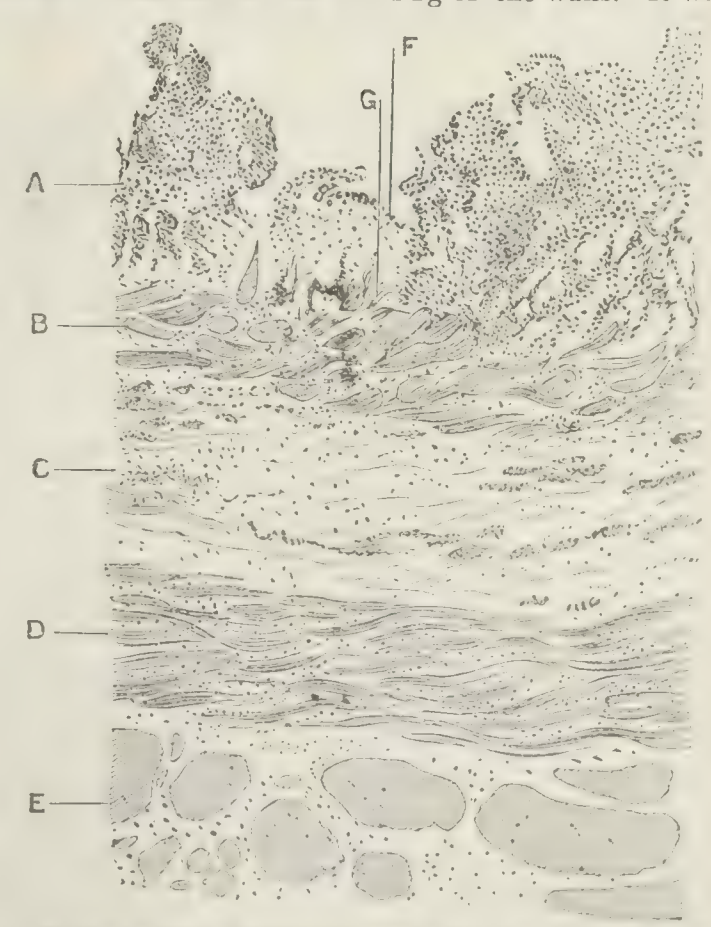


Fig. 3.—Vertical section through the œsophagus, showing the absence of the lining epithelium. A, mucosa thickly infiltrated with leucocytes; B, muscularis mucosæ; C, submucosa with leucocytes and connective tissue; D, inner layer of muscle; E, outer layer of muscle cut transversely; F, inner surface of œsophagus; G, point in the muscularis mucosæ. OO Verick. Eyepiece 4, tube out.

layer that gave the peculiar feel to the intestines described above. Congestion was absent, there being a few patches of injection

only. The Peyer's patches could not be made out. Passing to the large intestine, similar changes presented themselves. In the rectum the mucoid-like material was very thick, and on gently scraping it off a few abrasions of the coats were seen, exposing



Fig. 4.—Portions of Fig. 3 more highly magnified. The point marked F in Fig. 3, showing that the œsophagus is lined by a granulation-looking tissue. A, leucocytes; B, connective tissue. Hartnack VIII. Eyepiece 3.

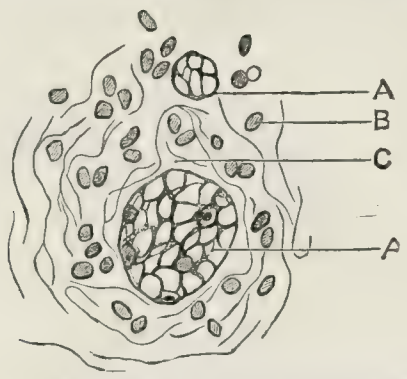


Fig. 5.—The point marked G in Fig. 3 more highly magnified, showing unaltered bundles of the muscularis mucosæ close to the surface. A A, bundles of involuntary muscular fibre (muscularis mucosæ): B, leucocyte; C, connective tissue. Hartnack VIII. Eyepiece 3.

the muscular coat. Nowhere was there any trace of ulceration or deposit of fibrinous membrane.



Fig. 6.—Vertical section through the jejunum. A, free surface composed of mucoid-looking unformed material; B, Lieberkühn's crypts unchanged; C, connective tissue of submucosæ; D, circular layer of muscular fibre cut transversely; E, external muscular layer; F, crypt showing first stage of destruction; G, inflammatory focus in the mucosa. Hartnack III. Eyepiece 3, tube out.

Microscopic Examination.—The portions of intestine were thoroughly hardened in Müller's fluid, embedded and cut in celloidin and stained with picro-lithium-carmine. *The tongue* (Fig. 1).—The epithelium was seen to be completely destroyed in some places, the destruction gradually passing into healthy tissue. The throwing off of the epithelial cells is well seen in Fig. 2. The muscular layers seemed to be quite healthy, so that the morbid process could not have penetrated deeply. *The œsophagus* (Figs. 3, 4, and 5).—Very marked and extensive changes were noticed

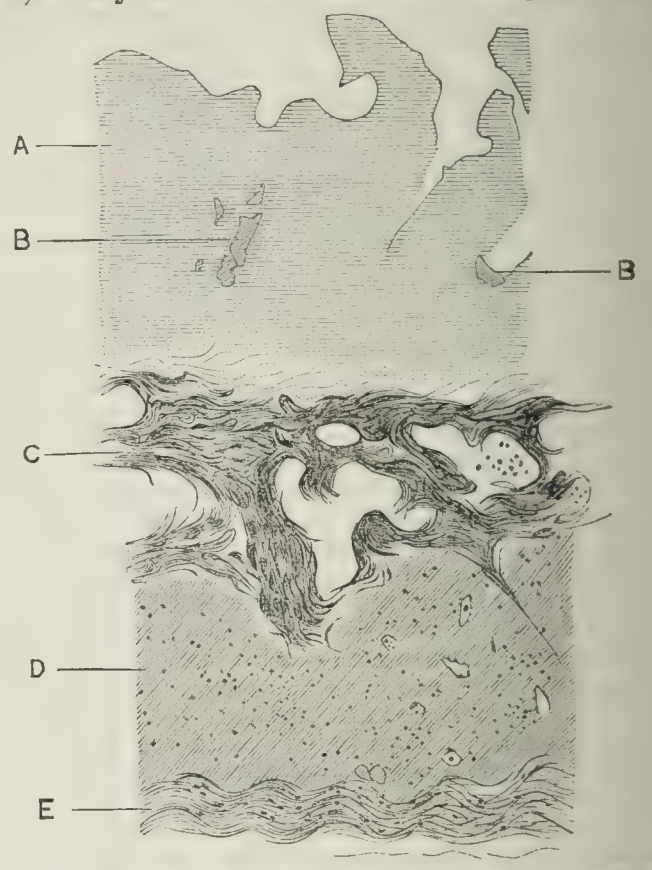


Fig. 7.—Vertical section through ileum. A, unformed mucoid-like substance lining the gut; B, remains of Lieberkühn's crypts; C, strongly developed fibrous tissue taking the place of the submucosa; D, circular layer of muscular fibres cut transversely; E, external layers of muscular fibres. Hartnack III. Eyepiece 3, tube out.

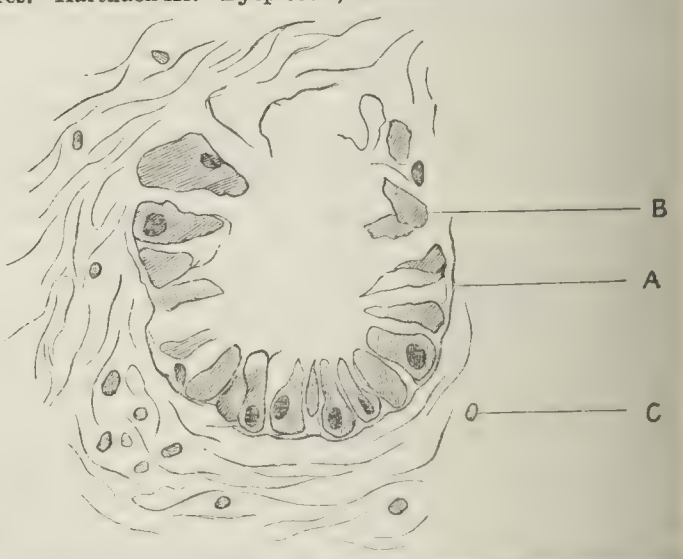


Fig. 8.—Remains of a Lieberkühn's crypt in mucoid-like substance lining ileum. A, membrana propria; B, detached epithelial cell; C, leucocyte. (The cells did not show evidences of breaking up, but there are evidences of loosening from the surrounding tissues.) Verick immersion No. XII. Eyepiece 1, tube out.

here. The epithelium entirely destroyed, and the mucosa densely infiltrated with small round cells. The inflammatory products were seen to have penetrated to the muscular layer; the submucous coat was thickly packed with exudation cells, and the glandular substance to a great extent destroyed. *The stomach and duodenum.*—No abnormal changes were noticed in these. *The jejunum* (Fig. 6).—Effects of the disease were again apparent here. Slight inflammatory action was noticed, as shown by the exudation cells and some destruction of the Lieberkühn's follicles. The epithelium of these seemed to be very little affected. *The ileum* (Figs. 7 and 8).—It is here that the most marked changes were

nd. The mucosa was almost entirely destroyed, being replaced a structureless substance enclosing leucocytes, and here and re the remains of a follicle. These remains are shown under a h power in Fig. 8, in which it will be seen that the epithelium ng the follicle is beginning to be detached. The submucosa eared much thickened, and the fibrous tissue abundant and e than usually solid in consistence. The walls of the vessels e also thickened, altogether denoting a more chronic process n in the other parts of the intestinal tract. The muscular er was thinned. The cæcum and rectum showed no changes. er sections were stained with methyl blue in order to search micro-organisms. As is usual with sections of intestine, some e found, but they were not more numerous than usual, and no inctive grouping could be made out.

he pathological changes described by Dr. Wethered are not y new but explain, in an unexpected way, some of the most portant symptoms of the disease. Their importance will be appreciated by those who have had the care of patients suffering from it abroad and in this country. An œsophagus entirely stripped of its lining epithelium and its glandular structures, and an ileum in which the absorbing and secreting surface practically useless, constitute pathological changes of the atest gravity and suggestiveness. We now understand how it hat patients complain not only of tenderness of the tongue and uth, but find great difficulty in swallowing hot or acrid substances. Some of my patients have suffered great distress from ir inability to swallow certain kinds of food, and one unfortunate erer often spent hours in endeavouring to hawk up morsels of ad which neither would go down nor up, and which, in the light what we now know, probably stuck in pockets of the gullet ubricated by the mucus which is needed to smooth the passe of the bolus. Another patient, in whom it was impossible ind a tender spot anywhere else, always complained of a certain uneasiness when the fingers were pressed firmly upwards er the sternum in the direction of the gullet, and occasionally plained of a choking sensation when attempts were made to llow solid food.

o little seems to be known of the exact changes which take e in the ileum in the process of digestion that it is very difficult *a priori* to understand what the effect would be of the practical obliteration of that part of the gut, but it is quite certain t such a large extent of surface must perform functions of a y important kind. Here again, as in the case of the œsophagus, the pathological changes bear out the results of clinical observation. As the stomach, liver, and pancreas were unaffected, estion must have taken place in the first instance, but as soon the bolus descended to the ileum further digestion, at all nts in so far as it depended directly on the condition of that , would be arrested. As regards absorption, not only is the orbing vascular surface practically destroyed, but the subcous connective tissue is converted into a thick sclerotic layer ich must have interfered with the absorbing functions of any he deeper vessels that may have remained. Not only so, but thick coating of mucoid-like substance that covered the free face of the bowel must have prevented the contact of the contents with the mucosa, such as it was. The result of such a condition must interfere directly with assimilation and nutrition, and se are functions which are profoundly affected in this disease.

he bolus, by the time that it has reached the ileum, has acred, at all events in the centre, an acid reaction which, to some ent, must be neutralised by the alkaline succus entericus. The truction of the crypts of the ileum must therefore lead to the ure of the supply of this alkaline juice, and the acidity must so much be increased, and possibly also the chemical constitus of the bowel contents. With this condition we may with bable justice associate the frothy fermenting appearance of stools. The large masses of fæculent discharge passed by some ients it is also fair to attribute to the want of absorption in ileum.

othing has been discovered in this or in any other case to ount for the peculiar pathological changes described, but their e extent suggests some morbid agent acting from the free surs, leading to a chronic and low form of congestion of the superal blood vessels with consequent gradual destruction of the helial structures. It is not to be forgotten that in the stomach, h its acid secretion, no destruction had taken place. The fact t the stomach, duodenum, and, to some extent, the jejunum, h the liver and pancreas, are practically uninjured accounts for the long duration, with alternating improvement and relapses, that characterises the history in many of these cases. The acute relapses of diarrhœa to which these patients are all liable after recovery is also explained by the condition of the ileum, because it is probable that even in cases in which apparently good recovery has taken place the membrane, with its vessels, is to some extent permanently impaired, and therefore is easily affected by the ordinary causes of intestinal catarrh.

Space will not at present allow me to pursue the subject further. Before long I hope to resume its consideration, more particularly in its practical aspect. I would only now remark that the fresh knowledge which has been gathered shows how necessary it is that patients who acquire this disease should recognise its gravity in its early stages, and sacrifice everthing towards seeking recovery in good climates and by appropriate treatment. On the other hand, I think we ought to recognise that in cases which appear to be hopelessly affected attempts should be made to render what remains of life less painful, and to humour idiosyncrasies more perhaps than has hitherto been done.

NOTE ON MESENTERIC AND OMENTAL CYSTS.

By SIR SPENCER WELLS, Bart., F.R.C.S.,
Surgeon to the Queen's Household.

A very able paper by Dr. Rasch, read last November at the Obstetrical Society, on a Case of Large Chylous Cyst of the Mesentery, and published in the 31st volume of the *Transactions* of that Society, induces me to bring before the profession notes of two cases which have occurred in my practice since the publication, in 1885, of my last work on *Abdominal Tumours*. In that work there is a short chapter on Mesenteric, Omental, and Pancreatic Cysts, and on Undescended Testicle, with some account of a case where I opened and drained a mesenteric cyst, and of another where I removed, in 1882, a solid mesenteric tumour as large as an adult head. Although this tumour proved to be a sarcoma, the lady remains, eight years after the operation, in good health.

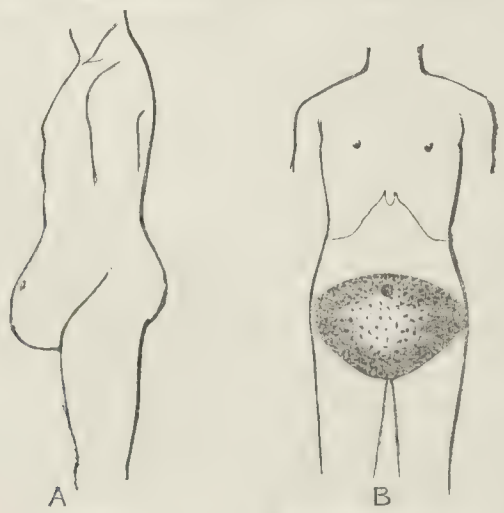
Dermoid Mesenteric Cyst.—The first of the two cases I now record bears some resemblance to Dr. Rasch's case of chylous cyst, but it contained fatty or stearoid matter, instead of chyle, and I have scarcely a doubt that it was congenital. The patient was an unmarried girl, aged 19, whom I saw in October, 1888, with Mrs. Garrett Anderson, who was disposed to regard a central fluctuating abdominal tumour as a large hydatid tumour of the liver. Dulness extended from the lower edge of the liver downwards for about four inches below the umbilicus. Thence to the pubes there was resonance, and vaginal examination excluded the idea of any pelvic tumour. Both flanks were clear on percussion. The cyst or tumour could be pushed rather freely from side to side, not at all upwards or downwards. This and the rather doubtful fluctuation, and absence of hydatid fremitus, or any sign of liver disease, were against the supposition of hydatid disease of the liver, and the history pointed to some congenital tumour of the mesentery or omentum. It was, therefore, arranged that I should make an exploratory incision, and I did so on October 21st, 1888, commencing in the middle line just below the umbilicus, and carrying it downwards for about three inches. On opening the peritoneum and pushing aside a coil of intestine, the mesentery appeared in cyst-like form, and yellowish-white in colour. On dividing the mesentery and holding the edges of the opening carefully forward so that none of the contents could escape into the peritoneal cavity, yellowish semi-solid fatlike matter escaped. More was pressed out, and some bundles of fine hair were also removed by the fingers. Then the cavity, which extended backwards quite down to the spine or root of the mesentery, was thoroughly cleansed by fine sponges. On considering the question of drainage, the difficulty of keeping such a large deep cavity thoroughly aseptic, and the doubt whether reaccumulation would or would not take place, it was decided not to drain, but to close the wound, including the opening in the mesenteric sac with the peritoneal edges of the opening in the abdominal wall. The fatty matter removed weighed six pounds. Some of it was kindly examined for me, at St. Thomas's Hospital, by Mr. Shattock, who reported it to be "a

mass of flattened epithelial cells with a considerable amount of fatty material amongst them. There are a few hairs present as well. Treatment with solution of osmic acid turns the substance black from the amount of fat in it. There can be no doubt that it has come from a dermoid cyst."

There is little to remark on the progress after operation except that there was sickness on the first and second day, and more fever for three or four days than usual after antiseptic abdominal sections, the temperature once reaching 103.2°, and the pulse 124; but by the seventh day, when the sutures were removed, the general condition was good, and the pulse and temperature hardly above the normal standard. The wound healed perfectly without discharge of any kind, and when the patient left London for Manchester there was no evidence of any refilling of the cyst. Her father wrote to me on November 20th, that she had borne the journey well, and I did not hear from him again until June, 1889, when he wrote that there "comes from the wound a very slight discharge of matter." I directed them to use a little iodoform and boracic lint as dressing, and did not hear again until October, 1889, when her father wrote that she "keeps very well," but that on the scar there was "a small portion of flesh, like a very small bladder, with a very small hole, out of which a very little matter comes now." The dressing was continued and a pad and bandage worn. The general health was good.

On May 21st, 1890, I saw her in London, in excellent health, with no signs discoverable of anything abnormal in the abdomen, except the cicatrix below the umbilicus with a projection of the upper part of it, very thin, like a small umbilical hernia, the size of a large grape. The skin, or cicatrical tissue, was very thin and easily pressed back, and at the upper part was a pin-hole opening through which a little matter was said to escape occasionally. I directed the use of iodoform to be continued, and a firm pad or plug of cotton wool to be well supported by plaster and a bandage. The general health was so good, and the discharge so very slight, that I postponed any idea of closing the hernial opening by stitches.

Omental Cyst.—On May 4th, 1888, a little girl, aged 4, was taken to Dr. Ransom, of Nottingham, who has favoured me by the following copy of notes taken by him on that day. "Her mother says she has had a large abdomen from early infancy, and that it has increased for the last twelve months. She suffered from affection of the abdomen five months ago, which was then called infantile remittent fever. At that time she had abdominal pains, but no diarrhœa. Now she is a pale, delicate looking child, not well nourished, but not seemingly ill. Complains—through her mother—of being soon fatigued, and of an increasing swelling of the belly. On examination one finds the abdomen prominent chiefly below the navel, and the prominent area is dull on percussion and fluctuating. On being examined standing, and in profile, the outline is as shown in Fig. A. When lying on the back, although the flanks bulge and the anterior face of abdomen about the navel is rather flat, yet the fluctuation and dulness are confined to the pelvic and hypogastric areas, as shown in the shaded parts of Fig. B. The conclusion was arrived at that there was a thin liquid in a thin walled cyst, probably ovarian."



Vertical. Horizontal Supine.

Soon after the above notes were taken the child was brought, by Dr. Ransom's advice, to see me in London, and after consultation with him by letter I drew off all the fluid, about 3 pints, by a very fine trocar and aspirator. The fluid was little more than water, with a mere trace of albumen, and no evidence of hydatids; when empty no remnant of cyst wall could be felt. Considerable relief followed, and she was taken back to Nottingham after three or four days.

Dr. Ransom's notes of subsequent progress are as follows:—

"June 13th, 1888. The cyst was tapped by Sir Spencer Wells about four weeks ago, and now it is filling again somewhat. She has a little pain, feels poorly, is rather fretful, and has an evening temperature of 100°; appetite impaired; bowels confined. Rest and gentle laxatives enjoined.

"September 21st, 1888. After last report she improved somewhat, but of late has been languid and pale. The swelling of belly is greater, and the cyst seems decidedly fuller. An operation for removal was advised."

I saw her again to consider the question of removal, and it was arranged with the parents that, as soon as Dr. Ransom thought the pressure of the fluid was doing harm, I should remove the cyst. It filled very slowly, and she was pretty well all through the autumn and winter of 1888. In February, 1889, Dr. Ransom wrote to me that "the cyst is certainly not tight, but it is bigger and the child suffers; I think you will have to remove the cyst some day."

Increase of the abdomen went on, but very slowly, and it was not until June 4th, 1889, that I operated, proceeding exactly as I should have done for a unilocular extraovarian cyst, Dr. Day administering methylene and Mr. Doran assisting me. On dividing the abdominal wall before opening the peritoneum, this bulged forward between the divided edges of integument, as if there was free dark fluid in the peritoneal cavity or in a very thin-walled cyst. After drawing the peritoneum carefully forwards, the latter proved to be the case. There was no free peritoneal fluid, but a very thin cyst-like expansion of the omentum was adherent in the right iliac fossa to the abdominal wall and to the cæcum and appendix cæci. The fluid was clear and watery, like that removed at the tapping, and measured rather more than 4 pints. When it was empty I proceeded to free the cyst, or the sac-like distended portion of omentum, from its adhesions. This was troublesome and took several minutes to do. In the upper part of the omentum there were a few small cyst-like collections of fluid like grapes. Some of these were removed after ligature and division of the sort of pedicle formed by the part of the omentum which had been adherent. Others above the site of ligature were simply pricked and emptied. The wound was closed as in ovariotomy.

Very little pain or sickness followed the operation, and only slight fever. In about a fortnight the patient returned to Nottingham. Her father wrote to me in November, 1889, enclosing a photograph to show how well the child was looking, and saying "She eats, drinks, and sleeps well, and romps about in a very different way to what she used to." Dr. Ransom wrote to me May 26th, 1890: "The child has been quite well ever since the operation."

Dr. Ransom's son made a careful examination of the cyst-like portion of omentum removed, and will probably send his report for publication. I would advise anyone interested in the mode of formation of these mesenteric and omental cysts to refer to Dr. Rasch's paper already referred to, and the interesting discussion to which it led, to Mr. Doran's valuable papers in the 23rd volume of the *Obstetrical Transactions*, and the 68th volume of the *Medico-Chirurgical Transactions*, and to Mr. Lockwood's first Hunterian Lecture published in the JOURNAL, June 15th, 1889.

INSANITY CURED BY INFLUENZA.—In a recent number of the *Neurologisches Centralblatt*, Dr. Metz records the case of a man aged 30, who had suffered from mental disease since the summer of 1888. In February, 1889, he became affected with delirium of persecution, and was so violent that he had to be placed in confinement. At the beginning of the present year there was an outbreak of influenza in the asylum. The patient in question was attacked on January 13; on the 17th he wrote a rational letter to his wife, giving a clear and coherent account of all that had occurred since he had become insane. He dated the recovery of his mental lucidity from the day on which he was attacked with influenza. On February 9th he was discharged cured.

NAVAN UNION.—The Navan Guardians have reduced the salary of medical officer to the workhouse from £100 to £80 per annum and £5 as consulting sanitary officer. A vacancy has arisen in consequence of the death of the late Dr. Nolan.

REMARKS
N THE SURGICAL TREATMENT OF TUBERCULOSIS OF THE PLEURA AND LUNG.

By Professor Dr. TILLMANNS,
Leipzig.

r the Congress of German surgeons held this year at Berlin, I owed a patient whom about two years previously I had cometely cured of severe tuberculosis of the left pleura and left lung r extensive resection of the front part of the left chest wall. ie tuberculosis of the left pleura and left lung was made cessible for purposes of local surgical treatment by removal of e fore part of the left chest wall, which was also affected with bercular disease. The heart was displaced to the right behind e sternum as the result of an empyema of more than two ars' standing. After the cure of the tuberculosis of the left eura and the left lung, I converted the left pleura into a taneous cavity by transplantation of skin according to iersch's method. The healthy right lung and the heart, which ill remains displaced to the right, now act so well that the tient, in spite of the loss of his left lung, has since about September, 1888, been able to attend to his business as a merchant ite in the same manner as before. My observation is also of terest with reference to the operative treatment of tumours and her diseases of the pleura and lung. The Editor of the British EDICAL Journal has invited me to report on the case to which have referred. I hereby very gladly comply with the request, and I propose to add some remarks on the surgical treatent of diseases of the lung and pleura.

In the first place, with regard to the history of the above menoned case, the following are the chief points. The patient, who now 28 years of age, came under my care on April 19th, 1888. e presented the appearance of one in the last stage of phthisis. he left lung was phthisical to a high degree, the pleura being rmly adherent in its upper third; in the sputum numerous bercle bacilli were found. In the two lower thirds of the left leural cavity there was an empyema which had been in existence r two years and a half; several fistulæ traversed the left front est wall, which was also the seat of tubercular disease. As a sult of the left-sided empyema, the heart was dislocated to the ght behind the sternum. The right lung was comparatively ealthy, and acted well. In the middle of October, 1885, the patient ecame affected with serious left-sided empyema, and after that me (that is to say, for more than two years and a half) he was, ith few exceptions, confined to his bed.

In November, 1885, about three litres of pus were removed by eans of puncture (thoracocentesis). In September, 1886, and anuary, 1888, thoracotomy, with resection of a piece of rib at the wer and hinder part of the thorax, was performed by a practioner in Saxony. When the patient came under my care in April, 888, I first sought to cure the existing left-sided empyema by eans of extensive rib resections—from the second to the sixth rib n the left side in front, and of the seventh, eighth, and ninth ribs n the left side behind—of course with slight hope of success, since ie left lung was already the seat of serious tubercular disease. s the patient was becoming steadily weaker, and had no prospect ut that of a speedy certain death before him, I determined to exose the tuberculosis of the left pleura and left lung by extensive esection of the anterior part of the tubercular left chest wall -ribs as well as soft parts—and subject it to energetic local eatment. In this manner the left lung would certainly be laced completely, and probably for ever, *hors de combat*, and the atient would have to be contented with the work of his right lung lone. But the left lung was extensively diseased, and had been nctionally incapable for months, and the patient had, in fact, een for months entirely dependent on his healthy right lung. y too long waiting the right pleura and right lung would also ecome tuberculous. On May 27th, 1888, therefore, the front part f the left chest wall, tuberculous and riddled with fistulæ as described, was resected *in toto* for an extent of from 5 to 12 centiètres, from the second to the sixth rib, close to the left sternal order. The breadth of the portion of the thoracic wall removed was 5 centimètres at the upper part; it became wider from above downwards, and measured 12 centimètres in breadth at the lower part. The whole of the left pleura was tubercular to a high degree; the left lung was phthisical, and only as large as a man's fist, and was firmly adherent at the level of the first rib. The left lung was partly covered by a pedunculated skin flap taken from the thorax, in such a manner, however, that it remained accessible to local treatment. The left pleura was energetically scraped with a sharp spoon, and then stuffed with iodoform gauze. On June 22nd the left pleura, after repeated previous scraping with the sharp spoon, was converted into a cutaneous cavity by transplantation of skin according to Thiersch's method. Local treatment of the left lung proved unnecessary in the further course of the case. The organ shrank together steadily more and more, and the tuberculosis, of which it was the seat, underwent a process of spontaneous cure in consequence of this shrinking. The patient was discharged cured on July 23rd, 1888. He has remained quite well up to the present time. He can attend to his business as a merchant as before his illness, and presents a blooming appearance. When I saw him again for the first time some time ago I did not recognise him at the first glance, so stout had he become. The left lung, entirely collapsed, can be felt in the upper part of the left side of the thorax, at the level of the first rib behind the flap of skin which partly covers it; it is quite inactive. The right lung is absolutely healthy; the heart is still displaced to the right. The left pleura is a skin cavity of the size of a man's fist, and covered with epidermis. In speaking and on deep inspiration the mediastinum is arched to the left. At the lower part of the mediastinum, that is, the median wall of the skin cavity, the movements of the heart can be seen and felt. The strength and movements of the left arm are not impaired, but perfectly normal.

I recommend that in similar severe cases of one-sided tuberculosis of the pleura and lung the same procedure should be adopted as I carried out in the case related, that is to say, the seat of disease should be exposed sufficiently for local surgical treatment by free resection of the chest wall in front or behind. In suitable cases the performance of a temporary resection of the chest wall may be recommended. A pedunculated flap of skin and bone is formed, and turned back, and afterwards when the disease of the pleura and lung is cured, the thoracic coverings are replaced in their original position. One can also proceed in such a manner that, after extensive resection of the ribs, the soft parts in the chest are divided in the direction of the lung, the two flaps of soft tissues drawn apart with wound hooks, the pleura and lung subjected to adequate local treatment, and then the soft tissue flaps united to the pleura by compression. In my above related case I was obliged to remove the anterior part of the left chest wall *in toto*, as it also was extensively diseased.

Our case teaches further, in my opinion, the manner in which unilateral tumours of the pleura and lung may best be removed. In these cases, likewise, the pleura and lung should be exposed by total or temporary resection of the chest wall or by resection of ribs with division of the soft parts of the thorax in the direction of the lung; and then later on, by a second operation, the diseased lung, which is by this time collapsed, should be removed, and the tumour extirpated or destroyed with Paquelin's thermo-cautery.

Recently I have also treated pulmonary phthisis by injections of iodoform glycerine and iodoform oil. I use 10 per cent. sterilised mixtures of iodoform glycerine or iodoform oil, which I inject into the lungs to the amount of 5 grammes, with antiseptic precautions, through an incision in one of the intercostal spaces. I have not found it advantageous to inject more than 5 grammes. At first I made the injections under chloroform narcosis; now I make them without an anæsthetic. Beyond ordinary dyspnœa, which quickly passes away, I have seen no injurious effects. I always make the injection into one lung only, never into both at the same time. I usually perform the injections at intervals of from one to two weeks; in slighter cases I make them every three or four weeks. With regard to the real advantages of these injections of iodoform into the lung I cannot as yet make any positive statement; I have not yet tried the method long enough, or in a sufficiently large number of cases. What I have seen up to the present, however, encourages me at all events to continue the treatment of pulmonary tuberculosis by injections of iodoform.

Dr. Emilio Di Tommasi, lately a member of the staff of the *Riforma Medica*, is about to proceed to Bolivia to establish an antirabic and bacteriological institute in the town of La Paz.

ON THE SURGICAL TREATMENT OF GENERAL PARALYSIS:

WITH NOTES OF A CASE IN WHICH TREPHINING WAS PERFORMED.

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AND
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W. F., a male patient, aged 29 years, was admitted into the Banstead Asylum on April 20th, 1889, with well-marked symptoms of general paralysis. He had been a railway guard, and there was a history of a blow on the left side of the head, caused, fifteen months before, by being jerked off the train. No depression could be felt, but he complained of great pain over the region of the blow, which was about 2 inches above the left ear. He exhibited large delusions, there was motor impairment of speech, some ataxy, and the patellar reflexes were very indistinct. As it seemed probable that the injury was the cause of the disease, and it was possible that some injury to the bone might be found, it was determined to trephine over the seat of injury, with the object of relieving pain, draining off some fluid, and lessening pressure. There was no history of syphilis. For the purpose of operation, the man was removed to St. Bartholomew's Hospital, and placed under the care of Mr. Harrison Cripps, whose account of the operation is here given.

Before leaving the asylum, his symptoms were very carefully noted by Dr. Habgood, whose account is as follows: "He walks with feet rather widely apart, bringing the heel down heavily. He cannot walk along a line nor stand with his feet close together without swaying, and not at all with his eyes closed, whilst in turning quickly he loses his balance. The hand grasp is strong on both sides, and the hands, when held out, are steady. Reflexes: plantar well marked, right knee-jerk sluggish, left normal; cremasteric and abdominal well marked. He can distinguish a point, but cannot feel the difference between a sharp and a blunt edge on the legs and arms. Can tell differences of temperature. Optic disc pale, but normal. Right pupil rather larger than left, but both react to light and accommodation. The senses of taste and smell were affected."

On January 27th the operation was performed, and for the following notes of the operation we are indebted to Mr. Bird, House-Surgeon of St. Bartholomew's Hospital:

The whole scalp, being previously shaved, was thoroughly cleansed with soap and water, and was covered with a carbolic antiseptic dressing twenty-four hours before the operation. The patient being placed under chloroform, a semicircular incision was made through the tissues of the scalp down to the bone, extending from the anterior inferior angle of the left parietal bone upwards to the middle line, and then downwards to the posterior inferior angle. The flap thus marked out was reflected from the bone, and turned downwards. Several bleeding vessels were at once ligatured with fine Chinese twist. A trephine cutting a 1-inch circle was applied just in front of the left parietal eminence. The disc removed was moderately thin. A second disc was then cut out, about an inch posterior to the former, the intervening bridge of bone being sawn through and removed. There was considerable bulging of the dura mater. A branch of the middle meningeal artery and some meningeal veins were divided and tied. A portion of the dura mater, arachnoid, and pia mater was now removed over an area somewhat less than the hole in the bone. The scalp flap was then replaced, and accurately united by fine ligatures, a small piece of drainage tube being inserted. An antiseptic dressing was then applied, and the head firmly bandaged.

The wound was dressed on the following day, and the drainage tube removed. In the course of a few days the whole flap firmly united by first intention without any constitutional disturbance.

On his return to the asylum it was noted that his condition had in many particulars improved. The pain in the head had entirely disappeared, and his memory was much better. There was no trace of delusion beyond a certain amount of contentment and sense of well-being. The motor symptoms appeared to be stationary. After being out on trial for a month in the care of his wife, he was discharged on April 18th, there being no mental disease beyond a little dulness to be observed, apart that is from the motor impairment. It is to be remarked that no convulsions have at any time been noticed either before or since operation, but as is well known, this symptom is often deferred until a late stage of the disease.

On May 14th, in answer to inquiry, I received a letter from his wife, from which it would appear that though the railway company gave him a situation as ticket collector, he has not been able to retain it. She also says that he appears to be suffering from some intestinal complication and is also irritable, whence it would seem that he is in much the same state as when he left the asylum. Was the operation justified in this case?

There is no doubt that some of the painful urgent symptoms were removed, and that the mental state as regards memory was much better, but the motor symptoms appear not to have been relieved. It must be remembered that the symptoms were well advanced before operation was resorted to, and that so far did his insanity disappear that he became responsible, and might safely have been permitted to make a will. In fact, a certificate of insanity could not have been made out against him.

We wish now to record the sequel to the account given in the JOURNAL of the first case, the man who was trephined last July, when in a very advanced state of disease. This patient, it will be remembered, before the operation often had convulsive seizures, chiefly on the left side. After the operation he went on very favourably until September 18th, when he had an attack of faintness with slight numbness of the left hand, which however soon passed off. From this time his mental condition improved greatly; he was cheerful and able to read several hours consecutively, his memory improved, and he had no recurrence of the convulsive attacks. The motor symptoms did not improve. So well did the patient become that from the disappearance of the mental symptoms it became impossible to keep him under certificates, and his discharge to the workhouse was ordered, when on February 14th he had a strong attack of convulsions, and after lying in a comatose state some time he died on February 20th, 1890, six months after operation.

It was noticed that during this last convulsive attack, though there was a little pulsation, there was no bulging over the trephine hole, and this led us to suppose that no benefit would be obtained by opening up the scar. The absence of bulging was accounted for at the *post-mortem* examination, and there is no doubt that it would have been good practice to have again operated. At the *post-mortem* examination, the place of the removed bone was found to be filled with a very dense fibrous membrane (which doubtless prevented any bulging), and about six ounces of fluid were obtained from the brain. The under surface of the above mentioned fibrous membrane was found adherent to the cortex in the middle of the ascending frontal convolution. The mitral valve was thickened, and this may have accounted for the fainting attack already noted.

Whether the fluid found in the brain in general paralysis is primary or compensatory is a question of some interest and importance. There can be no doubt that in both the cases operated upon, the fluid was exercising considerable pressure, as evinced by the marked bulging of the dura mater. Had it been purely compensatory, such intercranial pressure could not have been present. By relieving this pressure, if a cure cannot be obtained, there is great relief, as shown by our reported cases and by that of Dr. Batty Tuke. The cases are too few at present to judge of the risks of the operation, but if as a result a patient improve so much as to be able to make a will (and either of these patients might have been allowed to do this) there can be little question about the operation being considered a success. It must at the same time be owned that some improvement in the time when the operation may be best performed, together with a better knowledge of the size the opening should be made, is possible. Indeed, it would appear from what was subsequently observed in the first case, there would be a better chance of permanently relieving pressure by removing a much larger area, both of the bone and meninges, than we have hitherto done.

IN Italy, during March, 1890, 1,618 cases of smallpox were notified, as against 4,210 in the same month last year. The corresponding figures for other infectious diseases were as follows:—March, 1890 and 1889 respectively: Measles, 11,141 and 15,653; scarlatina, 1,435 and 3,266; diphtheria, 1,986 and 2,983; typhoid fever, 1,929 and 2,874; typhus, 118 and 138; puerperal fever, 558 and 844; malignant pustule, 54 and (?); rabies, 7 and (?). There were 16,090 cases of influenza in March, 1890.

REPORTS
TO THE
IENTIFIC GRANTS COMMITTEE
OF THE
3RITISH MEDICAL ASSOCIATION.

REPORT ON
E EXCRETION OF BALSAMS IN THE URINE.

By RALPH STOCKMAN, M.D., F.R.C.P.E.,
Research Scholar of the British Medical Association.
(From the College of Physicians Laboratory, Edinburgh.)

use which is now being made of balsam of Peru in the treat- of tubercular disease has aroused considerable interest in uestion as to whether it is apt to produce nephritis during cretion by the kidneys. I have made a number of observa- on it and other balsams with the view of determining this, he results of these are contained in the present paper.

ictly speaking, the term "balsam" should be confined to s and oleo-resins which contain cinnamic or benzoic acid or and hence, although commonly used, it is not properly cable to simple oleo-resins such as Canada balsam or balsam opaiba. The observations were carried out on Dr. S. W. thers, on myself, and on rabbits, and were limited to the balsams in the *British Pharmacopœia*, namely, balsam of balsam of tolu, prepared storax, and benzoin.

lsam of Peru.—Balsam of Peru contains about 30 per cent. sin, 60 per cent. of volatile oil, 6 per cent. of cinnamic and benzoic acid. It has hitherto been chiefly used in scabies inunction, either in its natural form or diluted with alcohol, lately Landerer[1] has praised it highly as an external and nal remedy in tubercular affections. He used it as an intra- us injection (emulsion of 1 in 400), and externally in ethereal ion, or as a plaster, or pure. Opitz[2] has also reported very rably of it in phthisis pulmonum, his method of employing ing in the form of subcutaneous injection—balsam of Peru, mmes; water and gum acacia, of each 1 gramme; ¾ per cent. solution to 10 cubic centimètres; neutralise with sodium bonate and sterilise by heating; dose, a syringeful twice ly. It caused some pain and swelling locally.

garding nephritis after balsam of Peru, cases have been ted by Litten[3] and by Vamossy.[4] In Litten's case the nt was treated with inunctions of balsam of Peru for scabies, fter some days developed dropsy and albuminuria, with blood e urine and tube casts. After recovery, 20 grammes were ed into his skin on several occasions, and each time caused tack of acute nephritis. Other patients and rabbits treated the same balsam of Peru did not suffer in any way. n ascribes the result to an idiosyncrasy, but the most pro- explanation is to be found in the fact that the man had ed for some time from lead poisoning, that changes were bly beginning in his kidneys, and that this rendered them iarly sensitive to any irritant.

nossy has used balsam of Peru, in the form of gauze, plaster, emulsion, for the treatment of local tuberculosis. It was in twenty-eight cases, mostly severe, with good results. In of these cases Vamossy states that albuminuria occurred, but ves no account of how he tested for the albumen, which, as all see later on, is a very important point.

utigam and Nowack[5] have recently administered balsam of in large doses to men (up to 11 grammes per day by the ch and 125 grammes in two days by inunction) without in ase producing albuminuria or tube casts.

e experiments which I made on myself bear out their obser- ns. After taking smaller doses without any result I owed 180 minims (14 grammes) between 11 A.M. and 5 P.M.

hener med. Wochenschr., 1888 and 1889; *Therapeutische Monatshefte*, 1890, 88.

[2] *Münchener med. Wochenschr.*, 1889.

te Annalen, vii, 187, 1882, "Ueber das Auftreten von Nephritis nach Einreibungen mit Perubalsam."

er med. Presse, 1889, 691, 733, 825, "Zur Therapie der Localtuberculose mit Perubalsam."

[5] *Cbl. f. klin. Med.*, 1890, 121, "Erregt Peru balsam Nephritis?"

The urine on being tested with cold nitric acid, or on heating after acidifying, gave no precipitate. At 3 and 5 o'clock it contained a large quantity of hippuric acid, but no albumen. The only effects noted were loss of appetite, and once or twice slight colic.

With rabbits, although there is no albuminuria, the results were not so negative. Two drachms (9 grammes) were given by the stomach to a large rabbit. The urine of next day was clear, straw-coloured, and had no special odour. On applying the nitric acid tests for albumen in the usual way it gave precipitates exactly resembling those of albumen. The precipitate was, however, soluble in alcohol and in excess of acid, thus proving that it could not be albumen.

The reactions were as follows:

Urine + nitric acid = dense white precip. sol. excess acid, sol. alcohol.
" + sulphuric acid = dense white precip. sol. excess acid, sol. alcohol. It soon assumed a purplish red colour, gradually deepening to black.
" + hydrochloric acid = dense white precip. sol. excess, sol. alcohol.
" + acetic acid = very faint precip. sol. alcohol.
" + boiling with drop nitric acid = dense white precip. sol. excess acid, sol. alcohol.

I was unable to obtain a sufficient quantity of the substance to examine it minutely, but there is no doubt that the resin of the Peru balsam is excreted by the kidneys, dissolved in the urine (probably in combination with glycuronic acid), and that it is precipitated by the addition of an acid. A similar condition has long been known in man, in the case of copaiba and cubebs. Its non-occurrence in man after balsam of Peru is probably explained by too small doses having been given. The urine may be left for many days exposed to the air without undergoing decomposition.

Four drachms (18 grammes) given to a rabbit by the stomach gave similar results, and no albuminuria.

Prepared Storax.—Styrax is also a mixture of resin, volatile oil and cinnamic acid, and is used in scabies and other parasitic skin diseases. The only account of nephritis after its use is given by Unna.[6] He was in the habit of treating his scabies patients with the following mixture: Styrax, oil of rape, of each 10 parts, spirit 1 part. It was rubbed in thrice all over the body, a bath was then taken and the cure was complete. In examining the urine he boiled it with nitric acid, and no further control tests were used. Out of 124 cases, the urine of 9 gave an abundant precipitate. In all these the urine was clear; there were no blood corpuscles and no tube casts. He remarks that it is peculiar that a comparatively large amount of albumen should rapidly appear in the urine, and then as rapidly disappear without causing further symptoms. He had no suspicion that it could be anything but albumen. The results of my experiments on rabbits show, however, that it was a resinous body, which had become absorbed through the skin and excreted in the urine.

After taking a mixture of styrax, alcohol, and glycerine in different doses without any result, I swallowed 180 grains (about 12 grammes) in 4 doses between 11 and 2 o'clock. The urine remained quite clear, and gave no precipitate with nitric acid; at 5, 7 and 11 o'clock it contained large quantities of hippuric acid, but no albumen.

A rabbit received 1 drachm, in olive oil and a few drops in alcohol, by the stomach. Next day the urine was quite clear, and gave the following reactions:

Urine + nitric acid = dense white precip., sol. excess acid, sol. alc. and ether.
" + sulphuric acid = dense white precip. sol. excess, sol. alc. Became deep red and then black.
" + hydrochloric acid = dense white precip. sol. excess acid, sol. alc.
" + acetic acid = very faint precip., sol. excess acid, sol. alc.
" + boiling with drop nitric acid = dense white precip., sol. excess, sol. alc.

Five drachms (about 20 grammes) gave the same result, and no albuminuria.

It is evident from the solubility in alcohol that here also we have to deal with a resin excreted in the urine, and not with albumen.

Benzoin.—Benzoin contains 80 per cent. of resin and a small amount of volatile oil, with cinnamic and benzoic acids. Dr.

[6] *Virchow's Archiv*, lxxiv, 424, 1878. "Albuminurie während der Styraxeinreibungen Krätziger."

Carruthers took in capsules from 40 to 140 grains in twenty-four hours, without causing any very distinct changes in the urine. On two occasions there was faint opalescence with acids, which cleared up on the addition of alcohol, but it was very difficult to decide whether it was caused by a resinous body or not.

Rabbits received up to 2 drachms, in glycerine and alcohol, but here also the results were negative. Owing to the difficulty of dissolving it in suitable menstrua it was found impossible to give larger doses.

Balsam of Tolu.—The tincture (1 in 8) is given internally as an expectorant. The syrup, which contains only 1 part in 29, is too weak to be of much value except as a flavouring agent. Dr. Carruthers took up to 124 grains in twenty-four hours. There was always a good deal of hippuric acid in the urine, but no resin could be detected. Owing to the difficulty of getting a suitable solution, it could not be administered to rabbits in a sufficiently large dose for the purpose of the research.

As a result of these observations, it seems to me to be proved that all those balsams can be given in as large a dose as is ever desired in practice, without any risk of producing albuminuria or nephritis. The amount of irritation which they cause is never sufficient to injure the healthy kidney, although it may irritate seriously one which is already diseased. In some (at least) of the recorded cases of albuminuria, after the administration of balsams, a resinous body in the urine has been mistaken for albumen.

In conclusion, I have to express my indebtedness to Dr. Carruthers for the interest which he took in the matter, and for the assistance which he gave me by swallowing a large quantity of the balsams.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

THE THERAPEUTICAL VALUE OF EXALGINE.

SOME little time before the appearance of Professor Fraser's paper on this subject, I was shown some of Brigonnet and Naville's exalgine, and I administered some of the powdered crystals in two cases of facial neuralgia in 2 to 4 grain doses, without any effect. Regarding the drug as valueless, I did not intend further to exhibit it. The appearance of Dr. Fraser's paper in the JOURNAL of February 15th gave, however, a fresh impetus to the subject, for when so distinguished a pharmacologist and so careful an observer gave so satisfactory an account of the therapeutical value of the drug, one was compelled to doubt one's own conclusions. The general verdict recorded in the JOURNAL has been favourable, but my experience has not. In all my cases since Dr. Fraser's paper appeared I have given the drug dissolved in weak spirit. I shall particularise three cases.

1. A lady, aged 39, had for long suffered from neuralgia, chiefly of the fifth and intercostal nerves. She was well acquainted with the action of various antineuralgic drugs, obtaining most relief from 10-grain doses of butyl chloral hydrate, repeated in two or three hours if required, and usually two doses were required. This patient, during a severe attack of neuralgia, began with 2 grains of exalgine, and was told to take 1 grain every hour until relieved. She found no relief from thirty-six hours of this treatment, and then after two 10-grain doses of butyl chloral hydrate, with two hours between, fell asleep, waking much relieved. A few days afterwards another attack occurred, on which occasion the doses of exalgine were doubled. She thought after seven hours' continuance of these doses there was some relief, but returned with more decided benefit to the butyl chloral hydrate.

2. A lady suffering from chronic oöphoritis with exacerbations at the menstrual periods, for the relief of which she usually took in solution $\frac{1}{10}$-grain of hydrochlorate of morphine every hour or two until relieved, had 4 grains of exalgine given instead, with 2 grains every hour afterwards for three hours. At the end of this time, being no freer from pain, she returned with benefit to the morphine solution. On a subsequent occasion I gave her 8 grains of exalgine in one dose; she stated this gave her some relief, but only very little.

3. An old gentleman suffering from sciatica, for which I usually gave him $\frac{1}{4}$-grain of morphine hydrochlorate in solution, and half this quantity three or four times daily until relieved, was much interested in the new analgesic. He carefully took it in 1, 2, 3 4-grain doses every hour for three or four hours, but could obta no relief, and returned to the morphine. The experiment was r peated with the same result on four occasions.

The above three cases are patients on whose observations I cou rely. I have notes of having given the drug in 24 other cases various forms of neuralgia. In some of these, especially whe toothache prevailed some slight benefit was obtained. In most these 24 cases 3 to 5-grain doses were administered. Some them were cases of influenza; in these exalgine failed while an pyrin did not.

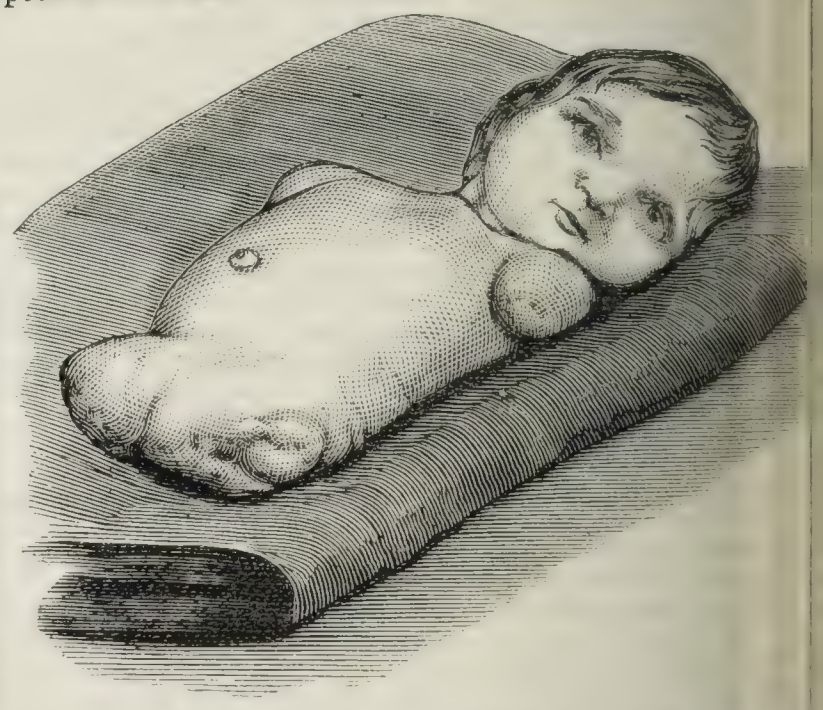
My experience of exalgine is such, therefore, that I cannot r gard its addition to our therapeutic resources as of any moment

Newcastle-upon-Tyne. G. ARMSTRONG ATKINSON, M.D.

A CASE OF MALFORMATION IN A NEWBORN CHILD.[1]

A FEMALE child was born in the Sir S. Ramasawmy Mudalia Lying-in Hospital on December 16th, 1889, as the result of fourth pregnancy in a native Christian female, aged 26 yea whose previous children are all of them well developed. T woman has no recollection of any physical or mental sho having occurred during pregnancy. The child presented by t breech, and caused considerable perplexity in diagnosis; t labour was completed without the least hitch, the stages lasti three hours and a half, forty-five minutes, and five minu respectively.

General Development.—The head and trunk are well develop the circumference of the former being fourteen inches and t length of the latter being thirteen inches. Its weight was t pounds and a half.



Upper Extremities.—These consist of the upper one-fourt each humerus. The shoulder-joints are perfect. On the r side the limb has the appearance of having been amputated, cicatrix being a transverse line half an inch long. On the side the appearance is the same, but the cicatrix is scarce quarter of an inch long, and is retracted.

Lower Extremities.—The right limb is merely a fleshy puscle, three-quarters of an inch wide and a quarter of an long, to the posterior edge of which is appended another corpu resembling in size and appearance the little toe of a new infant. On the left side the limb consists of a fleshy corpusc inch long and an inch and a quarter in circumference, resemb the great toe of an infant.

H. D. COOK, M.B.,
Surgeon-Major

PILOCARPIN IN DRYNESS OF THE TONGUE.

EXTREME dryness of the tongue is, under any circumstanc very distressing symptom, and one which does not readily y to treatment whilst the concomitant cause remains in opera The sucking of ice or sipping of bland fluids gives but tempo

[1] The child was shown at the meeting of the South Indian (Madras) B on January 10th, 1890.

inadequate relief, and the same may be said of glycerine em-ed as a paint. In this condition I have successfully used arpin, gr. $\frac{1}{20}$ to gr. $\frac{1}{10}$, in the form of a gelatine lamel allowed issolve on the tongue previously moistened with a sip of r. I find this small dose quickly establishes a moderate flow liva which persists for at least twenty-four hours, and is un-mpanied by excessive perspiration. The altered state of the h is often described by the patient as being delightful. I this note with the hope that others may share the satisfac-I have experienced, if they have not already done so, in this of pilocarpin. It is scarcely necessary to add that we must ise due caution in the use of so potent a remedy.

rtsmouth. J. G. BLACKMAN, M.D., M.R.C.S.

COCAINE AND MORPHINE.

ay have been often stated, but I have not seen it, that the ing sickness which complicates the continuous use of hypo-ic morphine can be annihilated by combining one-third of a n of cocaine with the morphine solution; even though, as in l case now under my own observation, the morphine has to eadily increased. This is probably far from an original com-cation, but it will be found, I think, none the less useful.

anklin. GEORGE H. R. DABBS, M.D.

FOREIGN BODY PASSED PER ANUM.

ID particulars of the following case, which is of interest from ge of the child (8 months), the size and shape of the foreign which it swallowed, and the value of injecting glycerine in ting its expulsion.

the afternoon of May 9th the mother gave the child a toy n to amuse itself with. The handle becoming detached the put it into its mouth. The mother, seeing what had hap-d, attempted to get hold of it, but instead of getting it out she ed it into the œsophagus. By the time I got to the house it passed down into the stomach. I advised the mother not to any purgative medicines, and to send at once for me if any vourable symptoms should arise.



the afternoon of May 12th I got a message that I was wanted. s then told that during motion of the bowels the mother saw of the foreign body projecting from the anus, but that it had back again. Before making any attempt at extraction I ght I would try the injection of glycerine. I inserted half a m into the rectum, when within three minutes I had the faction of seeing the handle of the organ expelled. With the tion of slight retching and vomiting of blood-tinged mucus e time of swallowing it the patient did not seem to suffer n inconvenience, and is now well and lively. The accom-ing drawing gives a correct representation of the size and of the handle of the toy.

nderland. JAMES BERWICK.

E ON A NEW FORM OF PROTECTIVE GAUZE TISSUE.

ING found that the ordinary protective tissue prevented the ption of discharge beneath it, I asked Mr. Macmillan, practi-hemist in this city, to make some experiments for me with ence to a new form of tissue which would insure the gauze her dressings not adhering to the wound, and still allow any arge to be absorbed through it.

er numerous experiments with many forms of muslin, and us varnishes into which isinglass entered freely, we found the best was coarse, pale book muslin, which is stretched on es and soaked with a mixture of isinglass, glycerine, water, ne solution, bichloride of mercury solution (1 to 4,000), and ide of ammonium. When this is dry it is permanent and eptic. In using it, a strip the size of the wound and an inch dth is cut and dipped into a tepid solution of corrosive sub-e, 1 to 2,000, and then applied over the wound with the ordi-surgical dressings above. Complete absorption of any dis-ge is allowed, and sufficient dissolved isinglass remains as a coating over the wound, which secures the non-adherence of the tissue, and thus enables the surgeon to remove the dressings without any pain to the patient.

Having used this tissue for six months, and being thoroughly satisfied with its efficiency, and having had satisfactory reports from several surgical friends of their trials of it, I think it right to bring it before the profession.

The tissue costs half what the ordinary protective does, and may be obtained from the maker, Mr. John Macmillan, of Great Western Road, Glasgow, to whom I am much indebted for his labours in carrying out the experiments, and in perfecting this addition to antiseptic dressings.

T. CRAWFORD RENTON, M.D.,
Additional Examiner in Clinical Surgery in the University of Edinburgh; Assistant-Surgeon to the Western Infirmary, Glasgow.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUY'S HOSPITAL.

PENETRATING WOUND OF ABDOMEN, WITH HERNIAL PROTRUSION OF THE BOWEL.

(By N. DAVIES-COLLEY, M.A., M.C.Cantab., F.R.C.S., Surgeon to the Hospital.)

L. K, aged 8, a healthy well-nourished child, was admitted on October 22nd, 1889, with the bowel protruding from a wound in the lower part of the abdomen.

While standing upon a chair to get at something from the wall, she had slipped and fallen down upon one of the uprights of the chair. From the account of the mother it would appear that the chair was in a dilapidated condition, having no upper crossbar, but that the ends of the uprights were quite smooth. The child was first taken to a doctor, who applied some lint and carbolic lotion, bound up the parts, and sent her to Guy's Hospital. Upon admission she was little if at all collapsed. On removal of the dressing it was found that a portion of the bowel was protruding from the wound at the lower part of the abdomen. Under ether a more complete examination was made. There was a transverse wound, about $3\frac{1}{2}$ inches in length, beginning in the middle line at a distance of $1\frac{3}{4}$ inch above the symphysis pubis, and extending nearly to the left anterior superior spine. From this protruded a knuckle of small intestine. A slight abrasion of the skin nearly 2 inches long by $\frac{3}{4}$ inch broad extended downwards from the middle of the wound into the groin. Upon inserting my finger I found that about the level of the umbilicus there was a deep opening in the abdominal wall, through which the bowel had escaped into the subcutaneous tissues. The blunt upright of the chair must have struck the middle of her groin, and grazed the surface for 2 inches before penetrating the skin. It had then forced its way between the aponeurosis of the external oblique and the integuments for about 4 inches. Finally, at the level of the umbilicus, it had torn through the rest of the wall of the abdomen, and entered the peritoneal cavity. I slit up the skin on a director, and could then make out a somewhat rigid transverse opening $1\frac{1}{2}$ inch broad, beginning about $1\frac{1}{2}$ inch to the left of the umbilicus. The loop of the small intestine, which had come through this opening, was about 10 inches long. At first no omentum was seen. After easily reducing the bowel, which was quite healthy, I proceeded to pass a deep suture of chromicised gut of moderate thickness through the aponeurotic sides of the opening and the peritoneum. This last was a proceeding of some difficulty, as I could not draw down the peritoneum sufficiently to bring it into view, and had to judge of its position by my finger I had also some difficulty in keeping back the omentum, and I was unable to prevent small portions of it from getting between the peritoneal edges of the deep wound. I now brought the edges of the skin together, and introduced a drainage tube into the subcutaneous tissue at the upper end of the wound. Carbolic spray was used throughout the operation. As the wound was clean, I used no other means of purifying the intestine, and I did not wash out the abdominal cavity. The wound was dressed with

carbolic and sal alembroth gauze. No medicine was given, and for the first twenty-four hours no food.

On the 23rd there was no pain. The child was complaining of much thirst. The pulse was of fair volume, soft, and not very rapid. There was no swelling of the abdomen. A pint of milk and a pint of barley water were allowed daily.

On the 28th the dressings were changed for the first time; there was some offensive pus upon them. The skin wound was gaping nearly half an inch. General condition good. All the stitches of the skin wound had given way, and the child had to be kept in bed for more than two months, until the large granulating wound which followed had healed. There was never any sign of peritonitis, and the wound in the abdominal parietes must have united firmly and rapidly, for there was no yielding or weakness at that point subsequently.

REMARKS.—I have thought this case worth recording on account of the peculiar course taken by the penetrating wound. I suppose that the child was in a stooping posture when she fell. The upright of the chair must have struck the groin obliquely, and after grazing the skin for a short distance it must have pierced that structure, but been stopped for a time by the tough aponeurosis of the abdominal muscles. Owing, however, to the flexed position of the child's body, the blunt instrument, after gliding along the smooth aponeurosis for a few inches, impinged almost at right angles upon it at the level of the umbilicus, and so tore its way through into the abdomen. The protrusion of intestine which followed was, for the greater part, concealed by the skin, and only a small knuckle made its appearance through the external wound. In my operation I did not venture to increase the size of the deep wound for fear of further weakening the abdominal wall. I therefore had considerable difficulty in passing my sutures in such a way as to secure good apposition of the peritoneum.

THE QUEEN'S HOSPITAL, BIRMINGHAM.

ENCHONDROMA OF RIB: RESECTION OF PORTION OF RIB AND PLEURA: RESPIRATORY MOVEMENTS OF LUNG.

(Under the care of F. MARSH, F.R.C.S., Surgeon to the Hospital.)

J. W., aged 20, a delicate-looking woman, having a good family history, was admitted on March 19th, 1890. For many years she has had double suppurative otitis media, a sequel of measles, but, with this exception, has had good health. Her occupation (brush-making) involves a considerable amount of shoulder movement by the pectoral muscles.

Two years ago she noticed, quite by accident, a lump on her chest, just above the right breast. It felt hard and was not in any way painful. It has slowly increased in size until a few months ago, but has grown more rapidly since, and, as it is becoming a deformity, she wishes to have something done for it. The growth now measures about three inches in its long diameter, is irregularly oval in shape, hard, slightly lobulated, painless, situated over the bony sternal ends of the third and fourth ribs, and firmly attached to one of them. The skin over the growth is normal and perfectly movable.

Under an anæsthetic the growth was exposed by an oblique incision, the soft tissues were easily separated from it, and the projecting part cut off with a chisel and mallet. It proved to be an enchondroma, hard externally, but of a crumbly consistence internally, attached to the third rib, a portion still being left wedged tightly in the third interspace, pressing the fourth rib downwards. On removing this with a gouge, it was seen that the growth expanded beneath the ribs into a mass the size of one's fist. Owing to its crumbly consistence and want of support, this could only be removed piecemeal. The portion of rib from which the growth originated was cut away, and so thin was the capsule, and so blended with the stretched pleura, that it was necessary to excise the implicated piece, measuring quite three inches by three inches. There was now an opening of irregular shape in the chest wall, and, as each bleeding point had been at once secured, the pale salmon-coloured lung covered only by visceral pleura could be distinctly seen. It was observed that the exposed lung moved synchronously with each movement of inspiration and expiration, forwards and backwards, to and from the anterior chest wall, rather than upwards and downwards, through a space of full three inches. The amount of movement varied with the length and depth of respiration from an inch to contact with the chest wall—in fact, great care had to be exercised to avoid including the lung in the sutures closing the wound. These physiological facts leave to physiologists to explain.

The removal of the tumour being effected, the treatment of t wound was the next question. It was impossible to bring t edges of the parietal pleura together, so I sutured the soft par together over the opening, placing a short good-sized rubb drainage tube in the lower angle, anticipating there would some pleuritic effusion. The patient was fairly comfortable afte wards, though the temperature for forty-eight hours kept up 100° F. The dressings were now changed, and, as they were d and the percussion note over the base was that of pneumothora I directed the patient to inspire deeply, to empty the pleur cavity as much as possible of air, and at the height of inspirati I withdrew the tube and closed the wound with strapping. T patient was much more comfortable after the removal of the tul the temperature fell to normal and kept there, and the wou healed by first intention. The slight pneumothorax rapidly d appeared, and the patient was shown at the Midland Medic Society on April 23rd, the percussion sounds being everywhe clear and normal.

The points of interest are:

1. The necessity of a guarded prognosis in these cases; wh was apparently a simple operation proving a difficult and unusu one, and attended by considerable risk of intrathoracic complic tions.
2. The observations bearing upon the physiology of respiratio
3. The tolerance of the pleura to surgical measures, no troul whatever being caused by excision of a piece of considerable siz
4. The treatment of the wound, and the question of drainage

Looking back at this case, I think it would have been better have completely closed the wound in the first instance when t lung was in contact with the parietes, and, if the necessity h arisen, to have inserted a drainage tube afterwards.

It is almost needless to state that aseptic precautions were served throughout, and care was taken to minimise the risk pleurisy and pneumonia by keeping as far as practicable swabs lint wrung out of hot water over the parietal opening. The wou was dressed throughout with a dry boracic dressing.

CANNANORE CIVIL HOSPITAL.

PLASTIC OPERATION FOR DEFORMITY OF CHEEK.[1]

(By Surgeon J. KERNAN.)

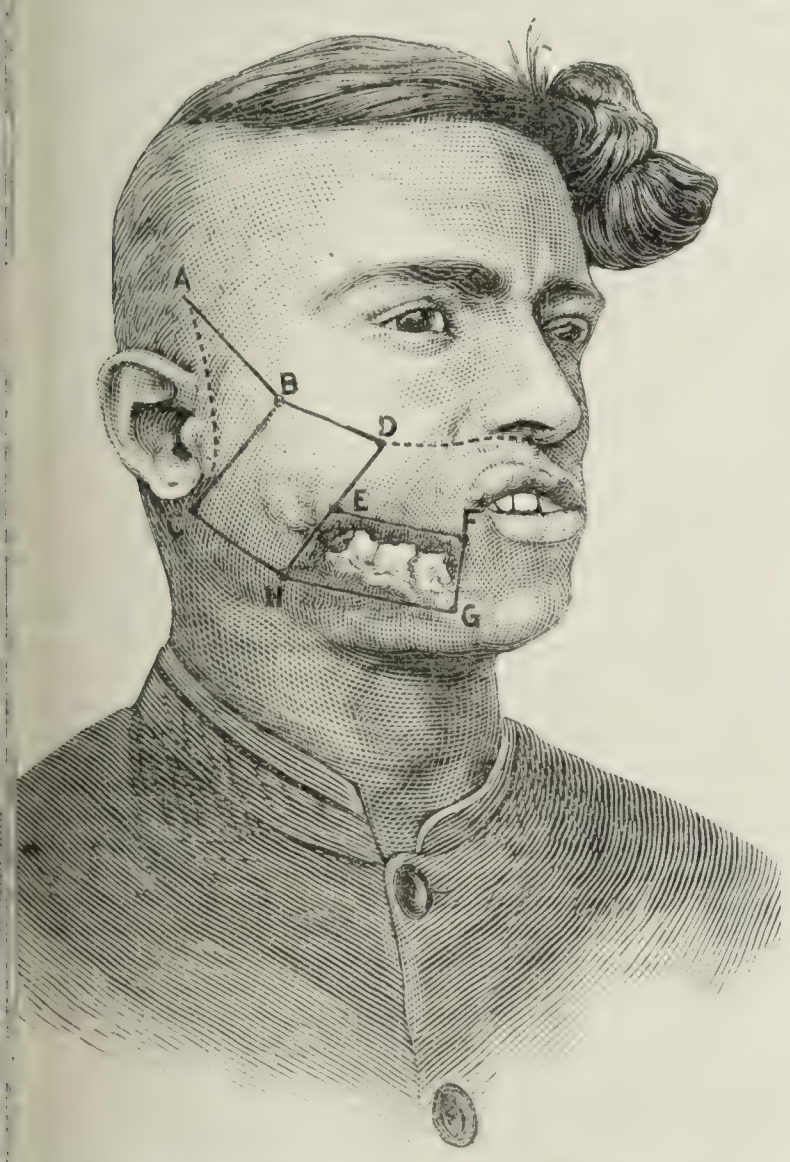
THE patient stated that he was attacked with inflammation his right cheek with stiffness of his lower jaw about two ye and a half ago. He suffered then from high fever and swellin the cheek for some days; then his cheek burst, giving vent t free discharge of pus. The fever soon subsided, and gradually edges of the opening in his cheek healed. About two years he came to this hospital and had one tooth and a piece of bone moved from the right side of the lower jawbone by Dr. Sark who advised him to go to the General Hospital, Madras, for furt treatment. He went there some time in 1887 or 1888, and an successful attempt to restore his cheek was made by bringin large flap from the inside of his right forearm. He remai under treatment for some months there, and then returned to village.

When admitted on November 7th he was in robust hea although the ankylosis of his jaw compelled him to take all food in a fluid or minced state. He was operated on on the mo ing of November 9th, and during the operation he was kept c pletely under chloroform, and placed lying on his back wit moderately high pillow.

Operation.—1. A layer of thin skin, about half-an-inch br and the length of the opening in his cheek, was dissected up removed from the outer side of the lower jaw, as it was fir adherent to the periosteum, and likely to interfere with the h ing of the new cheek. 2. The skin attached along the margi the lower jaw was dissected back for about one inch; the ski the lower lip and chin was freed from the bone down to the p of the chin, and the upper lip was dissected back almost to nostrils. The front and upper sides of the cheek opening w pared, then the posterior side was vivified. 3. A skin flap (CB about two inches and a half long by one inch and a half br was dissected up. The upper part of the cheek (DEF) which bound down by strong adhesions to the upper jaw, was dissected b

[1] Communicated to the South Indian (Madras) Branch of the Br Medical Association.

at to the infra-orbital foramen. An incision was carried up-s and backwards above the ear for about an inch and a half the upper and posterior angle of the skin flap. The triangu-kin flap thus formed in front of the ear was dissected from ubcutaneous tissue (*vide* dotted line). 4. Then as all the around had been well freed from their attachments, they brought together as follows: (ABC) the ear flap was ad-d to within a quarter of an inch of the upper cheek flap ') by a harelip pin; then the quadrilateral lower cheek CBDH, was turned forward, and its upper edge (BD) stitched with several interrupted sutures to the an-edge of the cheek opening (FG). When stitching its lower (HD) to the lower side of the cheek opening (HG), at first difficulty was experienced in bringing the parts properly her, as the flap was much thicker than the skin (HG); then arelip pin was inserted with the best result. The rest of dges were next stitched with interrupted sutures; a bead e was inserted in front of the ear; but as it was impossible ing the ear and upper cheek flaps into perfect apposition, edges were stitched to the subcutaneous tissue, and a patch an inch and a half long by three-eighths of an inch broad eft to heal by granulations. Several small arteries were ured during the operation, the end of the ligatures being ht out below the ear. Powdered zinc oxide, lint and plaster applied, with cotton wool over them; the right ear was d forward and bandaged to prevent tension on the ear flap.



did very well. He had slight fever on the second and third after the operation. The wound was dressed every second The flaps all united satisfactorily. On November 12th the arelip pins were removed, and the upper was replaced with l suture. On November 14th five ligatures and four sutures emoved. On November 16th the last ligature and all the ning sutures, except one, were removed. The part left to y granulation was healthy, but not filled up yet as the last re came from there. On November 18th the last suture was ed, and all the parts were healed except the granulating sur-face, which was healthy. Four skin grafts were put on it; three took; and on November 29th the part was quite healed. His appearance was much improved, and his mouth no longer puckered. On December 2nd he was discharged, to return hereafter for treatment of ankylosis of the jaw.

WEST LONDON HOSPITAL.

CASE OF RUPTURE OF THE RIGHT LUNG, LIVER, AND RIGHT KIDNEY WITHOUT INJURY TO ABDOMINAL OR THORACIC WALLS.

(Reported by HENRY G. WHARRY.)

ON April 5th, R. M., a servant girl, aged 19, fell from the window she was cleaning into the area beneath, having been supposed to have first struck the top or railings of the area. She was brought to the West London Hospital insensible, with extensive fracture of the vault, and signs of fracture of the base, of the skull. The patient died five hours after admission, and, *post mortem*, in addition to extensive comminuted fracture of the cranial vault, with fracture extending across the anterior zone of the base and laceration of the brain, the lower lobe of the right lung, the right lobe of the liver, and the right kidney were found to be ruptured. There was a large vertical antero-posterior rent extending the whole length of the lower lobe of the lung commencing on the diaphragmatic surface. The right lobe of the liver was lacerated in a vertical direction, and the kidney torn almost in two. There was no injury to the ribs or diaphragm, or any part of the thoracic or abdominal walls.

From the nature of these injuries it seems possible that she struck first the right side of the head and the right shoulder (the right acromio-clavicular articulation was dislocated), and that then the trunk was violently bent upon itself, crushing these organs together.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 10TH, 1890.

TIMOTHY HOLMES, M.A.Cantab., F.R.C.S., President, in the Chair.

A Contribution to the Chemistry of Gout.—Sir WILLIAM ROBERTS, who brought forward this subject, said that in a paper recently read before the Society he had adduced evidence to show that in the physiological state uric acid existed in the blood and urine exclusively as quadrurates, and that when it appeared in any other guise this was due to abnormal changes in the quadrurates. In that paper the changes were traced which the quadrurate underwent in urine, and which led up to the separation of free uric acid in gravel. In the present paper the converse changes were traced which the quadrurate underwent in the blood, and which led up to the deposition of sodium biurate in gout. These latter changes were intimately connected with the property possessed by the quadrurates of taking up in alkaline solutions an additional atom of base, and of being thereby converted into biurates. A knowledge of this reaction permitted a coherent view to be presented of the succession of events which culminated in a gouty paroxysm. In the normal state the uric acid, which circulated in the blood as quadrurate, was at once removed unchanged by the kidneys. But in the gouty state, either from defective kidney action or some other cause, the quadrurate lingered unduly in the blood. The detained quadrurate, circulating in a medium which is rich in sodium carbonate, was gradually transformed into sodium biurate, which was almost insoluble in blood serum, and was, probably for that reason, difficult of removal by the kidneys. Under these new conditions sodium biurate accumulated more and more in the blood, and, when the accumulation had reached a certain point, was precipitated in the crystalline form in the joints and elsewhere, thereby determining the occurrence of a fit of the gout. This view was based on a study of the reactions of blood serum and synovia with uric acid and the urates. In the case of blood serum, these depended essentially on the saline ingredients, of which the sodium salts exceeded all the other salts put together in the ratio of 7 to 1. A solution of 0.5 per cent. sod. chlorid. and 0.2 per cent. sod. carbon. was a fairly exact imitation of blood serum in so far as its saline ingredients were concerned. And it was found experimentally that

such a solution behaved with uric acid and the urates in the same manner as blood serum itself, and in the same manner as a solution composed of all the salines of the serum in their due proportion. A solution was therefore prepared containing 0.5 per cent. sod. chlor. and 0.2 per cent. sod. carbon. This was called the "standard" solution. The behaviour of uric acid and the urates with this solution was studied in detail, under varying conditions of time and temperature, and with varying modifications of its composition. The results thus obtained were then collated with those obtained with blood serum in similar circumstances, and with parallel modification of composition. The results were considered under the following headings: 1. Solubility of sodium biurate in the standard solution and its modifications, and in blood serum.—Sodium biurate dissolved in water, at 100° F., in the proportion of 1 in 1,100; but it was found to be almost insoluble in the standard solution and in blood serum, and no addition made thereto, of potassium, lithium, or magnesium salts, whether alkaline or neutral, made the slightest difference. The solvent power of the standard was found to depend exclusively on the sum of sodium salts contained in it—the nearer it approached to pure water the higher became its power of dissolving sodium biurate, and *vice versâ*. The degree of alkalescence had not the least influence. The solubility of gouty deposits in serum was tested directly. Gouty articulations, encrusted with uratic deposits, were suspended in a large volume of blood serum—but the deposits remained unchanged even after immersion for many months. 2. Behaviour of uric acid with the standard solution and with blood serum and synovia.—Uric acid was taken up freely by these media—as a quadrurate; but after a certain pause—a few hours or a few days—it was again precipitated, often somewhat suddenly, in the form of crystalline needles of sodium biurate, exactly resembling those found in gouty deposits. This remarkable reaction was held to be analogous to the phenomena of the gouty paroxysm. In gout it was assumed that the blood became increasingly charged with uric acid, until, after a certain period of incubation, sudden precipitation of sodium biurate occurred, and the "fit of the gout" was declared. Then followed a process of recovery, with restoration of the blood to a purer state. In the artificial counterfeit a similar succession of events was observed: impregnation of the medium with sodium quadrurate, a period of incubation during which the quadrurate passed into biurate, somewhat sudden precipitation of sodium biurate, and, lastly, restoration of the medium to comparative purity. In studying this process three stages were distinguished: *(a)* taking up of uric acid as quadrurate, or solution; *(b)* gradual conversion of quadrurate into biurate, or maturation; *(c)* deposition of the biurate in the crystalline form, or precipitation. 3. The conditions which hastened or retarded the processes which culminated in the precipitation of sodium biurate.—The following results were arrived at: 1. Precipitation occurred earlier in synovia than in blood serum. 2. Increased alkalescence of the media favoured the stage of solution, but did not retard the stages of maturation and precipitation. 3. The addition of salts of sodium hastened maturation and precipitation. 4. The addition of salts of potassium, lithium, or magnesium had no effect either way, except potassium chloride, which appeared to retard maturation. 5. Maturation was hastened and precipitation occurred much earlier at 100° F. than at the temperature of the room. 6. No circumstance exercised so decisive an influence on the speed of maturation and on the time of advent and copiousness of precipitation as the proportion of uric acid in solution. If the proportion of uric acid in solution was 1 in 2 500 or over there was observed in the middle period of maturation, on the second or third day, a copious critical precipitation; but if the proportion was 1 in 4,000, or under, the precipitation was throughout gradual and scanty, and postponed to the twelfth or fourteenth day.— Dr. HARLEY thanked Sir William Roberts for the paper, which was an admirable sequel to his former paper, in which he had dealt with the quadrurates. In the present paper he discussed the biurates. A distinct advance in their knowledge was made when Sir Alfred Garrod proved that gout was due to the presence of uric acid in the system, and a further advance was made when an acute attack of gout was shown to be due to the deposition of uric acid in the articular cartilages. Later on it was demonstrated that the deposits were not due to inflammation of the joints, but the deposits caused the inflammation around the joints, which was known as gout. The present paper was a chemical contribution to gout, and he urged that, through chemistry, a new pathology would be founded, in which all morbid changes would be proved to be due to chemical action. He discussed the action of drugs in gout, and insisted that their action was strongly influenced by the chemist of each individual.—Dr. HAIG welcomed the paper, as afforded a chemical explanation which he had long wante He had found that the excretion of uric acid was increas by the administration of alkalies, and Sir William Rober had proved that increased alkalescence favoured the state of sol tion of uric acid. Similarly acids diminished the amount of u acid excreted. The suggestion that there was a storage of u acid in certain organs was due, not to himself, but to Sir Alfr Garrod and Dr. Latham; he had only adopted the theory as a co venient one. He hoped that, in some future paper, Sir Willia Roberts would discuss the question as to how certain drugs creased or diminished the excretion of uric acid.—Sir WILLI ROBERTS, in reply, said that he had confined himself to certa chemical results, and had drawn no conclusion as to the p founder theories of gout. It must be remembered that there w something in gout beyond the chemistry of the urates. Gout v in essence a mode of nutrition associated with an error, which v uric acid. There was a colloidal form of uric acid as well as crystalline form, and the action of the two forms also differed. to treatment, he believed that, if an attack was imminent, a tient ought not to take mineral waters containing soda and li except very sparingly at first. Dr. Herman Weber had for m years warned his patients on this point. He thought it possi that most of the good done at mineral springs was due to water taken, and not to the salts contained in it.

On Four Hundred Cases of Amputation Performed at George's Hospital from October, 1874, to June, 1888, with Espe Reference to the Diminished Rate of Mortality.—Mr. C. T. D and Mr. W. C. BULL, who presented this paper, stated that in l a paper was published in the *St. George's Hospital Reports*, Mr. Holmes, dealing with 300 cases of amputation performed s 1852, and a second paper was written in 1878, which include series of 200 more cases. They now brought forward a third seri 400 cases performed between 1875 and 1888, and by compar with the former table showed how the more favourable res obtained in the last series were due to the absence of pyæmi result obtained by the general adoption of the antiseptic sys The conclusions drawn by Mr. Holmes were mainly two: 1. the mortality was influenced by the advance with the age o patient. 2. That the rate of mortality varied with the preval of pyæmia. Tables were introduced to prove the truth of the proposition, and the results of 900 cases, spread over a peri thirty-six years, were shown. The mortality between the ag 20 and 30, which in the first series amounted 18.9 per cent., a the second to 34.7 per cent., in the third had fallen to 14.7 cent. Similar results were found in the cases between 30 a years of age. In 463 amputations under the age of 30 t were 81 deaths; and out of 437 amputations over the age 161 deaths, or almost exactly double. This was precisely th sult which Mr. Holmes, dealing with 500 cases, arrived at. A tation, by whatever method performed, was shown to be a four times as dangerous after the age of 50 as before; stress laid on the importance of considering the patient apart from wound, the older he was. The authors directed attention t proportion of cases dying from the effects of previous injury disease to those dying from the sequelæ of the operation, showed that whereas the former class depended on circumst which could not always governed, the latter was generally ca of being influenced by strict attention to aseptic surgery. T were brought in to show the results of amputation for dise injury on the various limbs of the body. The percentage mort in the first series of 300 cases from 1852 to 1866 was 27.6; i second series of 200 cases from 1866 to 1874 was 37.5; and i third series of 400 cases from 1874 to 1888 was 21.—The P DENT referred to the great interest of this paper to himself, carried on a series of investigations that he had commenc 1852. He pointed out the erroneous importance assigned to pital construction by Sir James Simpson, and insisted that details in modern dressings was of more value than stru details. He discussed the improvements in modern amput and the almost total abolition of secondary hæmorrhage as a of death in the present day.

AT the annual meeting of the Royal Society, Mr. David S M.B, and Dr. Richard Thorne Thorne, deputy medical offi the Local Government Board, were formally elected int Society.

JTH INDIAN AND MADRAS BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

FRIDAY, DECEMBER 6TH, 1889.

puty Surgeon-General ROE, C.B., Vice-President, in the Chair.

udden Paraplegia from Syphilitic Disease.—Surgeon C. M. OMPSON, M.B., related a case of paraplegia due to syphilitic ease of the cord, which was remarkable on account of the very den onset and rapid development of symptoms. The patient s a native policeman, aged 24, who was in his usual health en relieved from duty at 6 P.M. on November 6th. At 10 P.M., ile on his way to reserve duty, he stooped, and as he bent lt something crack in his back." He was found lying on the d unconscious, and was admitted into hospital at midnight. en examined on the following morning he was drowsy, but ld be aroused to answer questions; the pupils did not respond light. Respiration was entirely diaphragmatic. There was esthesia from the upper margin of the fourth rib downwards, complete paralysis of the lower limbs; the penis was semi- ct, and the bladder distended; he had partial loss of power in h arms; he could just move them with a good deal of diffi- ty, sensation on the upper part of the thorax and in both upper remities was unimpaired. The respirations were shallow and y much laboured, 28 per minute; the pulse was full and strong, per minute. There was no sign of injury. At the back of the k, from a point corresponding to the sixth cervical vertebra to middle of the back corresponding to the eighth dorsal vertebra, re was pain on deep pressure. The pain on pressure was most ere at a point corresponding to the seventh cervical vertebra. ere was the cicatrix of an old chancre on the penis, and the nds in both groins were enlarged. He was a remarkably well- eloped muscular man, with a capacious chest. The temperature s 100° F. The patient rapidly grew worse, and died on November h. At the necropsy, which was made about 2½ hours after death, abnormality was detected in the brain, except that the pia mater s adherent to its surface along the upper margin of both hemi- eres. The spinal cord was carefully removed. Opposite the h cervical vertebra was a spot of softening of the cord, the a of softening extending for about half an inch; the upper rgin corresponded with the level of the fifth cervical nerve. the lumbar region of the cord was a spot of softening similar that found in the cervical region; its upper margin was on evel with the tenth dorsal nerve, and from this point the soften- extended for about one inch and a quarter. The dura mater s not abnormally adherent to the cord in this or any other part. dividing the cord vertically downwards, there was found in the vical region a circular cavity, a quarter of an inch in diameter, olving almost the entire thickness of the cord, and correspond- with the area of softening, and containing a thick creamy id. Corresponding to the area of the lumbar softening, there s a cavity presenting similar appearances, the long diameter which was in line with the axis of the cord. With the above- ntioned exceptions, the nervous tissues of the cord and its mbranes appeared to be perfectly healthy.

Cases.—Mr. H. F. STAUNTON communicated two cases of Am- tation of the Penis for Epithelioma.—Surgeon J. SMYTH re- ed a case of Alleged Snake-poisoning, in which Howard's thod of artificial respiration was found extremely useful.

Specimens.—Surgeon J. SMYTH: 1. A Ruptured Bladder. 2. eurysm of Transverse Portion of Aortic Arch. 3. Ulceration Vermiform Appendix due to Foreign Bodies. 4. Scirrhous ncer of Stomach.

FRIDAY, JANUARY 10TH, 1890.

urgeon-General G. BIDIE, M.B., C.I.E., President, in the Chair.

Plastic Operation.—The SECRETARY (Surgeon J. Smyth) read, Surgeon J. KERNAN, a description of a plastic operation on face, which is published on p. 1368.

The Effect of Chill in Producing Malarial Fever.—Surgeon R. ss reported the result of a critical examination of an outbreak fever in a Madras regiment, shortly after its arrival in Burmah, order to ascertain what etiological importance exposure to cold d in the production of the disease. The regiment had been ex- sed to heavy rains. Heavy showers, preceded by strong gusts wind, came up at short interals, but in the lulls between them e air was hot and still so damp that the sweat remained on the dy and clothes until, with the advent of the wind, it was dried by a rapid and chill evaporation. Some men were more ex- posed than others. He found that the percentage of sick among men who got wet was 27.1, while the percentage among those who remained dry was only 9.

Specimens.—Surgeon-Major H. D. COOK: Malformation in a Newborn Child (description is published on p. 1366): Surgeon-Major J. MAITLAND, M.D.: Sequestrum of Skull, following injury: Surgeon H. ARMSTRONG: Pachymeningitis in the Insane.

REVIEWS AND NOTICES.

BROWNING'S MESSAGE TO HIS TIME. By EDWARD BERDOE, M.R.C.S., L.R.C.P.Edin. London: Swan Sonnenschein and Co. 1890.

DR. BERDOE is well known as an active member of the Browning Society, and an enthusiastic admirer and exponent of Robert Browning's poetry. The present volume includes material of great interest to medical men as scientists and biologists, as well as men of culture and reading. It is a reprint of lectures and addresses given at various times, in which the science and religion of the poet, their interaction and secondary developments, are treated, and explanations given of the poems "Paracelsus" and "Rabbi ben Ezra." Dr. Berdoe teems with Browning, and though he has nothing very new to tell us as to the poet's philosophy and faith, he knows his author so well that he makes him explain his hidden meanings by apt quotations from his writings.

Browning was essentially the poet of his age, the life of which he lived to the full; but as beseems a poet, seeing further, hearing more, and knowing more than other men. A poet, yet learned in modern science; man of pleasure and fashion, yet the teacher of a stern morality—Browning is a stumbling block to those who have not ears to hear, but the source of strength and hope to those who understand. To increase the number of those who understand, so as to receive strength and hope from the great poet's words, is the object of Dr. Berdoe's book.

Browning was no crier of peace where there was no peace, no singer of joy where the strident note of pain was dominant; he rejoiced in painful struggle and in effort, though it might end in failure, and boldly facing the mystery of evil, he declared it to be "nought," the flint from out which is struck the spark—

> In this first
> Life, I see the good of evil, why our world began at worst;
> Since time means amelioration, tardily enough displayed,
> Yet a mainly onward moving, never wholly retrograde.

Believing absolutely in immortality and in this world as a probation place, Browning teaches, and repeats it again and again in words terse, pregnant, and burning with intense conviction, that pain, failure, struggle, and even sin prepare the soul for a higher existence. He is an obstinate optimist; he never despairs of any, not even of those who are stained with crime and vice, for he argues that they have gained an experience which can be used for a higher purpose hereafter, and have learnt—

> By the means of evil that good is best.

It cannot fail to be interesting to note the effect of scientific study on a strong mind so simple and earnest in its faith, and the most instructive part of Dr. Berdoe's book is that in which he treats of Browning as a man of science. We think he somewhat exaggerates Browning's scientific knowledge, but he is correct in saying that Browning accepted science as beams from the light of Truth, as unhesitatingly as he accepted moral order and belief in immortality as other scintillations; thus, his religion was scientific and his science religious, and his God not a god of negation, but the great "I am" revealed alike in the struggles of the soul and in the oscillations of the galvanometer.

Dr. Berdoe gives numerous examples of how Browning presses science into service to teach a moral truth or enrich a simile. Thus, referring to electricity, he says—

> As flash may find
> The inert nerve, sting awake the palsied limb.

And using the refraction of light as a simile, he says—

> Only the prism's obstruction shows aright
> The secret of a sunbeam, breaks its light
> Into the jewelled bow from blankest white;
> So may a glory from defect arise!

Evolution and biology both conduct him to the same point. Evolution ever leading upwards is the basis of his belief in immortality, for as Nature develops through imperfect forms,

Man, far aye removed
From the developed brute, a god though in the germ,

has an infinite future of possibilities before him, for

Life is probation and earth no goal
But starting point of man; compel him strive,
Which means, in man, as good as reach the goal!

Biology leading backwards—

We find great things are made of little things;
And little things go lessening, till at last
Comes God behind them,

and descending Creation's scale by means of the scalpel and the microscope, we reach the line which knowledge cannot cross, and

The Name comes close behind a stomach cyst,
The simplest of creations.....
.....The small becomes the dreadful and immense.

Browning had a close sympathy with medicine and with the great hopes and aspirations of workers in science, and this is strikingly shown in the wonderful poem of "Paracelsus."

"Paracelsus" must be read again and again to be fully appreciated; for no commentary and no extracts can give the passion, the moral insight, and the dramatic unfolding of motives portrayed in the poem. In Browning Paracelsus has found a biographer and a defender, and the poet shows that, however great was his ambition and arrogant his pride, his scientific insight was correct and his aims high; hero-like he attempted and man-like he failed.

As the discoverer of opium, Paracelsus was thought to work miracles,

Men in racking pains may purchase dreams
Of what delights them most, swooning at once
Into a sea of bliss.

but he claimed no omnipotence for drugs:

I have no julep, as men think,
To cheat the grave.

Readers of Dr. Berdoe's book will certainly turn to the pages of Browning to learn more of a poet to whom science is true, life eternal, and effort more than success.

OUTLINES OF PRACTICAL HISTOLOGY. By Professor STIRLING, M.D., Sc.D. London: Charles Griffin and Co. 1890.

DESPITE the fact that there are already so many textbooks of histology in the market—each laboratory apparently thinking it right to have and to publish its own special course in this subject—Professor STIRLING has not hesitated to bring forward yet another, to which, although it is fuller and more complete than any of its predecessors (including his own earlier textbook), he gives the modest title of *Outlines of Practical Histology*. The general plan of the work is admirable. The various tissues of the body are considered in a series of thirty-seven lessons; each lesson begins with a general description of some special tissue, its characters and varieties; and following upon this are several subdivisions, each devoted to the method of preparation of a characteristic form of the tissue, and the appearance that it should present under the microscope. In every instance in which we have tested Professor Stirling's directions, the results obtained have been uniformly excellent, and it is very evident that the suggestions given are the outcome of a prolonged experience in teaching practical histology, combined with a remarkable judgment in the selection of methods.

While cordially agreeing with what is urged in the preface, namely, that "it serves very little useful purpose to give students sections ready prepared, and ask them merely to mount them," we stand aghast at what Professor Stirling requires from those undertaking his course. We believe that it is not an exaggeration to say that to carry out the directions contained in this book, and to prepare honestly the sections included in the ordinary as apart from the advanced course here described, would employ the student during both the summer and winter sessions of two years, devoting two hours, or even more, during three days per week. This is manifestly too great a demand upon the ordinary medical student. Better give him a few characteristic pieces of work to do thoroughly, than numerous exercises, however interesting, that can be but rushed through. Were all the sections and preparations described by Professor Stirling not made by the student, but given out to him ready prepared, there would still be too much matter for him to assimilate in the ordinary course of one session, that is, if he examined each specimen well, and made—as he ought to make—careful drawings of its special features. Without doubt, the deliberate following out of Professor Stirling's directions would result in the production of histologists of very high order, but the book is intended in the main for medical students, and its employment would place us in this dilemma: that either too large a proportion of the medical curriculum must be devoted to histology, or the work set out to be done must be hurried over, the students be treated like Strassburg geese, and suffer all the ill consequences of mental indigestion.

We gravely doubt whether a textbook intended for practical work should be extensively illustrated, holding rather that it is a better training for the student that he should be led to recognise the features of his preparation from the descriptions given in the text; for by this means he is initiated into habits of careful study. Others, we know, with very valid arguments, hold the opposite view, and among them the author of these *Outlines* occupies a prominent place. The book before us is, in fact, profusely illustrated, there being no fewer than 344 illustrations in the 331 pages of which it is composed. The histological drawings, whether selected from other monographs and textbooks, or specially prepared for this work (and more than one hundred come under this latter category) are, with scarcely an exception, excellent; and Professor Stirling merits the highest praise for presenting these illustrations, which are at once clear and faithful representations of the tissues, while at the same time diagrammatic, all unnecessary detail being suppressed. Yet, in our opinion, their very excellence will lead to less conscientious study of the actual preparations; they are a very material aid to the pernicious practice of cramming. We have little doubt that their presence will ensure the popularity of the book among students, and render it the most widely distributed of all histological manuals. Whether we are right or wrong in our estimation of the value of the above-mentioned illustrations, we have no hesitation in affirming that in one direction at least, Professor Stirling's love for diagrams has led him beyond reasonable bounds. What is the use of ten views of microscopes by various makers, some of them occupying the entire page, or, similarly, of eleven different patterns of the microtome; of the illustration of the common pine-wood cabinet to hold sixty slides; of that of two pairs of fine scissors, or of the ordinary hypodermic syringe; or, lastly, of the Canada balsam bottle in general employment? Surely all the objects thus portrayed might, with advantage, have been passed over with merely a verbal description.

To sum up, we would say that the work will be of the greatest value for demonstrators and teachers, and for those who wish, and have the time, to gain a wide, thorough, and practical knowledge of human histology. For ordinary medical students it offers but doubtful advantages, though it is calculated to gain their affections over its older rivals, from its very fulness and from the mass of well-illustrated detail.

TERMINOLOGIA MEDICA POLYGLOTTA. By THEODORE MAXWELL, with the assistance of others. London: J. and A. Churchill. 1890. Pp. 459.

IT is but few men who, like von Moltke, can be silent in several languages, or even speak them, and it is perhaps a question if to these few a polyglot medical dictionary of a like range is a necessity, since even they can scarcely be occupied with the medical literature of more than two nations at once; while to the ordinary bi- or trilinguist such a work must necessarily be at once redundant and deficient—redundant because space is wasted with words he does not require, belonging to languages he does not speak; deficient, since to endeavour to compress the medical terminology of seven languages into 459 pages is a hopeless task necessitating the most extreme contraction and exclusion.

The roundabout course required by the plan of the work, too, is one which, in these days of cheap bilingual technical dictionaries no one would willingly take. In the case imagined in the preface of an Italian reading a German medical work by means of this book, he comes to the word "Leiste"; this he must trace in his *Terminologia* to its French representative "aine," under which he will find the Italian word "inguine" which he seeks. But if he has a German-Italian wordbook he can reach his destination at once. Why should a traveller journeying from Venice to Vienna take Paris on his way? Besides, to the ignorant, circuitous journeys are always puzzling. Imagine, for instance, a German innocent of French, translating an English treatise by this method. He comes upon the sentence "a common cold," and referring to his vocabulary for enlightenment here under the head "cold" he has the French *froid*, *frisson*, *rhume*, *catarrhe* to choose

m, with no hint to guide him, and he must consult each one these words to find the German equivalent; but, to add to his ıfusion, one of them is not in the dictionary as a chief word; *sson* (very properly) has no English synonym "cold," neither *catarrhe*. Bilingual dictionaries with insufficient definitions a source of error to the foreigner who must select one of eral words to express his meaning; but when he is carried ough a third language of which he is equally ignorant, and ere the definitions are entirely absent, nothing but confusion a result.

Under the head of "English," many clumsy sentences are given place of the word, if of foreign origin, used in English medical rature to express a pathological condition or entity. For tance, *clavus hystericus*, a very common word in all treatises on glish medicine, is rendered in our language as "circumscribed sterical headache." The French "coction" is rendered "cooking heating," as if coction, Hippocratic and other, had not been rent English for over 300 years. The editor evidently forgets t a foreigner translating his literature into English requires se equivalents which are commonly used (even if not wearing ue British dress), rather than those which are not, nor, per- s, ought to be. The English equivalents supplied are, as might expected in so contracted a work, limited in number. "*Pest-is*" (G.) is translated "fever hospital for epidemics" (Are there ever hospitals for endemics?"), while the old English "pest-ise" is not named. *Pest-beule* is rendered "malignant bubo." lague-spot" is not given. Perhaps one of the worst blunders in book is the translation of "mandrake" by *podophille* in French, ile *podophille*, again, has given as one of its English synonyms— andrake." The only excuse for the mistake is that in the United tes the *podophyllum peltatum*, or May apple, is sometimes vul- ly called the American mandrake; but a slight acquaintance with glish literature ought to have assured the writer that the true man- ke—the *mandragora officinalis*—was a plant known and valued ny centuries before the discovery of America, and bearing the ne relation to podophyllum as the Australian mole does to English one. Nor is the blunder confined to our own lan- ge: *mandragore* (corrupted, according to Latham, into *main de re*) was as common in French literature as the "shrieking ndrake" or "drowsy mandragore" were in English, yet *podo- lle* is the only French equivalent given. Among the various uits" inserted the *bruit de cuir neuf* is omitted[1], while the *it de soufflet* is given as *bruit placentaire*. No explanation is en of *diable* (in *bruit de diable*), although few French dic- naries have the real meaning of the word. A note that in nch *diable* represents *humming-top*, as *Nonne* does in German *nnen-geräusch*) would have been of use. Among the English ds not present as main ones, we notice black wash (lotio nigra in), false croup, tetany, bedpan, rider's bone, chin cough, pros- te, acritocromacy, Argyll-Robertson pupil, rice-water stool, jee evacuation, corroborant, bubo plague, and many more. the contrary *furlough* and some others are as palpably re- dant. We have no wish to be hypercritical, but a dictionary ocabulary to be useful must be complete; nor do we wish to me the editor of the present work—the magnitude of the un- taking in so small a space makes a greater or less failure a gone conclusion. It is the nature of the attempt, not the lt of the attempter, which has caused the want of success.

he work has a certain interest as it is (one can, for instance, ice how much nearer English medical terminology approaches hat of the so-called Romance languages, owing to classical in- nces, than to its natural relation—German), but, on the whole, nows ingenuity exhibited in a wrong direction. Like the jug- with his seven balls, it is most clever, but of little practical What we require is not vocabularies, sevenfold or single, real dictionaries, wherein derivation, definition, history, and mple are all attended to—medical home dictionaries on the iels of Grimm, Littré, and Murray—and bilingual dictionaries, aining the information of the former with comparison, con- t, and example.

[1] See Stokes, *The Heart and the Aorta*, 1854, p. 8, *et seq.*

the Newberry Library at Chicago, which has an endowment l of about a quarter of a million, a special department will be oted to medical works of reference and medical periodicals. Poole, the librarian, recently explained the plan which he osed to follow in making the collection to the Illinois State ical Society.

NOTES ON BOOKS.

Archives of Surgery. No. IV. By JONATHAN HUTCHINSON, F.R.S., F.R.C.S. 1890. (London: J. and A. Churchill.)—The present number of Mr. Hutchinson's *Archives* completes the first volume of the three or four promised. It contains papers of considerable interest, particularly to those who study diseases of the skin, for this subject has its usual attraction for Mr. Hutchinson, and gives scope for the work of the plate maker. There is a good paper on the Leprosy problem, in which the author emphasises his views upon the cause of the disease being connected with the eating of fish—a view which certainly requires further confirmation. There is also a paper of general interest on Heredity, in which he is inclined to differ from the recently expressed views of Weismann; and another on the Theory of Catarrhal Fevers and Influenzas which will attract attention; and another on Gout and Rheumatism. Further observations are given of cases of disease of the nervous system and of syphilis and of diseases of the skin. But there are none of those notes on canons of surgery, catechism of surgery, and cases for diagnosis suitable for the less initiated, which formed an attractive feature of previous numbers.

A Laboratory Course of Pharmacy and Materia Medica, including the Principles and Practice of Dispensing. By WILLIAM ELBORNE, late Assistant Lecturer in Materia Medica and Pharmacy in the Queen's College, Manchester. (London: Charles Griffin. 1890.)—These notes are intended for students who, having previously studied chemistry, physics, practical chemistry, and botany, are attending lectures and demonstrations on the materia medica, and a practical course of dispensing. Mr. Elborne evidently appreciates the requirements of medical students, and has taken into account that the time which can be devoted to the study of pharmacy demands that only the most important facts can be learned. An introductory chapter is devoted to definitions, weights, measures, thermometers, and the method of taking specific gravities. Under the heading of chemical pharmacy is given a concise but clear explanation of the various pharmaceutical processes of distillation, sublimation, pulverisation, etc. The proximate principles of plants—such as alkaloids, glucosides, oils, resins, etc.—are fully described. A certain number of typical examples of pharmacopœia chemicals are given for preparation in the laboratory; and there can be no doubt but that a student who works through this course will obtain an excellent insight into chemical pharmacy. In the chapter on Galenical pharmacy are considered the processes and manipulations by which crude vegetable and animal substances are prepared for medicinal use in the forms of tinctures, infusions, decoctions, etc. There is also a chart of pharmacopœia vegetable and animal substances, giving their description, preparations, etc. The laboratory course comprises the preparation of an infusion, a decoction, various extracts, and other typical galenicals. In the practical course of dispensing are described the various forms of prescriptions and the mode of dispensing them; facsimiles of autograph prescriptions are given, the subject of incompatibility fully treated, and there is a very complete list of terms used in prescriptions. This work will be of great use to medical students, and, for pharmaceutical candidates qualifying in pharmacy, there is additional work added. The book contains a large number of excellent drawings, illustrative of the various processes and manipulations described.

MR. J. J. TWEED, F.R.C.S., of 14, Upper Brook Street, has been presented with a handsome silver salver, by the members of the Foresters' Courts, 2709 and 2657, as a mark of respect, and in recognition of his medical services during the last thirty-five years. Mr. Tweed had previously received from Court Grosvenor and Court Lansdowne handsome illuminated testimonials on his retirement from his office of surgeon.

BERLIN MEDICAL CONGRESS.—The exhibition to be held in connection with the Berlin Congress will include not only apparatus, drugs, etc., but anatomical preparations and objects illustrating microscopic and bacteriological *technique*. In the section of Gynæcology, a collection of pelves, and in that of Hygiene, a comprehensive collection of pure cultures of micro-organisms will be shown. It is proposed to form a section of Orthopædic Surgery. A reading room, which will, if possible, contain the current numbers of all the medical journals of the world, is being organised for the benefit of those taking part in the Congress.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SPRING SESSION 1890.

Friday, June 6th.

JOHN MARSHALL, F.R.C.S., F.R.S., President, in the Chair.

Public Health Examination of the University of Glasgow.—The following resolution was moved by Sir WALTER FOSTER and seconded by Mr. CARTER: "That inasmuch as the Medical Act of 1886 throws upon the Privy Council, or the Medical Council, the responsibility of determining whether any diploma for proficiency in sanitary science, public health, or State medicine, granted by any college or faculty of physicians or surgeons or university in the United Kingdom, is such as to deserve recognition in the *Medical Register;* and inasmuch as the Medical Council on June 1st and November 30th, 1889, has thought it 'essential to declare with regard to its own future action under Section 21 of the Medical Act (1886) that it will not consider diplomas to deserve recognition in the *Medical Register* unless they have been granted under such conditions of education and examination as to ensure (in the judgment of the Council) the possession of a distinctively high proficiency, scientific and practical, in all the branches of study which concern the public health,' and has also adopted the report of a committee of its own body, to the effect that the examination in the above questions held by the University of Glasgow in the month of October, 1889, was conducted by papers which were not a sufficient test of the knowledge of the candidates, and the deficiencies of which were not satisfactorily supplied by the oral examination, the Council do now report the circumstances of the case to the Privy Council, and that the Registrar be instructed not to register diplomas in public health granted by the University of Glasgow until the decision of the Privy Council be made known."

Mr. BRUDENELL CARTER seconded the motion.

Mr. MACNAMARA moved, as an amendment, that the documents be referred to the Council of the University of Glasgow.

Sir JOHN SIMON said he should move, as an amendment, that the Council did not recognise these diplomas as constituting evidence of special qualification.

Sir DYCE DUCKWORTH seconded Sir John Simon's amendment.

Dr. QUAIN pointed out that it was clearly the duty of the Council to refuse to register these diplomas. It was for the University Board of Glasgow to take whatever further steps might be deemed necessary. It was for the University to perfect their examination, but the duty of the Council was to keep the diplomas off the *Register*.

Mr. R. B. CARTER called attention to the great injustice that would be done if registration were granted to some of these gentlemen to the exclusion of the others. One effect of either amendment would be to cast a slur upon the health diploma for years to come. The fault in any case would rest with the University, which had failed to conduct their examination in such a way as to command confidence. The injustice would be minimised by adopting Sir W. Foster's suggestion.

Dr. STRUTHERS pointed out that the examination in question was outside and beyond the scope of the resolutions of the Council of June, 1889, seeing that these were expressly stipulated "not to apply to medical practitioners registered or entitled to be registered before January 1st, 1890."

Sir JOHN SIMON said that was a misapprehension; for though the details were not to be enforced until the date mentioned, the broad principle of the examinations having to be of a sufficiently high standard was obviously intended to have immediate application. He said that he was in favour of Mr. Macnamara's proposal so far as it went.

Mr. CARTER recalled that, though the rules as to educational requirements did not come into force until some time after, that was not the case as concerned examinations.

Dr. STRUTHERS thought that the position was a painful one for the University, and on the whole he thought that Mr. Macnamara's motion went as far as it was desirable to go.

The Rev. Dr. HAUGHTON pointed out that they had nothing to do with the general excellence of the examinations at Glasgow. They were called upon to examine into a specific complaint.

Dr. HERON WATSON urged that the resolutions of the Council in respect of these examinations were wanting in clearness, and that if a mistake had arisen, the Council was not altogether exempt from blame. He said that there were several ways of getting out of a quickset hedge when the position became uncomfortable, and one was by going backwards. He asked what it was supposed the Privy Council would do if applied to. He suggested that they might suggest to the Council that, having got into a scrape they would have to extricate themselves; adding possibly some observations as to the lack of business aptitude on the part of the Council. In any case the Privy Council could not be expected to issue a retrospective ordinance. He thought that Mr. Macnamara's amendment met the requirements of the case, seeing that the University Court was a body of men quite free from bias and likely to do whatever was necessary to remedy the occurrence as far as possible and prevent its repetition in the future. He said that his sympathies had been aroused for the unfortunate candidates, who were in a very painful position, and that from no fault of their own.

The Rev. Dr. HAUGHTON said that if there was such a thing as logic, then the 55 men who passed the examination must be dealt with. They must either be allowed to go on the *Register*, or those on the *Register* would have to come off. Mr. Macnamara's amendment did not deal with this question at all, yet it would be flagrant injustice if 31 of the 55 were allowed to continue on the *Register* while the others were forbidden to register. One advantage offered by Sir John Simon's amendment was that it provided an immediate solution. To refer the matter to the Privy Council was to defer the matter for twelve months. The other proposal to send it to the University Court would also involve a similar delay. He urged that whatever course they determined on should be prompt and efficacious.

Mr. MACNAMARA pointed out that he had not attempted to deal with the candidates, this being a separate question. The first point to be settled was whether the matter was to be referred to the Privy Council or to the University Court.

Sir WALTER FOSTER observed that the University Court had already refused to consider the matter. (It was pointed out that it was the University Council and not the Court that had refused to entertain the complaint.) He argued that by referring the matter to the University Court they did nothing to protect the *Register*, which was, after all, their first duty. He thought that it was very desirable they should take joint action with the Privy Council in the matter. This might even be done by a friendly appeal to the Privy Council in which the University might join asking what had best be done.

Sir WILLIAM TURNER explained the constitution of the University Court, pointing out that this body was in many respects admirably adapted to investigate such a matter.

Dr. GLOVER: Can they withdraw the diplomas?

Sir WILLIAM TURNER said that was the question he was about to enter upon. The Court could probably say that no more diplomas should be issued; but as to recalling those already issued this would be a matter for their own lawyers to advise. He asked Dr. Leishman whether this was not the case. He urged that in respect of the legal aspects of this difficult question, it would be better to throw the onus on the University Court.

Dr. LEISHMAN said that Sir Walter Foster altogether misunderstood the attitude of the University Court in supposing that they would be at all likely to condone the matter. He pointed out that the right of the University to issue diplomas in public health on whatever condition it pleased had not been abrogated, and it was only the registration that concerned the Council. He said he had not been able to find anything in any Act of Parliament which would enable the Council to remove from the *Register* the diplomas of those who had registered them, and even the University could not do it. He suggested that the assurance given to those men not yet on the *Register* that this additional qualification would be inserted so soon as they had obtained a registrable qualification was also binding on the Council; they might rest assured that if the University could in any way assist the Council this would be gladly done. There would be the risk of a series of legal actions in the matter, and the Council might possibly get a rap over the fingers. The great objection to Sir John Simon's amendment was that they would hereby throw over the unfortunate students; he could not, therefore, agree to it. If the matter were remitted to the University Court he felt sure that the necessary precautions would be taken to prevent a repetition of the occurrence, and evidence of this would doubtless be furnished to the Council in due course. He suggested that if they took M

namara's amendment in conjunction with the suggestion ted by Dr. Quain, that would offer the best way of getting of a difficult position.

. QUAIN asked whether the University could not request the to return their diplomas.

. LEISHMAN said they might possibly do so, but it did not w that the men would comply with the request.

JOHN SIMON said that his resolution did not pretend to dis- nish between the two categories of candidates. He suggested hereafter the Examining Board might recommend certain of candidates as most fitted for admission to the *Register;* that d be for the University to determine. He thought that Mr. namara's amendment might be taken as a rider to his own osal. He himself was disposed to vote for reference to the y Council. With reference to the men who had registered diplomas, he suggested that the Council might declare these mas to have been granted under conditions which they could egard as registrable, and that they did not deserve recogni-

He pointed out that these titles conferred special privileges r the Local Government Act (1888), and it ought to be a point nour with the Council not to leave matters as they were. If re merely a college affair it would be another matter, but it much more serious.

WALTER FOSTER and Dr. HAUGHTON pointed out that the dment really did nothing at all.

e PRESIDENT mentioned that he had just received a letter the Public Health Medical Society expressing the hope that diplomas might be refused registration. He agreed that mendment then before them did not really touch the ques-

. Macnamara's amendment was then formally put, when ner long discussion ensued. On being put to the vote it was d to, and was subsequently adopted as a substantive motion.

JOHN SIMON then moved: "That the diplomas in public h granted by the University of Glasgow in October, 1889, ar to the Council to have been granted without due care to them to cases of 'distinctively high proficiency' in the ches of study which concern the public health; and that the cil, referring to the spirit of its resolutions of June 1st, 1889 Minutes of 1889, pp. 118-19) does not recognise those diplomas swering to the intention with which they had been made trable, nor as constituting evidence of special qualification he higher officerships of health under Section 18 of the Local rnment Act, 1888." He asked that his motion thus amended efixed to Mr. Macnamara's motion.

. STRUTHERS thought the motion was based upon an er- us assumption—namely, that this examination was bound to w the resolutions of the Council.

11 votes to 4 it was decided to prefix Sir John Simon's n to Mr. Macnamara's motion.

a later stage in the proceedings

e PRESIDENT intimated to the Council that before separating must instruct the Registrar as to his action with reference iplomas. Of the 55 holders of the diplomas 29 had already registered, 9 had received an assurance that they would be ered when qualified as practitioners, and 17 had not yet ed for registration.

. CARTER moved: "That the Council instruct the Registrar to registration to those gentlemen who were not upon the *ter.*" He would include in that motion those gentlemen to registration had been promised.

HERON WATSON said he would be prepared to second the n if the proviso were inserted "without instructions in each rom the General Medical Council."

CARTER agreed to insert those words.

HAUGHTON said he would deprecate any course which ed the diplomates into groups; they should have meted out m equal justice.

WILLIAM TURNER undertook to support the motion on the standing that it left it open to the Council to consider each n its merits.

DYCE DUCKWORTH hoped the University of Glasgow would he Council out of its difficulty by examining the 55 gentle- ver again, and giving them proper diplomas.

LEISHMAN said the University could not call upon the men to be examined again; they must use persuasion, but vas all.

motion was then agreed to.

Extension of the Curriculum.—After some discussion the Council adopted a consolidation clause embodying the resolutions they had passed with regard to the curriculum.

On the motion of Dr. STRUTHERS, seconded by Mr. WHEELHOUSE, it was agreed: "*a.* That the resolutions of the General Council in regard to preliminary examination in general education, required to be passed previous to the commencement of professional study, passed on June 5th, 1890, be transmitted to the various examining bodies whose examinations are at present received as fulfilling the conditions of the Council, with the intimation that these resolutions will come into operation on January 1st, 1892. *b.* That the resolutions of the Council on preliminary and professional education and examination, passed June 4th, 1890, be transmitted to the several medical authorities, with the expression of the hope of the Council that regulations in harmony with them may be brought into operation on January 1st, 1892."

The Qualifying Examination.—Dr. HERON WATSON, seconded by Dr. LEISHMAN, moved: "That the opinion of the legal advisers of the Council be obtained as to what constitutes a qualifying examination in medicine, surgery, and midwifery, in conformity with the terms of the Medical Act (1886); more particularly whether these three subjects may be taken separately, and whether these three examinations, when completed, regarded as one, do constitute the qualifying examination in medicine, surgery, and midwifery; or whether two of these subjects may be passed at one time, and the third, should the candidate fail in it on that occasion, be taken separately at a later date, still constitute a qualifying examination in medicine, surgery, and midwifery; and whether medicine, surgery, and midwifery be regarded in the meaning of the Act as one and indivisible, both for qualification under the Act and for the qualifying examination which admits to the *Register.*"

Sir JOHN SIMON thought that the President should simply be instructed to get any explanations he might think necessary.

Sir WALTER FOSTER said that nobody could give better advice on the subject than the Council itself.

Dr. HERON WATSON said he should be quite content to leave the matter in the hands of the President. At the same time he did not concur with the view that they would get no useful guidance from lawyers.

The motion was then withdrawn, and on the motion of Sir WILLIAM TURNER, seconded by Mr. CARTER, it was agreed that the question which it raised should be left in the hands of the President.

The Inspectors' Reports.—On the motion of Dr. HERON WATSON, seconded by Sir WILLIAM TURNER, it was agreed: "That the Council, having considered the reports of the inspection of 1888, held under the instruction of Section 3 of the Medical Act (1886), together with the explanatory remarks of the bodies inspected and the report of the Examination Committee, desires now to express its opinion that the examinations of all the bodies granting qualifying diplomas in medicine, surgery, and midwifery have been found sufficient for the purpose of conferring the right of registration in the *Medical Register* under the Medical Acts."

The Dentists' Register.—On the motion of Dr. LEISHMAN, seconded by Dr. GLOVER, it was decided: "That the attention of the Executive Committee be called to the frequency with which the names of certain persons are still entered on the *Dentists' Register* under Section 37 of the Dentists' Act (1878)."

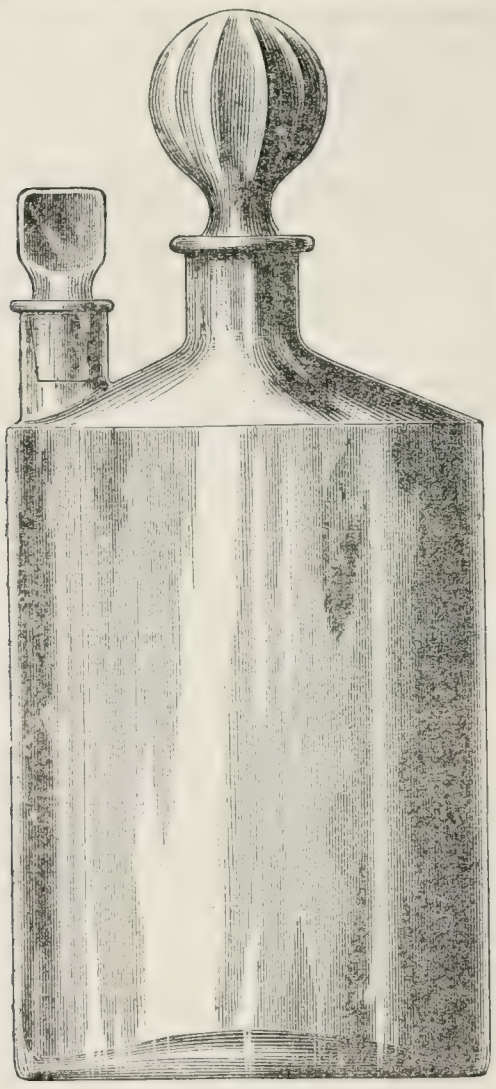
After the minutes of the sitting had been read and confirmed, the session of the Council was brought to a close.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SAFETY BOTTLES.

As we often read in the journals, valuable lives are frequently lost through taking in mistake various poisonous substances and mixtures intended for the most part for external use, or disinfecting purposes. A variety of contrivances have been devised, many of which have been patented, with the object of diminishing this great risk and evil. Of these contrivances nearly the only ones in use have reference to the shape and colour of the bottles employed, but these very simple means have not proved sufficiently

effectual. I have given much attention to this subject, and have succeeded in devising a bottle which will, I believe, secure absolute safety. In the medicine, and indeed all other bottles now in use, the neck is placed at the top of the bottle in the centre, and is perforated for the cork or stopper. In my bottle this neck is closed altogether, and the cork or stopper is replaced by a glass bulb or brush. The true neck I place high up at the side of the bottle, but at a lower level than the original, but now superseded or false, neck. This arrangement is shown in the sketch sent here-



with. Thus my safety bottle is two-necked. Now, it is evident that such an arrangement must afford absolute security; no person seeing such a bottle, or even feeling it in the dark, could for a moment fail to distinguish it from an ordinary and non-safety bottle; and thus such lamentable accidents as now too frequently occur would be prevented and rendered almost impossible under any likely circumstances.

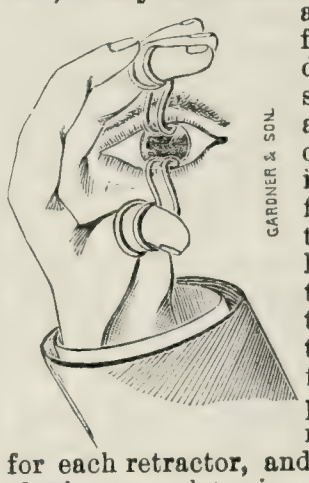
My two-necked bottle admits of some modifications, which I will now notice. In one of these the fixed knob is hollow and furnished with an aperture at the top; the knob is coated in the interior with some luminous paint, so as to render it, as has been before suggested, luminous at night. This proceeding is, however, unnecessary, and if adopted the luminosity would, I believe, not be lasting and effective. The double neck affords, in fact, all the security requisite. Another modification more ingenious than necessary is the following: The central or false neck, as I term it, being closed, so that there is no connection between it and the interior of the bottle, the neck itself is somewhat enlarged, so as to be capable of receiving a small bell attached to a watch spring and cork; on the removal of the cork the bell rings and an alarm is given.

So impressed was I with the importance of this subject that in the autumn of 1888 I obtained provisional protection for my invention, which I thought it best to secure, under the impression that it would be easier to find some manufacturer or other interested person to take the steps necessary to bring the "safety bottle" under the notice of the profession and the public. Whether this "safety bottle" will be generally employed depends on several circumstances. The public, as a rule, are very indifferent, even in matters which nearly concern themselves; they require in some cases the expenditure of a fortune before their attention can be secured and their confidence obtained, and even then that con fidence is often misplaced by want of proper discriminatio Whether the invention will be adopted or not depends very muc on the medical profession and the pharmaceutical chemist. medical men will order the "safety bottle" when prescribing lin ments and lotions, which usually contain strong and sometim poisonous doses, then the chemist will be bound to keep it; bu he can also do much independently to promote the general use the bottle in the cases indicated.

Lucerne. ARTHUR H. HASSALL.

A NEW FORM OF EYELID RETRACTOR.

THE difficulty in examining the eye in children is often ve great, especially in cases of corneal ulcers, ophthalmia neonat rum, or any affection of the eye attended with photophobia. T



accompanying woodcut illustrates a ne form of lid retractor which overcomes t difficulty (to a great extent) and mak such an examination very simple. The are two retractors each an inch and quarter long, but having the rings differe in size, the larger ring being intended fit the distal phalanx of either thumb a the smaller ring to fit any finger. Bo lids can easily be separated by means the two retractors, the one applied to t thumb and the other to the index finger the same hand, thus leaving the remaini fingers of that hand and the other ha perfectly free. In the common form of retractor two or three fingers are requir for each retractor, and if both lids are to be separated so as obtain a complete view of the eye, the surgeon requires both han for the retractors, thus excluding him from being able to use a application to the eye which he may think necessary. By mea of this simple form of retractor which I have described bo lids can be separated by the thumb and index finger of one ha thus leaving the other hand entirely free and at the same ti being able to steady the head with the palm of the hand holdi the retractors and the remaining fingers of the same hand.

These retractors enable the surgeon to obtain a very compl view of the front of the eye, especially when he is provided w no assistance except that of the nurse. The instrument has be made for me by Messrs. Gardner and Son, Edinburgh.

Dundee. ANGUS MCGILLIVRAY, C.M., M.B

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Assoc tion desire to remind members of the profession engaged in searches for the advancement of medicine and the allied scienc that they are empowered to receive applications for grants in of such research. Applications for sums to be granted at the n annual meeting should be made without delay to the Gene Secretary, at the office of the Association, 429, Strand, W.C. plications must include details of the precise character and obje of the research which is proposed.

Reports of work done by the assistance of Association gra belong to the Association.

Instruments purchased by means of grants must be returned the General Secretary on the conclusion of the research in f therance of which the grant was made.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writ Rooms of the Association are now fitted up for the acc modation of the Members, in commodious apartments, at offices of the Association, 429, Strand. The rooms are o from 10 A.M. to 5 P.M. Members can have their lett addressed to them at the office.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 14TH, 1890.

ASPICE ET PROSPICE.

STANDING within measurable distance of the fifty-eighth annual meeting of the Association, at which the Council and the various Committees will present their reports of the progress made and work done during the year, we may follow our usual custom on the occasion of the issue of this number, which, in addition to its ordinary circulation, will reach the hands of the many thousands in the United Kingdom who have not yet added to their professional privileges that of the membership of the Association, and in accordance with many precedents we may briefly review the chief facts of the year's history, and summarise some of its leading features.

THE HOME AND COLONIAL BRANCHES OF THE ASSOCIATION.

There are now 35 home branches of the Association in the United Kingdom, and 18 colonial branches, and we have the gratification of being able to announce two additions to these. To the next meeting of the Council two new branches, of which the preliminary organisation has been completed on the spot, will be recognised—one at Hong Kong, the most eastern possession of Great Britain, and the other in the Leeward Islands. The membership of the Hong Kong Branch will at once number, we believe, from 25 to 30, and there is reason to expect that this number will be shortly increased to about 37, including most of the members of the profession now practising in the treaty ports of China. The medical profession of Hong Kong, although it has recently sustained a heavy scientific loss in the departure of Dr. Manson, includes no small number of accomplished and distinguished men, and we may look to them, as also to our new members in the Leeward Islands, for further contributions to the many exceedingly valuable papers with which our pages are from time to time enriched by able and accomplished members of the profession who now abound throughout the far-reaching dependencies and great colonies of Great Britain. The constant growth of the colonial membership is one of the most legitimate sources of satisfaction and one of the most interesting features of the marvellous growth and beneficent development which the work of the British Medical Association is showing from year to year. Most of the colonial Branches are extremely active, the meetings being held frequently at monthly intervals, when papers are read and valuable discussions take place. The first colonial Branch—the Jamaica Branch—was recognised in 1877. The largest colonial Branches are the Sydney and New South Wales Branch, with 124 members, and the Melbourne and Victoria Branch, with 115 members. These, of course, do not include the unattached members, who also are in many cases numerous, and as to whom it would be very desirable that the local secretaries, while continuing their valued and active efforts to increase the membership by new accessions, should endeavour to include them also in the Branch organisation. The latest Branch recognised is that of Tasmania. For this Branch we hope that bright prospects are in store, looking to the importance of the colony and the great future which undoubtedly lies before it.

THE MEMBERSHIP OF THE ASSOCIATION.

The total membership of the Association has reached to unprecedented figures, and so rapidly does its progress continue, that we may be pardoned for expressing the anticipation that—in view of the great value which membership of the Association now offers, and the growing evidences of the increased power which unity and organisation give to the members of the Association through their collective action in local branches, or through the Central Council and Executive Committees of the Association—the numbers of the Association will ere long attain figures closely corresponding with the whole sum of the medical profession on the *Register*. The self-sacrificing action of the Association in surrendering seven hundred pounds of income by reducing, at its own cost, to a uniform rate of postage, the transmission of its JOURNAL to every part of the Empire, however distant, has no doubt contributed, and will contribute in the future, to facilitate the imperial extension of the Association, and the linking together by these easy means of intercommunication all the members of the medical profession throughout the British Empire. It is something for the Association to have created for its members the first practical example of a uniform and worldwide postage—a reform which cannot very long be delayed by Parliament, but in which we have the satisfaction of being the precursors and the pioneers.

THE SCIENTIFIC GRANTS AND THE LIBRARY.

The general finances of the Association are, as the balance sheet, already published, will have shown, in a thoroughly sound and flourishing condition. After providing the most ample means of literary, scientific, and professional intercommunication which has at any time been placed in the hands of medical readers, the Association is able to promote and assist scientific, literary, and social progress in the professional world with increasing munificence. The two research scholarships which the Association endows, the large annual contributions which it makes through the Scientific Grants Committee and through the Therapeutical Committee to men engaged in unremunerative studies for the benefit of suffering humanity, are among its highest and most undeniable claims to public gratitude. No selfish use is made of the surplus funds. They are devoted to the largest schemes for professional, educational, and public progress. The expenditure on the Library and Reading Room is one which will be generally regarded with satisfaction. In virtue of a carefully guided but liberal outlay, the Library of the Association has been substantially fitted, and already contains some 4,000 volumes, a large number of which are of a standard character; some of them

including costly illustrated works, great cyclopædias and series of year-books which are beyond the resources of a private library, and to which reference must frequently be made by practitioners and authors of papers. Such a nucleus naturally attracts gifts from generous donors. The number of books has increased by nearly a thousand since the commencement of the year, and a very large proportion of these are due to individual gifts and legacies; no doubt these will increase from year to year.

Degrees for English Medical Students.

Without attempting in the brief space to which these outlines must be restricted to set forth the excellent work which will be reported in detail at the annual meeting, we may refer with satisfaction to the prospects of a near settlement on a reasonable basis of the question of medical degrees for English students educated in the metropolis and in the great provincial schools. To this progress the Association, and especially the Metropolitan Counties Branch—and we believe we may add with universal assent the British Medical Journal—have largely contributed. The principles which we ventured at the outset to lay down with emphasis have been adopted *en bloc* by the Royal Commission which we claimed and which was appointed as a sequel to the action to which we refer. The result of that Commission has been that the University of London has been stimulated, and indeed compelled, to draw up a scheme which has been the subject of frequent conferences between it and the metropolitan colleges. A final result has not yet been attained, and, where so many interests and views exist, it is possible that the ultimate adjustment can only be obtained by the final intervention of the Royal Commission—which is at present only in suspension—and of the Government. All parties have now approached this question, however, with an evidently sincere and enlightened desire to obtain a successful result, and where so much ability and goodwill are employed in so good a cause a finally satisfactory conclusion may be assumed to be certain.

Reform of Hospital Administration.

So also in respect to the great question of hospital administration. The vigorous action of our last annual meeting and the attention subsequently given to the subject by the Branches of the Association and by the Committee appointed by the Council have together given to this question a great impulse. The appointment of the Select Committee of the House of Lords will help to carry it many steps further. The matter is one of such complexity and extent that many a day will probably pass before a full solution is attained; even then it can hardly be hoped that it will be satisfactory to all parties. In such matters we must be content to advance by degrees, and to progress so far as professional and public opinion on the subject, which is one of as much public as professional interest, can be reconciled and made to work together.

The Parliamentary Bills Committee.

The great services which the Parliamentary Bills Committee, supported by the Association, was able to confer on the Naval Medical Department, which is now in a state of complete contentment, are emphatically recognised by the authorised spokesman of that department on all fitting occasions, and were so once more by the Director-General this week. The Army Medical Department is, at the present time, less fortunate in its position, but we do not doubt—nor, we believe, does anyone who has fairly and impartially considered the subject—that the recommendations of the Camperdown Committee, which was appointed to consider the representations of the Parliamentary Bills Committee, and which fully confirmed its representations, must, in the end, be carried into effect. Already the great colleges of the metropolis, of Edinburgh, and of Dublin, to whom the *Memorandum* on the subject, recently prepared by the Chairman of the Committee, has been submitted, have taken steps to signify to the Government their assent to the conclusions suggested in that *Memorandum*, and to press upon the Secretary of State for War the necessity for carrying out its recommendations. The Branches of our Association all communicating with their Members will bring pressure which cannot but have the strongest effect upon any reasonable-minded Minister, such as Mr. Stanhope has the well-earned reputation of being. At any rate, this is certain, that if the Minister of War is so ill-advised by his military advisers as to continue to resist after pressure, it rests only with the schools, now as heretofore, by withdrawing the supply of candidates, to ensure that these just and reasonable demands shall be conceded without delay.

"The British Medical Journal."

We resist the temptation to dwell upon other topics, and proceed to speak the few words which it is customary to say on this occasion concerning the Journal itself, and which are due to our members and to our readers. We need only say that the unprecedented favour with which the Journal is received by the English-speaking profession throughout all parts of the world, as well as by our literary contemporaries, will stimulate the editorial staff to continue in their endeavours to make it more and more worthy of the great Association which it represents, and of the vast and varying interests which it furthers. Having attained a circulation which is more than half as large again as that of any other British medical periodical, and which is probably not far short of that of all the other English medical periodicals put together, there does not seem to be much room for increasing the already considerable number of our weekly pages. A weekly number of the British Medical Journal now corresponds in contents to that of an ordinary 8vo. volume in the customary book type. It is obvious, therefore, that we have, and must have, habitually to appeal to the indulgence of our contributors and correspondents in the inability under which we suffer of publishing all that is sent to us for publication; and in urging upon them brevity and condensation, and the omission of superfluous matter. There is, indeed, a certain small proportion of contributors and correspondents whose enthusiasm and diffuseness lead them to assume a claim to what we consider to be more than their due proportion of space. The rights, privileges, and needs of readers have to be considered, as well as those of correspondents and contributors. To reconcile these various and often conflicting claims is not always an easy task, but it is one to which we bring the most earnest desire to do justice to every interest, and to consider the claims of the least known and least publicly distinguished

individual with as much care as those of the most eminent and distinguished of the leaders of the profession.

Future Prospects.

The yearly record of the Association has, then, been wholly satisfactory, and judging from the programme which we are already able to put forward, there is every reason to expect that during the coming year the prospect will be not less gratifying than the retrospect.

HOSPITAL REFORM:

Mr. Hutchinson's Address.

At the annual Hospital Sunday Fund meeting, Mr. Jonathan Hutchinson, whose address was the leading feature of the meeting, put forward with intellectual power and religious pathos the overwhelming claims of these homes of the sick and houses of healing. It is a theme rich in topics which touch the heart and stir the sentiment of the best of mankind, and cannot leave even the worst unmoved. Eloquence, learning, and religion cannot be employed in a better cause, and they are sure of a great and growing sympathy from an ever-widening social circle. It is, however, a healthy sign of the times that even in such an address in which the great work of charity, and the pitiful needs which remain to be met, must form the leading consideration, the great question of hospital reform was not left untouched. It can be so no longer. The great movement which the British Medical Association has taken in hand, the reports and meetings of its Branches, and the abundant correspondence in these pages, have given an impulse and a direction to the question, which has raised it during the year into that foremost place among social questions which properly belongs to it. The admirable memorandum of the Charity Organisation Society, and the appointment by the Government of a Select Committee of the House of Lords show that the subject is one which the most serious of philanthropists and the most thoughtful of officials agree in considering ripe for further adjustment. It is not our purpose, here or now, to criticise the thoughtful words of Mr. Hutchinson; neither can we by silence give complete consent to them and to all that may be deduced from them. No doubt, when discussing criticism on hospital management at a meeting called to collect funds for the London hospitals he was speaking under close restraint and much disability. Any considerable admissions or any forcible exposition of charges of abuse would have been hostile, in some measure and for the moment, to the efficient performance of the particular duty which he had in hand. Otherwise it would be difficult to understand the assumption that in affording relief gratuitously to those who can afford to pay for it, hospitals do not injure the self-dependence and self-respect of the recipients, or do any important injury to medical men. We believe the evidence in both respects is the other way.

Most men will, however, agree that development in the right direction must grow out of the judicious criticism which the hospitals are now undergoing, and that meantime they have an indefeasible claim to liberal public support. The general practitioners of this country, from whom much of the present criticism proceeds, are least of all likely to adopt steps destructive of the utility and efficiency of institutions to which their education has owed so much, and to maintain which their profession is the main prop. But precisely because they are the main props of the hospital system, and precisely because the general practitioners do widely complain and stoutly declare all over the great towns, and throughout the country, that indiscriminate hospital relief injures them and demoralises the industrial population, the hospital and consulting medical officers cannot absolve themselves of their great responsibility. We cannot profess to be wholly satisfied with the address of Mr. Hutchinson; and able, experienced, and thoughtful as he is, we believe that many will prefer the recent utterances of Mr. Timothy Holmes before the Select Committee of the House of Lords. Both are men holding great positions; the President of the Royal Medical and Chirurgical Society has, however, in our opinion, gone much nearer to the mark on this matter than the able President of the College of Surgeons.

The name of Lord Saye and Sele has been added to the Select Committee on Metropolitan Hospitals.

The President of the Royal College of Surgeons has issued cards for a *conversazione* at the Royal College of Surgeons on the evening of June 26th, 1890.

The President of the Royal Society has issued cards for a *conversazione* at Burlington House on the evening of June 28th. This will be the ladies' night.

The sensation of the week has been the objection of the General Medical Council to register the diplomas in public health granted by the University of Glasgow. To this subject we shall refer next week.

The annual dinner of the Army Medical Staff takes place at the Holborn Restaurant, at 7.30 P.M., on the 18th instant. Those wishing to be present should apply for tickets to Brigade-Surgeon James Hector, 16, Schubert Road, Putney.

The Mansion House Council on the Dwellings of the Poor report that funds are coming in very slowly this year, only £270 having been received, as compared with £1,221 up to date last year.

We understand that Lord Dunraven, who has now ably delivered himself on the subject of "sweating," and vindicated his report, will, at the close of the present or early in the next week, introduce into the House of Lords the Bill of the Association of Members of the College of Surgeons for widening the representative basis of the Council of the College of Surgeons, and increasing the powers of the Fellows and Members.

The annual meeting of the After-Care Association for Poor and Friendless Female Convalescents on Leaving Asylums for the Insane will take place at 83, Lancaster Gate, W., on June 23rd, at 3 P.M. The Earl of Meath will preside. Cards of invitation can be obtained of the Secretary, Mr. H. Thornhill Roxby, Arden Lea, The Drive, Walthamstow, Essex.

The forty-two deputies of the French House of Assembly and thirty-two senators belonging to the medical profession are going to inaugurate, by a banquet, a series of lectures, in which the various legislative projects affecting their profession will be discussed.

At the last meeting of the Council of the Pharmaceutical Society, Mr. Michael Carteighe was re-elected its President. It is interesting to note that this society is entering its jubilee year, having been founded in 1841, with the late William Allen, F.R.S., as its first President. Mr. Carteighe, a man of notable administrative capacity and an excellent speaker, has occupied the presidential chair for the past eight years.

WHEN JUDGES DIFFER.

It has often been pointed out that though the phrase "doctors differ" is so commonly quoted as a reproach to the medical profession, it is one which both in its origin and its true application refers at least as much, if not more, to experts in the law, engineering, and in other so-called exact science. The Lord Chancellor (Lord Halsbury), speaking at the Mansion House on Wednesday evening, went so far as to make it a particular merit of the judges, and one of their claims to the public esteem which they so justly enjoy, "that they spent nearly half their time in differing from their learned brethren."

A £50,000 FUND.

A Committee of the Council of the Epsom Medical College has been appointed to consider in what way a fund of £50,000 can be raised before the Biennial Festival. A proposal to this effect, with a view of providing efficiently for the numerous pensioners seeking the benefits of the College, has been brought forward by Dr. Holman, and a liberal offer has been made of £1,000 towards starting the fund, provided the full amount can be raised. The members of the Committee appointed are, we understand, Mr. W. France, Mr. Malcolm Morris, Mr. Propert, Sir John Jennings, Mr. Page, Mr. Purnell, and Dr. Holman.

NAVAL MEDICAL SERVICE.

The revised regulations for the admission of surgeons into the Royal Navy have been issued. The alterations noted are (1) that the rules as to the retirement by age of the inspectors-general have been modified to admit of the retention until 62 of officers of that rank in cases in which the Lords of the Admiralty may consider that the interests of the public service will be materially advanced by such retention; (2) that surgeons who have been kept away from England and naval hospitals by lengthened service abroad will, if the convenience of the service will admit, be allowed to attend metropolitan hospitals for three months, to improve their professional knowledge, and while so employed they will be borne on ships' books and receive the ordinary pay of their rank.

AFTER-CARE OF THE INSANE.

The After-care Association of the Insane, of which the Rev. Henry Hawkins, Colney Hatch, is the Honorary Secretary, continues to carry on such excellent work, and is one so little likely to achieve ordinary popularity, that we feel bound to say a specially good word for it. During the past year fifty cases of female convalescents leaving asylums for the insane in a poor and friendless condition have been dealt with. In nearly every case assisted suitable employment was afterwards found. Convalescents have been boarded out in cottages with great success, under the superintendence of local friends who have rendered most valuable assistance in finding suitable employment for a large number of the cases boarded out. The Earl of Meath, Dr. Hack Tuke, and Dr. T. Claye Shaw, have been appointed trustees during the year. Cases have been assisted from eighteen different asylums. The Council feel that the warm co-operation and assistance of medical superintendents is vital to the success of their work, and it is sincerely hoped that many more will join the Society during the coming twelve months.

INFANT LIFE INSURANCE.

The Bishop of Peterborough has introduced a Bill into the House of Lords dealing with the above subject. In the first place, the amount for which a child may be insured is to be limited, in the case of a child under 5 years of age, to £4; between 5 and 10, £6; for a boy between 10 and 14, or a girl between 10 and 16, £8. The society is to be forbidden to pay the money to anyone but an undertaker, and a special certificate must be produced stating the amount claimed and the name of the society; these certificates are to be numbered, so that the society can see whether a certificate purports to be the first; if not, the society must inquire what sums have been paid or are payable on the same death by other societies. The certificate will be given by the registrar, who must previously have obtained a certificate of the cause of death from a duly-qualified medical practitioner or from a coroner. Stringent penalties are attached to the infringement of any of the provisions of the Bill by any society, or by the agent of any society, or by anyone attempting to defeat those provisions. The Bill is not intended to prohibit the insurance of children's lives, but only to prevent anyone, whether parent or guardian, receiving money in consequence of the death of an insured child; and it is one which deserves, and will, we trust, obtain, a speedy passage through both Houses of Parliament.

CASE OF INCLUDED FŒTATION.

Much has recently been published in the *Transactions* of the Pathological, Obstetrical, and other societies concerning these forms of monstrosity which throw the most light on normal embryonic development, such as acardiacus, and particularly parasitic fœtus and included fœtation. M. Kolisko has described, at a meeting of one of the Viennese societies, the case of an infant which had a fluctuating tumour in the right half of the abdomen. On tapping, about a pint of brown fluid escaped, containing great quantities of squamous epithelium. The infant died, hardly two months old, from gastritis. At the necropsy a cyst was found above the peritoneum which it pushed downwards. The cyst contained fœtal rudiments, not anatomically amorphous, as in dermoid tumours, but with hands, face, and tongue. Such a cyst must be reckoned as a true teratoma—an extreme form of the condition which, in a less developed type, constitutes the parasitic fœtus, such as was seen in the case of "Laloo" exhibited a few years since before the Pathological Society, and represented in two woodcuts published in the Journal, vol. i, 1888, p. 436.

THE GLASGOW CHLOROFORM COMMITTEE ON THE REPORT OF THE HYDERABAD COMMISSION.

Readers will find in the present number an important critical paper by the members of the British Medical Association Committee on Anæsthetics on the report of the second Hyderabad Chloroform Commission on the action of chloroform. After examining the kymographic tracings taken by the Hyderabad Commission, and which were courteously submitted for their inspection, the British Medical Association Committee cannot agree with the Hyderabad Commission in holding that there is no danger to the heart during the administration of chloroform, and they adhere to the general conclusions of their reports published ten years ago in the Journal.[1] Both committees have found that death occurs by failure of respiration in the great majority of cases, and that chloroform causes a gradual fall of blood pressure which in itself is a source of danger. Both have also observed that in addition to this gradual fall, there may be sudden and unexpected falls, with slowing of the heart, but as to the explanation of these falls they differ. The Hyderabad Commission hold that these sudden falls, during which life is in jeopardy, are caused by asphyxia, while the British Medical Association Com-

[1] Journal, 1880, vol. ii, p. 966.

mittee affirm that they are due to a failure of the heart due to a pecific action of chloroform upon that organ. We must refer to he Hyderabad Report and to the Remarks of the British Medical ssociation Committee for the evidence adduced in support of hese contentions. The general conclusion of the British Medical ssociation Committee is that while recognising the great value of he work done by the Hyderabad Commission, and more especially s aided by Dr. Lauder Brunton, they consider that the Hyderabad ommission attach too much importance to the most common ode of death from chloroform—failure of respiration, and fail to ecognise the danger to the heart that may arise in certain physio- gical conditions. They consider it unwise and unsafe in prac- ice to pay no attention to the state of the circulation and to bserve respiration alone. Further, they consider it unwise to onvey to the public, even through the profession, the notion that here is practically no danger in the administration of chloroform. dmitting that the number of deaths from so potent an agent is emarkably small, even in the hands of those who pay so little ttention to the circulation, they consider it to be an act of com- on prudence in giving chloroform to watch both the pulse and he breathing.

THE AMERICAN MEDICAL ASSOCIATION.

HE forty-first annual meeting of the American Medical Associa- on was held at Nashville, Tennessee, on May 20th, 21st, 22nd, nd 23rd, under the presidency of Dr. E. M. Moore, of Rochester, .Y. Dr. Moore, in his address, urged the necessity of appointing Minister of Health, with a trained body of experts under his rders. The address in Medicine was given by Dr. N. S. Davis, of hicago, who argued forcibly against the indiscriminate use of lcohol and antipyretics in fever. He urged that the antipyretic nd analgesic effects of these drugs were in reality due to their nterference with the most important metabolic processes and ervous functions on which heat production and nerve sensibility epends. They could not be given continuously in doses suffi- ient to produce an antipyretic effect without seriously impairing he quality of the blood, the nutritive or general metabolic pro- esses, and depressing the vasomotor, cardiac, and sensory nerve nctions. He said that clinical statistics entirely supported this iew; the ordinary use of alcoholics and the more recent internal ntipyretic remedies in the treatment of typhoid fever pretty niformly resulted in 1 death for every 4 to 7 cases treated, while ases of the same fever treated without any use of these remedies esulted in only 1 death for every 17 to 20 cases. The address in urgery was given by Dr. Samuel Logan, of New Orlears, who iscussed especially the relative merits and dangers of chloroform nd ether as anæsthetics. The number of members attending the eeting is stated to have been about the average, and the *New ork Medical Record* speaks appreciatively of the warm southern elcome which awaited the visitors. The report of the trustees the Journal of the Association showed an increase in the circu- tion. The next meeting of the Association will be held at ashington under the presidency of Dr. W. T. Briggs, of Tennessee.

EPROSY AND THE ATLANTIC PASSENGER TRADE.

t the meeting of the American Medical Association on May 21st rgeon-General Hamilton, who is at the head of the Marine Hos- tal Service, said that a very strict outlook for leprosy was being pt at all seaports, and two lepers had already been sent away nce the law came into effect. One of the two cases referred to Dr. Hamilton was no doubt that of the Swedish woman who as recently returned to Liverpool after having been refused per- ission to land at Boston. This unfortunate woman, after being used for a few days in the Brownlow Hill Infirmary, has been, arrangement with the Swedish Consul, returned to her own untry. Dr. Tanner asked a question in the House of Commons with reference to this case last week, and it is no doubt much to be regretted that the woman was ever allowed to cross the Atlantic. The fact, however, is that the blame rests upon the President of the Board of Trade, and not upon the medical officers of his department, who are, in fact, asked to perform impossibilities. The medical examination of emigrants at ports of embarcation has to be performed hastily, often in the open air, and always under circumstances most unfavourable to arriving at an exact diagnosis. It is very much to be desired that there may be no attempt to hush up the facts of this case. Last year, when the question of ship sanitation was raised on the estimates, Sir Michael Hicks-Beach made what can only be described as a flippant reply, and endeavoured to shift the blame on to the shoulders of the ship surgeons, saying that if the abuses alleged did exist it was the fault of the ship surgeons, who ought to have reported them. The disingenuous nature of this reply is sufficiently shown by the fact that the surgeons are not empowered to report to the Board of of Trade but to the shipowners, who unblushingly supply only so much information as they think desirable; indeed, they deliberately refuse to give information asked for under certain heads by the Board of Trade. The anxiety felt in America as to the importation of leprosy is very natural, for it would seem that there are on the mainland of North America at least three areas within which leprosy prevails to a serious and, there is some reason to fear, an increasing extent. These are in the neighbourhood of New Orleans, in Lousiana, and of Key West in Florida, and in New Brunswick.

THE LATE DR. DE BARTOLOMÉ.

THE funeral of Dr. de Bartolomé was, as might have been expected from the high position and great popularity of that eminent physician, made the occasion in Sheffield of an important public demonstration of esteem and regret. The medical school, the infirmary board and medical staff, the whole of the lodges of Freemasons, the Sheffield Medico-Chirurgical Society, the Scottish Amicable Life Assurance Society, and a large concourse of the medical profession and leading citizens accompanied the funeral and assembled at the church. A large number of floral offerings were sent. The service in church was impressively conducted, and the funeral rites of a late beloved president of the British Medical Association were accompanied by every demonstration of respect, affection, and regret.

THE ACTION OF STROPHANTHUS.

DR. BUCQUOY[1] has particularly studied the sphygmographic records of strophanthus action. He finds the strophanthus tracing characteristic: the ascent of the curve reaches a higher level, the line of descent falls more abruptly—in short, the characters of the collapsing or aortic regurgitant pulse are reproduced. Dr. Bucquoy's observations were on all varieties of valvular disease, mitral, bicuspid, and aortic, and on combinations of these lesions; further, he tried the effects of the drug on a case of fibroid kidney with arterial degeneration and hypertrophied left ventricle; also on a case of emphysema with "fatigued" heart, and on a case of "tachycardia," in which the hurried action was not dependent on valvular disease. His remarks are based on fourteen cases in all; but he states that he has had, during two years of work with strophanthus, an experience of several hundred cases. The indication for strophanthus is in every case ventricular incompetence. The increased force of the ventricular systole caused by the drug is accompanied by a diminution in the frequency of the pulse and by an attempt at regulation, but in many cases the pulse remained irregular. Strophanthus action is best shown in cases of aortic disease, and for the reason that an increased

[1] *Nouveaux Remèdes*, May 24th, 1890.

ventricular beat must become more manifest when the whole force of the stroke issues through the aortic opening than when, through mitral incompetence, only part of this stroke reaches the pulse; moreover, the dilatation and hypertrophy of the heart in aortic disease being greater than in mitral disease, the former condition is better adapted to show increased force of action. Does strophanthus cause contraction of the arterioles? Dr. Bucquoy, from clinical experience, holds that it does not. He further quotes experiments of Dr. Emil Delsaux, of Liège, with Roy's oncometer as bearing out this view, since the oncometer tracing did not show any variation during the administration of strophanthus. The urine curve of strophanthus action follows the pulse curve. The influence of strophanthus on blood pressure is not discussed. In cardiac failure Dr. Bucquoy asserts that strophanthus possesses the advantages of rapidity of effect, of sustained action, and of tolerance. It is, however, generally held to be less permanent in its action than digitalis.

THE VALUE OF THE MUZZLE.

THE statements of all the experts affording evidence of any real value all go to show the supreme importance of the muzzle as an agent for the suppression of rabies. The official returns from Berlin, when taken in their entirety, prove the case for the muzzle up to the hilt. The outbreaks referred to were traced to laxity of the police regulations, caused by years of practical immunity from rabies following upon prolonged periods of muzzling. Above all the report of the Select Committee is of the highest value, because, after having heard and examined all the witnesses for and against muzzling, the Committee reported first and foremost that when rabies is prevalent the muzzle should be enforced. After so conclusive a verdict being delivered by those specially appointed to consider the evidence, it is difficult to understand the frame of mind of those who seek to retry the case in the absence of the witnesses. If medical men do not necessarily understand the question of rabies in dogs it may at least be assumed that editors of canine journals do, and one need only refer to the columns of the *Stock Keeper* and the *Fanciers' Gazette* during the past three years to see that the experience of Berlin is regarded as being particularly instructive, and that muzzling regulations in various parts of the world have been in the highest degree beneficial.

THE COLLEGES AND THE ARMY.

WE are happy to be able to report that the memorandum of the Parliamentary Bills Committee on Army Rank and Organisation, and on the recent recommendations of the Camperdown Committee, have been brought under the notice of the Royal Colleges in England, Ireland, and Scotland, with excellent results. These colleges, mindful of their official position as the great authorities of the profession, have energetically seconded the efforts of those who desire to see the recommendations of the British Medical Association, endorsed as they now are by a Departmental Committee of the War Office, carried into effect. The Royal College of Surgeons of England and the Royal College of Physicians are both taking steps to induce the Secretary of State to adopt the course indicated. We have received an admirably drawn memorial from the Royal College of Physicians of Edinburgh to a like effect, and we understand that the Irish Colleges are also taking active steps. In the pending election at the University of Dublin this has been made, by the representatives of the medical graduates, a leading question, and the candidates have, we believe, pledged themselves to further the objects in view if elected to Parliament. In like manner all the Branches of the Association, through their officers, are pressing the matter on the notice of their respective members of Parliament, and we have received numerous letters indicating that the members in question are sensible of the importance of giving due consideration to the representations thus made. Sir Walter Foster, Dr. Farquharson, and other medical members of Parliament are arranging to have the subject debated in the House and, although immediate results may not be attained, there is a reasonable prospect that this object will be successfully carried out at no distant date. If, however, the schools continue to supply candidates for the Army Medical Service under the present conditions, this will greatly tend to neutralise the efforts which are being made. It is well understood in the War Office that the ultimate appeal is to the schools, and it is quite certain that if the supply of candidates for the British and Indian Army be cut off, the concessions, of which the justice is now universally admitted, will be made. On the other hand, if the supply is abundant they will be indefinitely delayed. We earnestly commend this view to the consideration of senior students, to the Deans of the schools, and to the Lecturers at the medical schools in Great Britain generally.

MENTHOL IN THE HYPEREMESIS OF PREGNANCY.

HYPEREMESIS in pregnancy is a grave complication. Within the last ten years Professor Horwitz, of St. Petersburg, and Dr. Grailly Hewitt have written upon the subject. Dr. Copeman first published in the JOURNAL of May 29th, 1875, the famous case which he treated after the method to which his name has since been applied. "Copeman's treatment" signifies the relief of sickness by dilatation of the os and cervix uteri. The obstetrician's fingers are usually sufficient for the purpose. The treatment has been widely adopted; between 1875 and 1880 several experienced obstetricians contributed papers to our columns on successful cases, and for full information we refer the reader to the statistical tables published by Dr. Hewitt in the *Transactions of the Obstetrical Society* for 1884. Of course Copeman's treatment does not suit every case. Dr. Gottschalk recently described a case in the *Berliner klin. Wochenschrift*, where in a woman, aged 26, who had been pregnant three times, incontrollable vomiting set in during the second month of her fourth pregnancy. Neither cocaine nor Copeman's treatment availed, and the sickness continued until abortion was induced. The patient became pregnant for the fifth time, and the vomiting returned, hæmatemesis taking place. A draught consisting of menthol 1 part, rectified spirits 20 parts, and distilled water 150 parts was prescribed by Dr. Gottschalk, and a tablespoonful given every hour. The vomiting ceased after the third dose, and pregnancy proceeded to term without any further complication. A second case was successfully treated with menthol.

THE FIVE YEARS' CURRICULUM.

IT is quite a mistake to suppose, as has been widely reported in the provincial and metropolitan press, that medical students are disturbed in mind on the subject of the decision of the General Medical Council to impose in future a five years' curriculum. It would be indeed unreasonable to expect that any student already started on the old curriculum would care much, so far as he is personally concerned, what regulations might be framed for the benefit or annoyance of his successors. On the other hand the lecturers and teachers would not be likely to oppose a regulation which, while it will greatly add to the efficiency and completeness of medical education, will be to their advantage in several respects. It should be noted that not only will the extended curriculum not apply to existing medical students, but that with a view of giving time to parents to make the necessary arrangements for the maintenance and cost of education of intending medical students for the extended period now decided on, it is resolved that the regulations in question shall not come into force until 1892.

THE REPORTED LEAD-POISONING BY DRINKING WATER.

further evidence of the value of the recent reports in our imns on the extensive lead-poisoning of the population of ffield and the surrounding district by contamination of the iking water—to which reports the attention of the House of imons was recently called—it may be mentioned that application been made by the distinguished head of the medical depart-it of the Local Government Board for reprints of the report. Special Commissioner who kindly undertook to visit the dis-t and to report the result of his investigations on the spot was S. Monckton Copeman, of St. Thomas's Hospital. We are ch indebted to the leading medical practitioners and the officers he local authorities for the kind reception which they gave to Commissioner, the valuable information which they furnished the facilities which they afforded for the researches on which excellent report has been based.

DOMESTIC MEDICINE IN THE OLDEN TIME.

old household recipe book is a well-known domestic institu-, and one of some archæological interest, for it is now happily ling to become extinct. Even in the days of our grandfathers ad already degenerated from the important place it held in es when printed books were few and expensive, and when rence was still paid to the pseudo-medical traditions handed n from one household oracle to another. Mr. Weddell, of castle, appears to have come across a good specimen of this , containing entries from the time of Queen Elizabeth to the dle of the last century, and proposes to issue a lithographic *simile* of this curious document. The method of reproduction ell chosen, since even as a historical study of handwriting *fac simile* will be valuable. The subject matter would supply erials for a corresponding history of domestic medicine as tised in noble families in the North of England, for though y of the formulæ were doubtless derived from printed books, selection would at least show what kind of remedies were popular. The modern reader will laugh and shudder by s at the strange remedies which our ancestors swal-d with undoubting faith. The book would appear to have tle, and the editors have given it that of *Ye Apothecarie; Booke*, which, if we may say so, does not seem altogether opriate, and the orthography of which savours of the pseudo-aic school. It is proposed to publish this curiosity of medical ature by subscription at 12s. 6d., and subscribers' names will eceived by Mr. George Weddell, 20, West Grainger Street, castle-on-Tyne, who will be pleased to show the original MS. nyone interested.

SURGEON PARKE.

EON PARKE has been the medical hero of the week. He was tained by the Public Health Medical Society on Thursday, by eaders of the metropolitan profession on Friday, and by the nteer medical surgeons on Saturday. Although "no orator as is," he makes no less favourable impression than his dis-ished and eloquent chief Stanley, chiefly by reason of his y but modest bearing, and a most prepossessing personality, h adds no small charm to his plain and unadorned periods. Council of the British Medical Association, as we publicly nced some time since, decided, before Surgeon Parke reached shores, on the public record of his work generously made by tanley, to bestow on him the "blue ribbon" of the medical ssion — the Gold Medal of the Association — the highest r which can be received as a recognition of heroic achieve-The public bestowal of this crowning honour will gain in from the subsequent and intervening recognition of its just wal by the many spontaneous and unofficial tributes which have been offered to the sterling value of his character and his excellent conduct under very trying circumstances. The graceful and distinguished honour done to him at the largely attended metropolitan banquet, which we report, must be among the most agreeable of his reminiscences of a rather overwhelming series of banquets, receptions, and festivities with which the African season is loaded. The "bitter cry" of a distinguished correspondent, who seems to have suffered much from the somewhat oppressive length of the proceedings of Friday evening last, must be heartily echoed by Surgeon Parke and his associations. But is it not strange that while loaded with eulogies and banquets, medals and honorary diplomas, and all the other insignia which are apt to be showered on those whom the British nation delights to honour, not a movement has been made by the War Office or the Government to confer promotion or official recognition (in grade or distinction) of the exceptional achievements which have so deeply stirred public feeling to demonstrations of enthusiasm?

DEGREES FOR LONDON MEDICAL STUDENTS.

"THE further revised scheme" for the reconstruction of the University of London, which has been submitted by the Senate for the consideration of the Royal Colleges and the London Colleges and the medical schools, is a somewhat perplexing document, which will require to be very thoroughly studied by the bodies interested before its complicated—and at first sight contradictory—provisions can be unravelled. Its most salient features are the recognition of all the metropolitan medical schools as constituent colleges in the Medical Faculty, and the acceptance of the principle that the examinations in anatomy, physiology, medicine, surgery, and midwifery for the Pass M.B. degree shall be conducted by a board of examiners consisting of the examiners appointed by the University, and examiners to be appointed by the Royal Colleges of Physicians and Surgeons. The proposals as to matriculation, and the absence of any proposals to modify the preliminary scientific examination are weak points in the scheme, to which the attention of the various colleges will doubtless be directed.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

No other candidates have sent in their names besides the seven mentioned in the JOURNAL of June 7th. The last day for application is now past. The three retiring members, Mr. Marshall, Mr. Power, and Mr. Croft, have all maintained their determination not to seek re-election, so that the candidates, arranged in order of seniority of Fellowship are Mr. Rivington, Mr. Carter, Mr. Langton, Mr. Bellamy, Mr. Marcus Beck, Mr. Mitchell Banks, and Mr. Lawson Tait. Our readers will find matter for reflection in the analytical statement of elections published in another column, especially as regards the present composition of the Council, and the representation of London and the provinces. All the metropolitan candidates are from the schools. These medical school candidates have usually been well cared for by their colleagues and old pupils; they are, moreover, all well-known men. Mr. Bellamy comes from Charing Cross Hospital, which has no representative at present on the Council. Mr. Rivington, of the London Hospital, is a strong advocate of reform, although not after the generally-accepted formula. Turning to the provincial candidates, we may first note that at present there are only three provincial members on the Council, Mr. R. Harrison being now an inhabitant of London. The candidates under this class are of known ability. Mr. Lawson Tait is member of the Council of Queen's College and President of Mason College, and therefore actively engaged in the superintendence and direction of the scientific and medical education of a very important centre. His great surgical reputation and his vigour in urging the cause he thinks right are equally familiar to the profession at home and

abroad. No Fellow is more fitted to fight boldly for the provincials and for thoroughgoing reform. There is a second most excellent provincial candidate, Mr. William Mitchell Banks. Beginning life with a sound scientific education, he distinguished himself by writing an important thesis "On the Wolffian Bodies." He is now known as a surgeon of great distinction, especially in relation to his advocacy of complete extirpation of cancerous breasts. He holds several important appointments at Liverpool, a city not at present represented on the Council. As an administrator, he is of tried and proved capacity in the medical institutions of his city; as a member of the General Medical Council, he has shown original power, independence of thought, and sound judgment, and has rapidly taken a prominent and useful position there. It is to be hoped that the Fellows of Birmingham, Liverpool, and the provinces in general will not neglect to make use of their voting papers, and that provincial candidates so well equipped will find acceptance also with that large proportion of the metropolitan as well as the provincial Fellows, who desire to see the College flourish and advance in the direction of reasonable progress, sound representative development, and educational usefulness.

FASHIONS AND CUSTOMS OF THE DARK CONTINENT.

THERE is a sad monotony in our European fashions. Even the so-called changes are often fugues on a trivial theme, or thinly-disguised variations and reproductions of forgotten trivialities. Our new communications and lively interest in the gentle inhabitants of Central Africa may suggest some startling novelties. Besides the graceful extravagances of their head-dress—which, however, hardly beat those of the seventeenth and eighteenth centuries, reconstructed for the public edification a few years since by Mr. Lewis Wingfield, and which may yet live again—there are many varieties among our new African *protégés* of the way they wear their *heads*. The ruling families of the Monbuttu tribe flatten their skulls so as to elongate their heads. The Bari apply pressure just in front of the ears so as to heighten the head in that place. The Beli distinguish themselves by extracting the four front teeth of the lower jaw. Then there is a variety of ways of wearing a tail, which beat the Court train of the modern beauty in simplicity and perhaps in grace. The Madi wear cotton tails, which swing when they dance. Elsewhere a lady limits her costume to a twig arranged as a tail, and manages to seat herself at a court function with this appendage in a graceful and dignified manner without throwing it over her arm, and without the intervention of a chamberlain. In the matter of eating, they are catholic and omnivorous, and nothing comes amiss, from a banana—which furnishes food and, when fermented, drink—to a fat pig or a deceased wife's sister, who gives little trouble there to legislators. Owing to their reticence as to their burial customs—for which dark reasons are suggested—it is difficult to pursue this branch of anthropolcgical and osteological research. It will be seen, from the graver gleanings which we publish elsewhere, that there is much to interest the physician and the anthropologist. Dr. Emin Pasha's diary is a mine of dry but instructive reading on this subject (*Emin Pasha in Central Africa*).

GAGGED BY THE PRISON COMMISSIONERS.

WE understand that Dr. Macnaughtan, medical officer to the General Prison, Perth, had prepared a paper for the meeting of the Perthshire Branch of the British Medical Association, but was refused permission to read it by the Prison Commissioners. The following minute was thereupon adopted: "The Perthshire Branch of the British Medical Association regret to receive Dr. Macnaughtan's letter declaring his inability to accept the position of President, on account of the attitude assumed by the Commissioners under the Prisons Act rendering it impossible for him to make scientific reference to the cases under his care. This meeting especially desires to urge the importance of inquiry into the facts of crime and insanity, and the fullest knowledge of such subjects as the after-history of insane criminals, and the Secretary is hereby instructed to communicate this minute to the Commissioners." To this minute the Commissioners replied that they had fully considered their decision. Dr. Macnaughtan acted in a loya spirit of subordination to his superiors in at once and uncomplainingly submitting to their decision, and has made no communication to us, directly or indirectly. He intended to read an address on an outbreak of diarrhœa. It is absurd that a medical officer should be gagged at this time of day, especially in the nursery of criminal anthropology, where Bruce Thompson did his excellent work. Therefore this decision ought to be reviewed and considered by the press and in the House of Commons. The Prisons Board in Scotland at present wants some attention.

INFLAMMATORY LEUCOCYTOSIS.

VON LIMBECK'S investigations, brought forward at the Heidelberg Congress last year, have shown that the white corpuscles of the blood, physiologically increased in number during digestion, are considerably increased in number in all acute diseases which are accompanied by coagulating exudations—for example, lobar pneumonia and suppurative peritonitis. This increase does not occur in the infectious diseases which give rise to no exudations into the tissues—for example, typhoid fever, intermittent fever, septic fever, even if the temperature rises very high. The danger of this inflammatory leucocytosis is mostly proportioned to the degree of exudation and its richness in cells; it declines critically with defervescence; it does not occur with stationary exudations, and it is not diagnostically, but prognostically, a valuable criterion. In a discussion on this subject at Prague,[1] von Jacksch confirmed the statements of von Limbeck as regards typhoid and lobar pneumonia in children, the proportion of white to red corpuscles being 1 : 40 to 75. In the latter disease, the hæmoglobin amount was also distinctly lessened.[2]

VACCINATION IN GERMANY.

DR. D. GOLDSCHMIDT has lately published some statistics as to the effects of vaccination that speak for themselves with an eloquence which makes comment superfluous. The figures are given on the authority of the Berlin Health Office, which in 1888 and 1889 was ordered by the Reichsrath to collect facts on the subject. The death-rate from small-pox in Prussia and Austria from 1860 to 1869, when vaccination was not compulsory, was 33.84 and 33.23 respectively per 100,000 inhabitants; in England during the same period it was 19.98. In 1875 vaccination and revaccination were made compulsory in Prussia, and between that year and 1884 the death-rate from small-pox fell to 2.23 per 100,000. During the same period it was 6.61 in England, where vaccination alone was compulsory, and 61.64 in Austria, where it was left to "local option." In Bavaria, where both vaccination and revaccination have been compulsory since 1875, the death-rate from small-pox between that year and 1884 has been 1.11 per 100,000, the corresponding ratio for Belgium, where vaccination is optional, being 44.36 during these ten years. Equally striking results are got by comparing the small-pox mortality of some large European cities during the same period. Taking first towns where vaccination is optional we find that the average death-rate per 100,000 inhabitants was 165.437 in Prague, 84.373 in Vienna, and 28.954 in Paris. In London, under compulsory vaccination, the corresponding ratio was 25.500. When we come to the towns where both vaccination and revaccination are compulsory, the difference is striking. Thus

[1] Verein deutscher Aerzte.
[2] *Berliner klin. Wochenschr.*, No. 51, 1889.

the small-pox death-rate per 100,000 was only 1.482 at Dresden, 1.614 at Breslau, and 1.687 at Berlin. In 1886 only 193 persons died of small-pox in the whole of Germany, being at the rate of 0.4 per 100,000, while in Paris alone there were 218 deaths from the disease in that year. Small-pox has all but disappeared from the Prussian army, only one man having died of it from 1876 to 1885. In the Austrian army, where the revaccination of recruits is not insisted on, the average number of deaths from small-pox is 52 a year. The following figures, drawn from the books of a few German hospitals, may also be commended to the earnest attention of antivaccinators; they show the proportion of deaths among small-pox patients during the great small-pox epidemic of 1870-71, according as they were unvaccinated, vaccinated, or revaccinated. Of patients belonging to the first of these categories 80 per cent. died at Munster, 70 per cent. at Posen, and 54, 70, 66, and 81 per cent. respectively at four Berlin hospitals. Of the vaccinated patients 13 per cent. died at Munster, 12 per cent. at Posen, and 13, 16, 15, and 14 per cent. in the four Berlin hospitals. Among revaccinated patients the corresponding percentages were as follows: Munster, 0; Posen, 2; Berlin hospitals, 0, 4, 9, 9 respectively. In Bavaria in 1882 it was found that of the whole number of small-pox patients only 14.6 per cent. were vaccinated and 5.8 revaccinated.

SCOTLAND.

THE PATHOLOGICAL CLUB, EDINBURGH.

At the last meeting of the Pathological Club Dr. Alexander Bruce was elected Secretary in the room of Dr. G. Sims Woodhead, who has resigned, owing to his removal to London. The meetings of the Club are reported to continue of a high order, and there can be little doubt that the affairs of the Club will not suffer in the hands of the new secretary.

POST-GRADUATE CLASSES AT EDINBURGH.

As reported in the JOURNAL two weeks ago post-graduate classes of a practical character will be held in Edinburgh in the late autumn. In most instances the attendance will be limited, and a definite fee payable. The success of the limited practical classes last year was so great as to warrant the expectation of a large increase in the coming autumn. A detailed advertisement will be published shortly.

ROYAL SOCIETY OF EDINBURGH.

At the twelfth ordinary meeting of the Royal Society of Edinburgh on Monday, June 2nd, under the presidency of Sir Douglas Maclagan, M.D., Vice-President, Professor Crum Brown read a communication on the Relation of Optical Activity to the Character of the Radicals united to the Asymmetric Carbon Atom. Professor D. J. J. Charles, M.A., Professor of Anatomy and Physiology at Queen's College, Cork, was admitted a Fellow of the Society.

THE PHYSIOLOGICAL SOCIETY AT EDINBURGH.

The Physiological Society has accepted the invitation of the Royal College of Physicians of Edinburgh to meet in the Royal College and Laboratory at the end of July, and it is understood that the Society will be entertained at dinner by the College within its hospitable hall.

THE ST. BERNARD'S WELL, EDINBURGH.

The faith of the Edinburgh public in the healing virtue of St. Bernard's Well, Stockbridge, received a rude shock last week by the announcement that a skilled analysis of the water showed it to be contaminated and unfit for drinking purposes. But it would appear that there is no need for alarm. It is rather a question of outraged feelings. The medical officer of the city—Dr. Littlejohn—has written to the daily newspapers to the effect that the result of repeated analyses within the last few days by the City Analyst of the water at various hours is to show that its constitution is, if anything, purer than it was at the opening of the present well, and that there is a total absence of anything indicating sewage contamination.

CLINICAL AND PRACTICAL TEACHING AT EDINBURGH.

REFERENCE has frequently been made in the JOURNAL to various suggestions towards the improvement of the excellent clinical advantages which Edinburgh affords. These suggestions have come both from teachers and students, and it is understood that the whole matter is receiving full consideration at the hands of the staff and the managers of the Royal Infirmary, which naturally holds the largest part of the clinical resources of Edinburgh. It is felt that the very clear expression of opinion of the General Medical Council on the question of practical work affords an additional and strong argument for the early rearrangement of hospital work at Edinburgh. With a better division of the forenoon and an increase of accommodation in certain departments, and of the number of the medical staff, Edinburgh could offer clinical advantages unsurpassed by any of her sister schools at home or abroad. The fault of Edinburgh in times past, as it affects both patients and students, has been the attempt to crowd everything into the space of one or two hours about midday, while there can be little doubt that the morning and forenoon are far better suited for hospital study. Further, the all-important work of the *post-mortem* room is carried on at a time when the majority of students are otherwise occupied. If the pathologists would only press to have this serious fault remedied, and to have the examinations conducted two hours earlier, they would confer an inestimable benefit on the whole hospital and school.

MEDICAL EDUCATION OF WOMEN IN SCOTLAND.

THE authorities of Queen Margaret College, Glasgow, are busily engaged preparing for the new departure, to be made in October, when the first session of a fully-equipped medical school for women will be begun. The guarantee fund deemed necessary has been raised, and the other chief difficulties, that of a dissecting-room and that of hospital accommodation, seem to be in a fair way of being solved.

THE TEACHING OF DOMESTIC ECONOMY.

A REMARKABLE educative work is being carried on quietly and with little extended public knowledge or recognition year after year in the centre of the busiest part of Greater Glasgow, the suburb of Govan, famous for shipbuilding. It is training in domestic economy and cookery, imparted to the wives and daughters of working men, at the instance of Mrs. John Elder, the widow of the great shipbuilder. A trained cook, who is also a capable teacher, is employed by Mrs. Elder throughout the whole year to conduct classes and also to visit the homes of the working classes and give instruction to the women who desire it but cannot attend the classes. During the past winter 3,751 have attended the cookery demonstrations, and 1,268 the meetings for practice. Dr. Underwood, when United States Consul, deemed the proceedings at the annual inspection of the school of such importance that he wrote a special report to his Government. It was specially noticed by the department, and he himself found shortly afterwards the fame of Mrs. Elder's cookery school known in every city of one district in America, 1,500 miles in extent. The girls attending these classes are not only taught how to cook, but have explained to them what the nutritive ingredients of food are; how they var in amount in different foods, and how to reckon cost

of nutritive materials. They are trained to provide dishes not only attractive and palatable, but also nourishing and at little cost This is the sort of work that ought to be done in Board schools; it is of too great importance in its bearing upon the healthy lives of the people to be left to private philanthropy, which is not too often exercised with so much practical wisdom as is displayed by Mrs. Elder.

UNIVERSITY REFORM AT ABERDEEN.

UNIVERSITY reform is the question of the hour. All directly interested have shown no lack of activity in taking up the question of needful reforms. The Students' Council were the first to take action, and since its reconstruction the Court has been very actively engaged. On Saturday the General Council considered and adopted suggestions and reports which had previously been drawn up by subcommittees. The thoroughness of these reports will not only strengthen the hands of their representatives in the Court, but will do much to justify their own existence in the eyes of the public. The proposed changes are eminently practical, and cannot but result in much good. The General Council have never taken so keen an interest in the affairs of the University, and they have succeeded in arousing the interest of the general public as well. The gallantry they exhibit in proposing that every class and examination should be thrown open without restriction to ladies will be highly appreciated by their wives and daughters, while their sons will hail with delight anything that will help to cheer up the dingy class rooms. The Medical Committee might now, with much advantage, take up the subject of clinical teaching, and they will do good service if they devise some means by which the abundant material which exists in Aberdeen may be better managed.

RECTORIAL ELECTION AT ABERDEEN.

THE approaching rectorial election is exciting much interest. The feeling is for a local man, but to get a local man is far from being an easy matter. There have been several names suggested. Dr. Struthers and Sheriff Dove Wilson have been spoken of, and lately Dr. ANGUS FRASER, who at present represents the Council in the Court, has been freely mentioned. Dr. Fraser is a graduate in arts as well as in medicine, and takes a keen interest in University matters. As less than half the students are at present in town, there is really no knowing what may be done when the election comes.

ANATOMY FOR PRACTITIONERS.

PROFESSOR REID, of Aberdeen, gave a very interesting demonstration of admirably prepared frozen sections of the body to the Aberdeen Medico-Chirurgical Society the other evening. There was a good audience which seemed thoroughly to appreciate the demonstration. It is hoped that Professor Reid will give a demonstration at least yearly. Nothing would do more to freshen the knowledge of anatomy in its practical aspects.

THE ABERDEEN UNIVERSITY CLUB.

AN Aberdeen correspondent writes: Our University Club in London held its half-yearly dinner last week. The three professors present evidently did not arrange beforehand what their message was to be, for while they all urged that the University needed money, they had three very different proposals for raising and even using it, should it be raised. The proposed five years' curriculum has not attracted much attention among the students at Aberdeen, who usually go as assistants for a year or more before settling as practitioners on their own responsibility, so the proposed change will make little difference to them. Everyone is agreed that there is plenty of scope for clinical teaching here. Very much more might be made of the hospitals and dispensaries if they were under one control, or even if the several controls wrought harmoniously together.

IRELAND.

AT a meeting of the Council of the Dublin Branch of the British Medical Association, held at the College of Physicians on June 3rd Dr. Conolly Norman, who had held the offices of Honorary Secretary and Treasurer for about a year, resigned, and Dr. Molony, F.K.Q.C.P., Medical Superintendent of St. Patrick's Hospital, was unanimously elected in his stead.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.

THE annual meeting of the Irish Branch of the British Medical Temperance Association was held in the College of Surgeons on June 5th, Surgeon-General Gunn in the chair. Dr. MacDowel Cosgrave, in moving the adoption of the report, stated that the Branch had increased from 40 members eleven years ago to 411 now. The following officers were appointed for the year 1890-91: — President: Depu'y Surgeon-General F. L. G. Gunn. Vice-Presidents: Dr. T. Collins and Dr. J. W. Young. Hon. Secretary and Treasurer: Dr. J. Wallace Boyce, Blackrock, Dublin. Members of Council (Dublin): Dr. A. Atock, Dr. T. Collins, Dr. O'Connell J. Delahoyde, Dr. MacDowel Cosgrave, H. Gray Croly, Dr. J. A. Scott, Dr. S. Thompson, Dr. W. J. Thompson; (Country): Dr. Ringrose Atkins, Dr. John Eustace, Surgeon-General Joynt, Dr. Robert Morton. Associates' Committee: Mr. R. B. Sealy, Medical School, Queen's College, Cork; Mr. W. Farrington, Queen's College, Galway; Mr. S. W. Wilson, Carmichael School, Dublin; Dr. J. G. F. Hearne, T.C.D.

CHARGES AGAINST A DISPENSARY DOCTOR.

AN investigation into charges of neglect lodged against Dr. King, of the Castlepollard Dispensary, was held by Dr. Burke, Local Government Inspector, on Thursday, June 5th. It was alleged that Dr. King had neglected a patient, and that she died in consequence. Several medical men and some laymen gave evidence for the defence. There was considerable public feeling in favour of Dr. King, and, at the close of the proceedings, he was carried through the town on the shoulders of his admirers. A bonfire was also lighted. The result of the inquiry will not be known for some time.

THE DIFFICULTIES OF THE CORK DISTRICT LUNATIC ASYLUM.

A SUM of £4,103 17s. 3d. is due by the Corporation of Cork to the governors of the Asylum, in payment for city patients admitted to the institution. Repeated applications for the money have been unavailing, the Corporation refusing the amount which has been collected from the ratepayers, on the ground that they were not sufficiently represented on the Board of Governors. At a meeting of the governors, last week, a report of the Inspectors of Lunatic Asylums was under consideration. A number of defects in the management of the institution and treatment of the patients, which they consider require to be remedied, was referred to; the insanitary condition of certain divisions of the Asylum was animadverted upon, and complaint was made that patients were permitted to remain for three weeks without change of linen. The Chairman thought the report unnecessary, and in the main injudicious, and the accusations brought against the institution most unjust. It was resolved that a committee of the whole board should be appointed to consider the inspectors' report. One of the inmates committed suicide this week by hanging herself.

THE FORTHCOMING MEETING OF THE ASSOCIATION AT BIRMINGHAM.

General Outline.—Additional Notes.

THE arrangements for the forthcoming annual meeting of the Association at Birmingham, which will be held from Tuesday, July 29th, until August 1st, are now nearly complete, and, as will be seen from the programme which we publish elsewhere, are very comprehensive, including every provision which could be desired for the practical and scientific discussion of questions of the highest interest and most opportune character in each of the Section. The addresses of Sir Walter Foster, Dr. Broadbent, and Mr. Lawson Tait will be eagerly looked forward to. The writings and the public work of the three selected orators have never failed to arrest professional attention, but there is something in the living voice and personality of a public speaker which is far more impressive than any reading in the study. It will not be surprising if Sir Walter Foster addresses himself largely to questions of general interest in Medicine affecting its relations to the outer world. Mr. Lawson Tait is always individual, original, and effective in his treatment of gynæcological doctrines and practice, as to which he can hardly fail to deliver himself in his address on Surgery; while Dr. Broadbent deservedly ranks as one of the first of our modern therapeutists and clinicians, and one who has known how happily to unite scientific research with practical therapeutical application. His address on Therapeutics will undoubtedly be one of the most attractive features of the meeting.

The subjects to be dealt with in the Sections have been carefully selected so as to elucidate the points of novelty or of doubt which practitioners and teachers throughout Europe are at the present moment most actively engaged in solving. In all the Sections there is to be found so great a wealth of material for able exposition and sound debate that the embarrassment will be in selecting the occupation of the day, and many would desire to be able to be in several places at once. There are no fewer than twelve sections, and it is only to be feared that not all of them will be able completely to exhaust the full lists of papers and debates set down for the three successive days on which they meet. The solid work of the meeting is therefore already so thoroughly laid out that the success of this fifty-eighth annual gathering of the members of the Association is assured. So rich a programme can hardly fail to attract great numbers of the profession to the meeting, which is as full of promise as it is rich in material, and as well constituted and arranged as any which the Association has ever held in its long and prosperous career.

It was intimated in the short sketch which appeared in the issue of December 14th that since the last meeting of the Association in Birmingham in 1872, under the presidency of Mr. Alfred Baker, a meeting which was in every respect memorable and successful, the town itself and its medical institutions have undergone considerable development. A fine new street has been driven through the centre of the city, and noteworthy among the new public buildings are the Council House, the Mason Science College, the Art Gallery, the Law Courts, the Medical Institute, and the School of Art. The hospitals, which are numerous and extensive, have been largely developed and multiplied in number. The Medical Institute occupies a handsome building, with a hall for meeting, a reading room, and a library of upwards of 12,000 volumes. The Town Hall, Mason Science College, Queen's College, and Midland Institute are so conveniently grouped together that it will be possible to obtain all the accommodation required without going further than across the street. With regard to occupation and recreation outside the ordinary work of the meeting most ample provision has been made. In this respect it will be sufficient to give a few notes only of additions to the programme already announced, for which we are indebted to Dr. Robert Saundby, the General Secretary, who is sparing no effort to carry on the laborious work of his office in such a way as to give full effect to the liberality and energy of his fellow workers and of the profession in the town and surrounding districts.

On Tuesday, His Grace the Archbishop of Canterbury has consented to preach the annual sermon in St. Martin's Church, which has been kindly granted for the purpose by the Rev. Canon Wilkinson, D.D., Rector of Birmingham.

On Wednesday, in the afternoon, there will be an excursion to Lichfield to attend the service and view the cathedral. The party will afterwards be entertained at tea in the George Hotel, the number being necessarily limited to 150. Lichfield is sixteen miles from Birmingham, and is easily accessible by train. The Cathedral of St. Chad's is a beautiful specimen of Decorated Gothic of the twelfth century. The town is interesting as the birthplace of Samuel Johnson, who, it may be remembered, once stood in the market place bareheaded in pouring rain to expiate an act of filial disobedience committed many years before. Lichfield contains many quaint old buildings, and is well worthy of a visit, which can be made on any afternoon during the meeting. On the same afternoon, Mr. and Mrs. J. E. Wilson, of Wyddrington, Edgbaston, will give a garden party to members of the Association.

On Thursday afternoon, the gold medal of the Association is to be presented to Surgeon Parke, and Mr. H. M. Stanley has signified his intention to be present. The Midland Association of Volunteer Medical Officers will give a reception at the Drill Hall to the officers of Her Majesty's medical services attending the meeting. If a party can be made up on this or any other day to visit Burton-on-Trent, Dr. W. G. Lowe has kindly consented to meet it, and to act as guide to the breweries, and to provide for the entertainment of members.

The annual dinner will be held in the Edgbaston Assembly Rooms. This is a very handsome building, with an excellently appointed suite of rooms. The ball-room will be used as a dining hall. The number it is possible to accommodate cannot exceed 250, so that members desiring to be present should secure their tickets in good time; but it was felt that the excellent accommodation provided in this building, where there are proper kitchens, permitting the dinner to be served hot, made it greatly to be preferred to the Town Hall, where possibly 50 more guests could be seated, but where only a cold dinner could be provided.

For the benefit of the large number who will be unable, or who do not desire, to be present at the dinner, a concert will be given in the large theatre of the Midland Institute at 8 o'clock. This will be open to all members of the Association and to ladies accompanying them, but tickets will have to be obtained at the reception room.

On Friday there will be a morning excursion to Droitwich to view the baths and salt works, after which, by the kindness of Mr. John Corbett, M.P., the party will be taken over Impney House and grounds and entertained at luncheon. The brine springs of Droitwich rise in the centre of the town from the saliferous and gypseous strata of the new red sandstone which stretch across this part of England. The springs were known to the Romans.

In the afternoon Sir Walter and Lady Foster will give a garden party at their residence, Ashfield, Edgbaston, from 4 to 6.

There will also be an excursion to Dudley Castle, to view the ruins and explore the limestone caverns, which will be illuminated. The Castle itself, which is a remarkably fine ruin, on the summit of a finely-wooded ridge of hills, is situated eight miles from Birmingham. It was founded about the year 701, by a Saxon chieftain, Dodo. The present keep and chapel (which are the oldest ruins extant) are probably of some 400 years later date. In the civil wars it was one of the last of the castles which held out for King Charles, when its keep was dismantled by Cromwell. About 1750 a fire broke out, which completed the ruin, and since that time it has little altered. Underneath are the famous Silurian caverns, parts of which will be illuminated. These were formed by the removal of limestone rock for manufacturing and agricultural purposes. The fossiliferous specimens found here are amongst the finest and most perfectly preserved in the world. The priory ruins, which are a short distance on the western side of the castle grounds, will be open for inspection. They represent all that is left of a priory built about 1190, and supported by monks from Wenlock. The party will be provided with a substantial tea, the number being limited to three hundred.

On Saturday there will be excursions to Kenilworth, Leamington and Warwick, Coventry, Stratford-on-Avon, Worcester, and Tewkesbury, at which places the members will be entertained and shown all objects of interest. The excursion to Worcester will be especially pleasant, as there will be not only a musical service in the cathedral and a visit to the porcelain factory, but after luncheon the party will proceed by steamer down the river to Tewkesbury, where they will inspect the magnificent Norman Abbey Church, and return by rail to Birmingham.

By the kindness of the Committee, the Edgbaston Botanical Gardens will be open during the meeting to all non-resident

members of the Association on production of their tickets of membership. These gardens form a delightful lounge in warm weather, and are very easily accessible. The band plays there in the afternoons, and there are frequent outdoor concerts.

All the principal clubs of Birmingham have most hospitably thrown open their privileges of membership to all non-resident members of the Association during the meeting.

In addition, permission to visit the principal factories and workshops in the city has been courteously accorded. An opportunity will also be given for members who desire to do so to go down a coalpit.

The Annual Museum will occupy extensive premises in Queen's College, with a separate entrance from Paradise Street. It will be divided into five sections. Arrangements will be made for demonstrations of the most important collections of anatomical and pathological specimens. These demonstrations will be fixed for some time when the sections are not sitting, so as not to interfere with other business.

A number of distinguished foreign and colonial visitors are expected to take part in the proceedings of the meeting. Among these are Professor Panas, of Paris; Professor Dubar, of Lille; Professor Nicolaysen, of Christiania; Dr. Unna, of Hamburg; Professor Bardeleben, of Jena; and Dr. Shoemaker, of Philadelphia.

GLEANINGS FROM THE DIARY OF A PHYSICIAN IN CENTRAL AFRICA.

I.

RELIABLE information is useful at the present moment as to the medical, anthropological, and social condition of the natives of Equatorial Africa. Travellers' stories are usually received *cum grano*, and the public mind becomes confused between the soul-curdling fictions of Louis Stevenson and Rider Haggard and the graphic descriptions of a Du Chaillu and Stanley, when all attempt to realise to us the same unknown regions and strange people inhabiting them. The records, therefore, of an explorer who has not sufficient imagination and humour to see the strange and comic side of what he quietly describes, and who is a close scientific observer, are especially valuable, and it is in the dry-as-dust diaries of Emin Pasha that much accurate information can be gleaned regarding the people of Central Africa whom he governed for so many years. The various races which inhabit the vast continent which lies between Lake Tanganyika in the south, Khartoum and the deserts in the north, the vast forests of the west, and the sea, differ much from one another in their customs and language, though interbreeding, owing to the dispersion of the women, who are carried off as the spoils of war, has greatly prevented pure types being preserved.

Chief among the tribes, most powerful among the kings, are those of the fertile lands of Uganda and Unyoro, which lie between the Lakes Victoria and Albert. Here the Arabs from Zanzibar have introduced the customs and articles of commerce. The cowrie shell is the substitute for coin, and as the natives are not naked savages, but go about elegantly draped in dressed hides and dyed bark cloth, imported woven clothes and finery are eagerly sought after. The slave and ivory trade has under Arab influence developed greatly, while the rich resources of the country—the iron, coffee, and fruits—are still neglected.

The Wanyoro or inhabitants of Unyoro are a cleanly and almost fastidious people; they wash frequently and anoint the body, which is clean shaven with the exception of the head, with a sweet smelling grey clay, and a kind of touchwood smelling of musk. They all extract the four lower incisors. Their food consists of various vegetables made into a porridge, except when meat, which is greatly appreciated, can be obtained. Unripe bananas are roasted, and of the ripe fruit, *mwénge*, a slightly intoxicating drink, is made, which is universally drunk by young and old. Honey, sesame, sweet potatoes, and yams are liked, but pepper is avoided, as it is said to produce sterility; also the flesh of the hippopotamus, which it is asserted causes skin diseases. Earth eating is practised, and the earth with which the termites arch over their passages is most affected. It is said to cure some diseases, but to produce discoloration of the skin and hair, emaciation, and finally death. Tobacco smoking is universal, and the greater the chief the larger the pipe bowl, in which glowing embers and tobacco are equally mixed, which causes a considerable production of carbonic oxide and increases the narcotic effect. Until their marriage, the young Wanyoro girls go about perfectly nude. Notions of morality are mixed and simple. It is not considered disgraceful for a girl to visit her lover at night, but if he is found in her house he is beaten. If she becomes pregnant before marriage she is sent to the house of her lover till she is delivered, and if she dies in childbirth he is doomed to die too, unless he ransoms himself. When a woman is pregnant and labour commences, all the women of experience are summoned to assist her. She sits on her heels, her knees stretched far apart, while one or two women support her back and arms, and the midwife sits in front of her ready to receive the child. Delivery is promoted by rubbing over the uterus. If the head presents it is considered a good sign; if the feet present, it announces misfortune to the family. Should an arm presentation occur, it is replaced and an attempt is made to turn; this operation is performed by men, who receive special presents for the service. Should a woman die in childbirth, abdominal section is at once performed, and the child, whether living or dead, removed. Many women die of flooding, probably arising from attempts to remove the placenta. The umbilical cord is cut with a sharp splinter of reed, at a considerable distance from the navel, and is tied to the body of the child until it shrivels or falls off, which is hastened by frequent rubbings with fat. Ligature is quite unknown. The fifth day after birth the mother takes her child and sits with it on the threshold, and the name ceremonies take place. The child is suckled for eighteen months, during which time the mother lives apart from her husband. Many women are barren, and most of them have only two or three children. Unlimited polygamy is stated to be one of the causes which reduces the population. Unyoro women only bear children between the ages of 12 and 25. A son inherits all his father's wives, who become his wives, with the exception of his own mother. Theft is punished by confiscation of property for the benefit of the person robbed; murder, by the slaying of the murderer by the nearest relatives; and adultery, by the wife being beaten and a fine paid by the offender. Prostitutes are a privileged class, living under the protection of the king, and they are the servants of his wives. Though prostitution exists in all negro countries, it is officially sanctioned only in Unyoro. Private property in land does not exist. The passion for human flesh is hereditary in some families, but cannibalism is practised secretly. These wild tribes are not free from what are often thought to be the diseases of modern life. Epilepsy is common among them, and no cure is known for it. Insanity and also mental aberration are frequent; the latter is treated with herbal remedies, which effect an immediate cure by means of sweating and sleep. Polydactylism is rare. If the superfluous fingers are noticed at birth they are at once removed. Small-pox is much dreaded, and the pustules are opened and washed with warm water, but the sufferers usually die. Vaccination is quite unknown, and syphilis is very prevalent, but widespread disorganisation is rare, and there is a tendency to self-healing. The sores are dressed with caustic herbs, and are thereby made worse. Exostosis is common, and its syphilitic origin recognised. The same is true of partial loss of pigment, which is very common in Uganda. Syphilis is said to have been unknown formerly; it has followed in the track of the Nubians.

The Wanyoro are light coloured, or rather red, the shades varying from black to yellow. The legend runs that Unyoro and and Uganda were formerly occupied by the Wichwézi, black-skinned cultivaters of the soil, and that a white-skinned man-eating race of herdsmen, called by themselves the "Wawitu, and by the people Wahuma," came from the far north-east and conquered the Wichwézi, and from the mixed race the present light-coloured people resulted. Where the emigrants have kept this race pure, as in Toru and Gambalagala they are still quite white. The Waganda of Uganda resemble the Wanyoro. The men are strong, enduring, and active, clever and skilful workmen, and they are fond of drinking, dancing, and music. The women are highly thought of; they have pretty, oval, and orthognathous faces, rather well-developed ears, and beautiful, large eyes, varying in colour from light brown to yellowish grey.

The Monbuttu tribe, who live to the far west of Unyoro, are a cannibal people, or rather, they are animal feeders, and, as there are no cattle in the country, flesh food is sought after, whether it be a fat guinea-pig, a dried-up ape, or a deceased relative. Bananas are, however, the staple food, and banana beer the universal drink, though drunkenness is rare. Monbuttu women are celebrated for their fecundity, and it is stated that they bear more female children than male. Burial ceremonies are more honoured

in the breach than in the observance, as body-snatching is the rule. Women are held in respect, and are consulted by their husbands. Indeed, it is stated that it is surprising how a Monbuttu woman of birth can, without the aid of dress, impress others with her dignity and modesty. Circumcision is practised in all males when they have reached their fifth or sixth year. Bleeding is stopped by the application of vegetable ashes, and by dressing the wound with the leaves of an arvid. In five or six days the part is quite healed. Both men and women mutilate themselves by cutting a piece out of the concha, and by filing a small triangular space in the upper middle incisors. Among the ruling families the heads of infants are bandaged, so as to produce a lengthening of the horizontal axis. The Monbuttu are, together with the Zandé, the artists of the equatorial tribes, and in their buildings, pottery, and wooden utensils they show great skill and taste in decoration. The magnificent vegetation, and the "gallery woods" of Monbuttu, make it the El Dorado of the naturalist.

The Zandé tribes to the north are inveterate cannibals. Among other tribes may be mentioned the Bari, Madi, Masai, Mittu, and the Shiluk. The Bari are distinguished from other negroes by artificial compression of their skulls just in front of the ears, which increases the height of the skull all along the sagittal suture.

Among the Madi and Shuli the custom prevails of erecting sheds in the villages, and here the girls go to sleep as soon as they have reached the age of puberty. The boys, who have attained maturity, have free access to them. Should a girl become pregnant her lover is bound to marry her, and pay her father the price of a bride. Though morality seems at so low an ebb, the Madi women enjoy a good position; they are never beaten, and are frequently called upon to give advice. Housework only is done by the women, and the fields are tilled by the men and boys.

The Nyam-Nyam, or Akka pigmies, with their poisoned arrows, vindictive disposition, and great agility of movement, are described incidentally, and Emin suggests that they are the remnants of a dwarf population which, ages ago, spread itself over Central Africa. A specimen, who was captured with difficulty, measured 42 inches in height, and his whole body was covered with thick stiff hair, like felt.

The negroes are a negative people, and are incapable of initiative. To govern them does not seem to be difficult, provided the means of access and egress to civilised countries is granted to their European rulers; but at present they are being decimated, ruined, and degraded by the slave trade.

Central Africa presents as attractive a field of exploration and colonisation to Europeans, and is as stimulating to the imagination, as Central America was to the buccaneers and adventurers of the sixteenth century.

THE MODERN ASSISTANT.

A Life Study by a Sufferer.

A correspondent, whose experience has been unfortunate, sends a sketch of his many and poignant sufferings from assistants of a modern type.

The modern assistant, he observes, is a man of much dignity. He is fully conscious of the importance of his position as a member of a learned profession, and maintains his self-respect by telling such of his employer's patients as show him the least "cheek" his candid opinion of them. "Cheek," in his vocabulary, is an inclusive term, covering such sins of omission and commission as want of confidence in his skill, dissatisfaction with the amount of his attention, impoliteness of bearing in the working classes, and many other shortcomings which he very properly resents as intentional affronts to himself rather than quietly passes over as failures of knowledge and training in the offender.

Should his "principal" mildly suggest that such high-handed bearing is injurious to the practice, and causes a diminution of patients, he readily rejoins that at the Scotia University, or St. Ocaigne's Hospital, as the case may be, "the medical staff always stood by their men if any patient turned 'cheeky,' and at once dismissed the beggar," and he is good enough to insinuate in no veiled language that a medical man taking another course with his assistant is indeed far other than a gentleman.

But, to be just, he is not always unbending; his manner to the working classes may be off-handed and even offensive, but to his employer he is often familiarly friendly and even patronisingly superior. To him twenty years' successful practice and dearly-bought experience are of small value compared to the brand-new theories of the schools. He laughs to scorn the successful therapeutics of yesterday. Mr. Jones or Dr. Lark of his hospital always gives so-and-so, and no man can do other and rest a scientist. In diagnosis, too, he holds his master cheap. In the abdominal pains of the chronic pauper, wherein his employer reads a natural desire for, and attempt to procure, medicines in the form of peppermint and extras in the shape of beef and gin, he recognises more recondite symptoms, such as the girdle pains of locomotor ataxy, and waxes eloquent in his discourse and scientific in his treatment, even to the extent of stretching the sufferer's neck and spine, to his effectual and permanent relief.

It is unfortunate that he is somewhat hazy about commoner ailments, and despatches a patient with eczema to the small-pox hospital under a trifling delusion that the case is one of variola. As a set-off he permits the servant of a neighbouring magnate to perambulate the house with well-developed measles upon her, and so forfeits the confidence of the lady of the house, who, when in consequence of the error her children sicken, sends for the neighbouring and rival surgeon, who triumphs greatly at the occurrence and mentions the affair casually to all his friends. But if the modern assistant makes blunders in diagnosis or in treatment it is not for want of armature. His midwifery forceps are fearful and wonderful instruments, with separate handles for axis and all other traction, after the pattern of his late teacher, Professor Timpson. His perforator is ready. His principal feels quite a glow of proud satisfaction as he despatches him to his first difficult case. It is not until summoned at midnight to aid him to perform craniotomy on the undilated uterus, mistaken for the fœtal head, or to apply the unfamiliar and complicated forceps on his failure to make them lock or even to get round the child's head, that the aforesaid glow dies away into the light of common and even cloud-shadowed day.

Of dispensing, of the doses and properties of various drugs, the modern assistant has curious and, perhaps, disappointing ideas. It would be obviously unfair to expect a gentleman of his superiority to know how to cork a bottle securely, to direct it correctly and legibly, or to wrap it up neatly; these are the accomplishments of the vulgar herd. But would it be asking too much to expect him to distinguish between the simple and compound powders of ipecacuanha, to know that quinine is insoluble in plain water, or to avoid giving the extract of male fern in half-ounce doses?

On the contrary, however, it is in this department that his virtues most appear. His soul is too lofty to permit him to be a respecter of persons; he cheerfully administers to chronic contract patients the most expensive drugs in the surgery, without any grovelling inquiry if any cheaper preparation will be as useful. Nor, knowing how valuable his life and health are to humanity, does he scruple to administer such remedies to himself. Having a slight cold, he prepares and uses thrice a snuff containing five shillings' worth of the hydrochlorate of cocaine, which he has seen recommended somewhere, but which he pronounces on the whole to be "an awful fraud." The antipyrin tin is found empty when that drug is most urgently required, because of "that confounded headache he had all last week, don't you remember"—which necessitated its wholesale consumption.

He has great ideas on asepsis and antiseptics, on this dressing and that treatment, but the instruments under his care are kept far from scrupulously clean, while the wounds coming to the surgery to be dressed are often permitted to become exceedingly dirty. He has never been used to the neatness and accuracy of application in dressings which were inculcated and insisted upon in pre-Listerian days; he is indifferent whether his oil-silk overlaps his lint for half an inch, or his lint protrudes beneath his oil-silk for a quarter. He is extravagant in his applications, and economical of his pains.

But no reasonable person can doubt the superiority of modern methods of training over old-fashioned ones. Our fathers made their apprentices pay them for the acquisition of practical experience, while we, more liberally, subsidise medical tiros to gain experience at our expense. Our predecessors thought that much could be learnt of art and something of science in the surgery of the private practitioner, and by the bedside of his patients; we, more modestly, hold that the necessary science can only be taught at the hospital bedside, even when overcrowded by a hundred students, while art we practically ignore. But wisdom, after all, is justified of her children, and modern methods can proudly point to their resultant—the modern assistant! In face of such a practical proof, criticism is silenced.

"Of course you can vaccinate?" said a surgeon to a doubly qualified and newly-fledged assistant the other day. "No, I cannot," was the reply. "Of course I hold the certificate of proficiency in vaccination; but I never vaccinated a baby in my life!" Could anything be more entirely satisfactory and excellent than this? Or more reassuring?

THE "BRITISH PHARMACOPŒIA."

II.

AMONG the proposed improvements in a future edition of the *Pharmacopœia*, alluded to in Professor Attfield's annual report to the Medical Council as being those which have been specially discussed during the past year, are the following:—

Synonyms.—Such a freer use of these is proposed that they shall become, according to existing law, the standards for the strength and quality of ordinary household medicines. Under this plan we shall probably cease to hear of paregoric without any opium in it whatever being sold by grocers and other shopkeepers, not qualified to sell poisons, of the sale of sal volatile deficient in ammonia and in spirit, of laudanum of half strength, and so on. The result will be a clear gain to the public, both as regards their general welfare and, in some cases, their safety, while chemists and druggists will welcome any such action, because it will very properly tend to keep the sale of drugs more within their hands.

Hydrocyanic Acid.—"Scheele's" acid is still much prescribed, but, unfortunately, there is no standard for its strength, which may be anything between $3\frac{1}{2}$ and $5\frac{1}{2}$ per cent. It is proposed to add a sentence to the official paragraphs on diluted hydrocyanic acid to the effect that Scheele's acid must have 4 per cent. of real prussic acid in it, and that diluted with an equal bulk of distilled water it may be used as the official acid to all the characters and tests for which it should then respond.

Salicylic Acid, physiologically pure, is provided for by such an extension of definitions, characters, and tests as shall ensure the absence of those more or less lethal impurities that were recently pointed out by Drs. Charteris and Maclennan in the pages of the JOURNAL. Salicylate of sodium is to be made with this pure acid.

Calamine is rarely prescribed, and is difficult to find in nature in anything like a satisfactory state for medical purposes. Dr. Attfield suggests its omission from the next *British Pharmacopœia.*

Enema Magnesii Sulphatis.—The oil in the officially made enema is liable to separate, and the whole mixture to become messy soon after manufacture. But if, instead of dissolving the Epsom salt in the starch mucilage, the oil be mixed with a mucilage of double strength and the solution of the sulphate of magnesium in the other half of the water be then incorporated by degrees, a perfect and permanent emulsion results.

Extractum Cascaræ Sagradæ Liquidum.—Some apparently slight modifications in the pharmaceutical operations necessary for the manufacture of this extract yield, according to Finlay, such a pharmacologically active product that ten drops taken before breakfast have a decided effect on a person troubled with habitual constipation, while twenty-five drops act as a powerful laxative.

Extractum Nucis Vomicæ.—Some pharmaceutical improvements in the manufacture of this extract are described. But what will more interest our readers is that the 15 per cent. of total alkaloids officially required to be present in this extract is seldom more than half strychnine, while the proportion of strychnine to other alkaloids may vary considerably, for of 100 parts of total alkaloids separated from the extract, as little as 42 or as much as 54 may be strychnine, so that the extract, even when accurately prepared and "standardised," may apparently be one-fifth stronger in strychnine at one time than at another. We support the reporter's opinion that, "considering the comparative inactivity of brucine, it may become necessary to regulate the strength of the extract by its percentage of strychnine rather than of total alkaloids.

Glycerine is liable to contain minute traces of arsenic, but, fortunately, not the variety that is used in medicine. It may be undesirable to needlessly multiply official tests for articles, or needlessly to raise an alarm, but we agree with Dr. Attfield that at least the official definition of glycerine should be so expanded as to peremptorily exclude the common varieties of glycerine made from soap leys by reaction with acids, from which acids the arsenic is doubtless derived.

Injectio Morphinæ Hypodermica.—The new Dutch Pharmacopœia includes the very practical and useful direction that all distilled water to be used in the preparation of hypodermic solutions (such as our official morphine solution) shall previously be well boiled. Micro-organisms are thus killed, and one cause of possible irritation by injections prevented.

Liquor Calcis Saccharatus.—The medical and pharmaceutical dispensers of this solution are not perhaps numerous, but one and all have been puzzled as to why the fluid should sometimes remain white and clear, and sometimes become of a more or less deep yellowish-brown colour. It turns out that the colour is due to an organic ferric compound, and that under the ordinary conditions of more or less exposure to the air, and therefore of absorption of oxygen, the depth of colour depends on the proportion of iron present. The source of the iron is the lime, which is, at least, as likely as not to contain iron. The remedy is to use lime that is free from iron, a condition easily secured with the aid of the test-tube.

Liquores.—The nine official "1-per-cent. solutions" of arsenicals and of powerful alkaloids, etc., contain, for all practical therapeutical purposes, 1 part by weight of the solid active substance in 100 similar parts by measure. The actual official proportions are, however, or in some cases may be, 1 in not exactly 100 but in two or three parts over or under 100. Now, seeing that the admitted variation in dose may result in different patients taking not quantities differing by two or three in 100, but differing to the extent that 100, 200, or 300 differ, it follows that the stated variation in strength of these solutions is of no practical importance to prescribers; but the pharmacist is nothing if not accurate, hence one of them, Macpherson, at the suggestion of Dr. Attfield, has recalculated the official formulæ, and the resulting figures may be expected to appear in the next *British Pharmacopœia.*

Lotio Hydrargyri Nigra.—It is well known that "black wash" may, even in a few days, become of a yellow colour, doubtless due to the absorption of oxygen from the air, and consequent conversion of the black mercurous oxide into the powerful yellow mercuric oxide. This change, which it is important to avoid, and which might occur after a freshly made and sound lotion had been delivered to a patient, is prevented by the addition of glycerine. The 30 grains of calomel in $9\frac{1}{2}$ fluid ounces of lime water must be supplemented by half a fluid ounce of glycerine. The lotion may then be kept for any reasonable length of time without change.

Pulveres Sodæ Tartaratæ Effervescentes.—It is suggested that the variations in the strength and character of seidlitz powders should be avoided by giving an official standard for their composition, and by adding appropriate characters and tests. The formula to be:—

Take of—

Tartarated soda	120 grains.
Bicarbonate of sodium	40 „
(Mix and wrap in a blue-colored paper)	
Powdered tartaric acid	40 „
(Wrap in a white paper)	

Pulvis Glycyrrhizæ Compositus.—A modification of the popular "liquorice powder" is offered for trial by some Scotch practitioners, who consider the official variety, which is practically identical with that of the German Pharmacopœia, to be too sweet and too griping, and the effect of the sulphur to be too pronounced: all of which faults are said to be remedied by displacing some of the sugar by cream of tartar. We agree with Professor Attfield that before disturbing the composition of the recognised powder, which gives very general satisfaction, "further opinions should be expressed," but we give the present and the proposed formulæ:

	Official.	Proposed.
Senna, in fine powder	2 parts	2 parts
Liquorice root, in fine powder ...	2 „	2 „
Fennel fruit, in fine powder ...	1 part	1 part
Sublimed sulphur	1 „	1 „
Refined sugar, in powder	6 parts	2 parts
Acid tartrate of potassium, in powder	none	4 „

Succus Limonis.—The present official requirements respecting acidity of lemon juice are too high—namely, 36 to 46 grains of citric acid per fluid ounce, 30 to 36 being fairer natural limits. The latter are recommended to the authorities for recognition.

Improvements in the pharmacy of tannic acid, saffron, enemata generally, extractum stramonii, ipecacuanha, oleum cajuputi, oleum ricini, quininæ sulphas, cascara sagrada, and rhamnus frangula barks, and syrupus scillæ are also commented on, and in most cases supported by Dr. Attfield. This is the fourth of his annual reports to the Medical Council on the current *British*

Pharmacopœia, which was issued by the Council in 1885. Each of the four has been equally voluminous, and equally practical, useful, and *ad rem*. They indicate the extent to which the excellence of our *Pharmacopœia* is due to the original researches of our chemists and pharmacists, and their issue is an earnest of the desire of the Medical Council to maintain that excellence.

MR. JONATHAN HUTCHINSON ON THE ADMINISTRATION OF HOSPITAL RELIEF.

At the Mansion House meeting in support of Hospital Sunday, Mr. Jonathan Hutchinson, F.R.S., delivered an address pleading for the increase of the fund from its total of last year—£41,000—to £100,000, the sum estimated to be required to keep the metropolitan hospitals out of debt. After an eloquent and thoughtful eulogy of the work and claims of medical charities, he discussed the question of hospital abuse:

Few institutions in the world, he said, were better managed than the hospitals of the metropolis. They began in the impulses of warm benevolence; they had been nurtured by the efforts of sound judgment; and they were now, it might be, receiving their final development at the hands of judicious criticism. In refusing absolutely to accept the position of an apologist for the hospitals, he wished it to be understood that the greater part of the criticism which they had recently received might be accepted with thanks as likely to be useful. But much which had been put forward appeared to be greatly exaggerated, and some of it absolutely false. They had been told that hospital relief was a species of almsgiving, and likely to impair the sense of independence in the recipient; that some hospitals were wasteful in their management; that in some cases the patients were seen hurriedly or by deputy; and that hospitals attracted those who were not really poor, and thus defrauded the medical profession. He believed that all those charges were to some extent true, but the extent to which they were so was insignificantly small. As regarded the contention that gratuitous aid to the sick and suffering tended to diminish their self-respect and independence of character, he believed there was very little in it. Medical advice was not to be spoken of as a form of "indiscriminate charity." It at least required of those who received it that they should be the subjects of disease or accident. None of them under such conditions felt the unpaid assistance of others to be either onerous or degrading. Nor need they, he thought, attach much importance to those statements which alleged that hospitals were an injustice to medical men by affording relief gratuitously to those who would otherwise have paid for it. To a certain very limited extent, such statements might be well founded, but, as a rule, they were baseless. A few meanly frugal persons would always be found who would take advantage of opportunities not designed for them, but they were a minute minority, and need scarcely come into their reckoning. Medical men would far rather encounter occasional injustice and loss than limit the scope of that charity to the poor, which had long been their proudest boast. In the hostile criticisms to which hospital management had been recently subjected, nothing had been alleged which was in the least novel, and some of it had long been obsolete.

Sir Sydney Waterlow claimed for the Hospital Sunday Fund that it had done much to root out abuses in the management of the various institutions, and to inculcate habits of economy.

MEDICAL PROVIDENCE.

The monthly meeting of the Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society was held on June 11th, at 38, Wimpole Street. Mr. Ernest Hart, Chairman of the Society, presided. In addition to the ordinary business, which was of a satisfactory character, a summary of the facts to be dealt with in the annual report, up to June 30th, was presented, which showed the Society to be in a progressive and flourishing position. The numerical progress of the Society had been fully maintained, over 120 proposals having been received during the year, while the loss from lapses and deaths was comparatively small. The result of this was that the effective membership was now considerably over one thousand, the number being about 1,060. The financial results promised to compare favourably with the very satisfactory work already accomplished, in spite of some exceptional circumstances. The influenza epidemic caused a sickness rate which fully tested the basis on which the Society was established; but the strain was met with perfect ease, and in the most satisfactory manner. One of the effects was to largely increase the number of claimants for sickness-pay, the number during the year being about 250 individual members—or nearly 1 in every 4—a striking proof of the widespread usefulness of the work. Despite this unusual condition, the aggregate sickness in the year had been less than that provided for under the tables, and thus there would be an addition to the already large surplus. The extra sickness arising from influenza had probably cost the Society nearly £600, and the total paid for incapacity caused by illnesses of a very varied character would reach £2,650, while £400 had been paid to the representatives of deceased members. There would, however, be a large increase in funds on the year—probably between £7,000 and £8,000—which will bring the accumulated reserves up to £40,000—the result of the work of six years and a half. Of this substantial amount, over £3,000 stands to the credit of the management fund, the profit saving resulting from exceptionally economical administration, achieved without in any degree restricting the usefulness or impairing the efficiency of the Society. The whole of the comparatively large amount of reserves, with the exception of the smallest working balance possible, is invested in the names of the trustees on behalf of the members, to whom (the Society being wholly and strictly mutual) it exclusively belongs. The Secretary of the Society is Mr. Radley, 20, Wynne Road, Brixton, S.W.

MEDICAL DINNERS.

Dinner to Surgeon Parke.

Surgeon Thomas Heazle Parke, A.M.D., the medical officer of the Emin Relief Expedition, was entertained at dinner by the medical profession of London at the Criterion on Friday, June 6th. More than 150 gentlemen were present, and the gathering, which was thoroughly representative, included nearly all the leading physicians and surgeons of the metropolis. The chair was occupied by Sir Andrew Clark, President of the Royal College of Physicians; Mr. Jonathan Hutchinson, President of the Royal College of Surgeons, being Vice-Chairman. The General Medical Council was represented by its President, Mr. John Marshall; the House of Commons by Sir Trevor Lawrence, M.P.; the College of Physicians by Sir Dyce Duckworth, Sir Edward Sieveking, Dr. Quain, and Dr. Church; the College of Surgeons by Sir James Paget, Sir Prescott Hewett, Sir Spencer Wells, and Mr. Erichsen; the Irish College of Surgeons by Dr. Croly; the Royal Academy of Medicine of Ireland by its President, Sir Samuel Gordon; the Army by Brigade-Surgeon Carter, Surgeon-Major Greenhow, and Surgeon-Major Platt; the Indian Army by Sir Joseph Fayrer; and the British Medical Association by Dr. Bridgwater and Dr. Holman. The London medical societies were represented by their Presidents: the Royal Medical and Chirurgical by Mr. Timothy Holmes, the Clinical by Mr. Christopher Heath, the Medical by Mr. Knowsley Thornton, the Ophthalmological by Dr. Hughlings Jackson, the Harveian by Mr. Bryant, the Hunterian by Dr. Stephen Mackenzie, and the Gynæcological by Dr. C. H. F. Routh. The President of the Pathological Society, Dr. W. H. Dickinson, was at the last moment prevented from attending. Representatives of the medical schools were present in great force, St. Bartholomew's being represented by Dr. Andrew, Messrs. Willett, Langton, Henry Power, Howard Marsh, Butlin and Bowlby, and Dr. Godson; Guy's by Dr. Pavy, Dr. Goodhart, Mr. Davies-Colley, and Mr. Bader; University College by Dr. Graily Hewitt, Dr. John Williams, Dr. Frederick Roberts, and Mr. Berkeley Hill; King's College by Dr. Curnow, Mr. Watson Cheyne, and Mr. Edgar Crookshank; the London Hospital by Dr. Langdon Down, Dr. Sansom, Dr. James Anderson, and Mr. Hurry Fenwick; St. George's by Dr. Whipham, Sir William Dalby, and Mr. Bennett; St. Mary's by Dr. R. Maguire, Mr. Herbert Page, and Mr. Malcolm Morris; St. Thomas's by Sir William Mac Cormac (resplendent with foreign orders), Mr. John Croft, and Dr. T. D. Acland; Charing Cross by Dr. Mitchell Bruce and Mr. John Morgan; Middlesex by Mr. George Lawson and Dr. J. K. Fowler; and Westminster by Dr. P. Abraham. There were also many other well known members of the profession, such as Dr. Buzzard, Dr. Frank (Cannes), Dr. Gowers, Mr. Reginald Harrison, Sir William Roberts, Dr. Russell Reynolds, Dr. George Harley, Dr. Maclagan, Sir C. Cameron, Dr. Douglas Powell, Dr. Mapother, Dr. Chepmell, Dr. Laffan, Dr. Donald Macalister (Cambridge), Dr. Sutherland, Mr. F. Durham, Mr. T. Wakley, Mr. W. Furner (Brighton), Mr. H. P. Symonds (Oxford), etc. Two of Surgeon Parke's colleagues—Captain Nelson and Mr. Bonny—were present as guests. Letters of regret for inability to attend—not mere perfunctory apologies, but warm expressions of admiration for the guest of the evening, and disappointment at being prevented from joining in doing him honour—were received from Mr. H. M. Stanley, Lieutenant Stairs, and Mr. M. Jephson; and from Sir William Bowman, Sir Joseph Lister, Sir George Paget, Sir Henry Thompson, Sir William Stokes, Professor Humphry, Surgeon-General Mackinnon (Director-General A.M.D.), Dr. Alexander Hill (Master of Downing), Sir Henry Acland, Dr. Wilks, Mr. Arthur Durham, Professor W. H. Flower, Dr. Matthews Duncan, Mr. N. C. Macnamara, Mr. Southam (Manchester), Mr. Pridgin Teale (Leeds), Mr. Cadge (Norwich), Mr. E. J. Furner (Brighton), Mr T. H. Wakley, and others.

In proposing the toast of "The Queen, the Prince of Wales, and the other Members of the Royal Family," Sir ANDREW CLARK was gracefully and copiously loyal, and Sir Prescott Hewett not less loyal but commendably brief. Mr. JONATHAN HUTCHINSON, in giving "The Army, Navy, and Reserve Forces," was somewhat oppressed by the incongruity of a man of peace by inheritance and by profession, like himself, having to glorify men of war; he succeeded, however, in reconciling his conscience to his appointed task by the reflection that the military services had, after all, done a good deal for the advance of science. Mr. Hutchinson paid a well deserved tribute to the amount and value of scientific work done by medical officers of the army and navy. Sir JOSEPH FAYRER, whose breast glittered with decorations, responded, acknowledging, by way of exordium, that he was a proper person to do so, inasmuch as he had, at one period or another of his career, served in each of the three branches of Her Majesty's forces included in the toast. He reminded the Chairman that they had been at Haslar together many years ago, and dwelt on the great improvement that had taken place in the services since that time, though the position of army surgeons was not yet all that it should be. Sir Joseph proceeded to deliver a somewhat lengthy homily on this excellent text.

Coming at last to the toast of the evening, the CHAIRMAN found large scope for his natural eloquence in the fact of "the ablest, best, wisest, and most distinguished representatives of one at least of the noblest professions," being gathered together to do honour to one of the youngest of their brethren. They were met to celebrate no great material success or intellectual achievement, but the moral heroism which Surgeon Parke had displayed during a time of unparalleled difficulty, disease and danger. The heart of the whole medical profession had gone out to Mr. Parke. From 1882 to 1886 he served continuously in the Soudan and in Egypt, and he had been on all occasions spoken of for his culture, his refinement, his acquirements, his modesty, his skill, his sense of duty, his self-effacement, and his tenderness. By a rare conjunction he joined in himself all that went to make the heroic in man and the loving in woman. After a vivid sketch of the difficulties and dangers through which the expedition had passed, and an allusion to its results, which would remain great in "moral influence," if in nothing else, Sir Andrew, laying his hand on Surgeon Parke's shoulder, congratulated him on his return home, and thanked him for the services he had rendered to our race, to civilisation, and to the profession. The toast was enthusiastically honoured, the whole assembly singing "He's a jolly good fellow," with an energy worthy of their student days.

When the company had resumed their seats, there was an awkward pause, during which it was seen that the gallant Surgeon Parke, like Thackeray, had apparently "forgotten all the fine things he thought of in the cab," and was anxiously refreshing his memory.

With ready tact, Sir ANDREW CLARK invited the guests to join in the worship of "the goddess Nicotina," and called on Dr. Frederick Roberts to fill up the interval with a song. That popular amateur's rendering "The Anchor's Weighed," it is needless to say, was loudly applauded.

Surgeon PARKE, who wore the Abu Klea medal, the Turkish Order of the Medjidieh, and the Order of the Brilliant Star recently conferred on him by the Sultan of Zanzibar, on rising to reply to the toast of his health, was so deeply moved that for some moments he could scarcely speak. He said that nothing could be more gratifying than the appreciation of one's work by those most capable of judging, and in his wildest imagination he had not pictured a reception like that which had been given him. He had to thank his medical training for a great deal of the success which he had met with. Surgeon Parke, who has evidently in high measure the "unconsciousness" which, according to Carlyle, is an essential element in the heroic character, quickly passed from himself to the subject of the expedition. He gave a most interesting account of its adventures, stating that the shortest time any of them had been in the great forest was 162 days, while Captain Nelson had been in it for a year and a half. The Europeans bore the hardships of the expedition better than the natives, ten of the former coming back out of thirteen who started. On setting out he had vaccinated most of the men, and when the epidemic of small-pox broke out only four were attacked, and none died, while the camp-followers, who had not been vaccinated, died in great numbers. Alluding to Emin Pasha, Mr. Parke said he was a small man, 5 feet 7 inches high, and very proud of his German medical degree. He spoke twenty-two languages, fourteen of which he could read and write. His accident was due to the fact that he had not been in a two-storey house for fourteen years. He fell through a window a distance of 30 feet and fractured the base of his skull. He had, however, made a wonderful recovery. Mr. Parke then referred to Mr. Stanley and his great qualities, particularly as a leader of men. He spoke warmly of his companions, than whom a more manly set of men never existed. They came from England, Ireland, Scotland, and even Canada, and at no time was there the least friction or rivalry among them. That was a very strong argument in favour of the Union. The absence of friction he attributed to the fact that they all had "real rank, not sham rank"; they were all counted as captains, each being in command of his own company. In conclusion, Surgeon Parke said he should never forget the reception accorded to him that evening, nor that given him by the Dublin College of Surgeons.

In response to calls, brief speeches were also made by Captain NELSON and Mr. BONNY. The former said that though the medical profession claimed the guest of the evening as its own, "we call him *our* Parke;" and that in addition to all his other qualities, Surgeon Parke was a first rate shot. Mr. Bonny delivered a little oration *pro domo suâ*, which was no doubt significant enough to the initiated, but was a trifle bewildering to the majority of the assembly. Sir JAMES PAGET, in a few felicitous sentences, proposed the health of the Chairman, whom he spoke of as a worthy representative of medicine among the cultured classes, a model President of the College of Physicians, and an ideal chairman at dinners such as the present, where (said Sir James with an arch smile) "every possible opportunity of indigestion is offered." The President of the College of Physicians was then lyrically declared to be a "jolly good fellow," by the united strength of the company. Sir ANDREW CLARK, in replying, hoped that he would continue more and more to deserve Sir James Paget's eulogium, and paid a well deserved compliment to Mr. Howard Marsh for the trouble he had taken in organising the banquet. Another song ("She Wore a Wreath of Roses") beautifully given by Dr. Drummond Hamilton, brought the proceedings to a close.

But for the somewhat prolonged oratory, the dinner was an unqualified success. Surgeon Parke personally expressed to our representative his delight at receiving so splendid a tribute of praise from those whose achievements have earned the praise of the whole scientific world.

Mr. Howard Marsh, to whose efforts the success of the feast is, for the most part, due, may fairly be congratulated on the excellent result. He was ably assisted by the stewards, Dr. Sutherland, and Messrs. D'Arcy Power, Bowlby, Edgar Willett, and J. Y. W. Mac Alister. Special acknowledgment must be made of Mr. Mac Alister's untiring courtesy and ready helpfulness, which contributed in no small degree to the comfort of many of the guests.

METROPOLITAN COUNTIES BRANCH.

THE dinner of the Metropolitan Counties Branch on June 10th was, as usual, in all respects a highly successful function. Sir WILLIAM MAC CORMAC, the new President, was in the chair, supported by a numerous and distinguished company. The Chairman and subsequent speakers were able to refer with satisfaction to the prosperity of the Branch, which is in just proportion to the general progress of the Association. It numbers now upwards of a thousand attached members; there are nearly as many unattached members of the Association residing in the metropolis, a large proportion of whom it may be hoped will, during the coming year take their place in the organisation of the Branch.

The DIRECTOR-GENERAL OF THE NAVY (Dr. Dick) once more expressed his satisfaction at being able to report the general contentment of that service, which was, he said, due, as he thought it right on all fitting occasions to acknowledge, to the successful efforts of Mr. Ernest Hart and the Parliamentary Bills Committee of the British Medical Association.

Brigade-Surgeon MYERS made a graceful speech in the absence of Surgeon-General Mackinnon, the Director-General of the Army Medical Department, but was unable to say that the Army Medical Service was in the same satisfactory position as the Naval—state of things, however, which it may be hoped may soon be brought about by similar means.

Dr. ORD, in a speech distinguished by elegance of language and elevation of thought, referred to his own duties during the past year, which had been carried out, although he was too modest

to say so, to the entire satisfaction of the Branch, and delivered an eloquent eulogy upon his successor.

The toast of the Association was proposed by Dr. BREIT, of Watford, in a speech of careful and accurate elaboration, and Dr. BRIDGWATER, President of Council, in responding to it, briefly and impressively, was able to point to the excellent work of the Association throughout the year, its most satisfactory and prosperous condition, and to the elements of progress which were visible on all sides.

A warm tribute of thanks was justly paid to the retiring Secretaries, Mr. Noble Smith and Mr. Eastes, who spared no labour in carrying out the onerous duties to this extensive Branch, and have shown much ability and tact under circumstances which have occasionally been of some difficulty.

Dr. Radcliffe Crocker and Mr. Andrew Clark, the new secretaries, were duly inducted with all good wishes for their future secretarial career.

Dr. F. Roberts contributed materially to the enjoyment of a most successful evening by giving the company the opportunity of listening to some of the fine old English song ballads, in which his superb vocal powers recalled the best traditions of Braham and of Sims Reeves.

It only remains to add that the speeches were for the most part short and to the point, and the company, which assembled at 7, dispersed at 10.30.

VOLUNTEER MEDICAL STAFF.

The annual dinner of the Volunteer Medical Staff was held on June 5th under the presidency of Director-General MACKINNON, C.B., who was supported by Earl Brownlow, Under Secretary of State for War; Colonel Ayres, C.B., and Mr. De la Beere, both members of the recent War Office Committee; Surgeon Parke; Brigade-Surgeon W. R. H. Smith; Mr. Ernest Hart; Surgeon Manby, and a great number of distinguished volunteer medical officers. The most important thing discussed was the great advance made in the organisation of the volunteer medical service, the creation of a brigade system, and the increase and improvement of general equipment. We have not space this week to refer to the way in which these topics were treated; but the excellent speeches of Surgeon Macmillan and Mr. Manby will deserve notice on a future occasion.

RETROSPECT OF ELECTIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE following paragraphs may prove of some service to those of our readers who take a special interest in the coming elections. The Council consists of twenty-four members, including the President and Vice-Presidents. Three members retire yearly, so that at the end of eight years all who were on the Council at the beginning of that period must have been replaced or re-elected. When a member dies or retires before the end of his eight years' term of office a vacancy is created for what is known as a "substitute member." The substitute remains on the Council till the eight years following the election of the member whom he replaces have passed by; then the substitute member must retire, seeking re-election if he chooses. The Council at present is constituted as follows:

President.—Mr. Jonathan Hutchinson; elected President, 1889; elected member of Council, (1) 1879, (2) 1887.

Vice-Presidents.—Mr. Bryant; elected member of Council, (1) 1886, (2) 1888.
Mr. Croft; elected member of Council, 1882.

Other Members of Council.—Sir T. Spencer Wells; President, 1882; elected member of Council, (1) 1871, (2) 1879, (3) 1887.
Mr. Marshall; President, 1883; elected member of Council, (1) 1873, "substitute," (2) 1874, (3) 1882.
Sir William S. Savory; President, 1885; re-elected till 1889; elected member of Council, (1) 1877, (2) 1885.
Mr. Lund; elected member of Council, (1) 1878, (2) 1886.
Mr. Power; elected member of Council, (1) 1879, "substitute," (2) 1882.
Mr. Cadge; elected member of Council, (1) 1880, (2) 1888.
Mr. T. Smith; elected member of Council, (1) 1880, "substitute," (2) 1884.
Mr. Hulke; elected member of Council, (1) 1881, (2) 1889.
Mr. Christopher Heath; elected member of Council, (1) 1881, (2) 1889.
Mr. Sydney Jones; elected member of Council, 1883.
Sir W. MacCormac; elected member of Council, 1883.
Mr. Lawson; elected member of Council, 1884.
Mr. Berkeley Hill; elected member of Council, (1) 1884, "substitute," (2) 1886.
Mr. Durham; elected member of Council, 1884.
Mr. Macnamara; elected member of Council, 1885.
Mr. Pemberton; elected member of Council, 1885.
Mr. Sibley; elected member of Council, 1886, "substitute."
Mr. Reginald Harrison; elected member of Council, 1886.
Mr. Willett; elected member of Council, 1887.
Mr. Pick; elected member of Council, 1888.
Mr. Howse; elected member of Council, 1889.

A complete list of the course of the elections during the past eight years was published in the JOURNAL, June 15th, 1889, pp. 1372 3.

From the above list of the Council as at present constituted, its composition may be readily analysed thus:

1. Members of Council attached to medical schools in London:	
St. Bartholomew's	4
Guy's	3
St. Thomas's	3
University College	3
Middlesex	2
London	1
St. George's	1
Westminster	1
Total number of members attached to London schools	18
2. Members attached to special hospitals in London	2
3. Members in general practice in London	1
4. Provincial members (all attached to hospitals)	3
Total	24

Under "2" must be classed Sir Spencer Wells and Mr. Reginald Harrison, the latter being no longer a provincial member. Mr. Sibley alone comes under Class 3. The three provincial members are Mr. Lund (Manchester), Mr. Cadge (Norwich), and Mr. Pemberton (Birmingham).

Thus exactly three-quarters of the seats on Council are filled from the London medical schools, St. Bartholomew's Hospital alone filling one-sixth. The provincial members fill but one-eighth.

THE PUBLIC HEALTH MEDICAL SOCIETY.

THE annual meeting of this Society was held on June 5th. The HONORARY SECRETARY, in reporting continued prosperity, said that the Society had during the last twelve months successfully taken action in a number of matters affecting the interests of medical men holding qualifications in Public Health.

The annual dinner was held the same evening at the Holborn Restaurant; Sir CHARLES A. CAMERON, the President, in the chair. He was supported by a large company, amongst whom were the Presidents of the Royal Colleges of Surgeons of England and Ireland; Sir J. Crichton-Browne, M.D., F.R.S.; Sir William B. Kaye, C.B., Q.C.; Dr. J. Bell, C.B., President Inst. Chem.; Captain Cameron, R.N., C.B.; Lieut.-Colonel Alan Gardner; Surgeon T. H. Parke, A.M.S.; Messrs. G. W. Hastings, M.P.; T. W. Russell, M.P.; J. McDonald Cameron, M.P.; T. A. Rentoul, M.P., LL.D.; P. Coll, C.B.; Rawdon Macnamara, F.R.C.S.; Ernest Hart; George Brown; Professor W. R. Smith, M.D., Vice-President; Professor Corfield, M.D.; Professor J. Glaister, M.D.; Professor Henry D. Littlejohn, M.D.; Drs. Sykes, Steavenson, Russell, Newsholme, Mumby, Lingard, Davy, Members of Council; F. J. Allan, Honorary Secretary, etc.

Surgeon PARKE, in replying to the toast of "The Army," said that the success which had crowned his efforts in Central Africa was due in great measure to the fact that Stanley gave each of his officers equal rank—not merely nominal but substantive rank; they were each appointed captain with equal seniority.

Sir J. CRICHTON-BROWNE proposed "Success to the Society" in an eloquent speech, in the course of which he suggested that were medical men skilled in sanitary science sent out to Africa to advise the new companies as to position of towns, water supply, sewage disposal, and many other points, much suffering might be spared and great credit gained; and he was sure it would remove the misgivings which many parents had in allowing their sons to go out to the new field for British enterprise.

The enjoyment of the evening was much added to by the singing of Mr. Martin's quartet party.

GERMAN UNIVERSITIES.—In the last winter semestre the total number of students in the German universities (including the Münster Academy) was 29,007, of whom 9,103 belonged to the faculty of medicine, 6,872 to that of law, 4,460 to that of Evangelical theology, 1,220 to that of Catholic theology, and 7,352 to that of philosophy. Berlin, Munich, and Leipzig attracted the largest numbers of students of all kinds; of the other universities, Halle, Tübingen, and Erlangen were preferred by theological students, and Würzburg and Greifswald. Berlin had the largest number of students in theology, law, and philosophy, but Munich had most students in medicine. The total number of teachers for the 29,007 students was 2,134, of whom 1,026 were ordinary, 270 extraordinary, and 60 honorary professors, 643 *Privat-docenten*, and 135 speech and exercise masters.

THE SELECT COMMITTEE ON HOSPITALS.

Seventh and Eighth Meeting.

[Special Report.]

The House of Lords Select Committee inquiring into the administration of the metropolitan hospitals resumed their sittings on Monday last under the presidency of Lord Sandhurst, there being an addition to the number of the Committee, as Lord Saye and Sele had been appointed since the last sitting.

Sir Sydney Waterlow gave evidence, and stated that in 1873 he was Lord Mayor of London, and had sat for twelve years in the House of Commons. He had had considerable experience of the work done at the metropolitan hospitals, Poor-law infirmaries, and convalescent homes. In 1874 he was appointed treasurer of St. Bartholomew's Hospital, and for eight or nine years he had resided in the hospital. During those years great changes had taken place, and the whole of the education there had improved. Having been the first chairman, a vice-president, and chairman of the Distribution Committee of the Hospital Sunday Fund, he had thus had the opportunity of viewing the accounts of all the hospitals within the metropolitan area. His opinion was that the assistance given to medical charity was less open to abuse than almost any other form of charity. The amount of accommodation provided in London hospitals, infirmaries, and convalescent homes had progressed fairly in proportion to the increased demands of the increased number of the poor population during the past ten years.

The Chairman: We have been told that if the out-patient department were done away with the public would not suffer. Do you hold that opinion?

The Witness: Certainly not. With regard to the treatment of patients at St. Bartholomew's Sir Sydney Waterlow said no unqualified man would have the opportunity of treating anyone on their own responsibility. Every student there had read to him the charge of the senior house-surgeon, which defined what the students had to do, and in some cases what they should not do. Their duties were strictly limited. That which had been stated by Mr. Nelson Hardy about the treatment of patients at St. Bartholomew's by students could never take place, except in direct contravention of the rules. The students were not allowed to initiate treatment, and every possible precaution was taken to secure the proper treatment of the patients by qualified professional men. He was bound and would be very glad to give an account of the work of St. Bartholomew's Hospital to show that the large endowments—£67,000 a year—were being utilised in a proper manner. The out-patient relief at the hospital was free. He certainly did not think it had a pauperising effect. Nothing was so injurious as to defer medical help in its early stages. Inquiries were made at the hospital into the circumstances of the patients by an intelligent officer: a kind of Charity Organisation Society inquiry was made. A good many patients, after the inquiry, did not come a second time. If they did come probably those who were believed to be able to pay would not be treated. Any accident case was treated, and he quoted the case of a Member of Parliament who was brought with a broken leg. Although the midwifery cases were restricted to a mile radius, the out-patients came from all parts of London. The hospital was governed by a body of 273 governors, who elected the president and treasurer, and the latter was assisted by four almoners. A governor might be elected either for pecuniary assistance or special service to the hospital. The whole body of governors were summoned quarterly, and thirteen was a quorum. The office of treasurer was honorary, as was that of the almoners and the House Committee.

The Chairman: Is there any medical committee?

The Witness: There is a medical council. They meet whenever required by the treasurer, and any motion relating to the medical department or medical school might be considered by the council. The witness continued: The medical officers received a small honorarium. There were 13 who were salaried, and in addition some of the students lived in the college.

The Chairman: With regard to the diplomas the gentlemen hold, is there any restriction in engaging professional men having a diploma only of the Royal Colleges of Surgeons or Physicians, or do you take anybody from Dublin or Edinburgh?

The Witness read from the rules of the hospital to the effect that for application as surgeon or physician it was necessary for the candidates to be members respectively of the Colleges of Surgeons or Physicians. There had been no difficulty on account of the rule, so far as he knew, but of course if the rules were too severe they could be modified by the governors. The students were directly responsible to the warden of the college, who was resident in the hospital, and he would report any misconduct to the treasurer. There were 345 beds for males and 303 for females, and a number of beds for ophthalmic and other cases. There were 198 medical beds, under four senior physicians, and 366 surgical beds under five senior surgeons. The total number of beds was 667. He was quite satisfied that if there was any error it was in favour of admitting rather than excluding poor patients on account of not being considered interesting cases. There were in the nursing department one matron, one assistant matron, one superintendent, one assistant superintendent, 27 sisters (the name having no religious significance), 20 nurses, 114 probationers, 27 ward assistants, and a number of servants. In connection with the hospital was a self-supporting nursing institution. The medical beds were constantly full, and the obstetric beds were in great demand. A few surgical beds were always kept vacant in view of serious cases of accident constantly occurring. He knew of the National Pension Fund for Nurses, but the question of affiliation with that fund had not been considered. After speaking of the hours of duty and holidays of the nurses, Sir Sydney said that as a rule they were persons in a fair position of life, they were necessarily educated, and most of them intended to devote themselves to nursing as a means of living. Cases of small-pox, scarlet fever, or other infectious disease were not treated at St. Bartholomew's. In 1871 special departments were established at the hospital for the ear, skin, eye, and for orthopædic cases; and in 1874 a department for diseases of the throat was established. The men at the head of the departments were men holding a high standing in the profession in the special departments to which they belonged. He was of opinion that were a special department was properly organised and under the direction of a man of experience in the speciality the department treated, it was far better than having special hospitals.

The Chairman: Do you think special hospitals increasing at an alarming rate?

The Witness: There is no reason for alarm, except that the larger the number of hospitals the more the expenses of management and the greater the money which has to be raised for their support. The Witness then gave particulars as to the office and duties of the resident and non-resident chaplains and the steward of the hospital. All the accounts were audited by a professional accountant. In 1889 there was cash available for hospital purposes to the extent of £70,529, which was derived mainly from freehold property houses in London and 13,000 acres of land in Essex, Kent, the south of London, and some in the Midland counties. That property had very much increased in value of late years, owing to the falling in of ground rents and the careful attention of the managing body to the letting of property. Occasionally the hospital received legacies and contributions; but never during his term of office had the public been appealed to. The accounts were printed annually, and a copy sent to the Charity Commissioners as well as to every one of the 27 governors.

Lord Cadogan: Have you given any attention to the question of hospital distribution in London?

The Witness: I have given considerable thought to that. Some consideration should be shown to the medical men who give their time practically free to the hospitals. If you place the hospital too far distant from the leading medical men you would not get the amount of attention for the patients they get now. The witness added that he thought more hospitals were required south of the Thames. The nearer the hospital to the centre the better for the patients, because they secured better attention from eminent physicians and surgeons. He should feel very diffident in exercising any powers of control over institutions which were voluntarily supported. The starting of small hospitals was much to be regretted.

In answer to Lord Spencer, the Witness said he was favourably disposed to provident dispensaries which were properly managed. He did not think there was any serious evil arising from the antiquity of St. Bartholomew's. Every four years each wing was painted; some of the wards were papered every year, the floors were frequently washed; there were many improvements in regard to ventilation and sanitary arrangements adopted; and every care and attention was paid to cleanliness. He differed from Sir Morell Mackenzie as to having hospitals in the country—t

patients would not go, and the medical men would not be able to find time to go to them.

Lord WINCHILSEA asked a number of questions as to the mode of keeping hospital accounts, and in reply the WITNESS said that a more uniform system of accounts was desirable, but he should not like to say how far it would be wise to interfere with charities supported by voluntary contributions.

The WITNESS, replying to other members of the Committee, said that so long as the public supported special hospitals it would be unwise to say that they should not be allowed to continue their work. He did not at all agree with Sir Morell Mackenzie in his statement that patients in general hospitals with special departments were not treated so well as in the hospitals specially dealing with the diseases in question. The medical students of the present day were very much superior to the students of twenty or thirty years ago; they were better educated, and their behaviour consequently greatly improved. Very rarely indeed had there been any necessity for bringing the conduct of the students at St. Bartholomew's under his notice. He had a very strong feeling that paying and non-paying patients should not be treated at one hospital; there should be separate hospitals for them. The result of mixing them and requesting them to pay according to their means—not in Guy's and St. Thomas's, but in smaller hospitals—was to keep the patients who paid as long as they paid. There were no paying beds in St. Bartholomew's, and he believed that there would not have been any paying beds at Guy's and St. Thomas's but for their financial needs.

Upon resuming the inquiry on Thursday, Sir SYDNEY WATERLOW's examination was continued, and in reply to the CHAIRMAN, stated that the result of the system of inquiry instituted at St. Bartholomew's in 1883 was to reduce the number of applicants in the out-patient department. It was very difficult to say whether that system had the result of sending the patients to other hospitals where there was no inquiry. Possibly that might result. He was thoroughly satisfied with the system of inquiry at St. Bartholomew's, for it had prevented persons coming who would have to disclose their position, which, if they did, would show they ought not to receive gratuitous treatment. With reference to the Hospital Sunday Fund, he said that last year collections were made in over 2,000 churches and chapels in the metropolitan area. The Council were not very strict as to the area within which the collection was made. The first collection in 1873 was £27,700, and that of 1889 resulted in £41,740. The public confidence in the fund, he believed, was increasing, because the money was divided among the medical charities on a satisfactory basis, having regard to the needs and merits of the respective institutions. After explaining in detail the method of arriving at the relative merits of the different hospitals, Sir Sydney stated that two institutions did not last year receive a grant from the fund, and several other hospitals declined to send a deputation to have their accounts audited. He hoped that the system pursued by the fund influenced for good the institutions.

The CHAIRMAN: Has the fund taken any steps to prevent the increase of special hospitals?

The WITNESS: Not any direct steps. He contended that the Council had indirectly endeavoured to discourage public support of special hospitals, unless they were particularly entitled to help. Of course, he did not say special hospitals did no good—that would be wrong; but comparatively speaking their work was not of so charitable a kind as those of the general hospitals. The fund collections had not, he thought, caused a decline in the other charitable contributions to the hospitals. As to the system of paying patients, he thought it was unwise to have the two systems of free and paying patients being treated at the same hospital. In reply to the CHAIRMAN, the witness added that grants had been made to 22 general hospitals, 5 chest, 12 children's, 3 lying-in, 6 for women, 27 other special hospitals; 20 convalescent homes, 11 cottage hospitals, 7 institutions for the sick, and 50 dispensaries. He did not think all the special hospitals applied to the fund for grants.

Lord KIMBERLEY: Is there not a tendency to extend the hospital accommodation without any actual necessity?

The WITNESS: I am afraid there is. He then stated that the Hospital Sunday and Saturday Funds were quite separate and distinct organisations. He was Chairman of the Central London Sick Asylum Board. His opinion was that the working of the poor-law infirmaries had been productive of great good. They might, however, to afford more opportunities of medical instruction than they did at the present time. He would suggest something like the plan adopted in the great hospitals in America. With regard to the power of the Charity Commissioners over the endowed hospitals, he said that whilst the extension of the power to other general hospitals would tend no doubt to the uniformity of accounts, he did not quite see why persons spending their own money should be compelled to render account to those with whom they had no relation. At St. Bartholomew's Hospital an endeavour was made to minimise as much as possible the treatment of venereal diseases. It was, he considered, a greater charity to try and cure a person suffering from a disease for which he was not responsible, rather than to attempt to cure a person suffering from a disease arising from his own vicious moral conduct. In reply to Lord KIMBERLEY, the witness said that the authorities exercised the power they believed they were entitled to by discriminating.

Lord KIMBERLEY considered it a monstrous position, contrary to all justice and charity.

Dr. STEELE was re-examined with the view of correcting and amplifying some of his previous evidence relating to the government of Guy's Hospital. He gave details as to the constitution of committees and the time of their meetings, and also stated that on the recent occasion of the appeal to the public for £100,000, the governors, although numbering only sixty, contributed £30,000. It was always necessary to have a number of beds vacant in hospitals and poor-law infirmaries; but he did not know why there should be as many as 2,000 Poor-law beds vacant. With reference to the discipline of the students, his duties were confined to the cases of misconduct occurring in the wards or among the residents in the hospital. The treasurer was the head of the medical school as well as of the hospital. The witness said that about twelve years ago he made inquiries as to the out-patient departments of hospitals in regard to the question of the abuses of the out-patient system.

The CHAIRMAN: But since then great changes have taken place at the metropolitan hospitals. At St. Bartholomew's and the London a system of inquiry has been instituted, and at Guy's you now take payment from patients. Was the appeal for £100,000 made because of complaint of the Charity Commissioners?

The WITNESS: No; but because we could not carry on the hospital, as the income available for the hospital purposes had diminished from £40,000 to £25,000.

The WITNESS then gave some details as to the system pursued at Guy's in the treatment of venereal cases.

The inquiry was adjourned until Monday.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 16th, and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 25th, and September 4th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

EAST ANGLIAN, CAMBRIDGE, AND HUNTINGDON BRANCHES.—The annual meeting of these Branches will be held at the Norfolk and Norwich Hospital, Norwich, on Thursday and Friday, June 19th and 20th, in conjunction with the Norwich Medico-Chirurgical Society. The following is the programme of proceedings:—Thursday, June 19th: 11 A.M., meeting of Council; 12 noon, first general meeting, President's address; 1.30 P.M., luncheon, by invitation of the staff of the Norfolk and Norwich Hospital; 2.30 P.M., general meeting; papers and communications; 5.30 P.M.: meeting of the Medical Defence Union; President, Dr. Barnes; 7 P.M., dinner, at Snelling's assembly rooms; tickets 7s. 6d. each, exclusive of wine (morning dress). Friday June 20th: 9.30 A.M. to 10.30, inspection of hospital and museum; 10.30 A.M. to 11.30, demonstration by Professor Humphry and Double Osteotomy for Knock Knees, by Mr. Williams; 11.30 A.M. to 1.30 P.M., concluding meeting; Demonstrations by Dr. Sydney Ringer and Dr. Lloyd Tuckey; 3 P.M., garden party at Brundall, by invitation of the President and Mrs. Beverley. The business of the meeting will be: 1.

To receive the report of the Council of the Branch. 2. To elect two representatives of the Branch upon the Council of the Association; the present representatives are Mr. T. W. Crosse, F.R.C.S., and W. A. Elliston, M.D. 3. To elect a Branch Council for the year 1890 91. The following papers have been promised: Mr. J. Knowsley Thornton: Cases of Ectopic or Extrauterine Gestation. Mr. William Cadge: A Case of Porro-Cæsarean Operation. Mr. T. H. Morse: Gonorrhœal Inflammation of Uterine Appendages, with specimens. Dr. Sydney Ringer: On Soporifics. Sir Peter Eade: Notes on some Sequelæ of Influenza. Dr. Elliston: A Case of Retropharyngeal Abscess. Mr. W. M. Crowfoot: A Case of Cystic Tumour of Breast. On Friday morning demonstrations will be given by Professor Humphry on the Pathology of Knock-Knee and Back-Knee, by Dr. Sydney Ringer on the Action of seme Soporifics and other Substances on the Heart of the Frog, and by Dr. Lloyd Tuckey on Hypnotism. All members of the profession living in East Anglia are cordially invited to the meetings of the Association. Members of the profession intending to join the Association, and members of the Association wishing to join the Branches, are invited to communicate with one of the Honorary Secretaries. Members intending to be present at the luncheon and dinner are requested to communicate with Dr. Beverley, Honorary Secretary, Norwich, who will also be happy to arrange for the reception of members wishing to stay the night.—EDGAR G. BARNES, Eye; MICHAEL BEVERLEY, Norwich; C. E. ABBOTT, Braintree; BUSHELL ANNINGSON, Cambridge: DONALD D. DAY, Norwich (Honorary Secretary of the Norwich Medico-Chirurgical Society), Honorary Secretaries.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Medical Institute on Thursday, June 26th, at 4 o'clock in the afternoon, when the ordinary business will be transacted and an inaugural address delivered by the President-elect of the Branch, Mr. Alfred Freer, F.R.C.S., of Stourbridge; and after the meeting the members will dine together at the Great Western Hotel at 6.30; tickets, exclusive of wine, 6s.—ROBERT SAUNDBY, M.D. and JORDAN LLOYD, F.R.C.S., Honorary Secretaries.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in Manchester on Wednesday, July 2nd, at the usual hour. Gentlemen wishing to read papers, make communications, or show cases, are requested to communicate with the Honorary Secretary at once, so that the circulars convening the meeting may be sent out in a complete form.—CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Cardiff on Friday, June 27th. Further particulars in circulars.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

YORKSHIRE BRANCH.—The annual meeting of this Branch will be held on Wednesday, June 25th, at 3 P.M., at Leeds, when the officers of the Branch and the representatives of the Branch on the General Council will be elected. Members intending to read papers are requested to communicate with the Secretary on or before June 15th.—ARTHUR JACKSON, Secretary, Sheffield.

SOUTHERN BRANCH.—The seventeenth annual meeting will take place at the Bugle Hotel, Newport, Isle of Wight, on Thursday, June 26th, 1890. The general meeting will be held at 1.15 P.M. (Refreshments will be provided between 1 and 3.) In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers are requested to forward at once the titles to the Honorary Secretary. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by Dr. Joseph Groves (the President-Elect), at 2.30. During the afternoon the members are invited to visit Carisbrooke Castle and several places of interest in the locality. The dinner will take place at 5.30 P.M. Tickets 6s. each, excluding wine. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Dr. J. M. Pletts, Ryde, on or before Wednesday, June 25th.—J. WARD COUSINS, Honorary Secretary and Treasurer.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting of this Branch will be held at the Salop Infirmary on Tuesday, June 24th, at 3 P.M. Papers will be read by Mr. Bennett May, Dr. Charnley, etc. After the meeting the annual dinner will be held; tickets, exclusive of wine, 6s. Members having any papers to read or communications to make will kindly give notice, on or before Saturday, June 14th, to the Honorary Secretary, J. ALLEN BRATTON, College Hill House, Shrewsbury.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The annual meeting of this Branch will be held at the Castle Campbell Hotel, Dollar, on the afternoon of Tuesday, June 17th, at 3.45 P.M., under the presidency of Dr. Strachan. The office-bearers for the ensuing year will be elected, and Dr. Strachan will read a paper on The Health Conditions of School Life. A discussion on The Present Position of Medical Officers under the Public Health Acts will be introduced by Dr. Wickham. The annual dinner will be held after the meeting. Tickets 5s. each.—C. J. LEWIS and J. PEAKE, Honorary Secretaries.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The summer meeting of this Branch will be held in the Kintore Arms Hotel, Inverurie, on Saturday, June 21st, at 1 o'clock P.M., Dr. Fowler in the chair. Business: 1. Minutes, etc. 2. Exhibition of various old Scotch and local objects of interest, with description of the same, by Dr. F. Maitland Moir, Aberdeen. A four-in-hand coach will, if the weather be favourable, start from the corner of Market Street at 10.45 A.M. for the conveyance of members to Inverurie *vid* Tyr Baggar, Blackburn, and Kintore, arriving at 12.45. The coach will leave Inverurie on the return journey at 6 P.M. Fare for coach and aërated waters, etc., *en route*, 5s. per head. Dinner in the Kintore Arms Hotel, Inverurie, at 1.30 P.M.; price (inclusive of attendance, but exclusive of wine), 3s. 6d. per head. N.B.—In order that suitable arrangements for coach, refreshments, and dinner be made, members intending to be present are urgently requested to signify their intention of so doing as soon as possible.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

NORTH WALES BRANCH.—The annual meeting will be held at Portmadoc the second week in July. Members having a paper to read, communications to make, or new member to propose, are requested to intimate before June 28th to to the Honorary Secretary, W. JONES MORRIS, Portmadoc.

PERTHSHIRE BRANCH.

THE last meeting of the session was held in the rooms of the Society of Natural Science, Perth, on Friday, June 6th, 1890.

Business.—1. The minutes of the last meeting were approved. 2. The reply of the Prison Commissioners to a communication from the Council was read (see page 1384). 3. A minute of condolence in reference to the death of Dr. Bramwell was sent to his widow. 4. Dr. Urquhart was elected representative of the Branch to the annual meeting at Birmingham. 5. The decision of the Perthshire County Council in reference to medical officers of health was considered, and action deferred in the meantime.

Papers.—Dr. DICKSON, of Dunkeld, read a paper on Unusual Cases of Midwifery; Dr. MCGILLIVRAY, of Dundee, read a paper on the Etiology and Treatment of Myopia.

BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, May 28th, Dr. FYFFE, President in the chair. There were present fifty-six members and two visitors.

New Member.—VINCENT MILNER, M.B.Edin., of Hanham, was elected a member.

The New Lunacy Act.—Dr. F. T. B. LOGAN drew attention to the action of the Bristol magistrates in deciding to require a medical man appointed by themselves to certify in all cases under the new Lunacy Act.—After observations by Mr. CROSS, Drs. BRABAZON, FYFFE, and LONG FOX, Mr. COATHUPE, and Drs. BONVILLE FOX and MARKHAM SKERRITT, Mr. COATHUPE, at the request of the meeting, undertook to represent to the magistrates the opinion of the Branch on the subject.

Epidemic Influenza.—The PRESIDENT introduced a discussion on epidemic influenza, which was continued by Drs. LONG FOX, BRABAZON, CLARKE, DAVIES, and WALDO, Messrs. BUSH and HARSANT, and Drs. WILLIAMS, PROWSE, BURDER, MARKHAM SKERRITT, ELLIOTT, AUST LAWRENCE, and PARKER.

SOUTH INDIAN AND MADRAS BRANCH.

THE annual meeting of this Branch was held in the Central Museum, Madras, on January 10th, 1890; Surgeon-General G. BIDIE, M.B., C.I.E., President, in the chair.

Statement of Accounts.—The HONORARY TREASURER presented a statement of accounts for the past year, showing a balance of Rs. 1,127-13-10 in favour of the Branch. This flourishing financial condition was due to the home remittances having been less by some 230 rupees, as postage for the JOURNAL was now not charged; also to a lessened expenditure of Rs. 285 in printing, postage, and stationery, as compared with the previous year. Last year's annual subscription included postage, and all the members who had paid their subscriptions locally were entitled to a refund of Rs. 3. If then the home subscription for this year was fixed at Rs. 15, and the local subscription at Rs. 8, the subscription for members of the Branch would come to Rs. 20—a reduction that would probably meet with the approval of all the members.—Proposed by Brigade-Surgeon SIBTHORPE, and seconded by Surgeon-Major MAITLAND, M.D., that Surgeon-Major W. E. Johnson, M.D., and Surgeon C. M. Thompson, M.B., be asked to audit the accounts for the past year; carried unanimously.

Reduction of Subscription.—Proposed by Brigade-Surgeon SIBTHORPE, and seconded by Surgeon-Major MAITLAND, M.D., that in accordance with the By-law VI the subscription to the Association be fixed at Rs. 15 for the year, and that those members who have paid the full subscription for 1889 be credited with Rs. 3, the difference between £1 6s. and £1 1s., the present subscription to the Association: carried unanimously.

Remission of Postage.—Proposed by Brigade-Surgeon SIBTHORPE, and seconded by Surgeon-Major W. R. BROWNE, M.D., That the best thanks of the Branch are due to the Council of the British Medical Association for remitting the extra postage charged on the JOURNAL to this country; carried unanimously.

Election of Officers.—The meeting then proceeded to the election of office-bearers for the year, with the following result:

President: Deputy Surgeon-General S. B. Roe, M.B., C.B. *Vice-President:* Surgeon-Major E. F. Drake-Brockman, F.R.C.S. *Honorary Secretary:* Surgeon-Major H. Allison, M.D. *Honorary Treasurer:* Surgeon-Major W. R. Browne, M.D. (Surgeon-Major Browne, M.D., having proceeded on leave, Surgeon F. C. Reeves was at the meeting held on March 7th elected honorary treasurer). *Committee:* Brigade-Surgeons C. Sibthorpe, F.K.Q.C.P., and C. E. McVittie; Surgeon-Majors A. M. Branfoot, M.B., and J. Maitland, M.D.; Surgeon J. Smyth, M.D. *Provisional Members of Committee:* Surgeon H. Armstrong; Surgeon W. B. Browning. *Representative on General Council:* Surgeon-General W. R. Cornish, F.R.C.S., C.I.E. (retired).

BRITISH MEDICAL ASSOCIATION.

FIFTY-EIGHTH ANNUAL MEETING.

THE fifty-eighth Annual Meeting of the British Medical Association will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, July 29th, 30th, 31st, and August 1st, 1890.

President: C. G. WHEELHOUSE, F.R.C.S., J.P., Consulting Surgeon, Leeds General Infirmary, Cliff Point, Filey.

President-elect: WILLOUGHBY FRANCIS WADE, B.A., M.B., F.R.C.P., J.P., Senior Physician, Birmingham General Hospital, 27, Temple Row, Birmingham.

President of the Council: THOMAS BRIDGWATER, M.B., LL.D., J.P., Harrow-on-the-Hill.

Treasurer: CONSTANTINE HOLMAN, M.D., J.P., Reigate.

An Address in Medicine will be delivered by Sir B. WALTER FOSTER, M.D., M.P., Senior Professor of Medicine, Queen's College, Birmingham.

An Address in Surgery will be delivered by LAWSON TAIT, F.R.C.S., Surgeon, Birmingham and Midland Hospital for Women Birmingham.

An Address in Therapeutics will be delivered by WILLIAM HENRY BROADBENT, M.D., F.R.C.P., Physician to St. Mary's Hospital, London.

The scientific business of the meeting will be conducted in twelve Sections, as follows, namely:

A. MEDICINE AND THERAPEUTICS.—*President:* Sir DYCE DUCKWORTH, M.D., LL.D. *Vice-Presidents:* EDWIN RICKARDS, M.B.; DAVID DRUMMOND, M.D. *Honorary Secretaries:* ISAMBARD OWEN, M.D., 40, Curzon Street, Mayfair, W.; CORNELIUS W. BUCKLING, M.D., 103, Newhall Street, Birmingham.

Two subjects have been set down for special discussion: 1. Functional Disorders of the Heart. 2. The Varieties of Hepatic Cirrhosis.

The discussion on (1) will be opened by the President on Wednesday, July 30th, at 10 A.M.; that on (2) by Dr. Saundby on Friday, August 1st, at 10.30 A.M. Professor Gairdner, Dr. Rickards, Dr. Broadbent, Sir Walter Foster, Dr. Sansom, Dr. Finlay, Professor Tirard, Dr. Eddison, Dr. W. R. Thomas, and Dr. Boyd have already expressed their intention of taking part in the former; Dr. Drummond, Dr. Goodhart, Professor Tirard, Dr. W. R. Thomas and Dr. Herringham of joining in the latter discussion.

The following papers are announced:

BROWNIE, J. Walker, M.B., C.M. Intralaryngeal Injections in the Treatment of certain Laryngeal and Pulmonary Affections.
HAMILTON, Brigade-Surgeon J. B., M.D. Enteric Fever in India.
HASSALL, A. H., M.D. On the Climate of San Remo, based on the Observations of Ten Consecutive Winter Seasons.
HERRINGHAM, W. P., M.D., F.R.C.P. Intermittent Albuminuria.
MACALDOWIE, Alex. M., M.D., F.R.S.E. Lead Poisoning and Gout.
MUDDEMAKER, John V., A.M., M.D. (Philadelphia, U.S.A.) The Physiological and Therapeutic Action of Coto Bark.
BUCKLING, C. W., M.D. Demonstration of Cases.
TAYLOR, Seymour, M.D. Cardiac Derangement in Association with Viscera Disease.
WARD, Professor N. I. C., M.D., F.R.C.P. Forms of Albuminuria
WILMOT, R. Eardley, M.B. The Therapeutic Uses of the Natural Saline Waters of Leamington Spa.
WILSON, T. Stacey, M.B., C.M., B.Sc. 1. Some Points in the Clinical Study of Vertigo, and their Bearing on the Functions of the Semicircular Canals. 2. Varices as a Cause of Hæmatemesis in Cirrhosis of the Liver.

B. SURGERY.—*President:* T. H. BARTLEET, M.B., F.R.C.S. *Vice-Presidents:* BENNETT MAY, M.B., F.R.C.S.; J. GREIG SMITH, M.B., F.R.S.E. *Honorary Secretaries:* F. A. SOUTHAM, F.R.C.S., 13, John Street, Manchester; F. MARSH, F.R.C.S., 34, Paradise Street, Birmingham; H. G. BARLING, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

It has been determined to bring forward for discussion the following subjects: 1. The Surgery of the large Arterial Trunks, to be introduced by Mr. Timothy Holmes (London), Mr. William Thomson (Dublin), Mr. T. H. Bartleet, Mr. Bennett May, Mr. Alfred Willett, Mr. C. A. Ballance, Mr. Damer Harrison, Mr. Jordan Lloyd, and Mr. Vincent Jackson. 2. The Operative Treatment of Acute Intestinal Obstruction due to Internal Strangulation, to be introduced by Dr. J. Greig Smith, Sir William Stokes (Dublin), Mr. Mayo Robson (Leeds), Mr. Kendal Franks (Dublin), Mr. Stanmore Bishop (Manchester). Mr. Lawson Tait, Mr. E. Atkinson, Mr. Bruce Clarke, Mr. Bennett May, Mr. Thornley Stoker, Mr. L. H. Ormsby, Mr. Jordan Lloyd, Mr. F. B. Jessett, Dr. Ward Cousins, Mr. Cleland Lammiman, Mr. W. D. Spanton, and Mr. F. Marsh will speak on this subject. It is hoped that Dr. Senn, of Milwaukee, will also take part in this discussion.

The following papers are announced:

ATKINSON, E., M.R.C.S. On Nerve Grafting.
CHEYNE, W. Watson, F.R.C.S. 1. Case of Internal Derangement of the Knee-joint. 2. On Operation in Cases of Fracture extending into Joints.
CLARKE, Bruce, M.B, F.R.C.S. Obscure Bladder Affections and their Exact Diagnosis by the Cystoscope.
DAVIES-COLLEY, J. N. C., M.B. On a Method of Closing the Hard Palate by a New Operation.
FENWICK, Hurry, F.R.C.S. The Influence of Electric Illumination of the Bladder upon our Knowledge and Treatment of Urinary Disease.
FRANKS, Kendal, M.D. On the Use of Massage in Recent Fractures, Dislocations, and Sprains.
JESSETT, F. B., F.R.C.S. The Surgical Treatment of Carcinoma of the Pylorus and Intestines.
LAFFAN, Thos., M.K.Q.C.P. The Field of the Aspirateur.
PARSONS, Inglis, M.D. On the Arrest of Growth in Cancer by the Interrupted Voltaic Current.
RAKE, Beaven, M.D. 1. The Treatment of Perforating Ulcer in Leprosy. 2. Reported Nerve stretching for Leprosy in the same patient, with relief each time.
ROBSON, A. W. Mayo, F.R.C.S. Tapping and Draining the Ventricles in certain cases of Brain Disease.

C. OBSTETRIC MEDICINE AND GYNÆCOLOGY. — *President:* THOMAS SAVAGE, M.D., F.R.C.S. *Vice-Presidents:* CHARLES J. WRIGHT, M.R.C.S.; JAMES MURPHY, M.D. *Honorary Secretaries:* J. K. KELLY, M.D., Park Villa, Crosshill, Glasgow; C. E. PURSLOW, M.D., 192, Broad Street, Birmingham.

Arrangements have been made for the following important subjects to come under discussion: 1. On Modern Methods of Managing Lingering Labour, to be opened by Dr. W. S. Playfair. 2. On the Importance of Gonorrhœa as a Cause of Inflammation of the Pelvic Organs, to be opened by Dr. George Granville Bantock. 3. On the Relief of Labour with Impaction by Abdominal Section as a Substitute for the Performance of Craniotomy, to be opened by Dr. Murdoch Cameron.

The following gentlemen have already promised to take part in the above mentioned discussions: Dr. Auvard (Paris), Dr. Elder (Nottingham), Dr. Imlach (Liverpool), Dr. Aust Lawrence (Bristol), Dr. Smyly (Dublin), Mr. Lawson Tait, Dr. J. R. Morison (Newcastle), Dr. Braithwaite (Leeds), Dr. A. V. Macan (Dublin), Dr. Cullingworth (London), Dr. Goodell (Philadelphia), Dr. R. N. Ingle (Cambridge), Dr. J. Inglis Parsons (London), Mr. R. O'Callaghan (Carlow), Dr. M. Handfield Jones (London), Dr. More Madden (Dublin), Dr. A. Duke (Dublin), Mr. A. Freer (Stourbridge), Mr. H. M. Morgan (Lichfield), Dr. Fancourt Barnes (London), Mr. A. W. Mayo Robson (Leeds), Dr. Berry Hart (Edinburgh), Dr. A. J. Smith (Dublin), and Mr. John W. Taylor.

It is proposed that a series of Clinical and Operative Demonstrations shall be given on the morning of each day before the work of the Section begins by Dr. Savage, Mr. Lawson Tait, and Mr. J. W. Taylor.

The following papers have been announced:

BALLANTYNE, J. W., M.D., F.R.C.P.E., and WILLIAMS, J. D., M.B. Some Points in the Histology and Pathology of the Fallopian Tubes.
BARBOUR, A. H. F., M.D. Recent Results from the Study of Labour, Especially of the Second Stage, by Means of Frozen Sections and Casts.
BELL, Robert, M.D. (Glasgow). On the Pathogenesis and Treatment of Oöphoritis.
BYERS, John W., M.D. (Belfast). On the Treatment of Puerperal Eclampsia.
CAMERON, Murdoch, M.D.Glasg. On Cæsarean Section with three successful cases. [Dr. Cameron will also show a Pair of Axis Traction Forceps.]
CARBONE, A. Postelli, M.D. (Malta). Acute Yellow Atrophy in Pregnancy, with specimens.
DUKE, Alex., F.K.Q.C.P.I. Delivery in Difficult Cases of Impaction by the Help of Tractors and Belt. Some Original Instruments will also be shown.
EDIS, A. W., M.D., F.R.C.P. On the Clinical Treatment of Sterility.
HARRIS, Robert P., M.D. (Philadelphia). A Communication in connection with the discussion on Cæsarean Section.

HART, D. Berry, M.D.Edin. On the Displacement of the Placenta in Extra-uterine Gestation.
JONES, M. Handfield, M.D. On Two Cases of Ovariotomy, Complicated by the Presence of Fibromyomata of the Uterus.
MADDEN, T. More, M.D. On the Pathology and Treatment of Displacement of the Ovaries.
MORGAN, Herbert M., M.R.C.S. (Lichfield), will Show a Pair of Axis Traction Forceps in connection with Dr. Reid's paper.
NAIRNE, J. S., F.R.C.S.Ed.(exam.). Some additional points in the Surgical Treatment of Cancer of the Uterus, with a retrospect of the twenty-three cases reported at the meeting of 1889.
REID, W. L., M.D.Glasg. On a Simple Form of Axis Traction Forceps.
RENTOUL, R. R., M.D. (Liverpool). On the Registration of Midwives and their Power to Practise Independently of the Profession.
SMITH, Alfred J. (M.B.Dublin). The Treatment of Retroflexed or Retroverted Uteri by Recto-abdominal Manipulation, with notes of a successful case. (Dr. Smith will also show the instrument he uses in elevating the uterus during massage for prolapse.)
TAIT, Lawson, F.R.C.S.Eng. A Record of 219 Cases of Operation for Removal of the Appendages for the Treatment of Uterine Myoma, performed between March 16th, 1883, and December 18th, 1888, giving the subsequent history of the cases, from twenty months up to seven years subsequent to the operation
TAYLOR, John W., F.R.C.S.Eng., and BERNAYS, A. V., M.B. A Contribution to the Theory of Exanthematic Inflammatory Disease of the Uterine Appendages.

D. PUBLIC MEDICINE.—*President:* ALFRED HILL, M.D. *Vice-Presidents:* JOHN BURGES WELCH, M.B.; A. S. UNDERHILL, M.D. *Honorary Secretaries:* LOUIS C. PARKES, M.D., 61, Cadogan Square, S.W.; SIDNEY BARWISE, M.B., Clough View, Blackburn.

The following topics for papers have been suggested as likely to lead to useful and interesting discussion: 1. Prevention of Pollution of Rivers (*a*) by Paper Works; (*b*) by Dye Works. 2. Smoke Abatement. 3. Lead Poisoning from Water. 4. Methods of Disinfecting Air from Small-pox Hospitals. 5. Treatment of Sewage. 6. The Compulsory Notification Act.

The following papers have been announced:

BARWISE, Sidney, M.B., D.P.H. Smoke-preventing Appliances.
FLETCHER, Wilfred W. E., M.B., B.A.Cantab. Medical Officers of Health and Infectious Diseases in Board Schools.
GORDON, Surgeon-General C. A., M.D., C.B., Q.H.P. The More Recent Phases of the Hydrophobia Controversy.
MCLINTOCK, James, M.D., B.Sc. The Electrical Treatment of Sewage.
MUMBY, B. H., M.D., D.P.H. The Compulsory Notification Act.
SEATON, Edward, M.D., F.R.C.P. Clinical Instruction at Fever Hospitals in connection with the operation of the Compulsory Notification Act.
SERGEANT, Edward, L.R.C.P., D.P.H. The Prevention of Pollution of Rivers.
THOMSON, Theodore, M.A., M.B., D.P.H. (Sheffield). Lead Poisoning from Drinking Water.
THRESH, John C., M.B., D.Sc. Pollution of Streams from Paper Refuse.
THURSFIELD, W. N., M.D., D.P.H. The Etiology of Outbreaks of Typhoid Fever in Rural England.
WALLEY, Thomas, Principal Royal Veterinary College, Edinburgh. Meat Inspection.

E. PSYCHOLOGY. — *President:* FREDERICK NEEDHAM, M.D. (Gloucester). *Vice-Presidents:* S. H. AGAR, L.K.Q.C.P. (Henley-in-Arden); E. B. WHITCOMBE, M.R.C.S. (Birmingham). *Honorary Secretaries:* JOSEPH WIGLESWORTH, M.D., Rainhill, Lancashire; EDMUND LEWIS ROWE, L.R.C.P., Borough Asylum, Ipswich.

The Section will be opened with an address by the President. A discussion will be arranged on the proposal made to the London County Council to establish a small hospital for the insane in London, to be opened by Dr. Yellowless.

The following papers have been announced:

HYSLOP, T. B., M.D. Sunstroke and Insanity.
KERR, Norman, M.D. Should Hypnotism have a Recognised Place in Therapeutics?
NORMAN, Conolly, M.K.Q.C.P.I. Mania a Potû.
TUKE, Hack, M.D. Imperative Ideas outside Insane Delusion.
WARNER, Francis, M.D. Development in Relation to Brain and Nutrition.

F. ANATOMY AND PHYSIOLOGY.—*President:* D. J. CUNNINGHAM, M.D. *Vice-Presidents:* W. H. GASKELL, M.D., F.R.S.; B. C. A. WINDLE, M.D. *Honorary Secretary for Anatomy:* W. P. HERRINGHAM, M.D., 13, Upper Wimpole Street, W.; *Honorary Secretary for Physiology:* F. J. ALLEN, M.B., Mason College, Birmingham.

An introductory address upon the Cerebral Convolutions will be delivered by Professor Cunningham.

The following subjects have been selected for discussion: 1. The relation which Examinations in Anatomy and Physiology bear to the teaching of these subjects; to be opened by Professor Windle. Dr. St. John Brooks, Professor Scott, Mr. William Thornley Stoker, Mr. Bruce Clarke, and others, will join in the debate. 2. The value of Nerve Supply in the determination of Muscular Homologies and Anomalies; to be opened by Professor Cunningham, Professor Birmingham, Dr. St. John Brooks, Dr. William Thomson, and others, will join in the debate. 3. The Evolution of the Vertebrate Nervous System.

The following papers have been announced:

BALLANTYNE, J. W., M.D. The Anatomy of the Anencephalic Fœtus studied by Frozen Sections.
BIRMINGHAM, Professor A. E. I., M.B. 1. Topographical Anatomy of the Bladder in the Child, illustrated by plaster models. 2. The Mastoid Region of the Skull, with special reference to operations on this part. 3. The Anatomy of Four Specimens of Absent Radius.
BROOKS, H. St. John, M.D. The Valvulæ Conniventes in the Human Intestine.
BRUCE, Alexander, M.B. On the Nuclei of the Third Nerve.
CUNNINGHAM, Professor D. J., M.D. A Stage in the Growth of the Primate Brain.
GASKELL, W. H., M.D., F.R.S. On the Evolution of the Vertebrate Nervous System, with lantern demonstration of microscopic preparations.
LLOYD, Jordan, F.R.C.S. Casts of the Kidney Pelvis.
MAHOOD, Allan E., M.B. 1. On the Acromial Epiphysis. 2. On the Eighth True Rib. 3. On an Abnormal Thoracic Duct. 4. Concerning the Great Intestine. 5. On an Abnormal Muscle in the Hand.
SCOTT, Professor J. A., M.B. A Lantern Demonstration of Photomicrographs intended for Histological Teaching and Research.
SYMINGTON, Johnson, M.D. On the Pelvic Viscera of a Girl Sixteen Years Old.
TOOTH, Howard, M.D. On the Tracts of the Spinal Cord.

G. PATHOLOGY.—*President:* D. J. HAMILTON, M.B. *Vice-Presidents:* C. A. MCMUNN, M.D.; G. SIMS WOODHEAD, M.D. *Honorary Secretaries:* SHERIDAN DELÉPINE, M.B., 6, Chapel Place, Cavendish Square, W.; GEORGE F. CROOKE, M.D., 2, Edmund Street, Birmingham.

The President will deliver an Introductory Address on the Pathology of Dyspepsia, and the following gentlemen have already promised to give papers and demonstrations on the result of their recent investigations in various branches of Pathology:—

BALLANCE, C. A., F.R.C.S., and SHERRINGTON, C. S. On Leucocytes.
BRUCE, A., M.B. (Title not received.)
CHEYNE, W. Watson, M.B., Tubercular Diseases of Bone.
COPEMAN, S. A. M., M.B. Improved Methods for the Examination of the Blood in Disease.
CROOKSHANK, E., M.B. Horsepox.
DICKINSON, W. H., M.D. The Tongue in Disease.
FROST, W. Adams, F.R.C.S. Morbid Conditions of the Fundus Oculi.
HAIG. A., M.D. The Estimation of Uric Acid in Disease.
MACFADYEAN, Professor J., M.B. Comparative Pathology of Tuberculosis.
MACMUNN, C. A., M.D. The Spectroscope in Medicine.
MARTIN, Sidney, M.D. The Pathology of the Proteids of the Body.
MOTT, W. F., M.D. Pathological Relations between the Cells and the Fibres of the Spinal Cord.
PAYNE, J. H., M.D. The Bacillus of Rhino-scleroma and its Demonstration.
RAKE, Beaven, M.D. Experiments in Protective and Antagonistic Inoculation in Leprosy.
RUFFER, M. A., M.D. Destruction of Micro-organisms by Leucocytes.
SNOW, H , M.D. 1. Bone Lesions in Mammary Carcinoma. 2. The Local Origin of Cancer.
WOODHEAD, G. S., M.D. Diseases of the Lungs (chiefly Tuberculosis).

These communications will be illustrated by practical demonstrations, such as projection of spectra, microscopical specimens, photographs, diagrams, etc., on the screen, chemical experiments, exhibition of microscopical and other specimens, models, casts, etc.

In order to insure the bringing forward of each demonstration at the hour appointed, a certain amount of time will be set apart at the end of each meeting for the discussions of the facts brought forward.

H. OPHTHALMOLOGY.—*President:* D. C. LLOYD OWEN, F.R.C.S.I. *Vice-Presidents:* HENRY EALES, M.R.C.S.; JOHN B. STORY, M.B. *Honorary Secretaries:* HENRY E. JULER, F.R.C.S., 77, Wimpole Street, W.; E. WOOD WHITE, M.B., 72, Newhall Street, Birmingham.

Mr. Priestley Smith will open a discussion on Myopia: its Causes, Prevention, and Treatment. Mr. Edgar Browne, Henry Eales, G. Glascott, and G. Hartridge have promised to take part in the discussion.

The following papers have been announced:

CANT, W. J., M.R.C.S., L.R.C.P. A New Syringe for Extracting Soft Matter in Cataract Operation.
EALES, Henry, M.R.C.S. (Title uncommunicated.)
EDRIDGE-GREEN, F. W., M.D. The Quantitative Estimation of Defects of Colour Perception.
GROSSMANN, K., M.D. 1. Colour Blindness. 2. Blennorrhœa Neonatorum.
MCHARDY, Malcolm, F.R.C.S.Edin. The Treatment of Immature Senile Cataract.
FROST, W. Adams, F.R.C.S. Lantern Slides, Illustrating Town Physiological and Pathological Conditions of the Fundus.

I. DISEASES OF CHILDREN. — *President:* ALFRED HENRY CARTER, M.D. (Birmingham). *Vice-Presidents:* WILLIAM THOMAS, F.R.C.S. (Birmingham); WALTER PYE, F.R.C.S. (London). *Honorary Secretaries:* HENRY HANDFORD, M.D., 14, Regent Street, Nottingham; ARTHUR FOXWELL, M.B., 47, Temple Row, Birmingham.

It is proposed to discuss the following subjects:—I. The Affections of the Lymphatic Glands in Childhood. (*a*) The Treatment of Simple and Suppurative Adenitis. (*b*) The Diagnosis of Glandular Enlargements due to causes other than simple Inflammation. (*c*) The relation of Strumous Adenitis to Tubercle. (*d*) Tabes Mesenterica. Dr. H. R. Hutton (Manchester), Dr. W. C. Chaffey (Brighton), Dr. L. W. Marshall (Nottingham), Dr. E. H. Greves (Bournemouth), Dr. W. H. Day (London), and Dr. J. W. Byers (Belfast) will speak on these subjects. II. (*a*) The Operations for the Radical Cure of Hernia in Children and their value. (*b*) The Surgical Questions involved in the Practice of Excising Joints the seat of Disease in Childhood. Messrs. W. Watson Cheyne (London), Noble Smith (London), H. O'Neill (Belfast), R. N. Pughe (Liverpool), and Dr. L. H. Ormsby (Dublin), will join in these discussions. III. The Claims and Limitations of Physical Education in Schools. It is hoped that Sir Andrew Clark will open this discussion. The President and Dr. Clement Dukes will take part in it.

The following papers have been announced:

HAY, Wm., M.D. Peripheral Birth Palsy.
MADDEN, Thomas More (Dublin), M.D. 1. On the Strumous Glandular Diseases of Childhood and their Relation to Tubercle. 2. On the Use and Abuse of Physical Education in Schools.
PUGHE, Rhinallt N., M.B., F.R.C.S. The Operations for the Radical Cure of Hernia.
WRIGHT, G. A., M.B., F.R.C.S. The Causes and Treatment of Adenitis.

Demonstrations.—Misses Chapman and Nyström (London) will exhibit their Anglicised Sloyd method of instructing children. Mrs. Strahan Mathews (London) will demonstrate the system of Swedish exercises as used by the girls in the London Board Schools.

J. LARYNGOLOGY AND RHINOLOGY.—*President:* JOHN ST. WITHIN WILDERS, M.R.C.S. (Birmingham). *Vice-Presidents:* CHARTERS JAMES SYMONDS, M.D., F.R.C.S. (London); ARCHIBALD EDWARD GARROD, M.D. (London). *Honorary Secretaries:* ERNEST HENRY JACOB, M.D., 12, Park Street, Leeds; SCANES SPICER, M.D., 28, Welbeck Street, Cavendish Square, W.

The following subjects have been chosen for special discussion: 1. The Treatment of Laryngeal Disease in Tuberculosis, opened by Mr. Charters J. Symonds (London) and Dr. Hunter Mackenzie (Edinburgh). 2. The Etiology, Significance, and Treatment of Spurs and Deflections of the Nasal Septum, opened by Dr. Woakes (London) and Mr. W. J. Walsham, F.R.C.S. (London).

Dr. Clifford Beale (London), Dr. Walker Downie (Glasgow), Dr. T. Ellis (Newcastle), Dr. William Hill (London), Dr. Greville Macdonald (London), Dr. David Newman (Glasgow), Dr. Scanes Spicer (London), and Dr. W. McNeill Whistler (London), have promised to take part in one or both of these discussions.

At the completion of these discussions, the time of the Section will be devoted to the reading and discussion of independent papers having reference to the special subjects embraced by the Section.

The following papers have been announced:

ALL, J. B., M.D. On Cough as a Sympton of Nasal and Pharyngeal Affection.
CONNER, A., M.D. Some Common Affections of the Pharyngeal Tonsil and their Relation to Diseases of the Ear, Throat, and Nose, with Special Reference to the so-called "Relaxed Throat."
COWNE, Lennox, F.R.C.S.E. On Faucial and Pharyngeal Tenesmus.
DOWNIE, Walker, M.D. Some Unusually Large Nasal Polypi.
ELL, William, M.D. On the Value of Hewetson's Method of Forcible Nasal Dilatation, especially in the Treatment of Anterior Nasal Stenosis.
ANTHACK, A. A., M.D. On the Structure of the Vocal Cords.
ACDONALD, Greville, M.D. The Question of Excising the Tonsils.
EWMAN, David, M.D. Malignant Diseases of the Nasal Fossæ.
OVILL, T. D., M.D. A case of Abductor Paralysis.
PICER, Scanes, M.D. 1. Some Points in the Differential Diagnosis of Syphilis, Cancer, and Tuberculosis of the Throat. 2. Medicated Nasal Cylinders in the Treatment of Hay Fever, Ozæna, Catarrh, etc.
SYMONDS, C. J., F.R.C.S. The Treatment of Ozæna.
EVELYAN, E. F., M.D. On Two Cases of Double Abductor Paralysis of the Larynx of Uncertain Origin.

K. OTOLOGY.—*President:* CHARLES WARDEN, M.D., F.R.C.S.Ed. *Vice-President:* WILLIAM HILL, M.D., B.Sc. *Honorary Secretary:* ROBERT KERR JOHNSTON, M.D., 22, Lower Baggot Street, Dublin.

The following subjects are proposed for special discussion: 1. Intranasal Disease in relation to Deafness, excluding Postnasal Catarrh and Adenoid Growths, to be opened by Mr. Lennox Browne, F.R.C.S.Edin. (London). 2. The Etiology of Tinnitus Aurium, to be opened by Dr. H. Macnaughton Jones (London). The following gentlemen hope to take part in the discussions: Mr. Prosser James (London), Mr. T. Mark Hovell (London), Dr. Hesswell Baber (Brighton), Dr. Richard Ellis (Newcastle-on-Tyne), Mr. H. Bendelack Hewetson (Leeds), Dr. J. Ward Cousins (Portsmouth), and Dr. Farquhar Matheson (London).

It is proposed to reserve the third meeting of the Section for the reading and discussing of Miscellaneous Papers.

The following papers have been announced:

COUSINS, J. Ward, M.D. 1. New Method of Removing Foreign Bodies from the Meatus. 2. The Value of Artificial Tympanic Membranes.
STEWART, Donald, M.D. On the Comparative Advantages of the Eustachian Catheter and Politzer's Bag for Inflation of the Middle Ear.
TURNBULL, L., M.D. (Aural Surgeon to the Jefferson Medical College Hospital, Philadelphia). 1. The Etiology (or Causes) of Tinnitus Aurium. 2. Intranasal Disease causing Deafness; Enlargement (Hypertrophy) of the Pharyngeal Tonsil as a Cause of Deafness.

Dr. J. Ward Cousins has promised to demonstrate on some patients the Use of his Antiseptic Artificial Drumhead.

L. DERMATOLOGY.—*President:* JONATHAN HUTCHINSON, F.R.S. (London). *Vice-Presidents:* MALCOLM A. MORRIS, F.R.C.S.Ed. (London); H. RADCLIFFE CROCKER, M.D. (London). *Honorary Secretaries:* GILBERT SMITH, F.R.C.S., 41, Newhall Street, Birmingham; THOMAS COLCOTT FOX, M.B., 14, Harley Street, Cavendish Square, W.

It is hoped that there will be a demonstration of living cases, of drawings, and of microscopical specimens each morning. The greater part of the time daily will be devoted to the discussions of the following subjects: Wednesday morning, July 30th, Alopecia Areata, introduced by Dr. Radcliffe Crocker. Thursday morning, July 31st, Vaccination Rashes, introduced by Mr. Malcolm Morris. Friday morning, August 1st, Treatment of Eczema, introduced by Dr. Unna (Hamburg).

The following papers have been announced:

BULKLEY, L. D., M.D. (New York). Notes on Feigned Eruptions.
MAPOTHER, E. D., M.D. Treatment of Psoriasis by Mercury.
MYRTLE, A. S., M.D. (Harrogate). Diathesis in Connection with Eczema and Psoriasis.
SHOEMAKER, J. V., M.D. (Philadelphia). Explanation of the Sudden Blanching of the Hair.
WALSH, D., M.D. (Birmingham). Dermatitis as an Excretionary Symptom.

Honorary Local Secretaries:

R. SAUNDBY, M.D., 83A, Edmund Street, Birmingham.
JORDAN LLOYD, F.R.C.S., 22, Broad Street, Birmingham.
A. HARVEY, M.B., 161, Lozells Road, Birmingham.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 29TH, 1890.

9.30 A.M.—Meeting of 1889-90 Council.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
4 P.M.—Sermon in St. Martin's Church by the Right Honourable and Most Reverend the Archbishop of Canterbury.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, JULY 30TH, 1890.

9.30 A.M.—Meeting of 1890-91 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine by Sir B. WALTER FOSTER, M.D., M.P.
Garden Party at Wyddrington, Edgbaston, the residence of Mr. and Mrs. J. E. Wilson.
9 P.M.—Reception by the Worshipful the Mayor of Birmingham in the Council House.

THURSDAY, JULY 31ST, 1890.

9.30 A.M.—Meeting of the Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery by LAWSON TAIT, F.R.C.S. Presentation of the Gold Medal for Distinguished Merit to Surgeon T. H. Parke, A.M.S.
4.30 to 6 P.M.—Reception by the Midland Association of Volunteer Medical Officers to Officers of Her Majesty's Services.
Garden Party: Mrs. Willoughby Wade.
7 P.M.—Public Dinner of the Association.
8 P.M.—Concert in the large Theatre of the Midland Institute.

FRIDAY, AUGUST 1ST, 1890.

10.30 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Therapeutics by W. H. BROADBENT, M.D.
9 P.M.—Reception by the President of Mason College and Mrs. Lawson Tait.

SATURDAY, AUGUST 2ND, 1890.

Excursions.

THE ANNUAL MUSEUM.

IN connection with the fifty-eighth annual meeting of the British Medical Association, the Museum and Exhibition will be held in the Queen's College, Paradise Street, Birmingham, close to the

building in which the sectional meetings will be held. The Museum will be arranged in the following Sections:—

SECTION A.—Food and Drugs, including Antiseptic Dressings and other Chemical and Pharmaceutical Preparations. (Honorary Secretary, Dr. Stacey Wilson, 65, Temple Row, Birmingham.)

SECTION B.—Pathology, comprising Casts, Models, Diagrams, Apparatus, Microscopical and Spirit Preparations, etc. (Honorary Secretary, Dr. G. F. Crooke, 2, Edmund Street, Birmingham.)

SECTION C.—Anatomy and Physiology, comprising Special Dissections, Methods of Preparation, Drawings, Models, and Microscopic Preparations. (Honorary Secretary, Dr. A. E. Mahood, Queen's College, Birmingham.)

SECTION D.—Instruments and Books, including Appliances, Ambulance, Medical, Surgical and Electrical; Microscopes and Microtomes. (Honorary Secretary, Mr. Gilbert Barling, M.B., F.R.C.S., 85, Edmund Street, Birmingham.)

SECTION E.—Sanitary Appliances. (Honorary Secretary, Dr. A. Bostock Hill, 14, Temple Street, Birmingham.)

To Non-Professional Exhibitors.

In consequence of the increasing cost of these exhibitions, charges will be made to exhibitors (other than members of the medical profession), according to the space occupied.

Regulations Regarding Exhibits.

1. Intending exhibitors must communicate with the Secretaries of each Section in which they propose to exhibit, and a brief description of each exhibit for insertion in the Museum Catalogue must be in the hands of the respective Secretaries before June 29th.

2. All exhibits should be addressed to the "Secretary of the Museum, British Medical Association, Queen's College, Birmingham," with the name of the Section for which they are intended. Packages should not be addressed to a firm's representatives at the Museum.

3. Communications on general matters connected with the Museum to be addressed to the Museum Secretary, Mr. Gilbert Barling, M.B., F.R.C.S., 85, Edmund Street, Birmingham.

All communications respecting advertisements in the Museum Catalogue must be made to Mr. Edward B. Lawley, Queen's College, Birmingham.

GILBERT BARLING, M.B., F.R.C.S. Hon. Sec.
BERTRAM C. A. WINDLE, M.A., M.D., Chairman.

SPECIAL CORRESPONDENCE.

VIENNA.

Salol as a Diagnostic Agent.

DR. G. PAL, of Vienna, as the result of work done in the clinic of Dr. Standthartues in the Vienna General Hospital, gives details as to the utilisation of the decomposition of salol for diagnostic purposes in a recent number of the *Wiener klin. Wochenschrift.* Two years ago, Sievers and Ewald described a new method of testing the motor power of the stomach. This method was based on Nencki's discovery that the acid compounds of phenol were broken up into their components by the pancreatic juice. They observed that all the parts of the digestive tract, except the stomach, had the power of decomposing salol into salicylic acid and phenol. The acid reaction of the contents of the stomach prevented that decomposition. In this method one gramme of salol was given in wafers half an hour after meals. Dr. Pal made two series of experiments with salol—namely, one on the permeability of the pylorus, and the second on the duration of the secretion of salicylic acid in the urine in its relation to the motor function of the intestine. If salol was introduced into the stomach, and the presence of salicylic acid could be proved, it was thus shown that the contents of the stomach had passed into the duodenum. The salol test thus permitted of an appreciation of the permeability of the pylorus. Dr. Pal had the opportunity of observing the patients in whom the reaction of salicylic acid in the urine did not occur after the use of salol. Occlusion of the pylorus was, for this reason, diagnosed, which, in both the cases, was confirmed by the *post-mortem* examination. In one of the cases the patient was a cachectic man, aged 52, who had been suffering from gastro-intestinal disturbance for two years. These symptoms had considerably increased during the six months before admission, and emaciation subsequently came on. Examination revealed the presence of dilatation of the stomach, want of free muriatic acid, ferment as well as pepsine. No neoplasm could be discovered. The salol test was used twice, and the reaction occurred in 115 and 120 minutes respectively. In an examination of the urine made eight days after the last test the reaction did not occur. The patient was then transferred to the clinic of Professor Albert, where jejunostomy was practised by Dr. Ullmann. He rapidly lost flesh, however, and survived the operation only two days. The *post-mortem* examination revealed scirrhus of the pylorus and the lower wall of the stomach, and a stenosis of the pylorus 5 centimètres long. The mucous membrane of the pylorus was infiltrated. In the second case, a tumour of the stomach and carcinomatosis of the peritoneum were present. The *post-mortem* examination showed, also, in this case that no gastric contents could pass into the duodenum. It is thus clear that the salicylic acid reaction in the urine showed that the pylorus was occluded.

In the second series of experiments Dr. Pal endeavoured to ascertain whether there is any relation between the duration of the passing of salol from the stomach into the intestine, and the duration of the secretion of salicylic acid. For this purpose he evacuated the contents of the stomach a definite time after the administration of salol. The experiments were made on two patients. The first was a medical student suffering from disordered digestion. His stomach was invariably found to be empty four hours after each meal. On two days 1 gramme of salol was administered half an hour after a meal, and in both the instances the urine was examined for salicylic acid only one hour after the administration of salol. The duration of the secretion was controlled for fifty hours. On one of the following days the first occurrence of the reaction was more precisely examined, and salicylic acid was proved to be present in the urine already after thirty-five minutes. This was also observed in a second experiment on the same patient, and after twenty-four hours when the stomach was washed out, no salol was found. The reaction in the urine, however, persisted for 72 hours. These observations showed that the duration of the secretion of the salicylic did not depend on the stomach, but only on the intestine. As to the intestinal function in this patient, the case was one of obstinate constipation. The patient's bowels were not opened once during the last experiments, that is during six days. In the second case, that of a patient suffering from impaired motor function of the stomach, owing to dilatation, the duration of the reactions in the urine after salol, and the stools were examined. The result was as follows:—Experiment 1, Duration of the reaction, 44 hours; no stool. Experiment 2, 48 hours; no stool. Experiment 3, 27 hours; 2 copious stools. Experiment 4, 26 hours; 3 copious stools. Experiment 5, 25 hours; 3 copious stools. Experiment 6, 42 hours; no stool. Hence in impaired motor function of the stomach there was more prolonged secretion of salicylic acid than when the stools were abundant. These experiments showed that the duration of the secretion of salicylic acid in the urine after the administration of salol is not only dependent upon the interval of time which a certain quantity of salol takes to pass from the stomach into the intestine, but on how long it remained in the intestine.

Experiments were then made as to the duration of the secretion of salicylic acid after the administration of salol and the motor function of the intestine. More than thirty experiments were made, from which Dr. Pal concluded that there is a relation between the secretion of the salicylic acid in the urine and the motory function of the intestine.

These experiments may contribute materially to the exact diagnosis of intestinal affections.

LIVERPOOL.

The Clinical Study of Epilepsy.—A Swedish Leper in Liverpool.

THE first annual report of the Home for Epileptics at Maghull has just been issued. The institution was opened on December 28th, 1888, with a single patient; thirty new patients were admitted during the following year, and twenty remained on the books at the end of that time. An interesting and valuable feature is the publication of a separate medical report by Drs. Alexander and Gardon, stating the nature of the cases, the treatment, and the results. In most of the patients the disease had lasted for years; they were poorly nourished, chilly, and indisposed for any exertion. Fourteen out of the twenty-two whose eyes were examined by Mr. C. G. Lee were found to have errors of refraction—a pro-

portion that would suggest a causal relation, were it not that the same proportion of error was found in the same number of patients in the Brownlow Hill Infirmary who were not known ever to have had fits. Patients whose superior cervical sympathetic ganglia had been removed by Dr. Alexander with the object of influencing the disease, were found to have hyperæmia of the fundus, consisting chiefly of a moderate engorgement of the retinal veins. Special investigations were made with the view of ascertaining whether any relation existed between epilepsy and asymmetry of the cranium. As far as the inquiry has gone at present, it shows that there is no form of asymmetry peculiar to epilepsy, and that asymmetry is not more frequent in epileptics than in others. The treatment employed consisted in careful dieting, with avoidance of stimulants and tobacco, and the enforcement of a salutary mode of life with a due proportion of physical exercise and occupation. The writers of the report state that they only use bromides to the extent of keeping the disease from injuring the patient. They have no faith in bromides effecting a cure, and believe they retard it. Residence in the home was marked in almost all cases by a considerable increase in weight and improvement in intelligence where this was deficient. As regards the frequency and severity of the fits, one-third of the cases were very much improved.

A case of leprosy has occurred in Liverpool in the person of an emigrant, a woman, who came from Sweden, and took passage in one of the Cunard steamers. The quarantine officers at Boston detected the nature of the case, and the woman, not being allowed to land, was brought back to Liverpool and lodged in the workhouse infirmary until arrangements were completed for sending her home.

CORRESPONDENCE.

THE RELATIONS OF THE FEMALE SEXUAL ORGANS TO MENTAL DISEASES.

SIR,—The reciprocal influences between the nervous and vascular systems and the sexual organs in women has always been a theme of interest and study. At the present day, especially, this study has assumed a position of vital clinical and practical importance. I hazard a suggestion that more complete and systematic means should be pursued to illustrate, if not to demonstrate, the influences of the ovaries, healthy or diseased, upon the nervous system. Modern abdominal surgery is pursuing a new and adventurous course of experiment directly bearing upon this question, and it is feared that some of the most luciferous factors are in danger of being neglected. To show how much has been lost, I would point to the following fact. Dr. Iscard, in a recent work, says: "Professor Coste was enabled to collect in the Musée du College de France a fine collection of uteruses and ovaries, taken from women of all ages who had committed suicide during the menstrual epoch." Hoping to gather from this source valuable facts in illustration of an inquiry now occupying my attention, I wrote to Dr. Auvard, asking him to examine this collection. He kindly responded to the call, and reports that the specimens are all scattered and spoiled. Thus the brilliant thought of Coste perishes as far as his collection is concerned. But the example remains, and should bear ample fruit. I believe some operators do preserve their findings; but there is no doubt that this m ne of physiological and pathological riches is imperfectly worked.

My suggestion that all ovaries removed, excepting perhaps the more pronounced cystic tumours, should be preserved, classified, and described, so that they may be studied in conjunction with the history of the subjects before operation and after recovery.—I am, etc.,

Harley Street, W. ROBERT BARNES.

THE WORKING OF THE NEW LUNACY ACT.

SIR,—Dr. Bower has pointed out in his letter to the JOURNAL of June 7th how the provisions of the Lunacy Act, 1890, with regard to medical certificates, may be evaded, and says I have fallen into error in stating that in the case of a private patient admitted into an asylum under an urgency order two fresh medical certificates are required within seven days, and he adds, "the simplest course to pursue in such cases is for one of the medical men, in addition to his ordinary certificate, to fill up another, which may be an exact copy with the urgency paragraph added, to sustain the urgency order." That this can be done I am well aware, but the point I raised in my letter was the additional expense that would be incurred by the justice refusing to sign an order for the reception of a patient, and thus compelling the admission of the patient upon an urgency order, which requires only one medical certificate, and which continues in force for only seven days, whilst for the further detention of the patient an order must be signed by a justice on petition, and the petition must be accompanied by two medical certificates other than the medical certificate accompanying the urgency order. One of the certificates accompanying the petition may, however, be signed by the practitioner who signed the urgency certificate, and it may be practically (not exactly, as Dr. Bower puts it) a copy of it, but it is nevertheless a separate and distinct certificate upon which a person may be detained as a lunatic, not for seven days only, but for an indefinite period, and for which the medical practitioner is, in my opinion, fully entitled to charge his usual fee.

Medical men, as a rule, are chary of signing medical certificates of unsoundness of mind; in fact, the majority point blank refuse to have anything to do with them, but if they are to give them in duplicate, and thus incur additional responsibility without fee or reward, such certificates will become even more difficult to obtain than they are at present.

A case has come under my notice where an attempt was made to make the urgency certificate answer the purpose of one of the medical certificates accompanying the petition, but this was properly refused by the Commissioners, and an additional certificate had to be procured.

I think it desirable that the fullest publicity should be given to this subject, as it is one of the many obscure points in this badly drawn and harassing Act.—I am, etc.,

Margaret Street, W. T. OUTTERSON WOOD, M.D.

THE MANAGEMENT OF IMPACTED LABOUR.

SIR,—In reference to Mr. Lawson Tait's letter in the JOURNAL of June 7th, on the "Management of Impacted Labour," there is nothing "specious" in my letter published the week before, and certainly no "misrepresentation." I asked a plain general question, and answered it on my own behalf, and gave my reasons. The women I referred to had had impacted labours and dead children, and would have had more if they had carried their children to term: but they did not, and they all did well and many of the children. The dwarf I delivered by craniotomy did well also. But my contention is such women ought not to be allowed to take their children to term. Individual interest or influence may conclude otherwise, but I submit it is not for the profession to so advise. These operations are very dazzling, bring a name to the operators, but they are the gravest of mutilations, and should be guided by some unwritten law or authoritative professional dictum.

I have had cases of placenta prævia, but I have had the good fortune not to lose any, neither do I think will Mr. Lawson Tait's mortality compare with general experience, nor his proposed remedy obtain professional consent.—I am, etc.,

Lindfield, Sussex. WM. ELLIOTT PORTER.

AFTER-DINNER ORATORY.

SIR,—About a year ago you published some trenchant remarks upon after-dinner oratory, and I could wish that the leaders of the profession who assembled to do honour to Surgeon Parke had taken your advice to heart. I was a humble unit of some 150 gentlemen who sat down at 8 P.M. to a fairly good dinner, the primary object of which was to do honour to our guest, whom we were all anxious to hear. Nevertheless, the President of the College of Physicians took ten minutes to propose the Queen's health, and the President of the College of Surgeons took even longer in explaining his relation—after, but equal—to his colleague, and in proposing the Army, Navy, and Reserve Forces. Sir Joseph Fayrer next proceeded to beat the record in replying to that toast. Then, at last, at 10.50 P.M., we got to the "toast of evening," and I have no complaint to make either of the matter or the manner of its proposal, but *figurez-vous* 150 elderly, and for the most part bald-headed, practitioners chorusing "For he's a jolly good fellow," under the leadership of an irrepressible pianist. Then silence for Dr. Parke? Not a bit of it! The secretary tips the chairman a hint, and he announces a song by a popular F.R.C.P., capital in itself, but painfully out of place; and at last we hear Dr. Parke make his modest speech, and his companions

say a few words. Then, at 11.45, I find myself in Piccadilly, having left the chairman on his legs once more.—I am, etc.,

DIOGENES.

THE COMING ELECTIONS AT THE ROYAL COLLEGE OF SURGEONS.

SIR,—I have found the pressure of practice so great this year, that it would have been extremely difficult to have discharged the duties of office as I should conscientiously have done had I been elected. Therefore I have decided not to offer myself as a candidate now. If, however, on a future occasion I can come forward, I trust that those Fellows who did vote for me, and others who would have done so had they been able, will kindly show the same favour again.—I am, etc.,

Clifton. CHARLES STEELE.

MEDICO-LEGAL AND MEDICO-ETHICAL.

DISGUSTED.—Our correspondent, who encloses advertisements issued by medical men, would be well advised to send such advertisements to the General Medical Council and the Royal College of Surgeons, both of which bodies, or one of them, would probably take the necessary steps to put a stop to the objectionable practice of which our correspondent justly complains.

DUTY OF SUBSTITUTES: A QUESTION OF FEES.

NOVICE writes: Mr. W. called at my house at 1 A.M. four weeks ago, and wished me to attend his wife, who was then in labour. At the same time he handed me Dr. M.'s card bearing Mrs. W.'s address, who had been engaged for the case. He explained that Dr. M. could not attend owing to a member of his household having recently died of an infectious disease. I went with Mr. W., and after Mrs. W.'s delivery would have written Dr. M., but as Mrs. W. wished me to continue visiting her, and as I understood that it was Dr. M.'s wish I should do so, I consented to take entire charge. I was paid the usual fee on my last visit, and a day or two afterwards I wrote Dr. M., enclosing for his acceptance half the fee. Kindly say if Dr. M. was entitled to half the fee, and if I should have written him earlier than I did, for example, immediately after delivery.

*** Although we fail to recognise anything ethically wrong in the course pursued by "Novice" in the above case, we deem it well to note that it would have been in stricter accordance with the following rule—by which all such cases should be governed—if, on completing the delivery, he had at once communicated with Dr. M., and notified Mrs. W.'s request that he ("Novice") would continue his attendance, and have been guided by Dr. M.'s expressed wish. With regard to the moiety of the fee, it would perhaps have been preferable to have received it from the pre-engaged accoucheur rather than personally to have retained it.

"When a practitioner is called in, or otherwise requested to attend at an accouchement for another, and completes the delivery, or is detained for a considerable time, he is entitled by custom (except in the case of illness, etc., provided for by Rule 3) to one-half of the fee; but on the completion of the delivery, or on the arrival of the pre-engaged accoucheur, he should resign the further management of the case. In a case, however, which gives rise to unusual fatigue, anxiety, and responsibility, it is right that the accoucheur in attendance should receive the entire fee. Note.—In either event, when the officiating accoucheur is a stranger, or a non-acquaintance of the family doctor, the full fee should be tendered to him."

PROSECUTION BY THE MEDICAL DEFENCE UNION FOR THE ASSUMPTION OF MEDICAL TITLES.

AT Bow Street, J. A. Sherman, of 64, Chancery Lane, appeared to a summons charging him that he "unlawfully, wilfully, and falsely took and used the name and title of Dr. J. A. Sherman."

Mr. W. H. Martin appeared on behalf of the Medical Defence Union; and Mr. Bodkin, barrister, appeared for the defendant.

Mr. Goodall, Assistant Examiner of Customs at Liverpool, deposed that he read the defendant's advertisement in *Modern Society*, and, believing he was suffering from hernia, he came to London on April 22nd, and went to the defendant's office. He addressed the defendant as "Dr.," and he did not reply. The defendant examined him and charged him a fee of £1 1s. He then said his fee for treatment would be 20 guineas, and witness, not having so much, paid £4 10s. on account, and signed an agreement to pay the remainder. Being somewhat pressed, however, he eventually applied for his money back. After some correspondence the defendant sent back the £4 10s., but did not return the guinea. Believing that the defendant was not duly qualified, he communicated with Mr. S. Smith, M.P., and was recommended by him to put the matter before the Medical Defence Union, which he did.

Mr. William Taylor, of Cheapside, said he went to 64, Chancery Lane before the summons was issued, and he found the words "Dr. Sherman" painted both on the wall at the door and on the glass door of the defendant's chambers.

Dr. Bateman, hon. secretary of the Medical Defence Union, proved that the defendant's name was not on the *Medical Register*.

Mr. Bodkin, for the defendant, contended that there was not sufficient evidence that he had "unlawfully, wilfully, and falsely" used the title of "Dr." within the meaning of those words as defined in certain reported cases.

Sir John Bridge said he had no doubt from the defendant's letters and the printed matter on the back of them that he had pretended to be a duly qualified doctor, and inflicted a fine of £10 and costs. He, however, granted a case on the point raised by Mr. Bodkin, and adjourned a second summons against the defendant until the case was determined by the higher court.

CLUB PRACTICE.

P. writes: A. and B. are two medical men. A. is in attendance on X., a member of a club to which B. is surgeon. X.'s fellow members wish B., the club doctor, to be called in in consultation. A. does not object. B.'s advice is followed, and X. wishes B. to continue his attendance. X. therefore writes to A. to tell him so, giving as his reason the fact that the attendance will probably be a long one. B. declines to interfere with A.'s patient, and A. writes that any communication on the point of changing doctors should have been made earlier, and not when the treatment was virtually completed; nevertheless, of course, if X. wishes it, he will not consider the case any longer under his care. B. still refuses attendance on the ground that X. did not send for the club surgeon in the first instance, and that, therefore, he (B.) could not undertake it now except by behaving unprofessionally to A. Under these circumstances, can X. insist on the attendance of B., the club surgeon, and will such attendance on the part of B. be considered unprofessional towards A?

*** Personally annoying as the change of medical attendant must necessarily be to A. under the exceptional circumstances related, there cannot, in our opinion, be a doubt that X. is fully entitled to the professional services of the club doctor, and that B., in rendering such, will not, in view of the incidents in question, be acting unprofessionally towards A.

THE VALUE OF AN EYE.

WHAT constitutes total and irrecoverable loss of one eye? We suppose that if this question were submitted to a jury of medical men they would unhesitatingly reply, such damage to an eye as shall cause entire loss of sight, irremediable by any means at present known to science. Such, however, is not the way in which a British jury viewed the matter when the question was submitted to them a short time ago, and three judges have just decreed upon appeal that the verdict must stand. The facts were simple, and not disputed; the plaintiff, who was insured in the defendant company, met with an injury to one of his eyes which resulted in the formation of a cataract; he claimed, as we may suppose, the full amount for loss of one eye, and the company decided to resist the claim, and paid 50 guineas into court. The questions submitted to the jury were: (1) whether, in the event of an operation being successful, the sight would be substantially recovered? and (2) would a reasonable and uninsured person submit to the operation? The jury answered both these questions in the negative, and awarded the plaintiff £500. Against this verdict the plaintiff appealed, with the result already mentioned. The judges went into elaborate disquisitions upon the possible interpretations to be attached to the words "total and irrecoverable loss of sight," practically deciding that this must be held to mean cases where complete restoration of sight could not be obtained, though one of them admitted that if the sight was partially recoverable, the plaintiff would not be entitled to recover.

NAVAL AND MILITARY MEDICAL SERVICES.

DOCTORS OR OFFICERS.

SIR,—I have read with interest your excellent footnote to the letter of M.D.Oxon., in the JOURNAL of May 24th, and as he refers to my name, I beg to make a few remarks in reply. "Let those who wish to improve the position and reputation of medical officers leave rank alone for the present, and devote themselves to their profession. They will gain most influence by successful treatment of disease: witness Surgeon Parke." I may tell you that no matter how successfully I could have treated disease, my work in connection with the Stanley expedition for the relief of Emin Pasha, would have been more a failure than a success if it had not been for my rank, as Mr. Stanley told me himself, "if I had simply called you a doctor, and not given you real rank, like the other officers had, why you would have had no control over the men, and they would have thought nothing about you." This is precisely the case; I had the real rank of Captain in common with my companions, which gave me equal respect and influence, and if I had no rank, or comparative or relative, or any other fancy rank which simply means no rank, my work as medical officer would not have been so successful, and might have been a failure, and Mr. Stanley, who has a vaster experience in military and other expeditions than any other man alive, recognised the fact at the commencement of the expedition; he therefore in his orders gave each of us real and defined rank, and there never was the least friction or rivalry, although we were all young and ambitious. One officer was as good as another, respectively, provided he did his duty. I had my own company of men to discipline, to feed and to lead, just as the other officers had theirs, and when pressure of professional work increased, the other officers had extra work thrown on them also; and certainly I have no reason to believe that Mr. Stanley, the Europeans, or our men (including Syrians, Zanzibaris, Nubians, and Somalis, about 700 in all) ever considered that my qualification in medicine, surgery, and midwifery, were in any way a disqualification for rank or

the manly and laudable work of commanding my own men. I was as much an officer as a doctor, and *vice versâ*; why make a distinction between the two? While serving with organised corps there must be rank or no rank; if one has real rank he is really somebody, whereas if he has no rank he is really nobody; even the darkest nations of the interior of darkest Africa recognise this fact as well as the British soldier can.—I am, etc.,

T. H. PARKE, Surgeon, Army Medical Staff.

ORGANISATION OF THE SCHOOLS.

No. 29 writes: We are now on the right tack, and must keep the ball rolling. I sincerely hope the English and Scotch colleges will follow the lead given by the Irish. I suggest a circular should be sent to all senates and schools, setting forth the unhappy state of the unfortunate Medical Department, dwelling especially on the fact that our first grievances having been recognised by an independent Commission, are now contemptuously disregarded as a sop to military caste prejudices. If the views of the schools and students are unanimously put before the Secretary for War, wiser counsels may yet prevail. The students especially are very badly informed of the condition of things in the army being as rule misled by the specious information supplied by the War Office.

MR. STANHOPE'S RESPONSIBILITIES.

THIRTY YEARS' SERVICE writes: The Government is responsible for army efficiency to the nation, and not to the "military" authorities. The health of our world-spread army, and the care of sick and wounded, demand that the medical service shall be thoroughly efficient and contented. Substantive army rank and titles are just as necessary for an efficient medical service as for an efficient commissariat; although the Commander-in-Chief confesses the latter obtained them after much reluctance on the part of "my military advisers." The medical officers were content to share relative rank with the other army departments, even although their duties made them part of the fighting line, which the others were not; but they will not submit to any position of inferiority. The unfortunate medical officer is at present neither civil nor military; precedence grading gives no military position. The medical officer has more than his own share of the hardships and dangers of military life in peace, besides being exposed to equal war risks. Mr. Stanhope should take care that the medical profession are not forced into opposition.

DOCTORS AND OFFICERS.

OVER SIXTY writes: As one who began in civil practice, then for many years in the army, and now in retirement again a civilian, I thank you cordially for your outspoken and generous remarks, both from the civilian and military side of the question, on the letter of "M.D.Oxon."

I fancy that gentleman's knowledge of civil life must be exceptional, and of military medical life and matters slight, or he would not write as he does. I have had wide experience of the world, and fear that, although the profession of medicine has risen much in social and general estimation in recent times, it is still far from what it ought to be in a country claiming to be humane and enlightened. I claim to be both doctor and soldier, and unhesitatingly affirm I require military rank and title in carrying out my duty, and say that an improvement in my status would react on that of my civil brethren. His reference to Surgeon Parke is beside the question; has he never heard of Thomson, at the Alma, and many others in India and Africa on the field of battle? Are such men to be denied the status of soldiers?

*** We have received numerous answers—some indignant—to the letter of "M.D.Oxon." His uncalled-for reference to Surgeon Parke is, indeed, very unfortunate for his line of argument. Those who have the pleasure of knowing that distinguished officer testify that in him are happily united and blended the highest professional accomplishments, with modest manliness and thoroughly soldierly bearing; he is a model soldier-doctor or doctor-soldier, from whatever point of view regarded. We can only say that to refuse to such a man due military rank and title while serving his Queen and country in the army is not merely an injustice but an outrage. It shocks alike the moral sense and the commonest instincts of fair-play. But nothing so obscures and warps these best impulses of our nature as the cultivation of an exclusive caste spirit; and it is this, we fear, which is poisoning the social life of the army, and distorting the views of many otherwise generous and fair-minded gentlemen.

THE NAVY.

URGEONS SAMUEL WILLIAM VASEY, JOHN SPEARE LAMBERT, HORACE XIMENES ROWNE, ALFRED HENRY MILLER, and CHARLES WILLIAM BUCHANAN HAMILON have been promoted to be Staff-Surgeons from June 4th.

Surgeon ALFRED PATTERSON has been appointed to the *Melpomene*, June 17th.

MEDICAL STAFF.

HE Christian names of Surgeon WHAITE, M.B., are THOMAS DU BÉDAT, and ot as stated in the *Gazette* of August 27th, 1886.

Quartermaster WILLIAM JOSEPH has been placed on retired pay. Entering s Lieutenant of Orderlies June 13th, 1874, he became Captain of Orderlies ebruary 16th, 1878 (from which date he was made Honorary Captain), and uartermaster July 1st, 1881. He was in the Abyssinian war in 1867-68 (medal), nd in the Egyptian war of 1882 (medal and Khedive's bronze star).

INDIAN MEDICAL SERVICE.

RIGADE-SURGEON D. J. MCCARTHY, M.D., Madras Establishment, is transrred to the temporary half-pay list.

The services of Surgeon R. H. CASTOR, Madras Establishment, are placed at te disposal of the Government of India in the Home Department.

Surgeon F. C. PEREIRA, Madras Establishment, on relief at Berhampore, is ppointed to the officiating medical charge of the 27th Native Infantry.

Surgeon C. L. WILLIAMS, Madras Establishment, arrived from England, is irected to do duty in the Madras district.

Surgeon T. H. SWEENY, Bengal Establishment, Civil Surgeon of Goruchpore, is posted to the medical charge of the Benares district, during the absence on deputation of Brigade-Surgeon W. R. Hooper.

Surgeon-Major W. H. CADGE, Bengal Establishment, Superintendent of the Central Prison at Agra, is appointed to the civil medical charge of the Alighur district during the absence of Surgeon-Major M. D. Moriarty on furlough.

Surgeon C. MACTAGGART, Bengal Establishment, in civil medical charge of the Bara Banki district, is appointed to officiate as Superintendent of the Benares Central Prison, *vice* Mr. F. W. Higginson, transferred.

Surgeon W. G. THOROLD, Bengal Establishment, Officiating Deputy Sanitary Commissioner, 3rd Circle, on being relieved by Surgeon-Major S. J. Thomson, is posted to the civil medical charge of the Bara Banki district, during the absence on deputation of Surgeon C. Mactaggart.

Brigade-Surgeon W. R. HOOPER, Bengal Establishment, Civil Surgeon of Benares, is transferred to Lucknow during the absence on leave of Brigade-Surgeon J. Cleghorn.

The undermentioned Surgeons-Major, all of the Bengal Establishment, have leave of absence as specified: W. A. C. ROE, for one year on medical certificate; A. CAMERON, M.D., for one year and 122 days on private affairs; S. C. MACKENZIE, M.D., for 276 days on private affairs.

Brigade-Surgeon J. CLEGHORN, M.D., Bengal Establishment, has leave of absence for six months in India on private affairs.

THE VOLUNTEERS.

MR. ROBERT BAILLIE MACBEAN, M.B., is appointed Acting Surgeon to the 3rd Volunteer Battalion King's Own Scottish Borderers (late the 1st Dumfries), June 7th.

Surgeon H. R. KER, from the 1st Volunteer Battalion Worcester Regiment, is appointed Surgeon to the 22nd Middlesex (Central London Rangers), June 7th.

Mr. WILLIAM FRANK DICKINSON is appointed Quartermaster to the Manchester Division of the Volunteer Medical Staff, June 7th.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, June 5th.

Custody of Children Bill.—The LORD CHANCELLOR, in moving the second reading of this Bill, hoped that, consistent with preserving parental rights, additional security might be provided by the Bill in the interests of children.—After some remarks from Lord THRING, Lord EMLY, and the Bishop of CARLISLE, the Bill was read a second time and referred to the General Committee.

Protection of Children Bill.—The Earl of MEATH, in moving the second reading of this Bill, was of opinion that the law ought to consider the benefit of the child rather than the benefit of the father, and the Bill, amongst other things, provided that a child should not be given up unless the Court was satisfied that the proceeding was for the benefit of the child.—Lord HERSCHELL thought there had hitherto been too great a regard paid to the sanctity of parental rights, even when the parents had violated the duty they owed to their children. He regretted if the Bill should be the means of proselytising but he thought there would be no difficulty in guarding against it.—Earl PERCY generally approved of the objects of the Bill.—The second reading was agreed to, and it was referred to the General Committee for consideration with the Custody of Children Bill.

HOUSE OF COMMONS.—Monday, June 9th.

Medical Officers of Health.—Mr. FRASER MACKINTOSH asked the Chancellor of the Exchequer with reference to a sum of £74,500, which appeared in the votes for civil services for the current year under the head of "medical officers of health and inspector of nuisances," whether any similar grant was made to Scotland, where sanitation appointments were compulsory, while they were optional in England; and whether in the inquiry promised that matter would be taken up and the anomaly removed.—The CHANCELLOR OF THE EXCHEQUER said that the hon. member was under a misapprehension. The item of £74,500 to which he referred did not appear in the Estimates for the current year. It appeared in the Estimates for 1888-89 for the last time, and an analogous item was continued for Scotland till the year after. Both grants had now disappeared under the Local Government Acts, and in both cases an equivalent had been given in the form of licences.

The Muzzling Order.—Mr. NORRIS asked the President of the Board of Agriculture in what districts the muzzling order for dogs had been rescinded; whether he could state the number of cases of rabies during the past year; whether it was proposed to continue the muzzling order in the metropolis; and whether statistics proved that if it were extended for six months to the whole kingdom the disease would entirely disappear.—Sir H. ROSCOE asked whether it was not the fact that the registration of dogs had signally failed in the Continental cities, where it was adopted; and whether the right hon. gentleman would reconsider his decision as to replacing muzzling by registration.—Mr. CHAPLIN said he was aware of both of the facts referred to by the hon. member, but must remind him that the order which had recently been made by the Board of Agriculture—substituting a collar for the muzzle—only extended to those districts in which they had reason to believe that the disease had ceased to exist. In reply to the question on the paper, the muzzle order had been modified in those parts of Essex, Herts, Kent, and Surrey, which were outside the Metropolitan Police district. The number of cases of rabies during last year was 340. The muzzling order had never at any time been extended to the whole kingdom, and there were no statistics to show what the effect of the order would be if it were made universal. From the progress made already, he anticipated that rabies might be effectually dealt with without any necessity for so stringent a measure.

Tuesday, June 3rd.

The Leprosy Case in Liverpool.—Dr. TANNER asked the President of the Board of Trade whether his attention had been directed to the case of leprosy in a Swedish emigrant, as reported in the *Liverpool Courier* of May 22nd; whether the woman in question was permitted to land in and pass through England, to pass the examination of the medical emigration officers of health at Liverpool at their survey of the Cunard steamship *Cephalonia* on April 17th last, and the second inspection at Queenstown by an officer of the same department; whether

it was true that the woman in question was not allowed to land by the port authorities in Boston, United States of America, after inspection by their medical inspector and several eminent American scientists, who declared the case one of genuine leprosy, and that the Cunard Company were in consequence compelled to bring her back to England; if it was true that on her arrival in Liverpool she was conveyed to the Brownlow Hill Workhouse, and there examined by Dr. Hope, assistant medical officer of health for the city, Dr. Hill, the Board of Trade officer, and Dr. Robertson, who entertained little doubt that the case was one of leprosy, and made special arrangements for her complete isolation; whether such isolation was effected on board the Cunard steamship on either passage; what had been done with the patient, and whether any steps would be taken to prevent the loathsome and infectious disease in question, as well as other contagious and infectious diseases difficult of detection, being propagated in consequence of the incomplete inspection carried out by overtaxed medical Board of Trade inspectors,and forced upon medical officers of the mercantile marine by the cupidity of the shipping companies.—Sir M. HICKS BEACH, in reply, said that he was not in possession of all the particulars of the case, but promised to make inquiries and to answer the question at a later date.

Wednesday, June 11th.

Infectious Disease (Prevention) Bill.—On the consideration of this Bill as amended, Mr. M'LAREN moved that the Bill be recommitted with respect to Clause 5, which empowers the medical officer of health to inspect dairies beyond the district in certain cases. The motion was agreed to, and the House went into Committee on Clause 5.—Mr. M'LAREN moved as an amendment that the medical officer of health must be "in possession of evidence" that some person in the district was suffering from infectious disease attributable to milk supplied within the district from any dairy without the district, in place of the words "have reasonable cause to believe" as contained in the Bill as it stood.—Mr. KNOWLES accepted the amendment, which was agreed to.—Mr. M'LAREN moved an amendment to the effect that the medical officer should be accompanied in his inspection by the veterinary officer of the district.—Mr. KNOWLES appealed to his hon. friend not to press the amendment, because it would tend to make the clause cumbersome and inconvenient in its operation.—Sir W. FOSTER urged the same course upon the hon. member for Crewe, pointing out that it would unnecessarily impede the action of the medical officer if he were compelled on every occasion to be accompanied by a veterinary surgeon.—Dr. FARQUHARSON thought the presence of the veterinary surgeon entirely superfluous.—Mr. ESSLEMONT asked the hon. member for Crewe not to press his amendment.—Mr. A. PEASE hoped his hon. friend would persevere with his amendment, because the inspection of a dairy without including the dairy cattle in the inspections seemed absurd.—Colonel NOLAN contended that the amendment would make the Bill unworkable, and Dr. CAMERON said that it was unnecessary.—The Committee divided, when there were: for the amendment, 42; against it, 82; majority against, 40.—Mr. KNOWLES moved to add to the clause: "An order made by a local authority in pursuance of this section shall be forthwith withdrawn on the local authority being satisfied that the milk supply has been changed, or that the cause of the infection has been removed."—Mr. M'LAREN moved to add after "authority" "or the medical officer on its behalf."—The amendment, as amended, was agreed to; and the clause, as amended, was reported to the House. The House resumed.—Mr. STEPHENS moved to insert the following clause: "Whenever it shall be certified to the local authority by the medical officer of health that it is desirable, with a view to prevent the spread of infectious disease, that they should be furnished with a list of the patients of any medical practitioner, the local authority may require such medical practitioner to furnish them a full and complete list of the names and addresses of the persons such medical practitioner is attending or has attended during the past two months, and such medical practitioner shall furnish such list accordingly, and the local authority shall pay to him for every such list the sum of 10s." The clause was negatived without a division.—Mr. WHITMORE moved the omission of Clause 4, which provided that dairymen and cowkeepers should furnish the local authority with a list of their customers, if the medical officer of health should have certified that he suspected that the outbreak of infectious disease was due to the milk supplied.—Dr. FARQUHARSON said that if this clause and Clause 6 were omitted he did not much care whether the Bill was passed or not.—Mr. RITCHIE thought his hon. friend had done well to move to omit this clause.—The motion was agreed to and the clause struck out of the Bill.—Mr. KELLY moved the omission of Clause 6, which provided that, whenever it should be certified to the local authority by the medical officer of health that it was desirable, with a view to prevent the spread of infectious disease, that they should be furnished with a list of the customers of any person earning a livelihood or deriving gain by the washing or mangling of clothes, the local authority might require such person to furnish them with a list of the names and addresses of the owners of the clothes.—Sir W. FOSTER hoped the clause would be retained.—Dr. CAMERON contended that it was entirely for the benefit of the laundries themselves that information should be given.—After some further conversation, the House divided, when there voted: for the clause, 35; against, 166; majority, 131. The clause was therefore lost.—On Clause 7 (further powers in relation to disinfection of premises), Mr. M'LAREN moved an amendment providing that in the case where disinfection might be more effectually carried out by the local authority this body might, if the owner or occupier neglected to attend to the notice, disinfect and cleanse the house.—The amendment was agreed to.—On Clause 9 (prohibiting the retention of dead bodies in certain cases), Mr. KELLY moved an amendment providing that no person without the sanction in writing of the medical officer of health shall retain unburied elsewhere than in a public mortuary "or in a room not used at the time as a dwelling place, a sleeping place, or a workroom" for more than forty-eight hours the body of any person who has died of any infectious disease.—Mr. RITCHIE thought that the clause was too stringent, and that it might operate harshly, especially in the case of the poorer classes.—The amendment was withdrawn.—The other clauses were, with some verbal amendments, agreed to.—The Bill was read a third time.

Pharmacy Act (Ireland), 1875, Amendment Bill.—The House went into Committee on this Bill, and progress was at once reported.

UNIVERSITIES AND COLLEGES.

OXFORD UNIVERSITY.

DURING the present term the delegates of the museum have published the reports of the Science Professors, which chronicle the work accomplished in the medical school for the past year.

The Regius Professor of medicine gives a short report, the most important items of which is the announcement that the Van der Kolk pathological collection is to be supplemented.

Lectures in elementary medicine and surgery have been given by the Lichfield lecturers, Dr. Collier and Mr. Morgan, and practical instruction in ward work by the staff of the Radcliffe Infirmary.

The department of Comparative Anatomy has increased its number of students as compared with the year 1888. The largest number of students working at one time in the laboratory being 30, a number in excess of the appliances at the disposal of the department. A considerable amount of original work has been carried on by Mr. Hatchett Jackson (the Deputy Professor), and the demonstrators, Mr. Mitchell and Mr. Latter.

In the Physiological Laboratory the numbers also have increased, 45 students having attended during the year. Seven of these are ladies working under the auspices of the Association for the Higher Education of Women.

The department of Human Anatomy maintains its numbers at about the same level as last year, the average attendance being 24. The want of permanent buildings for the study of human anatomy is emphasised by the unsatisfactory state of the temporary buildings, which are not weather-proof.

The Clinical department still shows the largest attendance of students, the number of those working regularly in the laboratories during 1889 being 93; this does not include students in attendance at lectures who do not work in the laboratory.

CAMBRIDGE UNIVERSITY.

HONORARY DEGREES.—The following are the speeches delivered by the Public Orator in presenting to the Vice-Chancellor the Presidents of the Royal Colleges of Physicians and Surgeons, on whom honorary degrees were conferred by the University of Cambridge on June 10th:

Dignissime Domine, Domine Procancellarie, et tota Academia:

Salutamus deinceps salutis ministrum, Æsculapii e filiis unum, quem idcirco præsertim Machaona nominaverim quod sæculi nostri oratorum cum Nestore ipso totiens consociatus est; nisi forte, Romano potius exemplo delectatus, mavult Asclepiadis illius disertissimi nomen mutuari, quo medico et amico utebatur Lucius Licinius Crassus, sæculi sui oratorum eloquentissimus. In re publica partium liberalium studiosus, in re privata liberalitate singulari insignis, non modo medicinæ sed etiam philosophiæ et religionis penetralia ingressus est. Etiam antiquos meministis quondam non de corporis tantum salute sed etiam de rebus fere omnibus quæ vitam anxiam et sollicitam reddant, ab ipso Æsculapio solitos esse oracula exposcere. Viri talis igitur, velut iurisconsulti Romani, domus, est velut civitatis oraculum, unde cives eius, ut Apollo Pythius apud Ennium dicit, consilium expetunt, non salutis tantum sed etiam "summarum rerum incerti," quos incepti certos "compotesque consili dimittit." Ergo virum, quem aut litterarum aut scientiæ aut medicinæ doctorem nominare potuissemus, iuris doctorem non immerito creamus.

Duco ad vos medicinæ professorem emeritum, Regii Medicorum Collegii Londinensis præsidem, baronettum insignem, suavem, eruditum, eloquentem, ANDREAM CLARK.

Etiam alter Æsculapii filiorum, Podalirius (nisi fallor), hodie nobis sese præsentem obtulit, quem a fratre suo idcirco disiungere neque possumus neque volumus, primum quod professoris in munere quondam erat collega eius coniunctissimus, deinde quod forte quadam domum vicinam atque adeo proximam incolit, denique quod dignitate non minore Collegio alteri præsidet, ubi Britanniæ chirurgi per tot annos quasi penates suos posuerunt. Medicinæ studiosis nota sunt scripta eius per seriem longam edita, in quibus pars ea medicinæ quæ manu curat illustratur, et litterarum monumentis mandatur. Neque silentio præterire possumus quæcumque de pathologia præsertim, quam quondam profitebatur, accuratissime scripsit; scilicet mortem ipsam, quæ aliis tacet, huic velut rerum naturæ vati et interpreti constat esse eloquentem. Neque prorsus intacta relinquimus quicquid de morborum conta-

gione disputavit. Medicorum nemo fortasse Horatii verba in re medica saltem eruditius illustravit:

"delicta maiorum immeritus lues."

Duco ad vos Regii Chirurgorum Collegii præsidem, chirurgum illustrem, JONATHAN HUTCHINSON.

Dr. Butler, Master of Trinity College, was on June 3rd elected to the office of Vice-Chancellor for another year.

Mr. Sedley Taylor, the delegate of Cambridge to the University of Montpellier, in a letter to the Vice-Chancellor on the ceremony, writes: "We had the great satisfaction of seeing Professor von Helmholtz, delegate of the University of Berlin, publicly received with much cordiality, and of learning that, on account of his optical researches, which have given such a beneficent impulse to modern ophthalmology, he was subsequently made the object of a special ovation by the Medical Faculty for which the University of Montpellier has long been famous."

In the Mathematical Tripos List published on June 7th in the Senate House, Miss Philippa Garrett Fawcett, daughter of the late Professor Fawcett, and niece of Mrs. Garrett Anderson, M.D., was declared to be "above the Senior Wrangler," Mr. Bennett, of St. John's.

On the recommendation of the Special Board for Medicine, Dr. Donald MacAlister and Professor Roy have been appointed to represent the University at the tenth International Medical Congress to be held in Berlin in August next.

At the matriculation on May 29th, the last of the year, six undergraduates were matriculated. This brings the total for the year up to 1027, the largest entry on record.

At the congregation on Thursday, June 5th, the following degrees were conferred:

M.D.—W. S. Tebb, M.A., Peterhouse; E. J. Tatham, M.B., Clare; W. H. Hamer, M.A., M.B., Christ's; G. B. Hoffmeister, M.A., M.B., Caius.

M.B. and B.C.—E. A. Shaw, B.A., King's; H. J. Cooper, B.A., Caius; H. S. Tuppen, B.A., Caius; F. C. A. Treadgold, B.A., Downing; H. L. Dixon, B.A., Cavendish.

EXAMINATION IN STATE MEDICINE.—The Registrary requests that the names of all candidates for examination in State medicine, together with the necessary certificates, may be sent to him on or before September 27th. The examination will begin on October 7th.

JOHN LUCAS WALKER SCHOLARSHIP IN PATHOLOGY.—Notice is given that there will be an election to the John Lucas Walker Studentship in Pathology as soon as convenient after August 26th, 1890, when Dr. William Hunter, of St. John's College, vacates the studentship on his election to a Grocers' Company's Research Studentship in Sanitary Science. Candidates are requested to send in their applications, and such testimonials as they may think desirable, on or before that date to Professor Roy, 2, Wollaston Road, Cambridge, from whom also full information regarding the conditions of tenure of the studentship may be obtained. The studentship is of the annual value of £200, or of such larger sum, not exceeding £300, as the managers shall from time to time determine, and is tenable for three years. The student is required to devote himself during the tenure of the studentship to original pathological research.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations, and having conformed to the by-laws and regulations, were at an ordinary meeting of the Council on Thursday, June 12th, admitted Fellows of the College:

Name.	Qualification.	Residence.	Date of Membership.
Grant, J. D.	M.B.Edin.	17, Finsbury Square, E.C.	Nov. 13, 1876.
Freeman, W. T.	L.R.C.P.Lond.	168, Castle Hill, Reading	Jan. 24, 1879.
James, H. E. R.	L.R.C.P.Lond.	Army Medical Staff, Dublin	May 21, 1879.
Lukis, C. P.	M.B.Lond.	92, Kensington Park Road, W.	Nov. 20, 1879.
Andrews, A. G.	L.R.C.P.Lond.	1, Clifford's Inn, E.C.	Nov. 19, 1881.
Drew, H. V.	L.R.C.P.Lond.	77, Gloucester Place, W.	July 19, 1882.
Wilson, A.	L.R.C.P.Lond.	338, Oxford Street, Manchester	Jan. 23, 1883.
Ridley, G. W.	M.B.Durh.	The Dispensary, Newcastle-upon-Tyne	Jan. 21, 1884.
Lewis, E. J.	M.B.Cantab.	87, Hamilton Ter., N.W.	Jan. 28, 1884.
Napier, F. H.	M.B.Lond.	31, Lower Seymour St., W.	Jan. 26, 1885.
Lake, R.	L.R.C.P.Lond.	Thornleigh, Barnes, S.W.	Jan. 29, 1885.
Francis, A. G.	M.B.Lond.	13, Charterhouse Sq., E.C.	Oct. 23, 1885.
Smith, J. W.	M.B.Edin.	21, Ackers Street, Manchester	July 19, 1886.
Crouch, C. P.	M.B.Lond.	35, Fellows Road, Hampstead	Jan. 21, 1887.
Lawrence, T. W. P.	M.B.Lond.	138, Maida Vale, W.	May 5, 1887.
Thompson, W. H.	M.D.Q.U.I.	20, Lower Baggot Street, Dublin	May 5, 1887.
Richardson, W. G.	M.B.Durh.	Cotfield House, Gateshead-on-Tyne	Aug. 4, 1887.
Colly, R. V.	M.B.Lond.	Blake Dene, Parkstone, Dorset	Aug. 4, 1887.
Waterhouse, H. F.	L.R.C.P.Lond.	University of Edinburgh	Aug. 4, 1887.
Trenchmann, M.L.	M.B.Edin.	Norton Lodge, Stockton-on-Tees	Nov. 10, 1887.
Parkin, A.	L.R.C.P.Lond.	Guy's Hospital	Aug. 2, 1888.
Turney, H. G.	L.R.C.P.Lond.	198, Camberwell Gro., S.E.	Aug. 2, 1888.
Barnett, L. E.	L.R.C.P.Lond.	Middlesex Hospital	May 9, 1889.
Kent, R. T.	L.R.C.P.Lond.	Weston Cottage, Lower Heath, Hampstead	Aug. 1, 1889.
Brown, A. T.	L.R.C.P.Lond.	Guy's Hospital	Not a Member
Cuff, H. E.	M.B.Lond.	76, Granville Park, Lewisham	Not a Member
Smith, G. B.	M.B.Lond.	Farnah, Bromley Rd., S.E.	Not a Member

The following gentlemen having passed the necessary examinations, and having conformed to the by-laws and regulations, were at an ordinary meeting of the Council on Thursday, June 12th, admitted Members of the College:

McArthur, D. C., L.R.C.P.Lond., 33, Huntley Street, W.C.
Sadler, E. A., M.B.Lond., The Uplands, Tamworth.

The following gentlemen having passed the necessary examinations were at the same meeting admitted Licentiates in Dental Surgery:

W. R. Barrett, 25, York Place, Portman Square; H. R. Bowtell, 146, Richmond Road, Hackney; E. H. L. Briault, 30, Richmond Crescent, N.; A. J. Cardell, 23, Victoria Road, Clapham Common; H. C. Carter, 181, Edgware Road, W.; A. B. Cox, M.R.C.S.Eng., Middlesex Hospital; E. C. Davids, 30, Monmouth Road, Bayswater; A. H. Derwent, 10, Park Terrace, Moss Side, Manchester; H. L. Hayman, Clevedon, Somersetshire; G. Hern, 12, Hamilton Road, Ealing; A. W. W. Hoffmann, 16, Beauclere Road, W.; J. B. Horden, Spencer Villa, Leamington Spa; W. D. Moon, 85, Newman Street, W.; J. P. Oliver, 121, Queen Street, Cardiff; E. J. Preedy, 360, Camden Road, N.; S. W. Read, 30, Finsbury Square, E.C.; S. Read, 12, Old Stein, Brighton.

INDIA AND THE COLONIES.

AUSTRALASIA.

LEPROSY IN THE AUSTRALIAN COLONIES.—An interesting report on leprosy in the Australasian colonies has recently been issued by the Board of Health of New South Wales. From this it appears that there are one or more lepers in all the colonies except Tasmania and New Zealand. The largest number in any one colony is twelve in New South Wales; next comes Queensland with six, Fiji with five, Victoria with four, South Australia with two, and West Australia with one. Two thirds of the total number of lepers are Chinese, and only two (both of them natives of New South Wales) are of European extraction. In Fiji, though there are only five cases under Government care, the chief medical officer reports that "there are cases (almost all of the macular or anæsthetic type) among the aboriginal race of Fiji, who are to a limited extent segregated by the order of the native district chiefs." And in New Zealand, though no cases are under Government treatment, it is officially stated that "the disease is not absolutely unknown." In the Australian colonies lepers are segregated, but in New South Wales and Queensland there is said to be great need for more stringent regulations. In Fiji a special investigation is being carried out with a view to future legislation. It is stated that the two persons of European extraction now suffering from leprosy in New South Wales had both been in communication with the Chinese. A case of death from leprosy in a man of European parentage occurred in Sydney. This individual had never been separated from his family, or specially isolated with them, and there is reason to believe, the report adds, that there are several other cases in the colony not in any way isolated, and under no official cognizance or care.

INFLUENZA IN VICTORIA.—An epidemic of influenza prevailed in Victoria during March, and at the meeting of the Medical Society of Victoria Dr. D. Astley Gresswell, the newly appointed superintending health officer for Victoria, requested the Society, acting in conjunction with the Victorian Branch of the British Medical Association, to assist the Board of Public Health in obtaining information. A subcommittee was appointed to act with a committee of the Victorian Branch in drafting a circular to be sent to all medical men practising in Victoria.

THE first Australian lady who has been granted registration in the Australian colonies was Miss Constance Stone, M.D., Philadelphia and Toronto, and L.S.A.London. Miss Stone is a native of St. Kilda, near Melbourne, and has been registered by the Medical Board of Victoria.

THE total sum received at the Mansion House in aid of the Metropolitan Hospital Sunday Fund up to Wednesday, June 11th, was about £15,000.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE HOUSING OF THE WORKING CLASSES.

THE long promised Bills for amending and consolidating the law as to the housing of the working classes were issued on Monday last, and thus the first practical step has been taken by the Government towards placing this important but difficult question on a satisfactory footing. The hopelessness of expecting a satisfactory administration of thirteen Acts dealing with the same subject, and inextricably interwoven with each other, as well as with the general sanitary law, has long been recognised as one of the chief causes of the neglect of local authorities to deal adequately with the unwholesome dwellings of the poor and with unhealthy areas. Even more hopeless has it been to expect the general public to master the intricacies of such a mass of Acts, and to take an intelligent interest in such a complicated matter. Shielded behind this labyrinth of legislative provisions, unwilling vestries and local authorities have been able to adopt a policy of masterly inactivity, and to plead, without much fear of contradiction, that the powers they possess are insufficient; whilst the more excusable ignorance of the general public on the subject has neutralised the influence of that public opinion which, in the words of the Royal Commission on the Housing of the Working Classes, is the strongest motive power in such cases. Knowing this, it is somewhat surprising that one Government after another has failed to take in hand the consolidation of the law on this subject. Mr. Ritchie deserves thanks for having at last undertaken the task.

He proposes to effect his object by two Bills, one amending the existing law in several repects, the other consolidating that law, which is scattered through Torrens's Artisans' Dwellings Acts, Cross's Artisans' and Labourers' Dwellings Improvement Acts, Lord Shaftesbury's Labouring Classes Lodging Houses Acts, and the Housing of the Working Classes Act of 1885. There is presumably some good reason for thus subdividing the subject instead of embodying the whole law in one comprehensive enactment, but we must confess that the reason is not obvious to us. The separation of the two Bills cannot fail to be disadvantageous, as the simplicity in the law which is essential to good administration will not be secured. As illustrating the confusion which two separate Bills are likely to occasion it may be noted that whilst the Amendment Bill proposes to repeal certain sections only of the Labouring Classes Lodging Houses Act, 1851, the Artisans' and Labourers' Dwellings Act, 1868, and certain other Acts, the Consolidation Bill proposes the repeal of the whole of those Acts. The Consolidation Bill is little more than a repeal of the 13 Acts which at present govern this subject and a gathering together in an intelligible sequence such of the provisions in those Acts as have not already been repealed or superseded.

The Amendment Bill, however, aims at strengthening the hands of local authorities in several important respects, and contains some useful new provisions with this object. It is laid down explicitly as the duty, both of medical officers of health and of local authorities, to ascertain the existence in the district of such dwellings as are in a state so injurious to health as to be unfit for human habitation; and it is also laid down as the duty of the authority to forthwith take proceedings under the Public Health Acts for securing the closing of such premises, or, in certain circumstances, their demolition. The powers of local authorities to deal with and remove "obstructive buildings" are extended, and provision is made for a representation on the subject by four inhabitant householders being sufficient to set the authority in motion. The method of carrying out schemes of reconstruction on areas that have been cleared is minutely set out, but appears to be too cumbrous and too permissive. Londoners will be glad, however, to find that it is proposed that the County Council shall have power to supersede a vestry or district board that has failed to take the requisite action under the Acts. It is also proposed that a report from the medical officer of health of any county, submitted to the County Council and forwarded by that council to the local authority of any district in the county, shall have the like effect as a report from the medical officer of health of the district. Further, a person shall not, subject to a penalty of £50, vote as member of a local authority or county council upon any resolution or question, if it relates to any premises, building, or land in which he is beneficially interested. By this means a great source of the present inaction on the part of local authorities will be counteracted. Safeguards are also proposed in the Bill against excessive or inflated compensation being awarded to owners of overcrowded or insanitary premises.

By these clauses the hands of local authorities who are anxious to do their duty will be very materially strengthened; but the Bill is too permissive in its proposals, and "shall" should in more than one place be substituted for "may."

There is one point which deserves further consideration, and that is whether it is desirable to retain, as proposed in the Consolidation Bill, the Secretary of State as the "confirming authority" in the metropolis, whilst for the rest of the country the Local Government Board is the central authority. There seems no sufficient reason why the powers should not be transferred to the Local Government Board, who possess a staff of skilled officers, both medical and engineering. The present seems to be a favourable opportunity for effecting this change, and thus securing a desirable uniformity.

It is to be hoped that with the law simplified and strengthened local authorities will enforce more energetically than has been their wont their powers for improving the homes of the poor. The moral as well as the physical welfare of the people is involved.

INFECTIOUS DISEASES NOTIFICATION ACT.

M.D. asks whether the medical officer of health (who is a medical man practising in the same town as himself) is right in examining private patients of his without any notice given to him or his permission being asked?

*** We have repeatedly answered similar inquiries. Medical officers of health have no right as such to examine patients whose cases have been notified to them. We regret to find so many instances in which medical officers of health act with want of judgment.

TENURE OF OFFICE OF MEDICAL OFFICERS OF HEALTH.

M.O.H., who was appointed in 1889 for an indefinite period, would be glad to know if he can retain the appointment of medical officer of health after 1891 without possessing a diploma in Sanitary Science.

*** If the appointment of medical officer of health is "during the pleasure" of the authority who appointed him, it is practically on the same footing as that of the clerk to the authority, and if any new regulation in effect dispossess him, he should be as much entitled to compensation as would the legal adviser of the authority, who is always appointed "during the pleasure" of the authority, or indefinitely.

EXAMINATION FOR D.P.H.

M.R.C.S. would be glad to know what are the best books to read, or where he could get the required information, for the examination for the diploma in Public Health of the Royal Colleges of Physicians, London, and Surgeons, England.

*** The Reports of the Local Government Board; Parke's *Hygiene;* De Chaumont; Knight's *Model By laws;* Newsholme, *Vital Statistics;* Louis Parke's *Hygiene;* the First Report and Evidence of the Vaccination Commission; McVail, *Vaccination Vindicated;* and current literature (medical journals).

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 5,970 births and 3,350 deaths were registered during the week ending Saturday, June 7th. The annual rate of mortality in these towns, which had declined from 19.9 to 17.8 per 1,000 in the three preceding weeks, rose again to 18.0 during the week under notice. The rates in the several towns ranged from 11.0 in Bristol, 11.5 in Leicester, 13.1 in Wolverhampton, and 13 9 in Plymouth to 23.7 in Sheffield, 27.2 in Newcastle-upon-Tyne, 28.0 in Manchester, and 29.3 in Bolton. In the twenty-seven provincial towns the mean death-rate was 19.3 per 1,000, and exceeded by 2.9 the rate recorded in London, which was only 16.4 per 1,000. The 3,350 deaths registered during the week under notice in the twenty-eight towns included 406 which resulted from the principal zymotic diseases, against 433 and 396 in the two preceding weeks; of these, 141 were referred to measles, 115 to whooping-cough, 56 to scarlet fever, 42 to diarrhœa, 31 to diphtheria, 21 to "fever" (principally enteric), and not one to small-pox. These 406 deaths were equal to an annual rate of 2.2 per 1,000; in London the zymotic death-rate was 2.5, while in the twenty-seven provincial towns it averaged 1.9 per 1,000, and ranged from 0.2 in Nottingham, 0.4 in Blackburn and in Sunderland, and 0.5 in Birkenhead and in Preston to 2.6 in Plymouth, 2.9 in Manchester, 4.0 in Liverpool, and 5.2 in Derby. Measles caused the highest proportional fatality in London, Plymouth, Liverpool, and Derby; scarlet fever in Bolton and Liverpool; and whooping-cough in Derby, Newcastle-upon-Tyne, and Oldham. The mortality from "fever" showed no marked excess in any of these large towns. The 31 deaths from diphtheria recorded during the week under notice in the twenty-eight towns included 20 in London and 2 in Salford. No fatal case of small-pox was registered during the week, either in London or in any of the large provincial towns; 7 cases of this disease were under treatment in the Metropolitan Asylum Hospitals on Saturday, June 7th, of whom 2 had been admitted during the week. These hospitals contained 1,057 scarlet fever patients on the same date, against 992 and 1,014 at the end of the two preceding weeks; 130 cases were admitted during the week, against 95 and 98 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 2.7 per 1,000, and was below the average.

MEDICAL NEWS.

THE Duke of Edinburgh has consented to open the Folkestone Victoria Jubilee Hospital on July 4th.

THE Mercers' Company have given a donation of ten guineas to the National Trust Society.

DR. SCHNEIDER, Professor of Zoology, and Director of the Zoological Museum in the University of Breslau, died on May 30th.

THE twenty-first general meeting of the German Anthropological Society will be held this year at Münster from August 11th to the 16th.

THE Aberdeen Medical Staff Corps started on June 5th on a march across country between the Dee and Don, and, from the reports of the "special war correspondent" that are sent almost hourly, they seem to be enjoying camp life.

BY a new regulation recently made by the Senate of the University of Vienna students on matriculating must present the Dean of the Faculty which they wish to enter with their photographs. These works of art will be used to identify candidates when interesting questions as to "signing up," etc, arise.

THE *Gazetta Medica Lombarda* of June 7th states that there is at present an epidemic of influenza among horses in the city and province of Milan. The disease, which is of a mild type, comes on, runs its course, and subsides in a manner perfectly analogous to what occurs in the human subject.

NEW YORK PASTEUR INSTITUTE.—Dr. Paul Gibier reports that during April seven persons were inoculated for hydrophobia in the New York Pasteur Institute. In three of the cases inoculation experiments showed that the dogs were suffering from rabies; in a fourth, another person bitten by the same dog, but not treated, died of hydrophobia; in the remaining three cases rabies was very probable, though its presence was not conclusively proved.

LABURNUM POISONING.—The laburnum has this year blossomed with such glorious profusion of richly-coloured flower that it is not surprising that cases of laburnum poisoning are reported from the south and the west of England. The blooms are no doubt very attractive to children, and it cannot be too widely known that all parts of the laburnum, and especially the seeds, are, in virtue of the active principle which they contain (cytisine), highly poisonous.

MEDICAL ARCHÆOLOGISTS.—On the Council of the Yorkshire Archæological Society the medical profession is well represented by F. Collins, M.D.; Rev. J. T. Fowler, M.R.C.S.; J. Sykes, M.D., J.P., F.S.A.; T. C. Mitchell, F.S.A.; J. W. Walker, F.S.A.; F. R. Fairbank, M.D., F.S.A.; D. H. Leadman, F.S.A. All these medical men are active and working antiquaries. We do not know if any other county antiquarian society has so many members of the medical profession on its Council.

PRIZE DISTRIBUTIONS, ETC.—The distribution of medals and prizes to the successful students of Guy's Hospital will be made on Wednesday, June 25th, at 3.30 P.M., by Samuel Hoare, Esq., M.P. —The distribution of prizes to the students of Charing Cross Hospital Medical School will take place on Wednesday, June 18th, at 4.30 P.M., at the Medical School, Chandos Street, the Rev. S. F. Lumberlege, M.A., Rector of St. Paul, Covent Garden, in the chair.

HONOURS TO GERMAN MEDICAL MEN.—The Order of the Red Eagle, third class, has been conferred on Dr. Schweikert, of Breslau. The German Emperor has granted permission to Professor Naumann, of Halle, to accept the Turkish Medjidieh Order, third class; while Dr. Zwingenberg, of Berlin, is allowed to receive the Commander's Cross of the Order of the Kingdom of Italy; and Dr. Wense, of Berlin, the Service Star, conferred by the King of the Belgians as Sovereign of the Congo State.

PUBLIC HEALTH IN BRAZIL.—The Sanitary Service has recently been reorganised in Brazil, a Central Council having been established at Rio de Janeiro and subordinate authorities in each State. The functions of these bodies are of a most comprehensive character, for they are charged not only with the control of the sanitary administration, but with the regulation of medical practice and the sale of drugs, and with the completion and improvement of the Brazilian Pharmacopœia.

DR. JOSÉ DE LA LUZ HERNANDEZ, one of the oldest and most esteemed members of the medical profession in Havana, died on May 3rd, 1890. He took his degree in medicine in 1826, and up to a few years ago took a most active part in public professional life. He was one of the pioneers of hygiene in Cuba, having given public lectures on the subject so far back as 1840, and having been instrumental in introducing many sanitary improvements in the city of Havana.

A HUNGARIAN MEDICAL CONGRESS.—At the meeting of Hungarian scientists and medical men, to be held at Grosswardein, from the 16th to the 20th of August, the following subjects among many others will be discussed in the medical section: Hospital Sunday, by Dr. J. Sassy; Hungarian Children, by Dr. Julius Faragó; the Training and Social Position of Hungarian Doctors in the Past Centuries, by Dr. Koloman Demks; Education of Midwives, by Dr. Emerich Berczeller; the Baths and Mineral Waters of Buda Pesth, by Drs. S. Gerloczy and W. Hankó, etc.

AT a recent meeting of the Hungarian National Sanitary Council, a discussion on the sale of poisons and medicinal substances took place, and the general feeling of the assembly was in favour of restricting the permission to sell them to properly qualified persons. A petition asking that the sale of saccharin by others than pharmacists might be legalised was rejected, and it was decided that it should be procurable only when prescribed by a medical man. Liqueurs, chocolates and sweetmeats containing saccharin are to be treated as adulterations, and are forbidden to be sold in Hungary.

DRUGS AND PROTECTION.—The new Tariff Bill, proposed by Mr. McKinlay, has caused a good deal of apprehension among pharmacists in the United States. He proposes to double the import duty on cod-liver oil, to put a heavy duty on sugar of milk, and the Bill contains a clause which will in effect prohibit the importation of fluid extracts of beef. Vigorous protests have been made by the wholesale and importing druggists, who allege that cod-liver oil cannot be manufactured in sufficient quantity in the United States because there are not enough cod, and that sugar of milk cannot be successfully manufactured there owing to the climate being unsuitable.

EXTENSION OF THE ROYAL VETERINARY COLLEGE.—A new range of buildings, which will include lecture room, library, reading room, laboratory, and museum, has been commenced in connection with the Royal Veterinary College. The Duke of Cambridge laid the foundation stone on Saturday, June 7th. Increasing attention is being given at this important institution to the scientific as well as the practical side of the study of diseases of animals, in which medical men can but feel interested, in respect both to the researches carried on and to the excellent work done generally for the study and cure of the diseases of animals.

THE BRITISH ASSOCIATION.—The programme for the coming meeting of the British Association at Leeds, over which Sir Frederick Abel, C.B., D.C.L., F.R.S., will preside, has been issued. The following are among the list of presidents of sections announced:—Chemical Science, Professor T. E. Thorpe, B.Sc., Ph.D., F.R.S.; Biology, Professor A. Milnes Marshall, M.A., M.D., D.Sc., F.R.S.; Economic Science and Statistics, Professor Alfred Marshall, M.A., F.S.S.; Anthropology, Mr. John Evans, D.C.L., LL.D., V.P.R.S., Pres. S.A., F.L.S., F.G.S. The first general meeting will be held on Wednesday, September 3rd, at 8 P.M., when Sir Frederick Abel will give the inaugural address, and the concluding meeting on September 10th.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION.—On Thursday, June 5th, the members of the Volunteer Ambulance School of Instruction, who are drawn from the various metropolitan regiments being assembled for an extra examination in connection with the St. John Ambulance Association, presented Sergeon R. R. Sleman, of the 20th Middlesex R. V. with a handsome tantalus, combining a cigar, card case, and spirit stand, in token of their esteem for the care and attention he had bestowed upon the instruction of the class. The next class, with Sergeant H. F. Stokes, London Rifle Brigade, as senior medical officer, will be held at the Head Quarters of the London Scottish R. V., commencing at 7.30 P.M., on Monday, September 29th.

LEPERS AT GIBRALTAR.—A correspondent writes to the *Globe* that one, if not two, lepers, resident within the Lines at Gibraltar, have given rise to some apprehension that the disease may spread in the garrison, particularly as there seems to be some difficulty

about getting the unhappy people transported to safer quarters. There seems, however, no reason to believe that the disease is likely to spread in the garrison. Lepers are found in small numbers in several parts of the Mediterranean Coast, and so far the disease has not spread actively. As the patient about whose case there seems least doubt is willing to be moved, the authorities have only to take the advice of medical men to be able to calm any fears that have risen, and to find a perfectly safe means of sending the lepers away from Gibraltar. Considering the number of lepers who travel about the world in steamers without injury to their fellow passengers, we cannot help thinking the correspondent has been more deeply impressed than is really necessary.

BLADDER WOUNDED BY DECAPITATING HOOK.—Dr. Berczeller, of Buda-Pesth, has related a case of some interest to all who have to conduct labours under difficulties. A note of his observations is contained in the *Centralblatt f. Gynäk.*, No. 18, 1890. He undertook decapitation in a case where delivery could not be otherwise effected; the presentation was transverse. Just as he had completed the severance of the head the bed broke down, and the end of the decapitating hook went clean through the anterior vaginal wall into the bladder. The wound was at once sewn up with two sutures, and a catheter retained in the bladder; it fell out on the following day. On the tenth day the sutures were removed. Union was perfect. As the wound was a clean cut, it might naturally be expected that it would heal more satisfactorily than the pared edges of a vesico-vaginal fistula caused by sloughing of a portion of the anterior vaginal wall through pressure of the fœtal head arrested for a protracted period in the pelvis. Dr. Berczeller's case also illustrates a yet more obvious fact. The obstetrician must feel sure that before he attempts any operation or operations, the bed or table on which the patient lies is thoroughly secure. This precaution is especially to be remembered in country practice.

MEDICAL VACANCIES.

The following Vacancies are announced:

BRISTOL GENERAL HOSPITAL.—House-Surgeon. Salary, £120 per annum, board, lodging, and washing. Double qualification. Applications with certificate of registration to be addressed to the Secretary, William Thwaites, by June 16th.

CHARING CROSS HOSPITAL MEDICAL SCHOOL. — Demonstrator of Anatomy. Honorarium, £150 per annum. Applications to the Dean, Dr. J. Mitchell Bruce, by June 19th.

CHARING CROSS HOSPITAL.—(1) Medical Registrar; (2) Assistant-Anæsthetist. Salary of the appointment of Medical Registrar, £40 a year. Applications to be addressed to the "Chairman of the Medical Committee" by June 22rd.

CO. DOWN INFIRMARY.—Registrar, Compounder of Medicine, and Assistant to Surgeon. Salary, £63, with board, fuel, and washing. Candidates, who must possess a surgical diploma, should apply to Mr. G. W. O'Flaherty. Election on June 14th.

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.—House-Surgeon; unmarried. Salary, £100 per annum, with board, lodging, and laundry. Knowledge of Welsh desirable. Applications to Mr. H. Howell, Secretary, 11, Morley Street, Carmarthen, by June 17th.

DERBY AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Senior Resident Medical Officer. Age not under 30 or over 42. Salary, £280 per annum, with house rent and taxes free, midwifery fees, and cab hire. Applications to the Secretary, Mr. J. Bullivant, 58, Abbey Street, Derby, not later than June 21st.

DERBYSHIRE GENERAL INFIRMARY.—Resident Assistant House-Surgeon (175 beds). Board and washing and bonus of £10. Applications to the House-Surgeon by June 21st.

DINORWIG QUARRY HOSPITAL, near Llanberis, Carnarvonshire.—Surgeon; must speak Welsh. Applications to the Hon. W. W. Vivian, Port Dinorwig.

GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon, with surgical qualification. No salary; washing provided. Applications to the House-Governor, J. D. M. Coghill, M.D., by June 28th.

GLASGOW CITY PAROCHIAL BOARD.—Medical Officer for the First District of the Parish. Salary, £55 per annum. Applications by June 18th to the Inspector of the Poor, 318, Parliamentary Road, Glasgow.

HORTON INFIRMARY, Banbury.—House-Surgeon and Dispenser; qualified. Salary, £60 per annum, with board and lodging. Applications by June 14th to C. H. Davids, Honorary Secretary, 27, Marlborough Road, Banbury.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House-Physicians. Applications by July 2nd to the Secretary, Henry Dobbin.

HULL BOROUGH ASYLUM.—Assistant Medical Officer; not over 35 years of age; unmarried. Salary, £100 per annum, with board, lodging, and attendance. Applications by June 25th to the Medical Superintendent.

HULL ROYAL INFIRMARY..—Assistant House-Surgeon. Salary, £70 per annum, with board, etc. Applications addressed "The Chairman, House Committee," by June 17th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, W.—Physician in Ordinary. Applications by June 21st to the Secretary, William H. Johnson.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, W.—Three Visiting Physicians. Applications by June 21st to the Secretary, William H. Johnson.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, W.—Surgeon. Applications by June 21st to the Secretary, William H. Johnson.

JARROW-ON-TYNE MEMORIAL HOSPITAL. — House-Surgeon; double qualifications. Age not under 25 years. Appointment for three years at a progressive salary of £130, £150, and £170 respectively, with board and lodging in the hospital. Applications by June 18th to James Campbell, Secretary.

JOINT COUNTIES ASYLUM, Abergavenny.—Junior Assistant Medical Officer. Single. Salary, £100 per annum, with furnished apartments, board, and attendance. Applications to the Medical Superintendent by June 18th.

LONDON HOSPITAL, Whitechapel Road, E.—Assistant Physician. Applications to the House Committee by June 17th. Election June 24th.

LONDON HOSPITAL, Whitechapel Road, E.—Assistant Surgeon. Applications to the House Committee by June 17th. Election June 24th.

LUTON FRIENDLY SOCIETIES MEDICAL INSTITUTE.—Resident Medical Officer. Salary, £180 per annum, rising to £220, with residence. Forms of application to be obtained from the Secretary, Thomas Keens, 12, Grove Road, Luton, Beds.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Resident Medical Officer at Bowden, Cheshire. Salary, £60 per annum, with board, apartments, and washing. Applications by July 20th to C. W. Hunt, Secretary.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall; double qualifications; not less than 25 years of age. Remuneration, £250 per annum, with board and residence. Applications by July 5th to the Chairman of the Board.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich.—Junior Resident Medical Officer. Salary, £30 per annum, with board, attendance, and washing. Applications by June 17th to the Honorary Secretary, G. R. Roberts.

NORTH RIDING OF YORKSHIRE.—Medical Officer of Health for the Riding; qualified to practise medicine, surgery, and midwifery. Remuneration, a fixed fee of £100 per annum, and 5 guineas per day (to include expenses) for every day's services, with leave to hold other appointments. Applications to William C. Trevor, Deputy Clerk of the County Council, Clerk of the Peace Office, Northallerton, before June 30th.

OXFORD UNIVERSITY.—Deputy Linacre Professor of Human and Comparative Anatomy. Salary, £700 a year. Applications to the Registrar of the University by June 21st.

PARISH OF FARR, Sutherland.—Medical Officer. Salary, 100 guineas per annum. Single. Applications to Chairman of Board, John Box, House of Tongue, Sutherland.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon. No Salary; board, lodging, and washing. Applications by June 25th addressed Chairman of Medical Committee.

ROYAL FREE HOSPITAL, Gray's Inn Road.—Junior Resident Medical Officer. Applications to the Secretary, Conrad W. Thies, by June 18th.

ROYAL FREE HOSPITAL, Gray's Inn Road.—An additional Assistant-Surgeon; a Fellow of the Royal College of Surgeons of England. Applications to the Secretary, Conrad W. Thies, by June 24th.

ROYAL GENERAL DISPENSARY, 25 and 26, Bartholomew Close, E.C.—Resident Medical Officer; doubly qualified. Candidates must attend personally the Medical Committee on June 24th at the Dispensary at 2 o'clock, with diplomas and certificates of qualification.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Clinical Assistants. Candidates must be qualified; preference given to those experienced in ophthalmic practice. Applications by June 21st to the Secretary.

SALFORD ROYAL HOSPITAL.—An Honorary Medical Officer for the Pendleton Branch Dispensary; double qualification. Applications, with certificates of age and registration, etc., to the Secretary, Alexander Hay, by June 16th.

STOCKPORT INFIRMARY.—House-Surgeon; doubly qualified. Salary, £10 per annum, with board and lodging. Applications to Lieutenant-Colone S. W. Wilkinson, Honorary Secretary, by June 16th.

WALLASEY DISPENSARY.—Assistant or Junior House-Surgeon, to visit and dispense. Unmarried; must devote his whole time to the duties. Salary £80 per annum, with furnished apartments, coal, gas, and attendance. Applications by June 22nd to the Honorary Secretary, Mr. William Heap, Elm Mount, Penkett Road, Liscard, Cheshire.

WELLINGBOROUGH UNION RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, £50 per annum. Election, July 2nd. Applications to Willan Jackson, Assistant Clerk, Wellingborough, by June 25th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Physician Appointment tenable for six months. Board and lodging. Applications to R. J. Gilbert, Secretary-Superintendent, by June 19th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Surgeon for six months. Board and lodging. Applications to R. J. Gilbert, Secretary Superintendent, by June 19th.

WILTS COUNTY ASYLUM.—Assistant Medical Officer; unmarried; with experience preferred. Salary, £100 per annum, with board, residence, attendance, and washing. Applications, endorsed "A. M. O.", to be addressed to the Medical Superintendent, Wilts County Asylum, Devizes, by June 23rd.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL Wolverhampton.—Resident Assistant; one qualification preferred. Board lodging, and washing provided. Applications to be inscribed, "Application for Resident Assistant," by June 23rd, to the Chairman of the Medical Committee.

ZETLAND COUNTY COUNCIL.—Medical Officer for the county and district- to reside in the county, with liberty to engage in private practice. Appli, cations, stating qualifications and salary, to be lodged with the County Clerk at Lerwick by June 30th.

MEDICAL APPOINTMENTS.

ADAMS, Frederick E., M.D., M.Ch., M.A.O., D.P.H.Cantab., appointed Medical Officer of Health and Public Analyst to the Borough of Bolton, *vice* Edward Sergeant.

ANDERSON, D. H., M.B., C.M.Edin., appointed Assistant Medical Officer to the Dorset County Asylum, Dorchester, *vice* J. Monteith.

ANDERSON, Tempest, B.Sc.Lond., M.D., M R.C.S., L S.A., appointed Consulting Physician to the York Lunatic Asylum, *vice* Dr. Matterson, deceased.

BARBER, Alexander, M.D.Brux., L.R.C.S.I., appointed Government Medical Officer and Vaccinator for the District of Hillgrove, New South Wales.

BROWN, Alexander Stewart, F.R.C.S., L.S.A., appointed Medical Officer for District D of the Fire Brigade, London County Council.

COLLINGWOOD, J. E., L.R.C.P.Edin., M.R.C.S.Eng., appointed Deputy Medical Officer for the Ropeley District of the Grantham Union, *vice* Dr. H. B. Bailey, resigned.

COOKE, James Ambrose, M.R.C.S., L.R.C.P., appointed Junior House-Surgeon to the Macclesfield General Infirmary, *vice* H. Joslen.

CUNNINGHAM, Andrew, M.B.Glas., C.M., reappointed Medical Officer of Health to the Oldbury Rural Sanitary Authority.

FERGUSON, R. Bruce, M.R.C.S., L.R.C.P., appointed House Surgeon to the Royal Westminster Ophthalmic Hospital, *vice* H. H. Folker, M.R.C.S., L.R.C.P.

FOGARTY, John William, M.D., appointed Medical Officer of Cushendall Dispensary District, Ballycastle Union, and Medical Officer of Health of same district.

FRANCIS, H., appointed Assistant House-Surgeon at the Female Lock Hospital, Harrow Road, W., *vice* H. C. L. Morris, resigned.

GEORGE, J. W., M.R.C.S.Eng., L.S.A., appointed Medical Officer for the Fifth District of the Upton-on-Severn Union.

HARRISSON, John Wm., M.B.Aberd., C.M., reappointed Medical Officer of Health to Sandwich Borough.

HAYNES, James R., L.R.C.P.Edin., M.R.C.S.Eng., appointed Divisional Surgeon to the Chelsea Subdivision of the B Division of Police.

JACKSON, Mark, M.D.Roy.Univ.Irel., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Barnstaple Urban Sanitary Authority.

KELLY, Charles, M.D.Lond., F.R.C.P., M.R.C.S., reappointed Medical Officer of Health to West Sussex Combined District for a term of five years.

KING, W., L.R.C.P., L.R.C.S.Edin., appointed House-Surgeon to the Devonshire Hospital, Buxton, *vice* Mr. F. J. Salter, resigned.

KINGDON, E. C., M.B.Edin., C.M., appointed Ophthalmic Surgeon to the Children's Hospital, Nottingham.

LITE, E. W. Dawson, M.B.Durh., M.R.C.S., L.S.A., appointed Public Vaccinator for the Bradford District of the Wortley Union, *vice* H. Payne, M.R.C.S., resigned.

LAWSON, Joseph, A. B., T.C.D., M.B., L.R.C.S.I., reappointed District Medical Officer for Heptonstall District of the Todmorden Union.

MCLEAN, Allan, M.D.Edin., C.M., L.R.C.S.Edin., reappointed Medical Officer of Health to the Isle of Portland.

MATTHEWS, Sidney Philip, L.R.C.P., M.R.C.S., appointed House-Surgeon to the Brighton and Hove Lying-in Institution, *vice* C. S. Simpson.

MOORE, Charles Arthur, M.D., C.M., M.R.C.S., L.S.A., appointed Honorary Assistant-Physician to the Leicester Infirmary, *vice* Dr. Bennett, appointed Honorary Aural Surgeon.

OXON, J. Burdett, M.R.C.S.Eng., L.S.A., reappointed Medical Officer of Health to Glanford Brigg Rural Sanitary District.

PARSLOW, C. E., M.D.Lond., M.R.C.S., Honorary Obstetric Officer, Queen's Hospital, appointed Ingleby Examiner, Queen's College, Birmingham, for the current year, in conjunction with Professor Lawson Tait.

PUGHTON, Walter, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the East Barnet Valley District of the Barnet Union.

SALTER, F. W., L.R.C.P.Edin., appointed Assistant House-Surgeon to the Devonshire Hospital, Buxton, *vice* Mr. King.

SAW, H. G., M.R.C.S.Eng., L.R.C.P., L.M.Edin., appointed fifth Assistant Medical Officer to the London County Asylum, Colney Hatch.

SAUNTON, Michael C., M.B., B.Ch., B.A.O., appointed Resident Surgeon to the Mater Misericordiæ Hospital, Dublin, *vice* John W. Fogarty, M.B., B.Ch., B.A.O.

SEELE, Sidney Thomas, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Morley Town Council.

STEPHENS, H. W., L.R C.P.Lond., M.R.C S.Eng., appointed Resident Assistant Medical Officer to the Workhouse and Infirmary of the Parish of St. Leonard, Shoreditch, *vice* F. Sloman.

TULL, G. C., M.B.Aberd., C.M., appointed Medical Officer for the Sheepshed District of the Loughborough Union.

THOMPSON, A., M.D., M.R.C.S., reappointed Medical Officer of Health for the Grange-over-Sands Urban Sanitary District.

TURSFIELD, Wm. Nealor, M D.Edin., M.R.C.S.Eng., reappointed Medical Officer for the Montgomery Urban Sanitary District.

UTTER, Robert De Bruce, L.R.C.P.Edin., L.F.P.S.Glas., appointed Medical Officer to the Perth Post Office, *vice* Dr. Bramwell, deceased.

WHILL, Dr., appointed Medical Officer to the Portlaw Dispensary District, Carrick-on-Suir Union, *vice* Dr. James Martin, deceased.

WHITE, George Bentley, M.R.C.S., L.S.A., appointed additional Medical Officer to the Children's Hospital, Nottingham.

WILSON, A. S., M.A., M.B.Cantab., M.R.C.S.Eng., appointed Medical Officer of Health to the Hastings Urban Sanitary Authority.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Mr. W. Arbuthnot Lane: On Acquired Deformities of Young Life.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. John Langton: On the Etiology of Hernia and its Bearing on the Treatment of the Disease. Lecture I.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On Insanity of Pregnancy; Puerperal Insanity; Insanity of Lactation. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Phagedæna.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. D. Ferrier: The Croonian Lectures on Cerebral Localisation. Lecture III.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Robert Maguire: On Congenital Affection of the Heart. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. R. Marcus Gunn: Ophthalmoscopic Cases.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. John Langton: On the Etiology of Hernia and its Bearing on the Treatment of the Disease. Lecture II.

ROYAL MICROSCOPICAL SOCIETY, 20, Hanover Square, 8 P.M.—Messrs. H. W Burrows and C. D. Sherborn and Rev. G. Bailey: On the Foraminifera of the Red Chalk of Norfolk, Lincolnshire, and Yorkshire.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 7 P.M.—Mr. William Ellis, F.R.A.S.: On Mean Temperatures. Mr. W. L. Dallas: On Barometric Pressure at Hill Stations in India. Mr. William Ellis, F.R.A.S., and Mr. Alex. B. MacDowall: On Variations of Wind at Greenwich.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, W.C., 2 P.M.—Dr. Buzzard: On Disseminated Sclerosis. The New Infirmary, Paddington, 4 P.M.—Dr. Broadbent: Clinical Lecture on Medical Cases. 5 P.M.—Dr. Savill: Pathological Examinations.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. D. Ferrier: The Croonian Lectures on Cerebral Localisation. Lecture IV.

FRIDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton, 4 P.M.—Dr. Robert Maguire: On Anæmia.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. John Langton: On the Etiology of Hernia and its Bearing on the Treatment of the Disease. Lecture III.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or Stamps with the notice not later than Wednesday Morning, in order to insure insertion in current issue.

MARRIAGES.

HAYES—VAN WYK.—On April 29th, at Clanwilliam, Alfred Adolphus Hayes, L.K.Q.C.P.I., L.R.C.S.I., youngest son of the late Edmund Hayes, third Justice in Her Majesty's Court of Queen's Bench, Ireland, to Emily Henrietta, youngest daughter of the late Wm. Robertson Van Wyk, Esq., of Clanwilliam, Cape Colony, South Africa.

KNIGHT—CARTER.—On June 4th, at St. Mary's Church, Kingston, Somerset, by the vicar, Rev. E. Bamford, M.A., F. Knight, M.D.Lond., of Swansea, to Lilian Annie, eldest daughter of H. T. Carter, Esq., The Laurels Kingston.

ROBERTSON—NICHOLSON.—On June 3rd, at the church of St. Mary and St. Rhadagund, Whitwell, Isle of Wight, Robert Robertson, M.D.Edin., Assistant-Physician to the Royal National Hospital for Consumption, Ventnor, to Mary, daughter of John Richardson, of Gartconnel, Dumbartonshire, and widow of the late Captain John S. Nicholson, R.E.

SHAPLEY—SHEPHERD.—On June 4th, at Lee, Kent, by the Rev. F. W. Helder, H. T. Shapley, M.B., M.R.C.S., of 20, Leam Terrace, to Edith, widow of the late W. T. Shepherd, of 48, Leam Terrace, Leamington.

WALLACE—BROWN.—At the Grand Hotel, Glasgow, on April 3rd, by the Rev Jas. H. Oswald, M.A., Morton, Dumfriesshire, Q. MacAdam Wallace, M.A., M B., C.M., Claughton, Cheshire, to Minnie, only daughter of the late William Brown, banker, Girvan, and granddaughter of William Acton, of Boddam, Peterhead.

DEATHS.

CAMPBELL.—On June 6th, at 1, Prince's Gate, Liverpool, Daisy, second daughter of W. Macfie Campbell, M.D.Edin., and granddaughter of the late D. A. Campbell, Esq., Barriemore, Argyllshire.

MURPHY.—On June 3rd, at Allahabad, India, of enteric fever, William Norman Murphy, M.D., Surgeon, Medical Staff, younger son of Surgeon-General M. W. Murphy, Sunday's Well, Cork.

OUTHWAITE.—On June 9th, at Hebert House, Denmark Hill, S.E., William Outhwaite, M.R.C.S., L.S.A., son of the Rev. W. Outhwaite, vicar of Farewell, Lichfield.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

QUERIES.

VOLUNTEER SURGEON would feel obliged for information as to style of stretcher best suited for volunteers, and where they can be procured.

MR. TAYLOR (Ticehurst, Sussex) would be glad to know of any institution, or person in private life, who would undertake the management of a bad case of hypochondriasis. The patient is the wife of a tradesman, who could afford to pay from £1 to £2 a week.

RUSTICUS would like to know of an institution to which a morally and mentally defective lad of 17 can be sent. He is exceedingly mischievous and troublesome, has been returned from the Royal Albert Asylum as "too intelligent," and is utterly unmanageable at home. The parents are in good circumstances.

DR. J. A. MACKENZIE (Balham) asks for answers to the following queries:—

1. Some years ago there was a discussion as to the identity of a disease prevailing at the Cape, said to be small-pox. Was it proved to be small-pox eventually, and if so what was the cause of the dispute as to diagnosis?

2. Where in London can one see any apparatus for smoke abatement, and what literature is there on the subject?

*** 1. The diagnosis lay between variola and varicella, and we believe that the diagnosis of variola was eventually very generally accepted.

2. Smoke-preventing stoves of a great variety of patterns are to be seen at the central offices of the chief London gas companies, also at the addresses of the makers. Space will not admit of our giving a complete list, nor fairness of our selecting a few names only. The Report of the Smoke Abatement Committee, 1882 (Smith, Elder, and Co.), and the subsequent reports of the Smoke Abatement Institution give much information on the subject.

MORPHINE HABIT.

A MEMBER wishes to know where is the best place a person who very much desires to give up this habit should go to for a time; if there is any substitute he could take, or any special treatment adopted when the drug is given up to lessen the suffering. Is there any English book upon the subject?

HOME FOR SURGICAL CASE.

DR. A. B. DRUITT (Dunstable, Beds) asks to be recommended a home where a child aged 14 years, suffering from caries of rib with discharging sinus, would be received at a moderate cost. Must be at seaside.

ANSWERS.

J.P.A.—Communication received, but declined with thanks.

A. M.—There are several electric belts in the market which yield a feeble current, appreciable by very delicate galvanometers. It is, however, not probable that such a current would relieve lumbago.

TREATMENT OF PERSPIRING FEET.

J. C. writes that "Surgeon" may see at 65, Fore Street, City, what professes to be a mode of ventilating the soles of boots or shoes.

LIQUID AND SOLID MEASURES.

IN reply to "Antiseptic," who asks what is the meaning of the expression "solution of perchloride of mercury 1 in 2,000," it may be observed: In this country solids are weighed, liquids are measured, and it is usual to make solutions containing parts by weight in parts by measure; the above expression would mean, therefore, one part by weight of perchloride of mercury contained in 2,000 parts by measure of liquid. On the Continent, all substances, solids and liquids, are weighed, and solutions are made to contain parts by weight of solid in parts by weight of the solution.

FEES OF OFFICIAL TEACHER OF VACCINATION.

INQUIRER.—There seems but little doubt that the "fee, not exceeding one guinea," which under the regulations of the Local Government Board an authorised teacher of vaccination may charge a student for a special certificate of proficiency in vaccination, is intended as the remuneration for the teacher himself. It may be noticed that all the proceedings in the appointment of an educational vaccination station are conducted by the Local Government Board directly with the vaccinator who is to be appointed the teacher, and not with the governing body of the institution at which the station is fixed; and, although it is not specifically so stated in the official regulations, it may, it seems to us, be reasonably assumed that the fee prescribed by the Board is the maximum fee which the teacher himself can receive from the student. Any arrangement as to a division or otherwise of the fee between the teacher and the governing body must, we should imagine, be a matter for private agreement.

NOTES, LETTERS, ETC.

THE letters of Miss Frances Cobbe and Mr. Berdoe, also Mr. Barker's article on "Removal of a very large Tumour from the Neck, probably a Disease of Accessory Thyroid Gland—Recovery," are in type and will be published in the next issue.

ERRATA.—In Dr. H. F. C. Eagle's remarks on Support instead of Dilatation of the Perineum, JOURNAL, June 7th, p. 1343, line 27 from bottom, for "joining" read "forming," and line 10 from bottom, delete "not."

MEDICAL EDUCATION.

M.D. writes: Why are the members of the General Medical Council so anxious to compel students to spend a certain number of years attending a certain number of lectures, etc., at certain places specified by them? If a man knows his work thoroughly, what does it matter whether he acquired his knowledge in three years or seven, in London or Timbuctoo, in private practice or at hospital, whether he is 21 years or 40? It may be said that it is difficult to determine by examination whether a man is competent to practise or not, and that some other evidence of a candidate's knowledge is required. But the mere fact of a student having attended all the courses, lectures, etc., required by the Council is no proof that he knows anything whatever of the subjects which he is supposed to have studied. It only shows that he has had time and opportunities for acquiring a knowledge of his profession, but it does not prove or assist in proving that he is competent to practise, which can only be determined by a complete and searching examination.

Students should not be compelled to study in a particular way at a particular place and for a particular time. Let them clearly understand that they must have a thorough knowledge of subjects specified by the Council before they are licensed to practise, and let them obtain that knowledge in their own way, without being hampered by rules, restrictions, regulations which are worse than useless. The laboratories, lecture halls, and hospital wards will then be filled with men who are there to learn, and not as at present by students whose sole object is to put in their attendances.

If, instead of fidgeting about the opportunities a man has had, the Council would insist, as it has a right to insist, that for the future every man, before being admitted a member of our already overstocked profession, knows his work, if they would insist that he passes a stiff preliminary examination and searching practical examination, over which sufficient time has been taken, in professional subjects, it would quickly raise the standard of medical education, and be fulfilling one of the chief objects of its existence.

A WARBLING GIRL.

A DOCTOR'S WIFE writes: A few weeks ago I heard a young girl of 14 years "whistle," as her people call it, but "warbling" it really is for she kept her mouth slightly open, and the lips merely trembled, the notes being formed in the throat, the centre of it working as a bird's does when singing and the sounds produced were exactly like those of blackbirds and thrushes. She warbled several airs to pianoforte accompaniments faultlessly and most beautifully modulated; and so powerful are the notes that her grandmother, who is excessively deaf, could catch every one, without the slightest effort, in another room a little distance off; in the same room some notes are deafening, when she pours them out at the *forte* parts. Although she was brought down for me to hear her, I could not believe that it was a human voice until I went to see her also. She has been self-taught entirely from "whistling" to her dog and sitting in the window to "warble" to the birds, and they invariably respond to her; her people say she has been doing it for the past two years.

Should the child be encouraged and properly trained as a "warbler," or is it likely to injure her throat for singing and speaking? Her people are uneasy, and fear the throat may become diseased. She is extremely nearsighted.

TWO CORRECTIONS.

MR. W. ROGER WILLIAMS (Cavendish Square, W.) writes to correct the report of his remarks, at the last meeting of the Pathological Society, on a case of disseminated polypi of the large intestine associated with two separate cancerous strictures (p. 1195). What he said was that in the immense majority of cases the outbreak of cancer is unilocal, but that in a few cases the outbreak of cancer occurs spontaneously at more than a single point, of which the case exhibited was an example. He also remarked that the association of the multiple cancerous disease in this specimen with the disseminated polypi showed that the epithelium of the whole vicinity was in an abnormal condition as regards the growth and reproduction of its cells. Mr. Williams also complains of an incorrect report of his remarks at the Clinical Society on Mr. Turner's case of thyroid tumour (p. 1,249). The question he there asked was whether inflammatory affections of the thyroid, such as might have arisen from arrest of the circulation in the capsule of the gland, might possibly have accounted for the disease.

THE TREATMENT OF OBESITY.

DR. WM. MONTAGUE BALL (Hounslow) writes: As the above is always an interesting topic, will you allow me to say that I found I lost 6½ lbs. in weight in the first fourteen days by following the diet laid down in your columns a little time ago, and elsewhere since by Dr. Davies, of Sherborne. I found the system advised very pleasant, and easy to carry out.

DR. NATHANIEL EDWARD DAVIES (Sherborne) writes: The cases published in the JOURNAL of May 31st by Mr. Towers-Smith are very interesting and very successful samples of what may be done by diet for corpulency. Plainly speaking, he makes the obese man live on his fat; a very good plan, for he is healthier without it. The 3 lbs. of meat he allows only contain one-half the amount of carbon necessary to keep the economy in full working order, and therefore the stored carbon is rapidly drawn upon. The system may be illustrated thus: Take a barrel full of water; put in one pint daily at the bung, and draw out a quart at the tap. However, there is this to be said—before the barrel is empty, Mr. Towers-Smith increases the amount put in at the

bung, but not in sufficient quantity ever to fill up the barrel again; hence the success, which is undoubted and well attested.

Excepting in very extreme cases, the diet is needlessly severe. I shall kindly ask you shortly to spare me a little space to give some cases of mine, as the successful treatment of corpulency must be—judging from the hundreds of letters I have received since I brought out my little work on the dietetics of obesity, *Foods for the Fat*—of great interest to many. The system I advocate does not entail any hardship, and reduces at the rate of over 3 lbs. a week.

Rose and Cooper Defence Fund.

DR. ARTHUR EVERSHED (29, Rosslyn Hill, Hampstead, N.W.) writes: I venture to invite the active sympathy of the profession for my neighbours, Drs. Rose and Cooper, who, in the performance of their professional duties, have been harassed by an action at law; and though the action was decided in their favour, the plaintiff (as usually happens in such cases) could not pay the costs; hence, in addition to the extreme annoyance to which they have been subjected, they have now to pay their costs—over £160. It seems but fitting that those of us who have hitherto been fortunate enough to escape such actions should hold out the hand of fellowship, and assist our less fortunate brethren by paying these heavy costs for them. I shall be happy to receive any subscriptions.

The following sums have been received:—

	£	s.	d.
Sir Morell Mackenzie	2	2	0
Dr. James Andrews	2	2	0
Dr. Edmund Gwynne ...	2	2	0
Dr. George Harley	1	1	0
Messrs. Lane and Monro ...	5	5	0
Dr. Andrew Miller	5	5	0
Dr. Pidcock	1	1	0
Dr. John Shaw...	3	3	0
Dr. Heath Strange	2	2	0
Dr. Arthur Evershed	5	5	0
Miss Holford	5	0	0
Dr. H. N. Evans	1	1	0
Morton Smale, Esq.	1	1	0
W. D. Wilkes, Esq. (of Salisbury)	2	2	0
Total	38	12	0

The Antiseptic After-treatment of Vaccination.

DR. C. R. ILLINGWORTH (Accrington) writes: Dr. Barrett is away from the subject. It is not a question of "introduction of septic matter," or "wounds inflicted with dirty instruments," but "is cross-cutting or post-vaccinal septic infection the cause of bad arms?" That Dr. Barrett's view is not correct is proved by the fact that the majority of practitioners use no antiseptic precautions either before or after the eighth day, and yet there are no untoward results. I stated that the commonest cause of bad results was cross-cutting. The vaccine lymph, on entering every furrow, attracts the blood in virtue of the spores it contains, and an erythema is the result, with effusion of plastic material. In parallel vertical lines, erythema to such a slight extent does not prevent the removal of inflammatory products, but "cross-cut" and you block whole areas of epidermis and rete mucosum, with the effect of exciting further inflammation than is necessary in the simple development of vaccine vesicles. But this further inflammation would not begin any earlier than the ordinary erythema of vaccination, although when once begun it would develop more rapidly. It would certainly not begin upon the first day, as Dr. Barrett says.

The Treatment of Influenza.

DR. GEORGE B. BATTEN (Lordship Lane, S.E.) writes: In answer to the opinions expressed regarding antipyrin, etc., by Drs. Illingworth, Greene, and Hanbury Frere, I may mention that during January and February I treated about 400 cases of influenza. During the early stage of fever with headache, pains in back and limbs, my almost invariable prescription was antipyrin in doses for adults from 5 to 8 grains, and salicylate of soda from 7 to 10 grains every hour, two hours, or three hours, until feverishness became less, and acute symptoms were relieved, then I followed up with quinine, nux vomica, and other tonics, treating the neuralgias and congestive headaches which sometimes followed later more successfully with caffeine than anything else. I also am happy to say that I did not lose a single case, and found no depressing or other evil effects from the antipyrin or salicylate, but on the contrary, found such a marked effect from them in relieving headache and cutting short the fever with its accompanying distaste for food, that they enabled the patient to take much larger quantities of stimulating nourishing food than was the case when these drugs were not given. At any rate I think that I too may claim that the results justified the treatment adopted.

Geysers.

MESSRS. EWART AND SON (346, Euston Road, N.W.) write: After what has appeared in the JOURNAL on this subject, we trust you will allow us, in the public interest, to state that it is not necessary to connect a geyser with the outside of the house. The whole quantity of gas consumed in warming a bath is only about 20 cubic feet, and perfect safety is secured if the products of combustion are conveyed into any passage or open space outside the bathroom, but inside the house. There is then no risk of back draught, and when the white flame is used there is no smell. The products are only dangerous when confined in a small space. If a bathroom were as large as a kitchen, a geyser would be at least as safe as a cooking stove. The vent pipe practically increases the size of the room, thus perfect safety is secured.

Considering the large number of geysers already in use, it is of public importance that it should be known that safety can be obtained in a simple and inexpensive way.

People who have used geysers for years without vent pipes will continue to run the risk rather than cut through outside walls. The other way is quite as safe, and avoids all risk of back draught.

On Massage of the Membrana Tympani.

MR. F. G. HARVEY (George Street, W.) writes: In the communication under the above heading in a recent issue of the JOURNAL, the author of the paper treats the term "chronic catarrh" as if it were a uniformly definite pathological change, or uses it as a synonym for several distinct changes. He goes on to speak of "all conceivable remedies for this very common affection," having been tried, and proceeds to mention various methods. Now, is this quite fair to the specialists? Do they apply in this haphazard way the various remedies alluded to? I maintain not. Has not each treatment spoken of clear indications for its adoption; every remedy specially directed to relieve special conditions?

To illustrate my meaning further, let us take for example: 1. Sclerosis (the two varieties of which the author appears to ignore). 2. Adhesive catarrh, with its subvarieties. 3. Tenotomy of the tensor tympani. 4. Tenotomy of the posterior fold of the membrana tympani. 5. Incisions of the membrana tympani. 6. Passing of bougies into the Eustachian tube. Have not all of these clear indications for their performance?

Later on, the author speaks of treating 64 cases, the basis of action being a negative result of Rinne's experiment—a basis obviously including many varied forms of middle ear deafness.

Further, is it not generally recognised that chronic catarrh is merely a generic term, comprising inflammation in its various forms, concomitants, and results? I might go on to take more detailed exception to the paper alluded to, but my object in writing is not to offer a captious criticism, but to protest against the errors engendered by the bare use of the word "catarrh," and to vindicate the specialists from the implied error of an indiscriminate therapeusis.

Diphtheria in Domestic Animals.

DR. F. P. ATKINSON (Surbiton) writes: That an animal may be inoculated with the germs of a certain disease is no proof that it suffers in the ordinary course of events from this affection. A mouse may have cholera artificially produced, but it is altogether questionable whether this is a disease of its ordinary life. A frog may be inoculated with diphtheria, but who would venture to say that this is a disease common to the species? Cows drink water in which their own excreta have been deposited without any apparent harm resulting, and in those instances where diphtheria is said to have been caused by cows' milk, the water supplied to the cows is not shown to have been contaminated with human excreta. If, therefore, it does not arise as in man, from the ingestion of decomposing animal matter, then it follows that the cause in man and animals must be different. Recklinghausen has been able to produce diphtheritic keratitis in a rabbit by inoculating the cornea with matter from a case of hospital gangrene. Dr. Fagge, in his *Principles and Practice of Medicine*, says: "Were it not for certain experiments of Oertel's referred to, we should be strongly disposed to think that the constitutional disturbance caused by this so-called diphtheritic inflammation excited by inoculation in the lower animals is, perhaps, nothing after all but a form of septicæmia, and that the substances employed act merely as other decomposing substances might act. In taking such a view of the matter, we might suppose that the presence of micrococci in the affected tissues in cases of diphtheria simply indicates the unhealthy character of the inflammation. This notion well accords with the statement of some recent writers that the false membranes in the larynx and trachea scarcely contain any living organisms, for those cases of diphtheria in which the air passages are affected commonly end fatally before a septic process begins."

Some time ago it was asserted that fowls were subject to diphtheria, that this could be communicated to cats, and also to human beings. Later investigations have shown that this diphtheria-like disease of fowls is not the same as that which occurs in man. If cats, as it is said, were in the ordinary way subject to true diphtheria, it would be much more common amongst them and also human beings than it now is.

Towards the end of 1882 and the beginning of 1883 we had a pretty widespread epidemic of follicular tonsillitis at Kingston-on-Thames, and the cause of this, like that of many other zymotic diseases, was put down to the milk supply. At the same time several cats were said to be suffering from vomiting and some ulceration of the mouth. The history of the epidemic, however, scarcely supported the milk theory. Rarely more than two or three persons were attacked in the same house, and these were mostly servants, except where there were no underground apartments. Very few, if any, children under 9 or 10 were affected, though young children are the chief milk drinkers. It must not be forgotten, also, that amongst the better classes the young children have their nurseries at the upper part of the house. The weather at the time was cold, damp, and foggy, the barometric pressure heavy, and the smell from the road level ventilators often abominable. In every case that came under my care I ordered a larger quantity of unboiled milk than usual, and yet they invariably recovered in about three days. I forgot to mention that the farms, the labourers, the water, the dairies, the storerooms, the cows, the cans, etc., were all examined with entirely negative results; but as the foggy and damp weather cleared the epidemic gradually declined.

These views no doubt will do little to advance our knowledge as to the origin of diphtheria, but I put them forward mostly with the object of creating some discussion.

"Muzzling or Registration?"

MR. ALEX. G. R. FOULERTON (Chatham) writes: In a leading article on "Muzzling or Registration?" which appeared in the JOURNAL of May 31st some figures were quoted and some statements made which I trust that you will allow me to very briefly criticise. The figures were given in order "to recall the services which the muzzle has rendered to us in London;" they will be found below in table A. Side by side with them, under B, are a second set of figures, taken from the return of the Contagious Diseases (Animals) Act Committee of the London County Council, which were quoted in the JOURNAL of March 1st, at page 519.

A			B		
Deaths from Hydrophobia.			Deaths from Hydrophobia.	Total No. of Dogs killed by Police.	No. of such Dogs found to be Rabid.
1884	No muzzling	9			
1885	,, ,, ...	27			
1886	Muzzling enforced (?)	9			per cent.
1887	No muzzling	2	2	141	27, or 19.14
1888	,, ,, ...	3	3	190	49, or 25.83
1889	Muzzling enforced after August 1st, 1890 ...	10(?)	7	330	123, or 37.27
1889*	Muzzling	0			

* (?) 1890.

In the article in question it is stated that "the 9 deaths in 1886 were all caused by bites inflicted before the muzzling order of December, 1885, so that the year 1886 really occupies the same position as the present year in its exemption from a death-rate obtained by a period of muzzling." I venture to think that the writer of the above must have overlooked the fact that the order in force from November 20th, 1885, to December 20th, 1886, was a very different thing to the late order which came in force on August 1st, 1888. I can speak with confidence, as I have lately been in communication with the Metropolitan Police Office on the subject. The earlier order provided that the dog should be "either muzzled or led," which practically is a very different thing from the absolute muzzling of the later order. But even if the very partial muzzling then adopted is to be credited with the decreased human death-rate in 1887-88, how is the fact that canine rabies increased during the same period to be accounted for? The figures under table B show, moreover, that there is no fixed ratio between the prevalence of rabies in dogs and hydrophobia in man.

Again, it is stated that "since the existence of the present rabies order no fewer than 61 dogs certified to be rabid have been seized by the police"—that is to say, that the number of rabid dogs, which when no muzzling was in force, in 1887, was 27, and in 1888 was 49, has under less than ten months' muzzling risen to 61. Surely this affords no argument in favour of the measure.

My own belief is that the statistics on the subject, so far as London is concerned, are much too limited to allow of any certain conclusion to be drawn one way or another. But, inasmuch as considerable stress was laid upon them in the article referred to, I think that you will see the justice of allowing the other side of the question to be published.

*** It is matter of common knowledge that the muzzling order of 1885-86 was not so well organised and efficiently carried out as the present one, but that, nevertheless, in accordance with the invariable history of such regulations, it (the 1885-86 order) reduced canine rabies to zero. The increase of canine rabies has always preceded the rise in the human death-rate for reasons too obvious to repeat. The statement made respecting the number of rabid dogs seized during the muzzling order is the customary *ex parte* remark for which the "justice" of publication is demanded. It is wearisome to continually point out what all know who take an interest in the suppression of rabies, that such statements, by giving only one-third of the facts, convey, no doubt unwittingly, an absolutely false meaning. The number of rabid dogs seized in an epidemic is necessarily greater than immediately before the execution of the order is commenced. The cases during the regulations have as usual diminished to zero. Mr. Foulerton evidently forgets the statements of Mr. Chaplin, recently made in the House, and published in all newspapers, or he would not have omitted to acknowledge its correction of the statement he has put forward. It is difficult to understand what Mr. Foulerton wishes to learn from statistics. He desires to have "a fixed ratio" between the exact number of rabid dogs seized and the number of human beings dying of the disease. If the figures show that as canine rabies increases so human beings die from the same malady (and he is too careful to say they do not), what more is required to show the obvious connection of the well-known facts? Certainly not "a fixed ratio."

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. J. Mackenzie Booth, Aberdeen; R. S.; Mr. T. H. Gillan, Bromyard; J. C. Simpson, M.B., Stoke Newington; Mr. J. Penberthy, London; Dr. E. Berdoe, London; The Dee Oil Company, London; The Duke of Westminster, London; G. A. Berry, M.B., Edinburgh; Miss Wilson, London; Mr. A. S. Hincks, London; Messrs. Street and Co., London; L. A. Hawkes, M.B., Ventnor; The Lord Mayor, London; Mr. J. P. Hentsch, London; Mr. W. Milligan, South Tottenham; Mr. J. N. Rees, London; Junior House-Surgeon; Mr. G. Morkett, Norwich; Mr. C. J. Evans, Northampton; Novice; Dr. J. H. M. Beck, Rondebosch; Dr. F. Payne, London; Messrs. Allen and Hanburys, London; The President of Guy's Hospital, London; Messrs. G. Mason and Co., London; Mr. J. Copeland, South Hampstead; Professor O. Fraser, Edinburgh; Dr. W. Wylie, Skipton; The Secretary of the New South Wales Branch of the British Medical Association, Sydney; The Secretary of the Board of Health, New South Wales; Messrs. Reynolds and Branson, Leeds; J. Buchanan, M.B., Glasgow; Dr. W. J. Richardson, Ravensthorpe; E. W. D. Kite, M.B., Sheffield; Professor J. McKendrick, Glasgow; Dr. W. Calwell, Belfast; Dr. D. J. Brakenridge, Edinburgh; Mr. A. A. Hayes, Clan William; Mr. W. Vernon, Stoke-on-Trent; M.S.; Mr. E. J. E. Risk, Gravesend; Dr. F. J. Allan, London; Mr. J. C. Renton, Glasgow; Dr. Rentoul, Liverpool; Dr. Urquhart, Perth; Mr. J. Freeland, Antigua; Dr. S. M. Copeman, London; Mr. C. F. Francis, London; Professor J. Attfield, London; Mr. C. Baber, Brighton; J. R. Yourdi, M.B., Queenstown; Dr. W. V. M. Koch, Port of Spain, Trinidad; Mr. W. H. Eagle, London; Mr. C. K. Cooke, London; The Liquor Carnis Company, London; Dr. R. Stockman, Edinburgh; Anti-Junkerism; Inquirer; Dr. W. V. Lush, Weymouth; Mr. Y. J. Pentland, Edinburgh; Observer; Correspondent; Mr. T. M. Watt, Hovingham; Mr. G. Balfour, Wimbledon; Dr. C. Steele, Clifton; X. Y. Z.; Rex; Dr. T. F. Pearce, Southsea; Brigade-Surgeon Manby, Wolverhampton; Dr. Ward Cousins, Southsea; Dr. C. Norman, Dublin; Dr. Mickle, London; Mr. J. S. Wilkinson, Wellington; Mr. W. R. H. Stewart, London; Diogenes; Messrs. Sampson, Low and Co., London; Volunteer Surgeon; Mr. C. W. Hunt, Manchester; Mrs. Faris, Monaghan; F. S. Arnold, M.B., Ipswich; Mr. H. A. Wanklyn, London; Dr. P. A. Young, Edinburgh; Dr. J. Davies, Brighton; Dr. R. Saundby, Birmingham; Dr. Herringham, London; Dr. J. G. Carageorgiades, Limassol, Cyprus; The Secretary of the Zoological Society of London; Mr. W. E. Edwards, Leominster; Dr. S. Martin, London; Dr. Robinson, Stanhope; The President of the British Laryngological and Rhinological Association, London; Mr. E. H. Hankin, Cambridge; Dr. M. Davis, London; Dr. G. A. Gibson, Edinburgh; Dr. A. Westland, London; Dr. G. Thin, London; Mr. C. F. Partridge, London; Dr. W. E. B. Davis, Birmingham, Alabama; Dr. Hofmeister, Carlsbad; Dr. E. M. Skerritt, Clifton; Mr. F. Kerslake, London; Mr. T. Dutton, London; Mr. H. T. Roxby, London; Mr. J. F. Pink, London; Dr. H. H. Phillips, Reading; Mr. J. M. Lamb, London; Dr. G. F. Crooke, Birmingham; Our Liverpool Correspondent; Mr. W. Philson, Cheltenham; Mr. C. J. Acton, Chesterfield; Mr. J. H. N. Nevill, Stoke Gabriel; Messrs. W. A. Smith and Co., Liverpool; A Doctor's Wife; Mr. M. Smale, London; Mr. W. E. Porter, Lindfield; Dr. R. Prichard, Cardiff; Dr. Halliburton, London; Dr. W. Marcet, London; Dr. L. Brunton, London; Mr. A. Baiss, London; Mr. William Marriott, London; Our Newcastle Correspondent; Dr. D. M. Wicks, West Hartford, U.S.A.; Miss Frances Power Cobbe, Dolgelly; Dr. R. S. Smith, Clifton; Dr. R. R. Whishaw, Croydon; Mr. J. West, London; Mr. J. J. Hicks, London; Dr. P. F. Mannix, Uttoxeter; Dr. D. Thomas, London; Dr. C. Warden, Birmingham; Professor V. Horsley, London; Mr. T. P. Carter, Sydney; Q.; Dr. C. E. Purslow, Birmingham; Mr. J. McMillan, Glasgow; Dr. R. McKilvie, Newton Stewart; Dr. G. V. Poore, London; Dr. Underhill, Tipton; Dr. Coombe, Southminster; Dr. T. O. Wood, London; Mr. J. Haysman, London; Dr. Edwardes, London; Mr. W. Rathbone, M.P., London; Dr. C. J. Lewis, Stirling; The Writer of the Article; The Secretary of St. Mark's Hospital, London; Mr. C. J. Radley, London; Dr. A. E. Aust Lawrence, Clifton; Dr. W. Brown, Fishponds; Dr. J. Chestnutt, Howdon; Quartermaster J. T. M. F. Shears, London; Dr. Henry, London; Mr. G. G. Glanville, Southsea; Dr. F. E. Adams, Wellingborough; Medical Staff; Messrs. C. Griffin and Co., London; Mr. M. Carteighe, London; Dr. William Thorburn, Manchester; Mr. R. Hagyard, Hull; Mr. T. M. Watt, Hovingham; Dr. R. Barnes, London; Dr. E. Pick, Berlin; Dr. Balding, Royston; Mr. A. Evershed, Hampstead; Mr. J. J. Tweed, London; Mr. F. J. Power, Cork; Mr. W. J. Morris, Portmadoc; Dr. E. Stephens, Ilminster; Mr. Taylor, Ticehurst; Dr. G. Cordwent, Milverton; Dr. Ward Cousins, Southsea; Our Oxford Correspondent; Dr. E. Haughton, London; Mr. W. C. Trevor, Northallerton; Dr. Louis Parkes, London; etc.

BOOKS, ETC., RECEIVED.

Formulaire Aide-Mémoire de la Faculté de Médecine et des Médecines des Hôpitaux de Paris. Par le Dr. Fernand Roux. Paris: G. Steinheil. 1890. Prix, 3 francs.

Blackie's Modern Cyclopædia of Universal Information. Edited by Charles Annandale, M.A., LL.D. Vol. VI. London: Blackie and Son. 1890.

A Treatise on Rheumatism and Rheumatic Arthritis. By Archibald E. Garrod, M.A., M.D. London: Charles Griffin and Co. 1890.

The Philosophy of Clothing. By W. Mattieu Williams, F.R.A.S. London: Thomas Laurie. 1890.

A Descriptive Catalogue of the Pathological Museum of the London Hospital. London: Taylor and Francis.

The "J. E. M." Guide to Davos Platz. By J. E. Muddock, F.R.G.S.; with analytical notes on the Food, Air, Water, and Climate, by Philip Holland. Fourth Edition. London: Simpkin, Marshall and Co. 1890.

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THE CROONIAN LECTURES ON CEREBRAL LOCALISATION.

Delivered before the Royal College of Physicians of London.

By DAVID FERRIER, M.D., LL.D., F.R.S.,

Physician to King's College Hospital, and to the National Hospital for the Paralysed and the Epileptic, Queen Square.

Lecture III.

Schäfer's further investigations, in conjunction with Sanger-Brown, led him to agree with Munk that complete unilateral extirpation of the occipital lobe alone caused persistent hemiopia, while bilateral extirpation caused total and enduring blindness. Admitting, however, that the lesions described by them were the cause of hemiopia or total blindness, it does not follow that these results are due to removal of the occipital lobe as such. Schäfer himself [1] admits that the visual area embraces not only the occipital lobe, but, perhaps also part, or the whole, of the angular gyrus. The relations of the different portions of the visual centres to the retinæ, founded on the phenomena of electrical irritation, as well as other facts, necessitate that the angular gyrus (its posterior limb at least, according to Schäfer) should be included in the visual area; more, therefore, than the occipital lobe proper. If total blindness, therefore, is caused by removal of the occipital lobes in the line of the parieto-occipital fissure, it is necessary to suppose that by this operation the medullary connections of the whole of the visual area become implicated. Schäfer [2] has himself suggested that fibres connected with the cortex of the adjoining parts of the brain, and especially of the angular gyrus, may be cut off along with the occipital lobe, and that this is the real explanation is supported by many considerations.[3]

Lesions of the occipito-temporal region alone are competent to produce hemiopia or complete blindness, according as the lesion is unilateral or bilateral, altogether apart from affection of the angular gyrus, or any other portion of the occipital lobe. I have myself recorded instances [4] in which lesions of the occipito-temporal region were followed by temporary hemiopia, and probably similar facts have led Luciani to extend the visual area into the temporal lobe. But, not only may temporary hemiopia occur, but the hemiopia so produced may be persistent.

Here is an illustration [5] of the brain in one of Brown and Schäfer's experiments. The operation consisted in removal of the right temporal lobe. Posteriorly, the lesion extended partly over the under surface of the occipital lobe. With the exception of this lesion of the occipital lobe, all the rest of the visual sphere was intact, yet this animal was completely hemiopic. The inference is that the lesion severed the whole of the optic radiations, for, otherwise, it should, on Schäfer's hypothesis, have caused blindness only of the lower portions of the retinæ.

It appears, therefore, that the incision for the removal of the occipital lobe carried along the line of the external parieto-occipital fissure is calculated to sever the whole of the optic radiations of the occipito-angular region, which emerge from the primary optic nuclei about this level. (See Fig. 12). In support of this I quote the following experiment: I exposed the lower extremity of the left external parieto-occipital fissure, and, inserting a director at this spot between the lower surface of the occipital lobe and and the tentorium, passed a stylet bent at an oblique angle along the groove in such a manner as to make a transverse incision a few millimètres in depth across the occipito-temporal region. The result of this was right hemiopia, which, however, speedily passed off, so that it was no longer clearly perceptible on the third day. A fortnight afterwards the right occipito-temporal region was similarly operated upon, the incision this time being made just anterior to the lower extremity of the parieto-occipital fissure. The animal died a month after the first operation. During the whole time it survived it remained absolutely hemiopic towards the left in every part of the

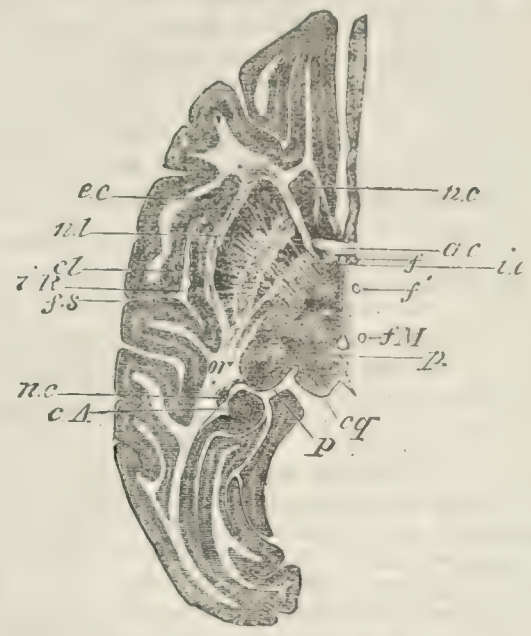


Fig. 12.—Horizontal section of left hemisphere of monkey—on a level with the anterior commissure (nat. size); *a.c.*, anterior commissure; *c.A.*, cornu Ammonis; *cl.*, claustrum; *c.q.*, corpora quadrigemina; *e.c.*, external capsule; *i.c.*, internal capsule; *i.R.*, island of Reil; *f.*, anterior or descending (Meynert) pillar of fornix; *f'.*, ascending fibres or Vicq d'Azyr's bundle; *f.M.*, Meynert's fasciculus; *f.S.*, fissure of Sylvius; *n.c.*, nucleus caudatus; *n.l.*, nucleus lenticularis; *o.r.*, optic radiations (Gratiolet); *P.*, pulvinar; *p.*, posterior commissure.

visual field. It was found after death (see Fig. 13) that the incision on the left side was shallow and not continuous, being interrupted in the region of the lingual lobule. On the right side the incision extended across the whole occipito-temporal region, and penetrated several millimètres into the substance of the brain, dividing the medullary fibres emerging from the region of the primary optic centres.

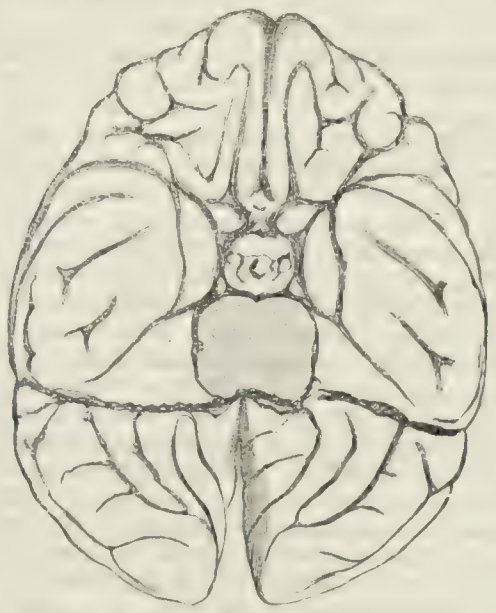


Fig. 13.

Brown and Thompson [6] believe that removal of the occipital lobe on one side causes hemiopia to the opposite side, altogether apart from lesion of the angular gyrus, which they entirely exclude from the visual sphere. They give particulars of a monkey, in which, after removal of the left occipital lobe, right hemiopia resulted, together with right hemianæsthesia, which was still observable on the twenty-sixth day after the operation. One hundred days after the first operation the right occipital lobe was similarly removed. This was followed by complete blindness, but they state that after three weeks the animal recovered vision to some extent towards the left. They assume—but furnish no evidence of the fact—that probably a few occipital fibres had escaped injury during the second operation. The animal died of phthisis

[1] Electrical Excitation of the Visual Area, *Brain*, April, 1888.

[2] *Brain*, vol. x, p. 372.

[3] This, however, does not fit conveniently into Schäfer's scheme, which is as follows:—1. The whole of the visual area of one hemisphere is connected with the corresponding lateral half of both retinæ. 2. The upper zone of the visual area of one hemisphere is connected with the upper half of both retinæ. 3. The lower zone of the visual area is connected with the lower part of the corresponding lateral half of both retinæ. 4. The intermediate zone of the visual area is connected with the middle part of the corresponding lateral half of both retinæ (*l. c. cit.*, p. 5). The reactions would, however, be fully explained on the assumption that the angular gyrus has relations with the whole of the opposite eye.

[4] *Phil. Trans.*, vol. ii, 1884, Experiments XXVII and XXVIII.

[5] Figs. 4a, 4b, *Phil. Trans.*, 1888, B. 30, plate 49.

[6] *Op. cit.*

on the 231st day. On examination it was found that the entire occipital lobe behind the angular gyrus upon each side had been removed, leaving a clean-cut surface. For some distance around this surface the pia mater was firmly adherent to the convolutions beneath, but it was stated not to have been thickened. It is certain, however, that their first lesion must have extended beyond the occipital lobe, owing to the hemianæsthesia, which does not occur when the lesions are restricted to the occipital lobe itself; and that the removal of the occipital lobes, as such, which they appear to have found equally complete on both sides, did not cause total loss of vision, is shown by the fact, which they themselves record, that the animal was still able to see, even if imperfectly, towards one side. In a second experiment they found that destruction of the left angular gyrus caused no result beyond hemianæsthesia on the right side, together with some paralysis of the right arm (!). On the ninetieth day a second operation was performed, consisting in excision of the whole of the right occipital lobe. This was followed by left hemiopia, which still persisted when the paper was written, seventeen months after the operation. These are the only experiments on monkeys which these authors have recorded. Lannegrace,[7] on the other hand, who has performed numerous experiments on the occipital lobes and angular gyri of monkeys, states, in accordance with my own and Yeo's results, that destruction of the occipital lobe causes no appreciable impairment of vision, whereas destruction of the angular gyrus produces crossed amblyopia of a temporary character. He reports two cases of successive lesion of the angular gyri. In the one the first lesion induced crossed amblyopia, which lasted four days. The second lesion, however, produced no appreciable alteration. In the other the first lesion again caused crossed amblyopia, which disappeared in two days, while the second gave rise to lasting amblyopia. These results, which are similar to those obtained by Yeo and myself, depend, no doubt, on the degree of completeness of extirpation of the gyri.

I have already mentioned that my earlier experiments, as well as those made by Professor Yeo, show that unilateral destructive lesion of this gyrus caused temporary blindness of the opposite eye, and that bilateral destruction caused for the time complete blindness in both eyes. Though these results have been much questioned, I must insist on their accuracy. I have corroborated the occurrence of apparently complete blindness of the opposite eye, on destruction of the left angular gyrus in an animal which I lately made the subject of experiment. In this animal I had previously enucleated the left eye, so as to exclude all complications from this side. After removal of the left angular gyrus, however, the animal, though otherwise well and in complete possession of all its senses and motor powers, was evidently absolutely blind. It responded to no test of vision; would not budge from the spot, but when urged to move sprawled blindly and helplessly. This condition lasted for several hours, during which it was under observation. Next day there were indications of vision, but the animal had become so prostrated, the weather being intensely cold, that it died before any further exact observations were possible. That lesions of the angular gyrus may cause implication of the optic radiations is possible, but this result is neither necessary, nor would it account for complete loss of vision in the opposite eye. The bilateral relations of the angular gyrus account for the transient nature of the amblyopia which results from unilateral extirpation, and, as in few of my experiments was the destruction of this gyrus complete on one side or the other, it occasionally happened that removal of the other gyrus some time subsequently did not seem to impair vision either on one side or the other. When, however, the angular gyri are completely destroyed on both sides, the animal, though for the first three or four days absolutely blind, does not remain so permanently, but it never regains normal vision. This also has been confirmed by the researches of Lannegrace. Apart from the affection of vision, destruction of the angular gyrus causes no other symptoms, either motor or sensory; there is no ptosis or paralysis of the ocular muscles, and the sensibility of the conjunctiva is absolutely unimpaired.

These results, confirmed by the researches of Horsley and Schäfer, contradict the statement of Munk that the angular gyrus is the sensory sphere of the eyeball; and it will be found, on examination of Munk's own data, that the phenomena on which he relies as indicating loss of the sensibility of the eye are in reality due to loss of vision. Thus he says that after destruction of the left angular gyrus approximation of the finger to the left eye invariably caused winking, whereas the same threat against the right eye caused only winking when the eyelids were actually touched. This appears to be a proof of the sensibility of the eye, and the non-perception of threatened danger at a distance. The absence of winking at threatened danger he admits to be characteristic also of blindness, but he argues that, inasmuch as the animal could not be blind, presumably because the occipital lobe was intact, therefore, the non-occurrence of winking could only be due to the inability of the cortex to act on the sphincter palpebrarum! Again, he says, that when the angular gyrus has been destroyed on one side, and the eye on that side closed, the animal often fails to seize things offered it, or thrown down before it, especially when the objects are small. This I consider a clear indication of amblyopia. And he also states that after bilateral extirpation of the angular gyrus of monkeys, "after incomplete restitution"—a phrase, however, which is not very intelligible—are unable like normal monkeys to take things offered them delicately with the fingers, but make grabs at them with the whole hand. This is only a further illustration of the same imperfection of vision which I have described—namely, want of precision in prehension, and a continual tendency to place the hand over or short of the object aimed at, instead of on it at once.

Schäfer also[8] records the symptoms in a monkey in which he destroyed both angular gyri. For the first few days the animal appeared totally blind, but vision gradually returned, and before long was quite good for distant objects. The animal could apparently see small objects, such as a raisin, at a distance, but on running up to it seemed to have some difficulty in finding it. Schäfer is of opinion that this latter fact is due to absence of vision in the antero-superior and lateral portions of the retinæ. I have lately carefully investigated the condition of vision in a monkey in which I had completely destroyed both angular gyri. There was no ptosis, the ocular movements were normal, the conjunctival reflexes unimpaired, sensibility was intact everywhere, and the motor powers were perfect, but, for four days at least, the animal was evidently absolutely blind. When urged to move it ran against every obstacle in its path, paid no attention to threats, could not find its food, except by groping, and appeared insensible to light flashed in its eyes. On the fifth day there were evidences of returning vision. It did not now knock its head against obstacles; would not walk over the edge of the table; showed signs of perception of light flashed in its eyes, and occasionally seemed to wince when threatened. Vision gradually improved, but continued very imperfect, especially for minute objects, which it rarely, if ever, seized quite precisely; groping at them with the whole hand, and reaching short, or over, or to the side. It appeared to see objects held above, below, and to either side much better than those held in front of its eyes. Six weeks after the operation my colleague, Professor McHardy, examined the animal, which was very docile, with me, testing every portion of the visual field by pieces of apple suspended by a delicate thread. It was concluded that vision was better in every part of the periphery than in the centre. Objects held directly before the eyes and at a little distance were apparently not clearly seen, and never laid hold of with precision. The condition remained unchanged for three months after the operation, similar tests being from time to time applied, and with the same result. I noted also that the animal, when examining any object, always held it at full arm's length from its eyes. The phenomena observable in this animal were such as would be best explained by impairment or loss of central vision; for it is well known that when central vision is lost or impaired in man, objects are better seen at a distance than close at hand, and less distinctly when the eyes are immediately converged on them. This is practically the condition seen in this animal. The loss of central vision would thus account for the fact, noted by Schäfer in his animal, that objects were better seen at a distance than near at hand; and that Munk's animal could never place its fingers precisely on any small object held directly in front of its eyes. There was certainly no indication, but the reverse, that the upper portions of the retinæ were less sensitive than the lateral and lower portions. It appears to me, therefore, that the symptoms resulting from bilateral destruction of the angular gyrus, described by myself, Munk, and Schäfer, are best explained on the supposition that the angular gyri are more particularly related to the area of distinct vision, and, accordingly, with the maculæ luteæ. The facts of disease in man render it necessary to assume that the region of the yellow spot is represented in each hemisphere, though more in that on the

[7] *Op. cit.*

[8] *Brain*, July, 1888, p. 159.

opposite than on the same side, and the probability is that the area of clear vision is represented mainly in the angular gyrus of the opposite hemisphere.

The retinal relations of the visual centres are not capable of being explained by a simple division of the retinal fields into co-related halves projected on the corresponding side of each hemisphere. For unilateral lesion of the angular gyrus produces a temporary blindness or amblyopia of the opposite eye; while bilateral destruction induces an enduring impairment of visual acuity in both eyes.[9] The results of my experiments seem to show that the angular gyrus has relations with both eyes. The crossed action, however, is the only one which is clearly demonstrable in the lower animals, but this does not exclude the possibility of some impairment of vision on the same side, not perceptible by tests applicable to them. It is certain that in man affections of the visual centres occasionally produce crossed amblyopia, and not homonymous hemiopia. Not only is this characteristic of the visual disturbances seen in hysterical hemianæsthesia, the pathology of which is obscure, but it has been noticed also in cases of organic disease. Usually, along with the blindness, or great impairment of vision in the opposite eye, there has been some degree of contraction of the visual field of the eye on the same side. I have myself reported several such cases,[10] and Gowers[11] has also seen similar instances. A well-observed case of this nature has been recorded by Sharkey.[12] *Post-mortem* examination revealed softening and absorption of a considerable area of the opposite hemisphere, including the angular gyrus. The occipital lobe was intact, and in nowise reduced in size as compared with the other.

A distinguishing test between tract and central hemiopia has been suggested by Wilbrand,[13] and advocated by Wernicke and Seguin, which consists in determining whether a pencil of light thrown on the blind side of the retinæ induces contraction of the pupil or not. As the optic tract is the path of the fibres which excite pupillary contraction through the oculo-motor centres, as well as those which excite visual sensations in the cortex, lesion of the optic tract will cause not only hemiopia, but also paralysis of the reflex reaction of the pupils to light; whereas, lesion of the cortical centres will cause hemiopia, but leave intact the pupillary reaction. This test, however, requires great care in its application, as it is difficult to restrict the rays of light entirely to the blind side. In a case recently under my care at King's College Hospital,[14] in which the dividing line passed through the fixation point, and which was carefully investigated in this relation by Professor McHardy and myself, the pupillary reaction was not obtained, as a rule, when the pencil of light was thrown on the right side of the retinæ; whereas it occurred readily when the light was thrown on the left half of each retina. These facts, therefore, would corroborate the hypothesis that this was a case of tract hemiopia.

I have recently verified the hemiopic pupillary reaction in two monkeys in which I accidentally severed the optic tract in establishing lesions of the temporal lobe. The result in both cases was absolute hemiopia to the opposite side. In both cases the left optic tract was divided, and in both, along with right hemiopia, there was absence of reaction of the pupil when a fine pencil of electric light was thrown on the left half of each retina; whereas active reaction took place when the light was thrown on the right half. Both in the monkey, and in several cases of hemiopia in man depending on lesions of the hemisphere, I have found that the pupillary reaction is equally well marked whichever side of the retina is illuminated. There can be no question that in man and monkeys there is decussation of the optic tracts in the chiasma. Michel, in his comparatively recent monograph,[15] still maintains the contrary, on the basis of microscopical investigation; but his results have been attributed by Singer and Münzer[16] to imperfect methods of examination.

In reference to the pathology of crossed amblyopia from lesion of the angular gyrus in the monkey, as well as of similar cases of disease in man, I may here allude to the hypothesis advanced by Lannegrace. Lannegrace regards the eyeball as innervated by two sets of fibres—sensorial, or optical proper, and sensory, on which the proper nutrition of the eyeball depends. The sensorial, or optical, decussate in the chiasma, and are distributed to the occipital lobe; while the sensory decussate in the pons, and, applying themselves to the posterior fibres of the internal capsule, are distributed mainly to the angular gyrus. Lesions of the sensory fibres produce amblyopia and sensory disturbances in the eyeball. A similar result follows lesion of the angular gyrus, and is essentially dependent upon changes which are induced in the nutrition of the eye. This hypothesis would require that in all cases of amblyopia from cerebral lesion there should be impairment of sensation in the eyeball. But this is certainly not the case, for, though in hysterical amblyopia there is affection of common sensation as well as of vision, it is not so in the amblyopia following destruction of the angular gyrus. Though affections of the fifth nerve, which cause loss or impairment of sensation of the eyeball, frequently also lead to trophic disorders of the eye, yet this is not necessarily so; and, even when the eyeball is absolutely anæsthetic, provided that no trophic disturbances have occurred, vision is not in the least impaired. In proof of this I would refer to cases (Cases I and III) reported by Hutchinson in the *Ophthalmic Hospital Reports*, vol. iv, 1863-65. Nor does complete anæsthesia of the eyeball induced by cocaine impair the visual acuteness of the eye.

These appear to me to be fatal objections to the hypothesis advanced by Lannegrace, and I contend that the only hypothesis which seems to harmonise with all the facts is, that the angular gyri are more particularly the centres for clear vision, each mainly for the eye of the opposite side. Whether the other portions of the retinæ, upper, lower, outer, and inner, are specially represented in corresponding regions of the occipital lobe, according to the hypotheses of Munk and Schäfer, cannot be said to have as yet been established; for, even after the most extensive destruction of the occipital lobes, no portions of the retinæ appear to be absolutely blind; hence, even if we admit that the effects of irritation probably indicate a special relation of the different portions of the visual field to certain portions of the occipital cortex, the relation, so far as we may judge by the facts of disease or experimental lesion, does not seem to be an exclusive one.

It is true that in man we sometimes find, besides general hemiopic deficiency, partial, quadrant or sector-like, defects in the upper or lower halves of the visual field. These appear, however, to be merely incomplete hemiopia, and occasionally, as in the case which I show you, an islet of subnormal visual acuity may be seen in the defective half. The pathology of these sector-like defects is a matter of conjecture. They have not been conclusively brought in relation with lesions of any particular portion of the cortex, and the probability is that they are dependent rather upon partial lesions of the optic radiations than of the cortical centres themselves. This was without doubt the pathology in the case which I have alluded to, for the defect occurred in a patient who had a sudden attack of hemiplegia accompanied by hemianæsthesia and some affection of speech.

It is doubtful whether there are on record any cases of strictly cortical lesions of the occipital lobe proper, accompanied by hemiopia, apart from direct or indirect implication of the optic radiations. In most of the cases of hemiopia which have been examined after death, in which the optic tracts, optic thalami, or corpora geniculata have not been obviously diseased, the lesions have been found in the medullary fibres of the posterior region, vaguely or inaccurately called the occipital lobe; or, if the cortex has been mainly affected, the lesions have been multiple and diffuse, and not confined to the occipital region. And in addition to hemiopia, there have been hemiplegia, hemianæsthesia, aphasia, or other symptoms of implication of the cerebral tracts and centres beyond those of the occipital region.

Under my direction, my friend and pupil, Dr. Ewens, has collected and analysed the majority, if not all, of the recorded cases of hemiopia (with necropsies) depending on cerebral lesions which have not obviously been of such a character as to cause indirect and indefinite implication of other regions. Of 41 cases of hemi-

[9] This accords with Gowers's hypothesis that "on the outer surface, in front of the occipital lobe, there is a higher visual centre in which the half fields are combined, and the whole opposite field is represented." (*Diseases of Nervous System*, vol. ii, p. 19.)

[10] Cerebral Amblyopia and Hemiopia, *Brain*, vol. iii, p. 456.

[11] *Diseases of the Nervous System*, p. 19.

[12] *Medico-Chirurgical Transactions*, vol. lxvii, 1884.

[13] *Op. cit.*

[14] The patient was a man, aged 39. Two years before he had contracted syphilis, and at the time of his admission was suffering from a large tertiary ulcer on the soft palate. He had twitching of the right side of the face, together with weakness and numbness of the left side. The left hand grasp was weak, and there was loss of dorsal flexion of the left foot. The tongue deviated to the right on protrusion. He was found to be absolutely hemiopic towards the left side, and a careful perimetric examination by Professor McHardy demonstrated that the dividing line passed exactly through the fixation point.

[15] *Über Sehnerven-Degeneration und Kreuzung*, 1887.

[16] *Beiträge zur Kenntniss Sehnervenkreuzung*, 1889.

opia, 15 were from disease of the occipito-angular region, 2 were cases of disease of the angular and supramarginal gyri only, 15 were described as being from disease of the occipital lobe alone. Of these 15, there were only 2 (Hun's case[17] and Doyne's case[18]) in which there was not either a tumour, cyst, abscess, or softening of the medullary substance of the occipital region, or another lesion affecting the optic thalamus; and in 1 of these cases (Doyne's), the position of the lesion was not accurately described.

In the other cases the lesions were of a diffuse character, 6 being from lesion of the occipito-temporal region, and 3 from lesion of the occipital, temporal, and parietal lobes simultaneously, the angular gyrus being implicated in all.

From the comparative frequency with which hemiopia has been found associated with lesions of the cuneus and its neighbourhood Seguin[19] and Nothnagel[20] are of opinion that this portion of the occipital lobe has a special relation to visual perception; while Wilbrand believes that the visual centre is more especially in the apex of the occipital lobe. These hypotheses are not supported by experimental research. The probability is that any apparent relation between lesions of the cuneus and the occurrence of hemiopia, is due to the special proclivity of this region to affection by morbid vascular conditions, and to coincident implication of the optic radiations of the occipito-temporal region. In Seguin's own case,[21] on which he relies in support of his hypothesis, not only was the cuneus implicated, but also the fourth and fifth temporal gyri and a part of the gyrus hippocampi.[22] Cases have also been recorded in which, not only unilateral, but bilateral lesions have been found in the occipital lobes without any affection of vision whatever.

Irritative lesions of the angular gyrus occasionally give rise to optical illusions, or flashes of light, followed by temporary amblyopia, as recorded by Hughes Bennett[23]; while destructive lesions of the angular gyrus, more particularly in the left hemisphere, are generally associated with the special form of sensory aphasia termed "word-blindness" (Kussmaul). Word-blindness is not necessarily accompanied by any noteworthy affection of visual sensation, though in some cases, where the lesion of the occipito-angular region is more extensive, there may be a greater or less degree of right hemiopia.

On the other hand, right hemiopia, pure and simple, is not necessarily associated with any defects in visual ideation. This would be an argument against its cortical nature. The fact that visual ideation, more particularly in reference to the association of written symbols with their meanings, is apt to suffer more readily than simple perception, appears to me to illustrate the laws of the evolution and dissolution of the nerve centres, which have been so ably expounded by Hughlings Jackson in his Croonian Lectures delivered here a few years ago (1884). As evolution is from the most simple and most stable up to the most complex and least stable, so destructive processes annihilate first of all the higher, and last of all the lower functional manifestations. The functions of the visual centres in respect to mere visual sensation, or simple presentation, are much more stably organised than those which imply visual ideation or re-presentation, and in particular such highly specialised and complex processes as are involved in the association between visual symbols and things signified. Hence, a lesion of the area of clearest vision may paralyse visual re-presentation, while the simpler function of visual presentation may not be appreciably impaired. In order that this also should be entirely abolished it is necessary that every trace of the given centre should be extirpated. In other words, re-presentative blindness will occur sooner than presentative blindness, and the former more readily in its most specialised modes of manifestation.

In regard to the visual centres of the lower vertebrates, I cannot quote many observations or experiments of my own. The visual centres of dogs have been the chief subject of physiological investigation. Hitzig[24] first noted the occurrence of blindness in the opposite eye from destruction of the occipital region in dogs; and in 1881 Goltz described an affection of vision resulting from destructive lesions of the opposite cerebral hemisphere, which, however, he did not specially associate with lesions of the occipital lobe, though he has more recently admitted this relationship. The affection in question was, in his opinion, not complete blindness, but an inability on the part of the animal to understand or interpret what it saw. To this condition he gave the name *Hirnsehschwäche*, or cerebral amblyopia. It was entirely crossed, and affected only the eye on the side opposite the lesion. Munk, in his first experiments, arrived at essentially the same conclusion; namely, that the affection of vision resulting from lesion at the point A., Fig. 14,

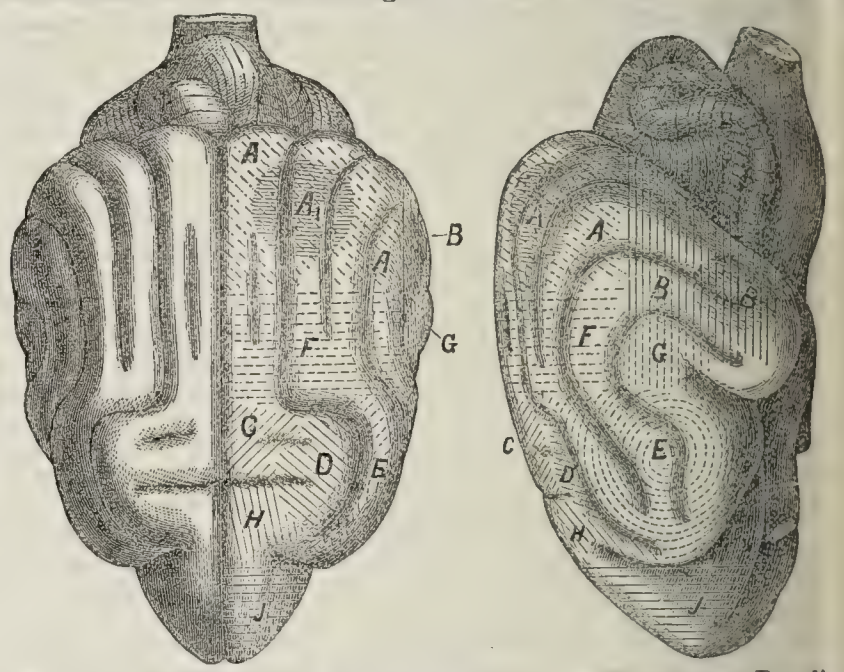


Fig. 14.—Cortical centres of the dog, after Munk. *A*, Visual area; *B*, auditory area; *C* to *J*, tactile sensory area (*Fühlsphäre*); *D*, fore-limb region; *C*, hind-limb region; *E*, head region; *F*, eye region; *G*, ear region; *H*, neck region; *J*, trunk region.

occurred only in the opposite eye. Dalton[25] also found that the opposite eye was rendered blind, and to all appearance permanently so, when the cortex was destroyed in the region of the posterior division of the second external convolution, which he terms the angular convolution. Luciani and Tamburini, on the other hand, found that destruction of the second external convolution, more particularly of its median or parietal portion, caused blindness of the opposite eye, and also some degree of amblyopia of the eye on the same side. The further experiments of Munk, however, as well as those of Loeb[26] and of Goltz,[27] and also the later experiments of Luciani,[28] appeared to show that though in dogs the visual area is mainly in relation with the opposite eye, it is also in relation with the outer quadrant of the eye on the same side. Hence, destruction of the visual centre in the one hemisphere paralyses the inner three-fourths of the opposite retina, and the outer fourth of the retina on the same side. The condition, therefore—at least the enduring one—is that of homonymous hemiopia towards the opposite side: the defect in the eye opposite greatly exceeding that in the eye on the same side. But the facts recorded by Luciani and Tamburini indicate that, for a short time at least, after the destruction of the middle portion of the second external convolution there is blindness in the opposite eye. And Goltz[29] remarks that he does not think that his former conclusions were due to defective observation, but that there was probably some variation in his operative procedure. It is, however, likely that we have here the same relations as exist in monkeys, and that, for the time at least, after complete extirpation of the visual sphere, there is total blindness in the opposite eye. This is confirmed by the experiments of Bechterew, recently published.[30] Bechterew finds that in dogs and cats there

[17] *Amer. Journ. Med. Sci.*, 1887, Case i.
[18] Ophthal. Soc., November 14th, 1889.
[19] *The Journal of Nervous and Mental Diseases*, vol. xiii, January, 1886.
[20] *Neurolog. Centralblatt*, 1887, p. 213.
[21] *Op. cit.*
[22] Since this was written a case has been put on record by Delépine (*Trans. Path. Soc. Lond.*, May 20th, 1890) in which right hemiopia was apparently associated with softening of the left cuneus. In this case, however, there was general arterial degeneration, and there were many circumscribed patches of softening in various parts of the brain. In particular there was a small area which had destroyed the greater part of the middle occipital convolution. This case is, therefore, too complex to allow of exact conclusions as to the connection between the hemiopia and the lesion of the cuneus in particular.
[23] Excessive Sensory Cortical Discharges and their Effects, *Lancet*, March 30th and April 6th, 1889.
[24] *Centralblatt f. med. Wissenschaften*, 1874.
[25] Centres of Vision in the Cerebral Hemispheres, *Med. Rec.*, 1881.
[26] *Pflüger's Archiv*, 1881.
[27] *Ibid.*, p. 459.
[28] Sensorial Localisations in the Cortex Cerebri, *Brain*, vol. 7, 1885, p. 145.
[29] *Op. cit.*, p. 48.
[30] Abstract in *Neurolog. Centralblatt*, April, 1890.

are two regions in the cortex related to vision; the one in the occipito-parietal region, in relation with the corresponding halves of both retinæ; the other, more especially in the parietal region, in relation with the opposite eye alone. Lesion of the former causes homonymous hemiopia; lesion of the latter, generally, possible only in association with the former, causes, along with hemiopia, amblyopia of the opposite eye by paralysing the centre of clear vision. This combined affection usually after a time gives place to homonymous hemiopia; or, on the contrary, the hemiopia disappears and the crossed amblyopia remains. Bechterew's conclusions may serve to explain, among others, the results arrived at by Gilman-Thompson and Sanger-Brown,[31] which appear to be entirely at variance with those of Munk, Goltz, and most other physiologists. For they find that lesions, of sufficient size and depth, in the posterior part of the occipital region in cats and dogs, invariably cause blindness of the opposite eye, with no impairment of vision in the eye of the same side. These authors, however, seem to think that the extent of the visual sphere is a matter more of cubical capacity than accurate anatomical localisation; for they say that in order that the blindness should be permanent, between 2.5 and 3 cubic centimètres of brain tissue should be removed in cats; and between 4.5 and 6 cubic centimètres in dogs. To render the blindness permanent, the incision must be at least 0.5 centimètre deep, and 2 centimètres in diameter, in cats; and 1 centimètre deep, and 3 centimètres in diametre, in dogs; and it must involve at least two convolutions. Smaller lesions produce complete blindness of the opposite eye, lasting from a day or two to six weeks. They conclude from their experiments that in cats and dogs there is complete decussation of the optic nerves in the chiasma. This is, however, opposed by the researches of von Gudden,[32] which show that in dogs and cats there is partial decussation of the optic tracts; and Nicati[33] found, experimentally, that division of the chiasma in the antero-posterior, or sagittal diameter, did not cause complete loss of vision in either eye. The recent researches of Singer and Münzer, previously alluded to, indicate that there is only partial decussation in the chiasma of the cat, dog, and also in the rabbit.

The exact limits of the visual sphere in dogs are still the subject of some differences of opinion, but all the experiments agree in including in this area the posterior half of the second external convolution. This is the convolution which in its electrical reactions corresponds with the angular gyrus and occipital lobe in monkeys. The visual area, as defined by Munk, is represented in the accompanying figure (Fig. 15). Point A, situated chiefly in the posterior division of the second external convolution, he regards as the centre of clear vision (macula lutea) of the opposite eye. The mesial portion of the visual sphere adjoining the falx he regards as the centre for the inner half, the anterior portion for the upper half and the posterior portion for the lower half of the opposite retina. The lateral portion he regards as the centre for the outer quadrant of the eye on the same side. Destruction of each portion he states induces blindness in the respective region of the eye on the opposite or same side accordingly, and it is only by abnormal fixation of the eyes, or by practice, that the animal is able to overcome the defects so induced.

Munk describes, as the effects of extirpation of a circular area of the cortex in region A, measuring about 15 millimètres in diameter and 2 millimètres in thickness, a condition of vision, or visual perception, similar to that already defined by Goltz. The animal is not blind, inasmuch as it is able to avoid obstacles, but it appears to have lost all visual ideation. To this affection he gives the name *Seelenblindheit* or "psychical blindness," in contradistinction to *Rindenblindheit* or "cortical blindness," which implies total loss of vision presentative, as well as re-presentative. In explanation of this condition he propounds what appears to me a somewhat crude hypothesis, viz., that extirpation of the region in question has removed all the visual pictures which are stored up in and around the spot, and that it is only by a process of education that the animal again acquires a new stock of pictures which are deposited in the undestroyed portion of the visual sphere. Some pictures, however, apparently less fragile than the rest, may escape the general destruction occasioned by this iconoclastic lesion. In one case it is the picture of the dish out of which the animal has been accustomed to drink; in another it is the sign to "give the paw," which the animal has been accustomed to obey.

[31] *Researches of the Loomis Laboratory*, 1890.

[32] *Archives f. Ophthalmologie*, 1874, Band 20.

[33] *Archives de Physiologie*, 2nd Series, Tome 5, 1878.

Goltz has criticised this hypothesis in the following amusing terms:—

"A considerable portion of the cortex of the occipital lobe is described as the visual area by Munk. By far the larger portion of this area, however, is, according to him, pure luxus. The memorial pictures (*Erinnerungsbilder*) of the visual perceptions are huddled together like sheep in a storm, in a narrow spot which occupies only about two-sevenths of the whole visual area. When this small spot, which corresponds to the macula lutea of the human retina, is destroyed on both sides the animal is at first blind, and only gradually learns to see, like a puppy, with the aid of the rest of its visual sphere. Five-sevenths of the visual sphere—a large portion of the cortex—appears retained in order that a dog which falls into the hands of the physiologist should again learn to see, when its accumulated visual pictures are cut out. All dogs which escape this fate—and these, since the creation of the dog, must be very many—carry during their life five-sevenths of their visual sphere as an uncultivated fallow field. A wonderful thing in hypotheses!"[34]

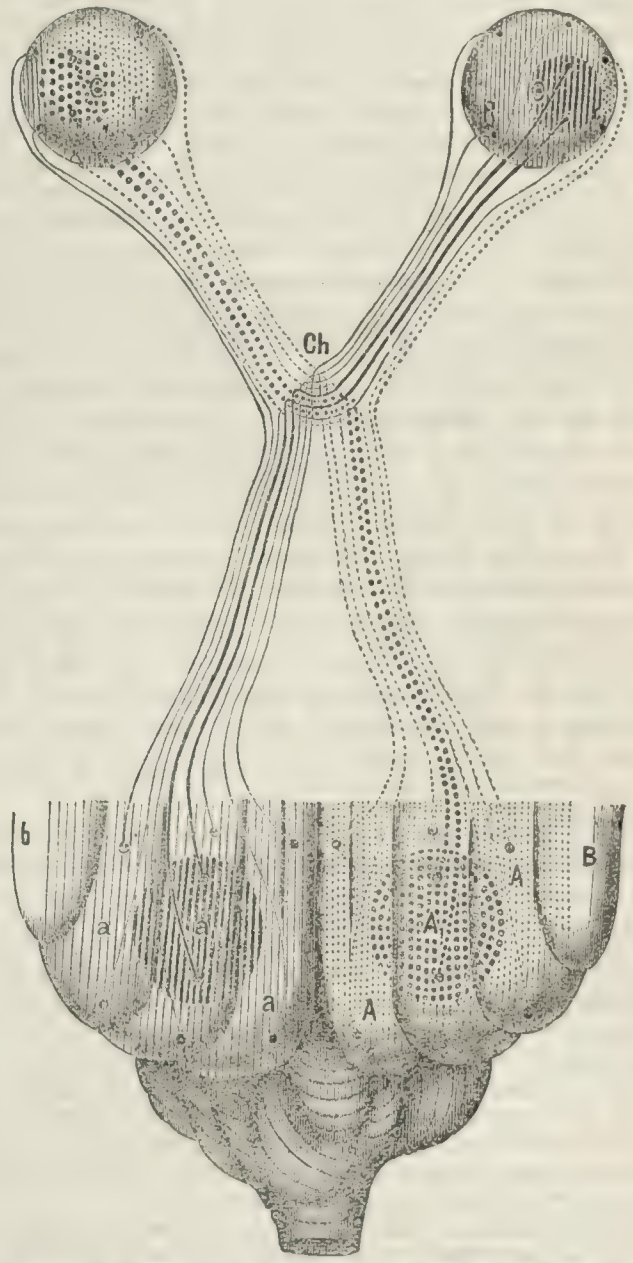


Fig. 15.—Relations of the eyes to the visual area in the dog (after Munk).

Even if it were the case that the different portions of the retina are represented in the indicated regions of the visual area, it is improbable that these could be determined with any degree of certainty except by exact perimetric investigation, which is naturally impossible in the lower animals. The difficulties of deciding questions of this kind in the lower animals are illustrated by Munk's account of his experiences with rabbits.[35] "I had at least believed that I could determine with which eye the rabbit saw better, and with which it saw worse. In this, however, I have been mistaken, because it occasionally happened to me that where

[34] *Op. cit.*, p. 175.

[35] *Sitzungsberichte Akad. d. Wissensch. zu Berlin*, vol. xxxi, June 20th, 1889, p. 631.

from tests I had thought I had made out that the greater imperfection of vision existed in the left eye, *post-mortem* examination revealed the fact that the left tract and the right optic nerve were more atrophied than the right tract and the left optic nerve."

Loeb, after a series of carefully devised experiments, concludes that there is no foundation for the views of Munk that particular segments of the retinæ are in special relation to definite regions of the visual area. When defect of vision occurs from lesion of the posterior lobe, it is always of the same hemiopic or hemiamblyopic character, whatever portion of the visual sphere be injured. The lateral portion of this sphere is not in special relation with the outer quadrant of the eye on the same side, nor is any portion more in relation with one part of the opposite retina than another. In particular, central vision is precisely that which is least affected in all cases, whether of unilateral or bilateral lesion of the visual zone. There is never any eccentric or abnormal fixation of the eyeballs when the special regions indicated by Munk are destroyed, such as would necessarily result if the corresponding portions were paralysed, nor is the recovery of vision, after partial lesions of the visual area due to practice, or to the acquisition of new visual experience, inasmuch as recovery takes place when the animal is kept absolutely in the dark, and thus prevented from exercising its visual faculties.

In rabbits the visual centre would, according to the homology of the electrical reactions, occupy the parieto-occipital region of the hemisphere. The exact limits of the visual zone of these animals do not appear to have been accurately determined by any observer, though certain experiments of Moeli[36] point to lesions of the region indicated as causing, at least, temporary blindness of the opposite eye. It has been supposed that in this animal there is complete decussation of the optic tracts in the chiasma, inasmuch as the experiments of Brown-Séquard have shown that sagittal division of the chiasma causes complete loss of vision of both eyes. The total decussation in the chiasma of the rabbit was also supported by the earlier researches of von Gudden, who found that after enucleation of one eyeball the opposite optic tract only became atrophied.[37] But, in his later researches, he concluded that a small fascicle of uncrossed, or direct, fibres exist also in the optic tract of this animal, similar to that seen in higher vertebrates. Singer and Münzer are also of opinion that there is only partial decussation in the chiasma of the rabbit, but the uncrossed tract does not run as a separate bundle, but as fibres more or less diffused throughout the optic tract. In the mouse and guinea-pig, however, the decussation is a complete one. The partial decussation of the optic tracts in the chiasma would favour the opinion that, in the rabbit also, both eyes are more or less in relation with each visual zone; and certain experiments of Munk would seem to favour this notion. The point, however, is one which requires further investigation.

In pigeons, and in birds in general, the region which in its electrical reactions is homologous with the visual centre of the higher animals occupies the parieto-posterior aspect of the hemisphere, where it forms a thin lamina over the corpus striatum. McKendrick[38] found that destruction of this region caused blindness in the opposite eye; whereas removal of the anterior part of the hemisphere had no effect on vision, nor removal of the posterior extremity of the hemisphere. Similar results have been obtained by Jastrowitz[39] and Musehold.[40] Blaschko, however, found that vision did not seem entirely abolished in the opposite eye by destruction of the cortex in the region indicated; and Munk came to the conclusion that though vision at first seems entirely abolished in the opposite eye, yet, after a time, it is regained in the extreme outer or lateral portion of the retina.

It is usually stated that in pigeons a complete decussation of the optic tracts occur in the chiasma, but von Gudden expresses some doubts on this point. Singer and Münzer, however, believe that in the pigeon a total decussation occurs. Munk quotes, in favour of his conclusions, certain observations by Müller to the effect that in the retina of the pigeon there is, besides the usual fovea centralis, another fovea, situated nearer the temporal region of the retina. The outer foveæ would subserve binocular, and the central foveæ monocular vision. These statements have been supported by the ophthalmoscopic investigations of Hirschberg.

[36] *Archives de Physiologie*, 1871-72: Sur les Communications de la Rétine avec l'Encéphale.
[37] *Archiv f. Ophthalmologie*, Bd. 20, 1874.
[38] *Trans. Roy. Soc. of Edinburgh*, January, 1873.
[39] *Archiv f. Psychiatrie*, Bd. vi, 1876.
[40] *Das Sehcentrum bei Tauben*, August, 1878.

It has seemed to me that if any bird can possess binocular vision it should be the owl, whose eyes are placed almost in the same plane. To decide this question I recently completely extirpated the right hemisphere of an owl. The right eye was then securely closed. The owl reacts very readily to visual tests, and is keenly alive to every movement coming within its field of vision. This bird, however, for ten days at least, remained perfectly indifferent to the electric light flashed in its eye, to all kinds of threats, and when urged to move flew blindly against every obstacle in its course. At the end of this time there were indications of vision, which were found, however, to depend on the partial unclosure of the right eye. In order to ascertain if the partial unclosure of the left hemisphere was undamaged, the right the visual centre of the left hemisphere was undamaged, the right eye was completely freed from its closure. This had the effect of restoring the animal's sight, so far as the right eye was concerned, though no indications of vision could be made out in the left eye. The bird was able to pursue and ultimately catch a mouse introduced into its cage, though the mouse frequently escaped for the time by getting to the owl's left. The right eye was then removed. It then speedily became apparent that the animal was not entirely blind, but could see towards the right with the outer portion of its left eye. It noticed and winced at threats made towards the right, came forward and pecked at pieces of meat held in this position, though its aim was not very accurate, and one day pursued about the cage and ultimately, after considerable difficulty, captured a mouse, which it devoured whole. No doubt can therefore be entertained as to the binocular relations of each cerebral hemisphere in the owl. It is stated, however, by Michel, as well as by Singer and Münzer, that there is total decussation of the optic tracts in this bird. If this be correct, it follows that total decussation of the optic tracts is not inconsistent with binocular representation in each cerebral hemisphere.

My own experiments, as well as those of Munk, Horsley, and Schäfer, show that when the lesions are strictly limited to the visual sphere, vision alone is affected or abolished, without any implication of the other forms of sensibility, general or special, and absolutely without any motor paralysis. The contrary results obtained by some authors are without doubt dependent on primary or secondary injury to other sensory or motor tracts or centres. In Goltz's experiments the affections of vision from injury of the occipital regions appear to have been almost invariably associated with other forms of sensory disturbance; but the manner in which he established his lesions has not been sufficiently definite as to exclude implication of the sensory tracts of the internal capsule, or other sensory regions of the cortex. Whether after destruction of the whole visual sphere in the higher animals, man and monkey, any form of reaction to retinal impressions, beyond that of the pupil, may continue—as has been contended for by Goltz in the case of dogs, and by Luciani and Tamburini, and Lannegrace even in the case of monkeys—is not supported by clinical investigation, or by my own experiments, or those of Munk on monkeys. Though the monkey, rendered blind by total extirpation of its visual centres, acquires the power of avoiding obstacles when left amidst its usual surroundings, yet this appears to be due rather to a sharpening of its other faculties, or more attentive appreciation of the impressions made on these by the objects with which it is surrounded, than to visual sensation. The question is, however, one which may well bear further investigation; for, if retinal impressions are co-ordinated with apparently purposive actions in the subordinate centres of the lower vertebrates, such as fishes, reptiles, and birds, there is at least the possibility that similar reactions may be discoverable in the higher animals, even though in a much less degree. It is certain, however, that the visual area of the cortex is not a merely functionally differentiated region capable of replacing, or of being replaced by, other cortical regions, inasmuch as destruction of the visual centres leads to atrophy in the primary optic centres, optic tracts, and optic nerves; and, conversely, destruction of the optic radiations leads to atrophy strictly confined to the regions included within the visual zone. The differentiation of an area exclusively—so far at least as can be judged from clinical and experimental results—would strongly favour the hypothesis that the other sensory faculties are also separately localised in definite cortical regions.

A TELEGRAM from Cairo says a small-pox epidemic has broken out in several villages in Egypt. The Government has granted a sum of £2,000 to the sanitary department for vaccinating purposes.

REPORTS
TO THE
SCIENTIFIC GRANTS COMMITTEE
OF THE
BRITISH MEDICAL ASSOCIATION.

REPORT ON ASSOCIATED EYE MOVEMENTS PRODUCED BY UNILATERAL AND BILATERAL CORTICAL FARADISATION OF THE MONKEY'S BRAIN.

By F. W. MOTT, M.D.,
Lecturer on Physiology, Charing Cross Hospital.

I HAVE already submitted a report of a portion of the work upon ilateral movements, which, with the aid of a grant from the cientific Grants Committee, I have carried out in conjunction ith Professor Schäfer at the physiological laboratory of Uni- ersity College. I am now able to offer an account of further esearches which we have made upon this subject. The experi- ents were for the most part carried out on large animals with ell developed brains, the species of monkey used being Calli- rix, Rhœsus, Bonnet, and Liponda. The animals were in all ases anæsthetised with ether. The results of these experiments ay be considered under four principal headings.

I. *Associated Eye Movements Caused by Unilateral Excitation f the Head and Eye Area of the Cortex of the Frontal Lobe.*— he results of these experiments showed that in monkeys having rge well developed brains the area of the cortex of the frontal be, which, when stimulated, gave rise to eye movements, could divided into three zones: 1. A middle zone, immediately below ie horizontal part of the precentral sulcus, faradisation of which followed by simple lateral deviation to the opposite side. 2. a upper zone immediately above this, which may extend to and clude part of the marginal gyrus. This gives on faradisation ownward inclination usually combined with lateral deviation. A lower zone, immediately below the middle one, and sometimes tending nearly down to the margin of the hemisphere. This gives ward inclination, usually also combined with lateral deviation. nteriorly the lateral zone tends to broaden, indeed all the zones come broader, and the effects more indefinite, as the electrodes e carried forwards into the prefrontal region. Associated head ovements are also observed. but we did not make these the sub- ct of special inquiry. We were most successful in obtain- g this localisation of the head and eye area of the frontal rtex in large Callithrix monkeys, but confirmatory results were tained in a large Rhœsus, and in a well-developed Bonnet onkey, whereas in small Rhœsus and Liponda monkeys, either definite or contradictory results occurred.

The result obtained by unilateral excitation of different parts of e head and eye area after section of the corpus callosum, and ter destruction of the corresponding area in the opposite hemi- here, agree with those of previous observers in showing that on mulation, bilateral movements take place after as before the sion.

II. *Effects of Bilateral Faradisation of the Frontal Cortex.*— ter trying various methods for producing an equal excitation identical points simultaneously, we at last adopted the fol- wing method as being the most satisfactory: We employed two mpletely distinct induction coils and electrodes, the keys being arranged that either side of the brain could be separately mulated or both sides simultaneously. It was first necessary find points on the cortex of the two sides, which gave when parately stimulated exactly the same kind of conjugate move- nts, and by varying the strength of the current and by shifting e secondary coils a movement of as nearly as possible equal tent and rapidity was obtained. When it was judged that the parate excitation resulted in nearly the same movement, after a ort period of rest the two points were simultaneously stimu- ed. The results obtained by this method of bilateral stimula- n of identical points—which, when singly excited, give rise to njugate deviation of the eyes to the opposite side—is invari- ly, if the eyes are not already in the primary position (looking straight forward), to bring them into this position, and to produce fixation of the visual axes upon a distant object. If the two pairs of electrodes are placed on the upper and lower zones of the frontal area—that is to say, on similar points which, when unilaterally stimulated, cause conjugate lateral deviation, combined respectively with more or less downward or upward movement—the effect of simultaneous bilateral excitation is to cause a simple downward or upward inclination of the visual axes, as the case may be, usually with maintenance of parallelism of the axes, sometimes with slight convergence followed by fixation. One of the most remarkable results of bilateral faradisation is the modification which is frequently produced in the results of subsequent unilateral excitation. It was sometimes found that after bilateral faradisation unilateral stimulation was not followed by conjugate deviation to the opposite side, but by visual fixation, as if the lower centres had taken on a habit of action set up by the bilateral excitation.

III. *Bilateral Faradisation of Identical Points in the Occipital Visual Area which when Singly Excited give rise to Lateral Movements Exactly Similar in Character and Rapidity Produced Results in every way Comparable to those Obtained in the Frontal Area.*

IV. *Simultaneous Excitation of a Point in the Frontal Area of the one Hemisphere and a Point in the Occipital Area of the other Hemisphere, Separate Excitation of which Points had been found to give rise to Lateral Movement in Opposite Directions of about Equal Extent and Rapidity.*—The result of this experiment showed that a very weak stimulation of the frontal area sufficed to overpower a strong excitation of the occipital visual area. This result accords with the difference in the period of latency of the frontal and occipital lobes. If it be desired to produce fixation by this method, it is necessary to apply a very strong stimulus to the occipital lobe and a very weak stimulus to the frontal lobe. If this is not done, the frontal centre invariably overpowers the effect produced by stimulation of the occipital.

The above description of our experiments is condensed from a fuller account which will appear shortly in *Brain*. Most of the results were exhibited to the Ophthalmological Society at a meeting on March 26th.

ILLUSTRATIONS OF SOME LESS-KNOWN FORMS OF PERIPHERAL NEURITIS, ESPECIALLY ALCOHOLIC MONOPLEGIA, AND DIABETIC NEURITIS.[1]

By THOMAS BUZZARD, M.D., F.R.C.P.
Physician to the National Hospital for the Paralysed and Epileptic.

As is now widely known, it is in the form of multiple neuritis that the toxic influence of alcohol is very prone to be exerted on the nervous system. Cases of alcoholic paralysis of this kind are not at all uncommon, and occur more frequently in women than in men, and occasionally even in females of good social position.

Let me first very briefly sketch a case of alcoholic polyneuritis, as it most commonly presents itself when seen in consultation.

The patient is lying in bed, unable to stand, able to flex the thighs upon the pelvis fairly well, and possibly also to bend the knees, but with still greater difficulty. The feet are "dropped," that is, they lie flaccidly in a position of over-extension, and the patient is unable, when requested, to dorsal-flex them. The knee-jerks are absent. The muscles of the legs, especially those on the anterior surface below the knee are probably atrophied, and are found to yield no response to induced currents of electricity. The arms are thin and the thenar and hypothenar eminences may be found atrophied. There is more or less "wrist drop," so that the patient presents the appearance of one suffering from lead palsy. The extensor muscles in the forearm, as well as the intrinsic muscles of the hand, may not contract to faradic currents.

On the sensory side we may expect to hear of pains, which are often of lightning character, coming and going in sudden darts, like stabs of a knife or the boring of a gimlet, and quite recalling those which are characteristic of tabes dorsalis. Or they may be described as gnawing, or burning, or pricking. They are usually most pronounced in the lower extremities. It is commonly found that great tenderness of the muscles is complained

[1] Read at a meeting of the East Surrey District of the South-Eastern Branch of the British Medical Association.

of when these are grasped by the hand. The patient herself will sometimes describe a sensation of aching in the muscles, and very commonly indeed a feeling of "numbness," "deadness," or "pins and needles," which is referred especially to the hands and feet. More or less cutaneous anæsthesia is found in the feet and legs. As a general rule the functions of the bladder are not disordered, and there is no tendency to bedsores.

There is usually a remarkable loss of memory, the patient often saying for instance that she has been out for a walk on that day, when she has not left her room for many weeks. There is often also a condition as though of complacent indifference and incapability of grasping the full meaning of her condition, which seems to be peculiar to a state of chronic alcoholism.

If such a case as this should give the opportunity of *post-mortem* examination (a comparatively rare exception) a subacute inflammatory process will be found affecting the nerve trunks, especially the radial and anterior tibial or the peroneal. The nerves will seldom show any particular change to the naked eye, but, having been hardened and submitted to section, evidence of parenchymatous degeneration is discovered in them, together with more or less interstitial neuritis.

In females affected with alcoholic neuritis I have observed now, during many years, that the catamenia are almost always suppressed, and often for many months during the illness. I do not attempt an explanation of this. It seems to me a curious and interesting fact when taken in conjunction with the well-known complete, or almost complete, immunity of the functions of the bladder and rectum.

Although in the majority of cases it is the nerves of the extremities which appear to bear the brunt of the lesion, yet I have seen paralysis of the respiratory muscles and of those subserving deglutition, and in one instance almost complete paralysis of the external muscles of the eyeballs. The pneumonia which occasionally terminates the scene in cases of this kind is very likely due to lesion of the vagus.

I have given an illustration of the more usual symptoms in a case of multiple neuritis due to alcohol. It is necessary to mention exceptional conditions which are found in certain cases. There may be no pains, and but very little or indeed no disturbance of cutaneous sensibility. It seems that in some rare instances it is almost entirely the efferent fibres which suffer. There is often a very considerable amount of œdema of the feet and legs, and the hands may look puffy and sodden. Indeed, I have seen one case in which the brunt of the lesion appeared to fall mostly on the vasomotor system of nerves, and give rise to œdema. In some cases it is chiefly a tottering ataxic gait which is noticeable. This often precedes the paralytic state, which may and often does arrive quite suddenly.

Although a dropped condition of the feet is so common as to be highly characteristic of alcoholic paralysis, and should always suggest inquiries into the history, yet I have lately seen a few cases in which the symptom was not present. In these, it is true, the amount of paralysis of the lower extremities was not very great, but as the loss of power in the anterior tibial muscles is commonly an initiatory as well as a very characteristic symptom, it seems worth while to note that it may occasionally fail to occur, at least early in the case.

A case which I have seen this winter illustrates some of these exceptional conditions. A gentleman who had greatly exceeded began in September to lose power in the knees and ankles, at the same time complaining of pains in the muscles of his legs. He managed to attend office for a month, then one day when dressed and ready to start, his legs gave way under him and he could not get up. He then began to lose power in the hands, which swelled and were numbed. They remained bad for a short time only. When I saw him two months after his attack he had not been able to walk or even to stand. His legs were swollen, he could not dorsal-flex the feet. There were no pains nor anæsthesia nor tenderness of muscles. The knee jerks were absent. He made a rapid recovery, and in three months was almost well. When I last saw him both knee-jerks had returned.

The lower extremities as a rule are more severely affected than the upper. It occasionally happens, however, that when the patient comes under observation recovery has taken place in all except one limb, and then there is a chance, unless care be taken, of a mistake in the diagnosis of the case. A lady was seen by me in consultation in April, 1888. She was suffering from loss of power in the left hand. She had no complaint to make of her legs or of the right arm. There was wasting of the thenar and hypothenar muscles of the left hand with loss of faradic reaction. The skin was red and polished looking. The catamenia had been absent for some months.

There was exquisite sensitiveness to touch at the tips of the fingers and in the palm, and if the wrist-joint were moved it caused her excruciating pain. The hand and arm presented the helpless look of a fractured limb. The fingers were white and puffy, the nails overgrown because she could not bear to have them cut. Great tenderness was experienced on pressing the median nerve at the wrist. The right thumb, and two fingers were sensitive at the tip, and the hand was weak; it had been still more helpless than when I saw it.

In January the patient had begun to feel as if she had "rheumatism," and her fingers became over-sensitive. At that time she was very weak.

In February her knees would give way, so that she fell more than once on her wrists. At that time she was walking with the help of a stick or someone's arm on account of "rheumatism" in her knees. She dragged her feet. She was treated with induced electrical currents, and the hand gradually improved.

On May 3rd, after the hand had been placed in hot water for the purpose of faradism, it became purplish red and swollen. I have often noticed this to happen in cases of neuritis. The cuticle will often scale off.

On May 26th, adhesions in the wrist and finger-joints were broken down under chloroform. Under faradism, massage, and passive movements she slowly improved, and I heard subsequently that the arms had got quite well. It should be said that there was a distinct history of excessive drinking in this case.

In the following case neuritis (presumably from alcohol) was confined from the first to the district of a single muscle.

A gentleman, aged 29, was sent to me by his medical attendant with paralysis of the index, middle, and, to a less extent, of the ring finger of the right hand, which had been observed for three weeks. The patient was a paroxysmal drinker, and had just come out of a debauch of several weeks. The hand presented just the appearance of an early stage of wrist-drop from lead. There was no blue line, and no history of exposure to that metal. The faradic excitability of the extensor communis of the right arm was lessened and A S Z > K S Z. The hand felt numbed. There had been no pain in the arm. There was no sign of lesion in the other arm or in the lower extremities. The knee-jerks were present and equal. Under treatment, chiefly by abstinence and with slight application of electric currents, he quite recovered in six or seven weeks.

In another example the lesion was confined to the brachial plexus of one side.

A gentleman, aged 22, came to me from a medical man in the country. His right arm hung helpless. It was exquisitely tender to the touch, full of pain, and presented a sodden appearance. Pains had begun in the arm some weeks previously. For some two or three years, I was informed, his habits had been most intemperate, and he had been on the verge of *delirium tremens* when the attack of brachial neuritis began. At first its occurrence appeared to check the development of the symptoms of delirium, but when he returned home he was in a half maniacal condition which prevented an exact examination of the arm being made. He had been then treated with salicylates, bromides, iodides, arsenic, and quinine. Under antipyrin, grains 25, and extract of Indian hemp, grain $\frac{1}{4}$, three times a day, he soon began to have less pain and tenderness. In a fortnight he looked very much better, and was free from pain. I heard later that he had quite recovered.

A female patient was brought to me on account of loss of power in the right hand and greatly impaired vision. I found the right grasp diminished in power. The two middle fingers were especially weak, and tended to drop. There was no cutaneous anæsthesia. She had suffered from what she called "rheumatism"—sharp shooting pains in the feet and across the instep for years, but had had no pain in the arms. In the course of the last six years she had had on three occasions an epileptic fit. The difficulty of vision was peculiar. At first it strongly suggested hemiopia. Looking at the word "holding," she could read "hold" only. After a pause and apparently readjusting her gaze, she saw the remainder of the word. Facing me, she could see my right eye clearly, my left but very indistinctly. Yet on holding up my fingers, and testing the field of vision, I could discern no impairment of the extent to which she could see to her right and left. It appeared, therefore, that she had a scotoma just to the

ight of the centre of the visual field. Her tongue appeared lightly inclined to her right. This last symptom, coupled with he suggestion of hemiopia, paresis of the right arm, and the history of fits, might easily lead to a diagnosis of intracranial disease. But close investigation did not confirm this.

The extensor communis muscle of the right arm showed distinct owering of excitability to both faradism and galvanism, but specially to the latter. This could not result from an intraranial lesion. It pointed to an affection of the "spinal" nervous ystem, and was most probably due to peripheral neuritis. (The ord "spinal" connotes, of course, the spinal nerves as well as he cord.) There was a history of alcoholism. I was disposed to efer the scotoma to periaxial neuritis of the optic nerve. The atient recovered completely in a few weeks.

I saw quite recently in consultation a lady, aged 64, who a fortight previously had entirely lost the use of the right arm. Investigation of the cause of this monoplegia excluded a traumatic rigin. The tendon reflexes in the other arm and in the legs were ood. In the right arm they were absent. There was total ıability to move any muscle of the right upper extremity, inuding the shoulder, together with anæsthesia of the hand, which ecreased shortly above the wrist. Pain of excruciating character, pecially bad at night, was described as affecting the right arm. was as though the "limb were being torn out of its socket on a ck." I had not an opportunity of testing the faradic excitality of the muscles, which were very flaccid, but the other symoms are sufficient to show that the lesion was probably a neurıs of the brachial plexus. The patient was described as not aving been sober for a year past.

These examples, I have thought, would prove interesting ıd valuable, as tending to show what has not yet, so far as I ow, been advanced respecting the influence of alcohol, that its fects may appear, not only in the more common form of a geneılised paralysis of the extremities, but in lesion of a peculiarly calised character. If I am right in the view that these are exnples of localised neuritis due to alcohol, it is evident that we all have in future to bear this possibility in mind when we meet ith neuritis of single nerves or plexuses, of the cause of which e do not find a ready explanation.

Let us turn now to peripheral neuritis arising from other causes an the influence of alcohol. A week or two after I had pubhed a work on *Paralysis from Peripheral Neuritis* the following se came under my observation at the hospital. It is one of ultiple neuritis occuring in a patient affected with diabetes ellitus:—

J. K., aged 55, carpenter, applied to the National Hospital for e Paralysed and the Epileptic on June 30th, 1886, suffering from s of power in the lower extremities, which he ascribed to work- in the wet. He had been quite well until the previous September, ıen, after working daily for several weeks out-of-doors in the d and wet, he began to get pain and tenderness in the front of e right thigh, which extended presently down the leg to the ot. The pain was very severe, and there was so much weakness at his knee often gave way and let him down. A month after e right the left leg was similarly attacked, and in three months m the first symptoms he could not walk at all. About this ne he noticed also numbness and "pins and needles" in both s, especially in the soles of the feet, and the pains were severe l continuous. The symptoms continued till the end of Febru-, when the pains became less severe, and he became able to lk upon crutches. The improvement in his lower limbs conued, but towards the end of May he began to have a little gling and slight numbness in the tips of his fingers. At no e was there any difficulty with his bladder, but soon after the mencement of his illness he was troubled with great thirst l noticed that he passed much urine, and, moreover, wasted in h a great deal.

n examination, the legs were found thin; they could be flexed dily upon the thighs, but extension was imperfectly performed. re was no power of dorsal-flexing the feet upon the legs. There tenderness on pressure in the soles of both feet, and he comined of tingling and numbness from the feet up to the knees— e in the feet, ankles, and front of the legs than in the calves. re was much loss of cutaneous sensibility in the feet and lower t of the legs. The knee-jerks were absent. There was no reıse to the strongest induced currents in the anterior tibial ıp of muscles, and this painful application could be borne hout inconvenience in that situation, whilst lower down it was y felt as pressure. It was remarkable, I may note by the way, that some immediate return of voluntary power in dorsal-flexing the feet followed this application, although the electric current itself caused no muscular contraction. Examination of the urine showed that it contained a large quantity of sugar.

The man was admitted as an in-patient a fortnight afterwards. Examination then showed the plantar reflex fair on the left, but hardly to be obtained on the right sole; the gluteal fair on the left, not well marked on the right; the cremasteric also better on the left than the right side. The abdominal and epigastric reflexes were present on each side. There was a ready and normal response to induced currents in the muscles of the hands and arms, but still no reaction in the anterior tibial group; the calf muscles responded, though not perfectly, and the muscles of the thighs also responded to the induced current. A strong galvanic current was required to cause contractions in the anterior tibial muscles, but the response took place on the right side to twenty-eight cells with the positive-pole closure, as against thirty-four cells with the negative-pole closure. On the left side, too, the positive-pole closure contraction was more marked than the negative. On the other hand, in the right gastrocnemius only twenty-two cells were required with the negative pole, as against thirty-two with the positive. A fortnight later a very strong faradic current produced contractions in the anterior tibial group, but a much weaker current was sufficient to act upon the peroneal muscles.

When he left the hospital at the end of August, K S Z > A S Z in the anterior tibial group. There was still great loss of cutaneous sensibility in front of the legs.

Examination of the urine showed that it was passed in large quantities and of high specific gravity, as the following figures will indicate:—

July 25th, 74	ounces	in the	24	hours,	specific gravity	1045
„ 26th, 79	„	„	„	„	„	1043
„ 27th, 94	„	„	„	„	„	1042
„ 28th, 84	„	„	„	„	„	1042

The urine contained sugar in abundance.

The patient was shown to the Harveian Society in November, 1886. After remaining as an out-patient during the winter and spring, he was again admitted into hospital in June, 1887, still complaining of great loss of power in both lower limbs, the movements of which were feeble. There was drooping of the toes of the left foot. Both legs were slightly wasted. The knee jerks and plantar reflexes were absent. There was continuous pain in both legs and feet, and some but less numbness than formerly. Sensation to touch was diminished below the knees. In the same region there was slight tenderness on pressure.

On the outer side of the right foot, just below the external malleolus, was a deep ulcer, the skin around it and on the outer side of the foot generally being much congested. This had begun as a small swelling, which had gradually increased in size, burst, and discharged a small amount of pus.

On the sole of the left foot, just below the metatarso-phalangeal joint of the great toe, was a cicatrix due to a similar condition which had arisen in connection with a corn in that situation in the February preceding.

Tactile sensation was diminished in both hands, and the patient complained of slight pain in both hands and the left forearm. There was pain in all the fingers of the left hand, and in the little and ring finger of the right hand. There was loss of power in both hands, especially in the left, and the power of flexing the elbow was much feebler on the left than on the right side. There was wasting of the thenar and hypothenar eminences of both hands, and of the interossei (especially of the first) in both hands; also slight wasting of the left forearm.

From the middle to the end of July the diet consisted in toast, green vegetables, meat, eggs; no potatoes, sweets, beer, rice, or other starchy food. The quantity of urine averaged 57 ounces per diem, and by the fermentation process the amount of sugar was estimated at an average of 25 grains per ounce of urine.

From the end of July to the middle of August soft bread was substituted for toast, with the result that the urine averaged 83 ounces per diem, with 35 grains of sugar per ounce of urine.

From the middle of August until the middle of October gluten bread replaced the soft bread previously taken. The quantity of urine fell to an average of 54 ounces per diem, with only 16 grains of sugar per ounce of urine. *Pari passu* with this decrease of glycosuria, the patient gained weight, the ulcer healed, and when he left the hospital, on November 3rd, his condition generally was described as much improved. I have since lost sight of him.

When I first saw this man in the out-patient room I recognised his case as one of a class to which (in order to distinguish them from those resulting from disease of the cord) I have suggested the name of neuritic paraplegia. The basis or ultimate cause of the neuritis did not at once appear evident, as there was no alcoholic history. It was in an endeavour to discover this, and influenced by the man's description of thirst and wasting, that I examined the urine for sugar. Just at that time the occasional dependence of peripheral neuritis upon diabetes had been announced abroad, and I was much interested in meeting with a case in point. The occurrence of perforating ulcers in this case is very interesting. From this, together with the absence of knee-jerks, and the pains, the case might readily, but for the discovery of the sugar and the existence of muscular atrophy, have been set down at first sight to one of tabes dorsalis, with which it had much in common.

In another case, to which I need only very briefly refer, symptoms of pains and weakness of the extremities, with absence of knee-jerks, had been ascribed to tabes. In that instance I discovered a large quantity of sugar, and under a partially restricted dietary there was remarkable improvement in the symptoms and the knee-jerks returned. The symptoms in this case had never attained the severity observed in the preceding one. There had been no considerable loss of power and the muscles showed no atrophy. In another, seen recently in consultation, a diabetic patient suffered from excruciating pain in the lower extremities with loss of knee-jerks. In the following example the paralysis and atrophy were strongly pronounced and much more localised than in the first example.

A gentleman, aged 60, was sent to me in October, 1887, with the left arm hanging helpless and its muscles wasted. He told me that he was suffering from diabetes and had had much gout. Sugar had been discovered six years, and he passed about 15 grains to an ounce. Albumen had been observed eighteen months, and it measured about a twentieth. The son of a gouty father, he had always drunk beer and port wine, and began to show gout at 40 years of age. His appearance was that of a man who had lived freely. His heart sounds were feeble, and he had an aortic systolic *bruit*. He passed in the twenty-four hours about 6 pints of urine, usually of a specific gravity of 1025. This was on a partially restricted dietary. On ordinary diet it would rise to 1040 or more. He was taking six ounces of whisky daily, besides some wine. His weight, which had been formerly 18 st. 10 lbs., was then about 14 stones.

Examination showed wasting of all the muscles of the left shoulder and arm, except the flexors of the wrist and fingers. In these only reaction to the induced current persisted, although it was diminished. In the wasted muscles there was none. There was much œdema of the hand, and the sensibility of the skin of the arm was much diminished. Only the left shoulder and arm appeared to be affected. The atrophy had been preceded by great gnawing pain about the shoulder, with shooting down the arm, which had begun, according to the patient's account, about a month previously. There were no knee-jerks.

When I saw this patient five months later, he could lift the shoulder and elbow, which he had not been able to do when he was first examined, but electrically there was no improvement. There was no reaction to the strongest induced current in the muscles of the shoulder, arm, and extensor side of the forearm; the flexors of the wrist and fingers required also a strong current. The skin of the shoulder of the right side was but little sensitive to induced currents, and he had been complaining of pain in that situation.

In June, 1889, I again saw this patient in consultation at his own house. He was then suffering from congestion of the base of the left lung. Both his arms were now very incapable.

I recently saw a female whose gait was shambling, and who could scarcely use her hands. There was a history of pains in the feet, gradually extending up the legs, of a sharp character, from which she had suffered for three years. She had no knee-jerks. Pupils reacted to light. There was anæsthesia below the knees. She could dorsal-flex the feet, but the legs were very weak. Her memory was good. There was no appearance or history of alcoholism. I suggested to her medical attendant to examine the urine for sugar. He found it of specific gravity 1042 and highly charged with sugar.

It appears from a case recently published by Dr. Althaus that the neuritis in diabetes may be limited to a single nerve.

REMOVAL OF A VERY LARGE TUMOUR FROM THE NECK, PROBABLY A DISEASED ACCESSORY THYROID GLAND: RECOVERY.

By ARTHUR E. BARKER, F.R.C.S.,
Surgeon to University College Hospital.

Some five years ago I published a series of cases illustrating the surgery of deap-seated tumours of the neck. These cases were put forward with the object of emphasising a then quickly-growing belief, since fully justified, that the older doctrines as to the inaccessibility of the deeper parts of the neck to operation are no longer tenable in these days of aseptic surgery. The series included some very formidable cases of tumours seated in various troublesome positions both behind and in front of the neck, yet in none of them were the obstacles to the complete removal of the latter found insurmountable, and all made excellent recoveries. It was shown that the great vessels and deeper muscles might be extensively exposed, and even in part excised, and the most important nerves be handled and pushed aside without any untoward sequelæ. Much has since been written by various surgeons in support of the newer view, and my own experience in many more recent cases is even more encouraging than that referred to above. But no case better illustrates the possibilities of this branch of surgery than one recently operated on. It is, moreover, interesting, not only as illustrative of a surgical fact of importance, but also on account of its pathological features. The tumour was, in the first place, the largest I have ever seen removed from this region, or, indeed, seen at all in the deeper part of the neck. But, besides this, it belongs to a group of neoplasms which still require much further study.

Tumours of the thyroid itself have received a large amount of attention within the last four or five years, and the proneness of accessory thyroids to become the seat of neoplasms has been more than once noticed. But, on looking through the *Transactions* of the Pathological Society, I can only find one case which appears to correspond in all points with the one now to be discussed. This was operated on by myself some five years ago, and was published in the series referred to. The microscopical characters of the growth were afterwards minutely described by Mr. Pollard in the *Transactions* of the Pathological Society for 1886, and were identical in every respect with those of the present tumour. These I have carefully studied microscopically; and a comparison of Mr. Pollard's sections of the first growth and of my own of this last shows that they might have been taken from the same specimen, so like are they. Both cases, too, were alike in their history and mode of growth; so that, if the conclusion as to the first being an instance of a new growth forming in an accessory thyroid be correct, it is equally so of the present case, which is as follows:

Mr. B., aged 50, was seen by me for the first time on October 19th, 1889, in consultation with Dr. Cole, of Bath, on account of a large tumour on the left side of the neck. He was a particularly healthy man, and had always been so. In the year 1880 he first noticed a small lump just above the clavicle on the left side in front of the edge of the sterno-mastoid muscle. This slowly increased, but gave no trouble. In December, 1881, when he first consulted Dr. Cole, it was about $\frac{3}{4}$ of an inch in diameter. In March, 1883, it was $1\frac{1}{2}$ inch across, and consisted of two lobes, the larger above. At this time it was pronounced to be cystic by a high authority who saw the patient with Dr. Cole. In May, 1884, it was $3\frac{3}{4}$ inches in its longest axis, which ran downwards and forwards, its larger end being still above. During the next four years it slowly increased in size. The girth of the neck in 1883 had been 15 inches, and in February, 1889, it was nearly 20 inches. The left side, therefore, of the neck had increased by 5 inches up to February, 1889. After this electrolysis was tried thoroughly, the patient having eighteen sittings in all, sometimes three needles and strong currents being used; but the growth became more rapid and the cysts more apparent; the needles were observed by Dr. Cole to move about within the latter.

In October, 1889, I found the tumour to reach from over the mastoid process to the clavicle (Fig. 1, from a photograph), which it overhung, although the finger could be slipped between the bone and the growth. In front the tumour overlapped the jaw, and pushed the larynx to the right; behind it reached well under the trapezius

muscle. The skin over the mass was very tense and deeply congested, and hardly movable on the subjacent cysts. The latter were evidently numerous, ranging from the size of a large orange to that of a marble. The largest was on the front of the mass, and looked as if it would soon burst through the tense skin. The whole tumour lay under the sterno-mastoid muscle, and was firmly fixed *in situ*. No enlarged glands were to be found anywhere in its neighbourhood, nor in the axillæ or groins. Both pupils reacted normally, but the left was perhaps a trifle larger than its fellow. There was no difficulty in breathing nor alteration of the voice. The throat was slightly congested and very irritable, so that a view of the vocal cords could not be obtained at that visit.

Reviewing the case carefully, we came to the conclusion that this was probably an adenoid tumour of an accessory thyroid gland, containing cysts, and lying very deeply in the neck under the sterno-mastoid muscle.

On being questioned as to the possibility of removal, I expressed the opinion that it could be taken away completely, although the risk would be very considerable. This merely confirmed Dr. Cole's view, who had for years been urging on the patient to have an operation done, and had only prevailed upon him to take counsel with an operator when the huge size of the tumour and the obviously near approach of rupture of the mass through the skin threatened a speedy and fatal issue. It is to Dr. Cole, therefore, that all the credit belongs of having first recognised the gravity of the condition, and of ultimately, with the courage of his convictions, persuading the patient to face certain grave risks in order to secure a longer term of life, and to escape from inevitable suffering when the mass broke through the skin. For myself, after explaining the condition of the patient and all the risks of the operation, I merely expressed my willingness to operate if desired, and was sanguine of the result. After a week's consideration the patient sent word that he was anxious for the mass to be removed, while fully recognising the risks.



Fig. 1.—Side view of neck showing the extent of the tumour pretty well. All its limits, however, are not displayed, being covered by the beard and clothing (from a photograph a few days before operation).

Operation, October 29th, 1889. With complete asepsis, I made an incision from over the mastoid bone along the sterno-mastoid muscle for about 10 inches, and with great caution, on account of the thinness of the skin over the cysts, which I wished to leave as long as possible unopened. Leaving part of the expanded and atrophied muscle, which was fused with the cyst wall attached to the latter, I dissected the mass clean on both sides as rapidly as possible. Just then the largest cyst burst, apparently at one of the electrolysis punctures, and about half a pint of dark chocolate coloured fluid, with old blood clots, spurted clear of the wound. This facilitated the dissection of the deeper parts, which was an anxious matter, on account of the distortion of all the anatomical relations. The external jugular and the termination of the facial vein had to be divided between ligatures. The greatest difficulty was experienced in creeping round the upper end of the growth, which lay both on and under the mastoid process, and contained a large cyst pressing in towards the pharynx. This cyst also burst at a thin spot when nearly cleared. Towards the end of the dissection, the sheath of the common carotid artery had to be stripped off the front of the vessel with the capsule of the growth for about 2 inches, and then the mass came cleanly away. Only a few very small arterial twigs required ligatures, and no nerves were seen except a small descending cervical branch. The lower end of the growth dipped below the clavicle close to the apex of the pleura, which could be seen rising and falling with respiration in a most disquieting way. Two or three glands were now removed from over the carotid artery (apparently healthy), and another group, the size of a walnut, from the apex of the pleura. The latter were obviously infected by the growth.

Very little blood was lost during the whole operation, which lasted fifty-one minutes. The toilet of the immense wound and the dressing lasted another half-hour. After stitching and the insertion of two tubes, a salicylic wool dressing was firmly bandaged round the whole neck, to bring all the wounded surfaces into apposition, and to prevent oozing and movement of the head.

The patient bore the operation well, but, two hours after, there were symptoms of severe shock. These yielded readily to stimulants, and in the evening the patient's condition was very good. The next morning he looked very well, and complained of nothing except hunger and thirst. The soaked dressings were replaced by dry wool, the wound looking very well. There was some flatulence and diarrhœa during the day, and the pulse was rapid (132). But, as it had been 160 the evening before operation, while the patient was quietly talking in his bedroom, I attached but little importance to the symptom. The temperature in the evening was 101.2°. Convalescence after this was practically uninterrupted. The dressings required changing daily for the first few days, on account of free serous soaking. On the seventh day he was sitting up as cheerful as ever. There was no suppuration, the serum only becoming a little turbid for a day or two before ceasing altogether. The patient was out of bed in the third week, and left for Brighton in the fourth. The wound had healed by first intention, except where the drain tubes lay. The only noticeable symptom during convalescence was a rapid pulse. It usually ran at about 110 to 116. But the patient told me that it was usually easily excited at other times.

I last saw Mr. B. on his way from Brighton to Bath on December 20th. He was then very well, but there was a spot of moisture at the lower end of the scar, which was otherwise hardly recognisable. Here a small ligature came away a few days later, and then complete closure resulted. At his last visit I examined the vocal cords, and found them normal in every movement. The mucous membrane of the throat was slightly congested still.

The tumour on removal was found to consist of solid material and numerous cysts. The latter were mostly peripheral, the largest amount of firm solid tissue lying near the centre of the mass. The largest cyst was seated anteriorly towards the lower end of the swelling, the next in size lay at the upper extremity, under and partly over the mastoid process. The first was the size of a very large orange, the next a little smaller. Numerous other cysts of varying size projected from the mass in various directions. Except at the most anterior aspect of the two largest sacs, where there were very thin spots, presumably the seats of puncture for electrolysis, the walls of these cavities were made up of a tough well-defined envelope of fibrous tissue about $\frac{1}{16}$ to $\frac{1}{8}$ of an inch thick. The tissue was fairly marked off from the stroma

of the mass in many places, but shaded into it in others. All the cavities presented practically the same appearance. They were filled with dirty brownish-coloured serum, and were smooth-lined except where larger or smaller papillomatous outgrowths projected into them. These prominences were firm at their base, but branched into the most delicate fronds, which floated in the fluid contents. They were exceedingly fragile, and their superficial portions crumbled away on being touched. The stroma of the mass was pinkish white on section, and firm in the main, with soft friable patches scattered here and there, to the naked eye looking very much like the soft material of the papillary outgrowths into the cysts. It was very much broken up by the numerous cavities of all sizes and shapes, so that it was rare to find a single square inch of it on section. When carefully hardened in spirit, the growth showed the following structure under the microscope. The basis of the mass consisted of a tough fibrous tissue, highly differentiated and containing few or no cells or nuclei (Fig. 3, p. 1425). This simply showed strands of parallel or wavy fibres packed closely together, so closely indeed as almost to give a hyaline appearance in certain parts. It was of this material that the walls of the cysts were composed. This substratum was broken up here and there by islands of cells generally of more or less cuboid shape, the centres of which islands were undergoing colloid change. Many of these islands, however, were made up of large cells packed closely together, without any arrangement and no particular shape. Large vessels cut at various angles were also to be seen in the fibrous stroma. In other parts were oval or very much elongated interspaces, lined with columnar cells of great regularity, and having clear material in their centre. This structure recalled strongly that of the normal thyroid gland, except for the irregularity in size and shape of the cell-lined spaces. These latter were apparently the beginnings of cysts. But where such cysts were fully developed they presented a very interesting appearance. Their walls were lined generally with a single layer of cuboid epithelium of the most regular form.

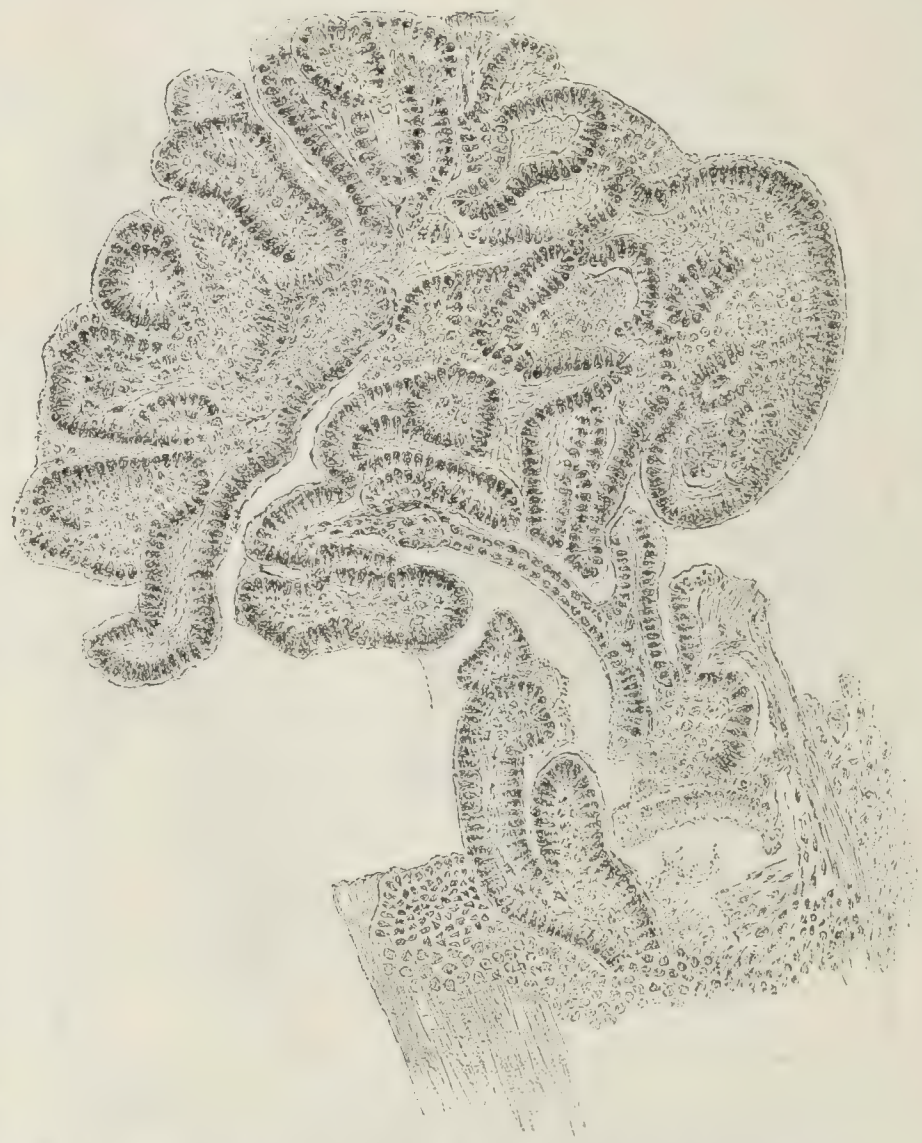


Fig. 2.—Highly magnified section of papillary growth springing from the interior of a cyst, and attached to the wall of the latter by its pedicle. This is a type of numerous other similar growths found within the cysts.

From these walls here and there papillomatous growths sprung out into the cavity of the cyst. These varied in size from small microscopic excrescences to masses as large as a walnut. But whatever their dimensions their structure was everywhere essentially the same. They consisted of soft, delicate tissue in their centre covered by cubical or columnar cells (Fig. 2). The shapes assumed by the papillomata were of great variety. Sometimes they were simple villous structures of greater or lesser length; sometimes this primary form was folded on itself over and over again, so that in section its outline resembled the old Greek border pattern. Others of the outgrowths were tree-like, branching in all directions (Fig. 2). Many of the latter when large showed on section spaces in their centre lined by the same epithelium seen on the surface. Whether these were independent cavities or only deficiencies left in the sections by division or depressions between lobules I am unable to say. But from what was seen in other parts of the more solid stroma, it appeared quite possible that they might be actual cavities closed on all sides which had sprung up in the centres of the papillomata.

It is very difficult to account for such a development of islands of epithelial cells in the centre of connective tissue structures when we remember the mode of development of the thyroid gland as described by Remak, but there was no appearance suggesting that the connective tissue had grown round and included the epithelial cells. In some of these papillomata the amount of connective tissue was so scanty as hardly to hold the epithelial elements together. In such a case the latter, on opposite sides of a villus, almost touched each other at their narrow attached ends, and the whole structure fell asunder on the slightest violence. Indeed, in some cases it was impossible to make microscopic sections containing more than small and imperfect fragments of the papillæ. This friability and the presence of thin-walled vessels explain the readiness with which bleeding may take place into the cysts of such a tumour. In a former case in which I aspirated one of these cysts with a fine needle, the cavity filled up with blood before the patient had left my room, and in the present case some of the larger cysts contained clots of blood.

Taking all the facts of this case into consideration, I think there can be little doubt that the tumour, as was surmised, was of thyroid origin, and that it started in a small accessory portion of the gland lying about one inch and a half above the clavicle. Such out-lying portions of the organ are known to exist, and their tendency to become diseased is already attracting attention. From what I have learned from the two cases met and dealt with, I should feel disposed to submit the tumours to early operation in all cases, for though in their slow growth and microscopic characters they do not appear malignant, there can be no doubt that in the end they have a tendency to invade neighbouring glands (as in the two cases referred to), and possibly other structures. They remain, on the other hand, undoubtedly for a long time quite localised, and if removed in this stage we may look for the most satisfactory ultimate result; and if it be possible to remove them with safety when as large as in the present case, we need not fear operation in the earlier stages.

The chief risks to the patient in this case depended upon the size of the tumour and its deeper relations; and had he not been fortunate enough to fall into Dr. Cole's hands, a fatal issue must very soon have come about. As it was, he only consented to operation when the immediate outlook became very serious. The great responsibility of urging operation, however, was soon compensated to Dr. Cole by seeing his patient relieved of a great incubus, and given a new lease of life. He still remains well and free from all recurrence seven months after operation.



Fig. 3.—Section through the harder part of the tumour showing a fibrous stroma with rounded loculi lined with columnar epithelial cells, and filled with other more irregularly shaped cells.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

HE PULSE DURING CHLOROFORM ANÆSTHESIA: A CASE IN POINT.

UST at the present time it is important to compare the inducons of pharmacologists with the clinical experience of anæsthets in regard to chloroform, and hence the following case may be interest.

On May 5th last I was administering chloroform to a boy, aged years, for tooth extraction, giving it on a piece of lint in the ual way. After a few minutes, and before the operation was gun, I noticed that the pulse had become very weak, and was rdly perceptible. On suspending the administration the pulse pidly improved, and in three minutes was fairly strong; on remmencing the anæsthetic the phenomena were repeated. The lse, on which I kept my finger, quickly became slower and eaker, and there was distinct pallor on the face. Again I distntinued chloroform, and again the pulse recovered. No distinct ilure of the respiration was noted. Certainly there was none rresponding in any degree to that of the heart. I now sent for her, and in about ten minutes began to administer this with a over's inhaler. The pulse immediately rose from 68 to 85, and ntinued full and strong. Extraction was now commenced, and complished without further trouble. I am sorry I have no more act records of the pulse and respiration rates, but I can vouch for e main facts, and my observations are confirmed by Mr. George unton, the dentist in this case—a gentleman of great experience d accuracy. I do not at all consider that there is anything ique in this case; on the contrary, I believe it to be an illustran of what is familiar to those who have given a good deal of loroform. When I was a student I was told to watch the pulse ring chloroform anæsthesia, and to believe that chloroform presses the heart more than ether, and experience does not lead to change my practice or belief in these particulars.

J. BENJN. HELLIER, M.D.Lond., Lecturer on Gynæcology in the Yorkshire College, Surgeon to the Leeds Hospital for Women and Children.

ATH OF A CHILD DURING THE ADMINISTRATION OF CHLOROFORM.

June 5th a child, aged 5 months, was admitted into the Bradd Infirmary, under the care of Mr. Roberts, suffering from intinal obstruction of three weeks' duration. The history was t there had been trouble with the bowels since birth. On a vious occasion the bowels had not been moved for 14 days. admission (June 5th, 4 P.M.) the child did not appear to be in n, there was no vomiting and no sign of an acute character. abdomen was greatly distended, note on percussion was reant all over, and no definite tumour was detected.

t 7.45 P M. the same evening the child was seen by Mr. Roberts, o had chloroform given (by the house surgeon) in order to mine the abdomen more satisfactorily. The chloroform was administered out of a drop bottle on the corner of a towel spread over the child's mouth and nose and held at a little distance from the skin, so as to allow of the free admixture of air. The quantity used was $1\frac{1}{2}$ drachm. The child took the chloroform well at first, keeping a good colour and no alarming signs appeared whilst the abdomen was thoroughly explored, both externally with the hands and also by passing a soft flexible catheter into the bowel. About half a pint of soap and water was next gently injected into the bowel, the body of the child being raised. It was at this stage that the face was noticed to become blue and the breathing stopped. The chloroform was put on one side and artificial respiration, inversion, flicking the chest with a wet towel, were tried without success for 35 minutes. The heart stopped about the same time as the respiration.

Post-mortem Examination 48 Hours after Death.—Body well nourished, rigor mortis passing off. There was marked discoloration of the abdomen, which was greatly distended. On opening the abdomen the coils of bowel were distended. No peritonitis. The large bowel contained much fluid fæcal matter, and many large cones of fæcal origin were found in the descending colon. On tracing the bowel upwards no cause of obstruction was noted until the duodenum was reached. Here a band was seen passing from within outwards, over and compressing (but not occluding) the duodenum. On cutting through the band there was no sign of inflammation in the bowel. The lungs were congested, contained air. Heart walls and valves healthy. Both sides empty and contracted. The other organs were healthy, and nothing further abnormal was noted. Death does not seem to have been due to asphyxia alone, but rather to reflex shock producing paralysis of the respiratory and cardiac centres.

C. F. M. ALTHORP, M.R.C.S.Eng., M.R.C.P.Lond., House-Surgeon, Bradford Infirmary.

NOTE ON SOME PROPERTIES OF SODIUM SILICOFLUORIDE.

IT is about two years since sodium silicofluoride was introduced as an antiseptic agent, during which time it has been more or less extensively used, and yet there is little new evidence forthcoming in regard to its chemical properties and physiological action.

Some months ago I was engaged in making a series of sterile pancreatic digestions, and after employing many of the current germicides, I determined to employ a sample of "salufer." Upon doing so it was surprising to find that at the end of a few days the digestions were some of them absolutely putrid.

The digestions were made in two ways—either a 2 per cent. solution of sodium bicarbonate was taken, and the silicofluoride subsequently added to saturation; or a known volume of the saturated solution of sodium silicofluoride was taken, and sufficient sodium carbonate added as would produce a 2 per cent. solution.

In the first case the digestion remained aseptic; in the second there was effervescence as the sodium carbonate was added, and the digestion became offensive at the end of a few days. In the first case the total fluorine was much greater, I believe, than in the second, existing probably in part as fluoride of sodium, and in part as unaltered silicofluoride. In the second case the silicofluoride became converted, on the addition of the sodium bicarbonate, into the silicate and fluoride of sodium, and so little silicofluoride remained that it was not sufficient in amount to act as a germicide.

It was suggested by Thomson,[1] who discovered the antiseptic action of the fluorides, that surgeons who placed their knives in solutions of sodium silicofluoride should add a little carbonate of soda in order to prevent corrosion of the steel. Such a procedure appears, in the light of the above facts, to be more than questionable.

With regard to the mode in which the salt acts as an antiseptic, the following facts may prove of interest.

In order to preserve a 5 per cent. solution of serum albumen in saline solution, an unmeasured quantity of silicofluoride was added. After a few days the solution was clearer and free from a hazy turbidity previously noticed, but no trace of proteid was detected in the supernatant liquid. This effect I have never been able to reproduce in the same degree, although a saturated solution of the salt slowly and partially precipitates serum albumen, egg albumen, and paraglobulin from their solutions. In fact, a saturated solution proves an exceedingly delicate test for these

[1] Thomson, *Brit. Assoc. Reps.*, 1887; Robson, JOURNAL, May 19th, 1888.

proteids. With a saturated solution of the salt, albumen was detected in a sample of urine containing casts, which only gave a reaction with trichloracetic acid on mixing, and with picric acid by the contact method, and which gave none on boiling with the addition of a drop of acetic acid, nor with an equal volume of picric acid, nor with acid brine, nor with the cold nitric acid test. The worst objection to its use as a test is that it must be used by the contact method, and that the drug varies a good deal in composition. Some specimens were acid, others neutral, and the majority alkaline.

While the saturated aqueous solution precipitates some proteids, there is yet another effect of the solid salt akin to that of certain other inert powders. M. Boymond[2] pointed out that the filtration of a solution of serum albumen through bismuth trisnitrate sufficed to removed the proteid from its solution, and I find that upon leaving a solution of serum albumen in contact with an underlying layer of fine sulphur a jelly-like layer of proteid separates out and can be seen lying upon the sulphur, while the supernatant fluid is clear. Sodium silicofluoride appears to act in this twofold manner, and one or both of these properties appear to me to offer a possible explanation of its antiseptic action, especially as similar precipitants of proteid—as alcohol, mercuric chloride, picric acid, etc.—are generally antiseptics.

With regard to its internal administration, I can corroborate the results of those[3] who describe it as not so innocuous as it has been represented. A single dose of 2 grains produced in one case discomfort and nausea. A quarter of a grain thrice daily, exhibited for some weeks, produced, however, no ill-effects.

It appears to me not unlikely that it may be decomposed within the body in the same way that it is by sodium carbonate, glass, etc., and that after absorption it is as useless as an "internal germicide" in infective disorders as it is in certain cases in the laboratory.

Leeds. E. Lloyd Jones, B.A., M.B., B.C.Camb.

UNCOMPLICATED ANGINA PECTORALIS AFTER INFLUENZA.

To the various and interesting series of sequelæ to influenza recorded in the Journal I have to add a case of angina pectoralis, which owes its origin to the epidemic which broke out here also at the end of last year.[4]

On January 14th I was called to see the advocate, Mr. M., a strong, healthy man of 52. He had an attack of influenza of gastric form without any catarrhal mischief in the lungs. On January 20th he was suddenly seized at night with a severe pain in the region of the heart, extending backwards to the scapula, left shoulder, and arm, and accompanied by a sense of faintness and of impending death by suffocation. Irregular action of the heart and depression, face pallid and lips livid; anxiety occurring in paroxysms. Urine passed in abundance without albumen or sugar. The attacks came on during sleep, and were induced rarely by emotion or by exposure to cold air; each lasted from some few minutes to half an hour, and occurred usually at an interval of one or two days.

The influence of the specific poison of influenza in connection with disorders of the pneumogastric and sympathetic nerves is here conspicuous.

The case has improved very much under treatment. During the attack sedatives, with the administration of nitrite of amyl, as recommended by Dr. Lauder Brunton, acted beneficially. During the interval an appropriate diet and treatment was directed; the different antispasmodic and nerve tonics have been prescribed with marked benefit. The patient, after having suffered for three months, gradually improved, and finally seems now to be restored to health.

Limassol. John G. Carageorgiades, M.D.

[2] *Répertoire de Pharmacie*, October 10th, 1889.
[3] Bokenham, Journal, February 15th, 1890.
[4] See "Etude sur l'Épidémie d'Influenza dans l'île de Chypre, pendant l'année 1889-90," par Dr. John G. Carageorgiades, in the *Revue Médico-Pharmaceutique* of Constantinople, March, 1890, page 34.

Notices of Branch meetings intended for insertion in the Journal of the current week should be forwarded, addressed to the Editor, so as to reach the office not later than mid-day Wednesday of that week.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

EYE, EAR AND THROAT INFIRMARY, EDINBURGH.

CASE OF SARCOMA OF THE TONSIL.

(Under the care of G. Hunter Mackenzie, M.D.)

R. C., aged 23 years, a shoemaker, applied at the Eye, Ear and Throat Infirmary of Edinburgh on January 7th, 1890, on account of pain and swelling on the right side of the throat. He had first experienced the sensations complained of about six weeks previously. He had had no previous throat affection. He had been a hard-worked boy from the age of 14. His father had died of tubercular disease of the lungs.

He was thin and pale, with a quick pulse, and had the appearance of having been neither too well fed nor too well lodged. On examination of the pharynx, the right tonsil was red and swollen, with a smooth surface, and a feeling of hardness on palpation. The adjoining parts of the fauces were also red and inflamed, and the palate in the neighbourhood of the tonsil was red, hard, and bulging. The remainder of the pharynx was tolerably normal. Slight dysphagia was present, and occasional pains shot from the tonsil towards the right ear. There was an excess of mucous secretion about the oro- and naso-pharynx.

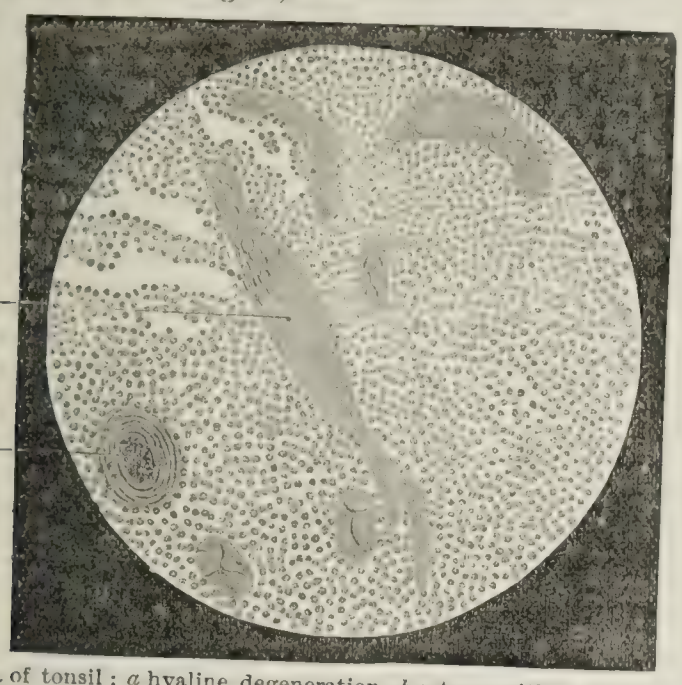
The appearances were very similar to those presented by the subacute inflammation of a previously enlarged tonsil, and, with the idea and in the hope that such was the case, the bulging part of the palate was punctured. This was followed by a moderate amount of bleeding. The patient was advised to use warm soothing applications externally and internally.

When next seen, about ten days subsequently, the tonsil was still enlarged, but the accompanying inflammation was much less. The tonsil presented the appearance of simple hypertrophy, and the question of its removal came to be considered. It was now noticed for the first time that one of the cervical glands on the same side was slightly enlarged and hard, and, profiting by the experience of a somewhat similar case some years ago, it was decided in the meantime to leave the tonsil alone. The patient now felt much better, and had returned to work. He was not seen again for about three weeks.

The further course of the case may thus be briefly stated: the cervical glandular enlargement gradually became more pronounced and extensive; the tonsil grew larger, and its surface began to slough; the palatal bulging encroached rapidly upon the oral cavity, and the whole appearances indicated some malignancy, probably sarcoma. Little or no pain was complained of. At this stage I had the benefit of the opinion of Dr. Heron Watson (under whose care the patient was admitted into Chalmers Hospital), who agreed with me that the case was one of sarcoma, and that, from the locality of the disease, and the extensive glandular implication, any attempt at removal was contraindicated. The patient lingered on in the hospital until April 2nd, when he died of exhaustion. During his residence in the hospital the tumour rapidly extended forward into and almost completely filled the mouth. A marked subsidence took place about a week before death, followed by a second and permanent enlargement. The glandular affection extended into the submental and left cervical region, and on the right side an enormous glandular mass was developed. Febrile symptoms were occasionally present, but only for a day or two at a time.

Necropsy was performed twenty-four hours after death. The right tonsil and adjoining soft structures were infiltrated, or rather supplanted, by a white, somewhat dense mass, which was directly continuous with a similar affection of the cervical glands. There was no line of demarcation between the tonsillar and the glandular disease, or between these and the healthy tissues. An examination of the specimen was made by Mr. Edington, who reports as follows: "On section, the tumour appeared pale in colour and firm in texture; it did not show any appearance of being divided into lobules. Examined microscopically, it was seen to be composed almost entirely of rounded cells, with little or no intercellular substance. Scattered throughout the tissue there were seen here and there irregular masses and bands of a homogeneous material, evidently the remains of a pre-existent tissue

which was undergoing hyaline degeneration. A few blood vessels were found undergoing obliteration, with thickened and degenerated walls, and contents composed of altered blood corpuscles and fatty globules. The tumour was evidently a large, round-celled sarcoma" (See Figure).



Sarcoma of tonsil; *a* hyaline degeneration; *b* artery, with coats thickened and degenerated, containing blood corpuscles and some fatty globules. × 175 dia., Zeiss BB. oc. 4.

REMARKS.—In this case the similarity in appearance between the disease in its early stages and chronic inflammatory enlargement of the tonsil was remarkable, and bears out the statement to this effect made in the JOURNAL of July 6th, 1889, vol. ii, p. 28. Sarcoma of the tonsil is not common. Gray, in reporting a case in the *American Journal of the Medical Sciences*, February, 1889, publishes a list of eighteen cases, being the total number met with in medical literature to that date. As stated by Morell Mackenzie,[1] many cases of tonsillar disease, with the clinical features of sarcoma, are found to have the microscopical characters of lymphoma or lymphosarcoma.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 4TH, 1890.

A. L. GALABIN, M.D., F.R.C.P., President, in the Chair.

Specimens.—Mr. BLAND SUTTON: Microscopical Sections and drawings of the Fallopian Tubes of Monkeys, etc., showing the ovulæ.—Dr. AMAND ROUTH: Apoplectic Ovum.—Dr. JOHN PHILLIPS: Uterus and Placenta with Fibroid.—Dr. HERMAN: Uterus with Purulent Senile Endometritis.—Dr. CULLINGWORTH: Sarcinoma of the Ovary.

Ectopia Viscerum.—Dr. DAKIN gave a demonstration on a dissected fœtus, the subject of retroflexion, ectopia viscerum, etc. He considered all the abnormalities primarily due to failure in development of the hinder part of the gut. He came to the following conclusions:—Retroflexion and ectopia viscerum may and often occur independently; they may, therefore, be associated, and do not have a common cause. The only way apparent in which a common cause could act was that described by Duncan and Harry,[2] namely, by shortening or doing away with the umbilical cord, and thus keeping the abdominal surface of the fœtus applied to the uterine wall and placenta. The latter, by its close application, prevented closure of the abdomen, keeping apart the centrically growing edges of the abdominal walls. This common cause was failure in development of the hinder part of the gut and its processes. Applying this theory to the present case, Dr. Dakin considered that the course of events was as follows:—1. Imperfect development of hind gut, and therefore of allantois, resulting in the absence of umbilical cord, and (?) of one of the vessels (umbilical arteries) normally projected on the allantois; (*b*) interference with outflow of urine, probably an allantoic end of ureters, producing right hydronephrosis and absence of left kidney and ureter. 2. Resulting from (*a*) close application of anterior surface of fœtus to placenta and uterine wall, causing—3. (*a*) Retroflexion, with its effects on the spine (meningocele and spina bifida occulta) at the point of flexion; (*b*) pressure effects on the side of the body held in contact with placenta and uterine wall; and (*c*) failure to close of abdominal wall.

Spurious Pregnancy simulating Ectopic Gestation.—Dr. SINCLAIR STEVENSON read a paper on a case of this nature. Mrs. S., aged 24, multipara, after four months' amenorrhœa with the usual phenomena of pregnancy, had severe pains and a bloody discharge. Three months later she had pains, and passed *per vaginam* a piece of skin. The pains ceased, and the fœtal movements, which had also been felt, stopped. The next day she had a profuse discharge, and the abdominal swelling rapidly disappeared. The breasts were secreting milk. From this date she felt ill, having constant pains, and suffered from a mucopurulent discharge. A month later there was a swelling the size of the fist. The os was large and patulous. In the right fornix a soft mass could be plainly felt. The uterus was retroverted and free from adhesions; its cavity was carefully examined. The diagnosis of an interstitial gestation, with rupture at the fourth month into the broad ligament, was made. Abdominal section was performed, and an ovarian cyst of the left side was found and removed. The other organs were normal. The patient recovered. The author asked whether a cyst which had burst might fill again and yet show no signs of it, such as adhesions or other inflammatory product.—Dr. MATTHEWS DUNCAN said he had published a case in which an ovarian cyst of large size was spontaneously evacuated through the uterus; subsequently, after refilling, ovariotomy was performed, and no trace of connection between the cystoma and the tubes or uterus could be found. In another case, pus and fæces were discharged in large quantity. The finger could easily pass through the roof of the vagina into the fæcal abscess. It soon healed, and in less than three weeks ovariotomy was performed successfully. At the operation, search was made, but no trace of connection between bowel and vagina could be found; there were no adhesions in the region of the vaginal roof.—Dr. HORROCKS said he had seen a case for one of his surgical colleagues who was about to perform ovariotomy. The tumour burst internally, and became much smaller. In three weeks it refilled, abdominal section was performed, and an ovarian tumour was removed. No trace of the rupture could be made out either in the form of adhesions or a scar on the cyst.

Fever in Childbed.—Dr. ROBERT BOXALL read a paper on this subject. The first part dealt with the general fever rate and septic rate of the General Lying-in Hospital during the last seven years, and marked the decline that had taken place. A series of charts and tables was appended, which dealt with the 2762 puerperæ who had been delivered in the General Lying-in Hospital during a period of seven years, from July, 1882, to June, 1889, inclusive. By this means it was proved: 1. That the proportion of cases affected with fever declined rapidly and then became steady, but had since diminished slightly. 2. That this decline had in the main resulted from decrease in and temporary abolition of cases affected with septicæmia and pelvic inflammation. 3. That in the febrile cases both the duration and the height of the fever had diminished. 4. That these changes were identical in point of time with certain changes effected in the hospital service. Chart I showed an increase in the number of admissions, a decrease in the number of febrile cases and particularly of septic cases, and a diminution in the amount of fever not only relative but absolute. Chart II was divided into four parts. The first division gave the percentage of patients in which the temperature rose above 100° F. and the percentage of patients who were affected with septicæmia and pelvic inflammation. This showed that in the whole number of patients delivered in the hospital before and after May, 1884, a drop occurred from 83 per cent. to 40.6 per cent in the cases followed by fever, and from 40 per cent. to 2.5 per cent. in the cases followed by septic fever, and, further, indicated an improvement in both respects in the months which immediately preceded that date. The second division gave the average daily percentage of patients in hospital with pyrexia and with septicæmia and pelvic inflammation. This showed in comparing all the cases before and after May, 1884, a drop from 39 per cent. to 8 per cent. in the daily proportion of cases in hospital with fever, and from 27 per cent. to 1.6 per cent. with septic fever; and, further, indicated an improvement in both respects in the

[1] *Diseases of the Throat and Nose*, vol. i, p. 84.
[2] *Obst. Trans.*, vol. xxvi.

months which immediately preceded that date. The third division gave the average duration of the fever in days. This showed in a comparison of all the febrile cases before and after May, 1884, that the duration of the fever was reduced from 7.7 to 3 days, together with some improvement in this respect also in the months preceding that date. The fourth division gave the average height of the fever in degrees above 100° F. This showed an average reduction in the height of the temperature dating from May, 1884, of very nearly 1° F., but no appreciable improvement in this respect in the months immediately preceding that date. Considered as a whole, Chart II proved that not only had the proportion of febrile to non-febrile cases diminished, but also the proportion of septic to non-septic cases had at the same time still more markedly diminished; that for months together such cases had entirely disappeared, and that simultaneously the duration of the fever had been shortened and its height diminished. Chart III showed that each patient admitted averaged as much as 17 degrees of fever during the puerperium before May, 1884, but only 1 degree after that date; and, further, that the amount was considerably reduced in the months immediately preceding that date. The septic rate, that is, the average amount of pyrexia due to septicæmia and pelvic inflammation (in days × degrees above 100° F.), for each patient admitted during each month was also given. This showed that each person admitted averaged as much as 13 degrees of fever from septicæmia and pelvic inflammation alone during the puerperium before May, 1884, but less than half a degree after that date, the amount being often reduced to zero or to a fraction of a degree for months together; and, further, that the amount was apparently reduced in the months which immediatelypreceded that date. This chart further demonstrated: 1. That the decline in the general fever rate had in the main resulted from decline in the septic rate. 2. That though occasional slight rises had occurred during the last five years, the general tendency had been towards improvement, not only in the general fever rate, but also in the septic rate, and that when the general fever rate had risen it had in the main resulted from increase in the septic element. The second part dealt with the death rate and the nature of the illness prevailing, and the decrease in and temporary abolition of septic cases. A tabular statement was given of the more severe cases of illness under three heads, which included all the cases (1) which were detained beyond three weeks, (2) which were transferred to other hospitals, and (3) which ended fatally. This table showed that the death-rate from all causes followed the decline in the general fever rate, and that as in the one case the improvement resulted in the main from decrease in the number and severity of cases affected with septicæmia and pelvic inflammation, so in the other the decline was mainly wrought by decrease in and temporary abolition of the septic element. In the third part a description of the hospital and of the manner in which its service had been conducted was given. Such alterations of a general hygienic nature as had been effected during the period under consideration were dwelt upon. Attention was directed to the fact that during the whole of the time the same principles had prevailed—antiseptics had been in constant use, but the details had been changing, especially with regard to the strength and character of the solutions employed.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JUNE 12TH, 1890.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

The Artificial Maturation of Immature Senile Cataract by Trituration.—Mr. MCHARDY concluded his paper on this subject, the first part of which he read before the Society at the meeting on May 1st. An abstract of this paper was published in the JOURNAL of May 10th, to which readers are referred. In his last hundred cases he had been obliged to remove the lens sooner than he intended in two cases, in both of which useful vision had been restored. In 3 per cent. of the cases, sight had been entirely lost.

Artificial Ripening of Cataract: Förster's Operation.—Mr. SIMEON SNELL (Sheffield) read a paper on this subject. After a passing reference to other methods of dealing with the class of cataracts in which the process of maturation proceeded so slowly as greatly to interfere with the comfort of the patient, and often to occasion worry and distress, he proceeded to speak of Förster's operation. He had performed this method of causing ripening by trituration of the lens capsule through the cornea in ten cases, being about six or seven per cent. of the cataract (senile) operations during the same period. He gave particulars of each case, and thought well of the operation. If performed with care, it appeared free from harm; if its immediate object was not attained, as in two of his cases, no evil results had ensued. No iritis nor ocular irritation had been occasioned in any case. The increased opacity showed itself frequently a few days after the operation, and extraction of cataract could generally be proceeded with in a month to six weeks subsequently. The stroking of the capsule should be gently done and in the centre as much as possible. The iridectomies in his cases had been small and made downwards, and the extractions were performed by a shallow lower flap.—Mr. CRITCHETT said that at Leeds a year ago, he had expressed the hope that at no distant date an opportunity might offer of gaining statistics on this important subject,which must be faced sooner or later. Already great progress had been made in the methods of extracting cataracts. He spoke of seven or eight cases of which his experience consisted, which had been commenced under great compulsion, and proceeded with only with great caution and some misgiving. Iritis had occurred in two, but no eye had been lost. During the last few years his success had quite equalled his expectations, and he thought that immature cataract could be removed almost as well as mature ones. He was convinced that it was wiser to wait till the patient could no longer see to find his way about before operating, and referred to a saying of Mr. Critchett, sen.: "You must always remember that the probabilities in ophthalmic surgery are so delightful that everyone would want to become an oculist; the possibilities, however, are so dreadful that they can only be mentioned to oneself in a whisper."—Mr. TWEEDY said that his experience in dealing with immature senile cataract was scarcely comparable to Mr. McHardy's. For more than nine years he had operated when the necessity arose upon unripe cataracts—that is, where both eyes were so affected that the patient was unable to follow his occupation. The results had been satisfactory, and this he ascribed entirely to the *modus operandi* he employed, which consisted essentially in opening the lens capsule at its extreme upper periphery after performing iridectomy. By this procedure the face of the anterior capsule was untouched, and any lens matter which remained behind or which formed subsequently was enclosed in the capsule in its natural position, and did not come into contact with the iris. In the seven years, 1881 to 1888, he had operated upon twenty-nine immature senile cataracts at Moorfields Hospital. Of these, one eye was lost from late serous iritis and glaucoma, two suffered from a sharp attack of iritis, and one lost a little vitreous. He assured Mr. McHardy that most ophthalmologists were fully alive to the importance of dealing with this class of cases. He had had no personal experience of trituration of the lens, but he thought that there were several possible drawbacks to the operation. Mr. McHardy had stated that iritis frequently followed trituration, and this was certainly an undesirable state of things to precede extraction; there was another possible drawback, namely, that the friction might induce thickening of the anterior capsule, and thereby lead to difficulties in secondary capsule operations. Of the twenty-nine cases referred to, a "secondary" needling was required in thirteen; he had not examined his records for the last two years.—Mr. HULKE said that he had come rather to listen and learn than to speak, as his experience did not furnish him with sufficient grounds for forming a judgment; but he fully endorsed the views of Mr. Critchett and Mr. Tweedy with regard to the ethics of this question, and would not himself feel justified in meditating the operation or suggesting it to a patient.—Mr. MACKINLAY said he had not taken kindly to the trituration operation described by Mr. McHardy, when he had first seen it performed. Recently he had been more favourably impressed therewith, and had performed the operation in about twelve cases. In all he had obtained satisfactory results, and no undue toughness of the capsule had followed.—Mr. HENRY EALES (Birmingham), said he had not yet had a very wide experience in operating upon immature cataracts, except in some cases of nuclear opacity. He had operated in such cases now about 30 times, being at first compelled by circumstances. One case was that of a farmer, who had already lost one eye and was incapacitated by opacity in the other lens. The result was good, the man obtaining vision equivalent to $\frac{5}{6}$. In no case was there failure in obtaining maturation. The lenses were removed about six weeks later. These cases exhibited slender adhesions of

the iris to the capsule, which easily gave way to atropine. The lens generally came away very cleanly, leaving a clear pupil, and no after-needling was required.—Dr. HILL GRIFFITH (Manchester) had done the operation in 28 cases, but always by direct trituration by means of a silver spoon introduced through the iridectomy wound. In 24 of these cases, no result whatever was produced in 13, or just over a half, and in one of these partial dislocation of the lens took place; this was the only mishap he had had from the operation. In the remaining 11 cases rapid maturation was effected, followed by extraction, with slight loss of vitreous in one case only. Good vision was ultimately obtained in all, but convalescence was very tedious from retention of cortex. The operation was useless for dealing with opacities which had no natural tendency to progress, as he had proved in zonular cataract and cart-wheel-like opacities in the posterior layers of the lens, and he had been disappointed in several cases of exceptionally slow growing cataracts, so that he thought that the cases in which the procedure might be of use were not so frequent as Mr. McHardy's statistics seemed to indicate.—Mr. BRAILEY thought the question required very careful examination, first on account of the limited applicability of the method, and secondly with regard to the ethics. In many cases the condition of the lenses did not seriously interfere with the occupation and progressed extremely slowly. Of 82 immature cataracts seen in one year and a-half 26 were seen a second time, and of these only four required operation, and only four others had progressed appreciably. In many vision had actually improved, probably through a diminished use of the eyes. The ethics of the question also deserved careful consideration. Iridectomy had been introduced as a panacea for everything, and had brought operating to some extent into disrepute. Many cases operated on when immature would probably not have advanced if left alone. The eye was subjected to great risk by the operation, and he thought they should advance very cautiously in its employment. —Mr. MCHARDY, in response, thanked the members of the Society for the interesting discussion which had been elicited, and replied briefly to some of the remarks made by different speakers.

Living and Card Specimens.—Sir WILLIAM BOWMAN: Portrait of the late Professor Donders, of Utrecht.—Dr. W. J. COLLINS: Cases of Persistent Capsulo-pupillary Membrane.—Mr. GUNN (for Dr. WERNER, of Dublin): Abnormality of Retinal Veins.—Mr. STANFORD MORTON: 1. Tumour of Plica Semilunaris; 2. Upward Coloboma of Iris.—Mr. LAWFORD: Embolism of a Branch of the Central Retinal Artery.—Mr. GUNN; Case of Proptosis (unilateral) with Intracranial *Bruit*.—Mr. BRAILEY: Case of Microphthalmos, with other Congenital Defects.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JUNE 11TH, 1890.

C. H. F. ROUTH, M.D., President, in the Chair.

Specimen.—Dr. MACNAUGHTON JONES showed a Large Fibroid Polypus, which had completely filled the vagina. The patient was a woman, aged 60, and the growth had contracted extensive adhesions to the vaginal walls. The patient did well.

Tumours of the Pelvis Simulating Ovarian Tumours.—Dr. OUBERT, of Calcutta, contributed notes of two cases of fibroid tumours of the pelvis occurring in native women, which gave a curious impression of fluctuation, though the tumours in both cases were subsequently shown to be solid masses of white fibrous tissue. In the first case he had been unable to complete the removal of the tumour, and the woman succumbed a day or two afterwards from shock. In the second case he had succeeded in enucleating the tumour, but again death took place; on that occasion from hæmorrhage into the sac. He called attention to the difficulty that existed in distinguishing between tumours of this kind and those of ovarian origin.—Dr. BANTOCK insisted on the undesirability of attempting to remove such growths when low down in the pelvis, and he mentioned a case in which he had been obliged to leave a fibroid, with the result that not only had the patient done well, but the interference with the blood supply had led to atrophy of the growth.—Remarks were also made by Mr. FENTON and the PRESIDENT.

Intestinal Obstruction.—Mr. F. BOWREMAN JESSETT read a paper on certain forms of intestinal obstruction, in which he discussed the means of dealing with them other than by creating an artificial anus, illustrating his arguments by diagrams.—Discussion on the paper was postponed.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, JUNE 4TH, 1890.

Professor SIMPSON, M.D., President, in the Chair.

Removal of Large Foreign Body from Orbit without Injury to Sight.—Mr. GEORGE BERRY showed a patient from whose orbit he had removed a portion of the stem of a clay pipe, about 2 inches in length. When first seen there was a wound of the lower eyelid, from which fragments of clay were taken away; there was a history of a blow from a closed hand containing a clay pipe. Suppuration having ensued, the wound was enlarged and probed, when a foreign body was detected. The wound was still further enlarged, several of the ocular muscles divided, and the pipe stem removed. The wound healed without suppuration, and, a month after the operation, when the patient was shown, the sight of the eye was as good as before the accident.

Laparotomy in a Tubercular Child.—Mr. A. G. MILLER showed a patient on whom he had performed laparotomy for a condition which he had judged to be tubercular peritonitis. The abdomen was opened, and the cavity washed and drained. The wound healed perfectly, and, six weeks after the operation, the child was apparently cured.

Specimens.—Mr. T. RITCHIE showed a specimen of hydronephrosis from a female patient; and Dr. WM. RUSSELL showed another, the result of calculus impacted in the ureter.—Dr. ALLAN SYM exhibited the brain of a servant girl, who had died suddenly with obscure symptoms of vertigo and nausea. Small hæmorrhages were traceable in both optic thalami.

Exhibits.—Mr. CHAS. CATHCART showed a double tin box, so arranged that steam could play for a given length of time on the contained surgical instruments, without the access of carbonic acid, and, consequently, without the possibility of rust. It was easily managed and portable.—Mr. ALFRED HUGHES showed a modification of Thomas's splint for club-foot.

Tetanoid Convulsions in an Infant.—Mr. THOMAS RONALDSON, read notes of a case of tetanoid convulsions in a child 12 days old. The child was born after a normal labour in apparent health. The umbilical cord was thicker than usual and did not separate at the usual date. When 9 days old twitchings were noticed in the muscles of the face and the left side of the body. Sedative treatment had no effect and hot baths seemed to increase the tendency, as many as 204 fits in 24 hours being recorded. Accordingly the umbilicus was incised and the fits gradually diminished.

History of an Abdominal Ligature.—Dr. WILLIAM TAYLOR read an account of a case in which both ovaries were removed, the left pedicle being cauterised and the right ligatured. Death occurred later from other causes, and at the *post-mortem* examination the left pedicle was found normally healed. The right pedicle, on the other hand, was thickened and indurated, and behind it there was similar induration which extended to Douglas's pouch and invaded the wall of the rectum. The cellular tissue round most of the abdominal organs was similarly indurated. There were malignant masses in the liver and the omentum. Dr. William Russell, who performed the *post-mortem* examination, thought that the irritation of the ligature was the primary cause of the malignant development.

REVIEWS AND NOTICES.

A TEXTBOOK OF OBSTETRICS, INCLUDING THE PATHOLOGY AND THERAPEUTICS OF THE PUERPERAL STATE, DESIGNED FOR PRACTITIONERS AND STUDENTS OF MEDICINE. By Dr. F. WINCKEL, Professor of Gynæcology, etc., in the University of Munich. Translated under the supervision of J. CLIFTON EDGAR, A.M., M.D. With 190 illustrations. Edinburgh and London: Young J. Pentland. 1890. Pp. 927.

THIS book, by one of the first obstetricians in Germany, is based upon thirty years' experience as a teacher and practitioner. The English translation is excellent; so good that, even if we were not aware of the translator's nationality, we could scarcely have hinted that the few Americanisms we find in it are not adornments. Of the 190 illustrations, twenty-five, which depict instruments, are new. The whole book is thoroughly original; the stamp of the writer's personality is on every page. It is therefore a work which no one interested in midwifery can omit to study, and no one who does study it will think that the time spent upon it

has been wasted. It is characteristically a German book. It is German in the care, thoroughness, and exactness with which minute points are dwelt upon and worked out; German also, may we (without offence to the Fatherland) say, in some want of sense of proportion, some want of the clear insight to single out the essential from the unimportant, in which consists the genius of the great practitioner. The author appears in the book, to our eyes, rather as a great scholar than as a great practitioner. It is German also in the fact that the author's acquaintance with the work that has been done of late years to advance obstetrical knowledge in France, and especially in England, is far less extensive than his knowledge of German literature. In some matters this deficiency makes his book far behind the time. A feature which deserves mention, in that it honourably distinguishes this work from most of those relating to the subject, is that the history of the subject is given more space than usual.

As an instance of what seems to us want of proportion, we may mention that the mechanism of labour (the section on which is brief and poor) occupies twenty pages, while an equal amount of space is given to the anomalies of the umbilical cord, not including prolapse, which occupies fourteen pages more. Indeed, the elaboration with which the possible modes of production of prolapse of the funis are discussed is in striking contrast to the short and somewhat inexact account of the far more important and more certainly and precisely ascertained mechanism of the passage of the fœtal head. This feature of the book, nevertheless, enables us to mention as a recommendation of the volume that some out-of-the-way conditions (for example, hernia of the gravid uterus) are more fully described in it than in any other textbook known to us.

Passing from general criticism, we may quote the author's views on some topics of interest. Some writers attach much importance to obliquity of the uterus as a cause of various departures from the normal course of labour, among these being shoulder presentations. It is often stated that shoulder presentations with the head to the left are more common than those with the head to the right; and this is held to be explained by the greater frequency of right obliquity, and to be evidence of the importance of such obliquity. Professor WINCKEL has analysed 894 cases in which the position was clearly defined, and finds that there is no such preponderance of cases with the head to the left; that cases with the head to the left and those with the head to the right occurred with equal frequency.

Professor Winckel is distinctly a conservative obstetrician. He does not support meddlesome midwifery. Thus, as to forceps, he writes (p. 698): "Whoever has any idea to what dangers he may, and frequently does, subject a parturient by such 'operations of convenience,' should understand that they are not 'operations of convenience,' but are unjustifiable ones. Here, if anywhere, Schiller's words are most appropriate:

> It is the curse of evil deeds
> That they give birth to further evil.

The evil deed is the application of forceps for weak pains; its after-results, the hæmorrhagic bleeding and the anxiety produced by it, the hasty action of artificially separating the placenta from the uterine wall, which has sent so many poor women to an early grave." It appears to us that in launching this denunciation the author has not sufficiently distinguished between weak pains and absence of pains. His condemnation is appropriate if it applies to the dragging out of the child in the absence of pains; but surely the practice of assisting pains which are normal in everything except power, that is, literally weak pains, to force the head over the perineum, is not so deadly as Dr. Winckel would have the student think.

In view of one of the discussions which are to take place at the next meeting of the British Medical Association, the following quotation, giving Dr. Winckel's view of the matter, will be read with interest:—"While the mortality of the women is 2·2 per cent. after the induction of premature labour, 4·8 per cent. after version and extraction, 2·8 per cent. after perforation, there is still a mortality of 8·6 per cent. after Cæsarean section (this was recently 54 per cent.), even by the most experienced operators..... The old mortality will soon be reached if the operation is undertaken very frequently outside well-conducted institutions" (p. 726). He is very emphatic in his condemnation of laparo-elytrotomy (p. 730). After recounting the objections to it, he writes: "May these lines serve to hasten this operation once more to a silent burial. God protect us from any future resurrection! but much more let him guard the poor parturients with contracted pelves who seek help from us physicians."

Dr. Winckel is very clear in his directions for the treatment of eclampsia, and claims to have been very successful. Every pregnant woman with any notable albuminuria is given a hot bath at 100° every day, the patient afterwards being wrapped in a blanket, so as to cause diaphoresis, which usually continues two hours; "it removes existing attacks, and enables the gravida to go to term without injury to the child." If this fails to improve the patient's condition drastic purgatives are given as well. If, in spite of these measures, eclampsia occurs, Dr. Winckel treats it by the combination of chloroform and chloral, which he thinks is more efficient than either separately. "Whenever the patient becomes restless, and the approach of an attack is thereby recognised, or as soon as the first contractions commence, chloroform is to be given, and the inhalation continued until the attack disappears. The chloroform acts, therefore, as a preliminary calmative until the chloral can be given (15 to 30 grains), which is to be at once administered after each attack per enema; this is repeated after each attack, and we are not afraid of giving as much as three drachms of this drug per day, and even more." (p. 596). Under this treatment the author has only lost 7 patients out of 92. He quotes the good results that have been obtained with morphine, and remarks, "further observations must show whether the morphine treatment will permanently displace that by chloral hydrate."

In the treatment of extrauterine pregnancy the advice given is distinctly behind the present state of our knowledge. Each year brings to our mind further demonstration that in early extrauterine gestation abdominal section is not only the sole effective treatment, but is probably less dangerous than most of its very doubtfully effective rivals. Dr. Winckel, however, speaks of abdominal section as being too dangerous, and recommends electricity and injection of narcotics into the sac—measures which at least are not always successful.

The section on operative midwifery suffers much from the point of view of the English student, from the fact that most of the instruments recommended are modifications by German obstetricians of those familiar to us in England, and that the dorsal position is assumed to be the usual one. We note that the author thinks that the "cephalotribe is an instrument which can be dispensed with, and the time is not far distant when it will be no longer used." We possess, he says, a much better and safer extraction instrument in the cranioclast.

In the chapter on puerperal diseases we find no mention, except indirect reference, to the well-marked cases known as septic intoxication, septic absorption, or sapræmia, in which washing out the uterus cures the patient in a few hours. The description of the morbid anatomy of puerperal diseases is full and good. Doubtless, in the preantiseptic period, the author had plenty of opportunity of seeing them.

In short, while the book is useful for the information it contains and the references it gives to sources of larger knowledge, as to many out-of-the-way points; interesting for the sketches of the history of the subject which preface some of its sections, and valuable especially as being the work of an independent, well-informed, and original observer and thinker; yet it is not one which can supplant our English textbooks, or teach much to a well-trained English practitioner as to the management of the conditions commonly met with in practice.

A HANDBOOK OF QUANTITATIVE ANALYSIS. By Messrs. JOHN MILLS and BARKER NORTH, of the Normal School of Science. London: Strangeways and Sons. 1889.

THIS treatise contains directions for certain simple quantitative separations of metals in alloys, etc., for the assaying of silver and gold, for water, gas, and organic analysis.

The authors state in their preface that the book meets the requirements of the practical examination for the M.B. of the University of London, amongst others. But, inasmuch as the commoner alkaloids are included in the prospectus of this examination, and no mention of these is made in the *Handbook*, we fail to see how this can be the case. The student is advised on p. 4 to dry salts which lose their water of crystallisation at 100° C., in a covered glass vessel over a dish of strong sulphuric acid (desiccator). This procedure would, however, frequently lead to erroneous conclusions on the part of the analyst, for it is well known that a very large number of salts lose their water of crystallisation when placed in a perfectly dry atmosphere, even at the ordinary temperature.

On p. 20 we notice that no chemical test is directed to be used for the purpose of ensuring perfect freedom of baric sulphate from soluble matter. Students are certainly saved much unnecessary labour by the application to the wash-water of such a reagent as silver nitrate solution, for example, when chlorides are being removed by washing, instead of trusting to the "three or four times washing by decantation, and four or five times on the filter" of this textbook.

Again, on p. 95, directions are given to dissolve cupric sulphide by pouring nitric acid over the filter, which is distinctly stated to be of paper. Such a method of treatment frequently leads to serious trouble in the subsequent precipitation of the copper as cupric oxide by potassium hydrate, since there is often so much organic matter carried into the copper nitrate solution by the action of the hot acid upon the paper, that it interferes with the complete precipitation of the copper as cupric oxide. This source of error is completely avoided by the direction given in the best works to dry the paper with any adhering copper sulphide, incinerate, dissolve, and add the solution to the main bulk of the copper filtrate.

The diagram on p. 121 requires amendment. It is intended to represent an apparatus for estimating combined water in metallic ores by ignition in a stream of dry air. The air is made to enter the tube containing the substance under analysis, after passing through a mysterious flask containing a liquid whose nature is not explained in the text. However, as the air is said to be dry after passing through this liquid, it is probably intended to be strong sulphuric acid. If this be so, grave doubts must be entertained as to the dryness of the air, for gases have been proved to carry steam and other vapours through sulphuric acid when merely bubbling through it, since the gas in the interior of the bubbles escapes contact with the acid. For this reason, U tubes packed with fragments of solid matter, such as pumice stone, glass beads, etc., moistened with sulphuric acid, are always used for drying gases. Further, if the air is dried by sulphuric acid, the tube for collecting the water evolved should also contain sulphuric acid. The work contains many good and useful analytical methods.

DIE INNEREN KRANKHEITEN DER HARN UND GESCHLECHTSORGANE. Für Aerzte und Studirende dargestellt, von Professor Dr. PAUL FÜRBRINGER. Zweite umgearbeitete und vermehrte Auflage. Mit 18 abbildungen in Holzschnitt. Berlin: Verlag von Friedrich Wreden. 1890. [The Internal Diseases of the Urinary and Sexual Organs. For Physicians and Students. By Professor Paul Fürbringer, M.D. Second revised and enlarged Edition. With 18 woodcuts.]

THIS work, as its title announces, is a textbook of diseases of the urinary organs, by a well-known German physician. It does not include some diseases that English works on the same subject usually discuss, such as diabetes mellitus and insipidus, while it includes diseases of the bladder, prostate, urethra, and testicles, which are with us relegated to surgical textbooks. The first part deals with the general pathology of albuminuria, hæmaturia, hæmoglobinuria, tube casts, dropsy, and uræmia; and the second part with circulatory disturbances in the kidney, nephritis, renal tumours, displacements of the kidney, bladder diseases, urethral diseases, prostatitis, epididymitis, balanitis, and impotence.

In the space at his disposal Professor FÜRBRINGER has necessarily to deal somewhat briefly with this great mass of material. Bright's disease in all its forms is disposed of in something less than a hundred pages, although it is the most important of all urinary affections, on account of its frequency and its manifold relations with other diseases. In his classification of Bright's disease he follows more recent German writers in describing acute and chronic diffuse nephritis, without attempting to maintain the old anatomical distinctions of "parenchymatous" and "interstitial" nephritis, but he separates these from "contracting kidney" (*Schrumfniere*), which he attributes to gout, lead poisoning, and, exceptionally, to primary arterio-sclerosis. He makes amyloid kidney another class apart, and also "purulent nephritis" (*eitrige Nephritis*).

He does not attempt to deal with the difficulty that cases which have displayed all the clinical characters of his "contracting kidney" often present, *post mortem*, organs which could not be so described; or that amyloid kidneys are for the most part cases of diffuse nephritis occurring in the course of chronic febrile diseases, such as septicæmia, phthisis, etc. For the most part, the facts are set out in a very dry, systematic fashion, with neither drawings nor cases to illustrate them, the few illustrations being of instruments or urinary deposits. When so moderate a space is devoted to Bright's disease, it is somewhat remarkable that gonorrhœa should take up nearly seventy pages.

The work will be consulted mainly by those whose line of practice leads them to regard with special interest all writings on urinary diseases.

NOTES ON BOOKS.

Stirpiculture, or the Ascent of Man. By A. P. REID, M.D., Superintendent of the Nova Scotia Hospital for the Insane. (Halifax, Nova Scotia: T. C. Allen and Co. 1890.)—The highest interests of the State are involved in studying the evolution or ascent of man to a higher standard of physical, mental, and moral attainment—conditions absolutely necessary to enable any nation to hold its own in the international competition for existence. This subject has often occupied the pen of the essayist, and the attention of philosophers and statesmen; and some degree of advance has already been made, mainly by attention to the details of hygienic care and the cultivation of State medicine. The pamphlet before us is a contribution of some value on these lines of research by Dr. A. P. Reid, of the Nova Scotia Hospital for the Insane. It is founded upon the records of 2,400 histories collected by him in cases of mental failure. Thus far the action of the State has been mainly limited to attempting, by criminal law, to restrain the action of the ill-disposed, while the scientist would say we should aid the ascent of man by hygienic care and education. We need legislation, not only to restrain bad action, but also to aid the evolution of mental and moral faculty in the masses. In these and other points Dr. Reid's paper is well worthy of consideration. He has studied not only cases of failure, but also the social and inherited forces at work which cause it, and has not hesitated to express his opinions, boldly advocating as remedial measures the indissolubility of marriage, the dignity of labour for both men and women, moral training in schools, and dogmatic religious teaching. Taking his stand upon the facts of biological science he argues questions in practical life and the possible means of attaining them. The author divides the people into (1) the good, (2) the bad, (3) the irresponsible, (4) the average of humanity capable of being moulded by association and training, out of whom other classes rise or fall. We are reminded that a man may present the present signs of health, and yet, if the family history be ignored, he may overlook a predisposition to evil, not expressed in his life because he has not been subjected to strain, though capable of transmitting evil tendency to offspring. Such men he would forbid to marry. Dr. Reid is strongly of opinion that all men are not equal, and that industrial training, as distinguished from literary education, is most needful for the masses, showing by means of statistics its greater efficacy in producing happy and useful lives. It is, however, by restraining unsuitable marriages that he looks for the greatest chances of improvement. There is always something unsatisfactory about the discussions on this question, and this will continue as long as we continue to study mental states by other than purely physiological means. To speak of people as "good, bad, irresponsible," etc., involves such complex relations as confuse the question and obscure the scientific search for causation. We need to describe the conditions we desire to remove as purely physical phenomena, analysing such facts to their simplest visible elements when devising means for their amelioration by physical agencies. We need primarily further vital statistics of conditions of development of brain power among the population; and these should be collected among the schools.

The Papers set for the Several Examinations for the Qualification of L.S.A.Lond. Collected by R. R. SLEMAN, B.A.Cantab., L.S.A.Lond. (London: Taylor and Francis.)—This is a collection of papers set at the various examinations held by the Apothecaries' Society of London for its licence. The papers are chosen from those set in recent years, and are supplemented by outlines of the oral and practical examinations. The collection is likely to be of considerable use to intending candidates.

A Descriptive Catalogue of the Pathological Museum of the London Hospital. Published by order of the College Board. (London: Taylor and Francis.)—The publication of a museum cata-

logue is always a subject for congratulation. In this case a large and valuable collection is for the first time made thoroughly useful for the worker within and without the London Hospital. The catalogue is prepared after the excellent plan of its prototype at the Royal College of Surgeons. Each specimen is described anatomically and its morbid features carefully explained. From this catalogue we learn that the pathological preparations exceed 2,400 specimens, carefully selected. This number does not include 175 plaster casts, 67 wax models, 207 calculi, and 190 plates of diseases of the skin, the latter arranged by Dr. Stephen Mackenzie. The entire catalogue is based on manuscript guides to the collection gradually compiled by past curators, among whom were Sir Andrew Clark, Mr. Rivington, Mr. McCarthy, Mr. James Adams, and Dr. Turner. The larger share of the labour of compilation and editing has fallen on the present Curator, Mr. T. H. Openshaw, who has been assisted by two other official editors, Dr. Charlewood Turner and Mr. Eve. The last named surgeon has had wide experience in the preparation of catalogues, having for several years held the office of pathological curator to the College museum. The book itself forms a large, well-printed volume. Pathologists and all who are accustomed to write monographs for societies will feel thankful to the editors of this catalogue.

Etude sur la Syphilis et son Traitement. Par le Dr. SIMON SMIRNOFF. (Paris: G. Masson.)—The author of this small work is President of the Russian Society of Balneology at Piatigorsk, and was formerly chief medical superintendent of the mineral springs of the Caucasus. Of these springs there are four different kinds, namely: iron waters at Géléznovodsk; alkaline (soda bicarbonate) at Essentouki, which is known as the Caucasian Vichy; waters highly charged with carbonic acid at Kisslovodsk; and finally, hot sulphur waters at Piatigorsk. It is, of course, these last that are chiefly used in the treatment of syphilis, but Dr. Smirnoff does not look upon them as having any real anti-syphilitic properties. Mercury, he justly remarks, is the true specific, and the sulphur baths are employed to accelerate the elimination of mercury, but, as a rule, the two remedies are not used at the same time. As regards the nature of syphilis, Dr. Smirnoff's view is that the soft and indurated sores are merely different manifestations of one and the same disease. The virus of the former he looks upon as being simply in a more concentrated state than that of the latter, and this, in his opinion, is why the pus of the soft chancre excites a more acute reaction, thus bringing about a rapid local destruction of the virus, and so preventing general infection of the system. The virus of the indurated sore, on the other hand, acts more slowly on the affected tissues, and this slowness of action the author considers a favourable condition for promoting general infection. Most readers of the JOURNAL will probably be surprised to learn, on the authority of Dr. Smirnoff, that English physicians look upon scrofula as *une syphilis métamorphosée.*

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

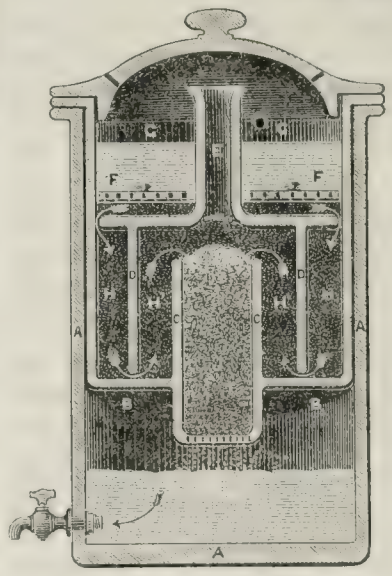
CREOLIN CAPSULES.

THIS is a convenient and agreeable form for the internal administration of the well-known antiseptic, creolin. The taste of this substance is so unpleasant that it is a difficult matter to give it by the ordinary methods. These capsules are made of flexible gelatine, and contain five minims of creolin. They have been introduced by the Jeyes Sanitary Compounds Company, 43, Cannon Street, E.C.

EXALGINE.

ONE of the latest additions to the medicinal compounds derived from the aromatic series is exalgine, which is manufactured by MM. Brigonnet and Naville, La Plaine, St. Denis. These aromatic derivatives act in three ways: they are antiseptic, antipyretic, and analgesic. It is claimed for exalgine that, although possessed of antiseptic and antipyretic properties, it is essentially analgesic. The remedy is at present upon its trial; but so far the reports are upon the whole favourable. Its uses have been studied and reported on in these columns by Professor Fraser, of Edinburgh. Exalgine occurs in the form of long crystalline transparent needles; it is but sparingly soluble in cold water, but it is readily dissolved in the stomach—a fact which has been experimentally proved. The most convenient form of administration is a mixture in which the exalgine is dissolved in a small quantity of spirit of peppermint, rum, whisky, or tincture of orange, before the addition of water. The sample which we have examined has been sent by Mr. B. Kühn, 36, St. Mary-at-Hill, Eastcheap.

CIRCULATING FILTER.



THIS filter possesses a very essential property—namely, that it can be cleaned and recharged with filtering material with the greatest readiness. The various parts of the apparatus fit simply and easily into one another, without the intervention of any joints, plugs, screws, india-rubber, or asbestos cloth packing, which so often render domestic filters difficult to take to pieces, or form collecting places for the dirt filtered out of water. Doulton's manganous carbon is recommended for use as the filtering medium, but Spencer's magnetic carbide of iron, or polarite, which have been found recently to possess such valuable filtering qualities, might be introduced instead. The filter is supplied by the Morris Tube, Ammunition, and Safety Range Company, Limited, 11, Haymarket, London, S.W.

BEEF-TEA ICES.

WE have examined some "ices" which are sent out in small paper cups contained in a "freezing box," and which are called "bovril ices." The samples consisted of large ice-crystals impregnated with small amounts of the preparation known as "bovril." The idea of sending out an iced beef-tea or frozen meat extract is a good one, and may be very useful; but, assuming the particular "extract" used in this case to be the one that it is desirable to use, it is to be regretted that the amount of the "extract" present is so very small as compared with the amount of ice. The preparation of the "ices" by the Horton Ice Cream Company has certainly been careful and cleanly.

RIZINE.

THIS is a preparation of rice in the form of laminæ or flakes. Rice grains are allowed to absorb enough water to become "gelatinised," and are then passed through an atmosphere of superheated steam; these are then dried superficially, and flattened by rollers. The samples we have examined were free from adulteration and impurities, and the starch granules were found to be thoroughly ruptured. The preparation has practically the composition of rice, but it is in the form of a light and easily digestible food.

PALATABLE CASTOR OIL.

MESSRS. PETTY AND CO. (Silvertown, London) have sent a sample of castor oil which, by a special method of preparation, has been entirely freed from its characteristic odour and taste. It is stated that in its manufacture no chemicals have been used, and no acids employed to bleach it, the oil being sold in its natural colour. We find upon examination that it has not the slightest odour of castor oil, and that it possesses a bland, pleasant taste. It certainly can be administered without any difficulty.

AN IMPROVEMENT IN BINAURAL STETHOSCOPES.

DR. CHARLES C. TEACHER (Edinburgh) writes: I take the liberty of pointing out through your columns a very simple and inexpensive way of improving the binaural stethoscope. As used at present, either with or without the india-rubber cap on the chest piece, the sounds conducted to the ear are not as clear as when heard with the ordinary stethoscope, as they are obscured by a sound like that heard when the external meatuses are closed with the finger tips. This humming sound is due, I suppose, to the ear pieces closing the external meatuses, and thereby causing unequal pressure of air on either side of the tympanic membrane. It can be got rid of entirely by boring a small hole in the side of each ear piece, so as to allow air into the external meatuses.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 21ST, 1890.

DEGREES FOR LONDON MEDICAL STUDENTS.

THE course of the negotiations between the Senate of the University of London and the other bodies interested in higher education in London has been protracted, but there are signs that we are at length approaching the end. In order to understand the present position it is necessary to remember the steps by which it was reached. The University of London was in its origin a protest and a challenge: a protest against the exclusion by the old universities of all who would not accept certain theological tenets, and a challenge to these older universities in the fields of learning and of science. The triumph of the principles for which the founders of the University of London fought has been complete. Theological tests are no longer enforced by the older universities, and science has begun to take its true place in their curricula. Fresh needs and new interests have, however, grown up in London, and it has been evident to thoughtful men for the last ten years or more that the University of London must change with the changing order, or cease to be any more an institution endowed with spontaneous vitality. The original causes for its creation having largely disappeared, it has to find in the new circumstances which have grown up about it fresh fields of usefulness.

As it is but too probable that we are to find the Convocation—that is to say, the body of graduates—of the University taking up a position of hostility to the proposals for reform which are likely to be adopted by the Senate and by the corporations and colleges acting with it, it is only fair to recall that the first stirrings of the spirit of reform are to be traced in the votes and discussions of that body. Gradually the interest in the matter increased, and very early in the movement it became clear that there were two separate springs of action. There was, on the one hand, the growing discontent of the collegiate teachers of arts and science with their position in the educational system, and their growing determination to seek its amelioration. This determination first found a collective voice in the Association for Promoting a Teaching University in London. On the other hand, there was the dissatisfaction of the teachers and students of the medical schools of London, upon whom, as compared with the teachers and students of Scottish, Irish, and some provincial cities, the obsolete regulations of the University of London pressed most unfairly. This dissatisfaction early found a voice in the memorable report of the Metropolitan Counties Branch of the British Medical Association. Both parties complained of the divorce of teaching from examination, and of the exclusion of the teachers from all direct participation in the conduct of the business of the University. Beyond this, however, there was very little agreement, and it was, therefore, from the first inevitable that any solution which might be arrived at must be of the nature of a compromise, and not wholly satisfactory to any party. Either party continued the agitation on its own lines; out of the discussions of the Association for Promoting a Teaching University in London, there grew as an offshoot the petition of University and King's Colleges to be formed into an Albert University; and the movement started by the Metropolitan Counties Branch was temporarily turned aside to result in the petition of the Royal Colleges of Physicians and Surgeons to be converted into a Senate of Physicians and Surgeons—practically a medical University. Both schemes were rejected by the Royal Commission on University Education in London, the latter emphatically and finally, the former with some hesitations and reservation of future action.

The report of the Royal Commission left to the Senate of the University the difficult task of reconciling the well-grounded claims of the metropolitan teachers and students of arts, science, and medicine with each other, and with the traditional aims of the old University of London. In justice it must be admitted that these last have not been allowed to stand in the way; on the contrary, the Senate has discovered the greatest willingness to meet the wishes of the teachers, and the final result of these well-meant endeavours is to be found in the "further revised scheme" of the Senate, to which we made brief reference last week.

Under this scheme, as under previous ones, the University would consist of a Senate, Convocation, Constituent Colleges, Faculties, and Boards of Studies. The Senate would consist of: 1, The Chancellor and nine Fellows nominated by the Crown; 2, the Chairman and nine other Fellows elected by Convocation; 3, twelve Fellows elected by the Faculties; 4, the President (or Chairman) of the Royal College of Physicians of London, the Royal College of Surgeons of England, the Council of Legal Education, and the Incorporated Law Society; 5, the President of University College, the Principal of King's College, and two other Fellows to be elected by each of these Colleges. The Constituent Colleges would be University College and King's College in all the faculties, and in the Faculty of Medicine all the metropolitan medical schools. The faculties would consist of representatives elected by the Constituent Colleges; there would be four such faculties: Arts, Laws, Science, and Medicine. Each Faculty would elect three members of the Senate, would elect members of the Board of Studies, and would advise on the admission of any constituent College. Each Board of Studies would consist of such number of members elected by the Faculty as the Faculty shall from time to time determine, two members of Convocation elected by graduates in the Faculty, an examiner in each subject in the Faculty in which examinations are for the time being held, and not more than two persons eminent in the subject of the Faculty, co-opted by the Board itself. The duty of a Board of Studies would be to consider and report

upon any matter referred to it by the Senate, "to represent to the Senate its opinion on any matter connected with the degrees and examinations and teaching of the subjects of its Faculty. To deliberate, if so requested, in conjunction with the Senate or any Committee thereof."

In a university thus constituted, it is probable that the medical members of the Senate would number from one-third to one-fourth; in the Board of Medical Studies the representatives of the schools would always be able to command a majority, while the examiners would constitute a considerable minority. Since the Board would be empowered to represent its opinion to the Senate, and since the teachers, acting collectively in the Medical Faculty, would elect members of the Senate, that body would be placed in a favourable position for learning the views and wishes of the teachers.

The proposal to establish so intimate a relation between the representatives of the metropolitan colleges and medical schools which will educate the students and the Senate which will direct their examination materially diminishes the objections which might otherwise be brought against the proposals with regard to matriculation and degrees. At the present time the University only requires certificates of attendance on special courses of instruction in recognised colleges from candidates for degrees in medicine. In future, while maintaining the old principle of granting degrees in arts and science to candidates found competent by examination, irrespective of their place of educatio n, special curricula will also be laid down in arts and science for such students as may desire to attend the courses of instruction in a constituent college. The degrees of B.A. and B.Sc. would, under the new scheme, be given to candidates who produced certificates of having attended such courses of instruction in a constituent college, and of having passed a matriculation and degree examination, conducted within the college by the college professor and a university examiner.

The proposed regulations with regard to degrees in medicine are of a different character. The clause of the scheme which deals with them runs as follows: "The examinations in anatomy, physiology, medicine, surgery, and midwifery for the Pass M.B. Degree shall be conducted by a board of examiners, consisting of the examiners appointed by the University and examiners to be appointed by the Royal Colleges, who shall join in their reports to the Senate on such examinations. The examiners appointed by the University may be called upon, if the Senate so think fit, to make in addition separate reports. These examinations may, if so agreed on, be conducted in combination with examinations for the Royal Colleges. This arrangement for joint examiners shall not lessen or interfere with the duty of the Senate to be satisfied as to the adequacy of the examinations in all respects."

What the exact position of medical students would be under these regulations, with regard to the matriculation and preliminary scientific examinations, is not very clear. Apparently they would still have to pass these two examinations, which, as at present conducted, are believed by most persons who have studied the subject to be the chief obstacles in the way. It may be hoped that before effect is given to the scheme in a new Charter attention will be directed to this point.

Even as it is the scheme, if adopted, ought to work a great change for the better in the position of the metropolitan medical schools. For the first time their right to have a share in the government of the body which, it may be hoped, will, in the not distant future, examine and give degrees to the majority of their students, is frankly recognised; at the same time, the right of graduates present and future to have also a voice in the management of their university is conserved; and, lastly, we are spared the creation of yet another medical licensing body.

THE NEW REGULATIONS ON THE POSITION AND FUNCTIONS OF PRINCIPAL MEDICAL OFFICERS WITH ARMIES IN THE FIELD.

No more striking example of doing and undoing, of progression and retrogression, in the administration of affairs of importance, could probably be quoted than in the example which is furnished by the recent change which has been made in the Army Medical Regulations regarding the position and functions of the head of the medical service of an army in the field. The indignation which was excited throughout the whole of Great Britain by the awful loss of life in the Crimea, entirely and solely due to neglect of sanitary rules which the officers of the medical service had no power to enforce, and the exhaustive inquiries which followed, are matters of history. There are few who are not aware that one of the most important outcomes of those inquiries was the promulgation of new regulations for the medical department of the army, by which increased responsibilities were imposed, and increased authority conferred, on the medical officers in everything connected with the preservation of health and medical welfare of troops, not only in time of peace, but also in time of war. It was no longer left optional for medical officers to give advice, or to abstain from giving advice, on the health concerns of an army to commanding officers; and it was no longer left optional for commanding officers to neglect the advice, when offered, without due consideration and without being ready to furnish adequate reasons for its rejection. In the words of the Regulations promulgated in the year 1859, "The medical department of the army and its officers are charged not only with the medical care of the sick, but with the duty of recommending to commanding officers, verbally or in writing, whatever precautionary measures may, in the opinion of the department and its officers, conduce to the preservation of the health of the troops, and to the mitigation or prevention of disease in the army whether at home or abroad." And again: "The principal medical officer, or sanitary officer, as the case may be, of every army in the field shall, on being consulted by the commander of the forces, give advice in writing on all subjects bearing on the health and physical efficiency of the troops. Even where such advice is not requested the principal medical officer shall, nevertheless, send in writing to the commander of the forces such recommendations as appear necessary for protecting the health of the troops." Nowhere in these regulations was the supremacy of the officer in command interfered with; they rendered it obligatory on the medical officer to advise, and left to the adviser the responsi-

bility of his advice only, while they left to the commanding officer the sole authority to decide, at the same time adopting measures to prevent the advice from being inconsiderately rejected.

In the following year, 1860, when Mr. Sidney Herbert, who, as President of the Royal Commission which had inquired into the sanitary state of the army, had been greatly instrumental in introducing the new code of medical regulations, was Secretary of State for War, he publicly referred to them and their results in the following words: "The relationship between the military and the medical element of the army has of late years greatly changed. Commanding officers now feel the importance of having medical officers who can preserve the health of the men under their command. I know of a case where a medical officer went to the military officer in command and told him that unless such and such things were done there would soon be a dreadful sickness among the men. The reply was 'When your advice is wanted it will be asked for.' Accordingly, nothing was done, but when the men were down with sickness, as had been predicted, then the doctor was sent for, but it was too late. Now it is very different."

How little the Secretary for War of that date could have foreseen that the very condition of things which he thus held up to public obloquy should become, under a later Secretary of State for War, the established order of things in the military service, may well be imagined. Yet thus it is. By the terms of the Code of Medical Regulations just issued under the authority of the Secretary of State for War, the principal medical officer of an army in the field is not only debarred from "recommending to the commanding officer such measures as may appear necessary for protecting the health of the troops," by being removed from them and being relegated to do duty under the officer commanding the base of operation and lines of communication, at some spot which may be hundreds of miles away from the troops who are engaged in active operations in the field; but it is specially laid down, it would seem almost sarcastically, that "the principal medical officer of an army will normally have his headquarters with the general officer commanding the lines of communication, but he will be available, *when required*, for consultation with the general officer commanding-in-chief, etc., on subjects bearing on the health and physical efficiency of the troops."[1] The very mode of conducting medical affairs that the Secretary for War of 1860 showed to be so injurious to the welfare of the troops, and made the subject of public opprobrium, is now legalised and officially ordered. Can such a regulation, so outrageous from a common sense point of view as well as from bitter experience, continue in force? If it is to remain the rule of the service, we can only pray that, should armed Europe fall to blows, no British army may take part in the contest; for assuredly, if such a calamity were to occur, with the status and professional influence of the medical department put further off in the background than they were before the reforms which Crimean experience brought about, the country might only too surely look for a repetition of disasters such as those which so violently shocked it at that terrible period of its history.

[1] See Regulations for Army Medical Services, War Office, 1890, par. 107, p. 22.

VITAL STATISTICS AS TO THE CONDITION OF THE SCHOOL POPULATION.

At the instance of a committee appointed at Leeds by the Section of Psychology, the council of the British Medical Association presented a memorial to the London School Board, in which they referred to a report published in the JOURNAL, showing the condition of about 6,000 children as to their average development and brain power, and asked the School Board to institute further scientific inquiry among the schools under their control. The memorial having been referred to a subcommittee for report, the Board replied that though they were not prepared to undertake an inquiry themselves, in the event of the Government or other responsible body being prepared to conduct such inquiry as that suggested, the Board will be prepared to give any facilities that will not interfere with the work of the school. When it is remembered that a year ago the Board declined to allow any investigations to be conducted in their schools by members of the Committee it will be seen that a considerable advance has been made in public opinion on this matter, and several members of the Board have expressed an active interest in obtaining a reliable basis of information as to the condition of the school population. As further indication of the growth of public opinion that the classification of children for educational training is a recognised necessity, we point to the greater attention drawn to the matter by the regulations of the New Education Code, and to the formation of a committee by the Charity Organisation Society to make provision for the feeble children. This committee contains many members of the medical profession interested in psychological questions.

The need of a reliable body of vital statistics showing, as the result of observation, the condition of selected groups of school children, is obviously necessary to a proper mode of classifying them for education, and determining the appropriate means of training them, as well as for assessing the value of the teacher's work during the year, upon which, to some extent, the annual grant is based. Such an investigation should be conducted in selected public elementary schools, certified industrial schools, as well as among groups of children exempted from, or summoned for non-attendance at, school. Children should also be examined in the country as well as in provincial towns, in order that a fair basis may be obtained for judging as to the distribution of classes of children and the causation of defective conditions. It has been demonstrated by the report published by the Committee appointed to study the condition of school children, that it is possible to make observations in schools, to keep records and prepare statistics showing the proportion of pupils of different physiological classes and their distribution as to place, sex, age, and standard. This kind of work, depending solely upon facts seen, and not on questions asked, was found in practice not to interfere with the teacher's conduct of the school: the teachers were generally pleased and no parent raised any objection to the investigations conducted by the Committee in any school. The greater liberty of classification for teaching purposes allowed by the New Code makes a further demand for scientific knowledge, which is necessary in the interests alike of the teachers, the children, and the public.

A scientific knowledge of the conditions of development

and brain power among children is necessary to know their tendencies before any defects have become obvious by misconduct, failure, or ill-health; this work is a department of preventive medicine. Like all departments of preventive medicine and sanitary science, the study of children in their school life must begin with a few workers, but a fair case has been made out for investigations on a larger scale. Public opinion is to some extent aroused to the importance of the matter, and no argument has been advanced against obtaining the knowledge sought for. Education is a popular work: hundreds of thousands of pounds are being spent cheerfully on technical education, and lavish expenditure is being poured out to perfect our public educational system; 6,000,000 children attend the elementary schools; surely a moderate sum might well be spent by the Privy Council and the School Boards in conducting an investigation for the purpose of preparing a body of vital statistics on the condition of the school population—a subject as to which we know so little at present. With a pauper population of 4 per cent. and a large proportion of unemployed—to say nothing of the criminal population—there is a dead incubus on society, which we must look to education as a means of lessening. Let us then learn how best to classify the children, study the causes of their defective conditions, and do the best possible for their improvement. This is a work worthy of general and extended support, not only as a scientific work, but also as one having a philanthropic aim based on rational grounds and likely to lead to national advantages. Detailed and expensive treatment is being adopted by many educational bodies; new modes of education are being introduced; children are being fed at school in some quarters—and all this work is being carried on without any accurate knowledge of the material to which this mass of treatment, in part speculative and experimental, is being applied. We are far from discouraging any good educational efforts, but we are spending our labour too much in the dark: the urgent need is more knowledge of the conditions of the children.

HER Royal Highness the Princess of Wales has consented to pay an inaugural visit to the Cheyne Hospital for Sick and Incurable Children, Cheyne Walk, Chelsea, on June 25th.

DR. JOHN ABERCROMBIE, Physician to Charing Cross Hospital, has been appointed Honorary Consulting Physician to the Foundling Hospital, in the place of the late Dr. Julius Pollock.

THE French Minister of Public Instruction has selected Professors Le Fort, Richet, and Bouchard to represent France at the forthcoming International Medical Congress at Berlin. The United States Government will be represented by Dr. J. S. Billings and Dr. C. H. Allden.

A MEETING of the delegates of the Royal Colleges of Physicians and Surgeons was held on Tuesday to discuss the new scheme put forward by the Senate of the University of London. A somewhat serious difference of opinion arose, we understand, on a point of comparatively secondary importance. A further meeting of the delegates will be held on Saturday, when it is hoped that more conciliatory counsels may prevail.

THE name of Dr. Frederick Taylor (of Guy's) should have been included in the list published last week of the committee nominated by the Council of Epsom College to consider how best to raise £50,000 as a permanent endowment for the pensioners of the College.

AT the meeting of the Convocation of the University of London to be held on Monday next, three persons are to be elected "whose names will be submitted to Her Majesty for the selection therefrom of a Fellow of the University," that is to say, a member of the Senate. The Crown always selects the candidate who obtains the greatest number of votes. The candidates are Dr. J. S. Bristowe, F.R.S., Sir Philip Magnus, Mr. A. W. Bennett, and Dr. M. F. O'Reilly. The contest, which is exciting a good deal of interest, lies between the two first named.

INFANT LIFE PROTECTION.

IT is, we understand, intended by the Government forthwith to nominate the Select Committee on the Infant Life Protection Bill which has been promoted by the Home Office with a view to strengthen the law against baby farming. The Committee, on which the following gentlemen have consented to act, is empowered by instruction to include in the Bill clauses dealing with the insurance of infants' lives: Mr. Bartley, Mr. John Corbet, Lord Francis Hervey, Mr. Story-Maskelyne, Mr. Mather, Mr. William Lawrence, Mr. Walter M'Laren, Mr. John Kelly, Mr. Knowles, Sir Herbert Maxwell, Mr. Patrick O'Brien, Mr. Powell, Mr. Parker Smith, Mr. F. Stevenson, Mr. John Wilson, and Mr. Woodall. There is a strong feeling that the Bishop of Peterborough's Children's Insurance Bill, even if it should pass the Lords, has no much chance of being accepted by the Commons.

THE INFECTIOUS DISEASE (PREVENTION) BILL.

WE are glad to see that Mr. Knowles's Bill was read for the third time, and that in its passage through the House of Commons it has not been robbed of its most useful provisions. An amendment was proposed by Mr. M'Laren, which would have had the effect of rendering inoperative the useful power conferred by Clause on medical officers of health in certain cases to inspect dairies and cowsheds beyond their districts. Dr. Cameron explained the necessity for this clause by reference to epidemics of scarlet fever and diphtheria which it was the business of medical officers of health to trace and control. If a medical officer of health is in possession of evidence that persons in his district are suffering from infectious disease attributable to milk supplied within the district from a dairy without the district, he should certainly have the power to make the necessary inspection of the suspected dairy. If in such a case he should find, on inspection of the dairy, no evidence to show that the outbreak owed its origin to defective drainage of the premises or disease among the persons in the dairy, he would naturally look to the cattle, and might then be desirous of supplementing his information by appealing to a competent veterinary surgeon. But to have enacted that he should necessarily be accompanied in his inspection by "the veterinary officer of the district" would have made the clause almost useless.

THE OBLIGATIONS OF SANITARY AUTHORITIES.

A MEMBER of the Bath Town Council has again brought this subject under consideration in connection with the circular issued by the Local Government Board some months ago. His remarks seem to imply that blame attaches to the medical officer of health of that city for the conditions under which the poorest classes of its inhabitants live. But while dwelling on the responsibility placed on the medical officer to see that the powers entrusted to the sanitary authority were fully exercised, it does not appear to

have occurred to him that as a member of the sanitary authority it is his duty to see that a proper and sufficient staff of inspectors of nuisances is provided for the purpose of keeping the poorer quarters of the town in good sanitary condition. Very few urban sanitary authorities have carried out the recommendations of the Royal Commission on the Housing of the Poor in this respect. For the purposes of house inspection alone, there should be at least one inspector for every 25,000 of the population.

ANNUAL DINNER OF THE ARMY MEDICAL DEPARTMENT.

THE annual dinner of the officers of the Army Medical Department, under the presidency of the Director-General, was held on Wednesday evening last, and, as is usual, was a very pleasant meeting. Surgeon-General Thompson, the head of the Indian Army Medical Service, was present, as well as most of the principal medical officers from the leading stations. Sir Thomas Longmore and Surgeon-General Maclean were missed from their customary places, but were assuredly not forgotten; the good tidings of the restoration of the latter much-beloved veteran of the service to excellent health was a source of general satisfaction. The medical guests of the departmental dinner were Sir William Mac Cormac, Mr. Jonathan Hutchinson, Mr. Macnamara, and Mr. Ernest Hart. Sir Andrew Clark, who was expected, was prevented from being present. The loyal toasts were given according to the custom of military messes, without speeches—requiring none to commend them. The "Sister Sciences," "The Guests," and "The Chairman" completed the toast list. The rigid restriction of the toast list and the pointed brevity of the speeches contributed much to the gaiety of a most pleasant meeting.

THE ROYAL SOCIETY.

THE "ladies' night" at the Royal Society on Wednesday evening was as usual a very brilliant and instructive entertainment. The numerous distinguished guests were received with assiduous courtesy by the President, Sir W. Stokes; the Secretary, Professor Michael Foster guided some of them through the rooms, among them Mr. Arthur Balfour, our most scientific Minister, who has never wholly sunk the philosopher in the politician, and whose sympathy with research work and educational progress is unfailing, and has many times proved of eminent service. The most interesting exhibits of the year were on view. Among these none seemed to excite more interest than those of the Marine Biological Association, showing the living larvæ of food fishes, and exhibiting microscopic lobsters, soles, brill, and flounders in a state of great activity, and showing their exquisite structure and developmental changes to great perfection. Among other interesting exhibits were Professor Lankester's series of the larvæ of the Amphioxus; Dr. Waller's sagacious dog, on whom he demonstrates the electric currents induced by action of the heart; Professor Macalister's priestly mummy heads; Mr. Barber's specimens of the leaves of Gymnema sylvestre, which, if chewed, have the property of depriving the tongue of the power of tasting sweet things.

HOSPITAL EXPENSES.

WITH reference to the article on "Hospital Expenses," in which we drew attention to the practical impossibility of comparing the items of expenditure in the different London hospitals, we have received a copy of the current report of the Dublin Hospital Sunday Fund. The statistical tables contained in this report, which is issued to the public, are full and satisfactory; special expenditure and income are distinguished from ordinary, and receipts and payments are carefully analysed. There is only one further suggestion we can make, the difficulties of which we have already emphasised. The receipts from entertainments are, as almost invariably is the case, treated as net. We would suggest that the money spent to bring in these amounts should be introduced, if only in brackets, besides the sums themselves. The present method has been in use at Dublin for the past 16 years, and in comparison with the meagre memoranda which are elsewhere prepared for the purposes of distribution of these funds and not even issued to the public, it deserves great credit, and, it is to be hoped, will some day be taken as the basis of a system for general use.

ROYAL COLLEGE OF SURGEONS: THE VOTING PAPERS.

ALL Fellows of the College who desire to avail themselves of the voting papers must bear in mind that such papers will not be forwarded later than ten days before the date of election, Thursday, July 3rd. The forms of application for voting papers must, therefore, be sent in by Monday next, June 23rd, before 2 P.M., as we are informed on sound authority. It must be borne in mind that no such things as "proxy papers" have been devised. The expression is often naturally used by mistake for the right term "voting paper," but this error is none the less very misleading. Yet we have reason to believe that many votes were lost owing to this misunderstanding last year. The error is natural, but still an error for which the voters alone can be really responsible. On the other hand, many Fellows object to the regulation which forces them to apply for voting papers. There appears to be no reason why the papers should not be sent round with the secretary's circular announcing the date of election. The present arrangement, by which an intermediate form of application is necessary, entails needless trouble both to the voters and to the College officials. Some confusion has been caused by the free circulation of an anonymous post-card, which bore the inaccurate statement that "the last day upon which you can obtain the voting paper for the above election is Saturday, June 21st." As the only available address on the card was the name of the College, several that were misdirected found their way to Lincoln's Inn Fields.

PRINCE BISMARCK AS A PATIENT.

PRINCE BISMARCK used to have the reputation of thinking anything but nobly of the medical profession, and his differences of opinion with the late Professor Frerichs as to the pathology and therapeutics of that important political organ, the liver, were expressed in language more familiar perhaps to scientific controversialists than to diplomatists. It is probable that the great statesman was a refractory patient, but bitter experience seems to have taught him that throwing physic to the dogs is not the most satisfactory treatment for the growing infirmities of age. He is now, according to a statement which he recently made to a representative of the *Daily Telegraph*, a model patient, paying the most exemplary obedience to the counsels of his medical adviser, Professor Schweninger. The Prince some years ago was in some danger of becoming the largest, as well as the greatest, man in Germany, but Dr. Schweninger relieved him of the growing load of "too too solid flesh," by the judicious application of Oertel's method, which has been made known to English readers by Dr. Mitchell Bruce and others. The details of the Prince's present dietetic regimen may be interesting to those interested in the treatment of obesity. He says: "I am only allowed to drink thrice a day—a quarter of an hour after each meal, and each time not more than half a bottle of red sparkling Moselle, of a very light and dry character. Burgundy and beer, both of which I am extremely fond of, are strictly forbidden to me; so are all the strong Rhenish and Spanish wines, and even claret. For some years past I have been a total abstainer from all these generous liquors, much to the advantage of my health and my 'condition,' in the sporting sense of the word. Formerly I used to weigh over seventeen

stone. By observing this regimen I brought myself down to under fourteen, and without any loss of strength—indeed, with gain. My normal weight now is 185 lbs. I am weighed once a day, by my doctor's orders, and any excess of that figure I at once set to work to get rid of, by exercise and special regimen. I ride a good deal, as well as walk. Cigar-smoking I have given up altogether; it is debilitating and bad for the nerves. I am restricted to a long pipe, happily with a deep bowl, one after each meal, and I smoke nothing in it but Dutch Knaster tobacco, which is light, mild, and soothing. Water makes me fat, so I must not drink it. However, the present arrangements suit me very well." Had Prince Bismarck shown himself as amenable to medical control in his robust prime as he finds himself compelled to be now, he would not perhaps have to submit to so strict a rule of life in his declining years.

COUNTY MEDICAL OFFICER OF HEALTH FOR ESSEX.

WE learn from the *Essex Herald* that the question of the appointment of a county medical officer has been again adjourned. It has been proposed "that an arrangement be made with a medical officer already employed in the county to become medical officer of health for the county in addition to his present engagements at a nominal salary, and travelling expenses when required by the County Council to be away from home." We think that the gentleman evidently predestined for the appointment is eminently well qualified to be a county medical officer; but, as we have protested against the North Riding appointment, so also we must protest against this appointment, though on different grounds. The Yorkshire appointment is objectionable because it sacrifices a principle for which we have always contended, namely, that medical officers of health should not be engaged in ordinary medical practice. The proposed Essex appointment is, in our opinion, even more objectionable on public grounds. A county medical officer of health should not himself have responsibilities to local sanitary authorities under the County Council if he is to be of use in supervising the work of local sanitary authorities and their officers. We would further add that any officer appointed should receive a fair remuneration for his services, and we do not think the scale fixed on by the Yorkshire County Council too high.

THE GENERAL MEDICAL COUNCIL AND THE DENTISTS.

A CORRESPONDENT writes: The resolution passed at the recent meeting of the General Medical Council, namely, "That it is the opinion of this Council that with the object of raising the status of registered dentists, facilities should be afforded them by the medical authorities of obtaining such additional titles after sufficient examination as are mentioned in Subsection 6, Section 11 of the Dentists Act," has been supported by Mr. Macnamara and those who sympathise with him, with a view to enable the various Colleges to confer upon dentists after sufficient examination one only of the conjoint diplomas, such, for instance, as the M.R.C.S. or L.R.C.S. only, without the licence of the College of Physicians. I venture to hope, however, that the various Royal Colleges will do nothing of the kind, for the issue of such "fragmentary diplomas" can only lead to confusion in both the public and professional mind. The Royal College of Surgeons of England has quite recently enlarged and altered the curriculum for the Licence in Dental Surgery in so thoroughly a professional spirit as to enable and encourage the dental student to take the conjoint diplomas in addition to the dental licence, and I am decidedly of opinion that it is better to act on these lines rather than to grant a diploma that does not allow its possessor to place himself on the *Medical* in addition to the *Dentists' Register*. By all means encourage the raising of the status of registered dentists, but the dentists are doing that for themselves; their status is rapidly improving; indeed, I doubt if any body of professional men have ever improved with greater strides; but allowing them to register on their *Register* any diploma save their own that they cannot also register on the *Medical Register*, will, I venture to think, be shortsighted. Mr. Macnamara does not say by whom he has been asked to bring the matter forward. The question has not been before the Representative Board or Business Committee of the British Dental Association, and must have but few supporters; it would be better that any scheme of this sort should have the support of that Association. The medical authorities of Great Britain should decide to act together in the matter, and refuse to grant a diploma such as was contemplated by the mover of this resolution. The dentists, I am quite sure, do not desire any special exceptions to be made on their behalf, or to wear "feathers in their caps," but are quite content to take additional diplomas on the same terms as ordinary medical practitioners. I would point out that such examinations as the one contemplated would not be visited by the General Medical Council, and could easily become a farce; for if a single diploma is to be given at all, it must be given to all who apply for it. I venture to think that the conjoint Colleges of England will not grant such a diploma; and I am quite sure the dentists of England require no such exception.

CHOLERA IN SPAIN.

A SUDDEN outbreak of cholera in the province of Valencia is alleged to have already caused no fewer than ninety deaths. Though the original reports have been confirmed by later telegrams, these do not seem to indicate such an extension of the epidemic as might have been expected; still we cannot forget how in the spring of 1885 the alleged reappearance of cholera in the same province was at first discredited. Dr. Candela, one of the leading physicians of Valencia, has visited Puebla de Rugat, and, from personal observation of most of the sufferers, has satisfied himself that the disease is cholera of the most pronounced type, and not an outbreak of common diarrhœa of an unusually severe character. The epidemic appeared first at Puebla de Rugat, whence a large proportion of the population fled panic-struck to other places. The first case at Almaida was one of the fugitives, who died within twenty-four hours of his arrival. No fact in the etiology of cholera is better established than that the agents in its extension are persons who have imbibed the poison—infected persons, still able to travel, migrating to other, perhaps distant, places, where the conditions of water supply and of the disposal of excreta are such as to permit of the contamination of the drinking water. These "ambulant" cases being often of a mild type frequently evade observation, and, occurring at a season when ordinary diarrhœa is prevalent, excite no suspicion at the time, and lend some support to the notion that the epidemic has advanced by leaps and bounds, or has been called into existence by local circumstances. It would seem that mild, so-called "sporadic" cases have occurred at Puebla de Rugat at various times for a month past. The constant communication that exists between all parts of the Mediterranean from Syria to Spain, which renders all attempts at quarantine utterly futile, and the fact that the province of Valencia has always been the starting point of cholera epidemics in the Peninsula, would justify the assumption of its importation unobserved from Syria, where it has been smouldering since the return of spring. If, however, there be any foundation for the official statement that the earliest cases at Puebla de Rugat appeared during certain excavations in the town, it is not impossible that the epidemic may be of home growth, for the climatic conditions of Spain are more like those of the tropics than those of northern and central Europe. We know that in India, though widespread

idemics are always connected with fairs and pilgrimages, there e, outside the area of Lower Bengal, where cholera is endemic, aces where it recurs year after year under favourable meteological conditions, and that troops on the march occupyg camping grounds where it has previously prevailed are very one to be attacked. Even in northern and central Europe, e poison retains its vitality in the soil, and the disease reappears two or even three successive years. There is really nothing unasonable in the supposition that in the semitropical climate of uthern and Eastern Spain it may remain latent for twice that ne. Yellow fever also—which when imported into England and ance has invariably undergone speedy self-extinction—has on veral occasions shown a strong disposition to establish itself re permanently in Spain.

VITAL STATISTICS IN FRANCE AND GERMANY.

E following figures drawn from the publications of the German perial Statistical Office and the French *Journal Officiel* respectly are interesting as showing that if Napoleon's saying that rovidence is always on the side of the big battalions" is true, ance will have little chance in any future struggle with Gerny if the gospel according to Malthus continues to be accepted her people as the whole duty of married man. In 1888 there re in the German Empire 376,654 marriages, 1,828,379 births 1,209,793 deaths, the excess of births over deaths being ,581 as against 605,155 in 1887. In France in the same year re were 276,848 marriages, 882,639 births, and 837,867 deaths, excess of births over deaths being only 44,772 as compared h 56,536 in 1887. In Germany the marriages in 1888 exceeded se of 1887 by 5,995, and those of 1886 by 4,328; in France, on other hand, there were fewer marriages in 1888 than in 1886 3,360. In Germany the birth-rate has been steadily rising since 4, the increase in 1888 as compared with 1887 having been 18, and 78,505 as compared with 1883. In France there was a ing off in the number of births to the extent of 16,794 as comed with 1887, and the number was the lowest recorded since 1. Since 1884 the birth-rate has been gradually falling, the erence between that year and 1888 being about 55,000. In nd numbers the birth-rate in Germany is 38.1 and in France per 1,000 inhabitants; while the excess of births over deaths 2.9 per mille in the former as against 1.1 per mille in the latter. the 87 departments in France, in only 44 was the number of hs greater than the number of deaths; in the remaining 43 e were more deaths than births.

NTESTINAL CALCULUS FROM ABUSE OF VICHY WATER.

Loviot described, before the Paris Obstetrical and Gynæcocal Society last autumn, a case where he discovered a scybalous s in the pelvis of a woman, aged 32, who had been under his rvation for over nine years. She suffered severely from conation, and within five years spent 250 francs in the purchase ichy water powder. Besides drinking the powder in solution y she also took Tamar, and administered to herself enemata. ecation became very painful, leaving the sensation—not an ion in her case—of a ball pressing on the perineum. Dr. Loviot eeded in partially breaking the mass down by means of a t curette, then it was easily extracted through the anus without any laceration of the sphincter. The mass was as big as a ll orange and very hard. The outer part consisted of dry l matter, infiltrated with salts. In the interior was a white ulous mass of salts. M. A. Guérin, in discussing Dr. Loviot's , spoke of another where severe diarrhœa was caused by the alous body. The mass itself was so hard that it had to be en up by placing against it the end of an iron gouge, the handle of which was carefully struck by a mallet. With care the fragments were extracted without wounding the bowel or the anus. The diarrhœa immediately ceased.

THE SPINAL CORD IN INFLUENZA.

At a meeting of the Royal Academy of Medicine of Turin on May 23rd, Professor P. Foà described the lesions which he had found in the spinal cord of a woman who died of influenza. The patient, who was "of middle age," had suffered from the usual symptoms, and the attack was followed by extremely acute bronchial catarrh, and later on by bronchopneumonia on one side, with hepatisation of the other lung. Sections of the spinal cord showed intense hyperæmia, its substance being dotted with minute red points. On microscopic examination, numerous hæmorrhagic foci were seen in all the divisions of the cord, notably in the upper two-thirds of the dorsal, and the upper portion of the cervical, region. There was recent infiltration of red corpuscles among the nervous elements, which were slightly separated and compressed, but not visibly altered in structure. Some of the vessels were obliterated, and it was in the neighbourhood of these that the hæmorrhages had taken place. Degenerative changes were also present in places, the axis cylinders being hypertrophied to five or six times their ordinary size, and the nerve fibres degenerated. These degenerative foci were, as a rule, independent of the hæmorrhagic patches, but in the highest part of the cord the two lesions were sometimes found together. The hæmorrhagic foci were chiefly situated in the posterior columns, almost always at their periphery; the degenerative foci occurred mostly in the lateral columns. Neither the grey matter nor the posterior roots showed the least alteration. Dr. Foà thinks that the lesions were due to occlusion of vessels, giving rise in some places to hæmorrhage, and in others to alterations in the nutrition of the nerve fibres. He thinks it probable that the occlusion was caused by an accumulation of micro-organisms, but admits that he was unable to verify this conjecture. Examination of the brain was not permitted.

COMPLETE EXTIRPATION OF UTERINE CANCER.

Removal of a cancerous breast is not the most satisfactory operation in surgery, yet the situation of the disease in this case allows thorough removal of the affected organ. Mr. Mitchell Banks, in his now memorable paper on the "Free Removal of Mammary Cancer," read at the Worcester meeting in 1882, and published in the Journal, vol. ii, 1882, p. 1138, laid down the rule "that in every case where the breast is removed the axilla should be cleared out as a necessary accompaniment." Many surgeons have come over to his opinion. Extirpation of the uterus for cancer is far less satisfactory than removal of the breast. The recent discussion on Dr. Cullingworth's paper on the subject, at the Obstetrical Society, is highly instructive. It is obvious that no far and wide clearing of suspected connective tissue can be effected as in mammary cancer. Professor Pawlik, of Prague, however, systematically operates on Mr. Mitchell Banks's principle. Professor Pawlik found, as did Ruge and Veit, Williams and Hofmeier, that cancer of the cervix tends to spread into the parametric connective tissue before it invades the body of the uterus. When the cervix is amputated the disease recurs in the parametrium rather than in the uterine stump. Hence Professor Pawlik boldly dissects away the parametric tissue when he performs vaginal extirpation of the uterus. During the dissection a catheter is passed into the ureter, which otherwise would almost to a certainty be damaged. Professor Pawlik has generally found diseased lymphatic vessels and cancerous connective tissue forming cords in the parametrium. Four cases, with satisfactory results, are recorded in the *Archives de Tocologie* for May, 1890. More after-histories will, however, be needed, and vaginal hyster-

ectomy—always a troublesome operation on account of the want of free space for manipulation—is rendered tenfold more difficult and dangerous when the dissecting away of the pelvic cellular tissue is undertaken. Mr. Mitchell Banks's principle—so satisfactory whenever it can really be carried out, as in the case of operations on the breast—can never be followed with precision in the deep recesses of the pelvic cavity.

IS REMOVAL OF THE TONSILS DANGEROUS?

REMOVAL of the tonsils by the bistoury or guillotine is a popular operation in this country. The French are less partial to it, and MM. Quénu and Lucas-Championnière have recently dwelt on its dangers at the Paris Société de Chirurgie. The latter surgeon referred to two cases in Broca's practice where profuse hæmorrhage followed removal of the tonsils. In one of these instances the patient, a medical student, died almost immediately after one tonsil was cut, so violent and uncontrollable was the bleeding. In a case in Mr. Lucas-Championnière's own experience the patient, a middle-aged man, had enlarged tonsils, quite free from inflammation, and he was not subject to any morbid condition liable to prevent the natural arrest of hæmorrhage. On removal of one tonsil hæmorrhage took place and could not be checked until after two hours of digital pressure with a tampon soaked in ergotine. M. Quénu always uses the galvano-cautery three or four times, at intervals of a fortnight, and atrophy of the tonsil always follows. MM. Marc Sée and Chauvel do not dread the knife. There can be no doubt that hypertrophy of the tonsils requires active treatment, especially in youth; the evil consequences of neglect are well known. In the majority of cases the risk of dangerous hæmorrhage is very slight; but the possibility of its occurrence should always be borne in mind, and the use of ice or of a styptic gargle should be enforced as a measure of precaution immediately after the operation.

A FLOATING SPLEEN IN THE PELVIS.

DR. KLEIN, of Breslau, has described, in the *Münchener med. Wochenschrift*, a case where a large displaced spleen was found, during a necropsy, in the pelvis of a woman, aged 63. It lay in the utero-vesical pouch, the uterus being pushed far backwards. Between the spleen and the greater curvature of the stomach ran a cord of the thickness of a man's thumb, twisted once on its long axis. This cord was formed out of the suspensory ligament of the spleen and the gastro-splenic omentum. The weight of the displaced organ seemed to account for its descent into the pelvis; the traction on the long cord had drawn somewhat downward the stomach, liver and transverse colon. A ring pessary was discovered in the vagina, where it had apparently lain for some time; this suggested that the spleen might have been mistaken for a retroverted uterus, as already occurred in a case described by Dietl and Rezek. Perfect evidence of such an error, however, could not be obtained, as the introducer of the pessary could not be traced. The instrument might have been slipped in on empiric grounds, to relieve symptoms of bearing down, without any accurate exploration, and on the other hand the displacement of the uterus backwards may have been diagnosed, and the pessary applied with a view to support that organ.

MORPHINE AS AN ANTIDOTE TO ATROPINE.

A CASE of considerable interest and of unique characteristics, which is reported in the *Medical Record* of Calcutta, occurred at Chadarghat, in Hyderabad. A medical student named Richard Mayberry, the son of Dr. Mayberry, of the Nizam's service, who was a great sufferer from neuralgia, for which he was accustomed to take antipyrin, went to indulge in his customary dose, but hit upon the wrong bottle and took four grains of atropine instead of antipyrin. In a few moments he became unconscious and fell. He was seen by a brother medical student, who instantly ran off and called Dr. Edward Lawrie. An emetic was speedily given, and the stomach pump used to wash out the contents of the stomach. The patient, however, seemed to be rapidly sinking from the profound narcotism of the drug. The pupils were dilated to their fullest extent, there was foaming at the mouth, stertorous respiration, and a rapid intermitting pulse. Mayberry's condition seemed hastening towards the end, when Dr. Lawrie thought he would resort to the antagonistic effects of morphine, and quickly injected one grain of this drug subcutaneously with no apparent effect. He then injected another grain, but with no decided result. The patient, though still alive, seemed hovering in the balance between life and death. From 8 o'clock in the morning till 3 in the evening artificial respiration was resorted to with varying intervals of rest. Dr. Lawrie now determined to try the hypodermic injection of a third grain of morphine, and this seemed to be the determining antidote, for in an hour the pulse improved, the breathing gradually resumed its normal standard, and consciousness returned. This case is remarkable, and points triumphantly to the truth of the experimental deductions of those able therapeutists who have shown on physiological grounds that atropine poisoning can be counteracted by poisonous doses of morphine.

BERI-BERI IN BRAZIL.

IN a recent number of the *Revista Medica de San Paulo* Dr. De Miranda Azevedo, of that city, gives some curious details as to the introduction of beri-beri into Brazil. Not very many years ago the disease was unknown in that country, and after its importation it was for some time confined to the northern provinces; it was not till after the Paraguayan war that some cases were observed at Rio de Janeiro. In the south it was so rare that in 1874 Dr. Sodré Pereira wrote "Beyond Bahia beri-beri does not exist in the other provinces of the Brazilian Empire." The affection spread rapidly, and now, as was recently stated by a distinguished physician at the Brazil Congress, it would be easier to stamp out yellow fever than beri-beri. In 1875 the disease was hardly known by name in the province of San Paulo; now it is found "from the towns in the north like Lorena to those of the extreme south, as well as in those of the maritime zone like Iguape and Santos, where it is common." Recently there was an outbreak of beri-beri in the convent of Santa Clara, which only ceased on the removal of the affected nuns. In a work published[1] some years ago Dr. Azevedo, alluding to the popular notion existing in India, Japan, and Brazil that rice has something to do with the etiology of the disease, suggested that it might be caused by some unknown parasite in rice, as pellagra is generated by diseased maize. On this ground he claims to have, to a certain extent, anticipated the discoveries of Lacerda and Pickelhäring.

VOLVULUS.

DR. SENN, of Milwaukee, successfully operated, last October, on a case of volvulus of the sigmoid flexure. The patient was an elderly man, and the obstruction had lasted for a week. An abdominal incision was made in the median line, midway between the umbilicus and pubes. The rectum was empty, the sigmoid flexure distended and twisted around its mesenteric axis. The abdominal incision was enlarged and the intestines allowed to prolapse, then they were carefully protected. The volvulus was easily reduced by rotating the sigmoid flexure in the proper direction. Peristaltic action appeared to be almost completely suspended, both in the large and small intestine. Reduction of the viscera, distended as they were, would have been impossible without serious danger. An incision, one inch in length, was made

[1] *O Beri-beri*, 1874.

the colon, parallel to its long axis, where the distension was eatest. By raising the intestines above the incision the contents, fluid fæces, were poured out of the incision, and the testine was washed out with warm salicylated water. The esentery was shortened in a manner which will presently be scribed. The wound was closed with two rows of silk sutures, ter replacement of the intestines, which was done without any k or difficulty. On the same evening the patient passed a antity of liquid fæces; castor oil had been given on the day fore operation. The patient made a perfect recovery. This eration is described in an interesting article on the Surgical eatment of Volvulus, which appeared in the *Philadelphia edical News*, November 30th. Dr. Senn concludes that the preposing causes of volvulus are either congenital or acquired, and nsist in elongation of certain segments of the intestine, abnormal gth of mesentery, and adhesions. The most important exciting ises are irregular distribution of intestinal contents and violent istalsis. Volvulus most frequently occurs at the sigmoid flexure l the lower portion of the ileum. Secondary volvulus on the ximal side of other forms of intestinal obstruction is not a rare currence; it is also frequently developed during an attack of itonitis. The symptoms are usually most acute when the vulus is situated above the ileo-cæcal region. Dr. Senn makes important statement that vomiting is not constant in volvulus the sigmoid flexure. He considers that the most important ysical sign of volvulus is a circumscribed area of tympanites, ich corresponds to the situation of the volvulus. This sign may ble the surgeon to make an early and positive diagnosis; but s only of value before general tympanites has set in. All cases, Senn insists, should be treated by abdominal section if osition cannot be effected by rectal insufflation of hydrogen , a practice which has been advocated for diagnostic purposes. Senn lays stress on the importance of the steps described in above brief report of his operation. When any considerable tion of the intestinal wall becomes gangrenous, enterectomy l be necessary. Irreducible volvulus should be treated by tblishing intestinal anastomosis with permanent exclusion of seat of obstruction from the active fæcal circulation. Recurce of the volvulus should be guarded against by shortening the entery by folding it upon itself parallel to the long axis of the el and suturing the apex of the fold to the root of the entery. This, it is important to remember, was done in Dr. n's recent case.

CONGENITAL DEXIOCARDIA WITHOUT VISCERAL DISPLACEMENT.

FESSOR GRUNMACH[1] describes a case of the above which he ntains to be the first of the kind diagnosed during life, and established by *post-mortem* examination. Of the cases hitherto ribed, some were not observed during life (Meckel, Abernethy, chet, Otto, Kundrat), and the rest were diagnosed during life not verified *post mortem*. In the present case there were des of the cardiac septum and pulmonary stenosis, and during peculiar cardiograms were obtained. The case was one of of congenital pulmonary stenosis with septum defect, of ch the cardiograms were shown at the Heidelberg Congress year, the peculiarity consisting in this, that curves of the t beat closely resembled radial pulse curves; and careful exnation showed that the first elevation corresponded to the tricular systole, the second followed closure of the aortic es, while the third—a very slight one—indicated auricular ole. The patient, a boy, aged 15, presented unmistakable sical signs of cardiac displacement, and a loud *bruit* over the nd left intercostal space indicated pulmonary stenosis, assumed e congenital from the gradual development of his symptoms from the second year of life; for the same reason a septum defect was assumed. Arrest of bodily development was an important symptom. The diagnosis ran thus: "Dexiocardia congenita, sive situs viscerum inversus: also congenital pulmonary stenosis and defects in the cardiac septum;" and this was fully verified *post mortem*. It is surprising that the boy had lived so long, considering that a very fine sound could hardly be passed through the ostium pulmonale. The ductus arteriosus was obliterated. The diseased condition probably began during the second fœtal month.

[1] *Berliner klin. Wochenschr.*, January 13th, 1890.

SUBSTITUTES FOR IODOFORM.

BY the action of iodine on members of the phenol series in presence of an alkali a number of homologous compounds can be formed, all of which have much the same therapeutical properties as iodoform. One of these, the iodide of diiodophenol ($C_6H_2I_2OI$), has been proposed by Messinger and Nortmann, under the name of "annidaline," as an efficacious and inodorous substitute for iodoform. It is formed by heating together solutions of iodine in iodide of potassium, and of phenol in caustic potash, in the proportion of eight atoms of iodine to one molecule of phenol and four of potassic hydrate. There results a dark red amorphous precipitate, which, when dried, forms a fine powder without odour, insoluble in water and dilute acids, but soluble in alcohol, benzol, and chloroform. Aristol, another of these bodies, is the biniodide of dithymol, and is formed by acting on a solution of thymol in caustic soda, with iodine dissolved in iodide of potassium. It is a reddish-brown amorphous body without odour, and apparently non-toxic. Aristol is insoluble in water and glycerine, slightly soluble in alcohol, and readily soluble in ether. It adheres well to the skin, and is very convenient for employment in the form of powder. It has been used by Eichhoff[1] in lupus and psoriasis with good effect.

HYDROPS TUBÆ PROFLUENS.

THIS condition, where the contents of the Fallopian tube discharge through the vagina, has been described by several reliable authorities, but is certainly rare. Dr. Schramm recently described a case before the Dresden Gynæcological Society. A woman aged 33 had contracted gonorrhœa, and for a year at every menstrual period a very free, sanious, watery discharge escaped from the vagina. A swelling was detected in one iliac fossa; it once disappeared after the escape of free discharge during the catamenia. An operation was performed, and the swelling proved to be a true tubo-ovarian cyst, the tube not being obstructed on the uterine side. The cyst was successfully removed, and the phenomenon previously seen at menstruation disappeared. The cyst probably represented simultaneous cystic degeneration of the tube and ovary, the result of chronic inflammatory changes, which interfered with the nutrition of the affected parts. As is usual in such cases, the cyst caused pain and other disturbances at period. But, contrary to rule, the uterine end of the tube remained open, hence the discharge.

BACTERIA OF THE SOIL.

AFTER very careful and extensive examination of the soil of Jena and its vicinity, by C. Fraenkel's method, Dr. Reimers comes to the following conclusions:[2]—1. The number of germs in the upper layers of soil is not so great as many observers have stated, not exceeding in sand a few millions in each cubic centimètre. 2. Down to a certain depth the number remains relatively high, after this it becomes much lower. 3. Still lower the germs diminish altogether suddenly, as Fraenkel has already shown. 4. The zone

[1] *Dermatologische Monatschefte*, 1890.
[2] *Centralb. f. d. med. Wissench.*, 1890, No. 5.

of sudden diminution lies in Jena, as in Berlin, between one and two mètres deep. 5. The exact position of this zone depends on the state of the ground; in disturbed ground it is deeper than in virgin soil. 6. Even at a slight depth (two mètres) the soil may be germ-free. 7. Germs taken from the surface, or near it, show quicker growth than similar germs from deeper layers. 8. This last fact shows that the conditions of life are not so favourable lower down in the soil. 9. The ground water at moderate depths was found both with and without germs. 10. In one series of cases the ground water showed no influence on the regular diminution of germs; in another series it was favourable to them. 11. Burial grounds made no difference to the germ-contents of the ground; neither beside nor underneath coffins was any increase in bacteria found. 12. Samples of earth from a grave thirty-five years old, and from another one year and a half old, also showed no increase. The last two results are somewhat surprising, and, if true, are of great importance from a national hygienic point of view.

SCOTLAND.

THE LORD RECTORSHIP OF ABERDEEN UNIVERSITY.

A CORRESPONDENT writes: The name of the Duke of Fife has been freely mentioned as a likely candidate, and as one who has much in his power to further the prestige of the University. His large estates all over the North make him almost a local man; yet such a one as would be above the suspicion of parochialisms, and who could be trusted to deal with all University questions in a wide, business-like and non-selfish manner. The Duke is a capital speaker, a ready debater, and, if rumour be correct, a first-rate business man.

SEVERE MORTALITY FROM WHOOPING-COUGH.

THE mortality from the epidemic of whooping-cough at present existing in Aberdeen is exceptionally high. Of the cases reported to the authorities, 1 in every 8 proved fatal during the month of May. This death-rate is startling in its severity. The weather has been cold and unsummer-like, with occasionally a warm day, which has been followed by more chilliness. The present epidemic is largely confined to the poorer classes, who, having only scanty comforts in home accommodation, food, and clothing, readily fall victims to sudden changes; while the tedious nature of the disease too often leads to relaxation of careful nursing, which at all times is a heavy tax on them. The Public Health Committee authorise their medical officer to prepare a handbill for distribution, calling attention to the precautions for preventing the spread of the disease.

EDUCATION OF BLIND AND DEAF-MUTE CHILDREN BILL.

A BILL has been introduced in the House of Lords by the Marquis of Lothian providing for the compulsory education of blind and deaf-mute children in Scotland, following on the lines recommended by the Royal Commission, appointed 1885, of which Lord Egerton was Chairman. The object of the Bill is to confer powers on school authorities to defray the expenses of education of such children at the different institutions of the country, of their boarding out, and of their journeys to and from the institutions; in the case of these children there will be an increase of the education grant. The Bill will clear up any doubt that the education of these children is compulsory, but the compulsory clause does not come into force until the age of 7 years or after the age of 14. Whether the latter age allows of a sufficiently prolonged training in many cases may be open to question. It appears that not more than 500 children will at present be affected by the Bill. This Bill appears to be well framed to effect a reasonable purpose, and in providing for a boarding-out system it follows the recommendations of some of the best authorities. We see in this Bill a fair instalment of very necessary legislation. Further legislation will be required to give effect to the recommendations of the same Royal Commission, that educational provision be made for those feeble and "exceptional children" who cannot obtain due training in the ordinary classes of the public elementary schools, but at the same time are educable in day schools or in small classes attached to larger schools; no provision is at present made for these pupils, though the attention of the public has long been drawn to the necessity of such provision as an effective means of lessening the pauper and criminal population.

IRELAND.

STEPS are being taken by an influential committee to raise a memorial to Dr. W. K. Sullivan, late President of the Queen's College, Cork.

DR. LETTS, Professor of Chemistry in Queen's College, Belfast, has received the Keith prize of £50 and medal from the Royal Society for his researches into the organic compounds of phosphorus.

OUTBREAK OF TYPHUS FEVER.

IT is reported that an outbreak of typhus fever has occurred at Magherafelt. Several cases are in hospital, as well as in private residences, in the town, but, according to the latest reports, the disease is mild, and no deaths have occurred.

MERCER'S HOSPITAL.

THE question regarding the appointments to the medical staff of this hospital will shortly come before the courts. Recently Dr. Auchinleck was elected to the vacant physicianship by the Board of Governors. It appears, however, that the Medical Board had already selected Dr. McDowel Cosgrave, and the matter to be decided will be as to the powers and rights of the respective bodies to make the appointment.

THE ARMY MEDICAL STAFF AND SURGEON T. H. PARKE.

THE officers of the Army Medical Staff in Ireland entertained Surgeon T. H. Parke at dinner in the Shelbourne Hotel, Dublin, on Monday evening last. Surgeon-General Sinclair, P.M.O., occupied the chair. There was a large gathering, but as no representatives of the Press were present no report of the speeches is available. The following were the toasts:—"The Queen;" "The Prince and Princess of Wales and the Royal Family;" "Our Guest," proposed by Surgeon-General Sinclair, M.D., and responded to by Mr. Parke; "Our Visitors," proposed by Sir Robert W. Jackson, C.B., and responded to by the President R.C.S.I., Sir John Banks, K.C.B., Mr. W. Parke, J.P., and Mr. A. J. Mounteney Jephson.

ELECTROLYSIS IN STRICTURE OF THE URETHRA.—On May 25th, Drs. Spanocchi, Pilocchi, and Bergellesi, of Ferrara, performed linear electrolysis for the relief of urethral stricture, after the method practised by Dr. Fort, of Paris. The operation lasted three minutes, there was no pain, and not a drop of blood was lost. The stricture, which before would hardly admit a No. 1 olivary bougie, allowed Nos. 9 and 10 to pass easily after the electrolysis. The patient did not require to stay in bed, and suffered no inconvenience. This is said to be the first time the operation has been performed in Italy.

THE RACES OF CENTRAL AFRICA.

Medical and Ethnological Notes.

The Masai tribes who inhabit the rich volcanic country east of the Victoria Nyanza are among the most interesting people in Central Africa. They are not negroes: they have good cranial development, straight, well-shaped noses, eyes with a slight Mongolian slant upwards, prominent cheek bones, jaws rarely prognathous, chocolate-coloured skins, and extremely well-proportioned limbs. Both men and women elongate the lobes of the ear by ear-stretchers, till they nearly reach to the shoulders, and their fists can be put through the orifice in the distended part. The chief achievements of the young Masai men or warriors seem to be to make eloquent speeches and to commit murder. Internecine wars have depopulated their country, and their ferocious attacks on caravans have made Masai land both the terror and the *terra incognita* of travellers. Till they marry the young men feed on milk and flesh food, and smoking and chewing tobacco and drinking fermented liquors are strictly forbidden. Before setting out on a fighting excursion the warriors retire to the mountains and gorge themselves with beef with the idea that they thereby store up strength. After marriage they add vegetables to their food, and they then chew tobacco and indulge in an occasional carouse. The married men and women live in kraals apart, and the unmarried girls and warriors live together in other villages by themselves, in a state of promiscuous free love. The women are completely clothed in dressed hides, and are as immoral as the men are arrogant and ferocious. The Masai will not allow burial of a corpse, as they think it will poison the soil, and it is therefore cast to the wild beasts without ceremony.

They have no religion and no belief in a future, but are extremely suspicious, and have complete belief in witchcraft. Thompson, the traveller, was the first European to traverse the country of this terrible Masai, did so by posing as a great white wizard by the aid of an electrical machine, an artificial set of teeth removed at will, and Eno's fruit salt, which, on being made to fizz at the firing of a gun, would, it was alleged, work wonders ten days after he had left. To spit on a person is to confer the greatest mark of respect. Where the Masai have, as the result of warfare, been obliged to settle and mix with other tribes, and have been cut off from the evil traditions of their race, their superior mental development has resulted in producing hybrid tribes distinguished for their energy in trade and their good government. This experience is encouraging at the present moment when we are making arrangements to take these wild tribes under our protection.

The Wa-Karirondo, who live north of the savage Masai, are cultivators of the soil and a vegetarian people. They have a less fine physique and less ferocity of disposition than the Masai. The men go absolutely nude; the women "wear a necklace and a smile," and sometimes a cotton tail; but though unclothed they are as distinguished for their modesty and virtue as the draped Masai women are for their audacity and vice. They are fond of dancing, in which violent muscular movements of the arms and shoulders play the principal part.

The Waganda may be said to be the French of Central Africa. They are people with ideas, and they lead the fashions. A race which prides itself on descent from remote white progenitors, the Waganda stand out, by reason of their elaborate system of autocratic government, their laws and customs which control all the affairs of life, even the amount of bare leg permissible at court; their higher civilisation, which is shown in their dress, houses, and sanitary arrangements—as distinct and separate from the naked savages which surround Uganda, "the Pearl of Central Africa." The Emperor Mtesa, with his barbaric court on the shores of the Victoria Nyanza, his arrogance and cruelty, his intelligence and eager desire to learn, his vast armies and his huge harem, has been described by Speke and Stanley with such minuteness and brilliancy that his name and character will never be forgotten. The Waganda are extremely intelligent, and the missionaries who followed in Stanley's steps and established a station at Uganda tell wonderful stories of individual converts who quickly learnt to read the Bible in their native tongue, and to write capital letters, and who even suffered cruel martyrdoms for their faith; but all who have had anything to do with these people agree that, as a whole, they are crafty, lying, murderous thieves. Both men and women are draped in bark-cloth, and immodesty is a crime; the dwellings are clean, and each householder is obliged to construct a privy away from the house; the banana and plantains are the staple articles of food, the savoury cooking of which is practised. The Waganda are very skilful with their fingers, and in the making of shields, spears, and canoes they excel all other African tribes; they are extremely fond of music, and have a number of musical instruments; indeed, so fond are all the African races of music, that, in Sir Samuel Baker's opinion, a man who plays the cornet, or an organ grinder, could pass unharmed from one end of Africa to the other; and that a missionary to be successful ought to be able to dance a jig and play the bagpipes. Women in Uganda are mere baggage, and all wives have their price.

The Wanyamwezi, who have become the trusted porters or *pagazis* of all exploring parties or trade caravans into the interior, are a people of great endurance and physical strength, and are docile, courageous, and obedient if well led. A curious custom prevails among the Wateita of coating the body with lampblack and castor oil, which acts as a protection against excessive heats by day and chills at night.

The cannibals of the Congo, whom Stanley was the first to discover and visit, and who pursued him and his followers all down the great river with yells and cries of: "Meat! Meat! Ah, we shall have meat to-day!" show, in spite of their horrible tastes, a somewhat high standard of achievement in the building of their houses and canoes, the smelting of metals, and ornamenting of weapons, etc.

The Pigmies of the forests of Central Africa are mentioned by Herodotus, and have been spoken of, mostly by hearsay, by nearly all African travellers; but Du Chaillu was the first to give an account of them and their settlements and to obtain measurements of their bodies and heads. Those described by him were the Obongos of Ashanpo-land. They are of extremely low type, with exceedingly low and narrow foreheads, in height about 4 feet 6 inches, and with the body covered with tufts of hair.

In some parts of the great central forest the dwarfs seem to be hunted and eaten by the more powerful tribes, and Stanley describes how the villages of the Congo are ornamented with the skulls of what the natives called "Sokos," who, they said, were hairy dwarfs who lived in the forest, and whom they hunted, killed, and ate, because they stole their bananas. Stanley obtained two Soko skulls, and brought them home and submitted them to Professor Huxley, who declared that they were human skulls, with all the characteristic peculiarities of the negro type, including a well-marked, but not unusual, degree of prognathism. The cephalic index was 75.

In Western Equatorial Africa the tribes are not cannibal south of the equator. The tribes are split into clans, each clan being presided over by a chief or father, under whose protection they live. The powerful king and the despotic form of government of Eastern Africa are unknown. The law of the strongest does not prevail, and they do not raid for plunder. Polygamy and slavery prevail here as elsewhere in Africa. They understand the arts of weaving and smelting metals, but how they learnt them they could give no account. As these races have not been subject to European or Arab influence it is probable that the people, as well as their primitive arts, are of great antiquity. Du Chaillu holds that "of all the uncivilised races of men the negro has been found to be the most tractable and the most docile, and he possesses excellent qualities that compensate, in a great measure, for his bad ones. That he will disappear in time from the land he (Du Chaillu) has very little doubt; and that he will follow in the course of time the inferior races who preceded him."

That the population of Africa is decreasing all allow, and Du Chaillu mentions as the causes: "The slave trade, polygamy, the barrenness of the women, death among children, plague, and witchcraft," and adds, "the latter takes away more lives than any slave trade ever did." The system of night nurseries, described by Sir Samuel Baker, must also have great effect in keeping down the population. Into sheds, built without the means of ventilation, the babies are put at dusk, there they lie all night on the clay floor in a reeking atmosphere. They are fetched in the chilly morning by their mothers, when they try to warm their little naked bodies at the hut fire.

The ravages made by small-pox are terrible. The most repulsive form of the disease prevails, and, unchecked by vaccination, it often sweeps away whole villages and clans. Some writers speak of plague, and describe the bubos in the axilla, which recall the plague of the Middle Ages. Elephantiasis, leprosy, and dysentery prevail, and Europeans are almost invariably attacked by malarial fevers, which yield, however, to quinine. Drunkenness is not, as is frequently stated, introduced by Europeans, but is one of the favourite vices of the primitive negro.

THE FASTING MAN.

The Objects of the Fast.—Mr. Robins's Report; the Clinical Events; Absence of all Serious Symptoms; Succi's Elixir; his Beverages; his Condition at the End of the Fast; his Subsequent Progress.—Report of Messrs. Powell, Burt, and Pike: the State of the Secretions; the Pulse and Blood; Mental Agitation and Loss of Body Weight; the Urine and its Constituents; the Body Temperature; Concluding Observations.—Cui bono?

THOUGH it is now more than seven weeks since Signor Succi completed his forty days' fast, like the proverbial nine days' wonder, his achievement is now all but forgotten. The propriety of yielding to a morbid popular taste in promoting entertainments which involve risk to life and limb is a question into which we cannot enter here, but as it has been asserted that important scientific conclusions might be drawn from observations made during the fast we are glad to have the opportunity of examining the results of the medical men who watched Succi. The faster himself has apparently suffered no injury, and both he and the place of entertainment where he exhibited himself are, if rumour speaks correctly, considerably enriched by the feat of endurance; but the physiologist and the physician ask whether any more enduring good will result from the experiment, from the point of view of the increase of scientific knowledge and of relief to human suffering. The tables which we published weekly during the progress of the fast, together with the fuller report by Mr. Robins, and the report of Messrs. Powell, Burt, and Pike—extracts from both of which we publish below—enable us to answer this question; and, after a careful perusal of these, we find that the scientific results of the experiment are as meagre as they well could be.

Mr. GEORGE N. ROBINS, M.R.C.S., L.R.C.P.Ed., the medical attendant, writes: Giovanni Succi is a native of Italy, aged 37, 5 feet $5\frac{1}{4}$ inches in height, slightly built, with sallow complexion and dark hair and moustache. Some years of his life have been spent in Africa, but latterly he has employed his time chiefly in "fasting" experiments, and claims to have accomplished 32 "fasts," varying from 20 to 30 days each, but never so long as 40 days.

Before commencing the present fast he enjoyed a fair luncheon, which was finished at 3 P.M. on March 17th. Observations were then made as to weight, etc., as given in the charts. In every respect he appeared to be in perfect health. After 31 hours he complained of feeling hungry and of slight pain in the epigastrium. To relieve this he took a few drops of his "elixir" in water, with good effect.

On March 20th, the third day, he felt comfortable, slept soundly, and had no desire for food.

On March 27th, when a quarter of his task had expired, Succi had lost 16 lbs. 5 ozs. in weight, and appeared considerably emaciated, but otherwise did not seem much the worse for his abstention from nourishment, and said he had no desire for food; the pulse was regular, and the temperature 97.6°.

On March 30th, in order to clear his stomach of "bile" and to relieve the parched condition of his mouth and foulness of breath, he took 12 ozs. of warm water as an emetic. The vomit measured $13\frac{1}{2}$ ozs., was clear, of a pale yellow colour, and contained no trace of solid food.

On the following day he repeated the warm water emetic, and also took some Hunyadi Janos water as an aperient, which caused an evacuation of about 5 ozs. of a meconium-like fluid, containing also a very small quantity of solid matter.

On April 6th (twentieth day), at 3 P.M., he completed the first half of his task; the total loss of weight was 22 lbs. 15 ozs., or 18.77 per cent. of his original weight. The loss during the previous 10 days had been 6 lbs. 10 ozs. During a 20 days' fast in Madrid in December, 1888, he lost 18 lbs. during the first half, and 8 lbs. during the last half of the time, a total of 26 lbs. His general health was good; the heart sounds, though feeble, were quite regular and natural; the lungs were resonant, and admitted air freely. His mental capabilities and special senses were in no way impaired.

On April 16th, the thirtieth day, the total loss of weight had been 28 lbs. 12 ozs., of which 5 lbs. 13 ozs. was lost during the last 10 days. The heart sounds were feeble but regular; he slept badly, and, having reached the limit of his previous fasts, he was in an anxious state of mind.

On April 18th, the thirty-second day, the feeling of anxiety noticed on the twenty-ninth and thirtieth days had worn off, and he was now very hopeful as to his success.

On April 26th, the fortieth day, he was very excited and rather irritable, but in very good health considering the immense strain to which he had been subjected. The pulse was regular and fairly firm, and the heart sounds, though feeble, were distinct. He had lost in weight 34 lbs. 3 ozs., or nearly 26.55 per cent. of his original weight.

It is a remarkable fact that from the first day to the last, Succi did not develop a single alarming symptom, or experience any great amount of discomfort. Even during the first few days, when the pangs of hunger might have been expected to assert themselves most acutely, he made no complaint, but in reply to questions, said he felt very comfortable. The change in his condition from that of a well formed though slight man to one of extreme emaciation, though very great, was almost uniformly gradual from day to day. There was not at any time any irregularity in the heart's action. The patella and axilla reflexes, which in his usual state of health are very slight, were never entirely absent. His tongue has been clean and moist throughout, except on one or two occasions when he complained of the foul atmosphere of his quarters.

As a rule Succi smoked one or two pipes a day, and occasionally a cigar or cigarette. During each day also he took a small quantity of an elixir, on an average less than sixty drops *per diem*, in doses varying from 5 to 20 drops, in water. This he took as a sedative to the stomach, and to relieve slight colic or flatulence, from which he suffered somewhat at times. It resembled chlorodyne in composition and effect, with the addition of a bitter, probably gentian, and capsicum, but nothing of a nutritive character has been detected in it, nor any coca; nor does Succi assert that he takes it for any other purpose than that mentioned. During his fast, Succi drank filtered water, Kaiser-brunnen alkaline table water, and occasionally a little Hunyadi Janos (purgative) water, and of these the total quantity taken was:—Water, $535\frac{1}{2}$ ozs; Kaiser-brunnen, 354 ozs: Hunyadi Janos, 33 ozs.—Total, $922\frac{1}{2}$ ozs.; being an average of $23\frac{1}{16}$ ozs. *per diem*. He passed urine to the amount of $622\frac{1}{2}$ ozs.; an average of a fraction over $15\frac{1}{2}$ ozs. *per diem*.

Although the forty days expired at 3 P.M. on April 26th, it was not until 4.45 P.M. that Succi took his first nourishment, which consisted of about half a pint of beef-tea. Between this time and noon the next day, he took only beef-tea, prepared rice, beef-peptone, three small oranges, and about $1\frac{1}{2}$ or 2 pints of water, and he increased 1 lb. in weight.

On April 28th, the second day after resuming nourishment, he had increased in weight 3 lbs., his diet being of the same materials but in larger quantities.

On April 29th a further increase in weight of 3 lbs. 12 ozs. had taken place. His diet was the same with the addition of a small quantity of fish (about 2 ozs.), which caused a feeling of dizziness and some pain in the epigastrium.

On April 30th he was 3 lbs. 10 ozs. heavier, and the effect of the rapid increase in weight was very apparent; he had filled out in all directions and had not the emaciated and cadaveric appearance of a few days back. His skin was regaining its elasticity to some extent. He had an evacuation, about $\frac{1}{2}$ lb., semi-solid and natural in colour.

On May 6 (after ten days) the total increase in weight amounted to 21 lbs. 12 ozs., and on May 9th to 22 lbs. 8 ozs. He was now beginning to take ordinary food in combination with the other articles mentioned, and except that he had still nearly a stone to recover, did not seem any the worse for the privations he has undergone. There is very little in his appearance to show that he has been living in an unusual manner.

On two occasions during the fast, viz., on the fourteenth and thirty-ninth days, the specific gravity of his blood was taken and found to be 1060 on the fourteenth day and 1062 on the thirty-ninth.

It will be noticed that there was a more or less rapid decrease in the amount of urea until the nineteenth day, but that after that date certain small fluctuations took place; thus there appear to have been four distinct rises, the first being recorded for the 24 hours ending at noon on Easter Sunday, *i.e.*, including the busiest part of Saturday, the other three rises including the busiest portion of the three succeeding Mondays; and on these four days Signor Succi underwent a considerable amount of fatigue owing to the constant demands made upon him to sign his autograph, and in other ways, thereby entailing a (to him) great amount of muscular exertion.

There appear to have been three periods during which the excretion of urea was diminished, viz., the three Sundays during which time Succi remained entirely in bed, not on account of ill-health, but simply for the sake of repose after the fatigues of the week. There were also other fluctuations doubtless due to the amount of work done (but which could not be estimated), and during the last few days, when the public flocked to see him in great numbers and he complained greatly of the fatigue of going through the long interviews and being kept writing almost without cessation during the whole day, there was a rise which continued to the end of the fast.

Measurements of Succi during his Forty Days' Fast.

	Mar. 23	Mar. 30	April 6	April 13	April 20	April 26	May 3
	inches.	inches.	inches.	inches.	inches.	inches.	inches.
Height (in socks)...	65½	65⅝	65 3/16	64⅞	64¾	64½	64¾
Chest (at nipples)...	31½	31	30⅜	30⅛	29¾	29¼	—
Abdomen (at umbilicus)	26½	25¾	25	24	23½	23½	—
Thigh (9¾ inches above lower border of patella)... ...	16	15½	15¼	14¾	14	13½	—
Calf (thickest part)	11¾	11½	11¼	11⅛	10⅞	10⅜	—
Arm (thickest part)	9	8¾	8¼	8⅜	7⅞	7½	—
Neck (level of cricoid cartilage and 7th spinous process)	13	12⅜	12½	12¼	11⅞	11⅜	—
Weight (126 lbs. 3 ozs. at start) ...	lbs. ozs. 113 9	lbs. ozs. 107 14	lbs. ozs. 103 9	lbs. ozs. 99 0	lbs. ozs. 95 15	lbs. ozs. 92 0	lbs. ozs. 106 12

Messrs. William Powell, M.R.C.S.Eng., L.R.C.P.Lond.; C. Barrow Burt, M.R.C.S.Eng., and A. E. Pike, F.I.C., F.C.S., who acted as a voluntary and unpaid committee, and who maintained a continuous medical watch, with much labour and some expense, have communicated to us a detailed report, with an elaborate tabular appendix, which we are unable to reproduce. They state that the secretion of saliva did not cease, and the fluid collected was slightly amylolytic. The liquid ejected from the stomach was neutral or faintly alkaline, turbid, and was not proteolytic; the secretion of an active gastric juice therefore ceased. The total undried solids evacuated from the bowels amounted to about 9 ozs. The pulse, counted while in bed, averaged about 50. On his getting up it increased to 70 or 80; it was regular in force and rhythm, easily increased in frequency by exertion, and became perceptibly feebler towards the end. Of the superficial cardiac dulness and the apex beat, both normal at the outset, the first was diminished, and the second became imperceptible, probably from shrinkage of the heart. Sphygmographic tracings were obtained with difficulty, and showed a feeble pulse wave. By the end of the first week the red blood corpuscles as counted by the hæmocytometer were increased, the number reaching about 6,500,000 per cubic millimètre. The white blood cells had practically disappeared. Later in the fast, numbers of small imperfect blood discs were observed. There never was any œdema or passive congestion of the tissues. The number of respirations was slightly increased, and fluctuated within healthy limits. The skin became dry, shrivelled, pallid, and cold, and a peculiar fœtid odour was emitted from the body. Mental agitation appeared to have a very direct effect on loss of body weight. This was well illustrated on April 3rd when Succi was greatly excited by the challenge of a rival faster, and on April 25th, when he was excited by the conclusion of his fast. The quantity of urea excreted was practically uninfluenced; the loss due to excitement therefore fell on the fat, the respiratory function being stimulated to greater activity.

His muscular power apparently suffered but little. The electrical reactions of the muscles showed nothing remarkable. The acidity of the urine was neutralised by the alkaline water; without this, it speedily became uncomfortably acid. The specific gravity of the urine was high throughout (conforming to the small quantity excreted), and it is interesting to observe its remarkably regular diminution. On referring to columns C and D, it will be seen that the daily average of the urine passed (which varied between one-third and one-fourth of the normal quantity) was, roughly, 10 ounces less than the water drunk. This simple ratio, however, did not hold good in the average of the first week, when the urine exceeded in quantity the water drunk; and it can be shown that the tissues were poorer in water to the extent of 17.8 ounces daily during this period. The fluids of the body must, therefore, have been largely called upon, the loss falling mainly on the blood plasma. This explains the relative increase of the red blood cells mentioned above. The urea excreted in starvation appears, after the first phase of the fast has been passed, to be only about one-half the normal amount, which, according to Sir Wm. Roberts, is 3.5 grains daily per pound of body weight. Comparing this with Succi's (G and H), we are enabled to perceive at a glance the amount of diminished proteid metabolism in starvation—not marked in the early days, but afterwards more quickly sinking, reaching its lowest point in the fourth week. According to the weekly averages, the urea excreted varies slightly with the quantity of liquid taken.

Column N represents in terms of dry proteid the quantity of albuminous tissue metabolised. The loss of fat is estimated from the expired carbon, after deducting from this the carbon furnished by the proteids; for 300 grammes of dried proteid, representing 100 grammes of urea, contain 139 grammes more carbon than do the 100 grammes of urea (Foster's *Physiology*, 1883, p. 428); and as human fat contains roughly 80 per cent. carbon, the quantity can be easily calculated. This is given in column O.

To complete the equation of weight the additional loss by the skin and lungs must be ascertained. It is given by the formula: $W - (P + F) + (a - b)$, where W is the daily loss of body weight, P and F the loss of proteid and fat, and a and b the water taken and excreted by the kidneys respectively. Thus, in the third week, for example, the daily loss of weight averaged 10 ozs.; deducting 5.75 ozs. from this, the combined loss of proteid and fat, we have 4.25 ozs. (this representing the loss of water by the tissues); adding to this 10.4. the difference between the water taken and urine excreted, we get 14.65 ozs., the amount required. But to find the gross amount given off by the skin and lungs, we must add the water obtained by the oxidation of the fat, that from the proteid being neglected as small. This may be taken as about the same weight as the fat itself. In this way we get the gross total daily average for the third week as 19.2 ozs. These approximate results appear in column P, and exhibit a uniformity in agreement with the conditions of the fast.

Daily Averages for Each Week.

Week.	A	B	E	F	G	H	C	D	K	L	M	N	O	P
			Urea Excreted.											
	Weight.	Loss of Weight.	Normally by Man of this weight.	By Succi fasting.	Normally per lb. Body weight.	Succi per lb. Body weight.	Total Liquid Drunk.	Urine Passed.	P.	N. — P.	Carbon by Lungs (Luciani).	Dry Proteid calculated from Urea.	Fat calculated from Carbon.	Total Water lost by Skin and Lungs.
	lbs.	ozs.	grs.	grs.	grs.	grs.	ozs.	ozs.	grs.	grs.	ozs.	ozs.	ozs.	ozs.
1	117.1	27.0	409.8	357.7	3.5	3·04	16.5	18.9	14.9	12.1	4.6	2.45	4.3	22.15
2	109.2	10.4	382.3	232.0	3.5	2.12	25.9	15.7	9.1	12.5	4.5	1.59	4.6	19.0
3	104.5	10.0	365.7	173.2	3.5	1.66	24.4	14.0	6.7	12.5	4.2	1.19	4.56	19.21
4	100.2	10.1	350.7	155.7	3.5	1.55	23.5	13.2	6.4	11.8	4.0	1.07	4.34	19.33
5	96.6	6.7	338.2	174.1	3.5	1.79	23.8	12.2	6.3	11.5	3.75	1.19	3.95	17.10
6 (6 days)	93.3	11.2	326.5	196.8	3.5	2.10	27.6	16.5	6.0	15.6	3.5	1.35	3 6	20.9

It will be noticed that at the end of the first week the body was drier by at least six pints of water than at the commencement of the fast.

The phosphates behave in a manner similar to the urea; that is, the amount excreted diminishes at first, but afterwards remain constant; hence it results that the ratio of nitrogen to phosphorus is throughout a permanent one. In Succi this quotient is 12; in Cetti 11·07.

Succi's temperature averaged 97.5°, and was never below 96°. The heat required was obtained from the oxidation of his own tissues, and was economised by a diminished dispersal. This was effected by the increased tone of the cutaneous vascular system and the diminished mass of the circulation of blood. Succi had learnt by experience that the loss of weight was less in warm climates, and it was not until his room was artificially heated that this loss was kept within satisfactory limits. Succi's recuperation was speedy and complete—a proof of the unimpaired integrity of his digestive and absorptive systems.

The investigators arrived at the following conclusions:—"We think, then, that it is fairly proved that the body may be deprived of food for a considerable period and yet remain in a condition of health, a fact which may be put to some use in practical therapeutics; it also has a direct bearing on the question of rectal alimentation. In cases of severe dyspepsia, of gastric ulcer, and in the surgery of the abdominal cavity and alimentary canal starvation would seem to be a perfectly rational means of treatment, while it is worthy of trial in obesity and in fatty and other tumours. The most favourable conditions for fasting are a uniform temperature of about 65° F., a limitation of the fluid drunk to about a pint or so *per diem*, the exhibition of morphine or salines, and a condition of mental quiet."

There is no doubt that the fast was a genuine one, and that it exhibited a very remarkable power of endurance and steadfastness on the part of Succi himself, but this by no means demonstrates that others, under less favourable circumstances, could have accomplished a similar feat; the daily press, unfortunately, too often shows us that people die from starvation after a much shorter fast. The faster, the acrobat, the professional Hercules, the parachutist—are all in the same category; they are people who by training or natural endowment are able to accomplish what is beyond the power of the ordinary man or woman.

Turning now to the results furnished by Mr. Robins and others, we see that they are the outcome of painstaking and careful analyses and observations. That they teach us so little is not the fault of Mr. Robins and his colleagues; experiments on public performers are never satisfactory. Some years ago Weston, the pedestrian, was the subject of observations made in America by Dr. Flint, and in this country by Dr. Pavy. The question in dispute was whether or not exercise increases the output of urea. The fact that these two physicians arrived at opposite results merely points the moral to the statement just made, that the limitations of an experiment performed almost in public are so great as to render any conclusions derived from it valueless. The subject of inanition in animals has been worked at by many physiologists, and the scientific results of Succi's experiment are merely of value as being in the main confirmatory of these. The animals experimented on have usually been carnivora, and show, as one would expect, a rather more sudden drop in the amount of urea discharged daily than Mr. Robins has noted as occurring in Succi's case. Whether Succi will repeat his performance is a question which, no doubt, he will decide for himself; from the point of view of the physiologist it is unnecessary. The practical physician and his patients will derive no benefit from it, and the general public can derive nothing but harm from witnessing for a prolonged period a fellow creature in suffering.

INTERNATIONAL MEDICAL CONGRESS, BERLIN, 1890.

THE following resolutions were passed at a recent meeting of the General Committee:

1. All notices regarding general addresses, reports, subjects for discussion, or papers should, as far as possible, be forwarded to the General Secretary by June 10th, in order that they may be announced in the general programme to be issued before the Congress. Communications sent in later cannot be included in the programme, and cannot be announced until the commencement of the Congress.

2. Promises of communications, and announcements by those wishing to take part in discussions, should be sent in as soon as possible to the officers of the Congress, Berlin, N. W. Karlstrasse. 19. Information on the part of those intending to be present is of especial importance, for the general arrangements and notices, and invitations can only be sent to those who have announced their intention of attending.

3. It is requested that home and foreign members will obtain their tickets beforehand, by sending the subscription of £1 to the Treasurer, Dr. Bartels, Berlin, S. W., Leipzigerstrasse, 75. By this means members will be spared trouble and loss of time at the commencement of the Congress, and the list of members can be made complete and accurate from the first. It is further recommended that members should secure their lodgings as early as possible. Applications regarding rooms should be sent to the Wohnungscomité, Karlstrasse, 19, Berlin, N.W.

4. Although the functions of the organising committees cease with the opening of the Congress, when the direction will be assumed by the Sections themselves; yet, in order to make provision for continuity in working, it is advisable that a committee should be nominated for each section, as in this way only can an orderly conduct of the business be ensured, without trespassing on the authority of the Honorary Presidents, to be elected later. To fulfil this object it is requested that each section will secure at least two secretaries capable of translating German, French, or English, into their native tongue. Sections in which a large amount of business will be transacted should be careful to secure sufficient assistance of this nature, and the practicability of obtaining members, capable of speaking other languages, especially Italian, Spanish and Russian, is to be borne in mind, since the regulations allow these languages to be used in discussions, provided someone be present to render the gist of the speaker in one of the official languages. In order to ensure the success of this secretariat, it is hoped that members of the Provisional Sectional Committees will assist in concerting the succession of business.

5. With regard to the Honorary Presidents, it is specially pointed out that under no circumstances are such officers to be nominated before the commencement of the Congress. At the first meeting in which each Section is constituted such officers are to be chosen from the members present, and the nominations communicated by letter to the central office of the Congress.

6. All speakers and reporters are reminded that they are required to bring a short abstract of their speeches with them. They are to be legibly written in one of the official languages of the Congress, on one side of the paper only, and ready for printing. Manuscripts handed in at the termination of the Congress cannot receive consideration. Only those communications can be included in the business which are read either by the author himself or a special deputy. Papers sent in beforehand to the Secretary in the absence of the author or a special deputy will be passed over.

Sectional dinners will be arranged to take place on a day to be determined by the General Committee. These dinners will all take place on the same day, and will be organised and presided over by the official committee of the Section. With a view to prevent unnecessary expense, the maximum price will be fixed at 10s., wine not included. Ladies may be present at these dinners. It has been arranged that special ladies' tickets shall be issued to the relatives of members. These will admit ladies to all such meetings as may be suitable for their attendance. For foreign members there will be no subscription. German members will pay a subscription of 10s. for such tickets.

THE BRITISH PHARMACOPŒIA.

III.

THE second step has been taken towards the production of an *Addendum* to the *British Pharmacopœia* of 1885. Last December the Medical Council decided that such steps as might be necessary should be taken for obtaining information and assistance in the preparation of an *Addendum*, Professor Attfield being appointed editor. Then, for the first time in the history of our pharmacopœias, the wise plan was adopted of applying for direct help both to the medical and pharmaceutical bodies; to the former to say which of the many new medicines and compounds introduced within the past few years possessed well-recognised medicinal value, and had received the general approval of the medical profession; to the latter to say what definitions, processes, and tests should be employed to ensure the maximum of efficiency in regard to every new medicine that the Committee and Council might select as worthy of official recognition. The medical authorities applied to were the twenty bodies whose representatives sit on the Medical Council, the pharmaceutical authorities being the Pharmaceutical Society of Great Britain and ths Pharmaceutical Society of Ireland. Both sets of bodies readily responded, the twelve medical authorities more especially interested in pharmacy forwarding lists of articles which they respectively recommended for insertion. To the editor of the proposed *Addendum* was then allotted the task of giving such an alphabetical tabular form to these lists as should show how many of the twelve medical bodies had, each unknown to the other, recommended the respective articles forming the complete alphabetical summary. A printed copy of this summary, with comments by Dr. Attfield, is before us. It includes a total of 140 articles, of which 37 were selected as worthy of a place in the *Addendum* by the Pharmacopœia Committee, which sat on April 27th and 29th, the decision of the Committee being adopted by the Medical Council on May 30th. It is this decision which constitutes the second step towards the official publication of the *Addendum*.

The articles selected are the following: Acetum ipecacuanhæ, adeps lanæ (lanolin), emplastrum menthol, eucalypti gummi,

euonymus atropurpureus (a preparation of), extractum hamamelidis liquidum, extractum hydrastis liquidum, ferri subchloridum (preparations of), hamamelis virginica, homatropinæ hydrobromas, hydrastis Canadensis, liquor cocainæ hydrochloratis (10 per cent.; in water saturated by salicylic acid), liquor morphinæ sulphatis, liquor trinitrinæ (1 per cent.), magnesii sulphas effervescens, mistura olei ricini, oleum cadinum, paraldehydum, phenylon (antipyrin), pilula ferri (Blaud) (an alternative to pilula ferri carbonatis, *B.P.* 1885), picrotoxinum, saccharinum, sodii benzoas, sodii nitris, sodii phosphas effervescens, sodii sulphas effervescens, stramonii folia, strophanthi hispidi semina, sulphonal, suppositoria glycerini, tinctura hamamelidis, tinctura hydrastis, tinctura strophanthi, trochisci sulphuris, unguentum conii, unguentum hamamelidis.

The two pharmaceutical societies will now proceed to supply the chemistry and pharmacy of the selected articles, presenting the results of their labours to the Medical Council next autumn. The Pharmaceutical Society of Great Britain—having libraries, museums, laboratories, and a wide organisation—may be expected to do the chief part of this work, more especially as its members have for some years past been urging their claims to some such official recognition by the Medical Council as they have now received—they being the men, after all, whose original researches have formed the foundations of the formulæ of the British Pharmacopœias. These societies will be in communication with the editor, who will thus be able to present the desired draft *Addendum* to the Pharmacopœia Committee of the Medical Council at the autumn meeting. Thus, rather more than five years from its publication in September, 1885, the 960 articles of the *British Pharmacopœia* will be supplemented by 37 articles which, since that date, have received the "general approval" of the medical profession, and possess "well-recognised" medicinal value.

The "Summary" is an interesting document. As Dr. Attfield says, "the list affords unbiassed evidence so far of the degree in which the new drugs and medicinal novelties introduced within the past few years, and much pressed on the attention of the followers of medicine and pharmacy, are held in estimation by the leaders of medicine in Great Britain and Ireland." A large number of these new things are, indeed, conspicuous by their absence from the list altogether—not one of the medical authorities consulted saying a single good word for most of the vaunted "new remedies." Then, of the 140 articles recommended for the consideration of the Committee by one or more of the twelve medical bodies, so large a proportion as 88 have only one recommendation apiece. Evidence of this kind should make medical men hesitate before they prescribe new remedies. Probably nineteen out of twenty of such things are tried a few times, found useless, and cast aside; the disadvantages being that the prescriber's credit is injured, the patient's cure delayed, and the pharmacist's shelves saddled with stocks of goods of which only a few grains of each have been or ever will be used; while the only person benefited is the proprietor of the article, who has sold a total of hundreds, not thousands, of pounds at what is certain to be a very large profit.

Professor Attfield goes on to say that, with regard to the extent to which each of the 130 (subsequently 140) suggested additions received the recommendation of the eleven (subsequently twelve) medical bodies, only one substance—namely, "antipyrin"—received their unanimous approval; strophanthus, 10 approvals; sanmolin and saccharin, each 9; antifebrin and hamamelis, each 8; sulphonal and terebene, each 7; euonymus, 6; extract of malt, chinosis versicolor, paraldehyde, nitrite of sodium, and syrup of hypophosphites, each 5 approvals. Fourteen substances, therefore, or, including their preparations, some 20 or so, received the approval of five or more of the eleven medical authorities. The remainder, 120, having received the approval of less than five of the medical bodies, can scarcely be said to have received "general approval." It is interesting to note that the experience of pharmacists who dispense large numbers of prescriptions, or who make up medicines at hospitals, or who supply general practitioners with drugs of three different classes consulted by Dr. Attfield—coincides with the direct medical testimony respecting the frequency or infrequency with which the respective new remedies are prescribed by medical men.

It would seem, therefore, that on the whole the Committee have succeeded in ascertaining and in recommending for official recognition the really valuable newer remedies that have gained the general approval of the medical profession since the present *Pharmacopœia* was published. Clearly, every official remedy should be a valuable remedy, and should be a remedy generally recognised as valuable. Possibly some of the remedies now rejected are valuable, but, not being generally recognised as valuable, are very properly not at present allowed a place in the *Pharmacopœia*. On the other hand, remedies only supposed to be valuable, and therefore much used, must not be included, unless the Committee are satisfied that they are really valuable. The syrups of the phosphates and hypophosphates are very popular, and, we notice, have been recommended for insertion in the *Addendum* by several of the consulted medical authorities, but they are not in the list selected by the Committee. The inference is that our leaders in therapeutics have little faith in the direct therapeutic value of these syrups. Antifebrin, which received 8 out of 11 possible recommendations by the medical corporations, was probably considered to be redundant in the presence of antipyrin, for it is not included. Terebene was also well recommended, but either is not so much more therapeutically useful, or is not yet sufficiently well recognised as more useful, than good turpentine, as to warrant official recognition. Otherwise, the Council has included in the *Addendum* all the articles that had a majority of approvals by the medical bodies. On the other hand, several articles are included that had quite a minority of such approvals, and three—namely, liquor cocainæ hydrochloratis, mistura olei ricini, and unguentum conii—are included, though not mentioned at all by the medical authorities. Malt extract, iridin, paraldehyde, and nitrite of sodium each had 5 approvals; the first two are rejected, the last two included. Menthol plaster, red gum, solutions of nitroglycerine and sulphate of morphine, oil of cade, benzoate of sodium, and sulphur lozenges had only one approval each, yet are included. The Committee, however, must be credited with the possession of good and sufficient reasons both for accepting and rejecting, especially as they seem to have done what was practicable in getting outside help in their work.

Finally, it would appear that the pharmaceutical societies, and, through those societies, the members of the British Pharmaceutical Conference—a society for the promotion of pharmaceutical research—are, in due time, to be asked to advise in what cases and in what degree objectionable appearance, or unpleasant odour or flavour, or undue bulk, etc., of official remedies may be so masked or minimised, or the remedies be so altered altogether in form, or have such a new form given to them, as to render them more acceptable to patients. Here the pharmacists will find abundance of work of the kind they seem to desire, while they not only will be labouring almost shoulder to shoulder with the Medical Council in the construction of any future *Pharmacopœia*—an honour they seem to be extremely anxious to share—but will have the fullest sympathy and best wishes for success of the whole of the profession represented by the Medical Council. The public, too, will be greatly benefited, though probably they will be unable properly to apportion amongst the "medicine men" any grateful feelings they may entertain for having had their pills and potions rendered less odious to eyes, nose, or palate.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

THE general meeting was held at the rooms of the Medico-Chirurgical Society on June 14th, 1890, Mr. POLLOCK, President, in the chair. The meeting was well attended, the following being amongst the number present: Mr. T. Holmes, Mr. Willett, Mr. Macnamara, Mr. Rivington, Dr. Robert Barnes, Mr. Lawson Tait, Mr. V. Horsley, Dr. Collins, Mr. Allingham.

The PRESIDENT read the report of the work of the Association during the past year, and at the same time pointed out that the Association had nothing whatever to do with the Association of Members, the main objects being to forward the interests of the Fellows of the College.

The adoption of the report was proposed by Mr. RIVINGTON, seconded by Mr. HOLMES, and carried.

In reference to the negotiations of the College with the University of London, Dr. COLLINS proposed, and Mr. LAWSON TAIT seconded, the following resolution, "That no arrangement between the University of London and the Royal College of Surgeons for the purpose of conferring degrees will be satisfactory without previously consulting the Fellows of the Royal College of Surgeons." Carried.

It was next proposed by Mr. TWEEDY, and seconded by Mr.

HAWARD, "That the Council of the Royal College of Surgeons be asked to receive a deputation from the Association, and that the deputation consist of the following: Mr. Pollock, Mr. Holmes, Mr. Wm. Adams, Mr. Davy, Dr. R. Barnes, Mr. Lawson Tait, Mr. Rivington, Dr. Collins, Mr. Herbert Allingham, Honorary Secretary, and that the President, Mr. Pollock, have the power to nominate any other member of the Association he may think advisable."

It was then proposed by Mr. TAIT, and seconded by Dr. BARNES, that the following resolution be entered upon the minutes—namely: "That this meeting of the Association of Fellows of the Royal College of Surgeons desires to express their strong disapproval of the system of voting papers adopted by the Royal College of Surgeons. They are of opinion that a simple voting paper should be issued to each Fellow at the same time, and together with a list of candidates from whom the selection is to be made." Carried.

A vote of thanks to the President was proposed by Mr. MACNAMARA, seconded by Mr. ALLINGHAM, and the meeting terminated.

MEDICAL DEFENCE UNION: METROPOLITAN DIVISION.

A MEETING of the Executive Committee was held at the offices of the British Medical Association, 429, Strand, on June 12th, the President, Dr. BRIDGWATER, in the chair.

The Honorary Secretary, Dr. CAMPBELL POPE, having stated that owing to the recent successful prosecution of "Dr." Sherman, no meeting to discuss the Medical Act had been called, the Committee came to the conclusion that it was better not to call the meeting at present, as the recent decision in Sherman's case by Sir John Bridge had shown that greater protection was afforded by the Act than was previously thought. Sir John Bridge had established the important principle that no man, unless legally qualified, could call himself "Dr." and practise the healing art for gain.

Dr. BATEMAN made a statement pointing out the leading features in Sherman's case, and stated that another prosecution would be commenced shortly.

Mr. ERNEST HART, Dr. GRANVILLE BANTOCK, and the HONORARY SECRETARY brought forward the particulars of three cases of illegal practice, one with "covering." It was decided to lay these cases before the Central Council of the Union, with a view to prosecution and the recovery of penalties.

Dr. MEAD having made some observations on organisation, and on the difficulties which he had experienced in deciding the boundaries of the Metropolitan Division and the East Anglian where they impinged on one another, it was resolved: "That for the present the boundaries of the Metropolitan Division should be coterminous with those of the Metropolitan Counties Branch of the British Medical Association, and that Dr. Mead and Dr. Campbell Pope should prepare a scheme for the purpose of making the Union better known amongst the profession in the metropolis."

THE SELECT COMMITTEE ON HOSPITALS.

NINTH AND TENTH MEETING.

[SPECIAL REPORT.]

THE Select Committee of the House of Lords, inquiring into the subject of the management and administration of the metropolitan hospitals, resumed their sittings on Monday last, when the first witness was

Sir EDMUND HAY CURRIE, who was re-examined, and said that, in his opinion, it would be better to have a central university for medical instruction, from which students would go to the hospitals for clinical instruction, than as at present having a school attached to various general hospitals. The present system of lectures was not entirely disinterested—it was done for fees. He should like to see London divided into different districts, so as to connect the hospitals with the sick asylums and the parish infirmaries. He thought the charitable people would take even greater interest in the hospitals if they were grouped. The public were pretty good judges, and did not give much support to institutions which were rotten. The hospitals, with few exceptions, were within a very small area around Charing Cross, and they would be of infinitely greater use if several could be removed—say, one to the north and one to the south of London. The present system of election of the medical staff was altogether very peculiar, and a reform would be desirable in the interests of everybody.

The CHAIRMAN: Would you now approve of building any new hospitals with 500 or 600 beds?—Certainly not. I should be very sorry to see any hospital built with anything like that number of beds in future. The patients would not have the same chance of obtaining fresh air as in a smaller hospital. The witness continued that he considered it would be of the greatest possible advantage if in the different districts all the charities for the relief of the sick poor were amalgamated. He thought the Local Government Board's system of inspection a very good one, and it would be very desirable to have some one to inspect all the metropolitan hospitals, to find out the good points and suggest their adoption at other institutions, and to see whether any abuses existing in one prevailed in another.

The CHAIRMAN: Such a person would have to be an expert?—Yes; and I suppose such a first rate man would require to be paid. If all hospitals contributed they would find it to their advantage, because of the improvements which such a person could suggest. There was no doubt some co-operation between the hospital authorities, and an excellent feeling prevailed among them.

The WITNESS, in answer to further questions by Lord CATHCART and other members, said he should like to see something like a hospital clearing house. On the suggested central board he should like to see the medical and lay members working together. There should be a different system of electing the medical staff, and he would not confine the appointment to members of the London colleges. He had a strong opinion that the best man to effectively deal with the sick poor should be elected, come from where he might. If the London hospitals were to be moved, he hoped they would be moved, not into the country, but into those metropolitan districts where the poor lived. For the proposed hospital inspectors he would have highly-trained medical men. He was in favour of a central body, composed of medical and lay representatives of the hospitals, of the Government, and of the poor—having power to distribute the patients into the various hospitals. He did not consider that such a central body would have a corresponding paralysing effect on individual efforts. The provident system in connection with hospitals he considered the most important question of the day for the London poor. There was no necessity for the big out-patient departments. The present choice which the poor possessed of going to any hospital was now used vexatiously. The hospitals were not in sufficient touch with each other.

The Archbishop of CANTERBURY: But would you not require some system to keep your suggested six central boards in touch?—Yes, I think so. The Witness further said that every hospital should have affiliated to it a certain number of dispensaries.

Lord SPENCER: Do you know of any successful example of provident hospitals on a large scale out of London?—No. The Witness further said that whilst very anxious for the poor they must take care not to ruin the medical men. He was in favour of hospitals being provided by private endeavour rather than by Government. There should be a certain number of small hospitals outside London, where there would be a better chance of life than in the vitiated atmosphere of some of the London hospitals, but they should be part of some general hospital. He had never worked out the question of having three classes of patients, but he did not see why it should not be done. It would not, however, be right to take beds away from the poor patients in order to provide for the paying patients.

Sir HENRY LONGLEY, K.C.B. (principal Charity Commissioner), explained that the Commission was established in order to exercise, in a semi-judicial way, the functions of State control, which up to that time had been exercised by the Court of Chancery, which was intermittent and involved long delay. They were appointed as the result of the long inquiry known as the Brougham inquiry. As to its powers, the Commission's functions were more judicial than administrative, for they acted only when called upon to do so. An important duty was the sanctioning of sales, leases, and mortgages, and of appointing trustees.

The CHAIRMAN: Do all those powers extend to certain hospitals in London?—They extend to all hospitals, except so far as they are supported by voluntary contributions. Those supported in that way were exempt from the Commissioners' jurisdiction. He then spoke of the extent to which the leading hospitals were supported by endowment. It was not correct for persons to speak of Guy's, St. Bartholomew's, and St. Thomas's as the only endowed hospitals in London. The Commissioners had power to invest real and personal property, and St. George's Hospital was in the habit of entrusting the Commissioners with considerable funds for in-

vestment. Guy's Hospital applied to the Commissioners and obtained authority to appeal to the public for £100,000. That amount was obtained, and thus the capital had been saved. They also obtained a scheme for taking paying patients, the Commissioners sanctioning the modification of the terms of the trust. The negotiations were personally conducted by Mr. Lushington. They could not have sanctioned a new scheme for Guy's unless the majority of the trustees had memorialised. He then stated that several proposals had been made to give further power as to the action of the Commissioners in the case of irregularity of the accounts of charities. The accounts of Guy's were not so clear as they should be, and, since the Commissioners called attention to that fact, there had been an alteration. The Commissioners had not devoted to convalescent homes or hospitals any of the funds at its disposal, because it was thought the hospitals and homes would go on without special aid, whereas the open spaces and polytechnics would not, and required special assistance.

In reply to other members of the Committee, Sir HENRY LONGLEY stated that the case of Guy's was a special one, because of the failure of the endowment to do what the founder wished, so that the Commissioners had power to frame a scheme without going to Parliament. The Commissioners had never required uniformity of accounts; so long as they were clear that was sufficient. Mr. Hayter (of the Commission) had examined the accounts of the endowed hospitals in London recently, and he reported as follows: "The accounts of all the hospitals were rendered in a form not difficult to understand, and would probably be regarded as sufficient for the purpose of those members of the public who would be likely to examine them."

The CHAIRMAN: Do you think it would be advantageous for all the hospital accounts to be on one common system?—It would be most advantageous. The witness added that it would be very desirable to have a central body for audit purposes, to which every hospital should render accounts. Some supervision over the accounts of voluntary charities was very much needed. Having read the Charity Organisation Society's report on the subject, he quite agreed with it. As a rule, there was something substantial in the complaints which were made to the Commissioners. They very rarely framed a scheme at the request of two complaining inhabitants in the face of the trustees.

The Committee adjourned until Thursday.

At the sitting of Committee on Thursday, Mr. COTTENHAM FARMER, M.R.C.S., general practitioner, was examined, and, in reply to the CHAIRMAN, stated that he practised in the neighbourhood of Gray's Inn Road, where were situated in close proximity the Royal Free, Central London Ophthalmic, and the Central London Throat and Ear Hospitals. He certainly thought the free medical institutions starved the general practitioners, who had to reduce their fees. The indiscriminate relief had a pauperising effect. He did not consider special hospitals, except those for women, were necessary.

The CHAIRMAN: Do you consider the enormous competition at the free charities reduces the medical practitioners to a very low level?

The WITNESS: I am quite sure of it, and in regard to medical science the reduction of the fees must naturally cause very bad treatment. The present free hospital system operated disastrously to the general practitioner. Dr. Bridges, in his report in 1878, after the system of inquiry had been instituted, stated that he saw patients at St. Bartholomew's at the rate of about one minute and a quarter to each, and in that time he had to make a diagnosis and select the cases.

Do you consider that time was sufficient?—Certainly not. There was no supervision in his (Witness's) time, in 1873, when he was a student, and for hours the patients were seen by students without supervision.

Besides being hurried, do you consider the treatment of an inefficient character?—Very.

And, therefore, that the public do not gain by the out-patient department?—I think they lose.

And yet the public seem to have a great amount of confidence in the out-patient departments?—In London the people seem to be demoralised, and have not the desire to pay which the country people have. According to Sir Sydney Waterlow's statement, things had greatly altered at St. Bartholomew's. Speaking with regard to his experience of dispensary work, the Witness said that he had for years had a dispensary, and he never had a case which he could not treat, and which it was necessary to send to a hospital. The great majority of the cases which went to hospitals were of a trivial character. He should willingly consent to treat the out-patient department as consultative.

Do you think there would be any harm to the profession or the public if the out-patient department were entirely closed?—I am sure it would do a great deal of good to the public. With respect to district nursing, the Witness said that if the system were extended that system would replace the out-patient department of hospitals in a great measure, if the general practitioner rose to the same level; but, owing to the competition of the hospitals, that rising was impossible.

The WITNESS, in reply to Lord CATHCART and other members of the Committee, stated that syphilis was certainly on the increase. He had been in practice in London about two and a-half years. While there were many persons who abused the hospital system there were many poor persons in great need of relief and could not afford to pay. They should have the option of going to the hospitals which were built for and open to them, and if they did not go there they could go to the Poor-law as a right. As to the question of discrimination, a system of inquiry was, in 1876, carried on at the Great Ormond-street and the Royal Free Hospitals, in conjunction with the Charity Organisation Society. That system reduced the number of patients, and had it been continued at those and at all hospitals the present Committee of Inquiry would not have been needed. He thought that about 90 per cent. of the cases which went to the out-patient department had no right to obtain charitable relief.

Lord MONKSWELL: Do you maintain that the treatment at hospitals is, on the whole, bad?—Very bad; it must be.

That is you consider because duly qualified practitioners do not see the patients?—Quite so. He would be quite willing that the hospitals should have the advantage of interesting cases. There would be quite sufficient cases for the outside practitioner.

Re-examined by the CHAIRMAN, the WITNESS said that if the infirmaries, in addition to the chronic cases, had medical and surgical cases, it would be necessary to double or treble their accommodation. But he was not complaining so much of the in-patient as of the out-patient departments. The abuses of the in-patient department were not so glaring as of the out-patient department.

Do you think the system in force in Vienna and Berlin, of having three classes of patients—the first luxurious, the second less so, and the third very poor—a plan applicable in England?—I think it would; but I do not think it ought to apply to the present charities.

If introduced into hospitals it would revolutionise the system of the honorary medical staff?—Yes.

Would you like to see the staff paid?—Certainly. The Witness said that in the interest of the general practitioner he objected to paying hospitals. Persons who could pay for treatment should go to their private medical attendant, and they would get much better attention in their own houses than they were likely to receive from a comparative stranger at a paying hospital.

The CHAIRMAN: Would you be in favour of some central board or body to supervise and inspect hospitals?—Certainly. There should be a scrutiny as to the circumstances of all patients by some body like the Charity Organisation Society. The patients should be sifted, so as to see which should go to the Poor-law, which to the hospitals, and which should pay. He had a strong objection to special hospitals as being unnecessary.

Mr. FREDERICK HENRY CORBYN, M.R.C.S.Eng., L.R.C.P.Edin, general practitioner, said he had passed his student days at King's College Hospital. He had not applied for an appointment at any London hospital, but had he done so the fact that he held an Edinburgh diploma would have been a bar. There were a number of hospitals not far from where he practised in St. John's Wood, and the effect was that the fees of the local practitioners were reduced. He believed that the local medical practitioners as a body attributed the reduction to the competition of the hospitals. He was in favour of medical clubs and of every sort of provident scheme. During the last fifteen years he did not think there had been much improvement in the out-patient departments of hospitals. Small cases coming in in the afternoon, in the absence of the senior medical staff, were seen by the students. There was great overcrowding, and the cases had consequently to be seen hurriedly. He was against mentioning the names of hospitals of which he complained, because he thought the general hospitals did much good. It was only the out-patient department which required reform. He was not complaining against the managers, but of

the system. The majority of cases would be very much better treated at a general hospital than at a special one. The patients had to wait a long time, and at great inconvenience, in the out-patient departments, and there was some danger from infection; that was especially dangerous at children's hospitals. He was in favour of abolishing the out-patient departments of hospitals, except the special departments. He was not quite sure that the immense competition between the out-patient departments of hospitals, the provident dispensaries, the part-pay hospitals, and the practitioners, although it had lowered the fees of the private practitioners, had not been a gain, because at one time those fees were such as to drive persons to get free relief. Now that those fees were reduced the people were coming back. He suggested a very extensive inquiry into the circumstances of all applicants for relief after first relief, and that the hospital should be used for consultative cases.

Lord CATHCART: Do you accept this as the proper definition of a hospital: "to lodge and cure bad cases?"—No, that is not a correct definition; a hospital is a charity, and it is to lodge and cure bad and necessitous cases.

Lord CATHCART: I accept your definition.

Mr. LENNOX BROWNE said he had had twenty-five years' experience in connection with special hospitals. He was opposed to Sir Edmund Currie's provident scheme, because he did not think that patients ought to pay in sickness and in health. The Witness explained in detail the system of part payment adopted at the Central London Throat and Ear Hospital, and said that it had paid off a loan and become absolutely solvent partly as a result of the payments from patients. The cost of maintenance was less than at many hospitals, and the average cost per bed was £80, and not £96 as stated by the Charity Organisation Society. Special diseases were better treated in special than general hospitals. He had a list showing that over 150 physicians and surgeons at general hospitals were consulting or actual officers of special hospitals.

The Committee adjourned until Monday.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 16th day of July next, at 2 o'clock in the afternoon.

June, 1890. FRANCIS FOWKE, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences, that they are empowered to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting should be made without delay to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

BRANCH MEETINGS TO BE HELD.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Medical Institute on Thursday, June 26th, at 4 o'clock in the afternoon, when the ordinary business will be transacted and an inaugural address delivered by the President-elect of the Branch, Mr. Alfred Freer, F.R.C.S., of Stourbridge; and after the meeting the members will dine together at the Great Western Hotel at 6.30; tickets, exclusive of wine, 6s.—ROBERT SAUNDBY, M.D. and JORDAN LLOYD, F.R.C.S., Honorary Secretaries.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting of this Branch will be held at the Salop Infirmary on Tuesday, June 24th, at 3 P.M. Papers will be read by Mr. Bennett May, Dr. Charnley, etc. After the meeting the annual dinner will be held; tickets, exclusive of wine, 6s. Members having any papers to read or communications to make will kindly give notice, on or before Saturday, June 14th, to the Honorary Secretary, J. ALLEN BRATTON, College Hill House, Shrewsbury.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held in Manchester on Wednesday, July 2nd, at the usual hour. Gentlemen wishing to read papers, make communications, or show cases, are requested to communicate with the Honorary Secretary at once, so that the circulars convening the meeting may be sent out in a complete form.—CHARLES E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Cardiff on Friday, June 27th. Further particulars in circulars.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

YORKSHIRE BRANCH.—The annual meeting of this Branch will be held on Wednesday, June 25th, at 3 P.M., at Leeds, when the officers of the Branch and the representatives of the Branch on the General Council will be elected. Members intending to read papers are requested to communicate with the Secretary on or before June 15th.—ARTHUR JACKSON, Secretary, Sheffield.

NORTH WALES BRANCH.—The annual meeting will be held at Portmadoc the second week in July. Members having a paper to read, communications to make, or new member to propose, are requested to intimate before June 28th to to the Honorary Secretary, W. JONES MORRIS, Portmadoc.

BATH AND BRISTOL BRANCH.—The annual meeting of this Branch will be held on Thursday, June 26th, at the Royal Mineral Water Hospital, Bath, at 4.30 P.M., when W. J. Fyffe, M.D., will resign the chair to A. B. Brabazon, M.D., President-elect. The business of the meeting will be to receive the report of the Council; to elect the officers of the Branch; to transact the necessary business; and to discuss such subjects connected with the interest of the Branch and of the profession as may be brought before it. Members having any communications for the meeting are requested to give notice of them to the Secretaries not later than June 22nd. The Secretaries will feel obliged if members will send them notice of any alterations in their diplomas or addresses. Members who have not paid their subscriptions are requested to do so immediately to the local secretaries. The dinner will be held at the Grand Pump Room Hotel, Bath, at 6.30 P.M. The Bath Secretary particularly requests that members will inform him by Monday, June 23rd, whether it is their intention to be present at the dinner. By so doing they will greatly facilitate the satisfactory completion of the necessary arrangements.—R. J. H. SCOTT, Honorary Secretary for the Bath District, 13, Bladud Buildings, Bath; E. MARKHAM SKERRITT, Honorary Secretary for the Bristol District, Thornton House, Richmond Hill, Clifton.

SOUTHERN BRANCH.—The seventeenth annual meeting will take place at the Bugle Hotel, Newport, Isle of Wight, on Thursday, June 26th, 1890. The general meeting will be held at 1.15 P.M. (Refreshments will be provided between 1 and 3.) In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Dr. Nathan Raw: 1. Trance following Influenza; 2. Two Cases of Raynaud's Disease. Dr. Frederick Pearse: 1. The Employment of Traction in the Use of Midwifery Forceps, and a New Form of Axis-Traction Forceps; 2. New Hypodermic Syringe. Dr. Ward Cousins: 1. The Surgical Treatment of Impassable Stricture of the Urethra; 2. New Aural Probe and Aromatic Wool for Drying and Cleansing the Ear. The annual address will be delivered by the President-Elect (Dr. J. Groves) at 2.30 P.M. During the afternoon the members are invited to visit Carisbrooke Castle and several places of interest in the locality. The dinner will take place at 5.30 P.M. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Dr. J. M. Pletts, Ryde, on or before Wednesday, June 25th.—J. WARD COUSINS, Honorary Secretary and Treasurer.

WEST SOMERSET BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Bridgwater, on Thursday, July 3rd, at 3 o'clock. Mr. H. H. Kemmis, President-elect, will take the chair on its being vacated by Mr. Hunt. Business: Minutes; Report of Council; Treasurer's Report; Election of Officers; Place of Meeting and President-elect for 1891. President's Address. Papers and communications. The dinner will be at the Clarence Hotel at 5 o'clock. Mr. Kemmis invites gentlemen present on the occasion to adjourn to his house after the dinner. The title of any paper or communication to be brought before the meeting and early notice of the intention of being present at the dinner should be sent to W. M. KELLY, M.D., Honorary Secretary, Taunton.

NORTH OF IRELAND BRANCH.—The twelfth annual meeting will be held in the Board Room of the Royal Hospital, Belfast, on Thursday, July 10th. Business: 1. To receive the Secretary's report and the Treasurer's statement. 2. To elect office-bearers for the ensuing year. 3. To appoint two members as representatives of the Branch on the Council of the Association, and also two members on the Parliamentary Bills Committee. 4. The President (Dr. George Gray) will deliver an address. 5. Dr. J. A. Lindsay will show a Cancerous Liver, and give an account of the case. He will also read the notes of a case of Diabetes Insipidus successfully treated with Valerian. 6. Dr. Dempsey will describe a New Method of Treating Placenta Prævia, and will read notes of a case. 7. Dr. H. O'Neill will read short notes of a case of Paget's Disease of the Nipple, and will show Photographs of the Breast before and after Operation. 8. Dr. Byers will give a short summary of Fourteen Abdominal Sections, and will show a boy, the subject of Athetosis (Post-hemiplegic Chorea). Gentlemen who wish to read papers, show patients, etc., are requested to communicate, as early as convenient, with the Honorary Secretary, JOHN W. BYERS, M.D., Lower Crescent, Belfast.

METROPOLITAN COUNTIES BRANCH.

THE thirty-eighth annual meeting of this Branch was held at the Holborn Restaurant, on Tuesday, June 10th, at 5.30 P.M. The chair was taken by the retiring President, Dr. W. M. ORD, who afterwards resigned it to his successor, Sir William Mac Cormac. The minutes of the previous meeting of the Branch were read and confirmed.

Report of Council.—Dr. RADCLIFFE CROCKER, one of the honorary secretaries, read the report, which stated that 80 new members had been elected, and 81 had been lost by death and resignation, leaving the number at present a few short of 1,200. Among the members who died during the year were Dr. J. B. Caskie, Mr. W. Coulson, Dr. L. T. Cumberbatch, Mr. G. Fenton, Mr. J. J. Gawith, Mr. E. A. Jones, Mr. John Norton, Dr. Charles Royston, Mr. E. Sandwell, Mr. Haynes Walton, and Dr. Walter Pearce. All had done good work and many had served upon the Council in former years. The question of facilities for granting medical degrees to London medical students had not been lost sight of and the Council were prepared to continue their efforts in this direction until a satisfactory result had been obtained. A twelvemonth ago it was generally expected that the annual meeting of the Association would be held this year in London. Certain difficulties arose, and it was finally determined to postpone the invitation for the present. Otherwise the Council were convinced that the support promised them was more than sufficient to insure a most successful meeting, and that this branch, under the presidency of Sir William Mac Cormac, would have taken a leading position in the entertainment of the Association. With respect to Dr. Rentoul's resolutions, in accordance with a resolution passed at the annual meeting of the Association at Leeds, in 1889, the Council of the Association instituted inquiries into the subject of these resolutions, and the Metropolitan Counties Branch, as well as the other branches, was requested to obtain the opinion of its members upon the points brought forward by Dr. Rentoul. At a meeting of the Branch Council, held on October 30th, 1889, a committee was formed for the purpose of making arrangements for a general meeting of the Branch. The district secretaries were in the meantime to hold meetings and obtain the views of the members of their districts. Dr. Hunt forwarded an important analysis of answers which he received to a circular sent out, and valuable information was supplied by other secretaries. At a general meeting held at the Royal School of Mines, on December 12th last, the subject was freely discussed, and several resolutions were passed, which had already been published in the JOURNAL. The general opinion of the members was to a great extent in sympathy with Dr. Rentoul's wishes, while they felt that several of the resolutions which he proposed were impracticable. The good work done by the district secretaries and the value and interest of the meetings held during the year were then referred to, and regret was expressed that Mr. Noble Smith, who had filled the office of secretary during the last three years with conspicuous diligence and ability, had found it necessary to resign the duty.—On the proposal of Mr. BRINDLEY JAMES, seconded by Dr. HOOPER MAY, the report was unanimously received, adopted, and directed to be entered on the minutes.

Vote of Thanks to Mr. Noble Smith.— On Mr. Noble Smith formally resigning the post of Secretary, the PRESIDENT alluded in graceful terms to his services; and Dr. CLEVELAND proposed: "That our most sincere thanks be presented to Mr. Noble Smith for the zeal and ability displayed in the performance of the duties of his office."— Dr. BRODIE SEWELL seconded the proposition, which was carried unanimously.— Mr. NOBLE SMITH returned thanks.

Election of Officers.—The result of the ballot for the election of officers and Council and of representatives of the Branch on the Council of the Association was as follows:— *President:* Sir William Mac Cormac. *President-Elect:* W. F. Cleveland, M.D. *Vice-Presidents:* William Ord, M.D.; Stephen Mackenzie, M.D.; H. O. Priestley, M.D.; C. Brodie Sewell, M.D. *Treasurer:* Septimus W. Sibley. *Secretaries:* H. Radcliffe Crocker, M.D.; Andrew Clark. *Eighteen Ordinary Members of Council* (the names to which an asterisk is prefixed are those of members nominated in place of thirteen who retire): *G Buckston Browne; Thomas B. Crosby, M.D.; W. Howship Dickinson, M.D.; *A. Forsyth, M.D.; Hickman J. Godlee; *A. Pearce Gould; F. De Havilland Hall; Cubitt Lucey, M.D.; Brigade-Surgeon A. B. R. Myers; *Thos. Barrie Nicoll; *Joseph H. Philpot, D.D.; *Sir William Roberts, M.D.; *William Rose; St. Clair B. Shadwell; *R. Percy Smith, M.D.; *E. Noble Smith; *George H. Savage, M.D.; *Frederick Taylor, M.D. *Representatives of the Branch in the Council of the Association:* J. Syer Bristowe, M.D.; Henry T. Butlin; H. Radcliffe Crocker, M.D. (*ex officio*); George Eastes, M.B.; Septimus W. Sibley; Noble Smith; Frederick Wallace.

Notice of Motion.—Mr. BUTLIN gave notice that he would at the next meeting of Council bring forward a motion relative to the method of election of officers.

Treasurer's Report.—Mr. SIBLEY (Treasurer) presented the financial report.—Mr. BUTLIN proposed and Dr. CLEVELAND seconded, and it was resolved: "That the Treasurer's report be received, adopted, and entered on the minutes, and that the best thanks of the Branch be given to Mr. Sibley for the able and efficient manner in which he has discharged the duties of Treasurer during the past year."—Mr. SIBLEY acknowledged the vote of thanks.

Vote of Thanks to Retiring President.—The PRESIDENT, in resigning the chair, thanked the Secretaries, members of Council, and others for their cordial assistance and support during his year of office, and Sir WILLIAM MAC CORMAC then took the chair as the new President of the Branch.—Dr. WALTER DICKSON proposed and Dr. DICKINSON seconded, and it was unanimously resolved: "That the cordial thanks of the Branch be given to Dr. W. M. Ord for his efficient and courteous conduct as President during the year, and especially for his able and judicious guidance and assistance in the consideration of those matters of professional importance which have been brought under the notice of the Branch."—Dr. ORD returned thanks for the vote.

President's Address.—Sir WILLIAM MAC CORMAC delivered an address.—Mr. SIBLEY proposed and Dr. OSWALD seconded, and it was unanimously resolved: "That the best thanks of the meeting are due and are hereby tendered to the President for his interesting address."—The PRESIDENT acknowledged the vote of thanks.

Letter from the Charity Organisation Society.—A letter was then read from the Charity Organisation Society asking for assistance in regard to the choice of evidence before the Select Committee of the House of Lords now sitting on the Management of the Metropolitan Medical Charities. As the matter was urgent, it was decided to leave it in the hands of the President and Secretaries of the Branch.

Dinner.—A report of the dinner was published in the JOURNAL of June 14th at page 1392.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE annual meeting of this District was held at the Royal Forest Hotel, Chingford, on Thursday, June 5th.

Officers and Committee.—After the usual formal business, the following gentlemen were elected officers of the District:—*Vice-President:* C. T. Aveling, M.D., Upper Clapton. *Representative on the Council of the Branch:* Mr. Percy Warner, Woodford. *Honorary Secretary:* J. W. Hunt, M.D., 101, Queen's Road, Dalston, N.E. *Committee:* Mr. J. Adams, Aldersgate Street; J. O. Adams, M.D., Upper Clapton; Mr. G. Birch, Lower Clapton; Mr. W. B. Colquhoun, Stoke Newington Common; A. Robinson, M.D., Mile End Infirmary; C. H. Wise, M.D., Walthamstow.

Vote of Thanks to President.—A cordial vote of thanks to the President (Dr. Ord) for presiding and for his uniform courtesy during his term of office brought the meeting to a close.

After the meeting the members and the visitors, to the number of thirty-seven, dined together, Dr. Ord, who was in the chair, being supported by Sir W. Roberts, Sir W. Mac Cormac, Drs. Brodie Sewell, Bridgwater, Bristowe, Dickson, and Hare, past Presidents.

SOUTH-WESTERN BRANCH.

THE fifty-first annual meeting of the South-Western Branch was held on May 21st, at the Ilfracombe Hotel, Ilfracombe, and was attended by between forty and fifty members. Before the meeting the members were hospitably entertained at luncheon at the hotel by Dr. E. Slade-King, President-elect.

General Meeting.—The general meeting was held at 2 P.M., when the chair was taken by the President, Mr. W. PEARSE. It was resolved that the minutes of the last annual meeting at Bodmin, of the intermediate meeting at Plymouth, and of the extraordinary meeting at Exeter, be taken as read.—The PRESIDENT then in a few words expressed the pleasure which his year of office had afforded him, and in resigning the chair introduced his successor, Dr. E. Slade-King.

Vote of Thanks to the Retiring President.—Mr. SOMER (Broadclyst) proposed that a hearty vote of thanks be accorded to Mr. Pearse for his conduct in the chair during the past year.—This was seconded by Dr. DEAS, and carried by acclamation.

President's Address.—The PRESIDENT then delivered his inaugural address, which was devoted to a discussion of the proposition: "That the physical condition and training of children is

a department of State medicine worthy the attention of the State."—Mr. FORTESCUE WEBB (Dawlish) moved: "That the best thanks of the meeting be accorded to Dr. Slade-King, for his very able, instructive, and suggestive address."—This was seconded by Mr. E. J. DOMVILLE (Exeter), who remarked that there could be but one feeling in their minds regarding Dr. Slade-King's address, namely, that the light of common sense had been thrown upon the subject of the management of our schools.—Dr. DEAS put the motion to the meeting, and it was carried by acclamation.

Report of Branch Council.—The PRESIDENT called on the HONORARY SECRETARY to read the annual report of the Branch Council. The report stated that there had been no falling off in the number of members. The present number on the roll was 219, three more than at the date of last annual meeting, and the largest number yet reached. Twenty-one new members had joined, of whom 16 were already members of the parent Association. Four had died, among whom had passed away, at a ripe old age, only within the last two months, Mr. William Pollard, F.R.C.S., of Torquay, a former president of the Branch, who, practising in Torquay for nearly fifty years, made himself respected and beloved both socially and professionally. Fourteen members had resigned, the majority from leaving the district. The finances of the Branch were in a satisfactory condition, the balance in hand having increased during the past year from £30 7s. 3d. to £39 14s. 7d. The annual meeting at Bodmin, which was also the jubilee of the Branch, was largely attended and most successful in every way. A special feature was the excursion on the day after the meeting, which promised to become a regular institution—at any rate, when the annual meeting was held in the more distant parts of the district. A successful intermediate meeting was held at Plymouth in November, at which an interesting discussion took place on the question of the reform of the out-patient departments of medical charities. It was hoped that another intermediate meeting would have been held in the spring, but the extraordinary meeting held in Exeter in March last prevented it. The annual meeting in 1891 fell to be held in one of the three towns, and the Council suggested that it should be held in Devonport, and that Dr. John Rolston, of Stoke, should be the President-elect.—On the motion of Mr. L. H. TOSSWILL (Exeter), seconded by Dr. BUDD (Exeter), the report of the Council was approved and adopted.

Next Annual Meeting.—Dr. BLOMFIELD proposed that the next annual meeting be held at Devonport, and that Dr. John Rolston, of Stoke, be the President-elect.—This was seconded by Dr. BERRY (Lynton), and carried unanimously.

Officers and Council.—On the motion of Dr. WOODMAN, seconded by Mr. PEARSE, Dr. Slade-King (as the president of the year), and Dr. Deas were elected as the two representative members on the Council of the Association. The following gentlemen were, on the motion of Dr. DEAS, seconded by Mr. COOKE (Barnstaple), elected to fill the vacancies in the Branch Council: J. Rolston, M.D. (Stoke), T. Leah (Stonehouse), M. H. Bulteel (Stonehouse), C. B. Rendle (Stoke), J. Harrison (Devonport), G. T. Rolston (Stoke).—On the motion of Dr. ALDRIDGE (Plympton), seconded by Mr. WADE (Chudleigh), Dr. Deas was re-elected honorary secretary, and also as representative on the Parliamentary Bilis Committee of the Association, with thanks for his past services.

Papers.—A paper entitled Sequel to Two Laryngoscopic Cases, shown at the intermediate meeting at Plymouth, was read by Mr. J. ELLIOTT SQUARE (Plymouth). The first was a case of complete paralysis of the left vocal cord, diagnosed to be due to a pressure of an aneurysm on the recurrent laryngeal nerve. The patient first came under treatment in November, 1888. In June of the same year he had lost his voice, without any cough or pain, and had gradually recovered it. A fortnight before he had again lost his voice. The laryngoscope showed general redness of the larynx and complete paralysis of the left vocal cord, the right moving naturally on phonation. On December 7th a soft and distant murmur over the left second intercostal space was first heard, with some tenderness on pressure; there was also a slight murmur at the apex after the second sound. An interesting feature was that the man spoke much better when he turned his head towards the right shoulder, thus stretching the paralysed cord and approximating it to the right healthy cord. He died on March 1st, 1890, of sudden hæmorrhage. *Post-mortem* examination revealed an aneurysm of the transverse portion of the aortic arch about the size of an orange, situated on the inferior and posterior aspect of the vessel; it had burst into the substance of the left lung. The second case was one of papilloma of the vocal cord, producing aphonia. Six years previously the man had lost his voice and never recovered it. He came under treatment in September, 1889, for a troublesome cough. With the laryngoscope, a small rounded tumour was seen protruding from below through the vocal cords, preventing their approximation. This was ultimately entirely removed with a pair of Mackenzie's antero-posterior forceps, specially made of unusual length. The growth was removed on December 24th last, with the result of some immediate improvement in the voice. On May 12th there was no appearance whatever of recurrence, and both the speaking and singing voice were greatly improved. Mr. Square advised those attempting to remove an intra-laryngeal growth to accustom the patient to repeated examination, to use a strong solution of cocaine freely with a laryngeal brush, to order a pair of forceps which exactly suited the particular case, to avail themselves of strong sunlight and to use no traction with the forceps until they could distinctly see in the mirror that they had hold of the part to be removed.—Mr. C. H. WADE (Chudleigh) reported a case of *Post-partum* Eclampsia, presenting some unusual and peculiar features.

Drive.—After the meeting, *char-à-bancs* were provided by the President for a drive along the beautiful coast to Watermouth and Combemartin.

Annual Dinner.—The annual dinner was subsequently held, which was numerously attended.

Excursion.—On the following day a number of members joined a driving excursion to Lynton, where they were received by Dr. Berry, who after showing them the beauties of the place, and also a very complete cottage hospital, hospitably entertained those present at luncheon at the Valley of Rocks Hotel. A journey was then made down to Lynmouth by means of the recently constructed Hydraulic Cliff Railway (the first of its kind built in this country), after which some returned to Ilfracombe, while others continued their drive across Exmoor to Dulverton.

SOUTH MIDLAND BRANCH.

THE thirty-fifth annual meeting of this Branch was held at Springfield House Asylum, Bedford, under the presidency of DAVID BOWER, M.D., on June 12th, 1890. Thirty-five members and one visitor were present, and were entertained at luncheon by the President prior to the meeting.

Report of Council.—The minutes of the previous (Committee) meeting were read and confirmed as follows: The Treasurer's report showed a balance in favour of the Branch of £23 1s. 2d.—The HON. SECRETARY reported that since the previous annual meeting one member had died, five had withdrawn, and five new members had joined the Branch, thus leaving the number about the same as last year.

Election of Officers.—Resolved: "That Mr. Percival be appointed President-Elect for 1891-2." "That Mr. Parrott, of Aylesbury, be placed on the Committee of Management, in the room of Dr. Bryan, retired." The other members of the Committee were re-elected. The Secretary was directed to write a letter to Mr. Bryan, conveying the members' appreciation of his services in the past. Mr. Hemming was reappointed to the double office of Representative on the General Council and Representative on the Parliamentary Bills Committee. The Hon. Treasurer and Hon. Secretary were also re-elected.

Autumnal Meeting.—Resolved: "That the autumnal meeting be held at Wellingborough on October 2nd."

New Members.—Mr. Leonard P. Banks, of Riseley, was elected a member of the Association and Branch; and Dr. Beamish, Surgeon-Major, Weedon Barracks, a member of the Branch.

Apologies for non-attendance were received from Dr. Bryan, Dr. Coombs, and Mr. Veasey.

Disposal of Surplus Funds.—The HONORARY SECRETARY proposed that an annual subscription of two guineas each be given to the British Medical Benevolent Fund and the Royal Medical Benevolent College, grounding his proposal on the satisfactory condition of the Branch funds, and on the benefits received from those institutions by a former member of the Branch.—Mr. TERRY seconded, and one or two others supported.—The HONORARY TREASURER moved as an amendment, "That the Branch funds be devoted to Branch objects." Some of the members thought a donation to a larger amount would be better than a subscription. Considerable discussion ensued, and ultimately the amendment was carried by a large majority.

Medical Charities.—A petition (received from Dr. Rentoul) was laid on the table praying that the Select Committee on Hospitals

the House of Lords would extend their inquiry so as to embrace ie provincial medical charities. It was signed by several of the embers present.

President's Address.—Dr. BOWER delivered an introductory ad-ess on Lunacy Practice, advocating early admission to asylums, inting out the desirability in many cases of consultations be-veen the asylum authority and the private medical attendant evious to the removal of a patient, and alluding to the frequent istakes and irregularities found in ordinary lunacy certificates.

Tariff of Fees.—Mr. BULL proposed a "recommendatory tariff of arges for the South Midland Branch," founding his observations Dr. De Styrap's tables prepared for the Shropshire Ethical anch of the Association, and inviting discussion thereon, but oposing no resolution. The proposal met with considerable position, and, after some discussion, was allowed to drop.

Papers, etc.—Dr. PRIOR read a paper on the Arsenic Industry Cornwall. Dr. JONES, Mr. HEMMING and others made remarks. Dr. NEWMAN read a short paper on Treatment of Retention of ine due to Prostatic Enlargement by External Urethrotomy, scribing two cases, and showing the advantages of the opera-n.—Mr. HEMMING alluded to the cases he had seen at the Leeds eeting, where the operation had been performed above the pubes. Mr. PERCIVAL read notes on Salufer and Silol as Antiseptic essings, especially recommending the former, and showing lufer cubes. His treatment of cases with it had been very satis-tory.—Dr. SKELDING read a paper on the Treatment of Typhoid ver, illustrating it by temperature and other tables and draw-gs, and comparing the treatment of the past with that of the esent day. He strongly advocated sponging of the body as con-cive to sleep. Hæmorrhage in typhoid fever was also alluded and its importance pointed out. The paper was founded on y cases, with six deaths and three necropsies. A good discus-n followed, and Dr. SKELDING replied.—Mr. KINSEY exhibited a ecimen of Perforating Ulcer of Foot, and another of Charcot's int in the Ankle of the opposite Limb, both being removed m the same patient, who was herself brought before the meet-g, and was examined by the members present.

Votes of Thanks.—Votes of thanks were cordially passed to the -President, to the Committee of Management, and to the Branch presentative for their services during the past year, to Dr. wer for his conduct in the chair and for his hospitality, and to readers of papers, etc.

EAST YORK AND NORTH LINCOLN BRANCH.

E thirty-fourth annual meeting of this Branch was held in ll on June 4th, forty members being present. Dr. Merson ring resigned the chair to Dr. Edward Daly, the usual business he Branch was transacted.

Officers and Council.—The following office-bearers and members council were elected:—*President:* Edward Daly, M.A., D.Oxon. *Ex-President:* John Merson, M.A., M.D Aberd. *President-Elect:* E. P. Hardey. *Vice-Presidents:* J. Sherburn, M.B.; C. Rockliffe, M.D. *Secretary and Treasurer:* H. W. Pigeon, B. *Representative of the Branch:* J. Dix. *Representative on Parliamentary Bills Committee:* R. H. B. Nicholson: *Members Council:* H. Thompson, W. Stephenson, J. F. Nicholson, M.D.; J. Lunn, M.D.; T. A. Baldwin, M.D.; G. F. Elliott, M.D.; J. W. son, M.B; H. W. Chambers.

President's Address.—The PRESIDENT delivered an address on Simulation of Organic Diseases of the Nervous System by steria. He reviewed in detail the differential diagnosis ween hysteria and (1) neuralgia, (2) epilepsy, (3) meningitis, tumours and other gross lesions producing ptosis, hemiplegia, hemianæsthesia; (5) diseases of the cord, namely, diffuse mye-s or compression myelitis from Pott's disease, infantile paraly-spastic paraplegia from sclerosis of the lateral columns, and eminated sclerosis; (6) syphilis of the brain and cord, chorea, nus, and hydrophobia. A cordial vote of thanks was accorded he President.

Cases and Papers.—Mr. HAGYARD showed two cases of Trans-ntation of Animal Nerve for Paralysis following Nerve ours, in which the musculo-spiral and radial nerves were in-ed. The results had been excellent.—Mr. EVANS showed a of Transplantation of Skin for Cicatricial Contraction follow-Burns. The patient had been crippled, but after the operation able to walk with comfort.—Mr. R. H. B. NICHOLSON showed se of Spina Bifida which had been cured by Morton's method. also read notes of a case of Excision of half the Tongue for Epithelioma, and of a case of Lithotrity in a Female, and showed the stone.—Dr. MERSON showed a case of Acromegaly.—Dr. WYLLIE showed two children on whom he had operated for Hæmatothorax and Empyema.—Dr. PIGEON showed a microscopic specimen from a case of Sarcoma of the Upper Jaw.—Dr. LOWSON showed parts of the third, fourth, fifth, sixth, and seventh ribs removed for the cure of a Chronic Empyema; also a portion of the thickened Pleura; also eight inches of gangrenous bowel removed in a case of Inguinal Hernia. The case had done well, but the patient had become melancholic. He also showed a specimen of Papilloma of the Posterior Wall of the Rectum.—Dr. ROCKLIFFE read a paper on a case of Pyæmic Panophthalmitis occurring in a puerperal woman.—Mr. CRAVEN read notes of a case of Cholecystotomy, and showed the gall stones removed. The case had done well.—Mr. KEETLEY read notes of a case of Gangrene of the Forearm, after simple fracture, extending to the shoulder, but was unable to offer any adequate explanation.

Lunch.—After the business of the meeting was concluded, the members sat down to lunch at the Station Hotel.

MIDLAND BRANCH.

THE annual meeting of this Branch was held on Thursday, June 12th, at the Lincoln General Dispensary, under the presidency of Mr. PILCHER.

Officers and Council.—Mr. Sympson and Dr. Webb were elected representatives of the Branch on the Council of the Association, and Mr. Joseph White on the Parliamentary Bills Committee. Mr. Franklin was elected Vice-President for Leicestershire, and Dr. Stewart Vice-President for Nottinghamshire. In the Branch Council Dr. Marshall replaced Dr. Whitelegge for Nottinghamshire; Drs. Benthall and Scriven replaced Drs. Livesay and Greaves for Derbyshire; and Mr. Bond replaced Mr. Franklin for Leicestershire. The rest of the members, being eligible, were re-elected. Dr. C. A. Greaves (Derby) was chosen President-elect. The Honorary Secretaries and the Treasurer were re-elected.

President's Address.—Mr. PILCHER gave an address on The General Medical Council and the Licensing Bodies in their relations to the Practitioner.

Communications.—The following papers were presented: Dr. HANDFORD: Granular Kidneys in Childhood. Mr. CANT: Cases, with notes; Cataract Extraction without Iridectomy; Conical Cornea treated by actual cautery; Thoracic Aneurysm; Lupus Erythematosus treated by blistering.

Exhibits.—Dr. HANDFORD exhibited drawings of Hydroa Vacciniforme (Bazin), and Elephantiasis Arabum treated by Martin's bandage.—Mr. BOND showed Perchloride of Mercury Tablets for making antiseptic solutions.

Luncheon and Dinner.—The President entertained the members at luncheon, and after the meeting the dinner was held at the Great Northern Hotel.

New Members.—At the meeting of the Branch Council, held on the same day, the following gentlemen, being members of the Association, were elected members of the Branch: Dr. Mounsey, Mr. F. S. Lambert, Mr. C. Stephens, Dr. C. W. S. Barrett, Mr. Blenkarne, and Mr. A. E. Lyster.

SPECIAL CORRESPONDENCE.

GLASGOW.

Glasgow University and Public Health Diplomas.—Glasgow University Extension Board.—Glasgow University Local Examination Board.—Fresh Air for Children of the Poor.

THE unfortunate position in which the University of Glasgow has found itself in relation to the granting of diplomas of public health will, there is great reason to fear, very seriously diminish the esteem in which the degrees of the University are held. The public can hardly be blamed if, proceeding on the principle *ex uno disce omnes*, they attach as little value to degrees in medicine and surgery as has, by the General Medical Council, been attached to the recently conferred diplomas in public health. Such a result would be as undeserved as it would be unfortunate. The examinations for degrees which confer a licence to practise are hedged about by so many safeguards, and are conducted with such rigour and circumspection by the professors and the extra-university asses-

sors, that the question has rather been whether examination is not overdone in the medical student's career. The standard of examination has been gradually raised, and none who know the facts of the case will deny that the Glasgow degree is equal to that of any of her sister universities. Anyone who can look back for sixteen or twenty years will testify that this raising of the standard of examination has been really the result of improved methods and extended means of teaching, and that in the equipments for teaching, whether in the theoretical or the practical subjects, the University has made remarkable progress in these years. It is only necessary to mention these facts to contrast them with the state of affairs as regards the public health diploma. The regulations for the granting of this diploma appear for the first time in the calendar for 1876-77, and since then up till, but not including, October last, only some four candidates in all received it—we may say, indeed, only four applied for it. It was not a diploma entitling to practise. During five years only one candidate applied, and under these circumstances it is hardly to be wondered at if, having drawn up fairly strict regulations for the granting of the diploma, the Senate left the examination in the hands of the professors mainly concerned; for the regulations at first prescribed the examination to be taken in two divisions, the first embracing physics, chemistry, meteorology, and geographical distribution of disease; and the second food, air, water, drainage, duties of health officer, manufactures, overcrowding, nuisances, etc., sanitary law, and vital statistics. Latterly, in 1885, one examination was substituted; but since that alteration only one diploma was granted until the close of last year. It is thus sufficiently obvious that while the University is, of course, responsible for what has been done in her name, the real responsibility rests with the two professors who were entrusted with the duty of administering the regulations and failed to do so efficiently. Such failure is impossible in any of the examinations for qualifying degrees. It is, however, only too probable that nothing that can now be said or done will diminish the bad effects of the whole case, though it will be a very great hardship and injustice if the medical faculty suffers to any extent in consequence of what has happened. The progress that faculty has made is shown by the fact that while in 1869 the number of students was only 336, in 1889 the number was 784, and, as has been already noted, the teaching facilities and opportunities for careful study have increased in proportion. The decision which the Medical Council has arrived at does not commend itself as very logical. To condemn the examination so completely and in such haste, and then to permit diplomas granted after so perfunctory an examination to remain on the *Register* are two rather inconsistent actions. If the diplomas were, as they were declared to be, so valueless as indicating any real knowledge such as a medical officer of health ought to possess, it is clear that they ought not to be permitted to be registered, and any already on the *Register* should be erased. If Dr. Glaister, and those who acted with him in the matter, had addressed the Senate in the first instance, and, failing in obtaining satisfaction, the University Court in the next, they would have done the real interests of the University more good with less risk of harm. If, on the other hand, the University authorities are stirred up to create a real department of public health in the University, with a fully equipped laboratory, the present shame may be forgotten.

The Glasgow University Extension Board have just issued their report on the work done during the past session. Lectures have been delivered at ten centres, the total number of courses being fifteen; while two courses have been delivered outside the Glasgow area by a lecturer of the Glasgow Board. The total number of students has been between 1,100 and 1,200, and 74 certificates were granted after examination. The largest classes were those attending lectures on the chemistry of common life, delivered by Mr. Aikman, and on the physiology of the senses, by Professor McKendrick, but a course on the French Revolution, delivered at Ayr, attracted a class of 116. The Board reports that at a conference, attended by representatives from Aberdeen, Edinburgh, Glasgow, and St. Andrews, inter-university areas were agreed upon and arrangements made providing for co-operation when necessary. The Board have this year been able to make the scheme self-supporting, and have, by the aid of subscriptions, wiped off a debt of nearly £150, and to close the accounts with a balance in hand.

The Glasgow University local examinations were held last week at the University and thirteen local centres simultaneously. The number of candidates shows a marked falling off, as was expected would be the result of the school leaving-certificates. The number is 516, and the decrease is about 90. For the higher education (women) certificates there are 19 candidates, 2 fewer than last year.

A scheme of great practical value in a similar direction, which is being worked with great success in Glasgow, is that for providing a fortnight's holiday for the children of the poor, who would otherwise never get a breath of fresh pure air. The Committee in charge of the scheme has begun to acquire houses capable each of accommodating a considerable number of children. The latest addition is Stewart Hall, in Bute, two and a half miles from Rothesay. There will be room for sixty children at one time, and the whole cost of the house has been borne by one individual. The extent of the benefit to the people of such schemes as these may be judged by the fact that last year 3,531 children were sent to the country for two weeks' holiday, one-third of the whole expense being obtained from Sabbath school collections in Glasgow.

SHEFFIELD.

Funeral of Dr. de Bartolomé.—Dr. de Bartolomé's connection with the Medical School.

THE remains of Dr. de Bartolomé were interred at Ecclesfield, on June 5th. The large attendance at the funeral amply testified to the regard in which he had been held both within and without the profession. Close upon 60 medical men were present, the great majority going in the procession to the quiet country church, in the graveyard of which their late valued friend's burial was to take place. Considering the distance from Sheffield, the number present was more than could well have been expected. Many had, moreover, come considerable distances from the outlying districts. All the medical staff of the infirmary except one, whose absence was unavoidable, were present to pay a last token of respect to a colleague whom they had so greatly valued and whose loss they so deeply deplored. The Weekly Board of the infirmary were well represented, as were also the Medical School and the Medico-Chirurgical Society. Moreover, the students sent a deputation, but others in addition to this also attended. The Freemasons were present in large numbers, Dr. de Bartolomé having been perhaps the oldest member of that body in the town.

In the obituary of Dr. de Bartolomé, in the JOURNAL of June 7th, reference is made to his very intimate and long connection with the Medical School and to what an extent the school in the past had been indebted to him for the zeal and energy with which he always promoted its interests. The opinion held by the lecturers of their late President is set forth in the following vote of condolence:—

"The lecturers of the Sheffield School of Medicine desire to express their heartfelt sympathy with Mrs. de Bartolomé and family in the loss they have experienced through the death of Dr. de Bartolomé. They find themselves quite unable to express adequately their sense of the loss they themselves have sustained in the removal of one who has for so many years been connected with the school in the capacity of lecturer and President, and who by his energy, counsel, and foresight has done more than anyone to further its best interests. As a man they had individually the deepest admiration and respect for his intense honesty of character and manly uprightness of conduct, and they returned to the full the warm affection which all felt he bestowed upon them. As a lecturer he set an example of punctuality, thoroughness, personal interest in his pupils, and disinterested devotion to the school, which his successors and colleagues find almost impossible to follow. They mourn him as a lucid and conscientious teacher, as an able and devoted colleague, as an honest and intelligent chairman, but above all as a true-hearted friend, upright and honourable in all his dealings, in whom they had perfect trust and confidence."

NEWCASTLE-UPON-TYNE.

The History of the Newcastle Medical School: its Early Troubles: The Split in 1851: Reconstitution of the School: its Union with Durham University.

THE history of the foundation and first forty years of existence of the Newcastle Medical School, which has just been published by Dr. Embleton, is full of interesting reading for all students of the institution, past and present. Dr. Embleton joined the staff of the College in 1839, only five years after its formal

ening, so that he is able to write the history from his own exriences and recollections, though he acknowledges some indebtness to old students, to the printed prospectuses of the College, d to papers of the Literary and Philosophical Society. The oceeds of the sale of this pamphlet will be devoted to assisting pay off the debt remaining on the new buildings of the present llege—a praiseworthy object, showing how much the author s at heart the interests of the College, for the success of which must have worked for many years in its early career without ceiving any pecuniary return.

A good account is given of the early troubles of the new instition, of its early lectures in a room in Bell's Court adjoining the rgery of the late Sir John Fife, of its removal to the Hall of the orshipful Company of Barber Surgeons, who, according to the thor, were glad to let their property to such respectable tenants, us enabling themselves to dine sumptuously once a year on their nual meeting day. The school was a proprietary one in its early ys, each lecturer being obliged to pay £40 on his election as a mber of the staff, and the profits, if any, were apparently ually divided, though for years these were *nil;* and, indeed, the ff were out of pocket—a self-denial from which their successors ip a plenteous return.

The history of the school is carried on to 1851, when through ernal squabbles, in which the author took part, the institution s dissolved, and two rival schools were founded and carried on six years, when an amalgamation took place, resulting in the esent successful College.

The author enters fully into the causes of the split, gives an acunt of the union of the College with the University of Durham, which scheme he himself was one of the original promoters. e book gives lists of the teachers in the school for every session m 1832 to 1872, and amongst them will be found the names of ny who held distinguished positions in their profession; for mple, the Fifes—one of whom became Sir John Fife—Drs. E. arlton, Dawson, R. M. Glover, T. M. Greenhow, T. E. Headlam, .; others there are who are now equally celebrated, namely, . S. Fenwick, of the London Hospital; and Drs. Heath, Gibson, ilipson, Nesham, and Arnison of the present staff of the College. ere is also a list of the students who attended the various sesns, and lists of the medical graduates and prizetakers. Dr. ibleton has supplied a history of the College which will be eresting reading to all students of the school, not only because the object to which the proceeds of its sale will be devoted, t as an account of their *Alma Mater* written by an old and tefully-remembered teacher, who spent both time and money further their interests. The author has the sincere wishes of students that he may be spared for many years to come. The tory would be still more complete and interesting if brought wn to the present date.

CORRESPONDENCE.

EXPERIMENTS ON ANIMALS.

IR,—Writing on this subject in your issue of June 7th, you charge h inaccuracy the statements made by me, both in my letter to *Times* of May 28th, and in my leaflet entitled *Veracity of the turns.*

t is true that I had overlooked, as you surmise, the date of commencement of Dr. Poore's official inspection. This, it aprs, reduces the period when he performed this duty to threerters of a year. The essential fact to which I drew attention ains, however, unaffected by this correction; namely, that re were 311 days last year wherein no inspection of laborres took place. Out of these 311, the two months' vacation ht possibly (as you urge) to be deducted; and on the other d there should be added to them (as I believe on good hority) the 52 Sundays of the year, specially selected by many isectors for their work.

our remarks as to the "intention of the Act" with regard to pionage," doubtless justly convey the views of those medical tlemen who besieged the Home Office in July, 1876, and caused d Cross to transform the Bill then in his charge from a asure protecting animals into one protecting their tormentors. intentions of those who drafted and promoted the original as it was carried through the House of Lords by Lord Carvon, were altogether different. I am in a position to assert personal knowledge, they certainly contemplated a real, and a sham, inspection.

Your further observations on this point are exceedingly valuable to me as proving how entirely impracticable it would be, even under the best order of inspectorships, to obtain anything like a thorough or reliable supervision of physiological laboratories. So far you amply confirm our contention that vivisection ought to be totally prohibited as a method of research, since no ingenuity of legislation can afford valid protection, even from the extremity of torture, to an animal once fastened on the torture trough. Where the law can provide no remedy for the gross abuse of a practice it is an axiom then the practice ought to be abolished.

Lastly, I beg to tender to you a copy of my leaflet *Veracity,* which you are pleased to say is "so full of inaccuracies that it is difficult to suppose the author guilty only of carelessness." I respectfully beg you to point out in your next issue any single instance of such inaccuracy affecting in the smallest degree the sense of the paragraph, or involving anything more than the reduction of scientific phraseology to plain English.—I am, etc.,

FRANCES POWER COBBE.

*** If Miss Cobbe will read Mr. Berdoe's letter she will find that with regard to the experiments culled from the *Proceedings of the Cambridge Philosophical Society* (1881) and the *Journal of Physiology* (1882) all the animals were under an anæsthetic from first to last; and yet Miss Cobbe makes no mention of the fact. The first twenty-five lines of Miss Cobbe's quotations are between inverted commas: "First the animal was cauterised..... had also to be reached." We shall be glad if Miss Cobbe will refer us to this passage, as we are unable to find it. When this has been done we will take the next paragraph.

SIR,—Your article on experiments on animals in the JOURNAL of June 7th raises an important physiological question upon which, I think, it is quite time that some light should be thrown from an authoritative source. In Dr. Roy's paper on the Mechanism of the Renal Secretion, in the *Proceedings of the Cambridge Philosophical Society,* May 23rd, 1881, and in another on the Spleen, in the *Journal of Physiology* for January, 1882, he states that the animal experimented on—rabbit, cat, or dog—was kept fully under the influence of ether, chloroform, or morphine, or a combination of two of these, from beginning to end of the experiment. The chief part of all the experiments consisted in watching the effects of reflex action resulting from electrical irritation of the cut ends of a large number of sensory nerves upon the blood vessels or circulation in either organ. Now what I wish to know is whether such reflex actions could be obtained from animals rendered insensible by anæsthetics or narcotics. My information up to the present leads me to deny such possibility.

In the account of the second series of experiments on the spleen, Dr. Roy speaks (pp. 207 and 221) sometimes of curare being used, in addition to an anæsthetic agent, during electric stimulation of nerves and of the medulla. Could an animal be kept insensible by anæsthetics during curarisation, and, if so, could the particular class of experiments referred to have been performed, and would the results have been conclusive?

In Dr. Brunton's evidence before the Royal Commission on Vivisection this point was raised (Q. 5743): "Is there anything to prevent your giving both drugs, or giving them mixed together, so as to stop the pain by the chloroform and the nervous movement by wourali? (curare) (?).

"Yes, there is, and it is this: In very many of these experiments you want to ascertain what is termed the reflex action, that is to say, that an impression is made upon a nerve, and goes up to the cord and is transmitted down. Now, chloroform acts upon the reflex centres, and abolishes their influence completely; so that if you give the wourali, which paralyses the ends of the motor nerves, and give chloroform, which paralyses the reflex centres, you deprive yourself of the possibility, in many instances, of making satisfactory experiments."

In your article you say that curare "was never used except on an animal already anæsthetised." This seems to require elucidation. You say, also, that "the use of curare as an anæsthetic is distinctly illegal." Quite so, *as an anæsthetic,* but certificates are given permitting experiments without anæsthetics. What hinders its use then?—I am, etc.,

EDWARD BERDOE, M.R.C.S.Eng., L.R.C.P.Edin.

Tynemouth House, Victoria Park Gate, E.

*** It is notorious that anæsthetised human beings cease to be conscious long before reflex action is abolished. Pain certainly

interferes with an experiment quite as much as a narcotic, and there can be no doubt that it is mainly due to anæsthetics that experiments such as those alluded to are possible.

If Mr. Berdoe will refer to the report he will find that the experiments performed without anæsthetics are mainly inoculations. There is no evidence to show that curare has been employed without anæsthetics in experiments requiring surgical operations.

THE MODERN ASSISTANT.

SIR,—Your "Long-suffering Correspondent" appears to belong to or to sympathise with the class of principal who engages the modern assistant and seems to think it the latter's duty to sit at his feet and worship his professional manner and appearance, his neat way of wriggling out of diagnostic difficulties, to bow to his experience, which has taught him no new treatment, and therefore confirmed his opinion of the old; to follow him in his pious fraud of giving ginger and water to a chronic contract patient. Above all, to be infallible in just those departments of the profession in which a young man trained in the usual way has had no opportunities for more than casual study, and the diagnosis of which the principal has himself learnt at the expense of many mistakes.

I was not a modern assistant for any length of time, but managed to see enough of the ignorance of certain general practitioners of the old school (all of them men holding first-class qualifications, especially those of "experience") to fill me with disgust.

I have seen a case of acute eczema treated by a principal who had enormous "experience" as syphilis with mercury to profuse salivation. I have noticed that the ideas of many of the old school upon skin diseases are very hazy. Such principals I have observed call nearly every eruption "specific," except gummata, which they regarded as incurable tumours. I have seen a little of the midwifery of these my elders also, and even this does not fill me with much admiration. Fortunately, the modern assistant did no harm. But what shall we say of a principal who, in the application of forceps, finding the locking difficult, unheedingly proceeded to deliver, lacerating the labia and bruising the head of the child? Or of another principal called into consultation upon a poor woman suffering from pelvic abscess, the result of unskilled instrumental labour, who declared, with a grave face, that the patient was being self-poisoned by "sulphurretted hydrogen gas."

"My dear sir," said a principal to me, "I have a large practice and have made money. I have only two medicines—one, a simple purgative, which you will find cures nearly everything. I give it in dyspepsia, loss of appetite, anæmia, amenorrhœa, menorrhagia, pneumonia, heart disease, typhoid fever, and delirium tremens." It was a wonderful medicine. It cured diarrhœa also. I called one of my principals to see a case of acute intestinal obstruction. He said it was a grave one, and that there was no time to be lost. Whereupon he applied a mustard plaister to the abdomen and gave camphor water every two hours. The patient died unrelieved. In a case of empyema, a principal of my acquaintance, after waiting for days, consented to aspirate. The child died. The needle had not touched the pus-filled cavity, but it had very successfully penetrated the liver. Another had never seen an aspirator (he had heard of it) and didn't know how to use it. One gentleman I worked under gave his typhoid fever patients solid food at the end of a fortnight, and could not understand how it was they all relapsed and some died. I have seen a principal treat a case of typhoid fever as pneumonia, rheumatism, and ague during the first week. His "experience" had taught him never to say "I don't know yet." The friends of the patient were not satisfied with his first wriggle of "deep seated mischief," and pressed him to be more explicit. His first shot was pneumonia, his second rheumatism (he said he had cured the pneumonia), his third ague (he said he had cured the rheumatism). He stuck to ague through thick and thin in spite of the mother saying it was very like gastric fever.

I wonder whether your correspondent has ever seen a modern assistant try to cure a strumous knee by the application of fresh lettuce leaves? One of my principals thought it a successful treatment. It was one of the things his five-and-twenty years' experience had taught him.

What I wish to point out is that the complaints made by your correspondent are chiefly those which affect himself, and chiefly in a pecuniary way. What many of us complain of is that "experienced" practitioners of the old school, whom he calls upon us implicitly and dumbly to reverence, do a vast amount of irreparable injury to suffering humanity which, with a freer hand, we might prevent. We younger men are obliged to sit silent while these blunders are made by grey heads, but youth is not always professional disqualification. The public, at least, are apt to recognise that age is not necessarily a sign of wisdom, and that ignorance is not always a concomitant of youth.—I am, etc.,

NOVA SCOTIA.

SIR,—Numbers of long-established and long-suffering practitioners doubtless join with me in corroborative applause of the recent excellent article in your columns anent that triumph of modern scientific production, the "modern assistant," with every one of whose idiosyncracies thus ably recounted we are only too familiar. I, for one, once had a fully qualified assistant who could not vaccinate (though certificated to that effect), and another, a M.D., who could neither open an abscess nor attend an ordinary midwifery case without mistaking a detached after-birth awaiting removal for a retained placenta.

Your article, moreover, interests me inasmuch as it so fully exemplifies a great truth—namely, that the good old system of apprenticeship, from which so many great celebrities have sprung in the past, is the normal method of medical education. My personal success in my profession I ascribe to the fact of having been my late father's apprentice; and almost every long-established practitioner I have found to endorse my view that medicine must be taught from man to man, through the medium of personal precept, example, and interrogatory; also that the assiduous pupil of any average, able, painstaking private practitioner will eventually prove of far more practical utility to suffering humanity than the highly crammed young theorician who has wandered in a crowd through the hospital wards under the charge of the most eminent of London consultants, hearing ten times less of the great man's voice than of his numerous companions' creaking boots. The former system is a school for practical men, the latter a hothouse for forcing the full-bloomed production of that scentless flower, the "modern assistant," who would not display that lamentable lack of courtesy, patience, and forbearance towards humbler sufferers were he enabled through personal example to acquire that *suaviter in modo* so rare nowadays in the rising professional generations.—I am, etc.,

Jamaica Road, S.E. J. BRINDLEY JAMES.

THE MANAGEMENT OF IMPACTED LABOUR.

SIR,—It is very difficult to reply to Dr. Elliott Porter in reasonable limits, for it is clear that he has not read my paper, or he has entirely misunderstood my propositions. When he says that my operations are mutilations, he leaves it quite open to me to say that his operations are murders; for when they are applied to such cases as I would apply mine they must be invariably fatal to the children, and are shown by statistics to be more fatal to the mother than mine are up to the present moment.

That the parents of a child are to have no voice in its fate is a proposition so monstrous as to be incapable of admission for a moment. It has been held by courts of law that we are bound to explain the nature and effects of grave surgical proceedings, so far as we can reasonably foresee them, to the patients interested, and that is an accepted canon in surgical practice. Our patients must always have the deciding voice for or against their adoption. We have to choose between carrying out the patient's decision or passing out of the responsibility altogether. When the patient's decision coincides with my own belief, I feel quite content, and when there is added the consent of the medical attendant, I am satisfied that no other course is open.

Dr. Porter will see, if he will read my paper, that my operations have not been proposed for or carried out upon cases where a living child could be born by the induction of premature labour; quite the contrary. They have been confined to cases at the full time, when delivery could not be effected without the destruction of a living child, or when previous experience of the case made it certain that induction of premature labour could not effect that end. These conditions exclude Dr. Porter's cases where "many of the children did well." The case of craniotomy in the dwarf left the patient uncured—that is, the dreadful incident was open to recur even after Dr. Porter's destruction of the child.

Amputation of the pregnant uterus at the full time in such a case not only saves the child but cures the mother. Supposing that in such a case the element of illegitimacy comes in and that both parents of the child would hail its death with satisfaction, would not Dr. Porter's decision to destroy it—with the

ernative before him by which he could save it—put him in a se position?

Dr. Porter has had the good fortune to lose no cases of placenta evia. If his number is large, then his good fortune is most ceptional. Talking with experienced professional brethren, I d they unanimously regard the occurrence of such a case as a aster of the most terrible kind. If we knew—and we do not ow—the full extent of its mortality, I think we should sanction y proposal which would show a reasonable chance of greater ccess than our present methods of treatment.

My proposal to treat placenta prævia by amputation of the erus is a tentative one, and it is little likely that I shall ever ve a chance of putting it in practice, as I am not associated in y manner with obstetrics. But if I ever should have a chance I ould not hesitate to carry it out any more than I should hesie to amputate a leg for ruptured aneurysm—the only analogy it of which I can think.

Propositions which seemed far wilder ten years ago are now tters of everyday practice.—I am, etc.,

Birmingham. LAWSON TAIT.

IE CAUSATION OF REDUCED ARTERIAL TENSION BY MERCURY.

SIR,—Dr. Haig has written a most interesting and scientific icle on Reduced Arterial Tension, etc., by Calomel. I presume at these observations were made on healthy persons, and I ire to draw attention to a few pathological exceptions, as they m to me, to his results.

First, I would mention the polyuria of granular contracted lney, where arterial tension is undoubtedly high, as compared th the statement "that high tension means contraction of all peripheral arterioles, those of the kidney among the number, th consequent diminution of the urinary water." Conversely, certain cardiac cases, or in the last stage of the above renal dition, with heart failure, there is scanty, or, at least, minished, excretion of urine, compared with the statement that vhen the tension falls the kidney arterioles are relaxed, and it e water) at once passes out in full stream."

Again, during the early administration of digitalis the amount urine excreted rises as the number of heart beats diminishes, d the arterial tension is increased.

The action of codeine or opium in reducing the polyuria, in ne cases, with or without glycosuria, is also strangely antagotic to the value of the latter drug, which is stated to "produce all in arterial tension and diuresis." One other point I may be mitted to note. It is said, as a general law, that "substances ich reduce the amount of uric acid in the blood lower arterial sion." Again, that "calomel, which reduces the amount of uric d in the urine, reduces it also in the blood," from which I would er that in saturnine gout, for example, where the uric acid is minished in the urine, there is also a less quantity in the blood *rgo*, lower arterial tension, but, if I mistake not, such arterial sion is not a characteristic of the disease.

Of course, in all these cases there are special changes in the ans affected, which may account for the dissimilarity of the ts of disease when compared with the facts as ascertained in a lthy subject.

I trust that these remarks will not convey the impression that value of such physiological observations is underrated.—I am,

toke Newington, N. J. CHRISTIAN SIMPSON, M.B.

E LORDS' COMMITTEE AND HOSPITALS FOR VENEREAL DISEASES.

SIR,—I was sorry to read in the JOURNAL of June 14th the arks made by Sir Sydney Waterlow respecting the treatment venereal diseases in St. Bartholomew's Hospital, where it apars that, according to Sir Sydney Waterlow, endeavours have n made to minimise as much as possible the treatment of these eases. The worthy baronet also falls into the old fallacy of ifusing venereal diseases and vicious moral conduct together. ave sent him a private note pointing out the error, and how his ole remarks are liable to be misinterpreted.

t is quite unnecessary for me to urge the claim which venereal ients have upon charity in a medical journal; but I would nestly hope that the Lords' Committee may hear evidence from h men as Mr. Berkeley Hill, Mr. Jonathan Hutchinson, Mr. xton Shillitoe, Mr. Alfred Cooper, and other surgeons exienced in the hospital treatment of these diseases. Their evidence would, I feel sure, convince their lordships that the question is to be considered in a truly charitable spirit, bearing in mind that a large number of those who suffer from these diseases are innocent wives and children, while, as for the others, venereal diseases are not necessarily the result of vicious moral conduct itself, but of vicious sexual indulgence with an infected person—not a distinction merely, but a very great difference. The well-to-do sensualist may keep a mistress, or if he contract disease can have the best surgical advice. The poor drunkard is not refused hospital relief, even when his accidental hurt is the direct result of his vicious indulgence in drink. If the relief afforded by hospitals be strictly limited to those who are free from vicious moral conduct, as Sir Sydney Waterlow would seem to imply, their operations must, I fear, be very contracted, and they would cease to be the truly catholic institutions which they now are.—I am, etc.,

Liverpool. FRED. W. LOWNDES.

THE LAWS OF DIPHTHERIA.

SIR,—I concur with Dr. Fox, whose view of diphtheria is criticised in the JOURNAL of June 7th. During the years 1858-59-60 I saw 43 cases of diphtheria. They were all in children or quite young persons; most of the cases occurred in infants, and in such remote places as to make infection by personal propagation improbable in the highest degree; I may even say impossible. It was fatal in quite 60 per cent. In no instance did the disease occur without very unmistakable evidence of mephitic exhalation, or, more distinctly expressed, privy vapour. I never saw evidence of infection from person to person; on the contrary, one child of several in a family was often the only sufferer.—I am, etc.,

Milverton. GEO. CORDWENT, M.D.

ITALIAN VITAL STATISTICS.

SIR,—The purpose of my letter was not to enter upon the alleged increase of consumption among the native population of San Remo, but only to prove that our statistical returns are most reliable. Dr. Hassall now says that during the twelve years that he has practised medicine in San Remo he was never required to furnish a certificate of death. As this statement has a great importance, I called the attention of the General Director of Statistics in Rome to it.

The deaths from general tuberculosis in San Remo during the seven years 1881-87 numbered: 1881, 76; 1882, 77; 1883, 72; 1884, 77; 1885, 77; 1886, 70; 1887, 51.—I am, etc.,

Università di Perugia. C. RUATA, M.D.

THE COMING ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

SIR,—Last year the eminent vice-presidents of the College of Surgeons who were applying for re-election to the Council set the example of issuing addresses to the Fellows through the post, and some lesser candidates, myself among the number, felt constrained to do likewise, if only to purge themselves from complicity with certain persons who had been stigmatised as endeavouring to deprive the Fellows of the College of their privileges. As I do not think it desirable that this practice should be continued, whilst it is only proper that the Fellows should have an opportunity of learning the opinions of candidates for their suffrages, I shall be obliged if you will allow me to state the views to which I should endeavour to give effect in the event of my election to one of the three vacant seats on the Council. Happily, this can be done in a very short compass.

Not only am I opposed to any diminution in the number of representatives of the Fellows in the Council and to any curtailment of their rights and privileges, but I am anxious to see the Fellows a more homogeneous, united, and influential body than they are at present. It has been conclusively shown that there is a vast disparity between the position of the Fellows of the Royal College of Surgeons of England and that of the Fellows of every other professional college in the realm, and it has been suggested that, without interfering with the annual meeting of Fellows and Members now summoned by the Council, separate meetings of Fellows should be convened within the College once or twice a year, at which questions of importance and interest to the Fellows can be discussed and authoritatively determined. This policy has my cordial support. I have great faith in the beneficial influence of free and open discussion, and the assembling of the Fellows within their own College would create an *esprit de corps* which would be advantageous to the College and to the profes-

sion, and would add strength and dignity to the Council. To further this policy is the main object with which I have come forward as a candidate, but on all questions which arose I should endeavour to preserve an open mind, and to exercise an independent judgment.—I am, etc.,

Finsbury Square. WALTER RIVINGTON.

SIR,—I notice in your retrospect of elections at the College of Surgeons that my old school, Charing Cross, has no representative. May I remark that neither has it amongst the examiners in surgery or anatomy. It is a large and thriving school now, and getting larger every year. Its hospital will shortly be doubled in size, and yet, for some unexplained reason, members of its staff seem unable to obtain seats. Is this FAIR PLAY?

MEDICO-LEGAL AND MEDICO-ETHICAL.

CLUB PATIENTS AND COLLIERY CONTRACTS.

J S. W. writes: A. and B. are neighbouring medical men in a coal and iron district, where the men mostly employed belong to clubs. A. is surgeon to a colliery field and certain iron works, for which he receives good pay. In case of an accident he attends to it, but should anything of a medical nature arise in its progress this is considered foreign to the services required, and he declines to attend for this secondary ailment, referring the patient to the doctor of his club, should he belong to one, or demanding extra pay for such attendance. B., as surgeon to various clubs, numbering amongst its members most of the men engaged in the above field and works, declines interfering, and considers A. solely should have the entire management of the case with or without complication to its termination, but if needful B. is ready to meet A. in consultation, or to take over the entire management of any such case.

B. has no personal feeling in the matter beyond clearing up any doubt of responsibility and wishing to feel substantially justified in the line of action he has adopted, also to know whether it may be customary or usual to eliminate professional responsibility for an intercurrent medical indisposition in the course of treating an accident.

*** In responding to the exceptional question submitted by J. S. W., we would note that if the "field" and "ordinary" clubs (with the distinctive features of which we are more or less conversant) have definite rather than traditional unwritten rules for the guidance of their medical officers on the subject of the contingency in dispute, they should be carefully adhered to. At the same time, it may be well to remark that, in our opinion, all patients who are members of both the ordinary and the field clubs are justly and legally entitled to the conjoint services of their respective medical officers. Nevertheless, in view of the strained relations which we have reason to believe at present exist between the two practitioners A. and B., we are distinctly of opinion that it would be conducive to their mutual interest and relief, and possibly to the advantage of the patients, if the "field" doctor accepted the entire responsibility in all cases of intervening secondary ailments.

THE SIXPENNY DISPENSARY.

H. H.—We can only reiterate the opinion that we have so frequently expressed in the JOURNAL, to the effect that the one effective remedy for the derogatory system of advertising for practice through the medium of sham dispensaries and the like, is to invoke the application of the disciplinary laws of the Colleges of which the offending practitioners are members (which, in the present case, are the Royal College of Physicians of Edinburgh and the Royal College of Surgeons in Ireland), to the respective authorities of which we would suggest that our correspondent should transmit a copy of the handbill and a list of the charges, with a brief protest signed by two or three local practitioners with the view to emphasise it, and, at the same time, avert the possible supposition of the proceeding being dictated by envy.

FEES OF MEDICAL WITNESSES.

W. B. writes: About three years ago I was asked by the magistrates' clerk to examine a man who had been murderously assaulted a few days previous. The case had been seen and evidence given thereon by a junior medical, but, as the case was likely to end fatally, the second opinion was ordered by the Treasury, I understand.

I gave evidence twice before the magistrates and once at the assizes, for which I received £4, my travelling expenses included. I had sent in a bill for £2 2s. for examining the man, who lived seven or eight miles away. I spoke to the clerk about it several times, and he said he would look the matter up, inquire into, etc. Lately I pressed him for the amount, and he tells me that on looking it up that he finds I was allowed £4 in the case, which I was paid. That is quite true; but I am told the real secret is the clerk omitted to "put in" my account in making up his accounts on the case. Of course that is unfortunate if true; but I am told he can do a bit of "sharp practice," and I certainly do care to let the fee go, although I don't want to be disagreeable. Can you tell me what to do in the case?

*** It would be well as ask the magistrates' clerk for particulars of the items allowed, but it is quite possible that the sum paid is all that can be claimed. For instance, on an examination before magistrates a medical witness may be allowed for each attendance a sum not exceeding 10s. 6d., if the witness resides within two miles of the place where the inquiry is held, otherwise £1 1s. for each such attendance. Assuming that W. B. comes under the former head he would be entitled, for the two attendances, to £1 1s.; if only one day at the assizes, £1 1s.; and, in addition, a sum of 3d. per mile each way for expenses. The difference between the above, therefore, and the sum actually received may have been the amount allowed for the preliminary examination of the assaulted man.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, June 16th.

THE INSURANCE OF CHILDREN'S LIVES.

THE BISHOP OF PETERBOROUGH moved the second reading of the Children's Life Insurance Bill. He said the existing law on the subject was unsound in principle and defective in operation, and led to serious evils. The amendments proposed to this Bill were not only likely to be effective in checking these evils, but were also just and reasonable. With the great and pressing temptations, the enormous facility and the all but absolute immunity, the wonder would be if some did not arise. Child insurance had become a speciality, and there were three or four large companies which engaged in that kind of business alone. There were no fewer than 600,000 children at this moment insured in Great Britain, and the great bulk of the business fell to the share of what he called the collecting societies, which he distinguished from the friendly societies, some of which were absolutely harmless. There were various opinions of these societies—opinions ranging from those of the people who spoke of them as pests of society, to the opinion of these insurance people themselves, who said they were the most calumniated persons in the world, and that if they could only be understood, they were nothing but a band of disinterested philanthropic persons engaged in benefiting the working classes. Accepting the view of the managers and collectors, he held that even if each manager was an archbishop, and every collector a bishop—and he suppose that a higher ideal of human perfection could not be conceived by some men—he still thought they were an evil. These agents received no less a premium than 30 per cent., and so energetic were they that children were actually insured before they were born, and the sex of the child was afterwards put into the policy. So keen was the competition that the agents were not too scrupulous as to the character of the parents who insured with them. If a parent or guardian insured a child in two societies—which was not uncommon—for 1d. per week in each, they would at the end of six months make a profit, after paying funeral expenses, of £3 16s. 8d., which sum represented the premium on child murder. It was, unfortunately, not an uncommon expression in some of the towns of this country among the lower classes, in the case of the death of an insured infant, that they would have a little funeral and a big drink. What he wanted to do by this Bill was to stop the little funerals and the big drinks. It was said that by this Bill they were libelling the working classes, and that parental affection was a safeguard against the evils which the Bill was introduced to meet. He held that they were not libelling grocers because they passed laws against adulteration, but in every class there was a residuum of evil-disposed persons against whom legislation was directed. It was computed that 600 children were annually murdered in this country for the sake of the insurance money, and a medical man in Birmingham estimated the number in that town alone at 100 per annum. He contended that the doctor's certificate was no safeguard, as the doctor, unless he could give evidence which would stand the brunt of a coroner's inquest, was obliged to say that the child died from natural causes. The medical man did not know the history of the case, and could only get the information from the parent or guardian. Very often something which began with natural causes was aggravated by neglect, improper food or treatment, and resulted in the child's death. The coroner's inquest was no protection, because it was seldom that direct evidence could be procured, and the same applied to the assizes. Having quoted the opinion of several judges, coroners, clergymen, the Registrar-General, and representatives of the working classes, the right rev. prelate explained that the Bill extended the protected life of the child to fourteen years for boys and sixteen years for girls, which was the recommendation of the Select Committee of the House of Commons. The second clause, to which he attached great importance, and to which he admitted much objection was raised, was that the money should go, not to the insuring parent, but to the undertaker, heavy penalties being provided in the case of collusion. It was said, What about the doctor? And his reply was that the services of the doctor could

be obtained by paying one penny a week to another society. There were other objections raised, but every one of them applied to existing policies only, and he was prepared to make the clauses purely prospective. He felt that the only alternative to this Bill must be to prohibit infant insurance altogether.

Earl BEAUCHAMP quoted authorities to show that the legislation of 1875 had not been a failure, and urged that a careful examination of the facts led to the conclusion that the children who were insured had a better life record than the uninsured, as they were usually the children of thrifty parents.

The LORD CHANCELLOR held it would be rash to proceed without some further investigation. His idea was that if they read the Bill a second time it should then be sent to a Select Committee, on which different views would be represented, and before which evidence might be taken. The fact that people were not brought to justice was by no means conclusive that this legislation was not required.

Lord HERSCHELL heartily supported the second reading of the Bill, and approved of the proposal to refer it to a Select Committee.

The Bill was then read a second time, and referred to a Select Committee, with power to take evidence.

Thursday, June 12th.

Soldiers' Baths.—Earl BROWNLOW, in reply to a question by Earl BEAUCHAMP, said he was fully alive to the advantages of giving every facility for ablution to the soldier. It was proposed to provide baths in the new barracks. They would be made of slate, that having been found the best material for the purpose, as it was clean, durable, and cheap. It was proposed that those baths should be in a separate room, and further that, where there were opportunities for it, it was proposed to give every facility for open-air bathing during the summer months.

Blind and Deaf Mutes.—The Marquis of LOTHIAN moved the second reading of the Education of Blind and Deaf Mute Children's Bill, which he said was founded on the report of a Royal Commission, and which provided for the compulsory education of blind and deaf mutes in Scotland, and gave school authorities power to defray the expenses of their education and boarding out at institutions, and the cost of their journeys to and from those institutions. It had not been thought necessary to provide for an extra grant, but if necessary the department would be willing to provide for that by an alteration of the code. The Bill was read a second time.

Friday, June 13th.

Working Classes Dwellings Bill.—On the motion of Lord ROWTON, this Bill was read a second time, and referred to the Standing Committee on Law.

Diphtheria in Northamptonshire.—Earl SPENCER complained of the delay on the part of the Local Government Board in dealing with the sanitary condition of East Haddon in Northamptonshire, where there had been an outbreak of diphtheria, which last year caused twenty-six or thirty deaths in a population of 500. In September last, the Local Government Board sent down an inspector, whose report was not received by the local authority till December. On January 28th, the local authority made an application for sanction to a loan for water supply, but up to now there had been no answer, while there had been another outbreak of diphtheria, which had already caused three deaths.—The Earl of JERSEY pointed out that the delay had not arisen from any negligence or indifference on the part of the department, but from the difficulties which surrounded the question.

HOUSE OF COMMONS.—Thursday, June 12th.

Barracks Bill.—The House went into Committee on this Bill, and progress was immediately reported on the motion of Mr. CONYBEARE.

Hospital Dues at Constantinople and Smyrna.—Sir J. FERGUSSON, in reply to Colonel HILL, said the final arrangements with respect to hospital dues at Constantinople and Smyrna had not yet been decided on. They were still under consideration.

The Blind and Deaf in Ireland.—Mr. A. J. BALFOUR stated, in reply to Mr. WOODALL, that the Government had before them the report and recommendations of the Royal Commission. They hoped to propose legislation for Ireland on the subject as soon as the state of public business admitted. In framing their proposals careful attention would be given to the suggestions of the Royal Commission.

Education of the Blind and Deaf.—Sir W. DYKE informed Mr. MUNDELLA that the English Bill for the education of the deaf and blind could not be introduced until certain difficult questions connected with it had been disposed of.

The Census.—Mr. WOODALL asked the President of the Local Government Board when the Bill authorising the decennial census would be brought in; whether the Departmental Committee relative to the census had made their report, and whether it was intended to present the report to Parliament?—Mr. RITCHIE said he was not in a position at present to state the date when the Bill would be brought in. The Departmental Committee had made their report, and it was under the consideration of the Government. It would shortly be presented to Parliament.

Medical Inspection of Emigrants.—Sir MICHAEL HICKS-BEACH, in reply to the question from Dr. TANNER printed in the JOURNAL last week, as to the reported poor emigrant, said: The woman in question was permitted to land at Hull and pass through England. The Board of Trade have no statutory authority to examine passengers arriving in this country from abroad. The woman did pass the examination of the medical emigration officers at Liverpool before embarking upon the Cunard steamship *Cephalonia*. These officers regarded the case as one of lupus of a non-contagious character; she brought with her a medical certificate to that effect. She had a husband and six children in America, whom she was going to join, and the officers did not think there was sufficient justification for preventing her proceeding in the ship; but, in consequence of her appearance, it was required that she and her immediate party should be kept in one compartment, isolated from the rest of the passengers. The woman was not reinspected by the medical officer of the Board of Trade at Queenstown; such reinspection would be unusual. He learned from the Cunard Company that this passenger was allowed to land at Boston, and remain on shore for twelve days, and that she was returned, not so much on account of the disease, as that her husband could not pay for her maintenance in hospital. She was isolated, as a matter of precaution, on her passage home, and her apartments were afterwards thoroughly fumigated, stripped, and disinfected; and she was sent by the Cunard Company to her home in Sweden, accompanied by a special attendant. On passing through Liverpool, the patient was, he understood, taken to the Brownlow Hill Workhouse, where she was visited unofficially by the two medical officers of the Board of Trade who had previously examined her; these officers reported that her later symptoms had more of the appearance of leprosy as understood by them. Every precaution was taken by the Board of Trade and its officers to prevent, as far as possible, the propagation of contagious and infectious diseases. It was to the interest of all steamship companies carrying passengers to immediately isolate any suspicious case that might break out during the voyage, and subsequently fumigate, disinfect, and paint any space occupied by such a case, and he was informed that this was done in this particular instance.

Friday, June 13th.

The Purity and Blending of Spirits.—The CHANCELLOR OF THE EXCHEQUER, in reply to a question as to the Committee on Bonding and Blending of Whisky, said the terms of the reference would be generally as follows: "That a Committee be appointed to consider the question whether, on grounds of public health, it is desirable that certain classes of spirits, British and foreign, should be kept in bond for a definite period of time before they pass into consumption, and to inquire into the system of blending British and foreign spirits in or out of bond, and as to the propriety of applying the Sale of Foods and Drugs Act and the Merchandise Marks Act to foreign spirits and mixtures of British and foreign spirits." The Right Hon. Sir Lyon Playfair had consented to act as chairman.

Inquiry into the Inebriates Acts.—Dr. CAMERON has given notice, at the request of the Inebriates' Legislation Committee and the Council of the Society for the Study of Inebriety, of a motion in the House of Commons for the appointment of a Select Committee to inquire into the working of the Inebriates Acts, and consider the expediency of amending them and extending their operation.

Monday, June 16th.

Education of Blind and Deaf Mute Children (Scotland) Bill.—This Bill passed through Committee, and was reported with amendments to the House.

Vaccination.—Mr. MATTHEWS, in answer to questions by Mr. CHANNING and Mr. PICTON, said he thought the fact that vaccination prisoners were not liable to hard labour must be well known to the magistrates without his using a circular on the subject.

Tuesday, June 17th.

The Local Government Provisional Order (No. 6) Bill.—This Bill was ordered to be read a third time.

Wednesday, June 18th.

Public Health (Scotland) Act, 1867.—Mr. S. WILLIAMSON obtained leave to bring in a Bill to amend the Public Health (Scotland) Act, 1867, in relation to hospitals for burghs. The Bill was read a first time.

UNIVERSITIES AND COLLEGES.

OXFORD UNIVERSITY.

THE question of admitting women to the examination for the degree of Bachelor of Medicine came before Congregation at Oxford on Tuesday afternoon, June 17th, when, after a debate occupying two hours, it was finally decided to promulgate the statute admitting women to the above examination. Professor Case had issued a pamphlet to all members of the House, in which he requested them to reject this statute in this its initial stage. He argued that it was not proper to admit women to any medical examination in a university of men. He pointed out that the proposed statute neglected the safeguards provided by the present statutes, which necessitated the gaining of the degree of B.A. before a person was allowed to present himself as a candidate for the B.M. examination. He further argued that the effect of this statute would be to prejudice the question of female doctors; and when the Royal College of Physicians and the Royal College of Surgeons had deliberately declined to grant their diplomas to women, and this closed the main avenues, it was not for the University of Oxford to open a back door for women to the medical profession. In consequence of Professor Case's declared opposition, Congregation House was crowded, when the Provost of Queen's, on behalf of the Council, moved the adoption of the statute. He argued in favour of women doctors for women, and stated in his own experience he had known a woman who had died because she objected to be examined by a male doctor. The Rector of Exeter, Professor Belham, and Sir Henry Acland supported the statute, the latter remarking that as senior examiner he could assure the Congregation there would be no difficulty in the examination of the women, and mentioned that the late Sir Salar Jung, in conversation with him, had stated there was urgent need for over a thousand women doctors in India alone. Professor Case replied to the various speeches supporting the statute. The preamble was carried by 75 votes to 58. The statute will have to

come before the larger House of Convocation before finally becoming the statute of the university.

THE following persons have been appointed by the Hebdomadal Council representatives of the Faculty of Medicine at the International Medical Congress at Berlin: Sir Henry W. Acland, M.D.; Professor Burdon Sanderson; Dr. William S. Church, M.D.; Dr. Francis H. Champneys, M.D., Brasenose College; and Mr. William Bruce Clarke, M.A., M.B., Pembroke College.

Science Scholarships: Balliol College.—An examination will be held on November 18th for a Brackenbury Scholarship, value £80 per annum, and also for an exhibition, value £40 per annum. Papers will be set in (1) Mechanical Philosophy and Physics; (2) Chemistry; (3) Biology. Not more than two out of these subjects will be expected. Candidates must communicate by letter with the Master of Balliol on or before November 11th.

Merton, New, and Corpus Christi Colleges.—Three scholarships will be offered, each of the value of £80 per annum, at New College. Also an exhibition of £60 per annum at Merton College. Candidates for the scholarships must be under 19 years of age; but there is not any limit for the exhibition. Papers will be set in (1) Chemistry; (2) Mechanics and Physics; (3) Biology. Candidates should call on the Warden of Merton on Monday, June 30th, between 6 and 7 P.M. The examination commences on July 1st.

Magdalen College.—An election will take place in October next to one or more Demyships in Natural Science. The value of the Demyship is £80 per annum, and their tenure is for two years; after which they may be renewed for a further period of two years. Exhibitions, varying from £25 to £50, are also offered. Candidates for the Demyships must be under 19 years of age.

CAMBRIDGE UNIVERSITY.

ISAMBARD OWEN, M.D., Assistant Physician of St. George's Hospital, has been elected, by the Council of the Senate, a governor of the University College of Wales, Aberystwith.

AT the Congregation on Thursday, June 12th, 1890, the following degrees were conferred:

M.D.—J. H. Edwards, M.A., St John's; L. Remfry, M.A., M.B., Christ's; S. A. M. Copeman, M.A., M.B., Corpus Christi; H. W. Dumergue, M.A., Corpus Christi.

M.B.—W. H. L. Copeland, B.A., King's; H. M. Fletcher, B.A., Trinity; W. Gordon, B.A., Trinity; H. A. Smith, B.A., Trinity; F. G. Swayne, B.A., Trinity; E. G. Trevithick, M.A., Trinity; E. M. Pilcher, B.A., Clare; A. B. Rendel, B.A., Clare; W. B. de Jersey, B.A., Pembroke; J. E. C. Bradley, B.A., Caius; H. J. Daggett, B.A., Caius; W. L. Dickinson, Caius; J. H. Dickson, B.A., Caius; W. K. Fyffe, B.A., Caius; C. P. Handson, B.A., Caius; D. S. Long, B.A., Caius; G. H. Wickham, Caius; S. Yeoman, B.A., Caius; J. W. Russell, B.A., Trinity Hall; W. H. Cooper-Pattin, B.A., Jesus; A. E. Durham, B.A., Christ's; E. C. Williams, B.A., Christ's; E. Barclay-Smith, B.A., Downing.

B.C.—The above (except W. L. Dickinson); H. W. Dumergue, Corpus Christi; H. T. Bulstrode, Emanuel.

SCHOLARSHIPS, ETC., IN NATURAL SCIENCE.—*Peterhouse:* Open competition commencing on Tuesday, October 14th, candidates to be under 19; subjects, Chemistry and Physics; application to J. D. H. Dickson, tutor. The following students of the college are awarded prizes and scholarships in Natural Science: First year, Silberrad, Martin, Julian; second year, Burn, Brunner; third year, Bull, Leese, Penny, Tindall; fourth year, de Havilland. *Caius:* The following awards in Science have just been made: Prizes to Bottomley, Collcutt, Brunner, Keeble, Morrell; Frank Smart Prize for Botany to I. H. Burkill; Scholarships, continued or increased, to A. S. F. Grünbaum, Bottomley, Collcutt, and awarded to W. Myers, H. F. Sheldon; exhibitions to J. W. G. Halliday, W. L. Griffiths. The Frank Smart Studentship in Botany (£90 for two years) is awarded to J. C. Willis, B.A., non-collegiate. *Christ's:* Elected to Scholarships: C. Krishnan, H. M. Stewart; H. T. Masterman, H. N. Weller, O. Brockbank; prizes to Newstead, Krishnan, Stewart, Brockbank, Roberts. *St. John's:* Scholarships awarded, continued, or increased, to: Groom, Hankin, Horton-Smith, Blackman, Hewitt, Lehfeldt, Woods, MacBride, Cuff, Whipple; proper sizarship and exhibition, to Baker; Wright's prizes to Hewitt, Lehfeldt, MacBride; Hutchinson studentship (£60 for two years) to E. H. Hankin, B.A.; Hockin prize for experimental physics to Lehfeldt. *Cavendish:* Prize to Smith.

IN consideration of the marked services to botanical science of Mr. Walter Gardiner, F.R.S., Fellow of Clare College, University Lecturer in Botany, his fellowship has been continued for six years.

THE General Board of Studies, in a report to the Senate, recommend that the fee for admission or readmission to each of the parts of the three examinations for M.B., be raised to £2 2s. The Board are of opinion that some of the additional annual expenditure proposed might reasonably be met by a charge made for that purpose to the students for whose benefit the expenditure is incurred, at least till such time as the repayment of capital raised for buildings has been accomplished.

READERSHIP IN MORPHOLOGY.—With a view of better recognising the services to the University and the scientific eminence of Mr. Adam Sedgwick, the head of the department of Animal Morphology, and of the teachers of Biology for the purposes of the Medical Regulations, the General Board of Studies propose that his lectureship should be raised to the status of a Readership. In the present state of the University finances they are, however, unable to propose an increase of the stipend of £100 which he now receives.

FIRST EXAMINATION FOR MEDICAL AND SURGICAL DEGREES, EASTER TERM, 1890.—Elementary Biology. The following were examined and approved:

Bagshawe, Caius	Hill, A., Joh.	Pearson, Caius
Baird, Caius	Hobday, Christ's	Renshaw, J. A. K., Trin.
Bartram, Joh.	Hughes, Christ's	Rice, Trin.
Biss, King's	Hutchinson, L. T. R., Trin.	Robinson, Emman.
Bottomley, King's	Jackson, T. L., Joh.	Salt, Caius
Burrell, Trin.	Jessop, Trin.	Smith, J., Jesus
Clarke, Caius	Johnston, Trin.	Stead, Caius
Cooper, Emman.	Jones, H. G. T., Joh.	Stewart, C. B., Christ's
Davies, L. G.	Key, Emman.	Tod, Trin.
Donaldson, Caius	Kingsford, Joh.	Twentyman, Christ's
Duckworth, Jesus	Lobb, Caius	Tyson, Caius
Edwards, Trin.	Maturin, Caius	Villy, Joh.
Elliott, W. R., Joh.	Mayor, Joh.	Vinter, C. H. S., Caius
Garrad, Clare	May, Clare	Ward, H. Selw.
Gordon, King's	Michael, H. Selw.	Warren, Trin.
Grummitt, Caius	Milsome, Trin.	Watson, F. J., Trin.
Gutch, Christ's	Moore, Joh.	Weaver, Trin.
Harrison, Caius	Muir, King's	White, Sid.
Haward, Sid.	Paget	Wills, Caius
Hayward, Caius		

SECOND EXAMINATION FOR MEDICAL AND SURGICAL DEGREES.—Human Anatomy and Physiology. The following candidates were examined and approved:

Alston, Clare	Garratt, Trin.	Penny, Pet.
Bird, Emman.	Harris, W. J., Christ's	Phillips, H. R., H. Cav.
Bliss, Sid.	Hart, Jesus	Roper, Clare
Bower, Trin.	Kirby, R. A., Trin.	Shuter, H. Cav.
Brown, H. Selw.	Lambert, Joh.	Smith, E. A. C., Caius
Carr, Trin.	Langmore, Joh.	Smith, G. G., H. Cav.
Colby, King's	Lewis, C. E. M., Joh.	Stallard, Sid.
Collcutt, Caius	Macdonald, Emman.	Stephens, Caius
Cooper, C. E., Caius	Marks, Jesus	Tatham, Caius
Day, F. N., Caius	Maw, H. T., Christ's	Thompson, G. W., Christ's
Edwards, Emman.	Neill, Caius	Wanklyn, Caius
Evans, Emman.	Pellew, Trin.	Willson, H. S., Emman.

There were ninety-one candidates in all.

BALFOUR STUDENTSHIP.—The managers of the Balfour Memorial Fund announce that the Balfour Studentship will be vacant by the resignation of Mr. William Bateson, Fellow of St. John's College, on October 18th, 1890. The names of applicants, together with such information concerning their qualifications as they may think desirable, must be sent by October 1st, 1890, to the Secretary, J. W. Clark, M.A., New Museums, Cambridge. The regulations affecting the studentship are given in the *Cambridge University Reporter* for June 10th, 1890.

ABERDEEN UNIVERSITY.

UNIVERSITY GENERAL COUNCIL.—A meeting of the General Council was held at Marischal College on Saturday, Principal Geddes presiding. Reports were submitted on the various curricula by committees which had been appointed at the previous meeting. The following report of the Medical Committee was, on the motion of Dr. Garden seconded by Dr. Mackenzie, unanimously adopted:—

1. *Medical Preliminary Examination.*—From information furnished by the Dean of the Medical Faculty, and from consideration of typical examination papers, the Committee concludes, first, that the nature of the present examining body is not compatible with thoroughness in the examination; secondly, that the practice of permitting attendance on qualifying classes before the passing of the whole preliminary examination is thoroughly inexpedient and mischievous; thirdly, that the examination papers are no sufficient test of proficiency in the subjects prescribed. The Committee, therefore, recommends:—First. That the standard of examination be raised. Secondly. That students be not permitted to attend qualifying classes until they have passed all subjects of the preliminary examination. This will involve a change in the relative date of the examination. Thirdly. That the professors of the Medical Faculty do not conduct or assist in conducting the medical preliminary examination. Fourthly. That among the preliminary conditions of the M.D. degree, an examination in Greek be no longer compulsory.

2. *The Medical Curriculum and Professional Examinations.*—The Committee finds, first, that the medical curriculum is overburdened, chiefly by reason of haphazard additions to the curriculum without regard to proportion of subjects; secondly, that, as a consequence, the lecture method of communicating knowledge has been developed out of all proportion, and largely to the detriment of practical education; thirdly, that the amount of practical work, compulsory or voluntary, is not a fair proportion of a professional curriculum. The Committee, therefore, recommends:—First. That, in accordance with the recommendation of the General Medical Council, the medical curriculum be extended to five years. Secondly. That the first year of the five include a course of physics, which shall be compulsory for graduation. Thirdly. That the fifth year of the five be devoted to clinical and practical work, and shall not involve compulsory

attendance on university or other systematic lectures. Clinical and practical are here taken to mean hospital and dispensary attendance or pupilage to a registered practitioner. Fourthly. That for the better correlation of subjects, and to prevent overlapping in the various lecture courses, the Dean of the Medical Faculty be required from session to session to lay before the University court a full syllabus of all lecture courses given within the University, of all extramural classes recognised by the University, and of all non-university classes necessary for graduation. Fifthly. That, in accordance with the recommendation of the General Medical Council, the number of systematic lectures in the curriculum be reduced. Sixthly. That for the better sequence of subjects in the curriculum and the better apportionment of examinations, the programme of changes already approved by the Senatus and University Court be adopted, with the modifications required by the five years' curriculum. Seventhly. That those clinical teachers whose lectures are compulsory for graduation shall, like the professors of the Medical Faculty, be *ex officio* examiners for degrees in medicine. Eighthly. That the number of assessors to examiners be increased to one for each subject. Ninthly. That all oral examinations be conducted in public.

3. *Finance.*—The Committee recommends: First. That after two winter sessions and one summer session of practical anatomy, every student shall receive, without payment of further fee, a perpetual ticket, which shall entitle him to dissecting room attendance in perpetuity. Secondly. That all class and laboratory fees be paid into a common fund. Thirdly. That the professors of the Medical Faculty be paid by salary. Fourthly. That inquiry be made into the conditions of the Wilson bequest with a view to using the funds of the bequest to found a medical fellowship or lectureship. Fifthly. That the class of medical logic be abolished, and that the funds thereby set free be devoted to some practical purpose within the medical curriculum.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

An extraordinary comitia of the College was held on Wednesday, June 18th, the President, Sir ANDREW CLARK, Bart., in the chair.

It was announced that Dr. Thomas Oliver had been appointed Goulstonian Lecturer for the ensuing year, and Dr. Broadbent Lumleian Lecturer.

Communications were read from the Chairman of the Board of Examiners in Chemistry; and from the Secretary of the International Medical Congress about to be held at Berlin; and also one from the Metropolitan Asylums Board, enclosing the full details of the scheme for making the fever hospitals available for purposes of clinical instruction, the scheme having received the final sanction of the Local Government Board.

An important communication was received from the legal representatives of the descendants of Sir Hans Sloane respecting the Physic Garden at Chelsea, at present in the occupation of the Society of Apothecaries, and after some discussion the subject was referred to the Council for consideration.

A letter was received referring to the grievances of the army medical officers and the general dissatisfaction at present existing throughout the service, and inviting the College to take up their cause.

Dr. FARQUHARSON moved a resolution to the effect that the College should, in conjunction with other licensing bodies, send a deputation to the Secretary of State for War pointing out the grievances and urging the claims of the Army Medical Department. He said that the army medical officers were a scattered body unable to combine, and it was therefore the duty of bodies like the College to take up their cause; he thought that prompt action was urgently needed, and that it was most important that the deputation should go before the Estimates came on in the House of Commons. They should insist that the report of Lord Camperdown's Committee should be adopted by the Government, and they ought to try to obtain the formation of a Royal Corps on the same lines as the Royal Engineers.

Sir DYCE DUCKWORTH seconded the resolution, and said that the treatment the subject had received from the Secretary of State for War was unfair, ignominious, and intolerable, seeing the importance of the subject and the great care bestowed on it by the Committee. He thought that such a deputation as was proposed would have great weight, and must succeed in its object. Owing to misunderstandings about the question of rank very serious breakdowns might occur.

Dr. BALFOUR said that, as the representative of the College at the Committee, he was sure that every endeavour had been made to get at the root of the grievances, but their recommendations had been set aside by the Secretary for War by the advice of his military advisers.

Sir GUYER HUNTER said that in India the medical men were never engaged in civil or in military duties. During sixteen years in the former capacity no friction had ever occurred, whilst when engaged in the latter capacity friction with the military officers was constantly arising. He felt sure that if the College went to the Government it would succeed.

Sir JOSEPH FAYRER, after alluding to the hesitation he felt in speaking on this subject owing to his official position, gave the College the opinions which his long experience had led him to form.

Dr. PYE-SMITH thought the College was not in a position to express an opinion at all; it had not sufficient knowledge of the subject, and had no right to form an opinion. On all medical questions, and on those relating to education, it could pronounce with weight and effect and was entitled to be heard.

The PRESIDENT observed that no improvement in this or kindred matters had ever taken place except as the result of agitation from without, and he thought the evidence collected by the Committee already referred to did supply the College with ample knowledge on the subject. It was a duty which ought to be undertaken by the College whether it succeeded or not.

Dr. JOSEPH EWART thought that they would succeed; at any rate they must not show want of courage. The reforms must eventually be conceded, if not at once.

Dr. PLAYFAIR also supported the resolution, and thought it was clearly their duty to come to the rescue of their military brethren.

Dr. QUAIN thought they had a good right to ask why the report of the Committee had been ignored, and was decidedly of opinion that the College should take action in the matter.

After a few words from Dr. FARQUHARSON, the resolution was put and agreed to.

A report from the Committee of Management was received and adopted.

The consideration of the amended scheme for the reconstitution of the University of London was postponed pending the report of the Committee of the College, who had been appointed to discuss the whole question.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Recognition of Colleges and Hospitals.—AT the last meeting of the Council of the Royal College of Surgeons a report was received from the Committee of Management, and was adopted subject to the approval of the College of Physicians. The Committee recommended that as the Cooper Medical College, San Francisco, had fulfilled the requirements respecting a preliminary examination in arts, it should now be added to the list of institutions recognised by the Conjoint Board for professional study. They further recommended that the Royal Portsmouth Hospital be added to the list of hospitals recognised by the Board; but with respect to an application from the College of State Medicine, the Committee resolved "that they were not at present prepared to recommend to the two Colleges to recognise the Laboratory of the College of State Medicine as a place of instruction for the diploma in Public Health."

Lord Camperdown's Committee.—At the same meeting of the Council, the Committee appointed to consider the report of Lord Camperdown's Committee on the Status of Army Medical Officers recommended that a letter should be addressed by the President to the Secretary of State for War desiring him to reconsider the question, and to take steps to carry into effect the recommendations contained in the report of the aforesaid Committee. This resolution was adopted.

Examiners.—The following gentlemen have been elected examiners:—First Examination. Elementary Anatomy: Messrs. C. A. Ballance, F.R.C.S.Eng.; Arthur Hensman, F.R.C.S.Eng.; W. Arbuthnot Lane, F.R.C.S.Eng.; C. Barrett Lockwood, F.R.C.S.Eng.; and C. Stonham, F.R.C.S.Eng. Elementary Physiology: Messrs J. R. Radford, M.R.C.S.Eng., and W. G. Spencer, F.R.C.S.Eng — Second Examination. Anatomy: Messrs. W. Anderson, F.R.C.S.Eng.; J. N. C. Davies-Colley, F.R.C.S.Eng.; Howard Marsh, F.R.C.S.Eng.; and G. D. Thane, M.R.C.S.Eng. Physiology: C. H. Golding-Bird, F.R.C.S.Eng.; Vincent D. Harris, F.R.C.S.Eng.; and B. T. Lowne, F.R.C.S.Eng.—Third Examination. Midwifery: Drs. William Duncan, F.R.C.S.Eng.; W. S. A. Griffith, F.R.C.S.Eng.; Peter Horrocks, M.R.C.S.Eng.; and J. B. Potter, M.R.C.S.Eng.—First Professional Examination for the Diploma of Fellow. Anatomy: W. H. Bennett, F.R.C.S.Eng.; W. Bruce Clarke, F.R.C.S.Eng.; A. Pearce Gould, F.R.C.S.Eng.; G. H. Makins, F.R.C.S.Eng.; and Frederick Treves, F.R.C.S.Eng. Physiology: John Barlow, F.R.C.S.Eng.; B. T. Lowne, F.R.C.S.Eng.; D'Arcy Power, F.R.C.S.Eng.; and Gerald F. Yeo, F.R.C.S.Eng.—Mr. A. Winterbottom has resigned his appointment as member of the Board of Examiners in Dental Surgery.

Mr. John Marshall.—At the last meeting of the Council it was

unanimously resolved that the best thanks of the Council be given to Mr. Marshall for his efficient services as representative of the College in the General Medical Council. The Council likewise expressed their deep regret that Mr. Marshall had determined to retire from his seat on the Council of the College.

The Select Committee on Hospitals.—In response to an application by Mr. J. F. Symms-Jeune, expressing the hope that the Council would assist the Select Committee in their inquiry respecting the metropolitan hospitals, etc., and requesting to be furnished with the names of gentlemen willing to act as witnesses, the Council have signified their approval, and it was left to any member who might so desire to give evidence.

The University of London and the Royal Colleges.—The Registrar of the London University has forwarded to the Council copies of the scheme for the reconstitution of the University, as amended since the conference with the representatives of the two Royal Colleges, and sanctioned by the Senate. The Council referred the scheme to the delegates of the two Colleges, to consider and report to a subsequent meeting of the Council.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND—The following Licentiates in Medicine of the College having complied with the by-laws, have, pursuant to the provisions of the Supplemental Charter of Victoria, dated December 12th, 1878, been duly admitted Members of the College:

J. Crawford, Lic. Med., 1868, London; S. T. Gordon, Lic. Med., 1874, Dublin.

At special examinations for the licences of the College, held on Tuesday, June 10th, 1890, the following registered medical practitioners were successful:

For the Licence to Practise Medicine.—J. A. Baird, L.R.C.S.I., Dublin; J. E. Dormer, L.R.C.S.I., Newtounbarry, co. Wexford.

For the Licence to Practise Midwifery.—J. A. Baird, L.R.C.S.I., Dublin.

ERRATUM.—In the examination list for the F.R.C.S., in the JOURNAL of June 14th, p. 1405, line 2, for "M. L. Trenchmann" read "M. L. Trechmann."

NAVAL AND MILITARY MEDICAL SERVICES.

THE ROYAL COLLEGES AND THE ARMY MEDICAL OFFICERS.

THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

WE have before mentioned that the College of Surgeons has resolved to take action in support of the claims of the army medical officers to real army rank and titles, as urged by the Parliamentary Bills Committee of the British Medical Association, and endorsed by resolution of the Association at its last two annual meetings to which that Committee has reported. The Camperdown Committee having approved the claim thus made as reasonable and proper to be granted, and the Government having nevertheless refused to act upon those recommendations, the Council of the College has now addressed the following letter:—

To the Right Honourable the Secretary of State for War.

SIR,—With reference to the Report of the Committee on the Pay, Status, and Conditions of Service of Medical Officers of the Army and Navy, to which, at your request, a representative was appointed by this College, I am desired by the Council of the College to express to you their deep regret that the recommendations of this Committee with regard to the grant of army rank and titles to medical officers of the army have not been acted upon.

The Council submit that the evidence taken by the Committee proves that it is necessary for the efficiency of the medical service that the recommendations contained in Section 3 of the report should be carried into effect, and that army rank and titles are essential for medical officers, to enable them thoroughly to perform their duties, especially when engaged on active service.

In the opinion of the Council the witholding of strictly defined army rank and titles from medical officers places them in a position of inferiority, which is unjust, considering their professional attainments and the important duties which they have to perform.

Moreover, the want of army rank and titles leads to such constant annoyance and mortification in the daily work and life of medical officers that many become disheartened and leave the service directly they can secure a pension, to the detriment of the army and the rapid augmentation of the non-effective charges.

It is believed also that the grievances complained of, if left unredressed, will in future much prejudice the service in respect of the quality of those who seek to enter it.

The Council therefore beg to urge you to reconsider the question, and to take steps to carry into effect the recommendations with regard to the grant of army rank and titles to medical officers contained in the report of the aforesaid Committee.

I have the honour to be, Sir,

Your obedient servant,

JONATHAN HUTCHINSON, President.

THE ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

THE following is the memorial of the Royal College of Physicians of Edinburgh:—

To the Right Honourable Edward Stanhope, M.P., Her Majesty's Secretary of State for War,

Sheweth that the Royal College of Physicians of Edinburgh is deeply interested in everything which concerns the welfare, honour, and efficiency of the medical profession, and that the Army Medical Staff is a very important branch of that profession.

That the College believes it to be universally admitted that the efficiency of the army depends in no small degree on its medical staff, and that it is necessary for the efficiency of the medical staff that there be no just causes of dissatisfaction among its members.

That the College understands that just causes of dissatisfaction exist at present in regard to the rank and position in the army held by the Medical Staff, and that these causes of dissatisfaction affect the consideration in which the members of the staff are held, and, consequently, their usefulness in the service.

That the College believes that the dissatisfaction which exists would be removed if the Medical Staff were granted rank as in the Royal Engineers, such rank being effective, as was recommended by Lord Camperdown's Committee, "in all respects and for all purposes except that of military command, which last shall appertain to medical officers only in hospitals, and when on duty with officers and men of the Medical Staff Corps or attached to it for duty."

That the College strongly urges that you will be pleased to take steps with a view to bring about some such arrangement, and thus place the Army Medical Service in the position which it is desirable it should hold in the eyes of the army, of the public, and of the medical profession.

T. GRAINGER STEWART, M.D., President.

A copy of the above has been sent to every Scotch member of Parliament from the College.

THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

AT the last meeting it was resolved to send a deputation to Mr. Stanhope (see page 1461).

REMARKS ON THE REPORT OF LORD CAMPERDOWN'S COMMITTEE.

WE have received a small pamphlet on the above subject printed for private circulation. The author clearly summarises the origin and development of the present controversy. He shows that it centres round the all-important questions of rank, title, and army status. Medical officers were content to share relative rank with the other army departments, but, in the advance of these departments, cannot consent to be left in a wholly inferior position; they must be levelled up; and it is not merely a question of sentiment, but of efficiency. It was owing to the independent action of the British Medical Association, in spite of official opposition, that medical officers were enabled to express their real feelings and desires. The result was the Camperdown Commission, which has fairly fixed the grievances. As regards pay, the cry that the medical staff were overpaid as compared with other branches is simply proved to be untrue. Not only is their pay not high, but it is the only thing they have to look to, as they have "no prizes." He condemns interference with retirement, and the retrospective application of the period in the rank before claiming the pension thereof.

As regards rank and title, he declares the attempt of the Commission to trace the origin of the dispute to the abolition of the regimental system as wholly fallacious and absurd. He maintains that 80 per cent. of medical officers desire substantive rank and titles, and that, if the majority of the "medical witnesses" were in favour of double titles, then they did not truly represent their department.

On the question of service, he says the medical staff is rapidly becoming a foreign service body, which will mean a startling increase in the odds against life and health. He says the Government of India should simply be ordered to give effect to Royal Warrants. The author touches on the curious dissents attached to the report. The outrageously retrograde proposal to "relieve" medical officers from command in their own establishments shows the spirit in which the dissent is conceived. So also the proposal to "ticket" or brand the medical officer's uniform. Is it necessary to ticket engineers, paymasters, ordnance officers, etc.,

nd if not, why not? He exposes the hollow cant and humbug onveyed in the talk of "the dignity of the eminent profession" of medicine) in the mouths of its bitterest enemies. He finally oncludes that the only satisfactory issue of the whole controversy ould be the formation of a "Royal Corps" with due military tatus and organisation.

CHANGES OF STATION.

HE following changes of station among the officers of the Medical taff of the Army have been officially notified as having taken lace during the past month:—

	From		To.
urgeon-Major W. E. Saunders	... Bombay	...	Dover.
,, J. M'Gann	... Dublin	...	Birr.
urgeon G. H. Sylvester	... Devonport	...	Monmouth.
,, M. F. Macnamara	... Birr	...	Dublin.
,, J. O. G. Sandiford M.D.	... Cork	...	Glenbeigh.
,, R. W. E. H. Nicholson	... ,,	...	Kinsale.
,, W. J. Baker	... Devonport	...	Carmarthen.
,, S. Townsend, M.D.	... Bengal	...	Ballincollig.
,, G. W. B. Creagh	... Castlebar	...	Navan.
,, W. Dick, M.B.	... Hereford	...	Beaumaris.
,, B. M. Skinner	... Dover	...	Lydd.
,, R. J. S. Simpson, M.B.	... Bengal	...	York.
,, G. M. H. Colman, M.B.	... Edinburgh	...	Cupar.
,, J. Riordan, M.B.	... Madras	...	Tipperary.
,, J. J. C. Donnet	... Dublin	...	Sligo.
,, A. Stables, M.B.	... Ennis	...	Clonmel.
,, W. Turner	... Preston	...	Fleetwood.
,, F. J. W. Stoney	... Dublin	...	Castlebar.
,, C. H. Hale	... Stirling	...	Perth.
,, G. Raymond, M.B.	... Youghal	...	Cork.
,, T. M'Culloch, M.B.	... Woolwich	...	Mauritius.
,, E. M'N. Woods, M.B.	... Portland	...	Jersey.
,, C. W. Reilly	... Macclesfield	...	Lancaster.
,, H. E. Winter	... Devonport	...	Swansea.
uartermaster R. Howell	... Cork District	...	Dublin.
,, J. Beach	... Natal	...	Cork District.

THE NAVY.

TAFF-SURGEON JOSEPH WOOD, M.D., who entered the service January 12th, 369, has been promoted to be Fleet-Surgeon from June 7th. He was Surgeon the *Himalaya* during the war with the Zulus in 1879, and received the South frican medal.

The following appointments have been made at the Admiralty:—GEORGE . H. SYMMONDS, Surgeon to Chatham Hospital, June 29th; ALFRED H. L. OX, Surgeon to the *Pembroke*, June 29th; WILLIAM W. PRYN, Surgeon to the *dus*, June 13th; ALFRED CROSSLEY, Surgeon to the *Asia*, June 13th; GEORGE EWLETT, Surgeon to the *Sandfly*, June 24th; F. W. COLLINGWOOD, Surgeon the *Curlew*, June 24th; JOHN OTTLEY, Surgeon to the *Boadicea*, additional, r the *Herald* and for medical charge of the *Mosquito*, June 17th.

MEDICAL STAFF.

RIGADE-SURGEON FRANCIS HOWARD, M.D., has been placed on temporary half-y on account of ill-health, June 6th. His commissions are dated:—Assist-t-Surgeon, September 30th, 1863; Surgeon, March 1st, 1873; Surgeon-Major, pril 28th, 1876; and Brigade-Surgeon, September 14th, 1888. He served in e Afghan war in 1879-80 in medical charge of the 25th King's Own Borderers edal), and in the Egyptian War of 1882 in medical charge of the 18th Com-ny Royal Engineers (medal, and Khedive's bronze star).

Surgeon-Major J. B. KELLY, ranking as Lieutenant-Colonel, is promoted to Brigade-Surgeon, *vice* J. F. Beattie, M.D., retired, May 31st, 1890. His pre-ous commissions bear date:—Assistant-Surgeon, September 30th, 1864; Sur-on, March 1st, 1873; and Surgeon-Major, September 30th, 1876. He has no ar record.

Surgeon-Major W. F. STEVENSON, M.B., has been appointed Assistant Pro-sor of Clinical and Military Medicine at the Medical School at Netley, *vice* igade-Surgeon J. F. Beattie, M.D., who has retired from the service.

INDIAN MEDICAL SERVICE.

E retirement of the undermentioned Brigade-Surgeons, already announced in e JOURNAL, has received the approval of the Queen:—J. F. BARTER and HUGH IFFITH, of the Madras Establishment, and WILLIAM DYMOCK, of the Bom-y Establishment.

The promotion of the undermentioned Surgeons to be Surgeons-Major, an-unced some time since in the JOURNAL, has received the approval of the een:—Bengal: J. F. MULLEN, M.D.; E. CRETIN, A. DUNCAN, M.D.; G. F. CHOLSON, M.D.; S. F. BIGGER, G. S. ROBERTSON, and G. M. NIXON. Madras: H. POPE, R. PEMBERTON, D. P. WARLIKER, J. J. MORAN, M.D.; F. C. SMITH, A. QUAYLE, M.D.; H. ARMSTRONG. Bombay: C. MONKS, P. J. DAMANIA, H. BULL, M.D.; F. F. M'CARTIE.

Brigade-Surgeon R. HARVEY, M.D., Bengal Establishment, is appointed to the ministrative medical charge of the Peshawur district, *vice* Deputy Surgeon-neral T. N. HOYSTED, who is transferred to the Sirhind district.

Surgeon J. J. PRATT, Bengal Establishment, second class civil surgeon, is nsferred from Kheree to Etawah.

The services of Brigade-Surgeon C. SIBTHORPE, Madras Establishment, are re-ced at the disposal of the Military Department.

The undermentioned Surgeons, recently appointed to the Bombay Establish-nt, are posted as follows:—J. B. SMITH, M.D., to general duty, Poona dis-t; H. F. CLEVELAND, to general duty, Bombay district; T. M. SHAW, M.B, general duty, Bombay district; E. L. C. SMITH, to general duty, Poona dis-t.

Deputy Surgeon-General T. RUDD, M.D., serving on the Bengal Establish-nt, in the Allahabad district, has leave of absence for six months on medical tificate.

ARMY MEDICAL RESERVE.

SURGEON JAMES CHARLESWORTH, 1st Volunteer Battalion North Staffordshire Regiment, is appointed Surgeon-Major, ranking as Major, June 11th.

THE VOLUNTEERS.

ACTING SURGEON H. HEALD, 3rd Volunteer Battalion Liverpool Regiment (late the 13th Lancashire), has resigned his appointment, dated February 11th, 1888.

The undermentioned gentlemen are appointed Acting Surgeons to the corps specified:—EDWARD OCTAVIUS CROFT, 3rd Volunteer Battalion West Yorkshire Regiment (late the 7th West Riding); WALTER DUNCAN GRIEVE, M.B., 3rd Volunteer Battalion King's Own Scottish Borderers (late the 1st Dumfries); ROBERT STIRLING, 4th Volunteer Battalion Royal Highlanders (late the 1st Perthshire); EDWARD WILLIAM FLEMING STIVEN, M.D., 21st Middlesex (the Finsbury).

Surgeon-Major (ranking as Major) T. PARTRIDGE, 2nd Volunteer Battalion Gloucestershire Regiment (late the 2nd Gloucestershire), has resigned his commission, with permission to retain his rank and uniform. His commission as Surgeon bears date July 30th, 1873; that of Surgeon-Major February 11th, 1889.

Acting Surgeon A. R. STEEL, 1st Volunteer Battalion King's Own Yorkshire Light Infantry (late the 5th West Riding of Yorkshire), is promoted to be Surgeon.

MILITARY INSTINCTS *v.* MEDICAL EFFICIENCY.

F.R.C.S.I. says: The handful of staff officers at home, well paid, and within reach of the best medical advice, are those who deny proper army status to medical officers, and so drive the best men away. But have they no thought for the multitudes of officers and soldiers abroad who have to rely upon the medical officers provided for them? When the Army Medical Service are decently treated, good men—some of the best men—come forward and enter it; but now neither first-class men will enter nor remain in it. The real sufferers, therefore, are the regimental officers and rank and file who of necessity serve abroad. Are these men to suffer because a little coterie at home are allowed to override Parliamentary Committees and degrade the Medical Staff?

M.B., C.M., I.M.S.—The proposals do not at present seem feasible. We should recommend our correspondent to do nothing rash, and to adhere to his present position.

HOSPITAL AND DISPENSARY MANAGEMENT.

BETHLEM ROYAL HOSPITAL.

WITH an average resident population of 250 patients, the admissions during last year reached the high figure of 264, and the number discharged or died during the same period was 285. It must be remembered, in dealing with the admissions and discharges, that incurable and chronic cases are not admitted. There has been no diminution in the number of applications for admission; nearly 1 case in every 7 had previously been in the hospital. Two female patients could not be detained as insane in consequence of their showing no signs of insanity after admission; one of them, however, remained as a voluntary boarder. One female patient, who had before admission cut off her right hand in obedience to the Biblical command as to an offending member, succeeded in getting her only hand out of a padded and locked canvas glove (mechanical restraint), and in a very short space of time completely removed her right eye. In such a case as this there can be no doubt about the propriety of the application of mechanical restraint; the only ground for regret seems to be that the restraint employed was not more effectual.

Dr. Percy Smith, the resident physician, in his annual report, speaks well of the use of sulphonal as a sleep procurer, which he thinks very valuable for senile cases with excitement. He also says that the attempt throughout the year to treat some cases by the use of hypnotism has been rewarded with only limited results. He also refers to the alteration in the law with regard to lunatics with justifiable alarm. The amount of additional mere clerk's work which recent legislation has thrust upon the medical officers of asylums is enormous, whilst the delay which is bound to take place in obtaining early treatment will be most prejudicial to the interests of the patients.

In addition to the Lunacy Act, 1890, which has just come into operation, the Commissioners in Lunacy, by the powers now conferred upon them, have issued a book of rules covering eleven pages of foolscap, together with a schedule containing nineteen "forms."

WESTERN COUNTIES IDIOT ASYLUM.—The annual meeting of the subscribers to this institution has lately been held, under the presidency of the Right Hon. Lord Clinton. From the report of the Board of Management it appears that since the last general meeting the number of inmates has increased from 158 to 180. Twenty-six cases have been admitted during the year, eight have been discharged, and ten have died. Allusion was made to the death of the President, the late Earl of Devon, and a resolution

was passed expressing the regret of the Committee at the loss they had sustained. The asylum has been at work for twenty-six years, and as a result of the training 100 pairs of boots had been made and nearly 1,200 repaired during the year. The financial position of the institution is in a satisfactory condition. A vote of thanks was accorded to the officers of the asylum, which was suitably acknowledged by Mr. W. Locke, the superintendent.

NEW METROPOLITAN PAUPER LUNATIC ASYLUM.—The Earl of Rosebery laid on June 12th, at Claybury, near Woodford, the foundation stone of the first lunatic asylum built for the new County of London for the accommodation of the pauper lunatics of the metropolis. The increase of lunatics for whom the Council had to provide was from 300 to 400 a year, and, as Claybury Asylum would accommodate 2,000, it needed, observed the Chairman, a very simple arithmetical process to understand that every five years London would require to erect another such establishment. He did not say that the increase referred to was out of proportion to the increase of the population—an increase of some 80,000 a year—but, such as it was, it had to be met. The building, on which already £90,000 has been expended, is in a forward state, and will, it is stated, be completed in two years.

HOSPITAL SATURDAY FUND.—The first general meeting of the Hospital Saturday Fund since its incorporation was held on Saturday, June 14th. The Lord Mayor was elected president, and Sir J. W. Whitehead, chairman of the council. From the financial statement presented it appeared that £4,196 12s. 2½d. had been received since January 1st, 1890, whilst £2,070 11s. 10½d. had been expended. Reference was made to some differences which had arisen between the managers of the Morley House Convalescent Home and the Hospital Saturday Fund, and it was agreed to recommend that a subcommittee of the Council should be appointed to meet the committee with a view to arranging a basis of settlement of such differences.

THE FRENCH HOSPITAL.—A committee of ladies in Paris, of which Madame Waddington has accepted the presidency, are organising a French *fête* at the French Exhibition, Earl's Court, to be held on July 5th, the entire proceeds of which will be handed to the funds of the new French Hospital in Shaftesbury Avenue. Colonel North has subscribed £500 to the fund. The Court of Common Council have granted £262 10s. out of the city's cash towards the funds of the hospital.

SICK CHILDREN'S HOSPITAL, ABERDEEN.—Dr. J. Mackenzie Davidson has been appointed ophthalmic surgeon to the Sick Children's Hospital. Dr. Davidson holds a similar position in the Royal Infirmary. The appointment marks a new departure in the staff of the Children's Hospital, which will benefit both the public and the medical school, the eye wards in the Royal Infirmary being at present, it is said, quite insufficient, as well as unsuitable, for the treatment of children.

CARDINAL MANNING AND THE LONDON HOSPITAL.—Cardinal Manning, who last week was the recipient of an illuminated address and a cheque for £7,500 in celebration of the silver anniversary of his episcopacy, as well as of an address and a sum of money amounting to £160 from the Thames Riverside Trades Unions, has declared his intention to devote a portion of it to founding a bed in the accident ward at the London Hospital for the maimed in working on the river Thames.

The Prince and Princess of Wales are expected to open the new Royal Infirmary, Liverpool, in October next.

MISAPPREHENSIONS AS TO HOSPITALS.

W. W. writes: I cannot think the majority of the public is aware that infirmaries and hospitals are institutions of a charitable nature, supported by the contributions given by generous people to afford medical and surgical comforts to the suffering poor who cannot afford to pay the ordinary medical practitioner or the consulting physician or surgeon for such attention. My opinion, founded on talking the matter over with several educated people, is that a great many believe they can go to the infirmary and secure the best medical or surgical aid from the ablest physicians and surgeons, who receive large salaries for such services. They never suppose they are receiving charity intended for the very poor, or that the medical officers are giving their services gratis to those whom they suppose are unable to pay for advice and medicine and are only objects of charity sent by some subscriber, who is supposed to exercise due care in only sending those who are worthy recipients of benefits bestowed by these deserving institutions. A very intelligent man told me he had been asked to subscribe to a hospital, and if he did he could send anyone or go himself when he was ill and receive medical and surgical treatment free. I told him that these hospitals were only for the poor, that they were supported by voluntary contributions, and that medical men got no salary for the time and labour they bestowed on them. He, I believe, hardly credited my story. I have spoken to a great many people, and find out that the majority look upon these institutions as very rich, and that the medical men are well paid for the work they do in them. Is it not time people should be taught differently? They should be told the truth, that they are charities supported by the public for the benefit of the deserving poor, that the medical men are not paid for the charitable work they do, and that those who give recommendations to others than those poor people are exceeding their duty, and should not have power to do so. I think, also, some committee should be appointed to examine into the fitness of candidates for the receipt of medical charity, and possibly such a step would prevent those in receipt of large incomes from going to these places to accept charity which was never intended for them.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

IMPUNITY IN ADULTERATION.

THE few local authorities who endeavour to do something approximating to their duty in reference to adulteration in their districts have many serious difficulties to contend against in the application of our badly drawn and cumbrous laws upon the subject. It is greatly to be regretted, in the public interest, that after much trouble and no inconsiderable expense have been incurred in proving cases up to the hilt, a snubbing should be administered to the active authority by the dismissal of such cases upon grounds which, in whatever way at any rate, they may be looked at by lovers of legal quibbling, are, from a common-sense point of view, altogether untenable, and, indeed, frivolous. The Vestry of St. George Hanover Square recently prosecuted certain tradesmen for selling tinned coffees which were certified by the public analyst to contain at least 80 per cent. of chicory. The tins bore labels describing the contents as "French coffee," these words being printed in very large letters, while the fact that the preparations were "mixtures" was stated upon another portion of the labels in very small type. Some previously successful cases of a similar kind, undertaken by the same public body, had no doubt caused the manufacturers to alter the wording of this part of the labels. The "French coffee" was described as a mixture of "chicory and coffee," and not as a mixture of "coffee and chicory" as before, but the fact remained that the principal title of the preparation was "Coffee." The vestry contended that this was an offence under Section 8 of the Sale of Food and Drugs Act, 1875, by which it is provided that declaration of a substance as a mixture is no protection to the vendor if, in the magistrate's opinion, the adulterant is present in sufficient quantity to fraudulently increase the weight, bulk, or measure of the article. Although it might have been thought that the presence of as much as 80 per cent. of chicory in a preparation the main title of which was "Coffee," was surely sufficient to constitute an offence under the section, the cases were dismissed upon the ground that a vendor was not bound to state the proportion of an adulterant in an article declared to be a mixture. If this decision were correct the section referred to would be altogether inoperative, and a vendor would be able to sell as coffee a mixture containing 99½ per cent. of chicory and ½ per cent. of coffee, with absolute impunity. It appears that in these cases the magistrate "regretted that he had to give his decision in favour of the defendants," and as such regrets are rare, this is, so far as it goes, satisfactory; but magisterial regrets are not as useful as magisterial convictions, and the latter would have been, on the whole, far more satisfactory to the public.

At the Glasgow Sheriff's Court a grocer was charged with selling some tinned peas which the public analyst certified to contain an injurious amount of copper. This case was recently fully reported in the JOURNAL, and from this report it will be seen that there was no defence worthy of the name, offered on behalf of the vendor. In accordance with the Act three tins had been taken by the inspector, and the presiding magistrate held that because the contents of one of these tins had not been analysed, although the others had each been found to contain injurious amounts of copper, the case was "not proven." This decision is a most extraordinary and unfortunate one. As a matter of fact one tin only (namely, the one which was submitted to the public analyst) need have been analysed in order to comply with the plain requirements of the law. The public analyst's certificate being legal evidence of the facts stated in it, no further analysis was required unless, at the request of the defendant, the tin reserved by the inspector had been sent to Somerset House. The matter in hand was plainly to determine

whether that portion of the peas which constituted the sample submitted to the public analyst contained an amount of copper which could be certified as injurious to health (and this was fully proved by the evidence brought forward by the prosecution) even if it were supposed that the third tin or any other tins contained no copper, or a smaller quantity of it. This ought clearly to have been no part of the question, inasmuch as such a quantity of the peas as would under ordinary circumstances have been taken at a meal contained a poisonous metal in a sufficient amount to be injurious.

But among the remarkable decisions which have been given in recent cases of adulteration, there are some relating to milk which call for severe comment. We have heard of a case in Battersea, in which heavy adulteration of milk having been proved against certain large dealers, the magistrate dismissed the summons on the ground that he "thought the defendants had been put to sufficient expense already in the matter." Among other things, such a decision shows an absolute want of comprehension of the meaning of adulteration. It points to the continued existence, even among educated persons, of the old idea that the practice is only, after all, a mild form of fraud to be looked upon with lenient eyes; and, upon the whole, rather as a joke. Again, in the same district a milk dealer was summoned for having sold to an inspector as "skimmed milk," some milk which on analysis was certified to be not "skimmed milk," but a milk adulterated with at least 15 per cent. of extraneous water. The magistrate is reported to have been "of opinion that as the defendant's wife denied having new milk and offered to sell skimmed milk, and the inspector having purchased skimmed milk, the sale was not to his prejudice," and dismissed the summons, cautioning the defendant as to his future conduct." It does not appear to be generally known that the composition of skimmed milk is entirely, different from that of milk adulterated with water, and that within certain limits adulteration, with water is far more serious offence than the removal of fat. But the curious part of this case is, that the inspector having agreed to purchase "skimmed milk," was entitled to get it under the Act. The article that he got was not of "the nature, substance and quality" required—a clear offence against the law.

It is in this district of Battersea also that some magistrates have distinguished themselves by imposing fines of 6d. upon tradesmen convicted of having sold margarine as butter. We can only express the hope that the local authorities concerned in the application of the Acts will not be so generally content in the future to submit to such decisions as those of which we have given some examples, and that whenever it is possible, they will feel it to be their duty to carry such cases to the higher courts, and failing satisfaction there—a not unlikely contingency—they will exert their influence and energies towards obtaining from Parliament adequate amendments in, and additions to, the present laws.

VIENNA HYGIENIC MUSEUM.

An Industrial Hygienic Museum was recently opened in Vienna, under the auspices of the Austrian Minister of Commerce. The object of the institution is to furnish information on the best means of protecting workmen against accidents, and the injurious effects of certain trades. The idea of the undertaking was suggested by the large number of accidents in Austrian manufactories. During the past six years the factory inspectors have received official notice of 14,236 accidents, including 1,240 fatal cases. It is hoped that the new museum, in which every known appliance for the protection of workmen in the various trades is exhibited, will be useful both to workmen and employers.

THE POLLUTION OF THE LEA.—The magistrate sitting at the Edmonton Petty Sessions on June 12th dismissed the summons taken out by the Lea Conservative Board against the Tottenham Local Board of Health, to compel the latter to obey the notice served on them under the Lea Conservancy Act of 1868, requiring them to discontinue the flow of sewage into the river Lea.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, June 14th, 5,672 births and 3,199 deaths were registered in twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons. The annual rate of mortality in these towns, which had been 17.8 and 18.0 per 1,000 in the two preceding weeks, fell again to 17.2 during the week under notice. The rates in the several towns ranged from 9.6 in Nottingham, 10.5 in Brighton, 11.5 in Bristol, and 12.9 in Cardiff to 21.0 in Sheffield, 21.1 in Newcastle, 22.5 in Wolverhampton, 23.8 in Plymouth, and 26.2 in Manchester. In the twenty-seven provincial towns the mean death-rate was 18.0 per 1,000, and exceeded by 1.8 the rate recorded in London, which was 16.2 per 1,000. The 3,199 deaths registered during the week under notice in the twenty-eight towns included 401 which were referred to the principal zymotic diseases, against 396 and 406 in the two preceding weeks; of these, 148 resulted from measles, 93 from whooping cough, 51 from scarlet fever, 39 from diarrhœa, 36 from "fever" (principally enteric), 33 from diphtheria, and one from small-pox. These 401 deaths were equal to an annual rate of 2.2 per 1,000; in London the zymotic death-rate was 2.6, while in the twenty-seven provincial towns it averaged 1.8 per 1,000, and ranged from *nil* in Leicester, and 0.4 in Nottingham, Bristol, and Blackburn to 2.6 in London, 3.0 in Manchester, 3.2 in Bolton, and 3.6 in Liverpool. Measles caused the highest proportional fatality in London, Birmingham, and Liverpool; scarlet fever in Wolverhampton and Manchester; whooping-cough in Derby and Bolton, and "fever" in Birkenhead. Of the 33 fatal cases of diphtheria recorded during the week under notice in the twenty-eight towns, 24 belonged to London and 3 to Manchester. The only fatal case of small-pox registered during the week occurred in Plymouth; 7 cases of this disease were under treatment in the Metropolitan Asylum Hospitals on Saturday, June 14th, none of whom had been admitted during the week. These hospitals contained 1,078 scarlet fever patients on the same date, against numbers increasing from 992 to 1057 at the end of the three preceding weeks; 96 cases were admitted during the week, against 95 and 98, and 130 in the three previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 2.8 per 1,000, and was below the average.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, June 7th, 848 births and 568 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had increased from 20.6 to 23.3 per 1,000 in the three preceding weeks, declined again to 22.0 during the week under notice, but exceeded by 4.0 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Greenock and Aberdeen, and the highest in Dundee and Glasgow. The 568 deaths registered in these towns during the week included 97 which were referred to the principal zymotic diseases, equal to an annual rate of 3.7 per 1,000, which exceeded by 1.5 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Aberdeen, Dundee, and Glasgow. The 278 deaths registered in Glasgow included 26 which resulted from measles, 16 from whooping-cough, and 4 from scarlet fever. In Dundee 7 fatal cases of measles were recorded, and 7 of whooping-cough in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 4.1 per 1,000, against 2.7 in London.

In the eight principal Scotch towns 853 births and 516 deaths were registered during the week ending Saturday, June 14th. The annual rate of mortality in these towns, which had been 23.3 and 22.0 per 1,000 in the two preceding weeks, further declined to 19.9 during the week under notice, but exceeded by 2.7 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Perth and Greenock, and the highest in Dundee and Glasgow. The 516 deaths registered in these towns during the week included 93 which were referred to the principal zymotic diseases, equal to an annual rate of 3.6 per 1,000, which exceeded by 1.4 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Edinburgh, Glasgow, and Dundee. The 259 deaths registered in Glasgow included 24 which resulted from measles (against 29 and 26 in the two previous weeks), 14 from whooping-cough, 3 from fever, and 2 from diphtheria. In Dundee 14 fatal cases of measles and 3 of whooping-cough were recorded. The death-rates from diseases of the respiratory organs in these towns was equal to 3.8 per 1,000, against 2.8 in London.

HEALTH OF IRISH TOWNS.

DURING the week ending Saturday, May 31st, the deaths registered in the sixteen principal town districts of Ireland were equal to an annual rate of 20.0 per 1,000. The lowest rates were recorded in Lisburn and Newry, and the highest in Dundalk and Lurgan. The death-rate from the principal zymotic diseases averaged 1.8 per 1,000. The 152 deaths registered in Dublin during the week under notice were equal to an annual rate of 22.5 per 1,000 (against 22.5 and 23.9 in the two preceding weeks), the rate for the same period being 16.6 in London and 19.6 in Edinburgh. These 152 deaths included 11 which resulted from the principal zymotic diseases (equal to an annual rate of 1.6 per 1,000), of which 5 were referred to whooping cough, 3 to diarrhœa, 2 to measles, and 1 to diphtheria.

During the week ending Saturday, June 7th, the deaths registered in sixteen of the principal town districts in Ireland were equal to an annual rate of 20.5 per 1,000. The lowest rates were recorded in Kilkenny and Armagh, and the highest in Dundalk and Galway. The death-rate from the principal zymotic diseases averaged 1.5 per 1,000. The 145 deaths registered in Dublin during the week under notice were equal to an annual rate of 21.4 per 1,000 (against 23.9 and 22.5 in the two preceding weeks), the rate for the same period being 16.4 in London and 16.9 in Edinburgh. The 145 deaths in Dublin included 9 which were referred to the principal zymotic diseases (equal to an annual rate of 1.3 per 1,000), of which 4 resulted from different forms of "fever," 4 from diarrhœa, and 1 from diphtheria.

DR. PERCY KIDD has been elected Assistant Physician at the London Hospital.

MEDICAL MAGISTRATE.—Mr. John Terrell Williams, M.R.C.S. of Barrow-in-Furness, has been placed on the Commission of the Peace for the borough of Barrow.

PRESENTATION.—The inhabitants of West Malling and neighbourhood have shown their appreciation of the services rendered by Dr. Pope, who is about to retire and leave the district after nearly half a century spent in the active duties of his profession there, by presenting him with a cheque for 100 guineas and an illuminated address.

INDIA AND THE COLONIES.

INDIA.

SHAMA SHUM LALA has offered 60,000 rupees towards the erection of an eye hospital at Calcutta. Rani Mohlab Kunjar, of Katiari, has given 3,000 rupees for the endowment of a scholarship at the Agra medical school.

THE LEEWARD ISLANDS.

THE MEDICAL SERVICE IN THE LEEWARD ISLANDS.—The want of medical officers in the colony is said to be the cause of much indignation among all classes, and efforts are being made to bring the whole question before Parliament, failing action on the part of the local government. Local papers received by the last mail report that in St. Kitts, in three districts covering twenty-one miles, with a population of over 18,000, there is only one doctor, who has also to attend to one of the district hospitals. If, however, our readers will refer to the letter which we published in our issue of November 9th, 1889, p. 1078, they will see that the work and prospects of any new medical settlers are described as "simply heart-breaking."

OBITUARY.

ROBERT EMINSON, M.R.C.S., L.S.A.

Mr. EMINSON, of Scotter, Kirton-Kindsey, has been cut off by a fatal epidemic of pleuropneumonia, which during the last three months has been rife in this village of North Lincolnshire, due, it is said, to grave insanitary conditions. In less than three weeks he devotedly attended about ten cases of this terrible disease, most of them being fatal, several dying within a few hours, and hardly one extending over a week. His own case has been the most protracted observed, beginning suddenly early on the morning of May 8th, and terminating in death on June 8th. This was owing partly to the more chronic character which the disease assumed, and partly to his iron constitution, his whole life having been one of constant activity, the most regular and simple habits, and almost perfect health. His end was hastened by the news of the death of his third son of the same disease.

Two years ago he celebrated his golden wedding amidst children and grandchildren, and his wonderful activity of mind and body then gave promise that a long and useful career might be prolonged to extreme old age.

He was a pupil and admirer of Sir Astley Cooper, and all through life an ardent temperance reformer. He has actively practised medicine in Scotter for fifty-six years, and obtained the Poor-law appointment in 1839. He was the first medical officer of health for the Gainsborough Rural Sanitary District, and effected important improvements in many of the villages of the union.

He leaves a widow, five sons (two members of the medical profession), and two daughters, as well as a large circle of friends, by whom he was much beloved and esteemed.

AUGUSTUS NEWMAN, M.A., M.B.Oxon., M.R.C.S., L.S.A.

THE death of Dr. Augustus Newman, at the age of 58, after a lingering illness, has caused a feeling of regret among a wide circle of friends in Derby. The deceased gentleman was a native of Dartmouth. He was formerly House-Surgeon at the General Lying-in Hospital, Lambeth, and Hospital for Sick Children, Great Ormond Street. He took the degrees of B.A. in 1855, M.A. in 1858, and M.B.Oxon. in 1859. He was for some time Surgeon to the Dartmouth Yeomanry, and J.P. for the Borough of Dartmouth, where he was much respected. He removed to Derby, and held for fifteen years the position of senior medical officer in connection with the Amalgamated Friendly Societies' Medical Association. He was for many years a member of the British Medical Association, and an occasional contributor to its JOURNAL. His funeral was attended by several of his medical colleagues who were desirous of paying a last tribute of respect to his memory.

DR. MIRKOW, the Chief Physician of the Bulgarian Army, has been dismissed from his post, and, it is said, will be tried for complicity in the Panitza conspiracy.

MEDICAL NEWS.

THE Middlesex Hospital Medical Society will give a *conversazione* in the grounds of the hospital on Friday, July 4th.

A NEW School of Naval Medicine will be established at Bordeaux in July.

THE new hospital for the sick poor in the Abbey parish, Paisley, was opened recently. The building is estimated to cost £8,000.

THE Limerick Town Council have granted a presentment of £75 towards the funds of St. John's Hospital.

THE Congress of the French Association for the Advancement of the Sciences will be held at Limoges from the 7th to the 14th of August.

DR. BRIEGER, whose name is favourably known for his original work in bacteriology and general pathology, has been appointed Extraordinary Professor in the University of Berlin.

THE general meeting of the German-speaking Cremation Societies is to be held this year at Frankfort-on-the-Main, on July 27th.

THE Committee of the International Medical Congress to be held at Berlin has decided to give their guests a grand farewell banquet, at an estimated cost of 15,000 marks (£750).

THE annual prizes will be distributed to the students of St. Mary's Hospital Medical School on July 1st, at 4 P.M., by Sir Henry Roscoe, M.P., F.R.S.

GUY'S HOSPITAL.—The Dental School of Guy's Hospital has been recognised as a place of instruction for the Licence in Dental Surgery of the Royal College of Surgeons of England.

THE annual meeting of the Metropolitan Provident Medical Association will be held this day (Friday) at 4.30, at Mrs. Bischoffsheim's, Bute House, South Audley Street.

A LADIES' COMMITTEE has been formed in connection with the International Congress to be held at Berlin to provide for the comfort and amusement of the wives of foreign practitioners during their stay in the German capital.

BEQUESTS.—Among other charitable bequests by the late Miss Louisa and Miss Frances Childers, of South Belmont, Doncaster, the Doncaster Infirmary has benefited by £500 from each of the two ladies.

THE Archduchess Marie Valerie, of Austria, has handed over the sum of 50,000 florins, voted by the Vienna Town Council for public charitable purposes on the occasion of her wedding, to the St. Anna Children's Hospital, on condition that it shall be applied to the erection of a pavilion for children suffering from infectious diseases.

IT is proposed to establish a Medico-legal Institute in the centre of Paris. Many *post-mortem* examinations, which at present have to be performed at the Morgue, will then be made in the new institution, and it is hoped that this arrangement will enable the practical teaching of forensic medicine to be carried out without wounding the feelings of the relatives of the deceased persons.

DR. DELVAILLE, of Bayonne, has been commissioned by the French Minister of Public Instruction "to study the questions of physical exercise and school hygiene" in Spain. As neither exercise nor hygiene is among the *cosas de España* that attract the attention of scientific observers in the land of the Cid, Dr. Delvaille's report on his mission is not unlikely to recall the famous essay, "On Snakes in Iceland."

A SERIOUS outbreak of typhoid fever is reported in the Porta Genova quarter of Milan, and diphtheria is said to be prevalent in other parts of the city. The *Gazetta Medica Lombarda* of June 14th says: "Such rumours seem to us destitute of foundation;" but so carefully guarded a contradiction is hardly likely to appease public anxiety. An inquiry has been instituted by the Medical Municipal Office.

A NEW medical society has recently been formed in France with the title of "La Société Clinique des Praticiens de France." It is to meet twice a month, and will hold the now inevitable "congress" from time to time, together with an annual dinner. Besides this the Society will publish two journals, the *Annales de la Société Clinique* and the *Clinique Française*.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The next examination in England for the certificate in psychological medicine will be held at Bethlem Hospital, London, on July 17th, at 11 o'clock in the morning. The examination for the Gaskell prize will take place on the following day at the same place. Candidates are requested to give fourteen days' notice to the Honorary General Secretary, Dr. Fletcher Beach, Darenth Asylum, Dartford.

THERE is a great flutter among the dovecots of quackery in Italy at present. Under the new law as to the "illegal exercise of the healing arts," 450 cases of unqualified practice of one kind or another were tried in the first three months of the present year. It is to be hoped that this springtide of virtuous indignation will not be followed by a proportional ebb—at least till it has done its work.

DEAFNESS IN TABES DORSALIS.—Morpurgo (*Archiv für Ohrenheilkunde*, 30 Band, 1 u. 2. Heft) states that 81 per cent. of persons suffering from tabes dorsalis have some abnormality of hearing. The majority are deaf, others hear sounds. Some of the patients showed aural disease that would account for the deafness, but the greater number did not. The author considers that they are examples of nerve deafness; he does not know whether they are central or peripheral.

BENEFIT SOCIETIES IN BERLIN.—At the end of 1889 the number of benefit societies in Berlin was 89, the total receipts of which during the year amounted to 5,689,215 marks (about £284,460), and the total expenditure to 5,100,133 marks (about £255,006). Of the latter sum 47.4 was for sick money, 4.8 per cent. for burial money, 6.7 per cent. for medical treatment, 15.9 per cent. for medicines, 15.8 per cent. for hospital expenses, and 3.3 per cent. for management.

SEAMEN'S HOSPITAL SOCIETY.—It has now been decided that the Prince and Princess of Wales will embark on board a special steamer at Westminster Stairs on June 24th, at 1.30 P.M., and proceed down river to the site of the new hospital of the Seamen's Hospital Society at the Royal Victoria and Albert Docks. There the opening ceremony will take place in one of the large sheds belonging to the dock company, after which their Royal Highnesses will inspect the new building, and the Princess will be asked to allow a ward to be named the Alexandra Ward.

THYROID GRAFTING IN MYXŒDEMA.—Mr. Horsley's suggestion that myxœdema might be treated by transplantation of a piece of thyroid gland from an animal to the human subject has lately been carried into effect by Professor Lannelongue, of Paris. The patient, a female cretinoid idiot, aged 14, presenting the usual signs of myxœdema, had a piece of the thyroid gland of a sheep implanted into the subcutaneous tissue of the left side of the chest. The wound closed over the graft, but sufficient time has not yet elapsed to allow a judgment to be formed as to the results of the operation on the constitutional condition.

INSANITY IN GERMANY.—The number of lunatics in the asylums of the city of Berlin, which was 1,582 in 1882-83, amounted to 2,528 in 1889. This shows a very large increase in the number of insane persons relatively to the growth of the population; in the period referred to the increase in the population was 22.49 per cent., whilst the increase in the number of lunatics was 59.79 per cent. The number of insane persons in confinement in the whole German Empire rose between January 1st, 1881, and the same date in 1886, from 34,270 to 42,669, being an increase of 24.5 in the five years, as against an increase of 3.6 per cent. in the general population in the same period.

MICROBES IN HAILSTONES.—Bacteria of various kinds have been found in ice and snow, and Dr. Fontin, a Russian observer, has now proved that hailstones are not free from them. He has found that the water produced by the melting of hailstones contains on an average 729 bacteria per cubic centimètre. Neither yeast fungus nor mould was present, but nine different kinds of bacteria were found, five of which (B. mycoides, liquefaciens, luteus, sarcina lutea, and aurantiaca) are already known. As the ordinary dwelling place of the bacillus mycoides is the earth, we are confronted with the fact that microbes of terrestrial origin may be carried up into the air, and thus rain, snow, and hail may be the direct means of conveying infection.

PORRO'S OPERATION FOR ATRESIA VAGINÆ.—Dr. Spaeth, of Hamburg, describes in the *Münchener medicinische Wochenschrift* a case where a woman, aged 30, suffered from almost complete stenosis of the vagina, the result of damage during cranioclasis at a labour seven years previously. Dilatation was performed by aid of the finger and vulcanite ball pessaries. Connection became feasible, and the patient conceived. A plastic operation on the vagina was out of the question, and further dilatation of the canal was not considered safe. When labour pains came on, Porro's operation was performed, a living child being delivered. The patient made a good recovery. It was not considered right to perform an ordinary Cæsarean section, as the lochia could not readily flow away through the narrow vagina.

THE STUDY OF INEBRIETY IN AMERICA.—At the recent meeting of the American Medical Association at Nashville, Tennessee, the Section of Medical Jurisprudence spent a whole day discussing papers on the criminal responsibility of inebriates. The subjects of the paper were: Inebriate Responsibility, by Dr. Evans; Medico-Legal Aspects of Insanity and Inebriety, by Dr. T. L. Wright; Inebriate Medico-Legal Questions, by Dr. Crothers; Medico-Legal Facts from 5,000 Cases, by Dr. L. D. Mason; and the Need of a New Criminal Jurisprudence affecting Inebriety, by Dr. Norman Kerr. The Section endorsed the disease view of inebriety, and elected Dr. T. D. Crothers, the leading American specialist on this question, as Chairman for next year's meeting at Washington. To ensure a full discussion of the subject, the Section will in future be called the Section of Medical Jurisprudence and Neurology.

LOCAL TUBERCULOUS INFECTION.—An accident which recently befell Dr. Gutzmann, of Berlin, may serve as a warning to surgeons and pathologists to be careful in handling tuberculous tissues. On February 19th, while he was making a *post-mortem* examination on a patient who had died of acute miliary tuberculosis, the nail of his right middle finger was slightly raised from the matrix. He felt a little pricking at the tip of the finger, but could see no wound. After washing it in sublimate solution and alcohol, he forgot all about it, and used the finger in percussion without inconvenience. On March 20th it again became painful, and a tiny abscess was found under the nail. This was opened and the pus examined by Ehrlich's method, when three tubercle bacilli were discovered. The preparation was shown to several practitioners, who all identified the bacilli. The abscess was then scraped out and disinfected with alcohol. Up to the present there has been no lymphangitis or glandular enlargement, and no rise of temperature. Dr. Gutzmann regards the case as an example of local tuberculous infection.

THE SANITARY INSTITUTE CONGRESS.—The following arrangements have been made for the Congress and Exhibition at Brighton, which commences August 25th. President: Sir Thomas Crawford, K.C.B., M.D. Honorary Treasurer: The Mayor of Brighton. Honorary Secretary: A. Newsholme, M.D., D.P.H. President Section I: Sanitary Science and Preventive Medicine: George Vivian Poore, M.D., F.R.C.P. President Section II: Engineering and Architecture: Professor Roger Smith, F.R.I.B.A. President Section III: Chemistry, Meteorology, and Geology: Wm. Topley, F.R.S., F.G.S. Conference of Medical Officers of Health: President: A. Newsholme, M.D., D.P.H., M.O.H. Conference of Inspectors of Nuisances: President: A. Carpenter, M.D., M.R.C.P. On Tuesday there will be a *conversazione* in the Pavilion Building; Wednesday, Lecture to the Congress by W. H. Preece, F.R.S.; and on Saturday there will be excursions, and an address to the working classes by B. W. Richardson, M.D., LL.D., F.R.S. The meetings of the Congress and Exhibition will be held in the Pavilion Buildings.

CHARING CROSS HOSPITAL MEDICAL SCHOOL.—The annual distribution of prizes at the above school took place on Wednesday afternoon, June 18th, when the Rev. S. J. Cumberlege, Rector of St. Paul, Covent Garden, took the chair. The meeting was held in the new Anatomical Lecture Room. The Sub-Dean read the annual report, which showed a steady increase in the number of the students. Reference was made to the very large physiological laboratory which had been erected in the new buildings, and to the difficulties which had been experienced in obtaining permission to close Bedford Court, and thus make the new buildings much more complete and useful, and the hope was expressed that the difficulties would eventually be overcome. The prizes were then awarded as follows: Llewellyn Scholarship, H. S. Baker; Golding Scholarship, G. H. Hooper; Governors' Clinical Gold Medal, J. B. Williams; the Pereira prize, J. Busfield; and the usual class prizes. After the distributions, the Chairman very

briefly addressed the meeting, dwelling first of all on the great loss sustained by the death of Dr. Pollock, and paying a high tribute to his integrity and impartiality. In a few well-chosen words, he reminded his hearers of the importance of the medical profession, and the necessity for making the utmost of their opportunities during their student career, and then briefly referred to the new buildings, which were nearly completed. A cordial vote of thanks to the reverend Chairman brought the meeting to a close.

ALCOHOL AND CHILDHOOD.—The Duke of Westminster presided at a conference promoted by the Church of England Temperance Society, Junior Division, on "Alcohol and Childhood," recently held at Sion College. A paper, by Dr. More Madden, of Dublin, on "Alcoholism in Childhood and Youth; its causes, results, and prevention," having been read, Dr. Samuel Wilks declared that children should be brought up without any alcohol whatever. Dr. Langdon Down was convinced that alcohol as a food was non-essential, and thoroughly detrimental to the welfare of the child. Nor was he prepared to admit that it was as useful as a medicine as some fancied. An analysis of the statistics of wine given at the London Hospital during the last eight years showed that in the case of one physician the average administered per patient was 8.05 ounces, whilst another used 43.6 ounces; the mortality amongst the patients of the two being 14.7 and 18.2 respectively, and the average stay 27 days as against 31 days. Drunkenness in parents distinctly tended to idiocy in children. Dr. Thomas Barlow thought it imperative that medical men should be absolutely honest with themselves and the public. For his part personally he should be very reluctant to be deprived of the use of alcohol in the treatment of acute disease, for his experience led him to the opinion that it yielded better results in picked juvenile cases than in adult cases, over a limited period. For prolonged periods, in the conditions of convalescence and chronic illness, it should be looked upon with the greatest possible caution. Dr. Bernays emphatically held that alcohol and childhood should have no connection whatever. Dr. Dukes objected to giving the young of both sexes alcohol in any form, except as a remedy for disease, when it was sometimes a drug of great value. Especially did he condemn the cruel and pernicious plan of supplying beer to boys in public schools at supper time, and contended that the extinction of the practice was one of national importance. A resolution declaring against alcohol as a dietary was carried.

MEDICAL VACANCIES.

The following Vacancies are announced:

ALCESTER UNION, Warwickshire Parishes.—Medical Officer. Salary, £80 per annum. Applications by July 8th to the Clerk.

AMPTHILL UNION, Beds.—Medical Officer for No. 2 District. Salary, £105 per annum, exclusive of fees. Applications by June 25th to the Clerk, John Wright.

BOOTLE BOROUGH HOSPITAL.—Assistant House-Surgeon and Dispenser. Salary, £40 per annum, with board, lodging, and washing. Applications to be addressed to the Chairman of the Committee, Bootle Borough Hospital, Derby Road, Bootle, by July 1st.

CHARING CROSS HOSPITAL.—(1) Medical Registrar; (2) Assistant-Anæsthetist. Salary of the appointment of Medical Registrar, £40 a year. Applications to be addressed to the "Chairman of the Medical Committee" by June 22rd.

COOTEHILL UNION, Cootehill Dispensary District.—Medical Officer. Salary, £95 per annum, including £15 as Medical Officer of Health, with usual registration and vaccination fees. Applications to the Honorary Secretary, Henry Brown, J.P., by June 28th.

DERBY AMALGAMATED FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Senior Resident Medical Officer. Age not under 30 or over 42. Salary, £280 per annum, with house rent and taxes free, midwifery fees, and cab hire. Applications to the Secretary, Mr. J. Bullivant, 58, Abbey Street, Derby, not later than June 21st.

DERBYSHIRE GENERAL INFIRMARY.—Resident Assistant House-Surgeon (175 beds). Board and washing and bonus of £10. Applications to the House-Surgeon by June 21st.

DINORWIG QUARRY HOSPITAL, near Llanberis, Carnarvonshire.—Surgeon; must speak Welsh. Applications to the Hon. W. W. Vivian, Port Dinorwig.

DROITWICH UNION.—Medical Officer and Public Vaccinator. Salary, £85 per annum. Election on July 9th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon, with surgical qualification. No salary; washing provided. Applications to the House-Governor, J. D. M. Coghill, M.D., by June 28th.

GORDON HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Assistant-Surgeon. Applications by July 12th to the Secretary, 278, Vauxhall Bridge Road, S.W.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House-Physicians. Applications by July 2nd to the Secretary, Henry Dobbin.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Assistant-Physician. Applications by June 25th to the Secretary, Henry Dobbin.

HOSPITAL FOR WOMEN, Soho Square, W.—House-Physician; doubly qualified. Appointment for six months. Salary, £30 with board, etc. Applications to the Secretary, David Cannon, by July 2nd.

HULL BOROUGH ASYLUM.—Assistant Medical Officer; not over 35 years of age; unmarried. Salary, £100 per annum, with board, lodging, and attendance. Applications by June 25th to the Medical Superintendent.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, W.—Physician in Ordinary. Applications by June 21st to the Secretary, William H. Johnson.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, W.—Three Visiting Physicians. Applications by June 21st to the Secretary, William H. Johnson.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, W.—Surgeon. Applications by June 21st to the Secretary, William H. Johnson.

LANGPORT UNION.—Resident Medical Officer for the 3A and B (Curry Rival) District. Salary, £86 per annum, with fees and extras to about £100. Applications to John Louch, Clerk, by June 24th. Election on July 1st.

LINCOLN ODD FELLOWS' MEDICAL INSTITUTION.—Junior Medical Officer from August to December. Salary at the rate of £120 per annum (out-door). Applications to Secretary, William Coulson, 12, North Parade, Lincoln.

LIVERPOOL EYE AND EAR INFIRMARY.—House-Surgeon; doubly qualified, and have paid special attention to ophthalmic practice. Salary, £80 per annum, with residence and maintenance. Applications to the Honorary Secretary, Reginald Haigh, 6, Grosvenor Buildings, Liverpool, by June 23rd.

LONDON THROAT HOSPITAL, 204, Great Portland Street, W.—House-Surgeon. Applications by June 30th to the Honorary Secretary of the Medical Committee, W. R. A. Stewart.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Resident Medical Officer at Bowden, Cheshire. Salary, £60 per annum, with board, apartments, and washing. Applications by July 20th to C. W. Hunt, Secretary.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall; double qualifications; not less than 25 years of age. Remuneration, £250 per annum, with board and residence. Applications by July 5th to the Chairman of the Board.

NORTH RIDING OF YORKSHIRE.—Medical Officer of Health for the Riding; qualified to practise medicine, surgery, and midwifery. Remuneration, a fixed fee of £100 per annum, and 5 guineas per day (to include expenses) for every day's services, with leave to hold other appointments. Applications to William C. Trevor, Deputy Clerk of the County Council, Clerk of the Peace Office, Northallerton, before June 30th.

OXFORD UNIVERSITY.—Deputy Linacre Professor of Human and Comparative Anatomy. Salary, £700 a year. Applications to the Registrar of the University by June 21st.

REDRUTH SANITARY AUTHORITY.—Medical Officer of Health. Appointment for three years. Salary, £100 per annum. Applications by July 3rd to the Clerk, Thurstan C. Peter, Union Office, Redruth.

RETFORD UNION, Retford District.—Medical Officer. Salary, £40; fees, £20 per annum. Applications by June 19th to the Clerk.

RETFORD UNION, Dunham-on-Trent District.—Medical Officer. Salary, £15; fees, £5 per annum. Applications by June 19th to the Clerk.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon. No Salary; board, lodging, and washing. Applications by June 25th addressed Chairman of Medical Committee.

ROYAL FREE HOSPITAL, Gray's Inn Road.—An additional Assistant-Surgeon; a Fellow of the Royal College of Surgeons of England. Applications to the Secretary, Conrad W. Thies, by June 24th.

ROYAL GENERAL DISPENSARY, 25 and 26, Bartholomew Close, E.C.—Resident Medical Officer; doubly qualified. Candidates must attend personally the Medical Committee on June 24th at the Dispensary at 2 o'clock, with diplomas and certificates of qualification.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, West Strand.—Clinical Assistants. Candidates must be qualified; preference given to those experienced in ophthalmic practice. Applications by June 21st to the Secretary.

TAUNTON UNION, Bishop's Lydeard District.—Medical Officer. Salary, £95 (to include all fees except midwifery, 10s., and 2s. 6d. for lunatic returns). Applications by June 21st to the Clerk, W. F. B. Dawe.

WALLASEY DISPENSARY.—Assistant or Junior House-Surgeon, to visit and dispense. Unmarried; must devote his whole time to the duties. Salary, £80 per annum, with furnished apartments, coal, gas, and attendance. Applications by June 22nd to the Honorary Secretary, Mr. William Heap, Elm Mount, Penkett Road, Liscard, Cheshire.

WALSALL AND WEST BROMWICH SCHOOL DISTRICT.—Medical Officer. Salary, £50 per annum. Applications to the Clerk, H. Ward, Church Street, West Bromwich, by June 21st, endorsed "Medical Officer."

WELLINGBOROUGH UNION RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, £50 per annum. Election, July 2nd. Applications to Willan Jackson, Assistant Clerk, Wellingborough, by June 25th.

WILTS COUNTY ASYLUM.—Assistant Medical Officer; unmarried; with experience preferred. Salary, £100 per annum, with board, residence, attendance, and washing. Applications, endorsed "A. M. O.", to be addressed to the Medical Superintendent, Wilts County Asylum, Devizes, by June 23rd.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant; one qualification preferred. Board, lodging, and washing provided. Applications to be inscribed, "Application for Resident Assistant," by June 23rd, to the Chairman of the Medical Committee.

ETLAND COUNTY COUNCIL.—Medical Officer for the county and district to reside in the county, with liberty to engage in private practice. Applications, stating qualifications and salary, to be lodged with the County Clerk at Lerwick by June 30th.

MEDICAL APPOINTMENTS.

ENSON, T., L.R.C.P.Edin., M.R.C.S., reappointed Medical Officer of Health for No. 3 District of the Lanchester Rural Sanitary District.

OLTON, W. T., L R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health for No. 2 District of the Lanchester Rural Sanitary District.

RAINE, C. Carter, M.R.C.S., appointed Anæsthetist to the Charing Cross Hospital, *vice* Woodhouse Braine, resigned.

ROWN, William, M.D., C.M.Glasg., appointed Medical Officer for the Stapleton Union District.

UENO DE MESQUITA, Ernest, M.B.Lond., M.R.C.S., L.R.C.P., House-Surgeon at the Miller Hospital, Greenwich, appointed House-Surgeon to the Croydon General Hospital, *vice* Henry W. Drew, F.R.C.S., L.R.C.P., etc.

OLMAN, G. E., L.R.C.P.Edin., M.R.C.S.Eng. appointed Medical Officer for the First District of the Hemsworth Union (rearrangement of districts).

OLYER, J. F., L.D.S., M.R.C.S., appointed Assistant Surgeon-Dentist to the Charing Cross Hospital.

OOMBES, S. Welsley, F.R.C.S., L.R.C.P.Edin., L S.A., reappointed Medical Officer of the North Claines District of the Droitwich Union for three years.

ROFT, Edward Octavius, M.R.C.S.Eng., L.R.C.P.Lond., appointed Honorary Surgeon to the Leeds Hospital for Women and Children, *vice* John Horsfall, M.A., F.R.C.S.

ICKINSON, George F., M.R.C.S., L.R.C.P., appointed House-Physician to Charing Cross Hospital.

VERETT, Wm., M.B.Edin., appointed Second Assistant Medical Officer to the Kent County Lunatic Asylum, *vice* T. Brushfield.

ILL, F. Claude, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Central London Ophthalmic Hospital, Gray's Inn Road, *vice* A. L. Travers, L.R.C.P., M.R.C.S.

ISON, Hanson Cotton, L.R.C.P., L.R.C.S.Edin., appointed House-Surgeon to the Lancaster Infirmary and Dispensary, *vice* Charles William Dean, L.R.C.P., L.R.C.S.E.

ANCE, E. P., M.R C.P.Eng., L.R.C.P.Lond., appointed Junior House-Surgeon to the North-Eastern Hospital for Children, Hackney Road, N.E., *vice* Mr. Marshall, M.B.Vict., promoted.

ABRIEL, Wm. M., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer of the Workhouse of the Keighley Union, *vice* Mr. J. Russell, resigned.

ALE, Arthur K., L.R.C.P.Lond , M.R.C.S.Eng., reappointed Medical Officer to the Fifth District of Ecclesall, Bierlow Union.

RANT, Frederick, L.R.C.P.Edin., L.M., reappointed Medical Officer of Health to the Market Harborough Local Board.

AVES, Dr., appointed Medical Officer of Health for the Urban Sanitary District of Knighton.

AVELOCK, Dr., Second Medical Assistant at Montrose Asylum, appointed First Assistant, *vice* Dr. Chambers, resigned.

ND, Albert, L.R.C.S., L.M., L.S.A., reappointed Medical Officer of Health to the South Molton Urban Sanitary District.

NDLE, F. T., L.R.C.P.Lond., M.R.C.S.Eng., appo'nted Medical Officer for the Third District of the Hemsworth Union (rearrangement of districts).

OLLINGSWORTH, John McKee, L.K.Q C.P.Irel., F.R.C.S.I., appointed Medical Officer for the Stebbing District of the Dunmow Union.

INSTON, David, M.D., L.R.C.S.Edin., reappointed Consulting Physician to the Montrose Lunatic Asylum and Infirmary.

WRENCE, Samuel, M.D St.And., L.R.C.S.Edin., reappointed Consulting Physician to the Montrose Lunatic Asylum and Infirmary.

CGILL, George, L.R C.P , L.R.C.S.Edin., reappointed Medical Officer of Health to the Wuerdle and Wardle Urban Sanitary District.

CKENZIE, W. Scobie, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Normanton Urban Sanitary District.

LONY, P. J., L.R.C.S.I., L.K.Q.C.P.I., etc., appointed Clinical Assistant to the Central Throat and Ear Hospital, Gray's Inn Road.

RTON, John, M.B.Lond., M.R.C.S., L.S.A., reappointed Medical Officer of Health to the Guildford Urban Sanitary District.

TT, Frederick Walker, M.D.Lond., M.R.C.P., appointed Assistant Physician to the Charing Cross Hospital, *vice* Dr. J. Abercrombie, made full Physician, *vice* Dr. A. J. Pollock, deceased.

UNCEY, Chas. J., M.B., appointed Medical Referee to the Government, Earlestown District (Lancashire) for Insurance and Annuities.

DEN, C., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Milnrow Urban Sanitary District.

BERTS, E. A., M.B., L.R.C.P., M.R.C.S., appointed Third Attending Medical Officer to the Pimlico Road Free Dispensary, *vice* T. Foster Palmer, appointed Surgeon.

YSE, E. L., M.R.C.S , L.R.C.P., appointed Resident Obstetrical Officer to Charing Cross Hospital.

LIVAN, E. J. H., M.D., appointed Medical Officer for the Fourth District of the Hemsworth Union (rearrangement of districts).

OMAS, Dr., appointed Medical Officer of Health to the Swaffham Urban Sanitary Authority.

OMPSON, C. Sinclair, M.B.Edin., C.M., appointed Medical Officer for Abbotsham District of the Bideford Union, *vice* J. Thompson, M.D.

D, H. B., M.R.C.S.Eng., L.R.C.P.Lond., reappointed Medical Officer of Health to the Charlton King's Local Board.

WILLIAMS, Ernest G. H., M.R.C.S., L.R.C.P., appointed House-Surgeon to Charing Cross Hospital.

WILSON, J., M.D., reappointed Medical Officer of Health for No. 1 District of the Lanchester Rural Sanitary District.

WOOD, E. Stanley, L.K.Q.C.P.Irel., L.M., M.R.C.S.Eng., appointed Surgeon under the Factory Act for Pontypool District, *vice* Dr. Edmunds, of Pontnewydd, deceased.

WOOD, G., M.D., L R.C.S.Edin., appointed Medical Officer for the Second District of the Hemsworth Union (rearrangement of districts).

WRIGHT, Alfred, M.R.C.S., L.S.A., appointed Honorary Medical Officer to the Romford Victoria Cottage Hospital.

WRIGHT, John Lister, L.R.C.P.Edin., M.R.C.S.Eng., appointed Honorary Medical Officer of the Derby Children's Hospital.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: On External Diseases of the Eye. Hospital for Sick Children, Great Ormond Street, 4 P.M.—Mr. Arbuthnot Lane: On Complications of Disease of the Middle Ear.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. William Hunter (Arris and Gale Lecturer): On Ptomaines, their Nature and Actions. Lecture I.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 2 P.M.—Dr. R. Percy Smith: On Legal Relations of Insanity. Hospital for Diseases of the Skin, Blackfriars, 4 P.M.—Mr. Jonathan Hutchinson: On Urticarial Affections.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. D. Ferrier: The Croonian Lectures on Cerebral Localisation. Lecture V.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Robert Maguire: On the Therapeutics of Phthisis. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: Ophthalmoscopic Cases.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. William Hunter (Arris and Gale Lecturer): On Ptomaines, their Nature and Action. Lecture II.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Mr. R. Brudenell Carter: On Ocular Symptoms in Nervous Diseases. The New Infirmary, Paddington, 4 P.M.—Mr. J. Hutchinson: Clinical Lecture on Surgical Cases. 5 P.M.—Dr. Savill: *Post-mortem* Examinations.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. D. Ferrier: The Croonian Lectures on Cerebral Localisation. Lecture VI.

FRIDAY.

LONDON POST-GRADUATE COURSE, Bethlem Hospital, 11 A.M.—Dr. R. Percy Smith: Clinical Demonstration. Hospital for Consumption, Brompton, 4 P.M.—Dr. Robert Maguire: On the Therapeutics of Phthisis.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 5 P.M.—Mr. William Hunter (Arris and Gale Lecturer): On Ptomaines, their Nature and Action. Lecture III.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or Stamps with the notice not later than Wednesday Morning, in order to insure insertion in current issue.

BIRTHS.

COLBOURNE.—At 11, Cleve Road, N.W., on June 12th, the wife of L. Colbourne, M.D. (Buenos Ayres), of a daughter.

HARLAND.—On June 14th, the wife of Henry Harland, M.D., of Eastridge Court, Ryde, Isle of Wight, of a son.

STEEL.—On Wednesday, the 11th inst., at Nevill Street, Abergavenny, the wife of William Dyne Steel, M.D., of a son.

MARRIAGES.

EDWARDS—DRIVER.—On the 14th inst., at St. Peter's, Cranley Gardens, by the Rev. J. F. Downes, F. Swinford Edwards, F.R.C.S., of Wimpole Street, W., to Evelyn Dudley, only daughter of S. Dudley Driver, Esq., of Westgate Terrace, South Kensington.

MILLIGAN—ANDERSON.—At the Presbyterian Church, Marlborough Place, St. John's Wood, London, on the 17th inst., by the Rev. Professor Milligan, D D., the University, Aberdeen (father of the bridegroom), assisted by the Rev. J. R. Gillies, M.A., William Milligan, M B., C.M., Manchester, to Bertha Warden, daughter of James Anderson, Esq., Frognal Park, London, and of Bicton, Aberdeenshire.

DEATHS.

HARMAR.—On June 17th, at 27, Hamstead Road, Handsworth, Birmingham, James Harmar, M.R.C.S., L.S.A.

PAINE.—June 13th, at Corbett House, Stroud, William Henry Paine, M.D., F.R.C.P., F.G.S., etc., J.P., Gloucestershire, aged 66.

WHITEFOORD.—On the 7th inst., at his residence, St. John's Wood, aged 82 years, Charles, eldest surviving son of Caleb Whitefoord, F.R.S., and grandson of Sir Adam Whitefoord, Bart., of Blairquhan, Ayr, N.B. Buried in Whitton Churchyard, Burford, Salop, Thursday, the 12th inst. Requiescat in pace.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

W. G. asks for the composition of "Dr. Wright's Pearl Ointment."

GROWING PAINS.

PAINS asks for advice in the treatment, curative or palliative, of "growing pains."

*** A note on Dr. Comby's recent observations on this subject is to be found in the JOURNAL for April 16th, 1890, p. 816.

TREATMENT OF PRURITUS VULVÆ.

A MEMBER wishes for advice in the case of a patient, aged 32 years, the mother of three children, who is suffering from pruritus vulvæ, which came on when bathing at the seaside last autumn, and has continued ever since in spite of all the constitutional and local treatment which he and his medical friends can think of. Lately the vulva was completely burnt with the thermocautery without any beneficial effect. The patient has no uterine disease, except a very slight leucorrhœa occasionally, and no sugar in the urine.

THE "WAGE LIMIT" AT HOSPITALS.

DR. R. R. RENTOUL (Liverpool) asks to be informed of the existence of a rule referring to the "wage limit" which debars applicants for receiving in-patient medical relief at the voluntary hospitals. He does not refer to the "wage limit" for out-patients.

ANSWERS.

MORPHINE HABIT.

A CHEMIST writes: Seeing an inquiry as to relinquishing the habit of morphine-taking in the JOURNAL, I desire to bring to your notice my own case. I was in business as a chemist, and through an accident was induced to take morphine; it grew into a habit, and for years I took 60 grains a day. About eleven years ago I became very ill, and my wife called in a medical man, who said the morphine must be given up. He had me under his care for some time, and since October, 1880, I have not taken an atom.

I give the name of my doctor and my own name, not for publication, but for *bonâ fides*.

INCOME TAX.

MEMBER OF BRITISH MEDICAL ASSOCIATION will find in Chapman's *Income Tax; How to get it Refunded* a special section devoted to the deductions which may be made by doctors in making their returns. It is published at 1s. by Effingham Wilson, Royal Exchange, or will be sent post free by the Income Tax Repayment Agency, 25, Colville Terrace, W., on receipt of thirteen stamps.

CERTIFICATES OF IDENTITY.

F. S. A.—It is not customary—indeed, we never knew it done—to charge any fee for signing the identity paper of a discharged soldier drawing pension. It is a labour of love which magistrates or medical men perform.

THE AVERAGE ALCOHOLIC CONSUMPTION.

DR. R. S. STEWART.—We have no detailed information as to England, Scotland, and Ireland separately, but the following has been the average annual consumption of intoxicants in the United Kingdom per head of the population: 1876, £4 9s.; 1886, £3 7s. 10d.; 1887, £3 7s. 8d.; 1888, £3 6s. 8d.; 1889, £3 9s. 11d.

NOTES, LETTERS, ETC.

RUSTICUS is requested to communicate his address.

THE BIOLOGY OF DAILY LIFE.

IN answer to the author of *The Biology of Daily Life*, we would express our regret that we have in one particular inadvertently misrepresented his teaching. He does not, it would appear, recommend a bread made out of sawdust,—the passages in which he dilates upon such diet were, it would seem, "writ sarcastic."

To Correspondents.

OUR correspondents are reminded that prolixity is a great bar to publication and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return or hold over a great number of communications chiefly by reason of their unnecessary length.

Alcohol and Childhood.

THE Rev. G. HOWARD WRIGHT (Hon. Supt. C.E.T.S.) writes: At the afternoon conference, at which his Grace the Duke of Westminster so kindly presided, the speakers were among the most prominent and leading men of the medical profession, and who have not been in any way mixed up with the temperance movement. The opinion and examples given by these gentlemen will prove as a revelation to the world.

This society has lately formed a juvenile branch into a separate department, and to grapple with this in anything like an adequate form £5,000 per annum is required. The executive have decided to supplement the excellent work already carried on by other societies in this direction, and to engage professional lecturers for the day schools throughout the land, which method of work Mr. Diggle (Chairman of the London School Board), when speaking at the morning conference, strongly recommended as a most practical means of grappling with the evil. Any subscription sent to the "Secretary, Junior Division C.E.T.S., 9, Bridge Street, Westminster, S.W.," will be gratefully acknowledged.

The Midwives Registration Bill.

DR. ROBERT R. RENTOUL (Liverpool), writes: In your editorial remarks you say "midwives are an old institution." May I show that the term "midwife" in the past has not referred to women midwives only? I would disagree with the statement "that a large proportion of women are so poor as to be unable to pay the fee of medical men." In Liverpool a great many midwives charge a cash fee of 15s. for the first and 10s. 6d. for a subsequent labour, and that in a great many cases thoroughly trained medical men conduct cases for 7s. 6d. or 10s. 6d., so that the fees of midwives are actually higher. The fact that the midwives wash the mother and baby, prepare food for the mother and baby, call and wash both daily for six to ten days, and so does the work of both doctor and nurse, makes a few prefer their wider services to that of the doctor. If the wage-paid classes would only lay by six sixpences per week from the time a wife becomes pregnant, there would be a fee of 20s. ready. Let us remember that each family spends on an average nearly £16 13s. 6d. on alcohol, not counting the money laid out in tobacco and other luxuries. Let them spend a little of this on their wives, then there will be less work for the relieving officer and the police, fewer brutal assaults by husbands, and fewer people depending on the charity of others. I think, therefore, I have shown that midwives are not called for simply because midwifery fees are high.

It has been stated that midwives are required because there are so few doctors! The fourth report of the Statistical Committee of the General Medical Council shows that there was 1 doctor to every 1,662 persons in England and Wales, and it is to be recollected that this number includes the army and navy at home, paupers, lunatics, and charity cases of all kinds, bringing down the above average to about 500 paying persons to each doctor. Supposing that of the above 1,662 half are women—women of all ages, and not of the child-bearing period only—then we would have 1 doctor to every 831 women. But it is to be further remembered that a large proportion of child-bearing women are already provided with doctors, either by the Poor-law, by medical charities, or through private benevolence, so that I would say that there are about 500 child-bearing women to each doctor. Let us further remember that the number of doctors qualified each year is not following the principle of demand and supply, but is increasing beyond all practical limits, and at a time, too, when the death-rate and sick-rate are decreasing, and when the birth-rate is lessening. (In 1888 the birth-rate was lower than any year since 1837). Lastly, this statement shows that there are almost too many doctors, and that there is no need to flood the country with another body of medical practitioners.

Again, in 1886 there was one doctor to every 2,199 acres in this country—a very fair average when we consider the number of unqualified assistants already at work.

I wish to point out further that the number of births does not warrant us in creating this new grade of practitioners. In 1888 there were 879,868 births, or about 51.7 births to each doctor. Of course I do not include the number of abortions or the number of practitioners who do not practise obstetrics, but these are more than neutralised by the number of charity cases.

I would appeal against the wild and misleading language used by those who pose as the protectors from "the deathful work of ignorant midwives." If these are men who wish to put down "deathful" work, let them improve the education of medical students; put a stop to unqualified assistants; in fact, let us put our own house in order. The statement has been made that the death-rate among women attended by skilled midwives is one in 600, while the average loss of life in childbed is 3 in 600. "Who is responsible for this," asks the Bill promoter. Answer: "The ignorant midwife." I would rather say—unqualified practitioners. I would, however, suggest that the above figures are unreliable. First, what is the puerperal period—five, seven, ten, or thirty-one days? Again, is the midwife called in to treat a puerperal fever case, and does she certify to cause of death? The 1888 Report of the Registrar-General states that there were 4,160 deaths directly ascribed to parturition, 2,386 being due to puerperal fever. That is, there were 4.73 deaths every 1,000 registered births. If anyone will look at Table 23 of that report it will be found that the puerperal death-rate varies in the different counties. Thus Huntingdonshire has 1.42 deaths to 1,000 births; Cornwall, 6.04; Derbyshire, 6.06; Cheshire, 5.98; Lancashire, 5.80; and North Wales, 7.49. What are the conditions of puerperal women in those different counties which causes this difference in death-rate it is difficult to state. The death-rate would appear to be highest when the wages paid is highest. In Huntingdonshire there is 1 doctor to 2,288 persons; Cornwall, 1 to 1,733; Derbyshire, 1 to 3,075; Cheshire, 1 to 2,184; Lancashire, 1 to 2,473; Flintshire, 1 to 3,326; Denbighshire, 1 to 1,867; Carnarvonshire, 1 to 1,851; Montgomeryshire, 1 to 1,847; Anglesea, 1 to 1,844. Therefore no conclusions can be drawn from these figures, except that the death-rate is not due to the want of medical practitioners. If I were asked to suggest a cause for the increased mortality in these counties I would say that it was due to the wide employment of unqualified assistants, and to the fact that the women have to leave their bed at too early a date. The first point might readily be decided by the Statistical Committee of the General Council.

How many midwives are required? It has been suggested that there should be 1 midwife to every 2,000 persons. Therefore the promoters of this scheme of a new class of practitioners would require 24,333 registered midwives, not counting their pupils or assistants. Yet the men who propose this say "the profession is overstocked."

It has been advanced as an argument that because some women practise as midwives a law must be made so that these can be registered. (This power is actually provided for in the Bill.) Now, to be practical and consistent, we should next try our hand at legislating for quacks, prescribing chemists, and other unqualified practitioners, and draw up a Bill after the following: "It having come to the knowledge of certain devout and well-meaning of Her Majesty's subjects that certain persons, namely, quacks, unqualified practitioners, and prescribing chemists are practising the art of medicine, it is considered advisable that such persons, on presenting a certificate of moral character—a form which none of the above will have the slightest difficulty in obtaining—showing that they have administered medicines to certain persons, should be put on the register, and should have the power of claiming fees in court of law for any obstetric operation." A signboard should be hung out with the notice: "Midwives qualified here while you wait; fee, 4s." One of the questions asked might be: "If it takes four years to make a clerk or skilled workman, how long will it take to produce a midwife?" Answer: "Three months, and a certificate of morality up to date. The latter can be obtained inside."

I should like to know, Is the puerperal death-rate less in those countries where they have midwives than that which exists in England? Let the promoters of this Bill answer. Just at the very time when the Medical Council is considering the advisability of extending the curriculum of medical study to five years here are a few—evidently not in touch with the state of affairs—trying to flood the country with a class of practitioners who are not able to diagnose all those conditions requiring skilled medical aid. Surely such is a retrograde proposal, and will introduce a downward and debasing competition, and foil the beneficial efforts of the General Medical Council. I have been told by a German doctor that great friction and antagonism exists in that country between doctors and midwives. If so, and if such an Act were introduced here, is it likely that midwives would send for doctors, and so point out to the patients their inferiority? In the past there has, in England, been reference made to he-practisers, men-midwives; and the want of virtue and delicacy in those who engage doctors. Surely we do not wish to rekindle this feeling. The present Midwives' Institute of London is the representative of the proposed "College of Midwives" in James the Second's time, in 1687. The latter had, and the present has, a fixed idea that the present practitioner must be ousted from midwifery work. I ask anyone to read the list of patrons and directors of the Midwives' Institute. If women wish to practise midwifery let them undergo the same course of training as medical men: and if this Bill is perfect, then I insist that men must be given the same privileges to practise as women. The effort made now by a few to introduce the Continental methods into our system of education is likely to be carried too far. France, Prussia, and Russia have their midwives, but some of these have to take out a three years' course, and many of them are qualified to vaccinate. But will any thoughtful man say that the conditions of life in Russia are the same as in England? By all means let us improve our system of medical education, but let us cease looking back to the days of Dr. Peter Chamberlen, of 1616, to get arguments in favour of the Midwives Bill. Let us go so far as to have a coroner's inquest on every woman who dies within a period of thirty days after her confinement. Let each doctor have a printed slip of directions for his nurses and for his midwifery patients; and let us have properly trained and registered monthly nurses, but don't let us be betrayed into pushing on the people—whether they like it or not—24,333 midwives, for of all the unnecessary proposals made by legislators or politicians during the last few years this is the most unnecessary, and the one which has been least asked for.

Prince Bismarck and Mr. Gladstone on the Effects of Modern Education.

Two great authorities on social matters have lately expressed their personal opinion on the results of modern education as to its effects upon the well-being of the population. Prince Bismarck thinks that higher education for the lower classes has been too widely spread, and in a recent conversation is reported to have said: "Over-education in Germany leads to much disappointment and dissatisfaction; in Russia, to disaffection and conspiracy. Ten times as many young people are educated there for the higher walks of life as there are places to give them, or opportunities for them, in the liberal professions, to earn a decent living, far less wealth and distinction. Perhaps it is not quite the right kind of learning, too. What good does it do them? When they have gone through it, in nine cases out of ten, there is nothing for them to do, and their learning is worse than a superfluity to them, for it makes them discontented—nay, miserable."

Mr. Gladstone takes a different view, but believes that classical education should only be given to those likely to profit by it in after life. He is strongly desirous to promote physical and corporal education generally, and attaches much value to the training of the eye and the hand; for this purpose he urges that some branch of natural history should have a higher place in the modern theories of education than it has yet obtained. In these days, when many medical men see reason to believe that education in too many cases exhausts and injures the nervous system, in place of developing and strengthening it, it is interesting to know the opinion of great statesmen of experience. The question is a very serious one, and demands inquiry as to the effects of our educational system upon the brains of the young.

Practice in British Columbia.

Dr. M. D. Brydone-Jack (Vancouver, British Columbia) writes: As the season for graduation at the different colleges and universities is approaching, and graduates will be looking round for good locations, I have thought that it might be advisable to give your readers an idea of what British Columbia—which, perhaps deservedly, on account of its climate and natural advantages, is being brought before the public—will offer in the way of attraction to the medical profession.

Every person who desires to practise in British Columbia, no matter what their degrees are—whether university or college, English, Scotch, or American—is compelled to pass an examination in all medical and surgical subjects, comprising chemistry, physiology, anatomy, materia medica, and all the other usual subjects, and for this examination a fee of one hundred dollars is charged.

Then the present proportion of medical men to the population is about 1 to every 400 or 500, and as the class of immigrants is a remarkably healthy one, and as British Columbia itself is one of the finest and healthiest localities in the world to live in, it follows that the proportion of sickness is very small. In Vancouver, the largest and most typical city in British Columbia—with, perhaps, the exception at present of Victoria—the death-rate is 9.2 per 1,000; and what will contribute to make it still more healthy now is the fact that they are putting in an efficient system of sewerage, and they have already what is probably one of the best water supplies in the world.

People need not be deterred from coming here by the fear of not having efficient medical or surgical attendance, as there are here in Vancouver already eight or nine practitioners, graduates of leading English and Scotch universities and colleges, while perhaps in the province there are altogether between thirty and forty; then, in addition to this number, we must reckon in numerous graduates of Canadian and United States colleges and universities who are practising here; and I may further add that the class of practitioners is as a rule exceptionally good. I might, perhaps, say that the proportion of medical men to the population is more than what is stated above, as while writing I have heard of three more who are about to settle in Vancouver.

While heartily endorsing everything favourable that can be said about British Columbia—its climate, natural resources, mining capabilities, farming, lands, etc.—it must be remembered that no one ought to come to a new country without being furnished with ample resources to assist in first developing that country; then, and then only, may he expect to reap an ample harvest in return for his money.

It may, perhaps, interest your readers to know that the average annual rainfall mean is 58.49, and that the average temperature mean is 47.9°; it very rarely goes below 34°, and very rarely above 70°. We have in the district numerous hot springs, which are available for the treatment of various diseases, and the hotel accommodation is all that anyone can desire.

If any of your readers would like any further information about the province and its prospects I shall be pleased to let them have it.

COMMUNICATIONS, LETTERS, etc., have been received from:

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THE CROONIAN LECTURES ON CEREBRAL LOCALISATION.

Delivered before the Royal College of Physicians of London.

By DAVID FERRIER, M.D., LL.D., F.R.S.,

hysician to King's College Hospital, and to the National Hospital for the Paralysed and the Epileptic, Queen Square.

Lecture IV.—The Auditory Centre.

R. President and Gentlemen,—Among the reactions consequent upon electrical stimulation of the cortex there is one, or ther an assemblage of reactions, which might almost be considered of itself indicative of the existence of subjective auditory nsation—a reaction which guided me in my first attempts to delie the auditory sphere by the destructive method. The reaction question is that which occurs on irritation of the superior temral convolution and its homologues in the lower vertebrates: mely, quick retraction or pricking of the opposite ear, associed frequently with opening of the eyes, dilatation of the pupils, d turning of the head and eyes to the opposite side. These are st the phenomena which occur when a shrill sound is suddenly ade in a monkey's ear, as I have found by actual experiment. e reaction, however, varies somewhat in its completeness. ter the first surprise is over, the repetition of the experiment ways induces the pricking or retraction of the ear, but generally ls to induce the other parts of the reaction, namely, the intense ok of surprise, and direction of the head and eyes to the supsed source of the sound. The results are still more characteric on stimulation of the homologous region (Fig. 14) in those imals whose habits are such as to make their safety largely dendent on the acuteness of their hearing. The region in question the posterior division of the third external or supra-Sylvian conlution. The reaction common to all these is pricking of the opsite ear, but the other factors vary in intensity. In the loped rabbit, irritation of this region causes sudden elevation of ear, as well as retraction and exposure of the mouth of the ricle towards the referred region of the sound. Occasionally animal makes a sudden start and movement, as if to bound the table. In the wild jackal, also, I observed on one or two casions that the application of the electrodes to this region used the animal to make a sudden spring or bound forward, cking up both ears as if suddenly startled. If the movements the eyeball on stimulation of the occipito-angular region are be regarded as signs of arousal of subjective visual sensation, have, I think, in the reactions under consideration, still more aracteristic indications of the arousal of subjective auditory sation. The determination, however, of affections of hearing ot so easy as that of sight in the lower animals. It is difficult discriminate between mere reflex starting to sounds, and hear- proper. Nor is it easy to avoid mere coincidences, or to enly avoid attracting the animal's attention by other channels of ception, such as sight, or smell, or sense of proximity condited by vibration, warmth, agitation of the air, and such like. animal's present behaviour should be compared with its past, with that of normal animals under conditions of variation of nd, all other things remaining the same. And even when all se precautions are taken, it is extremely difficult to avoid every rce of fallacy. Hence it may happen, as it has actually haped, that different observers may arrive at different conclusions, animals may be taken to be deaf which are not in reality simply because they do not respond to the test employed, or *versâ*.

n one of my earlier experiments, in which the upper two-thirds he superior temporal convolution were destroyed on both sides, following note was made as to the condition of the monkey day after the operation.[1] "Sight was good and tactile sensa- unimpaired. Various experiments were made to ascertain existence or not of hearing, but it was not easy to devise a , as the animal was continually on the alert, and it was not to make a sound without in any way attracting its attention ight. The following method was tried: while the animal sitting quietly by the fire I retired to the other room, and, le watching through the chink of the half-shut door, called loudly, whistled, knocked on the door, tinkled glass, etc., without ever causing it to look around or give any sign of having heard. I then cautiously approached the animal, and not till it saw me did it give any sign of consciousness of my presence. When the same experiment was repeated while the monkey and its companion were quietly seated at the fire enjoying the heat, it gave no sign of hearing, while its companion started with alarm, and came with curiosity to ascertain the cause of the sound. Ten hours afterwards, in the presence of Dr. Burdon Sanderson, I repeated the various tests with the view of eliciting signs of hearing. To all it remained without response. It seemed unconscious of my presence when speaking close to its ear, and only started when it caught sight of me."

I recorded also four other experiments,[2] in which, along with destruction of other portions of the temporal lobe, the superior temporal convolution was invaded, unilaterally or bilaterally. In two of the cases (XI and XII), in which the temporal lobe was destroyed only on one side, there was impairment or total abolition of reaction to sound when the ear on the same side was plugged; and in the two other cases, in which the destruction was bilateral, no signs of hearing could be elicited during the short period which the animals were allowed to survive, though, in other respects, they were fully on the alert. In these experiments, however, the time that elapsed between the infliction of the lesion and the death of the animals was not sufficient to establish any very reliable data as to the permanency of the impairment of the sense of hearing, which was undoubtedly, however, affected in all for the time being. In my subsequent investigations, in conjunction with Professor Yeo, however, it was established in the first place by an extensive series of experiments on the temporal lobe[3] that no signs of impairment of hearing could be detected when every part of the temporal lobe was destroyed, except the superior temporal convolution. What appeared to us, and most of those who saw it, conclusive evidence of the relation of the superior temporal convolution to the sense of hearing, was the behaviour of a monkey in which both superior convolutions were actually or potentially destroyed by means of the cautery. Where the cortex was not absolutely removed, the grey matter was undermined, and the medullary fibres destroyed by the action of the radiant heat.

This monkey was exhibited before the assembled physiologists at the International Medical Congress in London in August, 1881, and was admitted by all to be deaf, so far at least as that could be determined by comparing its behaviour with that of a normal animal, to the explosion of a percussion cap in the room.

As questions were raised in regard to the actual condition of this animal before and after the operation by the experiments of Professor Schäfer, to which I am about to allude, I have published a full account of my notes and observations on this animal.[4] Briefly, these were as follows: in all other respects, except as to hearing, it was in a perfectly normal condition. During the first four days after the operation, no signs of hearing could be elicited by any sounds made in its vicinity, and which invariably attracted the attention of normal monkeys. While the other animals were observed eagerly listening to approaching footsteps, this animal made no sign of attention until the person came within range of vision. It was observed also that, at first at least, the ears of the animal did not twitch as they do in monkeys which undoubtedly possess the sense of hearing, but it was doubtful whether the absence of reaction in the ears continued during the whole time that the animal survived. Almost daily examination was made during the thirteen months that it was allowed to live. To sounds of various kinds, such as calling by name, to which it used always to respond, tapping, whistling, ringing of bells, shuffling of feet on the floor (a sound which normal monkeys are particularly quick to notice), this animal paid no attention. Occasionally, however, it seemed to start coincidently with loud sounds made in its vicinity, so that doubts were constantly being raised as to whether it was absolutely deaf or no. These reactions were considered to be probably mere coincidences, for in general it did not even start when a percussion cap was exploded near it. Six weeks after the operation, while the animal was disporting itself before the assembled physiologists at the Medical Congress, it paid no heed to the explosion of a percussion cap, while another monkey, exhibited at the same time, started visibly, as, in fact, did the whole audience. From this time onward the tests were

[1] Experiment XV, *Phil. Trans.*, vol. 265, Part II, 1875.

[2] Experiments XI, XII, XIII, XIV, *op. cit.*, p. 462.

[3] *Philosophical Transactions*, Part II, 1884.

[4] *Brain*, April, 1888, p. 13.

constantly repeated and varied in every conceivable manner, but the results were essentially the same, and the conclusion seemed to be justified that the animal was essentially deaf, and that the occasional start which it made to loud sounds was either coincidence or merely of the character of the reflex start, which may occur in animals after removal even of the whole cerebral hemispheres.

Schäfer, in his earlier experiments, in conjunction with Horsley, did not arrive at any very definite conclusions with regard to the sense of hearing, though in one of their experiments[5] in which they had removed the right temporo-sphenoidal lobe, the animal did not seem to hear slight sounds when the ear on the same side as the lesion was stopped. But, working with Sanger-Brown, he succeeded in removing all doubts which he might have entertained on the question, and in convincing himself that hearing was not in the slightest degree affected after complete removal, not only of the superior temporal gyri but of the whole temporal lobe itself on both sides. He thus describes the result of their experiments[6]:—

"In six monkeys we have more or less completely destroyed the superior temporal gyrus upon both sides. I say more or less completely because in one or two a small shred of grey matter belonging to this convolution was found *post mortem*, but practically the lesion was complete in all six, some of the grey matter within the fissures bounding the gyrus being all that could be taken to represent the convolution, and even this being deprived of its medullary centre. But in order to make assurance doubly sure we, in one monkey, a large female Rhœsus, separated up the fissures bounding the gyrus and scooped it out entirely from the very bottom of the fissures, so that not a trace of the convolution in question should remain. In all six cases the result was the same. Hearing was not only not permanently abolished: it was not perceptibly affected. The animals, even immediately after recovery from the anæsthetic, reacted to slight sounds of an unusual character such as smacking of the lips or the rustle of a crumpled newspaper. Some of them were under observation for several months, and there never was any doubt in our minds as to the full possession of their auditory faculties. Nor could the reactions they exhibited to sounds be explained by supposing that they only responded in a reflex manner, for they gave every evidence of understanding the nature of different sounds, such as that caused by turning a door-handle or the differences between the footsteps of different people, varying emotion being exhibited according to the anticipations (of food, etc.) which the sounds called forth."

Two of these animals, in which the destruction of the superior temporal convolution seems to have been most complete, were examined by several members of the Neurological Society. Two, who, however, did not record the tests they employed, were of opinion that the animal heard; while another thought on one occasion that one of the animals could hear, at another time that it seemed deaf on the left side, and, on still another occasion, that it did not seem to react to sound so readily and completely as a normal animal.[7]

As illustrating the difficulty of arriving at definite conclusions on this matter, one member of the Society thought that a perfectly normal monkey was quite deaf, and another that an animal in which both superior temporal gyri had been removed was also deaf. Schäfer[8] believes that I also was satisfied as to the existence of auditory perception in his animals. Such examination as I made of them did not, I think, furnish any unequivocal evidence on the point. An unaccountable discrepancy between Schäfer's results and Yeo's and mine thus appeared to exist. If in his animals hearing was not perceptibly affected by the double lesion, this certainly was not the case in ours; for there was no question as to the profound difference between it and a normal monkey, and the only doubt was whether it had any real sense of hearing at all.

In order, if possible, to clear this matter up I have lately reinvestigated the question. In one monkey I removed, first, the whole of the convex aspect of the left temporal lobe, including the superior temporal gyrus. The animal speedily recovered from the unilateral operation, and, for the first few days, though undoubtedly it heard, it seemed to hear less distinctly towards the right than towards the left. A fortnight afterwards a similar operation was performed on the right side, but though the animal lived five days it remained in a state of great apathy. It took no notice of what was going on around it, and was altogether indifferent to the loudest sounds made in its vicinity. The experiment, therefore, on account of the short period of survival, was not quite a satisfactory one. Another monkey in which I performed the operation of bilateral extirpation of the superior temporal gyrus, with an interval of one month between the two operations, was specially well adapted for experimentation in regard to the sense of hearing. It was a remarkably tame dog-faced monkey, and its character and modes of behaviour under different circumstances were made the subject of careful study before it was operated upon. It was a noisy, talking monkey. It invariably responded when called to by name, and came immediately when called. It imitated smacking of the lips and other sounds of endearment. It always shouted vigorously and loudly when anyone approached or opened the door leading down to the laboratory in which it was kept. The rustling of a paper bag, from which it was accustomed to receive sweetmeats and nuts, was the signal for vociferous cries; as also any movement

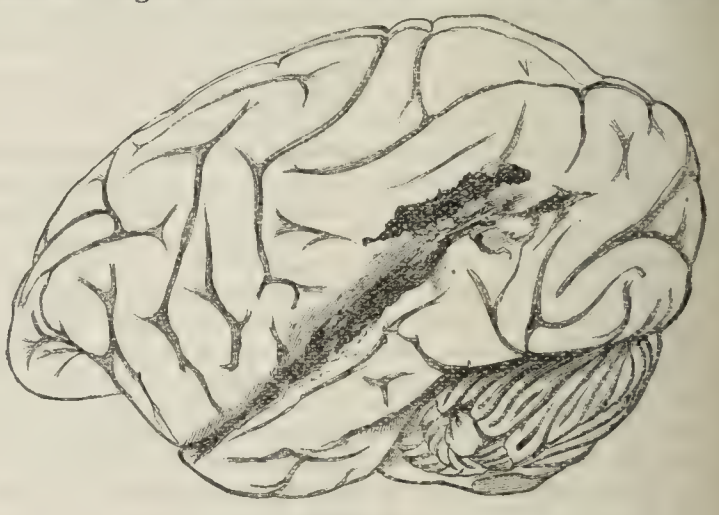


Fig. 16.

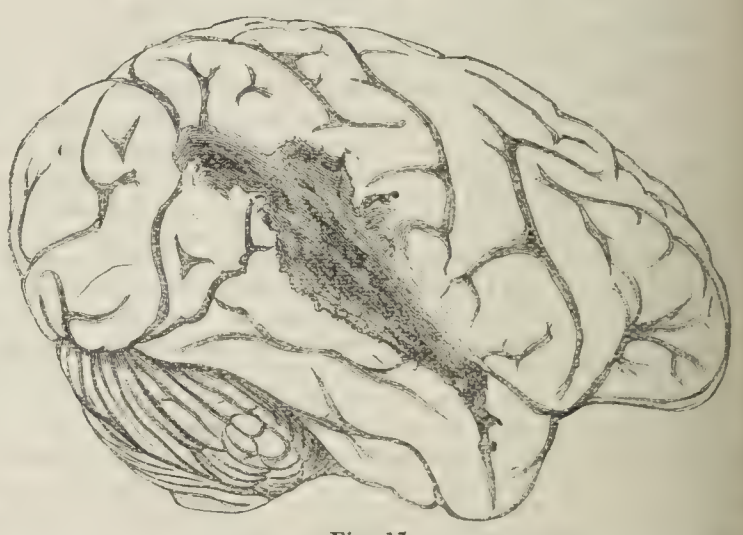


Fig. 17.

of the handle of a drawer in which apples and fruits were kept. It had an insatiable appetite, and was always clamouring for food, of which it never seemed to have enough. It had also an insatiable thirst, and the sound of plashing of water, made by turning on the water-tap, caused it to shriek to be let out and put its mouth under the tap. Not a sound could be made in its vicinity, or a movement of its companion monkeys in the other cages, without exciting its active attention. It was full of fun and mischief, and in every respect an animal unusually adapted for determination of any alterations that might occur in respect of its auditory or other facilities. The left temporal superior convolution was scooped out on October 8th. (As will be seen in the photograph) a small portion also of the middle temporal gyrus was destroyed, (Fig. 16).

The next day, owing to the occurrence, as afterwards proved, of some recurrent hæmorrhage and tension in the wound, there were one or two slight epileptic seizures affecting the right side. These, however, ceased entirely when the wound was redressed, and the animal was speedily quite bright and active.

On the second day it turned its head to the dangling of keys close to its left ear, but it did not do so, or very doubtfully, to the

[5] Experiment XXX, *Phil. Trans.*, 1880.
[6] *Brain*, Vol. 10, p. 373.
[7] See *Brain*, July, 1889, p. 164.
[8] *Phil. Trans.*, 1888, B. 30, p. 325.

same test applied to the right. Next day, and from that time onwards, it appeared, as regards its hearing, in every respect as it had been before the operation. It was noted, however, that it had become completely hemiopic to the right—a condition which lasted more or less completely until its death five months subsequently. This hemiopia proved after death to be due, in all probability, to the recurrent hæmorrhage which occurred on the day after the operation, ploughing up the optic radiations in the occipito-angular region.

On November 5th, the superior temporal gyrus of the right side was similarly exposed and scooped out. This time the lower extremity of the gyrus almost entirely escaped (Fig. 17). On the following day the animal made no response to any sounds made in its vicinity, nor when the door leading to the laboratory was slammed, nor to the noise of footsteps on the stairs which formerly used to excite lively demonstrations.

On the third day, though otherwise alert and bright, it made no reaction to sounds of any kind, did not reply to calls, did not notice the noise of footsteps on the stairs, exhibited no sign of perception when the water-tap was turned on, though it was evidently intensely thirsty, as it drank eagerly when water was presented to it; paid no attention to the cries of two animals which were placed in the adjoining cage, and, in general, responded to none of the tests of hearing which formerly aroused its active interest.

On the seventh day the condition was essentially the same. It paid no heed when called to, or when the door leading to the laboratory was slammed. The rattling of the drawer in which the food was kept or the rustling of the paper bag containing the sweetmeats were altogether unnoticed; the plashing of water was unheeded; and it went on quietly with its occupation, eating or searching for food on the floor of its cage, while various sounds, such as springing a rattle, loud barking, whistling, etc., were being made, which startled the other animals in adjoining cages. On the tenth day the condition was essentially the same. There was no reaction to calls, shuffling of feet, etc., which caused other two normal monkeys in the adjoining cage to peer curiously. On this day a test was employed to which it formerly invariably responded. It was late in the evening. I put out the light in the laboratory and ascended the stairs and shut the door. Several times I opened the door and called the animal by name. One of the other monkeys called back in reply, but no response was made by this animal. On former occasions this was the signal for a shrill and loud outcries. On the following day the same tests were repeated, and with the same results. It was very fond of the laboratory attendant, and would invariably go to him if he called it. On this day, while it was on the table and watching my movements, the laboratory attendant came down the stairs and, standing behind it, called it repeatedly. The animal paid no attention whatever, and never once turned its head in his direction.

On November 20th (fifteen days after the operation) the following notes were made:—

"The animal well and active, occasionally uttering grunts of satisfaction while sitting quietly by the fire. It also cries loudly when it wants food, but it never responds when called to; pays no attention to the familiar sounds, such as opening the drawer containing the apples or turning on the water tap, which formerly excited in it lively demonstrations. To-day a box containing a whistle, capable of being blown by a long india-rubber tube in such a manner as to avoid attracting the animal's sight, was placed in its cage and the whistle repeatedly blown, but it was absolutely unmoved. The same experiment with three other monkeys caused signs of alarm and perturbation."

About this time the question began to be raised whether the animal did not seem to be aware, by a sense of vibration or otherwise, of the approach of footsteps descending the spiral staircase leading into the laboratory. It was quite certain, however, that while it was being watched, and its attention thus occupied, it seemed quite unconscious of any sound made to divert it. On November 30th, that is, three weeks after the operation, these observations were confirmed after careful study by myself and assistant for several hours. But when all was still it seemed to be aware, as evidenced by its cries, of the proximity of anyone walking on the floor overhead, or opening the door leading down into the laboratory. This was noticed more particularly in the early morning, when this and the other monkeys were eagerly looking towards the stairs expecting their breakfast. Repeated observations during the course of the following week succeeded in clearing up the apparent irregularities in its reactions. It became evident that when the animal was left to itself it was aware of being called to, or of the sound of opening or slamming the door leading to the place in which it was kept, but when anyone was present in the laboratory, and the animal occupied in observing him, it showed no signs of hearing, and did not look round like the other monkeys when called to or when sounds of various kinds were made. If I waited in the laboratory within the range of the animal's vision, and my assistant went to the top of the stairs and called, it paid no heed whatever to anything he might do to attract its attention. Though it occasionally started when a percussion cap was exploded in its vicinity, it did not do so or look around if it happened to be engaged on anything else at the moment; whereas other monkeys would invariably start and look around towards the cause of the sound, and this condition remained practically unchanged until the death of the animal. In the direction of the laboratory door alone, towards which it was almost constantly looking, with expectation, did it seem able to refer sounds, but otherwise, especially when its attention was diverted in any way, it seemed entirely unaware of their origin, and did not turn its head in their direction. It either did not hear or wholly disregarded such sounds as scratching, tapping, rattling of keys, and so forth, which caused the other animals to peer eagerly through the bars of their cages. The plashing of water, rustling of paper, opening of the drawer from which it was accustomed to receive choice morsels never excited any notice, and caused none of the lively signs of interest which formerly were so characteristic. I did not observe in this animal, at least during the latter periods of observation, that absence of the twitching of the ears which I had noted in a previous experiment.

The condition of this animal may, therefore, be stated briefly as follows. At first it failed absolutely to respond to any of the tests which formerly excited active reaction, and which invariably attracted the attention of normal monkeys. To the last, with the single exception perhaps of the door of the laboratory from which it was always expecting something, it never realised the origin of sounds; it was altogether indifferent to sounds which formerly were full of significance to it, and all that could be said was that it was not, when otherwise occupied, insensible to sonorous vibrations. And it would have been difficult to make this out with any degree of certainty, had it not been that the animal was one qualified to give oral testimony of the fact. Whether this form of auditory sensibility is to be attributed to portions of the cortical auditory centres undestroyed by the lesions described, or to subcortical or mesencephalic centres, I am not yet in a position to decide. I have not yet been able successfully to carry out observations on animals in which the temporal lobes have been destroyed on both sides; but if, as Schäfer's experiments seem to indicate, the whole of the temporal lobes, like the other cerebral lobes, may be removed without entirely abolishing reaction to sounds, we should have reason for believing, with Longet, Goltz, etc., that in monkeys, as well as lower mammals, a crude and simple form of auditory sensation is still possible through the agency of the lower centres.

Munk, from his experiments on dogs, states that destructive lesion of the point B (Fig. 14), situated towards the lower extremity of the supra-Sylvian and adjacent extremity of the second external convolution, causes a condition as regards hearing similar to that resulting from destruction of A (Fig. 14) in the sphere of vision; a condition which he terms "psychical deafness" (*Seelentaubheit*). The dog seems to hear, but is unable to interpret the sound that it hears. This condition, however, lasts only for a few weeks at most. The animal again learns the meaning of sounds, and becomes restored to its normal state. In this region are stored up, according to him, the auditory pictures, similar to the visual pictures in the region A (Fig. 14). Frequently, however, before the secondary disturbances created by the primary lesion have subsided, the animal appears to be totally deaf, so that it exhibits no reaction to any kind of sound, however loud. Occasionally when the whole of the cortex of both temporal lobes had been destroyed, he has observed persistent "cortical deafness" (*Rindentaubheit*), as he terms it, but as none of the animals on which he has performed this operation seem to have lived beyond a few days, his experiments do not afford data for the determination of the duration of this complete deafness. He, however, assumes that the auditory area of the cortex embraces a much larger extent than B, and includes, according to his figures, the whole of the posterior half of the third, and also of the posterior or lower divisions of the first and second external convolu-

tions. With respect to the auditory sphere in the brain of the monkey, he assumes—for he does not appear to have performed any experiments bearing on this point—that it is situated at the lower extremity of the middle temporal gyrus (B., Fig. 18) a region which I have completely extirpated without causing the slightest affection of auditory sensation. And he considers that the upper portion of the superior or temporal gyrus (G, Fig. 18) is the sensory sphere of the ear; of this I can obtain no evidence, for neither after unilateral nor bilateral extirpation of this region have I been able to verify any affection of the sensibility of the auricle.

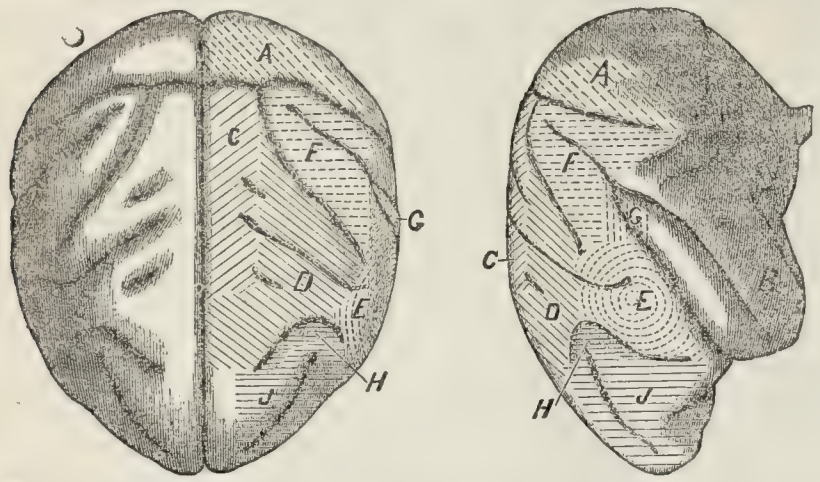


Fig. 18.—Cortical centres of the monkey, according to Munk. A, Visual area; C to J, tactile sensory areas (*Fühlsphaere*) of Munk's psychomotor areas of other authors; D, fore-limb region; C, hind-limb region; E, head region; F, eye region; G, ear region; H, neck region; J, trunk region. B is placed upon that portion of the cortex which, from experiments on dogs, is assumed to be the auditory area.

Luciani and Tamburini[9] found that unilateral destruction of the upper and posterior part of the third external convolution in dogs caused deafness in both ears, but to a greater extent in the ear of the opposite side. The difference in auditory sensibility on the two sides greatly diminishes, and after a few days disappears altogether, though it cannot be asserted that perfect recovery ever takes place. After comparative equalisation of the power of hearing on the two sides, removal of the corresponding region of the other hemisphere is followed by almost total deafness, approximately equal on both sides. This bilateral deafness passes off gradually, but data do not yet exist, according to them, for determining whether perfect recovery takes place. When the destructive lesions are confined to the posterior part of the second external convolution, and do not implicate any part of the third, there does not occur the slightest impairment of hearing, which, indeed, sometimes appears to be unusually keen. These authors believe that semi-decussation of the auditory nerves exists similar to that of the optic nerves, and that both ears are represented in each cerebral hemisphere. This latter is undoubtedly the case; for unilateral extirpation never gives rise to permanent deafness of the one ear; but, though I have on many occasions, after extirpation of the auditory area in one hemisphere, observed loss or impairment of hearing in the opposite ear, I have never been able to detect the slightest impairment of hearing on the ear of the same side. Luciani[10] states: "The effects of extirpations in the province of the parietal lobe confirm what was recognised by Ferrier, and afterwards by Tamburini and myself, that the bend of the third external convolution certainly makes part of the auditory sphere in the dog, but demonstrate also that this sphere irradiates from its central point in the temporal lobe, upwards towards the parietal region, forwards towards the frontal, backwards toward the hippocampal, inward towards the cornu ammonis." He thus includes in his auditory sphere a large portion of the cortex which is concerned with other functions. In reference, however, to this and other sensory centres, Luciani appears to contend for a form of localisation which is no localisation at all, as every centre seems to perform to some extent the functions of every other centre; results which I regard as absolutely opposed by the facts of strictly localised lesions.

It will be observed, in reference to the position of the auditory area in the dog, that it does not occupy the same relation to the fissure of Sylvius that the superior temporal gyrus does in the monkey, but is separated from it by the posterior limb of the Sylvian convolution. It has been assumed by Meynert that the posterior division of the Sylvian convolution is the homologue of the superior temporo-sphenoidal gyrus.[11] I, however, have ventured to suggest that the resemblance between the posterior division of the Sylvian convolution and the superior temporal gyrus is only superficial, and is conditioned by the shallowness of the fissure of Sylvius. The investigations of Sir William Turner[12] have led him to the conclusion that the Sylvian convolution in the dog is in reality the homologue of the island of Reil, visible on the surface owing to the shallowness of the Sylvian fissure. In this case the posterior division of the supra-Sylvian convolution would correspond accurately with that of the superior temporal gyrus.

The occurrence of deafness from cerebral disease in man is unusual, owing to the extreme rarity of bilateral lesions affecting simultaneously both superior temporal gyri. There are, however, on record two important cases in which this double lesion occurred.



Fig. 19.

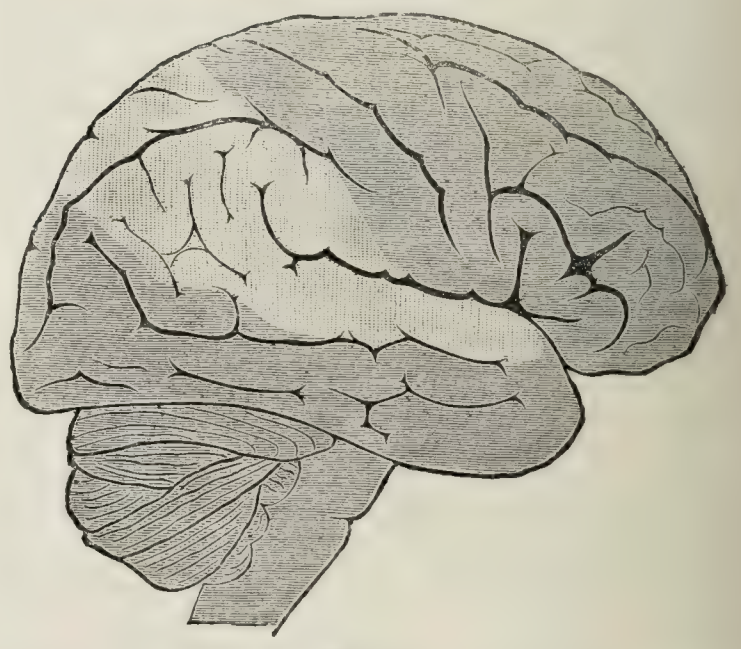


Fig. 20.

Shaw[13] has recorded the case of a woman, aged 34, who, two months before her admission into his asylum, lost power in the right arm, and soon after had a sudden apoplectic seizure, resulting in loss of speech and deafness. The loss of power in the right hand speedily passed off. She became excited, incoherent, and subject to delusions. On admission, she was found, after repeated testing, to be perfectly deaf and blind. Tactile sensibility and smell were unimpaired. She had occasional fits, and ultimately died of pneumonia a year after her admission.

[9] *Sui Centri Psico-Sensori Corticali*, 1879.
On the Sensorial Localisations in the Cortex Cerebri, *Brain*, 1885, p. 151.

[11] Die Windungen der convexen Oberfläche des Vorder-Hirns, *Archiv f. Psychiatrie*, Bd. vii, 1877.

[12] Report on the Seals, *Challenger* Expedition, Part LXVIII, p. 124.

[13] *Archives of Medicine*, February, 1882.

Post-mortem examination showed complete atrophy of the angular gyri and superior temporo-sphenoidal convolutions of both hemispheres. (See Figs. 19 and 20). The grey matter of the atrophied regions had entirely disappeared, leaving the outer layer attached to the pia mater, with a cavity underneath formed at the expense of the grey matter. The other cranial nerves were normal in appearance, but the optic nerves showed increase of the connective tissue septa, atrophy of the nerve fibres, and spaces filled with a colloid-like material. Whether the blindness was due to the lesion of the angular gyri alone or to degenerative changes in the optic nerves is a question, but the sudden onset of deafness in this case, coincidently with symptoms of cerebral lesion and the condition of the brain *post mortem*, point to the destruction of the superior temporal convolutions as its cause. A similar case has been reported by Wernicke and Friedländer:[14] "A woman, aged 53, who had never suffered from deafness or affection of vision,

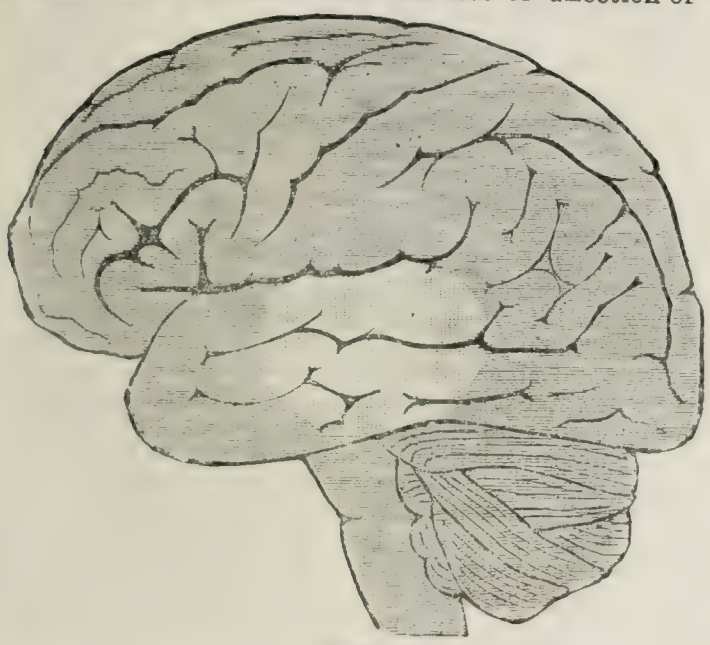


Fig. 21.

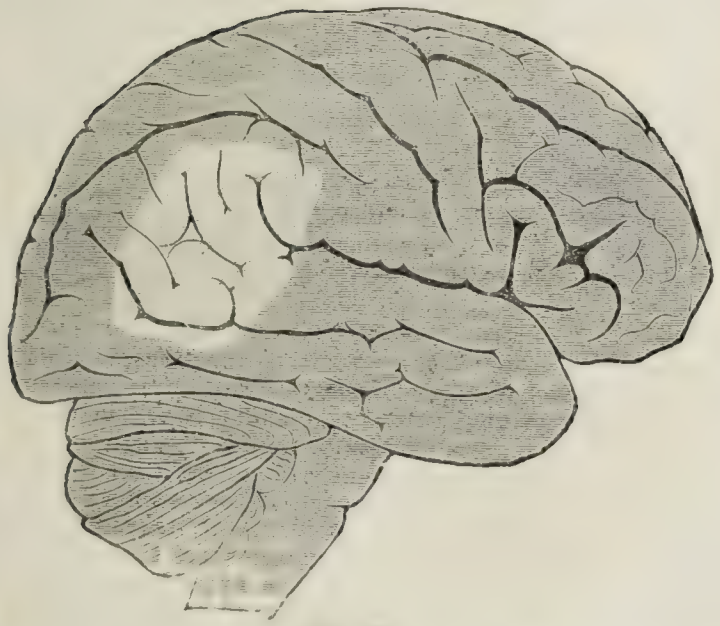


Fig. 22.

was attacked on June 22nd, 1880, with right hemiplegia and hemiasia. She remained in the hospital until August 4th, when she was discharged. At this time the patient could speak, but she spoke unintelligibly, and was sometimes believed to be intoxicated. She not only could not make herself understood, but she could not understand what was said to her. She was received into the hospital again on September 10th, with slight paresis of the right arm. The right hemiplegia had entirely disappeared. The patient was looked upon as insane. She was absolutely deaf, so that she could not be communicated with. She died of an attack of hæmatemesis on October 21st. An extensive lesion was found in each temporal lobe, invading the superior temporal convolution on both sides. (See Figs. 21 and 22). The rest of the brain exhibited no abnormality, nor were there any conditions leading to increase of the intracranial pressure or secondary affection of the cranial nerves.

It was proved that the patient had previously enjoyed excellent hearing. Her total deafness occurred suddenly in connection with the other indications of cerebral disease. In order to exclude possible local affection of the ears these organs were submitted to examination by Professor Lucae. The result of this examination was practically entirely negative, only a slight dry catarrh being found, and nothing locally to account for deafness. These authors conclude "that the auditory nerves ultimately end in the temporal lobe, and that double or bilateral lesion in these lobes causes complete deafness. It may therefore be stated with all certainty that the temporal lobes are the cerebral centres of hearing."

Though the lesions were not confined to the superior temporal gyri, yet these were involved both as to the grey matter and medullary fibres. The case, therefore, confirms, if it does not of itself suffice to indicate, the position I have assigned to the auditory centre in these gyri.

The affections of hearing with which we are most familiar in connection with cerebral disease are the various forms of what is termed "word-deafness"—a condition in which auditory ideation is impaired more particularly as regards the association of articulate sounds with acts of articulation and things signified. The word-deaf is not devoid of auditory sensation, for he can hear the ticking of a watch, and can recognise and hum an air, but articulate sounds, except, perhaps, his own name or some simple combination of words, have no meaning, and cannot be repeated. Word-deafness has been found associated with affection of the superior temporal gyrus in the left hemisphere. Seppili[15] finds that of seventeen cases in which a *post-mortem* examination was made in every one there was lesion of the superior temporo-sphenoidal convolution, and twelve in which also the second or middle convolution was involved.

Of twenty-five cases of word-deafness of which I have notes, collected by Dr. Ewens, ten were from lesions of the temporal lobe alone. In seven of these the first temporal gyrus was particularly affected; in the remaining three, the exact limits of the lesion were not stated. Eight were from lesions implicating the angular as well as the upper temporal gyrus; six were from lesions invading the superior temporal gyrus and adjoining portions of the occipital or parietal lobes, and one was stated to have been due to lesion of the angular gyrus alone. In this case there appears to have been both word-blindness and word-deafness. In all, therefore, except one, there was obvious lesion of the superior temporal convolution.

Further confirmation of the localisation of the auditory centre in this convolution is afforded by cases of auditory discharges or subjective auditory sensations in connection with irritative lesions implicating this gyrus. Gowers has reported two cases of this nature.[16] In the one a tumour, of which the oldest part was beneath the superior temporal convolution, caused convulsions commencing with an auditory aura referred to the opposite ear. In the other, a tumour affecting the superior temporal gyrus caused unilateral convulsions, preceded by a loud noise as of machinery. And Hughes Bennett[17] has reported several cases of auditory sensory discharges followed by temporary loss of hearing in the opposite ear, or in both. Thus a woman subject to epileptic attacks preceded by a loud noise like the ringing of a bell in the left ear, became temporarily deaf in each ear after each attack. Both ears were deficient in hearing, but the left undoubtedly the more so. The superior gyrus has also been found atrophied in cases of long-standing deafness or congenital deaf-mutism. Mills[18] records the case of a man deaf for thirty years: the brain, otherwise normal, showed extensive atrophy of both superior temporal gyri, more particularly on the left side. Broadbent[19] describes the brain of a deaf and dumb woman in which, in addition to some defect of the annectent convolutions and supramarginal lobule, there was atrophy of both superior temporal gyri more marked on the left side. The facts of human pathology, therefore, undoubtedly support the view that the sense of hearing is localised in the temporal lobe, and more especially in the superior temporal gyrus of this lobe.

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[14] *Fortschritte der Medicin*, Bd. 1, No. 6, March 15th, 1883; *Brain*, April, 1888, p. 19.

[15] *Revist. Speriment. di Freniat*, vol. x, 1884.

[16] *Diseases of the Nervous System*, vol. ii, p. 21.

[17] Sensory Cortical Discharges, *Lancet*, 1889.

[18] *University Medical Magazine*, November, 1889.

[19] *Journal of Anatomy*, 1870.

The experiments of Baginsky,[20] as well as the microscopical investigation of Flechsig and Bechterew,[21] indicate that the auditory nerve is in relation with the auditory centre of the cortex through the lower fillet of the opposite side, and thence by means of the posterior tubercle of the corpora quadrigemina and corpus geniculatum internum with the medullary fibres of the cortex. Baginsky's experiments consisted in destroying the labyrinth in rabbits, and then tracing the course of the paths of degeneration thereby caused. He found a marked disappearance of the fibres of the lower fillet in the opposite side, and some degree of atrophy also in the posterior tubercle and brachium and corpus geniculatum internum. Von Monakow also states that, after extirpation of the temporal lobe in newborn rabbits, atrophy occurs in the corresponding medullary fibres of the internal capsule and in the corpus geniculatum internum of the same side; thus furnishing confirmation of the views of Baginsky and Flechsig.

We have thus grounds for believing that the central fibres of the auditory nerves do not, as Meynert has stated, all pass through the cerebellum on their way to the cerebral hemispheres—a hypothesis which is otherwise inconsistent with the results of destruction of the cerebellum itself. Some of the fibres of the eighth nerve undoubtedly pass into the cerebellum, but these appear to be the vestibular fibres from the semicircular canals, and not the cochlear or true nerve of hearing.

Centres of Tactile Sensibility.

I will now proceed to consider the locality of the centres of common and tactile sensibility.

Many uncertainties still exist as to the paths and centres of the various forms of common sensation. It is universally admitted, since the classical experiments of Brown-Séquard, that, with the exception, perhaps, of the so-called muscular sense, the paths of all the other forms of sensibility are conveyed upwards on the opposite side of the spinal cord. But neither experimental, nor pathological, nor microscopical investigation has accurately determined in which particular part of the opposite side of the spinal cord the sensory tracts ascend to the brain. The experiments of Ludwig and Woroschiloff[22] appear to show that sensory impressions may be conveyed upwards, without any apparent disturbance of the normal relations, when the whole of the anterior and posterior columns, as well as the grey matter, has been severed; when, therefore, only the lateral columns of the cord remain intact. They found that, when only one lateral column remained, movements of the arms and anterior part of the body could be readily excited by irritation of the opposite leg behind the section, but only with difficulty by irritation of the leg on the same side. In order that impressions on the opposite leg should readily excite movements in the anterior part of the body, they found that that portion of the lateral column must remain intact which lies in the area bounded by the prolongation outwards of the anterior and posterior commissures, that is, the middle third. Ludwig and Woroschiliff were not able to differentiate the sensory from the motor tracts of the lateral columns, and concluded that both were more or less mingled together; but the facts of human and experimental pathology indicate that they are, to a large extent at least, distinctly separable from each other, and doubt may be entertained as to how far their experiments indicate the paths of true sensation as distinct from those of mere reflex reaction, more or less general. It does not appear that the paths of sensation proper degenerate upwards to any great extent after complete severance of the cord at any part. Of the paths which degenerate upwards the principal are the posterior median columns, or columns of Goll, which degenerate upwards, in some measure at least, as far as the nuclei graciles or post-pyramidal nuclei of the medulla oblongata. The posterior external columns, or columns of Burdach, degenerate upwards at most for a distance of only a few roots. In addition, upward degeneration occurs in the direct cerebellar tracts, which can be traced continuously to the restiform bodies, and thence into the superior vermiform process of the cerebellum. Anterior to the direct cerebellar tract, but more or less distinct from it, there is another tract in which ascending degeneration is frequently observed, as was first pointed out by Gowers, a tract which, as Bechterew has shown,[23] differs in its period of development from the other tracts of the cord. This constitutes the antero-lateral column. None of these tracts, however, have been conclusively shown to be the path of any form of sensation proper, using this term to distinguish the paths of conscious from those of mere afferent or centripetal impressions.

As the direct cerebellar tract undoubtedly ends in the cerebellum, and, as the observations of Tooth[24] would seem to show, is mainly derived from the posterior roots of the upper dorsal and cervical regions, and not from those of the lower extremities, we may eliminate these from the paths of sensation proper. The antero-lateral tract in which Gowers is disposed to place the path of painful impressions, appears, from the researches of Tooth, to consist largely of very fine fibres, and to arise from the cells of Clarke's column. It ascends to the nucleus lateralis, which is the upward continuation of the lateral horn of the cervical cord, also called the visceral horn. The further course of this tract is uncertain though its larger fibres are supposed by Tooth to ultimately reach the cerebellum. Gowers reports a case of unilateral lesion of the spinal cord[25] which would appear to support his hypothesis, and Bechterew states that analgesia follows transverse section of the anterior half of the cord. In neither of these observations, however, as Tooth remarks, can we eliminate affection of the grey matter itself.

I have lately performed an experiment on a monkey in which I divided the convex or outer half of the lateral column in the middle of the dorsal region. (Fig. 23.) Though a slight amount of paralysis occurred on the limb of the same side there was no impairment of tactile or painful sensibility on the opposite leg the day after the lesion. The slightest touch on either limb immediately attracted the animal's attention. In another, in which I divided the greater portion of one half of the cord, excluding the posterior column, part of the anterior column, and that portion of the lateral column lying in the angle formed by the anterior and posterior cornua (Fig. 24), there was almost complete motor paralysis in the leg of the same side, but sensibility was not abolished on the opposite side. Whether sensation was at all impaired could not be determined with certainty, but the sense of pain was undoubtedly retained. These experiments are, therefore, opposed to the hypothesis that the antero-lateral tract is the path either of tactile or painful sensation.

In another experiment which I performed on a monkey, the particulars of which I have elsewhere recorded,[26] I divided the

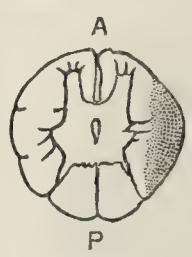


Fig. 23.

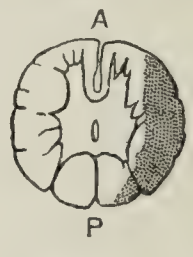


Fig. 24.

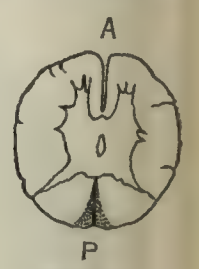


Fig. 25.

whole of the left side of the cord with the exception of the anterior and posterior median column. Though the greater portion of the left posterior median column and the whole of the right posterior median column, as well as the grey matter on the right side, and that surrounding the central canal on the left side were intact, there was complete anæsthesia and analgesia on the opposite side of the body. This experiment, therefore, negatives the hypothesis that the posterior columns are the paths of tactile sensibility. It also is opposed to the hypothesis that the posterior median column is the path of the so-called muscular sense on the same side. For the behaviour of this animal indicated, so far at least as can be judged from the observation of the lower animals, that it had entirely lost muscular sense on the opposite limb; for while it was able to move its right leg volitionally in all directions, and for all purposes, without any appearance of uncertainty or ataxy, and could grip strongly with its foot, this was only when vision was free. When, however, the eyes were blindfolded the animal was utterly unable to extricate its leg from any opposition to its intended movements.

In another experiment I endeavoured accurately to divide the posterior median columns in the mid-dorsal region. The lesion was effected by plunging a triangular keratome into the posterior median fissure to such a depth—as I had calculated by repeated

[20] *Sitzungsb. Akad. d. Wissenschaften zu Berlin*, 1886, 12.
[21] *Neurolog. Centralblatt*, December, 1886.
[22] *Der Verlauf motorischen und sensiblen Bahnen durch das Lendenmark des Kaninchens*, 1874.
[23] *Neurolog. Centralblatt*, 1885.
[24] Secondary Degeneration of the Spinal Cord, 1889.
[25] Clinical Society's *Transactions*, vol. xi, 1877.
[26] Hemisection of the Spinal Cord, *Brain*, vol. vii, p. 1.

xperiments on the dead spinal cord—as would divide the posterior ıedian columns down to the posterior commissure. Though it ɜemed as if the whole of the columns should have been severed, could not after death verify greater destruction than of the ɔrtions immediately adjoining the median fissure. (Fig. 25.) hough the animal was for a few hours somewhat weak or awk-ɤard in its hinder extremities next day, not the slightest impair-ıent of tactile or muscular sense could be discovered. It ran bout without any sign of ataxy, climbed with its customary reedom, clambered down the bars of its cage, planted its feet vith precision and without the aid of vision, and was at once ware when its feet reached the ground. The slightest touch on ither foot, or on any portion of the lower part of its body, at nce attracted its attention.

Bechterew has also found[27] that section of the posterior columns ɜ the cervical region in dogs causes no loss of tactile or muscular ensibility, though the operations appear to be followed by dis-rders of equilibration. These, however, tended to disappear with he lapse of time. Bechterew's experiments, therefore, are op-ɔsed to the view that the posterior columns are the paths of any f the forms of sensation proper.

It has been stated by Brown-Séquard, and generally accepted ɣ physiologists and pathologists, that the paths of the muscular ense do not cross with the other sensory tracts, but ascend in the ord on the same side; so that in hemisection or unilateral disease f the spinal cord, the muscular sense is impaired or lost on the ide of the lesion and retained on the opposite and otherwise ınæsthetic limb. The facts of hemisection of the spinal cord in he monkey are, in my opinion, opposed to this hypothesis, but I ɯm ready to admit that experiments on the lower animals, in vhich we can only infer as to the conditions of consciousness, are ıot so satisfactory in this relation as accurate observations on ıuman beings. On investigation, however, of the cases which ıave been adduced in support of Brown-Séquard's contention, I ind that the evidence of the retention of muscular sense on the ɔtherwise anæsthetic limb, and its impairment or loss on the side ɔf lesion, is far from satisfactory.

Out of 43 cases[28] of apparently unilateral disease of the spinal ɔord in which, however, there were only two *post-mortem* exami-ıations, in only 24 was there any mention of the condition of the nuscular sense in the original papers. In 6 the only evidence ɡiven of the muscular sense being retained was the ability to ɔerceive strong pressure or the power of directing movements vith precision; a condition, however, which has been proved to ɔe possible in the entire absence of any sense of movement. In the method of testing the muscular sense is not stated. In muscular sense appeared to be normal on both sides, no further letails being given. In another the only note was that the paralysed imb did not judge as exactly as the other side difference in weights. ın 3 the muscular sense[29] was present on the otherwise anæsthetic ıide, but in these three tactile sensibility was not lost. In one case[30] nuscular sense appeared to be lost on the paralysed leg; but in his case there was some anæsthesia of the arm on the same side, ınd probably, therefore, also on the leg. In one no investigation eems to have been made of the muscular sense while the limb vas paralysed. Afterwards it was said to have a certain degree ɔf inco-ordination and loss of motion of position. In another[31] he only note was that the patient retained the power of esti-nating weights and the consistency of bodies on the anæsthetic imb. The state of the other was not mentioned, and no exact letails are given as to the condition of the various forms of sensi-ɔility. Of the remaining cases, in one muscular sense was lost on he anæsthetic side.[32] The condition of the other is not recorded. ın another[33] the conditions varied according to the progress of he disease, but the muscular sense was always retained on the ınæsthetic limb, so long as tactile sensibility and the power of ocalisation were unaffected. In the third[34] muscular sense was etained on the paralysed limb, though its condition on the other-vise anæsthetic limb was not mentioned. This was the only case vhich was followed by a *post-mortem* examination. In another, Köb-

[27] *Neurolog. Centralblatt*, February 1st, 1890.
[28] Most of these cases have been quoted by Brown-Séquard in the *Archives de Physiologie*, vol. 1 and 2.
[29] Perroud, *Journ. de Méd. de Lyon*, vol. ix, 1868; Gilbert, *Archives de Neurologie*, tome 3, p. 275; Bayne, *Lancet* ii, 1865, p. 117.
[30] Brown-Séquard, *Lancet*, vol. ii, 1868, p. 689, Case 2.
[31] Dundas, *Edin. Med. Journ.*, 1825, p. 304.
[32] Sir Charles Bell's case, *Nervous System*, p. 245.
[33] McKenzie's case, *Lancet*, 1883, vol. i, p. 995.
[34] Charcot and Gombault, *Archives de Physiol.*, vol. v, p. 144.

ner's case,[35] it was found, on applying proper tests to the paralysed limb, that the patient had a perfect knowledge of any movement passively communicated to it; and a similar case has been recorded by Jaccoud.[36] Though, therefore, there appear to be some facts in favour of Brown-Séquard's theory, others are absolutely opposed to it. So that clinical observation hitherto cannot be said to give unqualified support to the theory that the muscular sense remains unaffected when all the other forms of sensibility have been lost. Such being the state of the question, the particulars of the following case, which I have recently had under my observation, are of some importance.

W. S., aged 25, admitted as an out-patient at the National Hospital for the Paralysed and the Epileptic on March 21st, 1890. Previous health had been good until three years ago, when he contracted syphilis. At Christmas, 1888, he observed that he had difficulty in emptying his bladder. Soon after this he had temporary paralysis of the sphincters, both of the bladder and rectum. In April, 1889, he complained of weakness of the left leg, which passed off after a few months, at the end of which time the right leg became affected and has continued so, becoming more and more rigid up to the present date. On examination, there is tenderness to percussion from the tenth to the twelfth dorsal vertebra, and to a lesser extent for some distance above this point. The patient complains of constriction round the abdomen, just above the umbilicus. There are no abdominal or cremasteric reflexes on the left side, but both are present and well marked on the right. Condition of the limbs: The right leg is paretic and rigid. The knee-jerk is greatly exaggerated, and there is well marked ankle clonus. In this leg all varieties of sensation are normal. When his eyes are closed, he can indicate with perfect accuracy every movement that is communicated to his limb. There is weakness of the left leg, and the knee-jerk is increased. There is no complete analgesia, but there is absolute tactile anæsthesia from the foot up to the knee, and dulled from this to the level of the umbilicus. Sensibility to heat and cold is very much impaired. With his eyes closed he is absolutely unable to say in what position his limb or any part of his limb is placed, but he is able to direct its movements with fair precision. In another case, the patient suddenly became paralysed on the left leg, and anæsthetic on the right. This fact he discovered by the insensibility of the leg to hot water which he could not bear with the right. At the date of my examination, a month after the attack, he had recovered from the motor paralysis of the left leg, but he was still absolutely insensible to thermal and painful stimuli on the right leg. Tactile sensibility was, however, equally good on both sides, and with it the muscular sense was also perfect in both. To my mind the evidence, from the various facts mentioned, is in favour of the view that the whole of the sensory paths pass up the opposite side of the spinal cord, and that they are not contained either in the posterior median column, or in the direct cerebellar tract, or in the antero-lateral tract; and, as the pyramidal tract may be entirely sclerosed without any affection of sensation, we are led by a process of exclusion to suppose that the sensory tracts ascend in immediate relation with the central grey matter. If the sensory tracts retain constant relation with the grey matter, this would account for their non-degeneration upwards like the other continuous afferent tracts of the cord.

[35] *Archiv f. klin. Med.*, 1877, p. 208.
[36] *Leçons de Clin. Méd.*, 1867, p. 451.

HEALTH OF THE SPANISH ARMY.—A report recently published by Dr. Pacheco, Subinspector of the Spanish Army of the First Class, shows that in 1886 the strength of the Spanish Army was 100,434, of whom 1,355 died. Of these deaths, 2.12 per mille were due to typhoid fever, 2.66 to tuberculosis, 1.42 to pneumonia, 1 to small-pox, and 12.21 to yellow fever (in Cuba). The sickness from malaria was 29.94, and that from venereal diseases 35.69 per mille. In Cuba the sickness from the last named cause amounted to 58.6, while in the Philippine Islands it was only 4.81 per mille.

PUBLIC HEALTH ADMINISTRATION IN ITALY.—On the initiative of Professor Carlo Ruata, of the University of Perugia, a society of Italian medical men, bearing the title of "Italian Association for the Triumph of State Medicine," has recently been formed for the purpose of "freeing society from preventable diseases and death by means of wise medico-social arrangements." The Association proposes to take part in public affairs with the object of making sanitary administration autonomous, by placing the direction of everything relating to the public health in the hands of Government officials entirely independent of local authorities.

THE TREATMENT OF PYÆMIA CONSEQUENT UPON DISEASE OF THE MIDDLE EAR AND UNASSOCIATED WITH THROMBOSIS OF THE LATERAL SINUS.

By W. ARBUTHNOT LANE, M.S.,
Assistant-Surgeon to Guy's Hospital and the Hospital for Sick Children, Great Ormond Street.

In a short paper which was recently published in the JOURNAL[1] I described the operative treatment which I have adopted in inflammation of the antral cavity and of the mastoid cells, and of the intracranial complications which are so frequently associated with these conditions. Since writing that paper I find that there is much misunderstanding as to the anatomy of the antral and mastoid cavities and of their anatomical and physiological relations to one another, and that for this the textbooks on anatomy are much to blame. In the last edition of *Quain's Anatomy*, vol. ii., p. 437, although a large number of pages and diagrams are devoted to the structure of the middle and internal ear, the cavities in connection with the middle ear, which comprise probably the most important portion of the skeleton from a surgical standpoint, receive only the following brief description:—

"The posterior wall of the tympanum has at its upper part one larger and several smaller openings which lead into irregular cavities, the mastoid cells, in the substance of the mastoid portion of the temporal bone. These cells communicate for the most part freely with one another, and are lined by a thin mucous membrane continuous with that of the tympanum."

I would first point out that there is a distinct cavity, commonly spoken of as the mastoid antrum, which communicates with the cavity of the middle ear and is placed almost completely in the petrous portion of the temporal bone, when its condition is normal. Its wall is reticulated, and it lies in relation both with the upper and posterior surfaces of the petrous bone, being usually nearer the former than the latter. This cavity is well-developed in young life, and its size increases proportionately with that of the middle ear, of which it practically forms a part, anatomically and physiologically. As the child grows up and the mastoid process increases in size the small cancelli which are present in the young bone become larger and form spaces—the so-called mastoid cells. The size and extent of these cells vary within the widest limits in the adult skull; while in some only a finely reticular structure is obvious, in others not only is the whole of the mastoid process occupied by large intercommunicating spaces enclosed on either side by a thin layer of compact bone, but the whole of the remainder of the mastoid portion of the temporal bone is similarly constructed, so that the dura mater of the posterior fossa and the lateral sinus are for a very considerable area separated from these large spaces by only a very thin layer of compact bone. These cells in the mastoid bone are obviously developed with a view of rendering a large bony process and area of muscular insertion as light as possible. If the cells in the mastoid bone develop to any extent they sooner or later form a communication, usually of small size, with the antral cavity. One sees at once what a perfect death-trap such a mastoid bone forms when the middle ear becomes inflamed, and also the cause of the greater frequency of subdural abscess in the posterior than in the middle fossa of the skull.

Another point of great practical interest in regard to operative measures upon the middle ear is the relation of the bony canal containing the facial nerve to the aperture of communication between the antrum and middle ear. The facial nerve lies to the inner side of the opening, so that if, after opening the antrum freely, a fine probe can be passed through it into the middle, one has the satisfaction of knowing that one can remove any portion of the bone external to the probe without risk of damaging a very important structure. If the middle ear becomes more or less chronically inflamed the wall of the antral cavity soon loses its irregular reticular outline and becomes smooth, and its cavity gradually increases in size. For some reason or another this increase in size takes place in the direction of the posterior rather than of the upper surface of the petrous bone, and if the antrum itself becomes perforated, it is, in my experience, into the posterior fossa as commonly as into the middle.

If the mastoid cells are at all well developed, if not already in communication with the antrum, they, if large, frequently become so shortly by the increase in the size of the latter cavity in an outward direction. They then also become distended with pus, and increase in size still more rapidly than the antrum owing to the much greater obstacles to the escape of their purulent contents. We see, therefore, that in the young child, and by no means infrequently in the adult, the antral cavity may be the only one requiring surgical treatment; in the older child or adult the mastoid bone also may form one large single abscess cavity in more or less direct communication with the antrum. That which is practically in either case a central abscess in bone, may perforate its inner or outer compact wall, or may set up a suppurative process between the dura mater or periosteum and bone. I think that we learn from all this that we should never be satisfied with treating a case of chronic discharge from the middle ear associated with attacks of tenderness about the mastoid by injections, and by removing so-called aural polypi; that we should not treat a so-called mastoid abscess by simple incision and drainage; that we should never be so unwise as to feel that we had done our duty as surgeons to the patient by tapping a cavity of whose area and size we are ignorant by a drill or trephine, but that in a case in which there is any definite evidence, or even strong suspicion of the existence of pus in a case of tension in this region, we should perform such a radical form of operative treatment as I have fully described, with the knowledge that such an operation is accompanied with a minimum of risk to the patient, while its result removes present and future risk absolutely. To do this no instrument is, in my experience, as perfect as the gouge. If, at the time of the operation, it be found that the disease extends to the dura mater of the middle or posterior fossa, or to the lateral sinus, or that suspicion exists of abscess in the cerebrum or cerebellum, these structures can be freely exposed, and any abscess drained through the same small area.

I will now allude to the chief point of interest in this communication, namely, the treatment of pyæmia consequent upon disease of the petrous bone, but unassociated with complete or obvious thrombosis of the lateral sinus. In August, 1888, I believe that I was the first to treat septic thrombosis of the lateral sinus by ligature of the internal jugular vein and removal of the septic thrombus, and with success. Mr. Ballance has recently published two cases of great interest, in which he adopted similar measures with complete success, and two in which the cases came under his observation too late to prove successful.

Since the case above referred to, I have been on the look out for one of pyæmia resulting from otitis media without thrombosis of the lateral sinus, with a view of occluding the lateral sinus where it comes into relation with the petrous bone. At last the following case came under my observation.

D. D., a boy aged 3 years, was admitted into Guy's Hospital on May 29th, 1889. Five weeks before admission he was said to have had diphtheria, and a fortnight after he was affected by a profuse purulent discharge from his left ear. There was also some discharge from the right ear.

For the three weeks preceding his admission he suffered from facial paralysis of the left side. A week before admission the discharge from the ear ceased, the mastoid area became tender, and for six days he had a rigor daily. During the rigors he had twitching of the face. On admission he was found to have a fluctuating swelling over the left mastoid process, and some discharge from the meatus, and marked facial paralysis. No optic neuritis. His temperature was over 104°.

At the time he was brought into the hospital we were unable to obtain any definite history, the parent denying any rigor, etc. The child was put under an anæsthetic at once, and the mastoid antrum, which was distended with pus, was obliterated by levelling down its edges; a large communication was made into the middle ear, and the dura mater of the middle fossa exposed. This was found thickened and inflamed, but there was no pus. On the 30th he had a rigor, and then for the first time, in the evening, we obtained evidence of previous rigors.

On the 31st the dura mater of the posterior fossa, in relation with the mastoid process and antrum, was fully exposed, and a collection of pus was found between the lateral sinus and adjacent dura mater and the temporal bone. Though the wall of the

[1] The Treatment of Suppurative Inflammation of the Mastoid Process Associated with Disease of the Middle Ear, March 29th, 1890.

nus was soft and sloughy, there was no evidence of thrombosis. n pricking the sinus over this area, blood flowed freely. During iat day the child had a rigor, and another on the following day, ine 1st. I then determined to ligature the internal jugular vein, id open and plug the lateral sinus. On tying the vein the child ;came so collapsed that I did not dare to proceed to open the lateral nus. I therefore proposed to postpone that portion of the opera- on till the child had recovered a little from the shock.

On June 2nd he had another rigor, and he was still very feeble. On June 3rd I opened the wound, and found that the sinus was m, and that it had evidently thrombosed very recently. I there- re determined to do nothing and watch the course of events. slight erythematous rash appeared on the shoulders on the fol- wing day; but with the exception of a rise of temperature, due a collection of pus about the ligature of the vein, the child had marked rise of temperature up to the present date, namely, venteen days after the ligature of the vein, and sixteen days ter the thrombosis of the lateral sinus and the last rigor. There s been no indication of the thrombus in the sinus breaking wn.

In this case we had a sequence of at least eleven rigors, the nperature rising each day to between 104° and 105°, then sub- ing abruptly, not with the ligature of the internal jugular vein t with the thrombosis of the lateral sinus, on the following day. seemed to me that the slowing of the venous circulation, con- quent upon the ligature of the internal jugular vein *plus* a obable amount of irritation or of superficial thrombosis result- ; from the inflamed condition of the outer wall of the sinus, de- mined its complete occlusion. There was no optic neuritis ob- ved at any time.

URTHER REMARKS ON THE SELF-RETAIN- ING PALATE HOOK; INCLUDING ITS USE IN POST-NASAL CATHETERISM.

By E. CRESSWELL BABER, M.B.Lond., geon to the Brighton and Sussex Throat and Ear Hospital; President of the Brighton and Sussex Medico-Chirurgical Society.

the Journal for January 12th, 1889, I described and recom- nded White's self-retaining palate hook for drawing forward soft palate. Since that date a constant use of this instrument continued to prove to me its great value both for examination l for operations in the nasopharyngeal cavity. As a larger ex- ience has brought out some fresh details in its application, and egard to the special cases in which it is of benefit, a few re- ·ks supplementary to those I have already made may be of ·ice to those using the instrument.

irst, I now never use a weaker solution of cocaine than 10 per t., and it almost always suffices to run a few drops into the ·rils with a syringe or medicine dropper (letting them run back r the palate), in order to allow the hook to be kept in position several minutes at a time. If sufficient anæsthesia is not pro- ed by these means, the cocaine is also painted up behind the palate.

econdly, after the hook has been introduced behind the palate, rect the patient to close his lips without biting the instrument. nasal respiration thus induced, especially if the patient sniff he same time, causes the palate to relax, and allows it to be vn freely forward with very little effort.

mistake often made by those unused to the instrument is that do not pull the palate forward sufficiently, and consequently in an imperfect view whilst producing more irritation. The k when applied should hold itself firmly in position without use of the screw. If it does not do so the instrument, if of t size for the case, is faulty. Either the arms of the sliding istment are not sufficiently bent towards the hook—which easily be remedied with the fingers—or the sliding adjust- t itself is not correctly fitted to the bar.

sometimes use a hook of which the lower part of the loop is ed by means of a thin plate of metal. This modification has advantage of not allowing the uvula to fall through; but it the disadvantage of preventing the angle of the hook from g easily altered. I have also tried Dr. White's modification ie hook, in which the bar is provided with a joint, enabling the handle to be turned laterally at right angles after introduction of the instrument, but have not found this of any special advantage.

Messrs. Down have made for me an electric palate hook—that is, one of these instruments which has attached close behind the convexity of the hook a small incandescent electric lamp, the wires carrying the current running in the stem of the hook. This gives a splendid illumination of the nasopharynx, but whether it has any special advantages over the ordinary hook I have not yet ascertained. With a view of using it to illuminate the nasal cavities by transmitted light, a little metallic reflector can be attached behind the lamp in order to throw the rays of light forward.

For simple inspection of the nasopharynx the hook is invaluable. By its use rhinoscopy is no longer in many cases a question of skill and perseverance, but can be thoroughly and easily performed, and is quite as simple as laryngoscopy. I agree with Tornwaldt that no inspection of the nasopharynx can be considered complete unless the palate is first drawn forward by this or some other method. For, on the one hand, the close proximity of the palate to the spinal column often renders it difficult to obtain a good view of the choanæ. On the other hand, the anatomical position of the vault and posterior wall of the nasopharynx necessarily renders a view of it obtained after the palate has been retracted much clearer and less foreshortened than it otherwise could be. Indeed, when the tubercle of the atlas is prominent, it is almost impossible to see the back wall of the nasopharynx at all without the retractor. A considerable portion of this wall can be seen by direct inspection in the following manner: The hook being placed in position, but for this purpose not drawn forward very tightly, the patient's mouth is opened wide and his head tilted back as far as possible without obscuring the pharynx with the lower teeth. The anterior end of the palate-hook is then depressed, tilting the distal end upwards. The posterior wall can thus be seen to a considerable distance above the tubercle of the atlas, sometimes even as high up as the opening into the pharyngeal bursa.

A class of cases in which the hook has proved very successful in my hands is those of deep syphilitic ulcers on the posterior wall of the nasopharynx. With the hook they can be treated and watched with the rhinoscopic mirror, and can be seen to a considerable extent by direct inspection in the manner just described. Painting with solution of sulphate of copper or of nitrate of silver, and a post-nasal spray of perchloride of mercury I have found the best local treatment for these cases. For the treatment of affections of the pharyngeal bursa and tonsil in the adult the hook is of equal value. Dr. Bronner prefers Voltolini's hook to this one, but surely when one requires both hands for holding the rhinoscopic mirror and operating in the nasopharynx, it is no small advantage to have an instrument which holds itself in position, can be easily adjusted to any tightness, and can be removed without the least difficulty.

There is another purpose for which I have found the hook of service, and that is in catheterism of the Eustachian tube through the mouth. The catheter which I have had constructed for this purpose is of metal; its size and shape are shown in the accompanying woodcut. The catheter measures nearly 18 centi-

mètres from the large curve to the end. Both curves are in the same plane, which enables the instrument to be used for either ear. It is well to have one or two catheters of slightly different curves.

The method of using this catheter is as follows:—The palate being drawn forward to its full extent, the patient holds down his tongue with an angular tongue depressor. The point of the

catheter is next introduced into the Eustachian orifice under guidance of the rhinoscopic mirror. The handle of the catheter is then moved towards the opposite angle of the mouth, and perhaps slightly depressed, the beak of the instrument being introduced well into the tube by a slight onward and upward movement of the whole instrument. Inflation can now be made with the bag in the ordinary way. The opposite tube can of course be catheterised without removing the instrument from the nasopharynx. My catheter, being only curved in one plane, differs from that of Cutter, of Boston, in which the terminal portion of the instrument is movable, and also from those suggested by Störk and Kessel, who, according to Politzer, recommend that the instrument should be bent to one side as well as somewhat backwards. I agree with Politzer that without fixation of the palate post-nasal catheterism is often difficult or impossible, but with the use of the hook it becomes a simple and sure procedure.

How far in cases of obstruction of one nasal cavity this method of catheterism will supersede that through the opposite nostril remains to be seen, but certain it is that the Eustachian tubes can be easily catheterised in this manner, and with but little inconvenience to the patient.

A SUCCESSFUL CASE OF CÆSAREAN SECTION.

By F. ALBERT MOUILLOT, M.B.,
Gorey.

On Friday, May 16th, I was sent for by Dr. Acheson to see with him a Mrs. L., who was in labour. On my arrival at 9 P.M., I found that Mrs. L. had been suffering from pains for thirty-six hours, and had had strong pains for eight hours. She was 30 years of age, and married nine months.

When I examined her, I found a large portion of the uterus low down in the pelvis, and the os sufficiently dilated to admit my finger. The presentation could not be felt, and the brim of the pelvis was certainly not more than two inches in its conjugate diameter.

After consultation, Dr. Acheson and I were of opinion that delivery was impossible except by abdominal section. This procedure was accordingly decided upon, but some delay took place owing to the reluctance of the patient's friends to allow the operation. The patient herself was in such dreadful agony that she was willing to submit to anything—indeed, she repeatedly asked us to poison her or allow her to throw herself into the river. Dr. Pounden's assistance was obtained to give chloroform. All this time the patient repeatedly said she could feel the child coming into the world, but examination showed that this sensation was caused by the pressure of the cervix on the perineum as more and more of the uterus was forced down by the violence of the uterine contractions.

At midnight Dr. Pounden put the patient well under chloroform, and a catheter having been passed, I made the abdominal incision in the usual manner. No vessel required ligaturing. The uterus, when incised, bled, but not profusely. The fœtus was found to be placed with its breech downwards and dorsal surface anterior. I removed it by the breech without difficulty, and following the cord found the placenta at the fundus. The child was vigorous and well developed. The uterine wound looked so very formidable that, contrary to my original intention, I made up my mind to suture it, but was prevented by a firm contraction coming on when I placed my hand on the fundus; and in consequence, I suppose, of so much of the cervical portion of the womb being in the vagina, only the fundus was to be seen after the contraction. A coil of intestine escaped through the wound, and had to be replaced.

The abdominal wound was then united by ordinary silk sutures, and the patient was allowed to recover from the chloroform. She was given a dose of ergot, and the wound was dressed with dry lint.

Dr. Acheson, who gave the case unremitting attention, tells me that on the fourth day the temperature rose to 100° F., and there was some sickness, which yielded to his treatment. After this recovery was uninterrupted. The sutures were removed on the ninth day, and the wound, which had been dressed with Gamgee's gauze tissue dusted with iodoform, was healed. The bowels acted the same day from a dose of pulv. glycyrrhizæ co.

I visited her on May 30th, and then found that her height was 4 feet 11 inches, and the distance between the anterior superio spines was only 8 inches.

The operation was done by candle-light in a peasant farmer house, and the satisfactory result can only be attributed to th fact that, though the patient's sufferings were terrible to witnes she had not become exhausted when the operation was done, an consequently a good uterine contraction followed the removal the child. Had I been prepared I would have preferred doin Porro's operation, but I only had an ordinary pocket case hand.

ON THE RADICAL CURE OF HERNIA.

By ERNEST KINGSCOTE, M.B.,
Honorary Surgeon to Salisbury Infirmary.

The utilisation of the sac as an internal pad in the radical cu of hernia has, since the introduction of antiseptics, become of su absorbing interest to the surgical world that any remarks bearin on the subject and substantiated by facts carry their apology wi them. Mr. Stanmore Bishop's interesting paper has induced m to give a short description of the operation I am in the habit performing.

The incision is transverse and well above the internal rin With the aid of retractors this gives plenty of room for manip lation, and after the final stitches are secured the wound is carri high up on the abdominal wall, and thus the danger of septicis from the pubic hairs, etc., is minimised. This was suggested me by my friend, Mr. Wainewright, of Charing Cross Hospit The operation is then conducted, up to the point where the tre ment of the stump commences, on similar lines to those of Ma ewen, Barker, and Bishop, the fingers and handle of the scalp being used where possible instead of the knife. The sac is th carefully dissected out, as in Macewen's operation, for about h an inch round the abdominal aspect of the internal ring, and t stout absorbable catgut sutures are inserted diagonally throu the stump, as far inwards as its separation from the abdomi wall will allow, and carried on loosely through the pillars of t ring (Fig. 1). One or more fine absorbable catgut stitches (stc

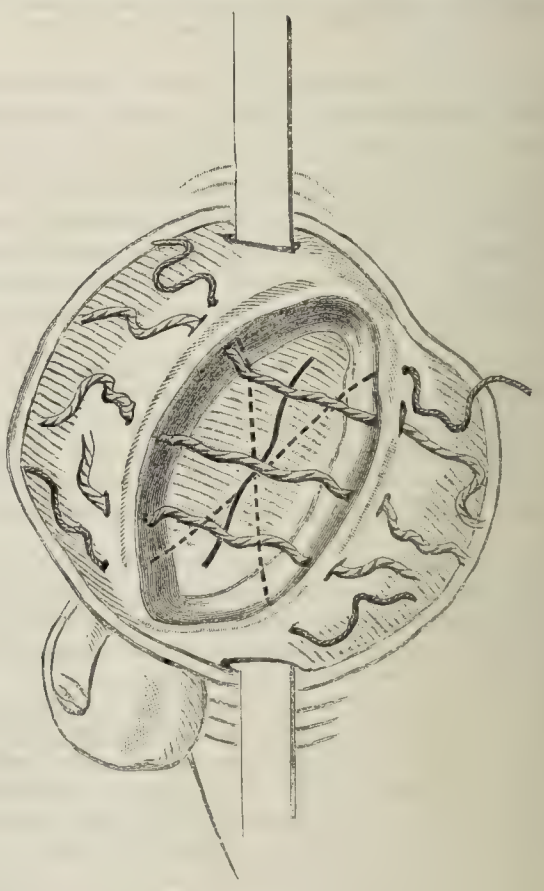


Fig. 1.

ones are unnecessary owing to the quickly uniting properties the applied peritoneal surfaces) obliterate the opening into peritoneal cavity.

The stump is then pushed a little inwards, and three—or m if necessary—very stout catgut sutures are introduced throu the transversalis fascia, etc. (the point of the needle impinging

that of the previously inserted forefinger), and the ring tightly closed, leaving, of course, sufficient play for the cord (Fig. 2). The

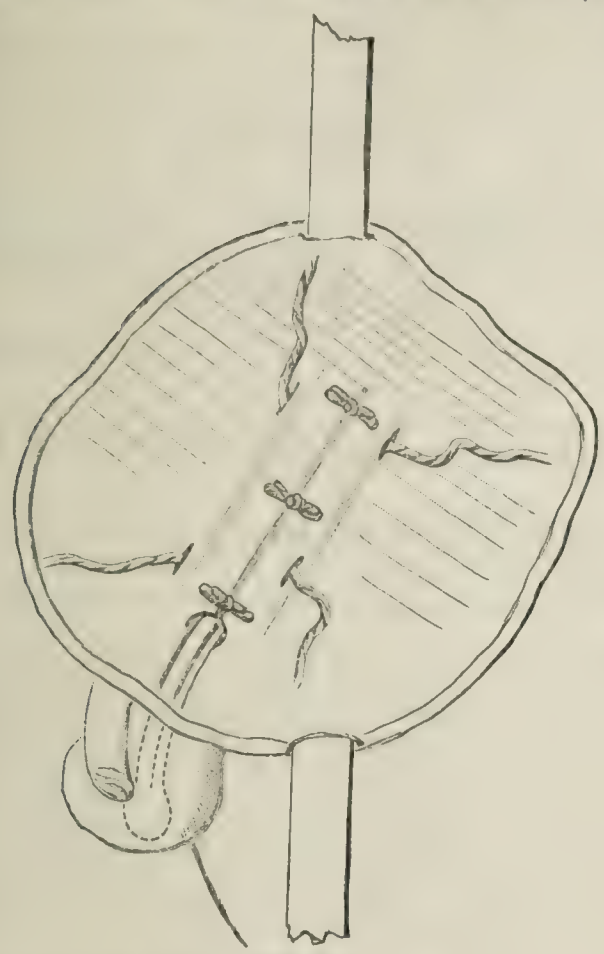


Fig. 2.

out diagonal sutures through the stump are now tied firmly over the tightly closed-up ring (Fig. 3), and the operation is completed

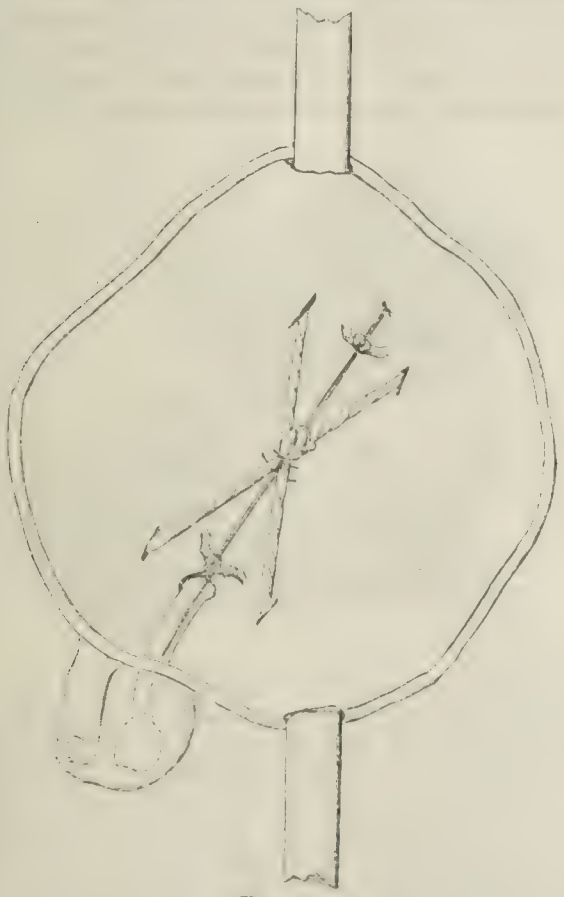


Fig. 3.

the usual way, great care being taken throughout to stop every stige of hæmorrhage.

The advantages of the operation are:—

. The preliminary incision is removed as far as possible from tic sources.

. An admirable smooth internal pad is obtained (Fig. 4).

3. The two serous surfaces of the stump are applied and unite in, say, thirty-six hours.

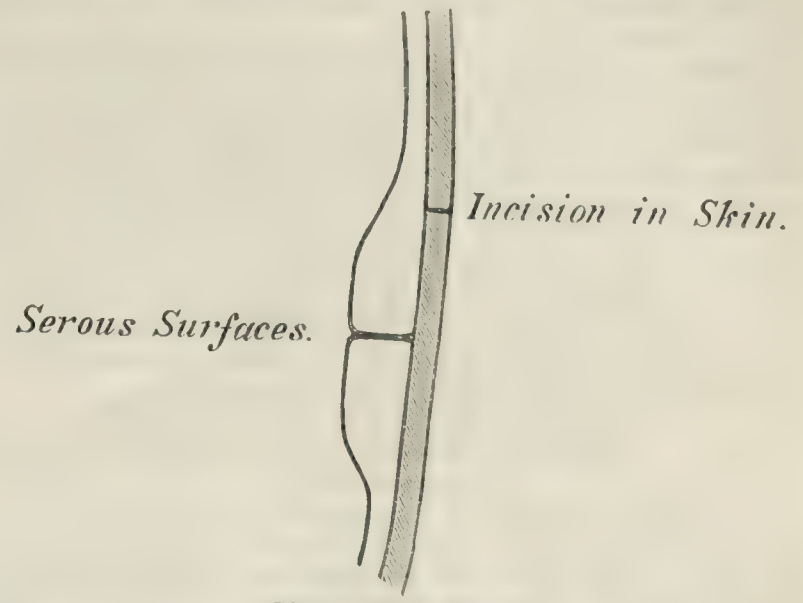


Fig. 4.—Profile View.

I have had several successful cases following this operation, and notably one: a patient who was operated on about two years ago, and into whose abdominal aperture one could, previous to the operation, almost put one's fist, who assures me that he has since put himself to the severe test of ascending the Matterhorn; and another, a lady, operated on about three years ago, who has experienced no return of her trouble. In no case has a truss been worn subsequently to the operation.

MEMORANDA;

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

NOTE ON VACCINIA OF THE EYELIDS.

I HAVE not been able to find any reference, in the different text-books on diseases of the eye, to the accidental occurrence of vaccine pocks on the eyelids. I am inclined to think, however, that such an accident is by no means so rare as this would appear to indicate. Possibly a good many cases do not come under the notice of the ophthalmic surgeon at all, but are recognised and treated by the family doctor. I have seen in all five well marked cases. Four of these occurred in women, one was in a man aged 30.[1] In all there was a distinct history of inoculation, or rather of the possibility of inoculation. A child had been vaccinated ten or fourteen days before the patient was seen. In all the pock occurred on the lower lid, but there were also to be found one or more ulcerated patches on the margin of the upper lid where it came into contact with the macerated surface of the primary vaccine ulcer. The swelling was always great, and involved not only the lids, but also the cheek. The base of the ulcer was decidedly harder than the surrounding swelling, but not so distinctly indurated as in the case of chancre of the lid, and the glands were not swollen. There was, comparatively speaking, very little pain; practically no spontaneous pain, and but little tenderness to touch. In no case was the eye affected. The affection never led to any alteration in the position of the lid, and even the cicatrix left was slight, barely perceptible, owing no doubt to the laxity of the skin in this situation.

The main interest in these cases consists in the possibility of the inoculation taking place at all, and in the differential diagnosis between vaccinia and a primary syphilitic sore. As to the manner of inoculation: in three of my five cases this could not be satisfactorily ascertained; in one there was little doubt that a direct transference of lymph took place, owing to the child's arm

[1] In my book on *Diseases of the Eye* there is a sentence in the paragraph devoted to chancres and vaccine pocks of the lids which somehow has got transposed, and which I take this opportunity of correcting. The sentence is as follows: "I have seen it in both adults and children." This should have come after instead of before the next sentence, as it refers to chancres and not to vaccinia.

being often in contact with its mother's face; in another the handkerchief used for wiping the vaccinated arm was admittedly used by the mother also.

Chancres of the lids, to judge from one's own experience, are of decidedly more frequent occurrence than vaccine ulcers. For the reason above stated this may, however, be only apparent. It is not unlikely that vaccine pocks in this situation have sometimes been mistaken for syphilitic sores. The latter is always a more distinctly clean-cut, eaten-out ulcer, which has taken a considerable time to develop from its first appearance as a pimple at the lid margin. The opposite lid margin is not ulcerated as a rule. The base of the ulcer is greatly indurated, and the preauricular, as well as the submaxillary, glands are often swollen. There is no history which can in any way connect the case with vaccination, and usually one which renders a syphilitic contagion possible. Lastly, secondary symptoms appear in due course.

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Ophthalmic Surgeon, Royal Infirmary, Edinburgh.

ANACHRONISM OF INVOLUNTARY MUSCLES.

THE JOURNAL of May 17th refers to a description of acute cardiac strain by Dr. Schott, of Nauheim, and others. I have met cases presenting symptoms corresponding to those described. There is one symptom, however, not alluded to in the annotation which I saw well marked, in one case at least, namely, anachronism of the ventricular contraction. Very many years ago, I myself competed in a running match with a very healthy but stout man. Immediately the competition was over he was seized with a sense of faintness and cardiac distress, which lapsed into an almost chronic condition of some months' duration, but at last ended in perfect recovery. All during this time a distinct reduplication of cardiac impulse and first sound was constantly present. The impulse felt as if it were broken. I accounted for the anachronism by the strain thrown on the right side of the heart by the impediment offered to the pulmonic circulation, which impediment temporarily strained and dilated it, for the subsequent physical signs pointed to this.

We meet, however, with other interesting phenomena of anachronism in other parts of the system, and it is with the idea of pointing more especially to certain such conditions in the genito-urinary apparatus that I offer this memorandum. In the normal act of ejaculation the vesiculæ seminales and vasa deferentia of both sides usually contract together, but sometimes those of one side contract before the other side, or not at all. Next the prostate and bulbo-cavernosus muscle contract and eject the fluid; but here arises an interesting and practical phenomenon, namely, the two latter often contract without a preceding contraction of the vesicles and vasa deferentia. Hence many persons the subjects of irritable prostate are said to suffer from "spermatorrhœa," often when such a disease does not exist, but a prostatorrhœa accompanied by the phase of contractile emission, generally nocturnal, sometimes diurnal. When to this fact we add the further fact that such emitted fluid generally is devoid of spermatozoa, or only a few motionless ones killed perhaps by the chemical alteration in the prostatic juice, we have in part an explanation of the condition looked upon as grave by some, namely, where the disease is supposed to have run riot, and gone on to the stage of alteration in the constitution of the seminal fluid itself.

Again, the bladder often acts irregularly and "stammers," and we have a "hesitating" stream. Finally the muscular fibres of the urethra may fail to dilate evenly, and we have a diverted stream. In almost every part of the body and in the uterus and Fallopian tubes we meet instances of this anachronism.

Crouch End. JAMES MACMUNN.

THE TREATMENT OF METRORRHAGIA.

THERE is one remedy I should like to add to Dr. Edis's very valuable and practical paper in the JOURNAL of June 7th, and that is simply plugging the cervix uteri with cotton wool. In cases of passive hæmorrhage unaccompanied by local disease, such as we meet with at the climacteric and in anæmic women, and even in some cases where there is local disease, which we do not feel justified in treating just at the moment, I have found the bleeding checked very much by simply passing a thick thread with cotton wool fixed along it right up into the uterus, and lightly packing the cervix uteri with it; it can be easily removed by allowing a portion of the thread to remain in the vagina. I use iodoform wool, and allow the plug to remain from twelve to twenty-four hours, and almost invariably I find the hæmorrhage lessened. The treatment is simple and devoid of danger and pain and may be repeated if required.

Clifton. A. E. AUST LAWRENCE, M.D.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

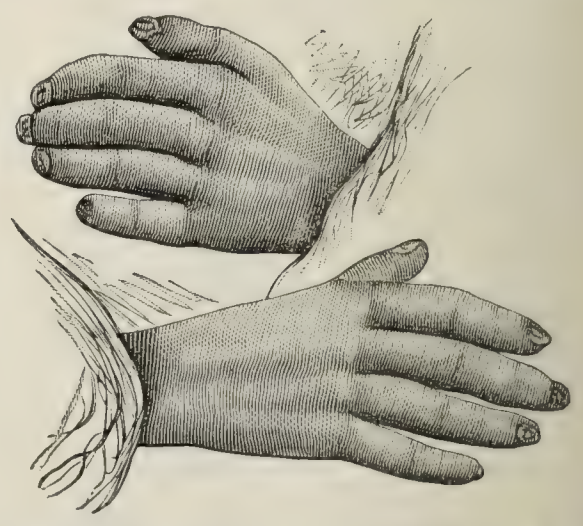
ULSTER HOSPITAL FOR WOMEN AND CHILDREN.

A CASE OF RAYNAUD'S DISEASE.

[Under the care of WILLIAM CALWELL, M.A., M.D., Surgeon to the Hospital, and Assistant-Surgeon to the Ophthalmic Hospital, Belfast.]

THIS case, a girl, M.A.G., aged 12, was admitted from the out-patient department of the Ulster Hospital for Women and Children, Fisherwick Place, Belfast, on May 7th last, by Dr. M'Kisack who showed her the same evening before the Ulster Medical Society.

Her family history is exceptionally good on both sides. When 3 years old she was severely burnt on the back, and during a lengthy recovery contracted bronchitis, from which since she has never been completely free. When 8 years old her mother noticed for the first time that at times her cheeks got mottled and her fingers became "dead." When about 10 years old, one winter morning, she accompanied her mother to a neighbouring small town on foot, but her fingers, feet, and face "got so black and swollen" that she had to be taken home quickly on a car. Some little time after this she had the measles; the rash, however, was not so bright or marked as on the seven other children. Since her first severe attack on the winter's morning she has been continually subject to similar ones, varying, however, in frequency from one in a month to two a week, and she is always unfavourably affected by cold. During this time the nails on the hands have suffered, and the tips of the fingers might be said never to be completely free from small patches of feeble suppuration. During an asphyxial exacerbation she always suffers great pain, and is peevish and irritable. No dark-coloured urine has ever been observed.



On examination the condition of the patient was as follows. The left hand was rather the worse of the two, but it was surprising the similarity in the severity with which corresponding fingers were affected. The distal phalanx of the little finger was absent, a truncated stump being left; on the ring finger this bone did not seem to be quite lost; on the middle and index there was the remnant of a nail, transversely grooved, and on the thumb a long curved, and transversely grooved one. The fingers at times were cold and black to the middle of the first phalanx, but the paroxysms were very slow, and from the atrophied condition of the pulp of all the fingers, and the general slightly swollen condition, the impression was given that the affection was chronic, and never completely absent. No pulse could be felt at the left wrist, but the brachial was distinguishable. The nails were all present on the toes, but the toes, soles, and heels for days presented the dark asphyxial condition, which at best only partially cleared off. The

skin over the malar bones and over the knuckles at times was mottled, and there was a ring of extravasation which underwent the usual changes on the outer side of the left thigh and on the back of the right forearm. On pressure with the finger on the foot a dead white spot was left, which took several minutes to regain its former appearance. Her pulse was about 100, temperature normal, or a few decimals subnormal; her appetite fair; the heart-sounds fairly strong, but rather sharp. An unexpected and hasty removal from hospital prevented a more complete examination of blood, fundus of eye, etc. During the time she was in hospital all four extremities were kept carefully and constantly well covered; and under this, with a little digitalis and iron, she considerably pulled up; but when I was about to begin the continuous current and massage she was most disappointingly carried off by her friends.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 11TH, 1890.

Sir THOMAS CRAWFORD, K.C.B., M.D., President, in the Chair.

Dengue Fever in the Fiji Islands.—Dr. A. J. F. SKOTTOWE read a paper on the epidemic of dengue fever that prevailed in the Fiji Islands from May, 1885 to March, 1886, attacking the entire population, and subsequently the natives as well as the Indian and Melanesian immigrants, though the latter suffered but slightly. It was evidently introduced by a European, who had contracted the disease in Noumea, whither he had been brought from Réunion. Within the preceding ten years extensive and fatal epidemics of measles and whooping-cough had ravaged these islands, and one of influenza broke out shortly before that of dengue, continuing along with it, but, unlike it, attacking the entire population. Dengue having been introduced into one of the two European towns soon spread to the other, for though they were on different islands, and parted by sixty miles of sea, there was constant communication between them. The natives first attacked were those resident among the whites or in the villages on the sea coast, whence they came in canoes with fruit and vegetables for sale in these towns. Owing to the rough character of the interior the progress of the disease inland was slow. It seemed to have reached the interior of these two larger islands chiefly or solely by the traffic up the rivers to the plantations and factories, where the Indian workmen and servants, being in closer association with their European employers, were attacked far more severely than the Melanesian labourers, while the natives in remote villages and outlying islands escaped almost entirely. Despite the regular and frequent communication with Noumea during the epidemic there it did not appear in the Fijis until (owing to the relaxation of previous precautions) a person suffering from the disease was allowed to land, after which it raged in these two towns for a considerable time before the intervening districts were involved. The concurrence of epidemics of influenza and dengue presented an opportunity of comparing and distinguishing these diseases. Dengue, like relapsing fever, clearly required close personal intercourse for its transmission, though intensely infectious within such proximity; the poison of influenza, on the other hand, if less contagious, was capable of much wider diffusion, so as rapidly to overrun an entire island, and thus apparently to justify the hypothesis of atmospheric transmission. Dr. Skottowe quoted cases from his own and Dr. Corney's experience, proving the incubation period to be little over twenty-four hours, and that one attack did not confer immunity. He described the symptoms of the disease, particularly noting the pyrexia, which reached 104° or 106° on the second day, declining on the third to rise again about two days later, and finally subsiding by the eighth or tenth. Each exacerbation was attended by an erythematous condition of the face, etc., followed by desquamation, not, he believed, a true eruption, but rather resembling that which often accompanied other fevers, as small-pox, quite apart from their characteristic exanthemata. Many cases, however, were mild and transient, and in these the erythemata might be absent. Of the complications said to have been noticed in some epidemics, as hæmorrhages and articular affections, he had seen none. True relapses did not occur, though the disease was of a distinctly remittent type, and recurrence on fresh exposure was not unknown. No one in Fiji had met with the complete intermissions, with apyrexia or subnormal temperature, described by Dr. Thomas, of Savannah, and Dr. Christie, at Zanzibar. Dengue was certainly not malarial, paludal fevers being almost or quite unknown in Fiji unless contracted elsewhere, and the points of resemblance between dengue, influenza, relapsing fever, rheumatism, etc., were evidently accidental, while those of difference were essential. In his experience the mortality was *nil*, but a number of deaths had been reported among the natives, doubtless caused by their practice of plunging or lying in cold running water during the height of a fever, to which the appalling mortality in the previous epidemic of measles was almost wholly due.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

FRIDAY, MAY 9TH, 1890.

EDWARD HAMILTON, F.R.C.S.I., in the Chair.

Surgery of the Brain.—Mr. THORNLEY STOKER read a paper on two cases of brain disease on which he had operated. The first was a case of abscess in the right temporal lobe, depending on disease of the ear. Pain, retraction of the head, and right anosmia were the leading brain symptoms. On March 9th, 1890, the brain was exposed with the view of exploring the cerebellum, if pus should not be found in the temporal lobe. The trephine opening was placed, with the purpose of exposing the second temporal convolution, with its centre one inch and a quarter behind the external meatus, and one inch and a half above this base line. Mr. Thornley Stoker spoke of the mistake made by Mr. Barker in placing the point to expose the second convolution too low down, namely, one inch and a quarter above the base line, and he demonstrated, by a number of Professor Cunningham's models and drawings, kindly lent for the occasion, that the point indicated by Mr. Barker could only expose at highest the inferior convolution, and might even endanger the lateral sinus. He expressed his intention in future of operating one inch and three-quarters above the base line, at which height only there would be reasonable certainty of exposing the second convolution. Nine exploratory punctures were made in different directions, and on the ninth, at a distance of one inch and a half from the surface of the brain, pus was found, to the amount of two or three drachms, lying above the tentorium, in a direction downwards, inwards, and backwards from the trephine opening at the junction of the under surfaces of the temporal and occipital lobes. The patient was now, three months after trephining, doing well. Although she had lost several drachms of brain matter by sloughing and by the removal of a hernia cerebri, she suffered no paralysis or impairment of any kind, the sense of smell being restored and all her symptoms relieved. The second case was one of a spindle-celled sarcoma, of small size, situated in the superior and back part of the right parietal lobe of a man, aged 42. It had given rise to tonic spasms of the left side, commencing in the leg and gradually invading the trunk, upper extremity, and face. Spasm was followed by paralysis, occurring in the same order from below upwards. The leg and arm centres were exposed, but the tumour was not discovered, as it lay at the extreme back of the leg centre, and was of the same consistence as the brain substance, so that instruments passed through it without resistance. The removal of pressure afforded by the operation gave temporary relief. The patient, who was nearly comatose and quite hemiplegic, recovered consciousness, and partial power in the side, but died three weeks afterwards. The chief points of interest in the case were: 1. The irregular position of the spasms, which sometimes engaged the upper extremity without the lower, although the tumour proved to be remote from the arm centre. Mr. Thornley Stoker dwelt on what he termed "referred" pressure, as an important and confusing factor in such cases. 2. That the position of the tumour pointed to the extension backwards of the leg centre into what had been regarded as a doubtful region. 3 That the case showed the leg centre to be behind that for the thigh. 4. The absence in this instance of three of the four classical symptoms of brain tumour—namely, optic neuritis, fixed headache, and vomiting; only the fourth, hemispasm, being present.—Dr. BIRMINGHAM communicated a preliminary report of an investigation which he was carrying on into the surgical anatomy of the parts engaged in the operations of trephining in mastoid and tympanic disease. Many specimens were shown illustrating the points considered.—Mr. PATTERSON said he had had a case in St. Vincent's Hospital in which it was decided to trephine the temporal lobe of the brain; and, taking a quarter of an inch higher than Barker's line in order to make per-

fectly sure, he had had great difficulty in removing the disc of bone, and when he succeeded he found that the lateral sinus was exposed, and occupying one-third of the available space, thus showing clearly that Barker's lines were unreliable.—After some remarks by Mr. TOBIN, Mr. THORNLEY STOKER, in reply, cordially agreed with Mr. Tobin's view as to treating the primary disease; and, in operating in the case of the temporal abscess, he was prepared to trephine the mastoid process with that object; but he did not find it desirable for several reasons. He looked forward to doing it, as at present the ear was suppurating, and required to be washed out twice daily with corrosive sublimate solution. As regards the use of the aspirator, the case was one of the first in which he operated for an abscess in the brain, and he used the aspirator, but with the result that he made up his mind that he ought not to use it again. It was calculated to do violence to structures, and it was totally unnecessary. The brain exercised such pressure that as soon as the abscess was opened, it closed the walls together, and the pus was pushed out with as much force as was desirable, so that the aspirator was unnecessary and might be injurious.—Dr. BIRMINGHAM also replied.

Cholecystotomy.—Mr. THOMAS MYLES read a paper on cholecystotomy.

SECTION OF MEDICINE.

FRIDAY, MAY 16TH, 1890.

JOHN WILLIAM MOORE, M.D., in the Chair.

Acute Confusional Insanity.—Mr. CONOLLY NORMAN pointed out that this form of psychoneurosis occupied an intermediate place between acute mania and the acute dementia of the older classificatory schemes, and contained a very large number of cases. It was characterised by engagement of consciousness in the form of dream-like confusion, together with hallucinatory disturbance. Puerperal, post-febrile, rheumatic, phthisical, and other varieties of insanity depending on general diseases, commonly took this form. Mr. Norman dwelt upon its frequency in alcoholic cases, and related a number of illustrative cases.—Mr. MOLONY inquired whether, first, in the younger persons whose cases had been detailed the state of the heart and kidneys had been examined; and, secondly, in the older persons, whether there had been any uterine trouble, or had the climacteric been reached. He had himself observed a considerable number of cases in which, at the climacteric time of life, there was confusion as to dates and places, and also, most commonly in cases of melancholia type, delusion of persecution by unseen agents.—Mr. CONOLLY NORMAN, in reply, said there was no heart or kidney affection in the younger cases; at least, though anxiously searched for, none was discovered.

Medicated Soaps.—Dr. WALTER G. SMITH drew attention to the differences in preparation and properties of soda and potash soaps, and pointed out the injurious effects upon the skin of an excess of alkali, which removed not only the greasy dirt, but also robbed the skin of its natural fat. This was derived from two sources: (*a*) the glands—sebaceous and coil glands; (*b*) the eleidin of the epidermis. Over-fatty (superfatted) soaps—that is, containing some unsaponified fat—represented a real advance in the preparation of good soaps for medicinal use. The composition of "Grund-seife" (Basis-seife) was: beef suet, 59.3 per cent.; olive oil, 7.4 per cent.; soda ley (38°, Beaumé), 22.2 per cent.; potash ley, 11.1 per cent. This could be medicated by a variety of drugs —for example, resorcin, ichthyol, sulphur, mercurials, etc. The detergent action of soap was explained, and the modes of using medicinal soaps commented upon. Some illustrative experiments were shown.—Dr. M'VEAGH expressed great faith in corrosive sublimate soap for eczema in children, rubbing it in and then putting on a thin gauze.—Dr. S. M. THOMPSON inquired whether salicylic acid might be used in soap for eczema of the head in children without causing irritation.—Mr. WILLIAM STOKER, having regard to the limitation of the term "medicated soap" chiefly to the soap composed of the fatty acids in which the alkali had replaced the glycerine, inquired as to lithium soap; secondly, in view of the explanation of the action of soap on the hands in the ordinary method of use, whether it was equally true of the superfatted soaps that there was free alkali in free dilution; and, thirdly, whether it was competent in the glycerine soap to retain much of the glycerine as used in commerce. He had been informed by a Dublin manufacturer, on the surface of whose soap he noticed globules, that almost all the glycerine was retained in the soap.—The CHAIRMAN said he had seen ointment containing 10 grains of salicylic acid to the ounce used even on children without deleterious effect. As regards the question whether glycerine was really present in so-called "glycerine soap," the sweet taste of that soap was conclusive evidence of its presence.—Dr. WALTER G. SMITH, in reply, said, as regards Dr. Thompson's inquiry, the question was one of the practitioner's judgment. He had no knowledge of lithium soap. The transparent glycerine soap contained a large amount of glycerine.

Old Fallacies Revived under New Names.—Dr. T. MORE MADDEN read a paper on this subject, dealing chiefly with hypnotism and massage. Under the former term had apparently been recently confounded the resuscitated phenomena of two essentially distinct conditions—namely, Braidism and "mesmerism." Of the possibility, in many cases, of producing by the former a state of concentration or anæsthesia, in which surgical operations might be painlessly performed, there could be no doubt; but the expediency of using the power, especially in neurotic subjects, was open to question. With regard to "mesmerism," "animal magnetism," and so forth, the real marvel appeared to be the fact that at the present day some men, of whose sincerity and sanity there could be no question, should claim these powers, and that others similarly circumstanced should admit the possibility of their influencing any persons save those of abnormal nervous or mental constitution, more especially the oftentimes semi-insane victims of hysteria. To deny *in toto* the possibility of a phenomenon, to the actuality of which so many witnesses had testified, merely because it was apparently at variance with common sense, and wholly inexplicable in the present state of our knowledge, might perhaps be thought unphilosophical. The final decision must be left to the eventual judgment founded on the better knowledge and experience of the profession. Dr. More Madden dismissed them with the following quotation from Fuller: "I meddle not with these Bedlam phancies, all whose conceits are antiques, but leave them for the physician to purge with hellebore." With respect to massage, he entered at length into the history of some persons whose methods of cure, successfully employed in Ireland so far back as the days of the Commonwealth, and subsequently in the time of Charles the Second, were largely anticipatory of the present practices of massage, as well as those of animal magnetism or hypnotism. Dr. More Madden concluded with a sketch of the career of Mesmer.—Remarks were made by Mr. A. N. MONTGOMERY and Mr. CONOLLY NORMAN; and Dr. MORE MADDEN replied.

SECTION OF OBSTETRICS.

FRIDAY, MAY 23RD, 1890.

S. R. MASON, M.D., President, in the Chair.

Specimens.—Dr. BAGOT showed a Fibromyoma of the Ovary. There was a great difference of opinion as to the nature of the solid non-malignant tumours of the ovary, some observers stating that they were fibromata, others that they were chiefly fibromyomata. Sir Spencer Wells had met with but six examples which he considered to be fibromata. Mr. Alban Doran, however, who had examined one of these tumours, stated that it was a leiomyoma, containing but little true connective tissue. The tumour shown by Dr. Bagot, which was removed from a woman, aged 44, who had been married twenty years, and had borne eight children, consisted mainly of unstriped muscle, arranged in bundles. Adjoining bundles ran at right angles to one another. Traversing this tissue were numerous tracts of fibrous connective tissue, rather dense. They presented a somewhat insular appearance, as seen in the sections. Small blood vessels could be seen here and there, and there appeared to be very thick external coats to these vessels.—Dr. W. SMYLY exhibited an Ovarian Tumour complicated with Malignant Disease of the Peritoneum, which he had removed from a woman aged between 50 and 60 The patient made an uninterrupted recovery, and left the hospital within three weeks. Dr. Smyly also exhibited a large Fibromyoma of the Uterus. He enucleated the tumour, which weighed something over 11 lbs., tied the broad ligament in the ordinary way, and stripped the peritoneum off the tumour. He stuffed the hole left by the tumour with iodoform gauze, and closed it up. The patient died on the second day after the operation.

Speculum Illuminator.—Dr. MORE MADDEN made some observations on a new speculum illuminator. (See JOURNAL, May 10th, p. 1078).

Paper.—Dr. MACAN read a paper on a case of ovariotomy during pregnancy.

REVIEWS AND NOTICES.

HE ANATOMY OF THE CENTRAL NERVOUS ORGANS IN HEALTH AND DISEASE. By Dr. HEINRICH OBERSTEINER. Translated, with annotations and additions, by ALEX. HILL, M.A., M.D., Master of Downing College, Cambridge. Pp. 432. London: Charles Griffin and Co. 1890.

v reviewing a translation, the work of both the author and the anslator has to be considered, and especially is this the case with r. OBERSTEINER'S work, for Dr. HILL has enriched it by many otes of his own. As instances we may mention that the accounts the preparation of nervous tissues for examination, and of the generation of nerve fibres after section, have been considerably nplified, and whenever it has been necessary, facts which have en discovered since Dr. Obersteiner's book appeared have been lded. Thus there is an admirable epitome of the curious results tained by Sherrington in his experiments, which show that the th of the descending fibres in the spinal cord is extremely com-ex, for not only do they cross as recrossed tracts and increase in mber from above downwards, but the arm fibres may actually most numerous in the lumbar area, and *vice versâ*.

Space will not allow us to allude to the other numerous stances in which Dr. Hill has added to the book. They all show w well it has been brought up to date, although so rapid e the studies made nowadays, that already since its publication scoveries have been made which will have to be incorporated in econd edition.

In some places Dr. Hill has been unable to resist the temptation inserting his own views upon the theory of the structure of the rvous system. The reader cannot complain, for he gets more od material than he expects, because he takes up the book look-g forward only to the pleasure of reading Obersteiner, and he ds that he has that also of reading Hill. Whether Dr. Hill is se in sandwiching his views in between Obersteiner's facts is, rhaps, open to question, for it may be that either they will be ried from some persons who would wish to find them, and would think of looking for them in Obersteiner's work; or, it may that others will assign them to Obersteiner.

The criticism which forces itself upon us is that so much of Hill's views are views only. For instance, one of his favourite ories is that the granule cells of the cerebral cortex and the ge cells of the spinal ganglia are comparable to the granule ls of the retina and of the olfactory bulb, both in origin and ction. But as neither the origin nor function of any of these ls is certainly known, it is a little rash to assume that the gin and function of all of them is similar. Perhaps the best y to illustrate the extremely theoretical character of these ws is to quote the following phrases, all of which occur in the ge and a half of printed matter in which this theory is dis-sed. "It is almost universally accepted." "There is every son." "It is safe to assume." "According to the translator's ory." "It is tempting to suppose." "Probably each." "Pre-ably." Different persons place different value upon state-nts, but for our part we cannot help thinking it would have n wise not to have introduced into a textbook a hypothesis sup-ted upon evidence so slender that it needs to be introduced by h phrases. Everybody is perfectly at liberty to assume any-ng he likes, but it is very much open to question whether it is to assume anything when considering so intricate a subject he central nervous system.

he fault we have just found is, however, the only one we have nd with the book. Dr. Hill's translation is most accurate, the glish is excellent, and the book is very readable—much more so n most translations. There are very few slips, and the glossarial ex in which the Latin, English, German, and French names for different parts of the central nervous system are all given will ound very useful.

here is one feature of Dr. Hill's work for which we think he erves the greatest praise, namely, that he has seized every op-unity of introducing comparative anatomy. We quite agree n him that the ultimate appeal as to the correctness of any v upon the structure and function of the central nervous sys-will have to be to the facts of comparative anatomy. On e 99 the broad differences between the brains of vertebrates are cated; on p. 266 is a very useful note on the differences of the ctory lobes in various animals; on page 276 the same subject is continued; and on page 330 there is a brief account of some of the differences in the cerebellum in vertebrates.

Turning now to the work of Dr. Obersteiner, we may at the outset say it is admirable. He has a marvellous power of marshalling together a large number of facts all bearing on an extremely intricate subject, and of presenting them to the reader as a harmonious, clear, consecutive whole. The majority of medical students and practitioners have not time to read so elaborate a book, but it will be invaluable as a textbook for those who devote special attention to the nervous system and as a book of reference for others. Of course all parts of it are not equally interesting—no one can make a bare description of a series of sections through the brain very attractive—but even these parts of the book are accurate and clear. The account of the external anatomy of the brain and spinal cord is likewise admirably written; it is at times a little wearisome, but that is the fault of the subject not of the author, for it is his duty in such a book as the present to mention all the parts which have received separate names, even when they are hardly worth naming. The sections which treat of the relationship of parts to each other, and of the course of the fibres, are quite fascinating reading. We would especially mention Section VI, on the course of fibres. Both motor and sensory fibres are clearly traced, and the account here given of the sensory fibres is by far the best we have met with. Even so confusing a subject as the fillet is made plain. Dr. Obersteiner has refrained from devoting more than a page or two to the many "plans of the nervous system" that have been put forward, and in this we think he is wise. Our knowledge of the brain and spinal cord would be more thorough than it is if some of the energy which ingenious speculators have spent upon evolving plans had been spent upon trying to unravel the numerous complexities of structure. The attempt to form a plan of the nervous system with only our present knowledge is as vain as the drawing of the map of a country when we only know for certain the coast line, and are driven to guess at the configuration of the interior; and a bad plan is like a bad map—it leads us hopelessly wrong.

The only weak point of the book is the account of the various diseases of the nervous system. It is so short that it is incomplete, and unless read with great care may be misleading. The illustrations are admirable, and the diagrams are particularly useful. The book is well printed and well got up, and the misprints are very few.

LECTURES ON NERVOUS DISEASES. By AMBROSE L. RANNEY, A.M., M.D. Philadelphia: F. A. Davis.

IN his preface Professor RANNEY says that it must be conceded that his work "differs radically in arrangement and plan from others published upon this department of medicine." This is due in part to the choice of the author, in part to the method he has adopted in composing the book. It has the scheme of a complete and systematic treatise on the pathology of the nervous system, but its most important portions consist of special lectures and papers by the author, some of which have already been published, and these are joined by shorter chapters upon most of the remaining subjects, so as to form a more or less continuous work.

The book is divided into seven sections. The anatomy and physiology of the nervous system and the method to be adopted in the examination of patients afflicted by nervous diseases are discussed in the first two sections; the diseases of the nervous system are afterwards described, and the book concludes with an account of the use of electricity in medicine and a glossary of neurological terms.

The first section—on the anatomy and physiology of the nervous system—is perhaps the most valuable in the book. While the author presents us with an analysis of literature with which his wide reading has made him acquainted, he has criticised the views of the writers quoted, and expresses the opinions he himself has formed.

The author adds, very unnecessarily, to the confusion already existing in regard to the use of the term "hemianopsia," by applying it to "loss of vision in one lateral half of each retina," whereas most writers are now in agreement that the word should be retained for loss of one-half of the field of vision. Thus Professor Ranney's bitemporal, is ordinarily known as binasal, hemianopsia, and *vice versâ*. A novel explanation is given of the occurrence of the binasal hemianopsia, as ordinarily understood. It is suggested that atheroma of the vessels forming the circle of Willis, may cause their pulsation to injure those fibres of the

optic chiasma or optic tract, which go to the temporal half of each retina.

In the description of aphasia, which is discussed both in the opening section and also under the head of diseases of the brain, Kussmaul is chiefly followed. The "General Deductions" on this subject are excellently put. Indeed not only here, but in numerous other parts of the work, as for instance in the summary of the physiology of the spinal cord, and in the tables of differential diagnosis of nervous lesions, the author displays the power of a clinical teacher and gives most useful help.

Anæmia and hyperæmia of the brain, and cerebral hæmorrhage are described with care, and in a very lucid manner. The causes of cerebral hæmorrhage might have been discussed at greater length. The author lays more stress upon changes of structure in the blood vessels than upon the strain of their walls caused by high arterial tension. Disorders of intelligence, he thinks, are proportionate in degree to the amount of destruction of nerve tissue, and are not related specially to the seat of the lesion.

The systemic diseases of the spinal cord are also well described, but the account of other diseases of the cord and that of many functional nervous diseases are very imperfect. Thus, three pages only are given to acute myelitis, and functional paraplegia is dismissed in scarcely half a page. The morbid anatomy of chorea occupies four lines, in which it is stated that it is doubtful if any anatomical changes exist. The author says that he has never seen any affection of the heart in chorea; this is a very remarkable experience. The theories held with regard to the production of the disease, even though some of them are based on important experimental data, are thought to be of so little moment that they are not related at all. In the account of myxœdema the thyroid gland is never mentioned.

There is a great deal of very excellent matter in the book, as might, indeed, be expected from so experienced a neurologist as Professor Ranney. But the different portions of this work are singularly unequal in merit; some chapters are of considerable scientific value and are written by a master hand, others are very sketchy and incomplete. In publishing a series of lectures, an author is, of course, justified in choosing such portions of his special study as he pleases; but the work before us has the arrangement of a systematic treatise, and it is expected to be complete. Moreover, there should be a due proportion in the attention paid to those subjects which are discussed, and it is to errors in both these respects that we have felt it our duty to call attention. The excellence of certain chapters accentuates the deficiencies of others, and we cannot but feel that the work suffers by comparison with the monumental treatises on nervous diseases by English authors at our disposal.

THE NATURAL HISTORY OF SPECIFIC DISEASES. By EDWARD F. WILLOUGHBY. London: H. K. Lewis. 1890.

IN a pamphlet of sixty-four pages, Dr. WILLOUGHBY discusses some of the most important and interesting problems which have arisen out of the minute inquiries and investigations of late years into the natural history and pathology of the group of diseases for which Dr. William Farr proposed the name "zymotic." Dr. Willoughby divides them into three classes: (1) The Contagia—which he subdivides into four subclasses, namely, intracorporeal, autochthonous, extracorporeal, and zoötic, etc.—(the subclass "extracorporeal" including the communicable miasmata of Hirsch). (2) The Miasmata (not communicable). (3) The Mycetosæ. The doctrine of evolution, as it bears on the elucidation of those diseases which he designates as extracorporeal contagia, under which heading enteric fever and diphtheria are classed, is then briefly discussed. The author shows a strong bias in favour of the view that the introduction of a specific poison is an essential condition of the appearance of enteric fever, however polluted the soil and water may be. "I have frequently enforced," he writes, "the value of sanitation of soil and water in the prevention of enteric fever and cholera by the simile of sowing a dunghill and a sandheap with mushroom spawn, when the former, though it would never have produced mushrooms of itself, will yield a heavy crop, and continue to do so perhaps for years; while in the other the yield will be scanty, and the spawn will soon die out for want of pabulum."

Under the headings "Immunity" and "Protective Inoculations" problems of great interest are touched upon, and many ingenious speculations are advanced to account for the inexplicable phenomena of infectious diseases. The most interesting part of this little work, from a practical point of view, is that which treats of the "Ways and Means of Infection." Here the author boldly challenges the views which are favoured by the Medical Department of the Local Government Board with regard to the spread of small-pox through atmospheric dissemination, and he instances the case of the Deptford Metropolitan Hospital, the experience with regard to which seems to point to conclusions exactly opposite to those arrived at in the case of Mr. Power's classical inquiries with regard to Fulham. This part of Dr. Willoughby's work deserves careful study, as does also that in which he gives prominence to the experiments of Voigt, which go to prove the identity of cow-pox and small-pox. But here, again, the author shows a somewhat partisan spirit, for he passes over almost unnoticed the numerous unsuccessful attempts by highly competent men to produce cow-pox by variolation. We must also caution readers that the views expressed by him, when writing on less controversial subjects, are not always those entertained by most authorities. For example, we find it stated in the section treating of "Periods of Incubation," that the usual incubation period of scarlatina is exactly forty-eight hours; whereas, in the textbooks of medicine, a much longer period is generally given.

Dr. Willoughby's pamphlet is well written, and, containing as it does much interesting and useful matter, it deserves a wide circulation.

NOTES ON BOOKS.

The "J. E. M." Guide to Davos-Platz. Edited by J. F. MUDDOCK, F.R.G.S. Fourth edition. (London: Simpkin, Marshall, Hamilton and Co. 1890.)—This well-known guide to Davos-Platz has reached a fourth edition, and this edition contains, besides the useful information provided in former issues, an account of the remarkable development of this health resort in recent years, of the sanitary and other improvements lately completed, and supplies an additional map showing the course and stations of the new railway which will in a few weeks be opened the whole way from Landquart to Davos. After July 1st next railway communications between London and Davos will be complete, and the tedious and fatiguing diligence, sleigh, or carriage journey from Landquart will be a thing of the past.

L'Intoxication Chronique par la Morphine et ses Diverses Formes. Par le Dr. L. R. REGNIER. (Paris: Aux Bureaux du *Progrès Médical*, 1890.)—The writer of this monograph has treated his subject with the exhaustiveness which we have learned to expect in all that emanates from his school. The major part is naturally devoted to the symptoms, prognosis, and treatment of morphinomania which the writer very justly regards as an exceedingly grave affection, both from the point of view of the patient and from the medico-legal aspect, for though he does not find that it leads to such complete failure of mental power as to cause irresponsibility, yet it may bring about such deviations from the normal mental condition that irresistible impulses are possible. Abstracts of the cases on which his work is based and from which his conclusions have been drawn are given, and a very full bibliographical index.

Health Springs of Germany and Austria. By F. O. BUCKLAND, B.A.Oxon., M.B.Edin. Pp. 132. (London: W. H. Allen and Co.)—The information contained in this little volume is generally accurate and reliable so far as it goes; but it is obvious that the "springs of Germany and Austria" can receive only a very superficial consideration in a small book of 132 pages printed in large type. Serious omissions are inevitable; as, however, there is no index to the book, these can only be discovered by reading through the volume. We have not been able to find in it an account of the important Saxon spa, Elster; the well-known Black Forest resort, Rippoldsau; the Alsatian Niederbronn; or of Rehme, the important and well-arranged salt bath in Westphalia. These are places of considerable resort, and should not be left out of consideration in a work which professes to be in some sort a guide to the spas of Germany and Austria. Nor is even the brief account given of some of the most frequented spas up to date; for instance, of Wildbad it is said: "The nearest station is Pforzheim, about an hour's journey beyond Karlsruhe...the drive from Pforzheim is delightful." Now, Wildbad has had a railway and station of its own for many years—certainly more than ten

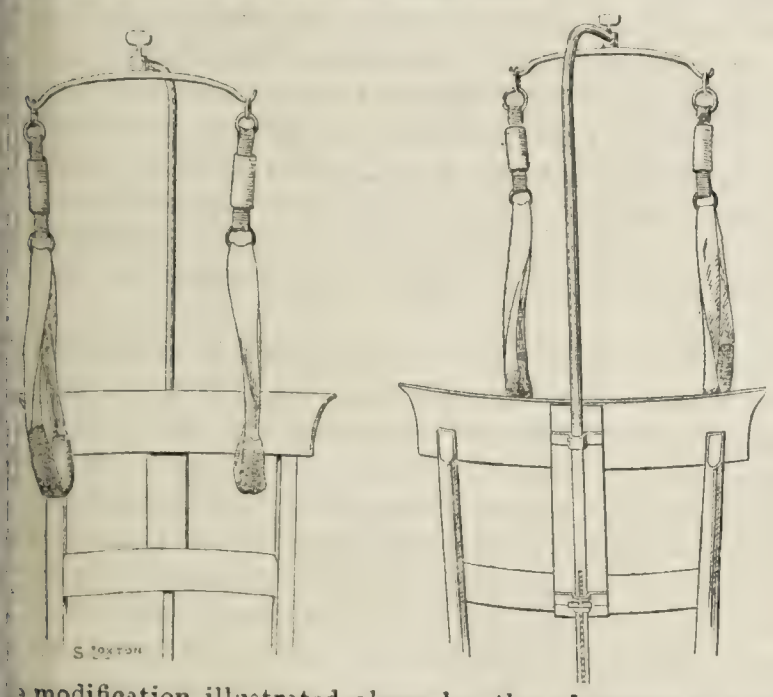
ain, what useful information is conveyed in such a vague and ieral statement as this?—"The 'earthy' waters seem to be ted to dyspepsia, diarrhœa, rickets, tuberculosis, eczema, riasis, and gouty manifestations generally." Surely there is y little guidance in a guide like this. There are, however, ay sound common-sense remarks scattered through the little ume on the action and uses of those springs the author is t acquainted with.

REPORTS AND ANALYSES
AND
ESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW CHAIR SUPPORT FOR SPINAL CURVATURE.

s supports, which I brought before the notice of the profession he annual meeting of the British Medical Association held in c in 1880, have proved of much service in my own practice in that of several others. I will mention only two illustra- cases. The gentleman for whom I first designed them vered perfectly from chronic inflammation of his cervical ebræ, which had induced severe headaches and spasmodic ma. A lady, who endured much suffering owing to her lower t ribs catching inside the crest of her ilium, lost all pain by ly having arm rests fixed to her easy chair.

hese appliances are suitable only for reading or other quiet pati n, in which a person can lean back.



e modification illustrated above has the advantage of allow- reedom of action for working and writing. I devised it lately n elderly lady who has severe lateral curvature, with con- able rounding of her back forwards, which causes great pain r dorsal muscles and nerves. It has relieved her extremely, ing her to read, work, and write so freely that, she tells me, as several times risen from her chair forgetting that her were in the supports, and was only reminded of the fact by held back by them. She has also been able to resume out- or walking exercise.

principle is obvious: a jury mast, capable of being raised or ed, fixed to the back of the chair, with cross bar (also ble), head straps, and arm loops, which are stiffened for rting the axillæ, and rendered elastic by being connected the cross bar by india-rubber rings. A strap can be used if ed to adjust the loops to the width of the shoulders.

Angell, surgical mechanist to Messrs. Ferris and Co., Bristol, rried out the design to my entire satisfaction.

re are many cases of lateral curvature in which, particularly erly people, plaster-of-paris or felt corsets are undesirable, l not be endured; whereas these simple appliances, fitted patient's ordinary chair and made use of at will, are gladly ed.

ton.

CHARLES STEELE, M.D., F.R.C.S.

7

AN IMPROVED FEEDING CUP.

DR. THOMAS M. WATT, of Hovingham, Yorkshire, has designed a form of feeding cup which is undoubtedly a very great improvement on those ordinarily to be obtained. The common feeding cup has a handle opposite the spout, and the mouth of the spout is circular. The first of Dr. Watt's improvements is to place a handle on each side at right angles to the spout; in this way, when the nurse, holding the third or middle handle, brings the spout to the lips, the patient has two handles one on either side to grasp and steady the cup to the lips. The second improvement is to flatten the end of the spout, so that the lips close over it without an effort. The third improvement is to graduate the cup inside in ounces, so that it may be seen at a glance how much the patient has taken. It will probably surprise a good many people, who have not given the matter a thought, to learn that an ordinary feeding cup will hold eight fluid ounces—a fact which proves the importance of Dr. Watt's suggestion as to graduation. The improved feeding cup can be obtained from Mr. R. L. Whigham, 22, Brook Street, Bond Street, W.

PEPSALIA.

THIS preparation is described as a digestive table salt. It is obtained by combining digestive ferments with salt by a special process of preparation, which is founded upon correct principles. We have examined several samples, and find that the substance is free from adulteration and impurities, and that it possesses a high degree of digestive power when tested under the usual conditions upon such food materials as hard-boiled egg albumen. The preparation, although it has a slight grey colour, resembles ordinary table salt, and is intended to be used in the same way—that is, as a condiment. Apart from laboratory experiments upon nitrogenous food, we have satisfied ourselves that when used as a condiment it affords a strong aid to digestion. The claims put forward by the proprietors (G. and G. Stern and Co., Gray's Inn Road, W.C.) are justifiable, and the preparation is likely to be a useful one.

SANTHA TEA.

THIS preparation is a powder of a light brownish colour put up in small bottles, and described as a "digestive extract of tea." We find, on analysis, that it consists of a dried and ground tea extract intimately mixed with gelatine, and containing a very small proportion of milk sugar. The object of adding the gelatine is to "neutralise" the tannin as such, and to produce a "tannate of gelatine" when the preparation is treated with hot water, so that the injurious effect of the "free" tannin in the tea will be obviated in so far as it is possible to do so by substituting the gelatine compound for the "free tannin." The amount of gelatine added has been graduated according to the amount of "tannin" present in the dry tea extract, so that precipitation will be avoided as far as possible; and a fairly clear liquid is obtained on preparing the substance in the manner indicated in the instructions. The manufacture of the powder has been conducted with care and intelligence, and it may be found useful. It is made by the Santha Tea Co., Hatcham, E.

STANDARD MALT EXTRACT.

IT is claimed that this is a malt extract of very high diastasic power, and that it is not liable to undergo fermentative change and decomposition. We find the extract to be very rich in diastase, and that it keeps very well—better than other well-known brands. It is of pleasant taste, sound, and well prepared. The method adopted to preserve the extract is not of such a nature as to be objectionable in a preparation of this particular kind, but we consider that it would be to the advantage of the manufacturers (Standard Malt Extract Co., Mistley, Essex) if they did not endeavour to make a secret of the matter.

A SIMPLE FEMALE CATHETER.

OTTO KÜSTNER condemns the conventional female catheter, in the *Centralblatt für Gynäkologie*, No. 23, 1890. He considers that the holes down the side and the blind extremity together form a bad arrangement. The extremity gets filled with liquid septic matter during use and with dust and dirt when at rest; it is difficult to clean and sterilise in hospital practice. When carried about it must collect dirt, which is seldom if ever carefully removed. Hence Dr. Küstner recommends that the female catheter should be a simple straight tube, open at both ends. Over and above this principle he insists that the best material for the instrument is glass. He has advocated and used a catheter of this kind since 1883. Its employment assures, he considers, the prevention of cystitis.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1890.

SUBSCRIPTIONS to the Association for 1890 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 28TH, 1890.

THE CHOLERA AND THE RIVER LEE.

Now that cholera is threatening, the disgusting and dangerous pollution of a river which largely supplies East London with drinking water is a matter of the most urgent public importance. It must be remembered that the last great cholera epidemic in London, which killed six thousand persons, was localised in East London, and was due to the pollution of this river by one family located in one house.

If any argument were needed to prove the necessity of a revision of the laws which affect pollution of rivers it surely came out on the recent case at the Edmonton Petty Sessions, before the local justices, when the Lee Conservators sought to punish the Local Board of Health of Tottenham for again fouling the reach of the river below the outfall of the sewage works of the district, the very site of the public outcry some four years since. The facts are very simple :—By a special clause in the Lee Conservancy Act, 1868, Tottenham has a statutory right to discharge its sewage into the Lee, provided it be purified and disinfected "by the best known practicable process." At once there is a peg upon which to hang controversy. What is the best known process? Surely that which produces the best results, not the best looking "effluent," not the "pellucid jets of spring water" which we were promised some 20 years ago, but a process which shall "purify and disinfect" the sewage and shall not injure the river into which such purified and disinfected fluid shall pass. It would appear that for some four years the Tottenham Local Board had purified its sewage by the use of a material which is manufactured out of black ash waste, by Hanson, of Wakefield, and, to use the words of a contemporary, "in a marvellously short space of time the Lee was rescued from a fearful state of pollution so as to become once more a place of pleasant resort to the people of the surrounding district." Now the Lee Conservancy Board are in this position : If they seek to enforce the use of any particular method of dealing with sewage they are open to the chance of such method being improperly applied and so nuisance created ; and the reply to complaints made would not unnaturally be : "We are using that which you yourselves recommended." If the Conservators let the matter alone until a nuisance arises and then seek their remedy at law they are, as in this case, tossed about from post to pillar, gaining no relief and the nuisance continuing. A type of this exists in the well-known Hertford case. After spending some six thousand pounds in an action at law, the Board was defeated and the partially-purified effluent from Hertford still pollutes river, and this, too, above the intake of one of the water co panies, Tottenham pollution being below any water sup question, but still affecting the health and recreation of mu tudes in north-east London.

The proceedings before the Bench at Edmonton ended in case being dismissed, as the Bench considered that the ri parties were not before the court. The facts are that in 1 an Act was passed whereby the Tottenham Local Board v divided into two districts—the Wood Green Local Board the Tottenham Local Board ; and these bodies appointe "Joint Drainage Committee," who, it was contended, are responsible parties. Now this Committee is not a "perso within the meaning of the Lee Conservancy Acts, and it is easy to see how Tottenham can get out of its difficulty by ruse it has adopted. The Local Board, as Mr. Horace Av pointed out, are liable for suffering the sewage to flow thro their works, and so to pass in an unpurified condition to stream. The Bench thought otherwise, and dismissed the with costs. We understand that the Lee Conservators h given notice of appeal to the High Court. Meanwhile, question remains unsettled.

According to Major Flower' evidence, the Tottenh Board, or Joint Drainage Committee, or their engineer, been "experimenting." Not content with leaving well alo and going on with that method of treatment which had duced such good results, and which had given satisfaction the residents, to the boating men, and to the conservators, t tried to please the ratepayers, and economise, and so "exp mented" with chemicals—all of which, or combinations which, had been tried and found wanting in the y gone by.

Mr. W. C. Young, the consulting chemist to the Cons ancy Board, who analysed the samples, proved that they v practically "foul sewage." The time has come when it pears necessary that the Tottenham sewage works be al doned, and the sewage taken out of the district altoget whether by joining the main sewers of the London Cou Council or by constructing the main intercepting sewer wh was jointly designed by Sir Joseph Bazalgette, C.B., M Lamorock Flower, and Messrs. Law and Chatterton. former is, we hear, physically impossible except during summer months ; the latter would be too costly to saddle u one comparatively small district, but one which is perfe practicable if made a scheme for the whole of the residen districts of the Lee Valley.

We are brought back to the position from which Tottenh retrograded when it began "experimenting" in the early of this year ; and it appears to us that if it could be agr upon that for five months of the year in perpetuity the sew of Tottenham could be received into the metropolitan sew and for the remaining seven months the sewage be prop treated by a sufficient quantity of Hanson's material an passed to the Lee in winter, we should arrive at a just inexpensive (comparatively speaking) solution of the mat The legal points remain, and the National Society to Sec Effective Legislation Against River Pollution, which originated by the late Mr. William Burchell, certainly ha *raison d'être* for its existence.

HE RELATION OF CHRONIC ENDARTERITIS AND BRIGHT'S DISEASE.

VER since the famous papers of Gull and Sutton on arterio-pillary fibrosis, there have been physicians who have fol-wed these authorities in regarding the arterial changes as e primary and essential lesion in at least a certain type of ntracting kidney. One of the most enthusiastic of these as the late Dr. Mahomed, who believed a persistent increase arterial tension to be the initial disturbance. There is little om to quarrel with this manner of looking at the facts, for rational explanation has been supplied by Dr. Haig, who s pointed out that excess of uric acid in the blood gives rise increased arterial tension, so that we may readily accept is order of events as true for that form of chronic kidney ease which has been called gouty or lithæmic nephritis; but is not so easy to accept the doctrine that the vascular ange is all-important, and that the kidney disease is merely ocal expression of a generalised pathological process and un-rthy to be any longer described as the titular lesion. This ggestion was made by the late Dr. Fothergill, in a book called *iso-renal Change versus Bright's Disease*, while Dr. Arthur Meigs, in a recent paper entitled "Chronic Endarteritis, d its Clinical and Pathological Effects (Chronic Bright's Dis-e)," boldly claims to have superseded the name of chronic ight's disease by "chronic endarteritis," in at least a certain mber of cases usually described by the former title.

Questions of nomenclature are not very profitable for discus-n, for it often happens that use and custom prevail over the t-founded arguments for change, numerous examples of ex-dingly ill-chosen names in established use being well known every reader (for example, cirrhosis, apoplexy of the lung, hyxia, amyloid disease), nor can we pretend to fear lest weak leaning towards fashionable Americanisms should atly influence the College of Physicians or the writers of tbooks. It is therefore altogether on its merits that we ld discuss this proposal, and see how far Dr. Meigs has n able to justify the doctrine that endarteritis is the essen-lesion of certain forms of what we should call chronic ght's disease.

At starting, we may say that Dr. Meigs writes as if chronic arteritis had never been recognised before, and he appears forget that the association of this affection of the larger middle-sized vessels with gout, and with the age at which æmic nephritis is especially prone to declare itself, is an lisputed fact.

It is also quite generally known that hæmorrhages of all ds are liable to occur in chronic Bright's disease, and the lanation of their occurrence is usually attributed to vascular eneration.

Dr. Meigs's actual contribution towards the solution of question consists of eighteen very briefly recorded cases, which three only were followed by necropsies. He tells us want of space alone prevented his giving a larger num-of necropsies. It would have been better had he selected publication those cases where the existence of the lesion to ch he attaches so much importance had been placed beyond ute by *post-mortem* examination. Of these eighteen cases teen presented the usual signs of Bright's disease, having albumen and casts in the urine, while only eleven showed any evidence (hæmorrhages, cerebral softening, rigidity of radial artery, or *post-mortem* evidence) of endarteritis. As an example of cases affording no sort of evidence of the existence of endarteritis, we quote Case 12 *in extenso* :—

"A man, who is now about 84, and for his age quite active, has for the past fifteen years had very frequently albumen and casts in his urine, and during most of that time his breathing has been somewhat wheezing, with bronchial and asthmatic *râles* to be heard in the chest."

That is all. The case may have been quoted simply to show that people live a long time who pass urine containing occasionally albumen and casts, but it certainly does not afford any evidence that chronic Bright's disease commences by endarteritis.

The pathological evidence is of a similarly inconclusive character. Thus Case 13 was that of a man who inherited gout, developed Bright's disease at 57 to 58 years of age, and died from general dropsy in a state of insanity, aged 60. At the *post-mortem* examination "The heart was greatly hypertrophied and the arteries diseased (see Figs. 1 and 2), and once he had a slight uræmic convulsion." Again we remark, that is all! The figures consist of a transverse section of a coronary artery showing chronic endarteritis deformans, and a similarly affected branch of the renal artery. Case 16 was that of a man, aged 32, who had suffered from acute rheumatism, followed by aortic regurgitation, and albuminuria with casts. There are no details of the *post-mortem* appearances except another drawing of a transverse section of a branch of the coronary artery affected as in the preceding case. Case 18 is the most remarkable, as it is that of a baby who died, aged 5 months, of marasmus, and in whose left coronary artery a patch of endarteritis was found and figured. If this was really chronic endarteritis deformans (atheromatous inflammation) it is of interest, as the disease is excessively rare at so early an age; but some pathologists may suspect that the marasmus and the endarteritis were alike syphilitic—an obvious objection which the author does not seek to meet in any way.

This is a fair summary of the evidence put forward, for we are unable to follow the author in his argument that pulmonary complications indicate the presence of pre-existing endarteritis. The ordinary explanation of their dyscrasial origin seems to us to have much in its favour, while there appears to be no sort of evidence, or even argument, in Dr. Meigs's paper to show that endarteritis, even if present, can cause pulmonary disease. At this point we should like to draw attention to the following passage, which seems not easily equalled for *naiveté* : "It is a curious fact," says Dr. Meigs, "and one worth recording, though at present I can offer no explanation nor draw any deductions from it, that in several different sorts of tissue removed by operation by surgeons as incurably diseased, I have found, upon microscopical examination, precisely the same endarterial inflammation and thickening, in some vessels so great as entirely to close their calibre, as found almost universally throughout the body in the cases of chronic endarteritis or chronic Bright's disease that have been described. These have been ovaries and Fallopian tubes removed by gynecologists, a vulvo-vaginal retention cyst, a

cancerous uterus, and, I think, other tissues." He is apparently quite unaware that this fact was many years ago fully described by Friedländer, and that the obvious interpretation put upon it is that where there is chronic inflammation of the tissues, or even an active formation of connective tissue—as in the cicatrisation of the corpora lutea of the ovary—the walls of the vessels participate in the change, a law already laid down by Cornil and by Rindfleisch; that is to say, the lesions of the vessels are secondary to, or participating in, the tissue changes. They are quite distinct in their etiology from the atheromatous changes which he figures, and with which he confounds them.

It may be admitted that atheromatous degeneration of the vessels is a primary disease, and, moreover, that when it attacks the renal artery it gives rise to changes in the kidney closely resembling those of contracting nephritis. But extensive atheroma of the renal artery, such as could thus interfere with the nutrition of the kidney, is a pathological rarity; Dr. Meigs has not brought forward satisfactory evidence to show that it was markedly present in any of his cases, though slight atheroma of the renal artery existed in Case 13.

The more, therefore, we inquire into the question the less satisfactory does the position of Dr. Meigs become. If he means to assert that all cases of contracting nephritis or chronic Bright's disease have atheromatous vessels or thickened arterioles he has against him almost everyone who has examined the subject. If, however, he only means that persons suffering from atheromatous disease of the arteries are liable to acquire a chronic form of kidney disease, we could only reply that we have known cases of marked atheroma without notable changes in the kidneys, while the extreme frequency of renal changes at the period of life at which atheroma occurs makes the coincidence of these lesions of small value as evidence of their dependence on one another.

Dr. Meigs is not at all clear as to the mode in which the endarteritis is produced, but in some cases at least he thinks it may be dyscrasial, as, for example, in Case 16, of which he says: "I feel quite satisfied that the man had rheumatic endocarditis, and at the same time or soon after, and as a combination of the same process, endarteritis." It would seem, therefore, permissible to ask why, if a dyscrasia can cause endarteritis, it should not also cause nephritis? But this does not seem to have occurred to him. He says: "It would be easy to accept the old explanation—rheumatic endocarditis, aortic regurgitation, cardiac hypertrophy, increased arterial tension, hypertrophy of the muscular coat of the arterioles, venous congestion of the kidneys, and thus Bright's disease secondary to the rheumatic heart disease. This as an explanation has long seemed to me more than merely theoretical—it is positively fanciful and visionary." We are not disposed to quarrel with his opinion of the explanation given as the "old" one, but who in the world ever hazarded the statement that increased arterial tension follows aortic regurgitation, or even that venous congestion of the kidneys causes Bright's disease?

Dr. Meigs appears to think that there may be a third factor—a lesion of the renal nerve plexus—which may account for both arterial and renal changes. This suggestion was made by Drs. Da Costa and Longstreth ten years ago; but Dr. Meigs makes some claim to priority over them. In any case it has been pretty well shown that the ganglionic changes relied on are exceedingly common, and are not confined to any particular form of Bright's disease, so that they can scarcely have the specific etiological value claimed for them.

While much may be excused in an author who is more concerned to expound new views clearly than to refer to the work of others, it is not clear that Dr. Meigs has made himself acquainted with the general relations of endarteritis, or we may add, with that of the changes in the sympathetic ganglia to which he alludes.

That there are persons whose symptoms may be mainly due to chronic endarteritis or atheromatous inflammation of the arteries is not denied, but this is nothing new, though possibly the supervention of some local disorder leads to this being classified under that rather than under the name of the primary and predisposing affection; but even this admission does not justify us in accepting the doctrine that chronic Bright's disease is a local result of atheromatous endarteritis—a conclusion which is in no way made more probable by Dr. Meigs's paper.

DEGREES FOR LONDON MEDICAL STUDENTS

Opposition to the scheme for the reconstruction of the University of London, adopted by the Senate after conference with the Royal Colleges of Physicians and of Surgeons of London, and University and King's Colleges, has shown itself during the present week in two quarters. As will be seen however, from the report of the meetings of Convocation, which is published in another column, that body rejected a somewhat strongly worded condemnatory resolution moved by Mr. Tyler and satisfied itself by merely expressing the opinion that it ought to be consulted as to the scheme of reconstruction before that scheme is embodied in a new charter. As to a second resolution, however, there was practical unanimity; this resolution, after a preamble declaring that the Universities of Oxford and Cambridge are the models upon which the University of London ought to develop, expressed the view that great or predominant power ought not to be placed in the hands of persons who are not graduates.

The opposition of the provincial colleges, which found expression some months ago in a deputation to the Lord President of the Council, has now led to the drafting of a memorial criticising the new scheme, which will be presented to the Lord President shortly. The memorial insists on the objection "against the transformation of a national institution like the present University of London, whose domicile is naturally in the metropolis, into a local university, with merely the additional power to grant degrees to outsiders." The provincial colleges thus take up the same position as that originally held by University and King's Colleges and since abandoned. Some doubt may therefore be reasonably felt as to the validity of the objection, which, however, has never been more forcibly stated than in this memorial, a copy of which is now before us. The memorial points out that the provincial colleges would be entirely excluded from representation on the governing body of the University, and that they would be equally excluded from the boards of studies. "Thus," the memorial continues, "the standard and char-

of the whole of the examinations will be practically in the ds of the London colleges and medical schools, and will urally (and properly for a teaching university) be made to the London curricula, without reference to the needs of er parts of the country. Another duty of the Board of dy of the Faculty of Medicine will be to advise the Senate he revision of the list of recognised medical institutions, to determine in what branches of medical education the ificates of each of the said institutions shall be received. s the acceptance or rejection of the certificates from pro- ial schools of medicine, and the approval or disapproval of r curricula of study, will depend entirely upon the repre- ation, and largely upon the judgment of rival schools in metropolis, many of which are inferior in equipment and eral efficiency to the provincial schools, and the provincial ols will have no opportunities of urging their claims to re- ition, inasmuch as they are to have no representation on faculties."

t is further urged, as an objection to the scheme, that the isions for the election of examiners will practically result ne appointment of Fellows of the Royal Colleges attached ondon hospitals. Finally, the memorial states that if a charter is granted on the lines of the recent scheme, "the versity will find it practically impossible to refuse the rank constituent college' to a number of institutions now ex- g within the metropolitan area which unquestionably d assistance to many students towards the degrees of the versity. But neither the character of the instruction given the professional standing of the teachers in these institu- would justify their being preferred before the more ent university colleges, whose only disqualification is that are outside the prescribed area."

he arguments advanced in the memorial are well worthy of ideration, and will no doubt have due weight. If, how- the University is able to go to the Privy Council with a ne which has the approval of the Royal Colleges, of the lon Teaching Colleges and Medical Schools, and of the l Commission, it will have a very strong case; and it has suggested that the provincial colleges seriously interested e question—a number much diminished since the founda- of Victoria University—would do well to open up nego- ns with the Senate of the University direct.

THE HIGHER MEDICINE.

UINCEY complains, in a passage in his autobiography, that English are haters and revilers of ourselves beyond all dent, disparagers of our own eminent advantages beyond fferance of honour or good sense, and daily playing into ands of our enemies." If this be true of educated Eng- en in general, it has a particular application to our own od of disparaging the art of medicine, especially in com- on with that of surgery, and nothing is more frequent gst us than the complaint that medicine seems to lag d whilst the physical sciences stride majestically forward. disparaging attitude towards medicine arises partly from ance of the true province and nature of medical science, partly from the universal practice amongst mankind of ciating the things in which they excel. It is always the ed men who affect to despise letters, and the wealthy who speak disrespectfully of money. These can afford to do so. But an imperfect appreciation of the true nature of the physician's art is, we suspect, at the bottom of most of the reflections cast upon it. Sound judgment, combined with a high order of manual dexterity, will make an excellent surgeon; but a great physician needs almost the mental equipment of a great poet. What Emerson said of the poet is applicable in its degree to the true physician:

> "As the eyes of Lynceus were said to see through . e earth, so the poet turns the world to glass, and shows us all things in their right series and procession. For through that better perception, he stands one step nearer to things, and sees the flowing or metamorphosis .....The poet alone knows astronomy, chemistry, vegetation, and animation, for he does not stop at these facts, but employs them as signs."—EMERSON: *The Poet.*

It is not enough for the physician to know anatomy, physiology, chemistry, and pharmacology; he must not stop at knowing these, but must put them into the alembic of his brain, and transmute them into medical science. Professor Huxley said the other day that it would be simply manslaughter for a doctor to treat his patients on the raw and undigested principles of physiology. Medicine must, therefore, never be looked upon as a mere science, because it is much more than that; it is wisdom sublimated from many sciences; and this is why the Gulls, the Jenners, and the Clarks can never be as common as the mere scientists who work by rule and scale. When Coleridge was accused of plagiarising in his *Hymn to Chamouni*, from the poem of Frederica Brun on the same subject, it was easily explained that though he had taken her framework and used certain of her ideas, he had done so simply to glorify and endow them with life. With her they were dead phrases; Coleridge created the *Hymn to Chamouni* out of them. Just in proportion as the physician can create diagnosis and treatment for the cases which come before him as living and as various as the patients which are the subjects of the different diseases, just by so much is he a true physician. The inferior mind may see the same things as the superior, but the latter alone "sees their flowing and metamorphosis." This is why patients would go and talk to Sir William Gull and derive benefit from the conversation, though they came away with no prescription, and took no drugs from his hands. The vulgar mind cannot understand the reason of this, and the hard scientist smiles a little superiorly at the idea.

We have been led into this train of reflection by reading Mr. Guy Beddoes's interesting work, *Habit and Health*.[1] It is a selection from the works of the wisest physicians of modern times, and, within the compass of 350 pages, there is enshrined a medical philosophy which is the essence of the best teaching on health of body and mind. Nothing could better answer the objection that medical science has not kept pace with other branches of human knowledge than a perusal of its deeply instructive pages.

A medical writer recently stated that in some departments our art "had done nothing but retrograde for a thousand years, and in the last fifty years we have done little but pick up the clues which were lost when the Alexandrian library was burned." Yet the men of the past were not such fools as we

[1] *Habit and Health: a Book of Golden Hints for Middle Age.* Derived from the Works of Eminent Medical Men, and Edited by Guy Beddoes. London: Swan Sonnenschein and Co. 1890.

are too apt to consider them; and as we read the wise advice of such men as Hunter, Wilson Philip, Paris, Abernethy, and Johnson, we are constrained to admire their insight and the breadth of their mental vision—if only because they have shown us how much lies within our own power in the maintenance of health. Such men speak with the authority of genius, and not as the scribes who lack such insight; and their genius is shown by their faith in the power of Nature to cure diseases, and the caution with which they estimate the power of medicines to do so. The true physician endeavours to learn the secrets of Nature by reverently questioning her, and Mr. Guy Beddoes has filled his pages with the answers which never fail that patient and respectful attitude. That we have in modern times learned this much at least is the earnest of our future advance. Sir Andrew Clark has pointed out the aid which physiology has rendered to the physician in a hundred ways—notably in respect to the influence of our modern undue work and worry in depriving the stomach of its rightful share of nerve force, and so causing it to fail in its duty. Dr. Andrew Combe, by application of the principles of physiology, showed how mental stimulus influences muscular action, and indicated the influence which the higher feelings, after they have the ascendency, exert in promoting the general health. He has explained how the lower feelings, when unrestrained, how the mind oppressed with grief, anxiety, or remorse, have a direct tendency to produce bad health. We believed all this before on the authority of philosophers and theologians. The physiological physician gives us scientific reasons for our faith. But he goes further. As we are not all intellect, we must not concentrate our vital action in the brain, or we shall deprive the stomach and other organs of their requisite nervous stimulus. Literary men, by a disregard of this axiom of the physiological physician, often become hypochondriacal dyspeptics, and blame the art of medicine for not curing by drugs what is the outcome of their own violence to physiology. As we turn the pages of this book, we meet, in a score of pregnant passages, the warnings of wise physicians against the lives of "wear and tear" led by so many, Englishmen especially—the restless activity of mind, ever directed to one end, and that not the highest. Physiology has pointed the moral, and doctors have preached the gospel of, serenity, but too often they have been as voices crying in the wilderness, for no man regardeth them, and the reproach of the almost certain result of the disregard of their teaching is laid at the door of medicine. The "terrible cost of nerve tissue," as George Henry Lewes aptly said, is disregarded even by the wisest of us; when intellectual activity is accompanied by agitating emotion it is ruinous. "Our passions are destroying flames." This is sound teaching, and doctors have endorsed it. The evil influence of anxiety on digestion alone is well ascertained; but as we cannot counteract it by drugs, we are often reproached for incompetence. The whole teaching of modern medicine is in the direction of a better regulated mode of life, prevention rather than cure, or if cure rather by a reconciliation with offended Nature than a warfare with disease by medicines.

MR. JONATHAN HUTCHINSON has been chosen to represent the Ophthalmological Society at the International Medical Congress at Berlin.

SIR WILLIAM TURNER, Professor of Anatomy in Edinburg University, was a recipient of the honorary degree of D.C. at the commemoration at Oxford University on Wednesda June 25th.

THE Prince and Princess of Wales, and Princesses Victoria a Maud, paid an inaugural visit to the Cheyne Hospital for Si and Incurable Children, Cheyne Walk, Chelsea, on Wednesd afternoon.

AT a meeting of the Select Committee of the House of Lords the Infant Life Insurance Bill, the Bishop of Peterborough w elected Chairman. It was decided that the Committee shou take evidence, and that the proceedings should be open.

ON June 20th the foundation stone of the main building of t Emperor and Empress Frederick Children's Hospital at Berlin w laid in the presence of the Empress Frederick. Professor Vircho in the name of the Committee, thanked that exalted lady for h unremitting labours on behalf of the new institution, towards t cost of which she had collected 500,000 marks (£25,000.)

A SCIENCE scholarship of the British Medical Association is no falling vacant, and applications for research scholarships gentlemen wishing to become research scholars should be f warded to the Secretary without delay. The value of the schol ship is £150, and the appointment is for one year subject to appointment. It has usually been held for three years.

So far from boycotting the Berlin Medical Congress Fran seems anxious to be officially represented thereat to the fulle possible extent. In addition to the nine army surgeons who w represent the Minister of War, and the three professors who a to represent the Minister of Public Instruction, it is now announc that Professor Proust, Dr. Netter, and Dr. Valude will be sent delegates by the Minister of the Interior, in his capacity of he of the sanitary service. Drs. Brassac and Hyades will represe the Minister of Marine.

MANY friends of Professor von Nussbaum, the distinguish head of the Surgical Clinic at Munich, will learn with regret th leave has been granted to him to retire on a pension. He h taught surgery in the University of Munich for more than thir years, and his growing infirmity makes him anxious to resign l chair. The severe attack of influenza which prostrated him in t early part of the year has had a bad effect on his health. He h long suffered from partial deafness, and recently his eyes ha begun to fail, while his left hand is disabled. His place will taken provisionally by Professor Angerer.

KISSING THE BOOK.

THE danger of kissing a greasy book, so often tendered in poli and law courts to a witness about to be sworn, is at last appre ated by some officials and in some quarters. We see it stated th when the Duke of Fife appeared lately at Stratford in a pr secution the Testament on which he took the oath was e veloped in some clean white paper for his use—a precauti which might with advantage be more generally adopted. Wh should not the formula and method of taking the oath in Engli Courts of Justice be altered and adopted, possibly in imitation the method adopted in Scotland, which is that of raising the ha in lieu of kissing the book?

THE ASTLEY-COOPER PRIZE.

Triennial Astley-Cooper Prize of £300 for the best essay on ie Origin, Anatomy, Results, and Treatment of Tubercular ases of Bones and Joints," has been awarded to Mr. William son Cheyne, M.B., C.M.Edin., F.R.C.S.

NTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY, 1891.

ROYAL HIGHNESS THE PRINCE OF WALES has accepted the of President of this important Congress. A meeting will be at the Mansion House under the presidency of the Lord or on Thursday, July 3rd, in support of the Congress. Members ie profession are invited to attend.

OXFORD SUMMER MEETING.

"third summer meeting of University extension and other nts" will be held in Oxford from August 1st to September During the first twelve days a series of lectures will be given minent teachers, selected not only from Oxford itself, but also Cambridge and the Scotch Universities. The subjects to be ed range from the History of Oxford itself, to a lecture on t illustrated by experiment. Mr. Francis Gotch, assistant ssor of physiology, will lecture on the Physiology of the ous System; Mr. E. B. Poulton, on the Influence of Courtship olour; Professor P. Geddes, on Evolution; and Mr. J. B. ier, demonstrator in botany, on Protective Adaptations in ts. Further particulars may be obtained from Mr. W. A. S ins, "Summer Meeting" Office, 35, Corn Market Street, Ox-

CHIEF CONSTABLE OF CLITHEROE v. M. PASTEUR.

RY sad but very instructive case is reported from Ashton-r-Lyme, of a boy, aged 13, who died from hydrophobia. rding to the report before us this lad, together with three persons, two whom were adults, were attacked and bitten e hand by a large hound. The other three were treated by asteur, and have apparently recovered. The deceased, we was treated by the Chief Constable of Clitheroe, who claims ave a remedy for the disease. Surely it is time that these ched superstitions about remedies for hydrophobia, which caused so much fatal neglect and so many painful deaths, lied out, and that the only successful method of averting phobia after bites of rabid animals—that introduced by M. ur—should be universally adopted.

HOUSING OF THE WORKING CLASSES BILLS.

uesday last Mr. Ritchie found the opportunity for which he een waiting, of moving the second reading of the two Bills he has laid before Parliament, for amending and consoli-g the laws relating to the Housing of the Working Classes, he favourable reception which his proposals met with from arties in the House augurs well for the prospect of their ning law during the present session. It is well that the have been referred to the Grand Committee on Law, with an ction to consolidate them at once. There is little in the ding Bill, and less in the Consolidating Bill, which is seriously ntious, and this being the case, it would be very undesirable rpetuate the inconvenient arrangement of unnecessarily plying Acts relating to the same subject. Mr. Ritchie has his best to ensure success and an acceptable scheme, by g taken the local authorities into his confidence, and ascer-l the reforms which in practice have been found to be sary. The result is a series of proposals which, if enacted, emove the chief obstacles experienced by willing local bodies in the enforcement of the existing law, and will also tend to secure a better discharge of their responsibilities by the unwilling authorities. As regards London, progress will doubtless be slow so long as the present faulty system of local administration remains unreformed. But the powers with which it is proposed to invest the County Council as regards superseding a defaulting vestry or district board in this matter of the housing of the poor will, it is to be hoped, be the means of stimulating a better enforcement of the law. In rural districts, also, it would be well to invest the County Councils with powers of taking the place, and doing the work, of defaulting sanitary authorities. It is to be hoped that the present Government measure, when it has become law, may create a new departure in the matter of securing decent habitable homes for our poor.

NEW BRANCH OF THE SEAMEN'S HOSPITAL.

THE Prince and Princess of Wales, accompanied by Princess Victoria and Maud, visited the Albert Docks on June 24th for the purpose of opening a branch of the Seamen's Hospital Society, familiarly known as the Dreadnought. The Duke of Edinburgh, as President of the Society, read an address of welcome, in which the valuable work of the society was recounted. On the conclusion of the ceremony the Royal party proceeded by train to the new branch hospital. This is one of several branches which the Greenwich Seamen's Hospital has established to meet the increasing demands of the maritime population on the Thames. The Dreadnought itself has 225 beds at Greenwich. This new branch hospital is connected with Greenwich by a steam launch.

PRINCESS CHRISTIAN'S FUND FOR NURSES.

THE Princess Christian has issued a public letter inviting subscriptions for the proposed Convalescent and Holiday Fund for Nurses. The great value of such an institution cannot be doubted, and the appeal for it will go straight to the heart, not only of the innumerable patients who have benefited by the great advance in skill and training of this devoted class of women, but deserves, and will assuredly receive, the hearty support and recommendation of the medical profession. Sir James Paget is, we are glad to see, foremost among those who support this cause; and among the wives of medical men who are taking part in the work of the Committee are Mrs. Ernest Hart, and Mrs. Bedford Fenwick, the Honorary Secretary, who is the active supporter of this useful and beneficent institution, and will be able to furnish particulars to any who may desire to assist in the work, and who will address her at 20, Upper Wimpole Street.

DIPHTHERIA IN PADDINGTON.

Five deaths from diphtheria having occurred simultaneously among the boys of the same private preparatory school who went to play at the Paddington Recreation Ground a short time ago, popular rumour has ascribed the illness to the drinking-water. From the report of the Sanitary Committee presented to a special meeting of the Paddington Vestry, it would appear that the boys who drank water at the Recreation Ground on May 5th and 6th had been taken ill, while those who drank ginger-beer had not. There was no evidence whatever of the water having been contaminated in any way, and among the many thousands of other children who drank the water the Committee were unable to trace a single case of diphtheria. It was further stated on the authority of the sub-committee appointed to inquire into the origin of the outbreak that of the boys taken ill one did not go to the Recreation Ground and another did not drink the water at all, but nothing is said with regard to the dates of the attacks or as to chances of infection at home. In fact the report is meagre and it is not surprising that its publication fails to give satisfaction to

those who are deeply interested in this apparently remarkable outbreak. A thorough investigation ought to be made by an expert who by training and experience is specially well qualified to conduct a difficult and important inquiry of this kind. Several outbreaks of diphtheria have been definitely traced by members of the medical department of the Local Government Board to milk supplies; but we are not aware that outbreaks have ever been shown by the kind of proof required by that department to be due to water supplies.

UNIVERSITY HONOURS FOR WOMEN.

MISS FAWCETT is Senior Wrangler, and Miss Alford bracketed Senior Classic, of Cambridge University for the present year—truly Atalanta wins. We heartily congratulate the colleges for women and all interested in the advancement of education as a means of improvement for the human race. Amid the much rejoicing, it may be well to consider the *cui bono* of examinations—How do they aid the human race? Men take honours at the university, and from that platform win professional position. We are told the ladies will do the same. Will this lead to purely scholastic women taking the highest places as guides of the education of the young? It has now been amply demonstrated that the female brain may, in certain cases at least, accomplish as severe and high class work as that of a man both in classics and in mathematics; this naturally raises the question, Why should not women receive their degrees in full competition with men? We are thus led to look to observations among students, and we find essential differences between the natural history of male and female brains. Thus, defects of development of the brain, of the head and features, etc., as well as the maximum of mental dulness and low nutrition, appear among the males; while a minimum of mental dulness and defects of body are found among women, together with greater quickness of action and more nerve-mobility—not to call it nervousness—with less weight of body. Alike in social life and in aims at useful and remunerative employment, the course of action for men and women is apt to differ, as do their inherited characters of brain. We should like to hear more of women's active amusements and social life at the university; both are means of increasing bodily and brain growth and strength. It might be well for women, who have shown at the university that the long school training which we give in special subjects to boys is for them not necessary, to consider how far they desire to submit themselves to the formulæ of school education and curriculum which do much to hamper and oppress the intellect.

MOLLITIES OSSIUM CURED BY OOPHORECTOMY.

ZWEIFEL has already proved that after a Porro's operation in a case of mollities, the bone disease, usually so intractable, may pass away. This result is not invariable after Porro's operation, and, when it occurs, it is apparently due to the removal of the ovaries. Dr. H. Fehling has recently noted the above facts in the *Centralblatt für Gynäkologie*. He quotes the favourable experience of Hoffa, P. Müller, and Winckel, and declares that in eight cases where he himself has removed the appendages in cases of mollities, the results have been excellent. In six of these cases the patients had not borne a child for at least two years before operation, yet the disease was making active progress, and preventing the patient from working for her bread or enjoying life. In most of the cases the arrest of the mollities was very rapid, in the remainder improvement set in slowly, but continued steadily after operation. These results, in Dr. Fehling's opinion, appear to justify the theory that it is the suppression of the functions of the ovaries that brings about the cure of mollities after the extirpation of those organs. Why such a phenomenon should occur, Dr. Fehling does not explain; but, if his theory be correct, we have a new physiological truth of great importance. The bones, in res to their red marrow, are known to be blood organs; now it app that the ovaries are, at least under certain conditions, bone- trolling organs.

SYPHILIS AS A NEUROSIS.

A CURIOUS paper read by Dr. G. Frank Lydston, of Chicago, meeting[1] of the Southern Surgical and Gynecological Associa at Nashville is worthy of the attention of those pathologists are disposed to press the neurotic theory of the pathogeny of and rheumatism to an extreme. He maintained that all the pa logical processes incidental to syphilis were due to disturba of nutrition produced by the impression of the syphilitic poi upon the sympathetic nervous system. Syphilitic fever he sidered was undoubtedly dependent upon the action of the poi on the sympathetic; roseola he attributed to vasomotor distu ance, and the cell overgrowth characteristic of most syphil lesions was due to an exaggeration of the normal process of tis building which, "as was well known,.....was presided over by filaments of the sympathetic nerves."

CONGENITAL UMBILICAL HERNIA.

THIS affection has been the subject of many papers in Europ and American archives during the past ten years. Statistics show that a radical operation, even when performed very sho after birth, is far safer than expectant treatment. Felsenrei case was but two days old, Treves's sixty hours, Dohrn-Eckerle five hours, Dunlap's and Whenomenoff-Stolypinsky's only hour. All these cases recovered, though Treves's patient die convulsions three weeks later. Dunlap's was a severe abdomi section, which the infant underwent without chloroform, showing no signs of shock. In fact, infants seem to bear se operations very well; in one of these cases a fæcal fistula for on the sixth day, yet ultimately closed, giving but little trou to the patient. Dr. Lindfors, of Lund, Sweden, has collec thirteen cases. all recorded within the last six years; the se includes those above mentioned. Three of the series were trea "expectantly," two dying. Here we must observe that in one of the three the heart was felt in the hernia, in one the intest was malformed, and in all the abdominal walls were very defici Ten underwent operation. Of these three died, but two out of th fatal cases were performed under very unfavourable conditi Thus Godlee's case was operated upon on the sixteenth day a a fortnight of expectant treatment, peritonitis having set in. Piperno's fatal case the infant was badly nursed. Dr. Lindfo article on this subject, well worth the attention of every surge is published in the *Centralblatt für Gynäkologie*, No. 28, 1 The references in this interesting article are, we must admit, invariably complete or accurate, so the surgeon should in ev case seek the original source of information. Infants toler operations, but they cannot tolerate chill. Hence the great portance of keeping the body thoroughly warm both during after radical proceedings on congenital umbilical herniæ.

THE DISAPPEARANCE OF PAPILLOMA OF THE PERITONEUM.

IN performing an exploratory abdominal section few results more painful to the operator and ominous to the patient than discovery of papillary masses disseminated over the peritone Once, and not long ago, any such case was simply given up good, the surgeon often wondering how it was that the pati managed, as a rule, to recover from the operation. The experie of specialists has proved, however, that not only are diffused pa lomata by no means necessarily malignant or pseudo-maligna

[1] *New York Medical Journal.*

at they may even disappear. This has occurred in the practice f the Samaritan Hospital, and Professor Freund has also found iat even partial removal of a papillomatous tumour of the ovary iay be followed by atrophy of disseminated papillomatous owths. Dr. Flaischlen has collected the literature on the subct, and published a monograph in last year's volume of the eitschrift für Geburtshülfe. More recently Dr. Sutugin has reted[1] two cases similar to those upon which Dr. Freund's experiice is founded. In the first, partial removal of a papillomatous vary was followed by apparent disappearance of a large mass of apilloma infesting the peritoneum; and ascites, marked before ie operation, certainly did not recur. In the second, there was milar infection of the peritoneum, with ascites and disease of th ovaries. The right ovary alone could be removed; it was t only papillomatous, but also bore signs of malignant degenera-n in certain places. A year later the patient was living, ascites d not recurred, and the tumour of the left ovary grew but wly. The peritoneal papillomata had apparently disappeared. ie patient became insane, and Dr. Sutugin could not trace her story any further.

THE PHYSICK GARDEN AT CHELSEA.

E understand that the Apothecaries' Society are considering the opriety of selling their old botanical garden, known as the 'hysick Garden," at Chelsea, which is in the vicinity of the elsea Hospital. The freehold is said to be of the value of upards of £30,000, and the maintenance involves a cost of £600 a ar; and it is thought the fund might be better applied. It may necessary, however, to apply for new legal powers in respect to ch sale.

POISONOUS DYES.

E have once more to draw attention to a case of poisonz, obviously induced by the wearing of certain socks dyed "dressed" with some dangerous material. The extensive e of poisonous dyes and "dressings" for application to icles of clothing and for all sorts of other purposes, is a matter ich calls not only for serious consideration, but, indeed, for legisive interference. It affects the interests of very large and imtant industries and trades, and opens up a wide field for vestigation. The use of compounds of arsenic in the preparation some of the dyes derived from aniline, and for purposes of "morating" has been mentioned as a fruitful cause of cases of enical poisoning; but while this is undoubtedly the case, it st be remembered that a large number of brilliant organic ouring matters actually used as dyes, or which are very liable be so used, are intensely poisonous. The use of such comunds is reprehensible under almost any circumstances, but for ing articles of clothing which are intended to be worn next the skin it is a practice which is in the highest degree danous. Many of these dyes are not "fast." They are in ie cases liable to be volatilised in small amounts even at low peratures; in others, changes are liable to occur which result he production of probably injurious substances. The objecns to the use of such pigments was, we believe, first sidered at length, by Mr. Cassal in some of the lectures ivered by him at the Health Exhibition of 1884, a course of ion, which, it may be remembered, naturally gave rise to a d deal of opposition from persons interested in the manuture of the dyes referred to. These lectures have never yet n published, a fact which is to be regretted. The matter s also brought up at the Leicester Congress of the Sanitary titute in 1885;[2] and again at the Congress of the same Institute Worcester in 1889,[3] in a paper in which the use of poisonous pigments generally was referred to. With reference to the use of arsenic and to legislative extension in regard to dealing with poisons, lengthy discussions have recently taken place at the Society of Public Analysts. It cannot therefore be said that the subject in its general aspects has been altogether neglected. It is, perhaps, too much to hope as yet for any extensions of the principle of the existing laws regarding adulteration to the matter, and certainly we have not yet arrived at such a state of general public intelligence as would result in the proper application of a law, if it existed, by the authorities who would probably be entrusted with its execution.

[1] *Centralblatt f. Gynäk.*, June 7th, 1890.
[2] Hygienic Analysis, Leicester, 1885.
[3] *Transactions of the Sanitary Institute*, 1889. Charles E. Cassal.

RUPTURE OF THE VAGINA.

Dr. Himmelfarb, of Odessa, writes on the causation of this injury, in the *Centralblatt für Gynäkologie*, No. 22, 1890. He has carefully searched the literature of the subject, and discusses cases in his own experience. The great majority of cases occur, no doubt, in association with labour. The remainder appear less frequently due to the introduction of foreign bodies than to violent coitus. The former is the alleged cause in some cases really due to the latter. Rupture of the vagina in very old subjects during connection is a well-recognised injury. Dr. Himmelfarb describes a case, and a specimen illustrating the injury in age is preserved in the museum of St. George's Hospital. A similar accident in young subjects is hard to understand. Zeiss and Frank have recorded cases. Dr. Himmelfarb relates another where, in a healthy woman aged 24, parametritis, peritonitis, and fatal pyæmia followed coitus. The posterior wall of the vagina was found to be torn through. Connection had frequently taken place after the first occasion, when the pain was very severe, notwithstanding the suffering which it caused. Dr. Himmelfarb thinks that rupture of the vagina is probably more frequent than supposed in cases of sudden pain with no sign of injury about the external parts, and in such cases coitus is the true cause of the rupture. Dr. Frank, of Prag, described two cases before the German Medical Association of that city last autumn. In the first, the patient was 32 years of age; she recovered from the injury, which was certainly inflicted during coitus. In the second, there was vagina duplex; the right half ended in a blind sac, the left communicated with the uterus. The hymen on the right side and the septum were lacerated in coitus. The entire subject is not without medico-legal interest.

AN ANGLO-SYRIAN DISPENSARY AT BEYROUT.

Beyrout is the port of Damascus. Fifty years ago it was bombarded by the British fleet, under Admiral Stopford, and its population of 12,000 was, as a consequence, reduced to still smaller proportions. To-day its inhabitants number 100,000, and a large and increasing maritime trade is carried on with all the ports of Syria, Palestine, and Asia Minor. It lies on the shore of the Mediterranean, embosomed in mulberry orchards, olive groves, and orange gardens, while in the back-ground tower the snow-topped mountains of Lebanon. But though Nature smiles man suffers; in spite of many noble efforts made by the French there is still a great mass of poverty and sickness unreached. Since 1885 Madame Sabra, who holds the certificate of the Obstetrical Society of London, has done good work in bringing assistance to the poor women —Christian, Jewish, and Mahommedan. Three years ago she was joined by her brothers—Drs. H. J. and J. J. Hannen, native gentlemen, who both received their medical education in London, and hold diplomas of the Royal Colleges of Physicians and Surgeons in London. It is now proposed to open a free Anglo-Syrian dispensary in Beyrout, and eventually, if funds can be obtained, to erect a small hospital, chiefly for women, for which an excellent site is

now available. An effort is being made to raise a sum of £400 a year, to carry on the dispensary, and also if possible a capital sum of £10,000. The scheme has the support of the English Bishop of Jerusalem, of the Greek Patriarch, and of the Emir Emin Arslem, the Druse Prince. The treasurer of the fund is the Rev. J. C. Rust, vicar of Soham, Cambs. Further information may also be obtained from Dr. H. J. Hannen, who is at present at 27, Upper Bedford Place, W.C.

SCOTLAND.

THE Public Health (Scotland) Act Amendment Bill was read a second time in the House of Commons on Wednesday, June 25th.

AT a meeting of the Aberdeen University Court, held on June 20th, Dr. Robert J. Garden was appointed Medical Examiner in Surgery and Midwifery, in place of Dr. Keith, Aboyne, who recently resigned the appointment.

DISEASED MEAT IN EDINBURGH.

WITH reference to the large figures which have been quoted in the JOURNAL in relation to the amount of diseased meat seized in Edinburgh, it should be stated that by far the larger part—in some instances the entire amount—has been seized in the slaughter-houses. The fact is of importance, as testifying rather to the excellent quality of the meat exposed for sale in Edinburgh, although the partial statement previously reported from the medical officer's report were liable to an equivocal interpretation.

THE ROYAL SOCIETY OF EDINBURGH.

AT the thirteenth ordinary meeting of the Royal Society of Edinburgh, under the presidency of Lord M'Laren, it was announced that the Victoria Jubilee Prize for 1887-90 had been awarded by the Council to Professor Tait, for his work in connection with the *Challenger* expedition, and his other researches in physical science; the Keith Prize for 1887-89 to Professor Letts, for his researches into the organic compounds of phosphorus; and the Neill Prize for 1886-89 to Mr. Robert Kidston, for his researches in fossil botany. Dr. Alexander Buchan read a paper on the Difference between the Diurnal Barometric Curves at Greenwich and at Kew; and Professor Crum Brown and Dr. James Walker communicated a paper on Synthesis by means of Electrolysis.

ST. BERNARD'S MINERAL WELL, EDINBURGH.

AT a meeting of the Public Health Committee last week a report, which ought to calm the anxiety of the Edinburgh hydrotherapeutists, was presented by the medical officer of health. The report embodied the result of a careful analysis of the water by the city analyst, which showed that the sample of water recently submitted to him was similar in composition to the sample taken from St. Bernard's well three years ago. On the whole the present sample was, if anything, the purer. There was an important difference between the two, in that the present sample, contained only a very small quantity of sulphuretted hydrogen while the other showed a considerable amount. The Public Health Committee have, however, resolved, with a view to allaying the present scare, to have the water frequently analysed during the next month, and have instructed the analyst to pay particular attention to the exclusion of sewage contamination. The immediate cause of the unsavoury suspicions thrown on the water seems to have been the fact that a sample of the water was submitted for analysis as if for the purpose of ordinary domestic consumption, and the analyst had felt bound to report that it was unfit for such use, just as any of the valuable mineral waters of other reputed spas would necessarily be excluded from simila service.

CLINICAL TEACHING FOR LADY STUDENTS AT EDIN BURGH.

IT appears that, on the application of the Scottish Association fo the Medical Education of Women, the City Parochial Board o Edinburgh sanctioned the attendance of lady students at the larg and well-appointed hospital, which contains some 200 patient The Board of Supervision ratified this sanction, and it was hope that an important advance and extension had been made in th clinical possibilities of Edinburgh. The Scottish Association nex approached the Board of Triple Qualification of Edinburgh an Glasgow, with the view of having the hospital, which had bee thrown open to their students, recognised as a qualifying teachin institution. But for some season, this Board has declined to gra the necessary recognition, and has thus shut off one of the mos important lines of development in over-crowded Edinburgh. Ther can be no possible question that, for clinical medicine at least, th city hospital affords advantages which are offered in few of th recognised hospitals of the kingdom, and contains far more bed than a large percentage of the qualifying hospitals. It seems great pity that the wise heads of the profession did not sugge some means of overcoming what resolves itself into a merel technical difficulty, and, even if surgery had to be studied els where, permitted the use of this mass of material which mea while lies idle. The unfortunate result has been that the Cit Board has withdrawn the permission accorded to the Scottis Association, reserving to themselves the right to reconsider th whole question, should the proposal be made to them again.

CLINICAL INSTRUCTION IN INFECTIOUS DISEASE AT GLASGOW.

THE recent arrangements made by the Glasgow Town Council fo clinical instruction being given at Belvidere Fever Hospital b the Physician-Superintendent, Dr. James W. Allan, have alread proved highly successful. Two courses, each of six weeks' dura tion, are being given this summer. The first has just terminate and class tickets certifying attendance have been granted to fift students and three qualified medical men. For the second cours about fifty men are entered, six of them being students who hav taken the first course also. The number taught in one class limited to twenty-five.

ABERDEEN UNIVERSITY CLASS HOURS.

TOWARDS the end of last winter session a conference, at the in stigation of the Students Representative Council, was held t discuss how the hours of clinical study and systematic lectur might be better arranged. As the summer session is alread drawing near a close, it is hoped that the anomaly of clinical an systematic lectures going on at the same time will be obviate next winter session.

IRELAND.

THE Pauper Lunatic Asylums (Ireland) (Officers' Superannua tion) Bill passed through Committee in the House of Commons o Wednesday, June 25th.

ON Tuesday evening next, the Freemasons of North Connaugh will give a banquet to Surgeon Parke, of the Stanley Expedition, i the Town Hall, Carrick-on-Shannon.

ANTHROPOMETRY IN IRELAND.

IT is intended to make a systematic investigation of the measurements of the population in various districts of Ireland, and the results will no doubt be of considerable interest. The Royal Irish Academy has voted a sum of £100 to a committee consisting of Professor D. J. Cunningham, Rev. Dr. Haughton, F.R.S., and Professor Hadden, M.A., to assist in the purchase of anthropometrical instruments.

HONORARY DEGREES AT TRINITY COLLEGE, DUBLIN.

AT a public meeting of the University of Dublin held on June 26th the degree of M.D. *hono is causâ* was conferred on Mr. John Marshall, President of the Medical Council, and on Dr. Richard Quain. Honorary degrees were also conferred on Bishop Stubbs and Bishop Wordsworth, Mr. W. Young Sellar, Rev. R. Percival Graves, and Professor Aulad Ali. Mr. Marshall and Dr. Quain were warmly received, but the latter received something of an ovation. The orator, Professor Palmer, introduced each to the Vice-Chancellor, Dr. Ball, in a Latin speech, which we subjoin:

Inter eos qui medicinam his annis promoverunt nemo magis laudatur, nemo laude dignior, quam RICARDUS QUAIN, Hibernicus. A oppido Mallow natus, Limerici educatus, cum casus huic universitati invidisset, Londinum se contulit, ubi primo quoque ad-entu summos honores reportavit, quibus anni novos semper ddiderunt, et plures quidem quam nunc commemorare possum. egiae societatis Medicorumque collegii socius illustrissimus est. oncilio medicorum summo interest, pharmacopoeorum praeest. ed ultimus laudis cumulus quod lexicon totius medicinae lendum curavit, opus maximum maximosque fructus pariturum. octissimos libellos de corde et pulmonibus scripsit. Pathologiam ordis, quae dicitur, morbumque, quo cor in adipem corrumpitur, rimus penitus exploravit. Novae morborum cohorti, quae his nis terris incubuit, pro virili obviam iit. Hostis ille formidatus, nfluentia seu *grippe* libentius audit, talem vindicem minime terit. Scriptis suis tempus haud breve vitae humanae prorogavit, si ventura saecula Methuselam mirari desinent, causa erunt edici huius per vestigia ingredientes.

Jam duco ad vos JOHANNEM MARSHALL, Regiae societatis cium, Concilii medicorum praesidem. Ut Quain in medicina, c in chirurgia familiam ducit. Londini educatus munera nplissima administravit in nosocomio Collegii Universitatis, ius famam magnam suis scriptis ac gestis reddit maiorem. venis ossibusque corporis humani multis laudatisque libris riose disseruit. Miris modis congruere artem anatomicam cturamque festivo libro docuit. Quis dubitet ossa luxata ticulosve expositos tali viro credere, qui fracta membra colcans artis venustae legibus parere iubet? Nemo hercule gnior extitit qui crus Aesculapio obligaret.

THE FELLOWSHIP OF THE IRISH AND ENGLISH COLLEGES OF SURGEONS.

URING the past few months the Council of the College of rgeons in Ireland has refused, on two occasions, to admit gentlen to their fellowship (*ad eundem*) holding the English fellowip. The charter of each college permits the recognition of the lowships conferred by certain licensing bodies, and the power admit, *ad eundem*, has on some occasions been exercised. The glish college, has, however, frequently declined to permit the ivilege when claimed, and a by-law has been passed by its uncil, which limits considerably the scope of the original law. the case stands at present, no candidate for *ad eundem* fellowp will be even eligible for election, unless he is able to declare at he was in *bonâ fide* practice as a surgeon in England or les on the 19th July, 1875. The effect of this is, practically to clude Irishmen and Scotchmen from receiving an *ad eundem* lowship in England. The Council of the Irish College has refore declared that its refusal in a particular case to recognise English fellowship shall govern all future like applications so g as the present condition of things exists. It is felt that the glish College of Surgeons has done nothing in the way of eciprocity," and that although the Irish College has lavished its honours on English fellows, but scant courtesy has been shown in return. The action of the Council meets with general approval in Dublin.

GALWAY INFIRMARY.

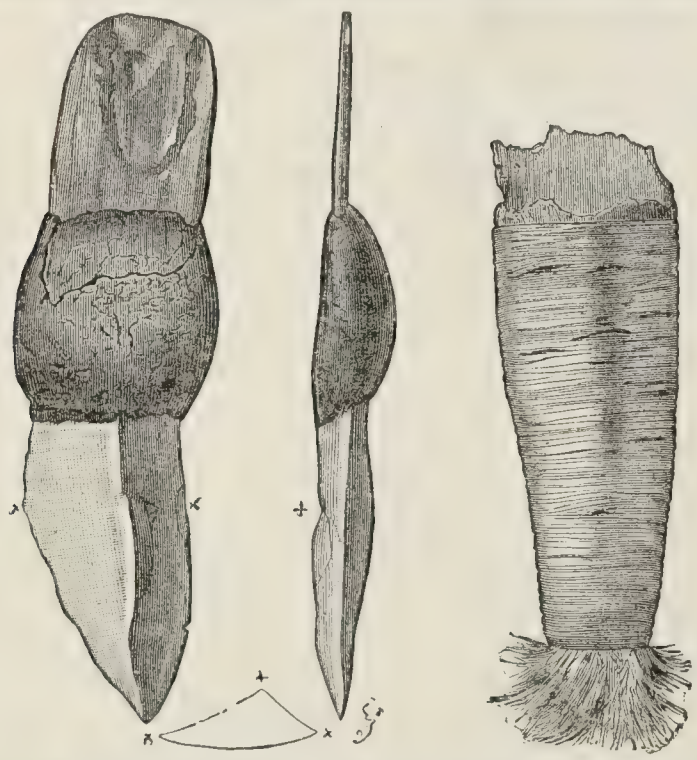
IN the Exchequer Division of the High Court on Monday last, the case of O'Hara *v.* The Governors of the Galway Infirmary came on for trial on a return to a writ of *mandamus* directing the governors of Galway County Infirmary to proceed to hold an election of surgeon to the infirmary, which had become vacant by the death of Dr. Browne in November, 1887. An election had been attempted to be held, but, owing to the want of a quorum of governors, it proved abortive. The matter afterwards came before the Queen's Bench on several occasions, and in June last year an order was made, on application for the relator, Colonel O'Hara, who was one of the governors, that a writ of *mandamus* should issue requiring the governors of the infirmary to hold an election. A return had been made to the writ, in which the governor stated that there was not a quorum of duly qualified governors who were capable of attending and voting. They admitted that there were seven qualified governors, but they alleged that of these three were physically unfit to attend, and it required five to make a quorum. This was traversed by the relator, Colonel O'Hara, and, an issue having been directed before a jury, the case came on for trial. During the hearing, Mr. Griffiths, one of the governors, who was admittedly qualified, and who, it was alleged, was incapable of attending a meeting of the governors through infirmity, appeared in court, and was examined. He stated that he was quite capable of attending at any time since the writ was issued, and that he had not had a day's serious illness for the last forty years. The evidence having closed on both sides, Mr. Justice O'Brien directed the jury to find in favour of Colonel O'Hara. The jury returned a verdict accordingly in favour of the traverse, and that the return to the writ was untrue.

ASTON MANOR (Population, 66,769).—*Isolation Hospital specially useful and growing in favour: Small-pox and imperfect Vaccination: Diphtheria and Scarlet Fever.*—The healthy character of this district was maintained during 1889, notwithstanding the fact that measles and scarlet fever were unusually prevalent, and the beginning and the end of the year were periods of extreme severity of weather. Mr. Henry May reports that the general death-rate (15.1 per 1,000), though 0.3 higher than in 1888, was 0.5 lower than the average of the past eight years. There were, however, 200 deaths from zymotic diseases, as compared with 115 during the previous year; and this in spite of vigilant measures to control the spread of infection. Mr. May gives very interesting accounts of the progress of the various outbreaks, specially noting the beneficial effects of the Isolation Hospital in cases of scarlet fever. Not only has the hospital been useful for purposes of isolation, but it has been remarkably successful in effecting cures. Commenting upon the freedom from small-pox enjoyed by Aston and the possibility of keeping the disease away altogether, Mr. May points out that this desirable consummation is most liable to be frustrated by the course adopted by some "medical men who systematically and extensively put one small mark upon the infant and grant a certificate that he has been successfully vaccinated, although there is most abundant evidence that such vaccination gives but feeble protection, and that the operation requires to be performed in several places to be efficient." There was a noticeable increase in the deaths from whooping-cough and diarrhœa, chiefly amongst very young children. There was not any unusual number of cases of diphtheria, "though the presence of scarlet fever has," observes Mr. May, "contributed to increase the number." Twenty-seven cases came to the knowledge of the medical officer of health, and 5 deaths were registered. Diphtheritic symptoms are said to have accompanied scarlet fever in several instances, and a death was registered from diphtheria when two other children in the same house were suffering from scarlet fever. Sanitary work is satisfactorily progressive in Aston. The water-carriage system for filth disposal is gradually extending and taking the place of the objectionable system of p ivies and middens, and the nuisance clauses of the Public Health Act are enforced for keeping the dwellings in a habitable condition.

A PRIMITIVE SURGICAL INSTRUMENT.

MR. CARL LUMHOLTZ, M.A., Member of the Royal Society of Sciences of Norway, undertook a few years ago an expedition to the northern parts of the continent of Australia, with the object of making collections for the zoological musuem of the University of Christiania, and of instituting researches into the customs and anthropology of the Australian aborigines, who are generally accounted the lowest race of savages now existent. Mr. Lumholtz carried out his scheme most completely, living for several years with the aborigines, sharing their privations, joining in their hunting expeditions, and narrowly escaping with his life from their treacherous hands. The tribes he lived with are cannibals, and it seems certain that he would have been killed and eaten but for the fortunate circumstance that previous experiences had taught the hungry natives that the white man's flesh is not grateful to the black man's palate, and that if eaten it causes, according to their own statements, *komerbory kawan*, terrible nausea. Mr. Lumholtz survived to return to Europe and to publish an account of his travels and discoveries under the title, *Among Cannibals, an Account of Four Years' Travels in Australia, and of Camp Life with the Aborigines of Queensland* (London: John Murray).

Among the customs of these aborigines is one seldom recorded, and possessing so much curious interest of a surgical nature, that it appears deserving of mention here. Certain tribes resort to the so called mika-operation to prevent the increase of population. In a few tribes, Mr. Lumholtz states, the children are operated on, only about five per cent. being spared. In other tribes a husband after becoming the father of one or two children must submit to the operation, which is conducted with certain solemnities: the operation consists in making an incision into the urethra with a flint knife. By the courtesy of Mr. John Murray, jun., we are enabled to reproduce the drawing of this knife which appears in Mr. Lumholtz's work. The knife is made by lighting a fire on a flint rock and then pouring water on the stone; this causes it to split, and and a suitable splinter is then selected. The knife illustrated in



the drawing has a very sharp point, and three sides, two of which are very sharp, so that the blade is two-edged. The handle is made of a lump of resin painted with a reddish-brown ochre; the knife is stuck into one end of this handle and a flat piece of wood painted with chalk figures into the other. The knife is contained in a sheath of bark bound by strong opossum hair, and ornamented by a tuft of red cockatoo down.

The cut, which is about one inch long, extends almost to the scrotum; the surface of the wound is first burnt with hot stones, and the wound is kept apart while healing by the insertion of little sticks. In this way an artificial hypospadias is produced, and the man, it is said, has no more children. The reason for the adoption of so extraordinary a custom does not appear to be lack of sustenance, but is said to be merely a dread of having many children, who entail undesired responsibilities in the way of providing food, very distasteful to the indolent nature of the savage aborigines.

NEW YORK AND THE MEDICAL SERVICE OF THE ATLANTIC STEAMERS.

THE Health Officer of the Port of New York—Dr. William M. Smith—has recently presented an important report to the Commissioners of Quarantine of the State of New York, in which he deals at some length with the position of medical officers of Atlantic passenger ships. We have already briefly referred to this report; from the full text which is now before us, we find that there have been some recent instances of defective administration and that the remedies which Dr. Smith suggests are identically those which have been frequently pointed out in these columns.

As an instance of the "pernicious effect of interference by the captain of a passenger steamer with the duties of a surgeon," he relates the following almost incredible story. One of the crew of a certain steamer developed small-pox during the voyage. the case was isolated in hospital by the surgeon, and another man shortly after beginning to suffer from symptoms which seemed to be those of the early stage of small-pox, was placed in the same room. This second man, however, recovered from these symptoms, and did not develop small-pox; he was fit to return to duty the morning before the steamer arrived at the New York quarantine station, but the surgeon, acting upon the most obvious rules of prudence, detained him "for such disinfection of clothing and disposition of the man as the health officer might think best to make. The captain demanded to know of the surgeon why in h—l the man was kept in hospital if able to work. The explanation was not satisfactory, and the seaman was imperatively ordered on duty. On the steamer's arrival in quarantine a few hours afterwards, the surgeon was asked why the man had been allowed to mingle with the crew of the steamer with his clothing filled with the contagion of the disease, with which he had been associated for several days. The doctor to d h's facts with evident reluctance, and said to the health officer, 'I am sure I shall lose my place for telling you.' The captain was told that it was neither proper nor profitable for him to interfere with the duties of the surgeon on his steamer, and the lesson was enforced by the necessary detention of the crew fourteen days for observation. This disregard of the opinion of the medical officer—this tyranny not often as marked as in the instance given, is the natural result of his having no status, no independent authority, which is established and sustained by a power superior to those with whom he associates as an inferior."

As to the remedy for a state of things which is causing serious expense and inconvenience—to put the matter on the lowest footing—Dr. Smith suggests, as has been said, certain alterations. He advises that there should be formed "a Medical Marine Service under the control and management of the Government (or a board of control responsible to it) whose flag the steamer flies." This he considers, ought to be the first and would be the most important step towards reform.

He goes on to sketch the rules which would be adopted by such a board of control. In the first place, such a board would sanction the appointment to the Medical Marine Service only of thoroughly competent and well qualified medical officers, and would ensure them an adequate scale of pay. In the second place, provision would be made within the service for promotion to better class steamers of the line, with increase of rank and compensation proportionate to length of service and general efficiency. In the third place, a principle so often insisted on in these columns, is distinctly formulated "the surgeon's tenure of office should depend on his ability and efficiency, and his discharge from service should be effected only by charges made and sustained before the Government Board which certified to his qualifications for appointment." Further, Dr. Smith perceives that marine medical officers in charge of passenger ships must "have their duties distinctly defined, their responsibility clearly determined, and their status as officers well understood through rules and regulations made by a supervisory board. The authority of the medical officer should be independent and absolute in these medical and sanitary matters which affect the lives and health of those on board the ship, or which may, by neglect or improper management, expose the health of the people."

We can only express the hope that this very able report, worded as it is in temperate and even guarded language, may attract, as it deserves, the attention of officials on both sides of the Atlantic, but especially of our own Board of Trade.

BILL TO AMEND THE PHARMACY ACT IRELAND (1875).

BILL that is now before the House of Commons, under the above tle, has for its object to give legal recognition to and provide for e registration of a class of "chemists and druggists" in Ireland ho shall be entitled to keep open shop for the sale, retailing or mpounding of poisons, but who will not enjoy the right to com- und medical prescriptions. When the existing Irish Pharmacy t was passed in 1875 it extended the right to compound medical escriptions, previously reserved to the apothecaries, to a class of armaceutal chemists brought into existence under its provisions. it it also gave to the Council of the Pharmaceutical Society of Ire- ad, which was entrusted with the carrying out of the provisions the Act, power to determine upon allowing certain persons to quire the title of "chemist and druggist," upon terms and con- ions to be decided upon, and it reserved the right of chemists d druggists already in business to continue to use that title and sell poisons, but gave them no authority to compound prescrip- ns. The Council, however, decided not to avail itself of the wer to create a second grade of chemists and druggists, and as a nsequence, when those whose rights were reserved died out, the tire business of selling and compounding poisons and of dis- nsing prescriptions in Ireland, would have passed into the nds of the pharmaceutical chemists. As a fact, however, the presentatives of persons who had their rights reserved, have, in ny cases after their death, continued the business in an egular manner, and others have gone into the business without en this pretext, so that the Council has been compelled to tiate prosecutions against offenders, especially in the north of land. The present Bill is the outcome of the dissatisfaction used by the results of these prosecutions, and it provides for the aking out and maintaining of a register of chemists and ggists, in which shall appear the names of those persons prac- ing the business on their own account prior to the 1st of nuary, 1889, and of others that shall afterwards pass certain aminations, conducted under the management of the Council of e Pharmaceutical Society. It also provides that registered emists and druggists shall have the right to become associates the society, and to send to the Council, which has vested in it e control of the examinations and the enforcement of the Act, out of its 21 members. On the other hand, it provides for a nsiderable increase to the income of the society, by making ention of a name on the register of pharmaceutical chemists, or st of chemists and druggists, dependent upon payment of an nual fee. At a meeting of Irish pharmaceutical chemists, held ently in Dublin, the Bill was denounced in strong terms, and e Council was requested to offer it a vigorous opposition; it has eady reached the Committee stage in the House of Com- ns, but on Wednesday the debate was adjourned in order "to ow time for an agreement to be come to between the chemists d the Pharmaceutical Society."

THE CHOLERA.

SPAIN.

E special medical commission sent to Puebla de Rugat to estigate the nature of the choleraic epidemic which has ken out there have reported to the Central Board of Health in drid that the disease is certainly cholera. According to official tistics published on June 25th, the total number of cases pre- ting choleraic symptoms which have occurred at Rugat and in province of Valencia is 196, with the high mortality of 113. e Madrid Board of Health has imposed quarantine regulation inst ships arriving from Valencian ports at other Spanish ports.

FRANCE.

mmediately on the news of the outbreak of cholera in Spain ng received, the French authorities took steps to prevent its portation into France. These measures will be enforced all ng the frontier. Disinfecting stoves have been sent to Cerbere l Hendage. Dr. Charrin, member of the consulting sanitation nmittee, left on June 18th for Cerbere, and Dr. Netter, another mber, left for Hendage. They are instructed to organise asures of disinfection and a small infirmary at the railway sta- n, one for actual cholera cases and the other for doubtful cases. passengers are to be examined; those who are perfectly lthy will receive a sanitation passport, but will be kept under veillance for a few days. All cases of gastro-enteritis will be treated at the infirmary for doubtful cases. MM. Charrin and Netter will organise the medical staff, using the services of the local medical men and the medical students of the schools in the south of France. The principal seaports are provided with disinfecting stoves, and passengers by sea will be subjected to the same rules as those described above for land passengers. It is forbidden to import fruit and vegetables from Spain into France. An exception is made for fruit or vegetables hanging from branches above the level of the ground. The mayor of the locality is to be kept informed of the name of every passenger and of their condition. All hotel and lodging house keepers who receive as lodgers passengers from Spain must notify the fact to the mayor; an infringement of these rules will be punished by imprisonment for three to five days and a fine of two-and-sixpence to five shillings. Private persons who receive friends from Spain are subjected to the same sanitary precaution. The minister, prefects, and mayors are responsible for the enforcement of these regulations, which are posted up in all the communes on or near the frontier. The law containing the above provisions was passed in 1822, but this is the first time they have been put in force on the outbreak of an epidemic. Rumour, which has not yet met with official confirmation or contradiction, states that cholera has broken out in Western France, Auray in Brittany being specially mentioned.

ITALY.

In the Italian Parliament Signor Crispi at first denied that the epidemic in Spain was really cholera. He has thought it prudent, however, to issue a decree dated June 18th, enjoining that all ships coming from Spanish Mediterranean ports shall be subjected to strict medical examination. No dirty linen or underclothing is to be allowed to be sent on shore from these vessels unless after careful purification in the steam disinfecting apparatus, if that is available, or, if not, by being steeped in boiling water for ten minutes, or in a 2 per mille solution of corrosive sublimate for half an hour. The medical inspectors must use their discretion as to disinfecting also the personal effects of the passengers and crew. Ships on which cases of cholera have occurred on the voyage, or which on their arrival have suspicious cases on board, are to be sent to the sanitary station at Asinara, there to undergo such purificatory measures as may from time to time be enjoined by ministerial order.

THE SELECT COMMITTEE ON HOSPITALS.

ELEVENTH AND TWELFTH MEETING.

[SPECIAL REPORT.]

THE House of Lords Select Committee resumed their inquiry last Monday, the first witness called being

Dr. SHAPURJI DADABHAI BHABHA, L.F.P.S.G., L.S.A., M.D. Brussels, a Nonconformist minister, who said he also practised medicine in the district of Nunhead. He had paying patients whom he visited at their own homes in the neighbourhood of Nunhead. His was an entirely private general practice. The out-patient departments of hospitals injured his practice. The part paying hospitals starved the local practitioners almost as much as out-patient departments of the general hospitals. It would be beneficial to have some system of co-operation between the practitioners and the hospitals. As a rule, the "doctors' shops" in his district were managed by unqualified men. There was not much need for a general hospital in the immediate neighbourhood. He would like to see some general system of supervision over hospitals to check the expenditure and to stop the misappropriation, as he considered, of the proper charities.

Lord CADOGAN: What do you mean by proper charities?—These charities, according to my view, were established for the absolutely deserving poor and none else.

The CHAIRMAN: Do you mean misappropriated by those who can afford to pay?—Yes.

Lord SPENCER: Have you a chapel?—No.

Are there many other ministers who practise medicine as you do?—No. Witness stated further that some of his patients had gone to hospitals; and, in answer to Lord Lauderdale, he said the hospitals which injured his practice were St. Thomas's and Guy's. He asserted that there was no system of inquiry as to the circumstances of the patients at either the general or special hospitals.

Mr. BRODHURST, F.R.C.S., said he had been surgeon to St. George's, was consulting surgeon of the Belgrave Hospital for

Children, and was a lecturer on orthopædic surgery at St. George's. He had been in private practice since 1851, was a member of the Medical Teachers' Association, whose object was to improve the conditions of the hospitals and the medical schools. The funds left for the general hospitals were left for the poor, and if the donations were properly used all the hospitals would be rich. The donations were made solely to benefit the hospitals and the poor, and there was no thought of benefiting the medical schools. Those schools were all private institutions, and even when located on hospital ground they were still private, and were bought and sold. The hospitals were now mere adjuncts to the schools. In consequence of the schools being attached to the hospitals, the management was in excess of that which was needed for the poor. The food was too luxurious, the nursing was fit for Dives, and every new medicine, instrument, splint, or knife must be tried for the sake of the students. Every surgeon had what he chose at the expense of the hospital. As the hospitals were not established for the schools, and the schools were not necessary for the hospitals, they ought to be removed from the hospitals, which ought to be conducted as formerly—for the benefit of the poor. The out-patient department was totally unnecessary except for teaching. The majority of persons applying to the hospitals needed baths and food but not medicine, and he believed it was a breach of trust and wicked to give medicine to a great number of persons who went to the hospitals. The paying wards in some of the hospitals had damaged some of the profession more than the out-patient department. They were open to some individuals who ought never to enter the hospitals. If the schools were no longer attached to the hospitals, and the latter resumed the functions for which they were originally intended, namely, for the relief of the sick poor, they would be much richer. There were between 2,000 and 3,000 medical students in London, and the professors spread over the various London schools were all badly paid, and so could not devote their whole time to teaching; whereas, if all students were collected at one central school, the professors could afford to devote their whole time to teaching. The students should be divided into classes according to years. At present only one course of lectures was delivered, and there was no change during the year; whereas, if there was a central school with large bodies of students contributing as they would to the central school, there would be something like £100,000 a year at the present rate of fees. The students were now driven into schools. They were obliged to attend to get their certificate. The clinical teaching might be maintained by fees paid by students.

The CHAIRMAN: Do you consider the London students fully competent to undertake the work entrusted to them?—They are more competent than they used to be, but they are not fully competent.

And if you had a central school they would be more competent than at present?—Yes.

Can anyone get an office at the hospital unless he has a diploma of the Royal College of Surgeons or Physicians of London?—I daresay it may be so.

Do you consider by the present system any distinguished men are excluded?—Oh no, not at all. The Fellowship of the College of Physicians and Surgeons is open to anyone. It is only a question of work and a certain amount of ability. The witness continued that the examinations in London were by far the most severe. A man rejected at London would go to Edinburgh, and if rejected there would go to Aberdeen.

In reply to Lord CADOGAN, the Witness said that so far as medical education was concerned, he had seen nothing in London at all compared to that which he had seen in Vienna. The clinical teaching given in Vienna was better than in any other medical school in Europe. He would like to see the same system adopted in this country. The cost of such a system was not half, or perhaps not a quarter, of the cost of the system as practised in London. During the eleven years he was at St. George's, the cost to him had been £2,000 a year, a loss altogether of about £22,000. The time and trouble connected with a hospital appointment was a great drawback, and he had to give several hours in the middle of the day. At no hospitals in Europe was such luxurious dietary provided as in London; at Paris, Vienna, and in Italy, the dietary was of the very simplest kind. In this country it was much too luxurious. There was much more system in the nursing in England than at Paris or Vienna.

The CHAIRMAN: You would like to see the out-patient department restricted?—I should like to see the out-patient departments removed from hospitals entirely, as they are unnecessary.

Do many persons take advantage of the hospitals who could afford to pay?—I am afraid they do, more particularly at the special hospitals.

The WITNESS, after giving some details as to his suggested central medical school in answer to Lord SPENCER, was asked by Lord KIMBERLEY whether the result of the education in Vienna was to make the medical man superior to those of this country to which the Witness answered that it was a very insidious thing to compare the two. If the lecturers were, as he had said, so superior that there was nothing to compare with them in England, surely the results ought also to be better. If they were not so, the fault was due to the men themselves, and not to the professors.

Lord KIMBERLEY said that that was an *a priori* argument, and asked whether the men were for the most part more highly qualified than in London.—They are not better qualified than those who go in for the higher qualifications, but as to the majority of men who go into practice they are far better qualified.

In answer to Lord THRING, the WITNESS said that theoretical education, as distinguished from the practical, was much better in Vienna than in England. A practical knowledge of surgery could only be obtained by practice. He then went on to speak in favour of orthopædic and other special hospitals, and said he looked upon a cancer hospital more in the light of an infirmary. No doubt the work of some of the special hospitals might be very well managed in general hospitals if a certain amount of special knowledge was brought to bear upon the cases, but the medical staff attached to the special hospitals had the great advantage of knowing their work exceedingly well, much better than they could know it in a special department of a general hospital. He would like to see some kind of licensing authority before the new special hospitals were started, and he would be in favour of some system of central supervision of the hospitals, although the actual constitution of the authority would be rather difficult, unless it were some kind of Governmental supervision.

The inquiry was then adjourned until Thursday.

Upon resuming the inquiry on Thursday, the Committee proceeded to the examination of

Mr. HENRY SELFE BENNETT, Bachelor of Medicine, of the University of Cambridge, who said he practised physic but not surgery. He had a diploma of the Royal College of Surgeons, and said his chief practice was in valuing life for insurance purposes in the City. Although there might be some slight errors in the memorandum of the Charity Organisation Society he was inclined to support it. Approximately one and a half million of the people of London received charitable relief, and he thought it impossible that such a large number stood in real need of such relief. Were it not for the free out-patient departments a large proportion of those patients would go to the local practitioners or the dispensaries. He did not think that the public suff red from the want of skill on the part of the medical practitioners in the poor districts who had to charge low fees as the result of the competition of the free out-patient departments. He was scarcely prepared to say that many poor persons were crowded out and could not obtain relief in consequence of the treatment of well-to-do persons. It was a great hardship to the profession that there should be hospitals with paying wards. It was a malversation of the funds which were left for purely charitable purposes. The undue competition tended to lower the tariff of the private practitioner, which was already sufficiently low.

The CHAIRMAN.—Are you in favour of special hospitals?—No. There were, he added, some special hospitals which had a justification for their existence. The only strictly legitimate special hospitals were those for infectious diseases, lying-in hospitals, hospitals for the treatment of acute or incurable diseases, those for the treatment of insanity, such as St. Luke's and Bethlem.

Do you call those hospitals or asylums?—I consider them hospitals, in so far as they treat acute cases. Other hospitals which the Witness considered justifiable were those of a distinct nationality, dental hospitals, and those for women who desired to be treated by their own sex.

Would you add children's hospitals?—No.

Lord CADOGAN: Why not?—Because children can be and are sufficiently treated at general hospitals.

In answer to Lord KIMBERLEY, Mr. BENNETT said he objected to paying wards, the paying hospital or ward being a pure commercial or business transaction. In certain cases the cancer and consumptive hospitals were justifiable.

Lord THRING asked a number of questions with reference to e use of subscribers' letters for patients being treated at hos-als, and the Witness said that in many cases he looked upon bscribers' letters as bribes to subscribers. He admitted the bscription for letters to be legitimate, but it was not charity. regarded it as scandalous for an institution like St. Thomas's spital, which had endowed funds for purely charitable pur-es, to devote a portion of their funds, to however small an tent, to such cases which were now admitted to paying wards.

Dr. SINCLAIR THOMPSON, M.D., University of Glasgow, and Fel-w of the Royal College of Surgeons, of Bayswater, stated that he s a private practitioner, and physician of the Kensington Free spensary. A free dispensary was a charity supported by volun-y contributions by the gentry of the neighbourhood by means subscriptions and donations. There were no beds in the dis-sary; it was merely an extension of the out-patient depart-nt. There was a resident surgeon who visited patients at their n homes. A system of working with hospitals was much needed. dispensaries should be associated with the hospitals in their ghbourhood, so that they might have the power at the dispen-ies of sending suitable cases for pressing treatment to hospitals ere there were beds and modern appliances not obtainable at pensaries. The large hospitals might also have their out-patient partments smaller by sending some of the less severe out-patient es to the dispensaries. He would allow students at the dispen-ies and infirmaries.

The CHAIRMAN: Would you use the hospital as a great centre h dispensaries as branches, and use the out-patient department ely for consultative purposes?—Yes, and they should not be ubled in the cases of ordinary ailments. The Witness said fur-r that he was in favour of paying hospitals. The system as ried on at St. Thomas's was most useful, and did no harm to the neral practitioner. Good men could make their way as general ctitioners, in spite of the paying patient system. He would e to see a central board for the supervision of hospitals. The tral body should have inspectors to visit the hospitals. The pectors should be qualified men, but not necessarily Govern-nt officials.

Lord CADOGAN: Do you consider the general condition of the ger hospitals in London on the whole satisfactory?—I do.—hough there are occasionally rumours of something wrong ier in the treatment of particular cases or in the management the hospital, yet, after all, do you consider the condition of ngs which prevails calls for any drastic cure or remedy?—No. did not think any system of licensing hospitals desirable, and uld be sorry to see them under government control. He was re favourable to special departments in general hospitals than special hospitals.

Lord THRING: Do you propose that the central board should be pulsory by Act of Parliament, or simply by arrangement with the pitals?—In the first instance, it should be left to the hospitals. hould be voluntary on their part. If they did not then adopt hen Parliament should take action.

Dr. JOHN WILLIAM KAY, general practitioner, said he had been ctising for 30 years in St. George's-in-the-East, and suffered y much from the competition of the London Hospital, to ich, he said, many persons went to be treated who could well rd to pay for treatment. He instanced a number of cases in of of the charge, and said he knew the cases from his own wledge. Within the past twenty years seventeen private ctitioners had been starved out as the result of the competition he hospital. In former times such practitioners made great unes. It was much more difficult for a medical practitioner get a living now than in years gone by. There was one private ctitioner to every 1,000 persons in London, but in his district e was only one to every 6,000 persons. The out-patient de-tment of the London Hospital was a great blessing to the ghbourhood, as it relieved an immense amount of suffering. t and the Poplar Hospital were sufficient for the district. All ad to say against the out-patient department of hospitals was t persons were treated there who could afford to pay fees. He uld like to see the departments restricted, but not closed. They uld be affiliated with properly conducted dispensaries. He uld keep the Poor-law infirmaries quite separate from the hos-ls and dispensaries. The class of persons who now went as a ter of custom without considering it charity to the hospital trivial accidents used to go to the apothecaries and pay. Pro-nt dispensaries should be established. The in-patient depart-nts of hospitals should be kept open, but the out-patient departments should be restricted to consultative cases sent there from the various medical clubs. There ought to be a large number of medical clubs near the hospitals and dispensaries. The out-patient departments of general hospitals tended to lower the skill of the general practitioner, and prevented him getting the experience he would otherwise get, and which used to come to him in the old days. There should be some general system of control over the hospitals.

Lord CADOGAN: Do you mean Government supervision?—Yes.

In answer to the CHAIRMAN, the WITNESS said the part pay system was very bad indeed. It took away all idea of gratitude. It was much worse than the free hospital, which really was a great blessing. The part pay system took away all respect of charity.

Lord CADOGAN: How would you provide for the sick poor?—The Poor Law.

The WITNESS continued that the pay system was a commercial transaction. He had two objections to the part pay system in a hospital: one was that the charity might be interfered with, and the other was that if the system were adopted, it would interfere with the business of the general practitioner. He should prefer to see see separate buildings for the patients who could and desired to pay.

Mr. LENNOX BROWNE was recalled, and proceeded to speak of the desirability of special hospitals for certain diseases, and particularly drew attention to the memorandum of the Charity Organisation Society as to the cost per bed, which he said was put down by that Society as excessive, and had been calculated on a different basis to that adopted by the Central London Throat and Ear Hospital, which submitted their accounts to the Hospital Sunday Fund, and which were never questioned. He was in favour of some authoritative body having control over hospitals. In regard to the Scotch and Irish medical degrees, and the protective system with reference to the London hospital appointments, he held the strongest views.

The CHAIRMAN: Do you consider that many good men are excluded because of the protective system?—I have no doubt of it. There is a gentleman who has recently come to London, and who has been a professor in the Andersonian University of Glasgow and an examiner for the qualifications of the College of Surgeons of Glasgow, who is absolutely unable to get a London hospital appointment because he does not possess this London degree. It is a hardship to ask a man at 40 or 45 years of age to go through what could be very well done as a student, but which would be hard work at his age.

That practice does not obtain in all the hospitals?—I think so, with the exception of St. Mary's.

Mr. J. F. GARIOCH, Secretary of the Tower Hamlets Dispensary, White Horse Street, Stepney, was then examined. He said he came to give evidence in support of the dispensary system because of the sweeping statement he had read, as having been made by Sir Edmund Currie, to the effect that in the East-end of London there as a large num ber of dispensaries which were doctor's shops. That, he (the witness) considered, rather reflected upon the dispensaries, which were doing a good work.

The Committee adjourned until Monday.

THE Infectious Diseases Prevention Bill was read a second time in the House of Commons on Thursday afternoon.

STROUD URBAN AND RURAL (Population, 9,680 and 28,241).—*Steady Improvement in Vital Statistics: Better Provision needed for Isolation of Infectious Cases.*—The annual reports of Mr. Thos. Partridge show a continuing improvement in the public health. The death-rates of the respective districts in 1888 were 13.0 and 15.4 per 1,000, and in 1889 13.4 and 13.7; and the quinquennial averages of Mr. Partridge's sixteen years of office show that there has been a steady downward movement. The infantile and zymotic rates have also decreased, but the health officer gives it as his opinion that the zymotic returns do not compare as favourably as they ought. The zymotic rates were not excessive during the last two years, and no serious epidemic came under notice in either district. Two cases of small-pox were reported in 1888, and in one instance considerable difficulty was experienced in effectually isolating the patient. Neither of the cases, however, proved fatal, and no case has since been reported. Diphtheria was prevalent during 1889, chiefly in the rural district, where, out of 7 cases, 6 proved fatal. Two deaths from this disease occurred in the town. A careful inquiry was made into each case, and sanitary improvements advised where needed. A few mild cases of scarlet fever and measles came under notice.

ASSOCIATION INTELLIGENCE.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members, in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the office.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 16th day of July next, at 2 o'clock in the afternoon.

June, 1890. FRANCIS FOWKE, *General Secretary.*

NOTICE OF QUARTERLY MEETINGS FOR 1890. ELECTION OF MEMBERS.

Meetings of the Council will be held on July 16th and October 15th, 1890. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, September 24th, 1890.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

THE Scientific Grants Committee of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences, that they are empowered to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting should be made without delay to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

BRANCH MEETINGS TO BE HELD.

WEST SOMERSET BRANCH.—The annual meeting of this Branch will be held at the Infirmary, Bridgwater, on Thursday, July 3rd, at 3 o'clock. Mr. H. H. Kemmis, President-elect, will take the chair on its being vacated by Mr. Hunt. Business: Minutes; Report of Council; Treasurer's Report; Election of Officers; Place of Meeting and President-elect for 1891. President's Address. Papers and communications. The dinner will be at the Clarence Hotel at 5 o'clock. Mr. Kemmis invites gentlemen present on the occasion to adjourn to his house after the dinner. The title of any paper or communication to be brought before the meeting and early notice of the intention of being present at the dinner should be sent to W. M. KELLY, M.D., Honorary Secretary, Taunton.

NORTH OF IRELAND BRANCH.—The twelfth annual meeting will be held in the Board Room of the Royal Hospital, Belfast, on Thursday, July 10th. Business: To receive the Secretary's report and the Treasurer's statement. To elect office bearers for the ensuing year. To appoint two members as representatives of the Branch on the Council of the Association, and also two members on the Parliamentary Bills Committee. The President (Dr. George Gray) will deliver an address. Dr. J. A. Lindsay will show a Cancerous Liver, and give an account of the case. He will also read the notes of a case of Diabetes Insipidus successfully treated with Valerian. Dr. Dempsey will describe a New Method of Treating Placenta Prævia, and will read notes of a case. Dr. H. O'Neill will read short notes of a case of Paget's Disease of the Nipple, and will show Photographs of the Breast before and after Operation. Dr. Byers will give a short summary of Fourteen Abdominal Sections, a will show a boy, the subject of Athetosis (Post-hemiplegic Chorea). Dr. E. Thompson (Omagh) will read: 1. Notes of Two Recent Ovariotomies; 2. (Case of Trephining the Skull for Sub-cranial Abscess; 3. Successful Remo of a Large Epithelioma from the Dura Mater; and 4. A Case of Excision of Knee (the last three cases will be exhibited). Gentlemen who wish to read pap show patients, etc., are requested to communicate, as early as convenient, w the Honorary Secretary, JOHN W. BYERS, M.D., Lower Crescent, Belfast.

LANCASHIRE AND CHESHIRE BRANCH.—The fifty-fourth annual meeting this Branch will be held in the Owens College, Manchester, on Wednesd July 2nd, 1890, at 2 P.M. Council meets at 1.30, before the meeting. Order business.—The meeting will be constituted by the retiring President (Davidson), who will then introduce the new President (Dr. Leech). Pre dential Address. The Report of the Council and Financial Statement for t past year. Election of Office Bearers—President-Elect, two Vice-Preside and Honorary Secretary. Election of Representative Members on t Council of the Association and Election of new Council. Selection of a pl for next Annual Meeting. Medical and Surgical Communications.—Dr. Mi gan: The choice of a Caustic in the Treatment of Granulations of the Mid Ear. Mr. Hare: Seats of Election in Amputation. Dr. Dreschfeld will rem on some unusual Forms of Hysteria in Man. Mr. Hardie: 1. Will remark Two Cases of Hypospadias in course of Treatment by his Method of Operati 2. A Case of Dislocation of the Acromio-Clavicular Joint Treated Operative Dr. Harris: The Canary Islands as Health and Holiday Resorts (with Limeli Views). Mr. F. A. Southam: A Case of Prostatic Retention of Urine Trea by Suprapubic Prostatectomy. Mr. Thomas Jones will mention a Case of Tr matic Aneurysm of the Femoral Artery in which the External Iliac was Ti Dr. Charles W. Jones (Peel Causeway), will exhibit and explain his "The peutic Pipe," being an improved tobacco pipe, also available for medical inh lations. Dr. Johnson Martin: On the Cause and Increase of Diphtheritic a Tuberculous Disease and the Best Means of Prevention. A series of Clini cases will be shown in an adjoining room by Drs. Brooke, Leech, Bury, Lu Hare, Larmuth and others, from 2 to 4 P.M. Museum.—Messrs. Armstro Brothers will show a variety of Optical Apparatus. Messrs. Weiss and Son a Messrs. Wood and Co. will show a number of Surgical Requisites. Mess Jewsbury and Brown, Mottershead and Co., and Woolley and Co., will show Assortment of New Drugs, Instruments, etc. Luncheon.—The President (D Leech) has kindly undertaken to provide luncheon in the College from 1 2 P.M. The annual dinner will be held in the Queen's Hotel, Piccadilly, 6 P.M. Tickets 8s. each (wine not included), for which early application shou be made to Dr. Glascott.—CHARLES E. GLASCOTT, M.D., Honorary Secretar 23, St. John Street, Manchester.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH.—The annual meeting the Branch will be held at the Belle Vue Hotel, Malvern, on Friday, June 27t at 4.15 P.M. Dinner at 6.15. Tickets 5s. each, without wine. Business of t meeting:—To elect officers and Council for ensuing year. President's addre Mr. Lawson Tait. Case of Obscure Abdominal Tumour: Dr. Stanley Hayn Divided Tendons Cured by Suture Eight weeks after the Injury: Mr. Gostli Intestinal Obstruction Caused by Prolapsed Spleen. Fatal Case of Fish-bone Œsophagus: Mr. Fletcher. Pathological Specimens: Dr. Paul Chapman a Mr. Bates.—GEORGE W. CROWE, Honorary Secretary.

NORTH WALES BRANCH.—The annual meeting will be held on Tuesday, Ju 8th, at the Sportsman Hotel, Portmadoc, when, in addition to the Presiden address, papers have been promised by Mr. Malcolm Morris, of London, the Etiology and Treatment of the Various Forms of Acne; and Dr. F. Imlac of Liverpool, on Puerperal Fever. Notice of intended papers should be sent June 28th to the Honorary Secretary, W. JONES-MORRIS, Portmadoc.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The annu meeting for the election of officers and committee for the ensuing year will held at the Holborn Restaurant, at 6.30 P.M., on Wednesday, July 2nd, 18 The annual dinner will take place subsequently, at 7 P.M., in the Duke's Saloo Dr. Bridgwater, J.P., Vice-President of the District, will take the chair, su ported by Dr. Brodie Sewell, Mr. Macnamara, Dr. C. Rose, Mr. Noble Smit Dr. H. May, and other members of the Council. Dinner ticket, 7s. 6d. (excl sive of wine). All members desirous of being present will oblige by signifyi the same by July 1st, 1890.—GEORGE HENTY, Honorary Secretary, 302, Camde Road, N.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be he at the County Hotel, Carlisle, on July 25th. Gentlemen wishing to rea papers to communicate with the Honorary Secretary, JAMES ALTHAM, Pe rith.

COMBINED MEETING OF THE EAST ANGLIAN AND CAMBRIDGE AN HUNTINGDON BRANCHES, AND THE NORWICH MEDICO-CHIRURGICAL SOCIETY.

GENERAL MEETING.

THE annual meeting of the East Anglian and Cambridge and Hunt ingdon Branches of the British Medical Association, conjointl with the Norwich Medico-Chirurgical Society, was held at Norwich under the presidency of Dr. MICHAEL BEVERLEY, on June 19t and 20th. The place of meeting was the Board Room of the Nor folk and Norwich Hospital, round which are hung the portraits o forty-three local medical worthies from the time of Caius to tha of Copeman. Mr. C. Williams, to whose enlightened zeal this in teresting collection chiefly owes its existence, presented every visitor with an annotated catalogue of the portraits. Among those present were Sir Peter Eade, Professor G. M. Humphry, Dr. Sydney

ger, Mr. Knowsley Thornton, Mr. R. Barwell, Mr. Pearce Gould, Bateman, Mr. Cadge, Mr. Crosse, Dr. Bradbury (Cambridge), many others.

Scientific Work of the Meeting.—The following is a brief amary of the scientific work of the meeting. On June h the following papers were read:—By Mr. KNOWSLEY ORNTON: Nine Cases of Ectopic or Extrauterine Gesta-; by Mr. WM. CADGE: Case of Porro-Cæsarean Opera-; by Mr. T. H. MORSE: Gonorrhœal Inflammation of the Uterine endages, with specimens; by Dr. SYDNEY RINGER: Soporifics; Sir PETER EADE, M.D.: Some Sequelæ of Influenza; by Dr. W. ELLISTON: Case of Retropharyngeal Abscess; by Dr. W. M. OWFOOT: Case of Cystic Tumour of the Breast.

t 9 30 A.M. on Friday the hospital and museum were thrown n to the inspection of members, and at 10.30 A.M. the meeting resumed.

rofessor HUMPHRY gave a demonstration on the Pathology of ock-Knee and Back-Knee, which was followed by the perform-e, by Mr. WILLIAMS, of the operation of Double Osteotomy for ck-Knee. Dr. SYDNEY RINGER gave a demonstration of the ion of various Soporifics on the Heart of a Frog; and Dr. YD TUCKEY gave a demonstration on Hypnotism.

President's Address.—At the first meeting of the combined aches and the Norwich Medico-Chirurgical Society which held at noon on June 19th, the President, Dr. MICHAEL ERLEY, delivered an address on Some Norwich Medical thies, which was received with general and prolonged ap-ise.—Dr. SYDNEY RINGER, in proposing a vote of thanks the President for his address, said that it seemed as if gs were reverting to what existed a hundred years ago. There a time even within his recollection when London threatened bsorb all the talent, but a reaction had now set in, and towns Birmingham, Norwich, and Manchester had medical men as inguished as any to be found in England or on the Continent. rofessor HUMPHRY, in seconding the proposition, said he had ably heard more addresses than any one present, and had de-red more than one himself; but never in his life had he heard ddress so interesting, so valuable, so full of literary research, so replete with admirable descriptions of character as well as urgical ability. No town except London could show such a rd of surgical ability as old Norwich. Caius was not only the test physician, but the most learned man of his day. He was xample of the fact that in his time medicine and literature t hand in hand, as they had done ever since. It was Caius , after studying under Vesalius, introduced the study of ana-y into England. He first dissected the human body in this try, and gave to Cambridge the privilege of having two bodies ally to dissect, so that human anatomy was there first studied ngland. It was not improbable that Harvey, who was a student aius College, laid the foundation of his great knowledge by nding the course of anatomy at Cambridge. Dr. Beverley had that there were giants in those days. But the generation of ts had been continued. He was not aware that the surgical ice of Norwich ever stood higher than it did at present. It able to meet any town in the country not only in surgery, but terary ability, as had been evidenced by the address of the ident.—Dr. BEVERLEY made a graceful reply, and an adjourn-t then took place for luncheon, which was provided at ets in the central hall of the hospital.

nnual Dinner.—The annual dinner took place on the evening he 19th at Snelling's Room, in Rampant Horse Street. Dr. erley was supported by the Mayor, Mr. W. H. Dakin, the iff, Mr. E. Orams, the Deputy Mayor (Mr. F. W. Harmer), the of Norwich, etc. Letters of apology were received from Mr. e, M.P., and Mr. Colman, M.P. After the usual loyal toasts, ETER EADE proposed "The Bishop and Clergy" to which the N OF NORWICH replied.—Dr. BATEMAN proposed "The Members arliament of East Anglia, and the toast was acknowledged by WILLIAMS.—Dr. BEVERLEY proposed "The Mayor and Sheriff." former, for many years Chairman of the Sanitary Committee orwich, had earned the gratitude of the citizens for his zealous otion of all measures tending to promote the public health, notably for his efforts to establish an infectious hospital. The ity Mayor (Mr. Harmer), who was well known for his scien-attainments, was a descendant of the old Norwich lithoto-of that name, and his son, Mr. Sidney Harmer, was a dis-uished zoologist and a teacher in the University of Cambridge. e MAYOR, in responding, said the name of Beverley had for been connected with Norwich, and with those things of the past which they valued most highly. In 1398 Michael Beverley was dean of Middleham College, and trustee to his own namesake, Sir John Howard, the ancestor of his grace the present Duke of Norfolk. In the year 1684 a Michael Beverley was Sheriff of Norwich, and held office two years after Sir Thomas Browne was interred in the chancel of St. Peter Mancroft. The citizens were proud of the President, and of the medical men engaged in Norwich.—The SHERIFF and DEPUTY MAYOR also responded.—Professor HUMPHRY gave what he described as a long and serious toast, "The British Medical Association and East Anglian Cambridge and Huntingdon Branches, and the Norwich Medico-Chirurgical Society, with the Health of the President, Dr. Beverley." Norwich was his mother city, inasmuch that he was there born into the medical profession. He was a pupil of the most earnest and energetic man he had ever met with—John Green Crosse. For three years he lived in that man's house, and he need not say that many memories were awakened within him when he that day went over the old ground and entered the old surgery, where there were still the very bell he used to answer, and the shutters which he used to put up and pull down. He believed he might take credit to himself for being the oldest worker in the Association. For more than half a century he had laboured for it. He began the work fifty-three years ago, under Mr. Crosse, in the surgery of which he had spoken. The Association had its origin mainly in Norwich and mainly from that man. Hardly any other man could have been so competent as he was to have started a thing of the kind. On Sunday evenings especially John Crosse would instruct him to write certain letters to members respecting the work of the Association. These Sunday evenings were well and usefully spent, for that Association, by seeking to promote the well being of man, promoted the glory of God; it also had as its object the scotching of that greatest curse of men, that foulest because most insidious work of the devil—jealousy and ill-feeling towards professional brethren. One of the great objects of the Association had been to bring medical men together, to make them put their knees under the common table, and to bring their hearts together above it, to cease to look at one another as opponents, and to regard one another as fellow-workers in the one great object of doing good on earth. With regard to the President, he need only say that while this or any other Branch of the Association could produce so good a man as Dr. Beverley to take the lead there would be no fear that it would fail, but it would surely go on with the great and high work it had to do.—The PRESIDENT having replied, the toast of "Our Guests" was proposed by Mr. CADGE, and responded to by Mr. RICHARD BARWELL and Mr. A. P. GOULD. Mr. CROSSE proposed "The Readers of Papers," to which Dr. S. RINGER and Mr. KNOWSLEY THORNTON replied; and the concluding toast, "The Secretaries," proposed by Dr. ELLISTON, was acknowledged by Dr. BARNES, the PRESIDENT (on behalf of Dr. Anningson), and Mr. D. D. DAY.

Mrs. Beverley's Garden Party.—On Friday, June 20th, all the medical visitors, together with several hundreds of the principal citizens of Norwich, and many of the county gentry, were invited by Dr. and Mrs. Beverley to a garden party at Brundall. Nearly 700 invitations were issued, and most of them were accepted. Dr. Beverley's gardens at Brundall are deservedly famous throughout the district for their extent and varied loveliness. Each guest was presented with an artistically drawn plan of the gardens enriched with a picture of the "wishing spring," and of specimens of Roman pottery discovered at Brundall. The charming hospitality and social *savoir faire* of the host and hostess, and their untiring exertions for the comfort and entertainment of all their guests made the party a great success, and the occasion will remain as an *albo dies notanda lapillo* in the memories of those who had the privilege to be present.

EAST ANGLIAN BRANCH.

A meeting of the Council of the Branch was held on June 19th at 11 A.M. In the absence of the President, the chair was occupied by Dr. BARNES.

New Members.—Twelve gentlemen were elected members of the Association and of the Branch and twenty-four, already members of the Association, were elected members of the Branch.

Report of Council.—The report of the Council stated that the membership of the Branch had considerably increased, 36 new members having been elected, making the total number now 231. Very successful meetings had been held at Sudbury, Braintree, and Haverhill, and special acknowledgment was made of the manner in which the President, Dr. J. Sinclair Holden, had dis-

charged the duties of his office, and of the generous reception he had given the Branch at Sudbury. Thanks were also due to Messrs. Tandy and Hargrave for their hospitality to the Essex division of the Branch at Haverhill. A special meeting had been held at Norwich to consider Dr. Rentoul's proposed "Public Medical Service" with the result that the scheme was declared to be under present circumstances impracticable.

Election of Officers.—Mr. T. W. Crosse and Dr. W. A. Elliston were re-elected representatives of the Branch on the Council of the Association, and Dr. Mead was re elected its representative on the Parliamentary Bills Committee. The retiring President, Dr. J. Sinclair Holden, was elected a Vice-President of the Branch.

New President.—The CHAIRMAN then introduced the new President of the Branch, Dr. BEVERLEY, who is also President of the Norwich Medico-Chirurgical Society.

Invitation to Cambridge.—During the meeting the members of the Cambridge and Huntingdon Branch invited the members of the East Anglian Branch to visit them next year at Cambridge. This invitation was cordially accepted.

CAMBRIDGE AND HUNTINGDON BRANCH.

The annual meeting of this Branch was held at the Norfolk and Norwich Hospital on June 19th, Mr. F. M. BECKETT, of Ely, President, being in the chair.

Next Annual Meeting.—A report of the Council was read recommending that a meeting should be held conjointly with the East Anglian Branch next year. The following resolutions were unanimously adopted: 1. "That the East Anglian Branch be invited to hold a conjoint meeting with the Cambridge and Huntingdon Branch at Cambridge in the summer of 1891." 2. "That the details of the proposed meeting be left to the Council." 3. "That the Council of the Branch ascertain whether the South Midland Branch could modify their arrangements so as also to join the meeting."

Election of Officers.—Mr. D. B. Balding, of Royston, was re-elected Representative on the Parliamentary Bills Committee. Dr. Anningson, of Cambridge, was re-elected Honorary Secretary and Representative on the Council of the Association.

STAFFORDSHIRE BRANCH.

THE third general meeting of this Branch during the present session was held at the Bell Medical Library, Wolverhampton, on Thursday, May 29, Mr. VINCENT JACKSON, the President, in the chair.

New Member.—Dr. Alfred Griffiths Greenway was elected a member of the Branch.

Fracture of Patella.—Mr. VINCENT JACKSON exhibited a young man who had been successfully operated upon for a transverse fracture of the left patella, by subcutaneously transfixing the soft parts immediately above the upper fragment, also the ligamentum patellæ just below the lower fragment, with strong steel pins, and after the edges of the divided fragments had been accurately approximated, they were retained so by wiring the free portions of the steel pins together. At the present time—nine months since the operation—the objective evidence of a fracture having occurred was *nil*, and the movements of the joint were also completely restored, the man being able to kneel with the left knee as well as with the right.

Traumatic Aneurysm of the Left Brachial Artery.—Mr. VINCENT JACKSON also exhibited a man aged 46, whose left brachial artery had been ligatured in the middle third a fortnight before for a traumatic aneurysm at the bend of the elbow, which was now quite cured and the arm wound healed. The artery was wounded some months before admission by a chip of sharp steel.

Glass Vaginal Tube and Female Catheter.—Mr. VINCENT JACKSON showed a glass female catheter and a glass vaginal tube which had recently been made at his suggestion. It could be used with the nozzle of any douche or indiarubber syringe. It was grooved externally in such a way that the return current was ample and free. The lateral apertures (there was no central aperture) were so made that the stream was directed laterally and forward, and not backward.

Mediastinal Sarcoma.—Dr. H. H. BROWN showed a mediastinal tumour which had occupied the entire mediastinum, from the external notch to the pericardium, the upper two-thirds of which were invaded by the growth. It corresponded in breadth to the sternum, and extended backwards to the spine, surrounding the trachea and roots of the lungs. In the lungs were numerous small secondary nodules, scattered over their under surfa Similar though smaller nodules, varying in size from a small to a miliary tubercle, were found in the kidneys. There w none elsewhere. The trachea and œsophagus were comple unobstructed, and the innominate veins and superior cava, tho embedded in the growth, were not perceptibly diminished calibre. Microscopically the tumour was found to be a ro celled sarcoma.

Malignant Tumour of Thyroid.—Dr. H. H. BROWN showed specimen taken from a man aged 51. The left lobe of the thy was replaced by a cystic tumour of an oblong shape, w measured 5 inches from above down, by 3½ in breadth and th ness. It weighed 15 ounces. Microscopically it was proved to small spindle-celled sarcoma.

Complications of Labour in 2,000 Consecutive Pregnancies.—JOHN T. HARTILL read a paper on this subject.

Insanitary Cesspools in Rural Districts and their Remedy.—REID read a paper on this subject and exhibited a model, show a plan suggested by him as a remedy adaptable to most of cesspits at present existing. It was inexpensive, and he found it answer well in practice.

SOUTH-EASTERN BRANCH.

THE forty-sixth annual meeting of this Branch was held at Gu ford, on Wednesday, June 11th, Mr. C. J. SELLS, of Guildford the chair.

Report of Council.—The report stated in 1875, when the meet was held at Guildford before, the branch consisted of only 286 me bers; now there were 508, the largest number hitherto registe At the last annual meeting there were 494 members. During year 30 new members had been elected; 10 had resigned, 3 h gone away, 2 had been struck off in arrears, and 2 had died. total loss to the Branch therefore was 17, and the gain 30. The increase for the year, therefore, was 13. One of the memb deceased, Dr. Lochée, of Canterbury, was President of the Associat when the annual meeting was held there in 1861, and he was aft wards made a Vice-President for life. He was a constant attend at the East Kent District meetings, till the infirmities of age co pelled his absence. The financial condition of the Branch continu to be most satisfactory. In the abstract of accounts a new it appeared for the first time in the receipts, viz., the sum received the Honorary Secretary from the Honorary Treasurer of the As ciation for payment of railway fare to the meetings of the Coun The establishment of a Public Medical Service for England havi been brought under the notice of the Council by Dr. Rento they reluctantly came to the conclusion, after a most exhausti discussion, that the proposals which Dr. Rentoul had so ably p forward were impracticable. The Council was strongly of opin that the provincial hospitals and dispensaries should be includ in the inquiry now being held on hospital management. Wi regard to the very unsatisfactory and almost strained relatio which existed between the War Office and the Army Medical Depa ment, the Council thought it the duty of every member of t profession, and especially of those belonging to the British Medi Association, to bring the subject under the notice of their resp tive representatives in Parliament, with the object of induci Government to perform an act of justice to a meritorious branch the public service. Thanks were due to the Hon. Secretari of the Districts, who, as usual had organised their meetings wi success, and added many names to the list of members. A feelin had been expressed in some quarters that the men of the prese day did not seem to be possessed with the same amount of enth siasm and energy, in regard to these meetings, as influenced t older members who established them and carried them on wit success. The Council mentioned this statement for the consider tion and meditation of the Honorary Secretaries and their Di tricts. In conclusion the Council congratulated the members o the continued prosperity of the Association. Notwithstanding th liberality of the Council and the Treasurer (Dr. Holman), th resources of the Association had never been so great.

Financial Report.—The financial report showed a balance i hand of £151 3*s.* 5½*d.*

Officers and Council.—Mr. G. Rigden, of Canterbury, was unan mously chosen President-elect for 1891–2. The following offic were declared duly elected for 1891–2: *Members of Council* Dr. Adeney, Tunbridge Wells; Dr. Bagshawe, St. Leonards; D Bowles, Folkestone; Dr. A. Buchanan, Chatham; L. Buckel Chichester; C. W. Chaldecott, Dorking; Dr. T. Eastes, Folkestone

H. Galton, Brixton Hill; Dr. Gogarty, Canterbury; A. H. B. Hallowes, Maidstone; F. B. Hallowes, Redhill; Dr. Hayman, astbourne; Dr. C. Holman, Reigate; Dr. Johnson, Tunbridge ells; Dr. W. Moore, Burgess Hill; A. Napper, Guildford; Dr. diman, Bletchingley; T. F. Raven, Broadstairs; Dr. R. Roberts, astbourne; Dr. Stowers, Finsbury Square; E. W. Thurston, Ashrd; J. S. Turner, Upper Norwood; J. L. Worship, Riverhead; . C. E. Hoar, Maidstone; S. G. Sloman, jun., Farnham.

Representatives of Branch on Council of Association.—For rrey, Dr. J. H. Galton; for Sussex, Mr. G. F. Hodgson; for nt, Dr. C. Parsons, Honorary Secretary.

Honorary Secretary.—Dr. Parsons, of Dover, was unanimously quested to continue in office.

Representative on Parliamentary Bills Committee.—Mr. E. H. lton, of Brixton Hill, was re-elected.

Next Annual Meeting.—It was resolved to hold the Annual eeting in 1891 at Canterbury.

Resolutions.—1. "This Branch having always persistently opsed the payment of the railway fares of the Branch representaves from the funds of the Association, it is resolved that the sum ceived by the Hono ary Secretary for this purpose from the easurer of the Association be given to the British Medical Benelent Fund, and that the donation be further increased to 10 ineas from the funds of the Branch." 2. "That a donation of guineas be made to the Royal Medical Benevolent College at som to the permanent endowment fund for the fifty pensioners the College." 3. "That this Branch offer a humble petition to e House of Lords requesting that the inquiry into the subject hospital management be extended to provincial hospitals and pensaries."

Votes of Thanks.—Votes of thanks for their services during the st year were passed to the President, Dr. Hayman, the two Vicesidents, Dr. Habgood, and Mr. Ewart, of Eastbourne; to the uncil of the Branch, and to the auditors and scrutineers, Messrs. born and Long, of Dover.

Dinner.—Forty-three members and visitors dined together after pleasant drive to Brookwood Asylum, and a visit to the chief jects of interest in the town of Guildford.

SYDNEY AND NEW SOUTH WALES BRANCH.

THE tenth annual meeting of this Branch was held at Sydney on nday, March 7th, Dr. FIASCHI, President, in the chair. The foling members were present: Drs Jarvie Hood, Williams, Crago, aggs, W. Chisholm, Jenkins, Ellis, Quaife, W. J O'Reilly, A. F. Reilly, Cohen, Graham, M'Donagh, Marano, Chambers, Worrall, nnie, Cotton, Wright, Brady, A. F. Hankins, Hodgson, Scotirving, Lyden, West, Shand, Megginson, Kendall, and Clubbe. . M'Clelland and Mr. Storey were present as visitors.

New Members.—The minutes of the previous annual meeting ving been read and confirmed, the PRESIDENT announced that . Douglas and Dr. Ford Hughes had been elected members of Branch.

President's Address.—Dr. FIASCHI, the retiring President, then ivered an address, in which he reviewed the work of the anch during the previous twelve months. Five Council and ie general meetings had been held, papers had been read on st of the branches of medical science, and many interesting exbits had been shown. Three members, Drs. Nott, James Smith, d P. M'Donagh, had died, and three had resigned. Fourteen w members had been elected, making a total of 129 members w on the roll, the largest number yet recorded. These facts owed that, on the attainment of its eleventh year of life, the anch was showing signs of vigorous development. The meetgs had been well attended, and the questions mooted had been ll discussed in a spirit of "more breezy and healthier criticism" an used to prevail in the early years of their existence. The esident then proceeded to speak of the medical mind as an inument. In this delicate instrument there was, first, the part at received the statement of the patient; the photographic ate should not beat it in sensitiveness and promptness. "A nt abnormal sound, a slight blur in the speech of your patient, difference in the complexion—may be a paleness, a yellowness, a mere general greasy look; the innumerable differences of the lse under the touch, the bogginess or hardness of a tissue, the ctuation, the wave—a peculiar odour even—might be all the e that in some cases might help to a correct diagnosis." No mer was the impression received than a process of sorting set ; the valuable evidence was retained, the useless cast out, just as the miner's cradle retained the golden dust, and allowed the sand to be washed out. A French professor of agriculture had these words printed in his lecture room: "There is nothing certain in agriculture." The same remark applied to medical treatment; not a week passed but every practitioner had cause to verify the glorious uncertainty of medicine. Judgment must there again use its most delicate balancing to find the treatment best adapted to the individual case. This point determined, the steady pressure of the will was required to overcome the difficulties that prevented the thorough carrying out of the treatment. Another power was still needed to guide and regulate this complex machinery, namely, "the unquenchable flame that is not love of gain nor of self-aggrandisement, but a mixture of professional pride, of sense of duty, and of philanthropical spirit." Like other instruments, the medical mind could work only under certain conditions which differed according to individuals, etc. One detrimental influence was, however, more or less common to them all, namely, overwork, which was the besetting sin of most practitioners in Australia. The treatment for this was, first, economy of power in work, quantity being sacrificed for quality; and secondly, the intellectual refreshment and communion with fellowworkers, as in the meetings of the two medical societies of Sydney. The President concluded his address with a few well-chosen words expressive of the mingled pleasure and regret with which he relinquished his office.

Vote of Thanks.—A vote of thanks to the President for his address was proposed by Dr. CHAMBERS, seconded by Dr. KNAGGS, and carried by acclamation.

Balance Sheet.—The balance sheet, which was read by Dr. CRAGO, showed that there was a balance of £152 16s. 10d. to the credit of the Branch. On the proposition of Dr. ELLIS, seconded by Dr. W. CHISHOLM, the balance sheet was adopted.

Officers and Council.—The meeting then proceeded to the election of officers and members of Council for the ensuing year. The following gentlemen were elected:—*President:* G. T. Hankins, M.R.C.S. *Vice President:* R. Scot-Skirving, M.B., C.M.Edin. *Honorary Treasurer:* W. H. Crago, L.R.C.P.Lond., M.R.C.S. *Honorary Secretary:* Ralph Worrall, M.D., Ch.M., Qu. U.Irel. *Auditors:* H. A. Ellis, M.B., Ch.B.Dub., and C. P. B. Clubbe, L.R.C.P.Lond., M.R.C.S. *Members of Council:* J. Chambers, F.R.C.P.Edin., W. W. J. O'Reilly, M.D., Ch.M.Irel., F. H. Quaife, M.D., C.M.Glasg., S. T. Knaggs, M.D.Aberd. and Syd., T. H. Fiaschi, M.D.Pisa, E. J. Jenkins, M.A., M.D.Oxon., M.R.C.P.Lond.

NORTHERN COUNTIES (SCOTLAND) BRANCH.

THE annual meeting of this Branch was held in the Royal Hotel, Inverness, on June 12th, under the presidency of Dr. WHYTE, Elgin.

President's Address.—The PRESIDENT delivered an address on "Anæsthetics," contrasting the value and effects of ether and chloroform, giving preference to the latter, and laying great stress on the necessity of the administration being committed to the sole charge of an assistant.—A general discussion on the subject followed, and a cordial vote of thanks was accorded to the President.

New Member.—Dr. Walter de Watteville, Kingussie, was admitted a member of the Association and Branch.

Officers and Council.—President: Dr. Grant, Grantown. *President-Elect:* Dr. Turner, Keith. *Vice-Presidents:* Dr. Whyte, Elgin, and Dr. Duguid, Buckie. *Secretary and Treasurer:* Dr. J. W. N. Mackay, Elgin. *Council:* Drs. McNee, Mann, Aitken, Finlayson, G. H. Mackay, and Simpson. *Representative to the Council and Parliamentary Bills Committee:* Dr. Ogilvie Grant, Inverness.

Next Meeting.—It was resolved that the next meeting should be be held at Elgin, and the Secretary was instructed to correspond with the Aberdeen, Banff, and Kincardine Branch, with a view to a joint meeting.

Dinner.—The members afterwards dined together, Dr. Whyte, who was in the chair, being supported by the Provost of Inverness, Dr. Mackay, Inspector-General of Hospitals, and Dr. Robert Grant, Brigade-Surgeon, Inverness.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.

THE annual meeting of this Branch was held at the Castle Campbell Hotel, Dollar, on the afternoon of Tuesday, July 17th. Dr. STRACHAN presided, and there were also present Drs. Leslie, Linton, Spence, Peake, Currie, Oswald, Mackintosh, and Lewis. Apologies for absence were received from Drs. Haldane, Galbraith,

Wickham, Cribbes, and Kirkwood. The minutes of the last meeting were read and approved.

Report of Council and Financial Statement.—The Council for 1889-90 presented its report, and the Treasurer, Dr. SPENCE, read the annual statement of the finances of the Branch, which showed a balance of £3 5s. to the credit of the Branch.

Officers and Council.—The following were elected office-bearers for the ensuing year:—*President:* Dr. Haldane. *Vice-President:* Dr. Lewis. *Honorary Treasurer:* Dr. Spence. *Honorary Secretaries:* Drs. Lewis and Peake. *Members of Council:* Drs. Strachan, Currie, Wickham, and Macpherson. Dr. Strachan was chosen to represent the Branch on the Council of the Association and on the Parliamentary Bills Committee.

Case.—Dr. PEAKE showed a case of extensive Burn of the Abdomen, Thigh, Arm, etc., healed over after 18 months by repeated skin grafting.

Health Conditions in School Life.—Dr. STRACHAN read a paper in which he insisted that sound and vigorous health was of the first importance in education, as upon it depended development, which determined the future brain power of the pupil. Learning supplied the tools but the brain was the workman, and according to organic strength was intellectual power and vigour. All time during the day which could be spared from necessary class work should be utilised for exercise in the open air. He suggested the introduction of plants in the classroom as a means, in addition to ventilation, of purifying the air. There was a general agreement among educational authorities that with insufficient nourishment ordinary school work was apt to be excessive and injurious, and he pointed out that this might be from want of appetite as well as want of food. With regard to exercise, he argued in favour of spontaneity, as also of a sufficient daily allowance at all seasons. He suggested that the usual Midsummer and Christmas holidays might be considerably curtailed and the time thus saved be distributed as additional playtime throughout the year. The fallacy of regarding physical exercise as a corrective of the evil effects of excessive brainwork was also alluded to. In regard to school work, he pointed out the weakening effect upon psychical action of emotional excitement, as fear, anxiety, etc., and urged the importance of avoiding such in school children. He concluded by referring to the danger of slight ailments being converted into serious illness by indiscreet usage at school, and to the evils resulting from strain upon the system during the period of functional development, especially in girls.—A discussion followed in which Drs. PEAKE, CURRIE, and LESLIE took part, and Dr. Strachan received a unanimous vote of thanks for his paper.

Exhibition of Instruments.—Messrs. J. Gardner and Sons, Edinburgh, then exhibited a collection of Gynæcological, Electrical, and Surgical Instruments.

Annual Dinner.—The annual dinner was held after the meeting.

SPECIAL CORRESPONDENCE.

PARIS.

Emphysema and Tuberculosis.—Renal Epithelioma.—Sulphur Vapour in Whooping-cough.—Laparotomy.—Oxygen Inhalations in Diphtheria.—Asphyxia from Pressing Down the Tongue.—General News.

DR. POTAIN, in a recent clinical lecture on emphysema and tuberculosis, demonstrated that the two conditions are sometimes coexistent. Dr. Peter believes that emphysema is favourable to the development of phthisis, inasmuch as nutrition then becomes imperfect. In 1875 Dr. Gallard showed that tuberculosis may lead to emphysema; since then Hérard and Grancher have confirmed this. Emphysema may succeed tuberculosis or precede it. In the former case it is more limited, in the latter it is often accompanied by chronic pneumonia.

At the Paris Surgical Society M. Terrillon gave an account of a case of epithelioma of the kidney. He had removed the tumour two years previously, and the patient remained well. M. Quenu has performed the same operation with equally good results.

In the *Bulletin de Thérapeutique* Dr. Weisgerer records three cases of whooping-cough treated by sulphur vapour. He uses Deschieu's bougie, No. 1, which burns ten grammes of sulphur in an hour. This treatment has been adopted at the Hôpital de la Charité, but the cases have not been published. Dr. Weisge placed the children in a room measuring about eighteen cu mètres, and ten grammes of sulphur were burned. The vap caused a slight sensation of pricking in the eyes and throat, whi however, the children bore very well. The treatment is repeat night and morning. The fits of coughing are greatly relie after a day or two of treatment, then disappear, often giving pl to a cough, which occurs once or twice in the course of twen four hours.

M. Thérard relates the following case: During the confineme of a woman with rickety pelvis the fœtal head could not be fe nor the fœtal *bruit* heard. M. Thérard believed the uterus to ruptured. He tried to effect podalic version, but it was impossi to extricate the head. He then performed embryotomy; but ev then the head could not be extracted. Laparotomy was th done, and M. Thérard observed that round the cervix there was fibrous ring, which proceeded from the vaginal insertion. antiseptic precautions had not been observed the peritoneu was washed out. The sutures used for the peritoneum we steeped in brandy; the edges of the wound were kept together strips of plaster. Chloroform was not used, but the patient d not suffer much and soon recovered.

M. Bouchut, in 1868, demonstrated that in diphtheria there acute leucocythemia. This theory was attacked by MM. Cuff and Sanné, but confirmed by Binault in his thesis on "Les Altér tions du Sang dans la Diphtérie." In a recent thesis M. Gonthi has again treated this question, taking as a basis the research of Brown-Séquard and d'Arsonval, who have shown that from t watery vapour that issues from the lungs of healthy human bein and all mammals a poisonous fluid is obtained. In diphtheria t breathing passages are obstructed, and this pulmonary excreti possibly condensed and elimination prevented, and in consequen of this there is insufficient ventilation of the lungs. M. Gonthi cites several cases of diphtheria which were successfully treat with oxygen inhalations.

M. Vergel has recently reported a case in which syncope a convulsions were caused by depressing the tongue. The chil 18 months old, was suffering from croup. In order to exami the throat, the tongue was pressed down with a spoon, when sy cope ensued. This was followed by a convulsion, and the chi remained during ten hours in a torpid state, from which it slow recovered. Bouchut has reported two cases of death from pres ing down the tongue; thus to avoid such accidents this should b done during expiration, otherwise even in adults spasm of th glottis may occur.

A bronze medal has been awarded by the French Governmer to Dr. Rondet, for his sanitary labours during the typhoid fev epidemic at Neuville-sur-Seine.

A philanthropic society called the "L'Œuvre de Ten Bron," o ganised at the Grand Hotel an evening entertainment, consistin of a lecture and a concert, for the benefit of their funds, whic are to be devoted to the treatment of tuberculous patients by a impregnated with salt. M. Verneuil presided.

The Baroness Mohrenheim gave a *matinée musicale* at th Russian Embassy for the benefit of the Paris Ambulance. M. Jule Simon described the development of this organisation. Severa well-known amateurs and distinguished professional artistes con tributed to the success of the *matinée*.

VIENNA.

Orexin.—Extirpation of the Vesiculæ Seminales.—Tests for Albu men in the Urine.—Parenchymatous Injections of Iodoform i Goitre.—Mental Disorder following Operations on the Eye.— Professor Dittel's Jubilee.

DR F. PENZOLDT, in the *Therapeutische Monatshefte*, describes th muriate of phenyl-hydrochinazolin or orexin (ὄρεξις, appetite) a a remedy which improves all the functions of the stomach, an especially increases the appetite. The drug, which is easily soluble in water, has a bitter, burning taste. It is a crystallised salt, and has only a very slight toxic effect in warm-blooded animals. The poisonous dose in man seems to begin at 25 grammes. In healthy persons slight disturbances, such as nausea, giddiness, or heat only occurred after the use of 1 gramme *pro dosi*. After half a gramme there was a striking and rapid increase of appetite. In a healthy man one-fourth of a gramme accelerated the digestion of white bread by half an hour, that of meat by 28 minutes; half a gramme accelerated the digestion of meat by one hour. Experi-

ents on thirty-six patients showed that in many cases the drug stored lost appetite. This effect rarely occurred after the first se; usually it came on after several doses given in the course of few days. Orexin has a prompt effect in anæmic and cachectic dividuals, in patients on whom operations have been performed, those suffering from phthisis, etc. The drug is of special value commencing pulmonary tuberculosis, and Dr. Penzoldt in many ch cases observed a considerable increase of the weight of the dy. No disagreeable after-effects had been observed, except casional burning along the œsophagus and rare and transitory miting. The dosage was from 0 3 to 0 5 gramme once or twice lay, and 0 5 gramme at once; the maximal daily dose is 1 5 ammes. Dr. Penzoldt recommends that orexin should be given gelatinised pills with large quantities of fluid, owing to the itating properties of the substance. The following is the mula: ℞ Orexin hydrochlor. 2 0 grammes; extr. gentian. pulv. lic. althææ q.s. ut fiant pilulæ xx; obduce gelatinâ. From ree to five pills are ordered in the forenoon; later on this antity is given twice a day, with a large cup of broth. The sis of orexin itself has a toxic effect like methylphenyl-china-in, and anisyldi-hydrochinazolin, and has little or no effect on appetite.

Dr. E. Ullmann, of Vienna, reports in the *Centralblatt für irurgie* the first case of extirpation of the seminal vesicles. In oy, aged 17 years, castration was performed on the right side ing to tuberculosis of the epididymis, and a considerable swell-; and solidity of the right vesicula seminalis was noticed at it time. Two months later extirpation of the vesiculæ semi-les was performed. The operation was performed in Professor bert's clinic. Starting from the perineum, the anterior wall of rectum was detached; both the vesiculæ seminales and the ht vas deferens were removed. Perfect recovery followed. Ullmann recommends this operation in primary tuberculosis the epididymis when the epididymis of the other side is althy, and the vesiculæ seminales tuberculous; also in primary erculosis of the vesiculæ seminales.

Dr. Zouchlos, writing in the *Wiener Allgemeine med. Z-itung*, ommends the following as convenient bedside tests for albumen the urine: 1. Some drops of a mixture of 1 part of acetic acid 1 6 parts of a 1 per cent. solution of sublimate, when added to ne containing albumen, produces a slight cloudiness. Peptone, en mixed with acetic acid and sublimate in the above-men-ned proportions, causes no cloudiness, and this is true also of c acid, solution of urea, phosphates and sugar. When the ne is much concentrated it does not become cloudy on the ad-ion of sublimate and acetic acid. 2. Another method wl ich is l more exact—even more than that with the ferrocyanide of assium and acetic acid—is the method with rhodanide of potas-m and acetic acid in the cold. It is best to mix 100 cubic centi-tres of a 10 per cent. solution with 20 cubic centimètres of tic acid, and to add some drops of this mixture to the urine to tested. When albumen is present in small quantities a dis-ct cloudiness occurs immediately on the addition of the above-ntioned mixture; when the amount of albumen is large a ck white precipitate is thrown down. An excess of the fluid s no harm. Normal urine, when thus tested, invariably gives egative result. The most convenient method is that with dan potassium and succinic acid, which can be carried about the solid form in boxes. Equal parts of succinic acid and danide of potassium are mixed together, and a small quantity is led to the urine. If even a small amount of albumen is present udiness is produced.

Professor Mosetig v. Moorhof, of Vienna, recommends injections iodoform (iodoform 1, ether 5, olive oil 9 or iodoform 1, ether 1 oil of olives āā 7 parts) in parenchymatous goitre. When m 1 to 2 grammes of this mixture are injected from five to ten es at intervals of three or four days, a decrease in the size of neck of from 2 to 4 centimètres invariably occurred in 79 es so treated. In substernal goitres it is sufficient to make the ections into the suprasternal part. The advantages of this thod, as compared with parenchymatous injections of iodine, are t inflammatory complications never occur. Suppuration has er been observed in Professor Mosetig's cases.

Dr. Lothar v. Frankl Hochwart, of Vienna, gives in the *Jahr-her für Psychiatrie* details as to psychical disorders occurring er operations on the eye. The communication is based on cases Professor Meynert's clinic in the Vienna General Hospital. It been known since the time of Dupuytren and Esquirol that chical disturbance may follow operations on the eye; the fact had also been noticed by Sichel, Schnabel, Schmid-Rimpler, and others. Dr. Frankl has dealt with 32 cases, which he divides into four classes. The first comprised 15 patients between the 30th and 90th year of age. The psychical disorder had the character of "hallucinatory confusion" in the sense of Meynert; aural and visual hallucinations of a terrifying nature formed the chief features of the delirium. The second class comprised seven patients of alcoholic antecedents. The third class comprised seven aged individuals in whom simple confusion and dementia, without hallucinations, followed operations on the eye. Finally, there were three patients in whom operation was followed by other somatic conditions, which led to a fatal issue. During these affections inanition delirium was observed. The operations were chiefly for cataract. Mental disturbance was, however, also noted after iridectomy, operations for squint, and enucleation of the eye-ball. The prognosis of the psychosis was not always favourable; it might last for months and years, and frequently ended in dementia. These cases might, perhaps, be reckoned among those in which mental derangements followed surgical operations in general. They were, however, proportionately so frequent after operations on the eye that other causes had to be sought for. The following points had to be taken into account:—1. The numerous nerve tracts connecting the eye with the brain; lesions of the eye also occasionally produced psychical affections. 2. The irritation of sensory organs might also be reckoned among the causes of madness. 3. The predisposition created by the depression caused by blindness. Dr. von Frankl cited cases in which mental disturbances occurred during the time blindness was coming on and recovery following operation. 4. The advanced age at which operations for cataract were frequently performed. This was, however, only true of a certain number of cases, as psychical diseases after eye operations were also noted in young persons. 5. The influence of the darkness cure was also very important, as darkness had a depressing influence, and there were individuals who became affected with hallucinations on mere closure of the eyes. Dr. Schmid-Rimpler had seen two cases of mental disturbance from shutting out the light without any operation. Psychical affections followed operations which did not require the darkness cure, but it was certain that the longer the darkness cure lasted the greater was the disposition towards mental disturbances.

Professor Dittel celebrated the fiftieth anniversary of his graduation as doctor of medicine on June 9th. The Vienna Medical Faculty conferred on him a new doctor's degree, which was presented to him by a deputation composed of the rector magnificus of the Vienna University, Professor Pölzl; the dean of the Vienna Medical Faculty, Professor Pogl; and Professor Albert. Several other deputations were also received. Almost all the professors and teachers of the Medical Faculty were present. The city of Vienna conferred upon Professor von Dittel the freedom of the city.

SWITZERLAND.

Esmarch's Bandage as an Aid to Cocaine Anæsthesia in Minor Surgery.—Precocious Maturity in a Boy.—Medical Service in Switzerland.

Some time ago Mr. Mayo Robson[1] and Dr. Corning[2] showed that the local anæsthetic effects of cocaine, when applied by subcutaneous injection, can be considerably intensified and prolonged and the danger of poisoning prevented, by means of an Esmarch bandage applied above the site of the injection. Dr. E. Kummer, of Geneva, recently tried this method in over fifty cases of various minor surgical operations, including incision of whitlow, evulsion of ingrowing nails, excision of hypertrophied scars, or of subungual exostoses, ganglia of the wrist or fingers, stretching the median nerve, resection of phalanges or digits, etc. The results obtained were highly satisfactory, all the operations being totally painless, and no toxic phenomena occurring. As a rule Dr. Kummer employs a 1 per cent. solution of hydrochlorate of cocaine, injecting several drops, with a Pravaz syringe, into several points around and over the site of operation, and carefully preventing the reflux of the fluid by compression. The total maximum dose of the alkaloid in adults was never more than 0.05 gramme, the limit in children being 0.01-2. In operations on a finger or toe a thin elastic bandage was tied around its base; this was fully sufficient to secure a perfect anæsthesia of all local

[1] Journal, No. 1349, p. 859.
[2] *New York Medical Journal*, vol. xlii, No. 12, p. 317.

tissues, including bones. In operations higher up the limb two elastic bandages—a proximal and a distal one—were necessary, and even then only soft tissues were anæsthetised, the bone remaining sensitive. Anæsthesia was complete in about eight minutes, when the operation may be commenced. When the operation was finished and before the dressing was applied, the wound was allowed to bleed moderately for some while, in order to allow as complete a washing-out as possible of the cocaine injected. When the application of Esmarch's bandage is impracticable cocaine produced anæsthesia of the skin alone, for which purpose an injection of 0.01 gramme was sufficient.

In the *Revue Médicale de la Suisse Romande* for May, Dr. V. Gauthier, of Geneva, describes an instance of precocity in a boy, aged 6 years and 7 months, of a healthy family. The boy's genital organs were as large as those of an adult man, the penis in a flaccid state being 9 centimètres long, the glans very bulky and fully exposed, the pubes and scrotum covered with abundant black curly hair-growth. The *pomum Adami* was similarly very prominent as in an adult, the boy's voice "being a basso of a vigorous man, with hoarseness resembling that observed in habitual drunkards." The child was 125 centimètres in height, the maximum circumference of the skull being 52 centimètres, of the neck (through the thyroid cartilage), 28.5, of the pelvis (through the buttocks) 30, the length of the lower limb 55. According to his mother's statements, there had been nothing abnormal about the child at birth, but when 6 weeks old he surprised everbody with his deep voice. When the child had reached its sixth month the woman was first struck by the extraordinary development of his penis, scrotum, and testicles, the organs gradually attaining their present size and appearance about the end of the fourth year.

According to the official census (referring to January, 1890) the total number of medical practitioners in Switzerland is 1,530 (including 10 ladies), of whom 217 live in Kanton Zurich, 204 in Berne, 140 in Vaud, 125 in St. Gall, 103 in Geneva, etc. The number of dental surgeons is 238 (1 lady). There are 3,095 midwives, 459 apothecaries, and 540 veterinaries.

LIVERPOOL.

Treatment of Spinal Cases.

Dr. John Ridlon, clinical teacher at the Vanderbilt *clinique* in connection with the College of Physicians and Surgeons, New York, lately gave a lecture and demonstration on the subject of Potts's spinal caries, at the Royal Southern Hospital, Liverpool. The apparatus he employs for fixing the spine is a modification of Taylor's, differing from it in this, that the pressure is made over the transverse processes of the vertebræ, and not, as in Taylor's apparatus, over the ribs. The basis of support is formed by a steel band passing behind the sacrum and between the iliac crests and the great trochanter, resting on the latter. From this two upright steel bands pass, one on each side of the line of vertebral spines, and terminate in a strap that passes round the shoulder and axilla. Above and below the point of deformity there is a transverse bar attached, having at either end a strap which passes forwards and is secured to an apron which covers the front of the patient. On each side of the deformity pressure is made along the line of transverse processes by cork pads attached to the upright bars. The advantages claimed for this apparatus are that the deformity is controlled to the greatest possible extent by the pressure being made on the transverse processes, and that there is no possibility of the angle slipping to one side. When the disease is in the upper dorsal region a support for the chin is added, and a frontal band is employed when it is in the cervical region. With regard to diagnosis, Dr. Ridlon regards rigidity of the spine as the most constant and unmistakeable symptom of Pott's disease, being present from its earliest onset, and only disappearing when the cure is complete. Local pain and tenderness at the point of disease he regards as never occurring in uncomplicated caries of the bodies of the vertebræ, and if found in any case suggests that the condition is not Pott's disease at all. The lecture was listened to with much interest by several practitioners in the neighbourhood, and a hearty vote of thanks was accorded to Dr. Ridlon.

BIRMINGHAM.

Improvements and Alterations in Queen's College.—The Birmingham and Midland Counties Branch of the British Medical Association.—British Nurses' Association.

To meet the growing demands of the students, whose numbers have so increased of late years, the Council have expended a good deal of money in extending and improving the accommodation in the college. The most important change is the provision of a museum for anatomical purposes only; it is well equipped, and contains sets of frozen sections, brain preparations, and embryological models, such as are to be found in few English medical schools. A larger pathological laboratory has been provided and a new medical lecture theatre. In addition to these structural alterations, the Council have instituted an important change in the management of the Medical Faculty, by reviving the long dormant position of Dean, and entrusting to that official the conduct of the departmental business of the faculty. Up to the present time this business has been partly managed by the Warden and partly by the Honorary Secretary, and the dual control has since the recent great increase in the number of students, been found to work unsatisfactorily. The change will be welcomed as likely to promote the best interests of the school, whilst at the same time the interests of the present Warden, who has for so many years been the official head of the College, are respected. The Council have appointed as first occupant of the revived post Professor Windle, who has held the office of Honorary Secretary to the College for some years, and to whose energy and devotion to his work is due not only the perfect state of his own (the anatomical department), but several other important changes. The Council are contemplating the foundation of a new lectureship of hygiene and public health.

The forthcoming meeting of the Association in Birmingham has had a most stimulating effect on the Branch, at the annual meeting of which more than a hundred new members will be proposed.

The British Nurses' Association proposes to hold their annual meeting in Birmingham on Friday, August 1st. The place of meeting was decided on last year, before the invitation to the British Medical Association to meet here was given; and, as there were many objections to meeting either before or after the Medical Association, the above-mentioned date has been selected.

CORRESPONDENCE.

THE MODERN ASSISTANT.

Sir,—It seems to me that your original correspondent and Mr. Brindley James are looking at the opposite side of the shield from "Nova Scotia," with the result that neither side gives a fair statement of the case. I think the position is briefly this: that the "modern assistant" has a great deal to learn from his principal which he has not the opportunity of learning during his student career, and that a good man of mature experience can impart a great deal of practical knowledge to the young graduate or licentiate, as the case may be; on the other hand, the "modern assistant" can bring his principal into touch with the schools, and the latest advances in medicine and surgery, interesting him in many things that are matters of every-day teaching now-a-days which were not even thought of when the principal was a student. I am acquainted with a general practitioner of forty years' standing, who is thoroughly up to date in all professional knowledge, and he is not a great reader, in fact he has not the time for reading. I asked him once how he managed to keep pace with the rapid advances in medical science, and yet conduct such a busy practice. His reply was, "I keep good assistants," and he proceeded to explain that by giving a good salary, and treating his assistant as a younger professional brother, he was able to secure some of the best men, with whom he always went upon the principle that they had much to learn from each other. Any young man who will not admit that he has much to learn from his professional senior of mature practical experience is quite unfitted to undertake the duties of a profession in which the oldest of us is learning something new every day. I think if the subject was approached in this way and not as your correspondents do by, on the one hand, contemptuously alluding to "hazy ideas," upon the subject of skin diseases or the "lettuce" treatment of strumous knee-joints, or the other sneering at the "highly crammed theorician," or the *unfortunate* possessor of a university degree in medicine against whom Mr. Brindley James seems to bear a particularly strong grudge, for this is not the first time I have read his views upon the ignorance and general shortcomings of M.D.'s. Might I be permitted to point out to him that in many people's estimation the M.B. and Master in Surgery of any university is quite the pro-

ional equal, as such, of the M.R.C.S.E. and L.R.C.P.L.—I , etc., M.B., C.M.

* We have received many communications on this subject, set- out both sides of the question. In view, however, of the great ssure on our space, we shall only be able to find room for letters taining some feature of novelty or relating specially instructive eriences.

DEGREES FOR LONDON MEDICAL STUDENTS.

IR,—I notice, in your leader on the subject of degrees for don medical students that it is stated to be doubtful whether medical student would not be required to pass the Matriculation the Preliminary Scientific. These latter two examinations have a the great obstacle to the majority of us obtaining the Lond., as we regard the rest of the examination, in common h many of our teachers and many of those holding the Lond., to be no more difficult than that required by the two don Colleges. I am afraid if the "pass" in these two exami- ons is insisted upon, things will remain as before. Another bt has arisen in my mind, and I suppose in that of others ilarly placed, is whether those who already hold the M.R.C.S., C.P. will be expected to pass again (if they wish to obtain the don degree) in anatomy, physiology, surgery, medicine, and wifery.—I am, etc.,

M.R.C.S.ENG., L.R.C.P.LOND., L.S.A.

ROVISION FOR FEEBLE-MINDED AND EXCEPTIONAL CHILDREN.

R,—It is very desirable that a determined effort should be e to ascertain the number of feeble-minded and exceptional dren attending board schools, public elementary schools, cer- d, industrial, and other schools in London and the provinces. re is no difficulty in carrying on the scientific part of the k, but money is required to pay the necessary expenses. lic interest is at last being roused in the matter; besides, the mittee appointed by the Psychological Section of the British ical Association, which has been for some time working at subject; a committee is being formed by the Charity Organi- on Society to inquire into the question, and a number of ladies nging to the Vigilance Committee are considering the best way rovide for feeble-minded women.

Bill is now before Parliament for the education of the blind deaf mutes, and it is to be hoped that legislation for feeble- ded and exceptional children will not long be delayed. It is less, however, to approach the Legislature until a sufficient ber of reliable statistics, collected by competent observers, been obtained. Money is the only things that stops the way, the British Medical Association would considerably aid the k, if they would make a grant to pay the expenses of col- ng statistics and circulating the results.—I am, etc.,

arenth Asylum. FLETCHER BEACH.

THE DIURETIC ACTION OF MERCURY.

R,—Dr. Haig attributes the diuresis following the administra- of calomel to the lessening of the amount of uric acid in the d, which he declares the drug causes. I, on the other hand, referred the diuresis to the increased amount of urea ed in the liver, and thence carried away by the blood under action of the metal.

the first three Figures of Dr. Haig's paper there is a general t relation between amounts of urinary water and urea ex- d, a rise in the amount of urea excreted being accompanied n increase of the urinary water excreted.

. Haig regards not the absolute amounts of uric acid excreted, these in relation to the amounts of urea excreted during the time. If the ratio of these to one another rises above 1.33. , according to Dr. Haig, there is an excess of uric acid in the d, and conversely. Fig. 1 regarded thus is in harmony with Haig's view. Fig. 2 is less favourable. Dr. Haig does not le to the increased excretion of urine at 10.40 A.M., because, I ose, he thought it was too soon after the calomel was taken e caused by it, although a reference to Fig. 3, in which no mel was taken, makes one doubt this. At 1.40 P.M., however, e was comparatively little urine passed. This is unfavourable oth theories, for, at the same time, there occurred a slight in urea, and the greatest lessening of the ratio of uric acid to during the whole day. The diuresis occurring at 3.40 P.M. is accompanied by the excretion of a large amount of urea, but by a rise in the ratio of uric acid to this from about 1.212 to about 1.43, the uric acid, too, being absolutely increased. From Fig. 3 no conclusion can be drawn on either side.

The diuretic action of urea has been directly demonstrated in manifold ways,[1] directly and plethysmographically. That both kinds of demonstrations are requisite follows from the work of Bradford and Phillips,[2] who found that digitalis has a diuretic effect at the very time that constriction of the vessels of the kidney is produced. The only fact wanting to establish mercurial diuresis as being, at any rate to a large extent, due to urea is the presence of this in larger amount than usual in the blood of animals under the influence of the metal. That such is a fact may be deduced from the work of Noel Paton,[3] in which no falling off of the urea excretion in dogs occurred after the administration of the drug was stopped, such as to allow the increased excretion of urea during the taking of the drug to be attributed to simple washing out of it by increased urinary water.

Dr. Haig may well admit that an excess of urea in the blood must cause diuresis, yet he holds that increased urea must cause diuresis indirectly by being necessarily accompanied by a lessened alkalinity of the blood.

The whole of Dr. Haig's work, including that on mercurial diuresis, depends on observations of the excretion of uric acid. All these observations, so far as can be judged from Dr. Haig's published statements, have been made by Haycraft's method. Recently Haycraft's method has been criticised experimentally by Gossage,[4] and both theoretically and experimentally by Salkowski.[5]

Gossage found, in a series of determinations of uric acid in five urines, that the amount found by Haycraft's method was from 28 to 117 per cent. greater than the real amount present as found by Salkowski's method, the accuracy of which is beyond question.

Salkowski, after showing that the method is an impossible one on theoretical grounds, gives a series of determinations of uric acid by his own and Haycraft's methods, in which the error of the latter varied from 7.4 to +60.4 per cent. He explains, too, how Hermann was led to regard the method as trustworthy, although, as Salkowski points out, he in one case found an error of +14.7 per cent.

It need hardly be pointed out that the doubt thrown on the accuracy of Dr. Haig's determinations of uric acid does not apply to his estimations of urea, and his result as to the excretion of urea can still be taken as evidence in favour of mercurial diuresis being caused by its increase in the blood.—I am, etc.,

F. S. LOCKE, B.A.,
Foundation Scholar of St. John's College, Cambridge.

MEDICO-LEGAL AND MEDICO-ETHICAL.

UNQUALIFIED ASSUMPTION OF MEDICAL TITLES.
THE TITLE OF "DR."

THE case of Goodhall *v.* Sherman, recently decided by Sir John Bridge, is one of considerable interest to the medical profession and the public. The prosecution was instituted to recover from Mr. J. A Sherman the penalty imposed by Section 40 of the Medical Act, 1858, which enacts that any person who shall wilfully and falsely pretend to be, or take or use the name or title of, a physician, doctor of medicine.....or any name, title, addition, or description implying that he is registered under that Act, or that he is recognised by law as a physician, or surgeon, or licentiate in medicine or surgery.....shall, upon a summary conviction for any such offence, pay a sum not exceeding £20.

From the evidence it appeared that the complainant, who was suffering from rupture, was induced to consult the defendant in consequence of an advertisement which he had seen in a paper. After being examined the complainant was told by the defendant that his fee for the examination was one guinea, and that his charge would be 20 guineas cash down, and the sum of £4 10s. on account if the latter, together with the guinea, was actually paid by the complainant. The defendant, however, declined to allow the truss with which he had fitted the complainant to be taken away until the 20 guineas were paid. This seemed subsequently

[1] *Practitioner*, xxxvii, p. 170.
[2] *Journ. of Physiol.*, vol. viii, p. 117.
[3] *Journ. of Anat. and Physiol.*, vol. xx. p. 297.
[4] *Proc. Roy. Soc.*, vol. xliv, p. 284.
[5] *Zeits. für physiol. Chem.*, vol. xiv, p. 31.

to have raised doubts in the complainant's mind as to whether or not the defendant was a properly qualified medical man, and he wrote to require the return of the £5 11s. paid, threatening criminal proceedings if his demand was not complied with. The £4 10s. was returned, but not the guinea, and ultimately the proceedings in question under the Medical Act were instituted on the ground that the defendant had wilfully and falsely assumed the title of "Dr."

The magistrate, in the course of his remarks, said that when a man calls himself a doctor and professes healing, undoubtedly that means a doctor of healing and doctor of medicine; and in giving his judgment the magistrate stated that no doubt the defendant by his printed matter had passed himself off as a doctor duly qualified and registered under the Act.....That the public must not think they are going to a man who is properly educated as a medical man when they are going to a man who is not properly educated as a medical man, and has not proper degrees to show that he has passed through the education he requires before he can properly treat the diseases of the human body.

A fine of £10 was inflicted, and costs. The importance of this decision lies in the fact that this is the first successful prosecution under the Medical Act that we are aware of for the unlawful use of the prefix "Dr.," and the remarks of the magistrate as to what constitutes an infringement of the section are particularly valuable.

It has, we think, been repeatedly held by the judges that the question of infringement is one of fact for the magistrate. In the case of Ellis *v.* Kelly, decided in 1860, the prosecution was instituted for unlawfully using the prefix of "Dr.," but in this instance the defendant was duly registered under the Medical Act as a M.R.C.S. and L.S.A., and also held a diploma of the University of Erlangen, in Bavaria (which he subsequently registered), and the prosecution failed.

In Andrews *v.* Styrap, decided in 1872, the infringement complained of was for unlawfully using the title M.D.; and the defendant, who only held what purported to be a diploma granted by the American University of Philadelphia (which, it was alleged, he had purchased), was convicted.

A NOVEL POINT.

A CURIOUS and, so far as we are aware, novel point has been raised in one of the Irish law courts resulting from the disastrous railway accident at Armagh some two years ago. A woman who was in the train at the time of the accident, and in an early stage of pregnancy, subsequently gave birth to a crippled child, and the child now sues the railway company, through its father, for the damage it has sustained in being crippled in consequence of the railway accident. Of course everyone is familiar with instances in which malformations have been ascribed, with more or less probable accuracy, to some injury or shock the mother received during her pregnancy, but we have been unable to find any instance in which such malformation has hitherto been the ground of an action at law.

CHARGES TO WIDOW OF MEDICAL MAN.

EQUITY asks whether a medical man should be called upon to attend a medical man's widow without remuneration, when such widow had plenty of money and has left no children. Is the medical man justified in claiming from the executors?

*** "Equity" will perceive from the following rule extracted from the *Code of Medical Ethics* that, under the circumstances related, he will be fully justified in making a claim for professional services on the executors of the deceased lady.

"All legitimate practitioners of medicine, their wives, and children while under the paternal care are entitled (*not* as a matter of *right*, but) by professional courtesy, to the reasonable and gratuitous services—railway and like expenses excepted—of the faculty resident in their immediate or near neighbourhood, whose assistance may be desired. In the case, also, of near relations who are more or less dependent upon a professional brother (other than wealthy), it will likewise be well, at his request, to forego or to modify the usual fee. On the other hand, a son or daughter altogether independent of the father, or the widow and children of a practitioner left in affluent or well-to-do circumstances—should be charged as ordinary patients, unless feelings of friendship, or other special reasons, render the attendant practitioner averse to professional remuneration; in such case the rule need not apply. Moreover, if a wealthy member of the faculty seeks professional advice, and courteously urges the acceptance of a fee, it should not be declined—for no pecuniary obligation ought to be imposed on the debtor, which the debtor himself would not wish to incur."

MEDICAL ATTENDANTS AND MEDICAL RELATIONS.

MESSRS. T. M. W. and R. A. S.—An exhaustive examination of the points volved in the correspondence, etc. (equal in extent to fifty odd octavo pa which precludes its insertion in our limited space), that has passed betw Mr. W. and Mr. S., leaves no doubt upon our mind that, in the course p sued by the latter in the case under consideration he has, however, un tingly failed in his ethical obligations to the former. We would, theref without traversing the whole subject, note as briefly as may be that, in opinion, the unreserved openness with which Mr. W. treated Mr. S. (junior by many years) in reference to his sister's case should have been by a like frankness; and that if he seriously differed from Mr. W.'s views was due to the latter, to his sister and himself, to have loyally expressed it the medical attendant direct, instead of privately urging upon her and mother the advisability of a specialist being consulted. Moreover, we to recognise the probability—especially in the absence of an exami tion, which the natural repugnance of a sister forbade—that Mr. should be able, at the outset of the attendance, to form an accu diagnosis, in face of the fact that not only the first specialist, after examinations, hesitated to express a definite opinion as to the real nat of the disease, but the second eminent expert distinctly avers that the early stage of the disease it must have been perfectly impossible have given any decided opinion as to whether the disease was malign or not; indeed, even now the question is open to doubt, although in own mind I have none at all."

Further, in regard to Mr. S.'s assumption that if his sister had been prised of the suspicion subsequently entertained by Mr. W., her course action would have been different, we would simply observe that although deemed it (and rightly so, we think) injudicious to do so, he at once notifie to her husband, whose suggested specialist was consulted without delay. view, therefore, of the above and other facts recorded in the correspondenc we think it is much to be regretted that Mr. S. does not abstain from cens ous comments on Mr. W.'s treatment of the case; in relation to which would add that it is laid down in the *Ethical Code* as "a golden rule wh cannot be too deeply graven on the heart, that a medical man should ne in any case which may directly or indirectly come under his notice, cens or disparage, much less condemn, the practice or diagnosis of another; for only may he thereby most unjustly prejudice the reputation of, but possi be the cause of a vindictive and costly action for malpractice against, a p fessional brother, whose treatment has been judicious and as successful the nature of the case admitted. Be it, therefore, our golden rule to do u others as we would be done by."

CHARGES TO CHEMISTS.

L.R.C.S.I. asks whether it is customary or right to charge chemists' assista for professional attendance, or are they to be looked upon as part of the p fession?

The case he alludes to is that of a man having charge of a branch est lishment, and the attendance was for an only child, who recovered.

*** Neither chemists *qua* chemists, nor their assistants are, in view of th more or less intimate business associations with the medical profession, titled to the gratuitous services of the faculty, but should be regarded ordinary patients, and charged in accordance with the principle laid down the respective classes specified in the *Medico-Chirurgical Tariffs*.

LIABILITIES OF MASTERS.

D. C. L. asks: (1) Are masters liable for medical attendance on domes servants?

(2) I was sent for to G., distant five miles, to attend servant twice. T first time the gentleman's groom brought message; second time the butl Is the gentleman liable? He denies the liability.

3. What is a fair medical fee for that distance? I charged £1 1s.

*** (1) Masters are not liable for medical attendance on their domes servants except in cases where such attendance is made at the maste request.

(2) If the groom and butler were sent by the servant's master he is liab but not otherwise.

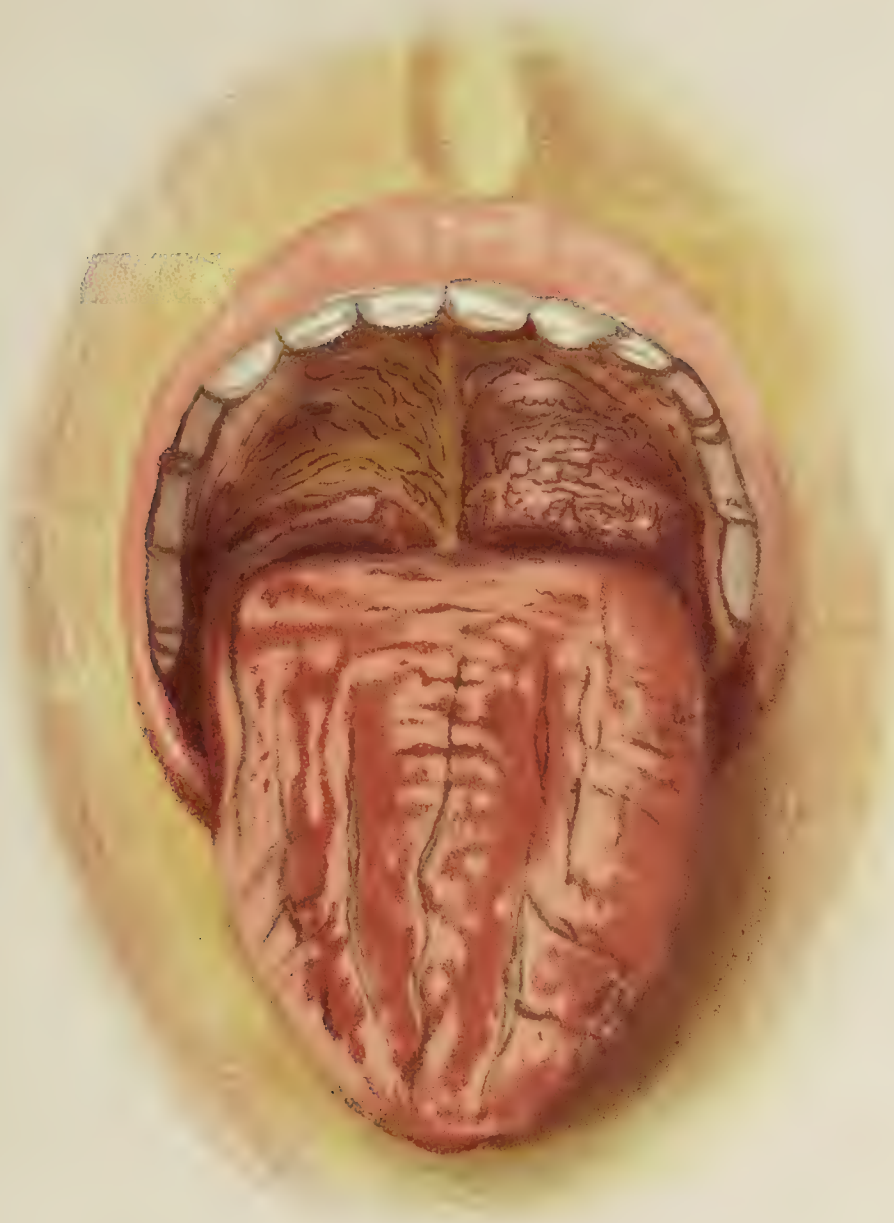
(3) £1 1s. is a reasonable charge for the two visits.

THE number of students in the University of Dorpat during th first semester of the present year was 1,748, of whom 820 we medical.

THE annual list of scholarships, prizes, and certificates of th London School of Medicine for Women was submitted to a larg gathering of the students and their friends by Mrs. Garret Anderson, M.D., the Dean of the School, on Wednesday June 25th.

SOCIETY OF APOTHECARIES OF LONDON.—The results of the ex amination in arts qualifying for registration as medical studen held in the hall of the Society on June 6th and 7th have just bee published. There were 200 candidates, and from the pass list i appears that 21 were placed in the second class, and 111 wer certified as having passed in some subjects but not in all. Th next examination will be held on September 5th and 6th.

NATIONAL ASSOCIATION OF SANITARY INSPECTORS.—The second annual meeting of this Association was held at Manchester. Th chair was taken by Mr. Pridgin Teale. Mr. C. C. Smith (Skipton read a paper on "Some of the Public Health Acts and thei defects from the sanitary inspector's point of view," in which he spoke in favour of the consolidation of the Public Health Acts.





TO ILLUSTRATE THE PAPER BY DR. THIN ON PSILOSIS.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

THE following appointments have been made at the Admiralty:—ALFRED H. MILLER, Staff-Surgeon to the *Basilisk*, June 24th; WILLIAM M. RAE, Staff-Surgeon to the *Serpent*, June 24th; WILLIAM GRAHAM, Fleet-Surgeon, and J. L. ACHESON, Surgeon to the *Inflexible*, July 1st; CHARLES BRADLEY, Fleet-Surgeon, and JONATHAN SHAND, Surgeon to the *Aurora*, July 1st; WILLIAM T. STEWART, Fleet-Surgeon, and EDWARD P. MOURILYAN, Surgeon to the *Immortalite*, July 1st; WILLIAM J. MAILLARD, Surgeon to the *Iron Duke*, July 1st; W. SLAUGHTER, Surgeon to the *Landrail*, June 21st; WALTER H. S. TALKARTT, Surgeon to the *Ajax*, June 21st.

Staff-Surgeon JOHN CAMPBELL, who for many years held the post of medical officer of Her Majesty's prison at Woking, died recently.

MEDICAL STAFF.

SURGEON-MAJOR G. D. BOURKE, serving in the Madras command, is, on return from the Chin-Lushai Expedition, directed to do duty at the station hospital, St. Thomas's Mount.

The undermentioned Surgeons, all of whom are serving in the Madras command, are posted as follows:—T. B. A. TUCKEY, from doing duty at the station hospital at Wellington to do duty at the station hospital at Madras, temporarily; E. O. WIGHT, from doing duty in the Belgaum and Bangalore districts to do duty at the station hospital at Wellington, temporarily; R. J. GEDDES, M.B., on return from the Chin-Lushai Expedition, to do duty in the Belgaum and Bangalore districts; J. OSBURNE, in medical charge of the station hospital at St. Thomas's Mount, to do duty at the station hospital at Madras, temporarily; W. H. BEAN, on return from the Chin-Lushai Expedition, to do duty in the Madras district; M. L. HEARN, on return from the Chin-Lushai Expedition, to do duty in the Belgaum and Bangalore districts; H. M. ADAMSON, M.B., on return from the Chin-Lushai Expedition, to do duty in the Secunderabad district; R. E. KELLY, M.D., J. DONALDSON, and W. HALLARAN, M.B., to do duty in the Secunderabad district.

Surgeon A. DODD, serving in the Bombay Command, in medical charge of the Ajmereghur Sanitorium, is transferred to general duty in the Mhow district.

At an examination held at Minbu, Upper Burmah, in February last, Surgeon W. E. HUNTER passed in Burmese by the higher standard.

INDIAN MEDICAL SERVICE.

THE services of Surgeons E. A. W. HALL, R. R. WEIR, and G. FISCHER, all of the Bengal Establishment, are placed temporarily at the disposal of the Government of the North-West Provinces and Oude.

Surgeon-Major D. P. MACDONALD, M.D., Bengal Establishment, is appointed senior medical officer at Port Blair, *vice* Surgeon-Major G. P. MACKENZIE, M.B., deceased.

The services of Surgeon G. J. H. BELL, M.B., Bengal Establishment, officiating civil surgeon of Bikaneer are placed at the disposal of the Home Department.

Surgeon-Major J. B. GAFFNEY, Bengal Establishment, has leave of absence out of India for one year on private affairs.

Surgeon A. W. DAWSON, Bengal Establishment, is transferred from the 36th Sikhs to the medical charge of the 2nd Bengal Cavalry, *vice* Surgeon-Major J. Young, M.B.

Surgeon J. D. M. SWINBURNE, Bengal Establishment, from officiating in medical charge, is appointed to the medical charge of the 19th Bengal Lancers, *vice* Surgeon-Major W. R. Murphy.

An exchange has been sanctioned between Surgeon-Major G. H. BULL, M.D., 1st Bombay Lancers, and Surgeon W. H. QUICKE, 3rd Bombay Cavalry.

Surgeon-Major E. FAWCETT, Madras Establishment, is appointed to the officiating medical charge of the 9th Native Infantry.

Deputy Surgeon-General C. SIBTHORPE, Madras Establishment, is appointed Principal Medical Officer to Her Majesty's Forces in the Rangoon district.

Surgeon-Major K. A. DALAH, M.B., Bombay Establishment, is confirmed in the appointment of civil surgeon of Dhoolia, *vice* Surgeon-Major H. W. B. Boyd, transferred.

Surgeon-Major W. MCCONAGHY, M.D., Bombay Establishment, is allowed privilege leave of absence for three months. Surgeon-Major O. H. CHANNER, M.B., Deputy Sanitary Commissioner Southern Registration District, is directed to perform Surgeon-Major McConaghy's duties, in addition to his own, during the latter's absence.

The undermentioned officers have been appointed to the officiating medical charge of the regiments specified: Surgeon J. R. ROBERTS, Bengal Establishment, to the 36th Sikhs, *vice* Surgeon A. W. Dawson; Surgeon K. PRASAD, Bengal Establishment, to the 44th Goorkha Light Infantry, *vice* Surgeon E. A. W. Hall, M.B., transferred temporarily to civil employment; Surgeon A. J. O'HARA, Madras Establishment, from the 25th Native Infantry to the 12th Native Infantry; Surgeon F. J. DEWES, Madras Establishment, to the 28th Native Infantry; Surgeon-Major D. P. WARLIKER, Madras Establishment, to the 29th Native Infantry.

The undermentioned officers, all of the Bengal Establishment, are appointed to the medical charge of the regiments named: Surgeon-Major J. YOUNG, M.B., from the 2nd Bengal Cavalry to the Bengal Sappers and Miners, *vice* Brigade-Surgeon S. C. Amesbury, retired; Surgeon B. K. BASU, to the 4th Native Infantry, *vice* Surgeon-Major G. P. Mackenzie, M.B.; Surgeon G. B. FRENCH, to the 8th Native Infantry, *vice* Surgeon P. DE CONCEIÇAO, deceased; Surgeon-Major W. R. MURPHY, from the 19th Bengal Cavalry to the 2nd Battalion 2nd Goorkhas, *vice* Surgeon-Major G. Bomford, M.D., transferred permanently to civil employment; and Surgeon H. W. PILGRIM from the 8th Bengal Infantry to the 4th Punjab Infantry, *vice* Surgeon-Major T. Robinson, M.B.

Surgeon-Major T. J. HACKETT-WILKINS, Madras Establishment, district surgeon of Anantapore, is appointed to act as district surgeon of Vellore during the absence of Surgeon-Major J. Lancaster, M.B., on furlough.

THE VOLUNTEERS.

ACTING-SURGEON J. W. DAVIES, 3rd Volunteer Battalion South Wales Borderers (late the 2nd Monmouthshire), is promoted to be Surgeon, June 21st.

Surgeon W. J. CARLYLE, M.D., 3rd Volunteer Battalion King's Own Scottish Borderers (late the 1st Dumfries), has resigned his commission, dated February 1st, 1889; he is granted the honorary rank of Surgeon-Major, and permitted to retain his uniform.

WILLIAM WALLERS is appointed Acting-Surgeon to the 1st Volunteer Battalion East Lancashire Regiment (late the 2nd Lancashire).

The Rev. WILLIAM KERR SMITH, M.A., is appointed Acting-Chaplain to the Leeds Division of the Volunteer Medical Staff Corps.

Surgeon-Major NAISMITH, of the Ayrshire Yeomanry Cavalry, was recently, on the occasion of his marriage, presented by Colonel Adam, on behalf of the officers, non-commissioned officers, and men, with a handsome piece of silver plate, consisting of a centre and two smaller cups, as a mark of their esteem and appreciation of his services to the regiment, especially of his untiring zeal in the instruction in ambulance work.

MILITARY MEDICAL TITLES.

WHAT'S IN A NAME writes: That the present titles of army medical officers have no real meaning "in a military sense" is borne out by the fact that the Government of British Guiana dubs the head of its Civil Military Department "Surgeon-General."

SURGEON-MAJOR INDIAN MEDICAL SERVICE writes: Some time ago I sent you a bill addressed to me as "Sergeant-Major;" I now send you a wrapper addressed in the same way which reached me from England two mails ago. This is the third time I have been so addressed, and I must confess to a feeling of irritation at its recurrence. My case is not exceptional, however, as similar mistakes occur occasionally in official documents also. It is easy to pardon the mistakes of tradespeople, but official blunders of this kind should not be possible. I will not burden this communication with illustrations nor with examples of the social slights medical officers are obliged to endure owing to their not having definite military rank. The want of pure military titles for medical officers is at the very base of all our grievances, as has so frequently been pointed out in your columns; and I can assure you that the Department can never be happy until rank is conceded.

When the "rank" question was first canvassed by you, I was amongst those who would have been content with a return to the old "relative" rank system, and said so at the time. I am not ashamed now to say that since then I have been absolutely converted, and I confidently affirm that, were a fresh vote taken, it would be found that the dissentients amongst medical officers from the movement for pure military titles would be reduced to a shadow of their former number.

M.B.CANTAB. writes: I think that "M.D.Oxon's" letter, in addition to your able critique, requires an answer from one of many of us who, while humbly trying to be worthy of and diligent in their profession, yet, little as they may like the assumption of military titles, see that for the efficient performance of their duties, for the maintenance of the dignity of the profession, and lastly, for their own comfort and dignity, recognised rank carrying military titles is necessary.

1. We want it for disciplinary purposes. We are in an anomalous position as being the only body of officers commanding men with no rank but departmental; a rank which carries no weight, is not understood outside the department, and is of about as much value as the grading of clerks in a Government office. As our duties of course bring us constantly into contact, sometimes into collision, with the rest of the army, the result is necessarily either self-assertion—always distasteful to a gentleman—and consequent friction, or acquiescence in a negative position and departmental self-effacement. We have large powers and only questionable authority.

2. I am inclined to think that the status of our profession in civil life is scarcely equal to that of the other learned professions, and that the word "doctor," as commonly used by lay lips, carries with it a certain feeling of tolerance and patronage. This feeling is naturally crystallised in the army, where everything is subservient to militarism, and where a body of men drawn mostly from the professional classes is brought into close contact with one that ranks higher politically, and hails from socially higher grades. Rank and title do and must, *per se*, carry weight in the army. We believe, and have grounds for our belief, that assimilating our titles and status will show us to be (where we consider ourselves) on a level with the army generally. I am speaking now, of course, departmentally, and not personally.

3. Socially, we can only say we need it; no man likes to publish his affronts. We have to assert ourselves personally and departmentally, or we lose prestige. The best illustration I know is the "Oh! I forgot" of the combatant officer when a "doctor" returns a military salute; or again, the generic use of the term "doctor," which has led some of us to prefer the plain "Mister."

SURGEON-MAJOR I.M.D. writes: I have read and am much pleased with your remarks on "M.D.Oxon's" curious letter. I maintain with you that it is those medical officers who are the most manly and devoted to their profession who claim substantive army rank.

M.D. writes: I have carefully read the remarks of "M.D.Oxon" and your criticism thereon, and think there is a certain measure of justice in his strictures. During long service I have only once or twice heard disparaging remarks in a mess room about "doctors," and although indignant at the time, could not help feeling the medical officers referred to had laid themselves open. But there is just reason why medical officers should have pure military titles; they stand shoulder to shoulder as executive officers with their combatant brethren.

WHY I VOLUNTARILY RETIRED FROM THE ARMY MEDICAL STAFF.

UT PROSIM gives the following as his reasons for retiring: 1. Increasing proportion of foreign service in unhealthy climates. Bad health thereby. 2. Frequent expense of outfits, overlapping house rents, etc., in consequence. 3. Difficulty of leave for either study or recreation. 4. No decent rank or position. Very "back seat" only on military coach. 5. As a "senior" having routine duties, formerly only done by juniors. 6. Empty official thanks merely for frequent war, and other good service. 7. System of promoting men (with interest) at expense of their brother officers (without). 8. Military instincts and class prejudices becoming more pronounced every year. 9. Depreciated value of rupee, making Indian service "more kicks than ha'pence."

THE INDIAN GOVERNMENT AND MILITARY LAW.

THE Indian Government in, we suppose, their anxiety to outstrip even the Horse Guards, have just issued an order forbidding medical officers to be examined in military law. As will be seen from the subjoined extract from the Regulations for Army Medical Services, Part I, military law forms an essential part of the examination for promotion:

"(*e*) The administration, interior economy, command, and discipline of the Medical Staff Corps, together with a knowledge of the principles of military law and their practical application (unless a cartificate of proficiency in military law has been obtained at a garrison class)."

SIR GEORGE HARMAN'S EVIDENCE.

A DOCTOR says: Sir George thinks our claim for rank means a claim to be considered "combatant." Not so; it means simply equality with the other so-called non-combatant branches. Let me illustrate. In this station (India) there are fifteen officers doing duty with troops in the garrison; there are also seven others who have no military duties, such as paymasters, magistrates, and road makers, yet all have military titles. These gentlemen are not sneered at by the military secretary for being called colonels and majors, and aiming to be what they are not. I have soldiers under my command, and might at any time be called upon to go under fire, yet am I to be sneered at if I call myself military? Does Sir George tell a paymaster to be proud of his profession? Why should clothing, feeding, and payment of troops be considered a higher function than personal ministration to them in sickness and and on the field of battle—perhaps under fire? If some of these Horse Guards gentlemen were dangerously wounded in the field, would their "military instincts" refuse the assistance of a "doctor" on the ground that he was not a soldier, and had no business to be there?

EXPRESSION OF OPINIONS.

PHŒNIX says: It has been carefully inculcated that for a medical officer to have the courage of his opinions is both dangerous and insubordinate. Adjutant-Generals and others may freely express their views, but the medical officer must suffer wrong in dumb silence. It has been suggested that a defence fund should be started and worked by retired officers, but will any come forward? I trust there is enough *esprit de corps* left amongst us, and beg you will not decline a cheque for £1 1s. towards such a fund.

Army surgeons have not asserted themselves enough, yet they need not plunge into unwise discussions in unsuitable places. Cannot, also, officers agree to address the director-general individually on the subject of their grievances? This was the line to which the late director-general had apparently no objection. Unity of mind and action is much needed in this crisis. Why could not a universal letter be drafted?

*** We do not think we would be justified in receiving money for a defence fund. Unity of action is certainly necessary and desirable at the present crisis. The drafting of a universal letter and its simultaneous transmission from individuals would, we fear, however, be held to be collective action under the thinnest of disguises. It is now utterly impossible for the authorities to shelter themselves under a cloak of assumed ignorance; they know the feelings of the department just as well as anybody. They are now having to listen to the opinions of the governing bodies of the profession at large, and we hardly think will refuse either to listen or to act.

THE NORTH LONDON VOLUNTEER BRIGADE BEARER COMPANY.

THE official inspection of the recruits of the North London Volunteer Brigade Bearer Company took place on June 17th, in the grounds of Park Lodge, Paddington, the residence of Brigade-Surgeon Danford Thomas. The men, who have passed through a course of instruction in the Brigade Ambulance School, were drawn up on the lawn in readiness for the inspecting officer, Surgeon Ramsay, Scots Guards, M.S.C., who arrived shortly after 8 P.M. He was received by Brigade-Surgeon Danford Thomas, with whom were Surgeon-Major Myers, 19th Middlesex, Surgeon Mathews, V.M.S.C., Acting-Surgeon Baldwin, 18th Middlesex, Surgeon Bateman, London Irish, and the honorary secretary of the school. Proceedings commenced with stretcher drill. The men requiring War Office certificates were then individually examined in the hall attached to the grounds. Meanwhile a party of patients labelled as suffering from various supposed injuries, were "dressed" by those awaiting their turn, the work being afterwards closely examined by the inspecting officer, who, addressing the men at the termination of the inspection, said he was very well satisfied with what they had done, especially the intelligence shown in the individual examination. He was glad to tell them he would be able to recommend every man presented for examination for the War Office certificate. He urged all to keep up the knowledge they had acquired, and to add to it The Brigade-Surgeon expressed his satisfaction at the result of the first official inspection in connection with volunteer brigade bearer companies, the formation of which has been so recently ordered by the War Office authorities.

REWARDS AND PROMOTIONS.

JUSTITIA writes: Next to the question of rank, that of honours and rewards has been one of the chief grievances of the medical officers of the army. The evidence given before the recent Committee on this point calls for remark.

The Military Secretary states (Q. 265): "There is no part of the service that receives more honours and rewards than the Medical Department." Again (Q. 266): that their services in the field have been recognised "in a greater degree than in any other branches of the service."

The Duke of Cambridge states that they have an excess of honours and rewards (Q. 2,447).

Now if these statements be in accordance with facts, the medical officers are most unreasonable in their complaints.

In Q. 160, Sir Ralph Thompson acknowledges that a certain proportion of honours and rewards is allotted to various branches of the service, and the Duke of Cambridge's remarks may apply to this proportion; but the Military Secretary makes no proviso. He states emphatically that medical officers are better rewarded all round. How, then, will he explain the following figures:—

Percentage to Strength of Promotions in Departments of Army for Nile Campaign, 1884-85.

Chaplain's Department	... ...	44.4 per cent.
Pay ,,	... ...	41.6 ,,
Ordnance ,,	... ...	30.0 ,,
Commissariat ,,	... ...	13 8 ,,
Medical Staff ...	... ...	7.9 ,,

Again:—

Rewards for Burmah Campaign (London Gazette, November 27th 1887).

Honours and Rewards.	Combatants.	Medical Staff
Promoted	43	0
K.C.B. and C.B.	29	0
D.S.O.	51	6
Total ...	123	6

Suakin, 1888.

	Combatants.	Medical Staff
Promoted	5	0

These are only ordinary examples of the honours and rewards conferred on medical officers for service in the field.

The War Office Committee of 1878 stated clearly (para. 41) that the medical officers were "far below" the combatant ranks in the standard of honours and rewards, and made a very proper comparison between the Royal Engineers and the Medical Staff in the active list at the time.

A similar comparison on January 1st, 1890, gives the following:

Honours and Rewards.	Royal Engineers. Strength, 707.	Medical Staff Strength, 841
G.C.B....	2	0
G.C.M.G.	2	0
K.C.B....	5	1
K.C.M.G.	1	0
C.B.	7	7
C.M.G.	10	1
C.I.E.	2	0
D.S.O....	10	6
Total ...	39	15
Percentage decorated ...	5.5	1.7

Now these are all plain figures open to verification by the Military Secretary. They are compiled from the official Army Lists and the official Gazettes, and they absolutely refute his very distinct statements. The questions to be asked by members of Parliament are:

1. What is the proportion of honours and rewards allotted to the Medical Department compared to other branches of the service?
2. What is the proportion to strength of medical officers rewarded in recent campaigns compared with other branches of the service?

If returns can be obtained on these points, it will be found that the grievances as to honours and rewards which were fully recognised by a War Office Committee in 1878 exist in a still more intensified form in 1890.

HISTORY OF THE SOUDAN CAMPAIGN.

OBSERVER remarks: The official history of this campaign, compiled by the Intelligence Department of the War Office, has been issued. It is curious to note the way the medical department has been treated in this document. The principal reports of the various branches of the service are duly published with the names of the officers responsible, but with the exception of the name of Deputy-Surgeon O'Nial no other is attached to any medical report. While other statistics are freely given, no medical statistics are printed, yet the medical history of that campaign was most successful and interesting. Would it not be well that a medical officer should be attached to the Intelligence Branch? The British public want to know everything about the army, and especially its cost in health and lives.

ARMY MEDICAL STAFF DINNER.

THE following are the officers past and present of the department who were present at the dinner: *Directors-General:* W. A. Mackinnon, C.B., and Sir Thomas Crawford, K.C.B. *Surgeons-General:* Sir J. H. Ker Innes, K.C.B., J. Irvine, W. H. Muschamp, J. B. C. Reade, C.B., W. Stewart, T. Tarrant, W. A. Thomson. *Deputy Surgeons-General:* W. Bissett-Snell, W. G. Don, J. G. Faught, G. K. Hardie, H. C. Herbert, R. Lewer, E. MacGrath, W. Sly, F. W. Wade, J. Warren, J. Watts. *Brigade-Surgeons:* C. A. Atkins, J. F. Beattie, M. Cogan, E. Footner, G. C. Gribbon, J. B. Hamilton, J. Hector, J. Hulseberg, J. Johnston, J. G. Leask, J. S. MacAdam, C. Mackinnon, T. R. Mould, W. Nash, W. B. Ramsbotham, W. F. Ruttledge, G. Ryan, F. B. Scott, C.M.G., W. J. Wilson, J. W. Wright. *Surgeons-Major:* H. Comerford, W. Creyk, J. D. Edge, F. Hensman, W. Johnston, T. Ligertwood, J. Macartney, H. A. Martin, W. H. McNamara, J. Maturin, J. Notter, T. W. Patterson, W. S. Pratt, E. A. Roe, W. F. Stevenson, J. N. Stock.

THE MEDICAL STAFF CORPS.

A CORRESPONDENT points out that it having been stated before Lord Morley's Committee that men of this corps sometimes proved unfit for their work, facilities were given to general officers to get rid of indifferent characters; but these special facilities have, in a recent order, been taken away, and this will have a very bad effect on the corps. Has this been done with the consent of the Director-General of the Medical Department? Some member of Parliament should ask the question.

A CO-OPERATIVE drug store, which is said to be the first of the kind established in Italy, was opened at Milan on June 1st. All customers, whether shareholders or not, are to share in the profits. A protest against the new establishment has been lodged by the druggists in the neighbourhood.

UNIVERSITIES AND COLLEGES.

CAMBRIDGE UNIVERSITY.

FIRST EXAMINATION FOR MEDICAL AND SURGICAL DEGREES, EASTER TERM, 1890.—Chemistry and Physics. The following were examined and approved:

Allan, Caius	Grummitt, Caius	Pearce, Trin.
Ambrose, A. C., Down	Hanson, R. J. E., Trin.	Reece, Down
Ascherson, Pemb.	Hayward, Caius	Renshaw, J. A. K., Trin.
Bagshawe, Caius	Hey, Trin.	Sheppard, Christ's
Bartram, Joh.	Heywood, Emman.	Smith, J., Jesus
Clarke, Caius	Irving, Caius	Somers, Pemb.
Cooper, Emman.	Jackson, T. L., Joh.	Stead, Caius
Cundy, Trin.	Kingsford, Joh.	Storrs, K. S., Emman.
Dashwood, C. E., Magd.	Lees, Caius	Sugden, Caius
Davies, L. G.	Macnamara, Pet.	Thomson, C. A. H., Christ's
Duckworth, Jesus	Marriott, E. B., Clare	Thorman, Caius
Dunn, C. F., Cath.	Maxwell, Corp.	Tyson, Caius
Evans, Trin.	May, H. J., Caius	Villy, Joh.
Fison, Corp.	Michael, H. Selw.	Vinter, C. H. S., Caius
Fowler, H. R., H. Selw.	Mills, Clare	Watson, F. J., Trin.
Garrad, Clare	Milsome, Trin.	Wicks, Caius
Godson, F. A., Joh.	Pead, Pemb.	Woodhouse, King's
Grosvenor, Trin.		

There were ninety-three candidates.

SECOND EXAMINATION.—Pharmaceutical Chemistry. The following were examined and approved:

Anderson, Pemb.	Guinness, Caius	Miller, Queen's
Barker, Emman.	Hadow, Caius	Milward, Clare
Barrett, Caius	Harrison, T. L., Joh.	Ogilvie, Christ's
Bedford, Trin.	Hayne, Caius	Phillips, Caius
Bousfield, Caius	Henderson, Joh.	Powell, Ll., Trin.
Bower, Trin.	Hutchinson, F. A. S., Trin.	Roper, Christ's
Crofton-Atkins, Clare	Jackson, G. C., Joh.	Rotherham, Trin.
Colby, King's	Johnson, M. B., Trin. H.	Savage, Caius
Cowie, Joh.	King, T. P., Joh.	Sell, Caius
Devereux, N., H. Selw.	Lees, B. H., Joh.	Smallwood, Caius
Dodgson, Emman.	Long, S. H., Caius	Smith, H., Trin.
Fothergill, Queen's	Marriott, C. E., Clare	Smith, E. A. C., Caius
Grosvenor, Clare		Taylor, Caius
Guest, Emman.		

There were fifty-six candidates.

THIRD EXAMINATION.—Part I. The following were examined and approved:

Attfield, Pet.	Greaves, Caius	Rouillard, Caius
Batten, Trin.	Hale, King's	Shaw, King's
Beaumont, W. H., Down	Hall, J. B., Pemb.	Simmons, W. W., Joh.
Bennetts, Caius	Hall, R. H., Pemb.	Smith, H. Austen, Trin.
Bradley, Caius	Hardy, Jesus	Smith, H. E., Caius
Burton, F. W., Joh.	Harrison, S. N., Trin.	Stubbs, Trin.
Buss, Sid.	Head, Trin	Sutton, Clare
Carruthers, A. E., Christ's	Lea, J., Caius	Swayne, Trin.
Cowell, Joh.	Long, D. S., Caius	Thomas, R. S., Jesus
Earl, H., Cav.	Low, P. C., Clare	Treadgold, Down
Fosbery	Molson, J. E., Emman.	Waggett, Pemb.
Fyffe, Caius	Molteno, Clare	Wellford, Trin.
Gillam, H. Cav.	Panting, King's	White, C. P., Clare
Gillett, Sid.	Peck, E. S., Christ's	Wilks, Caius
Gimson, H. Cav.	Pethick, Down	Winslow, W., Caius
Grabham, Joh.	Richardson, J. C., Caius	

Part II. The following were examined and approved:

Barclay-Smith, Down	Durham, Christ's	Russell, J. W., Trin. H.
Bindloss, Joh.	Fletcher, Trin.	Scott, T. W., Caius
Burton, F. W., Joh.	Foster, Trin.	Smith, H. Austen, Trin.
Creswell, H. Cav.	Handson, Caius	Swayne, Trin.
Daggett, Caius	Long, Caius	Trevithick, Trin.
Dalton, Trin.	Muir, Trin.	Tuppen, Caius
De Jersey, W. B., Pemb.	Nix, H. W., Caius	Wickham, G. H., Caius
Dixon, H. Cav.	Pilcher, Clare	Williams, E. C., Christ's
Dumergue, Corpus	Rouillard, Caius	Yeoman, Caius

UNIVERSITY OF LONDON.

MEETING OF CONVOCATION.

The Reconstruction of the University.—A meeting of Convocation was held on June 24th. The chairman, Mr. F. J. Wood, LL.D., said he could not state anything very definite as to the new Charter, but all that he knew on the subject was favourable. University College and King's College had substantially accepted the basis of the draft Charter that had been prepared. A committee of the Senate was then engaged in considering and discussing the question, and would report to a meeting of the Senate to be held on the following day (Wednesday). A long discussion took place on a resolution moved by Mr. T. Tyler, and eventually the following amendment, moved by Dr. Silvanus P. Thompson, was adopted: "That this House, though extremely desirous not to embarrass the Senate in its efforts to arrive at a satisfactory solution of the problem of reconstruction, hereby expresses its strong opinion that it ought to be consulted as to the scheme of reconstruction before that scheme is finally embodied in a draft of a new Charter." A further resolution, moved by Mr. Tyler, to the effect that there should be an avoidance of any provisions which may place great or predominant power in the hands of persons who are not graduates of this University, was carried.

Election of Members of Senate.—The chairman declared the result of the poll for the vacant seats on the Senate to be as follows: For Sir P. Magnus, 990 votes; Dr. Bristowe, 626; Mr. Bennett, 274; Dr. O'Reilly, 180. The three first names were, therefore, nominated on the list.

DURHAM UNIVERSITY.

FACULTY OF MEDICINE.—At the Convocation on Tuesday, June 24th, 1890, the following were recommended for the Degree of Doctor in Medicine for practitioners of fifteen years' standing:

Hale, C. D. B., L.R.C.P.Lond., M.R.C.S.Eng.; Lloyd, M., L.R.C.P.Lond., M.R.C.S.Eng.; Manser, R., M.R.C.S., L.S.A.; Pendavis, W. F., L.R.C.P. Ed., M.R.C.S.Eng.; Dyer, H. G., L.R.C.P.Ed., M.R.C.S. Mr. C. W. Chapman, M.R.C.P.Lond., M.R.C.S., has passed the professional part of the examination, and will be recommended for the Degree of M.D. when he has satisfied the examiners in Arts.

The following were recommended for the Degree of M.D:

Allden, S. J., M.B., B.S.; Aubrey, A. R., M.B., M.R.C.S.; Baigent, W., M.B., B.S.; Baine, L. A., M.B., B.S.; Baker, J. B., M.B., M.R.C.S.Eng., L.R.C.P.Ed.; Bontor, S. A., M.B., B.S., M.R.C.S.Eng., L.R.C.P.Lond.; Dalgliesh, J. W., M.B., B.S., M.R.C.S.Eng., L.R.C.P.Lond.; Davis, N., M.B., B.S.; Dimmock, A. F., M.B., M.R.C.S., L.S.A.; Fast, C. H., M.B., B.S., M.R.C.S., L.S.A.; Hare, F. W. E., M.B., M.R.C.S.; Pogson, J. W. B., M.B., B.S.; Revely J. S., M.B., M.R.C.S.; Simmons, E. W., M.B., M.R.C.S.; Stokes, J., M.B., B.S., M.R.C.S., L.S.A.

The following was recommended for the Degree of Master in Surgery (M.S.):

Ridley, G. W., M.B., F.R.C.S.

The following were recommended for the Degree of Bachelor in Medicine (M.B.):

Angus, H. B., College of Medicine, Newcastle-upon-Tyne; Brodie, F. C., M.R.C.S., L.R.C.P., L.S.A., Middlesex Hospital; Craggs, R. F., College of Medicine, Newcastle-upon-Tyne; Dalgliesh, C. A., College of Medicine, Newcastle-upon-Tyne; Gott, H., Yorkshire College, Leeds; Higgens, O. E., M.A., M.R.C.S., L.R.C.P., St. Mary's Hospital; Hutton, J. A., M.R.C.S., L.R.C.P., Middlesex Hospital; Poole, K. W., M.R.C.S., L.R.C.P., London Hospital; Preston, L. L., M.R.C.S., Middlesex Hospital; Scott, W. J., M.R.C.S., L.R.C.P., Guy's Hospital; Smith, H., College of Medicine, Newcastle-upon-Tyne; Warde, A. W. B., M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; Ware, G. S., M.R.C.S., L.R.C.P., L.S.A., Middlesex Hospital; Wood, G. E. M., University College Hospital.

The following were recommended for the Degree of Bachelor in Surgery (B.S.):

Angus, H. B., College of Medicine, Newcastle-upon-Tyne; Atkinson, W. A., M.B., College of Medicine, Newcastle-upon-Tyne; Cox, B., M.B., College of Medicine, Newcastle-upon-Tyne; Craggs, R. F., College of Medicine, Newcastle-upon-Tyne; Dalgliesh, C. A., College of Medicine, Newcastle-upon-Tyne; Davis, I., M.B., Middlesex Hospital; Gott, H., Yorkshire College Leeds; Hutton, J. A., M.R.C.S., L.R.C.P., Middlesex Hospital, Poole, K. W., M.R.C.S., L.R.C.P., London Hospital; Preston, L. L., M.R.C.S., Middlesex Hospital; Scott, W. J., M.R.C.S., L.R.C.P., Guy's Hospital; Smith, H., College of Medicine, Newcastle-upon-Tyne; Warde, A. W. B., M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; Ware, G. S., M.R.C.S., L.R.C.P., L.S.A., Middlesex Hospital.

GLASGOW UNIVERSITY.

THE final examinations for degrees in medicine at Glasgow University begin on July 7th, and continue till the 23rd of the same month. Three days are devoted to written examination, and the remaining time is occupied with oral examination. The clinical examinations are at present being conducted in the Western Infirmary.

ERRATUM.—In the Pass List of the Final Fellowship Examination of the Royal College of Surgeons, in the JOURNAL of June 14th, p. 1405, Dr. J. Dundas Grant should have been described as M.D., *not* M.B.

PRESENTATION.—On Friday last Dr. F. T. P. Newell, house-surgeon at the Meath Hospital, Dublin, was the recipient of two presentations on his retiring from his office, having been appointed to a city Poor-law dispensary. The medical board gave a handsome clock, and the hospital officers a writing desk. Sir George Owens occupied the chair, and testified to Dr. Newell's efficiency and popularity.

DONATIONS.—At the annual meeting of the Sydenham District Medical Society, held at the Crystal Palace on June 19th, the sum of ten guineas was presented to the British Medical Benevolent Fund. Twenty guineas was also presented to the "Pensioners' Permanent Endowment Fund" at Epsom College. Both charities have received previous donations from the Sydenham District Medical Society.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, June 19th.

Education of Blind and Deaf Mute Children (Scotland) Bill.—This Bill was read a third time and passed.

Friday, June 20th.

Children's Life Insurance Bill.—On the motion of the Bishop of PETERBOROUGH, the following lords were named of the Select Committee on this Bill:—The Lord Chancellor, the Earl of Derby, Earl Spencer, the Earl of Harrowby, Earl Beauchamp, the Earl of Selborne, the Bishop of Peterborough, the Bishop of Ripon, Lord Clifford of Chudleigh, the Marquis of Lothian, Lord Poltimore, Lord Brougham and Vaux, Lord Kinnaird, Lord Norton, Lord Herschell, and Lord Thring.

HOUSE OF COMMONS.—Thursday, June 19th.

Army Medical Officers.—Mr. E. STANHOPE, in answer to Mr. MACNEILL, said medical officers were classed as non-combatant for the simple reason that they were not combatants, and that there were only these two designations. It was the fact, nevertheless, that their duties took them under fire far more than other non-combatants, and that many medical officers had been killed or wounded in action, and that the Victoria Cross had been conferred upon two of them. Taking six recent campaigns together the mortality of line officers was 5.4 per cent., and that of medical officers 3.1 per cent. The question of sick leave was one of expense, as substitutes would be required for medical officers. This applied in a much smaller degree in the case of combatant officers.

Friday, June 20th.

Pharmacy Act (Ireland) 1875 (Amendment) Bill.—This Bill pssed through Committee, Clause 22 being omitted on the motion of Mr. SEXTON.

Monday, June 23rd.

Open Spaces Bill.—This Bill was read a second time.

Mortality Returns.—Dr. CAMERON asked the President of the Local Government Board whether his attention had been called to the fact that, according to the last report of the Registrar-General, in addition to 25,132 cases in which the cause of death was "ill-defined or not specified" in medical certificates of death, 15,747 deaths occurred in England and Wales in 1888 in which the cause of death was not certified either by a medical man or coroner; and whether, taking that fact into consideration, Government would consent to the appointment of a Select Committee to inquire into the sufficiency of the existing law as to the disposal of the dead, for securing an accurate record of the causes of death in all cases, and especially for detecting them where death might have been due to poison, violence, or criminal neglect.—Mr. RITCHIE said there were 25,132 deaths in 1888 in which the cause of death was "ill-defined or not specified," and 15,747 deaths in which the cause was not certified by either a medical man or coroner; but it was not the fact that the 25,132 deaths were all of them cases in which there was no medical certificate, or that they were in addition to the deaths in which there was no certificate forthcoming. The great bulk of the 15,747 uncertified deaths were, he was informed by the Registrar-General, included in the 25,132 deaths in which the cause was either not specified or not sufficiently defined for due classification. As regarded the 15,747 deaths without medical or coroner's certificate, it must not be assumed that these were all cases in which there was no medical attendance. Many of them were, doubtless, cases which had been attended by unregistered medical practitioners, who could not give legally recognisable certificates. The proportion both of deaths in which the cause was ill-defined or not specified and of uncertified deaths had been gradually diminishing. Thus, in the years 1881-87 the proportion of the ill-defined deaths averaged 5.7 per cent. of all deaths registered, but in 1888 it was only 4.9 per cent. As regarded uncertified deaths, the proportion in 1879 was 4 7 per cent., and this fell gradually until in 1888 it was 3.1 per cent. As he stated in reply to a previous question of the hon. member's, the Registrar-General had good reason to know that a very large proportion of the cases of uncertified deaths were reported by registrars to coroners prior to their registration, although those officers, in their discretion, decided that it was unnecessary to hold inquests. It was too late to entertain the question of the appointment of a Select Committee this session, but he could promise the hon. member that the question of the expediency of such a committee should be carefully considered during the recess.

Tuesday, June 25th.

Housing of the Working Classes Acts Amendment Bill.—Mr. RITCHIE, in moving the second reading of the Housing of the Working Classes Acts Amendment Bill, said there was a prevalent opinion that the amendment and consolidation of the law with reference to the housing of the working classes was necessary, and there was no doubt that a considerable complication of the law on this important subject existed. If the House would assent to the second reading of the Amendment and Consolidation Bill then the most convenient mode of dealing with the question would be to refer both Bills to a Grand Committee, with the instruction that they should be consolidated at once. A number of hon. members specially interested in the matter would be placed on the Committee. The procedure under the existing Acts ought to be simplified, and this the Bill proposed to do. It was made an absolute duty of the medical officer of health to report to the local authorities any premises unfit for human habitation; and it was also made the absolute duty of the local authorities to order proper periodical surveys to be made of their district, with the view of seeing that the medical officer of health fulfilled his duty. In explicit terms the Bill imposed upon the local authorities the duty of seeing that there were no unhealthy dwellings in their localities. When it was ascertained that there were dwellings unfit for human habitation, under the Bill there would arise no question of the interference of surveyors or of the provision by the local authorities of plans and specifications of what was wanted to put the premises into repair. The Bill assumed that the owner was wholly responsible, and, if the house was declared to be injurious to health, the owner was bound to find out himself what was to be done, and to do it within a limited time, If the repairs were not undertaken within this limited time, the house might be demolished. Another question dealt with by the Bill was that of obstructive buildings. Some doubt had arisen as to the meaning of the words "obstructive dwellings" in the Artisans' Dwellings Act of 1882. The Bill before the House considerably extended the meaning of the words, and further gave powers for the forming of schemes which would be intermediate between the larger schemes of the Cross Acts and the smaller schemes of the Torrens Acts. Many areas were not large enough to be dealt with by the Cross Acts, and were too large to be dealt with under Torrens Acts. The Bill proposed that a local authority, when buildings had been declared unfit for human habitation or obstructive, might proceed to take measures not only for dealing with the obstructive buildings, but to make a scheme taking in some of the surrounding dwellings, with the view of the clearing away of courts and alleys, and bringing light and air into the localities, as to make them more fit for human habitation than would be otherwise possible. There was a point in the Bill which he thought would render it peculiarly acceptable to hon. gentlemen who represented London. Great complaints had been made of the unwillingness of vestries and boards of works to put in force the law with regard to dwellings of this character. In a town like London every district was interested in the good health of every other district, and the central authority ought to have the power to act if they were satisfied that the local authorities were neglecting their duty. Therefore where it was shown to the London County Council that local authorities were neglecting to deal with unhealthy areas within their localities, the County Council would have power to take over the duties of the local authority. This power had been asked for by the London County Council for good and sufficient reasons, as he thought. It was undoubtedly a great scandal that men who were largely interested in these dwellings should be allowed to vote on questions affecting them. He thought he had said enough to show that the Government had approached this subject with a view to simplifying and insuring the operation of the law, and he hoped the House would reasonably consider the proposal to refer the Bill to a Grand Committee. He begged to move the seconding reading of the Bill.—Sir W. FOSTER observed that the present law was practically inoperative. The evil which arose from the defects in the law affected not only great communities like London, but also rural villages. He was glad that the right. hon. gentleman proposed to amend the law as well as to consolidate it. But he thought it was to be regretted that this Government, who had been wasting the time of the House in the consideration of the question of the endowment of publichouses, should not have earlier brought before the House a Bill which was likely to be of so much more advantage to the community at large. The proposal of the right hon. gentleman to refer the Bill to a Grand Committee appeared to be the quickest way of getting the Bill forward at this period of the session. He did not think the Bill ought to stop at the demolition of unhealthy houses. There ought to be some provision in the Bill to force the owners to put up other houses, as he thought people ought not to be driven from the districts in which they lived. This was especially necessary in rural districts, because it was most undesirable that people should be driven from rural districts into the already overcrowded towns. It would be of the greatest benefit to the localities if the rookeries, which were the nests of disease, were to be swept away, and sanitary dwellings, surrounded with open playgrounds for the children, substituted for them. He thought that the measure might be greatly improved in many respects when it came before the Standing Committee.—Sir W. HARCOURT did not think that there would be any great conflict of opinion with regard to this measure, and he therefore had great hope that the Bill would become law.—Mr. S. BUXTON regarded the Bill, which he cordially welcomed, as one of the most important measures the Government had brought forward during the present session; and, after some further discussion, Mr. RITCHIE, in replying to some of the points raised in the course of the discussion, expressed his gratitude to members in all parts of the House for the extremely cordial manner in which they had received the proposals of the Government.—The Bill was read a second time, and referred to the Standing Committee on Law.

Housing of the Working Classes Acts Consolidation Bill.—On the motion for the second reading of this Bill, Mr. CHANNING hoped advantage would be taken of the opportunity to extend the machinery provided by the Bill to rural sanitary authorities.—Mr. RITCHIE pointed out that the measure before the House was a purely consolidating Bill, and that to introduce amendments into it would alter its purpose and character. The matter to which the hon. gentleman had referred might very fairly be considered in Committee on the amending Bill —After some remarks from Mr. MACINNES, Sir W. FOSTER said they were all of one mind as to the beneficial character of the measure; but its provisions should be extended to rural authorities.—Mr. RITCHIE said there was no reason why that should not be done if it appeared to the Committee on the Bill to be necessary and desirable.—The Bill was then read a second time, and was referred to the Standing Committee on Law. It was also agreed that it be an instruction to the Committee that they have power to consolidate this Bill and the amending Bill into one Bill.

HOSPITAL AND DISPENSARY MANAGEMENT.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION. — The annual meeting in connection with the above Association was held on June 20th, at Bute House. The Earl of Desart presided. Mr. William Bousfield, Chairman of the Association, made a lengthy statement as to the objects with which the organisation was formed some ten years since. Sir T. Spencer Wells moved: "That the indiscriminate gratuitous treatment of out-patients in charitable institutions leads to overcrowding, loss of time, hurried treatment, and the attendance of some who could afford payment to medical practitioners; it lowers the feeling of independence among the working classes; and its evils can be best met by additional self-supporting provident dispensaries, near and in co-operation with hospitals and free dispensaries." Mr. W. G. Bunn seconded the resolution, which was carried.

OBITUARY.

WILLIAM HENRY PAINE, M.D., F.R.C.P.

THE subject of this notice, who died on June 13th, was born at Stroud in 1824. He was the son of the late Mr. John Paine, the first manager of the Stroud branch of the Gloucestershire Banking Company. He received his medical education at University College, London, and commenced practice at Stroud in 1851. For 35 years he held the appointment of honorary physician to the Stroud Hospital, and his skill and judgment were much valued by his colleagues. To the poor he was a generous helper, and to the distressed a sympathising friend and wise counsellor.

He was an old member of the British Medical Association, belonging to two Branches—the Gloucestershire and the Bath and Bristol. Of the Gloucestershire Branch he had been President. He took an active interest in scientific pursuits, and was for 22 years honorary secretary to the Cotteswold Naturalists' Field Club, a position which he valued as bringing him into close association with a band of earnest workers, amongst whom he counted some of his dearest friends. Many of them, to his sorrow, had passed away before him. He was a Fellow of the Geological Society and of the Royal Meteorological Society. In his later years he was a Justice of the Peace of the county of Gloucester, and having a natural leaning towards the law he was most assiduous as well as conscientious in the discharge of his magisterial functions.

Few objects of public utility in the town failed to secure his support, and in all the more important he was a leader and ardent worker. The drainage of the town, the water supply, the establishment of a public cemetery, and the foundation of a school of art may be mentioned among the objects in which he was deeply interested. As a member of the School Board, a Guardian of the Poor, chairman of the Feoffees of the Stroud Charities, and chairman, in its early years, of the Local Board of Health, as well as in other public capacities, he did the work of a good citizen with singleness of purpose.

His health began seriously to fail in the winter of 1888-89. Some improvement followed a prolonged stay at Torquay, but this was only temporary, and for the last six months he was almost entirely confined to his bed. He was buried amid demonstrations of respect and sympathy from the inhabitants of the neighbourhood, to whom he had in various ways endeared himself. He married, in 1850, a daughter of the late Mr. John Burden, of Cadham Hall, Essex, who survives him, together with eight sons and daughters.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE FACTORY AND WORKSHOP ACT AMENDMENT BILL.

THE Bill "to amend the Factory and Workship Act, 1878," brought in by Mr. Baumann and backed by several members of the House of Commons, proposes no alteration of the Act of 1878 that affects the office or functions of certifying surgeons. It aims at an extension of restrictions on labour, particularly that carried on in "domestic workships," and also at improving the sanitary requirements of the present Act. Its objects are best put forth in the words of the memorandum attached to the Bill:

"The object of this Bill is to prevent some of the evils of the sweating system by amending the Factory and Workshop Act of 1878. It does not touch the question of adult male labour. It proposes to give women, when working in domestic workshops and in workshops where none but adults are employed, the same protection they now get when working in workshops and non-textile factories with young persons, that is, the twelve hours' day, with an hour and a half for meals and rest. It abolishes the alternate day system for children, making the half-time system universal. Except in the case of perishable goods (such as jam and fish) and processes of manufacture liable to be spoiled by the weather (such as turkey-red dyeing, flax scutch mills, etc.), it abolishes the overtime clauses by which employers are allowed to work young persons and women for fourteen hours a day (with two hours for meals) for forty-eight days in the year. It repeals Section 61 of the present Act, which excepts domestic workshops and workshops where no children or young persons are employed from all sanitary regulations as regards cleanliness (that is, lime-washing, painting, varnishing, etc.), freedom from effluvia, overcrowding, or ventilating. It fixes minimum as well as maximum penalties for offences against the Act."

The measures whereby this object is to be accomplished are: An addition to the sanitary provisions of the Act of 1878, Section 3, requiring that "not less than 300 cubic feet shall be allowed to every person or child employed in a factory or workshop up to the hour of 8 P.M., and not less than 400 cubic feet to every person employed therein after 8 P.M., and for the purposes of computation three gas burners shall be considered as equal to one person employed."

This amendment is unobjectionable in a sanitary point of view, and would make havoc with many workshops of the present day, and especially with the miserable places of labour where the "sweating" system is pursued. It may be noted that there are gasburners and gasburners, and that it is not enough to specify the number to be reckoned as equal to one person in consuming the air and loading it with impurities, but the amount of gas burnt, as measured by the size and construction of the burner and by the amount of gas passed through.

The next Clause (3) proposes that where sanitary defects in a factory are noticed by a factory inspector, he shall be required to call upon the sanitary authority of the district, not, as heretofore, at his discretion or convenience, but "within fourteen days."

The fourth Clause has for its chief purpose the enlargement of the definition of the motive power employed in factories, and for the first time recognises gas and electric motors. This amendment is suggested with the view of bringing engines of all sorts within the conditions prescribed with regard to fencing.

It is not easy to apprehend the object of the next amendment proposed, namely, the striking out of "young persons" from the conditions of employment relating to the legal hours of labour in non-textile factories. For, if such conditions are salutary for women, they would seem equally requisite for those of immature age, ranging between 13 and 18.

If the limitation of the period of labour for such young persons be abolished, they will acquire the status of adults in respect to working hours, and thereby free from restrictions. This, surely, is a retrograde movement in protective legislation.

Section 6 repeals the alternate day system of school attendance and permits only that of morning and afternoon sets in alternate weeks. This change has been widely advocated in the interests of children, and presents undoubted advantages hygienically.

By Clause 7, Section 15 of the principal Act is repealed, the chief purposes of the latter being attained presumably by the amended reading of Section 13.

The following Clause (8) is evidently drafted to reach the circumstances of domestic labour as revealed by the Commission on the "sweating" system. It brings within the scope of factory supervision any apartment of a private dwelling in which three or more persons are employed in a manufacturing process "within the meaning of this Act," such persons being members of the family occupying the premises. It places definite limits to the hours of labour, and prescribes the time for meals.

When we reflect upon the multitude, position and surrounding circumstances of these domestic workshops, the thought will arise, by what agents can the inspection requisite to the enforcement of these conditions of labour be attained? Where are the men who shall perform the part of "Paul Pry" as to the time an industrious family shall devote itself to profitable labour, to eating its meals, or as to its hours of rising in the morning or going to bed at night? At the same time the father of the family remains a free agent, except it be in the arrangements of his household, in the matter of which the State usurps his place. On the whole, this interference with domestic life appears vexatious in character and impossible in execution.

Clause 9 repeals the permissive indulgence allowed by the principal Act as to overtime, where sudden press of orders in a business calls for extra labour; but it reserves other kinds of work specified in subheads, to which the Secretary of State may grant exceptional sanction. However, this high official is charged with the duty of keeping a record of the "number and nature of the cases in which he has extended this exception by order," and causing an annual return of the same to be presented to Parliament—a vexatious requirement to the party concerned, and of only imaginary value to Parliament and the public. What an endless chapter of Ministerial delinquencies might a busybody member, in search of abuses of official authority and of questions "before

the House" wherewith to trouble and embarrass the unfortunate Minister of State find in such a return.

The next Clause (10) makes similar regulations in regard to non-textile factories, and calls for the like returns at the hand of the well worked Secretary of State.

Section 61 of the principal Act is repealed, and thus all factories and workshops, including domestic, are placed under the same conditions with regard to sanitary provision, hours for meals and notices; and an alteration made necessary in the working of Section 66. The effect of this amendment is on the whole in the direction of increased sanitary observances.

The four following clauses of the Bill refer to changes in the amount of fines levied for transgressions of the Act. The remainder are concerned with questions of no sanitary importance.

ADULTERATION OF NORMANDY BUTTER.

ACCORDING to the last report of the British Vice-Consul at Caen, it would appear that certain butter dealers and merchants have again been very largely introducing the use of various fatty compounds for mixing with pure butter; and that, in spite of special laws recently adopted in France against these fraudulent practices, this particular fraud has been, and is still, carried on to a large extent. The exporters have for some time past been sending to the English market "Normandy butter" heavily adulterated with the foreign fatty compounds. That this proceeding will go far to shake the faith in the purity of Normandy butter—which, upon the whole, has hitherto been of a generally excellent character—is obvious; and it is therefore not surprising to learn that a syndicate of the butter merchants of Northern France has been formed with the main object of putting a stop to, or at least diminishing, the practice of this adulteration. This syndicate has issued an "appeal to all honest butter merchants" to endeavour to avert the disaster which it is foreseen will fall upon their trade through the decrease in the exportation to foreign markets, which is attributable to the adulteration of the hitherto pure butter exported. It appears that the export of Normandy butter in 1882 to the English markets alone, amounted in value to 89,900,000 francs, while in the year 1887 it had fallen to 58,100,000 francs, and that since the latter year there has been a still further decrease. It is proposed by the syndicate that a new law shall be passed, rendering it obligatory upon all makers of compounds intended as butter substitutes, or for mixing with butter, to add some distinctive and permanent colouring matter to their products, which shall differ entirely from the colour of natural unadulterated butter, so that it would be impossible to mix them with pure butter without their presence even in traces being obvious on mere inspection. From the Vice-Consul's report it seems that the adulteration of butter is extensively carried on in Caen.

While an "appeal to honest butter merchants" may be a useful measure—and its degree of usefulness can only be accurately gauged by butter merchants themselves—it certainly seems more likely that better results would be obtained by agitating for a more extensive and effective application of the existing laws against adulteration both in this country and in France. Wholesale manufacturers of adulterated products could not get on without the retail dealers who distribute them over a wide area, and who, in the words of a London public analyst, serve as "channels through which the manufacturers can reach the public." The suggestion that factitious butter, and butter substitutes should be permanently coloured blue, green, or red has often been made before, but has not met with much favour, perhaps on account of the difficulty of finding a colouring matter to which objection could not be taken, or one in every way thoroughly suitable for the purpose intended; and no doubt also because the trade in an article of food such as margarine—which, when properly made and sold for what it is, is valuable for a large class of persons—would be unjustifiably and unfairly hampered by such an expedient. If, as we have frequently urged, authorities charged with the application of the anti-adulteration Acts could be made to see that the control of the food supply of the populations which they are supposed to serve, apart from general sanitation perhaps, is one of the most important, if not the most important of their functions, far more satisfactory results in the way of checking adulteration would be obtained than by the sporadic issue of plaintive appeals to the "honest members" of particular trades, and the syndicate would do better to apply their energies in the direction of getting existing laws enforced in a proper manner by those whose business it is to enforce them in the general interests of the public.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council, held at their rooms, 3, Bolt Cou Fleet Street, on June 12th, a paragraph from a London newspap was read, announcing that a district Poor-law medical officer h offered to sign certificates required by the new Lunacy Act for t retention of pauper lunatics in a workhouse for a fee of five shi ings each. It was unanimously resolved to call the attention this medical man to a resolution of the Council passed at its pr vious meeting to the following effect: "That in the opinion this Council a minimum fee of half a guinea should be charg for these certificates;" and that he should be asked to reconsid this subject, with a view to obtain for himself and others a prop fee for the duty.

PAUPER NURSES.

MRS. ASHTON WARNER is an elected member of the board guardians of Mile End, who, when placed upon the Infirma Committee, made it her business to make special inquiries into t working of that department. From what she heard and saw s gave notice of the following motion:—"That in view of the opinio expressed by the Local Government Board, in their letter date February, 1883, namely, 'as to the matron, one of whose princip functions would be to superintend, subject to the directions of t medical superintendent, a large staff of female officers, it is of t highest importance that the person elected should have receive thorough hospital training, and that her education and mann should be such as to inspire respect,' and in view of the fact th there is not one thoroughly trained nurse in the Mile End Infi mary of 453 beds, from the matron downwards, steps be taken t replace the present matron of the infirmary (who has never bee trained) by a lady who has gone through a complete course o training in one of the metropolitan hospitals, and that the preser matron be asked to send in her resignation; that in taking th step in the interests of the poor sick patients, who must suff severely from untrained, and, therefore, unskilful nursing the receive, the Board desire that every consideration should be show to the present matron for her long service."

Three days before the motion came on for consideration, howeve Mrs. Warner received a communication stating that one of the gua dians had lodged an objection, on the ground that since the electio a new poor rate had been made, and that her name did not appea on the rate books. Thus her useful activity in the matter is sum marily cut short. This may be a convenient, and is obviously legal, way of shelving the question, but it can only be hoped tha it will not be of permanent effect; at any rate, it appears to be very palpable grievance that the sick poor of this grea infirmary should at this date not have the benefit of supervisio by trained nurses. There is a large supply of such nurses. Th evil consequences which result from the want of them ha long since been publicly known and admitted, and the Mile En guardians must feel that they are called upon to take some steps not only to justify themselves against the grave charge brought b Mrs. Warner, but to provide there shall be no basis for such a charg in the future.

SANITARY STATE OF SCHOOLS.

M. O. H. asks if the M. O. H. is justified in looking into the sanitary state o schools (national or otherwise), as to w.c.'s, water supply, etc., and to whom an insanitary state should be reported in case of refusal to improve; also does the new code still authorise the closing of schools in case of epidemics and justify the sanitary officers in visiting such places and requiring sanitary observances as to proper cleanliness of closets and water supplies for children's uses? Would it be well in case of difficulty to report to Local Government Board, or the department?

*** The medical officer of health is not only entitled to inspect the school of the district with regard to their sanitary condition, but it is an important part of his duty to do so, and to report thereon to his sanitary authority. As to the closure of schools—not for the removal of insanitary conditions, but on account of the prevalence of scarlet fever in the vicinity—we refer our correspondent to an editorial note on the subject in the JOURNAL of June 7th.

FEES FOR CERTIFICATES OF LUNATICS.

S. T. S., a Poor-law District Medical Officer, writes to say that he, having been requested to attend a police court, five miles from his residence and out of his district, in order to certify for the removal of a pauper lunatic to an asylum, was paid 10s. for the same by the relieving officer, that the guardians refused to pay more, and that the magistrate before whom he appeared said, as he (S. T. S.) was a Poor law medical officer, he could make no order for the fee.

S. T. S. asks whether the guardians could compel him to leave his district to visit and certify the lunacy of a pauper without paying him a proper fee for so doing?

*** The guardians have nothing whatever to do with the certification of

lunatics for removal to asylums, except to pay all necessary expenses, and certainly have no power to oblige a medical officer to leave his district to certify such cases. If the medical officer gives the certificate in question at the request of the magistrate, he is entitled to a reasonable fee for so doing, which we hold should for single cases be never less than one guinea, this amount, or even two guineas, which would be a proper fee for travelling five miles. The magistrate has power to make an order on the guardians to pay, but he is not compelled to make the order. The guardians can, however, pay the fee without the order, but if they decline to do so we fear S. T. S. has no remedy. We should recommend him to apply once more to the magistrate, and point out that it is not his duty, as Poor-law medical officer, to certify to the lunacy of paupers or others—we assume that S. T. S. has not entered into any contract with the guardians to give lunacy certificates if called upon by a magistrate to do so—and that he, the magistrate, has full power, under Section 285, Lunacy Act, 1890, to make an order on the guardians to pay a proper fee for this duty.

SALARY OF MEDICAL OFFICER OF HEALTH.

ENQUIRENS asks: What is the average salary paid to medical officers of health in urban districts of about 5,000 inhabitants? Also what is the lowest salary known to be paid under the above circumstances.

*** We are unable to say what is the average amount paid in salaries to medical officers of health for urban districts of 5,000 inhabitants. We know of cases in which the sum has been fixed at as low as £20. It is generally considered a disadvantage to a private general practitioner to hold the post at such a salary, and it is seldom to his advantage to hold it, even on a considerably higher rate of remuneration.

CONFIRMATION OF ORDERS.

POOR-LAW MEDICAL OFFICER writes: I am sent for to attend a woman, who has fallen down stairs, about 100 yards from my house, and away from her home. I find she has sustained a fracture of right tibia and fibula. As the woman has, during the nine years I have been in office, invariably had medical orders granted to her on application to the relieving officer, which in due course have been sanctioned by the board of guardians, I at once send to the relieving officer for an order. He is out. After a couple of hours have elapsed I send a second time, but he has not returned home. In the meantime I have given the case, which necessitated chloroform, the attention it required; and on the following morning I receive the usual order from the relieving officer signed the day previous. Ten days pass by and the guardians meet, with the result that they decide they will not confirm the order given by their relieving officer.

Having received the order to attend, cannot I enforce the payment of the fee, £3, from the guardians?

*** We are advised that our correspondent can legally claim the extra fee for this case, which is allowed, not simply for setting the fracture, but for the attendance on the case; if the relieving officer acted wrongly in giving the medical order, this must be a matter for the guardians to settle with him. The medical officer cannot be allowed to suffer.

POOR-LAW MEDICAL SERVICE.

DISTRICT MEDICAL OFFICER asks: In the case of a pauper lunatic sent out from an asylum on trial for a month, the district medical officer at the end of the month receives notice from the relieving officer to visit the lunatic and to certify whether or not she is fit to remain out of the asylum.

1. Is the district medical officer entitled to a fee of half-a-crown for so doing when he sends in his quarterly record of visits to pauper lunatics and account of fees?

2. Is a district medical officer entitled to half-a-crown for every visit he makes to a pauper lunatic during the quarter, should the latter be ill and require his services, or is he only entitled to one such fee for the prescribed visit at the end of each quarter?

3. A district medical officer is called by the relieving officer to a person who has become insane; the former visits him several times, and then has to certify him, by order of a magistrate, to be sent to the asylum as a pauper lunatic. Is the district medical officer entitled to a fee of half-a-crown for each visit to the lunatic, or for one visit only, or to no fee?

4. Should the visits under 2 and 3 be returned in the quarterly record of visits to pauper lunatics?

*** 1. We believe he is entitled to a fee of half-a-crown if he enters the case in his quarterly return.

2. A district medical officer is, under the Lunacy Act, only required to make one visit to each lunatic per quarter, and is consequently only entitled to one quarter's fee. If the lunatic is ill and requires medical attendance, this must be paid for by the guardians according to arrangement with the medical officer.

3. We doubt whether he is entitled to any fee beyond that ordered to be paid to him by the magistrate, as, when called upon to certify for removal to an asylum, he does not act in the capacity of district medical officer.

4. Under Nos. 1 and 2 one quarterly visit should be returned; under No. 3 we consider no entry need be made in the quarterly list.

INFECTIOUS DISEASE HOSPITALS AND THE LOCAL GOVERNMENT BOARD.

DR. T. BELL.—The recommendation of the Local Government Board with reference to the distance of infectious hospitals from houses has not the authority of an Act of Parliament, but if, as is usually done, application were made to borrow money to erect the hospital sanction would not be given unless the conditions laid down by the Board were fulfilled.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns, including London, which have an estimated population of 9,715,559 persons, 5,698 births and 3,334 deaths were registered during the week ending Saturday, June 21st. The annual rate of mortality in these towns, which had been 18.0 and 17.2 per 1,000 in the two preceding weeks, rose again to 17.9 during the week under notice. The rates in the several towns ranged from 11.8 in Brighton, 12.6 in Nottingham, 13.7 in Bristol, and 14.3 in Cardiff, to 23.9 in Bolton, 24.4 in Sheffield, 25.6 in Newcastle-upon-Tyne, and 29.0 in Manchester. In the twenty-seven provincial towns the mean death-rate was 19.2 per 1,000, and exceeded by 2.8 the rate recorded in London, which was only 16.4 per 1,000. The 3,334 deaths registered during the week under notice in the twenty-eight towns included 462 which were referred to the principal zymotic diseases, against 405 and 401 in the two preceding weeks; of these, 172 resulted from measles, 99 from whooping cough, 65 from scarlet fever, 57 from diarrhœa, 35 from "fever" (principally enteric), 32 from diphtheria, and 2 from small-pox. These 462 deaths were equal to an annual rate of 2.5 per 1,000; in London the zymotic death-rate was 2.7, while in the twenty-seven provincial towns it averaged 2.3 per 1,000, and ranged from 0.0 in Huddersfield and in Halifax, and 0.4 in Brighton, in Portsmouth, and in Oldham, to 4.0 in Plymouth, 4 1 in Birmingham, 4.4 in Liverpool, and 6 2 in Derby. Measles caused the highest proportional fatality in London, Plymouth, Derby, Liverpool, and Birmingham; scarlet fever in Birkenhead, Manchester, and Liverpool; whooping-cough in Derby; and "fever" in Plymouth. Of the 32 fatal cases of diphtheria recorded during the week under notice in the twenty-eight towns, 19 occurred in London, 3 in Derby, 3 in Salford, and 2 in Liverpool. Small-pox caused 1 death in Derby and 1 in Hull; 7 cases of this disease were under treatment in the Metropolitan Asylum Hospitals on Saturday, June 21st, none of whom had been admitted during the week. These hospitals contained 1,121 scarlet fever patients on the same date, against numbers increasing from 992 to 1,078 at the end of the four preceding weeks; 129 cases were admitted during the week, against 130 and 96 in the two previous weeks. The death-rate from diseases of the respiratory organs in London was equal to 2.5 per 1,000, and slightly exceeded the average.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, June 21st, 866 births and 572 deaths were registered in the eight principal Scotch towns. The annual rate of mortality in these towns, which had declined from 23.3 to 19 9 per 1,000 in the three preceding weeks, rose again to 22.1 during the week under notice, and exceeded by 4 2 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the lowest death-rates were recorded in Perth and Aberdeen, and the highest in Dundee and Glasgow. The 572 deaths registered in these towns during the week included 95 which were referred to the principal zymotic diseases, equal to an annual rate of 3.7 per 1,000, which exceeded by 1.2 the mean zymotic death-rate during the same period in the large English towns. The highest zymotic death-rates were recorded in Aberdeen, Dundee, and Glasgow. The 263 deaths registered in Glasgow included 27 which resulted from measles 2[illegible] from whooping-cough, 3 from scarlet fever, and 2 from diphtheria. Twelve fatal cases of measles were recorded in Dundee, and 6 of whooping-cough in Aberdeen. The death-rate from diseases of the respiratory organs in these towns was equal to 4.4 per 1,000, against 2.5 in London.

HEALTH OF IRISH TOWNS.

IN sixteen of the principal town districts in Ireland the deaths registered during the week ending Saturday, June 14th, were equal to an annual rate of 21.5 per 1,000. The lowest rates were recorded in Wexford and Dundalk, and the highest in Kilkenny and Lurgan. The death-rate from the principal zymotic diseases averaged 1.5 per 1,000. The 171 deaths registered in Dublin during the week under notice were equal to an annual rate of 25 3 per 1,000 (against 22 5 and 21.4 in the two preceding weeks), the rate for the same period being 16.2 in London and 16 9 in Edinburgh. The 171 deaths in Dublin included 12 which were referred to the principal zymotic diseases (equal to an annual rate of 1.8 per 1,000), of which 5 were referred to whooping-cough, 4 to different forms of "fever," and 3 to diarrhœa.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

HARWICH (Population, 9,284).—*High Infant Mortality: Results of Parental Neglect: Contaminated Private Wells Condemned.*—The chief points dwelt upon in Dr. W. W. Hardwicke's report for 1889 are the low rate of zymotic mortality and the comparatively high rate of infant mortality. There were no deaths from small-pox, measles, scarlet fever, or diphtheria—the only zymotic deaths being 2 from typhoid fever, and 1 from whooping-cough and diarrhœa respectively. The deaths of infants under one year showed a percentage of 34.4 of the total deaths, and of children under five years 49.6. Dr. Hardwicke is led to remark that a great number of children in the humbler ranks of life are lost annually from neglect on the part of parents, and from great ignorance with regard to the nurture of infants. An outbreak of typhoid fever in the borough last summer, which resulted in 2 deaths, was traced directly to the drinking of water obtained from contaminated private shallow wells. As there is in the district a company supplying good water, there is no sufficient excuse for continuing the use of shallow wells, which, even in the most favourable circumstances, are always open to suspicion. The prosperity of Harwich and Dovercourt as a health-resort demands the abolition of all dangerous sources of water supply. The ventilation of the sewers is also a matter deserving special attention at the hands of the local authority.

MEDICAL NEWS.

THERE are said to be 40,321 medical practitioners in Japan. The population is estimated at about forty millions.

STEPS are being taken by the Russian Health Society to organise a hygienic exhibition in Russia.

DR. THIÉRY, Prosector in the Paris Faculty of Medicine, has been commissioned by the French Government to study the condition of surgical education in England, Sweden, and Russia.

DR. CADET DE GASSICOURT has been elected a member of the French Academy in the section of medical pathology, in the place of the late Professor Damaschino.

OF the forty-two medical members of the French Chamber of Deputies, only one (Dr. Bourgeois, deputy for La Vendée) sits on the right or Conservative side of the House.

THE second annual meeting of the American Pædiatric Society was held in New York on June 3rd and 4th, under the presidency of Dr. J. Lewis Smith.

DR. BERTHERAUD, director of the *Journal de Médecine et de Pharmacie*, published at Algiers, recently met his death by accidental drowning.

SOME cases of yellow fever are said to have occurred at Malaga. The disease was imported by a vessel coming from an infected port.

INFLUENZA IN STYRIA.—Some genuine cases of epidemic influenza having recently occurred in the district of Judenburg, in Upper Styria, a searching medical inquiry is to be held.

A NEW Italian journal entitled *Il Sordomuto* (the Deafmute) has been started by Dr. G. Longhi, founder of the "Ototherapeutic" Institute at Milan. It is to be published monthly.

THE QUEEN has granted a suite of apartments in Hampton Court Palace, formerly occupied by Lady Torrens, to Mrs. Keith, widow of Surgeon-Major Keith, lately on the staff of the Duke of Connaught.

THE first case of yellow fever observed in the United States is reported to have been admitted into the Chandeleur Marine Hospital in Louisiana. It occurred on board a vessel thirty-eight days out from Rio de Janeiro.

"WHAT'S IN A NAME?"—The American Association of Genito-urinary Surgeons has changed its name, and is henceforth to be known by the surprising and ponderous title of "The American Andrological and Syphilographical Association."

THE police authorities of Vienna are making an exhaustive inquiry into a number of questions bearing on the regulation of prostitution. The professors of syphilology and dermatology are taking an active part in the investigation.

DR. W. SCHULEK, Professor of Ophthalmology at Buda-Pesth, has been elected Rector Magnificus of that University for the coming year. The College of Professors at Vienna has chosen Professor Zuckerkandl to be Dean of the Medical Faculty next year.

PROFESSOR TEICHMANN, of Cracow, has announced his intention of sending his well-known collection of injected anatomical preparations to the exhibition to be held in connection with the forthcoming International Medical Congress at Berlin.

AT a meeting of the Berlin Municipal Council on June 12th it was decided that a convalescent home for lying-in women should be established at the expense of the city. A sum of 140,000 marks (£7,000) was voted for the purpose.

THE increase of insanity in Berlin has made it necessary that a new public lunatic asylum should be established. The building, which is to accommodate 1,000 patients, will be situated in the easterly suburb of Lichtenberg. The City of Berlin already maintains an asylum with about 1,200 inmates at Dalldorf.

IN the University of Berlin the academic year will henceforth be divided into a winter and a summer *Halbjahr* (half year), the term "semester" hitherto in general use being proscribed, probably in deference to the ultra-Teutonic spirit which is at present insisting on the expurgation of the German language from all taint of foreign influence.

A NEW and most agreeable way of commemorating the dead h been found by Mr. H. L. Higginson, who has presented a field twenty-seven acres on the banks of the river Charles to Harva University for athletic recreation. The field is to be called "T Soldier's Field," and is to be a perpetual memorial of seven frien of the donor who died during, or as a result of, the war of t Rebellion.

THE University of Louvain has added a course of medical ethi to the ordinary programme of professional study. When a simil proposal was before the Belgian Parliament some time ago, it w objected by several deputies that medical students had qui enough to learn already without being burthened with addition subjects of study. Other enlightened representatives of the peop affected to believe that "deontology" (the French term for med cal ethics) must be a misprint for "odontology."

BECHTEREW (*Medizinskoje Obosrenje*, 1890, No. 4) points ou that destruction of different parts of the nervous system does n give the same results in newly born animals which are born blin as in those which are fully grown. For example, destruction o the motor area of the cortex or of the cerebellum give no resul These variations are probably due to the fact that in these anima the pyramidal bundles are not fully developed at birth. In anima born with the power of sight, the results of operations on the brai are the same in the newly born as in the fully grown.

THE FRENCH SOCIETY FOR THE HELP OF THE WOUNDED.—The French Société de Secours aux Blessés held its general meet ing on June 12th, under the presidency of Marshal MacMahon Since the war of 1870 the Society has distributed £128,000 amon soldiers and sailors wounded in war. It has increased its ambul ance material to the value of £4,000, and has organised temporar hospitals, railway station hospitals, and ambulance services on a footing ready for war. It has trained numbers of lady nurses bearers, etc. The Society has now 42,000 members, and the yearly subscriptions amount to £4,000.

TUBERCULOUS CATTLE.—The following official statistics relating to the public slaughterhouse of Augsburg may be interesting:— During 1889, of 23,592 calves slaughtered, only one (an animal 3 weeks old) was found to be tuberculous. Of 13,679 head of olde cattle, 612, or 4.4 per cent., were tuberculous. Of 8,537 oxen, 167 or 1.94 per cent., were tuberculous; while of 5,008 cows, 445, o 8 88 per cent., were affected with that disease. In 4 cases, o almost 1 per cent. of the cows, the udder was the seat of tuberculosis. In 67 of the 612 cases in which disease was discovered, the flesh was declared unfit for food on account of generalised tuberculosis and destroyed.

SOME GERMAN UNIVERSITIES.—The number of students in the University of Greifswald this summer semester is 902, being the largest number ever on its books. Of these, 421 are students of medicine, 274 of theology, 98 of philosophy, and 95 of law, while 24 are allowed to attend particular lectures without having matriculated in any faculty. At Erlangen the number of students is 1,012, being the first time it has exceeded 1,000. The theological faculty used to be the most numerously attended, but this year medicine heads the list. At Marburg there are 1,003 students, this being also the first time the number of 1,000 has been exceeded. There are 269 students in the medical faculty.

EPSOM COLLEGE.—The successes of the students of Epsom College at the matriculation and preliminary scientific examinations of the University of London has long been a credit to their teaching. The head master now enables all boys who seek to enter the medical profession by other avenues than the London matriculation and M.B. degree, which is beyond the reach of many, to receive while remaining at college similar advantages to those which are given in the preliminary scientific form to those who have succeeded in matriculating. They will be taught chemistry and physics—subjects of serious difficulty to students of moderate ability when away from the form work of school; and ground will be broken in physiological and biological studies—subjects which are regularly taught in the college. This preparation will enable all to pass the first examination of the Colleges of Physicians and Surgeons at the earliest possible date after entering at a metropolitan hospital. This departure at Epsom College appears to us a most excellent arrangement.

NEW HOSPITAL AT BERLIN.—The City of Berlin, which already maintains two general hospitals (Friedrichshain, with 720, and Moabit, with 600 beds), has now established a third general hospital (Urban) in the south of Berlin. The new institution, which was opened on June 10th, is built in the pavilion system, and cost 3⅓ millions of marks (£175,000). The director of the medical division is Professor Alb. Fränkl, and Dr. Werner Körte is head of the surgical department. The total number of beds is 570, of which 75 are for children. There is a special pavilion with 16 beds for cases of diphtheria. The hospital, which is fitted up in accordance with the most advanced modern ideas as to hygienic requirements and the comfort of the patients, is lighted throughout by electricity. Two independent systems of electric illumination are provided, so that if one goes wrong the other may be available. Gaslight is not used in the establishment. The electric light "plant" alone cost 160,000 marks (£8,000). This is said to be the first hospital in which the electric light has been employed as the sole illuminating power.

INTERNATIONAL MEDICAL CONGRESS.—The English and Dutch railway companies concerned in the route to Berlin *viâ* Queensborough and Flushing announce a reduction in fares to all members of the Congress taking return tickets. To obtain this concession it is necessary that intending members should forward the fee of £1 to Dr. Max Bartels, Berlin, S.W., Leipzigerstrasse 75, so that they may receive their tickets of membership beforehand. First-class return tickets will cost £6 16s.; second class, £4 19s.; for those wishing to extend their stay in Germany beyond thirty days a so-called circular ticket may be obtained, at three or four days' notice, which will be available for forty-five or sixty days. These tickets may be obtained through Messrs. Brasch and Rothenstein, 1, New Basinghall Street, London, E.C., or Messrs. Thomas Cook and Sons, Ludgate Circus, E.C. Messrs. Cook have in course of preparation a special circular containing information regarding routes, etc., both for the Congress and the British Medical Association meeting at Birmingham.

ADULTERATION IN PARIS.—During 1889 the total number of samples of various kinds analysed in the Municipal Laboratory of Paris was 18,773. Of 7,107 specimens of wine only 2,791 were good; of 1,292 samples of beer, on the other hand, only 8 were watered or adulterated with salicylic acid. Of 3,795 specimens of milk 403 were watered or deprived of their cream; of 333 samples of butter 66 contained foreign fats. Of 1,183 samples of peppers and spices 298 were adulterated. Of 167 toys about one-third were coloured with forbidden substances. Of 215 specimens of tin and pottery ware 97 contained lead. Of 244 wall papers 155 were coloured with poisonous materials. The examination of spirits and liqueurs showed that 53 samples of Kirsch were artificial, and 45 specimens of spirits "of bad quality." It is satisfactory to find that pharmacy at least keeps itself unspotted from the almost universal corruption of the commercial world; of 78 specimens of drugs and medicinal preparations examined all were genuine. The number of visits paid to markets, etc, was 43,179, with the result that in 164 cases articles of food exposed for sale were ordered to be destroyed.

AFTER CARE OF THE INSANE.—Some interesting facts were stated at the annual meeting of the Association for the After-care of the Insane held at 83, Lancaster Gate, on Monday last. The Earl of Meith presided, and, among others, Drs. Hack Tuke, H. Rayner, G. H. Savage, Norman Kerr, and Claye Shaw took part in the proceedings. During the past year 59 applications for assistance on behalf of patients discharged from asylums had been accepted. Of these mental convalescents, 30 had been placed in cottage homes where they were treated as members of the family. In each case a lady residing in the neighbourhood had undertaken to see that the resident convalescent was properly treated. Other persons had been aided with clothing or money. In view of the excellent work of this society, it is gratifying to observe that during the year 8 superintendents of asylums had become members. The boarding out of this class of convalescents in cottage homes has proved eminently satisfactory, and there is great need for largely increased funds to carry on and extend these valuable operations. Subscriptions can be sent to Mr. Thornhill Roxby, Arden Lea, Walthamstow.

THIRTEEN SHOULDER-PRESENTATIONS IN ONE PATIENT.—Dr. Eustache, of Lille, describes in the *Nouvelles Archives d'Obstétrique et de Gynécologie*, 1889, p. 239, the case of a patient who was delivered fourteen times, the shoulder presenting in every case excepting the first, where the presentation was normal. He could not trace the cause of malpresentation to hydramnios, twin-conception, small size of the fœtus, or pelvic deformity. He rather believed that the cause in this case lay in a severe laceration of the cervix which occurred during the first labour, and appears to have fixed the uterus to the brim of the pelvis, and caused relaxation of its walls. The patient, when under Dr. Eustache's observation during her last labour, was 40 years of age. Gery has published the history of a woman where the arm presented in nine consecutive labours, and a succession of transverse presentations is not rare in maternity departments in districts where women bear many children, but Dr. Eustache's case is the most extreme of its kind ever recorded. Dr. Eustache suspected so strongly ("*faute de mieux*," he writes) that the laceration was the cause of the cross births, that, had the woman been younger, he would unhesitatingly have advised Emmet's operation as a prophylactic measure against future difficult labours.

GUY'S HOSPITAL.—The annual distribution of prizes to the successful students of the past year took place on June 25th in a large tent, which was erected in the grounds of the hospital. The proceedings began by the reading of a report of the Dean, from which it appeared that the school was in a very flourishing condition, the number of students having increased considerably since last June and that the successes at the various examinations had been as numerous as usual. Reference was made to the new college for the residence of students, which appears to have met a distinct want, for nearly all the rooms are let. The new Dental School has also attracted many students, who seem fully to appreciate the opportunities afforded for learning dentistry. The medals and prizes were distributed by Mr. Samuel Hoare, M.P. The Treasurer's gold medal for medicine was awarded to A. Ellis Durham, and the Treasurer's gold medal for surgery to F. W. Hall. J. H. Bryant was *proxime accessit* to the gold medal for medicine. The list of prizes is too long for insertion here, but more than £600 worth of prizes were awarded, including entrance scholarships in arts of 100 guineas and 50 guineas, and entrance scholarships in science of 125 guineas and 50 guineas. The proceedings ended with a vote of thanks to Mr. Hoare, moved by the Treasurer, and supported by Dr. Pavy, the senior physician, and Mr Durham, the senior surgeon. The wards (as far as possible), the museums, school buildings, college, and chapel were open from 3 to 5.30 P.M. In the museum there was a most interesting exhibition of specimens added to it during the past year. The college attracted a large share of attention and looked very pretty with its red brick quadrangle and the boxes of flowers in the windows. The large dining hall, smoking room, and reading room were especially admired. Afternoon tea was provided in the college and the grounds. In the evening the Guy's Hospital biennial dinner was held at the Holborn Restaurant, Dr. Thomas Stevenson in the chair. About 200 old Guy's men dined together and spent a most enjoyable evening

MEDICAL VACANCIES.

The following Vacancies are announced:

ALCESTER UNION, Warwickshire Parishes.—Medical Officer. Salary, £80 per annum. Applications by July 8th to the Clerk.

AMPTHILL UNION.—Medical Officer for No. 1 District. Salary £100 per annum. Applications to the Clerk of the Board of Guardians, Ampthill.

COOTEHILL UNION, Cootehill Dispensary District.—Medical Officer. Salary, £95 per annum, including £ 5 as Medical Officer of Health, with usual registration and vaccination fees. Applications to the Honorary Secretary, Henry Brown, J.P., by June 28th.

DROITWICH UNION.—Medical Officer and Public Vaccinator. Salary, £85 per annum. Election on July 9th.

GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon, with surgical qualification. No salary; washing provided. Applications to the House-Governor, J. D. M. Coghill, M.D., by June 28th.

GORDON HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Assistant-Surgeon. Applications by July 12th to the Secretary, 278, Vauxhall Bridge Road, S.W.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—House-Physicians. Applications by July 2nd to the Secretary, Henry Dobbin.

HOSPITAL FOR WOMEN, Soho Square, W.—House-Physician; doubly qualified. Appointment for six months. Salary, £30 with board, etc. Applications to the Secretary, David Cannon, by July 2nd.

LEEDS GENERAL INFIRMARY.—Honorary Assistant Surgeon. Applications marked "Private," to the Treasurer, by June 28th.

LINCOLN ODD FELLOWS' MEDICAL INSTITUTION.—Junior Medica Officer from August to December. Salary at the rate of £120 per annum (out door). Applications to Secretary, William Coulson, 12, North Parade, Lincoln.

LONDON THROAT HOSPITAL, 204, Great Portland Street, W.—House-Surgeon. Applications by June 30th to the Honorary Secretary of the Medical Committee, W. R. A. Stewart.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Resident Medical Officer at Bowden, Cheshire. Salary, £60 per annum, with board, apartments, and washing. Applications by July 20th to C. W. Hunt, Secretary.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall; double qualifications; not less than 25 years of age. Remuneration, £250 per annum, with board and residence. Applications by July 5th to the Chairman of the Board.

METROPOLITAN ASYLUM BOARD, EASTERN FEVER HOSPITAL, The Grove, Homerton.—Clinical Assistant for a period of three months; board, furnished apartments, and washing. Applications to the Medical Superintendent at the Hospital.

NORTH RIDING OF YORKSHIRE.—Medical Officer of Health for the Riding; qualified to practise medicine, surgery, and midwifery. Remuneration, a fixed fee of £100 per annum, and 5 guineas per day (to include expenses) for every day's services, with leave to hold other appointments. Applications to William C. Trevor, Deputy Clerk of the County Council, Clerk of the Peace Office, Northallerton, before June 30th.

REDRUTH SANITARY AUTHORITY.—Medical Officer of Health. Appointment for three years. Salary, £100 per annum. Applications by July 3rd to the Clerk, Thurstan C. Peter, Union Office, Redruth.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Senior House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to the Honorary Secretary Medical Staff, Public Hospital, Sheffield, by July 11th.

STROUD GENERAL HOSPITAL.—House-Surgeon; double qualifications. Salary, £80 per annum, with board, washing, and lodging. Applications to the Assistant Secretary, W. H. Cornish, New Mills, Stroud, by July 10th.

SUFFOLK GENERAL HOSPITAL, Bury St. Edmunds.—Dispenser, fully qualified, age between 25 and 35 years. Salary, £40 per annum, with board, lodging, and washing. Applications to the Committee, at the Hospital, by July 1st.

WELLINGBOROUGH AND DISTRICT MEDICAL INSTITUTE.—Practitioner, doubly qualified, good Accoucheur and well up in the routine of general practice. Salary, £280 per annum (exclusive of accouchement fees), with dwelling, surgery, etc. Applications to George Bayes, Jackson's Lane, Wellingborough, by July 2nd.

ZETLAND COUNTY COUNCIL.—Medical Officer for the county and district, to reside in the county, with liberty to engage in private practice. Applications, stating qualifications and salary, to be lodged with the County Clerk at Lerwick by June 30th.

MEDICAL APPOINTMENTS.

BERRY, Frederick C., B.A., M.D., reappointed Medical Officer to the No. 12 District of the Southmolton Union.

BRODIE, G. C., F.R.C.S., appointed a Clinical Assistant to the Central London Throat and Ear Hospital, Gray's Inn Road.

BRODRICK, H. E., M.D.Durh., B.S., M.R.C.S., reappointed Medical Officer for the Borrowby District of the Northallerton Union.

BUTLER, Charles, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the West Sussex, East Hants and Chichester General Infirmary and Dispensary, *vice* T. Valentine, M.R.C.S., L.R.C.P., L.S.A.

CUMMING, Alexander, M.D., appointed Extra-Physician to the Royal Hospital for Sick Children, Edinburgh, *vice* R. Mackenzie Johnston, M.D.

DAVEY, R. S., M.D.St. And., M.R.C.S., reappointed Medical Officer for the 2nd Division, St. James's District of the Dover Union.

DAVIES, Arthur Templer, B.A., M.B.Cantab., M.R.C.P.Lond., appointed Physician to the Eastern Dispensary, Leman Street, Whitechapel, *vice* Dr. R. H. Temple.

DIXON, Walter, M.B.Edin., and C.M., reappointed Medical Officer for the 2nd Division, Hougham District of the Dover Union.

DUNCAN, Percy James, M.B., L.R.C.P., M.R C.S., appointed Medical Registrar, Charing Cross Hospital, *vice* Dr. F. W. Mott.

GEORGE, C. F., M.R.C.S., L.M., L.S.A., reappointed Medical Officer for the Blyborough District of the Gainsborough Union.

HALL, F. W., M.R.C.S., L.R.C.P., appointed Assistant House-Physician to Guy's Hospital.

HALL, J. C,, M.B., B.Ch., Irel., appointed Medical Officer to the Monaghan Infirmary.

HICKMAN, H. V., M.R.C.S., L.R.C.P., appointed a House-Surgeon to Guy's Hospital.

HILL, Hedley, M.R.C.S., L.R.C.P., appointed House-Surgeon to the County and County of the Borough of Carmarthen Infirmary, *vice* T. C. Creswick Williams.

HOWDEN, James C., M.D.Edin., reappointed Medical Superintendent of the Royal Lunatic Asylum, Montrose.

JESSOP, Edward, M.R.C.S., appointed a Clinical Assistant to the Central London Throat and Ear Hospital, Gray's Inn Road.

JESSOP, Thomas R., F.R.C.S., L.S.A., appointed Consulting Surgeon to the Leeds General Infirmary.

KEY, Andrew, M.D., L.R.C.S.Edin., reappointed Surgeon to the Montrose Infirmary.

LONG, Arthur, M.R.C.S., L.S.A., reappointed Medical Officer for the St. James and Hougham Districts of the Dover Union.

LUFF, A. P., M.D., B.S.Lond., M.R.C.P., appointed Physician to the Outpatient Department of St. Mary's Hospital, Paddington, *vice* Dr. Pearce, deceased.

MCBRIDE, William, M.D., appointed Medical Officer to the Crossmaglen Dispensary District.

MILNER, Ernest A., M.B., C.M.Ed., appointed Assistant Medical Officer to the Metropolitan Asylum, Leavesden, near Watford, *vice* C. T. Ewart, M.D.

MUTER, John, F.R.S.Edin., F.I.C., F.C.S.Lond., reappointed Public Analyst to the County of Lincolnshire.

NISBET, F. J., M.R.C.S., L.R.C.P., appointed a House-Surgeon to Guy Hospital.

PAGET, P., M.R.C.S., L.R.C.P., appointed a House-Surgeon to Guy's Hospita

RANDALL, Philip Nicholas, M.B.Lond., L.S.A., appointed Medical Officer t the Chatham Hospital.

SILK, J. Frederick W., M.D.Lond., appointed Anæsthetist to the Royal Fre Hospital, Gray's Inn Road.

SPICER, Robert H. S., M.D., L.R.C.P., reappointed Medical Officer to the No. District of the Southmolton Union.

STANSFIELD, F. W., M.B., Ch.B., appointed Second Assistant Surgeon to th Derby Amalgamated Friendly Societies Medical Association, *vice* Dr. Curl

STOKER, Ernest Wilson, L.K.Q C.P.I., L.R.C.S.I., L.M., Rotunda, reappointe Resident Medical Officer of Health to the North London Hospital for Con sumption and Diseases of the Chest, Mount Vernon, Hampstead.

STONE, Valentine, M.D.St.And., F.R.C.S.Edin., reappointed Medical Office to the Montrose Infirmary.

SYREÉ, Anton Hugh, M.R.C.S., L.S.A., appointed Assistant Medical Officer t the City of London Lunatic Asylum, Stone, Dartford, *vice* Thomas Duncan Greenlees.

TATE, Thomas Marshall, M.B., B.Ch., B.A.O., etc., appointed Registrar, Com pounder of Medicine and Assistant, to County Down Infirmary, *vice* Georg W. O'Flaherty, appointed Assistant Medical Superintendent, Dow Asylum.

THOMSON, W. Arnold, F.R.C.S.I., appointed Medical Officer and Public Vacci nator for the Bray and Hurley Districts of the Cookham Union, *vice* Dr Curwen, resigned, also on the staff of the Maidenhead Hospital.

THOMSON, Malcolm E., L.R.C.P.Edin., reappointed Medical Officer of Health t the Hardingstone Urban Sanitary Authority.

TODD, Frederick, M.R.C.S., L.D.S., appointed Dental Surgeon to the Roya Free Hospital, Gray's Inn Road, *vice* Haster Harris.

WARD, Edward, M.A.Cantab., M.B., M.R.C.S.Eng., appointed Honorary Sur geon to the Leeds General Infirmary, *vice* T. R. Jessop.

WATTS, William Frederick, reappointed Medical Officer of Health to th Borough of Dewsbury.

WHYTE, H., M.R.C.S., L.R.C.P.,appointed Resident Medical Officer for the new Branch of the Seamen's Hospital Society at the Royal Victoria and Albert Docks.

WINGRAVE, V. Wyatt, M.R.C.S., L.R.C.P., appointed Registrar and Anæs thetist to the Central London Throat and Ear Hospital, Gray's Inn Road *vice* Walter Fowler, F.R.C.S., appointed Assistant Surgeon.

DIARY FOR NEXT WEEK.

WEDNESDAY.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Dr William Duncan and others. Dr. Boxall: Fever in Childbed Dr. Hurry: Case of Symmetrical Erysipelas followed by Premature Labour; Eclampsia *Post Partum*. Dr. Lewers: On Plugging the Uterus in Severe Cases of *Post-Partum* Hæmorrhage.

FRIDAY.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Annual General Meeting. Patients and card specimens at 8 P.M. Mr Brailey: Result of Operation for Immature Cataract. Mr. Stanford Morton: 1. Foreign Body beneath Semilunar Fold 2. Aneurysms of Retinal Arteries. Mr. Spicer: Congenital Dislocation of Lenses. Papers:—Dr. Bronner: Concussion of the Eyeball giving rise to Acute Local Symptoms of Congenital Syphilis. Dr. Sharkey: On Graefe's Sign. Dr. Rockliffe: 1. Cephalic Tetanus following Penetrating Wounds of the Orbit; 2. Pyæmic Panophthalmitis. Dr. Berry: 1. Operative Treatment of Scleral Wounds; 2. Extraction of Foreign Body from Orbit. Mr. Edgar Browne: Cases of Symblepharon treated by Skin Flap. Mr. Snell: 1. Paralysis of Convergence; 2. Cellulitis of Orbit. 9.30 P.M.—Election of Officers.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in Post Office Order or Stamps with the notice not later than Wednesday Morning, in order to insure insertion in current issue.

BIRTHS.

GREVES.—On June 5th, at Rodney House, Bournemouth, W., the wife of Hyla Greves, M.D., M.R.C.P., of a son.

HART.—At 29, Charlotte Square, Edinburgh, on June 22nd, the wife of D. Berry Hart, M.D., F.R.C.P.Ed., of a daughter.

MARRIAGES.

LEWIS—COLE.—On June 24th, at St. Augustine's Church, Queen's Gate, by the Rev. C. P. Price, brother-in-law of the bridegroom, assisted by the Rev. Canon Thomas Williams, and the Rev. T. Hitchens, Edward John Lewis, M.B.(Cantab.), F.R.C.S., of Hamilton Terrace, N.W., to Georgina Ada, daughter of the late H. T. Cole, Q.C., M.P.

SCOTT-TEBB—DALSTON.—On June 19th, at the Parish Church, St. Giles, Camberwell, by the Rev. W. Fisher, vicar of Alford, Surrey, assisted by the Rev. E. Swain, William Scott-Tebb, M.A., M.D.Cantab., of Charlcombe, Bournemouth, only son of William Tebb, Esq., of Rede Hall, Burstow, Surrey, to Mary Maxwell, second daughter of Henry Maxwell Dalston, of the Glebe House, Champion Hill, Surrey.

DEATH.

PALMER.—At Barton-under-Needwood, died Mary Louisa, wife of Clement Palmer. Aged 42.

OURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

NCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

NTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

ARING CROSS. *Hours of Attendance*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M. 1.30; Dental, M. W. F., 9. Throat and Ear, F., 9.30. *Operation Days.*—M., 3; Th. 2.

ELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30. *Operation Days.*—M. Th., 2.30.

ST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

EAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. Wed. Th. F., 2.30; Obstetric, W., 2.30; Eye, Tu. Th., 2.30; Ear, M. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

Y'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F. 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

SPITAL FOR WOMEN, Chelsea. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

NG'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—Tu. F. S., 2.

NDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30, and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days.*—M. Tu. W. Th. S., 2.

TROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

DDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W. 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th. 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1, S., 2; (Obstetrical), W. 2.

TIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

RTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, Tu., 2; Dental, F. 9. *Operation Day.*—Th., 2.30.

YAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th. 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

YAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

YAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M. 2.

YAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th. 2; o.p., Eye, W. S. 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu., S., 9. *Operation Days.*—Th., 1; (Ophthalmic), F., 1.15.

. MARK'S. *Hours of Attendance.*—Fistula and Diseases of Rectum, males, W., 8.45; females, Th., 8.45. *Operation Days.*—M., 2, Tu. 2.30.

. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45, o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrotherapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 2.30 and 5, Th., 2, F. (Women and Children), 2, S., 3.30. *Operation Day.*—W. 2.30.

. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, except Sat., 2; Obstetric, Tu. F., 2; o.p., W., 1.30; Eye, M. Tu. W. Th., F, 1.30; o.p., daily, except Sat., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10. *Operation Days.*—W. S., 1.30; (Ophthalmic), Tu., 4, F., 2.

MARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

ROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30. *Operation Day.*—Th., 2.

NIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th., 1.30; S. 2.

EST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu., F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic, W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

ESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, M. Th., 2.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* JOURNAL *are devoted, will be found under their respective headings.*

QUERIES.

DECIMUS asks information about Bruges: its climate in winter and summer cost of living for family of four; educational advantages, etc.?

DR. JOHN PHILLIPS (Edgbaston) asks to be recommended a home for incurables for epileptic patients, and if it is possible to get one in by part payment? The family are poor, but will not take parish relief, they can afford to pay a small sum.

AN OLD BATON.

M.B. AND C.M. (Perth) writes: Some years ago, at the sale of the surgical effects of a deceased medical man I picked up, amongst other things, a baton possessing the following characteristics: In length it measures 21 inches, and in circumference 6½ inches. About three inches from the top the wood is notched circularly five times, the four rings being painted a bright red colour, the rest of the baton blue.

Can any of your readers kindly inform me what is the significance of this baton; is it representative of any old surgical guild or corporation, obsolete or extant?

PUERPERAL ECLAMPSIA.

DR. STUART NAIRNE (Glasgow) writes: A lady, married, aged 22, is seven months pregnant. She has a puffy swelling of the face; body swelled, feet and legs slightly œdematous. She has a violent convulsion at 11 A.M., and becomes unconscious, with contracted pupils, squinting, biting of the tongue, and frothing at the mouth. On examination the child was pronounced to be dead and the patient herself dying.

The convulsions continued, and increased in severity, left-handed rotation being observable, and opisthotonos becoming more marked with each convulsion. At 7 P.M. the os uteri, which was found absolutely closed, was dilated slightly with great difficulty, on account of rigidity of the parts. The dilatation caused some degree of uneasiness. At 8.30 P.M., after a severe fit, respiration and circulation apparently ceased, and she was thought to be dead. She slowly came round, however, with a fluttering pulse and stertorous breathing.

The urine was drawn off. There was only about two tablespoonfuls, and it was found to be albuminous. Her mother, it was noted, died in childbed.

Cases like these are constantly occurring. We have them always with us—very frequently in a great city—and I submit this one as a typically bad case for the purpose of obtaining more light. I should like to ask two questions, namely: (1) What would be the prognosis in such a case? and (2) What would be reasonable treatment? There must be a great number of men who can make practical suggestions on these points, and I hope they will favour us with them.

TREATMENT OF SYPHILIS OF THE TONGUE.

PERPLEXED asks of any member the most successful treatment for chronic ulceration of the tongue, no doubt syphilitic. Perchloride of mercury, arsenic, and iodide of potassium have been given internally, and solutions of chromic acid, chlorate of potash, and borax applied locally; but with this treatment at intervals only has the condition apparently been benefited during the last three years since it first was noticed. Although there is more or less a thickish brown fur over the dorsum, the tongue otherwise is healthy, except at each side of the base where the ulceration exists. There is no other evidence of syphilis. The patient's age is 35, and he is in robust health.

ANSWERS.

LEX.—We consider £5 5s. a very reasonable charge.

THE SPINAL CORD IN INFLUENZA.

DR. A. HANBURY FRERE.—Professor P. Foà's paper "On the Alterations of the Spinal Cord in Influenza," was published in *Il Policlino* of June 8th. No mention is made of treatment.

BROWNING'S HISTORY.

HISTORICUS.—"How they brought the good news from Ghent to Aix" refers to the Pacification of Ghent, 1576. The pacification, of course, is historical, and the "good news" refers to it; but the rest of the poem is not historical, and, as Mr. Orr says in the Browning handbook, "would gain nothing by being so."

NOTES, LETTERS, ETC.

EXPERIMENTS ON ANIMALS.

ERRATA.—In the comments on Miss F. P. Cobbe's letter, published last week at p. 1455, seventh line, for "cauterised" read "curarised."—In the review of Dr. Winckel's *Midwifery*, JOURNAL, June 21st, p. 1429, line 5 from bottom, for "twenty-five" read "all but twenty-five."

ANOTHER APPEAL.

THE treasurer of the "Danaher Fund" (Mr. Edward East, 16, Upper Berkeley Street, W.), begs to acknowledge the following subscriptions. The necessity for help is as great and pressing as ever. Amount already acknowledged:

	£	s.	d.
By Mr. Jonathan Hutchinson	11	8	6
,, Mr. East	10	3	0
	21	11	6
Sir Edwin Saunders, F.R.C.S.	2	2	0
— Daubeny, Esq.	0	10	0
— Allen, Esq. (per Mr. Woodforde)	2	2	0

THE BARBER-SURGEON REDIVIVUS.

IN a northern suburb a member of the ancient craft and mystery of barbers announces that he cuts hair "on physiological principles," and performs other tonsorial operations "antidextereously" *(sic)*. In some parts of Germany barbers are enjoined to use what may be called "modified Listerism" in shaving. With physiological hair-cutting and antiseptic shaving, barbers will probably soon claim to be restored to the body corporate of surgeons, from which they were rudely sundered in 1745. "Antidextereous" strikes us as a triumph of scientific neologism; it is just the word wanted to describe the surgical manipulator whose fingers are all thumbs.

MRS. BODINGTON'S "STUDIES IN EVOLUTION."

REFERRING to a review of this book which appeared in the JOURNAL of May 10th, p. 1076, Mrs. Bodington wishes to point out that the numerous errors of the press complained of are due to the fact that the writer was some thousands of miles away from her publisher, and the correction of proofs was left to a friend in London, in order to avoid delay in bringing out the book. "The climax of horror," says Mrs. Bodington, "is attained in the glossary, where the eager inquirer is informed that a 'zœa is an early stage of *decayed* crustaceans!'"

"MIDWIVES."

A SHANDEAN writes: Dr. Rentoul, in his letter on the Midwives' Registration Bill, in the JOURNAL of June 21st, says: "May I show that the term 'midwife,' in the past has not referred to women midwives alone." It is difficult to believe that the term "midwife," *tout court* could ever have been used to denote a male obstetrician. The "man-midwife," of course, was familiar enough to such of our great-great-grandmothers as were strong-minded enough to avail themselves of his services. It can hardly be supposed, however, that this hermaphroditic designation was ever accepted by decent practitioners except with the patient suffering of vulgar ridicule, which is the badge of all their tribe. In the veracious chronicle of *Tristram Shandy*, we find Dr. Slop objecting to the term as applied to himself. Says "my father," "Nothing will serve you but to carry off the man-midwife."..... "*Accoucheur* if you please," quoth Dr. Slop....."With all my heart," replied my father, "I don't care what they call you."

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BOOKS, ETC., RECEIVED.

Medical Law for Medical Men. By Percy Clarke, LL.D., and Charles Meymott Tidy, M.B., F.C.S. London: Baillière, Tindall, and Cox. 1890.

The Book of Climates. By D. H. Cullimore, M.D., M.R.C.P. London: Baillière, Tindall, and Cox. 1890.

Therapeutisches Hand-Lexikon für Aerzte und Studirende. Von Dr. Th. Zerner, jun., and Dr. Heinrich Paschkis. Wien: Moritz Perles. 1890.

Beiträge zur pathologischen Anatomie und zur allgemeinen Pathologie. Redigirt von Dr. E. Zeigler, Siebenter Band, Heft 1-4. Jena: Gustav Fischer. 1890.

Die Untersuchung der hinteren Larynxwand. Von Dr. Gustav Killian. Jena: Gustav Fischer. 1890.

A Handbook of Diseases of the Nose and Naso-pharynx. By James B. Ball, M.D., M.R.C.P. London: H. K. Lewis. 1890.

Our Lord's Miracles of Healing. By T. W. Belcher, D.D. Second Edition. London: Griffith, Farran, Okeden, and Welsh. 1890.

Bourne's Handy Assurance Directory for 1890. By W. Bourne, F.S.S. Price 2s. Liverpool: William Bourne. 1890.

Grundriss der Bakterienkunde. Von Dr. Med. Carl Fraenkel. Dritte Auflage. Berlin: A. Hirschwald. 1890.

Lehrbuch der chemischen Untersuchungsmethoden zur diagnostik innere Krankheiten. Von Dr. Felix Wesener. Berlin: Friedrich Wreden. 1890.

Mad Doctors. By One of Them. Price, 1s. London: Swan Sonnenschein and Co. 1890.

Rhinoplasty; being a short description of one hundred cases treated by Trihooondas Motichand Shah, L.M., at the Junagadh Hospital.

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